S. HRG. 105–340

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1998

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

UNITED STATES SENATE

ONE HUNDRED FIFTH CONGRESS

FIRST SESSION

ON

H.R. 2266/S. 1005

AN ACT MAKING APPROPRIATIONS FOR THE DEPARTMENT OF DEFENSE FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 1998, AND FOR OTHER PURPOSES

Department of Defense
General Accounting Office
Nondepartmental witnesses

Printed for the use of the Committee on Appropriations

Available via the World Wide Web: http://www.access.gpo.gov/congress/senate

U.S. GOVERNMENT PRINTING OFFICE

39–834 cc WASHINGTON : 1998

For sale by the U.S. Government Printing Office
Superintendent of Documents, Congressional Sales Office, Washington, DC 20402
ISBN 0–16–056136–1

COMMITTEE ON APPROPRIATIONS

TED STEVENS, Alaska, *Chairman*

THAD COCHRAN, Mississippi
ARLEN SPECTER, Pennsylvania
PETE V. DOMENICI, New Mexico
CHRISTOPHER S. BOND, Missouri
SLADE GORTON, Washington
MITCH McCONNELL, Kentucky
CONRAD BURNS, Montana
RICHARD C. SHELBY, Alabama
JUDD GREGG, New Hampshire
ROBERT F. BENNETT, Utah
BEN NIGHTHORSE CAMPBELL, Colorado
LARRY CRAIG, Idaho
LAUCH FAIRCLOTH, North Carolina
KAY BAILEY HUTCHISON, Texas

ROBERT C. BYRD, West Virginia
DANIEL K. INOUYE, Hawaii
ERNEST F. HOLLINGS, South Carolina
PATRICK J. LEAHY, Vermont
DALE BUMPERS, Arkansas
FRANK R. LAUTENBERG, New Jersey
TOM HARKIN, Iowa
BARBARA A. MIKULSKI, Maryland
HARRY REID, Nevada
HERB KOHL, Wisconsin
PATTY MURRAY, Washington
BYRON DORGAN, North Dakota
BARBARA BOXER, California

STEVEN J. CORTESE, *Staff Director*
LISA SUTHERLAND, *Deputy Staff Director*
JAMES H. ENGLISH, *Minority Staff Director*

SUBCOMMITTEE ON DEFENSE

TED STEVENS, Alaska, *Chairman*

THAD COCHRAN, Mississippi
ARLEN SPECTER, Pennsylvania
PETE V. DOMENICI, New Mexico
CHRISTOPHER S. BOND, Missouri
MITCH McCONNELL, Kentucky
RICHARD C. SHELBY, Alabama
JUDD GREGG, New Hampshire
KAY BAILEY HUTCHISON, Texas

DANIEL K. INOUYE, Hawaii
ERNEST F. HOLLINGS, South Carolina
ROBERT C. BYRD, West Virginia
PATRICK J. LEAHY, Vermont
DALE BUMPERS, Arkansas
FRANK R. LAUTENBERG, New Jersey
TOM HARKIN, Iowa
BYRON DORGAN, North Dakota

STAFF

STEVEN J. CORTESE, SID ASHWORTH, SUSAN HOGAN, GARY REESE, JAY KIMMITT, MARY C. MARSHALL, and JOHN J. YOUNG

ADMINISTRATIVE SUPPORT

MAZIE R. MATTSON and JUSTIN WEDDLE

MINORITY STAFF

CHARLES J. HOUY, C. RICHARD D'AMATO, and EMELIE EAST

CONTENTS

THURSDAY, FEBRUARY 27, 1997

	Page
Department of Defense: Comptroller	1

WEDNESDAY, MARCH 5, 1997

Department of Defense: Joint Chiefs of Staff	73

WEDNESDAY, MARCH 12, 1997

Department of Defense: Ballistic Missile Defense Organization	137

MONDAY, MARCH 31, 1997

Department of Defense: U.S. Pacific Command	187

WEDNESDAY, APRIL 9, 1997

Department of Defense: Department of the Navy: Office of the Secretary	215

WEDNESDAY, APRIL 16, 1997

Department of Defense: Department of the Army	325

WEDNESDAY, APRIL 30, 1997

Department of Defense:	
National Guard Bureau	389
Adjutant Generals	441

WEDNESDAY, MAY 7, 1997

General Accounting Office: National Security and International Affairs Division	467
Department of Defense: Depot operations	509

TUESDAY, MAY 13, 1997

Department of Defense: Environmental Program	535

WEDNESDAY, MAY 21, 1997

Department of Defense: Department of the Air Force	607

WEDNESDAY, JUNE 4, 1997

Nondepartmental witnesses	705

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1998

THURSDAY, FEBRUARY 27, 1997

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:04 a.m., in room SD–192, Dirksen Senate Office Building, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens, Domenici, Shelby, Gregg, Hutchison, Inouye, Bumpers, Lautenberg, and Dorgan.

DEPARTMENT OF DEFENSE

COMPTROLLER

STATEMENT OF JOHN J. HAMRE, Ph.D., UNDER SECRETARY OF DEFENSE (COMPTROLLER)

ACCOMPANIED BY JOHN VAN ALSTYNE, GENERAL, U.S. ARMY

OPENING STATEMENT OF HON. TED STEVENS

Senator STEVENS. Good morning, ladies and gentlemen.

We are happy to have the Comptroller of the Department of Defense, the Under Secretary of Defense. I understand, Dr. Hamre, you have a presentation that is of very substantial length. As you know, there is a competing event, but we have decided to go ahead with this, because we had postponed it once before. We appreciate your courtesy.

PREPARED STATEMENT OF SENATOR DORGAN

I have an opening statement from Senator Dorgan that I would like to place in the record at this point.

[The statement follows:]

PREPARED STATEMENT OF SENATOR BYRON DORGAN

Mr. Chairman, this is my first hearing as a member of the Senate Appropriations Committee, and I want you to know how pleased I am to have been named to serve on this prestigious committee. I am particularly pleased to be a member of the Defense Appropriations Subcommittee, which you and Senator Inouye have so ably chaired over the past several years.

Although I have served in the House and Senate for over 18 years, I have never been on a committee with jurisdiction over defense issues, and I am looking forward to learning as much as I can as quickly as I can. I have able mentors in the Chairman and Ranking Member. I also look forward to learning from the various experts within the Department of Defense about our national defense strategies and funding needs.

As you know, Mr. Chairman, we have two very important Air Force bases in North Dakota—at Minot and Grand Forks—both of which are, in my view, crucial

elements of our national defense. We are very proud of our bases and all that they contribute to the State of North Dakota and the nation. Supporting these bases and the B–52 bomber fleet housed at the Minot Air Force Base will be my highest priority as a member of the Subcommittee. And with regard to our armed forces around the world, I will be pleased to join in the subcommittee's efforts to improve the quality of life for our military personnel.

Defense hawks will argue that the defense budget is woefully under funded and does not begin to meet our national defense needs. Others will argue that defense must take its fair share of cuts as we downsize the government and as the pot of money available for domestic discretionary spending continues to shrink. I want to state clearly and unequivocally that I am committed to doing whatever is necessary to ensure that the United States has the best national defense, bar none, in the world. That is our responsibility as members of this subcommittee. What I am interested in learning from Dr. Hamre and other Pentagon experts in the weeks ahead is what our defense needs are, what our priorities are or should be, what kind of force structure and weapons systems do we need to meet the challenges and threats of the 21st century, and what constitutes adequate funding in both the near and long term.

I understand from reviewing last year's testimony that all the services face a procurement funding crunch and that we risk combat readiness if we do not adequately fund weapons modernization. General Shalikashvili's stated goal was to have a procurement funding level of $60 billion a year beginning with the budget before us. But the budget before us falls far short of that goal. In fact, the request of $42.6 billion is almost $3 billion below last year's funding level, and is nowhere near the $60 billion goal set by General Shalikashvili. I would like to know what the rationale is behind the $60 billion procurement level as well as the level proposed in the budget we are reviewing here today. Last year, the Appropriations Committees added $5.7 billion above the request level to the procurement account. If the committee chooses to increase that account by a similar amount again this year, I would like to know where the DOD would prefer to spend that extra money.

Mr. Chairman, I will have lots of questions as these hearings proceed. I regret that I am unable to stay for the full hearing today due to numerous other conflicts. I hope that will not be the case with future hearings. I would ask the Chairman if he would submit for the record the questions I intended to ask today.

Again, I want to thank the Chairman and Ranking Member for their patience and willingness to work with me as I familiarize myself with the broad range of important defense issues that fall under the jurisdiction of this subcommittee.

Senator STEVENS. If there is no objection from members, it would be my desire that you just proceed uninterrupted through your presentation and we will hold questions until you are done. Is that acceptable, gentlemen?

Senator INOUYE. Certainly.

Dr. HAMRE. Thank you, sir. And I will go quickly. It does not have to be a long presentation. I will try to move through it very quickly.

Senator STEVENS. Do not skimp, John. [Laughter.]

We have what you are going to say, but I would take umbrage at what you leave out.

Dr. HAMRE. I am not going to leave anything out.

BRIEFING OUTLINE

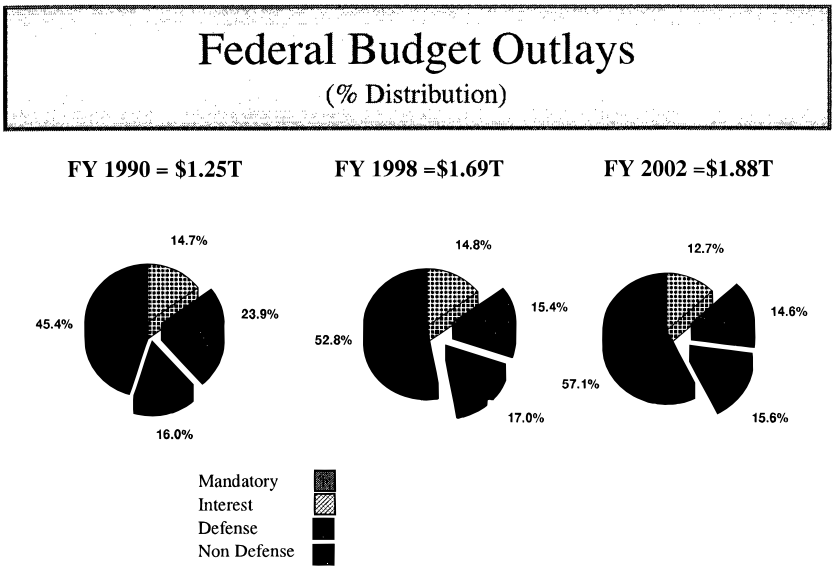
Fiscal year 1998 Budget in context
Highlights of fiscal year 1998 Budget
Supplemental Request for Bosnia/Other Contingencies

OVERVIEW OF DEFENSE BUDGET

Sir, I thought what I would do is just take a minute to talk about our budget, and put it in context with the overall budget that the administration has submitted. I think that there are some very im-

portant and somewhat controversial elements to that, that I need to say, about this context. I will talk very briefly about the budget, and then I know that a particular concern is the Bosnia request, the supplemental to help pay for Bosnia.

I would also like to introduce General Van Alstyne who is here with me from the Joint Staff. He is our expert. He has been working Bosnia issues on a day-to-day basis. And any substantive questions, he is perfectly able to answer. So I did at least bring an expert here with me.



Sir, I am just showing you a chart of the four major categories that are in the Federal budget. Of course this large black section is the mandatory. That is things like Social Security payments, Medicare, and Medicaid. It also includes things like crop payments and crop insurance, VA benefits, et cetera.

This patched area is interest payments. The upper gray section, in each case, is the DOD budget. And the lower gray section is discretionary spending.

Now, there are a couple of major things to draw out of this which I think are of significance. Note, first of all, how the debt servicing actually drops during this period of time. At least we are forecasting that it is going to drop during this time.

Senator STEVENS. How can you drop the debt servicing when the debt continues to expand?

Dr. HAMRE. Sir, it is, I think, probably some very heroic assumptions that are in here.

Senator STEVENS. Yes.

Dr. HAMRE. But it is saying that interest rates are going to be lower.

Senator STEVENS. I know. They are heroic, and you cannot spend the heroes. [Laughter.]

Dr. HAMRE. Sir, I am pointing it out to say I think that if that does not happen, of course it is likely to be coming at the expense of those pieces. And that is what I think we have to watch out for.

I do not have a reason to question it, but we have very optimistic assumptions about inflation. Virtually, the economy is doing very well. There are some risks about this being achieved.

Senator STEVENS. What is the rate of assumption of interest through the 1998 to 2000 period?

Dr. HAMRE. Sir, I will get that. But I think the nominal interest rate is about 3.5 percent. But we will get that.

[The information follows:]

As shown in the Economic Assumptions chapter of the President's fiscal year 1998 budget, the following are the assumed interest rate percentages:

	Fiscal year—		
	1998	1999	2000
91-day Treasury bills	4.7	4.4	4.2
10-year Treasury notes	5.9	5.5	5.3

Senator STEVENS. I said I would not interrupt. Pardon me.

Senator LAUTENBERG. That is the chairman's prerogative. [Laughter.]

Dr. HAMRE. The other thing that I would just note, look how the mandatories go from about 53 percent up to 57 percent during this period when we are getting the balanced budget. And that is with some fairly significant cuts in Medicare and Medicaid this year as you know. So this is going to be a tough budget for us to pull off.

I would point out that the President has protected the Department of Defense in putting this budget together. And let me show you that on the next chart.

FISCAL YEAR 1997 RESCISSION AND SUPPLEMENTAL

Two components:
$2 billion rescission and supplemental for Bosnia
$2.8 billion rescission only for outlay relief in fiscal year 1998

	Fiscal year—			
	1997	1998	1999	2000
Bosnia BA:				
Rescission	−2.0	.....	.....	.....
Supplemental	+2.0	.....	.....	.....
Outlay Rescission:				
Budget Authority	−2.8	.....	.....	.....
Outlays	−1.3	−0.8	−0.5	−0.2

FISCAL YEAR 1997 RESCISSION AND SUPPLEMENTAL

But before I get to that, let me out this chart. We are submitting with our budget—and I know this is going to make you all hopping mad—a proposal to rescind $4.8 billion. Now, there are two elements to that rescission. There is a $2 billion piece——

Senator STEVENS. In authority or outlays?

Dr. HAMRE. This is all in budget authority, sir.

Now, the first piece is to pay for Bosnia. And it is to take $2 billion out of slower spending accounts and put it in to pay for Bosnia. So our proposal is to pay it. Now, we are not giving you individual rescission items. We proposed a cancellation.

Now, we have done that 2 years running. And 2 years running, you said no. So I am not sure, but I still need to get funds for Bosnia. So I need to have a basis to work with, then we can work together and we can get some resources so we can get Bosnia paid for.

The other part, which is I think very controversial as well, is this $2.8 billion rescission. And we do that for one reason. We need it to generate this stream of outlays. Now, let me explain why we had to do that.

We had a big outlay problem in fiscal year 1998. It was caused by three things. It was caused by, first of all, we had some compositional shifts inside our program. We had some holes in our operating accounts that we needed to plug. And we moved about $4 billion from procurement into O&M to plug those holes. That had about a $3 billion outlay tail that came with it. So we had an outlay tail that came from that plugging some holes.

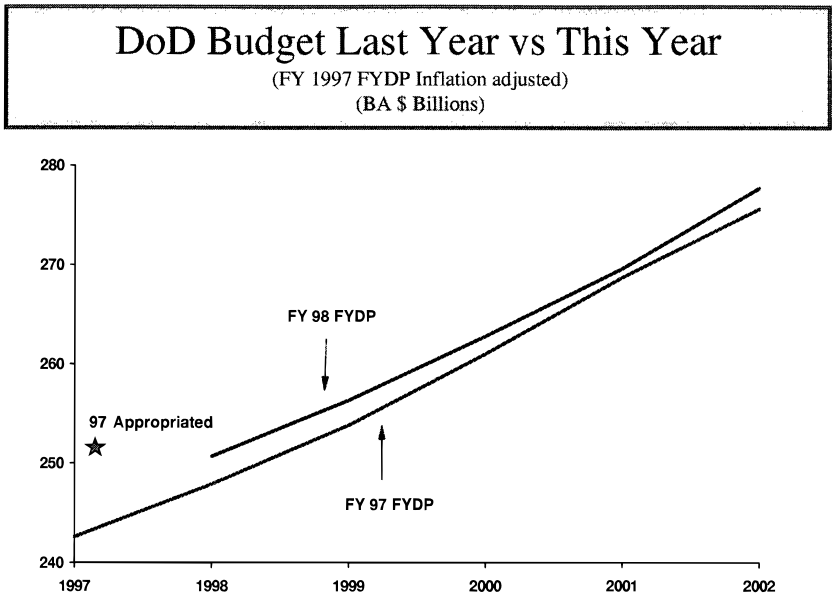
The second thing we had was we had to pay for Bosnia. We had about 2 billion dollars' worth of outlays that were not in our 1998 column because of Bosnia.

Third is we got the congressional increase last year that the President signed, of $10 billion; $3 billion of those outlays showed up in 1998. So altogether we had about an $8 billion problem in fiscal year 1998.

The White House gave us relief. We got some funds from the White House from it. We also realigned our own program. But we were still about $8 billion short in building our program. So when we got down to it, we said we either cut our 1998 budget request or we propose a rescission of 1997.

Now, sir, if I may, the politics here is very different in this sense. If you choose not to cancel 2 billion dollars' worth of funds for Bosnia, I have a problem. Because I still have to work with you to try to get funds for the supplemental. If you choose not to rescind $2.8 billion to generate the outlays, it is not my problem. It is going to be your problem in building the budget resolution for 1998. Because it means that stream of outlays which were embedded in our assumptions are not going to happen. And I also know that outlay estimates are a controversial item right now. And I would be happy to talk with you about what I know about them.

So this is our problem. This is very much your problem. I know you resent that, but I just wanted to be up-front that that is what happened this year.



BUDGET COMPARISONS

Sir, I am showing this chart, and I am trying to compare this year's DOD budget with last year's. This lower line is last year's budget extended over 5 years. The upper line is our budget request for this year.

As you can see, it is higher in every one of these years. The President gave us about $7 billion more budget authority for the fiscal year. We have about $5 billion of it in 1998 and 1999 and smaller amounts in the out-years.

We were also allowed to keep about 4 billion dollars' worth of inflation savings. The inflation rate actually dropped one-tenth of 1 percent. And rather than take that from us, the White House let us keep that. And so our spending power is about $11 billion higher than it was last year.

Senator STEVENS. Only if we cancel $5 billion from last year, John. Now, let us be honest here.

Dr. HAMRE. Sir, depending on the outlay situation that we are in controversy with at OMB.

Now, may I point out, sir. This star on my chart is where you ended up with the appropriation last year, about $252 billion. All of this, by the way, is 051. It is just DOD. About $252 billion. And we are requesting about $250 billion. So we are down about $2 billion compared to where we were last year. So this budget still goes down, if your point of comparison is last year's appropriated level. And it is down about $2 billion.

It is up from where we wanted to be last year, where we said we were going to be this year, by about $2.6 billion.

Senator STEVENS. Actually $8 billion below where you were last year, because we have to cancel that other in order to get to where you started. You are really carrying it forward into 1998. The 1997

money is going into 1998 now. So you are not spending it in 1997. You are taking it from 1998 and you are actually giving us less than you had to start with last year.

Now, this is a funny-money chart. I respect you, but that is a funny-money chart. And it is hard for us to work from that.

Dr. HAMRE. Well, sir, what we are proposing is that this number comes down $2.8 billion.

Senator STEVENS. Plus another $2 billion.

Dr. HAMRE. Well, the $2 billion is just moving around inside the accounts. We are still planning to spend it for Bosnia. The content is different.

Senator STEVENS. You already spent it.

Dr. HAMRE. Well, we are spending it right now, yes, sir. Because the operation is underway. And that is what we need, to be able to work with you, to find a financing mechanism. We are financing it now, borrowing money from quarter to quarter. But there is the $2.8 billion that this number would come down. But it is only here. And these numbers are still higher. But, again, I realize, because of the outlay problem that exists now with CBO, that this number is in some risk if it is recalculated.

So I am not disputing what you are saying, sir.

Senator STEVENS. Let me just put it this way. If you deduct the $4.8 billion, almost $5 billion, your star is down $5 billion to start with.

Dr. HAMRE. This would be down, sir, but $2 billion is going back.

Senator STEVENS. Right, right.

Dr. HAMRE. So only $2.8 billion comes down in net terms.

See, this piece here, sir, is what—I take out $2 billion, but I put in $2 billion for the supplemental. So that is just a wash.

Senator STEVENS. No; but it is not a wash, because you spent it on something we did not budget last year. It is already spent for something that was not in the budget.

Dr. HAMRE. Being spent for something that was not in the budget, yes, sir.

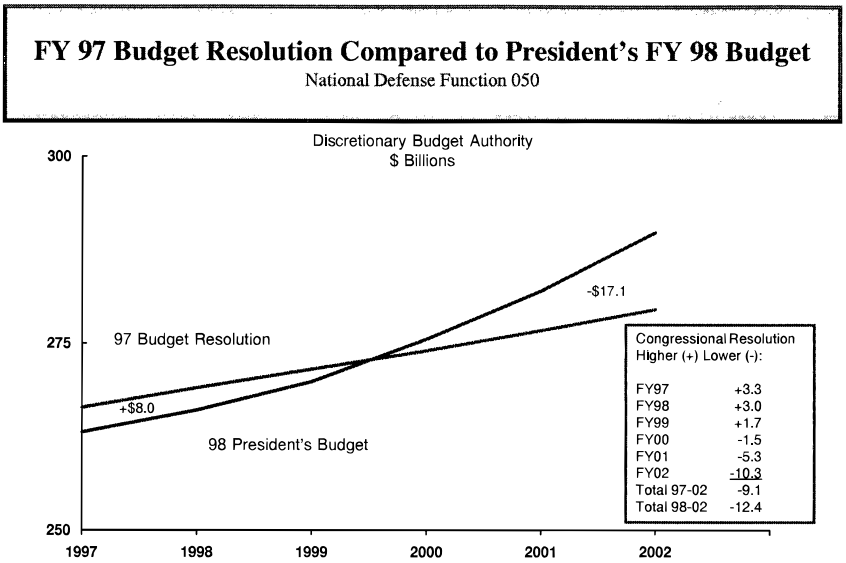
Senator STEVENS. Yes; so you are asking us to rescind other things because you spent it for something we did not budget for or you did not budget for.

Dr. HAMRE. Yes, sir.

Senator STEVENS. But that has got to be money outside of our 1997 fund, and, therefore, it is down $5 billion.

Dr. HAMRE. The program content would be $5 billion lower, yes, sir.

Senator STEVENS. Thank you.



COMPARISON TO BUDGET RESOLUTION

Dr. HAMRE. Sir, on this chart I am trying to compare where we are against the budget resolution from last year. And, again, we are looking here at fiscal year 1998. The lines are marked as the President's budget request and the congressional budget resolution.

Now, in 1998, we are $3 billion below the congressional budget resolution. That is a product of two things. There was about a $2.6 billion increase in the Department of Defense budget request compared to last year, and there was about a $3 billion increase for the Department of Energy budget request compared to last year. So the only difference, whereas 1 year ago there was a $9.4 billion difference between the President's budget request in 1998 and the congressional budget resolution in 1998. This year it is only $3 billion.

And as you can see, the area under the curve is now narrow. So we have $17 billion where the President's budget request is higher in the out-years, and the congressional budget resolution is about $8 billion higher in the near term.

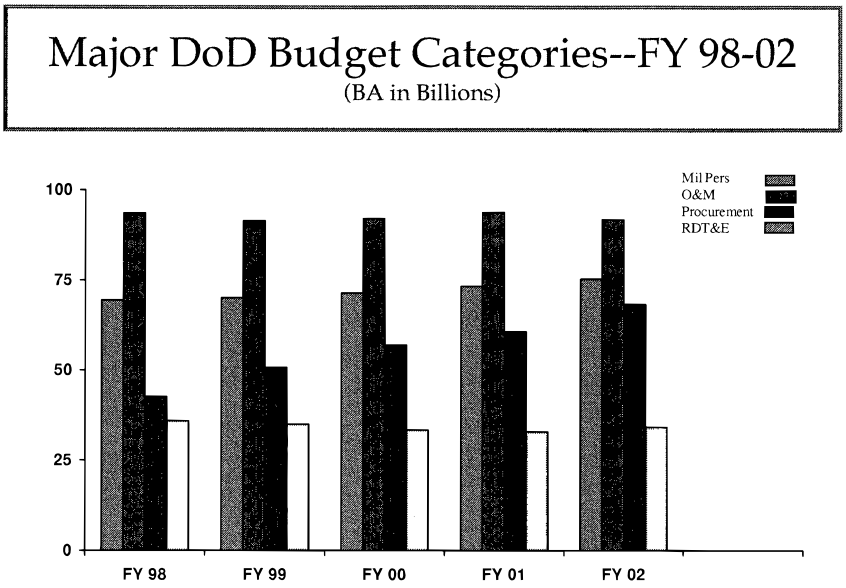
Senator STEVENS. Go ahead. I am just trying to figure out where I disagree. Thank you.

Dr. HAMRE. We can come back to any of these, sir.

HIGHLIGHTS OF FISCAL YEAR 1998 DOD BUDGET

Funding increased every year of the FYDP
Readiness remains highest priority
Ongoing military operations are fully funded
Quality of life improved
Modernization real growth protected but ramp delayed

Sir, I am just going to speak very briefly to each of these as the highlights of our budget request. As I pointed out, the budget is higher every year of the FYDP, because the President gave us some additional funds and let us keep the inflation money. I will talk about readiness and how we reflected readiness. I will spend some time talking about military operations—how they are funded in this budget. And I also have some charts on the supplemental that we can talk about briefly. Very brief on quality of life. And then modernization, where there is a lot of criticism of our budget and where there is some disappointment in how we ended up the year. We will go through all of that, sir.



This chart is designed to show you the broad outlines of our budget request. And let me just take a second. These are the four major categories. The left-most bar is for military personnel. And as you can see, this bar is very static, with a minor increase in the out-years. And that is basically putting in the pay raises. So our personnel—and I will show you in a subsequent chart—is largely flat, and a minor increase in pay, just simply to pay for the legal maximum pay raises in the budget.

The tallest bar is O&M, operations and maintenance. As you can see, it is basically flat. It goes down here from 1998 to 1999. And that is because this has $1.6 billion of Bosnia operations in it that is not in 1998. We have 1999, because our budgeted bill will be out by August 1998. And so, therefore, it is down. But that is not a real cut in underlying readiness, that is simply reflecting that we do not have to pay for Bosnia.

The right-most light gray bar is for R&D. And as you can see, it goes down modestly over this period of time. And that is largely a product of the major systems, like the F–18E/F, the new attack

submarine, the F–22—those big programs that are no longer consuming big R&D dollars as they transition over to procurement.

And then, finally, the darkest gray bar is the only area of growth in the budget: for modernization or procurement. This is about a 40-percent increase in real growth. But there is also a lot of contention about that, and I have a separate section of the charts to cover it later. And if I might defer those questions until later, because I think I might anticipate your criticism at that time.

FORCE STRUCTURE

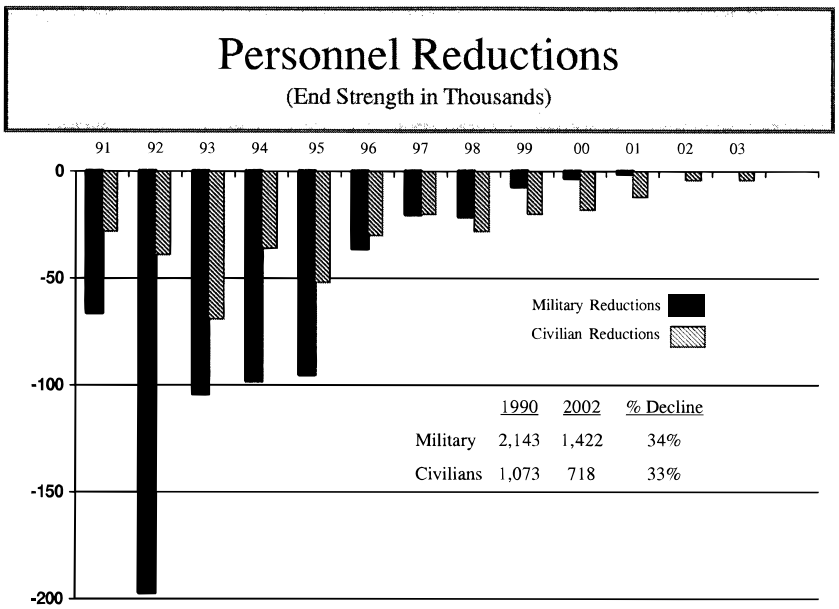
	Cold War Base 1990	Base Force	1998	BUR Goal
Land Forces:				
Army active divisions	18	12	10	10
Reserve Component Brigades	57	34	[1] 42	[1] 42
Marine Corps (3 Active/1 Reserve)	4	4	4	4
Navy:				
Battle force ships	546	430	346	346
Aircraft carriers:				
Active	15	13	11	11
Reserve	1	.....	1	1
Navy carrier wings:				
Active	13	11	10	10
Reserve	2	2	1	1
Air Force:				
Active fighter wings	24	15.3	13	13
Reserve fighter wings	12	11.3	7	7

[1] Includes 15 enhanced brigades (equivalent to 5+ divisions). Also includes 8 National Guard Divisions (24 Brigades).

FORCE STRUCTURE AND PERSONNEL

Sir, very briefly, there is no change in this year's budget request in our force structure. The "Bottom-Up Review" goal, which we reached 2 years ago, is the same. There is no change to that program.

I have got to tell you that this is under deliberation right now in the "Quadrennial Defense Review," but there are no decisions that have been made about that. But, clearly, this budget—basically, we got to our force structure, and we are staying there for the time being.



Personnel: As you can see, we continue to have reductions in personnel. In this case, there are cuts. And so I am showing you that the cuts are tapering off and getting smaller. The black bars are the military reductions; the lighter bars are for civilians. We thought that we were going to be done with military reductions last year. This year's budget we are proposing another 21,000 cuts—about 11,000 out of the Navy, 10,000 out of the Air Force—below where we thought we were going to be.

And this was a product of reviewing the program, cutting out some overhead. These are noncombat billets that were eliminated. This is going to be controversial. Because last year, the authorization committee put a floor in the law and said we could not go below that. We treat personnel not as an independent variable. We do not program a level of personnel. We program missions and say, what do we need to have by way of dollars and equipment and facilities and people to do that? And we honestly thought we could do it with 21,000 fewer people, all in the Navy and in the Air Force. There is no cut in the personnel levels in the Army or in the Marine Corps.

There is about a 10,000 reduction in the Reserve components. In the case of the Navy Reserve, it is down about 2,000 below what the "Bottom-Up Review" level numbers were, and the active Navy was down about 10,000.

You see that the civilians are still on the glide path to be cut. And we are still cutting about 4 percent a year of our civilians. Now, we do not have any programmed RIF's in this year. We think we still can accommodate it through voluntary separations. But we still are going to be separating 28,000 civilians in fiscal year 1998.

HIGH LEVELS OF READINESS SUSTAINED

	Fiscal year—		
	1996	1997	1998
Army:			
Tank miles per year	618	800	800
Tactical hours per crew/month	13.9	14.5	14.0
Navy:			
Tactical hours per crew/month	22.8	23.8	23.7
Steaming days per quarter:			
Deployed fleet	50.5	50.5	50.5
Nondeployed fleet	29.6	28.0	28.0
Air Force: Tactical hours per crew/month	20.0	19.3	18.7

READINESS

For readiness—and this is only the most superficial look at readiness—and clearly, when we go through the hearings, you will be asking all of the services to be more explicit to you. I just wanted to show you, as a measure of input. But basically, we have resourced readiness the same way we did these last 2 years.

Now, the Army is always down a little bit. They always budget for 800 miles, and they tend to execute less than 800 miles. So that is the phenomenon we saw there. We anticipate no reduction in readiness that comes from the way we input the resources.

Senator LAUTENBERG. What does the 800 miles represent?

Dr. HAMRE. Sir, it is a very crude measure that tries to reflect the composite base of activity for a battalion.

Senator LAUTENBERG. Is that per tank?

Dr. HAMRE. Per tank, yes, sir—per vehicle, where we count them. And we only count tank vehicles in combat units. And then we normalize everything to that one measure. It is not a particularly—it is a very highly aggregate measure that only is useful in telling you rough trend lines over time.

I should say, sir, that this is the first time that we have actually budgeted simulator miles into the readiness program. These were all real miles, on the ground, driving vehicles. The Army, this year, has proposed about 70 miles are actually done on simulators for the first time. It was their proposal.

Senator LAUTENBERG. Forgive me a moment, Mr. Chairman.

Sir, are you saying that 800 miles is the minimum level per unit that is required to keep this vehicle in a state of readiness?

Dr. HAMRE. Yes, sir; it is what we budget for the Army as an aggregate. Some units will be higher, some units will be lower. But, on the average, we budget 800 miles per combat vehicle as a rough measure of how much dollars we put into the fleet for the readiness. We expect no readiness problems in the Army as long as we get the supplemental. And I have to go through that in just a moment.

You will see a minor reduction in flying hours for Army helicopters. Those are all out of noncombat administrative helicopters—the helicopters that are flying people around in the rear areas.

There is also a minor reduction here in the Air Force. And that was because they went through a review of the training syllabus and actually felt that they could squeeze out one-half a flying hour per month with no change in their readiness profile.

So we honestly think our readiness program is solid. It will be just like it was last year and the year before.

Senator STEVENS. Does the time in combat zones count toward that?

Dr. HAMRE. Sir, what is embedded in here—for example, in 1997, those units which are in Bosnia today, their readiness program was built into those numbers. In addition, the supplemental is for only the marginal cost in addition to what we budgeted for them.

So, yes, those units that are in Bosnia right now, their readiness program is assumed by their activity in Bosnia. But we are adding a supplement of additional dollars, because we do not have enough to pay for wartime conditions.

QUALITY OF LIFE INITIATIVES

Pay Raise

Provides full legal pay raise through the FYDP

Housing

Expands use of Family Housing Improvement Fund

—Navy has quadrupled housing units provided at Corpus Christi at lower cost using FHIP

—Currently evaluating a number of projects with a goal of providing over 12,000 units more economically

Health Care

Maintains health care benefits at lower cost (95 percent of eligible beneficiaries under TRICARE)

Average out-of-pocket savings of $170 to $240 for enlisted personnel

Commissary

Sustains commissary benefit through Performance Based Organization initiative

QUALITY OF LIFE

And very briefly, on quality of life. Secretary Perry, as you know, who built this budget, put a high priority on it. And we have tried to do that. We have a full legal pay raise throughout the FYDP. It is 2.8 percent in 1998 and 3 percent per year in the out-years. That is one-half of 1 percent below the ECI. That is the legal maximum. For civilians, it is 1.5 percent below the legal maximum.

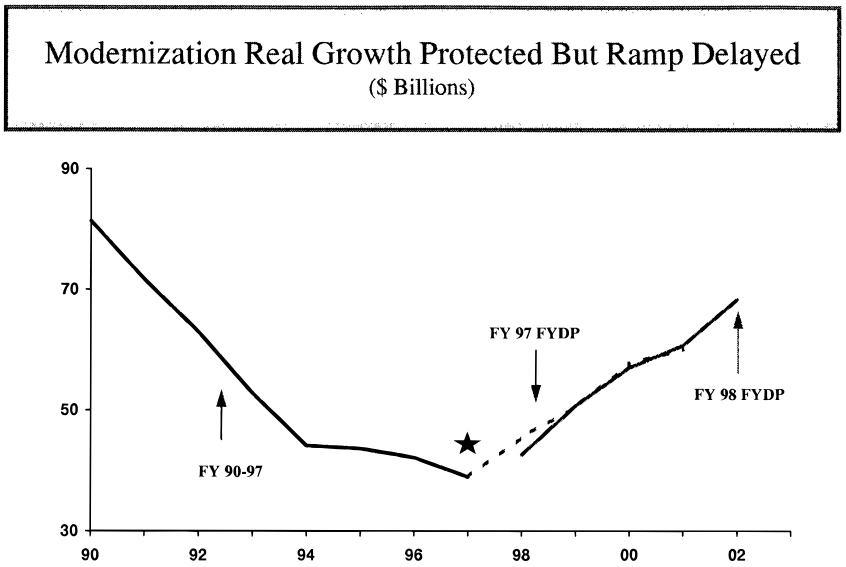
We have expanded use of the housing fund that Congress authorized us to enter into. This is using private sector initiatives to leverage our Milcon dollars. We honestly believe that the private sector gets 30 percent more output for the same dollar input because they are more efficient in using private sector techniques. They do not go through the kind of cumbersome contracting techniques that we do in Milcon. And so we are trying to use that to get bigger oomph out of this program.

There is not a lot more housing being built by this program this year. We held at roughly last year's level. We would like to get more than we have. This was a balance that we had to strike.

Our health care program—I know one of the questions you may be asking is: Have we properly funded our health care program? And I believe we have, although there may be a budget amendment coming, and I would be delighted to talk to you about that. We are converting over to TRICARE; 95 percent of our people will be under TRICARE by the end of fiscal year 1998. And this is definite savings for people who are right now paying out-of-pocket expenses. And they will be saving on the average from $170 to $240 per person.

Our commissary program is not changing, even though we are changing the organizational concepts to more of a business-like process. Let me give you an example of what this is to do. When DECA started, when they brought all of the commissary operations together, they inherited a real hodgepodge. And one of the things they wanted to put in was bar scanners, you know, at the checkout counters that was integrated into the inventory control systems.

It has taken us 3 years to go through the normal Government contracting procedures—something that Giant Foods could have done in 3 months. So we are trying to get freed up from those kinds of cumbersome regulations so we can make DECA function much more like a commercial entity.



MODERNIZATION FUNDING

This is where I think there is some controversy and disappointment with our program from your perspective. I know that Secretary Cohen feels that if there is a weakness in this budget, it is in this area. It is in modernization. This is history. This left line here. This is all history. This is down about 58 percent in real terms, from 1990 down to 1997. This is where we ended up. That star is where we ended up last year, where you added about $5 billion to our budget, more than we requested. So it went up.

This dashed line is where we had planned to be 1 year ago. And this right solid line is where we are now. Let me just discuss briefly the relationship of the numbers here. We are down compared to—well, we are up compared to where we were 1 year ago in our program. We are up about $3.9 billion. But we are down about $1.7 billion from where you appropriated last year. So if you compare us to where you ended up last year, we are down about $1.7 billion in our proposal to you.

Probably more importantly is, last year, we had proposed to be at this level—roughly $45 billion—and we are only at $42.6 billion.

Senator STEVENS. None of your proposed rescissions or reprogramming affects the level of that star?

Dr. HAMRE. Sir, the cancellation that we have proposed—the $4.8 billion cancellation—we had to go through a process with OMB to estimate the outlays that come with it. And it does assume that about one-third of that $4.8 billion would be procurement.

Senator STEVENS. Well, that star is——

Dr. HAMRE. This star is where we ended up. It would be slightly lower, by about another $1.5 billion to $2 billion if we were to go that route. Again, as I said, I am not sure you are going to agree with that.

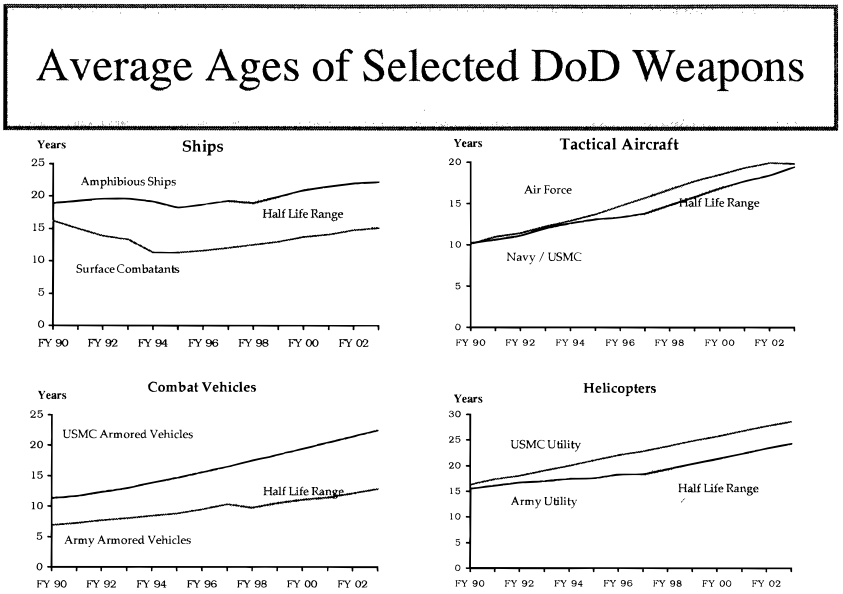
Senator STEVENS. Does that right line reflect the changes?

Dr. HAMRE. Sir, this right line simply reflects what we have in the FYDP, including budget year 1998, for procurement. And this line would not be changed based on what happens with the rescission or the supplemental. That number is the number that we have put in front of you, and it is about $2.8 billion or $2.9 billion lower than what we wanted it to be last year. We want it to be on this curve, and we clearly had to trade dollars away from procurement to put it into O&M. And it was largely because of some holes in the Air Force and the Navy budget that we had to plug.

I can come back to any of this, because I do know that this is where there is a lot of dispute.

Senator STEVENS. Yes; do that.

Dr. HAMRE. Yes, sir.



AVERAGE AGES OF DOD WEAPONS

Sir, I showed this to you 1 year ago, and it is not dramatically different from where we were 1 year ago. But that is showing you the problem we had on why we have got to get our modernization program up. I am showing you ships, tactical aircraft, helicopters, and combat vehicles. And I am showing you the average age of these fleets.

Obviously I want to be in this gray band in every case, because that represents roughly one-half of my fleet size is younger than that, roughly one-half of it is older than that. And that is roughly a planning factor. It might be an artifice, but a planning factor we can use.

There are several things to conclude from this. First, note that the trend lines are all in the wrong direction. Nothing is coming down in average age in our program; everything is going up. You would like to have these things pointing down, but they are not. So it is getting worse. Our average age—and I use that simply as a surrogate for modernity of our combat—you know, the fighting tools. The trend lines are adverse. They ought to be going the other way, and they are not.

The second thing to note is that, invariably, by the time we end out the period, with the exception of surface combat vehicles—surface combatants I should say—they go above the average age in the out-years. So this is a big problem to reverse. Because not only are the lines heading in the wrong direction, but when they are above the half-life point, you are running fast, but the escalator is moving faster than you are.

So we have to do something about this.

That is part of the reason why—just to go back to the previous chart—we have got to get up to the $60 billion range, to start re-

versing that. And we cannot really tolerate the slippage that has been occurring every year, where we said yes, we are going to get up that curve, and every year we get into the budget year and we tradeoff procurement dollars to buy something else, to buy Bosnia, to buy back holes that exist in the O&M account, or something else.

So we have got to do something about it. And that is really the core of the QDR problem. That is what we have to do in the "Quadrennial Defense Review."

Senator DOMENICI. Mr. Chairman.

Senator STEVENS. We are going to get back to it. We said we would let him do it.

Senator DOMENICI. I just wanted to make one quick observation. That last "we," you include you, do you not?

Dr. HAMRE. Oh, yes, sir. As a matter of fact, I was really talking about "we" in DOD. We have to do that. We are not assuming our top line is going to go up to fix this problem. We have got to do that inside our own top line.

Senator DOMENICI. Thank you.

HIGHLIGHTS OF MODERNIZATION

First priority to leap-ahead systems
- Continues Comanche, V–22, NSSN, F–22, Joint Strike Fighter, F–18 E/F

Sustain Cost Effective Upgrades
- Funds CH–47 engine, Longbow Apache, Abrams Tank, Bradley sustainment, Medium Truck SLEP, AV–8B remanufacture, B–1B conventional upgrades

Expand battlefield situational awareness
- Increased funding for Army digitization, UAV's, Global Broadcast System, SBIRS, MILSTAR, Cooperative Engagement

ACTD's/Dual Use
- Accelerates introduction of state-of-the-art technology into the operating forces

Stronger BMD program
- Significant increases in Airborne Laser program, BMDO's Theater High Altitude Area Defense (THAAD), and Navy Theater-wide Ballistic Missile Defense (NTW BMD) programs

HIGHLIGHTS OF MODERNIZATION PROGRAM

Dr. HAMRE. May I very briefly discuss the modernization program we have submitted to you.

We did put our highest priority on these programs—kind of the new leap-ahead technology systems. And these are things that are not going to be with us for years in some cases. The E/F is now coming on board. But the F–22, that first squadron does not stand up until 2004—I think it is 2002—something like that. A very long period of time. So we have to think in long-term ways about our modernization, which is why we continue to put primary emphasis on major new combat systems.

We do have upgrades going on. And that is where the bulk of the things for the day to day is underway. It is not particularly bigger than it was 1 year ago. We did continue a lot of emphasis on the battlefield awareness initiative, really started by Admiral Owens when he was the vice chairman. We continued it. And these are very important, very high-leverage programs.

We are putting some continued emphasis on the ACTD's and on the dual-use. It is not dramatic funding—about $300 million. And in BMD, we have a stronger program. I do know that this is going to be why they debated during the year, how much stronger is it, et cetera. But we have put about $2.5 billion more into BMD.

BALLISTIC MISSILE DEFENSE PROGRAM

Accelerates first unit equipped THAAD (from 2006 to 2004)
Reduces risk in Navy Theater Wide
Accelerates SMTS first launch (from 2006 to 2004)
3+3 NMD program stays on course

BALLISTIC MISSILE DEFENSE PROGRAM

Let me show you that program very quickly. So we have accelerated it. We have added about, as I said, $2.5 billion. We put in $730 million into THAAD, the theater high altitude air defense system. This is the Army-managed system, high-rate, outside of the atmosphere interceptor. We have brought forward its deployment from 2006 to 2004.

Paul Kaminski, who is the Acquisition Under Secretary, believes that this is paced only by technology—this date. We have had some failures—six failures in six shots at that. And so, the seventh one is coming up here within 1 month. So we have to make that one work or I think we have to go back and look at this program. And I am simply quoting Paul Kaminski on that.

This is Navy theater wide. It used to be called Navy upper tier. We put in about $250 million more into this program. This is a very tough technical problem. And again, I am not the expert here, so I am only parroting the things that I have heard from Paul and others. We are taking here—this is to intercept outside of the atmosphere—and you want to intercept outside of the atmosphere against attacking RV's with penetration aids.

So you need to have very sophisticated electronics that can pick out which one is the RV and which one is the decoy when you are outside the atmosphere. That dictates very sophisticated electronics, and we are trying to pack it in a very small vehicle. This is a very risky technical project. And, therefore, we feel this is paced by technical risks, not by budgeting.

This is the old brilliant eyes. We have to move that over from 2006 to 2004, just like we did for THAAD, in order to get the leverage out of the program. So the first launch moves up to 2004. We do not think that is a risk. Our three plus three NMD program is staying on track where we were. It is really a two plus three program now, so that we can make a deployment decision by the year 2002.

One of the questions you will say and the criticism we received last year was, you have got a three, but you do not have the second three. You have not put in your budget the procurement dollars to buy the second three. You have only put in the development dollars for the first three. And we will have to deal with that this summer, when we go through the program with you—are we going to put those dollars in or not?

Now, the administration's position is we will put the dollars in when a threat emerges that says we have to do it. And we feel we are well ahead of the threat, but none of us—that is one of the debates that we are going to have this summer. And I know that Secretary Cohen has promised a full, open discussion about that both with you and inside the building.

QUADRENNIAL DEFENSE REVIEW

Process Underway
- Steering Group conducting a comprehensive review
- Military Departments, and OSD and CJCS working collaboratively
- CJCS and Chairman of National Defense Panel to provide an independent assessment of preliminary findings to Secretary
- Secretary submits the QDR results to Congress
- Secretary, after consultation with CJCS, submits final NDP report to Congress

Everything is on the table
- Strategy
- Modernization
- Force Structure
- Infrastructure
- Readiness

Results to be included in fiscal year 1999 budget

"QUADRENNIAL DEFENSE REVIEW"

Finally, sir, let me just say the last part about our overall budget. And this is, I mentioned, the "Quadrennial Defense Review" which is underway right now. I think you have got 10,000 people at the Pentagon who are working on it. It seems everybody is doing it. We have got a steering group that is outlining the various categories that we ought to be looking at. Everybody is working on the process together.

The Secretary has said everything is on the table. We are looking at our strategy. We are looking at our modernization program. We may not get to the $60 billion as fast, for example. We are looking at our force structure. We may cut the force structure below the level that I have shown you on the chart. Everything is on the table. And I cannot tell you—there is no formula right now on how we are going to do it.

But what we do know we need to do is we have got to eliminate these claimants that come against the modernization program every year when we build the budget—$4 billion migrating out of procurement into O&M. That is what happened to us this year. We have got to get at the underlying problems.

Senator STEVENS. What is the time line on that process?

Dr. HAMRE. Sir, we are required by statute to provide a report to the Congress by May 15. Now, I cannot tell you—it is not going to be engineered in the FYDP by May 15. We will go through the program review and the budget review during the summer and the fall to do that. But the major outlines are due by May 15. And the Secretary is committed to do that. And he has also said that he is anxious to consult in advance, before that happens, with all of you.

Now, sir, if I may, I would like to very briefly talk about Bosnia and our unfunded program in Bosnia.

ESTIMATED FISCAL YEAR 1997 OPERATIONS COSTS

[In millions of dollars]

	Total	Funded	Unfunded
Bosnia	2,524	677	1,847
Southwest Asia	714	590	124
Drawdown Recovery	35		35
Totals	3,273	1,267	2,006

FISCAL YEAR 1997 OPERATIONS COSTS

This is our biggest risk to readiness this year. Our total bill for contingency operations in fiscal year 1997 is $3.3 billion. And I must say, it would not have happened without your leadership, Mr. Chairman, and this committee's leadership. You gave us $1.3 billion this last year. And I know those were hard dollars to come up with in the middle of last year's conference. And thank you for doing it. Really, it made all the difference in the world for us.

But we are short $2 billion. And it is largely because of Bosnia. We did not have it in our budget, because we did not have the decision made we were going to stay in Bosnia through SFOR (stabilization force) until December 20. So this program is not funded.

There are some minor cats and dogs in these other numbers, but basically we have a request before you for a supplemental for $2 billion in offsetting rescissions. Although we have not proposed specific lines for rescission. And that is something that I need to be able to work with all of you on.

BOSNIA COSTS LESSONS LEARNED

Problem:

Significant cost growth in Bosnia budget estimates submitted to Congress

Direct Factors

Incomplete knowledge of mission specifics
Environmental factors not understood
Operation changes
Revision of program/pricing assumptions

Contributing Factors

Contingency operations estimating process not standardized
Reliance on ad hoc cost estimating processes

BOSNIA COSTS LESSONS LEARNED

I know that my personal credibility with all of you is lower than a snake's belly in a wagon rut when it comes to Bosnia cost estimates. Because when I came up here last year, I said $2 billion. And we were off. We were off significantly. I have backup charts that go through this.

Why were we off? We are going to spend, when the whole thing is said and done, about $6.5 billion. Why were we off?

Well, we did not have a good understanding of what the nature of this mission was going to be. We thought we did. And we made our initial forecast. But we had to make changes once we got on the ground.

And General Van Alstyne is here, and he can talk to you much more about that and the content of that.

It turned out to be a very different program by the time we got there. The environment—we had the famous 100-year flood on the Sava River. We took every bit of bridging the United States Army had in Europe and took it to that one place and had to use it. Very severe environmental conditions that we had not anticipated.

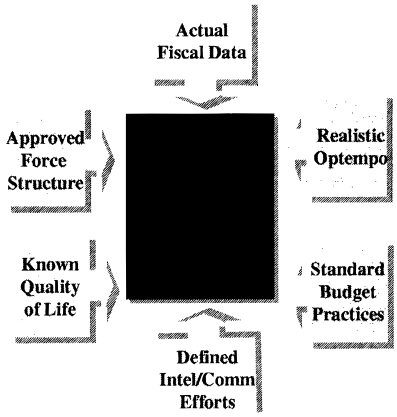
We did change the nature of the operation. We had fewer base camps in the original concept. And we have more base camps now, as part of the programs—that we were more out with the community, in terms of policing the warring factions. And, frankly, we just blew it on the cost estimating. I have got to be honest about that. A big part of it was we just blew it.

So, now, why do I think our estimate is any good this year? It was not any good last year; why is it any good this year?

Bosnia Cost

Why have Confidence in our FY 1997 Estimate?

- Based on actual FY 1996 fiscal data
- Incorporates lessons learned from last year
- Utilizes refined force structure
- Built around existing and stabilized operating concepts
- Developed by DoD Components using standard budget practices



It is based on actuals. When we put our budget together last year, we based it upon a forecast using a model. The model we used is the one we used to forecast our costs for Somalia and for Haiti. And it was relatively accurate for those two operations. It was way off for this operation.

So this year's budget request is actually built on fiscal data. We know exactly what it has cost during the last 12 months. And that is the basis for our forecast of this year's budget. We know our quality of life situation. We know what OPTEMPO is like. So I think this year's budget forecast is—you know I am not going to have a shock to you. I think I have got the upper bands—that it

is expensive. And I said, the hole bill for Bosnia from the beginning through getting out in July–August 1998 is about $6.5 billion.

SUPPLEMENTAL REQUEST—RECAP

When do we need more money in fiscal year 1997?

Approval of funds needed by early April

Why so soon?

If supplemental is not approved by early April, the Services must begin adjusting to reduced funding levels

—Training schedules will be revised and training support contracts canceled
—Training opportunities will be irreparably lost this year
—Readiness will be seriously degraded even if full supplemental is approved at a later date

TIMELY PASSAGE OF SUPPLEMENTAL APPROPRIATIONS

One last plea. I hope, if it is at all possible, that we can ask for your help in getting the supplemental before the Easter recess. We are, right now, using our fourth quarter O&M for training to pay for Bosnia. And if we do not get replacement soon, the Army and the Air Force—they are the primary players here that are affected—are going to have to start canceling training programs and rotations at the National Training Center and red flag and green flag and things of this nature, in order to pay for it. So we really do need your help.

And if it is at all possible to be able to do that here by about the middle of April, that would be great to really do that. If we know that you will be active and that markup is coming, then we can hold off and we do not have to take any extraordinary measures.

Sir, we are prepared to go over anything further in either the overall budget or on Bosnia. That concludes the formal tract. I do have more information. I will be glad to answer any questions that you pose to me.

Senator STEVENS. I hope the Senators will agree that we will limit our questions to 10 minutes the first time around.

I was negligent in not calling on my good friend to see if he had any opening statement. I put mine in the record. This is our first hearing, but I hope everyone agrees, again, this year, we will follow an early bird rule. That is, unless there is an objection, that will be the case. You all understand the early bird rule, I assume?

[No response.]

FUNDING FOR PEACEKEEPING

Senator STEVENS. Let me start off, then, if I may.

How much is in your budget for 1998 for peacekeeping?

Dr. HAMRE. Sir, I know there is a formal definition for peacekeeping. So may I come back and give you——

Senator STEVENS. Well, for what we saw in Kuwait and Saudi Arabia and Bosnia, what we see in the Pacific, which is related to peacekeeping.

Dr. HAMRE. Yes, sir.

Senator STEVENS. Not normal training, not normal deployment.

Dr. HAMRE. Yes, sir; we have, for Bosnia, in our 1998 budget request, approximately $1.6 billion. We have, for Southwest Asia—that would be for intrinsic action for Southern Watch and Northern Watch—we have—I will give you the precise number—we have got, altogether in 1998, we have got $2.2 billion; $1.5 billion is for Bosnia and $700 million of it is for Southwest Asia.

Now, the Southwest Asia bills are higher than that, but we have received payment in kind and other support from Kuwait and Saudi Arabia. So that those costs are higher, but those are the costs that are in our budget, and that is all we would need.

TEMPO OF OPERATIONS

Senator STEVENS. Well, I have already expressed to the Secretary my point of view that the tempo of operations in Kuwait and Saudi Arabia and Bosnia and Italy are at a higher level than we have had during the time when there was intensive combat in the area. I do not know what we are going to do about that. Because the estimates that we used for our appropriations last year were as bad as yours, but, when we got there, we found out why.

Who controls now the level of operations? Do you have anything to do with that, in terms of the money that is available? Does the money we put up have anything to do with the amount of money they are going to spend?

Dr. HAMRE. Sir, the money that you provide us has an awful lot to shape what we choose to do. But there is an institutional disconnect—and I do not mean this in a negative sense—but there is an institutional disconnect sometimes in this area, because the people who call for operations are CINC's, they do not control the dollars. Those are controlled by subordinates. And it is very hard for a subordinate, sometimes, to tell their superior officers that they are not going to do something.

And so there probably is occasion a pace of activity that is higher than we budgeted for, and the budget is not what is pacing it. So we work very hard with that. We have an effort underway right now, through JCS, that is trying to give us a better handle on that, so that CINC's do know what the cost of an operation is going to be.

Senator STEVENS. I hate to tell you this, but we presume that you are sitting there by the Secretary and when the President says, let us send more people to Kuwait, someone, such as you, says, well, Mr. President, we do not have the money to do that.

Dr. HAMRE. Sir, I do do that. But I also have to tell you, my job is to support my Secretary when I—when he has made a decision and I give him the information, he says, well, we are going to do this and you are going to have to find a way to take care of it—yes, sir, that is my order and I will do that.

I am not going to tell him, sir, you cannot go to Bosnia because I do not have it in the budget. Well, last year, we were severely criticized for taking the money from where we did to put $1.2 billion into the budget. It was less than 50 percent what is actually being spent during this year. As a matter of fact, the spending rate at the time we finally ended up the bill was in excess of what—we should have put more in, because we saw what was being spent. I do not understand how we can get any control over it.

Senator STEVENS. Let me ask this. Does anyone consult you about the expenditures that are going to be made in deployments?

CONTROLLING OPERATIONAL EXPENDITURES

Dr. HAMRE. Sir, General Shali has put a very important new requirement on every one of the CINC's and his own organization, when any deployment is to be made, there now needs to be a cost estimate associated with it. So that we do know that information and people are thinking about it.

I got to tell you, it was not done before this year.

Senator STEVENS. Well, when we were in Kuwait—and as I recall, that deployment was not one requested by the host country, it was not one that was consulted with the Congress at all, and we were told that that was a deployment for 20 to 50 years. Were you told that before they made that deployment?

Dr. HAMRE. No, sir; and I honestly do not think that my Secretary thinks that that is a 50-year commitment right now.

Senator STEVENS. Well, the Secretary is not spending money; the CINC is. How do we get some control over the CINC's? That is what I feel, after this last trip. The CINC's are spending money without regard to how much we have appropriated. They put in a request to you for money. You cut them back. We cut them back—or we put some money somewhere else. We are not cutting the overall budget. But they go ahead and spend based on what they have requested.

Now, how do we get some control over the CINC's financially? Is there a financial officer for the CINC?

Dr. HAMRE. No; there is not. The CINC's do not have resource management organizations under them. They rely on their subordinate organizations to do that.

But, sir, I have got to tell you, philosophically, I need a CINC to worry about the military threat, not worry about funding sources. That is really for me to do for him. I do believe he needs to be aware of what it costs.

Senator STEVENS. Well, true combat, I would agree with you. But when I see a CINC planning for a 20- to 50-year deployment without any consultation with Congress, then I start to worry about the system that we operate. How can we fund the Department now for another year? Look what has happened to us. We put up—we rearranged the money last year, gave you money for Bosnia, and now we are looking at reshaping the 1997 budget to the tune of almost $5 billion before we even get to 1998. And we are going to have extreme difficulty to do that in this committee.

Incidentally, I want to thank you and Mr. Raines for acceding to our request. And that is, we are not getting too specific about where the money is coming from.

Dr. HAMRE. Yes, sir.

ACCURACY OF COST ESTIMATES

Senator STEVENS. Because, obviously, it looked like you were going to come up and just cut out all of the congressional priorities and leave the ones there that the administration wanted. There has got to be some balance in this reshuffle of money. But we know

we have to do it. All of your chiefs have come to us and said they have to have this money by April. We respect that.

But someone is not putting the arm on the CINC's and telling them to slow down in the rate they are spending money. If there were people in harm's way, we would agree with you, I think—at least I would—about no restraints on CINC's. But this is not harm's way. This is planning for future deployment.

And I was just aghast when I saw what was going on, in terms of planning, by the expansion of Aviano, expansion of the Kuwait deployment, the expansion of the deployment in Saudi Arabia, without any consultation with us or the Armed Services Committee, to the best of my knowledge, in terms of the rate of deployment and the tempo of the activities under that deployment.

We cannot trust your numbers right now compared to what I saw, in terms of the rate of flying, the rate of deployment, the kind of activities taking places, in terms of rotation out there. And maybe I am speaking too much for the committee. This is my feeling.

Dr. HAMRE. Yes, sir.

Senator STEVENS. I do not know how we can recommend to the Senate that this budget really reflects what is going to be spent in 1998, in view of what has happened in 1997.

Dr. HAMRE. Sir, we have built our budget estimates for intrinsic action—Southern Watch and Northern Watch—off of the last 4 years of actuals. I actually do not think we are off in our estimate to you. You are raising a bigger question, though. And you are raising a question about what are the ways in which resource decisions are brought to bear by CINC's when they are making operational decisions.

I am not trying to duck this, but I think this is a thing you should raise with General Shali next week. General Shali has actually put in place some constraints for the first time, where we have to think about and consider those costs up front.

Senator STEVENS. Well, we deal with other departments in this committee. And if we have a portion of the Fish and Wildlife Service or the Park Service in Hawaii, they do not go out and start building buildings and hiring people without some clearance with their central fiscal officer. What I am hearing is the CINC's do not have a financial officer; you do not have any control over them. They are going out and spending money, and they give you the bill. And now you are giving us the bill. All in the same fiscal year, now, Doctor.

We are not talking about 1998 now. We are talking about this fiscal year. We have to reshuffle fiscal year 1997 to the tune of almost $5 billion. And we have only got, what, one-half of the year left by the time we do it. As a matter of fact, just barely, if we get it done by April 1.

The effect of that is staggering in terms of what we wanted to do in terms of priorities for defense. And I think we have more than erased what we did last year, in terms of giving an increase of $8 billion over what the President wanted. You have gone ahead and spent the money on what you wanted to spend it on anyway, without any control at all.

Now, I am going to try to find some way to put some controls into effect so someone is responsible, when we see the excesses of Haiti, Somalia, Bosnia, and now Kuwait and Saudi Arabia—all of them are far in excess of the estimates. Somehow or other, how can we tell these people in the Senate that this is—we can once again predict that we are going to have rising—you have a rising line there. It is not true.

Because you are starting from a much lower level, in terms of what has actually been spent on the program. You have spent money for things that were not on the program. And that really disturbs me. I do not know if it disturbs the others. But I do believe—I have got 1 minute left—I believe we have got to have some meeting of minds with the Department, because we cannot have an impact.

We are going to lose the momentum we have put behind the national missile defense, despite what you said. We are going to lose the momentum in terms of research and development. And we are going to lose the development in terms of modernization, because the money has been spent in peacekeeping efforts, which we were told we were going to be at a very low ebb. We were supposed to be out of there by last December.

Now we find that we have another deployment started in Kuwait and another one started in Saudi Arabia, and I think we are going to see the same thing from those unless we put some constraints on the Department. Someone is going to be responsible, and I think someone ought to go to jail if you spend more money than we give you in a particular function.

Now, there has to be some control over this Department if we are going to have the mutual respect that we should have.

Dr. HAMRE. Sir, I am the one that gets to go to jail if that happens. [Laughter.]

Senator STEVENS. No; you are not the one spending the money; you are just telling us that it has been spent.

Senator LAUTENBERG. We will put you on parole.

Senator STEVENS. Senator Inouye.

Dr. HAMRE. I am glad the time ran out, sir. [Laughter.]

Senator BUMPERS. And that is one of his tamer presentations, Dr. Hamre.

Senator INOUYE. Mr. Chairman, I have a whole set of prepared questions, and I ask that they be submitted.

I am going to be submitting a whole set of questions.

Dr. HAMRE. Yes, sir, and we will be responsive.

BUDGETING FOR MAJOR REGIONAL CONFLICTS

Senator INOUYE. I have just one question.

Senator STEVENS. I did not get to my questions. [Laughter.]

Senator INOUYE. Four years ago, the most commonly used term was "major regional conflict." It was used in almost every other paragraph, major regional conflict.

Dr. HAMRE. Yes, sir.

Senator INOUYE. And that the budget was sufficient to have our Nation be involved in two major regional conflicts. In this budget presentation, there is not a single time when you used the term "major regional conflict."

Under this new budget, how many major regional conflicts can we be involved in at the same time?

Dr. HAMRE. Sir, this budget this year is no different in terms of the planning assumptions from the previous years. It is based on the assumption that we will be able to fight two nearly simultaneous major regional conflicts. We have never said they were at the same time. We have always said they were nearly simultaneous. And we do not have sufficient resources to do two at the same time. We have never advertised that we could do that.

What we do have enough to do is to fight one at the same time and deter a second one at the same time that that is underway, with sufficient force that we can come and bring to bear to stop them from achieving their objectives during that period.

Senator INOUYE. Even with the reduction in surface vessels in the Navy and carrier forces?

Dr. HAMRE. Sir, there is no reduction in the surface vessels in the Navy in this budget compared to last year.

Senator INOUYE. What about carriers?

Dr. HAMRE. Sir, there are 12 carriers.

Senator INOUYE. And the air wings; are they reduced?

Dr. HAMRE. Pardon me, sir?

Senator INOUYE. The air wings, are they reduced?

Dr. HAMRE. No, sir; there is no change in any force structure with the fiscal year 1998 budget compared to 1997. I will doublecheck to make sure that is the case. But if it was, it was just part of the regular programmed reduction that went into the "Bottom-Up Review." But I will make sure that is right and get back to you, sir.

Senator INOUYE. Do you think we can sufficiently carry out our mission?

Dr. HAMRE. Sir, I can only quote what my Secretary has said and what the Chairman of the Joint Chiefs has said, that we can carry out our national strategy. There is risk associated with our ability to be able to do that, and we think that risk is acceptable, but we believe we can do that, yes, sir.

Senator INOUYE. Thank you, Mr. Chairman. I have another committee to attend, so I yield back the balance.

Senator STEVENS. We are glad to have your balancing influence, Senator. Thank you very much.

Senator Lautenberg.

HOST NATION SUPPORT

Senator LAUTENBERG. Thank you, Mr. Chairman.

Dr. Hamre, do we have any recovery, changes in percentages, et cetera, for the infrastructure requirements, or whatever costs we try to pass on to host countries, such as Kuwait, Saudi Arabia, et cetera? Are we maintaining a particular percentage that they are responsible for? We do not ask them to pay our salaries or things of that nature, but we do try to get them to cover some part of the costs for being there.

Dr. HAMRE. Yes, sir.

Senator LAUTENBERG. Shared by the host country.

Dr. HAMRE. Yes, sir; of course, the precise cost relationship between us and our host countries varies based on status of forces

agreements, and they will vary from location to location, but let me give examples.

Senator LAUTENBERG. Let us talk about Saudi Arabia and Kuwait.

Dr. HAMRE. Saudi Arabia: Of course, we have Southern Watch underway in Saudi Arabia. They provide assistance in kind to support the Saudi Arabia operation. That means fuel, water, things of that nature. In addition, as we made our relocation for force protection in Saudi Arabia there was a very explicit cost-sharing arrangement with them. The informal notion is that if it is inside of the boundaries of the camp and it is not permanent, it is our bill. If it is a permanent facility or outside of the borders, it is their bill. And they are paying it. We estimate that that will be about $200 million this year, sir.

Senator LAUTENBERG. So if it is outside of the encampment area, whether that is a permanent facility or not——

Dr. HAMRE. If it is outside, it is their responsibility. If it is inside and permanent, it is their responsibility. If it is inside and temporary, it is ours.

Senator LAUTENBERG. Saudi Arabia, are they paying that?

Dr. HAMRE. Yes, sir.

Senator LAUTENBERG. In full, 100 percent.

Dr. HAMRE. Sir, we have just concluded the negotiations or are concluding the negotiations on the final details. We are very confident that they will be paying that.

Senator LAUTENBERG. Negotiating from what base, Dr. Hamre?

Dr. HAMRE. When Secretary Perry went over last July, he sat down with the senior leadership in Saudi Arabia and worked out an arrangement with them. But as is always the case, the fine details have to be worked out, and they have been doing that. I would like to give you a more formal response, sir, than what I can do off the top of my head.

Senator LAUTENBERG. I would like to have it.

[The information follows:]

The agreement that Secretary Perry and HRH Prince Sultan entered into on July 30, 1996 required the U.S. to fund the immediate relocation expenses to move our troops to safer locations and the Kingdom of Saudi Arabia (KSA) to fund permanent facilities to include: infrastructure (water, fuel, electricity, and sewage), force protection enhancements, external security for all facilities, and housing. In January 1997, USCENTCOM formally requested the KSA to fund a number of permanent facility requirements. As a result of several executive level discussions related to the U.S. request, the KSA has committed $200 million for these permanent facilities. While detailed U.S./KSA negotiations continue, we expect the $200 million will fund the following efforts: force protection at Eskan Village; housing and force protection at Prince Sultan Air Base; relocation of troop housing to more secure location in Taif; consolidation of housing at Dhahran; strategic, tactical and local communications facilities; most operations, administrative, and maintenance facilities for air-based operations; and a medical facility at Prince Sultan Air Base.

Senator LAUTENBERG. How about Kuwait?

Dr. HAMRE. Yes, sir.

Senator LAUTENBERG. Is that the same?

Dr. HAMRE. Please let me just give you a formal response that is correct. I can give you in general terms yes, we are receiving support. It turns out about one-third of our costs for being in Kuwait is borne by the Kuwaities, and we pay about the other two-thirds.

[The information follows:]

Beginning in 1996, Kuwait expanded the extensive support they provide U.S. security forces in-country. They now provide enhanced U.S. force protection following the Khobar towers bombing in Saudi Arabia, additional support for the more extensive exercises scheduled by U.S. forces, and storage for the additional military assets temporarily deployed to Kuwait following the latest Iraqi military actions. The U.S. military does not pay rent for any facilities in Kuwait, nor does it pay airport or port fees. All operational and residential facilities are maintained by Kuwait, and all food and transportation requirements are covered. Kuwait pays all costs of conducting Army battalion level training exercises (Operation Intrinsic Action) to include troop transportation costs, maintenance of propositioned brigade equipment, storage buildings, barracks, supply points and purchase of spare parts. In addition Kuwait's Udairi range, one of the most significant training areas available to U.S. forces outside CONUS, is made available free of charge. Finally, Kuwait has agreed to pay the full costs associated with the in-country deployment of the F–117 aircraft and a Patriot unit associated with Operation Desert Strike.

COOPERATION OF COUNTRIES

Senator LAUTENBERG. I will make an observation. I have been concerned about the cooperation of the countries and I have been disturbed by some of the impediments that we have run into in getting information from them. But if there is one thing that ought not to be a problem, it is to get them to carry the financial burden. That should be easy for them, and that is the financial side. I do not want to put our forces out there as a mercenary force. That is not America's objective. Our objective goes far beyond just being there at their convenience. But I would appreciate it if we can get that data furnished to the whole of the committee ASAP.

Dr. HAMRE. Sir, let me assure you, you will have no constraint getting information from me. I will get you whatever you need.

Senator LAUTENBERG. OK. And if you would, be selective. Those countries—you know, Bosnia, they are not going to be able to contribute at all.

Dr. HAMRE. Yes, sir.

Senator LAUTENBERG. But if there are things that any of these countries could do, and those countries that can contribute, I would like to see what percentage they are giving us, and whether or not they are delinquent in the flow of funds.

Dr. HAMRE. We feel very good about it, sir, and let me say—and I sure do not want to pick a fight—we are not there to save their necks. We are there because we have national interests where we feel it is very important for us to be present. And we share this interest with them. But we are there because of our needs.

Senator LAUTENBERG. Well, we are there because of our needs. But I will tell you, if you were protecting my house because you wanted to protect yours next door, I'd sure be grateful, and I'd make sure that we made it very comfortable for you to do that.

Dr. HAMRE. And they are being very responsive, but I will provide that information, sir.

R&D EXPENDITURES

Senator LAUTENBERG. There was a figure among your charts that I had a little trouble with, having to do with R&D. Can you just, any of you, pick out the page that had a reference to R&D expenditures?

Dr. HAMRE. I showed you this chart, sir, which shows that it is going down modestly over this period.

Senator LAUTENBERG. I would like to ask you this: Do any of the R&D projects get further shifted to the outside? We have partners in most of our major R&D projects. Thank goodness we have. The private sector is ingenious, more often than not, in looking for ways to develop things. Has that share changed at all, so that we can get a little better definition of what our expenditures mean in terms of the product that we gain?

Dr. HAMRE. Sir, I will get for you for the record the way in which the dollar split between Government and private sector evolves over this period of time. You will primarily see that it is coming out of the private sector because the major dollar expenditures are when you are developing new weapons systems, and as you phase out of those, which is why the line goes down modestly. It is going to be cut.

Senator LAUTENBERG. I just wanted to have some feel for whether or not we are doing less R&D than we used to. And considering that this chart shows about an even funding level, maybe there is more on the outside.

Dr. HAMRE. Sir, I think there are two ways, if I could be fair in describing it. I think there are two ways to characterize that. If you look at are we doing more or less in R&D, you can compare in nominal terms or real terms what did we do 20 years ago. We are doing less. If you were to look at it as a percent of our overall defense budget, we are doing far more. We have historically spent about 10 percent of our budget on R&D, and this budget has about 14.5 percent on R&D. So in depending on how you choose to look at the problem, I think we are doing well in R&D, given the overall constraints that we have as a Department.

Senator LAUTENBERG. Perhaps the general ought to answer this, but is there a balance between personnel requirements and advancing technology in some way? If we cut back on the numbers of people we have in training in the field, et cetera, do we still gain a military advantage based on technology, or are we in some way impairing our ability to do the job that we would like done?

General VAN ALSTYNE. I would propose that I do two things: First, that I take your question and provide a more detailed response. But initially, I would say definitely all of our systems, and I am sure as the chiefs of services or the Joint Chiefs come over and testify, they will make the connection between increased technology and the ability to perform, to accomplish their mission with a lesser force. So they definitely make the connection between an increase in technology and modernization and the ability to accomplish with current or a lesser force.

But, sir, I am a little bit out of my field. I would be pleased to provide a response for the record.

[The information follows:]

There is a connection between an increase in technology and modernization and the ability to accomplish the mission with a lesser force; however, any connection is both mission and situation dependent. There are well known examples of fielded systems which, using technological enhancements, have resulted in fewer people "in the field": stealth aircraft using precision weaponry can destroy in one pass the type of targets which, in the past, required multiple aircraft flying multiple missions.

However, this system may not be the appropriate weapons system for all missions and all situations.

Each of the services has better systems which demand fewer people for operation and maintenance; however, the unpredictability of future U.S. military operations will require the ability to mix and match forces and equipment. The mix will be affected by the traditional factors which play a part in any military operation: political objectives and restrictions, rules of engagement, geography, weather, etc. We cannot, therefore, say with any certainty that new technology and any resulting decrease in numbers of people we have training in the field will guarantee a military advantage for U.S. forces in all situations.

INTERNATIONAL COMPARABILITY OF DEFENSE EFFORTS

Senator LAUTENBERG. I would be very interested in maintaining our capability. I was struck by the reduction in the number of divisions in the Army—since I think 1990, was the year.

General VAN ALSTYNE. Yes, sir.

Senator LAUTENBERG. We were up at 18.

Dr. HAMRE. Yes, sir; we were up at 18, and we are down to 10.

Senator LAUTENBERG. And the requirements do not seem to reduce substantially.

I would ask you one more thing in the time that I have allotted here. What the charts do not show is how much we spend on defense relative to other—let us say members of the advanced societies world, the other countries who have obligations, feel the need to help participate in international affairs and maintain their own defense, as well, and some of them are restricted by philosophies that emerge as a result of World War II. But is our spending on a comparable level? Do we spend more on defense on a relative basis than the Frances, Germanies, United Kingdom, and I know that Germany has a particular structure. Do we spend more on defense than these countries, or do we spend less?

Dr. HAMRE. Sir, we provide to the Congress a report every year on relative expenditures from each of the countries. And I will have to get that and refresh my memory. I do not recall.

As I recall, we were one of the higher as a percent of GNP spending on defense, but there were other countries that spend a higher percent of GNP. I would need to share—I need to go back through that, sir, and I will have that to you before the day is out. I am not trying to duck your question, I just do not know it.

[The information follows:]

According to the privately published Military Balance, for fiscal year 1994 the following were the percents of Gross Domestic Product spent on defense:

France	3.3
Germany	2.0
United Kingdom	3.4
Canada	1.7
United States	4.3
Japan	1.0

Senator LAUTENBERG. I would not think that you did.

Thank you very much, Mr. Chairman. We will get that.

Senator STEVENS. Thank you, Senator. That is a good request. We will look forward to the answer to your question.

Senator Domenici.

COST OF MAINTAINING OLDER SYSTEMS

Senator DOMENICI. Thank you very much, Mr. Chairman.

I just want to make two observations before I ask questions. Mr. Chairman, one of the charts that the Comptroller presented——

Senator STEVENS. Page 13?

Senator DOMENICI [continuing]. Yes—had to do with the average age of selected DOD weapons. Maybe you could just put that up there very quickly. Let me, while he is putting it up, if you just look at the two on the right-hand side, one of the reasons we are having problems with reference to our budgets and O&M is that if you look up there on tactical aircraft and just look at 2002, the average age of the Air Force's planes will be then at 20 years—almost 20, am I correct?

Dr. HAMRE. Yes, sir.

Senator DOMENICI. And then down below, if you look at the helicopters you will see that the U.S. Marine helicopters in 2002 are averaging over 25, almost 30 years. And Army utility is there around 20, 22 years. I think what is happening, Mr. Chairman, is that these aircraft, and I assume the same is on ships, but I do not know that much about them, the cost of maintaining them is getting to be very, very high when they get that old. And there is a tradeoff when you have to spend that much money to maintain, replace engines, and the like. That is a tradeoff against procurement in the future, the way we are budgeting now, because to the extent that we have to do that it has to remain in O&M and clearly you cannot then reduce O&M and spend it for the weapons of the future. And I actually believe that it might be good exercise to tell us what might be a mixed scenario of replenishing more of existing kinds of aircraft and helicopters and maybe delaying some at the tail end, the entry of brand new weapons systems. I think in the meantime that the differential in costs may very well work out on our favor and the risks that are imposed because of delays on the other end may not be very serious. I just make that as an observation.

First, let me make my second one. Mr. Chairman, in my State I have now visited many of the military personnel on bases, and I have decided, with your help, that I would dedicate a bit of my time this year to the quality of life as it pertains to pay for the military men and women, especially at the bottom levels, and also the quality of life as it impacts upon family life on military bases. And I believe we have some serious problems with reference to child abuse, spousal abuse, divorce rates that are creeping up in the military. I think the military has to look at things to do on these bases to give families a better chance of surviving under these difficult times. I intend to ask the committee to perhaps even have a hearing on this issue of the family situation on our military bases: Are we doing enough to help them maintain a decent family life?

BOSNIA COSTS

Now, having said that, let me suggest that everybody has asked questions about Bosnia and the $6.5 billion, but I would suggest, and I would ask you, is it not entirely possible that that $6.5 billion is not enough, as far as our commitment? Is there not some planning going on as to what we will do there with reference to a large aid package to help keep the peace?

Dr. HAMRE. Sir, the $6.5 billion that I referred to is only the Department of Defense's bill.

Senator DOMENICI. Yes.

Dr. HAMRE. I will have to find out what the Department of State and others are doing. They are working on that.

Senator DOMENICI. Can we get that, Mr. Chairman? Are there other plans to spend more in Bosnia in addition to the $6.5 billion?

Dr. HAMRE. There are costs associated, for example, with equipment and training; there are costs associated with economic reconstruction; that are not in our budget. I will get it for you.

[The information follows:]

In addition to the $6.5 billion required by the Department of Defense to support operations in Bosnia for fiscal year 1996 through fiscal year 1998, there is $1.5 billion in U.S. support being sponsored by the Department of State and other domestic agencies for program requirements advocated by the Dayton Accords. Included are programs associated with economic reconstruction, humanitarian aid and assistance, and other support related to such programs as the civilian police force, U.N. peacekeeping, the War Crimes Tribunal, demining efforts, etc.

CIVIL WORKS IN BOSNIA

Senator STEVENS. Senator, if you will yield, we found evidence when we were over there that there is a substantial amount of civil works being done by reserve strength, spending Department money but doing civil works. Now, I think his question is a very good one.

Dr. HAMRE. Yes, sir.

Senator STEVENS. Are we hiding the reconstruction of Bosnia in the defense budget?

Dr. HAMRE. No, sir, but may I speak? I do know of some of this because I have had several conversations with General Nash about it. General Nash is indeed pushing some projects that look like civil works projects, but he uses that as a way to get into a dialog and working with the local warlords, as it were, with them so that he can get cooperation. So he is very explicit. The projects that he is doing that may look like civil works are actually very important from his standpoint in peacekeeping.

Maybe General Van Alstyne can speak to that, too.

General VAN ALSTYNE. I would just add one point, sir. In speaking with General Meigs, General Nash's replacement, the civil actions support that he is providing, in his mind, provide substantial training for the units concerned. So he sees that as a good deal.

Senator STEVENS. He can train those people in Alaska or Hawaii or in Arkansas.

General VAN ALSTYNE. Sir, I certainly would not argue with that.

Senator STEVENS. The question is training in Bosnia. If you are going to start the reconstruction of Bosnia with a military account, we have a right to know.

CONGRESSIONAL CONTROL OVER DEFENSE APPROPRIATIONS

Senator DOMENICI. Mr. Chairman, I want to proceed. I do not want to linger on this too much longer. I want to make another observation for you, and I really do appreciate your comments on inaccurate estimating of what we have to pay for out of defense. You and I and others have been saying we do not want more entitlement programs for this Government. We have been saying we want annually controlled appropriations. And when we have appropria-

tions that are as uncontrolled as you have just described in terms of moving money around within a budget and then putting us in a position where we have no alternative but to appropriate, then we lose some of the vigor behind annual appropriations as a way to control spending in the Government. I believe the military has to help us in that regard, as you have suggested here.

I want to make sure, Mr. Hamre, that you have indicated here on the record that you were mistaken and inaccurate when you spoke, heretofore, about how much new money was available to the Department of Defense under the President's budget, because after you stated that there was $6.8 billion available. It was called to your attention that you were using savings in other agencies that are funded out of the 050 national defense budget function, such as DOE, that you should not have, and that the new money is not $6.8 billion, but rather $2.9 billion, is that correct?

Dr. HAMRE. Sir, what I indicated at the time earlier was that there was—I was miscomparing the budget resolution, which is 050 against the Department of Defense, which was 051.

Senator DOMENICI. Right.

Dr. HAMRE. The differential between the 050 number and the 051 number is $6.8 billion. The math is right. Maybe the politics was wrong. So I certainly am guilty for that.

Senator DOMENICI. Well, the math actually is not right, but the main point is that the assumption is irrelevant. Because to just do that subtraction is to assume that the Department of Energy's nuclear activities can get along with less than they have asked for and even less than they got in 1997 in their budget, and the other six agencies, the Coast Guard and others, that are funded under that.

Dr. HAMRE. Sir, I do not want to get into a fight over it. What happened, there was a change in the way we budgeted this year, and there would be no change in the actual activity in those accounts this year because they fully funded them where they had historically not funded them. But I was certainly not trying to mislead anybody.

Senator DOMENICI. The only point I am making is DOD officials could be looking at your earlier presentations and their salivary glands could be wetted a bit because they could think they have really $6.8 billion to spend when they do not.

Dr. HAMRE. Well, sir, we do not have anything to spend. It is you that has the money. It is your decision how you choose to go this year.

Senator STEVENS. The chairman of the Budget Committee is making his point to me.

Dr. HAMRE. I am hearing it too, sir.

Senator DOMENICI. Well, I have a little bit of interest that you would continue to treat the DOD nuclear activities as defense activities. We do not want any shortchanging of that.

Dr. HAMRE. I hope that I have reassured you in the way I presented it today.

Senator DOMENICI. You have. You have done it correct today, accurate today.

PROPOSED RESCISSIONS

One last one. Could you explain one more time, you are seeking $4.8 billion in rescissions, supplemental rescissions. Now, am I correct that $2 billion of that is to pay for the unanticipated costs of Bosnia and Southwest Asia, and $2.8 billion of those rescissions are there to address an $800 million outlay shortage in 1998 in your brand new budget?

Dr. HAMRE. Yes, sir.

Senator DOMENICI. So what has happened is you cannot, according to OMB, fund the programs you have got in your new budget unless there is a rescission of $2.8 billion because your program costs $800 million more than you expected.

Dr. HAMRE. Our outlays would otherwise be $800 million higher than I am allowed to submit as a budget, and, therefore, to accommodate that, we either could cut it out of 1998 or we could propose a rescission in 1997, and we chose to do the latter.

Senator DOMENICI. Or Congress could conclude that we ought to fund your budget and give you $800 million more.

Dr. HAMRE. I am not asking for that.

Senator DOMENICI. Well, I mean, that could be done, obviously. You are not asking for it, but Congress might do that.

Thank you very much, Mr. Chairman.

Dr. HAMRE. I just want to be on record, sir, that I did not ask for that. [Laughter.]

Senator DOMENICI. We understand.

Senator STEVENS. Senator Gregg.

CURRENT DEFENSE STRATEGY AND FORCE STRUCTURE

Senator GREGG. Thank you, Mr. Chairman.

I was wondering about this issue which Senator Inouye raised, which is the question of fighting two regional conflicts. I think he said two and one-half regional conflicts. Which is it, two, or two and one-half?

Dr. HAMRE. The "Bottom-Up Review" strategy talks about two simultaneous—nearly simultaneous major regional contingencies. But we also talk about the ability to conduct other ongoing operations that are less than a major regional contingency at the same time. We have never formalized that into a two and one-half versus two. But our program is to do two nearly simultaneous major regional contingencies at the same time that we are undertaking ongoing operations of a smaller nature.

Senator GREGG. And you believe that under your present force structure that you are still able to genuinely take the position that you can accomplish that?

Dr. HAMRE. Sir, we have never advertised that there was no risk associated with it or that there were simultaneously two wars at the same time. We have never advertised that. We have said that we needed to have enough to unequivocally work and win a major regional contingency, still having enough resources to be able to deter a second theater conflict, denying potential aggressors any chance of achieving their objectives until we can clean up one contingency and move over and take care of it. This is just exactly what happened in World War II.

Senator GREGG. I understand that. But I was just, with the restructuring of the defense establishment that has gone on over the last 5 years, I am wondering if you still maintain that you can do that. Is that your position?

Dr. HAMRE. Yes, sir. I heard both my Secretary and the chairman say they believe we can accomplish that. It is not without risk. There is risk associated with it.

EXCESS DOD INFRASTRUCTURE

Senator GREGG. Now, to what extent—we have gone through the base closure process, but to what extent do you still consider that you have excess infrastructure?

Dr. HAMRE. Sir, we do believe we do have excess infrastructure. Our force structure has been cut about 30 to 35 percent. Our infrastructure has been cut about 15 to 20 percent. Do we have to cut infrastructure further? That is part of what is being reviewed right now in this "Quadrennial Defense Review." The Secretary has been very clear: We do not know at this time if we will recommend an additional round of base closures. It is definitely something we are looking at, but it is not a foregone conclusion.

Senator GREGG. Well, if, under this review process, you determine that you either have to reduce force structure or reduce modernization, which would be the priority?

Dr. HAMRE. Sir, I cannot answer that. The Secretary has to answer that. It is ultimately his choice. I can tell you where Secretary Perry was when he was here, which was he felt that our force structure was about right. He did not feel we could get much smaller, and we clearly had a 3-year history of deferring modernization in order to sustain our force structure. But I am not sure that that is where Secretary Cohen is, and I am not empowered—I can only put my own job at risk today.

Senator GREGG. Well, do you put force structure and overhead in the same category?

Dr. HAMRE. No, sir. Oh, no, sir. No; we are definitely drilling in on overhead. Now, overhead is not the same as infrastructure, because there are other ways we are bringing down overhead every day.

Senator GREGG. What is your present estimate of infrastructure surplus?

Dr. HAMRE. Sir, all I can do is give you the basic impression of how much it has come down. I cannot tell you how much of that is surplus because in part we do want to keep surplus because if we ever have to mobilize again we are going to need training ranges, we are going to need excess capacity in various locations. And we do not think that—it is excess to current peacetime needs, but maybe not for wartime mobilization requirements. It is a more complicated answer, and I would certainly need to give a more thoughtful response.

Senator GREGG. Well, let me try something else.

Dr. HAMRE. I will respond to you in any way, sir.

Senator GREGG. No; I would rather have you respond the way you feel is appropriate.

UNIVERSITY RESEARCH

What is the situation with the university research?

Dr. HAMRE. University research largely resides inside our 6.1 and 6.2 accounts. Those are primary elemental basic research technology, science and technology research. The funding for that for this fiscal year is up 5.6 percent.

Senator GREGG. I notice in your R&D that you are coming down and you were saying that you were coming down as a result of——

Dr. HAMRE. Major weapons systems.

Senator GREGG [continuing]. Major weapons systems not being completed or not being pursued. Do you anticipate that as you go into that 5-year category that you are going to maintain university research at its present levels, or continue to increase slightly?

Dr. HAMRE. Sir, the formal guidance to the departments is zero real growth; in other words, we will protect them for inflation at today's levels for 61 and 62—61. That is our formal guidance. It is actually a 5.6-percent increase this year. And that is what our instructions are to the services in building the budget.

SAUDIA ARABIA PERSONNEL LEVELS

Senator GREGG. Now, in Saudi Arabia, you have increased the personnel there by about 240 people from 1995 to 1996, is that correct?

Dr. HAMRE. Would you like to add further, General Van Alstyne?

General VAN ALSTYNE. Sir, I need to take your question and provide a response. I am going to say that the figure is generally correct, but I need to provide you a precise response.

[The information follows:]

The number of U.S. Military personnel deployed in Saudi Arabia increased by 730 during the period 1995–1996. This increase represents the deployment of additional security forces and base support personnel in response to the Khobar Tower Bombing on 25 June 1996. These forces include Air Force security flights, military working dog teams, two infantry companies, counter intelligence teams, and an explosive ordnance company that provide increased protection for the U.S. military facilities at Eskan Village, Taif, and Prince Sultan Air Base, Saudi Arabia.

UNITED STATES COSTS AND TROOPS FOR SAUDI ARABIA

Senator GREGG. And you have increased operation accounts in Saudi Arabia by how much? How much more are we spending this year?

Dr. HAMRE. Compared to what was appropriated for 1997, we need another $124 million for operations in Southeast Asia.

Senator GREGG. And what percentage of that are the Saudis paying?

Dr. HAMRE. Sir, that is only our share of the costs. I think—and again, I know I sound like I am ducking every question here, but I think it is like $200 million is what we expect their cost to be associated with the force protection initiative. But I would like to prepare that and send it to you, sir. I owe that to Senator Lautenberg, and I will see that you get it, as well, sir.

Senator GREGG. In increasing these personnel and these dollars to Saudi Arabia, I recognize we have been doing it. I recognize your argument that we are doing it for our own personal protection and

it is not an act of generosity to the Saudis. But very obviously, it benefits Saudi Arabia to be secure, does it not?

Dr. HAMRE. And us, too, that they are secure.

Senator GREGG. To what extent are we conditioning the commitment of these additional troops and dollars on their being forthcoming on who blew up our people?

Dr. HAMRE. Sir, you have asked a very sensitive question, because there has been a lot of dispute about this. The Department of Defense has proposed a force protection initiative for our people, and we would have done that whether they were very cooperative or they were not as cooperative. The Justice Department is working with them on the investigation.

Senator GREGG. Oh, no. The Justice Department is not working with them on the investigation, because they are not working with the Justice Department. That is the problem.

Dr. HAMRE. Sir, all I can tell you is what we are hearing, that they feel they are being more responsive, and please do not get me into that kind of a problem here because I do not know enough about the details of what Justice is doing with them. But it would not change how we would approach what we are doing to protect our people.

Senator GREGG. Well, it should change it. It should change it. If the Saudis are not going to tell us what they know about who blew up our people, then I have a very serious concern about increasing the commitment to the Saudis, even though we may be doing it under representations that we are assisting ourselves.

General VAN ALSTYNE. Sir, when I provide the figures on the increase from 1995 to 1996, almost every additional soldier or airman that has gone into Saudi Arabia in the last 6 months has been a security policeman or someone associated with our own force protection, not to extend the mission in Saudi Arabia.

Senator GREGG. So the additional 240 people are police officers to protect our people?

General VAN ALSTYNE. Sir, I am going to say many of them are security police, and those with other specialties associated with force protection, almost to a man.

Senator GREGG. How much less would we need if we knew why and who blew our people up?

General VAN ALSTYNE. Sir, that would call for a great deal of speculation on my part. I would prefer not to speculate.

Senator GREGG. Well, it is an answer we should have.

Dr. HAMRE. But, sir, knowing who did it the last time I do not think lowers the risk we may face for the next time.

Senator GREGG. But it might lower the number of people and the amount of money we had to spend on protection.

Dr. HAMRE. I think that would rest with are we doing——

Senator GREGG. But we will not know the answer to that question unless we get some forthcoming attitude from the country that we are protecting. And I would simply state that my view is going to be that I will ask for some sort of language to make sure that we get some more forthcoming attitude from the Saudis on this issue.

Dr. HAMRE. And may I take back your proposal that I get you better information so that you can support your thinking on this,

because I currently cannot do that. But I would like to make sure people do talk to you if they can.

Senator GREGG. Well, I do have pretty good information because I chair the committee that has jurisdiction over the Justice Department.

Dr. HAMRE. Yes, sir.

Senator GREGG. And this full committee's jurisdiction. And I can tell you, they are not being forthcoming.

Thank you.

Senator STEVENS. Thank you very much, Senator.

Senator Hutchison.

Senator HUTCHISON. Thank you, Mr. Chairman.

I want to extend the remarks that were made by Senator Gregg just a few minutes ago and say that what he did not add is that the term nearly put before simultaneous significantly lowered the bar for what we were supposed to be ready to face in this country with our military. We now do not have the standard that we have had in the past of two simultaneous major regional conflicts, but two nearly simultaneous major regional conflicts. That is a great concern to many of us, and certainly to myself.

I know you are not the policymaker, Dr. Hamre, but I am just telling you that to lower the bar to nearly simultaneous puts us at great risk for someone who is wanting to make trouble for the United States seeing us engaged in a major regional conflict in another part of the world, knowing that they can begin then another onslaught that would be a security risk.

Second, I just have to say once again you are not the policymaker, but this administration is continuing to cut the defense budget and then increase the use of military in operations other than war is another great concern to many of us, and something that we do not understand how you can continue to come up and cut the budget that we believe is necessary for this lower standard of nearly simultaneous major regional conflict, plus the other fields where we are, the theaters. It is a very great concern.

RELEASE OF APPROPRIATED FUNDS

And now I will get to the point that I think is appropriate for you, and that is to say that I think Senator Stevens said it very clearly, you cannot come in with this new standard, with a lower defense budget, using our military for operations other than war, and start asking for more cuts in the defense budget, and only cutting what are clear congressional priorities. Now, you have held up money that was asked for by the military, was passed by Congress, and you have not released the money for many of those programs and projects, and we are 6 months into this year. Now, this is an appropriate question for you: When are you going to adhere to the wishes of Congress in the bill that was passed by Congress and signed by the President and release the money for the programs that have been stymied for 6 months?

Dr. HAMRE. Ma'am, there is no systematic—we do not have a systematic policy to hold up congressional adds, and I do not do that. I need to explain just the process that the Department uses, and has always used, and that is it takes an allotment from OMB to release the funds, and so the services ask me to prepare that

and submit it to OMB. For individual programs, projects, and activities, the services will ask me to release the funds.

I know it is not something that you like, but I really do have other bills such as Bosnia that I do not have covered, and I have to find a way to pay for those, and I have to make a decision. I probably do five of these a day: is this one that I think there is any chance of being able to use to pay for the bill, or not? And 99 times out of 100, I release the money because I know there is no chance.

There are some where frankly I was instructed by my Secretary I have to have enough money to put serious rescissions on the table if I cannot make it work in coming up with informal ways to take care of Bosnia. And so there are a couple of items, and I do know that one of them is a major concern of yours, ma'am, and I apologize for that. It is certainly not—I am not trying to flaunt your position or to fly in the face of congressional prerogatives. I am just simply trying to reconcile a very difficult situation that I have and every previous comptroller has always had, and I certainly am not going to let anything get broken in the process.

Senator HUTCHISON. Well, I think that you should try to be—I do understand your problem.

Dr. HAMRE. I know you do, ma'am.

Senator HUTCHISON. I will say that your outright admission that you blew it on the estimates for the cost of Bosnia were appreciated, but I would say that the Armed Services Committee said, and if you will look at their hearings way back, that your estimates of $2 to $3 billion were not realistic. Many of us had been to Bosnia and we could have told you it was not realistic. We did tell you it was not realistic. And we were talking about $5 billion back then.

So to now come in and say that you have gotten all these bills that were not expected, and you are taking it from priorities that were set by Congress, I would just ask you if you would not be a little more equitable in the way you are holding money back for projects that were congressional priorities, perhaps due to some of the priorities for Congress, at least.

Dr. HAMRE. Yes, ma'am. Yes, ma'am. I realize, since I am coming to you to ask for you to help me in paying for Bosnia that the last thing I could do is to really tick you off by holding up things that are important to you.

Senator HUTCHISON. Then why are you doing it?

Dr. HAMRE. Well, you are ticked, too.

Senator HUTCHISON. Well, you have set a great standard. Now, just tell me why you are violating it.

Dr. HAMRE. One of them just—well, the AHIP program, I just released $22 million last week to make sure we did not have a break in the production line. I do not know if that word has gotten to you, but I really am trying not to let anything get broken as I am trying to find the other solutions.

Senator HUTCHISON. Well, that is very important. It is also very important, as we are looking at keeping lines open with foreign sales, that you show the U.S. priority for these programs, and in some cases these are Presidentially submitted. It is military, it is Presidential, it is congressional, and it is still being held up. So it does become an issue for foreign sales that are very precarious at this point. They need to see a commitment from the United States

to some of these programs which then may allow us to have a little more leeway, because the last thing you want to do is lose some of your bread and butter programs and have to retool and do a startup.

Dr. HAMRE. Ma'am, you are absolutely right. That is the last thing I want to have happen. And I look at every one of these to say if there is a compelling case it is going to disrupt the underlying program, it is going to undermine us in some way, I am not holding those things up. I am trying to find ways that I can resource the Bosnia commitment without flying in the face of the very people who have been most helpful to us and that I continue to need to have cordial relations with. And I promise you, I will not let something get broken, and I will come back to you to find out specifically other items you are concerned about.

Senator HUTCHISON. I will be happy to accommodate you.

Dr. HAMRE. Yes, ma'am.

GREATER PRIVATIZATION OF DEPOT MAINTENANCE

Senator HUTCHISON. Two other issues, until my time runs out. One of the areas that is beginning to be cut, and the notices are already going out, is maintenance of our equipment, including equipment that we are using in Bosnia. I am concerned that the privatization issue has become so politicized that we are not going to be able to achieve the savings that are being counted on to go into other readiness areas. I want to know how you feel about the artificial constraints of the 60–40 rule, and if you agree with the CBO estimates that as much as $1 billion a year could be saved if we eliminate that rule.

Dr. HAMRE. Senator Hutchison, I am not familiar with the CBO study, and so I will look into that, and I will give you a response to my reactions to the CBO study.

The 60–40 rule is an artifice. I think we ought to find—I think the criteria ought to be what is the most efficient way to get a job done. I do understand that there is great fear that people will sacrifice the depots in this kind of an environment for work that the private sector will choose to abandon later on when they get interested in something else, though that is a balancing act that we have to go through. The 60–40 came in as a way to kind of force an ongoing attention to it.

My personal view is that 60–40 is inefficient.

Senator HUTCHISON. Well, the Department of Defense has said that it will define the core workload so that there will not be a readiness issue on the core, and does that not suffice for making sure that readiness is not a factor?

Dr. HAMRE. Yes; very much, in my view. Yes, ma'am.

Senator HUTCHISON. What kinds of savings would you estimate that we could get? I mean, we have had testimony from Vice Chairman Owens as he left that it would be in this range of savings, that it was absolutely essential in the "Bottom-Up Review" numbers, so what is your estimate?

Dr. HAMRE. Ma'am, this is all underway right now in the QDR. I would like to give you a response that is thoughtful, a response that reflects what we really think, and I do not have that at the top of my head, and if I gave you one right now I could mislead

you. Will you let me come back to you as soon as I can in the same context that I will come back in the other matters and talk with you about that?

Senator HUTCHISON. Yes; I would appreciate that.

If I still have another couple of minutes——

Senator STEVENS. One minute.

MILITARY MEDICAL CARE

Senator HUTCHISON. One minute. The quality of life initiatives on health care for our men and women in the services. I am getting so many complaints, and legitimate complaints, that I have gone and actually had hearings and gotten providers, doctors, together with the TRICARE system and the recipients of TRICARE. I am not hearing anything good about TRICARE, and I am alarmed at many of the problems that I hear about TRICARE. I want to ask you if you are hearing these things, and if you think that we have got to re-look at this TRICARE issue, because many of our military personnel are not even being served because we have not paid the doctors. I am very concerned.

Dr. HAMRE. Well, I have not ever heard anybody say that we have not been responsive in paying the doctors, and I will find out about that. That, we cannot have.

I think historically——

Senator HUTCHISON. Well, let me just say, if you have not heard this, that the doctors are not only not being paid, but they are totally cutting off the military personnel because they cannot afford it to keep their practice.

Dr. HAMRE. I will absolutely find out what is going on in that area, because I had not heard that, and I will get on top of that.

Senator STEVENS. Senator Hutchison, we welcome you to the committee, our new member on our side. We have another new member on the Democratic side, we look forward to Senator Dorgan joining us, too.

Senator HUTCHISON. Thank you, Mr. Chairman.

Senator STEVENS. Senator Shelby.

Senator SHELBY. Thank you, Mr. Chairman.

Dr. Hamre, can you assure the committee that this will be the last time—the last time—that this administration will ask for supplemental funding for Bosnia? [Laughter.]

Senator BUMPERS. If you answer that question, you are not as smart as you look. [Laughter.]

Dr. HAMRE. Well, before I became a virgin——

Senator SHELBY. I have known you a long time, and I did not think you were a virgin. [Laughter.]

POSSIBLE FUTURE SUPPLEMENTALS FOR BOSNIA

Dr. HAMRE. Sir, our program right now is that we will be out of Bosnia in June, July, August 1998. That is the program that we have built. I have put in our budget request absolutely what it takes for us to execute that program. If factors occur or if something develops that causes an extension, and there is nobody in the Department talking about that, and I know that my Secretary believes we will be out by that time, then I will not have to come back and ask for aid to do that. I could make myself a liar if some-

thing came up that I have absolutely no control about and its force is totally unforeseen at this stage. So I cannot give you an absolute assurance.

Senator SHELBY. Well, as it has been pointed out, it just seems that the numbers have been low-balled, and then you come back on the supplemental basically believing, and it is true, that we want to back our troops.

Dr. HAMRE. Of course.

Senator SHELBY. We are not going to leave them over there unfed and unarmed, as you well know.

Dr. HAMRE. Sir, having worked up here for 10 years, I know exactly how you feel. You feel like you have been painted into a corner on a policy decision that you did not have a chance to participate in, and now you are being asked to ratify it.

Senator SHELBY. And low-ball—not you necessarily, but others—low-ball it, and then come up with a supplemental over and over and over.

Dr. HAMRE. Sir, we certainly blew it in the early cost estimates.

Senator SHELBY. Well, are you going to continue to blow it?

Dr. HAMRE. I am not going to blow it any further. We have launched a fairly elaborate effort to try to make sure two things, that the basis for our forecasting costs is as good as possible, and we missed it on Bosnia. We used the same model we used to predict our costs for Somalia. They were right there, they were way off on Bosnia, and we are trying to figure out why were we way off. We now think we know. We did not have any intention—it was never an intentional effort to try to give you a misleading number.

Senator SHELBY. You say you think you know now. If you know now where you went wrong, you should not go wrong in the future. And if you should not go wrong in the future, you would not need to come up here on a supplemental, would you?

Dr. HAMRE. Except for those events that occur totally outside of any planning horizon and they really are an emergency that occurs.

Senator SHELBY. Well, we understand that. We are talking about big events, though.

Dr. HAMRE. Yes, sir; big events where we are programming them, we know it is underway, we should not ever come back to you and ask for a supplemental.

BMDO TECHNOLOGY BUDGET

Senator SHELBY. In another area, I think a lot of us would agree that modernizing our weapons is critical for the success of our military forces, especially at times as we cut down. For example, I am concerned about the BMDO support technology budget request, which is reduced by 29 percent from last year, it is my understanding. Are you aware of why this account is being reduced in this manner, if you were aware, and why? Is this a trend that will continue? I mean, this is on the cutting edge of technology.

Dr. HAMRE. Sir, I am not aware that there was a reduction.

Senator SHELBY. Would you look into that?

Dr. HAMRE. I certainly shall.

Senator SHELBY. Would you get back with me to meet?

Dr. HAMRE. I would be delighted to talk to you.

FUNDING PROJECTIONS AND THE QDR

Senator SHELBY. You alluded to the "Quadrennial Defense Review" just a few minutes ago. A lot of us are concerned that the "Bottom-Up Review" has had only minimal impact on the defense budgets. The "Bottom-Up Review" force has not been fully funded. I raise this issue here because of the "Quadrennial Defense Review," which is assessing, as I understand, the Nation's future defense requirements and strategy. This budget request, as I understand it, contains funding projections until 2002.

Dr. HAMRE. Yes, sir.

Senator SHELBY. Which is the same period which the QDR is supposed to set defense policy. I am concerned that this could bias the findings of the QDR. Have you thought about that? Either the QDR panel members could ignore the out-year projections and risk embarrassing the administration when funding does not meet their policy guidance, or on the other hand, they could merely conduct a budget exercise where the QDR policy guidance justifies the out-year numbers, not threats in defense needs. Have you thought about all of that?

Dr. HAMRE. Sir, we have, and I know that Secretary Cohen has spent a lot of time——

Senator SHELBY. This is important.

Dr. HAMRE. It is, very important. And Secretary Cohen has been very explicit about this. He does not consider this a budget exercise. He thinks this needs to be led by——

Senator SHELBY. It has got to be real, has it not?

Dr. HAMRE. It has to be real, and it has to be a strategy review. And he has been quite adamant that we have got to lead by looking at our strategy and our requirements. And it is not a budget drill.

Senator SHELBY. Dr. Hamre, would you basically agree that the out-year projections in this budget request should not—should not—prejudice the findings and guidance of the QDR?

Dr. HAMRE. They should not, and I do not think they are. Although I have also got to tell you——

Senator SHELBY. But they could, could they not?

Dr. HAMRE. None of us really thinks there is lots more money available in the environment that we are in. And so I think the Secretary would also——

Senator SHELBY. But the environment could change, could it not?

Dr. HAMRE. Sir, it could. But I do not think any of us feels that we can count on a magic new source of funds to avoid making some hard choices here. But we should not be led by that. We are going to be led by what our strategy calls for, and that is what Secretary Cohen has given very explicit direction to the Joint Staffs and to the Chiefs and to others.

Senator SHELBY. Doctor, would you basically agree that the defense policy of this Nation should drive the defense budget, and not the other way around?

Dr. HAMRE. Yes, sir.

Senator SHELBY. It does not always do that.

Dr. HAMRE. It does not always do that, and it has not done that.

Senator SHELBY. But we should set policy based on security.

Dr. HAMRE. Yes, sir.

Senator SHELBY. And the budget should drive that.

Dr. HAMRE. Yes, sir.

Senator SHELBY. Rather than we piece this together and beg for that, and so forth, and hope against hope.

Dr. HAMRE. And hope against hope. But the trend over the last 10 years, frankly, has been where so much of the budget pressure has fallen on discretionary accounts, and we are one-half of the discretionary accounts, and for that reason we have taken very heavy reductions, I think, in the context of budget pressure. That has not been—we just have not done it by just simply looking at requirements alone.

FOLLOWING QDR GUIDANCE

Senator SHELBY. Dr. Hamre, as the comptroller over defense, would your office be willing to recalculate your projections, bringing them in line with the QDR guidance, if that was requested?

Do you want me to say it again?

Dr. HAMRE. Yes; would you say it again, sir?

Senator SHELBY. As a signal of good faith here, would your office be willing to recalculate the out-year projections bringing them in line with the QDR guidance, if that was requested?

Dr. HAMRE. Well, I will be doing that no matter what. I mean, whatever the QDR decides, and wherever we are heading——

Senator SHELBY. That is going to be the guiding force, is it not?

Dr. HAMRE. That is going to be how I will build the FYDP. The QDR is the blueprint. The FYDP is the engineering drawings. And I am going to have to put that into the FYDP, and, of course, I will do that.

Senator SHELBY. Thank you, Mr. Chairman.

Senator STEVENS. Senator Bumpers.

Senator BUMPERS. Thank you, Mr. Chairman.

Dr. Hamre, in looking over your Federal budget outlays, and this really is just a question that I thought I ought to ask, in the budget resolution that we passed last year, which was supposed to take us to zero deficit by the year 2002, as I recall the projections in that budget, defense will be getting around $279 billion in the year 2002; nondefense discretionary spending will be down to $222 billion, and yet in this chart here you show defense being 14.6 percent of the budget in 2002, and nondefense discretionary spending at 15.6 percent. Am I wrong about the budget? I would not mind the Budget Committee chairman getting into this. Do you recall those figures, Pete?

Senator DOMENICI. No; we did not implement the balanced budget, however. It passed, and we did not do it.

Senator BUMPERS. Well, that is true, but I am using the projections from the fiscal year 1997 budget resolution. In that, the projection for the year 2002 was $57 billion more for defense than for nondefense.

Well, I do not want to belabor the point, Dr. Hamre. What I want to talk to you about is the F–22. This is my favorite subject in the whole world.

F–22 COST ESTIMATES AND JUSTIFICATION

Dr. HAMRE. Yes, sir.

Senator BUMPERS. Now, we have a new estimate as of February 13 that the F–22's cost has gone up $15 billion. You are familiar with that.

Dr. HAMRE. Yes, sir.

Senator BUMPERS. And when you take the R&D and the $15 billion increase, we are looking at an $80 billion program. That is $180 million for each of the 440 planes we propose to buy. Now, I am mightily concerned about that because we are also planning to buy F–18E/F's for the Navy and Marines. We are going to buy 1,000 of those, and the cost of those is calculated to be, I think, $91 million each. But now apparently, we are not going to buy 1,000 because the Marine Corps says they do not want the 300 that is being allocated to them. Is that going to push the cost of the AF up?

Dr. HAMRE. Any time you take a major quantity reduction like that, it will drive up unit cost. I do not have that off the top of my head.

Senator BUMPERS. You do not have an exact figure or projection on that?

Dr. HAMRE. I will sure get it to you, sir.

[The information follows:]

Even though the Marine Corps does not intend to procure the F/A–18E/F, the Navy has a requirement for and still plans to procure 1,000 F/A–18E/F aircraft. The fiscal year 1998 recurring flyaway unit cost is $92.9 million. The average recurring flyaway unit cost for 1,000 aircraft is $41.4 million (fiscal year 1997 dollars).

Senator BUMPERS. Now, following the F–22 and the F–18E/F we are going to buy 3,000 joint strike fighters, at a cost of——

Dr. HAMRE. About $35 million a piece, I think.

Senator BUMPERS. How much?

Dr. HAMRE. About $35 million apiece, something like that.

Senator BUMPERS. Yes; is that in then-year dollars?

Dr. HAMRE. No; I do not think it is.

Senator BUMPERS. You think that is today's dollars?

Dr. HAMRE. I think that is today's dollars projected to that time period, but I will have to check.

Senator BUMPERS. Now, those are supposed to be in production by the year 2010. And by some of the statements that were made by Navy officials in this committee last year, there is not a fighter plane in the world, that will threaten us until the Russian fifth generation fighter is fielded in about 2015. I mean, they were going to have it on line 2005, and then it was 2010, and now it is 2015, and, of course, as you know, they cannot even come up with their money on the space station, let alone build this fifth generation fighter [FGF], which they have been postponing now for over 10 to 15 years.

My question is why are we going to build an airplane that is going to cost $180 million when there is not going to be anything to even compare with the F–18E/F until the year 2015, the point at which we are supposed to be well into fielding the beginning of 3,000 joint strike fighters? And incidentally, if we scrub the F–22, we could start on the JSF much faster. Do you agree with that?

Dr. HAMRE. Well, sir, one cannot just compare the fighter against its opposite number to talk about the threat it faces. It is also facing a very dense air defense environment that is from the ground.

This requires a very sophisticated, capable airplane. The ground environments are very intense, and the proliferation of very capable air defense systems that are ground based is going on all around us right now, even though the production of a fighter equivalent to the F–22 is not going on right now in any quantity.

Senator BUMPERS. Let me interrupt you at that point, Dr. Hamre, to ask you, are you suggesting that the joint strike fighter will not be—that it will be much more vulnerable to the ground environment?

Dr. HAMRE. No, sir; it is being designed—we will design it to have to confront the threat environment it will face, as well. The joint strike fighter was not designed to be able to do supercruise and other things which we need for air defense. So it is a very capable, very sophisticated airplane. It is not comparable to the joint strike fighter, although it is going to confront a threat environment that will be just as intense. But we are not going to design something we know that cannot do the job in a joint strike fighter.

F–22 SALES ABROAD AND OTHER SOURCES OF SAVINGS

Senator BUMPERS. Are we planning to sell the F–22 abroad?

Dr. HAMRE. It seems to me that we are. I do not know what our formal position is. I am sure we are willing to do it, but it depends on the customer. This is very advanced technology, and we are not just going to sell it to anybody. But I cannot tell you what our formal position is, sir, and I apologize.

Senator BUMPERS. I understand that. But is that not also calculated—I mean, are not the manufacturers of this airplane suggesting that the cost will come down because of foreign military sales?

Dr. HAMRE. I believe that they are suggesting that some of the costs will be down because there will be a greater production, a higher production rate, and spreading some of those costs. I think we feel that about one-half of the $15 billion we have got a good basis to say that we will be able to handle that one-half, and I am not as confident about the second one-half yet.

Senator BUMPERS. Now, the Air Force, I noticed, has come up with a $15 billion offset on tier 1 and tier 2 savings to avoid overruns on the F–22. Is that correct?

Dr. HAMRE. Yes, sir, they have. And as I said, I think that we feel that about one-half of that is pretty solid. The other one-half, we still need to take a look at how realistic is it.

AFFORDING THE F–22

Senator BUMPERS. Why did they have to have a cost overrun of $15 billion before they could find $15 billion in savings?

Dr. HAMRE. Sir, I do not think they were looking for the cost overrun, but I think that it was a product of the extension of the higher costs associated with the development that usually carries over into the development. This is a sophisticated aircraft, very capable, we need it to make sure that we have that overwhelming advantage in the air, and it is producing, it is going to come at somewhat higher cost. I think we have very conservative estimates on the $15 billion, and frankly, some of it is a product of slippage of the program that occurred because of cuts. When I was up here

working on the Hill, I frankly made a mark against it when I worked for the Senate Armed Services Committee, and I know that we have made some cuts when I have been in the Comptroller's Office, and some of that shows up as higher cost in the program.

Senator BUMPERS. Somebody, I think, has testified, perhaps you testified earlier in this hearing, about procurement. I know that General Shalikashvili has said that we must get procurement up to $60 to $65 billion. Now, there is something over $40 billion in your projection to be requested for 1998. And my question is this: When you add a $15 billion cost overrun on the F–22, if you assume that you are not going to be able to accomplish all of these savings under tier 1 and tier 2, does that not squeeze the chances of being able to buy all the weapons you want still further?

Dr. HAMRE. It does, or it may also affect the timing of when we get the last 100 of the aircraft. We may procure at a slower pace than it would otherwise. I mean, I just cannot predict how exactly we would accommodate the cost if we cannot realize it through the efficiencies and the programming changes we are seeking. But it would affect the last part of a production run, not the front of the production run.

I think we still know we want to have this airplane, and that it is an important aircraft for our overall air defense environment in an integrated theater when we go to war, and so the fact that we are not exactly sure how we will get the savings in the back end may affect actually how you produce the quantities for the tail end of the production run. But I cannot predict right now what I think the outcome would be, sir. It clearly could squeeze it, but there might be other ways, and it may have to be accommodated.

Senator BUMPERS. Dr. Hamre, I have asked GAO to do a study of the F–22 for me.

Dr. HAMRE. OK.

Senator BUMPERS. Certainly, that will be shared with everybody. But I have been in the Senate 22 years, and I consider this the most monumental mistake I have ever seen the Defense Department make, just from a cost-benefit standpoint. The F–22 should not be built. It is an extremely expensive plane. It is going to cost a minimum of $180 million each, and we are going to follow it on with the joint strike fighter, which we ought to start developing right now. And let me say I am one who does not care whether the defense budget is $300 billion or $100 billion, as long as it is strong enough to meet our foreign policy obligations and keep this Nation secure.

I disagree strongly, occasionally, with how we ought to do that, and, of course, that is normal. That is part of my job here, to try to reach those conclusions on my own and try to convince others to join me. Of course, I am concerned about the money because we are under such terrible budget constraints here.

And let me just close by saying this: There are no real, visible enemies to this country. We spend twice as much money on defense as our eight most likely adversaries, including China and Russia. At the same time, less than 15 percent of our budget goes to nondefense discretionary spending. That is law enforcement, that is medical research, that is the environment, that is education, that is some kinds of health care, that includes women and infant chil-

dren [WIC]—I mean, the things that really go to make this country a great Nation, so far as our people are concerned.

Consider the fact that the entitlement programs are taking about 75 percent of the budget, and we cannot touch them—certainly we cannot touch interest payments, and we cannot save much from Medicare. That leaves us roughly—about 25 percent for all discretionary spending, including defense. And I know this place like the back of my hand, and when push comes to shove it will not be defense that will suffer, it will be these programs for education and all of the things that are going to be squeezed. And that is one of the reasons I like to keep defense under control.

As I say, I do not care how much it is, as long as I am satisfied that this country is going to be secure. But I can tell you this: This country's security is based on more than defense. It is based on how we treat our people.

Well, Dr. Hamre, I appreciate your candor this morning. I think you are an excellent public servant. You have been here before this committee many times, and I have always found you to be extremely well prepared and very candid, and I appreciate that.

Dr. HAMRE. Thank you, sir. I am always gratified when I am not considered the biggest monumental mistake the Department has made.

Senator BUMPERS. Thank you, Mr. Chairman.

Senator STEVENS. You have just seen the first round of the battle of 1997. The F–15's were put online in 1972, the F–18's in 1979. By the time we can get an F–22 out there, our people will be flying 32-year-old models, and believe me, we have more people deployed outside the United States, except for the European theater, than any President since Lyndon Johnson. For people who advocate that kind of deployment to not want our people to have the most modern equipment available, I have difficulty.

We are going to have some real interesting debates, Senator, and I look forward to them.

Senator BUMPERS. So do I.

Senator DOMENICI. Mr. Chairman, could I make just an observation, and then I will be out of your hair.

Senator STEVENS. I was hoping that you would chair when I leave.

Senator DOMENICI. If you want me to.

Dr. HAMRE. You all can quit any time. [Laughter.]

Senator DOMENICI. I have some people waiting.

DEFENSE SPENDING IN CONTEXT

Senator STEVENS. Go ahead.

Senator DOMENICI. I was just going to say that the picture of the American budget presented by Senator Bumpers is just kind of one-half of the picture. The truth of the matter is that when John Kennedy was President, 50 percent of the American budget was defense. Only 17 percent was entitlements, and the rest for whatever else we do. It is not defense that is denying our people programs that we may need in education and the like, it is that 65 percent of the budget is interest and entitlements, and that means there is very little left.

It surely is not extraordinary for America to spend 15 percent of its budget on defense. We have been spending that or more from and after the Second World War, except for a little dip in the early and mid 1970's, and we are very sorry about that. We made a bad mistake.

So I think that the record has to be clear, it is not this budget that is pushing everybody out, it is our failure to control entitlements, Mr. Chairman.

Senator STEVENS. You are absolutely correct, and the real problem is that by the time we get to the end of this budget, 14.6 percent, it will be less money than President Roosevelt had to pay for defense in 1938, as a percentage of either the budget or of the GNP.

Senator BUMPERS. Mr. Chairman, may I just respond to what Senator Domenici said?

Senator STEVENS. Yes; a minute.

Senator BUMPERS. The percentage of the defense budget as a percentage of the budget is absolutely irrelevant. I have listened to that argument for 22 years, too. I do not care whether it is 40 percent or 5 percent. The amount of money we spend to make sure that our people have the most modern weapons and that we are a secure Nation, as I say, it may be 5 percent of the total budget, it may be 30 percent of the budget. The percentage that defense is of the budget is absolutely irrelevant to a good defense.

Senator DOMENICI. Mr. Chairman, could I just urge you, before you respond to the administration and agree to the rescission package, that you get a briefing as soon as possible by the Congressional Budget Office estimators?

Senator STEVENS. We shall do that, and we are going to have a series of conferences with Dr. Hamre and whoever else he wants to include, and Mr. Raines, and see if we can find some way to avoid the collision that I see. If the collision occurs, you are not going to get the money until about July.

Senator DOMENICI. See, Mr. Chairman, I think the CBO is going to tell us that their $800 million is really $4 billion, which means their budget is $4 billion off the mark, or more. We cannot make that big a rescission.

Senator STEVENS. You are right. They are asking us to take more money out of 1998 in order to meet the problems of really fiscal years 1996 and 1997.

Dr. HAMRE. Sir, we really do strongly disagree with CBO on this.

Senator STEVENS. I know you do, but we have to balance the budget somehow.

Dr. HAMRE. Yes, sir.

Senator STEVENS. Let me ask you this: I would like to know, and you can just give me these for the record, if you will, what is the timetable to complete the 1991, 1993, and 1995 base realignment and closures [BRAC] decisions?

Dr. HAMRE. The moves directed by the 1988 Commission are complete, while those directed by the 1991 Commission will be complete by the end of fiscal year 1997. The decisions of the 1993 and 1995 Commissions will be completed by fiscal year 1999 and 2001, respectively.

Senator STEVENS. How much money will—I do not see that. I see places open all over the country that were supposed to be closed.

Dr. HAMRE. Sir, I will make sure I am right in telling you.

Senator STEVENS. I am talking about BRAC decisions, not your decisions within the Department. The Department has not followed some of BRAC, apparently.

Dr. HAMRE. All right, sir. I will find that out.

[The information follows:]

The Department has maticuously complied with all of the recommendations of the four commissions and has not deviated from their recommendations. However, latter commissions have reversed or redirected some of the earlier commissions recommendations.

Senator STEVENS. How much will we spend on BRAC this year in the Milcon bill, do you know?

Dr. HAMRE. I think it is like $1.7 billion, but I will find that out.

Senator STEVENS. You can put that in the record.

Dr. HAMRE. Yes, sir.

[The information follows:]

The Department requested $2.1 billion in fiscal year 1998 to continue actions directed by the 1993 and 1995 commissions as well as continuing environmental cleanup at all BRAC sites.

Senator STEVENS. Can you tell us what funds have not been released by OMB up to this period for 1997, again for the record?

Dr. HAMRE. Yes, sir.

[The information follows:]

OMB has released all of the BRAC funds appropriated through fiscal year 1997; however, in fiscal year 1996 OMB revised their inflation estimates. Since the program was built using higher inflation assumptions than actually materialized, the BRAC accounts had more funds appropriated than was required to execute the program justified to Congress. As a consequence, I have withheld approximately $134 million of BRAC funds from the Services and am considering using these savings as a partial bill payer for the Bosnia supplemental.

Senator STEVENS. It is obviously the judgment of this committee that congressional priorities are being frustrated, delayed, and sometimes absolutely overruled by the release process from OMB, and as I said to the staff and Senator Domenici, we may just have to rewrite that budget law to see what authority you really have. That is impoundment, and it is violation of the Impoundment Act, and somehow or other it is occurring.

The other thing is we were briefed here this past week on the expansion of NATO, and the estimate was that that would be a cost of $9 billion for total costs for the change for NATO, of which they estimated our cost would be $1 billion. I questioned that, and I would like to know to what extent that the Department has looked at the military U.S. Department of Defense that we cover in this committee cost for the expansion of NATO, assuming that there are going to be three additional nations join NATO by 1999. That is what we were told to assume.

BUDGET AMENDMENT FOR HEALTH COSTS

In your statement you said that a budget amendment to deal with health costs will be given to us soon. I would like for you to elaborate on in the record, or preferably in some sort of a letter to us to detail what we are talking about.

Dr. HAMRE. I would be delighted to, and may I just give you a thumbnail of it right now? We knew back in July that we had about a $250 million problem. Everybody knew about that. It was largely a result of paying off the outstanding bills associated with the CHAMPUS contract. At the time, we were told by health affairs that they could take care of it, and they did not propose the additional funding to take care of it. When I put the budget together I knew of no shortcoming or shortfall in our budget. I would not have embarrassed my President to put a budget together that I knew was short.

Health affairs has subsequently said they cannot absorb those funds, and so we met with OMB last night. We will be submitting a budget amendment. I will lay out the entire history, and it will be for about $270 million, and I will have offsets.

[The information follows:]

LETTER FROM JOHN J. HAMRE

UNDER SECRETARY OF DEFENSE,
1100 DEFENSE PENTAGON,
Washington, DC, March 25, 1997.

Honorable TED STEVENS,
Chairman, Subcommittee on Defense, Committee on Appropriations, United States Senate, Washington, D.C.

DEAR MR. CHAIRMAN: As soon as the President's fiscal year 1998 Budget was delivered to you, it was reported that the defense health budget was underfunded by $609 million. This report came as a complete surprise to me. I have since met with the Assistant Secretary of Defense for Health Affairs to examine this allegation. I want to explain what I have found and what we are doing about it.

The $609 million was composed of three categories. They are: (1) costs that the Department addressed in the summer program review and understood to be absorbed within the health budget, (2) cost growth associated with the impact of technology and complexity on medical procedures, and (3) costs associated with application of new inflation factors.

The first category includes the transition of the CHAMPUS program to TRICARE, and a shortfall in the health program operation and maintenance budget. During the program review, everyone agreed these were real costs, but Health Affairs reported that they did not need funding relief to handle the costs. They did not raise the issue during the budget review. My staff was satisfied that we had fully funded the health care program and I reported that to Secretary Perry. No one appealed the final budget to Dr. Perry. These costs totaled $243 million of the $609 million. They have since been revised to $241 million. Even though the health affairs office indicated last summer that they did not need funding, they now believe that funding will be needed or they will suffer some loss of service during the year.

The second cost category concerns how much and to what extent new technology (MRI's are used much more often than Cat-SCAN's today) and intensity of effort (bypass surgery and transplants occur more often today than in the past) are taken into account in developing cost estimates for health programs. While we know these trends exist, with associated cost requirements, no one knows whether past inflation experience as reported by the Department of Commerce can distinguish between straight inflation and the impact of Technology and Intensity (T&I), as this phenomenon is called. It is not clear to what extent T&I should be added on top of inflation or if it is already included in the inflation projections. As you know, we budget an inflation rate for health care that is twice the general inflation rate. Administration policy continues to exclude T&I funding from discretionary medical budgets. We do not think it is appropriate to budget for a phenomenon whose impact on costs is not clearly defined.

The third category concerns how inflation rates are applied to the health program. The $609 million estimate includes $112 million for this item. After analyzing this subject, this estimate has been revised to $33 million, and I am recommending that this $33 million be funded in fiscal year 1998.

The sum of the three items recommended for funding—CHAMPUS bills, O&M underfunding and inflation—totals $274 million. The Assistant Secretary of Defense for Health Affairs has confirmed with me that this is all that is required to address

any presumed underfunding in our program. These costs would have been funded in the fiscal year 1998 budget had we known about them at the time the budget was prepared. Therefore, OMB has decided that the Administration will submit an amendment to the fiscal year 1998 budget reflecting this increase to the budget, fully offset by reductions to other defense programs.

It is unfortunate that your review of the fiscal year 1998 budget has to begin with this situation as a backdrop. It is embarrassing to me personally, as well as to the Department as a whole, that these cost increases were not brought forward during the Department's budget review where they could be reviewed, analyzed, and resolved in the correct manner. I assure you that this problem will never happen again.

Sincerely,

JOHN J. HAMRE.

CLOSING

Senator STEVENS. All right. Do not take offense to any of the comments we make here. We have great faith in you, and have known you and have worked with you and I think you ought to get the magician's award for the year, in terms of making a presentation here that you can defend, and at the same time sort of making numbers disappear and reappear, John, in places where we do not really expect them. So you have done a great job at that.

Dr. HAMRE. I think that was a compliment, sir. Thank you.

Senator STEVENS. We have to find out what you did. I just wish we could somehow color code the budget—you can trust this, you have got to believe this, and you are going to have to question this.

Dr. HAMRE. Sir, I will stomp my foot.

ADDITIONAL COMMITTEE QUESTIONS

Senator STEVENS. Thank you. There will be some additional committee questions from various Senators which will be placed in the record after your response.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR TED STEVENS

Question. Dr. Hamre, for the past several years, Congress has had to make up for funding shortfalls in the Defense Department's health program. What is the forecast for fiscal year 1998? Has the Department fully funded the Defense Health Program?

Answer. At the time the President's fiscal year 1998/99 budget was submitted, there was consensus in the Department that the Defense Health Program (DHP) was fully funded.

Question. Dr. Hamre, it is my understanding that there is some dispute within the Department as to whether a funding shortfall actually exists. Would you please comment on this.

Answer. After the President's fiscal year 1998/99 budget was submitted, it was reported that the DHP was underfunded by $609 million. This came as a complete surprise to me and my staff.

Question. Dr. Hamre, if a shortfall does exist, what options does the Department have to correct the problem?

Answer. After it was reported that a shortfall may exist, we met with senior OMB and DHP officials and resolved that $274 million of additional funding would be provided for fiscal year 1998. The shortfall involves costs associated with awarding Managed Care Support contracts ($163 million); pricing of military personnel assigned to the DHP ($78 million) and medical inflation ($33 million). OMB has decided that the administration will submit an amendment to the fiscal year 1998 budget to reflect a $274 million increase to the DHP. With the addition of this increase, DHP is fully funded in fiscal year 1998.

Question. Dr. Hamre, DOD will have to dedicate at least 50 percent more than the historical average to buy its aircraft modernization program according to a recent CBO study. Does the Defense Department's commitment to tactical aircraft reflect a balanced approach to providing the full range of required military capability?

Answer. Yes, the Department's plans assume the ability to modernize a full range of military capabilities. Obviously, this is an enormous challenge and that is why I am hopeful the on-going Quadrennial Defense Review (QDR) will provide some insight into our ability to meet the goals we have set out for ourselves. I recognize that there are serious modernization issues regarding virtually all mission areas, including shipbuilding, missile defense, sensor-to-shooter capabilities, combat support and others. This will not be easy, however, with the proper national security policy framework we should be able to make the kinds of prioritization judgments that will need to be made.

Question. Dr. Hamre, a recent study indicated that the cost of the F–22 procurement program may rise from $49 billion to $63 billion. Can the procurement budget endure cost growth in tactical aircraft modernization programs and still provide for modernizing other combat and support systems?

Answer. Significant cost growth in any acquisition program, whether tactical aircraft or something else, is a concern to the Department and results in a serious reevaluation by the Department. The final results of the independent cost analysis of the F–22 are not complete yet, therefore, I think it would be premature for me to discuss any specifics at this time. The results will be available in the near future and I will let them speak for themselves once they are done. I should emphasize that we need the F–22 capability. Given the projected threats of the next century it is critical that the United States be able to maintain the kind of air superiority we have enjoyed in recent times. The F–22 will ensure that we will be able to maintain our air superiority advantage well into the next century. All modernization programs, including the F–22, are being evaluated as part of the Quadrennial Defense Review (QDR) and cost is certainly part of that evaluation. Any cost growth in an individual program will make it more difficult to meet the Department's modernization goals. We are taking a hard look at this and other related issues as we make the tough decisions we have to make during the QDR.

TACTICAL AIRCRAFT

Question. Dr. Hamre, what threats are driving DOD's robust effort to modernize our tactical aircraft inventory?

Answer. Our efforts to modernize the tactical aircraft fleet are being driven primarily by two interdependent factors: the increasing cost of sustaining operational readiness with an aging inventory, and the growing sophistication and regional proliferation of potential threat weapon systems.

In terms of the threat, a number of countries, ally and adversary alike, are developing and fielding sophisticated fighter aircraft, air-to-air missiles, and surface-to-air missile systems. Of particular concern are the highly capable SA–10 and SA–12 surface-to-air missile systems, and the Mica and AA–12 air-to-air missiles. Critical aircraft are the Mirage 2000, SU–35, Rafale, Grippen, Chinese F–10, and the Euro-Fighter 2000.

Those aircraft and weapon systems are being aggressively marketed to anyone with an interest and the available cash. International weapon programs continue to push the leading edge of technology, and may eventually pose a significant threat to our current fighter force. That is specifically why proliferation of such technology and enditem weapons concerns us.

Our emerging tactical systems will provide the dominant combat power necessary to counter all existing or prospective adversaries, whether regional or global. We have a substantial investment in these aircraft and weapon systems which, properly leveraged, will provide the nation with a ready, robust, and cost effective tactical aviation force for many years to come.

NATIONAL MISSILE DEFENSE

Question. Dr. Hamre, the fiscal year 1998 budget request includes $504 million for development of a National Missile Defense system to protect this nation from a limited ballistic missile attack. Does the requested level of funding guarantee our ability to develop and deploy an NMD system by the year 2003?

Answer. No. The funding requested is for initial development activities leading to a system demonstration in 1999. The "3 plus 3" program is specifically structured to develop sufficient capability to allow a demonstration in 1999 but defers many developmental activities until after a deployment decision. If made in 2000, the program is structured to achieve an IOC by 2003. The entire "3 plus 3" effort is a high

risk program. It assumes success at every step of the development and test process. The funding levels do not provide for back-ups, parallel efforts or spares. There are many "single point failure" opportunities in the program. The requested funding certainly does not "guarantee" that the development can be accomplished to support a 2003 IOC. Additionally, since we have not programmed any funds for deployment of the system, it could not be fielded without significant additional funding.

Question. Dr. Hamre, the fiscal year 1998 budget includes more than $930 million for the Joint Strike Fighter and $504 million for National Missile Defense. Is this appropriate given that the nation can meet any tactical aircraft threat but cannot stop a single ICBM launched into U.S. Territory?

Answer. Along with fighter aircraft replacement, ballistic missile defense (BMD) is one of our highest priorities. Within BMD, Theater Missile Defense is our highest priority followed by National Missile Defense and Support Technologies.

BALLISTIC MISSILE DEFENSE PROCUREMENT FUNDS

Question. Dr. Hamre, will missile defense procurement funds be adequately protected when budgeted in military service accounts?

Answer. Yes. Ballistic Missile Defense (BMD), as a mission, will continue to receive top level DOD review and oversight. Overall BMD planning, architecture development and maintenance, and mission area management will remain the responsibility of the Ballistic Missile Defense Organization (BMDO). BMDO's comprehensive and integrated plans will continue to serve as the basis for Defense Resources Board decisions on RDT&E and Procurement investment levels for BMD systems and technology. My office will ensure that BMDO has adequate opportunity to coordinate, assess and advise senior DOD leadership on any proposed transfer, realignment or reprogramming of BMD procurement funds. Although BMD procurement dollars will be submitted in Service budget requests, the Director, BMDO, will be the primary spokesperson for DOD on all BMD programs, budgets and issues and BMDO will present reports, supplementary budget justification documents, if needed, and testimony to Congress covering the entire BMD program, to include procurement funds.

Question. Dr. Hamre, it is my understanding that preliminary estimates indicate that there may be a $4 to $5 billion difference in outlays between the OMB's and CBO's scoring of the outlays associated with your fiscal year 1998 defense budget. Can you provide the Committee some insight on this disagreement?

Answer. On March 3, CBO released its analysis of the President's fiscal year 1998 budget. One of its conclusions was that defense outlays for fiscal year 1998 were understated in the President's budget by $5.6 billion ($4.7 billion related to DOD and $0.9 billion related to DOE). The $4.7 billion for DOD was based primarily on differences in:

Spendout rates against prior year unexpended balances ($2.9 billion).—DOD/OMB projects outlays from prior year balances at the appropriation account level, while CBO projects outlays from prior years by looking at total DOD prior year outlays. DOD/OMB believes that using the certified Treasury actuals by account is more accurate than the CBO method.

Spendout rates for certain fiscal year 1998 programs ($1.3 billion).—CBO projects that outlays from new budget authority requested in fiscal year 1998 will be about $1.3 billion higher than the DOD/OMB estimate. Our projection reflects our best judgment based on past experience.

Timing for Congressional action on the fiscal year 1997 rescission proposal and fiscal year 1997 supplemental ($0.5 billion).—In computing outlays associated with the fiscal year 1997 supplemental, DOD used the spendout rates for Operation and Maintenance accounts and assumed that about 75 percent of the funding for the supplemental would be spent in fiscal year 1997 and the remainder in fiscal year 1998. CBO assumed that Congress would not take early action on the supplemental and shifted more outlays into fiscal year 1998. In our view, however, since DOD is already borrowing money from its other O&M accounts that would spend late in the year to fund fiscal year 1997 military operations in Bosnia, the supplemental funding will be spent quickly once it is approved by Congress. Therefore, the CBO assumption about a lag in spending is not valid.

Question. Are you or anyone in the administration doing anything to work with CBO to narrow this difference?

Answer. Yes. We are working with OMB, who is seeking to convince CBO of the validity of our outlay projections and offering meetings to try to resolve differences.

Question. Dr. Hamre, can you provide us with an explanation for why these operations, which have been treated as contingency operations in the past, are now considered to be a permanent part of DOD operations?

Answer. Our budget presentation does not bear on how these operations are considered. We have requested fiscal year 1998 funds to support the continuing operations in Southwest Asia in the various Service/Agencies appropriations, as was done last year. The new Overseas Contingency Operations Transfer Fund was used only for those operations with an identified end date, which only include operations in the Bosnia AOR for fiscal year 1998.

Question. What is your criteria for defining "contingency operations" in terms of the fund? Do you have written policies and procedures in place for operation of the Fund?

Answer. The Overseas Contingency Operations Transfer Fund for fiscal year 1998 was used only for those operations with an identified end date, which only include operations in the Bosnia AOR. We would also envision in the future using the Fund for any new contingency operation because of the inherent difficulty in accurately estimating detailed costs for specific appropriations. The Fund allows needed flexibility to allocate funds to the proper account as actual costs become known. No requirement is perceived for written policies or procedures for operation of the Fund since it is basically a transfer account whose use is based on currently established procedures used for similar funds such as the Drug Interdiction and Counter-Drug Activities, Defense Transfer Fund and the Environmental Restoration, Defense Transfer Fund.

Question. Dr. Hamre, the U.S. seems to provide a disproportionate share of resources to maintain the free flow of oil out of Southwest Asia. Our country gets less that 20 percent of its oil from the region, compared to, for example, Japan's requirement of 75 percent. Are any efforts being made to shift some of this burden?

Answer. Relative reliance on Gulf oil supplies may not be the most appropriate criterion for viewing burdensharing of our mutual security interests. There is a single world oil market, and a disruption in the supply of oil from the Gulf would affect prices everywhere, not just in those countries whose normal source was interrupted. In this sense, the Japanese have no greater interest than the U.S. has in ensuring the free flow of oil from the Gulf.

Our Pacific and European allies provide a broad range of host nation support to U.S. forces stationed on their territory, including direct cost sharing, land for U.S. bases and material storage facilities, logistics support such as ammunition storage and equipment maintenance, and pledges of wartime host nation support. Japan, South Korea, and Germany all provided generous cash and in-kind support to the U.S. during Operation Desert Shield/Desert Storm in 1990–91. The 1997 Defense Authorization Act largely incorporates the Administration's approach to "responsibility-sharing," broadening the focus of our concern from cost-sharing narrowly defined to other areas where allies can and should contribute to shared security objectives. In addition to contributions to U.S. stationing costs, we look to our allies to increase their budgetary outlays for defense and foreign assistance to levels commensurate with our own and to increase the military assets that they contribute to multinational military activities worldwide, including United Nations or regional peacekeeping operations.

The U.S. is clearly the most capable of providing the military forces to ensure the free flow of Gulf oil, although both the French and British air forces make welcome contributions to Operation Southern Watch monitoring southern Iraq. In addition, fourteen countries besides the United States have participated in the Maritime Interception Force that enforces the U.N. embargo on Iraq. Australia, the United Kingdom, the Netherlands, and New Zealand are currently participating with the U.S. Navy in the Gulf. Oil exporters also benefit from the free flow of oil from the Gulf, and both Saudi Arabia and Kuwait contribute generously through assistance-in-kind to the needs of our forces in the region.

Question. Dr. Hamre, the fiscal year 1997 Supplemental identifies incremental costs totaling more than $2 billion, but provides no specifics on potential sources. Can you outline DOD's game plan for resourcing these requirements?

Answer. We will be working with the staffs of the Appropriations Committee of the House and Senate to identify potential sources that ideally will be mutually acceptable. Early indications are that some of the offsets might be relatively painless, like more favorable inflation or currency rates.

Question. What funding in the Supplemental Request is for military personnel costs? What does this include? Why is DOD now deploying troops for six month rotations vice the one year rotation policy of last year?

Answer. The Supplemental request for $2,006.2 million contains $360.1 million for incremental military personnel costs for Imminent Danger Pay, Family Separation Allowance, Foreign Duty Pay, and Basic Allowance for Subsistence. Under the definition of "incremental costs," these expenses would not be incurred except for participation in the identified contingency operations.

With regard to troop rotations, the original IFOR deployment was planned as a 12 month effort (January-December 1996) with no troop rotations. The current 6 month rotation policy was based on quality of life considerations to shorten these kinds of deployment to ensure that the soldier is not unduly separated from his family for extended periods.

Question. What inputs are you getting from the Service Chiefs on the impact of delaying training, readiness and quality of life to pay for the extension in Bosnia?

Answer. The Service Chiefs have indicated no adverse impact from the extension of operations in Bosnia assuming full congressional approval of the supplemental request by early April.

LOGISTICS CIVILIAN AUGMENTATION PROGRAM [LOGCAP]

Question. Dr. Hamre, what are the latest projected costs for LOGCAP support in Bosnia? What do these costs include?

Answer. Current cost estimates for LOGCAP support for Bosnia in fiscal year 1997 have been revised downward from $386.9 million to $240 million. The original estimate was based on the potential for added costs associated with the transition to a new contractor since a new contract award was imminent. This would have resulted in additional start-up costs. This did not happen. In February 1997, the Army awarded a single source contract to Brown & Root for continued operations in Bosnia. The revised estimate of $240 million was based on the award of the single source contract and the latest assessment of actual cost experience.

The contractor is responsible for the operation and maintenance of all base camp facilities in Bosnia. Additionally, the LOGCAP contract for Bosnia operations covers requirements at the Interim Support Base to include maintenance and upgrade of facilities, waste management, power generation, showers and latrines, kitchens and food service, potable water, and laundry services.

Question. Why is the fiscal year 1997 cost at the same level as last year when this should be a period of stability, with a much smaller force and fewer camps in operation?

Answer. The Logistics Civilian Augmentation Program (LOGCAP) cost estimate of $386.9 million identified in the fiscal year 1997 Supplemental, now revised downward to $240 million, covers 12 months of LOGCAP support compared to the 9 months of operation in fiscal year 1996. The Implementation Force operations also remained at full strength at the 15 base camps through the first quarter of fiscal year 1997 when the phasedown to the Stabilization Force began, with attendant support at 11 base camps. In fact the fiscal year 1997 estimate is based on our actual experience in fiscal year 1996 and when the above factors are considered, the fiscal year 1997 cost reflects almost exactly the average monthly costs as experienced in the last few months of fiscal year 1996.

Question. Dr. Hamre, I understand that the Air Force and Navy are establishing separate programs along the same lines as LOGCAP. What sort of oversight will OSD have over these programs? Has any formal guidance been developed to ensure that these separate mechanisms don't end up competing with one another for limited support and personnel, driving up the overall cost to DOD?

Answer. The Navy and Air Force do have similar programs; however, they are designed to accomplish different objectives. The Air Force contract acquires supplies and services, while the Navy contract is focused on construction and engineering services in support of the Navy's contract construction agency mission. A team, comprised of representatives from the Office of the Secretary of Defense, Joint Chiefs of Staff, and the Services, was formed to review the best approach for management of these programs. The determination was made that civilian augmentation support during operations would be most effectively met through individual programs. This does not preclude a Service from using another Services' contract, through transfer of funds, when an existing contract meets the requirements. It is the Service, in consultation with the operational Commander in Chief (CINC), that should decide when they require augmentation and when they could provide combat service support. When using contract services, the CINC within a given area is responsible to provide oversight through Joint Procurement Boards to ensure that there is no overlap of contractual services.

Question. What is the status of negotiations with Hungary for the rebate of the value added tax? I understand that Brown and Root estimates put the potential rebate at $8 million. Do you agree with this figure? Who will actually receive this rebated amount?

Answer. Negotiations with the Hungarians for the "rebate" of Value Added Tax (VAT) are on-going. It is hoped that an agreement at the executive level could be reached by late April or early May 1997. The parliamentary ratification process

could extend into the late June 1997 period. The USAREUR analysis, as of 14 March, indicates that the potential Brown and Root refund will be approximately $5.7 million. The Government of Hungary will reimburse USAREUR directly for the VAT paid Brown and Root under its cost-reimbursement contract, USAREUR will recover the VAT paid as a refund of a contract overpayment. The VAT refund will be returned to the same appropriation from which it was disbursed, e.g., refunds for VAT paid in fiscal year 1996 will go to the USAREUR fiscal year 1996 account.

UNIT ROTATION

Question. During the summer of 1996, it was decided that some of the units with heavier equipment, such as tanks, would be replaced with lighter units, such as MP companies. We understand that the most recent rotation has again deployed heavy units and in greater numbers than were there originally. What has changed operationally that now requires these heavier units? What is the difference in OPTEMPO and redeployment costs? Do you foresee a period when these heavy units will be replaced during the year, resulting in added transportation and reconstitution costs?

Answer. As we continue our presence in Bosnia, a detailed mission analysis and threat assessment has been central to properly structuring each force rotation to conduct assigned missions, and to ensure the necessary level of force protection.

Through this process, we found that we needed to structure our forces to transition from a posture of implementation, to one of stabilization. Stabilization Force One (SFOR1), which is currently deploying, is task organized to conduct that stabilization mission.

The SFOR1 structure replaces the initial SFOR's two MP battalions with one additional mechanized Battalion Task Force. However, when looking only at the number of armored vehicles deployed, SFOR1 is lighter than both the initial IFOR deployment, and the reshaped IFOR of August 1996. Furthermore, the projected follow-on SFOR2 armored vehicle count will be about half that of SFOR1. The Army has projected their OPTEMPO costs for the aggregate 17 month SFOR involvement at $338 million. This projection is considerably less than the roughly $900 million the Army spent during their 12 month IFOR effort. Naturally, aggregate SFOR rotation costs will be greater than the IFOR cost. However, by making prudent use of forward deployed equipment stocks, and by rotating personnel into mission deployed equipment, the Army is making every effort to minimize transportation and reconstitution costs associated with the schedule of unit rotations.

QUESTIONS SUBMITTED BY SENATOR THAD COCHRAN

NATIONAL GUARD AND RESERVE O&M/PROCUREMENT FUNDING

Question. We have seen that the National Guard and Reserve are being asked to play an increasingly significant role in peacekeeping and peace-enforcing activities, including the operations in Bosnia. In recent years the Guard and Reserve forces have relied on this Subcommittee to add to the Administration's requests to fund accounts for the equipment and training of the Guard and Reserve. Given the increased use of the Guard and Reserve, do you believe that additional funds for O&M and procurement should be added for the Guard and Reserve for fiscal year 1998? I understand there is concern that this budget does not meet the needs for National Guard Pay and Allowances and Operations and Maintenance. Is this accurate?

Answer. The Guard and Reserve do continue to share a greater role in the defense of our nation. The fiscal year 1998 budget recognizes this increasing role and reflects the O&M resources the Department believes are necessary to maintain readiness and meet current operational requirements. There should not be any concern that the needs of the National Guard Pay and Allowances and Operations and Maintenance accounts are not being met. The concern that you allude to represents the National Guard Association's preference to increase fiscal year 1998 funding to further enhance readiness of later deploying units. However, given the current threats in the world today, a lower level of readiness for later deploying units is acceptable. On the equipment side, the Department does rely heavily on the National Guard and Reserve Equipment appropriation to improve the state of equipment readiness for all Reserve Components. Fiscal year 1998 is no exception. The Guard and Reserve do continue to have some unfunded equipment requirements.

PROCUREMENT

Question. In every one of the Administration's budget requests, the Future Year's Defense Plan in the category of Procurement has always been greater than what

is actually requested the following year. Last year, the Administration indicated that it would ramp-up the annual procurement budget starting this year. Yet, now we see that the $44.1 billion requested is $2.9 billion less than what the Department originally intended to request for fiscal year 1998. Given that your procurement requests continue to decline, how do you expect to reach an annual procurement budget of $60 billion by the year 2000?

Answer. I do not expect the procurement request to decline again. The Department has made it clear that we were very disappointed with the level of fiscal year 1998 funding for procurement. However, the Department was able to retain the growth profile for procurement from fiscal year 1998–2003 and I have made it a priority of mine to see that it happens. As I have testified, I think it is important not to overemphasize any particular number. However, improving the funding available for modernization is one of the major goals of the Quadrennial Defense Review (QDR) and I have conveyed my thoughts in that area to the Department as unambiguously as possible.

SHIPBUILDING

Question. The Navy has stated that it needs 346 ships. Given the average life span of a ship is approximately 35 years, it appears that the Navy needs to procure around 9 or 10 ships a year to maintain a 346-ship Navy. Instead, this budget requests 4 ships for fiscal year 1998. How do you expect the Navy to reach the Administration's stated need at this rate of ship procurement?

Answer. The quantity of ships procured in fiscal year 1998 has very little to do with the number of ships in a future force structure. The relatively low procurement numbers reflected in the budget request is more indicative of the fact that we currently have a relatively young fleet in terms of service life and that we are in the process of transitioning to a new generation of warships. In the Future Year Defense Program (FYDP) accompanying the fiscal year 1998 President's budget, there is substantial funding for the acquisition of a new generation of aircraft carrier, attack submarine, surface combatant, combat logistics ship, and amphibious assault ship. Rate production of these new programs is not expected to be attained until the post FYDP period. This is due to the fact that it takes time to prudently design and test these new hulls prior to committing to full production. In addition, it should be pointed out that the long-term number of total battle force ships is also driven by other factors beyond new procurement rates, such as retirement rates of existing ships and possibly life extensions where warranted.

The Department is in the process of evaluating future shipbuilding alternatives in the Quadrennial Defense Review (QDR). This detailed analysis of national security goals, defense priorities, and mission objectives is considering not only what our future warfighting and presence requirements will be, but also assessing the number of ships needed, the mix of ships, and the impact that new technologies like Cooperative Engagement Capability (CEC) will have on fleet size.

With regard to the total size of the fleet, the 346 ships mentioned at times by the Navy is their requirement. This figure was first cited in the Bottom Up Review (BUR) and should have been considered as a intermediate position, not a fixed figure. This amount was subsequently clarified to mean a force of between 330 and 346 ships in the fiscal year 1994 President's budget request. The fiscal year 1998 President's budget request for new construction and total ship inventory sustains a force level that is within this parameter. In addition, because of the long lead times to develop and construct ships, it is misleading to focus on a procurement rate in one budget year, or even an average across a given 5-year period (i.e., the FYDP), as a means either of judging the adequacy of this year's shipbuilding program funding or of predicting future fleet size.

RESCISSIONS

Question. I understand that, unlike past years, the Department is asking for blanket authority to rescind $2 billion from the fiscal year 1997 appropriations bill. It appears that you are asking Congress to trust DOD not to rescind funds for programs that Congress believes are important. Why aren't you providing a program-by-program rescission list?

Answer. The Department has not proposed a rescission. The fiscal year 1998 budget includes a legislative proposal to cancel $4.8 billion under a DOD-Wide Savings Proposals fiscal year 1997 Supplemental appropriation. If the Congress decides that this legislation is acceptable, the Secretary of Defense will determine which accounts the cancellation should be applied to.

Question. Will we have a rescission list before the Congress is asked to grant authority for these rescissions?

Answer. As I noted in the answer to the previous question, our proposal is not a rescission, it is an fiscal year 1997 Supplemental appropriation that cancels $4.8 billion of the fiscal year 1997 program. As spelled out in the proposed legislation, the specific accounts will be determined upon enactment of the Supplemental appropriation.

BALLISTIC MISSILE DEFENSE

Question. In the past, funds for Ballistic Missile Defense programs almost exclusively have gone through the Ballistic Missile Defense Organization to ensure a centralized focus, even though the funds were for the most part passed to the services for program execution. Now, however, this budget requests funding through the services for Theater Missile Defenses (TMD) procurement. Why do you think that in future years sufficient TMD procurement funds will be asked for by the services, given tight procurement budgets and the TMD programs having to compete with tanks, ships and planes?

Answer. The Services have the responsibility to recruit, train and equip the forces under their cognizance. While it might make sense to have a central organization like the Ballistic Missile Defense Organization (BMDO) develop a class of weapons to take advantage of technological synergies, avoid duplication and ensure interoperability; once a weapon system reaches the stage where it needs to be procured to equip the force it is most appropriate that those decisions be made by those responsible for equipping the affected force. BMDO will remain as the acquisition executive for all TMD programs and will continue to play an active part in all future resource decisions through both the acquisition process and the PPBS process. The Service leadership is aware of and understands the threats that face the Department in the future and are responsible for making appropriate resource prioritization decisions.

An implication of the question is that budgeting the procurement of TMD systems in a central office such as BMDO will somehow make them immune from the normal competition for resources. Nothing could be further from the truth. BMDO is funded within the same topline the Services are. The procurement budget for BMDO is subjected to the same tight constraints the Service budgets are. The PPBS process will allow any and all TMD funding issues to be vetted at the highest departmental levels. Allowing the Services to budget for their own TMD requirements will enable the Services to exert the influence they think appropriate to ensure the TMD requirements are met.

In addition, the obvious Service investment in the weapon system will ensure coordinated planning for all of the essential support elements, i.e., logistics, training, etc., necessary for successful deployment. The BMDO does not have the resources necessary to replicate the full compliment of support required to deploy systems of this magnitude.

QUESTIONS SUBMITTED BY SENATOR PETE V. DOMENICI

Question. What is DOD's current estimate of the number of active duty personnel on food stamps or other forms of public assistance?

Answer. There are approximately 12,000 active duty personnel receiving food stamp benefits. If the value of furnished military housing were included in computing food stamps eligibility, this number would be less than 5,000. We do not have an estimate for other forms of public assistance.

Question. What measures does DOD employ to assess the condition of active duty military families?

Answer. The Department assesses the quality of life of active duty military families in a variety of ways. In December 1994, the Secretary of Defense established a Task Force of distinguished individuals (the Marsh panel) to review and provide recommendations on how to improve the quality of life. This Task Force focused specifically on the areas of military housing, personnel tempo, and community and family services. The Department also created a Quality of Life Executive Committee that has made significant progress in implementing both the Secretary of Defense's Quality of Life initiatives and the approved recommendations of the Task Force. This Committee brings the military services together to provide a formal, institutionalized means of assessing quality of life needs and outcomes.

Quality of Life is also assessed by commanders at all levels through formal quality of life programs and by special reviews. For example, in May 1995, the DOD Inspector General reported on quality of life from the installation commanders' perspective.

In addition, both the military services and DOD conduct surveys of their members. These include annual surveys at the installation level that assess satisfaction with local community support programs and services. Every five to seven years, DOD conducts a comprehensive, longitudinal survey of officers and enlisted personnel and their spouses. Our last survey was conducted in 1992. Data analysis from the 1992 survey examined patterns of community support program utilization by members and their families, the relationship between program use and satisfaction, and member attitudes about facilities and programs. Use of the commissary, exchange, fitness centers, libraries, and recreational facilities are consistently seen as very important to service members. Support programs such as marriage and family counseling, spouse employment, and housing referral showed lower usage but high satisfaction among members. The next survey document is being developed, and we anticipate administering the survey in 1998–1999.

Question. Are data collected on spouse and child abuse?

Answer. The Department collects data on spouse and child abuse through the Family Advocacy Program. The data are collected for those who are eligible for treatment in a military medical treatment facility. Thus the data are collected on active duty families, including the families of Reserve component members who are on active duty. It also includes a small number of retirees and a small number of civil service or contract personnel who are eligible for treatment abroad or at remote sites in the United States.

Question. Are data collected on divorce rates?

Answer. The Department does not collect data on divorce rates.

Question. Are data collected on pregnancies or fathering of pregnancies among unmarried military personnel?

Answer. The Department does not collect data on pregnancies or fathering of pregnancies among unmarried military personnel.

Question. What trends do these data show for spouse and child abuse for the last ten years?

Answer. On July 10, 1987, the Department published DOD Instruction 6400.2, "Child & Spouse Abuse Report." Data collection began effective in fiscal year 1988. The following charts depict the spouse abuse and child abuse data for the Family Advocacy Program from the beginning of fiscal year 1988 to the end of fiscal year 1995. This information is not currently available for fiscal year 1996.

SPOUSE ABUSE REPORTED TO THE FAMILY ADVOCACY PROGRAM

Year	Spouse population	Substantiated reports	Rate/1,000	Total reports	Rate/1,000
Fiscal year:					
1988	1,139,771	13,705	12.0	17,583	15.4
1989	1,061,512	15,335	14.5	18,978	17.2
1990	1,026,119	14,840	14.5	19,042	18.6
1991	1,040,090	15,657	15.0	20,286	19.5
1992	1,016,263	18,052	17.8	23,812	23.4
1993	923,206	16,728	18.1	22,799	24.7
1994	934,478	17,584	18.8	24,412	26.1
1995	855,939	16,282	19.0	22,107	25.8

These data show a trend of increased number of reports of spouse abuse and of substantiated reports of spouse abuse for the last eight years. This increase may be due in part to public awareness campaigns by the Family Advocacy Program and the increased visibility of the problem of spouse abuse in the national media due to such events as the 1994 Violence Against Women Act and the 1995 O.J. Simpson trial. The rates of substantiated reports and total reports per 1,000 spouses are useful in identifying how frequently spouse abuse occurs, particularly when the size of the force is changing. Since the beginning of fiscal year 1992, the increase in the rate of reports per 1,000 has slowed. Reported abuse and substantiated spouse abuse per thousand within the Department is far below the remainder of the U.S. civilian population. However, the data are not comparable to civilian programs that include abuse between dating couples, cohabiting couples, and formerly married couples.

CHILD ABUSE REPORTED TO THE FAMILY ADVOCACY PROGRAM

Year	Spouse population	Substantiated reports	Rate/1,000	Total reports	Rate/1,000
Fiscal year:					
1988	1,556,190	9,378	6.0	20,715	13.2
1989	1,572,219	10,336	6.6	20,891	13.3
1990	1,580,494	9,696	6.1	20,857	13.2
1991	1,707,327	10,552	6.2	22,608	13.2
1992	1,643,669	10,251	6.2	23,343	14.2
1993	1,546,693	10,219	6.6	23,475	15.2
1994	1,419,867	10,436	7.3	21,292	15.0
1995	1,299,283	8,246	6.3	17,902	13.8

In interpreting the child abuse data, it is important to keep in mind that the term "abuse" includes neglect and sexual abuse. The alleged abuser may be a parent who is an active duty service member or a civilian parent, or a staff member or volunteer in a DOD-sponsored or sanctioned caregiving role, such as a child care center or youth program.

The DOD rates of substantiated reports and total reports of child abuse have remained relatively constant over the eight-year period. Both rates are approximately one-half of comparable rates in the U.S. civilian population as compiled by the U.S. Department of Health and Human Services. This may be explained in part by the strong support military families receive and the success of prevention efforts sponsored by the Family Advocacy Program and other military family support programs. Another reason is that about half of the civilian cases involve alleged child neglect due to poverty; in contrast, military families have at least one wage-earner, thus making poverty-related neglect cases less common.

FAMILY HOUSING

Question. What is the number of family housing and barracks units that are currently in excess of 20 years old or are otherwise in need of renovation or replacement? What is the projected cost for renovation or replacement by traditional methods? What innovative ideas are being considered for this problem?

Answer. The aggregate number of family housing units requiring renovation or replacement is approximately 206,000. The estimated cost of improving these units using traditional military construction methods is approximately $16.45 billion.

In the past, the Department has estimated that it would take approximately $9 billion to improve its barracks stock. The new 1+1 barracks standard, which was approved in November 1995, has changed the way in which the Services collect data for renovation and replacement planning. Each Service is now on its way towards completing installation-level master plans which will detail implementation of the new construction standard. Included in these plans are costs for future renovation requirements.

Initiatives the Department is pursuing to improve the housing problem include expansion of the privatization tools included in the Fiscal Year 1996 Defense Authorization Act, efforts to demolish unneeded housing/barracks facilitates, and improving our housing allowance system.

TRICARE

Question. Dr. Hamre, before and after TRICARE, what measures are used to indicate problems and complaints? What trends do these data show since the initiation of TRICARE?

Answer. The Office of the Assistant Secretary of Defense for Health Affairs (OASD-HA) has conducted two surveys to track problems and complaints by measuring satisfaction with specific aspects of health care delivery. The Annual Health Care Survey of DOD Beneficiaries is sent to all categories of beneficiaries eligible for military health care. The TRICARE Prime Enrollee Satisfaction Survey samples individuals enrolled in TRICARE Prime. Together, the two surveys (which will be merged after TRICARE is fully implemented) provide a detailed and consistent picture of satisfaction with health care delivery. Both surveys suggest that TRICARE is improving satisfaction and reducing problems among DOD beneficiaries.

In 1995, the OASD-HA fielded the first Annual Health Care Survey of DOD Beneficiaries. This survey is being used to track satisfaction, health status, use of care,

and access. By carefully sampling beneficiaries, the survey data can be used to identify problems and also to determine how widespread those problems are. This allows the Department of Defense to target its resources to the most serious and pervasive problems.

TRICARE has been implemented in some locations for two iterations of the Annual Survey. While this does not provide enough data to identify nationwide trends, it is possible to track year-to-year changes in those regions that have implemented TRICARE and compare with changes in regions that have not yet implemented TRICARE. This comparison can be used to indicate whether TRICARE has increased satisfaction among military families.

Among beneficiaries living inside U.S. catchment areas (the largest group of beneficiaries), overall satisfaction with care at military facilities rose between 1995 and 1996. However, regions that offered TRICARE for at least one year (specifically, Regions 6, 9, 10, 11 and 12), now have higher satisfaction ratings than regions that do not yet have TRICARE. Satisfaction with quality of care also rose between 1995 and 1996. But the change was much greater in regions offering TRICARE. Regions not yet offering TRICARE showed a negligible increase.

Analysis of the TRICARE Prime Enrollee Satisfaction Survey also indicates that beneficiaries are enjoying greater satisfaction and experiencing fewer problems. This survey, which was sent to enrollees in Regions 6, 9, 10, 11, and 12, found that Prime improved their access to care, quality of care, and the benefits package. Specifically, over a third of enrollees report that Prime improved overall access, with only 12 percent citing a decline. Over a third report that Prime improved quality of basic health care, with only 8 percent citing a decline. Finally, just under 40 percent of enrollees thought the overall benefits package had improved with only 16 percent perceiving a decline.

Since the 1996 Annual Survey and the Enrollee Survey were completed, more regions have implemented TRICARE. The 1997 survey will provide information on how TRICARE has affected beneficiary satisfaction in those regions. In addition, survey results, which are still being analyzed, have been disseminated to the Services, regional commanders and local military treatment facilities to make them aware of the problems and to track their efforts to improve satisfaction.

Question. Dr. Hamre, under TRICARE, what opportunities exist for active duty military personnel to be denied healthcare that did not exist previously? What number of denials of health care to active duty personnel, and to their families, have been brought to your attention under the TRICARE system. How does this compare to the previous system?

Answer. Under TRICARE, active duty personnel should not experience any change in their access to medically necessary care. Active duty will continue to receive priority for all care appropriate to the treatment of the patient's diagnosis, symptoms, and history at military medical treatment facilities. Family members, especially those who choose to enroll in Prime, should see access to care improve. For family members, TRICARE also covers generally accepted, medically necessary, and appropriate care that is not experimental or investigational. Moreover, TRICARE Prime covers many enhanced benefits, including preventive screenings, immunizations and other services.

Recent data from the 1996 Health Care Survey of DOD Beneficiaries supports the Department's position that beneficiaries should not see increases in denials of healthcare. If denials were a problem in the system, satisfaction with access to system resources should reflect this problem. This measure of satisfaction is based on 6 questions in the annual survey that ask about satisfaction with access to health care resources, including access to specialists (if needed), medical care in an emergency, and access to hospital care if needed.

In fact, between 1995 and 1996, satisfaction with access to resources rose among those beneficiaries living inside U.S. catchment areas. Moreover, the increases were largest in regions that had offered TRICARE for at least six months (regions 6, 9, 10, 11 and 12). Based on this analysis, TRICARE has improved access to system resources, indicating that denials of care are not worsening.

Analysis of the TRICARE Prime Enrollee Satisfaction Survey also indicates that beneficiaries who enroll in Prime are not experiencing denial of care. This survey of enrollees in Regions 6, 9, 10, 11 and 12 found that 35 percent of beneficiaries rated Prime's coverage as very good or excellent, while only 5 percent rate it as poor. This satisfaction scale is determined from beneficiaries' ratings of the range of services covered by Prime, the number of doctors to choose from, choice of hospital and ability to see specialists.

Results of both the Annual Survey and the Prime Enrollee Satisfaction Survey indicate that access to care will improve as TRICARE is fully implemented. Active

duty and family members will continue to receive the medically necessary and appropriate care they need.

QUESTIONS SUBMITTED BY SENATOR CHRISTOPHER S. BOND

ARMY NATIONAL GUARD O&M/MILPERS ACCOUNTS

Question. Dr. Hamre, it has come to my attention that the Army National Guard personnel and Operation and Maintenance accounts are short $743 million. This looks to me like you are setting the National Guard up to be unable to meet much less maintain, its basic readiness requirements. With the training account funded at 11 percent of its requirements, it seems to me that this will insure the hollowness of our force and is exceptionally shortsighted on the part of the Department of Defense. Is it the intent of the Army and the Department of Defense to dismantle the Army National Guard, or is this indicative of a greater, more encompassing fiscal crisis facing the entire department in its readiness accounts?

Answer. It is not the intent of the Army or the Department of Defense to dismantle the Army National Guard, nor is the $743 million identified by the National Guard Association of the United States indicative of a greater or more encompassing fiscal crisis facing the entire Department of Defense in its readiness accounts. The National Guard budget is consistent with the fiscal year 1997 funding level and reflects the resources the Department believes are needed for the ARNG to maintain readiness and meet current operational requirements. For several years the Department has used a tiered readiness approach to ensure that early deploying units receive priority in funding. This means that some late deploying units are maintained at lower levels of readiness. Although the National Guard Association would prefer to devote a higher level of funding to these units, a lower level of readiness for late deploying units is acceptable given current threats. The $743 million represents the National Guard Association preference to increase fiscal year 1998 resources to further enhance readiness of later deploying units. As you know the Department has begun the Quadrennial Defense Review (QDR) and we will be looking at tiered readiness to see how well it is working and whether it is appropriate to apply to other units.

Question. Dr. Hamre, Secretary Money has made it known to you that the Air Force requires the aircraft for which we budgeted last year. I would like for you to address specifically your plan to release the funds for all six F–15E airframes.

Answer. The funding for all six F–15E aircraft will be released by the end of March.

Question. Dr. Hamre, as we are half way through the fiscal year, I would also like you to address why, as of this morning, the F/A–18 C/D funds which the Marine Corps and Navy have asked for, have likewise been withheld.

Answer. As you know, the Department is faced this fiscal year with the need to finance nearly $2 billion in unfunded costs to extend operations in Bosnia. Therefore, I, as DOD Comptroller, have been very circumspect with regard to releasing funds for a number of programs in case the Department needed those funds to help finance the contingency costs. That is part of my Title 10 responsibility as Comptroller. Funds for programs have been released on a case-by-case basis when the program identifies a need to execute contracts or maintain production lines. The F/A–18 C/D funds will be released by mid-March.

QUESTIONS SUBMITTED BY SENATOR DANIEL K. INOUYE

FORCE STRUCTURE

Question. Dr. Hamre, I understand your budget request does not achieve the modernization goals you set last year. Is your department examining additional reductions in other areas of the budget to free up additional funding for modernization?

Answer. I have indicated we were disappointed we could not fund the fiscal year 1998 procurement program at the level we forecast last year. However, given our emphasis on readiness and quality of life issues, I think the fiscal year 1998 budget does reflect an appropriate balance of requirements. The Secretary has made it clear that everything is on the table for the Quadrennial Defense Review (QDR). We are hopeful that the on-going reexamination of force structure, readiness, infrastructure and modernization will provide us with some new insights. We are committed to improving the modernization-funding situation and are looking forward to working with the Congress to achieve the most appropriate balance of defense resources when the results of the QDR are complete.

Question. Mr. Secretary, there are some who believe forces will have to be reduced further to live within the tight budgets foreseen for the future. What is your view on this?

Answer. That is one of the central questions being addressed by the QDR, and I am reserving judgment until I read its analysis and recommendations.

Question. Dr. Hamre, over the past few years, has the Army's investment budget been squeezed by its high costs of military manpower?

Answer. I would not characterize the cost of military manpower as high. The cost of military manpower for all the Services is appropriate given the force structure requirements driven by the current national security strategy and the need to provide our volunteer military force with a reasonable, competitive compensation package. As the Secretary, Chairman and I have noted throughout our testimony, readiness and quality of life remain the highest priorities of the Department. My sense is that policy is well founded and for which there is a consensus both within the Department and among the congressional oversight committees. The budgetary impact of making readiness and quality of life issues our highest priority is that those accounts that fund pay, training, maintenance, supplies, medical, housing and other related costs will be emphasized. The further outgrowth of that emphasis is to limit the funding available for modernization for all Services, not just the Army. We recognize the need to increase the funding available for modernization and that is a major focus of the on-going Quadrennial Defense Review (QDR).

QUADRENNIAL DEFENSE REVIEW

Question. Dr. Hamre, if the QDR were to substantially change DOD's requirements, would you recommend submitting a budget amendment to the Congress to readjust your funding plan?

Answer. Secretary Cohen has said that the QDR results will be incorporated into next year's budget for fiscal year 1999 and beyond. I do not anticipate any developments that would cause him to alter that plan by submitting an amendment to this year's budget.

HEALTH CARE COSTS

Question. Mr. Secretary, we are told that your health care budget is underfunded by more than $500 million; however, we have also heard reports that you fully funded the amount requested by the Surgeons General. Can you clarify this matter for the Committee?

Answer. Currently, the Defense Health Program is not underfunded. At one point a communication problem existed but that has been corrected. An additional $274 million was added to the budget proposal. At the present funding level, although challenging, I believe sufficient resources are available to meet the Department's medical responsibilities.

Question. Assuming for the moment that the health care requirements are underfunded by $500 million, what recommendations would you have for solving this problem?

Answer. Currently, the Defense Health Program is not underfunded. As a result, I am unable to speculate on solutions to a $500 million shortfall.

ECONOMIZING HEALTH CARE

Question. Dr. Joseph, can you identify ways to economize in the health care field?

Answer. The fiscal year 1998/99 Defense Health Program (DHP) budget includes a number of initiatives that I believe will serve to economize the Department's health care operations. The first and most significant is the completion of our managed care support network. By the end of fiscal year 1998 the network will be in place providing many of the cost containment capabilities private sector medical operations are now accessing. Second is the implementation of aggressive utilization management principles across our system. Our budget includes utilization management cost savings of $165 million. While this presents an extremely challenging goal, I believe it is achievable. In terms of infrastructure, the DHP is economizing by re-engineering 17 small hospitals from ones that provide inappropriate levels of inpatient care to facilities that can provide improved access to ambulatory care for beneficiaries and ensure that care is rendered in a cost effective, high quality manner. On a smaller but very important scale is the resourcing of a variety preventative medicine programs in each of the Services.

DEFENSE SPENDING TRENDS

Question. Secretary Hamre, I am told that the Office of Management and Budget disagrees with the Congressional Budget Office on the amount of current year spending—outlays in the budget vernacular—that your budget includes. Can you assure this Committee that no games were played with this estimating by the Administration, no smoke and mirrors?

Answer. Yes, I can. We are working with OMB to show CBO and others that our estimates of outlays are valid.

Question. Dr. Hamre, could you submit for the record an explanation of any differences between the Administration's and CBO's outlay estimates for fiscal year 1998?

Answer. On March 3, CBO released its analysis of the President's fiscal year 1998 budget. One of its conclusions was that defense outlays for fiscal year 1998 were understated in the President's budget by $5.6 billion ($4.7 billion related to DOD and $0.9 billion related to DOE). The $4.7 billion for DOD was based primarily on differences in:

Spendout rates against prior year unexpended balances ($2.9 billion).—DOD/OMB projects outlays from prior year balances at the appropriation account level, while CBO projects outlays from prior years by looking at total DOD prior year outlays. DOD/OMB believes that using the certified Treasury actuals by account is more accurate than the CBO method.

Spendout rates for certain fiscal year 1998 programs ($1.3 billion).—CBO projects that outlays from new budget authority requested in fiscal year 1998 will be about $1.3 billion higher than the DOD/OMB estimate. Our projection reflects our best judgment based on past experience.

Timing for Congressional action on the fiscal year 1997 rescission proposal and fiscal year 1997 supplemental ($0.5 billion).—In computing outlays associated with the fiscal year 1997 supplemental, DOD used the spendout rates for Operation and Maintenance accounts and assumed that about 75 percent of the funding for the supplemental would be spent in fiscal year 1997 and the remainder in fiscal year 1998. CBO assumed that Congress would not take early action on the supplemental and shifted more outlays into fiscal year 1998. In our view, however, since DOD is already borrowing money from its other O&M accounts that would spend late in the year to fund fiscal year 1997 military operations in Bosnia, the supplemental funding will be spent quickly once it is approved by Congress. Therefore, the CBO assumption about a lag in spending is not valid.

SUPPLEMENTAL CONTINGENCY COSTS

Question. Last year, Congress provided $1.14 billion to cover all of DOD's estimated costs for overseas contingencies. Since then, the President has authorized U.S. troops to stay in Bosnia through most of fiscal year 1998. Can you tell us, is the entire $2 billion supplemental request to cover the costs of the S-FOR in Bosnia, or are there new higher costs for other overseas activities as well included within this amount?

Answer. The supplemental request covers additional incremental requirements to support the extended operations in Bosnia, the enhanced level of operations in Southwest Asia, and recovery of expenses related to drawdown of stocks and services in response to unforeseen foreign emergencies.

Question. Dr. Hamre, last year following the Khobar Towers bombing, several improvements were recommended for protecting our troops in the region. How are these costs going to be paid for?

Answer. The costs to improve force protection in Southwest Asia (SWA) are being funded in three ways. First, $149.5 million was appropriated in the fiscal year 1997 Appropriations Bill (Section 8137 and Title IX) to relocate troops to safer locations in Saudi Arabia ($122.6 million); to procure body armor and armor kits for vehicles for operations throughout SWA ($13.5 million); to improve physical security for troops in Bahrain ($12.2 million); and to establish three Air Force antiterrorism specialty teams in SWA ($1.2 million). Second, additional force protection requirements in SWA have been funded internally through realignment of funds. Specifically, in fiscal year 1997, the Air Force will spend $30.8 million to upgrade force protection measures for Southern Watch operations in Saudi Arabia, Kuwait and United Arab Emirates and to complete relocations in Saudi Arabia. Third, the Saudi Arabian Government has agreed to fund $200 million fixed facilities for U.S. forces in Saudi Arabia. This includes force protection, troop housing, a medical facility, relocation of housing in Taif to more secure location; consolidation of housing at Dhahran; communications facilities; and operations, administrative and maintenance facilities for air-based operations.

Question. Dr. Hamre, what oversight do you have into the use of the funds provided to the CINCS in these overseas contingencies?

Answer. The only combatant CINC that has a direct fiduciary responsibility is the CINC, U.S. Special Operations Command (USSOCOM). All other CINCS rely upon the various Services to maintain and field the forces required to meet CINC requirements and therefore are not directly provided any contingency funds. The Services, USSOCOM, and the various Agencies provide through their comptroller organizations a monthly cost report identifying the incremental costs incurred in support of designated contingency operations.

Question. I understand that several members have expressed a concern that the funding provided could be construed as helping to sustain a long term presence in the mid-east. Can you assure the Committee that this is not the case.

Answer. The continuing missions in Southwest Asia are designed to contain the Iraqi threat to the region and should remain until such time as Iraq complies with applicable United Nations Security Council Resolutions. The funds requested for Southwest Asia are limited to the amounts necessary to sustain essential operations. These costs include certain personnel pays associated with deployment and normal operating and base support costs. Those costs associated with establishing fixed facilities to relocate U.S. forces for force protection are being paid by the Saudi Arabian Government.

Question. Dr. Hamre, are there other unfunded DOD requirements which are not addressed in the supplemental request?

Answer. In addition to the supplemental request of $2 billion for ongoing operations in Bosnia and enhanced operations in Southwest Asia, the Department has submitted two other supplemental requests for consideration: one for $72 million for the Ready Reserve Mobilization Income Insurance Fund, and a second for $20 million for eligible claimants for Vietnamese POW's. I also expect to submit an Omnibus Reprogramming later in the year to address other requirements identified by the Services based on execution of their programs.

SUBMARINE PROGRAMS

Question. Dr. Hamre, your budget would buy four new attack submarines over the next five years. As Comptroller, are you satisfied that this plan which uses two shipyards to build these ships is financially sound and affordable?

Answer. As we are all aware, the Department had originally proposed to build nuclear attack submarines at one shipyard, based to a large extent on our perception that the relatively low annual production rates in the future would not adequately support maintaining two separate vendors. However, despite our analysis on this subject, the Congress did not agree with the Department and directed a competitive procurement strategy to retain two separate shipyards. While we readily admit that there are certain positive benefits in retaining two nuclear submarine-capable shipyards for new construction, this alternative is not viewed within DOD or the Navy as being either efficient or affordable.

In order to satisfy congressional concerns, the Navy, after evaluating various alternatives, proposes proceeding under a teaming arrangement that would leverage the considerable experience in each shipyard. This strategy, while innovative, is unproven and may not generate the savings we are hoping for. Notwithstanding these concerns, the Navy and the two shipyards are committed to making this plan work and believe that the program, as currently funded, is executable. The Department has monitored the evolution of the memorandum of agreement between the two shipyards, and believes that they are off to a good working relationship. Based on preliminary analysis, it seems clear that relative to the previously congressionally directed competitive plan the teaming arrangement proposed in this year's budget will expend considerable less money across the FYDP, while maintaining both nuclear capable shipyards.

Question. Dr. Hamre, can you assure us that it is cost effective to split the total new attack submarine program between two shipyards?

Answer. It is the Department's view that the most affordable and cost-effective solution is to award the contract for the New Attack Submarine to only one prime contractor, and that delivery of all of the ships of the class be from the same location. However, the Congress has repeatedly indicated a general discomfort with the Department's plan to award the production contract for the New Attack Submarine to only shipyard. Given the Congress's position, the Department and the Navy have searched for strategies that are programmatically and fiscally executable.

Based on our estimates of the cost of the competitive program proposed by the Congress, I am firmly convinced that the cost of sustaining two shipyards at relatively low production rates would be prohibitively expensive. Given that the De-

partment will not be able to afford to procure New Attack Submarines at rates greater than two ships per year in the foreseeable future, this teaming strategy appears to be appropriate and more cost-effective than a competitive plan. Therefore, in light of the interest of the Congress to maintain two nuclear capable submarine shipyards, the teaming strategy reflected in the budget request is the most affordable and cost-effective solution.

Question. How many submarines per year would the Navy have to fund to allow both Electric Boat and Newport News to produce them efficiently?

Answer. It is not possible at this time to define what will be an "efficient production rate" at these shipyards. Under the teaming arrangement reflected in the budget request, the most efficient production will evolve over time. Currently each shipyard would concentrate its expertise on the portion/section of the New Attack Submarine it can produce most efficiently.

Question. Have you calculated whether it will cost more for the Navy to have two producers of submarines?

Answer. Of all the alternatives available to the Department, I believe that the most expensive approach is to sustain two full service (design, construction, test, and ship delivery) new construction shipyards. The least expensive approach is to build the New Attack Submarine at one shipyard, as originally proposed by the Department in the Bottom Up Review (BUR). The new teaming approach reflected in the fiscal year 1998 President's budget, falls in-between these two plans, since its cost goal is to deliver a submarine whose cost is the equivalent of building the ship at one shipyard. This goal will be possible if each shipyard can concentrate its expertise on the portion/section of the New Attack Submarine it can produce most efficiently.

INFRASTRUCTURE COSTS

Question. Dr. Hamre, I understand that there is a growing sense in the Defense Department that additional base closures are required to balance military needs with current DOD infrastructure. Are you considering recreating the Base Closure Commission, some other means to close bases, or are there no plans to close more bases?

Answer. New legislation would be required to recreate the Base Closure Commission. The Department is looking hard at its infrastructure as part of the Quadrennial Defense Review. Secretary Cohen has noted that all issues are on the table, but it is too early to predict whether the Department will ask for authority for an additional round or rounds of closure.

Question. Dr. Hamre, is it clear that closing bases has actually saved DOD money? Can you validate these savings for the record?

Answer. Yes, Sir, it is very clear that the Base Realignment and Closure process is saving the Department of Defense significant dollars. Our projections show that the four rounds of closures will costs about $22 billion and will generate savings of approximately $36 billion through the end of the final BRAC implementation period, fiscal year 2001. This will result in net savings of about $14 billion through the end of the implementation period and annual recurring savings of about $5.6 billion. Although it is generally acknowledged that the Department has and will continue to realize significant savings from base closures, these savings are difficult to audit. The Department's budgeting and accounting systems are designed to identify and track costs, not savings. As a consequence, the DOD Inspector General has been asked to review and validate the costs and savings resulting from base closures. The Department will provide the results of that review when they become available.

Question. Dr Hamre, I am told that one of the reasons you were unable to meet your goal for investment funding was because of higher than anticipated costs for the DOD infrastructure. Can you give this committee any assurance that infrastructure costs will not continue to increase?

Answer. Sir, I cannot give you assurances at this time that infrastructure costs will not continue to increase. However, I can assure you that the Department is taking a very hard look at the entire infrastructure during the Quadrennial Defense Review (QDR) with the goal of reducing overall requirements and costs while maintaining mission readiness. We will report the results of the QDR to the Congress later this spring.

INFRASTRUCTURE SAVINGS

Question. Dr. Hamre, when considering infrastructure savings, are we talking mostly about cutting civilian employees and closing bases?

Answer. The Quadrennial Defense Review (QDR) will be looking at all aspects of the Defense infrastructure with the goal of reducing requirements and costs while maintaining mission readiness. Until the QDR report is complete it is difficult to speculate on where most of the potential savings will be generated. We will all have to wait until the report comes out this spring.

QUESTIONS SUBMITTED BY SENATOR BYRON DORGAN

DEFENSE BUDGET TOPLINE

Question. Dr. Hamre, as I mentioned in my statement, one of the chief aspects of this year's defense debate will be whether the President's budget adequately funds procurement and weapons modernization, both in fiscal year 1998 and in future years.

I think it is interesting to look at this question over the full length of the competing budget plans. In fiscal year 1998 and fiscal year 1999, the Administration has requested $3 billion and $2 billion less, respectively, in budget authority than the majority's budget resolution provided last year. However, in fiscal year 2000, fiscal year 2001 and fiscal year 2002, the Administration's budget exceeds the fiscal year 1997 budget resolution by $2 billion, $5 billion and $11 billion, respectively.

For planning purposes, in order to accommodate weapons modernization efforts, which is more realistic: the Administration's request, which rises from $266 billion in fiscal year 1998 to $290 billion in fiscal year 2002, or the majority's fiscal year 1997 budget resolution, which rises from $269 billion in fiscal year 1998 to only $279 billion in fiscal year 2002?

Answer. The Administration's request would be better for accommodating planned weapons modernization efforts, which will increase substantially between now and fiscal year 2002.

Question. Last year's defense appropriation bill included $11.5 million for modifications of B–52 attrition reserve aircraft. That was funding that I worked hard to secure last year for our nation's B–52 fleet; I do not want there to be a second class of B–52 bombers without upgrades. You can imagine my surprise last week when I learned that the Air Force was considering part or all of that money for another program. Can you confirm that the Air Force is no longer considering this reprogramming option?

Answer. Yes, I can confirm that. The Air Force had been considering reprogramming B–52 funds from procurement to development to support future modifications associated with enhanced electronic countermeasures (ECM). The Air Force now plans to identify an alternative source of funds to satisfy that requirement.

FISCAL YEAR 1998 B–52 FUNDING

Question. Looking ahead funding for the B–52's in this year's appropriation bill, what is the Air Force's projected cost in fiscal year 1998 of retaining 23 B–52H aircraft, not in the POM as of February 1996, as fully maintained attrition reserve aircraft?

Answer. The Department's approved requirement for B–52 aircraft calls for a total inventory of 71 aircraft, which includes 56 Primary Authorized Aircraft (PAA), 8 attrition reserve (AR) aircraft, 6 backup aircraft (BAI) and 1 test aircraft. The Department has determined that the 71 aircraft B–52 fleet meets all conventional and SIOP missions. If the Department is forced to fund an additional 23 B–52 attrition reserve aircraft, then funding for critical bomber enhancements such as incorporation of Precision Guided Munitions (PGM's) as well as other reliability and maintainability modifications will be delayed, resulting in a potential degradation in future bomber fleet capability. The Department does not have a requirement to fund an additional 23 B–52 attrition reserve aircraft and no funding for this effort is included in our Future Years Defense Program (FYDP).

The fiscal year 1998 cost of retaining 23 B–52H aircraft as fully maintained attrition reserve aircraft, assuming no retention beyond fiscal year 1998, is estimated to be:

Appropriation	*Fiscal year 1998 dollars in millions*
O&M, Air Force	39.2
Military Personnel, Air Force	4.5
Total	43.7

B–52 RE-ENGINING STUDY

Question. Report language in last year's defense appropriations conference report directed the Office of the Secretary of Defense and the Air Force to examine the potential savings of a plan to lease new engines for the B–52 fleet. That report is due to the defense committees by March 15, 1997; when do OSD and the Air Force intend to submit it?

Answer. The Office of the Secretary of Defense and the Air Force have examined this issue and the report is substantially complete. In order to deliver an accurate report to the Congress, the Department expects to submit the report before April 15, 1997.

Question. I understand that the cost savings of this plan depend largely on assumptions regarding fuel costs and engine replacement rates. Why does the Defense Department use a different set of fuel price projections than the estimates available in the private sector?

Answer. The Air Force chose to use a risk-adjusted fuel index when conducting their Life-Cycle Cost (LCC) estimate. The Air Force developed an expected range of fuel prices over the next 40 years. The range captured the DOE low-end expected fuel price index of 2 percent as the low estimate, the OSD index of 2.7 percent as the most likely, and the DRI index of 4.6 percent as the high estimate. The Air Force then used simulation analysis to predict the most likely outcome. The Air Force is required by OMB and OSD to use rates they provide for budgetary estimates. However, the Air Force can use private sector forecasts for sensitivity analysis.

Question. Are private sector estimates not the "best commercial practices and methodologies" that should be used to evaluate commercial programs?

Answer. Both the DRI index (commercial index) and the risk-adjusted rate that the Air Force used in their analysis represent bet guesses. No one can project fuel prices in the year 2036 with any degree of certainty. This is why the Air Force used simulation analysis to generate the most likely outcome. However, the Air Force did conduct a sensitivity analysis of the LCC estimate using the DRI fuel index. In this case, the lease option still required additional funding about the projected cost of maintaining the status quo which was unacceptable to the Air Force.

Question. I understand that the Air Force is using engine removal rate projections from the TF33 Engine Division even though real-time data and records are available, since the RB211–535E4–B engines have been in commercial use on the Boeing 757 aircraft for years now. How does the Air Force justify using projections when historic data from objective sources are available?

Answer. The Air Force used the same data as Boeing in developing projected engine removal rates for the RB211–535E4–B. These projections, derived from commercial historic data, were used in calculating the contractor logistic support (CLS) costs associated with maintaining the RB211–535E4–B in the Boeing proposal. The Air Force did use TF33 Engine Division data in projecting the total engine removal (TER) rates for the TF33 engines currently installed on the B–52. These projections were based on 26 years of historical data.

Question. I understand the TF33 commercial vendor quotes of the repair and rejuvenation costs for the B–52's current engines are actually much higher than the repair costs predicted by the OC-ALC TF33 engine depot. Could the Air Force please explain this discrepancy?

Answer. The commercial vendor quotes which Boeing obtained were for complete overhauls and included commercial requirements that aren't levied upon the Air Force. Based on past history, only 14 percent of the engines returned to depot require this level of maintenance. The remaining 86 percent of the engines require significantly less maintenance. The depots develop a weighted average composite rate each year based on the maintenance requirements of the engines they anticipate maintaining. In fiscal year 1997 the composite rate for TF33–3 engines is $275,064; the composite rate for TF33–103 engines is $191,786.

Question. Lastly, has the Air Force included in its study the savings that leased engines would provide from reductions in mobility footprint and greater environmental noise compliance?

Answer. Yes, the savings reductions in mobility footprint are included in the Air Force Study. The Air Force included the cost of the AGE equipment in the status quo estimate; this expense is not included in the lease option. The Air Force isn't subject to the noise compliance requirements levied upon commercial aircraft. Therefore, there wouldn't be any savings associated with this enhancement.

SUBCOMMITTEE RECESS

Senator STEVENS. The subcommittee will be in recess now. We are going to hear the Chairman of the Joint Chiefs provide an assessment on global national security requirements next Wednesday.

Thank you very much.

[Whereupon, at 12:03 p.m., Thursday, February 27, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1998

WEDNESDAY, MARCH 5, 1997

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10 a.m., in room SD–124, Dirksen Senate Office Building, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens, Cochran, Domenici, Gregg, Hutchison, Inouye, Leahy, Bumpers, and Dorgan.

DEPARTMENT OF DEFENSE

JOINT CHIEFS OF STAFF

GLOBAL ASSESSMENT

STATEMENT OF GEN. JOHN M. SHALIKASHVILI, CHAIRMAN

OPENING STATEMENT OF HON. TED STEVENS

Senator STEVENS. General, since this morning we inaugurate the new facility, we thought it best that you be the first one to appear here. We look forward to the overview you are going to give us.

Hopefully, more of our members will be arriving. There are several other meetings going on and I just left one. I am going to thank you for coming.

Do you have any statement, Senator Inouye?

Senator INOUYE. No; I would just like to join you in welcoming the chairman. I may not be able to stay very long, though, because of other business. But I may have a statement for the record later.

Senator STEVENS. Are there any other opening statements?

Senator LEAHY. I will probably have questions for the record, Mr. Chairman.

Senator STEVENS. Very well.

General, we welcome you. Not only do we admire you, but we have a great feeling of friendship for you and what you have done for our armed services. We have some questions we would like to ask.

But first, we would like to have your global overview.

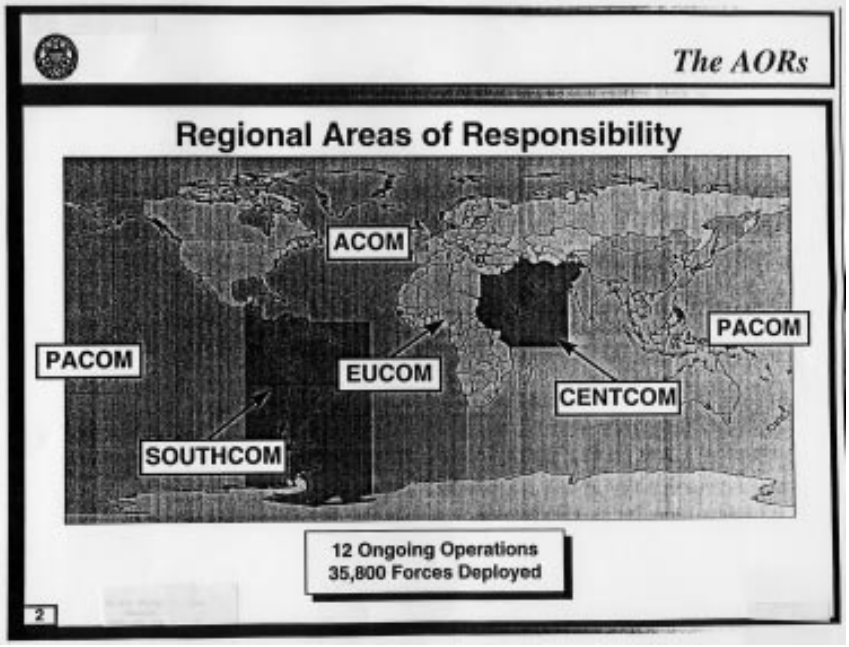
General SHALIKASHVILI. Thank you very much, Mr. Chairman. I am only sorry the cameras aren't here for the inauguration of this beautiful room.

Senator STEVENS. If the cameras come in here, we are in trouble. [Laughter.]

GLOBAL OVERVIEW

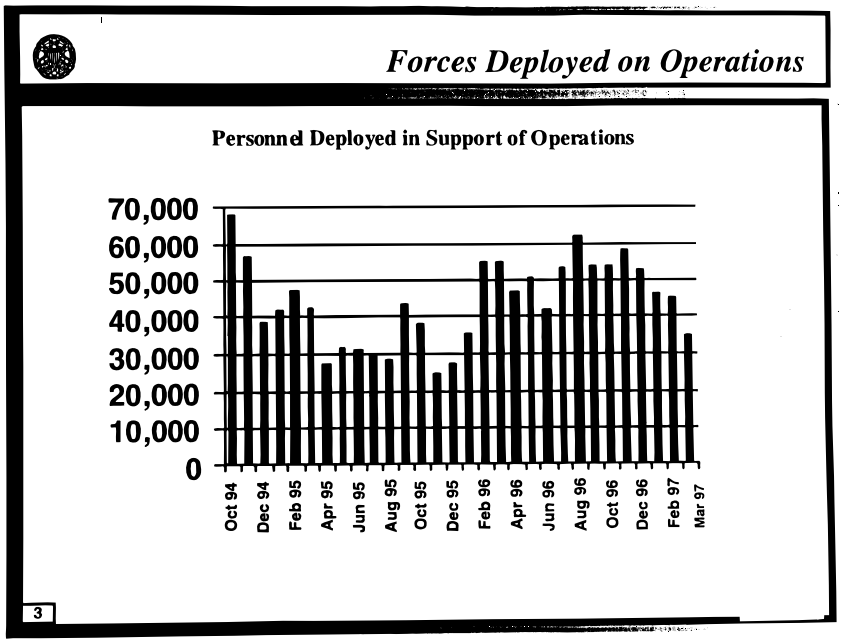
General SHALIKASHVILI. Thank you very much for letting me come and present this global overview. I am going to try to emphasize our current worldwide deployments, which I know you are interested in.

I trust that each one of you has a set of slides in front of you. You may wish to follow along with me.



[CHART 2]

This chart, chart 2, shows a quick overview of the geographic areas of responsibility for our six regional CINC's. Currently, that is, today, these six regional CINC's are responsible for 12 ongoing operations involving some 35,800 military personnel.



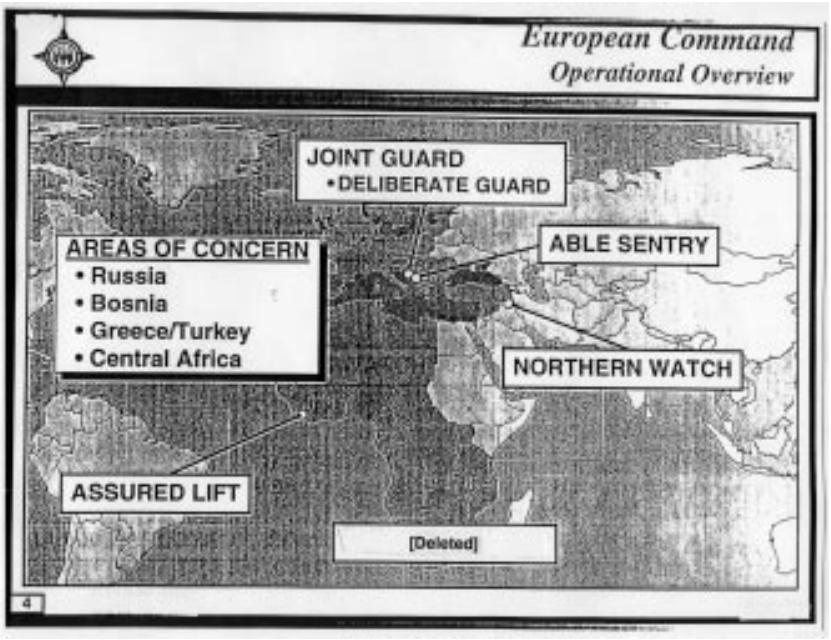
[CHART 3]

The next chart, chart 3, shows how this number of 35,800 compares to the deployments we have had since October 1994. As you can see, during this period the number of personnel deployed on our operations has fluctuated anywhere from a high of 68,000 back in October 1994 to a low of 22,000 in the fall of 1995.

As a matter of fact, since I have been chairman, the average has been about 14 operations and some 40,000 personnel deployed on any given day.

EUROPEAN COMMAND

With that, let me now start with our European Command and let me ask you to turn to chart 4.



[CHART 4]

The major areas of concern for General Joulwan, our commander in EUCOM, are, of course, the developments in Russia, progress in Bosnia, and in the last few days the developments in Albania. You know that, while the capital, Tirana, is quiet, troop movements have been observed in Albania and clashes with demonstrators have occurred in the south. The Italians yesterday conducted a small, noncombatant evacuation. It is useful to remember that we have some 250 Americans, official Americans, in the country and some 2,200 unofficial ones. So we—and George Joulwan, in particular, need to watch that area to make sure that we are prepared to conduct a noncombatant evacuation should that situation arise.

Having said that, our Ambassador right now feels fairly comfortable and does not see that as a problem.

An additional area of concern to us, of course, is the deteriorating situation in central Africa, especially Zaire, and it is also important that we keep watching that. I will have a little bit more to say about that in 1 minute.

There are in Europe right now, in the European theater, five separate military operations ongoing. So let me turn to chart 5 and start with the situation in Russia.

RUSSIA: STATUS OF MILITARY

Size of force
—[Deleted]
Readiness
—Ground Force: [Deleted] divisions combat-ready
—Navy: [Deleted]
—Air: [Deleted]
—Air Defense: [Deleted]
Nuclear C^2
—System remains responsive
—Equipment aging
—Leadership retains control
Nuclear Safety
—[Deleted]

[CHART 5]

RUSSIA

Let me concentrate on the military aspects of the situation in Russia, if I may.

Today, Russia's armed forces are very different from what they were in 1990. The overall strength has gone from some [deleted] in their active forces. But that does not begin to tell the story.

The Army has gone from some [deleted] divisions. But to the best of our knowledge, only about [deleted] divisions are combat ready on any given day.

The Navy is down to [deleted] submarines and [deleted]. And the surface combatants in Russia, to the best of our knowledge, are also down to [deleted]. It is not known how many of those really could go to sea on any given day.

The Air Force went from [deleted] aircraft and the [deleted]. However, there is no evidence, contrary to reporting in the press, that the [deleted]. That said, however, there are indications that they have [deleted] there are some [deleted] and probably there is [deleted].

RUSSIA: MILITARY CRISIS

Wage arrears most acute problem
—[Deleted]
Russian military in decline
—[Deleted]
Military discontent at high levels
—Junior officers leaving service
—Troops moonlighting to survive
—Draft evasion persists
[Deleted]

[CHART 6]

If you turn to chart 6, you will see that wage arrears in the military is perhaps the most serious problem facing the men and women in uniform. Russia's military continues to decline, as you can see from this chart. The economy will probably remain too weak for some time to come to reverse the declining capabilities of Russia's armed forces.

Now with that look at Russia, let me now turn to Bosnia and ask you, in turn, to turn to chart 7.

BOSNIAN SITUATION TODAY

Former Warring Factions (FWF) cooperating with SFOR
Military capabilities substantially reduced since 1995
Freedom of movement impaired
Freedom of residence blocked
Economic reconstruction/civil institutions still lagging

[CHART 7]

BOSNIA

For the moment, it is fair to say that, as long as there is a credible NATO force, large-scale fighting is not likely to resume. Bosnian Serbs have reduced their military from some [deleted] troops to about [deleted] with their heavy equipment in cantonment areas and under observation by NATO forces.

The federation, that is, the Moslems and the Croats, in turn, have gone from some [deleted] troops to somewhere between [deleted] troops, and their equipment as well is in cantonment areas and being monitored by SFOR.

The federation remains handicapped by its partners' deep, mutual distrust, and that has been like that from the beginning. Freedom of movement across the inter-entity boundary line remains impaired, while freedom of residence in minority areas remains blocked in most, if not all, cases.

Certainly, economic reconstruction and building of political institutions continues to go slower than anyone would like. But progress is being made.

It is in this environment that SFOR, the Stabilization Force, has been operating since last December, with a mission that is shown on chart 8.

SFOR'S MISSION

Deter resumption of hostilities, and stabilize and consolidate the peace in order to contribute to a secure environment thus facilitating civilian implementation.

[CHART 8]

Just as important as it is to know what SFOR's mission is and what they will do, so it is to understand what they have been told not to do. That is shown on chart 9.

SFOR WILL . . .

NOT engage in civil police functions
NOT guarantee the movement of individuals or forcibly return refugees
NOT enforce arms control agreements
NOT provide logistical or organizational support to the OSCE to the same extent as IFOR
ONLY detain indicted war criminals if they are encountered in the course of performing its mission and if the tactical situation allows

[CHART 9]

SFOR has been told not to act as a civil police force on a daily basis. For that there are the indigenous police forces. The Bosnian Serbs, the Croats, and the Moslems maintain their police forces and, under Dayton, are required to keep law and order. And there is a number of international police monitors there who are supposed to see that police work is done and that human rights violations are reported.

SFOR is also not there to guarantee the movement of individual people or to forcibly return refugees. They will not enforce arms control agreements or provide the same logistical support during the next elections, which are tentatively scheduled for July. But there is already some talk among the Europeans of perhaps postponing them into September, which we oppose. I oppose it because it simply kicks the can down the road.

And, of course, as you know, SFOR will only detain indicted war criminals if they fall into their hands, but they will not mount operations to hunt them down. There is, however, an effort ongoing right now, and the first planning meetings are being held in Europe, [deleted].

As a matter of fact, several European countries and the United States are going to start meeting in Stuttgart, Germany, [deleted].

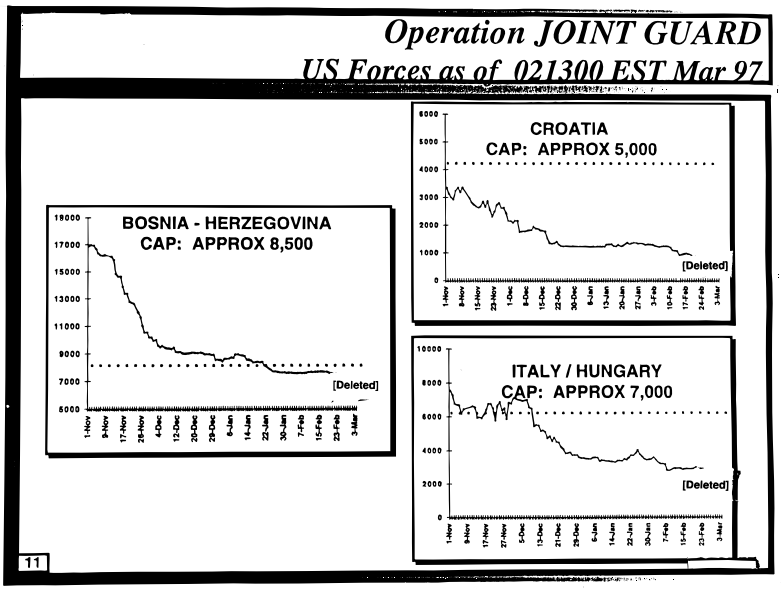
SFOR Contributing Nations

NATO (15):	
Belgium	300
Canada	1,300
Denmark	785
France	4,500
Germany	3,500
Greece	250
Italy	2,300
Luxembourg	23
Netherland	1,000
Norway	600
Portugal	400
Spain	1,600
Turkey	1,300
United Kingdom	5,000
United States	8,500
Non-NATO (17):	
Albania	30
Austria	225
Czech Republic	600
Egypt	400
Estonia	3
Finland	300
Hungary	390
Jordan	10
Latvia	50
Lithuania	140
Malaysia	1,500
Morocco	810
Poland	420
Romania	200
Russia	1,200
Sweden	350
Ukraine	400

[CHART 10]

Chart 10 shows you the nations that now contribute to SFOR and the numbers which they have pledged to support it. As you can see, all NATO countries, with the exception of Iceland, of course, which does not have a military force, contribute to SFOR, as do 17 non-NATO nations. And 13 of those 17 non-NATO nations are Partner for Peace nations.

As you know, the President has announced that our contribution inside Bosnia would be 8,500.

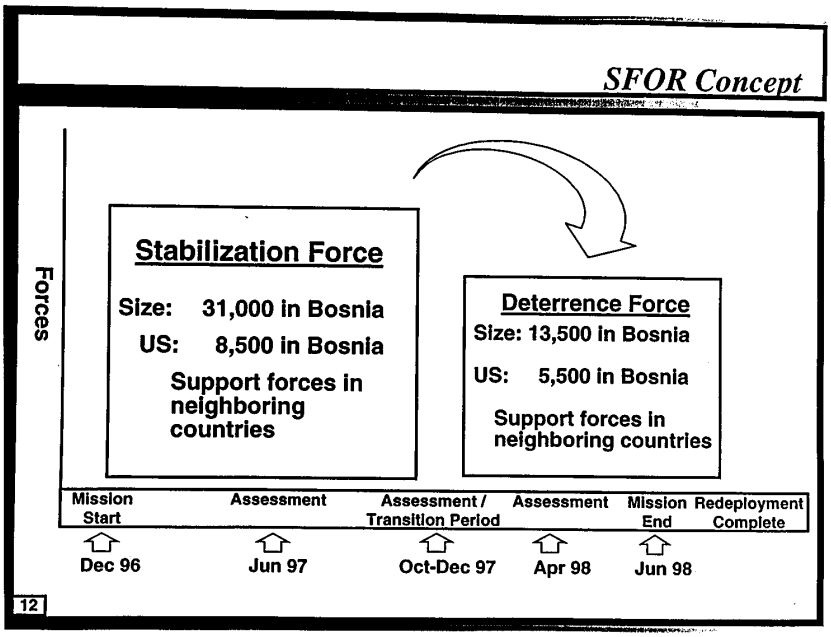


[CHART 11]

Chart 11 shows the actual numbers that we have there today and have had there for some time, both inside and outside of Bosnia.

Inside Bosnia, we are about 1,000 below the cap that the President had established. Shown as well are the numbers in Croatia, Hungary, and Italy.

Again, you can see they are way below the caps. The reason the caps are so high is because those numbers increase when you bring forces in and they will increase again as you withdraw them. So there is no intention of keeping people in Croatia to the numbers that the cap indicates. But we want to have the head room during the times that you bring the force in and bring it out. The same is true of Italy.



[CHART 12]

On chart 12, I tried to attempt to show the way ahead. We plan to conduct formal assessments at 6 month intervals. Starting this June, we will begin to see if the situation will permit us, sometime late this fall, to further reduce the force from some 8,500 United States personnel in Bosnia to perhaps a number like 5,500. But much will depend on the security situation.

But, currently, the thinking is that there ought to be one further reduction possible. And if things go as expected, the thought now is to end the mission in June 1998, and to have Americans withdrawn shortly thereafter.

I am sure you have been reading Secretary Cohen's remarks in Europe these last few days, where he has been very strong and very positive that he does not expect to see Americans participating in the operation after June 1998 and has so stated in London and in Bonn. I think he is on his way to Paris to do the same thing.

THREATS TO SFOR

SFOR dominant military force in Bosnia
—Terrorist threat reduced, not eliminated
Bosnia in compliance with foreign forces provisions of Dayton Accords:
—[Deleted]
Mines, weather and disgruntled individuals and criminals remain primary threats

[CHART 13]

Today, the threats to our troops in Bosnia are shown on chart 13. These threats have not appreciably changed except that the threat that we initially had from the [deleted].

Depending on who you talk to, estimates are that there are probably still around [deleted] type folks in Bosnia, but that they are not [deleted]. Those that just stayed behind married local women or are working for nongovernmental agencies and what-not.

Let me next turn to our small, ongoing operation in Macedonia, as shown on chart 14.

Operation ABLE SENTRY—June 28, 1993

[U.S. contingent of U.N. operation to observe sanctions violations along Serbian/Macedonian border]

U.S. forces	530
Nordic Forces	500
Indonesian Forces	50

[CHART 14]

Since June 1993, we have maintained some 530 soldiers in Macedonia as part of a U.N. operation to observe sanctions violations along the Serbian-Macedonian border. This operation so far has been virtually incident free and has done much to stabilize that border and probably Macedonia itself. Next to us, the Finns have the largest contingent there.

The other operation dealing with the Balkans is shown on chart 15.

OPERATION DELIBERATE GUARD—AVIANO ITALY

[December 20, 1996]

Mission: Conduct air operations in direct support to SFOR * * * to execute the military tasks, to protect friendly forces, and be prepared to provide emergency support.

U.S. Aircraft:	
Fighters	[Deleted]
Support	[Deleted]
Allied Aircraft:	
Fighters	[Deleted]
Support	[Deleted]

[CHART 15]

The United States maintains some [deleted] fighter aircraft and some [deleted] appropriate support aircraft as part of an operation called Deliberate Guard. That operation is designed to support our ground troops in Bosnia [deleted].

As a result of the situation in Bosnia and your visit, Mr. Chairman, there, we are under direction from Secretary Cohen to relook this operation and see how many aircraft can be brought out of there without jeopardizing the troops. This is not a deny flight operation, but when we reduced the troops by the numbers that we did from IFOR to SFOR, from some 17,000 or 18,000 to 8,500, General Joulwan felt that he needed some reserve that would be there,

readily available, in case trouble came. So that is why these numbers of aircraft are being maintained for that.

But we are probably at a point where we can make some adjustments of that, and, hopefully, we will do that in the near future.

OPERATION NORTHERN WATCH—IRAQ

[April 6, 1991]

Combined operation to enforce the no-fly zone and provide surveillance/monitor Iraqi military forces in Northern Iraq

U.S. Combat Aircraft	[Deleted]
Allied Combat Aircraft	[Deleted]
U.S. Support Aircraft	[Deleted]
Allied Support Aircraft	[Deleted]

[CHART 16]

Since April 1991, we have been patrolling the skies over northern Iraq as part of an operation that was first called Provide Comfort and recently renamed Northern Watch. That operation is shown on chart 16.

Today we are joined in this operation by the Turks, with [deleted] aircraft, and the United Kingdom, with [deleted] aircraft. The French participated until last September, when they withdrew mainly because of [deleted]. But they, at that time, had something like [deleted] aircraft in that operation.

Let me now turn to Africa and chart 17.

OPERATION ASSURED LIFT—AFRICA

[January 29, 1997]

Operation to support airlift of troops from designated African nations to Liberia in support of ECOMOG

U.S. forces	200
U.S. aircraft	8
Sorties flown	47
Total Pax	1,119
Total Short tons	428
End date	March 4, 1997

[CHART 17]

Yesterday, we concluded a month long operation, flying in some 1,200 African troops into Liberia to reinforce the peacekeeping operation there, called ECOMOG. It is an ongoing peacekeeping operation that has been there for quite some time and has had a spotty record of success in keeping trouble out of that country.

You might recall that last spring we conducted a very intensive operation in Liberia because the fighting had gotten almost out of control. At that time we brought out some 2,400 civilians from 83 different countries, including 485 Americans who had been caught up in that fighting.

Today, the security situation, while it is still tense, has returned to fairly normal, and our Embassy is, once again, operating with its full complement.

CENTRAL AFRICA

Zaire: Insurgency threatens government
—Conflict internationalized
—200,000 at risk
Burundi: Government confronting ethnic war
—Both sides radicalized
—Political solution unlikely
Rwanda: Insurgency growing
—Hutu militants targeting Tutsis, NGO's

[CHART 17B]

Let me, on chart 17B, discuss for a moment the situation in Zaire. We, of course, don't have anyone involved in Zaire right now. But I want to highlight that to you because the situation is not getting better. The rebels that are operating in the eastern part of the country continue the movement westward. Depending on whose reports you listen to, some 100,000 to 300,000 or 400,000 refugees are being relocated in the area by the fighting. Negotiations between the government and the rebels are going nowhere right now.

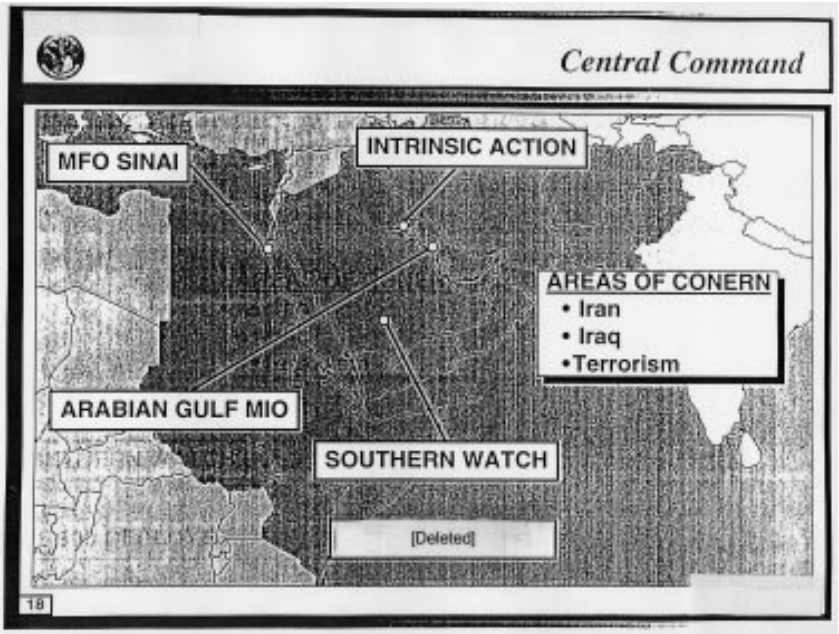
The U.N. Secretary General and France have resurrected their idea of a multinational force, and the loss of the major city in that part of Zaire, Kisingani, if that city were to fall to the rebels, it could very well unhinge the government in Zaire.

We do have a large number of Americans in the area. So we are looking very carefully at whether we will need to conduct a noncombatant evacuation here in the near future and will need to be ready for that. But it won't be easy. It will probably be a very complex operation.

That is the reason I point it out to you, because the signs are not good in that country, as they are not good, really, in all of that central region of Africa.

Senator LEAHY. Is this a huge operation or not?

General SHALIKASHVILI. When you have to evacuate several thousand Americans over an area that is as huge as Zaire, God knows where they all are because the Embassy has great difficulty staying in touch with everyone—the missionaries, the NGO's. They are found in many parts of the country. It is not going to be an easy operation if we have to conduct a noncombatant evacuation.



[CHART 18]

CENTRAL COMMAND

Let me now leave the European Command, if I may, and with chart 18 turn to the CENTCOM region.

The areas for General Peay to worry about are Iran, Iraq, and, of course, terrorism.

There are four military operations ongoing in this area with a total of [deleted] military personnel deployed as of today.

Let me first turn to Iraq on chart 19.

IRAQ: SITUATION UPDATE

Threats

Threaten regional stability
Challenge No-Fly/Security Zone
Acquisition of WMD
UNSCOM at odds with Iraq
—[Deleted]
Baghdad thinks sanctions near end
—Implementation of UNSCR 986
Willingness to use military
—Attack on Irbil—1996
—Kuwait border—1994

Weapons of mass destruction

[Deleted]

[CHART 19]

Today's Iraqi military consists of some [deleted] as compared to some [deleted] during Desert Storm. Saddam's republican guard di-

visions, his best, went from [deleted] and his regular army divisions from [deleted].

However, these divisions are now [deleted]. They continue to do [deleted] training. They have shown us time and again that [deleted]. So they do that fairly well. [Deleted.]

Although there are currently today some very intrusive UNSCOM inspections ongoing, we expect [deleted]. Yet there is every suspicion that [deleted].

[Chart 20 deleted].

If you turn to chart 20, while Iraq is a [deleted] threat to our interests in the region, so is actually Iran. More importantly, Iran is [deleted] for us.

Iran is not only building up its conventional capabilities, but also its weapons of mass destruction programs, while all along supporting terrorism and working to undermine the regimes in the region, [deleted] and others.

As a result of press speculations here within the last month or so that [deleted] the Iranians have been [deleted].

U.S. CENTRAL COMMAND OPERATIONS SUMMARY

MFO Sinai—July 1983

Observe and report violations of the 1979 Egyptian-Israeli Treaty
U.S. Forces—[Deleted]

Southern Watch—August 27, 1992

Joint/Combined operation to preserve regional peace and order in Southern Iraq
U.S. Forces—[Deleted]
U.S. A/C—[Deleted]
U.S. Ships—[Deleted]
Allied Ships—[Deleted]
Allied A/C—[Deleted]

Arabian Gulf MIO—August 1990

Conduct Maritime Intercept Operations to enforce UNSCR 661/687 against Iraq
U.S. Ships—[Deleted]
Allied Ships—[Deleted]

Intrinsic action—1991

Multinational Ground Field Training Exercise
U.S. Forces—[Deleted]

[CHART 21]

Chart 21 describes the four operations now ongoing in the region. Let me start in the upper right hand corner, if I may.

The Arabian Gulf maritime intercept operation continues with [deleted] U.S. ships today. Usually, allied ships participate as well, usually [deleted]. But today, as we are meeting, there is [deleted] in that operation.

This morning, just to illustrate the kind of work they do, off the coast of [deleted]. That situation is still ongoing. Probably, like all situations, it will resolve eventually. But that is the kind of work that goes on almost every day.

We never hear about it. It is a fairly quiet operation. But there are on any given day, the estimate is, [deleted] that are trying to [deleted].

The next operation listed there is Intrinsic Action. It is a near continuous presence of a mechanized armored task force in Kuwait to train with the Kuwaitis [deleted].

This operation, these training events, are forecast for the year, and all that is forecast, other than personnel costs, is paid by the Kuwaiti Government. It is essential training for them and it is very good training for us. If you talk to soldiers who have gone to train there, they find it very beneficial. So does the Army.

The next one is the multinational force and observers in the Sinai. We usually do not talk about it as an operation, again because we never hear about it. But that is nearly 1,000 soldiers who have been there since the Camp David accords were signed.

Their task is to be, in fact, what they are, observers along the Israeli-Egyptian border. [Deleted.] They have been doing this for all these years now.

My discussions with the Israelis—and I try to bring it up as often as I can, when would it be time to go home—the answer that you get is that it would undermine the peace process if we took them out now, that we need to wait. So there has been no sympathy on the part of the Israelis to let that force go.

The operation, by the way, is paid equally by Israel, Egypt, and the United States. It is a one-third, one-third, one-third arrangement.

The final operation, of course, is the one that we all know about, Operation Southern Watch, the enforcement of the no-fly zone, to last September up to the 32d parallel, since last September up to the 33d parallel.

As you know, after Khobar Towers, we consolidated almost all of our flight operations at the remote Prince Sultan Air Base south of Riyadh.

Prince Sultan, who was just here last week after reviewing the security situation with us, [deleted] both in that air base, in the housing area, Eshkon Village, south of Riyadh, and for improvement in quality of life for the airmen stationed there.

The discussions we have had with Prince Sultan, Mr. Chairman, [deleted].

The gist of the answers, at the risk of oversimplifying, was that it was a [deleted].

Nevertheless, Secretary Cohen has directed us as a part of the total review of our worldwide forces to take a very close look and see what adjustments can be made there.

I must tell you, though, Mr. Chairman and members of the committee, that going back to September and October 1994, when Saddam Hussein moved his forces toward Kuwait, Secretary Perry, then, after visiting the area, felt that as long as Saddam Hussein was around and was as unpredictable as he was, we needed to make sure that we did not try to save on what we could do to deter him from moving and then have to pay a higher price if he were to repeat something that he attempted to do during Desert Storm. [Deleted.]

We have done a lot of computer runs and other things to see what we could do to halt an Iraqi attack [deleted].

Having said that, we are relooking it to see if other adjustments can be made downward.

CENTRAL COMMAND AIR EXPEDITIONARY FORCE

AEF to [deleted] Qatar

(February 20–May 20, 1997) AEF deployed to [deleted] Qatar
90 day deployment [deleted]
AEF will fly missions in support of Operational SOUTHERN WATCH
AEF flew 8 SOUTHERN WATCH sorties within 24 hours of arrival

AEF Composition

[Deleted] F–16C (Air-to-Air)
[Deleted] F–15E (PGM)
[Deleted] F–16CJ (HARM-Capable)
[Deleted] Tankers (Standby)
[Deleted] Bombers (CONUS Standby)

[CHART 22]

On chart 22, I show a deployment that we have ongoing right now in Qatar. As we have done in the past, when there were [deleted] an Air Force expeditionary force of some [deleted] aircraft is deployed in the area, currently now in [deleted] in Qatar.

They are now scheduled to stay there until May [deleted].

PREPO EQUIPMENT CENTRAL COMMAND

Kuwait

AWR–5—1 BDE

Qatar

AWR–5 Division Base (0 percent)
1 BDE [deleted]
Projected Completion January 2000

AWR–3 [Deleted]

Cape Douglas
Cape Horn
Cape Hudson

AWR–3 [Deleted]

Cape Henry
Cape Washington
NOTE.—MPSRON located Diego Garcia

[CHART 23]

Finally, chart 23 shows the prepositioned combat equipment we have in the region because you cannot talk about what you need to do against [deleted] without understanding what is prepositioned there.

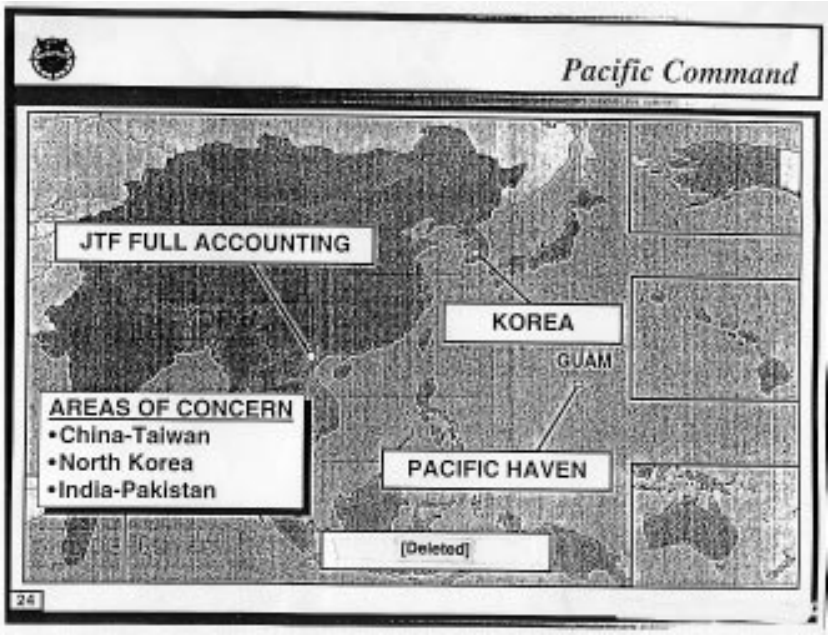
There is one Army brigade set of equipment prepositioned in Kuwait. It is on that equipment that these task forces that go to Kuwait train.

Another Army brigade set of equipment is being started at Qatar, and we have there now one battalion. It shows on the chart that we are about [deleted] complete. We expect to complete that prepositioning by about the year 2000.

Another Army brigade and a division base is on board five ships near [deleted]. But that is also equipment that will go to [deleted]. So this is equipment that would swing either way.

So we watch very carefully the situation in [deleted] to make sure that we start moving the equipment in time as things heat up in that part of the world.

Finally, a complete set of Marine equipment is in Diego Garcia. With that, let me now turn to the Pacific Command, if I may.



[CHART 24]

PACIFIC COMMAND

Certainly the areas watched by Admiral Preuher are China and Taiwan, certainly the Korean Peninsula, but also India and Pakistan. There are two operations ongoing right now, Joint Task Force Full Accounting, with which you are very well familiar, which today is deployed to Cambodia and Laos; and Operation Pacific Haven, in Guam, which I will discuss in 1 minute.

A total of some [deleted] personnel are deployed on these two operations. Of course, in addition to the [deleted] or so that are on the Korean Peninsula.

FLASHPOINTS

Taiwan Strait
—Chinese goal of reunification by 2010
—Expect yearly Chinese military exercises involving island attack scenarios
—Taiwan refuses to acknowledge "one China" under PRC
South China Sea
—Competing resource claims
—China agreed to "shelve" dispute for now
—Resource development continues

[CHART 25]

Chart 25 shows the two flash points involving China. China continues to renounce force to settle reunification with Taiwan. But China's military exercises increasingly include island attacks in areas.

However, it is my judgment that China will not be capable of a successful invasion of Taiwan for a number of years.

As an aside, China's military consists now of some [deleted] million personnel, [deleted] million, of those are organized in [deleted] divisions as ground forces. It has some [deleted] combat aircraft, some [deleted] major surface combatants, and some [deleted] submarines.

They also have some [deleted] launchers. We are not sure [deleted]. A small number of that is active.

NORTH KOREA: POTENTIAL FLASHPOINT

Situation
—Military training despite food/material shortages
—Four major leadership changes in less than one month
—Economy in downward spiral; infrastructure breaking down
—Fall harvest inadequate
—Capable of inflicting mass damage on south
Military forces: [Deleted]
Manpower: [Deleted]
SOF: [Deleted]
Reserves: [Deleted]
Divisions: [Deleted]
Tanks: [Deleted]
Artillery/MRL: [Deleted]
Aircraft: [Deleted]

[CHART 26]

Chart 26 shows the current situation in North Korea.

First, canning of radioactive material at Yongbyon reactor continues. But the very long, very large conventional capability is still there and very close to the DMZ. Despite severe food shortages and all that we read about that is happening in North Korea, training there continues. Miscalculation is always possible. Long-range artillery, missiles, special operations forces still give the regime the capability to inflict enormous damage.

We just have to remember that much of their long range, though not all of their long-range, artillery is within range of Seoul, and certainly their extensive Scud systems can hurt as well.

When you look at their [deleted].

So despite what is happening, we have to understand that the threat on the Korean Peninsula is still real. Despite what intentions the North Koreans might have, the chance for miscalculation is very great.

The economy, of course, is probably in a free-fall. [deleted].

But it is also important to remember that the North Koreans probably have an enormous capacity to absorb hardship. That is another thing that we also ought to remember about Russia. Despite the unraveling and what we hear about the military, they do have a much larger capacity to absorb hardship and to muddle through somehow than we sometimes give them credit for.

INDIA-PAKISTAN: STRATEGIC RIVALRY

Both sides seek better relations; Kashmir major obstacle
Pakistan improving ballistic missile capabilities
—M–11 [deleted]
Indian improving missile arsenal
—[Deleted]
Both are outside arms control regimes

[CHART 27]

Chart 27 describes the strategic rivalry between India and Pakistan. The Indian Army has about [deleted] military personnel in Kashmir. Pakistan has nearly [deleted] troops along or near that line of control.

Overall, India has about [deleted] under arms while Pakistan has [deleted]. This rivalry continues to drive the pursuit for weapons of mass destruction as Pakistan seeks to counter India's conventional superiority.

The M–11 missiles that have a range of about [deleted] that they receive from China are [deleted]. Pakistan, we believe, [deleted].

The Indians have the Prithvi missile, which has a shorter range of [deleted].

Operation PACIFIC HAVEN (Groups II and III)

Current Population	3,594
Security Checks Completed	3,503
Population on Guam with Sponsorship	945
Ready to Airlift	959

Total Moved: 889 (20 percent)
Initial Population: 4,434
Births to Date: 47

[CHART 28]

Chart 28 describes the status of our ongoing operation in Guam. As a result of Saddam Hussein's military operation in northern Iraq last September, the United States Government has brought some 4,400 Kurds out of northern Iraq to Guam for processing prior to movement to the United States. So far, some 890 have been processed and moved to the United States. We have no good estimate of how long this operation will take. But probably we should not expect it to be finished before June or July, or maybe even later.

There are currently some 1,380 service personnel there in Guam caring for and running this operation.

ATLANTIC COMMAND

Areas of Concern
Cuba
Haiti

Operations
Counter Drug Ops
—2,992
1 Exercise
—484 Participants

[CHART 29]

ATLANTIC COMMAND

Let me now turn to chart 29 and the Atlantic Command, where General Sheehan continues to watch carefully the developments in Cuba and Haiti, while continuing to oversee counterdrug operations.

CUBA

Castro remains in control; [deleted]
Manpower/equipment
Army—[Deleted]
Navy—[Deleted]
Air Force—[Deleted]

[CHART 30]

Chart 30 summarizes the situation in Cuba. Major political or economic change is unlikely while Castro remains in power. There is little reason to believe that he will soon depart.

The current situation is stable, but we need to understand that that could change with very little warning. [Deleted.]

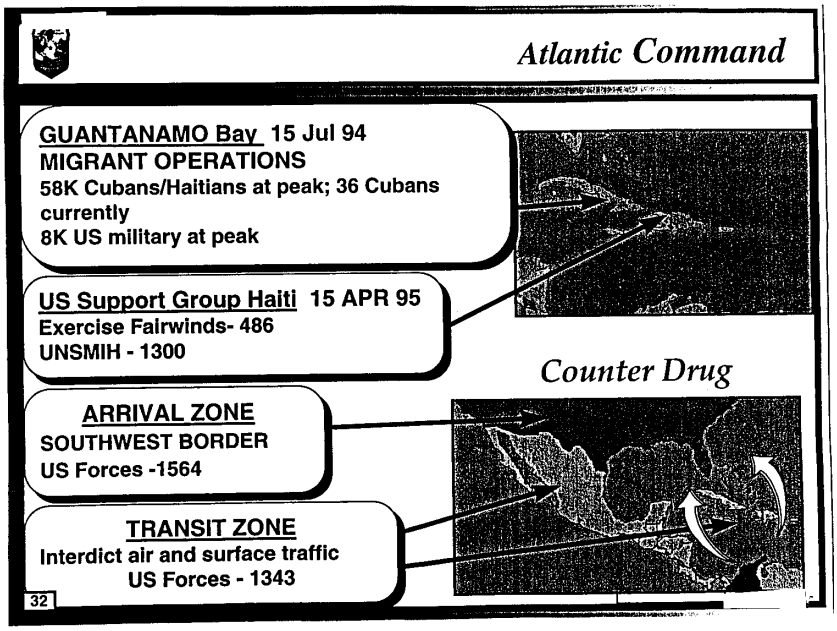
HAITI: POST-UNSMIH SECURITY AND STABILITY ASSESSMENT—6 MONTHS

Political institutions functioning, but Preval unable to satisfy popular demands for economic improvements
—Protests/strikes have increased
—Poverty underlying cause for crime
HNP slowly improving
—Gaining public acceptance
—Able to handle routine police duties
HNP unable to cope with:
—[Deleted]

[CHART 31]

Chart 31 shows the situation in Haiti. The Haitian National Police, some 6,000 of them that had been trained by us, are handling the routine police duties, but certainly need more experience and more training. It is my judgment and the judgment of General Sheehan, who just returned from Haiti a couple of days ago, that they would [deleted].

At the moment, [deleted] if for no other reason, the population seems to view the Preval government as a legitimate government. But, again, it is one of those tenuous situations at best, and you don't know when you are in places like City Soleil or somewhere else if some violent event will occur that could get out of hand.



[CHART 32]

Chart 32 shows the operations that General Sheehan is currently overseeing. In Guantanamo Bay, he is still caring for some 40 Cuban migrants. These are migrants that weekly one or two will come in or swim in from Cuba that are held in Guantanamo and, as soon as possible, are either returned back to Cuba or turned over to the proper civilian governmental agencies that handle these folks.

But ever since the end of our mass migration there that we have handled, we have maintained anywhere from 30 to 40 Cuban migrants on any given day.

In Haiti, we maintain a support group of some 490 personnel to support ongoing engineer exercises and training similar to those kinds of exercises in training that we conduct in Central America. Our ongoing counterdrug operation in General Sheehan's area involves on any given day some 1,300 military personnel.

SOUTHERN COMMAND

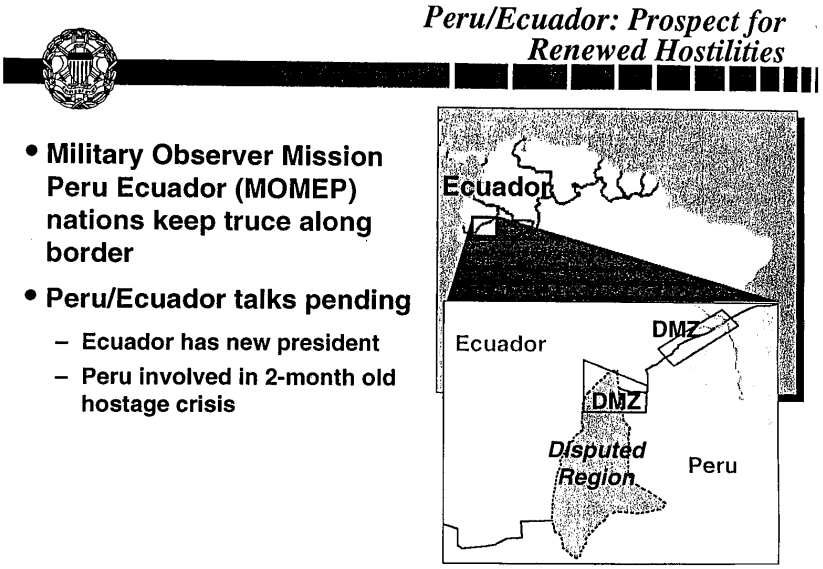
Areas of Concern
Narcotics
Peru-Ecuador

Operations
SAFE BORDER—68
LASER STRIKE—331
STEADY STATE CD—459

[CHART 33]

SOUTHERN COMMAND

Chart 33 brings us to the Southern Command, where narcotics is our main concern and where along the Peru/Ecuador border we participate in a small peacekeeping operation. You can see that on chart 34.



[CHART 34]

Since January 1995, the United States, Brazil, Argentina, and Chile, the four guarantor nations, have been providing observers to oversee the ceasefire between Peru and Ecuador. We provide some observers and helicopter support. This helicopter support, by the way, is now going to be taken over by Brazil. They have purchased American Blackhawk helicopters, and as soon as the training is completed, they will take over that mission. So we will be able to reduce our personnel there further.

I must tell you that [deleted]. They have been making very moderate progress. Now the hostage situation in Peru, the fall of the government in Ecuador, the purchase by Peru of Mig aircraft which further raise the level of anxiety in Ecuador, [deleted].

But, meanwhile, it is felt that this is a small investment to keep them at least from fighting each other.

U.S. SOUTHERN COMMAND OPERATIONAL OVERVIEW

LASER STRIKE U.S. Forces—331

[CHART 35]

Chart 35 describes a counterdrug operation that is ongoing, called Laser Strike, which started in April 1996. It is designed to disrupt the production and air and waterway movement of illegal drugs from and within this source region. Some [deleted] U.S. personnel are supporting host nations that are actually doing the work. [Deleted.]

Again, all of it is to assist the host nations that do the work.

Let me finish really quickly, if I may, Mr. Chairman, with just four slides that sort of summarize what the terrorist situation is around the world where our troops are stationed.

COUNTERTERRORISM

I will then be prepared to answer your questions.

TERRORIST THREAT OVERVIEW: EUROPE AND AFRICA

[Deleted]

[CHART 37]

If you will then go to chart 37, in the European theater, that is, Europe and a major part of Africa, only [deleted] right now. That is the highest we have. In essence, what that means is that a terrorist act can occur at any moment now. We cannot expect any more information.

[Deleted.] Periodically, particularly in Saudi Arabia, that goes up to—not in Saudi Arabia, [deleted]. But it has not now for some time.

TERRORIST THREAT OVERVIEW: SOUTH AMERICA

Peru and Colombia are major concerns
—[Deleted]
High Terrorist Threat countries: Peru and Colombia

[CHART 38]

If you turn to chart 38 and Latin America, [deleted].

TERRORIST THREAT OVERVIEW: ASIA

No High Threat countries in PACOM
Area of least concern from terrorist attacks against U.S. forces
[Deleted]

[CHART 39]

On chart 39, in Asia, there are no countries right now in [deleted] are [deleted]. Again, we have to be prepared that this could change overnight, particularly if [deleted].

TERRORISM THREAT OVERVIEW: MIDDLE EAST

Arab-Israeli conflict driving force behind most terrorism
Saudi dissidents opposition to U.S. presence
[Deleted]

[CHART 40]

On chart 40, finally, in the Middle East, the current [deleted]. As I alluded to, just a second ago, [deleted] and so on.

One of the problems we have and that I do not know how to solve is that you can really keep troops on a high-threat level for only so long before numbness sets in and you begin to operate fairly routinely. And so, when to gauge, when to bring them up and then how to bring them down so you didn't get caught at the wrong time coming down is a difficult issue that the CINC's and I talk about. That is really the big issue.

Let me tell you that, as far as counterterrorism is concerned, we have worked very hard since Khobar Towers. I have established an office in the Joint Staff that works that very exclusively. It is their only function. We have worked on the Downing report and all the recommendations. There were some seven or eight recommendations. All but two are fully implemented. The two that are not are issues that we are still waiting for contractors to deliver certain equipment on to fully implement them.

The CINC's are all very well aware of this.

The fact is that we are indisputably the best at many things. We are the best if you ask someone about nuclear submarine operations, or armored warfare, or dissimilar air combat. People know to come to the United States to learn how to do that.

The one area where they will go somewhere else is force protection and antiterrorism. They will probably go to Israel or maybe to the United Kingdom because of their experience in Ireland.

Our task, then, and the task I've set for myself and for the CINC's and the services is to turn that around so that as soon as we can bring it about, we will become known as the best in force protection and antiterrorism.

PREPARED STATEMENT

It is easy to talk about but harder to do, and much of it is a mindset change. But we absolutely have to do that.

Mr. Chairman, with that let me finish. Thank you for your time and I am prepared to try to answer your questions.

[The statement follows:]

PREPARED STATEMENT OF GEN. JOHN M. SHALIKASHVILI

Mr. Chairman, members of the committee. I am proud to report to you that the United States' military remains the finest military force on earth. Time and again this past year, the 3.1 million members of the Total Force performed superbly in a variety of challenges around the globe. Success was due in large measure to the strong support of Congress, the Administration, and the American people. But more importantly, the force succeeded because of quality people, outstanding unit leadership, and its unique ability to adapt and persevere in an environment characterized by change and uncertainty.

As busy as the force has been and with all of the talk about today's dangerous world and the difficulties Americans have faced, it is too easy to overlook the fact that today the United States and its Allies are much safer than they were in the dark days of the Cold War. This "strategic pause," where the United States has no adversaries who are global powers, is providing us with the time to regroup, reflect on the challenges ahead, and prepare America's forces for the next millennium.

One of the strategic consequences of the post Cold War period is that the U.S. has been able to reduce military force levels. Since 1989, the active all-volunteer force has been reduced by 700,000 people—about a third of the active force. The Army has gone from 18 active divisions to 10, a 45 percent reduction; the Navy from 566 ships to 352, a 38 percent decline; and the Air Force, from 36 to 20 fighter wings, down 45 percent. These are the lowest force levels since before the Korean War. The Defense Budget has also been cut by about 40 percent since 1985. In fiscal year 1998, it will represent only 3.0 percent of the Gross Domestic Product, the lowest since before World War II.

The force drawdown these past few years has not been an easy experience for military members. Many outstanding Americans were asked to leave the service of their country, thousands of whom had hoped to make the military a career. But through all this, the great people in uniform have persevered and once again confirmed the importance of American leadership in a number of contingencies around the globe.

OPERATIONS

America's military today is performing more missions, in more places than it did during the Cold War, and is doing so with significantly fewer personnel. Yet our men and women have performed brilliantly from one end of the world to the other, with Bosnia standing as a prime example.

Balkans

Fifteen months ago in many Bosnian towns and cities, artillery fire was killing men and women in their homes and snipers often shot children playing in the streets. Atrocities were nearly a daily occurrence. U.S. forces went into Bosnia with the Implementation Force (IFOR), the NATO force tasked to accomplish the military tasks assigned in the Dayton Accords. It was a heavy force, involving nearly 20,000 U.S. military members who participated in keeping the factions separated, demobilizing forces, and achieving the other military goals of the Dayton accords.

The situation has changed dramatically since then. Today there are no weapons firing into towns and children once again play in the streets. The absence of war brought by IFOR offers a ray of hope for the future. On December 20, 1996, U.S. forces reached a milestone with the successful transition from the Implementation Force to a Stabilization Force (SFOR).

SFOR continues to build on the success of IFOR by providing time and an environment that will permit civilian initiatives to proceed. Up to approximately 8,500 U.S. personnel in Bosnia and an additional 5,000 in neighboring countries are supporting the Stabilization Force. SFOR is a mobile force that will concentrate on providing a safe and secure environment for civilian implementation of Dayton accords. The Commander, Stabilization Force (COMSFOR) is supported by an air operation built on the foundation of the successful Operation Deny Flight; 1,800 U.S. personnel are involved in this facet of operations.

Our forces will be in place for 18 months. Every six months, a review of the security situation and civil initiatives will be conducted with the goal of moving to a deterrent force of reduced size.

Equally important to regional stability in the Balkans was Operation Able Sentry. Able Sentry is the U.S. contribution to the United Nations Preventative Deployment operation in Macedonia. 500 U.S. personnel joined 500 troops from other nations to ensure containment of the crisis in Bosnia.

Middle East

Operations in the Middle East remained key to the preservation of regional peace and stability during 1996. Nowhere was this more evident than in efforts to deter additional Iraqi aggression and enforce U.N.-ordered sanctions and resolutions.

With the closing of the Military Coordination Center last year, the Secretary of Defense approved a modification of the mission in Northern Iraq. Since 1991, Operation Provide Comfort had provided humanitarian assistance to the Kurds and enforcement of the northern no-fly zone. The new Operation Northern Watch will focus exclusively on enforcement of the no-fly zone. Approximately 1,100 U.S. personnel support these efforts along with personnel and aircraft from the U.K. and Turkey.

Operation Southern Watch remained in effect throughout 1996, tasked with ensuring compliance with United Nations' Security Council Resolution 949 and the 1994 U.S. demarche prohibiting the build-up of Iraqi ground forces south of the 32d parallel. Southern Watch remains a multinational operation with participants from the U.K., France, Saudi Arabia, and Kuwait.

Arabian Gulf maritime intercept operations continued to monitor shipping to ensure compliance with pertinent U.N. Security Council Resolutions. Although the U.S. assumed the bulk of responsibility for operations, during 1996, the U.K., Netherlands, Australia, Belgium, Italy, and France also participated.

In spite of international efforts to maintain the peace and force compliance with U.N. resolutions, Iraq still conducted military operations against its Kurdish population in the North. Operation Desert Strike was the U.S. response to this aggression. Designed to deter Iraq from further offensive operations, U.S. forces struck military targets in Southern Iraq and expanded the no-fly zone in the South, further constraining Iraq's military.

The attack on the Kurdish population made it clear that the coalition could no longer guarantee the safety of civilians that had been working with the United States and international relief organizations to secure the peace. Operation Pacific Haven was initiated to evacuate and relocate former U.S. Government employees, political refugees, and their families. Using facilities on Guam, the DOD in cooperation with the Department of State and other agencies, airlifted approximately 6,500 Kurds from Iraq to the island of Guam. 1,540 service members and 150 civilians support this operation on Guam.

All these operations were in addition to on-going participation in the Multinational Force and Observer (MFO) missions in the Sinai. Nearly 1,000 U.S. forces man outposts in the Sinai. Since 1982, these troops have performed monitoring duties in accordance with the provisions of the peace treaty between Egypt and Israel.

Latin America and the Caribbean Basin

The United States participated in a wide range of operations the past year in Latin America.

In Haiti, Exercise Fairwinds continues to help promote the building of a safe and stable environment. Approximately 500 U.S. medical, engineering, and security personnel currently are in Haiti. Together with monthly port calls from Navy and Coast Guard vessels, our forces perform select humanitarian projects designed to restore the devastated infrastructure and provide hope for the population struggling to emerge from this crisis.

Counter-drug operations continued in cooperation with regional governments in Operation Laser Strike. Working to support host nation counter-drug operations, Laser Strike focused on data collection and interdicting air and sea movement of illegal drugs. More than 500 U.S. personnel are making significant contributions to the development of a more comprehensive regional approach to counter-drug operations.

In Honduras, Joint Task Force Bravo (JTF-B) continued its 12th year of operations designed to promote cooperative security and regional stability. The 500 members of JTF-B conduct medical training, engineering operations, disaster relief, counter-drug operations, and CJCS-sponsored military exercises.

Another operation is Safe Border, the U.S. contribution to monitoring the cease fire along the Ecuador-Peru border. Established by the Rio Treaty, 60 U.S. personnel joined observers from Brazil, Argentina, and Chile to mitigate the conflict.

Finally, U.S. forces continued support to migrant operations at Guantanamo Bay, Cuba. Only a few cases remain to be resolved after more than 58,000 Haitian and Cuban refugees transited the base between 1994 and early 1996.

But these were by no means the only operations U.S. forces participated in during 1996. In Southeast Asia, America continues to seek resolution of those missing in action through Joint Task Force Full Accounting. In less than 48 hours, our forces successfully evacuated 2,400 non-combatants from 68 countries in Liberia. In the Pacific, when tensions flared between China and Taiwan, U.S. forces quickly responded by diverting two carrier battle groups to the region to limit the chances of escalation. This kind of mobility and response acts to stifle any potential misperceptions about our ability to show resolve in areas where U.S. interests are at stake.

In support of domestic requests, men and women in uniform deployed to support the 1996 Olympic Games, fought fires in the West, provided flood relief in the Northwest, and assisted in clearing transportation routes during a particularly difficult winter in the Dakotas.

Today, over 40,000 men and women in uniform are deployed on 14 different operations. On an average day during the past year, 50,000 military professionals participated in deployed operations, and an average of 1,700 defense civilians also deployed to support the uniformed Services.

These numbers do not necessarily include the more than 250,000 forces forward stationed or routinely deployed at sea, that are in addition to the hundreds of local unit training deployments and Joint or multinational exercises that occur on a routine basis.

In Korea, for example, 36,000 U.S. forces stand ready with 600,000 troops from the Republic of Korea to ensure peace on the peninsula against 1.8 million North Korean forces. The instability in North Korea remains a concern as economic problems, food shortages, and energy deficiencies continue to worsen. Kim Jong Il's repressive regime and brittle ideology cannot address the current crisis. Thus it is imperative that our forces stand guard to protect a fragile peace.

During the past year, the importance of selected reserve component contributions to operations around the world also continued to remain key. Reserve units and individuals possess many of the capabilities needed for regional contingencies and crises, exercise support, and peacetime augmentation.

The Services continue to leverage the cost-effective contributions of the reserve components to compensate for a smaller Total Force. Support is funded by taking advantage of scheduled routine training periods, or through the Active component funding Reserve active duty days to meet surge requirements. As a practical example, last year, nearly 145 Guard and Reserve units activated to support operations in Bosnia. They have proudly met the challenge. The active force fully appreciates the contributions of America's citizen-soldiers.

The Services continue to take action to avoid unbudgeted costs of non-routine operations from absorbing funds required for readiness and modernization. In fiscal year 1997 Congress appropriated $1.3 billion to cover military operations anticipated at the time. Two unanticipated operations resulted in $2 billion in unbudgeted fiscal year 1997 costs: Iraq's provocation in the North and the President's approval of SFOR in Bosnia. To cover these costs, the Administration is requesting a fiscal year 1997 $2 billion supplemental appropriation.

The fiscal year 1998 President's Budget requests $1.5 billion in the Overseas Contingency Operations Transfer Account to complete operations in Bosnia, and an additional $700 million for operations in Southwest Asia. This funding is important for the sustainment of critical operations and continued success in two regions.

Looking back on the operations this past year, it is gratifying to count the large number of successes. Key military determinants of success included: early involvement of military leaders in establishing a clear mission and achievable objectives, a clear chain of command, robust Rules of Engagement for operations and force protection, sufficient assets to achieve the objectives, outstanding pre-deployment training, and great people. These operations demonstrate both the importance to our nation's security of Peacetime Engagement, Conflict Prevention, and Forward Presence, as well as the necessity for our military forces to have the ability to conduct successful operations across the full spectrum of challenges.

As an integral part of a framework for success, commanders and planners must also give priority consideration to protecting our soldiers, sailors, airmen, and marines.

Force protection and combating terrorism

Few challenges loom as large as that of terrorism. The problem of terrorism and the issue of force protection are much more complex than they were 20 years ago. But terrorism isn't a new problem, it is simply an old problem getting worse. And so today, the Combatant Commanders and the Services are redoubling their efforts

to provide America's men and women with the best possible force protection measures available.

Those out to do us harm are no longer just political zealots with a few sticks of dynamite. These are determined operatives, with access to very sophisticated information and technology. They construct bombs of immense destructive power like those used at the World Trade Center and Khobar Towers.

Equally challenging is the problem of chemical and biological weapons in the hands of terrorists or rogue states, dangers that U.S. forces may face in future operations. The Chemical Weapons Convention is an important step in implementing comprehensive measures to address this particular problem. I strongly urge your support for its expeditious ratification so that the U.S. has a strong voice in the control regime.

Adding to the danger is the increasing level of financial support these groups receive from private sources and hostile states. Unable to confront or compete with the United States militarily, rogue nations are spending millions of dollars each year in an attempt to counter U.S. influence. These states try to achieve their policy objectives by exploiting small groups to do the dirty work for them.

The Secretary of Defense commissioned the Downing Assessment Task Force to examine the facts and circumstances surrounding the Khobar Towers bombing. In response to the Downing Task Force, the Secretary designated me as his principal advisor and the Department's focal point for all matters related to force protection.

The Downing Report addressed 26 findings and 81 recommendations, 79 of which have been implemented. The actions taken in response to the Downing Report include organizational changes, policy changes, intelligence emphasis, increased use of technology, and additional physical security funding. The remaining two recommendations yet to be implemented involve contract deliveries for vehicle armor kits and personnel body armor which should be completed by April 1, 1997. The SECDEF determined one finding, dealing with the number of ambulances available in CENTCOM's area of responsibility, was faulty.

Organizational changes were made in the Joint Staff, combatant commands, and Services. I established a new Deputy Director for Operations for combating terrorism (J–34) that is now the focal point for coordinating the combating terrorism program among the Services and combatant commands. The Services and combatant commands also established focal points to ensure force protection is addressed in all daily operations and is a consideration during long range planning and funding.

Policy changes were codified in DOD Directive 2000.12, "DOD Combating Terrorism Program." This directive establishes the Chairman of the Joint Chiefs as the principal advisor to the Secretary of Defense on antiterrorism force protection matters. Additionally, it establishes new responsibilities for the Services, combatant commands, defense agencies, and OSD staff. These responsibilities range from implementation to assessment of antiterrorism programs.

A major policy change resulting from the Downing Report is the delineation of force protection responsibilities between the DOD and the Department of State. In the future, force protection for overseas DOD personnel will be provided by the department which is most able to provide the best security. Currently the Joint Staff and DOD are in the process of finalizing specific country-by-country agreements between DOD and the Department of State for the Arabian Peninsula. Similar agreements are being considered for the other overseas commands. In addition, DOD Directive 2000.12 also implemented DOD Handbook O–2000.12H, as the standard for antiterrorism force protection. The handbook establishes threat assessment, education and training, physical security, personnel protection, and weapons of mass destruction related standards for all of the Department of Defense.

Force protection training for DOD personnel and assessing the physical security of the installations on which they work, are two critical areas of our overall personnel security program. Through the Services and CINC's, I have implemented a four-tiered program which includes individual, unit, commander, and senior executive level training.

Individual training is conducted by the Services upon entry into the military and throughout an individual's career in conjunction with various formal training courses. Unit level training is conducted by the individual organization. This includes formal training for the unit antiterrorism force protection instructors. Commander training is provided during the Services' pre-command training programs. This training focuses on the commander's force protection responsibilities as outlined in DOD Directives, Joint, and Service publications. Professional Military Education will also incorporate force protection into its curriculum. The final level of training is the executive level seminar for commanders involved in force protection planning and execution. Executive training culminates with a force protection wargame.

The Joint Chiefs are committed to ensuring the best available force protection equipment is available to U.S. forces. During several fora, military leaders noted the lack of "state of the art" anti-terrorism protection devices and challenged industry to draw on their extensive expertise to fulfill requirements. The response has been encouraging. But, before America procures new equipment, commanders must have a firm understanding of potential vulnerabilities and requirements.

This is where a new program of vulnerability assessment plays a key role. J–34, in close cooperation with the Defense Special Weapons Agency (the executive agent) is forming a number of assessment teams that will visit more than 650 facilities and installations on a prioritized schedule. Approximately fifty assessments are scheduled in 1997. Once the teams reach full strength they will complete 100 assessments per year. These teams will not only provide commanders with vulnerability assessments and recommendations, but most importantly will educate commanders on the types of force protection capabilities available to address shortfalls.

Timely intelligence information available at the appropriate level is a key factor in successfully combating terrorism at all levels of command. We have worked with the Defense Intelligence Agency to prioritize collection efforts in order to improve analysis of terrorist related events, both at the national and theater levels. At the national level, the Defense Intelligence Agency created the Office of Counterterrorism Analysis to provide support to the Joint Staff and combatant commands. Additional improvements were made by integrating the Deputy Director for Operation for combating terrorism (J–34) with the Defense Intelligence Agencies' Transnational Warfare Counterterrorism Office. This fusion of intelligence and operations functions improved both the analysis and dissemination of threat information to the Combatant Commanders. In addition, an Antiterrorism Watch Cell has been established which supports the National Military Command Center Watch Teams in the event of a terrorist incident.

Despite recent improvements in policy, procedures, and intelligence DOD's best efforts will not prevent every terrorist incident. Therefore, OSD initiated an effort to infuse technology improvements into force protection programs. Currently OSD has three programs; the Counterterrorism Technical Support, Physical Security Equipment Action Group, and Commercial-Off-The-Shelf Technology Insertion Program to address force protection technology improvements.

As the SECDEF's principal advisor, I play a strong role in this process. In November 1996, the Joint Staff sponsored a force protection symposium to discuss force protection requirements with industry. Industry is providing DOD with technological solutions and equipment to improve force protection. Evaluations of both off-the-shelf and emerging technologies are underway.

As the priority for force protection is raised we need to ensure it is also given a high budget priority. We initiated a review of future funding for force protection and have designated force protection as a major issue for the fiscal year 1998–2003 program review. In the near term, a Combating Terrorism Readiness Initiatives Fund was authorized in direct support of a Downing Report recommendation to fund emergency or high priority antiterrorism requirements.

This effort was possible only because of the exceptional cooperation between the Services, Unified Commands, DOD and other government agencies, and commanders at all levels. The ultimate goal is to make the U.S. military the premier antiterrorism force in the world.

QUALITY PEOPLE—THE KEY TO SUCCESS

The ability of the United States military to sustain its record of operational success into the next century is based first and foremost on our ability to recruit and retain highly capable men and women. This is the reason my number one priority remains people; their recruitment and retention through strong support of the issues important to service members.

During the last fiscal year, the DOD met 101 percent of the recruitment goals. 96 percent of new recruits have high school diplomas as compared to 1974, when that rate was only 61 percent. 70 percent of these young people scored in the top three categories of the mental aptitude test. Twenty years ago in 1977, 32 percent of new recruits scored in the lowest recruiting category. Today it is less than 1 percent (0.3 percent).

However, emerging trends are cause for concern. The Services anticipate an increase in the number of new recruits they will need to sustain the force now that the drawdown is nearing completion. Moreover, the Services are going to continue to find themselves competing more with private industry for the best and brightest young people. This is especially true given that the soldier of the 21st century, just

as the worker of the 21st century, will most likely require greater math, computer, and language skills.

But recruiting is only part of the picture. The Services must concern themselves with retaining these outstanding Americans once they enlist. Overall retention rates have increased the past year. The retention rate for DOD was the highest it has been during the past seven years. The Army and Marine Corps maintained retention rates near 83 percent, the Navy increased by 2 percentage points to 85 percent, and the Air Force increased 3 percentage points above last year, from 86 percent to 89 percent. This stability provides evidence of the dividends paid by investment in quality of life programs for America's service men and women, and reinforces the focus on these issues in the coming years.

Quality of life programs

Looking out on the horizon, military operations will continue to demand great sacrifice and dedication from U.S. forces. It is important to reaffirm the importance of the top five "people" priorities: compensation, retirement, medical benefits, housing, and personal dignity.

Congress deserves much credit for supporting the 1997 pay increase and the additions to the Basic Allowance for Quarters. The fiscal year 1998 budget funds a 2.8 percent pay increase and 3.0 percent in the out-years. But, it is bothersome that so many of the young enlisted men and women still have difficulties making ends meet.

When Congress made the decision to move away from the draft to an all volunteer force, the demographics of the force changed as more people viewed service as a professional career. Forty-three percent of the force is now below 26 years of age. The Services now attract more young married couples, as opposed to the single draftees of years past. 61 percent of the active force is married, and together have more than 1.3 million children. Since the military reflects society in general, it should come as no surprise that 5 percent of the force are single parents, with all the challenges that accompany such status.

Congress and DOD should jointly explore solutions to the problem of adequate compensation for these young Americans. The arduous life style and devotion to duty asked of young men and women deserve a fair recognition of their efforts through adequate compensation.

Congress should resist pressures to make additional changes to the existing 20-year retirement compensation system. The foundation of the military pay system has historically been based on the concept of delayed compensation. The 20-year retirement system provides an incentive for members to make the Services a career. Reforms this past decade have already cut by over 20 percent, the value of retirement for a member leaving at 20 years. The greatly reduced force levels of today will eventually result in savings in this area in the out-years. Any additional changes made now may have unanticipated consequences in terms of force retention, recruitment, and force composition down the road.

In light of decreasing military medical assets, maintaining an adequate level of health care for Service members, dependents, and retirees is a critical quality of life issue. With the drawdown and restructuring initiatives occurring throughout the Services, access to military medical facilities could become more difficult, especially for dual-eligible retirees (those over 65 and Medicare eligible). Medicare subvention will allow retirees to enroll in TRICARE and have appropriate access to military facilities. Congress should support a subvention test as a means to maintain the good faith promise to retirees and validate cost estimates. The military's peacetime health care system maintains wartime readiness and is a key retention issue.

Again this year, the Services request your support for the continued improvement of military quarters and family support. In fiscal year 1998, quality of life funding is continued in such areas as barracks and family housing, child care, family support programs, and Morale, Welfare, and Recreation (MWR) activities. The planned fiscal year 1998 funding for replacement or refurbishment of 5,900 family housing units and 11,000 barracks living spaces is a program worthy of unanimous support.

But adequate pay, medical, and retirement benefits alone will not attract or retain the quality people we must have to sustain our armed services. We must create an environment that fosters an atmosphere of trust and respect for personal dignity.

The recent incidents of sexual harassment at training centers and hazing are particularly troubling because these events are not consistent with our values of integrity, moral courage, trust and confidence. Moreover, sexual harassment and hazing destroy teamwork, a key element of combat success. We have an absolute responsibility to ensure these events do not occur. The Chiefs and I reaffirm our zero-tolerance policy for discrimination, harassment, and all actions contrary to our core values.

Ours must be a military that any American can be proud to serve in. America's parents must be able to trust in our commitment to treat their children fairly and justly and provide them a safe, harassment-free environment.

READINESS

The ability to respond to national crises requires that readiness remain the Services' next priority. Today's force is among the busiest in our history. This fact presupposes a high level of readiness, but it also makes maintaining readiness a more complex task.

The Services made a determined effort to heed the warnings about a hollow force. Resolved to avoid the mistakes of the past, readiness accounts received top priority funding. This strategy paid big dividends in terms of mission success. However, readiness requires our constant attention as the tension between modernization, personnel programs, operations, and training becomes more acute.

Operations/personnel TEMPO

America's professional force maintained readiness the past year even with an increased level of tasking. The high OPTEMPO stressed our Operations and Maintenance accounts (O&M), as forces required additional supplies, maintenance, and training in preparation for impending taskings and exercises. In the budget, O&M receives a justified increase from $92.9 billion in fiscal year 1997 to $93.7 billion in fiscal year 1998. Each military Service is working to sustain high levels of readiness while implementing new initiatives to reduce costs.

The rotational nature of operations such as SFOR in Bosnia and the enforcement of the no-fly zones in Iraq, challenged the operations tempo (OPTEMPO) and personnel tempo (PERSTEMPO). The regional CINC's and the Services continue to deftly manage these key issues to maintain the quality of the force. However, the increased time away from home brought on by frequent training events as well as actual operations, can erode the quality of life and family unity of Service members.

Several processes and tracking mechanisms are being put into place in order to monitor the pulse of PERSTEMPO and attempt to alleviate hardships. As problems are identified, the Joint Monthly Readiness Review provides a forum for bringing them to the attention of the Services, OSD, and me for action. Initiatives are also underway to monitor those individuals in critical jobs that seem to get tasked more often than others. Prior to issuing deployment orders, the Joint Staff (J–3) in conjunction with the Service and CINC staffs, now discuss the impacts on PERSTEMPO and explore potential alternatives as required.

The Navy has defined and developed OPTEMPO and PERSTEMPO programs aimed at meeting both DOD directed requirements and ensuring reasonable conditions for Navy families. PERSTEMPO exceptions are personally approved by the Chief of Naval Operations; last year there were only five. PERSTEMPO rose only slightly above the Navy goal of 50 percent of the time in home port, due primarily to meeting CINC requirements and unforeseen contingency operations.

Today's Air Force is very much an expeditionary force. It is 36 percent smaller, 66 percent less forward based, and has nearly five times more airmen deployed today than in 1989. Yet careful management has resulted in less than 3 percent of Air Force personnel exceeding the Chief of Staff's PERSTEMPO goal of 120 days per year away from home.

The Marine Corps deployment tempo (DEPTEMPO) for the past year once again demonstrated an ability to provide initial response to unanticipated contingencies, such as the crises in Liberia and the Central African Republic, while sustaining forward presence. All this despite a 12 percent decrease in force structure since 1989. On an average day, the Marine Corps has approximately 25 percent of the operating force deployed. Marine Corps EA–6B electronic warfare aircraft are good examples of assets in high demand around the globe. These units are carefully managed to ensure they meet both the Commandant's DEPTEMPO guidelines and the requirements of our Global Military Force Policy.

Last year, the Army remained a resilient quality force which deployed on an average day, over 34,000 soldiers, not including many soldiers already forward deployed in countries such as Panama, Italy, South Korea, and Germany. The average yearly deployment rate rose by more than 2 percent last year.

Although the Services carefully monitor the effects of increased PERSTEMPO, the adverse effects may not appear immediately. This is one reason the Joint Staff aggressively pursues PERSTEMPO measurement initiatives.

Family oriented programs are another area in which the Services are very aggressive. During on-going operations in Bosnia, family service centers setup counseling services in schools attended by children of deployed Service members. Additionally, American forces have access to on-line E-mail, morale calls to home, and Morale

Welfare and Recreation (MWR) support facilities throughout the area of responsibility (AOR). Chaplain support during the Bosnia operations is particularly strong to both families and deployed members.

Readiness of the force is based on several components, but an important new element the past several years has been jointness.

Jointness: Ten years after Goldwater-Nichols

The changes brought about by the Goldwater-Nichols Act have had a positive effect on our readiness and have become a major source of what we refer to as "jointness." The tenth anniversary of Goldwater-Nichols was celebrated with a symposium at the National Defense University. Several panels of distinguished speakers offered unique insights into the both the process and progress of Goldwater-Nichols implementation. The symposium was an opportunity to take a historical look at Goldwater-Nichols, the improvements in jointness that it brought about, and what remains to be accomplished.

Much has been accomplished. Jointness cannot be measured by the number of joint publications produced or by listing the new Joint Centers and organizations. Jointness is out in the field, in the air, and on the oceans. One only has to compare the inadequate level of air-ground cooperation in Grenada with the outstanding efforts in Haiti, where an Army light division deployed from an aircraft carrier, or look at Bosnia, where two successive commanders on the ground were admirals.

The effort to improve the military advice provided to the President, Secretary of Defense, and National Security Council is an important success story. The roles of the Chairman and Vice Chairman are well established and have produced tangible results. Additionally, the added voice in the resource allocation process that Goldwater-Nichols provided the CINC's has proven most beneficial.

Following Goldwater-Nichols, the Department of Defense revised its acquisition directives, thus helping ensure military requirements and mission needs are met responsively through cost-effective modernization programs. OSD has initiated very important acquisition reforms this year which will help us field the warfighting capabilities postulated in 2010.

Increasing the number of senior leaders who have significant Joint duty experience is still key to improving the process. A process is now in place to assess all joint manpower positions to ensure a particular manpower position provides sufficient joint expertise to be included on the Joint Duty List. An oversight board composed of eight Flag Officers or civilian equivalents have validated the process. The results of these initiatives are being codified in a DOD manual covering the Joint Officer Management Program.

Joint doctrine has emerged as a central organizing force. Without establishing the basic beliefs about the best way to fight the Joint war, operations were in danger of falling victim to "doctrine du jour," the tendency to adopt ad hoc procedures. Developing Joint doctrine has not been an easy process by any stretch of the imagination. Nevertheless, the Services, CINC's, DOD Agencies, Joint Staff, and the Joint Warfighting Center have teamed to produce a large body of authoritative Joint doctrine to enhance operational effectiveness. To date, 76 Joint doctrine manuals are in place and the body of approved Joint doctrine continues to evolve. The value of Joint doctrine has been demonstrated numerous times in deployed operations around the globe.

Joint education continues as a pillar of force readiness. The National Military Strategy requires an educated officer corps capable of coping with a broad range of operations while simultaneously shaping the strategic environment. Continued improvements to joint education programs will prove to be future force multipliers.

The Joint Requirements Oversight Council (JROC) continues to evolve into one of the most useful tools available to the SECDEF, the Chairman, the Services, and CINC's. The JROC has grown from an acorn to a sizable oak tree in terms of responsibility and effectiveness. Now the JROC tree must grow to full maturity.

Within the context of strategic planning, the JROC has expanded its scope and focus dramatically over the past three years. It now plays an increasingly central role in two areas, one associated with the validation of mission needs for the acquisition process, and one related to the assessment of Joint warfighting capabilities. In both these roles, the JROC supports me in executing one of my important Title 10 responsibilities—to advise the Secretary of Defense on requirement priorities, assess military requirements for Defense Acquisition Programs, and provide the SECDEF with alternative program recommendations to achieve greater conformance with the priorities established.

Codifying the JROC and Chairman's role in the last Defense Authorization Bill, was an important step in the process. As Vice Chairman of the Defense Acquisition Board (and the only military member of that board) and my designated Chairman

of the Joint Requirements Oversight Council (JROC), the Vice Chairman now plays a pivotal role in ensuring that we achieve the optimal military capability, at the right time.

The Joint Warfighting Capabilities Assessments (JWCA's) have provided an analytical foundation for JROC deliberations. The JROC oversees the JWCA process, directing assessments of specific Joint military areas. Through improvements in the JWCA process, the JROC has further increased the interaction with CINC's and the Services on warfighting capabilities and requirements issues. Additionally, the Joint Staff has been able to further integrate the JROC and JWCA process with the Planning, Programming, and Budgeting System (PPBS). This process continues to mature and gain relevance, facilitating consensus among the JROC, CINC's, and the JCS on military planning and requirements.

Readiness to conduct effective operations is also tied very closely to improvements in Joint training. This is where an aggressive program of Joint training and education initiatives is so important. These initiatives combine the teachings of Joint doctrine and Joint operations to fully utilize all aspects of Service capabilities as a Joint force. Professional Military Education programs have made great progress in educating officers about each Service's capabilities and the contributions that each brings to the full range of Joint operations. These programs provide a unique environment which allows future leaders to critically assess the status today, and think "out of the box" about the future. But the theoretical must be reinforced with the practical. During the past year, the Joint Staff continued efforts to fully integrate new modeling and simulation efforts. Additionally, the staff has taken steps that enable training efficiencies by matching training requirements to the exercise program. The feedback from the theater CINC's is positive and results from the Joint Exercise Program are encouraging.

Jointness is moving into the future, building on the core competencies of each of the Services. Continued cooperation will allow realization of the operational goal to achieve full spectrum dominance in the near term and out into the challenging future.

MODERNIZATION—EQUIPPING THE FORCE FOR THE 21ST CENTURY

The most challenging aspect of modernization remains the continuing underfunding of our acquisition accounts. In my last two reports to you, I have stressed the need to raise procurement funding to a steady state of about $60 billion per year. This is still an operative goal although the Quadrennial Review may adjust it to meet the dictates of a new or modified force structure.

This budget does not reach the target level of funding until 2001. While this is later than I think is optimal, I am encouraged that at least it is now accepted as a realistic, achievable goal. If we are to achieve this goal, as a minimum, we will have to cut out excesses and learn to work smarter.

As difficult as it is politically we will have to further reduce our infrastructure. The BRAC process reduced our base infrastructure by some 18 percent and should provide a net cost avoidance of $14 billion between 1990 and the year 2001. But at the same time, while we cut these bases by a little less than a fifth, we also reduced the force by a third, and reduced our combat structure even more than that. The result is that we perhaps have more excess infrastructure today than we did when the BRAC process started. In the short run, we need to close more facilities, as painful and as expensive as it is.

We also must change how we do business, relying more on outsourcing, privatization, and the procurement of off-the-shelf equipment and services. Where possible, we will also have to trim personnel end strength especially where technological changes such as improved weapons systems, afford us the possibility to consider fewer or smaller units.

During the last year, the Joint Chiefs and Unified Commanders established a common vision of future capabilities that will lead us in a common direction towards future warfighting concepts and complementary interoperable capabilities. In tandem with the great work being done by the Joint Requirements Oversight Council, Joint Vision 2010 provides the Services and Unified Commands the conceptual template to achieve dominance across the full spectrum of future operations. The implementation plan for Joint Vision 2010 is already well underway and will ensure that the vision is turned into reality.

As the Joint Chiefs look to the future vision and requirements, the Chiefs also recognize that new technology is not the answer to all operational challenges. Some missions will still require forces to engage in many of the same activities they have had for the past 200 years. The Services remain committed to improving capabilities across the full spectrum of combat capabilities, not just on the high end.

Future modernization plans will be rooted in one of four key operational concepts contained in Joint Vision 2010: focused logistics, precision engagement, full dimensional protection, and dominant maneuver. Looking to the future, a few key areas require increased emphasis and wider support. DOD has already begun a number of initiatives to make these capabilities more affordable.

A top priority remains strategic lift, a substantial pillar of America's military strategy. The C–17 Globemaster III is an increasingly important component of America's strategic mobility fleet and today the program is in good shape. The C–17 program is executing a seven year procurement for a total of 120 aircraft by 2003 (last C–17 delivered by 2004), saving approximately $1 billion compared to annual lot buys. The C–17 program remains necessary to replace the aging C–141 fleet.

Strategic sealift is critical and requires additional attention. Over 95 percent of the equipment deployed during a major conflict will be lifted on ships. The Mobility Requirements Study/Bottom Up Review Update (MRS BURU), validated a need for 10 million square feet of surge capacity to move the forces for one Major Regional Conflict (MRC). This is the minimum surge sealift required for a single MRC, and it would be recycled for a second conflict.

In order to ensure appropriate types of vessels required, primarily Roll-on/Roll-off (RO/RO) ships, DOD embarked on an ambitious acquisition plan of organic sealift. The nineteen Large Medium Speed Roll-On/Roll-Off (LMSR) vessels which DOD will acquire by fiscal year 2001 will be the centerpiece of America's strategic sealift capability. Upon delivery of the last ship, five million square feet of capacity will have been added to the fleet, three million square feet for surge and two million square feet for pre-positioned equipment. This program has enjoyed strong support from Congress in the past and is funded in the Navy budget. Keeping this program on track for a fiscal year 2001 completion is essential and a top strategic lift priority.

In addition to the LMSR's, the study identified a need to add 19 smaller RO/RO ships to the Ready Reserve Force (RRF). This piece of the surge requirement has proved to be more difficult. Although we've added 14 of the 19 RO/RO's to the RRF since 1992, it is unlikely the Mobility Requirements Study/Bottom Up Review Update (MRS BURU) completion goal of fiscal year 1998 for these ships can be met. The Joint, TRANSCOM, and Navy Staffs are looking at all options, including evaluation of commercial U.S. flag programs, not available at the time of the BURU, in order to fill surge requirements, to reach a capacity goal of 10 million square feet. DOD had been converting foreign built vessels in the absence of suitable U.S. built vessels. The requirement for five more RO/RO's, or an additional 550,000 square feet, remains today, but Congress has not authorized RO/RO acquisition the past two years. We need to remain committed to reaching the Ready Reserve Force capacity goal in order to close the gap.

My next priority focuses on providing U.S. forces with systems that enhance situational and battlefield awareness, and command and control. Several technologies will enhance both the ability to maneuver and engage precisely.

First, the exploitation of emerging Unmanned Aerial Vehicle (UAV) technologies offer the potential of becoming great force multipliers. The JROC has done an enormous amount of work appraising UAV programs and manned platforms in order to provide recommendations regarding the reconnaissance force structure necessary to support CINC requirements. Warfighters have a requirement for a tactical UAV and my top UAV priority is a system to support the ground commanders.

The JROC-chartered UAV Special Study Group is reviewing UAV programs to assess the proper funding priority for UAV programs. Once the Services establish that UAV's can carry the necessary sensors and meet mission requirements in anticipated weather conditions, DOD should move swiftly to evaluate the cost-saving tradeoffs between manned and UAV reconnaissance systems. I remain committed to fielding a UAV force that is interoperable among all Services as an important enhancement to warfighting capability.

Next, the ability to ensure precision engagement and dominant maneuver as described in Joint Vision 2010 depends on providing an effective mix of both offensive and defensive information infrastructures. The fusion of all-source intelligence with the effective integration of platforms, command organizations, sensors, and logistics support will be what distinguishes the U.S. from second-rate military forces.

The Services have come a long way in this area the past ten years. The lack of interoperability between the Services' disparate command, control, communications, and computer (C^4) systems was a major theme of the 1970's and 1980's. Compare this with the recent successes in Joint Task Force (JTF) operations across the globe, particularly in supporting the Implementation Force in Bosnia where the U.S. established a communications and information architecture that integrated hundreds of different systems from 32 different nations. The progress made in C^4 coordination

was as much a miracle as the successes in transportation and enforcement. In the future, Joint Task Force integration becomes even more dependent on information superiority and new communications solutions.

However, with technology advancing so rapidly, acquisition and budgeting processes may be inadequate to address C^4 needs with the speed required. Potential opponents can buy state of the art C^4 systems right off the shelf, but DOD requirements go through a lengthy acquisition and budgeting processes. This delay results in the warfighter often receiving "old" technology. The Services cannot afford the long lead-time of the system given the rapidly advancing status of C^4 technologies. It seems prudent that where significant capabilities are commercially available in the open market, particularly when these capabilities are essential to the future vision, DOD could have a more responsive acquisition and budgeting process. This is an area that needs a hard look.

The military is also facing a new challenge from the commercial and international sectors over an issue no one anticipated 20 years ago: availability of the frequency spectrum. In the rush to provide "bandwidth" for the myriad of new communications and information systems flooding the worldwide market, governments are selling-off portions of the frequency spectrum. It is critical that future spectrum sales take the impact on defense systems into account. There is potentially a significant dollar impact involved in this issue. If DOD has to yield portions of the spectrum to new commerce, existing military equipment operating within these frequencies must be replaced with systems that can operate on other portions of the spectrum.

As the United States continues to improve its combat information and communication systems, an important consideration is the impact such modernization will have on friends and allies.

The United States is the world's leader in the exploitation of information technologies. This is evident in every facet of American life and is particularly true with respect to the military. Information dominance is the common thread running throughout the fabric of future operational concepts. As a result, the Services are making key investments in new information technologies, investments that will produce significant combat multipliers in the next century. Unfortunately, friends and allies are not proceeding at the same pace or with the same levels of interest.

The United States must ensure key information systems remain interoperable and complementary with allies. This is particularly important to the success of multinational operations. America's strategy must envision information architectures that avoid the same compatibility pitfalls encountered within our own Services in the 1970's and early 1980's.

Additional enhancements to the operational concepts of precision strike and full dimensional protection center on the recapitalization of our tactical aviation programs. The Joint Chiefs supported transitioning the Joint Advanced Strike Technology effort into an acquisition program.

The Joint Strike Fighter (JSF) program is the benchmark for future Joint weapon system efforts. The JSF program will provide the Navy, Marine Corps, and Air Force with a critical, survivable, lethal, and highly interoperable multi-role strike capability. The efficiencies associated with this cooperative, Joint-Service development approach are substantial and deserve support from Congress and the Administration. Additional aviation modernization programs and technology upgrades will be needed to ensure voids in capabilities do not occur in the next century.

Stealth technologies have provided America with an unmatched combat capability in the F–117 fighter and B–2 bomber. Low observable technologies will eventually be exploited in a wider array of combat systems including the F–22, naval vessels, tanks, ground vehicles, and the JSF. Both DOD and Congress should fully support leveraging this technology through continued investment. However, funding for additional B–2's is not in the best interest of the force. The limited procurement budgets can be put to better use on higher priorities.

One of those advancing priorities key to protecting our force is the development of effective Theater Missile Defenses (TMD) for deployed forces. U.S. forces face danger from the proliferation of weapons of mass destruction and their associated delivery systems. The JROC is monitoring progress in the TMD area and is taking the prudent course in relation to concerns about the priority of the National Missile Defense Program. For example, in fiscal year 1996, JROC actions prioritized funding for lower tier systems to address the near-term ballistic missile threat. Recently (Jan. 24, 1997), the Navy Area Defense System successfully intercepted a ballistic missile in the first test of its new infrared seeker at the White Sands Missile Range. The Patriot Advanced Capability 3 system is scheduled to conduct its first test by this summer. Additionally, earlier this fiscal year, DOD increased funding for upper tier programs. This will accelerate the fielding of the Theater High Altitude Air De-

fense System (THAAD) and provide for additional risk mitigation testing of the Navy Theater Wide Defense System.

The NMD Deployment Readiness Program optimizes the potential for an effective National Missile Defense System. If the decision is made to deploy a NMD system in the near-term, then the system fielded would provide a very limited capability. If deploying a system in the near-term can be avoided, DOD can continue to enhance the technology base and the commensurate capability of the NMD system that could be fielded on a later deployment schedule. The objective here is to be in a position to be three years away from deployment, so America can respond to the emergence of a threat. This approach fields the most cost effective capability that is available at the time the threat emerges.

The fiscal year 1998 budget authority requested for ballistic missile defense is $3.5 billion. During fiscal year 1999–2003, an additional $17.9 billion is planned. Beginning with the fiscal year 1998 budget, funding for Theater Missile Defense programs are in the appropriate Service accounts.

THE QDR

The Quadrennial Defense Review (QDR) does not start with a clean slate, rather it begins with the fact that the U.S. currently has the best force in the world. America's military is the envy of the world because of what it can accomplish on a daily basis. It is not just the equipment that other nations admire. It is the organization, leadership, training, and the great people. Thus, the QDR must ensure that tomorrow's force is every bit as capable to protect America's interests as is today's force.

The QDR is a serious effort to examine strategies, force structure, force modernization plans, infrastructure, budget plans, management, and other elements. It will highlight what is right and those areas where change is required. If there is an opportunity to restructure ourselves to be better prepared to protect America's interests, then we will respond appropriately.

However, when the nation's security is at stake, changes have to be made carefully. American forces must have the capability to prevent future conflicts by shaping the strategic environment, deter conventional and nuclear war, and when necessary, fight and win the nation's wars.

These tasks underscore the need to maintain well-balanced forces to prevent conflict through engagement, deter conflicts before they start, or fight and decisively win those that do. In short, America must maintain a military capable of dominating an opponent across the full range of military operations. Mobility and forward deployment will be essential characteristics of the force.

Like mobility, forward deployment provides military commanders with several advantages. The ability to forward deploy forces, whether permanently, rotationally, or temporarily in the Pacific, the Middle East, and Europe dramatically reassures allies of America's commitment, reduces the response time to regional crises, signals a commitment to defend American interests, and moderates potential aggressiveness directed at friends and allies.

Prepositioning of equipment is a facet of overseas presence that demonstrates to allies the U.S. commitment to come to their aid if threatened or attacked. Prepositioning also gives the U.S. the ability to respond faster to a developing crisis and increases the ability to deter war.

The capabilities of forward deployed units must be sufficient to quickly and decisively prevail across a wide range of potential operations. In the future, success or failure of operations may be determined by America's response in the first few hours or days of a crisis.

Forward deployment provides significant side benefits as well. A continuing program of engagement relying on military-to-military contacts, multinational exercises, and Joint training opportunities provides the regional Combatant Commanders with the building blocks necessary for effective operations. The complex political demographics unique to each AOR are carefully considered in developing a proper level of Joint and Multinational exercises to support each CINC's engagement strategy. These programs enhance levels of trust between regional friends, strengthen command relationships, promote doctrinal and tactical awareness, and enhance the mission of conflict prevention.

The array of bilateral and multinational cooperative efforts this past year reinforce the importance of the alliances and partnerships that grow out of engagement programs. Nowhere is this more evident than in the cooperation between a rejuvenated NATO and members of the Partnership for Peace (PFP) program. America's active and reserve soldiers, sailors, airmen, and marines are establishing the ties so critical to ensuring a lasting peace on the European continent.

Today, the United States has the best military in the world. With continued support from Congress and key investments in quality people, readiness, and modernization, America's forces will remain preeminent in the year 2010 and beyond.

Senator STEVENS. Thank you very much, General. We do have a full complement of people here and I expect that we will get more. So if there is no disagreement about this, I would like to limit the first round to 10 minutes.

Let me just run through the charts with you, General, if I could.

OVERSEAS DEPLOYMENTS

On chart 3, don't we have a record number of people overseas for peacetime in the period shown there, between 1994 and 1997? If you discount Europe, we just are maintaining more people overseas in different spots. You said it was in some 17 different spots, didn't you?

General SHALIKASHVILI. We are maintaining, since I have been chairman, we have had 14 operations, that is, a Bosnia, a Haiti, a Rwanda, those kind of operations. We have averaged about 14 operations on any given day involving some 40,000.

This number, 40,000, only partly includes people that we routinely keep overseas—approximately 100,000 in northeast Asia and 109,000 in Europe that are permanently stationed there.

Some of the people that go on operations in the Middle East and go on operations certainly in Bosnia come from Europe. So they are included in that 100,000. But many of them come from the United States. Many of them come from the Pacific theater. For instance, Haiti, for the longest time, had a brigade sized unit from Hawaii participating in that operation.

So in addition to that, of course, you have the normal naval deployments and marine deployments. I was just referring, Mr. Chairman, to the named operations that we run, the Bosnias and so on.

Senator STEVENS. It just seems that the level of deployment is maintained at a fairly high level. Even with Europe and Korea, we are running at 240,000 to 250,000 overseas at all times right now, isn't that right?

General SHALIKASHVILI. We maintain, if you don't count the marines, we maintain 209,000 plus this year. Part of it is counted—yes, it is probably less than 250,000, but probably close to that that are either living overseas or on a temporary deployment overseas.

Senator STEVENS. I don't think we have ever figured into this rotation, if there is rotation for those, and we have problems with some of the people that they leave behind. I think we have a new dynamic entering into defense deployment in terms of family problems.

General SHALIKASHVILI. We have two issues here, Mr. Chairman. One is that we do maintain these 40,000 on deployments. But when you look at a force of 1.5 million, you would say that is something we can manage. So you have to look and see what else is happening that is causing this.

I hate to say that, but sometimes we are our own worst enemy. It is probably fair to say that we have not seen an exercise we don't like. We haven't seen a training opportunity we don't like. So you will not get a solution to this if you just look at the deployments.

We really have to look also at how many days away from home does a soldier at Fort Hood, TX, spend, who never goes on one of these deployments, perhaps, but goes to the National Training Center, participating in this or that exercise.

We are an extraordinarily well trained force. I know that we read in the paper how our readiness and our training is suffering. But we are a very well trained force.

The Chiefs and I have agreed that as part of this "Quadriennial Defense Review" [QDR] process we have to look at the totality that causes our people to move on operational deployments but also on training events.

RUSSIAN MILITARY

Senator STEVENS. I think that is something we ought to go into.

On Russia, we are going to go to Hvarsk, Vladivostok, and Sakhalin in the latter part of March. Would you see what you can do to give us some information on what is out there?

General SHALIKASHVILI. I surely will.

Senator STEVENS. I have a feeling there is more military in Eastern Russia than most people realize.

General SHALIKASHVILI. [Deleted.] Much of their nuclear strategic capability is out there.

Senator STEVENS. And they also are not subject to limitations as they are in the Western zone. That is something I would like to see.

There are some interesting figures about the Duma with only 62 percent support of their military budget. I think we ought to learn a little bit more about that.

Do you see any change in terms of the arrearages and paying military people in Russia?

General SHALIKASHVILI. I was in Russia to visit my counterpart in December. [Deleted.]

BOSNIA

Senator STEVENS. Switching to Bosnia, when we were there, we got the word that most of this equipment has been in cantonment now for over 1 year. Have you looked at how much of that will be usable when we leave?

Let's assume that we leave at the end of 1998, as scheduled. If all of that equipment has been in cantonment areas and has not been exercised, not been utilized, how much of it is reusable?

General SHALIKASHVILI. I will try to give you a very precise answer for the record, if I may.

Senator STEVENS. Yes.

[The information follows:]

All three Former Warring Factions have access to their equipment in cantonment sites and have been conducting maintenance to keep equipment in working order. Some of the equipment has been exercised, all of which must be approved by SFOR, but the [deleted] compliance with the military aspects of the Dayton Accord began.

The Bosnian Serb Army has the most heavy equipment in cantonment and [deleted]. The Bosnian Serb Army has been able to perform a minimum level of maintenance necessary to keep the majority of weapons in working order. [Deleted] but SFOR inspections indicate [deleted]. However, over time, the [deleted] Federal Republic of Yugoslavia. In contrast, the [deleted]. By 1998, the Federation Army will

have [deleted]. Both the Bosnian Croats and Moslems [deleted]. While the Bosnian Moslem Army is [deleted].

General SHALIKASHVILI. The information that I have now is that they do take some of it out. They have to come to stabilization forces [SFOR] and say I want to take 12 tanks out to go on an exercise. They may do that, and then they have to return them. So they do exercise the equipment.

Senator STEVENS. They do.

General SHALIKASHVILI. [Deleted.]

Senator STEVENS. How much is really in cantonments? Do we know how much did not get there? How much of their armaments are not under our control now?

General SHALIKASHVILI. To the best of our knowledge, all of the heavy equipment, that is, tanks, APC's, artillery pieces, those are the three sets of equipment that need to be there. All of those that we know about are in cantonment areas or are being processed for destruction. They sell some of that stuff, also.

General Joulwan has no worry now that somehow there is a large number of equipment that's not there.

An interesting thing is that the [deleted].

The Moslems were very accurate in what they told us they had. It is just one little bit of information for you.

Senator STEVENS. I am down toward the end of my time. I will ask other questions later, but let me ask this now.

I noticed on charts 10 and 11, if we are down to this level, why are our costs still so high in Bosnia?

As a matter of fact, we provided almost $1 billion for Bosnia and now you have asked for reprogramming for this year and there is a substantial request for next year.

Why are our costs so high if we have only 8,500 out of the total, whatever it is, deployed there? Are we paying for more than we realize? Are you paying for—are we the host nation for these other forces?

General SHALIKASHVILI. No; not at all.

Senator STEVENS. Where is all the money going?

General SHALIKASHVILI. Again, we have a fairly, I think we have a very good accounting of where that money is going, and I will provide that to you for the record. We have scrubbed this and scrubbed this because we were so off in the initial estimate last year.

We have hired a firm that is reworking our costing model. I think you will find that the costs that we carry for that are now very accurate. But to see exactly what it is for, I need to really give you the detailed information and ask your staff to review that.

Much of the cost comes from moving people in and out. So what we are paying now is, remember, implementation forces [IFOR] had to go home. This SFOR came in. Camps had to be broken down because we are so much smaller now. So much of the cost—not "much,"—a good chunk of the cost is also in moving the force into the area. But it is also just sustaining the force.

They have a very high optempo. Particularly now that they are smaller, they no longer just sit like they did before. But they continue on the road in patrolling.

[The information follows:]

COST ESTIMATE FOR UNITED STATES PARTICIPATION IN BOSNIA OPERATIONS

[In billions of dollars]

Estimated costs	Fiscal year—			Total
	1996	1997	1998	
Army	1.9	1.8	1.0	4.7
Navy	.1	.1	.1	.3
Air Force	.3	.3	.3	.9
Agencies	.2	.2	.1	.5
Total	2.5	2.4	1.5	6.4

Note: This cost may vary depending on pace, timing, and extent of SFOR drawdown during fiscal year 1998

The following major cost categories are included in the above estimate:

Military Personnel.—Additional special pay, such as family separation, received by U.S. troops involved in operations, as well as pay for the activated reserves.

Personnel Support.—Subsistence (food and water), TDY, and medical support.

Operations Support.—Fuel, spare parts, communications and engineering support.

Transportation.—Deployment, sustainment, rotation and redeployment costs.

The estimate is based on the following assumptions:

Operations will be accomplished in a peaceful environment.

Under the Implementation Force (IFOR), forces peak at approximately 20,000 in Bosnia, with an additional 5,000 in other sections of the Former Yugoslavia, and 7,000 logistics support troops in Rim countries.

Forces reduce to approximately 8,500 in the AOR in March 1997 for the Stabilization Force (SFOR).

Further force reduction anticipated for fiscal year 1998 following completion of SACEUR's operational assessment.

Activation of reserves for support activities in Bosnia.

Continues U.S. air forces currently involved in Operation Deny Flight at an Optempo similar to that maintained during the past year.

U.S. naval forces deployed in the region would be available if required.

No support provided to other than U.S. troops.

No humanitarian or nation building efforts.

Fiscal year 1996

Deployment and start up, building to 20,000 troops.

Ten months of operation.

No redeployment or reconstitution.

Fiscal year 1997

Continuation of 20,000 for first quarter, drawing down during second quarter to 8,500.

Six months of operations at the reduced level (8,500 through the end of fiscal year 1997).

One full rotation of troops.

Redeployment of IFOR and SFOR.

Reconstitution of IFOR and SFOR.

BUDGETING CONTROL

Senator STEVENS. This is my last question.

Dr. Hamre, when he was before us last week, I asked him if these things have a financial officer, a deputy from his shop. He told us no.

Why don't we have some such concept. In wartime, now, it might be different. But in peacetime, why don't we have a concept of really budgeting control for the CINC's? It appears that they ask for things from all over and they get the support. But they don't have to figure out what they can afford.

Is that a defect in Goldwater-Nichols?

General SHALIKASHVILI. I don't think so.

Let me explain how I think the system works. First of all, on a day-to-day basis, whatever the CINC's needs are compete in a normal budget process through their components back to the services. So if you raise the issue why do we have so many airplanes in Aviano, that process with Aviano should be there and how many aircraft should be there, competed not only through the services, competed with OSD, was briefed to Milcon committees, and so on. That happens day to day.

So there is very good control.

When an operation comes up—and the quicker the operation comes up, the bigger the problem—when an operation comes up, that is when we need to understand how the system works because it works differently than on a day-to-day operation.

Senator STEVENS. Let me stop you, General. I want to get with you on that one of these days, but I don't want to take the time of my colleagues on it now. But I do think we need to have some understanding of how can the CINC's have someone standing right beside them saying: General, you really cannot afford to do that now, and in peacetime in particular.

But let me move on, if I may. I don't want to be rude, but I want to give my friend his time.

Senator Inouye.

NORTHEAST ASIA

Senator INOUYE. Thank you very much.

General, I will have just one question if I may.

The policy of the United States, diplomatic and military, as it relates to North Korea and South Korea, I believe can be divided into two parts. The first is to minimize the threat that North Korea presents to the stability of that area. Second is to bring about at the earliest a reunification of North and South Korea.

Having said that, during the past several years I have made it a point to meet and discuss this issue with the leaders of Japan, China, and South Korea. In my discussions, I get the impression that these leaders would prefer to maintain the status quo.

They seem to be concerned that if the American policy is put into reality, that North and South Korea are reunited and we have a one-country peninsula there, a new element of threat would be presented in that part of the world.

The Japanese, for example, make no bones about it. They are concerned about the combined military and the economic threat that a combined Korea would present to them. The Chinese seem to express the same, and South Korea seems to be content with the present level of confrontation.

Is my observation wrong or is it correct? What is your call, sir?

General SHALIKASHVILI. Senator Inouye, when I travel through the Pacific, what I hear is the hope that our policy in the Pacific is not a temporary sort of policy that will change because some changes in the near-term occur, might it be in Korea or wherever else. They feel that one of the greatest stabilizing influences in the Pacific as a whole, but certainly in the Northeast Asia region, is the forward presence of American troops; that they do not want us to look at that forward presence as a presence against North Korea, but as a presence for stability in the region.

They always remind me that this is an extraordinary area of the world, where the interests of the major powers come to a very sharp point—Russia, China, Japan, the United States, and Korea—and that if it were not for our presence there, it would be very destabilizing.

So the U.S. Government, at least ever since I have been chairman, has continually made the point that our presence, our military presence, there is a vital, long-term component of our long-term interests in the Pacific.

We have experienced within the last year problems on Okinawa that have raised that issue. My sense is, however, that it is incumbent upon us and the Japanese Government, because I believe firmly that they also feel that our presence is vital in that area, to work that issue to find a way to lessen the burden on the people of Okinawa while at the same time not lessening our forward presence there.

KOREAN REUNIFICATION

Senator INOUYE. I agree with you that our forward presence is absolutely essential at this time of history and that, without our presence there, instability would be, well, high on the agenda of Asia and the Pacific rim. But my question related to our policy on reuniting Korea.

If that is our policy, I get the impression from my discussions with the leaders of China, Japan, and South Korea, that they would prefer that we kept the status quo. They are quite concerned that we may succeed in reuniting the Koreas.

Is my observation correct?

General SHALIKASHVILI. I think your observation is correct. I am not sure that the U.S. Government would say now that our policy is the reunification. Our policy is to bring to an end the hostilities between the two Koreas and to let them work out what best suits their circumstances.

It is to that end that we have encouraged, and, I guess, starting today is the resumption of the North-South talks again in New York, to let those two reach an agreement between them and reach a peace agreement between them and get away from the armistice that we have had all this time.

Also, if I may, my sense is that probably both North and South Korea also are not at all convinced that reunification, at least in the near-term, is the right answer—for South Korea because of the extraordinary expense involved. After all, they have watched what has happened in Germany. For North Korea, they have also watched what happened in Germany and they see how the regime could disappear overnight. So I would be very much surprised if the North Koreans were supportive of that notion.

Senator INOUYE. I realize that this is long term, but would a united Korea present a new element of concern?

General SHALIKASHVILI. It could, depending on which way it went. [Deleted.]

Senator INOUYE. One final question, sir.

We are now about at the end of carriers using conventional energy, and we will soon have a fleet entirely of nuclear-powered carriers.

I believe the Japanese have made it clear that they will not welcome the presence of any nuclear-powered vessel, like a carrier, in their ports. If that is the case, where would our presence of carriers be quartered?

General SHALIKASHVILI. I would very much hope that the Japanese would not insist upon it, but it's possible that they would. I cannot give you an immediate answer of what the alternative would be that the Navy would come up with.

Certainly, the forward presence of a carrier in Northeast Asia has been of great assistance to us not only in being close to a trouble spot like Korea but also because it has so significantly shortened our deployments to the Middle East. So it is a good thing for us to have a carrier forward deployed.

I would hope that we would be able to continue doing that in Japan. But you are exactly right, we might have to find some alternatives.

Senator INOUYE. Thank you very much, Mr. Chairman.

Senator STEVENS. Thank you.

Senator Gregg.

TERRORISM

Senator GREGG. Thank you, Mr. Chairman.

General, I wanted to pursue the issue on the terrorism question for the foreseeable future, at least, that being defined as the next 10 to 15 years. It appears that the biggest physical threat to the United States proper and our citizenry would be a terrorist attack of either chemical, nuclear, or a biological nature.

If that is our most significant threat to our people, I am wondering if you could give me your thoughts on how you are coordinating with the different agencies and whether you think that that coordination is adequate if that threat were to come from outside the United States.

I recognize that there is a domestic threat. But I am talking about a threat from outside the United States. How are you coordinating with the FBI, with the CIA, and with the State Department? Where do you think there might be a weakness in that coordination in anticipating the threat versus reacting to the threat?

I recognize that there is significant coordination in reacting to an event. But my concern has been and continues to be toward nations at the highest levels and down through the agencies on reacting and anticipating such a threat and being able to communicate between the military, law enforcement, State Department, and the intelligence agencies of where that threat might come from and how to deal with it.

General SHALIKASHVILI. Our coordination with the intelligence agency has always been good. It doesn't mean that the intelligence agency was always capable of producing the threat information that we wanted, because we always want very precise information that often is not available.

But that coordination has always been very good and I think the linkage is all there.

Senator GREGG. I'm not talking about the threat against military installations. I'm talking about the threat against the U.S. population.

General SHALIKASHVILI. The terrorist threat in general, for instance if there is a threat against an airline or something, I believe that that information within the interagency here gets passed around very quickly and works very well.

When you ask me now how is the coordination between the military and the FBI here in country or with the State Department on issues that go on overseas, I think it is getting better, but it is nowhere near the same coordination that we have with the intelligence agencies.

How is the coordination with the FBI and the local community where the terrorist threat might, in fact, materialize? I probably am not the right person to talk to.

Senator GREGG. No; I wouldn't expect you would be.

General SHALIKASHVILI. But I would say it varies from agency to agency. We have always had it well from intelligence because we had a central focus for intelligence in each Department. I have now created a central focus for antiterrorism in the Joint Staff for all the military that involves everything. It involves State and other agencies, the FBI agency, all of that. So I feel comfortable that I am beginning to get a handle on all of that.

But I feel very uneasy about how this information were to be translated to the civilian community. Let me give you an example of why I am worried about it.

In almost every city in the United States, at some shopping center we have recruiting stations. We have soldiers, airmen, marines working in that shopping center. What do I know about the terrorist threat in Peoria, IL, where that recruiting station is? Probably very little; not as much as I should know, because we have our people so diffused in the area.

So as long as I still have that feeling, the answer must be that we are still not doing as well as we should.

It is an extremely difficult thing to get the word to everyone, for the FBI to get the word out, for the Government to get it to the States and to the local municipalities. The problem even gets multiplied when you go overseas.

There we have started to get a handle on it for the military, but not for the Americans who live in Frankfurt, for instance. For the military, now, we are taking over more and more of the responsibility for antiterrorism that in the past has been handled by State Department, taking it over in the Defense Department for our own people because we think we are more capable of doing it. They don't have the resources to deal with it.

So I would tell you that we are a way off yet before anyone can report to you that the system we have, which should insure that when a terrorist threat arises that information is passed to where it needs to go and that there is someone exercised, trained, and ready to respond to that, to prevent that incident from happening, is adequate. The record, at best, is spotty right now.

Senator GREGG. I agree with that analysis just from my limited knowledge, chairing the committee that has jurisdiction over the FBI and State Department operations.

I guess my followup question to you is this. Have you given any thought to how we should develop a system within the different agencies that are involved in this to correct what is clearly a gap?

I notice that the Israelis have gone to a system on this just recently where they actually, I think his name is General Digan, has been asked to take over the coordination. He is physically responsible for all of it.

Now that is a smaller country and they have the ease their size offers. I don't think we want a terrorist czar. But I do think that we need to have some very thoughtful effort made on getting coordination for anticipation of terrorist events between your agency, CIA, FBI, and State. I do not see it now in place. I think it has to come from the top.

General SHALIKASHVILI. It seems to me, Senator Gregg, that the first instance is a dissemination of threat information.

Senator GREGG. You have to have a structure for this, though.

General SHALIKASHVILI. Correct. You have to have some center that is responsible for that and then has the communications means to pass it to the local law enforcement agencies which will have to deal with it wherever it is.

So if I were working that problem, I would work it first to get the information to everyone who needs to have it. That ought not to be that hard. You establish some center here and you establish the communication means to the point of contact in wherever it is. It is doable, I think.

CHEMICAL, BIOLOGICAL, NUCLEAR THREAT

Senator GREGG. Well, I think the second problem is being addressed by the FBI. I think they are aggressively addressing it.

I think the bigger issue is the major threat, the chemical, biological, and nuclear threat, trying to basically model where it is coming from, anticipate where it is coming from, from the intelligence sources, and then responding to it. There seems to be no centralized effort on this that brings all of the different parties to the table on a regular basis at the level necessary to do it.

I am hopeful that we can move in that direction.

General SHALIKASHVILI. There is a center established here that is responsible for that, I think.

Senator GREGG. Yes; and the FBI is looking into that, too. Also, the National Security Council is actually specifically directed to do that. But I don't sense that it is working yet. I don't think it is up and functioning at the level we need.

I believe my time is up.

Thank you, Mr. Chairman.

Thank you, General.

Senator STEVENS. Senator Dorgan, I think this is the first committee meeting that you have been to. We welcome you here today.

Senator DORGAN. Thank you very much. It is a pleasure and an honor to be here.

I think the questions Senator Gregg asked are critically important. Rather than follow up on those, however, I just want to associate myself with the concerns that he expressed. I think these are of critical interest and importance.

On page 9 of the posture statement that you gave to us, you talked about the Chemical Weapons Convention and that relates to some of the assessments that you gave us on the charts about

chemical weapons capability. I want to ask you a question about that.

The Senate must act by April 29 to ratify the treaty or we will be shut out of the international monitoring agency, or at least we will not have a voice in the control regime, as you put it.

Can you describe for me what we will miss if we don't have a voice in the control regime and why is this important.

General SHALIKASHVILI. The control regime, many aspects of it, are still to be set up. We would like to be at the table as these procedures are established, so that we can insure that our interests are fully protected and that we have systems and procedures that give us the greatest assurance that the other guys have to be forthcoming, forthcoming about what their programs are, in the inspection regimes that are being set up, how the inspections will be conducted, that they are so set up to meet our requirements to protect our information, our industries. On the other hand, they must be intrusive enough so that we will be able to find out whether other countries are complying with the treaty.

It is these procedures that I was referring to.

Senator DORGAN. When you put up the board charts that describe various threats and various capabilities, among those areas were chemical weapons threats. How would the ratification of this treaty and our participation in it decrease the chances that our troops in the field might come under the risk of chemical attack?

General SHALIKASHVILI. I think that you have to start out with the proposition that we are now a nation that, for all practical purposes, does not have chemical weapons.

We are facing potential adversaries that have nuclear weapons. In the first instance——

Senator DORGAN. Chemical weapons.

General SHALIKASHVILI. Yes; I'm sorry. Chemical weapons. In the first instance, I think it would be to our advantage if, to the maximum extent possible that we can, we reduced and eliminated chemical weapons stockpiles that are out there that our troops might have to face. Also, right now, there is not a good way to monitor the chemicals that are necessary to make chemical weapons.

This regime, while not foolproof, gives us a better handle on monitoring that traffic. So it reduces the chance and makes it more difficult for rogue nations, who will always be there and not up to the treaty, it will make it more difficult for them to create chemical weapons and become chemical weapons states.

So if you start out with the proposition that right now we are the major power that does not have chemical weapons and there are plenty of chemical weapons out there, any regime that, in fact, reduces the stockpiles out there, that reduces the number of chemical weapons that we might have to face in a potential conflict—God knows when—I think it is to our advantage and it adds to the security of our troops.

Then the precursor chemicals that I was talking about further allow us to restrict at least some of the chemical weapons developments among some of the rogue nations, recognizing that we will never capture all of them.

BALLISTIC MISSILE THREAT

Senator DORGAN. General, thank you. Let me ask one additional question.

You talked also in your chart presentation about various threats. You described ballistic missile threats and potential ballistic missile capability.

In your statement you talked about theater missile defense. The antiballistic laser program that is now under development by the Air Force, can you give us anything that tells us what the prospects for that program are? Are you optimistic about that?

General SHALIKASHVILI. We are very optimistic about it. I think space-based lasers offer a possibility of being effective defensive systems against all kinds of threats from the national missile defense aspect, also from the theater aspect.

So we do want to continue with the R&D program and want to see where that can take us. I think it is too early to tell how it will pan out. But certainly it is a very promising technology and we encourage it.

Senator DORGAN. But that particular program is not space based. Isn't that aircraft based against theater missiles?

General SHALIKASHVILI. Yes; yes.

Senator DORGAN. Well, I am interested in that program and its possibilities. But I appreciate very much the presentation. I thought it was very interesting. It was my first opportunity to have a presentation of that type and I thank you very much.

Senator STEVENS. Thank you very much, Senator.

Senator Bumpers.

NUNN-LUGAR

Senator BUMPERS. Mr. Chairman.

General, Senator Dorgan asked some of the questions I wanted to ask on the Chemical Weapons Convention. But I also wanted to say there is one additional reason we should ratify it, and that is because we want to maintain the moral high ground among the nations around the world. But having said that, let me ask you about where we are with Nunn-Lugar.

We have spent $2 billion under Nunn-Lugar. What have we gotten for the money?

General SHALIKASHVILI. I think Nunn-Lugar has been one of the more successful programs we have had. The title of cooperative threat reduction is, I believe, the right term for it.

We have been able not only to help them develop systems that provide a greater assurance of the security of their nuclear warheads, but we have been able to help them safeguard the warheads with that money in that they have taken off launchers and missiles. We have also been able to help move in an area of actual demilitarization of nuclear warheads.

So it is a very small investment considering that the alternative is that these weapons would either be running around loose, with less control than they have now, or they would not be destroyed as rapidly as they might be now. It would just pose a further threat to us.

So I think in all of that, giving them money to destroy airplanes that they have taken off alert, money to have the equipment to destroy missiles that have been taken off alert—and we have all seen pictures of that—it has been an extremely successful program. Also, for the United States, dollar for dollar, penny for penny, it has been an extremely cost effective program.

Senator BUMPERS. How secure is the fissile material that they are taking out of those weapons?

General SHALIKASHVILI. I will not pretend to be able to give you a good answer. I think that intelligence folks tell me that they are secure but that we ought to continue to worry about it, and that we need to continue to work through programs like Nunn-Lugar to give them the capability to keep better records, keep better procedures, storage facilities, where they can store these weapons until they are demilitarized.

Senator BUMPERS. There was a lot made of the fact that both countries were taking their missiles off alert, retargeting them, and so on. How much of that is accurate?

Are our missiles still on alert? Are the Russian missiles still on alert? Are our bombers still on alert? Are they targeted? Is our SIOP the same and are our missiles targeted accordingly?

General SHALIKASHVILI. Our missiles are still on alert. Our nuclear submarines are still on alert. Our bombers are not on day to day alert.

The missiles, while we still have a SIOP, the missiles themselves, on a day-to-day basis, are not targeted against their actual targets. They are targeted at a point in the ocean. In this way, if there is a miscalculation or something, or if something goes wrong, they will not go and hit whatever the target is in Russia, but they will go in the ocean.

They can be retargeted very quickly. The objective is really as a safety measure, that if something were to go wrong, that missile would not fly and hit Vladivostok or somewhere, but would hit an ocean area.

The Russians say they have done the same thing. We have not indication that they have not. But we have no indication that they have. This is not an agreement that was reached based upon verification and so on. This was a confidence building measure where both countries agreed that we do so and retarget their missiles from their actual targets for the safety reason that I just outlined.

Ours I can assure you are not targeted on actual targets.

Senator BUMPERS. Are their missiles as secure from accidental launch or even intentional, say a rogue, launch, as ours are?

General SHALIKASHVILI. As far as we know, they are.

Early on, in a Nunn-Lugar effort, I was on the team that traveled to Russia back and forth. We made the first attempts, the first contacts with the Russians. So at least the first year of that program I spent quite a bit of time with the Russians who worked these issues.

It is fair to say that our system, while not only mechanically safe, also relies an awful lot on the reliability of human beings—our reliability program. So two men control and rely on two reliable individuals.

The Russians all along knew that they could rely less on people and had to rely more on mechanical systems. So they actually have more mechanical systems that keep a missile from being launched than even we do because of the concern they have had all along.

It manifests itself in such things, for instance, as in the past, when we still had tactical nuclear weapons, we would have them all the way down to firing units. The Russians never would do that because they were not quite sure that they could trust people down there.

So they retained them, the weapon itself, and controlled it much higher because of that.

As far as we know, their mechanical systems for securing their weapons and their launch codes are still very secure. [Deleted.] We ought not to be surprised by it. I mean, these are people who have not been paid. They have to go scavenge for food and so on.

There must be some cracks in that.

BALLISTIC MISSILE DEFENSE

Senator BUMPERS. General, do you agree with the three plus three ballistic missile defense program? It is two plus three now, I guess.

General SHALIKASHVILI. I believe, first of all, that our priorities are right, that the first priority, because the threat is there, should be theater ballistic missiles defenses. Second it should be the national missile defenses. I believe that this Nation requires a national missile defense.

I do believe that the way Secretary Perry had outlined it is about right, that we continue to go to the year 2000, I guess, and try to get the best technology, and be ready to go into production.

If the threat has materialized by then, as some say it will, then we should go right on and field the best system that we can. Scientists tell us it will take about 3 years.

If on that day the threat has not materialized, as some now think it will, then we ought to take the extra year or how many we have to continue to improve our technology so that when we do field and spend that money, we are buying ourselves the best possible system we can.

There is no doubt in my mind that this Nation needs a national missile defense.

Senator BUMPERS. Not just any old missile defense, though.

General SHALIKASHVILI. Yes.

Senator BUMPERS. But one that we have really carefully planned out.

General SHALIKASHVILI. The best possible that money and time will allow us to field.

Senator BUMPERS. General, let me just close with two things.

No. 1, I read an article in the Omaha World Herald dated February 20 quoting you as saying that we are being forced to maintain more ballistic missiles, more ICBM's than we really need to because the Russians have failed to ratify START II. I certainly agree with that.

I don't want to belabor that, but let me say one other thing.

By all the accounts I read, of course, your No. 1 priority and the place you think that defense is being hurt most is in procurement. I do not have any judgment on that. I accept your judgment on it.

F–22 EXPENSE

But I will say this. I cannot for the life of me reach a rationale that makes very much sense to me for building the F–22 fighter. The plane is prodigiously expensive. The 18E/F will be more than adequate to meet any threat between now and the year 2015, when the Joint Strike Fighter should be onboard.

The idea of paying what will ultimately be $180 million per copy for 438 airplanes when you are desperate for something a lot less exotic and things that we need a lot more than we need the F–22 is, well, as I say, I have felt this way for the last 2 years. We'll take another shot at the F–22 this year on the floor of the Senate. We will almost certainly defeat it. But, as Uncle Earl Long says, them's my views.

Thank you, Mr. Chairman.

Senator STEVENS. Thank you, sir.

I am going to yield to Senator Cochran.

General, I have to go to another meeting at 11:45. I do want to thank you again for your courtesy. We have two Senators left who want to ask questions.

I would like to suggest that sometime later in the year we come over your way and have a briefing from the individual members of your staffs—Army, Navy, Air Force, and Marines—and see if we could not go through not a question and answer session but just an extension of some of the things that we have discussed here so that we will be better informed before we mark up the bill.

General SHALIKASHVILI. Sure. Delighted to.

Senator Cochran.

RUSSIAN NAVAL FORCES

Senator COCHRAN. Thank you, Mr. Chairman.

General, one thing that I notice is missing from the global overview is an assessment of the operational naval forces of Russia. I think on the chart that you used, chart No. 5, it says Navy, [deleted]. The other units, at least the ground force and the Army is described and the total force is described with Air Force select units, and there is the nuclear capability.

To what extent is Russia maintaining an operational navy with combatants that are at sea and conducting missions?

General SHALIKASHVILI. I think I am correct when I tell you that the [deleted].

Readiness is uneven because selected units get more training and that even takes more away from others.

I, like you, probably have seen all the photographs of ships in various ports. Some of it is misleading. You have to remember that, for instance, at the height of the cold war, they had some [deleted] surface combatants and they are down now to about [deleted] number. So what we see and what some people characterize as the fleet going to pot is they see those that they have not spent money on disassembling. They just sit there.

The other fleet, the other ships are still seaworthy and operational. Certainly when you look at [deleted].

So it is an uneven picture, like it is in the other forces. We should never write them off. But we also should recognize that they have come down significantly from what they were.

Senator COCHRAN. Are they engaged, if you know, in any modernization in the Navy? Are they building new ships? Are they developing new weapon systems for the ships? Do you know?

General SHALIKASHVILI. I would have to give you that for the record. I know what they do in the submarine business, but I don't know for surface combatants. I just don't have that at my fingertips.

[The information follows:]

The Russian Navy remains in a critical period. The continued [deleted]. Naval leaders are counting on [deleted]. Over the past 5 years, there have been limited attempts to [deleted]. However, most of these [deleted] to the order of battle. The most successful aspects of [deleted] has been in the area of [deleted].

Russian surface warship construction is [deleted]. Since 1991, there have been [deleted]. It is unlikely that any of the remaining SOVREMENNYY Class destroyers currently under construction will be finished. [Deleted.]

Regarding long-term construction plans for future units, [deleted].

The incomplete carrier VARYAG has been sold for scrap and is currently being stripped of electronics and weapons. The KUZNETSOV, Russia's only operational aircraft carrier, is [deleted]. Naval aviation procurement is [deleted].

No further [deleted] is projected through [deleted]. We expect the first unit of [deleted] to begin sea trials circa [deleted]. The first units of a new series of [deleted] projected to initiate trials in [deleted] is expected each year, with construction [deleted].

NAVAL PROCUREMENT

Senator COCHRAN. In India, I know that they are involved in a navy building program and have plans for amphibious exercises and the like that we hear about. I know that there may be other countries, though I don't know about China and the extent to which they are involved or Iran, purchasing ships from Russia or other sources. I am concerned that when you talk about the fact that your goals for procurement are being met with a $60 billion commitment to procurement, in our plans for our Navy, it seems that we are going to be building fewer ships over time under the procurement plans that we know about. And, instead of our being able to deploy a 346 ships Navy, as we have right now, we are well on our way toward one-half that as a capability in our naval forces.

Is this an area where we should be concerned? Should we argue with the administration, for example, over these decisions? I am inclined to think that we should.

General SHALIKASHVILI. I have been testifying before our committees for the last 2 years—this is the third year—that we are significantly underfunded for procurement. And this is just for the procurement, for the things that we have on the books today. This is for the things that we know will break due to usage, whether they are marine tents or trucks, or whether they are the Navy ships.

The $60 billion that I say is the procurement you need to buy what you are wearing out and to buy the programs that we now all testify before you about. We testified before you that we do not have a ship building program that will sustain the kind of Navy you just mentioned.

So this all comes on top of that.

I was talking that it takes $60 billion to buy those things that I just mentioned. Certainly the Navy is a concern to me. The "Quadriennial Defense Review" is going to be the vehicle by which we, the Chiefs, will try to make clear what adjustments we need first of all in the way we manage to free up some money—and some of it can be done—what changes we need to make in some programs, which can be done, in order to buy the things we cannot buy. But we need to buy two things, Senator Cochran.

We have the force today. The "Quadriennial Defense Review" is just a few years out there, in 2005. Then we need to concentrate on the force out there, in 2010, 2015, 2020, the kind of force that we need. We have to make sure that, as we pass through the eye of the needle that is the "Quadriennial Defense Review," we are getting actually to the force we want to get.

Why is this important? Because the things we are now talking about buying are today's technology. We need to be sure that 10, 15 years from now, 20 years from now, when we once again will have perhaps another peer competitor, we have now invested in technologies and things and we must have a force that can still be the best force in the world.

So it is not good enough to just look here. We really need to look beyond it. For that, we need to be able to do business much more efficiently than we do now, not only to recapitalize our Navy but also to begin to buy the technologies for tomorrow.

If we don't, if we just solve the "Quadriennial Defense Review" problem here, we will just have moved the problem from here to there.

"QUADRENNIAL DEFENSE REVIEW"

Senator COCHRAN. It seems that the President's budget, which, of course, is a proposal for multiyear spending, is going to be the policy while you are going through this QDR exercise. I don't know how you are going to catch up and try to undo what is being done now with the defense budget unless the Congress asserts itself and tries to be an influence in that regard.

We would like to have the QDR right now so that we could be guided. What we are guided by is the annual testimony from military leaders and others, who can give us information about this. It puts an enormous responsibility on this committee, as I see it. So many of us are taking this very seriously.

For instance, I wonder if we shouldn't start now making some decisions about changes in policy, such as the deployment of such huge numbers of personnel in so-called permanent positions overseas—your charts were showing the 40,000 who are over there around the world in special operations. Of course, that is just a very small part of our overseas commitment.

Visiting, as we have, the Middle East, we see the permanent base being established. It looks permanent. Well, not right now, it doesn't. But they are building permanent things in Saudi Arabia and in Aviano. They are increasing the commitments there for construction.

You mentioned Qatar and some other places in your overview. Then you look at Okinawa, where we are changing the configura-

tion there, trying to map out plans for more or less a permanent deployment position there. In South Korea, everything is hardened stuff. It looks like we're there forever.

In Germany, I have not been there recently to look at those facilities and bases, but I don't see any change. Everything that I see going on is for more and bigger, more expensive, and for longer duration. There is nothing temporary about these things.

How in the world are we going to add money to procurement or to deal with the problem of downsizing the Navy forces when the global overview shows that we are going to need more forces that can move around quickly and not fewer.

I am very concerned about this. We see these other countries, many of them, being very adventuresome, particularly in the missile area. And here we are, negotiating a demarcation on ABM to limit the effectiveness of our theater missile defense—over your objection, I assume. I know that in past reports you have argued against making any further concessions in that area and even to roll back proposals that we have made to the Russians. But here our negotiators are over there continuing to negotiate. What are they negotiating?

That is just another factor that bothers me right now, and very seriously because this goes to the heart of our capability to protect the security of our Nation.

This administration is off on these rabbit hunts. They are chasing rabbits. I don't understand it.

What is your reaction to the last thing, the negotiations on demarcation?

ABM TALKS

General SHALIKASHVILI. You are correct. I have been of the view that there was a period of time, probably 2 years ago now, when we had gone further than we should have. I then wrote a letter and said that we not only should stop and not go any further, but that if the opportunity presents itself, to roll it back.

Well, the opportunity presented itself and we rolled it back. So we were all right.

Since that time, I have maintained that, and that is one of the reasons that to this day we don't have a theater missile defense [TMD] demarcation agreement, because our position is such that, at least so far, the Russians have not been willing to accept it.

I meet with the Chiefs frequently on this subject, have met within the last 2 weeks on that subject, and we make it very clear what our red lines are on that issue.

Now, obviously, ultimately it is the decision of the President to do what he wants to. But I also have firm views that we must not allow an agreement to limit the technologies that we can offer for the protection of our troops.

Senator COCHRAN. How about our citizens as well.

General SHALIKASHVILI. Yes; and our citizens.

So I feel very strongly that any offer that limits, that puts a gate on the technology, is not the right thing.

It is perfectly all right if you want to talk about what we will test it against. But don't ask us to put Governors on a missile, or whatever.

May I address the fact that you say it looks all permanent outside, like it is growing? Overseas we have significantly reduced our presence. When I was SACEUR and Commander in Europe, we had 345,000 Americans stationed in Europe. We have 100,000 stationed now. So it is not that we have not gone back.

In the Middle East, you saw us on a permanent base. That is not our base. We don't own a piece of it. It is the Saudis' base. They have been building it. We said while you're building it and while we're still there can we live there because it is safer than where you had us before. It's the same with the housing area. We didn't pay a penny for it. They pay for it. It's their housing area and they let us move into it.

So it is permanent but it is not permanent because of us.

I know that there were some unfortunate things said to you that we are there until hell freezes over or such. I will tell you that I think it is fair to say we are there as long as Saddam Hussein presents a threat to our interests, the oil fields in that area. If Saddam Hussein were to be replaced tomorrow by someone who is not, we would be out of there in a flash other than for our prepositioned equipment. We have no interest in staying there.

I think that is fair for the administration to say and it is certainly fair for this guy, sitting here and testifying before you, to say.

Senator COCHRAN. I can understand that threat and our security interests in that area a lot better than I can in Korea right now, for example.

Does it seem to you that there are any likely places where, even in the QDR, we are to expect some policy changes about these deployments?

General SHALIKASHVILI. The QDR is a difficult vehicle to get at that. We are there because the Presidential policy says we are going to be there. It is not a military issue and the QDR deals with military issues.

So the QDR is not the right vehicle to get us out of an overseas deployment. What the QDR will tell you is recommendations on how to fight the forces, what size forces should be, what programs we should have, how we should train them, recruit them, and so on. Also it's how we should manage ourselves, how many bases we need on which to station, how do we procure things. We have made some great advances in procurement, but we still have some awful stories where to buy a $12 part you need $250 in paperwork. That's nonsense.

Senator COCHRAN [presiding]. Right. That needs to be changed.

Thank you very much, General.

Senator Hutchison.

Senator HUTCHISON. Thank you.

General, I have several areas that I want to ask you about. The first one is Mexico.

There is no CINC real responsibility for Mexico. Do you think with what we are seeing in the drug situation, the corruption, and the destabilization of the economy, that that should be something SOUTHCOM should actually have responsibility for? Should we have more of an interest there?

General SHALIKASHVILI. I am of the view, Senator Hutchison, that it would be best if we had a regional CINC responsible for Mexico. Mexico has repeatedly refused to go along with that because they feel that if Mexico were to be responding to a regional CINC, they would lose their direct contact with Washington. They feel they have a special status with Washington because they do not report to a CINC. They report directly to Washington.

So from a military point of view, I agree with you fully. I just cannot be that sure that we can make that happen.

If enough of us who think like that talked up the issue and convinced the Mexicans that they would really benefit by it as well—because they would have a CINC who would visit, work the military to military issues with them and help them—that would be useful. Certainly Gen. Wes Clark would be delighted to do that, and Barry McCaffrey before him wanted to do that. We were just unsuccessful.

Senator HUTCHISON. It also seems that we might have the ability—and God knows we need every piece of help we can get in this drug issue—and it could be that maybe there could be more cooperation if we had more direct contact at any and every level between our two countries. They have military people in their drug enforcement.

I am just becoming increasingly concerned about Mexico. The recent things that have happened in the drug area are just scary. I truly believe the President is trying, and I think the Attorney General is trying. But I think the corruption is so deep and so embedded that, well, I hope it is not hopeless. But it's just not enough.

General SHALIKASHVILI. Yes; we need to keep pushing that, I think. I will take that up again.

Senator HUTCHISON. If you could, I think it would be certainly something that will put it more on a front burner. Then perhaps we might make some progress there.

General SHALIKASHVILI. OK.

NUCLEAR WEAPONS TESTING

Senator HUTCHISON. Second, I am always interested in the Department of Energy's role in the maintenance and storage of our nuclear stockpile. I would like to ask you a general question.

Are you confident that they are doing everything that you think is prudent in maintaining and storing our weapons? Do you think we are maintaining and storing enough? And do you think we can rely on a safe and reliable nuclear stockpile when we have banned any testing?

General SHALIKASHVILI. The answer is yes, and let me tell you what I base this on.

I think it is 2 years ago that the President established a system where each year the Secretary of Defense, the Secretary of Energy, and the Commander of our Strategic Forces, now General Habiger in Omaha, have to certify that the stockpile is safe and reliable. The system is such that if any one of them reports that it is not so, then the President has to consult with Congress on that issue.

Senator HUTCHISON. How do they tell when you cannot actually test? Do you think the computer modeling is sufficient? Do you think the testing is sufficient when you can't test?

General SHALIKASHVILI. The Energy Department has proposed and the Secretary of Defense has agreed with the establishment of a science-based stockpile verification program. It is a very costly program. To stand it up—and I might have my number off but not by much—it is about $4 billion a year, to establish the laboratories, the computer suites, and all of that, to establish it.

What I monitor is whether—this year, for instance, in the energy budget there is approximately $4 billion toward the science-based stockpile verification program. Just 10 days ago I was in Omaha to get a briefing from General Habiger on how he is coming along on making the judgment that this year the stockpile is still safe and reliable.

Not only is he in constant communications with the nuclear laboratory directors who work that issue, he also has a panel of prominent experts on the subject who report to him. Based upon his observations, because he monitors what is on the missiles and so on, his discussions with the labs and the report that he gets from the panel that is established just to answer that question, last year, for the first time, he made the judgment that it was safe. He tells me that, unless something comes up before he reports again, he is going to again certify this year.

With each year that goes by and we are further and further away from having done the last test, it will become more and more difficult. That is why it is very important that we do not allow the energy budget to slip, but continue working on this science-based stockpile verification program and that we get this thing operating.

But even then, Senator, we won't know whether that will be sufficient not to have to test. What we are talking about is the best judgment by scientists that they will be able to determine the reliability through these technical methods.

Senator HUTCHISON. Do you think we should have some time at which we would do some testing just to see if all of these great assumptions are, in fact, true?

How can we just sit here and say gee, we really hope this works and then be in a situation of dire emergency and have them fizzle?

General SHALIKASHVILI. I don't know. I won't pretend to understand the physics of this enough. But I did meet with the nuclear laboratory directors and we talked about this at great length.

They are all convinced that you can do that. But when I ask them for a guarantee, they cannot give it to you until all of the pieces are stood up. Obviously, if we stand it up, and we cannot do that, then we will have to go back to the President and say we will have to test.

Hopefully, it will work out. But we are still a number of years away before we will have that all put together so that we can tell you for sure whether it will work or not.

Senator HUTCHISON. Well, mark one Senator down as skeptical.

General SHALIKASHVILI. Mark one Chairman of the Joint Chiefs of Staff joining you in that skepticism. I just don't know.

But I know that if you do not help us to make sure that energy puts that money against it and does not siphon it off for something else, then I can assure you we won't get there from here.

Senator HUTCHISON. Please do everything you can to keep the warning flag up, because there are some areas in which we cannot afford to make a mistake. This seems to me to be one of them.

MISSILE DEFENSES

Along the same line, the missile defense system, why not deploy now?

General SHALIKASHVILI. What would you do different if you deployed now is the question that I ask myself. I think if we made the decision to deploy now, then we would still do for the next 2½ years or however long the same things and then go into deployment. We would then in essence go to the technology that we now have. If we make the decision 2½ years from now that no, we have to deploy, then we have not lost anything. If we say no, we have an extra year or two, then we have bought ourselves 2 more years to continue to improve it.

That is the only difference.

Senator HUTCHISON. Well, you cannot realistically say that we are not going to be under threat 2 years from now from rogue nations with ballistic missile capabilities.

General SHALIKASHVILI. I can only point out to you that about 2 years ago, I think, or so, there were statements made that the [deleted].

But if there is, then we haven't lost anything. We just go on and go into production.

Senator HUTCHISON. I do not understand why we would wait. I mean, particularly, I think one of those countries that you mentioned could become hostile. I hope not. I hope that we do everything possible to avoid that. But I just don't understand, knowing that we are talking about a range that would reach this country, but we are also talking theater missile defense. I mean, why not deploy now? The ultimate leverage is intercepting in the upward trajectory. Why not deploy now? Why not do everything we can to get that defense and then we will not have to worry about that issue?

General SHALIKASHVILI. Part of the reason is because we are pushing technologies. THAAD is the tactical ballistic missile system that the Army is developing. That is a perfect example.

We are behind. Why are we behind? It's because we have not figured out yet how to hit the incoming missile with THAAD. That is our problem.

We were going to have another test today, but it has been postponed again. I understand now it is going to be tomorrow, and I pray we hit the damn target missile.

But if we don't, I don't know where we are going to go. And that is my highest priority, to get that kind of system.

Senator HUTCHISON. It seems that if we would begin in earnest with the technological advances, waiting to see if perhaps there won't be any need for it, which seems like pie in the sky for me—why wouldn't we go in full force? We have our men and women in the field right now. We have borders that basically can walk across in our country. You could have a missile come in to Mexico from somebody, some terrorist organization.

So I don't understand why we don't go full throttle on this issue. I just don't understand it.

General SHALIKASHVILI. I share with you going full throttle on the development of the thing. I think once you accept that this Nation needs a missile defense, it isn't a question of trying to hide it or trying to get around it or something. This Nation needs a missile defense.

Senator HUTCHISON. Is there any question in your mind on that question?

General SHALIKASHVILI. No; no.

Senator HUTCHISON. So we do need one?

General SHALIKASHVILI. We need a missile defense.

Senator HUTCHISON. OK. Now what's the next step?

General SHALIKASHVILI. We need then the best missile defense at the time that we need it. Right now, I think we have the requirement to go full speed to develop the best possible system. If 3 years from now—or I guess now 2½ years from now—the threat is there, as you indicate and others indicate it will be there, then we ought to, without stopping to pause at all, just go on and start the fielding so that 3 years later we actually have a system. But you know that that system will not be the best technology that we can have.

Scientists will tell you that, that if we can buy another year or two, we can get a better system.

Right now, this is the first time we are putting this together. It's not like we have a long experience of defeating missiles in space. This is the first thing we are doing.

So the more we can be sure that we have it right, the better it is. Again, I just go back on the one hand to what is happening to the threat because the [deleted].

We, too, are having problems and THAAD is just an example of it.

Senator HUTCHISON [presiding]. Well, you have more than just nuclear capabilities out there. You've got roughly 30 countries with ballistic missile capabilities. Many of those don't have nuclear, but they have chemical and biological. So I don't know why there should be any question. Most certainly I think we have to be armed regardless of what the threat of the moment might be in the year 2000.

We know China is a potential always, and I think we just have to be realistic if we are going to remain the superpower of the world.

I don't understand why we wouldn't go full force and why there is any hesitancy on anyone's part in this administration about doing that. Of course, that is a fundamental difference we have.

It seems to me that we are dreaming if we think in 2 years we are going to say well, there is no need for a missile defense system.

HUMANITARIAN/PEACEKEEPING MISSIONS

Let me move on to one other area.

I am really open on this subject, now, unlike the other questions I have asked you, in which my mind is already made up. The question I am going to ask you is really a question of should it be a consideration that we would have a section of the armed forces, particularly the Army, in which people would sign up and agree

that they wanted to do humanitarian/peacekeeping type of missions.

You know some of the concerns that we hear are that a lot of people do not feel like they signed up to capture war lords or do missions like Haiti, even Bosnia, and we know the training is different for being a warrior that is going to fight versus someone who is going to feed hungry children, or build runways, or fight fires, or even keep warring factions apart with the mission of not getting involved.

Is there a place for that or is that just not realistic?

General SHALIKASHVILI. I have been asked that question very often. My answer has always been that I would prefer we not do that. I say this for a couple of reasons.

I think we maintain armed forces first and foremost to fight and win our nation's wars. We should not set aside a piece of our armed forces and say you guys are peacekeepers.

First of all, they will quickly become second-class citizens within the culture of the military. Second, to be a good peacekeeper I think you, first and foremost, have to be trained in your military specialty. So if you are an engineer, you need to be the best combat engineer. If you are an infantryman, you need to be the best infantryman in the world, and so on. We have seen that in many places.

In my experience in northern Iraq, when I came out of the Operation Provide Comfort to bring the Kurds out of the mountains and back into Iraq, it was clear that what I needed most were the combat soldiers that understood their jobs. First of all, they will protect themselves properly. When they run into a warlord or someone, they will know what to do. They'll know how to respond and so on. And you won't have the sort of mistreatment of peacekeepers and the national shame, almost, like you saw in UNPROFOR in Bosnia, where someone captures peacekeepers and chains them down.

If those soldiers had been trained properly, led properly, and had had the right rules of engagement, you would not have seen that. So it is not fair to them.

Finally, we are now so small that to carve out 20,000 or whatever and say you guys go to the Bosnias and the Haitis from now on and the rest of them will get ready in case there is a real conflict, we just don't have that flexibility any longer. We need everyone now to be hitting at 150 percent and on all cylinders.

I believe the Americans, surprisingly enough, are the best keepers because we are, first and foremost, the best soldiers in the world. And look at what happened in Bosnia. When NATO under our leadership moved in and we moved in an Army division, it turned around overnight. No one challenged us. Why—because we were the meanest looking guys and girls around and everyone knew that if they fooled around with them, some tanks were going to run over them.

So I think that is the kind of peacekeeping you need. So I would ask you to let's train them first to be the best military and then let's give them the right kind of orientations and training before we send them into peacekeeping operations. Then, when they come back, let's reorient them again to be the best airmen, soldiers, marines, and sailors.

Senator HUTCHISON. Do you find morale problems when you send people to build runways and feed starving children?

General SHALIKASHVILI. I don't think so. It depends on how long you keep them there. You know, there are two phenomena at play here. First of all, a young 18 or 19 year old seldom signs up to spend his tour at Fort Hood or Fort Riley or whatever. He really wants to get out to see the world and do exciting things, or he wouldn't have come into the military—he or she. So when you say that tomorrow you are going to a place you didn't even know about, it is exciting for most of them—not for all, but for the vast majority.

If you go there and you tell him specifically what he needs to do and so on, and take care of him, and don't let him stay there too long, and then bring him back, he is all right then.

I have talked to God knows how many who went and who came out of Haiti, out of Rwanda, out of Bosnia. I know you travel a lot. Next time you are in Germany, go to the place and talk to the folks who have been in Bosnia and see what they will tell you. Most of them tell me that they stayed there too long and they should not have stayed there that long. But they would not trade it because for them, that is the action today and they wanted to be there where the action was.

Senator HUTCHISON. What seems to be the optimum amount of time that they can be in one of those operations and come back without a morale problem?

General SHALIKASHVILI. I think when you balance how long they should go for, what the cost is of moving them back and forth, and how long they can be gone—for instance, if he is a tanker, without shooting his tank gun so that he loses his proficiency—probably it is around 6 months.

When we went to Bosnia the first year, we sent them there for 1 year. We did that because we wanted to save money. We did not want to have this huge force of 20,000 going home and coming all the time. It worked out well.

But from the standpoint of the answer to your question, it was longer than it should have been. So now we have corrected that and we've sent this next batch in for 6 months. I think as long as I am chairman I am going to argue that 6 months is the right period.

Senator HUTCHISON. I thank you very much.

I am interested in the views on the peacekeeping. I certainly would not press it if it weren't something that you didn't think of as well.

ADDITIONAL COMMITTEE QUESTIONS

General SHALIKASHVILI. I think you and many. And some countries do that. I just am against it.

Senator HUTCHISON. All right.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

ADDITIONAL COMMITTEE QUESTIONS

U.S. DIRECT ENLARGEMENT COSTS

Question. General Shalikashvili, can you explain how the Department arrived at its estimate of $150 to $200 million a year for NATO direct enlargement costs? How do current expenditures for NATO support these costs?

Answer. The Administration, in its Report to Congress, developed illustrative cost estimates based on a set of assumptions that included admitting a small group of Central European countries to the Alliance in the first round of enlargement. Under these assumptions, DOD estimated that the total direct enlargement costs (those costs that are directly and exclusively tied to enlargement) would be approximately $9 to $12 billion between 1997 and 2009.

DOD further assumed that new members would essentially pay for their own direct enlargement costs, unless there was evidence of likely assistance from other sources or the enhancement would qualify for common funding (e.g., improvements to reception facilities). This means that new members would pay about $3 to $4.5 billion of the total direct enlargement cost. (This amounts to about 5 percent of their total projected defense budgets.)

U.S. and current Allies would pay for the remainder of the direct enlargement costs largely based on our respective obligations to the NATO common budget. Under this criteria, our Allies would pay for $4.5 to $5.5 billion (about 0.2 percent of their collective defense budgets) and the U.S. would pay for the remaining $1.5 to $2 billion (about 0.07 percent of our defense budget). As NATO does not incur the majority of these direct enlargement costs until after the new members join the Alliance in 1999, it was estimated that U.S. direct enlargement costs would average $150 to $200 million per year for the ten year period following enlargement.

No decision has been reached by the U.S. or NATO on the extent to which these direct enlargement costs will be additive or reprogrammed within current budgets.

NEW MEMBER REQUIREMENTS

Question. Is it the intention of NATO or the Administration to wait until 1999 to admit new members? Is there a time line that outlines requirements for prospective members?

Answer. President Clinton set the U.S. goal to admit new members to the Alliance by 1999—NATO's 50th anniversary and ten years after the fall of the Berlin Wall. NATO has adopted this goal and planning is well underway to meet this goal.

The NATO military staffs will focus on those countries invited to join the Alliance after the July Summit in Madrid. NATO will build on the experience these countries have gained through the Partnership for Peace program. The intent is to begin to outline military force requirements for each of these countries later this year, and to begin developing force proposals and goals by mid-1998 so that the new member requirements can be fully integrated in NATO's defense planning process when they join the Alliance in 1999.

SOUTHWEST ASIA OPERATIONS

Question. General Shalikashvili, can you provide us with an explanation for why operations in Southwest Asia, which have been treated as contingency operations in the past, are now considered to be a permanent part of the DOD requirement?

Answer. I do not consider our forward presence in Southwest Asia a permanent part of the DOD requirement, regardless of Service budget submissions. Our forces are there as deterrent forces responding to serious Iraqi and Iranian threats to our vital interests and those of our allies and regional partners. They also enforce U.N. Security Council resolutions against Iraq, and are prepared to respond to threatening actions by Saddam Hussein. We provide this deterrent force by rotational deployments of air and naval assets, frequent combined exercises with Gulf countries, and an interim PATRIOT air defense deployment. We expect this deterrence mission to continue because the threats we face there are not expected to be reduced in the near term.

Question. During the Committee's recent visit to Kuwait and Saudi Arabia, we saw many indications that point towards a permanent presence of U.S. forces in the Persian Gulf region, even though Congress has not been consulted on this significant change. What is your assessment? What sort of constraints do you place on the CINC's regarding expenditures prior to execution, particularly in these sort of peacekeeping operations?

Answer. As I previously indicated, our force presence in the Gulf is not permanent but is there to deter threats to our interests and those of our regional partners. This mission is accomplished using rotational deployments that can be and are adjusted

as contingencies demand. Recent force protection measures, such as consolidating U.S. military presence in Saudi Arabia at Prince Sultan Air Base, require extensive construction efforts to build secure, efficient, and reasonably comfortable facilities for our forces. The Saudis are paying for this construction. Such construction activities are efforts to improve the security of our forces and do not reflect a change in U.S. policy or the basis on which our forces are present in the region.

There are constraints placed on CINC's' expenditures prior to execution. The costs of known contingency operations are estimated and budgeted by the Services and approved by OSD in the annual DOD budget process. For quickly emerging contingency operations that fall outside the PPBS cycle, other mechanisms are in effect. CINC's develop operational plans which are reviewed by DOD senior leadership before execution. As a part of the review process, OSD, the Joint Staff, and Services collaborate to develop a preliminary cost estimate of the operation. This estimate is provided to the SECDEF and CJCS for consideration during review and decision making. Where costs appear excessive, CINC's are directed to relook and modify the plan as needed. Additionally, after approval of the operational plan, cost estimates are developed for every modification order and deployment order, and provided to senior leaders for consideration during the order approval process. This measure was implemented in May of this year to ensure that costs are considered prior to execution. Other DOD initiatives are underway to further enhance contingency cost awareness and management, including oversight of contingency costs via the DEPSECDEF's Senior Readiness Oversight Committee, and oversight of process enhancements by a DOD senior steering committee.

SUBCOMMITTEE RECESS

Senator HUTCHISON. I thank you very much and I think that does it for today.

General SHALIKASHVILI. Thank you very much.

[Whereupon, at 12:15 p.m., Wednesday, March 5, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1998

WEDNESDAY, MARCH 12, 1997

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10 a.m., in room SD–192, Dirksen Senate Office Building, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens, Cochran, Inouye, and Dorgan.

DEPARTMENT OF DEFENSE

BALLISTIC MISSILE DEFENSE ORGANIZATION

STATEMENT OF LT. GEN. LESTER L. LYLES, USAF, DIRECTOR

OPENING STATEMENT OF HON. TED STEVENS

Senator STEVENS. Good morning, General. We do have some conflicts this morning. I have several hearings taking place at the same time.

I am delighted to have a chance to have you present your statement today. I think it is one of the most difficult problems we will face in this committee this year, is how to handle funding for your organization.

Our cochairman has had another subcommittee and will be along later, but I would like to proceed now. If you would, I would be pleased to hear your statement.

General LYLES. Yes, sir, Mr. Chairman. It is a pleasure to be here. I do have a formal statement that I will submit for the record and a few brief remarks, if you do not mind, that I would like to read right now, if I could.

Senator STEVENS. Please.

OPENING STATEMENT

General LYLES. It is a privilege to appear before you, Mr. Chairman and other members of the committee, to represent the Department's ballistic missile defense program. What I would like to do is to focus on the significant progress that we have made in all three areas of our ballistic missile defense activities over the past year.

Mr. Chairman, when I joined the Ballistic Missile Defense Organization [BMDO] 6 months ago, I immediately appreciated the high level of support and strong commitment that this program enjoys both within the Department of Defense and certainly within Con-

gress. It is clear to me that Secretary Cohen and obviously Secretary Perry before him, Deputy Secretary White, and Dr. Kaminski all strongly support this program.

They are absolutely committed, as they have conveyed to me personally, to successfully fielding improved missile defenses for our warfighters, and as I have had the opportunity to meet with you and Members of Congress and staff, again, I am extremely pleased and obviously very much impressed with the strong support that we have for this very, very important mission from Congress.

Mr. Chairman, as you know, missile defense is a critical element of the Department's and the country's overall counterproliferation strategy preventing, deterring, and defending against missile threats. Diplomacy and arms control obviously represent our first line of defense against ballistic missiles and weapons of mass destruction by preventing and reducing the threat.

Deterrence represents our second layer of defense against ballistic missiles and weapons of mass destruction, and to the extent that these first two elements, threat reduction and deterrence, are not fully successful, we must be prepared to defend directly against a threat, and my job is to ensure that those defense elements are available, effective, and capable of meeting the warfighters' requirements for missile defense.

When I was nominated to be the Director of BMDO, I was charged by both Dr. Kaminski and Dr. White to bring my 28 years of acquisition experience to bear on what I consider to be two very critical elements. First, to ensure that our acquisition programs are executable, the existing programs, and that we are trying to get rubber on the ramp as quickly and as expeditiously as possible.

And second, restructuring our technology programs with an acquisition focus, making sure that they are tuned and really focused on getting into weapon systems.

I consider this to be my personal charter, and a very, very important one, and, therefore, as I have noted to my people many times, Mr. Chairman, my management approach for our ballistic missile defense [BMD] programs can be described succinctly in three words: execute, execute, execute.

In that light, I am very pleased to announce to you that we are aggressively moving out to protect our deployed forces with improved theater missile defense systems and to protect the U.S. homeland with a national missile defense system.

THEATER MISSILE DEFENSE

Notwithstanding our recent failure, intercept failure with the THAAD program, the theater high altitude area defense system, which I will address shortly, over the last year we have had several significant and in some cases first-time successes in our theater missile defense program. This includes successful intercept tests by the Army's Patriot system, the Navy's area defense system, and even the Marine Corps' HAWK system. Mr. Chairman, these intercepts move us closer to our mutual goal of fielding highly effective theater missile defense systems.

I would like to just briefly list and talk about some of those successes that we have enjoyed over the last several months. Recent combined systems tests involving Patriot, THAAD, Navy air, and

HAWK, have provided us with the kind of information and data and operations of how to integrate battle management, the key glue for all of our missile defense systems, and that is, in fact, a major role of BMDO, to ensure that all of our systems operate as a family of systems, and that they can work and fight together.

The Patriot air and missile defense system we are fielding today is much more capable than its gulf war predecessor. As an example, we recently completed fielding the first of three improvements that are part of the Patriot advance capabilities 3, PAC–3, as we call it, for the Patriot system.

We are scheduled to field the final phase, which consists of a full configuration 3 system, in fiscal year 1999. This will include the very critical hit-to-kill capability that we must have with PAC–3.

Compared to the Patriot system in the gulf war, these improvements will provide a significant increase, almost an eightfold increase in defended area coverage, and, Mr. Chairman, I think we have in front of you a folder that shows a chart that illustrates the improvements that we have in the capabilities for Patriot versus what we had during the gulf war.

As dramatic proof of our improved capabilities, on February 8 last month an operational unit of Patriot warfighters, soldiers from the field, with PAC–3 configuration 2, both hardware and modifications, successfully engaged at Kwajalein missile range a Scud missile. This was a target missile that was fired toward Kwajalein.

This was the first multiple engagement of Patriot which used both a PAC–2 and a guidance-enhanced missile to give us the capability to counter the threat. It was the first long-range intercept that we have done with the new, improved Patriot. The target was actually fired from some 320 kilometers away, and the first intercept of the PAC–2 against this configuration and model of Scud.

I can talk about the actual model, because that information is now unclassified. This was an actual firing against an actual Scud, and I think this dramatically improves, or it shows the improved capabilities that we now have.

We have a test upcoming, a different flight profile that is coming Monday, also at Kwajalein, a second of these series of tests involving another actual Scud, which will be fired and we will allow our Patriot system to intercept it.

Likewise, Mr. Chairman, in the Marine Corps we have begun to field upgrades to the HAWK system. This follows a highly successful operational test series that was concluded last August, August 1996. The HAWK missile and the upgraded radar successfully engaged and destroyed multiple Lance targets and air-breathing drones, drones which are surrogates for cruise missiles. They have also demonstrated a very impressive kill rate.

I think the next chart that is in your folder shows a picture of an actual intercept of one of the HAWK's against multiple engagements of Lance targets at White Sands, and we are now starting to deploy 1,000 lethality-enhanced missiles that will be fielded over the next 2 years to give us the kind of HAWK capability we need to have for our warfighters.

On January 24, the Navy area defense program also successfully had an intercept. They intercepted a Lance missile at White Sands missile range; the standard missile block IV–A intercepted the tar-

get using its internal infrared terminal guidance system. The color photograph you have in your folder shows an actual photo from the telemetry and shows the very last scene that was picked up by the standard missile before the warhead destroyed the target.

Mr. Chairman, within BMDO one of our most significant roles is to ensure that each of our theater missile defense systems are interoperable, that they can work not just alone but work with each other. We have been conducting several complex live tests to demonstrate this interoperability. We call these tests systems integrations tests, or SIT tests.

The most recent one was held on February 21, and during this test, in addition to a Patriot radar, we also used a THAAD radar system, we had an aegis destroyer tracking the targets, we had them passing information and target cues to the Patriot system, we also had the joint tactical air-to-ground system, or JTAGS, passing on satellite information also to the Patriot radar and the Patriot battery. This test was a complete success.

NATIONAL MISSILE DEFENSE

Mr. Chairman, if I could for a few minutes, let me turn to our national missile defense program. In the past, when we have talked about BMDO, we talked about the priorities of our organization. First, theater missile defense systems, second, national missile defense systems, and third, technology. Today, it is clear to me that BMDO really has two top priorities: obviously to field highly effective theater defense missile systems, but hand-in-glove with that is to develop and deploy and start deploying planning for a highly effective national missile defense.

We are now up and running, Mr. Chairman, to do that, and I think we have made substantive progress in our total program. We are committed to developing a system that we can deploy rapidly, so we are already starting to focus our efforts over the last several months to not only firmly define the national missile defense system, but to actively engage in preliminary deployment planning to look at where we might do sites for our national missile defense system and to start the early process of planning for the deployment phase that will be so critical.

Nonetheless, Mr. Chairman, I think I owe it to you, to the members of the committee, and to the rest of the Congress, to tell you that I characterize our three plus three national missile defense strategy as being very high risk, not so much in terms of technology, not so much in terms of cost, but specifically in terms of the schedule that we are trying to engage.

I think this is critically illustrated by our recent test failure that we had. We were attempting to do a sensitive fly-by test of the EKV, the exoatmospheric kill vehicle, in a seeker test. This is a major test to allow us to down-select and determine eventually who should be the contractor that builds the EKV for our national missile defense system.

BMDO and the Army planned to launch the EKV a little over 1 month ago. We wanted to use that test with some targets coming out of Vandenberg Air Force Base to characterize and understand in a sensor fly-by exactly the kind of performance we had in this one design of EKV.

We were able to successfully launch the target. We launched the target from Vandenberg Air Force Base. We deployed the target generators that we had on the system. We had the targets in space. Unfortunately, we were unable to deploy the booster carrying the EKV.

It turns out that it was a simple human error that caused an electrical failure and did not allow us to successfully launch the booster with the EKV.

This was and is, it turned out, Mr. Chairman, a one-of-a-kind target vehicle, the one we launched from Vandenberg Air Force Base. We did not have backup targets, did not have backup target scenarios to be able to pull together and do another test in a very, very rapid manner.

As a result of that, the single string failure, and I think we have lots of them in our very aggressive NMD program, we now are experiencing some serious delays in our ability to complete the EKV sensor test flights. We are now delayed until next January before we can repeat the exact test we tried to do this past January. We will be testing the second variant of this series of tests in the May timeframe, but we specifically lost time and incurred some dollar losses as a result of this particular situation.

This illustrates to me the kind of single string, single failure mechanisms that we have potentially in the NMD program, and the reason why I characterize it as being very high risk.

I want to reemphasize, however, Mr. Chairman, to you and the other Members of Congress, that I fully support the administration's three plus three NMD strategy. To me, it is the right one to do. It makes sense.

We need to aggressively try to develop the capability as quickly as we possibly can. We need to get into an integrated test as quickly as we possibly can to be able then to make a deployment decision based on the threat, but as you can see from the illustration I gave you, the program has its risk elements, and I want to be very honest and open and tell you that it is high risk.

SUPPORT TECHNOLOGY

Let me shift to one last topic, Mr. Chairman. It is the subject of technology. The history of BMDO and its predecessor, SDIO, clearly demonstrates the strength and the importance of our technology investments. Like my predecessor, I consider that to be a strategic investment for the future.

Yesterday's technology programs are the ones that are allowing us and giving us the potential opportunity to be able to do the things we are doing today in theater missile defense and also the things we are going to do for national missile defense.

I would like to give you one specific example of how technology has already started to pay off. In April of last year, we launched the MSX program, the mid-course space experiment, a satellite to give us the capability to characterize ballistic missile signatures during the very, very critical mid-course phase of flight.

Now, I think we all understand and we demonstrated that we can detect and pick up the launch of a ballistic missile threat with our current overhead sensors. What we are not able to do is to characterize exactly what happens when the postboost phase is

over with. When the threat and the enemies have deployed either decoys or RV's, we need to be able to characterize and discriminate and understand what is the actual RV and what are chaff, penetration aids, or decoys.

The mid-course space experiment, or MSX, was designed to give us exactly that kind of information, and during its lifetime, since we launched it last April and started gathering data last summer, we have already gathered billions of bits of data that are helping us to determine exactly the kind of information we need to be able to detect, track, and disseminate realistic targets against the background of the Earth and certainly the space background.

The information we are getting out of MSX is illustrated in the photos in the chart that you have. The photo on the left-hand side shows an actual photo some 2,000 kilometers away, taken by one of the sensors on MSX.

What you are looking at is a string of targets from a specific dedicated launch vehicle. There is an actual RV in there, and there are also lots of details and calibration objects. We were able, through this particular sensor on MSX, to be able to characterize exactly what is the RV and what are the decoys and calibration objects.

This information will allow us to then develop algorithms so we can put them in our sensors so we can do this in a realistic operational scenario.

The photo on the right-hand side is another photo of an RV taken against the background of the Earth's limb. The contrasting background of the warm atmosphere of the Earth resists the cold atmosphere of space. It is a very, very critical one, and we have illustrated in this particular photo that we can pick up and determine what the RV is, what the actual target RV is in this kind of scenario.

The information for our space and missile-tracking system, as an example, SMTS, is going to benefit from MSX and the technology that we have demonstrated in those photos. We will continue doing this kind of test, and it will be very, very critical to the kind of capability we must have for the future.

The bottom line of which is that we still need to continue to protect our technology program. It is a strategic investment both for today and certainly an investment for tomorrow.

THAAD TEST INVESTIGATION

Mr. Chairman, before I wrap up my statement, I need to talk a little bit about the failed test we had last week on the THAAD program. As you know, last Thursday we attempted to conduct an intercept for the theater high altitude area defense system, or the THAAD missile. The target was launched successfully at White Sands missile range. We launched the actual THAAD missile successfully. The radar and all the elements, the BMC^3, command and control associated with the THAAD system, seemed to have worked perfectly.

Unfortunately, we did not have a successful intercept. We have photos showing the very, very last minutes of the end game, where we were able to pick up not only the target but the intercept vehicle in the same frame. We were very, very close to an intercept.

We think today, based on the latest information, that the altitude control system for the THAAD failed to operate properly. We had all the other critical elements operating perfectly, but we failed to have the altitude control necessary to divert the actual interceptor into the target vehicle.

This is the fourth intercept miss that we have had on the THAAD program, and it causes us a lot of concerns. We have addressed, I think, most of the critical elements that we must have in the THAAD program, but each one of the failures that we have had to date have all been in the very, very critical end game, and that is where we have had different failure mechanisms each time.

The failure this past Thursday was not like any of the other failure mechanisms, and each one of them was also very, very unique.

As a result of that, I have commissioned a failure investigation team to be led by Brig. Gen. Dan Montgomery out of Huntsville, AL, to look at every element of the THAAD program. We are not going to just look at exactly what happened on this previous test. We are going to relook at the entire design, and design margins and reliability associated with the THAAD system. We will also look at other options we may have available to us to do the THAAD mission just to make sure we really understand what alternatives are ahead of us, and we will relook at the critical requirements we are trying to meet.

This team was constituted as of this week. They are now up and running. I expect to have a final report back to me by the April timeframe and then we will make critical decisions relative to the rest of the THAAD program, and specifically the additional tests that are still ahead of us.

I think it is important to remember, Mr. Chairman, that THAAD is still in a demonstration validation phase. We have been able to successfully do a lot of things, and I have a chart in your folder which I think shows the different successes we have had in the THAAD program, and this is exactly the kind of timeframe, during demonstration/validation, where we need to understand does everything work together perfectly, and where are there some things that we still need to do some additional testing on.

I think the design of the THAAD system is still a very sound one. We are having engineering problems, the kind of engineering problems that we need to find out during the demonstration/validation phase, and we will find out exactly what is going on so that we will be able to complete a successful intercept and get on with this critical capability we have to have for our warfighters.

PREPARED STATEMENT

Mr. Chairman, that completes my statement. I would be very happy to address any questions you might have on any elements of the rest of our missile defense program.

Thank you very much.

[The statement follows:]

PREPARED STATEMENT OF LT. GEN. LESTER L. LYLES

Mr. Chairman and Members of the Committee, it is my privilege to appear before you today to present the Department's Ballistic Missile Defense (BMD) program and budget for fiscal year 1998. I am particularly pleased to be able to report to the

Committee significant progress in all three areas of the BMD program: Theater Missile Defense, National Missile Defense and BMD Technology. I look forward to outlining those significant accomplishments in just a few moments.

At the same time, I think it is equally important that we recognize the challenges we still face in developing and fielding ballistic missile defenses—in many cases this really is "rocket science." We are building highly sophisticated BMD systems, consisting of sophisticated sensors and interceptor missiles that incorporate state-of-the-art electronics, seekers, communications, avionics and propulsion. We are applying the very best talents that government and industry have to offer across all BMD programs. We will continue to reduce these risks by diligently applying our financial and personnel resources to ensure program success.

My twenty eight years of experience in the United States Air Force, all of which has been involved in research, development and acquisition, tell me that we have structured the right program to address the existing and projected missile threat and that we are proceeding as rapidly as possible to field these systems. Where we have deployed upgrades to air and missile defense systems, it is clear that they are significant improvements over the capabilities our forces had in the Gulf War. But we cannot stop with these upgrades because the potential missile threat warrants continued development and deployment to ensure highly effective defenses.

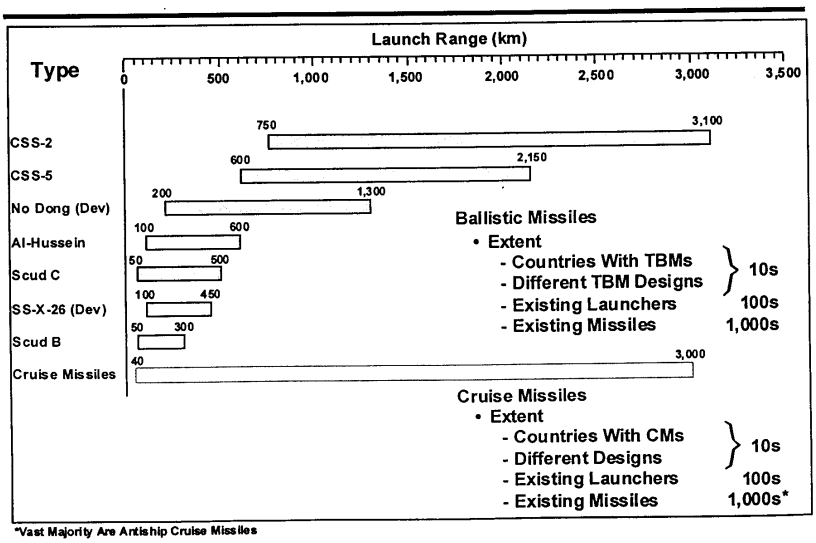
The Ballistic Missile Threat.—While the end of the Cold War signaled a reduction in the likelihood of global conflict, the threat from foreign theater missiles has grown steadily as sophisticated missile technology becomes available on a wider scale. The proliferation of weapons of mass destruction and the ballistic and cruise missiles that could deliver them pose a direct and immediate threat to the security of U.S. military forces and assets overseas, as well as our allies and friends.

We have already witnessed the willingness of countries to use theater-class ballistic missiles for military purposes. Since 1980, ballistic missiles have been used in six regional conflicts. Recently, United Nations reports indicate that, in addition to the high explosive warheads used during the Gulf War, Iraq was prepared to use theater ballistic missiles with chemical and biological warheads. Fortunately, it did not do so.

Strategic ballistic missiles, including intercontinental and submarine launched ballistic missiles (ICBM's and SLBM's) exist in abundance in the world today. Fortunately, the Intelligence Community rates the threat to the U.S. homeland from these existing missiles as low. The greater concern, however, stems from the emergence of a Third World long range missile threat to the United States.

Theater Missile Assessment.—I must note that my organization is a consumer, not producer, of intelligence analyses on missile threats. Therefore, my testimony reflects the unclassified assessments provided by the intelligence community. The missile threat to our forward deployed forces, allies and friends involves a wide range of systems, including theater ballistic missiles and cruise missiles launched from sea, air and land platforms. Representative theater threats are illustrated in the chart below.

THEATER THREAT - REAL AND GROWING



*Vast Majority Are Antiship Cruise Missiles

These missiles represent a continually evolving threat, as increasing numbers of countries are acquiring these weapons due to their relatively low cost and the comparative ease with which they can be constructed. While the threat posed by these missiles is regional in nature, the trend is clearly in the direction of systems with increasing range, lethality, accuracy and sophistication. At the beginning of 1996, there were thousands of theater-class ballistic missiles in service in 30 non-NATO countries. In addition, nine of these same countries are reported to be developing nearly 20 new theater-class ballistic missiles. Even a relatively small number of ballistic missiles armed with weapons of mass destruction—chemical, biological or nuclear weapons—would dramatically raise the potential costs and risks of U.S. or coalition military operations.

The cruise missile threat is also a growing concern. Currently 77 nations possess cruise missiles, with 17 countries producing approximately 130 different types of cruise missiles. The majority of these systems are anti-ship cruise missiles. Land attack cruise missiles are being developed by 13 nations, and proliferation of advanced land attack cruise missiles is expected in about 10 to 15 years. Like theater-class ballistic missiles, cruise missiles are inexpensive and the technology to build them is relatively easy to acquire. Combining these facts with their high degree of accuracy, mobility, survivability and multiple roles make cruise missiles an attractive weapon for "rest of world" nations. The threat posed by both ballistic and cruise missiles is likely to continue to evolve.

The theater missile threat is here and now. It is widely dispersed and has to be taken very seriously. Our Theater Missile Defense program plays a critical role in the Department's overall Counterproliferation strategy to reduce, deter and defend against these and potential future threats. Our TMD program is structured to provide a highly effective, active defense against missile attacks.

Strategic Missile Assessment.—In the case of nuclear strategic weapons, Russia has a significant capability for delivering these weapons with strategic weapon delivery systems—land-based and submarine-launched missiles and long range aircraft. China can also deliver these weapons with land-based and emerging sea-based ballistic missile capabilities. We do not see these systems as posing a threat to the United States in the foreseeable future. That is, we do not see an intent that goes with the capability. Even if that situation changes, we will continue to field a significant U.S. deterrent force.

We do not see a near-term ballistic missile threat to U.S. territory from the so-called rogue nations, but we cannot be complacent about this assessment. The threat of long-range missiles from rogue nations could emerge in the future. The Intelligence Community estimates that this threat would take 15 years to develop, but

could be accelerated if those nations acquired this capability from beyond their borders.

This no longer makes sense. We cannot take lightly the emerging ballistic missile capability of a rogue nation to threaten any part of the United States. This is why the Department's three plus three NMD program is designed for a possible deployment as early as 2003—well ahead of the intelligence community's estimates for a potential Third World ICBM deployment. My staff and I are working closely with General Estes and his staff at U.S. Space Command to ensure that we develop an NMD system that meets the warfighter's requirements. General Estes and I want to ensure that the NMD system can be deployed in a timely manner, while effective against the identified threat.

Fiscal Year 1998 Program and Budget.—In order to address the missile threat, the Department has structured a sound and affordable program for fiscal year 1998. The total fiscal year 1998 budget request for the Ballistic Missile Defense Organization is $2.589 billion. This includes $1.835 billion for Theater Missile Defense, $504 million for National Missile Defense, $250 million for Support Technologies. In addition, the Department is requesting $384 million in procurement funds for TMD systems, which were realigned to Army and Navy budgets. The following chart provides a detailed overview of funding for fiscal years 1996 through 1998. Of the total BMD budget request (BMDO and Service Procurement funds) for fiscal year 1998, TMD accounts for roughly 75 percent, NMD 17 percent and Technology 8 percent.

BALLISTIC MISSILE DEFENSE ORGANIZATION FUNDING

[TY dollars in millions]

Program element	Program	Fiscal year—		
		1996 actual	1997 estimate	1998 estimate
	PROCUREMENT			
208863C	HAWK Procurement	13.980	14.665	.....
208864C	TMD BM/C^3 Procurement	27.101	19.696	.....
208865C	PAC–3 Procurement	285.989	219.413	.....
208867C	Navy Area Wide	16.276	9.151	.....
	Total Procurement	343.346	262.925	.....
	RDT&E			
602173C	Support Technology—Applied Research	96.092	102.510	101.932
603173C	Support Technology—Advanced Technology Development	130.611	251.294	147.557
603861C	THAAD System—dem/val	565.818	341.307	294.647
603863C	HAWK—dem/val	22.819	.....	.....
603864C	TMD BM/C^3—dem/val	27.147	.....	.....
603867C	Navy Area Wide—dem/val	277.565	59.315	.....
603868C	Navy Theater Wide—dem/val	200.442	304.171	194.898
603869C	MEADS—dem/val (PD–V)	20.123	56.232	47.956
603870C	Boost Phase Intercept—dem/val	.....	23.276	12.885
603871C	NMD—dem/val	730.656	828.864	504.091
603872C	Joint TMD—dem/val	429.137	506.492	542.619
604861C	THAAD System—EMD	.....	277.508	261.480
604864C	TMD BM/C^3—EMD	10.118	.....	.....
604865C	PAC–3—EMD	352.547	381.092	206.057
604866C	PAC–3 Risk—EMD	23.358	.....	.....
604867C	Navy Area Wide—EMD	.....	241.330	267.822
605218C	Management	158.748	.....	.....
	Total RDT&E	3,045.181	3,373.391	2,581.944
	MILCON			
603865C	PAC–3	1.349	.....	.....

BALLISTIC MISSILE DEFENSE ORGANIZATION FUNDING—Continued

[TY dollars in millions]

Program element	Program	Fiscal year—		
		1996 actual	1997 estimate	1998 estimate
603871C	National Missile Defense	.....	.....	.540
603872C	Joint Theater Missile Defense	1.642	1.404	1.965
604861C	THAAD System	13.104	.....	4.565
	Total MILCON	16.095	1.404	7.070
	Total BMDO Program	3,404.622	3,637.720	2,589.014

Source: PB 98/99 CPS.

TMD Procurement Funds.—The fiscal year 1998 budget request marks a significant change from previous budgets in that procurement funds for BMD programs reside in the Military Service budgets. For fiscal year 1998, the Department is requesting $349 million for PAC–3 and $20 million for TMD BMC3 in the Army budget, and $15.4 million for the Navy Area Defense in the Navy procurement budget.

The Department shifted BMD procurement funds to the Services over the Future Year Defense Plan (FYDP) in recognition that our TMD programs will soon be transitioning to the procurement phase. For example, the THAAD system will transition to the EMD phase of the acquisition process in less than a year and the PAC–3 program is scheduled for a milestone III decision in 1999. Recently, the Under Secretary of Defense for Acquisition and Technology gave BMDO and the Navy permission to proceed into the EMD phase for Navy Area Defense. As these programs mature, it is important that increasing attention be placed on operational and logistical matters. These are the appropriate responsibilities of the Military Departments. By moving the procurement funding to the Services that will actually field and operate these systems, Service planning for deployment and operation can be more easily combined with manpower and force structure considerations.

BMDO will continue to serve as the central DOD manager and integrator of the BMD mission, and will develop and maintain BMD architectures and ensure interoperability among systems. The Director of BMDO remains the Department's BMD Acquisition Executive. As such, I will continue to serve on the Defense Resources Board (DRB) when BMD programs and issues are discussed and, thereby, will be able to influence the allocation of funds to programs and DOD components. Finally, procedures are being developed which will ensure that BMDO will review any proposed Service reprogramming, realignment or transfer of BMD program funds within the Services. As the BMD Acquisition Executive, I will have the opportunity to concur or non-concur with Service funding proposals that impact BMD programs. If I disagree with a Service proposal, I will work with that Service and the Department's senior leadership to ensure BMD programs are appropriately funded.

Theater Missile Defense Programs.—Since the theater ballistic missile threat is diverse with respect to range and capability, and the assets we must protect are similarly diverse—from military forces, their assets and points of debarkation to population centers and regions—no single system can perform the entire TMD mission. This leads us to a "family of systems" approach to successfully defeat the theater missile threat. The family of systems approach will ensure a defense in depth, utilizing both lower-tier—those systems that intercept at relatively low altitudes within the atmosphere—and upper-tier systems—those that intercept missile targets outside the atmosphere and at longer ranges—to fully engage the theater threat and ensure highly effective defenses. Lower-tier programs include the Patriot Advanced Capability–3 (PAC–3), Navy Area Defense, and Medium Extended Air Defense System (MEADS). Theater High Altitude Area Defense (THAAD) and Navy Theater Wide systems comprise our upper-tier development efforts. In addition, the Air Force, in coordination with BMDO, is developing a boost-phase intercept system called the Airborne Laser (ABL). Finally, BMDO is developing the command and control mechanisms that will ensure these systems are interoperable.

Lower Tier TMD Systems

PAC–3.—The PATRIOT Advanced Capability–3 system builds on the existing PATRIOT air and missile defense infrastructure. Since the Gulf War, BMDO and the Army have significantly increased the effectiveness of the PATRIOT system. In the

last few years we have fielded the PAC–2 Guidance Enhanced Missile (GEM) to improve PATRIOT's accuracy against short-range ballistic missiles. In addition, the PAC–3 Configuration 1 Air and Missile Defense System will be completely fielded and we have begun to field the PAC–3 Configuration 2, which uses both PAC–2 and GEM interceptors. It also incorporates modifications to the radar, communications system, remote launch capability, and other system improvements.

On February 8, 1997, the PAC–3 Configuration 2 system, utilizing both PAC–2 and GEM interceptors, successfully engaged a theater-class ballistic missile to demonstrate system performance. The target missile was launched from Bigen Island toward the U.S. Army Kwajalein Atoll (USAKA) in the Central Pacific. The PATRIOT missile was launched from Meck Island within USAKA and intercepted the target over the broad ocean area. The objective of this mission was to obtain sensor data on the target and to demonstrate the effectiveness of the improved PATRIOT system against ballistic missiles.

PAC–3 is a smaller interceptor which results in increased firepower (16 PAC–3 missiles per fire unit vice four PAC–2) and improved lethality (hit-to-kill intercepts). The new interceptors, when combined with other improvements to the system, will allow the PATRIOT air and missile defense system to increase its battlespace and range. Later this year, BMDO and the Army will begin flight tests of the PAC–3 missile, leading up to a low rate initial production decision by the end of the calendar year. We are planning a First Unit Equipped (FUE) date for the fourth quarter of fiscal year 1999.

Navy Area Defense.—This program represents a critical TMD capability that can take advantage of the strength and presence of our naval forces, and build upon the existing AEGIS/Standard Missile infrastructure. Naval vessels that are routinely deployed worldwide are currently in potential threat areas or can be rapidly redirected or repositioned. A Naval TMD capability can therefore be in place within a region of conflict to provide TMD protection for nearby land-based assets before hostilities erupt or before land-based defenses can be transported into the theater. Equally significant, Navy Area Defense can provide protection to critical points of debarkation, such as seaports and coastal airfields. Our Naval Area Defense program focuses on modifications to enable tactical ballistic missile detection, tracking and engagement with the AEGIS Weapon System and a modified Standard Missile II, Block IV.

On January 24, 1997, the Navy Area Defense program successfully intercepted a Lance missile at White Sands Missile Range, New Mexico. The Standard Missile Block IVA intercepted the target using its infrared terminal guidance, and its blast fragmentation warhead completely destroyed the Lance missile. This test, which is required by the exit criteria for a milestone II decision, completed the demonstration of all the criteria needed for Navy Area Defense to proceed to the Engineering and Manufacturing Development phase of the acquisition process. As I noted a moment ago, the Under Secretary of Defense for Acquisition and Technology permitted BMDO and the Navy to proceed into the EMD phase based on this important accomplishment.

User Operational Evaluation System (UOES) software will be available for testing and crew training in fiscal year 1998. UOES flight hardware will be available in 1999. UOES at sea testing will commence in 2000 after we complete EMD development flight testing at the White Sands Missile Range. BMDO and the Navy plan to field a UOES system for continued testing and training, as well as an emergency warfighting capability, upon the successful completion of the UOES testing in fiscal year 2000. The Navy Area Defense program will equip its first unit (FUE) in fiscal year 2002. The Navy has designated the U.S.S. *Lake Erie* (CG–70) and the U.S.S. *Port Royal* (CG–73) as the Aegis cruisers to support the Navy Area Defense UOES system.

Medium Extended Air Defense System.—Operationally and tactically, our forces will likely fight on less dense battlefields, over greater expanses of land and with large gaps between friendly forces. Ground force commanders will incur risks as they constitute forces in major unit assembly areas upon arrival to a theater of operations. MEADS will play a key role in reducing these risks in future Army and Marine Corps operations because it is the only TMD system under consideration that can provide maneuver forces with 360 degree defense protection against short-range tactical ballistic missiles, cruise missiles and unmanned aerial vehicles.

Both the Army and Marine Corps have requirements for such a system that can provide defense of vital corps and division assets associated with their maneuver forces. As such, this system must provide 360 degree defense against multiple and simultaneous attacks. In addition, it must be available for immediate deployment for early entry operations within a theater, using C–141 transport aircraft. MEADS must also be transportable aboard C–130 aircraft and standard amphibious landing craft. Finally, it must be able to move rapidly and protect the maneuver force dur-

ing offensive operations. MEADS is designed to perform these critical air and missile defense functions.

In 1993 an Army/BMDO RDT&E cost estimate for a U.S.-only Corps SAM new start program was $3.1 billion. The use of technology leveraging from DOD investments in the TMD mission area and multi-national burden sharing by the U.S., Germany, and Italy have reduced cost estimates. Burden sharing with Germany and Italy have reduced the current RDT&E cost estimate to $1.9 billion. Current schedule will achieve FUE in fiscal year 2005.

Upper Tier TMD Systems

Theater High Altitude Area Defense.—Last year the Department restructured the THAAD program by concentrating on militarizing the User Operational Evaluation System design with low risk enhancements to a "UOES plus" configuration. This program, termed the new THAAD objective system, retains significant capabilities to meet the most critical THAAD requirements while reducing overall program risk. It concentrates on militarizing the UOES design and upgrading certain components, such as the infrared seeker, radar and battle-management, command, control, communications, computers and intelligence (BM/C^4I) system. Currently, a UOES capability that will include two THAAD radars, four launchers, two BM/C^4I systems, 40 missiles, and 295 soldiers will be available for developmental testing and contingencies by fiscal year 1999. All of the UOES equipment is currently available, except the missiles. An option to purchase the UOES missiles will be exercised following the successful intercept of its target. In response to Congressional direction, the Department has increased THAAD funding by $722 million over the FYDP to accelerate fielding the system. This move will shift the FUE date for THAAD from fiscal year 2006 to 2004.

In fiscal year 1998, the THAAD program will conclude its program definition and risk reduction flight tests. These tests are designed to resolve technical issues and demonstrate the system's capabilities. So far, BMDO and the Army have conducted seven flight tests.

The first three THAAD flight tests—which by plan did not include intercept opportunities—successfully demonstrated several basic missile functions, including missile launch, booster separation, and kill vehicle closed loop navigation. On the next three missions, the THAAD system was unsuccessful in its attempts to intercept the target. On flight test four, for instance, the seeker obtained a solid lock-on the target, but the missile did not achieve an intercept because an errant mid-course maneuver caused the kill vehicle to deplete its fuel supply prior to achieving intercept. On flight test five, a malfunction occurred during booster separation causing a loss of command functions on-board the kill vehicle. Therefore, the kill vehicle did not respond to navigation commands and did not acquire the target. On flight test, number six, a seeker malfunction occurred following target acquisition which prevented the interceptor from locking-on the target. The post-flight investigation indicated that the failure was most likely due to small particle contamination which caused an electrical short in the seeker.

On March 6th, we attempted—but failed—to intercept a ballistic missile target with the THAAD interceptor at White Sands Missile Range. We did not hit the target. We are currently reviewing the flight data to determine the reason for the miss. Initial indications—and I must stress they are preliminary—are that the THAAD interceptor missed the target because the THAAD missile failed to divert to the target during the critical "end game." At this point in time, I cannot say how close we came to an intercept.

The corrective measures for the failures on flight tests four and five were verified during flight test six. Although the previous three missions were not successful in achieving intercepts, several key test objectives were met. Ultimately, the program gained valuable data needed for modeling and simulation validation. The program also successfully integrated the command and control element and the launch platform into the test configuration. The THAAD radar, which successfully operated in the "shadow" mode during the previous missions, was the primary sensor for flight test seven and worked as predicted. These accomplishments are noteworthy in that they have demonstrated critical overall THAAD system capabilities. However, BMDO and the Army fully recognize that the system's ultimate performance is linked to the successful intercept of the target missile.

As a result of flight test seven's results, I have directed that we stand up a failure investigation team immediately. I am in the process of selecting team members with the right experience for this important investigation. Personally, I have experience with these teams, having served on them many times throughout my Air Force career. I want you and the members of the Committee to know that I will personally

see to it that this investigation is conducted properly and that we fully assess the technical issues associated with THAAD.

I remain confident that the THAAD system is a critical element of our TMD "Family of Systems." THAAD addresses critical warfighter requirements to intercept longer-range theater-class ballistic missiles at high altitudes and further downrange from the intended target.

Lastly, it is important to remember that THAAD is in the demonstration/validation phase of its testing. This is exactly the timeframe during which we want to work out such engineering and technical issues, and ultimately prove the system can work.

Navy Theater Wide.—The Navy Theater Wide program continues to build upon the modifications we are making for the Navy Area Defense system to AEGIS ships and to the modified Standard missile. The Navy Theater Wide system will further modify the missile for ascent, midcourse, and descent phase exo-atmospheric intercepts. In addition, we will work with the Navy to modify the AEGIS Weapon System to support the increased battle space required for the improved, longer-range interceptor.

Last year the Under Secretary of Defense for Acquisition and Technology, Dr. Kaminski, designated the Navy Theater Wide program as part of the "core" TMD program. Navy Theater Wide has also been designated a pre-Major Defense Acquisition Program (pre-MDAP), a program that may eventually become an MDAP. Therefore, BMDO and the Navy have begun the steps necessary to establish NTW as an acquisition program under the Department's 5000 series regulations.

These important steps, along with increased resources, allow the Navy Theater Wide program to accelerate its development. Congressional funding increases, and the Department's increase of $254 million over the FYDP, have allowed the Navy to modestly accelerate the initial intercept date. Most notable, however, is that increased resources have allowed program managers to reduce program risk and increase the number of flight demonstration program flight tests from five to eight. Finally, we have been able to procure additional backup hardware specifically to reduce the risk of a single hardware failure slowing down the program.

Later this year, Navy Theater Wide will conduct its first flight under the flight demonstration program. This flight test will use a Standard Missile II, Block IV and help us understand the performance of the Standard Missile autopilot at high altitudes up to the third stage injection (or stage separation) point. In addition, the BMDO-Navy team will continue engineering and ground-test activities to support the first controlled test vehicle flight test in fiscal year 1999, as well as continuing risk reduction activities.

Remaining TMD Efforts

Joint TMD Program Element.—The activities we collect within this program element represent programs and tasks that are vital to the execution of joint TMD programs. These activities have been grouped together because most of them provide direct support across BMD acquisition programs which could not be executed without this important support. (Activities such as the Arrow Deployability Program are an exception, but are funded within this program element.) Therefore, we introduce greater efficiency into the programs because they accomplish an effort that otherwise would have to be separately accomplished for each Service element.

I would like to outline just a few critical activities that are funded in the Joint TMD account. Interoperability in BMC^{3}I is essential for joint TMD operations. Accordingly, BMDO takes an aggressive lead to establish an architecture that all the Services can build upon and is actively pursuing three thrusts to ensure an effective and joint BMC^{3}I for TMD. These three thrusts are: improving early warning and dissemination, ensuring communications interoperability, and upgrading command and control centers for TMD functions.

The primary goal is to provide the warfighter with an integrated TMD capability by building-in the interoperability and flexibility to satisfy a wide-range of threats and scenarios. From its joint perspective, BMDO oversees the various independent weapon systems development and provides guidance, standards, equipment and system integration and analysis to integrate the multitude of sensors, interceptors, and tactical command centers into a joint theater-wide TMD architecture. While these activities may not seem to be as exciting as building new and improved TMD interceptors, it is absolutely critical to the success of the overall U.S. TMD system. It is the glue that holds the architecture together and will ensure that the whole is greater than the sum of its parts. To ensure these important activities are built-in to the TMD systems, I have recently realigned my organization to emphasize Architecture/Engineering to ensure interoperability.

In addition to BMC^{3}I, the other activities in this program element strongly support the TMD system and key acquisition programs. BMDO test and evaluation responsibilities include: oversight of major defense acquisition program (MDAP) testing; sponsoring and conducting TMD family of systems integration and interoperability tests; development of common targets; and providing for range upgrades. These activities are key to the success of all our core programs. System integration tests will enable us to assess end-to-end system interoperability and performance of the TMD architectures in the presence of live targets. Furthermore, BMDO's consolidated targets program has facilitated improved management of target requirements; verification, validation, and accreditation processes; and acquisition of expendable and support systems.

This program element also funds modeling and simulation support. Because of the large number of variables, safety concerns, and the high costs associated with "live" testing, integrating models and simulations into all BMDO programs is a must. As a result, the BMD community has developed an extensive array of computer models, simulations, wargames, and system exercisers. The network of modeling and simulation facilities includes the Joint National Test Facility (JNTF) at Falcon AFB, Colorado and the Advanced Research/Simulation Center (ARC) at Huntsville, Alabama. The JNTF provides the BMD community access to a world class facility where real-time simulations, threat models and wargaming are performed to evaluate BMD weapon systems across Service boundaries. The JNTF is the BMDO's joint missile defense modeling, simulation, and test center of excellence whose focus is the joint inter-service, interoperability, and integration aspects of missile defense system acquisition. It is staffed by all the Services. As such, the JNTF allows BMDO to present a level playing field for the resolution of missile defense issues which cut across Service interfaces.

The JNTF conducts man-in-the-loop missile defense wargaming for concept of operations (CONOPS) exploration and development. All of the NMD program's BMC^3 work will be conducted at the JNTF. Test planning and analysis for both NMD and TMD are conducted at the facility as well. BMD system level analysis of missile defense issues are also conducted there. Finally, the JNTF also provides inter-Service computational capabilities and wide area network communication networks with Service facilities. In fiscal year 1997, BMDO began a modernization program to improve the computation suite, including hardware upgrades and developing improved models and simulations to support the program.

Our interaction and responsiveness to the needs of the warfighter is a key element in the BMDO mission. The Joint TMD program element funds a critical series of interactions with the warfighting CINC's. Our CINC's TMD Assessment program consists of operational exercises, wargames, and Warfare Analysis Laboratory Exercises (WALEX). These activities provide an opportunity for the material developer to have direct contact with the user. This is the CINC's vehicle for refining and articulating TMD concepts of operation, doctrine and TMD requirements. Our assessments provide the BMD community with operational data—something that is absolutely invaluable to the material developer.

Of special interest in the Joint TMD Program Element is the U.S.-Israeli Arrow Deployability Project. The U.S. derives considerable benefits from its participation in this project—primarily gains in technology and technical information that will reduce risks in U.S. TMD development programs. Of course the U.S. also benefits from the eventual presence of a missile defense system in Israel, which will help deter future TBM conflicts in that region and will be interoperable with U.S TMD systems.

In response to Congressional direction, BMDO has increased funding for Cooperative Engagement Capability (CEC) analysis. CEC is a program run by the Navy to distribute sensor and weapons data, using existing systems, but in a new manner. The data is filtered and combined to create a common "air picture" or composite track. BMDO's Joint Composite Tracking Network (JCTN) is a real-time network, based on the CEC program, that directly links sensors and shooters within a theater to maximize synergy of multiple systems.

Congress also directed that we provide funds for upgrade of the Kauai Test Facility at the Pacific Missile Range Facility (PMRF). I am happy to say that the capital improvements to instrumentation, resources, and sites will soon begin. Improvements include precision optics, radars, telemetry, global positioning system (GPS), communication, range safety, and range command and control. With these important improvements, PMRF will be able to meet the Navy's requirement to support the Aegis Weapon System's multi-mission warfare capability, and provide hit-to-kill efficiency and miss distance information.

The Joint TMD program element has sustained significant reductions, which limits our ability to support the core TMD acquisition programs. This program element

should be recognized as a collection of critical engineering and support for all our Core TMD programs, as well as important projects like Arrow. JTMD provides a cost-effective approach to acquisition support using centralized management and decentralized execution. The JTMD product is a true example of synergy—where the total benefit really is greater than the sum of the individual elements. As I stated before, it really is the glue that holds the architecture together.

National Missile Defense.—During the last year, the NMD program has witnessed perhaps the most significant change of all BMD efforts. Last year, Secretary Perry transitioned the NMD program from a Technology Readiness Program to a Deployment Readiness Program and defined the Department's "3 plus 3" program that could achieve an operational system by the year 2003. Dr. Kaminski designated the NMD program as a major defense acquisition program to ensure it receives the appropriate level of management attention and oversight. The Congress authorized and appropriated a substantial funding increase for the NMD program. Within the past few weeks, the Department released to industry a request for proposals for the lead system integrator, who will act as "prime" contractor for the NMD system. Finally, the Department selected Brigadier General Joseph Cosumano, United States Army, to be the Program Manager for NMD. He will report directly to me. Each of these significant steps move us closer to developing for deployment an effective National Missile Defense system that can protect the United States against the emerging ballistic missile capabilities of rogue nations.

The "3 plus 3" program was designed to conduct three years of development and test activities, leading up to an integrated system test of the NMD elements in fiscal year 1999. If the threat at the time warrants, a decision to deploy could be made in 2000. With additional funding, the system could then achieve operational capability in another three years, i.e., by the end of 2003. If, because the threat has not emerged, we do not need to deploy an NMD system in the near-term, then we could continue to enhance the technology of each element and the concomitant capability of the NMD system that could be fielded on a later deployment schedule. The overarching goal of the "3 plus 3" program was to remain within a three year window of deployment so that we can effectively respond to an emerging threat.

As Secretary Perry outlined last year, the development program that we execute will be compliant with the ABM Treaty as it exists today. Again, as the Secretary asserted, the system that is ultimately fielded might comply with the current Treaty, or it might require modifications to the Treaty depending upon what the threat situation requires.

NMD Architecture.—Based on the BMD Program Review concluded a year ago, the Department is pursuing a fixed, land-based architecture for the National Missile Defense program. The NMD system we plan to demonstrate in an integrated system test includes six fundamental building blocks: the interceptor; ground-based radar; upgraded early warning radars; forward-based X-band radars; Space-based Infrared System (SBIRS); and battle management, command, control and communications (BMC^3). Depending on the threat to which we are responding when a deployment is required, an NMD system consisting of these elements could be deployed in a Treaty compliant configuration or in a configuration that may require some amendment to the ABM Treaty. Nonetheless, the system elements have remained fairly consistent over time and throughout several architecture analyses.

The Ground-based Interceptor (GBI) is the weapon element of the NMD system. It consists of an exoatmospheric kill vehicle (EKV) launched by a fixed, land-based booster. We have made significant progress over the past few years to develop an EKV which can perform hit-to-kill intercepts of strategic reentry vehicles in the midcourse phase of their trajectory. As a result of the changed focus of NMD toward deployment readiness, and the increased funds authorized and appropriated by Congress, we have made some changes in the EKV program. The program has been structured to accommodate the more stressing nature of a deployment program. Moreover, the program is a competitive effort and we had planned to down-select to a single contractor about 18 months ago. Instead, we have continued this competition. This significantly reduces the technical risk, but does require additional test resources. Rockwell/Boeing and Hughes are under contract to develop and test competing EKV designs which will be evaluated in a series of flight tests. I will address our first flight test attempt in just a few moments. Following intercept flights in 1998, a single contractor will be selected for the initial system. The EKV flights will be conducted using a payload launch vehicle as a surrogate for a dedicated GBI booster.

Several booster options are being examined for the GBI, including the Minuteman missile, and other modified, off-the-shelf boosters. My intention, is to foster a "level playing field" and ensure that all booster options are fairly evaluated. The bottom-line must be the use of the most effective and affordable booster option available.

The NMD Ground-based Radar is an X-band, phased array radar that strongly leverages off developments achieved by the THAAD radar program. By taking advantage of the work already completed in the TMD arena, BMDO and the Army have been able to reduce the expected development cost of the GBR. Before the "3 plus 3" program shifted program focus, the GBR program was a technology effort. We have subsequently changed the design to make it directly traceable to the deployment configuration and accelerated the development. We are in the process of building a prototype at the U.S. Army Kwajalein Atoll test range to support the integrated system test for NMD.

The Upgraded Early Warning Radar (UEWR) program is designed to answer fundamental questions concerning how UEWR's can contribute to NMD while completing the initial development work. Working with the U.S. Air Force, we have already completed two years of successful demonstrations, showing how software modifications can increase the radars' detection range, sensitivity, and accuracy. We will continue this work and prepare specifications for the early warning radars' upgrades necessary if there is a decision to deploy an NMD system before the Space and Missile Tracking System is available.

Forward-based X-band Radars would place the radar where it can obtain accurate high-resolution data from the early phases of an ICBM's trajectory. These radar attributes provide for early and accurate target tracking and signature data, permitting earlier launch of defense interceptors and a greater battle space within which they can operate. The overall system's defense performance would consequently be enhanced. Several X-band radars are under consideration and will continue to be explored under the program.

The NMD BMC^3 program provides the capability for the designated operational commander to plan, coordinate, direct, and control NMD weapons and sensors. BMC^3 has always been identified as one of the most difficult issues associated with an NMD system. Unlike the other elements, this is not primarily a hardware issue, but rather a software development challenge. With the additional funds authorized and appropriated by Congress, we have established an active development program that is working with the user to address this complex issue. Using a "build-a-little, test-a-little" philosophy, we have already been able to deliver a core BMC^3 capability to the user for assessment. We are also conducting numerous exercises and wargames to validate BMC^3 concepts and exercising the evolving BMC^3 system during every test.

Deployment Readiness Activities.—While no decision to deploy has been made, BMDO has begun several activities to support the deployment readiness program. These activities are absolutely critical to begin in order to field the NMD system within three years of a decision to deploy. Many of these efforts, incidentally, are a result of the Congressional funding increase during the past year.

In particular, the shift in program emphasis to deployment readiness led us to increase our NMD Systems Engineering efforts. This has allowed us to increase our activity in developing: operational requirements documents; NMD System and NMD Element Cost Analysis Requirements Documents (CARDS); Deployment Planning and Documentation Requirements; Test and Evaluation Requirements; and other critical acquisition documentation. Finally, the emphasis on deployment readiness allowed us to establish formal review processes for the NMD program, such as the Systems Requirements Review, which greatly increases our understanding of the system's requirements as well as its performance and costs. In addition, these efforts include developing an Integrated Deployment Plan for the deployment of the NMD system that includes all the system elements; and beginning or expanding Site Activation Plans and Site Surveys for the North Dakota Region; Site Development and Environmental Planning; NMD Industrial Base Assessments; and Logistics and Deployment Planning. While these efforts represent modest funds, their importance far outweigh their financial costs. For example, site surveys and environmental planning today can preclude lengthy delays down the road.

NMD Program Execution.—Several fact of life issues have potentially impacted our ability to execute the "3 plus 3" program along the timelines the Department has previously outlined. While the "3 plus 3" program approach remains an absolutely valid strategy, recent events have highlighted the very high risk associated with the program schedule. Our inability to establish the management team, embark on our acquisition strategy by establishing a prime contractor, and most significantly the recent failure of the EKV seeker flight test together have left us well "behind the power curve" in executing the program.

Earlier this year BMDO and the Army attempted the first test of the GBI EKV sensor. We planned to launch an EKV seeker from the U.S. Army facility at the Kwajalein Atoll in the Pacific Ocean to observe a set of targets launched aboard a Minuteman missile from Vandenberg AFB, California. While the targets were suc-

cessfully launched and deployed, the payload launch vehicle which carries the EKV for testing failed to launch. The problem has been traced to a human procedural error and corrective procedures have been implemented. Working with the Army, we are in the process of recovering from this failure. We are assessing schedule and cost options to reattempt the test. Our next opportunity is in May 1997, with the second of two EKV seeker flight tests now likely delayed until January 1998. This delay is due to the time required to program, fabricate, assemble and test a new target set and target launch vehicle. This simple human procedural error clearly highlights the very high level of schedule risk associated with the NMD program. Since we do not have backup test hardware we are essentially delayed eight months because a technician failed to turn a switch to the correct power current level. It is also important to note that since we have not yet demonstrated EKV seeker performance, we still have high technical risk associated with the EKV seekers.

We have not made any final assessments on the overall "3 plus 3" schedule, but will continue to assess our ability to execute the program over the next few months. But I assure you, we will continue to work to develop an NMD system that could be deployed as early as 2003, should the threat warrant. As we select our prime contractor candidates, we will benefit directly from industry involvement. They will assist us in identifying program and schedule risks, technical long-poles, and can help develop efforts that can help mitigate these risks and challenges.

Space and Missile Tracking System.—In addition to the elements being developed by BMDO, future NMD systems will be significantly enhanced by the sensing and tracking capability of the Space and Missile Tracking System, also known as SBIRS Low. The U.S. Air Force's SBIRS-Low (SMTS) program has been allocated those mission requirements that are best met by a low-altitude system with long-wavelength infrared sensors, primarily the ballistic missile defense mission. The unique orbit and sensors on SBIRS-Low (SMTS) will also provide valuable technical intelligence and battlespace characterization data.

The SBIRS-Low (SMTS) constellation of sensor satellites will acquire and track ballistic missiles throughout their trajectories. Unlike DSP or SBIRS High satellites, SBIRS-Low (SMTS) will be able to continue tracking the warheads after the missile booster stages all burn out and the warheads are deployed. This information provides the earliest possible trajectory estimate of sufficient quality to launch interceptors for a midcourse intercept. By providing this over-the-horizon precision tracking data to the NMD system, the interceptors can be fired before the missiles come within range of the ground-based radars at the defense site. This maximization of their battlespace: increases the probability of defeating the threat by providing the maximum number of opportunities to shoot at each incoming warhead; maximizes the area that can be defended for any given interceptor deployment by permitting the interceptors to travel the farthest from the deployment sites; and allows the warheads to be destroyed as far as possible from the defended area.

Each SBIRS-Low (SMTS) satellite will carry a suite of passive sensors that will provide surveillance, tracking and discrimination data, including short-, medium-, and long-wavelength infrared sensors, which detect objects by their heat emissions, and visible light sensors that use scattered sunlight. These sensors, which can be instructed to look in different directions independently of each other, will provide global (below the horizon and above the horizon) coverage of ballistic missile targets in their boost, post-boost, and midcourse phases. SBIRS-Low (SMTS) can detect and track objects at very long distances by observing them against the cold background of space.

The SBIRS-Low (SMTS) program consists of two competing contractor teams. Hughes/TRW is developing a two-satellite Flight Demonstration System (FDS); Rockwell/Lockheed-Martin is developing a single satellite Flight Experiment. Both programs will launch in late fiscal year 1999. These risk-reduction satellites will serve as a "bridge" to a fully operational SBIRS-Low (SMTS) early in the next decade. The Department has accelerated the schedule for an EMD phase of SBIRS-Low (SMTS), which results in a first launch in fiscal year 2004.

BMD Support Technology Programs.—As the BMD program has adapted to the demands of the strategic environment, we have dramatically shifted our program and its allocation of resources from technology development in the mid- to late-1980's to acquiring and fielding missile defense programs. The fact that we allocate about 70 percent to TMD systems and 20 percent to the NMD program necessarily limits our investments in technology. I do not advocate that we not field highly effective defenses. Instead, I want to remind everyone interested in missile defense of the importance of technology investment. Our past investments in technology allow us to build into today's interceptors, sensors, and radars the capability to counter existing and emerging missile threats. For example, our LEAP technology program which began in 1986 under the SDI program, now forms the basis for Navy

Theater Wide. PAC–3's hit-to-kill technology is derived from the ERINT program, which was preceded by the Flexible Lightweight Agile Guidance Experiments (FLAGE) under SDI in the mid-1980's. More recently, we demonstrated twenty three different component technologies on our Clementine satellite that orbited the Moon. Some of those technologies are now being inserted into the THAAD system and the Space and Missile Tracking System. Currently, the Midcourse Space Experiment (MSX) is demonstrating the function of midcourse missile target tracking that will feed directly into the Space and Missile Tracking System.

The importance of technology investments is clear. In order to ensure that we efficiently use those limited resources, BMDO's technology program has five main thrusts:

—Advanced sensor technology (focal plane arrays, laser radar, image processing algorithms) to help us detect and track missiles better.

—Advanced interceptor technology (improved sensor windows, projectile structures, guidance and control, and seekers) to vastly improve our hit-to-kill capabilities.

—Directed energy (chemical laser) to provide us an option of space-based, global coverage with a powerful boost-phase intercept defense capability.

—Phenomenology and missile plume signature measurements to assist in readily identifying and tracking missile threats.

—Innovative science and technology (IST) programs to explore novel, albeit high-risk, options in technology to enable quantum leaps in missile defense capability.

Our technology investment strategy is straightforward. We anticipate the future missile threat and push our own technologies in relevant areas in response. We leverage other Federal and industry research and development investments where appropriate to aid missile defense. We integrate and demonstrate emerging technologies in modest systems demonstrations that seek to identify their merits. Finally, the BMDO technology staff works closely with acquisition staff to expedite the insertion of the newest technology into BMD systems. With this approach, we ensure that our five technology thrusts help develop near-term improvements or technology insertions to our current acquisition programs, or provide an advanced BMD capability to address evolving missile threats.

Our accomplishments in fiscal years 1996 and 1997 continue to directly support our theater and national missile defense programs. While the entire technology program is important, I would like to highlight two of our recent accomplishments. The MSX experiment I just noted, launched in 1996, is the first technology demonstration in space to characterize ballistic missile signatures during the important "midcourse" phase of flight between booster burnout and missile reentry. During its lifetime, MSX will detect, track, and discriminate realistic targets against earth, earth-limb, and celestial backgrounds. To date, MSX has collected literally billions of bits of data on numerous missile targets and backgrounds. MSX is capable of observations over a wide-range of wavelengths, from the very-long infrared to the far-ultraviolet. It represents a pioneering use of hyperspectral imaging technology in space. The spacecraft incorporates five primary instruments consisting of eleven optical sensors. All sensors are precisely aligned so that simultaneous observations with multiple sensors can be made. This is essential for scenes or targets that change rapidly. MSX will allow us to collect a complete book of knowledge on what we can expect our sensors to see during future missile engagements leading to intercept. The performance of the MSX long-wave infrared (LWIR) sensor is feeding directly into the development of the Air Force's Space and Missile Tracking System's LWIR sensors by the contractor teams.

Similarly, we recently successfully tested the key components of the space-based chemical laser program in a ground-test at the Capistrano Test Site, California. On February 20th, BMDO conducted a high-power test integrating the Alpha high energy laser and LAMP telescope. This was the first time that the high energy laser beam has been propagated through a representative SBL beam control system using the four meter LAMP telescope. This experiment demonstrates precise pointing, jitter control, and wavefront measurement. Initial review of the results indicate all test objectives were met. Detailed analysis of the test data will continue for several more weeks. The test will lead to two additional high power tests of the beam control system later this year. The objective is to demonstrate proof-of-principle end-to-end operation of the SBL system in our ground test facility.

Conclusion.—Mr. Chairman, I appreciate the opportunity to appear before this Committee and share my views about the BMD program. While I have only been on board as the Director of BMDO for roughly a half year, I can assure you the program is sound. It is strongly supported by Secretary Cohen, Deputy Secretary White and my immediate boss, Dr. Kaminski. My interactions with the user commu-

nity and the Joint Staff similarly indicates strong support for both the mission of missile defense and the program we have structured to ensure we field those systems as soon as possible.

My twenty eight years of research, development and acquisition experience tells me that we have our challenges and some aspects of the program are relatively high-risk, but I am reminded that nothing worthwhile is ever easy. And, when the issue is the threat of missile attack, potentially carrying weapons of mass destruction, those program risks may be acceptable if they allow us to field our defenses more rapidly.

I am particularly impressed with the combined Government-industry team that is working to develop and field highly effective missile defenses for the warfighter. The talent, experience and dedication across the spectrum is tremendous. When combined with strong support inside the Department and here in Congress, this talented team can deliver on the promise to make missile defenses a reality.

Thank you, Mr. Chairman. I look forward to working with all the Members of the Committee on this important program. Mr. Chairman, that completes my statement. I look forward to addressing the Committee's questions.

BIOGRAPHICAL SKETCH OF LT. GEN. LESTER L. LYLES

Lieutenant General Lester L. Lyles is the Director of the Ballistic Missile Defense Organization (BMDO), Department of Defense, Pentagon, Washington, D.C. As director, General Lyles is the Acquisition Executive for all Ballistic Missile Defense systems and programs throughout the Department of Defense.

Prior to his appointment as Director BMDO in August 1996, General Lyles served as the Commander of the Space and Missile Systems Center, Air Force Materiel Command, Los Angeles Air Force Base, Calif. He has served in a variety of assignments, including Vice Commander and Commander of Ogden Air Logistics Center, Hill Air Force Base, Utah; the Air Force System Command's (AFSC) Assistant Deputy Chief of Staff and Deputy Chief of Staff for Requirements; the Director of Tactical Aircraft Systems for AFSC; and Director of the Medium Launch Vehicles Program and Space Launch Systems Offices. The general has had assignments as the Avionics Division Chief in the F–16 Systems Program Office; special assistant and aide-de-camp to the commander of Air Force Systems Command; and Program Element Monitor of the short-range attack missile, Headquarters U.S. Air Force, Washington, D.C.

General Lyles was promoted to the rank of lieutenant general November 16, 1994.

The general entered the Air Force as a second lieutenant in 1968 after receiving his bachelor of science degree in mechanical engineering from Howard University and completion of Howard's Air Force Reserve Officer Training Corps program as a distinguished graduate. In 1969 he earned his master of science degree in mechanical and nuclear engineering through the Air Force Institute of Technology, New Mexico State University, Las Cruces, N.M. His professional military education includes: Armed Forces Staff College; National War College; the Defense Systems Management College; and National and International Security Management Course, Harvard University, Mass.

His military awards and decorations include the Distinguished Service Medal, Legion of Merit with oak leaf cluster, Meritorious Service Medal with two oak leaf clusters, Air Force Commendation Medal, Senior Missileman Badge and Space Badge. General Lyles was awarded the Astronautics Engineer of the Year by the National Space Club in 1990. In 1994 he earned the Roy Wilkins Renown Service Award in recognition of outstanding contributions to military equal opportunity policies and programs by the NAACP.

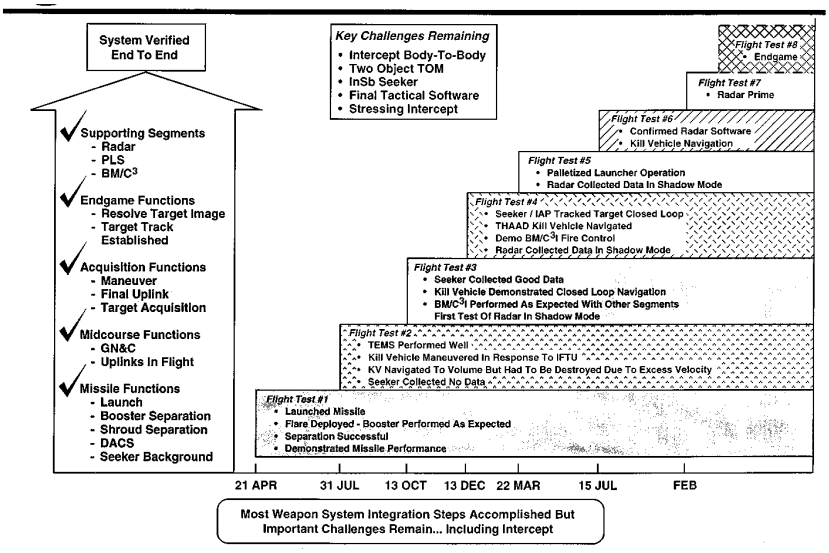
General Lyles and his wife, Mina, are both from Washington, D.C. They have a son and three daughters: Rene, Phillip, Leslie and Lauren.

BALLISTIC MISSILE DEFENSE

Meeting The Threat

	To Theater	To United States
Prevent / Reduce Threat	Nonproliferation Treaty, North Korea Framework Agreement, INF Treaty, MTCR, Export Controls	START I, START II, CBMS, Cooperative Threat Reduction (Nunn - Lugar)
Deter Threat	Conventional Forces Theater Nuclear Forces	Strategic Nuclear Forces
Defend Against Threat	TMD Lower Tier TMD Upper Tier	NMD

THAAD SYSTEM ACCOMPLISHMENTS



Senator STEVENS. Thank you very much, General.

Gentleman, I did not make an opening statement. Does anyone have an opening statement they want to make at this time?

[No response.]

ARROW INTERCEPT

Senator STEVENS. General, the Defense Daily reports this morning that the Arrow program had a successful intercept yesterday but its warhead did not detonate, but it had a direct hit. Are we

working closely enough with the Israelis to know what they are doing and how they are solving some of these problems?

General LYLES. Mr. Chairman, yes, we are. As you might recall, this is a joint development program. We share the resources and share the development with the Israelis. We have put about 36 percent of our money, U.S. money, into that particular effort. About 64 percent during the development phase is Israeli money.

We are doing this joint development to make sure we clearly understand what their needs are and how we support them, but more importantly that we understand how some of the technologies might also benefit our particular efforts.

It is critical I think, in terms of where we are going with our THAAD program, that the seeker, or at least parts of the seeker, the focal plane array parts of the seeker for the Arrow program are identical to the seeker material that we plan to use in THAAD. It is an indium antimonide seeker that we must have on our THAAD program.

We are now understanding and working closely with them to understand not only exactly their successes, but also understand any problems they have and how that might address any of our needs within our THAAD and other theater missile defense activities.

We will learn from their particular test successes and what happened yesterday, and be able to apply any lessons learned to our particular efforts.

Senator STEVENS. Well, we visited the Arrow program in January. Let me back up by saying staff tells me that we have had some 10,000 computer simulations of THAAD and in those simulations THAAD successfully hit the target almost every time.

In ERINT, we had computer validation of the systems and the approach, but that failed in its early test flight.

SYSTEM TESTING

Now, I was impressed when I was in Israel that they seemed to be testing portions of their systems before they really go out and test the whole system in actual full operation. Are we doing that? Are you testing the systems separately, portions of the system?

General LYLES. Yes, Mr. Chairman, we do that.

Senator STEVENS. The last one that failed, have you tested it separately? You have concluded one particular part of the THAAD failed.

General LYLES. The front end end game seems to be where we are having the problems in all the failed intercepts that we have conducted to date, and yes, Mr. Chairman, we do do similar sort of testing with the same sort of rigors that I think you saw during your trip to Israel.

We do testing of the various components separately. We do simulations. We do hardware in the loop simulations. We do actual hardware testing as much as we possibly can, but I think ultimately the critical decision and the critical answers come to tests where we bring everything together and we do an actual flight test.

I might mention, Mr. Chairman, that all the simulations we have done on THAAD, not all of them have been successful. Most of them have. Mostly we are trying to verify the software, that all the various software and signals are getting from one subsystem to an-

other, that the timing, the critical timing on all that software is exactly correct, that the algorithms are exactly correct.

The one thing we cannot test in some of the simulations that we do is, how will they operate as an integrated system in flight, and the failures we have had to date on the THAAD system, none of them were the types that we would have picked up in a simulation at all.

THAAD PROCUREMENT

Senator STEVENS. Well, I think we are about ready to buy 40 THAAD missiles based on that test. Are you still going to buy them?

General LYLES. No, sir; part of the critical exit criteria for making the decision to commit the money for that user operational evaluation system, as we call it, UOES, 40 missile buy, hardware and software, and radar was dependent on successfully completing not only that intercept test, but also successfully completing lots of hardware in a loop test and some other different elements. Because of that failure, we will not exercise that option. And we still have to make that exit criteria a reality. We have to have an actual intercept and also the other elements before we will commit the money to buy those 40 missiles.

Senator STEVENS. I am also informed, though, that that seeker in the missiles you were to buy would have been different than the one that was actually tested. Now why is that?

General LYLES. We have had some problems with the previous seekers that we had and the seeker that was actually used last week. The material was called platinum silicide. We have had some concerns about the platinum silicide—one of the key ones being, Mr. Chairman, produceability. It is expensive and harder to produce than the seeker that we think we need to go to for the THAAD system.

Senator STEVENS. Are you going to test the one that is in the missiles you are going to buy before you buy them?

General LYLES. Yes, sir, we are. Our very next test of the THAAD will have the indium antimonide material for the seeker in it, for the focal plane array.

As I mentioned to you earlier, this is one of the side benefits we are getting from the Arrow program. Arrow has gone to the indium antimonide seeker material from the very, very beginning. And all of their tests have been with that. And we have done lots of other tests, both at the component level, material level, and certainly the upcoming flight test will be with the indium antimonide before we make that final decision.

PREPARED STATEMENTS OF SENATORS SHELBY AND DORGAN

Senator STEVENS. Senator Shelby intended to be here. He is conducting a hearing over in intelligence. I am going to put his statement in the record, along with a statement from Senator Dorgan, and ask you to respond to his questions.

But I understand some of them pertain to what is going on at Huntsville. Obviously, he will be very interested in that.

[The statements follow:]

PREPARED STATEMENT OF SENATOR RICHARD C. SHELBY

Mr. Chairman, the ballistic missile threat is real. Not only are forward deployed American troops vulnerable to missile attack but, to the surprise of most Americans, the United States is also vulnerable. Our exposure to missile attacks is growing as new threats emerge with the proliferation of ballistic missiles and weapons of mass destruction. Developing and deploying theater missile defense and national missile defense systems are daunting tasks. But I am confident that we have the technological base and proficient, motivated workforce to produce highly effective missile defense systems.

I am concerned, however, by the President's budget request for ballistic missile defense (BMD). The administration has repeatedly scaled back funding for missile defense and delayed development schedules. The fiscal year 1998 budget request is no different. The President's budget reduces BMD funding by approximately $504 million. The administration significantly decreases National Missile Defense (NMD) funding by $829 million, revealing the administration's lack of commitment to NMD. In addition, programs previously funded in the Services' budget have been transferred into the BMD budget, including programs such as the Airborne Laser and the Space and Missile Tracking System. Once again, the administration is telling the military, "do more with less."

In addition to these budgetary problems, I am deeply troubled by the Ballistic Missile Defense Organization's (BMDO) management of NMD. BMDO recently released a Request for Proposal (RFP) for a Lead System Integrator (LSI) for the NMD. General Lyles, the Director of BMDO, states that the LSI is no different than any other prime contractor. In fact, the LSI is very different. The LSI would centralize traditional Service roles within the Office of the Secretary of Defense (OSD). Centralizing a program of this size within OSD is unprecedented. The reach of this power grab by BMDO is still being determined. We know, however, that the LSI RFP prohibits the Services from "directing the contractor in any manner." Congress should be suspect of an approach that excludes the Services from management and oversight of defense systems.

In the past, many of us on the Committee have voiced concerns about the size of BMDO's bureaucracy. I believe these concerns will be magnified by this new NMD development approach. BMDO will add an additional 70 positions when it stands up the NMD Joint Program Office (JPO). Also, the number of contractors supporting BMDO will increase once the LSI contract is awarded. I am told that the number of contract personnel could return to the amount supporting the more ambitious Strategic Defense Initiative. Furthermore, the bloated bureaucracy created by the JPO and LSI will duplicate current efforts to develop and integrate the NMD elements. Finally, NMD funding will shift away from hardware development. As a result, money that would otherwise be available to conduct additional tests on the Exoatmospheric Kill Vehicle (EKV) or develop the Ground-Based Interceptor (GBI) booster will pay for program overhead.

The establishment of the JPO and LSI contractor bureaucracy will significantly and unnecessarily delay the fielding of a NMD system. The LSI contract intentionally delays the development and testing of the NMD elements by at least one year. For example, General Lyles recently stated that the "3 plus 3" clock does not begin until the LSI contractor is in place later this year. I believe all of us on the Committee thought the three years of development began when former Secretary Perry announced the "3 plus 3" deployment readiness program last year. Also, BMDO will not permit the Army to issue a contract proposal for the integration of the GBI, which is a significant milestone for integrated flight tests. Finally, the shifting of funds from hardware development to the JPO and LSI bureaucracy will lead to additional delays.

Mr. Chairman, the LSI approach privatizes the defense of the United States from ballistic missiles. It is our duty to carefully scrutinize this proposal. I commend your leadership in holding this hearing and thank you for allowing me time to make this statement.

PREPARED STATEMENT OF SENATOR BYRON L. DORGAN

This morning the Defense Subcommittee hears testimony from Lieutenant General Lester Lyles, USAF, the Director of the Ballistic Missile Defense Organization, on missile defense programs. I am pleased the subcommittee is holding this hearing, and I thank the Chairman for devoting a hearing solely to the issue of missile defense. This is an important issue in which I have had a long-standing interest.

The preliminary point that I would like to make this morning is that I think the Administration's missile defense policy is right on target, even if some of our development programs recently have not been.

The Administration's missile defense budget request focuses our resources where they should be—on defending our soldiers, sailors and airmen against the short-range ballistic missile threat. Of the Administration's total budget for the Ballistic Missile Defense Organization of $2.6 billion, $1.8 billion would go to theater missile defense programs. I believe this allocation is entirely appropriate.

On the national missile defense (NMD) side, the Administration has a robust program to develop NMD technology to enable us to deploy an NMD system if the intercontinental ballistic missile threat warrants it. The "3+3" program would enable policymakers to decide in 2000 whether the threat justifies deployment of an NMD system. The Administration's policy would also enable the Defense Department to field an NMD system in 2003, although I note from General Lyles's prepared statement that the recent failure of an Exoatmospheric Kill Vehicle test may leave us "behind the power curve" in this program.

I would close, Mr. Chairman, by saying that the recent failure also of the seventh THAAD test only underscores in my mind the ambition and sophistication of these missile defense programs. It is a fallacy to suggest that the United States right now has the technology to hit a bullet with a bullet, which is essentially what missile defense is all about. I look forward to this morning's discussion of how we can best advance our efforts to gain that technology in the future.

Senator STEVENS. There have been some delays now in the national missile defense acquisition strategies. What are we going to do to see about straightening that out?

I get the impression from what you said that you believe that the three plus three is at risk. Many of us thought that we ought to concentrate a little bit more on development and accelerate that development. Are you telling us that we are pressing you too hard with money?

NMD ACQUISITION STRATEGY

General LYLES. No, sir, Mr. Chairman. What I am saying is that we are committed to the three plus three strategy. And I think the heart of that strategy, the first 3 years, is to rapidly develop the capability, do testing to give us confidence that we understand what we have and that we could potentially deploy that capability. But as I think all of you understand, the rigors of the testing that we have to do or will do in this three plus three program are no way normally the types of rigors of testing we would do for normal acquisition things.

I think the risk and our clear desire to be able to meet the threat to rapidly deploy a capability has embarked us on a strategy where we know we have to take a high-risk approach. And I just sort of reinforce that it is very high risk. We have single strings. We only have minimal tests. But we think that is a prudent approach. And we have to try to do that if we are going to be able to rapidly deploy a national missile defense system.

As far as the acquisition strategy—excuse me a second, Mr. Chairman, to answer your question, or Senator Shelby's question, about acquisition strategy—that acquisition strategy is now blessed, and we are now up and running with the strategy that we think is the appropriate one for our national missile defense system.

Senator STEVENS. Have you decided to go ahead with this lead systems integrator, LSI, concept?

General LYLES. That is part of our strategy. And I would like to sort of clarify. I was hoping I would get the opportunity to have the

dialog with Senator Shelby, because I think the title, lead systems integrator, perhaps has been a misnomer to people. What I would like to give you an analogy on is, every other major program we have in the Department of Defense, from Navy programs to Air Force programs, and even to Army programs run down at Huntsville, like the THAAD program as an example, all of our programs employ a prime contractor, a key contractor, who works for the program office, the program director, to provide us the capability to bring together all the elements, all the critical elements that are needed to have a successful and very effective system.

Now, we gave the name to this prime contractor for NMD. We gave it the title lead systems integrator. And I think somehow that has given people the wrong impression.

Senator STEVENS. Well, you are right. Because my time is running out, let me ask you some specific questions. Are you going to flow all the funds that are associated with the national missile defense through the LSI?

General LYLES. No, sir; they will all flow through the program office. The LSI is just one of the contractual tools.

Senator STEVENS. You are not answering me. Do all the requests and all the allocations have to go through LSI first?

General LYLES. No, sir, they do not.

Senator STEVENS. Who are they going to go through?

General LYLES. They go through the program office. And the program office will flow them down to the executing elements.

Senator STEVENS. Is that in Huntsville?

General LYLES. Some of the executing elements are at Huntsville, Mr. Chairman.

Senator STEVENS. Where is the program office?

General LYLES. The program office will reside here. A very small element of it will reside here in Washington. The program director that the Secretary of Defense has named is sitting right behind me, Army Brig. Gen. Joe Cosumano. He will have a small staff here in what I call a federated approach. The bulk of the program office team will be at Huntsville, AL.

Senator STEVENS. Well, is not the Army Space and Strategic Defense Command still in Huntsville?

General LYLES. Yes, sir, it is.

Senator STEVENS. Well, why are you splitting it? Why are you bringing the people who have the money and the control of the money up here and leaving the workers down there?

General LYLES. Mr. Chairman, the approach we have of this joint program office, or federated approach that we have, I think it is the right strategy to manage this program. This is not an Army national missile defense system. It is a U.S. national missile defense system. It has Army elements. It has Air Force elements. It even has BMDO elements. And potentially it could even have a naval or nautical element in the future.

The program office and the lead of the program office will be here in Washington, but most of the team will be down at Huntsville and then at other places around the country.

Senator STEVENS. My time is up, but I do want to go into this. I just do not understand why we have now, at the time when we are trying to accelerate the activity, why we have to confuse the

administration of this program by bringing in more offices and more people before you actually get to the people who are going to be doing the work.

Senator Cochran.

NMD PROGRAM RISK

Senator COCHRAN. Thank you, Mr. Chairman.

You used the phrase, General, "high risk" to describe the three plus three program. I am concerned about that, because it seems to have a negative connotation. What is at risk? Why are you describing it as high risk?

General LYLES. Senator Cochran, I think that the key element of risk here is in schedule risk. As I mentioned earlier, we made a conscious effort to lay out a program that is very, very aggressive in both the deployment and the amount of testing that we are going to do. It is very single string. If we have an anomaly like we had with that one EKV sensor fly-by test I described in my opening statement, it jeopardizes our ability to be able to meet the full schedule for the program.

Senator COCHRAN. Well, does this affect the three plus three goal? You talked about the time lines the Department has outlined in your statement. You say several fact-of-life issues have potentially impacted our ability to execute the three plus three program. Does this mean that previous promises or claims that the administration will have a system capable of being deployed by 2003 are now in doubt? Is that the risk?

General LYLES. The risk is in the schedule, Senator Cochran. And I think the previous characterizations were that this was a high-risk program and a very fragile one in terms of schedule and the testing and elements we had ahead of us. So I think we are now beginning to get evidence of that.

ABM TREATY PROVISIONS

Senator COCHRAN. Let me ask you this about the negotiations that are going on with the Russians on the ABM Treaty provisions and whether or not they apply to some of our theater missile defense [TMD] programs. Do you feel restricted by any interpretation this administration is giving to ABM Treaty provisions with respect to your testing program of TMD systems?

General LYLES. Senator Cochran, to date, we do not have any restrictions either to our theater programs or our national program as we are currently laying them out.

Senator COCHRAN. There is some concern that if these negotiations produce an agreement, it may restrict our ability to deploy TMD systems that we are now testing. Is that a concern of yours as well?

General LYLES. Yes, sir; it is a concern. I sort of echo the comment I think the Congress heard recently from General Fogleman from the Air Force. You probably will hear that same thing from CINCSPACE, General Estes. There is concern about what might happen relative to those discussions.

Senator COCHRAN. I did read the article that I think was in the Washington Times, quoting General Fogleman, I suppose, in an interview with a reporter at the Washington Times about the fact

that this is a concern that is shared by all of the chiefs. It seems to me that if we pursue these negotiations for the purpose of reaching an agreement to further restrict us that we are going to put the whole program in jeopardy, not only TMD but certainly the national system as well. Do you agree with that?

General LYLES. Senator Cochran, yes, we are concerned. At least since we do not know exactly what the final outcome is, we are concerned about anything that limits our ability to field an effective capability.

Senator COCHRAN. The ABM Treaty allows for the deployment of 100 interceptors at a single site in Grand Forks, ND. The Senator from North Dakota was here, and I thought he might ask a question about this. But has BMDO done an analysis on the question of whether 100 interceptors at a single site can protect the entire United States from a limited ballistic missile attack? And if so, what does your analysis show?

General LYLES. Senator Cochran, we are doing that analysis right now. We have done some parts of the analysis. And we are looking at various potential single sites, including Grand Forks as an obvious one.

Our analysis to date is still in process. We do not have the final answers. And we are looking at all the various options. The preliminary information is that for some threats that are out there, a single site would be sufficient to protect the 50 United States. For some other threats, we have some question marks about that. And we are examining all those options currently.

Senator COCHRAN. With regard to the threat posed by theater-range ballistic missiles, on page 3 of your statement, you mention a continually evolving threat. And you go on to say that the trend is clearly in the direction of systems with increasing range, lethality, accuracy, and sophistication. If this is as you say—and I am confident it is—toward greater sophistication in these theater-range missiles, is it reasonable to expect that at some point in the future, instead of facing single warhead theater-range missiles, we could be faced with multiple independent reentry vehicles [MIRV] theater-range missiles?

General LYLES. Senator Cochran, that certainly is a possibility. We do not have any indications of that to date. But certainly, given evolution potential for things like that, that certainly is a possibility.

Senator COCHRAN. And that would have a negative effect on our TMD systems, in terms of our future capability to test our systems, if we are restricted under ABM Treaty interpretations from testing against MIRVed theater-range missiles?

General LYLES. And we would be very concerned about that, yes, sir.

Senator COCHRAN. Thank you, Mr. Chairman.

Senator STEVENS. Senator Inouye.

ARROW PROGRAM

Senator INOUYE. Thank you.

If I may, I would like to follow up where the chairman left off on Arrow.

General LYLES. Yes, sir.

Senator INOUYE. Apparently, the tests have been very successful. You report that there was a successful test yesterday. In our visit to Israel, it was made known to us that the Israelis would desire very much to accelerate the program because of their concern about the threat from Iran and Iraq and the 500 or so Scuds that Syria has. Do you have any position on accelerating this program?

General LYLES. Senator, we are working very closely with the Israelis, as I think you noted and learned during your trip there. They are looking at ways to accelerate the program. I think the pace that they are currently on for development is already an accelerated one. And given their successful intercept yesterday and the previous one they had in August, I think they are on track to be able to make their deployment decisions and continue with the pace that they currently have.

One area that, as a part of acceleration, I know they are interested in is potentially buying more systems. And we are obviously talking to them about that. Though that is an issue that they would have to decide upon themselves.

Senator INOUYE. So you have not made your views known on the additional unit, the battery that they had been requesting?

General LYLES. Not yet. We have had some preliminary discussions. General Biran from the Israeli Government was visiting here last week. We are looking at some options on what could be done.

I think what is key in this particular area, Senator Inouye, is that our memorandum of agreement with the Israeli Government requires that we not procure hardware for them, but also that we work very closely to ensure interoperability of their missile defense systems with potentially our systems, which may be in the same theater. So we are looking at ways that perhaps we can continue additional interoperability activities, testing, et cetera, beyond the current schedule for the memorandum of agreement we have with them. And we will be discussing that with the Israeli Government members as they come back into our country.

PACIFIC MISSILE RANGE FACILITY

Senator INOUYE. If I may, I would like to touch upon the Pacific missile range facility upgrades. Last year, we were told that testing for the Navy's areawide defense would begin at this facility during fiscal year 1998, and that significant facility and instrumentation upgrades would begin also during that fiscal year. We have also been told that the facility wants about $100 million for upgrades. And yet, this budget does not show any upgrades.

However, your statement says that "I am happy to say that the capital improvements to instrumentation resources and sites will soon begin. Improvements include precision optics, radar, telemetry, global positioning systems, communications, range safety, range command and control." Is this backed up with dollars?

General LYLES. Senator, it is to some extent. And we are currently in negotiations with the Navy to ensure that we are supporting and splitting the costs associated with the upgrades to the Pacific missile range facility, the PMRF. Some of the upgrades that are necessary for that range support more than just ballistic missile tests. And what we are in negotiations with, with the Navy is how much do we in BMDO help support that goal toward the im-

provements for just ballistic missile testing and how much the Navy needs to put in, on their own resources, to support other tests that are conducted out at that range.

I think we are going to reach the appropriate medium on that. We have not concluded the discussions yet.

Senator INOUYE. When will the upgrades show up in the budget?

General LYLES. Some of the money that we currently have—we have some lines in our budget that we call joint theater missile defense. And some of the money that we already have in our budget is being used to support upgrades to the PMRF. And I would like to, if I could, Senator, to provide for the record what exact amount we are doing today with our budget, and then what we see for the future.

Senator INOUYE. I would appreciate that.

General LYLES. Yes, sir.

[The information follows:]

PMRF Upgrades Funding Profile

[TY dollars in millions]

Fiscal year:	
1997	$4.3
1998	11.8
1999	14.1
2000	4.4
2001	.8
Total	35.4

Assumes Air Launch (Mobile) Delivery of Targets—Non-Mobile Delivery would cause a substantial cost increase.

Future Evaluation will be Required When Navy Theater-Wide Test Program Requirements are Defined.

BMDO will subsequently realign funds within the TMD program to fund these upgrades.

ARROW CAPABILITIES

Senator INOUYE. Speaking of Arrow, is there any place in our inventory for that?

General LYLES. I do not think so, Senator. The Arrow system, as designed, is specifically to meet the requirements of the Israeli Government, the country of Israel. It is their national missile defense system, obviously. It has neither the mobility nor the size that we are looking for, for our theater missile defense assets. And nor does it have the ability to do what are some things we consider critical in our requirements—like hit to kill.

Their warhead is a blast-fragment warhead, seemingly a very effective one, but it does not have what we consider the critical hit-to-kill capability to be able to counter some of the threats that are out there. So it is limited in terms of the threats that we are trying to counter in our requirements.

PATRIOT

Senator INOUYE. I have been told that the Patriot PAC–3 testing program is about 3 months behind schedule. Is that correct?

General LYLES. The next test of the Patriot is about 2½ to 3 months delayed. So that is correct, Senator.

Senator INOUYE. What is the difference between PAC–2 and PAC–3?

General LYLES. It is primarily enhancements to the software, the guidance capabilities. It gives a little bit more envelope and ability to counter various threats. One big difference, however, in PAC–3 is the hit-to-kill capability. The warhead is significantly different for those systems.

Senator INOUYE. Are we purchasing the PAC–3?

General LYLES. We will plan to purchase the PAC–3. Part of our criteria and our schedule is to be able to have PAC–3 in the inventory by the years 2000 and 2001.

SIMULATION PROGRAM

Senator INOUYE. I have been told that flight tests are very expensive, so you are now going to computer simulation. From your vantage point, how effective is the simulation program?

General LYLES. Sir, simulations obviously are designed to give you some answers—specific answers—about the capability of a weapon system. As I addressed to the chairman earlier, you can particularly wring out electrical signals, software, algorithms, and things of that nature through simulations. So, from that standpoint, they are very effective for that particular need.

When it comes to actually testing hardware in an integrated sense, you need to have actual flight tests. And that is the reason why we try to have a balance of the two—flight tests and simulations.

Senator INOUYE. Would you support an action on the part of Congress if we urged you to increase flight testing and reduce simulation?

General LYLES. Senator, I certainly would not only enjoy that, I would appreciate that. In terms of me being an acquisition expert, we always look for additional testing to ensure we really understand what it is we have and what its capabilities are.

I would counter, or at least offer, that we do not reduce simulations, however, because they are very critical to answering some other things. I always think we need to do more rigorous actual flight testing. But simulations have their own place, and I would not recommend we trade one for the other. If anything, we add traditional flight tests and keep the amount of simulations where they are.

CRUISE MISSILE THREAT

Senator INOUYE. I gather there are 77 nations with cruise missiles. Is that number correct?

General LYLES. Our estimate is that there are at least 77 nations that have either a cruise missile or the potential of putting together a cruise missile, Senator.

Senator INOUYE. Because of your concern and the potential threat, is there any move to put the defense for that under your command?

General LYLES. Part of it is, yes, sir. A recent decision last December—actually last November—by Dr. Kaminski and the Vice Chairman of the Joint Chiefs of Staff, General Ralston, we have now stood up what we call a Joint Theater Air and Missile Defense

Organization in the Joint Staff. That organization will develop the operational requirements for not just ballistic missiles, as they have currently been doing, but also cruise missiles. And our objective is to integrate cruise missile defense with our ballistic missile defense programs.

My organization, BMDO, will work hand in glove with them to develop the actual requirements, systems architecture, and lay out the integrated program for cruise missile defense with our ballistic missile defense activities. That is the long way of saying yes, Senator, but I wanted to explain exactly what has taken place.

Senator INOUYE. And you would consider cruise missiles as a major threat?

General LYLES. Yes, sir, we do.

Senator INOUYE. I thank you very much, General.

And I would like to submit, if I may, Mr. Chairman, a few other questions.

General LYLES. Thank you, Senator.

Senator STEVENS. Thank you, Senator.

Well, General, in the last 2 years, we added funds to modify Patriot to deal specifically with the cruise missile problem. Have you been in on the use of that money?

General LYLES. Yes, sir; the money that has been added by Congress are going, in part, to address that part of the requirement for Patriot. And some of the testing that we have done for Patriot is to demonstrate exactly that capability. So, yes, sir, we have done that.

TEST PROGRAM

Senator STEVENS. I want to read to Senator Inouye a little statement here from the Aviation Week and Space Technology of February 24, which staff has provided me a very interesting series of articles on missile defense. It says:

> I am used to more testing, more intercepts. And we are about to make a major decision about going into the next phase for THAAD based upon a successful intercept. I always worry about the random successes as opposed to random failure. I am worried about that and about what we are really buying. That tells me the BMDO, the program offices, and the contractors need to make sure we are mitigating risk through modeling and simulation or components or other testing to make sure we are not completely relying upon a potential random successful intercept. I do not think we have the rigor, the robustness, or number of tests I would normally expect in a fully builtup program. I am concerned about the rigor and the risks associated with the planned testing.

Does that sound familiar to you, General?

General LYLES. Yes, sir, it does.

Senator STEVENS. That is your statement.

General LYLES. Yes, sir, it is.

Senator STEVENS. Have you got enough money for those tests?

General LYLES. We are not sure if we do today have money to do the kind of rigorous testing that I would normally like to see in a program. I think the answer to that is probably no. But I would like to provide you for the record where we think we might have some specific shortfalls.

Senator STEVENS. Well, will you do that.

[The information follows:]

As a result of the most recent missed intercept, I have chartered independent assessment teams to evaluate the missile design and overall system requirements. As part of their efforts, an examination of future flight test requirements is underway. I think, therefore, it would be premature at this point to identify any funding shortfalls with respect to our future test needs. I would prefer to hear the independent assessment team's recommendations and then respond to your question.

Senator STEVENS. But also tell me what is going to happen to your timetable if you go into more testing. What happens to the timetable?

General LYLES. Senator, that is the sort of balance, as I mentioned to you earlier, about the need to get capabilities as rapidly as possible, and the willingness to take risks relative to schedules and testing to at least give us an opportunity to field a capability early. Obviously, if we add more tests, we are probably going to impact our schedules. And so we have to very carefully look at and try to balance the two.

RISK REDUCTION

Senator STEVENS. Well, we thought if we added money for Patriot, so you could upgrade Patriot, you would have an interim time to deal with the most pressing problems, which I take it, would you agree, are the cruise missiles, right? They are the ones that are out there—so many of them?

General LYLES. Mr. Chairman, that is not the only pressing problem. Obviously, cruise missile is one. But somewhat sophisticated RV's on short-range ballistic missiles or theater missiles are also a very, very stressing requirement. So they both are stressing.

Senator STEVENS. Well, is there anything else we could do to give you more breathing room on the longer-range program in order to cover the gap that exists now? I think we are pushing. We were pushing for a quicker program than the three plus three, as a matter of fact.

General LYLES. Mr. Chairman, I think the moneys and plus-ups you have given us in the past certainly have been appreciated. We have applied those to reduce the risk as much as possible. I still think, as I have stated earlier, there are high risks. And any additional funds, if we were to get any, would be used to mitigate the risk.

I do not think there is any way we can buy back schedule. But it is critical, however, I think, to reduce the risk, to at least give us a good chance of being able to make the schedules that we are currently trying to address.

Senator STEVENS. This article says, for example, a single national missile defense test flight to evaluate seekers runs about $50 million, according to your officials, the BMDO officials.

General LYLES. Yes, sir.

Senator STEVENS. Only five such flights are scheduled through 1999. Is that right?

General LYLES. That is correct, Mr. Chairman.

And, again, we did that and we laid that out in a very aggressive manner, taking risk relative to the numbers of tests, to at least give us an opportunity, if they were all successful, to try to meet that three plus three schedule and strategy we have for our national missile defense program.

Senator STEVENS. Well, what is constraining the number of tests—money, time, or the systems themselves?

General LYLES. I would have to say it would be the former two, Mr. Chairman—both funding to support the additional testing and then the schedule—time. As you add more tests, as I answered to Senator Inouye, you obviously are going to stretch out the schedule a little bit, particularly if you have any kind of anomalies. And we were trying to maximize at least the potential of trying to make our three plus three strategy. So we took some calculated, very high risk in laying out the schedules that we currently have.

MINUTEMAN BOOSTER

Senator STEVENS. Well, I think that Senator Cochran went into this a little bit. But is the Minuteman a viable competitor in this area?

General LYLES. Minuteman is certainly one of the booster alternatives that we will examine for our national missile defense system. And we have already started to begin to look at that, to understand exactly how it meets our requirements. It does have some benefits. And we will examine that in terms of its capabilities.

Senator STEVENS. When will you start flight testing the Minuteman to see whether it can fit into this national missile defense program?

General LYLES. In some respects, Mr. Chairman, we have actually started some of that. And let me caveat to make sure I am clear when I say that. There are operational tests of Minuteman that are done almost monthly, if you will, several times throughout the year.

We are going to work with the Air Force to piggyback off of some of those tests to look at various elements of our battle management command and control, understand exactly, in some cases, the characterizations of Minuteman as a booster. So we are already trying to take advantage of what we call targets of opportunity, tests of opportunity, to see about some aspects of Minuteman, and particularly aspects of battle management command and control.

USE OF OTHER SYSTEMS

Senator STEVENS. Have you got full freedom to utilize any system that is available in the world in your program?

General LYLES. Any U.S. system, certainly, sir, we certainly have.

Senator STEVENS. I did not say that. Can you go out and see whether someone else has developed a piece of equipment that you can integrate into your system and accelerate it? You are looking at the European, you are looking at the total world market as far as the development so far?

General LYLES. The answer to your question, Mr. Chairman, I think is yes. To the extent that that knowledge and information is available, we have either already or certainly in the case of things like THAAD, as I mentioned earlier, we will look at all other alternatives to make sure we understand what is available and what also might meet our requirements and our needs.

Senator STEVENS. We are going into the Eastern Military District of Russia in just 2 weeks. Have you inquired from them what they have done in this area?

General LYLES. I think the answer to that question is no, Mr. Chairman. I certainly have not personally. And I do not think my organization has.

Senator STEVENS. There is a pregnant "why" out there in my mind. Why? Why have not we done that?

General LYLES. I think, at least my personal answer, Mr. Chairman, is that we did not want to depend on somebody else's systems to provide us, particularly, a national missile defense, a defense capability to defend our homeland.

Senator STEVENS. It is not depending on their systems, but finding out what they have done. Ours is published, almost all of it. I do not see much classification left in your systems, General.

General LYLES. No, sir; and there are some things that we could learn, perhaps, in discussions. And where we have been able to do that, I think we have gained some information.

Senator STEVENS. Now, one subject we have not mentioned yet, and I will close with just this. But, I want to go back to that other thing, first, though, before I get to that last question.

NMD LEAD SYSTEM INTEGRATOR

Staff tells me that all national missile defense dollars flow through the program office, then the LSI, and then they reach the contractors. Is that your understanding?

General LYLES. No, sir; that is not my understanding or the way we plan to do it. The program office will flow all the dollars down. The LSI contractor has the role of helping us to integrate all the different pieces. That does not say that every dollar has to flow through the LSI contractor to the various elements. Some of those dollars will flow directly to those various elements.

Senator STEVENS. Well, I urge that you get your staff to talk to the committee staff and Senator Shelby's staff to make sure we are not misunderstanding what you are doing. We just do not want to add more redtape to this program. That is, I think, the fear that is there.

General LYLES. Senator, I can guarantee you we are not adding redtape. I would like to at least offer some information as an example of how we are not doing that. The strategy we have of our prime contractor is exactly, exactly the same strategy for prime contractor that the Army and Huntsville use on all of their programs. This is not a different acquisition strategy. It is exactly the same kind of strategy.

In terms of management, the Army also have management elements of their activities at Huntsville here in the Washington area. We are not doing anything different or doing anything devious whatsoever. I am very concerned about working as a team with Huntsville. To me, that is my key mandate and the key mandate I have given to our Program Director, General Cosumano.

COUNTERMEASURES

Senator STEVENS. My last subject is countermeasures. Am I correct in my understanding that your organization is in charge of and

puts about 3 percent of your budget into the threat—the basic threat that is out there, including countermeasures, jammers, chaff, or whatever that might be? Is that right?

General LYLES. That is correct, Mr. Chairman. We think that is very, very critical for us to understand what types of countermeasures might be available out there and, more importantly, how do we counter those countermeasures.

Senator STEVENS. Well, in the days gone by, I guess we can talk about it now, we had different organizations that developed sort of the red team concept, to go out and test what we were doing. Do you think you ought to be testing what you are doing or trying to determine what would be the countermeasure to what you are doing? Or should not there be a separate organization looking at that?

General LYLES. In all honesty, Mr. Chairman, we do have a red team effort within BMDO. We keep them separate from our development activity. They happen to be people who work for me. But they operate just like a red team. They are independent. They go off and do things independently. In some cases, one element of that team, which is out at Kirtland Air Force Base in Albuquerque, NM, actually has people who use literature available to the free world to try to determine how you might counter some of our various threats.

So we use rigors of that same process. Even though the people who are part of that red team are people who work for me, they are independent from the development activities.

Senator STEVENS. Are you putting enough money into that?

General LYLES. I think we are, Mr. Chairman.

Senator STEVENS. As the countermeasures evolve, you will have to evolve your systems, will you not?

General LYLES. We certainly will, Mr. Chairman.

Senator STEVENS. You are putting 97 percent into evolving a new system and 3 percent into what might counter it.

General LYLES. I think the way we are doing that and the breakout of the money is sort of a fair way of doing it. The information available for various countermeasures is, in some cases, very, very limited. And we can, with that 3 percent of the money, do the right kind of testing, the right kind of what ifs, the right kind of counters, if you will, to see if our systems are going to be effective.

I would love to have the opportunity, Mr. Chairman, to come back and show you and some of the other members the results of some of those red team countermeasure efforts, and to show you how effective they have been in helping us to get answers.

Senator STEVENS. Well, we just may travel out to New Mexico and see what they are doing.

General LYLES. We would love for you to do that.

Senator STEVENS. I have the feeling that there ought to be more emphasis on that as you evolve the systems, because if you suddenly find, as you finally mature the system, that there is already an effective countermeasure to it that is not too good a program.

General LYLES. We are very concerned about that, and we will always continuously look at that and make sure we have the right amount of dollars.

Senator STEVENS. Senator Cochran.

TEST DETERMINATIONS

Senator COCHRAN. I am concerned about your description of the pressure that is being put on the success of any single test as a condition to authorizing a buy for interceptors. I think that was a response you made to Senator Stevens' question. Do you think too much pressure is being put on the THAAD program specifically, making any single successful test determine the future of the program?

General LYLES. Senator Cochran, I would not describe it as pressures, even though I used that word. Or at least I would characterize the pressure as really an internal one. Our pressure and our desires to field a capability as rapidly as possible in the theater missile defense area, which THAAD is obviously intended to counter, we know the threat exists today. We have already lost some 27 lives in Desert Storm. So the pressure is really an internal one to field a capability rapidly. And we have laid out very aggressive schedules, and in some cases, high-risk schedules, at least to try to get a capability early.

PROCUREMENT FUNDING

Senator COCHRAN. In talking with Senator Stevens about the management configuration that you have now with Huntsville, you use the illustration that this is not really an Army program and not an Air Force program, it is a BMDO program. Why is it that we are going in the opposite direction, then, in the allocation of TMD procurement responsibilities and putting TMD procurement funds under the control of individual services now rather than BMDO? Does that worry you?

General LYLES. Senator, I think the word I used is it really is a national program for national missile defense. It is not Army or Navy or Air Force. It really is a national and joint program. So our management approach is specifically to ensure that we have a joint program office and we are working jointly with all the various elements.

The issue that you just brought up about procurement dollars was a conscious decision to ensure that the organizations who are going to have to field and operate these various systems—the Army, the Navy, the Air Force—had the responsibility for making decisions on where their procurement dollars go for those various systems. It is a different approach than what we have had in BMDO. I will be honest, it takes away some of the clout that we have had in the past. But, in some respects, I think it is an appropriate one.

The Secretaries of the services are going to have to decide in the future, with limited dollars, do they spend it on planes, tanks and boats, or do they also allocate some to missile defense? That is going to be a tough decision. But in our fiscally constrained environment, I think they need to be the ones to help make that decision. And that is why procurement dollars have now been put in their budget lines.

ISRAELI BOOST-PHASE INTERCEPT SYSTEM

Senator COCHRAN. There was some discussion about the Arrow program. I think Senator Inouye talked in more detail about that with you. There is also another program that we are working on with the Israeli Government. I wonder if you could discuss the boost-phase intercept research that is being done?

General LYLES. Yes, Senator Cochran. We call it—or they call it—IBIS, Israeli boost-phase intercept system [IBIS]. We are also working with them cooperatively on that program, in terms of sharing dollars and development dollars. We are trying to help them to develop a boost-phase intercept capability. And I think we all clearly understand that if we can counter and shoot down theater missile system, threats against us, in the boost phase, it is not only an effective way of doing things, it offers a little bit of a deterrence, with the systems falling on their homeland.

This program is—we look at it as a hedge in some respects, in case our Airborne Laser Program, which will have boost-phase intercept capability, does not work. So we are working with the Israelis in trying to determine exactly what they do in that program, and sharing some of the development with them.

Senator COCHRAN. Does that offer the hope to us in our ability to develop the same kind of system for our use? Do we have similar interests in developing this program as they do?

General LYLES. Yes, sir; and as I just stated, our interest primarily is focused on the Airborne Laser Program, the Air Force's Airborne Laser Program. While that program is fully and totally within the Air Force's budget line, it is part of our missile defense architecture. That is our primary boost-phase intercept program for the Department of Defense.

We look at the Israeli IBIS program as a potential hedge in case airborne laser does not work. We perhaps can learn from and take some of the technology and capabilities from their program to give us a boost-phase intercept capability if airborne laser is not successful.

TEST RANGE AVAILABILITY

Senator INOUYE. General Lyles, reports indicate that every test delay or postponement costs millions. The latest statistics suggest that the range availability is 92 percent at the Pacific missile range, the highest amongst all the ranges. Do you take that into consideration in assigning missions?

General LYLES. Senator, in assigning test areas and test locations, we do take that into consideration. However, what we try to do is to ensure that we have a balance of capabilities for doing our missile defense testing. One area where we obviously focus our testing today is White Sands missile range. It is range limited in some respects, from a safety standpoint. And so we cannot do all testing, long-range testing, there. So the Pacific missile range offers some clear advantages in that area.

And as I think you are aware, we are at least looking at the possibility too of seeing how the Eglin Air Force Base range in Florida, in the gulf, could also potentially aid our missile defense testing in the future.

Senator INOUYE. Thank you very much, sir.

Senator STEVENS. Any further questions, Senator?

Senator COCHRAN. No, sir.

THREE PLUS THREE TEST COSTS

Senator STEVENS. I hope in the information you are going to give us, General, you will give us—we all understand that you are a good officer and you are subject to the Commander-in-Chief's direction and some OMB directions, but you are also a witness before us and we are asking a specific question now.

General LYLES. Yes, sir.

Senator STEVENS. What will it cost to do the tests that must be done to maintain the three plus three at least? What is the money that you need now in terms of the complications that may come out of this unfortunate test to maintain the schedule that you have? And is it possible to accelerate that test schedule at all? Is it possible to accelerate an interim solution, such as upgrading the Patriot even quicker?

We want you to give us your best judgment now, as our really most informed witness on this subject, what can we do to maintain this schedule and improve it?

General LYLES. Mr. Chairman, I can tell you I will always, always be completely open and honest in my testimony and discussions with Congress.

Senator STEVENS. And there is no implication you might not be, but you might be constrained by some people who live downtown in answering my questions unless I am very specific. And in years gone by, I sat at the table and some Senators told me, now, listen, son—and you are not a son to me—but let me tell you, he said, no matter what they tell you downtown, you answer my question. And that is what I am respectfully saying to you. No matter what anyone tells you, we want the answers to those three questions.

General LYLES. Yes, sir, Mr. Chairman. We will provide that for the record.

Senator STEVENS. Thank you very much.

Senator INOUYE. He is not a downtown man.

Senator STEVENS. No; he is not a downtown man.

General LYLES. I am from Washington, DC, downtown, though, sir, born and raised. [Laughter.]

[The information follows:]

These questions need to be answered in reverse order. First, let's address only the first "3" of the 3+3 since that culminates in our system demonstration in fiscal year 1999 and postures us for a deployment decision. With just over two years left before this test, the lead-times involved in procuring hardware obviate any schedule acceleration or added flight tests. In other words, we can't buy schedule at this point. We believe by an upgrade to the PATRIOT you are really referring to the upgrading of our Payload Launch Vehicle (PLV), which is currently the NMD intercept test booster. We looked at this earlier in the year and determined the time and dollars required for this upgrade did not outweigh the time and dollars needed, or performance gained, by either an off-the-shelf or Minuteman booster development. Again, we can't buy schedule at this point. However, we can buy back scheduled activities such as the failed flight test. We've estimated this to cost us about $60 million in fiscal year 1998. This accounts for the procurement of another target and contractor (Boeing, Hughes and Lockheed) costs associated with the delays. Funding only of this shortfall, however, only gets us back to the high risk program we've had and does not provide any cost margin to mitigate further delays or failures, nor apply further risk mitigation efforts. We've recently completed a detailed cost estimate as

part of the Defense Acquisition Board process that does include this type of cost risk margin. This life cycle cost estimate indicates a need for $464 million (fiscal year 1997 dollars) more in fiscal year 1998 than what was submitted in the President's Budget. This estimate is currently under review as part of the Department's Quadrennial Defense Review and the Defense Acquisition Board processes.

ADDITIONAL COMMITTEE QUESTIONS

Senator STEVENS. If there are any additional questions from other Senators, they will be supplied to you for your response.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR PETE V. DOMENICI

BALLISTIC MISSILE DEFENSE

Question. General Lyles, compared to last year, the 1998 request for "Ballistic Missile Defense" includes items not counted last year, and some procurement activities are apparently being transferred from BMDO to the military services. Using an "apples to apples" comparison and including all missile defense activities, please compare last year's actual funding to this year's request.

Answer. Please see attached chart.

	Requested fiscal year 1997 in fiscal year 1997 PB	Appropriated fiscal year 1997 in fiscal year 1997 PB	Variance	Requested fiscal year 1998 in fiscal year 1998 PB
Programs managed by BMDO:				
Procurement:				
THAAD System	.....	([1])	.....	.....
HAWK	19.379	[1] 19.379	.....	.....
TMD–BM/C[3]	19.256	[1] 19.256	.....	20.200
PAC3	215.378	[1] 215.378	.....	350.700
Navy Area Wide	9.160	[1] 9.160	.....	15.500
Total Procurement	263.173	263.173	.....	386.400
RDT&E:				
Support Tech	226.342	366.342	140.000	249.489
THAAD System	481.798	621.798	140.000	556.127
Navy Theater Wide	58.171	304.171	246.000	194.898
CORPS SAM/MEADS	56.232	30.000	(26.232)	47.956
BPI—DEM/VAL	.....	24.300	24.300	12.885
National Missile Defense	508.437	833.437	325.000	504.091
Joint Theater Missile Defense	520.111	525.511	5.400	542.619
PAC3—EMD	381.509	381.509	.....	206.057
Navy Area Wide	301.582	301.582	.....	267.822
Total RDT&E	2,534.182	3,388.650	854.468	2,581.944
MILCON:				
National Missile Defense	.....	.....	.....	.540
Joint Theater Missile Defense	1.404	1.404	.....	1.965
THAAD System	.....	.....	.....	4.565
Total MILCON	1.404	1.404	.....	7.070
Total BMDO Program	2,798.759	3,653.227	854.468	2,589.014

	Requested fiscal year 1997 in fiscal year 1997 PB	Appropriated fiscal year 1997 in fiscal year 1997 PB	Variance	Requested fiscal year 1998 in fiscal year 1998 PB
Programs funded outside of BMDO:				
Procurement:				
JTAMDO (JCS)	.....	.....	.....	1.200
PAC–3—(Army) Included above	.....	.....	.....	.....
BMC^{4}I (Army) Included above	.....	.....	.....	.....
Navy Area TBMD (Navy) Included above	.....	.....	.....	.....
Total procurement	.....	.....	.....	1.200
RDT&E:				
Joint Aerostat (Army)	38.900	26.900	(12.000)	86.200
SMTS/SBIRS Low (A/F)	113.251	242.250	128.999	86.200
Airborne Laser (A/F)	56.800	56.800	.....	219.441
Theater Missile Defense (A/F)	22.285	31.295	9.010	157.100
JTAMDO (JCS)	.....	.....	.....	23.100
Total RDT&E	231.236	357.245	126.009	515.023
Total ballistic missile defense:				
Procurement	263.173	263.173	.....	387.600
RDT&E	2,765.418	3,745.895	980.477	3,096.967
Milcon	1.404	1.404	.....	7.070
Grand total	3,029.995	4,010.472	980.477	3,491.637

[1] Procurement Funding has been transferred to the services. These figures are displayed here for information only.

Question. Much of the testing that BMDO apparently envisions for missile defense systems employs computer simulations to help cut costs.

Did any computer models or simulations anticipate any of the four failures in THAAD testing to hit and destroy the test targets? If so, why was the test held? If not, what level of confidence do you realistically expect you can have in test results if a significant portion of the results is based on models and simulation? Will the use of simulations lessen the confidence you can have in actual performance?

Answer. Simulations did not predict the failure mechanisms in the four most recent THAAD tests. This is not unexpected since simulations cannot be expected to identify reliability or random failures, such as those the program has experienced. Following the FT07 failure, BMDO chartered two independent review teams to look at the THAAD missile design margin and reliability and ways to reduce overall programmatic risk.

We, and the test community in general, are convinced that simulation plays an important role in risk reduction and confidence in the THAAD flight test program. Simulations have predicted, and flight tests have verified, overall THAAD flight performance except for the final endgame intercept. The THAAD flight test hardware and software undergoes extensive hardware in the loop testing and hundreds of simulation runs to prepare for a mission. This process has been successful in identifying potential flight problems prior to conducting actual flight tests. For example, simulation testing conducted at Lockheed Martin Missiles and Space Software Integration Laboratory prior to FT07, identified a firmware problem in the missile's inertial measurement unit, that could have prevented the seeker from acquiring the target.

THAAD is in the Program Definition/Risk Reduction phase of development, and is still in the process of verifying, validating and accrediting (VV&A) system performance models. Data collected during the flight test program is being used to address known modeling uncertainties, that will allow the THAAD Project Office (TPO) to complete the VV&A process. These flight tests will serve to substantiate program definition and to reduce risk for the next phase of development—Engineering Manufacturing Development (EMD).

Question. What would be the cost to test a production representative THAAD in the most realistic settings possible in a number of live tests that are statistically adequate for a 90 percent level of confidence that the results are valid?

Answer. The THAAD Project Office is already planning to move their flight test program from White Sands Missile Range to Kwajalein Missile Range (KMR) during EMD, in order to fully exercise the system against longer range threats with realistic trajectories. However, assuming a standard normal distribution, anywhere from 75 to 175 flight tests (depending on the results of early flight test) would need to be conducted in order to achieve a 90 percent confidence level. Rough order of magnitude (ROM) cost estimates to conduct 100 missions at KMR, exceed $2.6 billion.

Question. The 1998 request transfers procurement activities away from BMDO to the Military Services. This contradicts the rationale for BMDO—in part—which was to protect missile defense procurement funds from competition with conventional systems and their inevitable cost overruns.

Why was this decision made?

Answer. The Department shifted BMD procurement funds to the Services over the FYDP in recognition that our TMD programs will soon transition to the procurement phase, requiring increased attention to operational and logistics matters. The THAAD system will transition to the EMD phase in less than a year, Navy Area Defense entered Milestone II, and PAC–3 is scheduled for a Milestone III decision in 1999. As these programs move into the latter stages of the acquisition process, it is important that increasing attention be placed on operational and logistics matters. The Services, not BMDO are chiefly responsible for integration of the operational and logistical concerns for BMD systems with their other missions. Moreover, having the Services directly budgeting and managing these BMD resources facilitates Service planning for the deployment and operation of these systems with manpower and force structure considerations.

Question. What are your personal views about it?

Answer. I would like to highlight several points. First, in a February memorandum to the Department's senior leadership, Deputy Secretary of Defense White affirmed BMDO's role as central planner, manager, and integrator for the BMD mission, and in particular, the role of the Director of BMDO as the BMD Acquisition Executive. As such, I will continue to serve on the Defense Resources Board (DRB) when BMD programs and issues are discussed and, thereby, will be able to influence the allocation of funds to programs and DOD components. Second, as the BMDAE, I will have the opportunity to concur or non-concur with Service funding proposals that impact BMD programs. Third, the DOD Comptroller will provide BMDO the opportunity to review any transfer proposed by a Service. Should BMDO and the Service be unable to reach an agreement, the issue will be elevated to the DRB level where I will work with the Service and the Department's senior leadership to ensure BMD programs are appropriately funded.

Despite these three venues for managing BMD procurement funding, there remain significant challenges to doing so.

First, BMDO will not be able to affect BMD procurement funding directly. New procedures for BMDO to influence BMD procurement funding levels, on a program-by-program basis will have to be established. These could prove to be cumbersome and less efficient.

Second, it is inevitable that the Military Services will attempt to budget for BMD program in the context of total Service requirements. To the extent that BMD programs are not a Service's top priority, there could be attempts to move BMD funding into other accounts, or to offer BMD funding as a bill payer when Congress or the Department issues non-specific reductions to the DOD budget.

Third, each Service will tend to favor its own BMD programs over those of the other Services, and to resist a BMDO plan which, while optimizing performance and/or response to the total threat, favors one particular Service's system at the expense of another Service's system.

Fourth, in the past, BMDO has tended to produce system cost estimates that substantially exceeded cost estimates generated by the Services for the same system. While in full control of the funds, BMDO has typically budgeted at the higher number to minimize risk. Should the Services continue to produce lower cost estimates and insist on budgeting at those lower levels, the risk of not meeting schedules or having to reduce system performance could increase substantially.

What I have described above are potential problems but, clearly, to be forewarned is to be forearmed. So I do not view this situation as a problem as so much as a challenge.

Question. What guarantee can you provide that missile defense funds will not be compromised to help conventional systems, and what promise can you provide that the reverse will not happen?

Answer. I can provide no guarantee. The Secretary of Defense has always had the authority to move funds in and out of BMD programs based on Department priorities. I will continue to prepare program plans covering the entire spectrum of BMD

programs with the purpose of optimizing performance against the total threat and satisfying all user requirements in the most cost-effective manner. I will present these plans to the Department and trust the Secretary to make choices which produce the best balance for the Department when all requirements are considered.

Question. When he was a Senator, Secretary Cohen was a supporter of National Missile Defense and was one of the architects of the compromise that was achieved with the Administration. Have you had an opportunity to discuss these issues with Secretary Cohen? Has he begun to effect any changes on Administration policy on these issues?

Answer. Yes, I have had the privilege of discussing the NMD program with the Secretary. While he must obviously balance a great many competing priorities I found him fully supportive of our program. He clearly understands and supports the rationale for the "3 plus 3" program.

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

BALLISTIC MISSILE DEFENSE

Question. At last year's missile defense hearings, Lt. Gen. O'Neill testified that the administration's "3 plus 3" approach was a high risk development program. To reduce that program risk, Congress increased funding for national missile defense. With that in mind, what specific actions have you taken to reduce the risk of the development phase of the "3 plus 3" strategy? How has BMDO allocated the additional funding to reduce risk? Why are you testifying this year that the risk has increased even though Congress provided additional funds to meet the needs as defined by the former BMDO director?

Answer. We've used increased funding to reduce the technical risks of integration and limited flight testing by beginning the selection of a Lead System Integrator and significantly increasing our ground hardware in the loop capability. We've also put funds into NMD piggyback testing on other missile flight tests such as Minuteman and Peacekeeper. We've moved to mitigate schedule risk with the purchase of spare kill vehicle and radar hardware, increasing our system engineering and deployment planning efforts and, again, by selecting a Lead System Integrator to ensure we can deploy within the second "3".

Despite the risk reduction activities described above, the NMD "3 plus 3" program continues to be a high risk development from technical, schedule and cost perspectives. Technical integration continues to be a challenge until a Lead System Integrator is fully on-board and we successfully accomplish an intercept. Schedule risk has been extremely high and recent delays in awarding a Lead System Integrator concept development contract (which includes selection of our booster), standing up a Joint Program Office, and accomplishing our first kill vehicle sensor flights have only put more pressure on an already tight schedule. Finally, funding level continues to affect both our program strategy and schedule. We've had no funding margin to absorb the above delays. Therefore, program content, schedule or both must change as delays and failures occur. Hence, overall program risk remains high.

Question. How much of the $833 million authorized and appropriated by Congress for fiscal year 1997 have you allocated to purchasing additional hardware, conduct additional flight tests, and the GBI booster development?

Answer. We used the additional $325 million provided by Congress in fiscal year 1997 to address technical, schedule and cost risk areas across the NMD program over the fiscal year 1997/98 time frame. Technical risk was addressed primarily through increases in systems engineering, integration, and hardware testing. Schedule risk was addressed primarily with additional hardware procurements and adoption of a Lead System Integrator concept to ensure we could achieve a deployment within "3" years of a decision. Cost risk was addressed by increased funding to elements experiencing cost growth or requiring better definition of their needs. We identified these issues and their funding requirements in late fiscal year 1996, prioritized them to best reduce overall program risk, and distributed all funds soon after they were received from OSD. Specific to the above question, we allocated an additional $84 million over fiscal year 1997/98 for hardware. This hardware includes a spare EKV and EKV ground test units, spare radar components, ground test hardware-in-the-loop components, spare target front end and development of and hardware for the In-Flight Interceptor Communications System and GBI communications transceiver. We allocated $105 million over fiscal year 1997/98 for the GBI booster/Lead System Integrator. The GBI booster funding is split between booster development, which we currently have in our EKV/GBI element and the Lead System Integrator, who will select the booster, write the specification, and integrate the

kill vehicle to the booster to complete the GBI. We did not specifically add flight tests but we did significantly increase or testing capability at the element and system levels. We allocated an additional $119 million over fiscal year 1997/98 for test activities. These activities include GBI hardness and lethality testing, further development of hardware in the loop capability, an increased use of NMD piggyback testing on other missile tests such as Minuteman and Peacekeeper, and development of a high fidelity system simulator to verify performance requirements.

Question. Is the administration's fiscal year 1997–99 budget plans sufficient to execute the first three years of the "3 plus 3" NMD program?

Answer. The NMD "3 plus 3" program was initiated in February 1996 and subsequently designated a Major Defense Acquisition Program. The program was deemed very high risk from a cost, schedule and technical perspective. At the time, coupled with a proposed Congressional plus-up in fiscal year 1997, we felt if all were successful, we could achieve an integrated system test by the end of fiscal year 1999. Since that time, and after the fiscal year 1998 President's Budget was submitted, we've experienced several test and program delays, as well as a flight test failure. These costly events will necessitate both schedule and program content adjustments over the next several years; thus potentially impacting execution of our original "3 plus 3" program. Additionally, we are completing a detailed "3 plus 3" life cycle cost estimate. This estimate is based on a more moderate costing/funding approach to the NMD program and also indicates program execution issues within the current President's Budget. We are currently reconciling these issues within OSD via the Defense Acquisition Board and Quadrennial Review processes.

Question. General Lyles, would you agree that past investment in the NMD elements, system, and architecture has produced significant accomplishments? Could the LSI cause another NMD program restart? If so, please detail all prior spending that will not be used? If not, why is the LSI needed to continue the progress that has already been made without an LSI?

Please calculate the total amount allocated to BMDO NMD SE&I efforts, system architecture studies, SETA's, Tiger Teams, and so forth. Considering how much has been invested, why is it necessary for the LSI to conduct another concept definition before work can begin?

Answer. Our past efforts in both TMD and NMD have yielded some very significant results. The LSI effort builds on these accomplishments. Without them, we could not pursue the current NMD or LSI program. These existing programs address the technology within the elements, such as sensors, weapons and BM/C^3. To meet our 3+3 program objectives, we must now address how to integrate and field NMD at the system level. This is not a program restart, but is instead a logical continuation of the existing effort, and a necessary step to be ready to deploy the system. Although the LSI contractors have not yet provided us their NMD plans, we envision that it will leverage the existing investment similar to the Government developed NMD planning. You are correct in stating that we have performed many architecture studies, however the study the LSI will be conducting is not so much an architectural concept development, but is instead developing a plan for the management and integration of the NMD. The LSI Concept Definition (CD) contractors will be developing the approach and program they will use to integrate, and potentially produce and deploy the NMD system. Our previous efforts have generally addressed "what" would be in an architecture, now we are addressing "how" it would be integrated and deployed.

Since the NMD program has become an Major Defense Acquisition Program the total allocated for SE&I, SETA and LSI (for fiscal year 1996 through fiscal year 1998) is as follows:

	In millions
SE&I	$129
SETA	45
LSI	52

Question. Last February, former Secretary William Perry announced that the administration would pursue the so-called "3 plus 3" deployment readiness program for NMD. I believe that everyone understood that the clock started ticking last year. You have stated however on several recent occasions, including testimony to the SASC last month, that the development program of the "3 plus 3" strategy will not begin until the LSI contractor has been selected later this year.

General Lyles, if the LSI is critical to the three years of NMD development, why wasn't the LSI mentioned when Secretary Perry and Dr. Kaminski announced the "3 plus 3" program?

Do your recent statements mean that the demonstration of the elements of the NMD system will be delayed by one year? Isn't it more accurate to describe the administration's NMD program as "4 plus 3" or "5 plus 3?"

Answer. The "3 plus 3" program that was announced by Secretary Perry was a statement of the overarching policy that the Administration intends to follow for National Missile Defense. It was designed to make maximum use of the technology development efforts on-going at the time but was clearly a more comprehensive program than the technology readiness program implemented following the Bottom-up Review. The "3 plus 3" program, as defined by Secretary Perry, required a system demonstration by 1999 and the capability to deploy within 3 years following that demonstration. These two objectives could only be fully accomplished by providing an integrating contractor that would take the excellent work being done on individual elements and mold it into the system of systems that is necessary for a deployable NMD. This contractor must be in place during the first three years of the "3 plus 3" in order to be prepared to execute the second three. If not, there is a very low possibility that the second three year deployment could be accomplished.

Question. My understanding is that the Army prepared a Request for Proposal (RFP) for the GBI almost eighteen months ago so that a booster would be ready for integrated testing in 1999. Is that correct? Why did BMDO stay the release of the RFP? Please tell us what actions have been taken to develop the GBI booster.

Answer. Yes, the Army prepared a GBI RFP about 18 months ago. The RFP was never released because the requisite funding was not available in the GBI budget and all options concerning booster development had not been appropriately qualified and considered. To date, very little has been done reference the development of an integrated GBI. The Lead System Integrator contractor will be tasked to design and develop a cost effective GBI which leverages NMD system-level trades associated with cost, performance, schedule and risk.

Question. General Lyles, your written statement mentions that the failure of the EKV seeker flight test illustrates the high risk associated with the "3+3" schedule. Didn't Congress authorize and appropriate additional funding specifically for "the acquisition of additional kill vehicles and test booster hardware?" If extra targets had been available for the EKV flight test, how long would it have taken to conduct another test after the failure in January? How much would BMDO have saved if you were able to conduct a second test within a few days instead of six months or more? Would you agree that acquiring additional test equipment, as directed by Congress, reduces the schedule risk you have mentioned today?

Answer. Congress did provide additional funding for additional kill vehicles and test booster hardware. In order to reduce technical risk, BMDO has continued to fund two competing EKV contractors. Additional funding has been applied to purchasing kill vehicles and test boosters to support flight testing by the second contractor. If an extra target had been available for the first EKV sensor flight test, the test could have been rescheduled in approximately one month. The exact delay would have depended on the amount of time required to identify and correct the cause of the failure, and on test range availability. If we had been able to conduct the test within one month rather than several months, we would have saved approximately $35 million. I would certainly agree that acquiring additional test equipment reduces schedule risk.

Question. General Lyles, do you agree that it is now common practice to solicit the input of the war fighter during program development? Doesn't this process provide feedback so that program managers can respond to the needs of the war fighter? Are there any provisions in the LSI RFP to ensure that the Services can direct the LSI contractor in the elements of the system that they will ultimately field and operate as war fighters? Are there any efforts to seek the input of the CINC's?

Answer. In developing the NMD, we are fortunate in having all of our War Fighting requirements developed by a single unified command, the U.S. Space Command. This command includes elements of the Army, Navy and Air Force. Requirements for the NMD are provided by this using command to BMDO, via the Joint Requirements Oversight Council (JROC). BMDO will remain responsible for meeting these requirements, and we plan to continue our extensive interaction with the user. The LSI will respond to these requirements, as directed by BMDO. There will be no change in these relationships.

Question. General Lyles, why do you believe that another integration contractor—the LSI—is needed at this time? Don't you have to demonstrate the elements in the first three years before they can be integrated and deployed? Don't you need to focus your funding on demonstrating the elements so that they can be integrated?

Doesn't BMDO have in place the NMD SE&I contract to develop the integrated system requirements and BM/C^3 element which is supposed to ensure an integrated system? If so, please tell the committee why this SE&I effort for an integrated and

deployable system is inadequate to accomplish the demonstration of the elements in fiscal year 1999?

Answer. In order to be ready to deploy and field a system within three years, we must demonstrate not only that each of the elements functions and performs independently, but that they can be integrated into a system and work together to meet the user's mission requirements. BMDO does not believe these issues are secondary to the element technology, nor do we believe they can be deferred until the element development is completed. BMDO believes that integration of the NMD is a critical developmental challenge that must be started now to ensure we could be able to deploy in 2003.

First, we need to provide a design for the NMD system at the Deployment Readiness Review (DRR). Our current development is focused on developing an element tool kit that could support deployment against a wide range of threats. This is important, but it is by no means sufficient. We must develop an NMD design that would use these elements, determine its performance, and plan for its integration, deployment and support. Second, we know from past experience that integration of weapons systems is a critical phase. We do not believe we can defer this effort and perform it, along with all of the challenges that will have to be met, during the very schedule constrained three year deployment period. Lastly, we proposed to do a system demonstration. A system demonstration implies that we will provide more than just a set of standalone elements; we need to demonstrate an NMD system that is reasonably similar to the one we would deploy.

The current SE&I contract is a significant resource in this effort, but it was not developed to fulfill this role. The contract was originally written for the Technology Readiness Program (TRP), which did not envision a 3+3 program. We have significantly modified this contract, but it does not have the scope to provide for physical design of the NMD and performance responsibility. It was oriented around standalone element programs. As we move to implement the Joint Program Office (JPO) we will be integrating our management so that we are not executing the NMD program through a large number of separate contracts, but through one integrated prime contract that will ensure integration of our system and element development. This would not have been possible through the existing SE&I contract.

Question. Will the LSI be responsible for testing the NMD elements in the integrated systems test in fiscal year 1999?

Answer. We have provided the LSI with flexibility in proposing a role for the fiscal year 1999 test. This reflects the long lead time for the acquisition of test articles, launch vehicle integration, and test facility planning. The Government has been performing the planning for this test, and our current LSI Statement of Objectives (SOO) allows the LSI to leverage this investment. We will need to work with our contractors to develop approaches to achieving the best mix of LSI and Government responsibility for this test.

Question. Your written statement asserts that the SBIRS Low, or SMTS, is a critical element of the NMD system. Why wasn't the SBIRS Low placed under the direction of the JPO and included as an element of the LSI?

Answer. While SBIRS Low is a critical element of the NMD system, it is an integrated component of the overall SBIRS architecture. This architecture, approved by Dr. Kaminski (USD (A&T)) in 1994, encompasses more than ballistic missile defense support. SBIRS must also support missile warning, technical intelligence, and battlespace characterization. The Department of Defense appointed the Air Force steward of the SBIRS Low program based on recommendations from the 1994 OSD SBIRS Summer Study. A single manager for the entire SBIRS architecture was determined to be the most efficient and effective way to ensure the High and Low programs will synergistically support all missions.

In compliance with Fiscal Year 1997 National Defense Authorization Act direction for a management review of the SBIRS Low program, the Air Force, BMDO, and DUSD (Space) have reviewed the current management of the SBIRS program. BMDO agrees that the multi-mission nature of the program and the synergistic effects of designing complementary high- and low-systems require a single manager. Dividing responsibilities for the SBIRS Low program from the remainder of the system will likely result in unnecessary duplication, complicated interfaces, increased cost, and loss of overall mission capability. Furthermore, transfer of management would destabilize progress towards meeting the SBIRS Low 2004 initial deployment schedule.

Currently, BMDO is closely involved with the Air Force on the SBIRS program, and has played a key role in the development of the overall DOD SBIRS program. The BMDO team works within the SBIRS integrated product team (IPT) structure to define the requirements and interfaces for SBIRS Low to meet ballistic missile defense requirements. BMDO is a member of the AFSPC Requirements Review

Group (RRG) and DUSD (Space) Independent Technical Review Board for SBIRS. BMDO and the SBIRS program office jointly chair an Integration Control Working Group (ICWG) to resolve issues between the NMD and SBIRS programs. The SBIRS program office personnel also participate in NMD IPT's. Finally, BMDO and the Air Force have a Memorandum of Agreement on the acquisition management of the SBIRS Low program. This agreement ensures that the entire SBIRS architecture is responsive to ballistic missile defense needs. Overall, this extensive involvement of BMDO in the SBIRS program ensures the connectivity of SBIRS with the missile defense programs.

Question. In your written statement, you mention that "past investments in technology allow us to build into today's interceptors, sensors, radars the capability to counter existing and emerging missile threats." Dr. Kaminski has provided similar testimony, commenting on the importance of BMD support technology programs to block upgrades.

Would you agree that next technology upgrades to our current core acquisition systems require the same level of development and demonstration as required for implementing system upgrades? What specific technology programs in BMDO are being developed to support block upgrades?

Answer. We understand your question to be: "Will the technology programs to affect future system block upgrades be as expensive as our initial technology programs that made today's acquisition programs possible. The answer is no. In the past, the technology investment from SDIO/BMDO ran over $1.5 billion per year. To adequately sponsor R&D and demonstrations for implementing system upgrades will require between $450–$600 million of technology investment per year.

Today the existing technology programs supporting block upgrades are: Advanced Sensor Technology Program (ASTP); Discriminating Interceptor Technology Program (DITP); Structural Materials; Radar Technology; Power Technology; Atmospheric Interceptor Technology (AIT); and Innovative Science and Technology (various 6.2 programs on power, communications, electronics, seekers, propulsion and propellants, and sensors).

Question. Congress appropriated an additional $140 million in BMDO Support Technology funding in fiscal year 1997. General Lyles, please explain why BMDO redirected the Support Technology program funds to other projects. How does BMDO determine which Support Technology program funds are redirected? Do the Services have any input in the decision to redirect such funds? If so, please explain this process to the committee. If not, why are the Services not allowed to participate in this process?

Answer. Contrary to the question, BMDO has not redirected any Support Technology program funds to other projects, with the exception of a few percent in taxes which were necessary to fund the Small Business Innovation Research (SBIR) program mandated by law, MEADS (which was Congressionally directed and under funded), as well as Support Technology's fair share of minor undistributed cuts.

QUESTIONS SUBMITTED BY SENATOR BYRON DORGAN

BALLISTIC MISSILE DEFENSE

Question. General Lyles, you will recall that Section 245 of the Defense Authorization Act for Fiscal Year 1997 requires that the Secretary of Defense report to the Congress on the Air Force's National Missile Defense Plan. I cosponsored the floor amendment requiring this report. The report is specifically supposed to discuss the cost and effectiveness of the Air Force's plan, its arms control implications (if any), and its potential for future growth. The law required that report to have been submitted 6 weeks ago. When will the Congress see this report?

Answer. The report is final coordination and should be provided in the very near future.

Question. General Lyles, on page 17 of your prepared remarks (for the SAC Defense Hearing of Mar. 12, 1997) you state that: "Several booster options are being examined for the Ground-Based Interceptor, including the Minuteman missile, and other modified, off-the-shelf boosters. My intention is to foster a "level playing field" and ensure that all booster options are fairly evaluated. The bottom line must be the use of the most effective and affordable booster option available.

General, has the Air Force told you that it could contribute enough boosters for a 100-interceptor system, including spares and test boosters, without affecting its own required 500-missile Minuteman 3 deterrent force?

It's my understanding that a commercial off-the-shelf booster may not be able to absorb the shock and vibrations of a silo launch. Do you have a cost estimate for a thoroughly tested, off-the-shelf booster capable of a silo environment?

Don't you agree that using existing silo infrastructure would be smarter and cheaper than digging new silos? Wouldn't this avoid the environmental impacts of digging new silos?

Wouldn't existing command and control systems in place at either Grand Forks AFB or Minot AFB enable more economical deployment of an NMD system?

Answer. There are a number of technical issues for the NMD booster that we have not decided, since we wish to provide the LSI contractors the maximum flexibility in developing their approaches. We have the Air Force letter stating that they can provide the 100 Minuteman boosters, and will be providing that to the LSI's.

We are not constraining our LSI contractors to a silo-based configuration. They are free to select basing to achieve performance and cost objectives. Silo environments are one of the many aspects of this selection. With support from the Air Force and Army, we will be validating the LSI's analysis to make sure that they have considered and addressed these issues.

In the LSI CD contract, the LSI CD contractors are to assume that the existing silos are available, for use with either the Minuteman, an existing, or a GBI-specific booster. The contractors will be competing for the lowest cost to the Government, so we are sure that they will leverage any available savings.

As for existing Command and Control systems, we have asked our LSI CD contractors to provide us the most effective, lowest cost system they can propose, including BM/C^3, which includes the command and control function. We anticipate that they will exploit existing communications systems, and may propose to use these existing command and control systems, as well. The requirements for strategic control over nuclear weapons, and operation of a non-nuclear defense system are different, and we will have to wait and see the engineering analysis before we can decide the direction BM/C^3 development will take.

Question. General Lyles, I'll be frank with you and say that I'm concerned that the Defense Department might develop an NMD architecture that violates the ABM Treaty. Perhaps I am reading too much into your statement, but on page 16 you say: "[T]he development program that we execute will be compliant with the ABM Treaty as it exists today. Again, as Secretary Perry asserted, the system that is ultimately fielded might comply with the current Treaty, or it might require modifications to the Treaty depending upon what the threat situation requires * * * Depending on the threat to which we are responding when a deployment is required, an NMD system * * * could be deployed in a Treaty complaint configuration or in a configuration that may require some amendment to the ABM Treaty."

The United States is now a party to the ABM Treaty. That Treaty received its constitutionally required Senate approval nearly 25 years ago. The Senate approved it because the ABM Treaty removes incentives for an expensive and wasteful ballistic missile arms race, a race that could well occur if we abandon the limitations on missile defenses that the ABM Treaty provides. The ABM Treaty is the foundation upon which we have built the succession of strategic arms limitation and then reduction treaties. Even during the Cold War, the SALT and START treaties and talks gave stability and predictability to the nuclear age.

In my view, increasing the number of interceptors or interceptor sites permitted under the ABM Treaty would be major changes to the Treaty. Such major changes would in my view require Senate approval. Let me assure you that unless the Intelligence Community is completely wrong about the intercontinental ballistic missile threat in 2003, I will actively oppose amendments to the ABM Treaty.

Given these views of mine, I am somewhat concerned that the Ballistic Missile Defense Organization may be planning NMD architectures that violate the Treaty. What controls do you have in place to ensure that your NMD program assumes the existence in 2003 and later of ABM Treaty requirements that the NMD system field no more than 100 interceptors at a single site?

Answer. The development of the NMD system will be conducted in an ABM Treaty compliant manner. The Department of Defense has established effective controls to ensure ABM Treaty compliance. Under these controls, before BMDO takes any action that could reasonably raise an issue of ABM Treaty compliance, we must seek clearance from the Under Secretary of Defense for Acquisition and Technology. The Under Secretary is charged by the Secretary of Defense with monitoring arms control compliance and with providing the necessary guidance for DOD programs, such as ballistic missile defense, to assure they remain in compliance.

Question. General Lyles, at the beginning of your statement you noted that it is important: that we recognize the challenges we still face in developing and fielding ballistic missile defenses—in many cases that really is "rocket science." We are

building highly sophisticated BMD systems, consisting of sophisticated sensors and interceptor missile that incorporate state-of-the-art electronics, seekers, communications, avionics and propulsion.

I agree with your assessment of this technology. With the exception of the booster for the Ground-Based Interceptor, the technology is cutting edge. Too many people have been suggesting that we could field sensors, software, guidance systems and kill vehicles for a National Missile Defense system with currently-available technology.

Could you please describe some of the technological challenges that the NMD program must overcome in order to field an effective system?

Answer. The current NMD 3 plus 3 Program is designed to allow for continual technology development as the system is demonstrated and fielded. We are using technology that is currently being developed in each of our elements initially. These technologies will mature as the element and system test programs proceed. However, the most difficult challenges for the NMD program are the EKV sensor and kill vehicle development and integration, and the system integration and data fusion by the Battle Management Command, Control, and Communication (BM/C^3) system ultimately combining the elements into the NMD system of systems.

Question. General Lyles, on page 15 of your prepared statement you mention the "Last year, Secretary Perry transitioned the NMD program from a 'Technology' Readiness Program to a 'Deployment' Readiness Program." Could you please be a little more specific about what this transition means for the program?

I thought the goal of the Administration's "3+3" program was to have the technology ready in 1999 for a decision in 2000 or later on whether to deploy. Does this transition that you speak of mean that the BMDO is somehow prejudging the outcome of this policy decision, which has yet to be made?

Answer. The Deployment Readiness Program was implemented to position the United States so that it could deploy a National Missile Defense System quickly if a threat from a rogue nation developed. Specifically, the program was structured as a "3 plus 3" so that sufficient development would be completed in 1999 to allow a deployment decision to be made as early as 2000. Once a decision is made to deploy, the program is required to be able to field the operational capability within three years. This provides for an earliest Initial Operational Capability of 2003 but in no way commits to the deployment for such an IOC.

The time lines associated with a "3 plus 3" program are extremely stressing. To achieve these accelerated schedules it was necessary to utilize the existing technology developments underway at the programs inception. But, since these technology activities were not originally intended for deployment, additional development and integration efforts are also necessary to make this system of systems complete. Without these additional activities it would be impossible to test the entire system in the manner necessary to allow a deployment decision to be made. Over the last year we have identified the additional efforts required and have initiated many of the activities necessary to preserve the "3 plus 3" schedule. In this process no actions has been taken which would prejudge the deployment or any other policy decision.

SUBCOMMITTEE RECESS

Senator STEVENS. We are going to recess now. We will have a hearing on Wednesday, March 19, in S–407, for our intelligence issues before the committee.

Thank you very much.

General LYLES. Thank you, Mr. Chairman.

[Whereupon, at 11:08 a.m., Wednesday, March 12, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1998

MONDAY, MARCH 31, 1997

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Honolulu, HI.

The subcommittee met at 9 a.m., in the Prince Kuhio Federal Building, 300 Ala Moana Boulevard, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens, Cochran, Domenici, and Inouye.

Also present: Senator Roberts.

DEPARTMENT OF DEFENSE

U.S. PACIFIC COMMAND

STATEMENT OF ADM. JOSEPH W. PRUEHER, U.S. NAVY, COMMANDER IN CHIEF, U.S. PACIFIC COMMAND

OPENING STATEMENT OF HON. TED STEVENS

Senator STEVENS. Good morning. The subcommittee today will hear from Admiral Prueher, Commander in Chief of the U.S. Pacific Command.

We meet today for this session in Hawaii at the conclusion of a 10-day mission to the Russian Far East, South Korea, and North Korea. Saturday, the members participating in today's hearings had the opportunity to meet with Admiral Prueher and the service component commanders here in the Pacific. We heard from them about issues facing this command and had the opportunity to report to them our observations from our trip.

In Russia, we met with the leaders of the Far East Military District in Khabarovsk and the Russian Pacific Fleet in Vladivostok. In South Korea, we met with senior civilian leaders of the Republic of Korea and top United States commanders including General Tilelli and General Iverson.

Our subcommittee went to the Pacific in part out of our concern that the current focus on Bosnia and Southwest Asia may have a negative impact on our forces in the Pacific. When we return to Washington, we face a $2.1 billion supplemental defense request to pay for the operations in Bosnia and Southwest Asia. All of those costs must be offset by reductions elsewhere in the defense budget.

Admiral, today we want to know whether these other missions are impacting the readiness of forces under your command or the quality of life of your people. Admiral Prueher, your full statement

will be included in the record for the benefit of those subcommittee members who cannot be with us here today.

I ask that you summarize the issues that you would like to focus on during today's presentation, and then I believe all of us have some questions we would like to ask you for the record.

Before we proceed, let me first thank the cochairman or vice chairman, whatever he wants to call himself, Senator Dan Inouye for his participation in our trip. He has a standing in the Pacific that no one else in the Congress has, and his hospitality in hosting this delegation here in Hawaii could not be surpassed.

Senator Inouye, do you have any opening comments?

STATEMENT OF HON. DANIEL INOUYE

Senator INOUYE. Yes, Mr. Chairman. If I may, on a personal note, commend you, sir, for leading this delegation to parts, heretofore, unknown to most of us.

Although most people will look upon Khabarovsk and Sakhalin and Vladivostok and Pyongyang as areas of great depression and ugly dark moods, I think it was good that these senior Senators took the time to visit them. We saw that their system of government is not doing as well as ours and that's an understatement. However, at the same time, I have to conclude that our problems are still ahead of us. Much as we would like to proclaim to the world and to our people that peace is at hand, after visiting Pyongyang, I cannot say that.

It was a strange experience. On one hand this is a Nation with the fourth largest army in the world, with hundreds upon hundreds of artillery pieces aimed at Seoul, with missiles that can go beyond Seoul, with the No Dong missile that can reach Tokyo, with an army on exercise when we arrived there, with huge buildings, a 105-story hotel building which incidentally was never completed, boulevards that are eight lanes wide, and yet people are starving. That, to me, sir, is a very dangerous combination. And if we don't watch ourselves, we may be witnessing at this moment the beginning of an explosion.

So I am glad that we have men like Admiral Prueher at the helm to make certain that this explosion doesn't happen. So I wish to join my chairman and welcome you.

Admiral PRUEHER. Thank you, sir.

Senator INOUYE. And to tell you, Mr. Chairman, that your help in this delegation trip was immense. I think we got much out of it. Thank you, Mr. Chairman.

Senator STEVENS. Does any other member have an opening statement?

Senator COCHRAN. No.

Senator ROBERTS. No.

Senator DOMENICI. No.

Senator STEVENS. I'd like to include in the record the names of the people who accompanied us on our trip including Dr. Chandler and Eric John, who is the person who occupies the North Korean desk at the State Department.

Admiral Prueher, I would be happy to have your statement, sir.

PACIFIC COMMAND STRATEGY

Admiral PRUEHER. Thank you very much, Mr. Chairman. It is a pleasure for me to be here with you Senators this morning, and welcome to Hawaii, particularly after coming from North Korea.

In the last year since I have had the opportunity to visit most of the nations in the area of responsibility [AOR] and meet with their political leaders as well as their military leaders, and also to visit our troops, our soldiers, sailors, airmen, and marines and their families around the AOR, and to get a good look and a good feel for what they are doing. I must say it is a very encouraging picture.

The Asia-Pacific region of responsibility is a pivotal one for our Nation, as we discussed on Saturday. It is an area that is largely at peace, but as Senator Inouye has pointed out, there are certain flash points and it is certainly not conflict free. We have fought three major wars here in the last century. But we are a region generally at peace, and our strategy, and our efforts are to keep it that way.

It is an area marked by a confluence of security issues, economic issues, as well as diplomatic ones, and our effort is to work these in harmony and work them synchronously, as neither the diplomatic, military, nor economic issues in our view can be advanced separately.

We talked also about the U.S. presence in the Asia-Pacific region, about 100,000 troops, which is shorthand for the capabilities represented here, brokering the security in the area which begets the stability which yields the economic prosperity which the Asia-Pacific region enjoys, the United States enjoys with the Asia-Pacific, and is important to the world economy as well.

Our concept and our strategic notion for dealing with this is one of cooperative engagement. Cooperative engagement has three parts: The first part is peacetime engagement, what we do every day in visits like yours to the area, visits of high level military dialog that go on amongst the leaders in the region as well as efforts like the Asia-Pacific Center here in Honolulu, exercises in military-to-military relationships with the nations. That is the area in which we build bonds, we build structures on a day-to-day basis.

The second element of our strategy of cooperative engagement is the ability to respond with capable, ready forces to crises. We need the forces capable and ready in the area to respond. An example of this was just about 1 year ago at the China-Taiwan crisis when we were able to respond with two carrier battle groups.

And then the third part of this, our cooperative engagement strategy, is the ability to fight and win a major conflict which we hope not to do but we must be prepared to do and be seen to be prepared to do. And because of that, the ability to do this third part it enables us to operate in a lower spectrum, because in circular logic, that is the way that military strategy works.

I think instead of running through a summary of my assessment of the various nations in the theater, I will wait for questions and answers, if those are of interest. But certainly the issue with China is a backdrop, our pivotal security relationship with Japan, which is our primary one in the area, and the burgeoning economies and

the economic progress of the nations in the Asia-Pacific region are important to all of us.

RESOURCES TO SUPPORT THE STRATEGY

The resources our Congress and our Nation have provided to the Pacific Command to do our job, in terms of not only monetary resources but assets as well as the lives that are entrusted to us by our young soldiers, sailors, airmen, and marines are adequate to the task. We have enough to do but people are working very hard to carry out our national strategy at this point.

There are a couple of things that are relatively low budget but very important to us. One is international military education and training [IMET] assets whereby we teach commissioned, enlisted, and civilian defense personnel from other militaries in the region and from all over the world. In fact, they come to the United States and go to our schools and learn about the United States as well as learn our military doctrine and resource management. That has low cost and high payoff for us and is an important program. Our forces are responsive, they are flexible, they are adaptable, and they are combat-ready.

One last point I would like to make is what we, the commanders in chiefs [CINC's] of the regions in the world, owe our Congress and owe our Nation, and that is good stewardship of these assets provided to us. Frequently CINC's are talked about as having a short view, only responding and reacting to short-term crises and we are responsible and accountable for this. That is part of the statute of what we do.

But also it is important for CINC's to realize our modernization will be short-term readiness 20 years from now. Modernization equals future readiness to us, so we must plan to use our assets carefully. We must not ask for more than we need to do chores. And we must consider prudent risk as we carry out all of our responsibilities. And we must also, when we are charged with working events with our Nation, work to try to bring these things to a close so they do not continue to just be a drain on assets for a longer period of time than they need to be. We need to plan carefully and use assets well.

PREPARED STATEMENT

With that, Mr. Chairman, I would like to close my remarks, and thank you for putting my written statement in the record, and I am ready for your questions, sir.

[The statement follows:]

PREPARED STATEMENT OF ADM. JOSEPH W. PRUEHER

Mister Chairman, Members of the Committee/Sub-Committee: On behalf of the men and women of the United States Pacific Command, thank you for this opportunity to provide you my theater security perspective on our region. The past year at the Pacific Command has been busy, enlightening, and rewarding, with many opportunities for dialogue with key U.S. and foreign officials and military leaders, service members and their families, and U.S. civilians. This report also marks the Pacific Command's fiftieth year of promoting peace and security in Asia and the Pacific. Though most of the region today bears little resemblance to the immediate post-World War II scene, the importance of strong U.S. military presence and engagement continues. Our presence, together with the cooperation of our allies and friends throughout the region, deter conflict and continue to underwrite the stable

conditions upon which economic prosperity depends. This statement begins with a brief assessment of our area of responsibility, a review of our strategy, a report on how our strategy is working, and ends with some essential resources and needed support.

EXECUTIVE SUMMARY

Security.—The Asia-Pacific, perhaps more than any other region, represents a confluence of the security, diplomatic, and economic elements of international power. This confluence helps define the significance of the region to the U.S. and the world, and drives our strategy of presence and engagement to promote and protect our national interests. Our government's leaders as well as those throughout the region agree that security, brokered primarily by U.S. military engagement and presence, underwrites the stable conditions upon which regional economic prosperity depends.

Japan.—While many other issues draw our attention, our security relationship with Japan is pivotal to the entire region. Our united efforts are the foundation for peace and stability throughout the Pacific. The tangible Japanese support for our forces gives us the strategic reach necessary to deter conflict and to prevail in war. We should continue to nurture the U.S.-Japan relationship as the cornerstone of security and stability for Asia and the Pacific.

North Korea.—North Korea's downward trends lead most observers to agree that economic and governmental change will occur. Due to North Korea's opaqueness, the timing and pace of change are uncertain—one to ten years perhaps, but it could come faster. Our immediate security concern is North Korea's ability to lash out if cornered. Our commitment of thirty-seven thousand U.S. troops plus our solidarity with our Republic of Korea and United Nations partners mitigate against that. We are also working to shape and accommodate eventual North-South reconciliation.

China.—China will be a backdrop against which many regional activities are played. We share regional concern about China's military modernization and lack of transparency on security objectives. Our military-to-military contact with the People's Liberation Army (PLA) is important, not only to improve transparency, but also because of the PLA's influence on China's security policies. We see Hong Kong as a harbinger of China's ability to integrate into the global community as a responsible player. We can also expect perturbations on Taiwan issues, although we are much better off than we were a year ago. Peaceful resolution of cross-Strait tensions will be a long-term process where it is not in any party's interest to use force. We do not view China as an immediate threat and are cautiously optimistic about China's evolving leadership role in Asia. We have decades of steady work ahead, to patiently engage China from a position of strength and resolve, focusing on our interests while respecting theirs.

Other nations.—The other countries in the region also deserve our attention and military-to-military engagement. Although India's immediate concern is with Pakistan and the Kashmir, India's long-term military concern is China. Economically, India also looks east, particularly to Southeast Asia. The Southeast Asian nations, with their burgeoning economies, are modernizing their armed forces. To date, these military enhancements are balanced and appropriate.

Treaties.—Our treaty partnerships with Australia, Thailand and the Philippines are solid. Australia remains an especially staunch friend and regional supporter who highly values its defense relationship with us. Thailand is a model of access and mutual training. Continued military-to-military interaction with these countries is important to ensure that the relationships are not taken for granted.

Strategic concept.—Our strategy of engagement and presence throughout Asia and the Pacific is the right solution for shaping an otherwise uncertain future. Our investment in peacetime engagement is more effective than a strategy based solely on reacting and fighting. The readiness of our combat forces and the will to use them to fight and win are essential to rendering peacetime engagement possible and successful.

Forces.—Forward-deployed forces of about 100,000 military personnel mitigate the tyranny of distance in the Pacific and are the regional metric of our commitment. Maintaining our forward-deployed, forward-based, and CONUS reinforcing forces is essential to our strategy's success in peace, crisis and war. The resources allocated to PACOM are appropriate and necessary if the U.S. is to continue to be an active, engaged player, partner, and beneficiary in this vital region.

ASIA-PACIFIC ENVIRONMENT

The unique Asia-Pacific region is important to the U.S. for a number of reasons. It goes well beyond the fact that we fought three wars in Asia in this century. A confluence of political, diplomatic, economic, and security issues help define the sig-

nificance of the Pacific Command Area of Responsibility (AOR) which encompasses this region:

—The Pacific Command AOR includes 44 countries representing many different forms of government.
—More than fifty-six percent of the world's population lives in the Pacific Command's AOR.
—Many developing countries in the Asia-Pacific region have economies growing at an annual rate greater than 7 percent.
—Thirty-eight percent of U.S. international trade is with this region. This is double our amount of trade with Europe, and more than our trade with North and South America combined.
—U.S. exports to the Asia-Pacific region account for more than 3 million American jobs.
—Foreign exchange reserves of the countries in the region total over $600 billion.
—Sixty percent of the world's economic growth over the next decade is expected in this region.
—Eight of the world's nine largest armed forces are located in or operate in the region.
—Five of seven U.S. defense treaties are with nations in the region. These commitments bind the U.S. legally and morally to the region.

The confluence of these factors inextricably links the U.S. with the nations of the Asia-Pacific region.

Rapid changes which are occurring throughout the region also challenge present and future U.S. security interests:

—Expanding commercial ties and market competition will increasingly affect our relationships within and without the region.
—Increasing regional energy demands, particularly in India, China, and Japan, will stress global energy supplies.
—Rapid industrialization, urbanization, and diminishing agrarian sectors pressure the region's states, domestically and internationally.
—As economies expand globally, there are corresponding increases in reliance on shipping lanes and vulnerability from sea-lane chokepoints.
—The propensity for rapid technical modernization of militaries increases as economies flourish and dual-use technologies become available and affordable.
—The region faces a potential proliferation of weapons of mass destruction.
—Historic animosities and enduring ethnic and ideological differences simmer among and within countries.
—U.S. relationships will be affected as "Asian values" shape the evolution of national, regional, and international institutions.

Engagement and presence of credible, combat-capable forces are key to safeguarding our national interests and coping with regional challenges and uncertainties. As Japanese Prime Minister Hashimoto stated during his January trip to ASEAN capitals, the most important factor for peace and stability in the region is "* * * the presence of the United States in Asia." Virtually all Asia-Pacific leaders agree with Prime Minister Hashimoto. They join in consensus with the leaders of our government that security, brokered primarily by U.S. military presence and engagement, underwrites the stable conditions upon which regional economic prosperity depends.

COOPERATIVE ENGAGEMENT IN PEACE, CRISIS, AND WAR

Pacific Command's strategic concept of Cooperative Engagement is designed to accomplish three major goals: In peacetime, shape the regional environment to render conflicts and crises less likely; in times of crisis, resolve specific situations on terms that advance our long-range interests; and in war, win quickly and decisively with minimum loss of life.

In Peace

We believe a strategy that protects the nation's interests without fighting is far more effective and less costly than a strategy based on fighting. As a result, the preponderance of our activities today are aimed at conflict prevention—making conflicts and crises in the region less likely by shaping the security environment. These peacetime activities are designed to accomplish a range of subordinate objectives including: Sustaining regional peace and stability; deterring the use of force and encouraging peaceful resolution to conflicts; fulfilling security treaties and agreements; ensuring freedom of navigation on the sea and in the air; countering the proliferation of weapons of mass destruction; promoting security cooperation; and communicating U.S. interests and commitment.

We accomplish these peacetime objectives through activities in two general categories, engagement and preparedness. Engagement involves bilateral and multilat-

eral activities aimed at resolving security concerns in the region before they escalate to crisis or conflict, as well as demonstrating the steadfastness of U.S. commitment to the Asia-Pacific region. Engagement involves a wide range of activities including: multinational training exercises and operations, counterpart visits and exchanges at various levels, regional conferences and seminars.

Preparedness consists primarily of unilateral efforts to maintain readiness to respond to the full range of potential conflicts and crises in the region. Being prepared to respond is the best way to deter conflicts and crises. Preparedness activities include not only unit-level training, large-scale joint and combined exercises, but also prepositioning materiel, and surveillance of regional hot spots.

Successful engagement and preparedness require both presence and cooperation. Cooperation with our friends and allies is evidenced in our many bilateral arrangements. This cooperation is primarily bilateral and tailored for each relationship. Arrangements vary from long-standing treaty relationships with Japan, the Republic of Korea, the Philippines, Australia, and Thailand to nascent military-to-military relations with countries such as Mongolia. Multilateral military activities are slowly gaining wider appeal among regional countries as efficiencies are sought by all and confidence among militaries builds.

U.S. forward presence facilitates cooperation, increases responsiveness, promotes transparency, and provides more options to U.S. decision makers. Our forces in the area provide the foundation for the "shaping function" of our national strategy and are a critical component of the overall force structure determinations as they provide our ability to respond to crises. U.S. presence also is tangible evidence of our commitment to the region, the most visible form of which is the forward stationing of forces and families in East Asia. Other forms include adaptable rotational units and forces participating in specific training exercises and exchanges. Our forward-deployed force structure of about 100,000 troops is watched closely by regional players and is the metric for assessing U.S. commitment to the region.

In peace, our Cooperative Engagement strategy reduces the likelihood of conflict. The scope and depth of peacetime engagement activities are essential to continued U.S. success in the region. Our Security Assistance programs significantly contribute to regional security and our interests. These programs include defense sales—both Foreign Military Sales (FMS) and Direct Commercial Sales (DCS)—as well as Foreign Military Financing (FMF) and the International Military Education and Training (IMET) program. IMET is the best vehicle to expose and influence future political and military leaders to democratic principles. These peacetime engagement activities, in concert with our readiness and preparedness, reinforce security and prevent conflict in the Asia-Pacific region. Supplemental Security Assistance Program information is included at Annex D.

Crisis Response

Regardless of the effectiveness of our peacetime engagement activities, crises will occur. In PACOM we have developed a two-tiered command and control structure to employ resources efficiently and effectively in crises. Pre-designated commanders and their staffs are trained as Joint Task Force headquarters. In crisis, we augment them with a tailored cadre of joint warfighting specialists. These headquarters and forces from all services conduct periodic joint training and exercises to enhance the effectiveness and efficiency of this command and control concept. This structure is highly adaptable and is used in joint (multiservice) and combined (multinational) scenarios. As a result, we have several headquarters trained and ready to support a wide variety of Joint Task Force operations. This effort is essential to effective response to regional crises.

Within PACOM, where distance is always a challenge, our forward infrastructure is pivotal to rapid, robust crisis response. To that end, Guam, by virtue of its proximity to potential trouble spots and its U.S. territorial status, has special strategic importance. Our assets there should be maintained.

In the past year, several events validated our response capability across a spectrum of military operations. These events included the China/Taiwan confrontation last March, humanitarian operations in support of Kurdish refugees (Operation PACIFIC HAVEN) on Guam, Chinese migrants (Operation MARATHON PACIFIC), and disaster relief to Palau (Operation PACIFIC BRIDGE).

Warfighting

We can never lose sight of our raison d'être: to be able to fight and win our nation's wars. Should crisis response fail, we are prepared to fight and win, multilaterally if possible, or unilaterally if required. In circular, but valid logic, our credible capability and will to fight and win underpin our peacetime engagement success. Our ready forces—forward deployed, forward based and CONUS based—are pre-

pared to respond to crises across the spectrum of conflict. Realistic training combined with technologically superior equipment are essential to this capability.

HOW COOPERATIVE ENGAGEMENT IS WORKING: AN ASSESSMENT

Our Cooperative Engagement strategy is working well throughout the theater. The region is generally stable with increasing dialogue, transparency, and interdependence.

Japan.—Events of the last year reemphasized the importance of our bilateral security relationship with Japan. During the Tokyo Summit, the President Clinton—Prime Minister Hashimoto Joint Security Declaration reaffirmed the commitments of our two countries to enhanced security dialogue and specific bilateral cooperation. The Declaration also specifically called for the continuing forward presence of "about 100,000" U.S. military personnel in the region. Our two governments agreed to continue maintaining about the current level of U.S. troops in Japan. Japan will continue to provide an exceptional measure of Host Nation Support (approximately $5.1 billion per year.) Additionally, our two governments agreed to conduct a review of the 1978 Defense Guidelines. This ongoing review is likely to have far reaching implications for the U.S.-Japan relationship.

The April signing of the Acquisition and Cross Servicing Agreement (ACSA) with Japan is improving reciprocal logistics support, supplies, and services between us. The issuance of the Special Action Committee on Okinawa (SACO) Final Report in December marked the culmination of intense effort between our two countries in reducing the impact of U.S. military presence on Okinawa while ensuring that critical military capability is maintained. Full implementation of the final report, particularly those aspects related to the return of Futenma Marine Corps Air Station, will take time. We will remain engaged in this ongoing bilateral process to promote our long-term regional security strategy and our shared interests with Japan.

Korea.—A mutual beneficiary of the regional stability our presence has made possible, the Republic of Korea (ROK) is an emerging international economic power whose influence and partnership with us spreads well beyond the Pacific region. By contrast, North Korea's economy is in decline. Unfortunately, North Korea's military capabilities still present a real threat and the intentions of Kim Jong Il's regime are unpredictable. The September 1996 submarine incident is a clear example of the hostility. As we reaffirmed to the ROK at the October 1996 bilateral security meetings, the U.S. will continue to assist in deterring North Korean aggression through robust military and diplomatic cooperation. The physical presence of U.S. Forces in Korea, and PACOM's capability to quickly reinforce them remain the most important factors in deterring North Korean aggression. To help defray the U.S. cost of maintaining forces on the peninsula, the ROK has progressively increased its cost sharing contribution. The fiscal year 1996 ROK government contribution to the U.S. was $330 million. This is planned to increase by 10 percent per year in 1997 and 1998.

North Korea's decline runs counter to regional trends of interdependence, prosperity, and transparency. The North is in a downward spiral and collapse is widely predicted. However, timeline estimates vary because of the North's opaqueness, unpredictability, and record as a "survivalist" nation. While change in the next decade seems likely, even this estimate is the subject of debate. Our near-term concern is North Korea's ability to lash out should survival of the regime become threatened. PACOM and U.S. Forces Korea are working to keep that from happening. For the longer term, our efforts are directed toward shaping and dealing with eventual reconciliation.

China.—China is a backdrop against which many regional activities are played. We share regional leaders' concern about China's military modernization and lack of transparency on security objectives. Recent air and maritime modernization programs are developing a limited force projection capability. In our estimate, it will be about one and one-half decades before China could field a military with a modernized, force projection capability. China's reticence to articulate a clear security strategy contributes to regional concerns. However, China's intent to improve their armed forces to play a stronger regional hand is manifest.

Because the United States and China share many common interests, we are attempting to engage China in a military-to-military relationship. Our contact with the People's Liberation Army (PLA) is important, not only to improve transparency, but also because of the PLA's influence on China's security policies. China realizes that peace and stability in the region benefit all countries.

We recognize how strongly China feels about Taiwan sovereignty. Likewise, Chinese leaders recognize from our response to events in the Taiwan Strait last spring that the U.S. is bound by our domestic law and is committed to peaceful resolution

of the issue. We do not currently see China as a threat based on capabilities and intentions. However, greater efforts on their part toward transparency and confidence building would allay concerns about China's military modernization and goals.

We see Hong Kong as a harbinger of China's ability to integrate into the global community as a responsible player. China's intended "one country, two systems" approach will be tested. Members of the Department of Defense and representatives of the Chinese Ministry of Foreign Affairs and PLA met in January to discuss technical details of post-reversion port calls by U.S. Navy ships. We look forward to concluding an agreement on post-reversion procedures in the next several months.

We have many opportunities to work with China on a host of matters affecting the region and the world and we must plan to work these issues for the long haul. By building mutual trust and confidence between our two militaries we will increase the likelihood of cooperation, stability, and peace in the region. We are better off now than a year ago. We are optimistic regarding China's participation as a responsible player in the global community. We have decades of steady work ahead to patiently engage China. The U.S. can best influence the situation from a position of strength and resolve, focusing on our interests while respecting China's.

Russia.—Russia is also a Pacific nation with legitimate national interests in the Asia-Pacific region. We are hopeful that an economic rebound will bolster Russia's fragile political reforms. Although readiness has deteriorated considerably since 1991, the Russian military retains significant influence, a credible nuclear capability, and potential for contributing to regional security.

While smaller than in the Soviet era, today's Russian Pacific Fleet is built around a core of modern combatants. The Russian Pacific Fleet demonstrates continued resolve to increase combat readiness despite funding shortfalls. In 1996, Russian Pacific Fleet submarines carried out missions of strategic deterrence, protection of strategic assets, regional security, and training for anti-surface warfare. Additionally, surface operations were active and included two major training exercises and numerous smaller training events. The Russian Navy maintains the capability to carry out "defense of the homeland" operations and retains the force structure for out-of-area submarine and surface combatant operations.

PACOM supports the Chairman, Joint Chiefs of Staff, Russia Program through engagement with the Far East Military District and Russian Pacific Fleet. It is in our interest to stay engaged with Russia, by continuing military-to-military exchanges, visits, exercises, and working groups. Our hope is that Russia will become a constructive participant in Asia-Pacific security and prosperity.

Australia.—Australia is a staunch treaty ally and one of our most reliable and innovative friends. The Joint Security Declaration signed at the July 1996 Australia-U.S. Ministerial and the November 1996 Presidential visit reaffirmed the significance and vitality of this relationship. Australia offers consistent and timely support to the United States. Prime Minister Howard publicly endorsed our actions following Operation DESERT STRIKE in Iraq and during our deployments in the Taiwan Strait last Spring.

Our military-to-military program reflects the strength of our overall relationship. The March 1997 bilateral training exercise TANDEM THRUST 97 is the largest exercise ever held in Australia and involves over 22,000 U.S. and Australian personnel. Additionally, Australia has offered the use of large training areas in the Northern Territory. This could provide excellent combined arms and live fire training for our forces, especially Navy and Marine Corps units transiting the region. Australia remains a solid friend and regional supporter which highly values its defense relationship with the United States.

India.—India is a rising regional player with the potential to assume a larger global role. By the middle of the next century, India will surpass China as the world's most populous nation. While Pakistan is India's near-term concern, its long-term security anxiety is clearly China. India is also seeking greater economic cooperation with Southeast Asian nations. India is definitely looking East.

We are concerned about developments in weapons of mass destruction and delivery means. Controlling proliferation is important to regional stability. We urge both India and Pakistan not to deploy ballistic missiles or to test nuclear devices.

In 1995, the United States government established formal military-to-military relations as part of the larger U.S.-India security dialogue. PACOM is the designated executor of this dialogue.

Thailand.—Under the treaty umbrella of the Manila Pact, the U.S.-Thai security relationship makes a critical contribution to regional security and stability. Our relationship with Thailand is a model for access and training. Our bilateral relationship is also a model for counter-drug programs with other nations in the region. We enjoy mutually beneficial interactions and expect this relationship to continue.

Philippines.—The 1951 Mutual Defense Treaty serves as the framework for our bilateral security relationship with the Philippines. We have maintained a healthy program of military-to-military activities during the five years after we left Subic Bay and Clark. However, our activities in the Philippines are currently "on hold" pending resolution of legal protection issues for U.S. forces. We seek conclusion of a Status of Forces Agreement (SOFA) or interim measures which provide adequate legal protection for our personnel prior to resumption of our military activities. Our relationship with the Philippine military is excellent and I look forward to a timely resolution of the SOFA issue.

Indonesia.—Indonesia's role in the Asia-Pacific region cannot be overstated. Its strategic location, large Muslim population, and well established regional involvement make closer relations with Indonesia a strategic requirement. The U.S.-Indonesian defense relationship is tied to the broad interests we share—stability, prosperity, and peaceful resolution of conflicts. Expanded-IMET is serving as a valuable tool to promote democratic values and to improve mutual cooperation and understanding. We look forward to continued progress in our relationship with Indonesia.

ASEAN.—The Association of Southeast Asian Nations includes seven countries—Brunei, Indonesia, Malaysia, Philippines, Singapore, Thailand, Vietnam. We are hopeful that this organization will assume a greater role in regional security affairs.

Increases in defense spending and military modernization by ASEAN nations reflect economic growth, rather than response to a perceived threat to the region in the immediate future. As domestic insurgencies have abated, emphasis has changed from counterinsurgency to improving conventional forces. Greater wealth prompts these nations to improve their ability to defend economic and security interests, including protection of territorial waters and sea and air lines of communications. Thus, ASEAN states are modernizing air and naval forces and developing ground forces with emphasis on rapid employment. Military modernization is balanced in the region and has not developed into an arms race.

The ASEAN Regional Forum (ARF), consisting of 20 countries, including the U.S. and the European Union, contributes to regional security. As the region's most productive multilateral forum, ARF is an outstanding venue to highlight and discuss security issues. However, we must be careful not to view ARF through western eyes—it is not a NATO. It is uniquely Asian, and reflects Asian methods of working to achieve consensus on issues. The Forum deserves our continued support and active participation. Examples of the Forum's growing importance are inter-sessional meetings scheduled in Beijing, Singapore, New Zealand and Kuala Lumpur to discuss confidence building, peacekeeping, and search and rescue operations.

Pacific Island Nations.—PACOM maintains U.S. presence throughout the Pacific island nations. Our goals are to maintain the good will and access which the U.S. has enjoyed through out these islands for the last 50 years. Under the Compacts of Free Association, PACOM maintains Civic Action Teams in Palau and the Federated States of Micronesia. These small teams provide vital construction and limited medical support to the governments of these developing nations.

Our humanitarian and disaster assistance programs provide support throughout the Asia-Pacific region when it is needed most. During 1996, PACOM deployed water purification teams to Palau when water lines supplying the major population center were destroyed in a bridge collapse. Operations such as this demonstrate not only our humanitarian concerns, but also U.S. commitment to the region.

BALANCING RESOURCES FOR OUR STRATEGY: PROGRAMS AND INITIATIVES

Engagement and preparedness require resourcing that balances service, joint and combined requirements. We are committed to good stewardship of taxpayer dollars through innovative use of technology to support joint force and service training. Increased use of simulation is one ingredient in achieving training economies. This approach can increase efficiency while reducing costs and personnel tempo, but cannot fully substitute for regular unit exercises. Funding to support training for tomorrow's military leaders is critically important to ensure future readiness. Training conducted with our allies is especially useful, as it increases their self sufficiency, demonstrates our capability, and enhances combined interoperability.

Harnessing technological advances will be a key factor in future warfare. Recapitalizing the current force and exploiting the potential for revolutionary improvements in sensor, mobility, targeting, precision munitions, and command and control is critical to future military readiness. Employing Advanced Concepts Technology Demonstrations (ACTD) allows us to realistically exercise new technologies. ACTD's help fill key needs faster by using commercially available technologies. ACTD's can reduce risk and shorten acquisition time.

Modernization for future readiness must be balanced with current and near-term readiness requirements. Technology is not a panacea. Over-reliance on technology can divert attention from successful low-tech solutions such as options provided by Special Operations Forces and procedural innovations such as the theater Joint Intelligence Center (JIC) concept. Moreover, technical solutions can amplify friendly force vulnerabilities—prime targets for asymmetric attack by adversaries.

Through participation in the Chairman's Joint Requirements and Oversight Council and the DOD budget process, Unified Commanders continue to have a voice in the decision process. This process helps to achieve the goals of the Goldwater-Nichols legislation and ensures a long-term joint perspective. Prudent risk in conducting efficient operations must be considered in balancing short-term operations with long-term modernization requirements.

Other important programs, activities, and initiatives which directly support our strategy and deserve continued budgetary and policy support are: Operations in Southeast Asia to attain the fullest possible accounting for missing service members; counter-drug operations in Southeast Asia and in the Eastern Pacific; Military Construction; Security Assistance Programs which support humanitarian demining assistance in Cambodia and Laos International Military Education and Training activities with key militaries in the region; and the Asia-Pacific Center for Security Studies.

Assessments of these "tools" and their impact on promoting U.S. security interests in the region are addressed in appropriate annexes.

People remain the nexus of all our efforts. I am constantly impressed with the spirit and dedication of service members whom I meet. We must continue to attract intelligent, dedicated, motivated young Americans. This requires rewarding opportunities and quality of life commensurate with the high demands we place on our forces. Quality of life issues must remain a budget priority. PACOM strongly supports the Secretary of Defense and Chairman, Joint Chiefs of Staff, on the following quality of life priorities:

—Maximum annual pay raises allowed by current law. The 3 percent pay raise and increase in dislocation allowance from 2 to 2.5 months are positive initiatives to improve quality of life. We must continue to ensure that military pay is attractive and competitive with the private sector as called for in the President's budget.

—Protection of retirement benefits. Maintaining a stable retirement system protected against inflation is an important career incentive.

—Adequate health care benefits. As we "right-size" the medical community, we must ensure we preserve an affordable, accessible health care system with emphasis on prevention of disease and efficient care. We should not allow privatizing of some services to become a reduction in the quality of care or a windfall for insurers.

—Continued funding of military family housing and bachelor enlisted quarters operation, maintenance, upgrades and privatization. The 4.6 percent increase in the Basic Allowance for Quarters continues progress toward the Congressional intent of 15 percent out-of-pocket housing expense. Applying the new VHA floor approved by Congress in the fiscal year 1997 defense authorization bill benefits our personnel living in high cost areas. Several areas in PACOM are among the most expensive areas in the world to live. A balanced replacement of government housing in PACOM is encouraging to our service members. We must continue to maintain living standards at an adequate level.

Quality of life includes workplaces and military communities free from discrimination and harassment of any kind and for any reason. Through command involvement, indoctrination and sustainment programs, we strive to maintain the highest standards of professional conduct.

Another core requirement is to make duty stations as safe as reasonably possible from terrorist and other criminal threats. Antiterrorism and force protection are priority activities in PACOM. Force protection requires focused intelligence to produce predictive threat information, as well as physical and procedural deterrent and protection measures. Our initial estimates for force protection enhancements include $93.28 million and 108 additional military personnel. We will continue to refine these estimates and will submit them to DOD for consideration and decision.

CONCLUSION—COOPERATIVE ENGAGEMENT WORKS

The security strategy in the Asia-Pacific region is working in our nation's interest. The region is at peace, but not conflict free. The prognosis is positive for peaceful resolution supplanting armed conflict as the mode for dispute resolution. Although security concerns such as the Korean Peninsula rightfully capture our attention and

resources, the region as a whole is secure and nations are able to focus on economic development. This stability and the resulting prosperity we share are underwritten primarily by the consistent engagement and presence of U.S. military forces. Our strategy of engagement and presence is the right solution for shaping an uncertain future.

We support the Quadrennial Defense Review process to determine a correct strategy, equipment, and mix of forces needed in the years ahead for the full spectrum of tasks we face. We are actively involved in this effort to develop an approach that balances readiness and modernization and capitalizes on our core strengths and comparative advantages. Maintaining the capabilities of our forward-deployed, forward based, and CONUS forces is essential to our strategy's success in peace, crisis, and war. Forward-deployed forces of about 100,000 military personnel are about right to safeguard our commitment to the region.

Visits to the region by Administration and Congressional delegations reinforce mutual understanding and enhance the perception of our nation's commitment to the region. The continued support by Congress and the American people is vital and appreciated. With your support and the cooperation of our allies and friends, the United States will continue successfully advancing our national interests as an active partner and beneficiary in the Asia-Pacific community.

ANNEX A.—PACOM COUNTER-DRUG PROGRAM

Illegal drugs pose a serious threat to the U.S. and the Asia-Pacific nations. Narcotics not only drain the strength and health of individual users, but that of nations as well. Drug production and trafficking are a multi-billion dollar business which pays no taxes. Drug trafficking insidiously encourages the corruption of government officials, addicts populations and destroys the basic fabric of society.

PACOM's counter-drug program supports the President's National Drug Control Strategy, specifically Presidential Goals 4 and 5. (Goal 4: Shield America's air, land, and sea frontiers from the drug threat. Goal 5: Break foreign and domestic drug sources of supply.) With the help of many nations throughout the Asia-Pacific region, PACOM continues to fight the scourge of illegal drug use and trafficking. PACOM's counter-drug standing joint task force, Joint Interagency Task Force West (JIATF West), has steadily increased its counter-drug support to many countries throughout the Pacific. By directly supporting greater regional cooperation and counter-drug efforts, PACOM helps regional governments reduce the amount of illegal drugs produced, consumed, and transported in the Asia-Pacific area. This support includes cooperating closely with U.S. and foreign law enforcement agencies, training civil counter-drug police, sharing intelligence, and providing DOD expertise in command and control activities. We intend to continue our counter-drug activities throughout Southeast Asia over the next several years.

While PACOM is primarily focused upon heroin and Southeast Asia, we are working closely with USCINCSOUTH to combat the flow of cocaine in the eastern Pacific. Since the beginning of 1997, JIATF West's Eastern Pacific Campaign Plan has netted over 3.3 tons of cocaine.

ANNEX B.—PRISONER OF WAR/MISSING IN ACTION ACTIVITIES

Joint Task Force-Full Accounting (JTF-FA) continues a high OPTEMPO in Vietnam, Laos, and Cambodia with the goal of "fullest possible accounting" for missing service members in Southeast Asia. During the past year, JTF-FA completed 325 field investigations and 68 excavations. JTF-FA also sent a two-person investigation element to China in October 1996 to interview witnesses concerning losses in Vietnam and Hainan Island. These efforts resulted in the repatriation of 35 sets of remains associated with unaccounted for Americans. Vietnamese cooperation on the President's four key measures of progress continues to be good, and Lao cooperation is steadily improving. JTF-FA expects the current pace of operations to continue through 1999 in Vietnam and 2000 in Laos, followed by limited operations in both countries through 2001. Of course, these dates may change as new information comes to light.

JTF-FA maintains forward detachments in Bangkok, Hanoi, Vientiane, and Phnom Penh. During fiscal year 1997, there are five field activities scheduled in Vietnam, six in Laos, and one in Cambodia. These field activities last about 30 days and involve as many as 100 U.S. personnel in Vietnam and 40 U.S. personnel in Laos.

Cooperation from host nations continues to be good. For example, Vietnam continues to publicize a remains amnesty program in an attempt to get private citizens

to turn over remains they may be holding. Trilateral cooperation continues to progress. Vietnamese witnesses now routinely enter Laos to assist JTF-FA investigations, and the first use of a Vietnamese witness in Cambodia occurred in February 1997. Cambodia and Vietnam have undertaken a bilateral initiative to investigate cases along the Cambodia-Vietnam border. In Laos, archival research continues and the Lao government recently agreed to expand the program to include archival holdings in key provinces.

JTF-FA's current caseload, which includes historically-based projections for reinvestigations and new excavations, consists of 299 case investigations—244 in Vietnam, 44 in Laos, and 11 in Cambodia. There are 107 excavations or recovery operations to complete—39 in Vietnam, 66 in Laos, and 2 in Cambodia.

ANNEX C.—MILITARY CONSTRUCTION

Our top military construction priorities are warfighting infrastructure and quality of life projects. The infrastructure in the Pacific is our platform for launching our Cooperative Engagement strategy in peace, crisis, and war. Over the last several years we have significantly reduced our military base footprint in the Pacific. Remaining vital infrastructure must be properly maintained and renewed with new facilities when mission or economics require that capital investment. The fiscal year 1998 USPACOM MILCON program contains 45 projects totaling $559 million (Table 1).

TABLE 1.—*Fiscal year 1998 USPACOM military construction*

	Dollars in millions
Warfighting Infrastructure:	
Construct Three 83,000 BBL Tanks, Elmendorf AFB, AK	$21.7
A–10 Squadron Operations/AMU, Eielson AFB, AK	7.8
Upgrade POL System, Indian Mountain, AK	2.0
Replace POL Pipeline, Andersen AFB, Guam	16.4
Aeromedical Clinic, Andersen AFB, Guam	3.7
Fire Protection System Improvements, NCTAMS, Guam	4.1
Oily Waste Collection Treatment System, Pearl Harbor, HI	25.0
Renovate Existing DFAS Facility, Pearl Harbor, HI	10.0
Fire Training Facility, Kunsan AB, Korea	2.0
Environmental Prev Med Unit Add./Alt., San Diego, CA	2.1
Waterfront Operations Support Facility, Coronado, CA	7.5
Aircraft Maintenance Training Facility, Camp Pendleton, CA	4.3
Highbay Warehouse (Phase II), Camp Pendleton, CA	6.9
Emergency Spill Control, Camp Pendleton, CA	2.8
River Field Control San Margar, Camp Pendleton, CA	21.9
Bridge Replacement, Camp Pendleton, CA	5.6
Comm/Electronics Maint and Storage Facility, 29 Palms, CA	3.8
Ordnance Facility, El Centro NAF, CA	11.0
Maintenance Support Facility, North Island, NAS	15.3
Visual System Bldg. Addition, North Island, NAS	1.4
Seawall Upgrade, North Island, NAS	2.9
Tank Trail Erosion Mitigation, Yakima, WA	2.0
Medical/Dental Clinic, Everett, WA	7.5
Electronic Warfare Training Facility, Whidbey Island, WA	1.1
Quality of Life:	
Improve 82 Units Family Housing, Elmendorf AFB, AK	12.5
Fitness Center Addition and Renovation, Wahiawa, HI	3.9
Bachelor Quarters, MCBH, HI	19.0
Replace 132 Units Family Housing, Schofield, HI	27.0
Whole Barracks Complex Renewal, Schofield, HI	44.0
Improve 123 Units Family Housing, Hickam AFB, HI	23.8
Whole Barracks Complex Renewal:	
Camp Red Cloud, Korea	23.6
Camp Stanley, Korea	7.0
Camp Castle, Korea	8.4
Camp Humphreys, Korea	32.0
Dining Facility, Camp Casey, Korea	5.1
Dormitory:	
Kunsan AB, Korea	8.3
Osan AB, Korea	11.1

	Dollars in millions
Bachelor Enlisted Quarters, Camp Pendleton, CA	12.0
Family Housing 171 Units, Camp Pendleton, CA	22.7
Enlisted Dining Facility, Miramar, CA	8.7
Family Housing 166 Units, Miramar, CA	29.1
Family Housing Replacement:	
29 Palms, CA	24.1
Lemoore NAS, CA	14.8
Whole Barracks Complex Renewal, Fort Lewis, WA	29.0
Child Development Center, NSY Puget Sound, WA	4.4

The Host Nation Funded Construction (HNFC) program is an excellent example of burden sharing by Japan and Korea. Our investment in this program is only 1.6 percent of the approximately $1.1 billion spent by the host nations. However, the Army's role as the executive agent for construction in Japan and Korea is critical to provide quality facilities. The Government of Japan (GOJ) provides approximately $1 billion in construction each year under the Facilities Improvement Program (FIP). The GOJ does not pay for U.S. government quality assurance and criteria package development. The cost for Special Action Committee Okinawa (SACO) related construction is estimated to be $2.5 million in fiscal year 1998. This funding requirement will increase during the following 4 years. Without the additional funding, the FIP will be affected as resources will have to be diverted to support SACO construction requirements. As soon as final costs can be determined PACOM will coordinate through DOD to ensure requirements are adequately funded.

The Republic of Korea has proved an excellent burden sharing partner in the effort to improve our facilities. Under the November 1995 Special Measures Agreement, Korea will increase its $100 million annual contribution to Host Nation Construction by 10 percent each year for the next two years. Unfortunately, our barracks in Korea are the worst in the military, and this contribution will not be enough to meet requirements. We need to do our share, and I request your support for $97 million for fiscal year 1998 for six barracks projects and a dining facility project.

Elsewhere, we continue to improve housing for our families. Service members and their families are gratified by the completion of replacement housing and housing improvements. This is a significant factor in retention of highly skilled career personnel. Most of the construction budget for fiscal year 1998 is dedicated to improving family housing and barracks in Alaska, Hawaii, California and Washington.

Our en route infrastructure is reaching the end of its service life, particularly aging POL systems. Many facilities constructed in the 1940–1950 time frame need major repair or replacement. Real property maintenance accounts for essential facility repairs are "must pay" costs that continue to escalate. Readiness is degraded by hollow infrastructure when facilities fall into disrepair, or when we must shift funds to perform expensive, incremental or emergency maintenance on those facilities.

ANNEX D.—SECURITY ASSISTANCE PROGRAM

The Pacific Command strongly endorses a robust and responsible Security Assistance program. This program continues to play a key role in supporting our regional engagement strategy. USPACOM fiscal year 1996 Foreign Military Sales were over $3 billion while Direct Commercial Sales were over $1 billion. In fiscal year 1996 two countries in USPACOM received Foreign Military Financing grant funds for demining: Cambodia ($1 million in support of demining activities and another $1 million of unrestricted grants) and Laos ($500,000 for demining). This humanitarian and non-lethal assistance warrants continued support.

IMET is one of our most cost effective activities promoting peace, security, democracy and interoperability. Our IMET program objectives are to gain country access, influence future leaders, and improve civilian control of the military. To ensure USPACOM and host country objectives are achieved, a robust and stable IMET program is a must for all eligible countries.

ANNEX E.—ASIA-PACIFIC CENTER FOR SECURITY STUDIES

The Asia-Pacific Center for Security Studies (APCSS) plays an important role in our theater strategy. In only its second year, the Center is expanding the linkages and common frames of reference vital to fostering cooperative approaches to security in the Asia-Pacific region. The Center's conferences focus on today's leaders, while

its academic program focuses on tomorrow's leaders. The first 12-week security studies course in the Center's College of Security Studies (September 23 to December 13, 1996) brought together 23 students from 12 nations. The second course started on March 3. The seven conferences conducted to date by the APCSS provided superb venues for interaction between key leaders from 35 Asia-Pacific nations. APCSS is an excellent investment in regional security. We are extremely optimistic about its contributions and future possibilities.

The following provides a brief description of the key components of the APCSS:

College of Security Studies.—As the primary component of the Center, future leaders from the region study past and present security issues and seek to identify potential security problems, the roles and missions of the military, and how governments shape their military forces to meet perceived threats. By 1998, the College will expand to three 12-week sessions per year with 75 to 100 participants per session. International participants will compose about 75 percent of each class. As one participant of the inaugural class stated, "The U.S. is uniquely placed in taking this lead, which is without a doubt, both timely and important."

Conference and Research Center.—The six to eight conferences per year will be tailored to reflect specific issues such as "Asia-Pacific security in the 21st century." The international research staff contributes to defining relevant conference topics, identifying leading experts for presentations, and recommending appropriate participants. The research staff also provides conference results to appropriate audiences.

ENGAGEMENT WITH RUSSIA

Senator STEVENS. Thank you very much, Admiral. We are delighted to be able to be back with you again.

You know, in Khabarovsk we met a General Kuroedov, the deputy commander of the Russian Far East Military District. We talked about many things including the IMET program. They remarked that none of their people have ever been involved in IMET, but we sensed that they really would welcome that. What would you think about that?

Admiral PRUEHER. Well, sir, at present European Command manages IMET with Russia. We would like very much to work IMET with the Russians. We would welcome their participation in our schools and participation in the IMET program.

Senator STEVENS. Is there a chance that they might participate in your program here in Hawaii?

Admiral PRUEHER. Yes, sir; in fact, we have two Russians here now in the current class. One came from the Russian Pacific Fleet, Russian Far East Military District, and one from the Russian General Staff Academy in Moscow. We have also invited the Russians to send two personnel to the next class at the Asia-Pacific Center.

I will work with General Chechevatov and see if we can influence it so we can continue to get people from the Far East Military District, more of them if possible.

Senator STEVENS. We missed the opportunity to meet with him. We were told he was in Moscow at the time and may be being considered for a higher position in their military.

But you know, it was apparent that both you and Adm. Archie Clemens have developed a very close relationship with the military in the Russian Far East, and we certainly commend you for that. They commented on both of you and the programs that they have participated in so far.

But as you mentioned just now, they indicated that Moscow sort of forgets about the Russian Far East and that very little, if any, of the Nunn-Lugar moneys have been spent there in their part of Russia. We have some considerable interest in the disposal of the nuclear powerplants and the submarines to be decommissioned,

and I personally discussed that with the admiral there, Admiral Kuroedov.

What would you think if we tried to earmark some funds for you as the Commander of the Pacific Command to work with them to work out a cooperative program to assure that the disposal of those nuclear powerplants would not impact the future of the North Pacific?

Admiral PRUEHER. Mr. Chairman, I think if funds were earmarked in that way, we would make sure they were spent well, and I think that would be helpful. You mentioned an earlier point about Moscow and the Far East Military District not necessarily coordinating. It is something that we—I don't think we have that problem to the degree that they do, but we can understand. I think we could work well with the Far East Military District.

Senator STEVENS. Alaskans sometimes wonder whether Washington understands the difference between Alaska and Siberia. There is no question about that.

I just have one last comment. I don't think it is fair to question you about it, but you have about one-half of the world in your command in terms of area of responsibility, and you get about 10 percent of the defense budget. So as a practical matter, the problems that the Russian commanders commented on, you could easily comment on. I know that—that is in terms of being left out when it comes to dividing the money.

But this committee tries its best to see to it that your projects do get funding. We would like to work out some way that there was more, really, thinking about the future in terms of allocating costs out here. The future of trade, the future of our relations with the world, the future of potential conflicts are primarily in the area of the Pacific Command, and I do hope we can find some better way to allocate funds for your use.

FORWARD PRESENCE AND REGIONAL STABILITY

Senator Inouye.

Senator INOUYE. Thank you very much, Mr. Chairman. A few months after the U.S. military departure from Subic Bay, it was suggested to the committee that a special trip be taken to the Pacific rim nations. Senator Stevens and I went on a prolonged trip visiting the capitals of countries such as Australia, Malaysia, Indonesia, Thailand, Singapore, the Philippines, South Korea, Taiwan, Beijing, and Tokyo.

And the one question we asked was, Do you want a forward military presence of the United States in this part of the world? And their response was rather enlightening because every country, in its own way, responded that Americans were welcomed, Americans were necessary. Some countries described our forward military presence as guarantors of peace or guarantors of stability.

We are presently at peace in the region and as a result, for every jumbo jet that flies across the Atlantic, there are four of them flying across the Pacific. The dollar value of our trade with the Pacific rim is more than double that of Europe.

So my question may have an obvious answer, but, for example, what would happen to the Spratly Islands if we were not there?

Admiral PRUEHER. The premise certainly of the importance of the United States in the area is reemphasized everywhere I go by every political and military leader in the area, appreciating and increasingly stating in public support for the U.S. presence in the region.

The Spratlys in the South China Sea are a very important part of what is going on. One thing that is gratifying, I think, is the way the ASEAN nations have banded together to work the Spratly issues as an offset to some of China's description about what it would like to do in establishing areas of influence in the South China Sea.

But the United States presence and our commitment to freedom of navigation in the South China Sea and around the Spratlys and the Paracels has been vital, and our presence there is a backup to what the other nations are able to do with their militaries. It has ensured the stability, has ensured the free flow of traffic of about 400 ships a day that come through the South China Sea plying the routes upward to Japan and to South Korea and to the points to the north, sir.

Senator INOUYE. Then your answer would include the Malacca Straits?

Admiral PRUEHER. The Malacca Straits as well, sir.

Senator INOUYE. What would happen in the Korean Peninsula if we were not there?

Admiral PRUEHER. It is difficult for me to say exactly what would happen if we were not there, but what has happened over the last 46 years has been a gradual shift from a very powerful North Korea and a fragile South Korea to a democratic Republic of Korea, and as been described, a much weakened bastion of hardcore communism in North Korea, which is an economic failure.

The stability on the Korean Peninsula has been brokered by our presence, not only physically with our 37,000 troops on the Korean Peninsula but also by the presence of the 7th Fleet, the III MEF, and the 5th and the 7th Air Forces in the region. So we have created a situation where—it was very tense, we have had an armistice, and we have not had conflict in that area. Hopefully, as we look toward the future, given the dire situation in the North, we can prevent a conflict from happening and create a peaceful solution to what is going on in the peninsula, sir.

Senator INOUYE. During the past years many political and military analysts and experts have suggested that if we were to leave that area, we would see the beginning of a horrendous arms race.

For example, they suggest that Japan, who at this moment because of our presence doesn't feel it necessary to have a huge military contingent, may find itself requiring a military. And if that should happen, the Chinese would get excited and the Filipinos would get excited. Is that assessment credible?

Admiral PRUEHER. Yes, sir, I believe it is. In trying to think about this issue, one of the worst notions most students, academics, and politicians can think about is if the U.S. presence were withdrawn from the Asia-Pacific region, what that might lead to, particularly as nations are more economically capable of modernizing their militaries.

We create a balance in an area where there have been historic animosities, and our presence creates a balance and is very essential to be the flywheel, as it would, to create the balance of power in the Asia-Pacific region, which again creates security, creates the stability and the conditions for economic prosperity which we are enjoying right now, sir.

Senator INOUYE. Thank you very much, sir.

Admiral PRUEHER. Thank you, Senator.

Senator STEVENS. Senator Cochran.

Senator COCHRAN. Thank you, Mr. Chairman. First of all, I want to acknowledge the impressive leadership that you and Senator Inouye are providing for our committee, particularly in coming out to this region and giving us a chance to personally observe and inspect the situation and try to formulate some ideas about what this means in terms of our committee's responsibility to provide funds for the security of this region.

Senator Inouye very carefully but accurately and graphically described what we saw when we were in North Korea. It is a sad sight and it is disconcerting, and I might add dangerous. My impression was that those with whom we met are asking the United States for food aid and at the same time blaming us for their economic problems rather than acknowledging the mistakes and failures of their own regime. Our country and others, especially South Korea and Japan, are being made the scapegoats for the hardships now being suffered by the people of North Korea.

KOREAN PENINSULA

Nobody can really be sure what this means in terms of a military threat to our forces that are deployed in South Korea, but I can tell you that it worries me. And I am concerned about whether or not the budget request submitted by the administration and now under review by our committee is sufficient to provide the funds to meet that threat.

The Admiral has already talked about the need to modernize, to look down the road at the future and what our needs will be then as well as now but I am concerned about now as well as then.

I wonder, Admiral, in that context, if you can tell us what your impression is of the situation and whether or not I may be overstating it. But it seems to me that our troops who are deployed in the Korean area are in a more dangerous situation than they have been in some time. Is that your assessment as well?

Admiral PRUEHER. Sir, I think the tensions fluctuate between South Korea and North Korea. Our troops on the front line work there for 1 year at a time, and they work 365 days of that year with very little time off. I think you got a chance to see the 2d Infantry Division there, and they are working very hard. This 1-year tour is called a hardship tour. I think you also saw their morale is pretty high. They are committed to do what they do. They feel like it is worthwhile.

And here are some conditions less good than we would like them to be for working that hard. I think they are physically not under more danger right now than they have been in the past, but we are watching very carefully with the major military exercise, and the conditions you all saw in North Korea. We are hoping that by reso-

lutely standing arm-in-arm with our ROK allies in Korea, we can create a situation in which the North will not see it worth their while to lash out. And also we need diplomatically to handle the situation delicately so we don't corner them so they feel that they do need to lash out.

CHINA

Senator COCHRAN. One of the things I remember about the Korean War was that China was very much involved on behalf of the North, working closely with the North, fighting side by side with North Koreans in that war.

Do you see any relevance to that historic relationship to the fact that in China we are seeing a buildup and modernization of their military forces including a navy that is making port calls all around the Pacific region? Is China posing a new threat militarily to the United States now?

Admiral PRUEHER. Senator Cochran, I would not characterize China as a new threat. I think with their increased economy, certainly in their southern provinces, they are putting more and more resources and modernizing primarily their air force and their navy. Their intent is strong to modernize their air force and their navy to be able to certainly be a regional power and to impact events in the world.

From my military assessment, China is not a threat to the United States. And for reasons I can go into a little bit, I don't think they will pose a traditional power projection threat, except maybe right around their borders, for 1½ decades. They have issues of training. Their conscript force does not get trained well enough to work with very modern technology.

They are trying to work on tactics. And they are acquiring modern gear, but they are quite a ways away from that. I do not want to belittle their intent to modernize, it is just that there is a long way to go for China right now, sir.

Senator COCHRAN. I think you have one of the most important commands that our military can offer one individual. This is a region of the world that is growing in importance economically and militarily. There are things happening here, changes occurring which attract our attention and concern. It seems to me that we do need to emphasize the importance through the process of appropriation.

The bills that are drafted and reported by this committee not only carry out the policies of our Government, but in many cases, particularly in the area of national security and defense, set those policies. So this makes our hearing today all the more important, particularly in the context in which we find ourselves today with the activities and concerns that we have seen on our trip to this part of the world.

We appreciate your being available to us and helping us understand what this means in dollars and cents terms, and what we ought to be on the lookout for in the future. Thank you very much, Admiral.

Admiral PRUEHER. Thank you, Senator Cochran.

Senator STEVENS. Senator Domenici.

Senator DOMENICI. Thank you very much, Mr. Chairman. I too want to thank you and Senator Inouye for your leadership. I wish that many more U.S. Senators could see what we have seen.

NORTH KOREA

It is a very strange environment to see a part of the Soviet Union, which less than a decade ago was communistic, free. Their political leaders, incidentally many of whom we met with, are very, very proud of the fact that they are free. They are also very, very proud, so that when you suggest ways of helping them, they aren't too sure they like the word "help."

When you suggest, as some of us did, that their central government is terribly, terribly lackadaisical about changing their laws so that free enterprise can succeed, they readily acknowledge it, but in some strange sort of pride-filled way, they say, "We will work it out."

The anomaly of all of this is that they went from communism to freedom and allegedly a capitalist economic system and have not changed their laws with reference to capital, profits, the kinds of things without which a free enterprise system will not work. It was amazing to me to see how well informed their local leadership and local dumas and their local governors were in that regard, openly stating how bad their laws were in preventing business successes.

And then to go to North Korea you see a country which has not abandoned the communistic philosophy but has improvised upon it to where it is probably worse than the worst of Soviet communism in terms of the status of their people.

It is amazing to me to listen to them speak because I would think if I were in your shoes here and those close to Korea, I would really be wondering whether they believe what they say, because they say so many ridiculous, ludicrous things as part of their approach to the region and to America and to South Korea that one just wonders if they believe it. If they believe it, things are worse than we think. And my guess is that they are not as open as the Soviet Union was before it fell, and thus, they may believe more than the Soviet Union believed of its status.

To watch a starving country and a country with hardly enough energy to move food supplies in serious disrepair and to have this monstrous total mobilization, Admiral, which we were right in the middle of, was something to behold. I cannot imagine what goes through their military leaders' minds in pulling such an event off in the midst of deprivation. But it looks as sincere as anything that you could imagine.

I, for one, am very proud of the relationship with South Korea, even though they have their problems. I hope we are ready to live up to our commitments to them. And when we say things about what we will do, I am hoping we can believe what we say. Can we deliver what we have indicated we will deliver in the case if these North Koreans do something as foolish as to invade South Korea?

Admiral PRUEHER. Yes, sir, we can deliver what we say we will deliver. Certainly our equipment, our provisions, and our infrastructure are set to develop to support two major regional contingencies, one in Southwest Asia, one in Korea. If they both occurred concurrently, our time line for providing General Tilelli in [deleted]

the assets he needs to work his war plan, his [deleted] is a little slower but we can meet it on a satisfactory level, sir.

Senator DOMENICI. So when they are told what will happen to them, it is your opinion that we can make that happen?

Admiral PRUEHER. There is no question that we would prevail if North Korea tried to invade South Korea. No question, sir.

Senator DOMENICI. But you understand most Americans don't as of now understand that North Korea could inflict millions and millions of——

Admiral PRUEHER. Yes, sir; if they did, it would be a bloody event.

Senator DOMENICI. Because Seoul is within their artillery range?

Admiral PRUEHER. Yes; that is correct. We estimate in the hundreds of thousands of casualties of both military and civilian in South Korea if they should invade, even though we would prevail.

Senator DOMENICI. My own observation, for what it is worth, is that all the hot spots you have under your command and your concern, and there are some, China is an evolving monstrous, big country that we have to watch out for, but I think the most dangerous one is Korea at this point. Would you agree with that?

Admiral PRUEHER. Yes, sir; I certainly agree. The situation in Korea is our most volatile flash point.

QUALITY OF LIFE

Senator DOMENICI. Let me change the subject for just two questions. In your command, how many of the men and women that you command are members of a family? How many are married with dependents or at least married in a family unit, what percentage?

Admiral PRUEHER. About 60 percent.

Senator DOMENICI. What is the status of families under your control compared to the American mainland? Are there more divorces, less divorces? Are there more cases of abuse of spouse and children or less, or do you keep tabs on those kinds of things?

Admiral PRUEHER. We keep tab on it but I will have to provide the comparative answer for the record, sir, but we watch very carefully the conditions in families and abuse cases. I think as people get stretched financially, as they get stretched from being away from home and some of the emotional stretches there, those cases tend to rise a little bit. We watch them very carefully, and there have been isolated pockets of increase, but there is not a trend increase in that type of issue.

[The information follows:]

There are no statistics available for divorce rates.

The Department of Defense is in the process of developing a comprehensive data base for Family Advocacy (child abuse and neglect and spouse abuse) cases. A working document among the Office of the Assistant Secretary of Defense (OASD) for Family Policy, Support and Services (OFPS&S), the Defense Manpower Data Center (DMDC) and the Military Services Family Advocacy Program, Central Registries, which describes the guidelines, requirements and procedures for data collection, analysis and distribution has been implemented. Pacific region relevant data has been submitted to the Department of Defense by the military services. Retrieval of Pacific Command specific data is not yet possible. Action to make such retrieval possible is on-going.

We do have good data on child abuse and neglect from the State of Hawaii. In 1981, the military represented 16 percent of the population and accounted for 27 percent of the child abuse and neglect reports. Our latest figures for 1995 show the

military population at approximately 11 percent of the population, while the child abuse and neglect reports have dropped to slightly over 4 percent of the state total.

This significant drop in child abuse and neglect cases is in no small way attributed to the success of prevention programs such as the "A Solid Parenting Experience Through Community Teaching and Support" (ASPECTS), a Department of Defense funded community health nursing program at Tripler Medical Center serving the entire military population in Hawaii.

Admiral PRUEHER. We have, owing to a lot of work that this committee has done in providing funds for housing, the base housing for people in overseas locations has improved a great deal. It has improved here in Hawaii. It has improved throughout our AOR, and so some of these stresses are abating to some extent. But the deployments, as we have our people forward deployed more and they are away from home more, do create stresses on the family, sir.

Senator DOMENICI. It is my opinion when we went to an All-Volunteer Army that we made, at first, a tacit commitment, and now it is obvious that it is an explicit commitment, that we would have to be supplying a standard of living that supported family life because our goal is to have them members for long periods of time.

Are we adequately supplying you with the resources to be good stewards of these family relationships with reference to what you are able to provide them?

Admiral PRUEHER. I think we are on track to do that, sir. From the time 30 years ago, 25 years ago when about 30 percent of our force was married, about, roughly one-third, to now about 60 percent, the situation has changed. And commensurately, we have increased the amount of funds spent for family issues and facilities, base facilities, and trying to care for the families of our troops. So it is working, it is on track to work well. We need to spend these resources very carefully as well, sir.

Senator DOMENICI. Thank you very much, Mr. Chairman, and thank you, Admiral.

Admiral PRUEHER. Thank you, sir.

Senator STEVENS. Senator Roberts.

Senator ROBERTS. Thank you, Mr. Chairman. I am going to date myself and refer to an old Johnny Mercer tune called "Accentuate the Positive, Eliminate the Negative, Don't Mess with Mr. In Between," and I would say that the men and women in uniform under your command are the folks that certainly help us with in between.

But while I share the views of my distinguished colleagues, I would like to try to accentuate the positive as a result of Chairman Stevens' and Senator Inouye's very fine efforts.

NORTH KOREA

I just jotted down some thoughts here. As a result of our trip to North Korea, and for that matter the Russian Far East, I think we have made some real progress in convincing the North Koreans that they should take part in the four-party talks; at least that was my impression. After their obligatory statements in regards to ideology and commitment and the fact that their government, their way of life is not going to collapse, I think Chairman Stevens was able to set the parameters of the discussion, to a degree we made some progress, so that's good.

I think in regards to food aid, it is my impression at least, that they did back off on making food aid a precondition to the four-party talks. They simply ended up saying something to the extent of a good faith effort. And I would point out that the American people and the Congress have always responded in regards to aid in a humanitarian nature. We have already committed $18 million. We will commit more in conjunction with our allies. And so I think we made some progress there.

I think we made some progress in regards to the light water reactor. I know that's very difficult. I know it's very tenuous. Senator Cochran was very firm in pointing out to the North Koreans some of the severe problems that remain, more especially in regards to inspection, but I detected at least they listened. Perhaps they didn't listen the first day to Senator Cochran, but he persevered. And I think if that occurs, you are going to have 1,000 experts or technicians from South Korea into North Korea. You let 1,000 people from South Korea into that land and it will expedite the situation where I think certainly the populace would become gradually aware of the real world, so that's a positive.

We are making some tenuous progress with the POW/MIA situation. And in regards to trade, which I think is the key to the long-term possible success of North Korea as to whether they succeed or not, I will tell you that at least the diplomatic folks that we dealt with can list every farm program over and above my knowledge of the farm programs, and I am the former chairman of the House Agriculture Committee. They know each and every program, and appealed to us in that regard.

Senator STEVENS. Let's take a station break for 1 minute and change the tapes.

Senator ROBERTS. We will be back with these and other news stories in just a moment, but first this message.

Which golden word of truth did you miss? I am on trade. Interestingly enough, I think the North Koreans are in a position where they would like to trade. And we were going over one particular situation, but they are learning that trading for a wheelbarrow full of IOU's doesn't work very well and so they are becoming educated to that. But I think there are some possibilities.

And I think I want to pay credit again to our chairman who over and over again told them that while we were the first delegation to be allowed in to visit that very difficult country, that we could not negotiate. And I think they are learning about our system of government, but that we would make every effort to try to improve the situation.

Well, that is my hope, but as you can tell from the testimony of my colleagues, it is a real flash point. You, sir, have already said our commitment of 37,000 United States troops plus our solidarity with the Republic of Korea and the United Nations partners mitigate against a situation, but you also warned about their ability to lash out. And while the diplomatic folks, at least under my impression, were under considerable pressure, the military and the theocracy that exists over there is into regime preservation at all costs, so we must be on the alert, and I commend you for doing that job.

UNITED STATES INTERESTS IN THE PACIFIC

There is one other thing that I would like to make as an observation, Mr. Chairman, and everybody else has asked the pertinent questions. The Admiral and I were having a discussion yesterday, and I don't think that foreign policy and defense policy is a very high blip on America's radar screen in terms of public attention, and I think it should be, because we are in a very tenuous situation, a very dangerous situation with North Korea.

I am from Kansas. Somehow or other that Kansas wheat farmer has to understand that when we passed a major reform of our farm legislation, we must rely on trade and exports, and that is across the board for our total economy. You, sir, have indicated that if you have security, you have stability. If you have stability, you have economic opportunity and growth. I can tell you that if a Korean conflict will break out, that trade will be interrupted to the entire Asia market, and the price of wheat at the Dodge City elevator won't be $4, it is going to be about $2.50, and we will spend about $20, $25 billion on farm program subsidies that we shouldn't be spending.

So the daily life and pocketbook of that particular cowboy in Dodge or wheat farmer in Dodge depends on the job that you do, and I think that is lost to a great degree on the American public, and I want to thank you in their behalf, even though they might really not know about the job that you are doing. But I think that is certainly far reaching with regards to the economy.

I have no further questions, Mr. Chairman. You are doing a hell of a job, Admiral, and we really appreciate it. Thank you.

ALASKA AND EXERCISES NORTHERN EDGE

Admiral PRUEHER. Thanks, Senator Roberts.

Senator STEVENS. Thank you very much, Senator Roberts. Admiral, before we went to Russia, we stopped by in Alaska to see Gen. Pat Gamble and Gen. Ken Simpson and the Northern Edge exercise was discussed. I wonder if you could tell us, have you had any reports on that exercise and its success this year? And is there any reason to believe that that is going to increase in its tempo and include other forces in years to come?

Admiral PRUEHER. The Northern Edge exercise we had this year was a tremendously successful exercise in terms of training value. And I have to tip my hat to General Gamble and General Simpson up there for putting together such a good one because the training areas are among the best that we have. The few restrictions on training, owing to the area available, allow us to train to a degree which we cannot do in other places.

The Northern Edge exercise is an important piece of what we do. And as we look at our overall exercise program in trying to get the most we can for the dollar, we think Northern Edge will continue to be an important part. As you know, it is a little off the beaten track but for our Pacific forces, but when we look to the rest of the AOR back to the east where people really do the training to fight and win, the Northern Edge exercise is an important part, sir.

MISSILE DEFENSE

Senator STEVENS. Admiral, we will be going back now, and one of the basic problems we face as we look at the defense budget this year is prioritizing the national missile defense, theater missile defense, and the tactical missile defense concepts with all the other demands on us for funds in the military budget. We do handle that budget, and it is going to be a very contentious matter this year.

As I have said before, you command the largest area in the world that has real demands on you for defense. How high a priority should we give to these missile defense systems, theater defense, and national missile defense and the basic tactical missile defense concepts?

Admiral PRUEHER. Sir, if General Tilelli got an opportunity in Korea, he talked very much about how important theater missile defense was to him there on the peninsula. They live close to the flame, and it is a very high priority. It is a high priority for us as well.

With what looks like occurred in Helsinki with some of the restrictions on theater missile systems that would have been in place from the ABM Treaty we will be able to work them in a fuller way with the agreements made in the recent trip to Helsinki by the Secretary of Defense and General Shali. So this opens up the theater missile defense, in my opinion, to take an increasing role in what we need to be doing in the United States.

In my mind, national missile defense and theater missile defense are not necessarily completely exclusive in the areas that they can cover, though testing against certain types of missiles is the rub and that's still in the ABM Treaty. I think the theater missile defense should be a very high priority. We have several programs that have a lot of opportunity for payoff. Theater high altitude area defense [THAAD] is one, the Navy areawide and the Navy theaterwide systems are others. They have a lot of promise. I think theater missile defense should have a high priority for us because if we do theater missile defense well, we can move these assets around and take a big bite out of quite a few of our problems, not only in our AOR but also in our homeland defense.

UNITED STATES CARRIER HOMEPORTING IN JAPAN

Senator STEVENS. Gentlemen, any other questions?

Senator INOUYE. I have one.

Senator STEVENS. Senator Inouye.

Senator INOUYE. Admiral, of the few remaining aircraft carriers in operation all are nuclear powered, with the exception of a couple that are powered by diesel fuel, and those diesel-powered aircraft carriers will soon be decommissioned. The Japanese Government has indicated time and again that it will not permit nuclear-powered vessels to operate in their waters and be ported in their bases. What plans do we have at this moment for the forward presence of carriers?

Admiral PRUEHER. [Deleted.] And so the problem is not immediately upon us but it is coming.

So for our forward deployed, we gain a lot in terms of OPTEMPO with the ability to forward deploy a carrier. I think one of the

things that has been discussed in the "Quadrennial Defense Review" is the possibility of forward deploying a carrier. The only other one we have done historically, other than in Japan, was we had a try in the 1970's in Greece where we forward deployed the *Forrestal* and it only worked for a couple of years. So right now I think we have no serious looks at forward deploying other carriers other than the one in Japan, [deleted].

Senator INOUYE. So we have no idea what the outcome will be at this moment?

Admiral PRUEHER. From those discussions?

Senator INOUYE. Yes.

Admiral PRUEHER. No, sir; not right now.

Senator INOUYE. Thank you, sir.

Senator STEVENS. Senator Cochran.

BURDENSHARING

Senator COCHRAN. Mr. Chairman, one other closing note on the Korea situation. One thing that we observed when we were in South Korea was that we have reached agreement with the South Korean Government to contribute more to defray the costs of maintaining our deployment in that region and providing for the collective defense.

Are you satisfied that that agreement reflects a fair balance of responsibility to pay for those costs? We note that your statement on page 12 and 13 specifically says that the government there is going to contribute $330 million in this fiscal year and there is a planned increase of 10 percent per year in 1997 and 1998.

Admiral PRUEHER. Yes, sir; what the South Korean Government is giving seems to be about right in their agreements to do those increases through 1998. It seems to be about the right amount for the proper balance for their defraying of our costs of being there, sir.

Senator COCHRAN. In the case of Japan, we notice that that allocation of responsibility has been such that there is a substantial reimbursement by Japan for our costs of deployments in that region. A lot of people, I think, back in the States don't realize the extent to which Japan is contributing to help defray those costs. What does that come to now in terms of dollars or percentage of the total costs?

Admiral PRUEHER. Japan contributes a great deal to the stability in the area. In terms of defraying the costs, they contribute about $5.1 billion a year, which is over 70 percent of the cost of our deployments in Japan.

In addition, related to Senator Inouye's question about forward-deployed forces, they allow us, by having forces deployed in Okinawa and on mainland Japan, a great efficiency in our deployment patterns which creates an additional savings which I cannot give you a dollar figure for. I am not a good enough economist to do that. But they also contribute in that manner to the defense and stability of the region.

Senator COCHRAN. Thank you very much, sir.

Senator STEVENS. Senator Domenici.

Senator DOMENICI. I have no further questions.

Senator STEVENS. Senator Roberts. Any last questions?

Senator ROBERTS. I just wanted to say that I am not an appropriator which means you don't have to pay much attention to me. But at any rate, I do serve on the Armed Services Committee and I want to bring you greetings from Senator Thurmond.

Admiral PRUEHER. I feel like a defendant here already, sir.

CODEL VISIT TO NORTHEAST ASIA

Senator ROBERTS. I did want to say a special greeting from Senator Thurmond, our distinguished chairman, and the ranking members, Senator Levin and Senator Warner, and others, for the outstanding job that you are doing.

I am also on the Intelligence Committee. I know you are—we are going through quite a meaningful dialog as we go through the QDR and all of that and trying to figure out where we are in regards to readiness and modernization and procurement and all the things that Senator Cochran has mentioned, and so we will do our level best.

But one thing that I would like to underscore again, and I know I am being repetitive and I know I am taking time, Mr. Chairman, is the positive effort that I think you have brought as a result of this delegation in our relationship with North Korea. Now, we have heard an awful lot about how they can lash out, and how we have got an angry and very hungry badger in a hole, and I understand that, but I think through your decorum and through your very careful negotiations, we have set a positive tone at least with the diplomatic folks.

I am concerned in regards to listening to the news and hearing the Vice President talk about "North Korea will fall," as you will recall, and they may well. But as you will recall, they said that, "We will not collapse," that "Our people are not mad at our leadership and the dear leader, they are mad at you because you are causing this," which is sort of their paranoia. And I think it would be well if the administration could have a consistent voice. We have Ambassador Richardson stressing the approach that we certainly tried to use a position of strength but trying to get them to negotiate, and we have other comments made that could be contrary to that.

I hope we can get that straightened out and I hope we can make some progress, and I think you've done a marvelous job in that respect.

Senator DOMENICI. Mr. Chairman?

Senator STEVENS. Yes, Senator.

Senator DOMENICI. I just wanted to mention, Admiral, when we were in Vladivostok talking to the admiral whose name is difficult for me to pronounce.

Admiral PRUEHER. Kuroedov.

Senator DOMENICI. Kuroedov, I asked him whether they would be willing to accept nuclear experts and scientists from our national laboratories if you were going to engage in an effort to dismantle and protect the environment in a maximum manner, and he said openly that he would welcome them. And we will look into that in Washington, but I think they are a great asset and I just wanted to call that response to your attention.

Admiral PRUEHER. Thank you very much, sir. I think our conversations with them have been direct, and we have addressed issues. And I think they have confidence in us and we have a pretty good confidence in them in dealing with them, sir, so thank you.

Senator STEVENS. Admiral Prueher, we are home and we are more than happy to be home. But I've got to tell you that you can't make that trip without realizing that in both of the countries in the former Soviet Union, as well as in North Korea, their leaders made a substantial mistake in terms of the quantity of the resources they would have available for the future and in allocating those resources. As the Senators have said, when you see these large monuments in North Korea and the large and broad boulevards and you realize that they are not only out of food but they are out of fuel, you can understand the difficulty in allocation of resources.

The job of this committee is to recommend to the Congress the allocation of resources, particularly in the defense area. And we have relied upon your advice and the other CINC's in the past, and we will continue to do that. I do hope that you will help us with regard to the problems there along the Pacific rim in terms of some of the funds we will try to make available to you to see if we can lessen this tension.

As I left North Korea, I told Mr. Kim, who was the vice minister that dealt with us primarily, that I would like to see the day that I could return and visit Pyongyang and have it be in a park, an international park, where we could meet and discuss the history of the past relationships and really go on to a better relationship with that country.

I share what Senator Roberts said, the hope that somehow or other we may have brought them to the point where they might think about different avenues of approach to the problems they face other than military solutions. If they seek a military solution, they certainly will be destroyed.

If they do seek to find other ways to deal with us in a way that we might be able to help them solve some of their problems, you will be at the forefront of that effort. You are the representative that they recognize in the Pacific from our country on a constant day-to-day basis, and we want you to know we are going to do everything we can to give you the resources to meet those responsibilities. It has been a pleasure to be with you again and thank you very much.

SUBCOMMITTEE RECESS

Admiral PRUEHER. Thank you very much, Mr. Chairman.

Senator STEVENS. The meeting is recessed.

[Whereupon, at 9:58 a.m., Monday, March 31, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1998

WEDNESDAY, APRIL 9, 1997

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:02 a.m., in room SD–192, Dirksen Senate Office Building, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens, Cochran, Domenici, Bond, Shelby, Gregg, Hutchison, Inouye, Hollings, Bumpers, and Dorgan.

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE NAVY

OFFICE OF THE SECRETARY

STATEMENT OF HON. JOHN H. DALTON, SECRETARY OF THE NAVY

ACCOMPANIED BY:

ADM. JAY L. JOHNSON, USN, CHIEF OF NAVAL OPERATIONS
GEN. C.C. KRULAK, USMC, COMMANDANT OF THE MARINE CORPS

OPENING STATEMENT OF HON. TED STEVENS

Senator STEVENS. Good morning, gentlemen.

I have to smile when I see my friend here. He sent us all a tee shirt that says "I survived CODEL Stevens." [Laughter.]

That has got to be something.

We are going to begin our first of three overview hearings today. We welcome Secretary Dalton, Adm. J. Johnson, and General Krulak. We do look forward to your review of the Navy and Marine Corps 1998 budget request.

Secretary Dalton and General Krulak have appeared before our committee before, but this is your first visit. Some people call it the maiden visit or voyage. I will have to think about that. Admiral, it is nice to have you with us, though.

Admiral JOHNSON. Thank you, sir.

Senator STEVENS. We appreciate the demands that are placed upon those who are in charge of the marines and the Navy. We have visited many of your installations and people in the last few months. They are doing a great job for us around the world and they have great stewardship right now.

Our trip to the Pacific that we have just come back from convinces us of really the validity of the policies we are pursuing with our naval forces and our marines in their deployment. So I think

this should be a very happy occasion for all of us, and I welcome the statement of our co—we call him our co-dear leader now. [Laughter.]

Guess what he calls me.

STATEMENT OF HON. DANIEL K. INOUYE

Senator INOUYE. I call him the magnificent one. [Laughter.]

Mr. Secretary——

Senator STEVENS. The record will be sanitized and the press will be sanctioned. [Laughter.]

Senator INOUYE. Mr. Secretary, Admiral Johnson, and General Krulak: I would like to join my chairman in singing the praises of your senior officers in the Pacific. Once again, they have demonstrated that men and women in uniform can be good ambassadors, good diplomats, and our trip to the Russian far east demonstrated that very amply.

This year the Navy will reduce its battle force ships to 346—personally, I never thought it would reach that number—with further reductions planned for 1999. Civilian personnel will be reduced by another 2,200. More than one-third of the Navy's total civilian work force has been cut since 1990. Navy military personnel levels will fall by another 11,200, to 391,000. Marine end strength will stay at 174,000.

At the same time we are calling upon the Navy and our Marine forces to keep an eye on Bosnia, on China, on Korea, on the Persian Gulf, and everywhere else. So we continually ask ourselves if this posture can be sustained with these smaller forces. I am concerned, as I am sure you are as well, with the impact on our men and women in uniform. I know that you are doing all you can to ensure that we are taking adequate care of their needs.

Looking at the investment budget, I know that the Navy will only build four combatant and two sealift ships this year, and I wonder how long we can sustain the fleet at these rates of production.

Mr. Secretary, Admiral Johnson, and General Krulak, we are extremely grateful for your dedication and tireless efforts on behalf of our sea services.

Mr. Chairman, I look forward to listening to their views on the state of the Navy and the Marine Corps. Thank you very much.

Senator STEVENS. Ladies and gentlemen, any further opening statements?

PREPARED STATEMENT OF HON. CHRISTOPHER S. BOND

Senator BOND. Mr. Chairman, I will just submit mine to the record. I certainly welcome the Secretary, the Admiral, and the General. I join in the statements and the concerns expressed by you and the ranking member, and I will save my comments for the record.

Senator STEVENS. It will be printed in the record.

[The statement follows:]

PREPARED STATEMENT OF SENATOR CHRISTOPHER S. BOND

Thank you, Secretary Dalton, Admiral Johnson, and General Krulak for speaking to the committee today. I want to echo the statements and concerns of the Chair-

man, Senator Stevens and the Ranking Member, Senator Inouye. I especially want to emphasize my concerns for the health and readiness of the Navy.

As we all know, this year has been a busy one for our armed forces and I see no sign that our commitments and responsibilities are going to slack off in the future. As the President has sent the military on increasingly frequent and tedious missions, many observers have expressed real concern about the readiness and maintenance of our military equipment. I share the concern of committee leaders on the impact this has on personnel. Furthermore, as we lose bases abroad, our forces will have to remain at sea for longer durations and will be more dependent upon the Navy for operation platforms.

Considering the present situation, I believe that naval aviation is the cornerstone of future operations and I am concerned by the overall state of naval aviation. It is in this same light that much has been said about the Navy's choice for a strike fighter aircraft.

Senator STEVENS. We welcome you, gentlemen. Secretary Dalton.

OPENING REMARKS OF SECRETARY DALTON

Mr. DALTON. Mr. Chairman, Senator Inouye, distinguished members of this body:

It is a privilege and an honor for me to appear before you today for the fourth time on the state of the Navy and Marine Corps. My message this morning is simple. I am reporting to you that our Navy and Marine Corps are on course and speed, now and for the future.

The Navy and the Marine Corps are meeting their operational commitments. Morale is good. Quality of life for our sailors, marines, civilians, and their families is the best we have seen it. And the future, while serious challenges remain, is bright.

I do not want to paint an exaggerated picture of our situation, but operationally, programmatically, and in personnel the Navy-Marine Corps team is answering all bells. We are focused and efficient, operating forward to protect America's interests around the world. Our forces are second to none, and with your help I intend to keep it that way.

QUADRENNIAL DEFENSE REVIEW

Together with Secretary Cohen and our Defense Department leadership, the Navy and Marine Corps are taking a hard look at the makeup, the mission, and capability of our force structure. A major part of this process is the quadrennial defense review [QDR]. I believe it will offer a logical, reasoned assessment of America's defense strategy, force structure, military modernization programs, and defense infrastructure.

The Navy Department is well positioned to tackle the tough issues ahead in strategy, programs, budget, and personnel. First and foremost, the Navy and Marine Corps do not need to reinvent themselves. We've already been down that road and have made the incremental and some revolutionary changes since the end of the cold war.

Certainly, the Navy Department is energized, fully energized, to take another hard look at our strategy and requirements during the QDR.

Let me address the areas of strategy, programs, and personnel in turn. First, our strategy and operations. Winston Churchill once observed: "A warship is the best Ambassador." That sentiment is true more than ever in today's world. Forward-deployed U.S. forces,

primarily naval expeditionary forces, are crucial to regional stability and to keeping local crises from escalating into full-scale wars.

I am very proud of our operational forces. They have been ready every time the Nation has called. The past year was no exception—from operations in the Taiwan Straight to calm tensions, to embargo enforcement in the Arabian Gulf and Red Sea, to peacekeeping with the Army and Air Force in Iraq and Bosnia, to evacuation operations in Liberia, and most recently in Albania. And they are on station today off the coast of Zaire in case we need to rescue Americans there in harm's way.

So from A to Z, from Albania to Zaire and everything in between, our Navy-Marine Corps team does it all. When the Nation calls, we deliver. Last week I was with Senator Inouye visiting our sailors and marines in Hawaii. Those men and women serve at the tip of America's defense arsenal and they are ready to defend our Nation's interests on a moment's notice. It is not something any of us should take for granted. I certainly do not.

Right now about one-half of our Navy and Marine Corps are underway; 33 percent, or 115 ships, and nearly 60,000 sailors and marines are forward-deployed, protecting American diplomatic and economic interests around the globe. And this is a typical day of operations. On average we have roughly 50 percent of our force underway and around 30 percent forward deployed.

This forward presence and the sacrifices associated with being underway are the price we pay for freedom. The United States and its allies should not be forced into fighting a war with overwhelming and expensive forces. Instead, it is much better and cheaper to resolve a crisis before it gets out of hand.

It is obvious that the United States and our allies must maintain, even in a world that contains just one superpower, a level of military security that can operate forward, whether to support humanitarian operations, to keep peace, or make peace, whenever and wherever required. The force of choice to fulfill this mission is most often our naval expeditionary forces. That means a Navy-Marine Corps team that America, with your leadership, has bought and paid for, and it is a force with which you are all familiar.

The second area where I think we are doing very well is in our programs and budget. The Navy-Marine Corps team has a solid, reasoned plan to modernize our forces for the 21st century. I am very pleased with our aviation and ship construction programs as we work the 1998 budget.

On the aviation side, the V–22 Osprey and the F/A–18E/F immediately come to mind when I think of intelligent, innovative, efficient acquisition programs designed to meet any threat for the next 20 years. The T–45 Goshawk trainer, the AV–8B Harrier avionics upgrade, and the Joint Strike Fighter are other smart aviation programs vital to our future strike warfare capability.

I am particularly pleased with our shipbuilding plan. We have funding for CVN–77 in 2002, LPD–17 and DDG are on track, and teaming for construction of the new attack submarine, with congressional approval, will solve some difficult funding and industrial base issues.

We are also conducting research and development for the next generation aircraft carrier, or CVX, the arsenal ship, and a new

surface combatant or SC–21, for the 21st century. Our shipbuilding plan is an extremely positive and balanced program.

A big part of our success is due to an aggressive acquisition reform strategy. We have had to do more with fewer platforms and personnel, and efficiency has been the answer. The Department of the Navy will continue acquisition reforms while developing promising technologies for tomorrow's Navy and Marine Corps.

SUPER HORNET STRIKE FIGHTER

Let me cite two examples of some of the changes we have made in the way we do business. First is our Super Hornet Strike Fighter. This was a program designed from the ground up to implement our new acquisition reforms. Both the technology and our production procedures are cutting edge.

The Super Hornet project has been a tremendous success. It is on time, on budget, and underweight. And it has been a long time since we have had a major new weapon system that has met those criteria. Most importantly, the Super Hornet is flying right now at our Patuxent River, MD, test facility after completing its first round of carrier suitability trials this past January on board U.S.S. *John C. Stennis*.

The Super Hornet is the right aircraft for the Navy now and for the future. The E/F can carry every tactical air-to-air and air-to-ground weapon in the Navy's inventory. We have balanced our approach to survivability by blending in low observable technology, state-of-the-art defense electronic countermeasures, and reduced areas of vulnerability.

The Super Hornet is simply a superb multimission aircraft spanning the full tactical spectrum from long-range air dominance to all-weather deep strike. When we look out 20 years, the intelligence community cannot predict one threat that this versatile strike fighter cannot counter. It is the right mix of technology, stealth, and affordability to meet the Navy's and the Nation's forward-deployed strike fighter requirements well into the next century.

I am pleased with the Defense Department's decision to proceed with the low rate initial production of the Super Hornet. That is good news and the right answer for the Navy.

ADVANCED AMPHIBIOUS ASSAULT VEHICLE

The second example is the advanced amphibious assault vehicle. Late last year, the Marine Corps and General Dynamics cut the ribbon on the new AAAV Center near Quantico, VA. I was there again last month to review their progress. Let me tell you that this groundbreaking center is working very well.

We have collocated the program manager and the prime contractor in the same office. The benefits are clear: We are already increasing the flow of information, ideas, and creativity, all in an atmosphere that fosters trust and cooperation. This adds up to cost savings and enhanced capability.

We will continue to press forward with these and other ship, aircraft, and systems modernization programs. Our goal for 1997 is to maximize efficiencies in our research, development, and acquisition

processes to ensure that our next generations of systems and equipment are more cost effective, more affordable, and more capable.

PEOPLE

The third area where I think we are doing a superb job is our people. I am extremely proud of our sailors and marines, of the job they do day in and day out. They are meeting the Department of the Navy's missions and requirements. Whether it is the Arabian Gulf, Haiti, Asia, supporting salvage operations in the case of TWA Flight 800, or off the coast of Albania or Zaire, we are on station right now.

Our men and women are trained and capable professionals. That is something for which I am extremely grateful and very proud, and it is something that you can look on with a great deal of pride as well.

I hope that you will stay in touch, continue to visit our forces, our bases, and our ships. See for yourselves how good our sailors and marines really are. The simple fact is we have the best sailors and marines we have ever had. I see it first-hand on ships, squadrons, and bases that I visit. It is a tremendous privilege and honor to lead these fine men and women.

Running the Navy family also means we must address the full range of personnel issues. The Navy Department has certainly sailed some choppy seas in this particular area. Gender relations is a good example. As with some of the other tough personnel challenges that the Navy has faced, namely race and substance abuse, we have learned some lessons. While we were out front in identifying and addressing the issues, there are still some rough spots.

Part of the issue is that our team must more closely reflect the society it serves in both opportunities and complexion. But we know the right answer, and in areas where we are not quite there yet we are working toward the goal as a team.

Overall, I am pleased with the progress that the Department of the Navy has made and is making on combating sexual harassment and other unprofessional behavior. Our baseline requirement is clear. Treating each individual with dignity and respect is the only acceptable standard.

The Department of the Navy will continue to ensure that our emphasis on the moral aspects of our people remains strong and clear. Honor, courage, and commitment will always be the entering arguments in our plans and policies. I have confidence that we will do whatever we need to do to keep our service the finest ever.

I will say it again: The Navy Department is looking good and I am excited about the opportunities ahead. Let me emphasize that the Navy Department is indeed an organization for the future. The Department's programs, policies, and organizational changes are forward-looking and in step with the rapidly changing challenges to our national security.

The Navy and Marine Corps are on course and speed to meet these challenges, and we are poised to remain the preeminent military force for decades to come.

Mr. Chairman, before I conclude my statement I would like to recognize Capt. Mike Worley. As you may know, Captain Worley is retiring from the Navy on May 1. He has done a superb job in

keeping the members of this subcommittee and your staffs informed on the Department of the Navy programs and issues. He has served me extremely well as my principal adviser on defense appropriations. Mike will be missed by this subcommittee, by the Navy he has served so faithfully for 28 years, and especially by me. I know you join me in wishing him continued success in his retirement.

Senator STEVENS. We do, Mike. We appreciate it very much.

[Applause.]

Mr. DALTON. I also look forward to great things from his relief, Capt. Dick Rodgers, and you can count on the same professionalism and responsiveness from him in the years to come.

PREPARED STATEMENT

I would like to thank this subcommittee and each of you personally for your support in ensuring that our Navy-Marine Corps team remains in peace and war the finest the world has ever known.

Thank you very much for the opportunity to appear before you today, and I look forward to responding to your questions.

[The statement follows:]

PREPARED STATEMENT OF HON. JOHN H. DALTON

DEPARTMENT OF THE NAVY 1997 POSTURE STATEMENT

This posture statement explains the Department of the Navy's mission, our accomplishments this past year and the priorities that guide our decision making. In 1997, we will continue the focus on four broad departmental themes: people, readiness, technology, and efficiency. In each of these areas, the Navy and Marine Corps will balance current operational and budget demands with our strategic vision and projected force requirements for the 21st century.

Recent operations around the world demonstrate the continuing requirement for naval forces that are ready, capable, and forward deployed. These sea-based forces are vital to regional stability and to containing crises. It is our forward presence that makes naval forces the right force, tailor-made for these uncertain and challenging times. They are the rheostat of national response capabilities—forces that use the world's oceans as a means of access and as a base and are equally effective across the full range of missions, from peacetime engagement, crisis response and deterrence, to warfighting campaign operations in support of a joint commander.

Our Sailors, Marines, and civilians remain the heart and soul of the Navy and Marine Corps. The readiness of our force depends first and foremost on the men and women who comprise our team and the training and equipment we provide them. Building on a firm foundation of proven leadership, strong character, and ethical behavior, the Department will continue policies that protect individual dignity and respect for all personnel. We are also committed to providing the highest quality of life possible for our men and women and their families.

The Department continues to foster an environment conducive to revolutionary thinking and innovation. In addition, we are pursuing an aggressive acquisition reform strategy while developing promising technologies for tomorrow's Navy and Marine Corps. These initiatives and reforms will allow us to press forward in our modernization and recapitalization programs. Our goal for 1997 is to maximize efficiencies in our research, development and acquisition processes to ensure that our next generation of systems and equipment are cost effective, mobile, affordable, and capable.

Today, naval expeditionary forces are underway, ready and on-scene at trouble spots around the world. As you read through the following pages, you will see that our Sailors and Marines are well-prepared to respond to any mission ordered by the National Command Authorities. The Navy-Marine Corps team will continue to provide the premier forces from the sea that are adaptive, ready and forward-deployed to support the Nation's interests around the world—now and into the future.

THE NAVY-MARINE CORPS TEAM

Events of the past year have reaffirmed the enduring significance that forward-deployed, combat ready naval forces play in shaping the strategic environment. In March, the carriers *Nimitz* (CVN 68) and *Independence* (CV 62) and their carrier battle groups moved into the South China Sea in a measured but swift response to rising tensions in the Taiwan Strait. From April through August, the 22d Marine Expeditionary Unit, as the joint task force commander, and the ready group with the amphibious assault ship *Guam* (LPH 9) evacuated 757 U.S. citizens and country nationals from Liberia and the Central African Republic. Also, in September, the *Carl Vinson* (CVN 70) carrier battle group was the centerpiece of a joint response to Iraqi aggression against the Kurds. Daily, U.S. naval forces demonstrate their ability to support and defend our national security interests through highly visible forward presence, expeditionary readiness, and potent on-scene power projection capability. Sea-based forces are sovereign extensions of our nation, operating in international waters. They are unencumbered by the treaties and access agreements that land-based forces normally need to operate overseas. Naval forces also offer the flexibility of acting within full view of a potential aggressor, over the horizon, or submerged and totally undetected.

Naval forces play a pivotal role in supporting our national interests and the objectives as defined by the National Security Strategy and National Military Strategy. Our prosperity hinges on the sea: 70 percent of the world's population lives within 200 miles of the sea; 80 percent of the world's capitals lie within 300 miles of the sea; and 99 percent of all U.S. overseas trade travels on the seas. We are indeed a maritime nation.

The Navy-Marine Corps white paper Forward . . . From, the Sea focuses on the importance of littoral operations and the daily presence of our naval forces around the world in meeting our national security objectives. Forward presence enhances regional stability through peacetime engagement, underscores U.S. resolve, bolsters deterrence, prevents and contains crises, reassures allies, and lays the groundwork for successful coalition operations. Similarly, the capabilities of our expeditionary naval forces are especially critical in the initial stages of a developing situation, when rapidly responding, combat credible forces heavily influence the outcome. Moreover, naval forces present a unique range of options to the National Command Authorities (NCA). By using the oceans both as a means of access and as a base, forward-deployed Navy and Marine air, land, and sea forces provide the NCA with a rheostat of national response capabilities.

The Navy-Marine Corps team: The embodiment of jointness

Naval forces also provide the joint force commander a full range of land- and sea-based military options flexibly tailored for peacetime missions, crisis response, or conflict. Naval forces are typically the first to arrive at the scene of a crisis; once there, they shape the battlespace for further joint operations. By attacking the enemy's infrastructure, seizing and defending key ports and airfields, sustaining the flow of sea-based logistics, and (in the future) providing sea-based theater missile defense, naval forces carry the fight until the heavier land-based forces are able to build up combat power ashore and achieve the full warfighting potential of a fully integrated joint force. In addition, naval forces can establish a temporary or permanent joint task force (JTF) command structure. Carrier battle groups and amphibious ready groups are ideally suited for assuming these duties in the initial stages of a crisis, while our numbered-Fleet command ships are capable of establishing a long term, national base for JTF command and control from the sea. The built-in command, control, and communication links of our carriers, amphibious assault and command ships, along with their ability to integrate quickly with forces from other services, are key factors in establishing a joint force. Naval forces also can establish a JTF Headquarters ashore, when needed. The II Marine Expeditionary Force is leading the effort to establish a premier standing JTF Headquarters. This Marine Corps initiative provides regional commanders with a ready-made organization that trains together and can deploy rapidly. The standing JTF Headquarters contains the command-and-control links necessary to conduct joint operations. On a smaller scale, all forward-deployed amphibious ready groups and their embarked Marine expeditionary units are being upgraded to assume a limited JTF Headquarters role when required. The Navy-Marine Corps team is the critical catalyst for joint operations.

Most important, naval forces are adaptive forces for uncertain times. The Navy and Marine Corps continue to exploit the synergy created when carefully tailored naval forces are dispatched to the scene of a crisis. In addition to forward-deployed carrier battle groups and amphibious ready groups with embarked Marine expedi-

tionary units, specifically tailored battle groups and special purpose Marine air-ground task forces provide regional commanders with the precise tools they need.

Overall, naval forces provide our nation with a rapid response force: persuasive in peace, compelling in crisis, and capable throughout the full range of conflict. Whether the mission is humanitarian assistance, crisis response, or conflict resolution, adaptable forces from the sea, operating independently or jointly, are a powerful instrument for carrying out national policy.

To ensure that the capabilities we acquire are appropriate for such a wide range of functions, the Navy and Marine Corps use joint coordination groups to discuss, evaluate, and propose to the leadership anticipated requirements for the two Services. The process allows the Navy-Marine Corps team to voice requirements within the joint arena from a single naval perspective. This teamwork also is occurring in the budget process. As the only military department with two services, the Department of the Navy must coordinate its budget submissions closely to improve efficiencies and create a more cohesive product. Such integration leads to better support of our overall naval strategy.

A focus on the future

The Department of the Navy is proud of its heritage of innovative thinking and its long-standing contributions to national security. In 1991, the Navy-Marine Corps team examined the changing world environment and recognized that the ending of the Cold War era would require a move away from the standing Maritime Strategy. We responded with the publication of our landmark white papers: . . . From the Sea and Forward . . . From the Sea. These documents focused both the Navy and Marine Corps on the critical littoral regions of the world, while capturing the unique capabilities of each service. They also established the foundation for operational concepts that will drive our future doctrine and ensure our continued operational primacy. "Operational Maneuver from the Sea," signed by the Commandant of the Marine Corps in January 1996, is one example. This capstone document details a naval concept for the projection of power ashore, exploits the Navy-Marine Corps team's expeditionary capabilities, and provides a framework for applying maneuver warfare to maritime operations during a joint campaign. Similarly, the Chief of Naval Operations will sign the Navy's Operational Concept in early 1997. This seminal document describes how the Navy operates forward from the sea to carry out the three components of the National Military Strategy: peacetime engagement; deterrence and conflict prevention; and fight and win. It explains the vital role of the Navy in future joint operations envisioned in Joint Vision 2010.

With the Chairman of the Joint Chiefs of Staff's strategic vision, Joint Vision 2010, and the recently approved Joint Strategy Review as guides, the Department of the Navy is aggressively preparing for the future warfare environment. Organizations such as the Naval Doctrine Command and the Marine Corps Combat Development Command are working on concepts to make the capabilities of sea-based forces most useful to the joint force. Both services are examining these concepts through test beds such as the Commandant's Warfighting Lab, the Navy's Fleet Battle Experiments, and the recently approved "Extending the Littoral Battlespace" advanced concept technology demonstration .

NAVAL EXPEDITIONARY FORCES

Executing the national military strategy today

Our National Military Strategy of Flexible and Selective Engagement defines two national military objectives: promoting stability and thwarting aggression. It also outlines three sets of tasks: peacetime engagement; deterrence and conflict prevention; and fight to win. Because we are a maritime nation with vital economic and security interests that span the earth's oceans, we must meet the military objectives through overseas presence and power projection, which naval forces are ideally suited to execute. Indeed, forward presence and power projection form the centerpiece of strategic guidance in the white papers . . . From the Sea and Forward . . . From the Sea.

U.S. naval forces remain a critical ingredient in promoting and protecting national interests. Joint Vision 2010 outlines a plan for achieving the objectives set by our National Military Strategy—a strategy revalidated by the Joint Strategy Review, and one that demands the capabilities of sea-based forces. Joint Vision 2010 also notes the rapid advances in command, control, and intelligence capabilities, and links information superiority with emerging technologies to create four new operational concepts: dominant maneuver; precision engagement; full-dimensional protection; and focused logistics. These concepts highlight many of the unique capabilities that sea-based forces possess today, and provide a framework for 21st-century

execution of our enduring strategic concepts of overseas presence and power projection. They will enhance our naval forces' ability to continue to play a critical role: persuasive in peace, compelling in crisis, and capable in every aspect of war.

Persuasive in peace

Naval forces play a unique and vital role in maintaining U.S. overseas presence. Their full combat capability, inherent mobility, and capacity for self-sustained operations make them an expeditionary force without peer. A balanced, forward-deployed naval force serves multiple purposes. Simultaneously, it can reassure friends and allies, build and enhance coalition interoperability, deter potential aggressors, and respond effectively to crisis or war. On any given day, roughly 30 percent of the Navy and Marine Corps' operating forces—more than 50,000 men and women and 100 ships—are deployed throughout the world. Our carrier battle groups and amphibious ready groups with embarked Marine expeditionary units are forward-deployed to achieve near-continuous presence in four major deployment hubs: the Mediterranean Sea, the Arabian Gulf/Indian Ocean, the Western Pacific, and the Caribbean. In Japan, we maintain a Marine expeditionary force as well as the forward-stationed *Independence* (CV 62) battle group and the *Belleau Wood* (LHA 3) amphibious ready group. Finally, the Navy's Western Hemisphere Group specifically is focused on supporting our nation's counterdrug efforts as well as strengthening and improving our ties to Caribbean and South American friends and allies. From these strategically placed forward locations, naval forces can quickly deploy to crisis areas outside these regions.

Naval forces participate in the full range of peacetime-engagement activities. This year alone, Navy ships made 1,629 port visits to 99 nations, including such frequently visited ports as Freemantle, Australia, and Naples, Italy, and ports where U.S. forces are seldom seen—such as Shanghai, China, and St. Petersburg, Russia. Each of these visits provided enormous benefits through military-to-military contacts and goodwill established with local communities. These ships hosted hundreds of thousands of visitors onboard. In return, more than 20,000 Sailors and Marines went into nearby communities to participate in numerous public-service projects, such as refurbishing schools and orphanages and providing basic medical care.

Navy and Marine Corps cooperative efforts with the sea, land, and air forces of friends and allies are essential to successful coalition building. The enhanced relationships and interoperability—gained through 160 major multi-national and bilateral exercises with 64 different countries—increase U.S. capability and credibility in forming and maintaining coalition partnerships to deter aggression and control crises. Because sea-based forces do not require sophisticated support facilities ashore to operate with other nations, the burden imposed on any exercising partner's infrastructure is limited. Ultimately, the interaction of our naval forces with other nations provides tangible evidence of our commitment to peace and regional security.

Naval forces also are critical to joint force information superiority. They extend the national command, control, communications, computer, intelligence, surveillance, and reconnaissance (C^4ISR) system throughout the littorals in peacetime, enabling the intelligence preparation of a potential battlespace well before crises or conflicts. These forces maintain operational familiarity with potential areas of conflict, and with coalition partners and potential adversaries. Our contribution to information superiority is critical today, and will be even more significant in joint warfare of the future.

Recurring natural disasters, civil wars, and challenges to international law and order have led to an increase in the number of military operations other than war—including humanitarian relief, counterdrug, counterterrorism, and peace operations. These efforts usually require the disciplined, highly mobile, self-contained, and well-organized response capabilities inherent in our military services. Forward-deployed in a high state of readiness, naval expeditionary forces are especially attractive candidates to conduct these types of operations.

As a key tenet of our National Military Strategy, our military forces must present a credible deterrent to an adversary's most potent weapon. As long as nuclear weapons are deployed in a manner that threatens our homeland or other national interests, we must continue to discourage their proliferation and use. Fundamental to overall nuclear deterrence is our highly mobile and capable strategic ballistic missile submarine force. This force, able to remain undetected at sea, is the most survivable element of the nation's strategic nuclear triad.

Forces based in the continental United States do contribute, but the key to successful conventional deterrence lies in combat-credible forces overseas. Visible forward-deployed naval expeditionary forces clearly convey to potential aggressors our capability to both deny and punish—and to do so quickly and effectively. These forces also are bought and paid for as part of our budget. A distinct advantage of

naval expeditionary forces is their ability to act as sovereign extensions of our nation, free of the political encumbrances that might inhibit or limit the employment of ground and land-based air forces. Our conventional deterrence capability enhances regional stability by deterring aggression and reassuring allies and friendly nations of our commitment to their well-being. These naval capabilities combine to make our forces truly persuasive in peace.

Compelling in crisis

Naval forces involved in peacetime engagement also serve the nation by providing immediate crisis response capabilities. Their expeditionary character becomes more pronounced when nations are reluctant to offer visible support or grant access, either for fear of reprisal or because the warning is ambiguous. Operating in an uncertain world, the Navy-Marine Corps team—highly mobile, self-sustaining, and responsive in nature—is a prudent first choice when our national interests are threatened. Naval forces, on scene at the onset of a crisis or conflict, represent the Nation's willingness to act and share in the risks. To limit the extent of a crisis, U.S. leadership is provided a wide range of options, including: naval fires for fire support, interdiction and strike missions; amphibious operations; special operations; and Marine air-ground task force operations ashore. These forces also serve as the immediately available and visible forward element of the powerful combination of joint forces that can be projected from the continental United States. These attributes result in naval forces frequently being used as an instrument of our foreign policy. Naval forces are suited ideally for conducting rapid noncombatant evacuation operations when U.S. citizens or foreign nationals are at risk, supporting U.N. sanctions or crisis response. A number of operations, that clearly demonstrated naval crisis-response capabilities during the past year, are discussed in the following chapter.

An increasingly important issue in promoting regional stability during a crisis is our emerging ability to extend theater missile defenses (TMD) to joint forces, friends, and allies—unobtrusively, from offshore. Mobile, sea-based TMD will enhance the security and safety of friendly nations by providing defense against missile attacks by rogue states. Building on the existing Aegis system, the Navy is vigorously pursuing area and theater missile defense capabilities.

The Navy-Marine Corps team continues to be a powerful, visible, and credible instrument for supporting national policies and preventing conflict. Forward-deployed naval forces, expeditionary and adaptive in nature, are the preeminent force for deterrence and conflict prevention, and they are able to bring sustained, decisive force to bear when required. Naval forces protect our nation's global interests—most of which reside within the littorals. Their on-scene capability, ready to respond immediately to the nation's tasking, makes them compelling in crisis.

Capable in every aspect of war

The ability to fight and win against any adversary is the irreducible core of the U.S. military. Naval forces are an integral part of this joint capability. When deterrence fails, forward-deployed naval forces, working with other U.S. and coalition forces, must blunt an adversary's offensive, prevent him from consolidating its position, and protect friendly forces until additional combat power can arrive in theater. The speed and flexibility of these forward-deployed naval forces provide the National Command Authorities with viable options during the initial stages of a crisis or conflict. In recent years, rapid repositioning of carrier battle groups and amphibious ready groups has been instrumental to national policy execution. The acquisition and deployment of the F/A–18 E/F will enhance significantly our strike capability and will ensure continued air superiority in future conflicts.

Naval forces must guarantee maritime superiority and provide strategic sealift to transport joint and allied forces into theater. Using the sea as a secure maneuver space, naval forces can ensure dominant maneuver at the operational level, throughout the littorals. The sea-control, strategic-sealift, and forcible-entry capabilities inherent in our naval forces are essential to attaining dominant maneuver by joint forces. Procurement and development of the MV–22 Osprey tilt rotor aircraft and the advanced amphibious assault vehicle, coupled with the present utility of the air cushion landing craft and highly capable amphibious shipping, will provide improved tactical and operational mobility for over-the-horizon maneuver. The threat of amphibious operations disrupts enemy planning and execution, forcing it either to concentrate its forces at the most likely avenues of approach or to spread its defenses to cover the entire threatened area. In either case, the enemy's action—or inaction—will expose gaps and vulnerabilities that joint or combined forces can exploit.

Maneuver operations from the sea provide an opportunity to exploit unique naval advantages in executing precision engagement. Naval precision engagement under-

scores the Navy-Marine Corps team's ability to tailor force packages for specialized and task-organized missions, to employ special-operations forces and Marine air-ground task forces, and to deliver extremely accurate and high-volume naval fires. We are leveraging technology aggressively to enhance precision engagement and destroy targets that become exposed in the course of our dominant maneuver.

Emerging technology will allow naval forces to employ a wide range of ordnance against targets ashore. Our weapons can be delivered from a variety of platforms, with unprecedented flexibility and lethality. These fires can be launched from well beyond an opponent's reach. Sea-based engagement permits rapid maneuver and sustained concentration of lethal fires from far less vulnerable positions. Integrating precision fires with extensive command, control, computer, communication, intelligence, surveillance and reconnaissance (C^4ISR) will allow us to quickly transmit tasking orders for strike, interdiction, and fire support, to deliver accurately the appropriate ordnance, to conduct timely battle damage assessment, and to reattack when required. In 1996, the Navy's Cooperative Engagement Capability, which links sea, air, and land sensors to firing platforms for air and missile defense, supported the first-ever successful engagement of an air target that was well beyond a firing unit's radar horizon. Improvements in Tomahawk cruise missiles and innovations in naval surface fire support and weaponry—such as the Arsenal Ship and improved munitions, to include the extended range guided munition and a Navy tactical missile system—hold the potential to increase dramatically the ability to conduct precision-engagement operations.

Naval forces also provide the defensive umbrella under which joint and combined forces can deploy safely during a conflict. These forces counter enemy threats from the air, land, or sea. Beyond defensive measures, naval contributions to full-dimensional protection will include offensive initiatives to eliminate potential threats at the source. Sea-based defenses will, in many circumstances, be the only capability available at the onset of a crisis. They provide critical protection to forces flowing into theater by airlift, sealift, or prepositioning ships.

The future long-range delivery of weapons of mass destruction will increase the importance of force protection for U.S., allied, and coalition forces. The emergence of naval theater missile defense capabilities will reassure potential coalition partners and allies, and will be critical for gaining access to overseas bases and infrastructure. Another critical part of full-dimensional protection are units such as the Marine Corps Fleet Antiterrorism Security Teams and the Chemical-Biological Incident Response Force. These units provide protection against terrorism and consequence management for chemical and biological incidents, respectively.

Controlling the undersea battlespace remains a unique naval capability and is a vital aspect of sea control. Our dominance in this arena counters the threat posed by advanced capability submarines and sea mines and enables early preparation of the battlespace through surveillance and intelligence collection. In addition, since over 90 percent of the material required to support a land campaign arrives by sea, undersea battlespace dominance ensures other elements of the joint force may transit successfully to the objective. Concern with the growing challenge posed by submerged threats to our power projection forces prompted the Navy to establish the "Anti-Submarine Warfare Requirements Division" under the Deputy Chief of Naval Operations for Resource and Warfare Requirements. This organization assesses the Navy's undersea warfare capabilities to ensure continued undersea battlespace dominance.

Naval forces provide the strategic sealift to transport forces into theater and to ensure the uninterrupted flow of logistical support—the lifeblood of any military operation. Self-sustaining endurance is an intrinsic strength of naval expeditionary forces. As the vulnerability of large stockpiles ashore continues to increase, sea-based logistics will become even more important. The Navy and Marine Corps are experimenting actively with innovative concepts to overcome the logistic challenges associated with supporting a land campaign from the sea. Future developments in the Maritime Prepositioning Force and advances in ship design are part of the answer to these challenges. Providing focused logistics from the sea in support of forces throughout the littorals will become a reality, as innovative concepts reducing logistic requirements are tested and proved.

Naval forces make critical contributions during all phases of conflict, to include: maritime, air, and information superiority; Marine air-ground task force, Maritime Prepositioning Force, and amphibious operations; precise naval fires for fire support, interdiction, and strike; special forces operations; and crucial sea-based logistics. This wide range of missions demonstrate our naval force capabilities in every aspect of war.

Total force integration

To ensure success, throughout the full range of missions that have been discussed, requires the seamless integration of active and reserve forces in the Total Force package. This is critical with today's smaller active-duty force strength. Unprecedented levels of Reserve support in 1996 have increased reserve readiness while helping to maintain an acceptable operational tempo for our active forces. Through this total integration of our active and reserve forces, naval capabilities are further enhanced and our overall ability to meet all taskings is increased.

In conclusion, our continued operational primacy depends on the total integration of our warfighting capabilities. Proliferation of precision technology will make it increasingly dangerous to mass forces ashore, especially in the early stages of a conflict. During this period, joint force commanders can look to naval forces to provide fire support, logistics, and operational maneuver from the sea. Forward-deployed naval forces serve as a catalyst for joint operations. Our capabilities fully support Joint Vision 2010 operational concepts of dominant maneuver, precision engagement, full-dimensional protection, and focused logistics.

OPERATIONAL PRIMACY

Although our overarching responsibility ultimately lies in maintaining our ability to fight and win wars, our day-to-day efforts are focused on peacetime engagement and crisis response. The accompanying figures show the actual force dispersal of a carrier battle group and amphibious ready group with an embarked Marine expeditionary unit during a recent deployment. The George Washington (CVN 73) Carrier Battle Group (CVBG) and the Guam (LPH 9) Amphibious Ready Group (ARG), with 22d Marine Expeditionary Unit (MEU) embarked, provide a vivid example of the utility of naval forces to the National Command Authorities across the full range of operations. Specifically, the Guam ARG and 22d MEU demonstrated: mobility, by transiting over 3,500 nautical miles within the region; flexibility, by executing multiple taskings through combined and split force operations; joint capability, by performing as a joint task force commander during a regional crisis; sustainability, by remaining unobtrusively on station for 69 days; and national resolve, by protecting and evacuating U.S. citizens and foreign nationals. Simultaneously, the George Washington CVBG rapidly repositioned multiple times in support of national interests in three widely dispersed geographic regions: the Mediterranean Sea, continuing our Adriatic presence in support of Bosnia peacekeeping; the Persian Gulf, supporting a U.N.-mandated no-fly zone in southern Iraq and Southwest Asia maritime interception operations; and the Indian Ocean/Western Pacific, surging to release *Nimitz* (CVN 68) in response to heightened tensions in the Taiwan Strait. These diverse actions highlight the importance and utility of naval forces to the nation.

The following summary reflects the wide variety of real-world operations and exercises that the Navy-Marine Corps team conducted in 1996. It includes crises, humanitarian operations, support to our civil authorities, and major joint and combined exercises.

Summary of 1996 operations

Europe

Bosnia-Herzegovina: Operation Provide Promise (July 1992-March 1996).—This joint operation with the U.S. Air Force, involving both naval carrier aircraft and land-based air, protected humanitarian relief efforts in the besieged cities of former Yugoslavia. Navy and Marine Corps aircraft, a Marine aerial refueling squadron, a military police unit, a Navy fleet hospital manned with both active and reserve personnel, and on-call Marines from the European theater's amphibious ready group (ARG) and Marine expeditionary unit (special-operations capable) (MEU [SOC]) supplied vital support to U.N. forces.

Adriatic Sea: Operation Sharp Guard (June 1993-December 1995)/Operation Decisive Enhancement (December 1995-December 1996)/Operation Determined Guard (December 1996-Present).—U.S. naval forces, including surface combatants, intelligence-gathering attack submarines, and active and reserve maritime patrol aircraft, operated with NATO and the Western European Union to enforce the U.N. sanctions in the former Yugoslavia. Over the past three years, 73,000 ships have been challenged. Among these, more than 5,800 were inspected at sea and another 1,400 were diverted for inspections in port.

Bosnia-Herzegovina: Operation Joint Endeavor (December 1995-December 1996)/Operation Joint Guard (December 1996-present).—The European Command's ARG/MEU(SOC) was assigned as theater reserve for NATO forces, while Naval Mobile Construction Battalions 133 and 40 constructed base camps for Implementation Force personnel. In addition, from June to October a Marine Corps unmanned aerial

vehicle (UAV) squadron, VMU–1, supported the operation with Pioneer UAV imagery both to U.S. and multi-national units. VMU–2 continues to provide similar support.

Bosnia-Herzegovina: Operation Deny Flight (July 1993-December 1995)/Operation Decisive Edge (January-December 1996)/Operation Deliberate Guard (December 1996-Present).—Operation Deny Flight transitioned to Decisive Edge in support of the Implementation Force (IFOR) Operation Joint Endeavor. Operation Decisive Edge then transitioned to Deliberate Guard in support of the Stabilization Force (SFOR) Operation Joint Guard. Carrier and shore based squadrons continued flight operations in support of joint and combined enforcement of a U.N.-mandated no-fly zone in the airspace over the Republic of Bosnia-Herzegovina. Throughout the year, Italy-based Marine F/A–18D and EA–6B aircraft provided suppression of enemy air defenses, close air support, and electronic warfare to IFOR. This included support from the Tactical Electronic Reconnaissance Processing Evaluation System that provided critical, analyzed intelligence information to the area commanders. In addition, Navy maritime patrol aircraft, equipped with electro-optical sensors, provided real-time, still and full motion video imagery to the ground commanders.

Africa

Liberia: Operation Assured Response (April-August 1996).—As a result of factional fighting and general violence in Liberia, the exceptional flexibility and capabilities of naval forces were again showcased. In early April, elements of the *Guam* (LPH 5) amphibious ready group (ARG) and the 22d MEU (SOC), were ordered to the vicinity of Monrovia, Liberia. Upon arrival, the 22d MEU (SOC) commanding officer assumed command of Joint Task Force-Assured Response (JTF-AR), which included Air Force, Navy, and Marine forces. With additional support from an MH–53E helicopter detachment and other Navy-Marine Corps aircraft, embassy security and transportation were provided and 309 non-combatants were evacuated—including 49 U.S. citizens. While still conducting this operation, elements of JTF-AR were ordered to Bangui, Central African Republic, to conduct similar operations. A special purpose Marine air-ground task force, embarked on the *Ponce* (LPD 15) and with ten days' notice, relieved the *Guam* task force, and assumed the duties of CJTF-AR. This was done to allow the *Guam* ready group and the 22d MEU(SOC) to return to the Adriatic Sea and provide the European Command's desired over-the-horizon presence during the Bosnian national elections.

Central African Republic: Operation Quick Response (May-August 1996).—In response to civil unrest and rebellion by rogue military elements in the Central African Republic, the same Navy-Marine Corps team that responded in Liberia successfully provided security to the U.S. Embassy and evacuated 448 noncombatants, including 208 American citizens.

Zaire/Rwanda: Operation Quardian Assistance (November-December 1996).—To assist in the large humanitarian effort in Africa, Navy P–3C aircraft, which were forward-deployed to the Mediterranean, detached to Entebbe, Uganda. The crew and aircraft provided critical overland surveillance data to the joint task force commander. This information on the mass movement of refugees from Rwanda to Zaire assisted national-level policymakers in responding to changing needs. The timely distribution and evaluation of this data prevented the unnecessary deployment of a multi-national force.

Southwest Asia

Iraq: Operation Southern Watch (1991-present).—U.S. Navy, Marine, and Air Force units continued to enforce the U.N.-mandated no-fly zone over Iraq protecting Iraqi minority populations. Naval operations in 1996 included extensive Navy and Marine aircraft sorties from carriers *America* (CV 66), *Nimitz* (CVN 68), *George Washington* (CVN 73), *Carl Vinson* (CVN 70), *Enterprise* (CVN 65), *Kitty Hawk* (CV 63), and amphibious assault ship *Peleliu* (LHA 4).

Iraq: Operation Desert Strike (September 1996).—Despite warnings from the United States, Iraq moved 40,000 troops into Northern Iraq, which threatened the Kurdish population. In response, the President ordered a strike on military targets posing a threat to coalition aircraft in the no-fly-zone. On 3 September 1996, a coordinated cruise missile attack on the Iraqi air defense infrastructure was launched. *Laboon* (DDG 58) and *Shiloh* (CG 67) fired 14 of the 27 cruise missiles while Air Force B–52's, escorted by F–14's from *Carl Vinson* (CVN 70), fired the remaining 13. The following day, a second strike of 17 Tomahawks from destroyers *Russell* (DDG 59), *Hewitt* (DD 966), *Laboon* and nuclear-powered attack submarine *Jefferson City* (SSN 759) was conducted. The speed and flexibility of forward-deployed naval forces was demonstrated following the initial strike. *Enterprise* (CVN 65) departed the Adriatic Sea on order of the National Command Authorities and con-

ducted a high speed transit through the Suez Canal. Her arrival in the theater two days later enhanced the overall force disposition in the Persian Gulf and further demonstrated U.S. resolve.

Saudi Arabia: Operation Desert Focus (July 1996-present).—The I Marine Expeditionary Force provided counterintelligence team support to Joint Task Force Southwest Asia (JTF-SWA) in the aftermath of the Khobar Towers bombing in Dhahran, Saudi Arabia. Effective route survey and counterintelligence ensured protection of JTF-SWA movements in Riyadh, to include the U.S. Air Force 4409th Operational Group aircrew relocation to and from the airfield. The deployment has been extended into fiscal year 1997 in light of a continued terrorist threat.

Kuwait: Operation Vigilant Sentinel (August 1995-present).—Navy and Marine Corps combat forces and active and reserve Military Sealift Command forces quickly responded to Iraqi threats against Jordan and Kuwait. Maritime Prepositioning Ship Squadron Two sortied from Diego Garcia, with equipment for a 17,300-Marine combat force, and remained onstation to provide rapid response capability in this U.S. Central Command area of responsibility.

Bahrain: Reinforcement of naval security in Bahrain (July 1996-present).—On 4 July 1996, elements of the Fleet Antiterrorism Security Team (FAST) Company deployed in response to a request for security augmentation. The FAST Company reinforced Navy security forces of Administrative Support Unit Bahrain immediately following the attack on an Air Force barracks in Dhahran. Following the initial reinforcement, the Marine Corps developed a plan to provide extended security support. The timely disestablishment of Marine Corps Security Force Company on Diego Garcia provided a force structure for an interim company in Bahrain.

Maritime intercept operations.—Throughout 1996, surface combatants and maritime patrol aircraft continued to execute maritime intercept operations in the Arabian Gulf in support of U.N. sanctions against Iraq. The U.S. Coast Guard cutter *Morgenthau* supported the 5th Fleet's mission in the Gulf, applying the 1995 Department of Defense and Department of Transportation Memorandum of Agreement on "Use of Coast Guard Capabilities and Resources in Support of the National Military Strategy." By the end of 1996, surface combatants had conducted more than 23,000 at-sea intercepts, while simultaneously carrying out other forward-presence missions in the region.

Caribbean

Haiti: U.N. mission in Haiti (April 1995-April 1996)/U.S. Support Group Haiti (April 1996-Present).—Navy SeaBees participated in Exercise Fairwinds 96–2, helping to rebuild Haitian infrastructure that included schools, hospitals, water systems, and roads. Navy construction personnel, both active and reserve, built, repaired or upgraded these facilities. Marines from the Fleet Antiterrorism Security Team provided security to all facets of the operation. Naval forces provided humanitarian civil assistance and supported the effort to institute democracy in Haiti. Currently, the II Marine Expeditionary Force has deployed three of the four subordinate elements to the U.S. Support Group Haiti which include detachments from a medical battalion and the 2d Marine Air Wing, and companies from a tank and engineering support battalion.

Guantanamo, Cuba: Operation Sea Signal (August 1994-February 1996).—Navy personnel based at Guantanamo Bay, Cuba, and Marines from II Marine Expeditionary Force continued Cuban and Haitian migrant handling, as well as security support to Joint Task Force 160. Since September 1994, the Navy-Marine Corps team housed and processed over 40,000 migrants awaiting repatriation or parole to the United States. Support to Joint Task Force 160 spanned 18 months.

Counterdrug operations.—Navy ships and aircraft, active and reserve, continued counterdrug detection and monitoring missions in the transit zone of the Caribbean and Eastern Pacific. In fiscal year 1996, more than 32,000 counterdrug flight hours were flown by fixed-and rotary-wing aircraft; 2,000 ship steaming days were provided by Navy surface combatants and surveillance ships modified especially for counterdrug missions; and 170 days of covert support were conducted by submarines. Marine Corps teams conducted 96 logistical and operational missions with domestic law enforcement agencies along the southwest border of the United States. Naval mobile training teams provide additional support and training to drug source countries in Central and South America. Navy and Marine Corps personnel also serve as tactical planners and analysts to enhance host nation law enforcement and military capabilities. Navy relocatable over-the-horizon radar sites in Virginia and Texas provide wide-area surveillance of the transit zone. A third site, planned for Puerto Rico, will enhance coverage further. Marines provided one of five ground mobile radar sites positioned to assist in disrupting illegal uses of airspace and interdicting alternate modes of transportation and drug-production capabilities. The Di-

rector of Naval Intelligence provides dedicated, maritime-focused counterdrug intelligence support and inter-agency coordination through multi-source fusion analysis of commercial shipping and non-commercial suspect vessels.

Northeast Asia

Guam: Operation Pacific Haven (September 1996-present).—The U.S. Pacific Command established a joint task force (JTF) on Guam to screen and process Kurdish refugees fleeing from northern Iraq, after Iraqi military operations began in early September. More than 350 Marines and 35 Navy personnel are supporting the operation—either with JTF Headquarters, security details, or medical units. To date, more than 2,100 refugees have been processed and relocated while another 4,500 remain on Guam awaiting relocation decisions.

Taiwan Strait flexible deterrent option (March-April 1996).—The value and flexibility of forward-deployed naval forces was demonstrated when the U.S. Seventh Fleet monitored Chinese military live-fire exercises off the coast of Taiwan. The forward-deployed *Independence* (CV 62) carrier battle group (CVBG), with embarked Carrier Air Wing Five, responded to rising tensions between China and Taiwan by taking station off the eastern coast of Taiwan. These forces provided a visible sign of U.S. commitment to stability in the region. The *Nimitz* (CVN 68) CVBG transited at high speed to arrive in the South China Sea within days, intensifying the signal of U.S. resolve. The successful tracking of missiles during the exercise demonstrated the inherent capability of Aegis as a foundation for sea-based theater missile defense.

Korea.—Forward-based Navy and Marine expeditionary forces from Japan continue to provide a visible and unambiguous presence on the Korean Peninsula and in surrounding waters during routine operations and bilateral training exercises with South Korean forces. One of the most important exercises is the Combined Forces Command sponsored, joint/combined command post exercise Ulchi Focus Lens. This exercise supports real world operation plan concepts and evaluates specific aspects of command, control and communication by providing essential joint and combined staff interaction from the lowest to the highest staff echelons. Participating elements were globally sourced with personnel coming from Marine Forces Reserve and Marine Forces Atlantic joining the in-area staffs from Naval Forces Korea, Marine Forces Pacific, Marine Forces Korea, and 7th Fleet. This total force exercise provided a unique opportunity for both Commander, Marine Forces Korea and Commander, Naval Forces Korea as component headquarters to operate and to demonstrate the importance they play in the overall defense of Korea.

Military support to civil authorities

TWA Flight 800 salvage operations (July-November 1996).—The Navy supported operations closer to home with salvage operations for TWA Flight 800. Navy Supervisor of Salvage assets and explosive ordnance disposal teams were among the first to respond to this tragedy. Their efforts included coordination of both the civilian and military crash site mapping efforts. The first Navy salvage ship on scene, *Grasp* (ARS 51), responded only 50 hours after returning from a five-month Mediterranean deployment. As the scale of the operation grew, the Navy deployed *Grapple* (ARS 53) to provide additional support. A total of 149 active and reserve Navy divers participated in the recovery of victims, location and retrieval of flight data and voice recorders, and recovery of more than 90 percent of the wreckage. Amphibious ships *Oak Hill* (LSD 51) and *Trenton* (LPD 14) served as afloat command post and wreckage-retrieval platforms.

Northwest forest fires (September 1996).—During September, more than 500 Marines from I Marine Expeditionary Force deployed to Oregon and joined 5th Army efforts in fighting forest fires in the Umatilla National Forest. The Marines provided a command element, 25 firefighting teams, and a medical evacuation detachment for two weeks, supporting the National Interagency Firefighting Center's effort to bring forest fires under control throughout the West.

Additional domestic support (July-November 1996).—Our forces responded to numerous requests for assistance to civil authorities in support of domestic operations. During July and August, the Marine Corps Chemical/Biological Incident Response Force (CBIRF) and military police explosive-detection dog teams supported security efforts for the 1996 Summer Olympic Games in Atlanta, Georgia, and just recently, CBIRF provided support during the presidential inaugural. In addition, from August through November, the explosive-detection dog teams provided support to the U.S. Secret Service at the Democratic and Republican conventions, and during campaign stops by candidates throughout the United States.

Major joint and combined exercises

Russia.—Exercise Cooperation From The Sea 96, conducted in Vladivostok, included both amphibious and at-sea training for U.S. and Russian naval forces. In addition, elements of the *America* (CV 66) carrier battle group and *Wasp* (LHD 1) amphibious ready group conducted bilateral operations with a Russian carrier battle group in the Mediterranean. These interactions continued to build on the positive foundation laid in 1995, and set the stage for further cooperation between our naval forces. U.S. naval forces also participated in the Russian Navy's 300th anniversary celebrations in St. Petersburg and Kaliningrad.

Central and Eastern Europe.—The Partnership For Peace (PfP) program continued to be the centerpiece of NATO's strategic relationship with Central and Eastern Europe. Naval forces conducted four major PfP exercises with Eastern European nations. These operations, part of our bilateral military-to-military contacts program, included basic seamanship exercises and familiarization visits with the naval forces of the region. Units from the Sixth Fleet, including assigned Marine expeditionary forces, conducted fleet and amphibious training exercises with forces from Romania, Ukraine, Bulgaria, Albania, and Georgia. The training exercise BALTOPS 96 was conducted in the Baltic Sea and involved a record 43 ships from 12 countries, including the U.S. Coast Guard cutter *Gallatin* (WHEC 721).

Cooperative Osprey 96.—This 19-nation exercise, was conducted at Camp Lejeune, North Carolina, with the Commanding General, Marine Forces Atlantic, as the exercise director. Part of the PfP program, this exercise focused on military operations other than war. Exercise objectives included developing procedures to form and train coalition forces for peacetime operations in the littorals. The first visit by Ukrainian Navy ships to the United States in September was particularly significant. These vessels conducted amphibious training with Atlantic Fleet units at Norfolk, Virginia.

Black Sea operations.—Marines conducting training with forces from Romania, Ukraine, and Bulgaria made a major contribution in building Black Sea alliances and furthering PfP efforts in the region. Forward-deployed, self-sustaining amphibious task forces can exploit excellent opportunities for initial bilateral training with the armed forces of emerging democracies.

UNITAS 96.—The 37th annual UNITAS deployment is a primary means of supporting regional stability in the Western Hemisphere. Active and reserve surface combatants, P–3C aircraft, Marines embarked in an amphibious combatant, and a submarine joined to conduct multi-national exercises with South American nations, while circumnavigating the continent, during a five-month period. This year, Canada, Germany, the United Kingdom, South Africa, and the Netherlands also participated during certain phases of the deployment. Our naval forces operate with host-nation air, sea, and land forces during each Latin American stop. These exercises often provide the only opportunity for Latin American forces to train with U.S. and other allied forces. For example, UNITAS Marines participated in four amphibious exercises and two riverine exercises in the nine-nation, 27-city deployment. The riverine exercises provided an invaluable foundation for the expanded riverine training occurring with South American allies through the recently established Riverine Center for Excellence. In addition, this year embarked explosive ordnance detachments experienced real-world training while searching for voice and data flight recorders from AeroPeru Flight 603, after the aircraft crashed off the coast of Lima, Peru, in October.

CARAT 96.—Regional stability in Southeast Asia is supported by the Pacific Fleet's Cooperation Afloat Readiness and Training (CARAT) program, patterned after the UNITAS deployment. Active and reserve surface combatants, maritime patrol aircraft, a special purpose Marine air-ground task force embarked in amphibious combatants, medical detachments, and a U.S. Coast Guard training detachment exercise with six countries in the South China Sea region for two months each year. In 1996, Brunei, the Philippines, Indonesia, Malaysia, Thailand and Singapore participated. During each stop, our naval forces exercised with the host nation's air, sea, and land forces. The objectives for each phase were to promote regional maritime interoperability, increase readiness, enhance military-to-military relations, and ensure stability of Southeast Asian sea lanes of communication.

Rim-of-the-Pacific 1996 (RIMPAC 96) is a biennial exercise designed to enhance interoperability and proficiency of multinational and bilateral forces operating in response to short-notice littoral missions. More than 28 ships and 1,200 Marines—including the *Independence* (CV 62) and *Kitty Hawk* (CV 63) carrier battle groups, the *Essex* (LHD 2) amphibious ready group with the 11th MEU(SOC) embarked, and U.S. Coast Guard vessels—participated in RIMPAC 96. An additional 29 ships from Australia, Canada, Chile, Korea, and Japan were involved in the exercise. In addition to embarked carrier air wings, U.S. Air Force and Hawaiian Air National

Guard and maritime patrol aircraft from the United States, Canada, and Japan also participated.

West African training cruise (WATC 96).—Is an annual exercise conducted to provide interaction between U.S. naval forces and host-nation counterparts, enhance military training, and maintain familiarity with the West African littoral environment. U.S. Marine Corps and Coast Guard personnel, embarked in amphibious ship *Tortuga* (LSD 46), conducted training in Benin, Cape Verde, Cote D'Ivoire, Guinea-Bissau, Mauritania, Senegal, and Togo.

Sorbet Royal.—Was a NATO-sponsored submarine escape-and-rescue exercise, involving units from seven countries and observers from six other countries. Conducted in the Vestfjord area of Norway, the exercise successfully demonstrated an ability to coordinate a multinational rescue of the crew of a disabled submarine and marked real progress in the standardization of procedures and equipment.

Freedom of navigation

An essential element of U.S. foreign policy is ensuring free and safe transit through ocean areas and international air space as a matter of legal right—not contingent upon the approval of adjacent countries. Naval forces are especially useful in demonstrating transit rights under international law. In 1996, Navy ships and aircraft conducted numerous freedom-of-navigation operations in or through areas where coastal nations have maintained excessive maritime claims in conflict with existing international law. The President, Secretary of Defense, and Chairman of the Joint Chiefs of Staff all have emphasized the importance of these operations as an active component of U.S. policy.

People

The most vital resource of the Navy-Marine Corps team is our people: active, reserve, and civilian. The intense demands of a modern, high-tech naval force operating in a complex foreign littoral environment require highly motivated, well-trained, and responsibly-led Sailors and Marines. The daily sacrifices of our people, who are deployed around the globe to ensure the security of the United States, deserve the best possible career and family support.

The current force

Total integration—The active, reserve, and civilian team

During 1996, the Navy's endstrength was 416,735 active and 97,956 reserve personnel. Further reductions are planned to meet our fiscal year 1999 programmed endstrength. The Marine Corps continues to maintain a force mixture of 174,000 active-duty Marines and 42,000 reservists. Department of the Navy civilian personnel endstrength approached 224,768, the lowest level since before World War II, and is targeted for 210,967 by fiscal year 1999. This reflects the results of base closures, force-structure reductions, and management efficiency. To meet the demands of our worldwide commitments successfully, an unprecedented level of integration among our active, reserve and civilian components is in order.

The role of the Naval and Marine Corps Reserve, in fulfilling the Department of the Navy's mission, has increased through their contributory support to the active component. The extent of this varies between warfare communities, ranging from routine operations and regional commander support, to such contingency operations as the evacuation of civilians from Liberia.

Capitalizing on reserve capabilities and our ability to employ reserve components seamlessly, we expanded active and reserve force integrated operations. Reserves regularly supported missile exercises, naval coastal warfare exercises, counterdrug operations, and search-and-rescue services for fleet carrier qualifications. In 1996, Marine Corps reservists participated in numerous exercises, such as BATTLE GRIFFIN, a USMC/Norwegian combined exercise in which 85 percent of U.S. participants (including the commanding general) were reservists. In addition, Marine Corps reservists from the 6th Engineer Support Battalion participated in Arctic Engineer, the military engineer civic action exercise in Noorvik, Alaska. This exercise provided valuable training for over 100 Marines in the movement and widening of an existing runway, protecting the airfield from encroachment of a nearby river. The Naval Reserve also played a significant role in exercises, including: BALTOPS 96, in which the first-ever reserve ship visit to a former Soviet port was conducted; UNIFIED SPIRIT 96, the largest NATO exercise of its type in more than five years; and UNITAS 96. This integration of reserve personnel and equipment into missions normally assigned to the active component not only improves reserve readiness but also keeps the active component personnel deployment rates at a reasonable level.

The Coast Guard also is a valuable participant in naval services integration and brings unique capabilities and expertise to the joint forces team. In addition to its

complementary surge capability, the Coast Guard plays a distinctive role in executing the regional commanders' peacetime engagement strategies. Smaller foreign nations view the Coast Guard as a model for their maritime forces, which share similar missions and challenges. The Navy and Coast Guard made significant strides toward the increased integration of forces in support of national security and military strategies.

Creating the force for the future

Recruiting

The Department's readiness depends heavily on the ability to attract and retain high-quality people. Although quite challenging, 1996 proved to be a highly successful year for Navy and Marine Corps recruiting. Through targeted marketing, Navy and Marine Corps recruiters achieved 100 percent of the enlisted accession goal. The recruiting strategy attracted qualified individuals for particular skill areas needed most in the Fleet and Fleet Marine Forces, while making significant progress in recruiting minorities. Minority accessions this year will be the most representative in the Department's history. Although low national unemployment and other changes in demographics made for a difficult recruiting environment, the academic quality of enlisted recruits remained high: 95 percent possessed high school diplomas, and more than 66 percent scored in the upper half of the Armed Forces Qualification Test. The addition of more recruiters to the force and a congressionally sponsored increase in recruiter special duty assignment pay will help ensure a solid recruiting effort. Federally legislated educational benefits also have a direct impact on recruiting. The 1995 New Recruit Survey listed the Montgomery G.I. Bill as the number one reason for enlisting. The Navy and Marine Corps College Funds are used as an enlistment incentive for specialized skill areas.

The year also was successful for officer recruiting, with nearly all programs attaining 100 percent of goal. Medical recruiting accessed 36 percent more physicians and dentists than just a year ago. Similar increases were attained for pilots and naval flight officers.

To continue the positive momentum of the Navy-Marine Corps recruiting team, the services implemented several initiatives to improve the process. Adopting proven methods from the commercial sector, the Navy successfully tested the concept of using professional telemarketers, resulting in more than 34,000 quality leads for recruiters. In addition, a 60-second "infomercial" was developed for selected cable networks. This promising program generated leads comparable to direct-mail efforts, and will be further evaluated during 1997. Traditional commercials emphasizing core values are well received and continue to be a major factor in reaching the general populace. Based on new recruit-survey results, our fiscal year 1996 advertising program has worked. The Department of Defense Youth Attitude Tracking Survey registered the first positive movement since 1991 in the desire of male youth to join the Navy.

For the Marine Corps, the propensity to enlist has remained constant. This is largely attributable to a modest but effective advertising program. An increase in the direct-mail budget realized a 25 percent rise in contacts. The Internet also proved to be a useful, low-cost source of leads and contacts. Continued improvements include an expanded "enhanced area canvassing" effort through "event" partnerships with youth-oriented programs. This program, along with other cost-effective methods, is connecting our recruiters directly with the youth market.

As an investment in future civilian recruitment needs, we have established special residential and scholars programs to expose outstanding high school and college students to the Department's technical missions and functions. These programs have enhanced our ability to recruit a well-qualified and diverse civilian work force, by bringing Navy and Marine Corps activities together with tomorrow's work force.

Retaining a quality force

Maintaining a quality force is a key element of overall readiness, and retention of officer and enlisted personnel is a critical component. We have many tools to accomplish this. Special pay and bonuses are targeted to those skills most costly to replace. The Selected Reenlistment Bonus (SRB) and Special Duty Assignment Pay (SDAP) are two of these. The SRB program is the Navy and Marine Corps' most cost-effective tool for increasing or holding steady the retention of high-quality people and highly technical skills. It provides an ability to respond quickly and precisely to changes in either requirements or retention.

Similar to bonuses, special pay provide compensation for personnel serving in specific billets, locations, or types of arduous duty. SDAP is used to attract high-quality volunteers into the most demanding and responsible billets. This initiative permits

significant savings in the areas of permanent-change-of-station costs and retraining of new personnel for those billets.

Bonuses and special pay also are essential tools for ensuring that our future inventory of officers meets our diverse and highly technical requirements. Examples of these include Nuclear Officer Incentive Pay, Aviation Continuation Pay, and Medical Officer Incentive Special Pay. Bonuses and special pay help us remain competitive for those skills that can be used directly in civilian industry. As a case in point—problems were encountered in Navy and Marine Corps aviator retention, primarily because of a major increase in civilian airline hirings. The Marine Corps has expanded its Aviation Retention Bonus program in fiscal year 1997 to reverse this trend. The Navy's Aviation Continuation Pay program also has been expanded to reflect the increased competition from the civilian sector and increases to the programmed force structure. In addition, legislation has been included as part of the Department of Defense fiscal year 1998 budget submission which maintains the bonus program structure and increases the maximum allowed award level for Nuclear Officer Incentive Pay. This increase will help counter falling retention, currently at a ten year low, in order to adequately man the nuclear-powered fleet. Adequate compensation and consequent improved retention in mission-critical skills will allow us to maintain peak readiness and morale, which is critical in today's all-volunteer force.

The Navy has initiated a new Homebasing Program designed to reduce the turbulence and costs associated with PCS moves. This enlisted program is evolving in response to changing Navy demographics. Since 1980, the number of Navy personnel with families has increased from 42 percent to the current 60 percent. The Homebasing Program's goals are to improve quality of life and retention.

Voluntary education programs also make a significant contribution to recruiting, retention, and readiness. For those already in the service, the vast majority of tuition assistance users are our prime retention candidates in pay grades E–4 to E–6. We have made concerted efforts toward standardizing the tuition assistance payment policy; expanding distance learning opportunities through the Program for Afloat College Education and the Marine Corps Satellite Education Network; increasing access to basic academic skills learning; and establishing an official educational transcript program, which will ensure that military personnel receive full academic credit for their educational experiences.

Training and educating for the future

We have the best trained Navy and Marine forces in the world, and several innovative training concepts are under development.

Training challenges

Providing affordable, quality training is a major challenge. Course consolidation, outsourcing, and interservice training all are being used to train in a more cost-effective manner. Specific evaluations of training schedules and career timing have resulted in better integration of training and operational commitments. In addition, we have made significant shifts in training to more appropriate career points. Aggressive use of simulation, virtual reality, war games, models, and distance learning also are providing quality solutions to some of our training challenges. Our training methods are improving, and we continue to look for better ways.

Innovative solutions

Accession training.—Technological advances, such as electronic classrooms and electronic training manuals, have improved training effectiveness and curriculum design. Training reviews have led to the adoption of core and strand training courses, selected computer-based instruction, and general reductions in the time required to train individuals.

Recruit training.—The transformation process is quite challenging, and requires an emphasis on instilling the ideals and core values of our naval services to build an effective fighting force. The Marine Corps has begun a four-phased program to build Marines with the mental, physical and moral courage that will be required to succeed on the chaotic battlefields of the 21st century. Marine recruiters begin the first phase by selecting only the most qualified young men and women to become Marines and introducing them, during their time in the delayed entry pool, to the ethos of the institution and to our core values. Drill instructors continue this process with the second phase during recruit training. The addition of one week focuses on core values training and allows for inclusion of the "Crucible"—a 54-hour mental and physical challenge exacerbated by sleep and food deprivation, designed to teach recruits steeped in self-discipline the value of selflessness. Marines learn in the "Crucible" that they must rely on each other to succeed, much the same as in combat. Marines then attend Marine Combat Training—training designed to give

each Marine a common, solid foundation in basic warrior skills. The third phase, cohesion, involves teams of Marines from recruit training remaining together upon graduation for their first tour of duty. Through the team, Marines can draw strength from one another and our core values when confronted with challenges inherent in being a Marine. The fourth and final phase, sustainment, continues through the duration of a Marine's enlistment or career and is the responsibility of every NCO, SNCO and officer in the Marine Corps. This phase is the continuation of the educational process, ultimately ensuring that Marines win in combat and that the Marine Corps returns to the nation a better citizen for having been a Marine.

The Navy also has adopted the concept of mentorship and individual stewardship to promote further the internalization of core values. This concept begins on day one of the new Sailor's journey at Recruit Training Command. On a new Sailor's first day, the recruit is met at the airport by Recruit Division Commanders and escorted to a bus within the first 45 minutes. While en route to the Great Lakes Training facility, the recruits view indoctrination videos and receive a "Blue Card"—designed to reassure new Sailors of the network of support around them—and a "Recruit Bill of Rights Card"—which outlines the Navy's policy regarding discrimination and sexual harassment. These improvements are indicative of the Navy's efforts to create a climate of excellence, founded on an initial positive and reassuring experience. Our efforts send men and women to the fleet prepared to participate, contribute, learn, help, and grow. In addition, these initiatives reduce attrition and increase the foundation for future success in the fleet. The Navy's basic military continuum builds upon the solid foundation established during boot camp.

Innovative readiness training.—Is a Department of Defense civilian/military program that provides combat support and combat service support units with the opportunity for hands-on, real-world training in their occupational fields, while providing support to under-served civilian communities. The Marine Corps Reserve sponsored Operation Arctic Care 96, in which members of the 4th Force Service Support Group (FSSG) Medical and Dental Battalions provided medical services to remote Alaskan villages above the Arctic Circle. Operation Arctic Engineer 96 used the same FSSG and 4th Marine Aircraft Wing personnel to repair and upgrade a rural runway in Noorvik, Alaska.

Leadership training and professional education

Leadership continuum.—Strong leadership is the cornerstone of our Navy and the key to future success. Strong leadership ensures mission readiness and provides our members and their families with a sense of purpose and commitment to our profession. Continually improving leadership throughout the chain of command is essential.

The Navy established the Leadership Continuum as a vehicle for imparting leadership qualities for specific positions in the chain of command. Developing exceptional leaders requires role models, experience, and commitment to excellence. The Leadership Continuum molds these qualities into a program of recurring training and provides a concentrated, hard-hitting series of two-week courses under a single training program. Enlisted personnel will attend the continuum after selection to E–5, E–6, Chief Petty Officer, and Command Master Chief/Chief of the Boat. Officers will receive instruction during training en route to their first duty assignment, at the 7–9 year point, at the 11–14 year point, and prior to their first command tour at approximately the 15–21 year point. The courses are solid, relevant, and of superior quality.

Marine Corps Research Center.—The Marine Corps University is expanding educational opportunities through improved nonresident professional military education courses, distance learning resources, video-teleconferencing, and "virtual" seminar and conference groups. The recently opened Marine Corps Research Center (MCRC), as part of the Marine Corps University, is specifically designed to meet the growing information needs of our global force. The MCRC provides a comprehensive facility for the study of expeditionary and amphibious warfighting, linking scholarly research and schools of professional military education with lessons learned from the field. It serves the information needs of the operating forces around the world, as well as those of the professional military education schools.

Civilian leadership development program.—The Department of the Navy Civilian Leadership Development (CLD) Program was established to deal with the challenges of restructuring, downsizing, technological changes, and new roles and missions. The program also ensures that minorities and women are provided improved opportunities to acquire skills and abilities that enhance their competitiveness for higher level positions. To meet these challenges, we are developing a framework of technical and leadership training for civilian employees. The framework identifies certain competencies of good leaders that commands and activities can use as a

basis for establishing formal leadership development programs. A Civilian Leadership Board assists in developing the CLD framework and overseeing its implementation by commands and activities.

Climate of excellence

Core values: What we give and what we get

The Department of the Navy is committed to the moral foundations of our Services. The past year involved a Department-wide effort to rededicate ourselves to our core values of honor, courage, and commitment. To this end, a core values charter was established this year and distributed throughout the Department of the Navy. In an effort to ensure that all who enter the naval services can move to a higher plane, the charter highlights the bedrock principles of the Navy and Marine Corps: uncompromising integrity; honesty and truthfulness; the moral courage to take responsibility for our actions; meeting the demands of our profession and mission; and achieving the well-being of our people, without regard to race, religion, or gender. We strive to develop the highest degrees of moral character and professional excellence in our people. The principles of honor, courage, and commitment are being incorporated systematically not only in training but also in the actions and decisions in day-to-day operations. The understanding of these core values begins with recruiting. In the Navy, these core values are the basis of the 1997 national advertising campaign; while the Marine Corps' emphasis centers on the transformation process. Both of these approaches are intended to ensure that young people who join the Navy and Marine Corps understand our expectations and are willing to serve at this level of excellence.

By instilling these values in our people, it enriches not only our Navy-Marine Corps team, but also our society—whether an individual stays in the service or returns to civilian life.

Equal opportunity

Through leadership, training, education, and mentoring, the Department of the Navy offers all hands the opportunity to succeed. To that end, it provides an environment that recognizes the dignity and unique qualities of all. The Navy equal-opportunity vision statement is a foundation of this environment, supplemented by our increased emphasis on core values. Leadership is the key in this area, and through mentoring and personal attention at all levels, all will have the opportunity to demonstrate their skills and ability to succeed. Several initiatives provide the policy guidance necessary to assist leaders in identifying and eliminating discrimination, as well as in removing artificial barriers to advancement. These include the Navy and Marine Corps' Equal Opportunity Manuals, various equal opportunity conferences, and a stern reminder by the Secretary of the Navy that involvement in extremist activities and membership in supremacist or extremist groups by naval personnel will not be tolerated.

The Department of the Navy has made great strides in identifying and eliminating sexual misconduct. Active efforts throughout the Department concentrate on oversight, leadership, policies, and training, while at the same time providing assistance services and formal assessments of our progress. The Navy's Leadership Continuum and the Marine Corps Professional Military Education courses provide fleet relevant leadership education, with strong core values emphasis. We continue to support a top-level standing committee on military and civilian women. We have added more fleet equal-opportunity billets, and have provided command-managed equal opportunity officers or equal opportunity advisors to all commands. Toll-free advice lines, as well as victim/witness assistance programs, have been established at installations, offering full access to counseling, advocacy, and other community support services. We are committed to the elimination of discrimination and sexual harassment from our ranks, and as statistics and prevention/intervention strategies are reviewed over time, we will continue developing and refining our policies and initiatives.

The Department of the Navy also is continuing its support of the "Enhanced Opportunities for Minorities Initiative (12/12/5)" to achieve cultural diversity within the Navy and Marine Corps. The goal is to reach an accession level of 12 percent African American, 12 percent Hispanic, and 5 percent other minorities by the year 2005. This would create an officer corps that is reflective of the racial composition of American society and our enlisted force by the year 2025. Although the goals of this initiative will take a number of years to achieve, the impact will have a lasting and positive effect on the future of our Navy, Marine Corps, and our country.

Quality of life

The best quality of life we can provide is to bring our Sailors and Marines home alive. To do this, we must ensure our naval forces are well trained, equipped, supported, and led. An important component of this effort is in taking care of our personnel and their families. Key elements of quality of life include an adequate package of compensation and benefits as well as a positive environment that provides service members the tools to reach their full potential. To this end, the Department of the Navy has established minimum quality-of-life standards—and aggressive goals to meet these standards in cost-effective and coordinated ways.

Quality bachelor and family housing continue to be a high priority. Recently, a private sector-based housing strategy was developed to construct and revitalize housing for military personnel. This public-private venture, the Military Housing Privatization Initiative, was authorized by Congress in fiscal year 1996. It has been expanded to include bachelor housing in 1997. Revitalization and construction of bachelor and family housing hinges on our ability to use these authorizations. A combination of these approaches will permit accelerated achievement of the Department's goals, without increasing costs.

Quality child care at affordable prices also is critical. Several options to meet the growing child care demand already are under way or currently being developed. These initiatives include contracting for spaces in qualified off-base civilian centers, expanding family child care to incorporate off-base residences, enhancing our resource and referral program, school-age care partnerships, and obtaining wrap-around contracts with local providers.

We also remain committed to providing a full range of community and family support services for our service and family members. These services emphasize basic skills-for-living adult education and provide timely, accurate community information and referral. They also help prepare family members for the rigors of required relocations, major life transitions, employment opportunities, deployments, and mobilizations. Examples of these programs are the Marine Corps' formal Key Volunteer Network program and Navy's Ombudsman program which are designed to assist spouses while the service member is deployed. In addition, the Marine Corps is implementing "LINKS" (Lifestyle, Insights, Networking, Knowledge and Skills), a program that assists new families in adapting to the Corps. Additional funding is programmed in fiscal year 1998 for counseling services, to ensure that the highest-quality professional assistance is available.

The needs of our single members also are a key concern. Single Sailors and Marines, representing the majority of our Sailors afloat and overseas, typically live in the most modest accommodations. They have a greater need for programs which enhance their recreational opportunities which enhance their recreational opportunities and offer constructive activities for their off duty hours. Recent survey results indicate single Sailors and Marines perceive their needs have not been met at the same level as married personnel. The Navy and Marine Corps have established separate Single Sailor and Marine programs with long-term funding to address specific needs. Initiatives include safe and secure storage for personal belongings and vehicles during deployment, and pierside laundry facilities for those who live aboard ship or are deployed overseas. In addition, the Navy has established a center at Great Lakes to meet student recreational needs and emphasizes constructive leisure activities and opportunities available in Navy recreation programs during the recruit training curriculum.

The Department of the Navy has made a significant commitment to funding morale, welfare and recreation (MWR) programs. This provides a stable, long-range recapitalization plan to ensure adequate MWR facilities. Computerized libraries, learning resource centers, and state-of-the art fitness equipment and recreational gear are all being funded to enhance morale.

Community action and healthy people

The Department is actively promoting numerous programs that create the right environment and provide the necessary guidance for our people to pursue healthy life styles. Our zero tolerance drug policy has significantly reduced drug use, with a decrease in positive drug-test results from 14 percent in 1981 to 1 percent in 1996. Over the past year, we established a standing committee on alcohol use deglamorization, to highlight the Department's policies and attempt to change existing attitudes toward alcohol. The Navy's Right Spirit campaign and the Marine Corps' Semper Fit program are additional ways of educating our people and instilling personal responsibility for themselves and each other.

We are not limiting these programs to our naval family. Programs such as the Drug Education for Youth, Seaborne Conservation Corps, Young Marines, and our

media campaign seek to influence local youths by emphasizing core values and using role models from the Department.

Meeting our spiritual needs

More than 800 military chaplains in the Navy continue to mold values by facilitating the free exercise of religious faith. In addition to round-the-clock pastoral care and counsel, they provide spiritual-formation programs encompassing marriage preparation and enrichment and personal growth events, such as the Chaplains Religious Education Development Organization. Among other traditional and innovative programs, chaplains continue to foster initiatives for individuals and families with chaplain-led programs and benevolent service projects in the local communities.

As key players during crisis, chaplains provide intervention and support during times of personal loss, bereavement, and transition. In cooperation with the Army Chaplain Corps, Navy chaplains fill quotas for attendance at the prestigious Menninger Clinic for a one-week suicide prevention course.

Enhancing the quality of life means ministry at sea and ashore, with chaplains interacting with family service centers, the Navy and Marine Corps Relief Society, the American Red Cross, and others to ensure that military people have the best support possible.

Quality of civilian work life

In 1994, President Clinton directed the leaders of executive departments and agencies to establish programs to encourage and support expansion of flexible, family-friendly work arrangements, including: job sharing, career part-time employment; alternative work schedules; telecommuting; and satellite work locations. We have established a multi-tiered work life program to attain the objectives of the President's directive. Work life resource and information centers are being established at several locations throughout the Navy to make available material and information in such areas as career and personal planning, health and wellness, financial planning, and continuous learning. The Department of the Navy is participating in a federal telecommuting pilot program in the Washington, DC, metropolitan area to allow work to be performed at home by selected personnel. The President's Management Council has asked the Department to expand the telecommuting pilot to include civilians outside this area.

Regionalization of the civilian human resources management system

Program Decision Memorandum 61 directed Department of Defense components to regionalize base level civilian personnel functions and to reduce manpower to a 1:100 ratio between personnel specialists and the serviced population. Achievement of this significant improvement in servicing ratio, coupled with the planned drawdown of the civilian work force, requires reducing (by roughly 45 percent) the number of employees providing base level civilian personnel services by the year 2001. A major challenge is to continue providing quality civilian personnel services to our managers and employees throughout this transition. After extensive analysis of facts and alternatives, and with continuing participation by diverse groups of stakeholders, the Department will stand up three human resource service centers in fiscal year 1997 and four in fiscal year 1998. We believe that regionalization will give us the best return on our dollars, by eliminating duplication and standardizing human resource services.

Medical

The Department is committed to providing the highest-quality health care to active-duty and retired service members and their families. Recent innovations for keeping people healthy and on the job, providing medical services as close as possible to the work site, and using technology to move information instead of patients have provided a solid foundation for future improvements.

Navy medicine's strategic plan, Journey to Excellence: Meeting the Challenges of the Future, will help guide us in meeting our primary mission of readiness. This strategic plan describes the means for reengineering the approach to medicine and health care services, particularly through the development of measurable data. Navy medicine is developing performance indicators that are specific, measurable, accountable, realistic, and time-phased. The annual planning process aligns us with the Government Performance and Results Act; supports TriCare, the Department of Defense managed-care program; and makes strategic planning a part of our culture.

Navy medicine has had great success this year with telemedicine technology, greatly reducing the need to transport patients. By using this new technology, we are realizing benefits with enhanced medical care, specialty consultation to remote areas, and time and cost savings. This technology also is enhancing our ability to

provide quality health care forward with operational forces, ships at sea, and remote medical treatment facilities. This change in the way we do business is helping to keep our people on the job by taking health care to the deckplates. The successes on board *George Washington* (CVN 73), our operational testbed for telemedicine technology, have been incorporated into other areas of operational medical support and treatment facilities in the United States and overseas.

Another example of our reengineering efforts is a pilot project to enhance medical support for ships at sea through active preventive health care and health promotion. This past year, we deployed a physical therapist and a dietitian with *Enterprise* (CVN 65), providing significant health maintenance benefits to the crew.

Navy medicine is on board with the Department of Defense's TriCare implementation and is performing its responsibilities as the lead service in San Diego, California, and Portsmouth, Virginia. TriCare is allowing us to give our beneficiaries what they want: choice, guaranteed access, and quality care at low out-of-pocket expense.

Another important program is the Medicare subvention demonstration project to allow the Military Health Services System to be reimbursed for medical care given to retirees over age 65. The Department of Defense is considering additional alternatives that will demonstrate our concern for and commitment to military retirees who are Medicare-eligible. Meanwhile, Medicare-eligible patients continue to be seen on a space available basis at military hospitals and clinics.

READINESS

Navy and Marine Corps readiness is high today, but concerns about the future persist. Readiness is not limited to our ability to meet today's commitments; our readiness must be able to answer both near-term and long-term needs, as well. This requires attaining a careful balance between funding of current operations, modernization of existing assets, and procurement of new platforms to recapitalize future force levels—a balance that is increasingly more difficult to reach. Application of balanced solutions to the sometimes divergent objectives of maintaining current capabilities, operations, and recapitalizing for the future is a significant challenge in view of projected fiscal constraints.

Today's readiness

Indicative of today's readiness is the continued success of the Navy-Marine Corps team during this past year. Beginning with forward-presence missions committed to real-world operations and culminating with joint and combined exercises, naval forces were successful because our readiness remained high. This level of readiness was attained by providing the best training and equipment available, and by preserving these assets with outstanding leadership and prudent safety programs. Our tactical training strategy ensures battle group, amphibious ready group, and Marine expeditionary unit readiness through a comprehensive, realistic interdeployment training cycle.

Because we are forward deployed, incremental costs for contingency operations can be relatively small. However, unfunded contingencies that require deployment of additional ships, aircraft squadrons, and Marines cause reductions in other areas of the Navy and Marine Corps Active and Reserve Operations and Maintenance (O&M) accounts. Diverting programmed O&M funds directly impacts the balance of current readiness across the force, delaying vital equipment repairs and disrupting quality training.

Realistic operational training

Realistic operational training while deployed or preparing for deployment has remained a top priority for the Navy and Marine Corps. Funding constraints have made it imperative that we reap the top benefit from our training budget. Continued advances in simulators and unit-level training systems provide highly effective training and reduce the time required to train on actual equipment. Almost all systems purchased today have cost-effective computer-based training systems that enhance operator skills. The Battle Force Tactical Trainer, a shore-based broadcast system, now can simulate combat scenarios with real-time updates, allowing watchstanders the opportunity to run integrated battle problems inport or underway. Simulators are providing valuable and realistic training in dangerous scenarios without risk to personnel, and at a significant monetary savings. For example, the Marine Corps Air-Ground Combat Center at Twenty-Nine Palms, California, is on the leading edge of advanced warfighting experiments. Their modeling, simulation, and range instrumentation capture information and permit more accurate and precise evaluation of actions and decisions made under the stress of simulated combat. Sea-based instrumented ranges, such as the Naval Air Warfare Center Sea Range and the Atlantic Undersea Test and Evaluation Center, also provide critical training

data. These technological advances are providing major improvements in our training—and ultimately in our readiness.

A critical component of readiness includes the hundreds of unilateral, joint, and combined exercises in which we participate each year. In 1996, more than 260 joint and combined exercises had naval participation. This training not only provided valuable service-specific training but also increased interoperability readiness with the Army, Air Force, and foreign countries.

Protecting and, when possible, expanding the areas where naval forces can conduct training is key to readiness. Initiatives such as obtaining permission to use foreign training areas allow us to maintain our combat edge while deployed. Superb examples of important overseas training areas include Northern Australia and the missile range off the coast of Crete in the Mediterranean Sea.

The Department is committed to maintaining a proper balance between environmental protection and operational readiness and safety. Today, environmental concerns have limited training and testing at numerous ranges and bases. The key to successful management of our environmental responsibilities is the integration of environmental planning into the earliest stages of decisionmaking, especially in the operations and acquisition arenas. The Department is working closely with the environmental agencies to ensure that a prudent balance is maintained between critical environmental issues and vital readiness for our naval forces. Several initiatives are being pursued to solve shipboard-discharge challenges and base and installation hazardous waste disposal/cleanup. Also, we are seeking aggressively common ground to address—and, where necessary, eliminate—the impact of our training and testing on endangered species and marine mammals, which ultimately will lessen the likelihood of environmental issues affecting both Navy and Marine Corps missions.

Equipment readiness

Our readiness today depends on providing the tools our forces need to operate. This year our equipment readiness has been consistently at or above goal, primarily attributable to the outstanding maintenance efforts of our Sailors and Marines. However, there are areas of potential concern. Due to the age of a significant portion of Marine Corps equipment, the average maintenance requirements are growing. Close scrutiny of the material condition of our equipment is required to guarantee future readiness. We must ensure our equipment remains well maintained amid a declining budget without further decreasing our modernization accounts.

Preserving our assets

An inherent responsibility of the Department of the Navy is to conserve resources and protect our personnel from hazards. The preservation of our assets is the cornerstone of our safety and occupational health program and must be successful or readiness will suffer.

Operational safety and survivability initiatives, in conjunction with the Naval Postgraduate School, the Naval Safety Center, and Fleet and Fleet Marine Force units, are beginning to reduce characteristic losses of the past. Losses attributable to human causal factors, which generally run in the range of 75–80 percent of total losses, are under special scrutiny. A focused Human Factors Quality Management Board has begun to analyze underlying cultural characteristics that provide information and guidelines necessary to reduce losses further. In all phases of naval operations, new windows of human performance information and opportunity are being explored. Initial goals of reducing human-factors-related losses by 50 percent in five years, and by 70 percent in ten years, have been set.

Operational Risk Management (ORM) is an effective tool for maintaining readiness in peacetime and dominance in combat. The Navy's ORM program is modeled on the very successful Army program dating to 1991. This program is designed to eliminate unnecessary losses, whether in combat or training, by providing the unit commander with an understanding of risks associated with pending actions. The Navy is emphasizing ORM in multiple safety and education programs toward the goal of attaining significantly lower mishap rates. The knowledge gained will help define and control risks. Subsequent actions will improve effectiveness and contribute to a continued high state of readiness.

The Navy surface force had its second-best year ever in fiscal year 1996, while naval aviation recorded one of its best years in history. Highly visible aviation mishaps received increased attention from many sectors, but the Navy and Marine Corps safety-of-flight programs—which already were under way in cockpit voice and flight data recorders, Global Positioning System navigation systems, and Ground Proximity Warning Systems—gained new footholds as baseline systems for long-term operational success and loss reduction. Other new safety initiatives throughout

the Department include: A revitalized explosives and weapon systems safety program; safety and survivability "Reinvention Lab" streamlined acquisition programs; changes in Marine Corps aviation from an hour-based to a sortie-based training system; and improved base and station fire-fighting support, to include fire department consolidation.

Improving our readiness

A fundamental part of readiness is to focus frankly and honestly on the chinks in our armor. For example, the proliferation of technology has had a revolutionary impact on the full range of warfare, presenting significant challenges in the form of enemy access to satellite reconnaissance and secure communications, cruise missiles, chemical/biological weapons, sea mines and advanced capability submarines. Our naval expeditionary forces influence and work in the battlespace extending out from the shores of a potential aggressor. Therefore, the Navy-Marine Corps team has pursued aggressively initiatives to maintain dominance in the littorals. Some examples of our push to preserve our expeditionary edge include:

—Acquisition of the *San Antonio*-class (LPD 17) amphibious warfare ship;
—Procurement of the MV–22 tilt rotor aircraft to extend the Marine air-ground task force's influence inland;
—Development of organic minehunting capability for surface and submarine forces;
—Procurement of the F/A–18E/F aircraft to improve power projection capability;
—Employment of Pioneer unmanned aerial vehicles along with the development of follow-on systems to enhance the interoperability and connectivity of naval forces;
—Development of the advanced amphibious assault vehicle to provide a needed maneuver-at-sea capability;
—Conversion of *Inchon* (former LPH 12) into a mine countermeasures command-and-control ship;
—Development of advanced antisubmarine capabilities in our attack submarines, P–3C aircraft, and surface ships' sonar suites and weapon systems;
—Pursuing the Navy's theater missile defense capability for Aegis cruisers and destroyers;
—Development of extended-range 5-inch projectiles and a strike missile to revitalize naval fires;
—Arming SH–60 LAMPS helicopters with the antiship Penguin missile;
—Acquisition of the Advanced Deployable System to enhance the undersea battlespace picture and provide timely cueing to undersea warfare (USW) forces.

These programs typify the Department of the Navy's efforts to upgrade its capabilities as the force of influence and of choice in the littoral regions of the world.

Readiness for the future

Future readiness requires investment today. Both the Navy and Marine Corps are planning increases in procurement and research and development accounts to guarantee future readiness. This continues to be dependent on the need for readiness today. New Attack Submarines and *San Antonio* (LPD 17) class amphibious ships will replace their aging predecessors in the near term. Next-generation platforms and systems, such as the Surface Combatant of the 21st century (SC 21), MV–22 aircraft, the Joint Strike Fighter, advanced amphibious assault vehicle, and theater missile defense are essential long-term investments. Where considered most cost-efficient, current systems—such as the AV–8B Harrier aircraft and P–3 Orion aircraft—are being remanufactured or given service-life extensions. Using the development of Cooperative Engagement Capability and the naval C^4I strategy (Copernicus . . . Forward), the Department will leverage the capability of all present and future systems. Cost efficiencies also are sought by designing ships with reduced manning requirements, such as the new arsenal ship. But whether giving new life to old systems or taking a technological leap into systems of the next century, it is only through proper funding of modernization accounts that naval forces will be able to support the national security and military strategies in the future. However, increases in modernization accounts must come from continued reductions in infrastructure investment and other savings initiatives. The budget constraints challenge us to create and maintain the correct balance between current and future readiness. Both are important and neither can be ignored. The Department believes that within these constraints a correct balance has been attained.

TECHNOLOGY

Modernizing the current force

The Department of the Navy is investing in the platforms, equipment, and infrastructure necessary for success in the future. Our approach relies on an acquisition investment strategy that maximizes our scarce procurement dollars without compromising quality or losing critical capabilities. This strategy must capture the cutting edge of technology to guarantee the continued operational primacy of our Navy-Marine Corps team. Our goal is to maintain a balance between reinvigorating older platforms through technology insertion and acquiring the next generation of systems. A quick review of naval programs shows that we are meeting our goal.

Solid, proven platforms are superb candidates for modernization. The *Arleigh Burke* (DDG 51) class destroyer, *Los Angeles* (SSN 688) class submarine, AV–8B Harrier, F–14 Tomcat, and the Marine Corps' light and medium vehicles are suited perfectly to this approach. Modernizing these platforms is fiscally sound. For example, a relatively small investment in *Arleigh Burke* destroyer modernization initiatives results in exceptional capabilities upgrades. Similarly, a remanufactured AV–8B saves approximately 23 percent, compared to the cost of a new aircraft.

Although modernization of major systems is appropriate in the short term, retaining our operational primacy requires recapitalizing our force structure. A successful recapitalization program requires continued funding support to meet production goals and acquisition timelines. Our investment strategy must remain executable, to avoid losing future capabilities.

New-generation platforms, including the New Attack Submarine, MV–22, Joint Strike Fighter, advanced amphibious assault vehicle, and Surface Combatant of the 21st century (SC 21) are critical replacements for older technology. By the time some of these platforms enter active service, they will be replacing systems that have been on the front lines for 30 years or more. Our strategy maximizes the return on investment. One example of this strategy is the dual-track recapitalization philosophy being pursued with CVN 77. In addition to modernizing the carrier force, CVN 77 will incorporate innovative technologies for both existing and future aircraft carriers. Most important, CVN 77 maintains the carrier force level while facilitating long-term planning for CVX, a completely new and revolutionary air capable platform for the 21st century.

In another approach, revolutionary technology will be introduced through platforms such as the tilt-rotor MV–22 Osprey, the replacement for aging CH–46E and CH–53A/D helicopters. The MV–22 will revolutionize the battlefield and lead to further use of advanced technology.

The Advanced Enclosed Mast System (AEMS) is an excellent example of using technology insertion to produce advanced equipment at a reduced cost. The AEMS encloses rotating antennas in a composite structure to reduce radar signature, improve sensor performance, and reduce maintenance. Positioning sensors and communication equipment, an AEMS structure improves ship survivability and facilitates the integration of next-generation planar and embedded sensors. The AEMS will be installed on the *Radford* (DD 968) during fiscal year 1997 and is under consideration for *San Antonio* (LPD 17) class ships.

Exploiting technology: Investing for our future

Every day, naval personnel operate complicated systems around the world in extremely diverse and challenging physical environments. To contend with these complex requirements, we must embrace change and keep pace with rapid technological advances. Training, materials, systems, and platforms all require cutting-edge technology. Consequently, the Department is using the latest business applications, commercial off-the-shelf (COTS) technology, and streamlined acquisition methods to expand capabilities for the future. These methods ensure new technology is readily available when needed. The use of COTS technology in such systems as Battle Force Tactical Training, C^4I equipment, and submarine sonar processing and display equipment are examples of improving the pace of technology insertion into the Fleet.

Naval science and technology (S&T) programs continue to explore ideas that span the technology spectrum, such as basic and applied research, advanced technology development, and a vigorous manufacturing technology program. Some examples of Navy S&T programs that will be of great value to the Fleet include the "Mountain Top" cruise missile defense program—which achieved the first-ever beyond-radar-horizon engagement of cruise missile targets in 1996, using the new Cooperative Engagement Capability technology—and the Specific Emitter Identification program, which will allow tracking of individual ships by their unique radio-frequency "fingerprints." The Navy's Smart Ship project is another effort to exploit commercial technology. This pilot program is designed to rapidly identify labor saving technologies

and evaluate them in a designated test ship, *Yorktown* (CG 48). Specific initiatives designed to reduce manpower are being evaluated during fiscal year 1997. Because science and technology opportunities are abundant in areas outside the Department, we actively foster partnerships with the other services, government agencies, academia, and industry to reduce acquisition costs. The Joint Direct Attack Munitions program and the Global Command-and-Control System are multiservice programs typifying these efforts.

Marine Corps S&T has focused on the land-warfare aspects of naval warfare, using Operational Maneuver From the Sea as the guide. Joint S&T investment with the U.S. Army has proved highly successful. Recently, the Target Location and Designation Hand-Off System—a Marine Corps Advanced Technology Demonstration—displayed the ability to locate mobile targets precisely and to transmit pre-formatted calls for fires rapidly. These efforts have achieved unprecedented improvements in responsiveness, accuracy, and lethality.

Excellence through innovation

Innovation occurs throughout the Department of the Navy. Although innovation in technology is key to future success, innovation in concepts is yet another engine that pulls the technology train. Experience from operations in the littorals and maneuver from the sea has resulted in such new platform and weapon concepts as the Arsenal Ship. In partnership with the Defense Advanced Research Project Agency, arsenal-ship technology efforts focus on demonstrating affordable and innovative enhancements to our current force. The arsenal-ship concept has the potential ability to mass firepower in the littorals to deliver strike, missile-defense, and naval fires. The arsenal-ship concept further investigates critical manpower savings and C^4I linkage issues. The future concepts tested in the Arsenal Ship will become available for incorporation in the SC 21 and other future platforms.

Innovations also are evolving around organizational structures, such as the Marine Corps Chemical-Biological Incident Response Force (CBIRF). The first of its kind, it connects electronically the aggregate knowledge of specialists located at institutions, schools, hospitals, and government organizations around the United States with the deployed unit. Intended to provide consequence management during chemical and biological incidents, the CBIRF first was deployed in support of the 1996 Summer Olympics and later to Washington, D.C., to support the presidential inaugural.

Other innovations include the development of theater missile defense around existing Aegis hardware to enhance full-dimensional joint force protection in the littoral. In addition, increased peacekeeping and peace-enforcement operations result in the innovative development and use of nonlethal technology. The Marine Corps, as the designated Department of Defense Executive Agent for nonlethal weapons, is ensuring the timely development and fielding of these weapons throughout DOD. Deployable Marine Corps units already are equipped with several nonlethal weapons. We are striving to develop a flexible standoff capability by employing nonlethal weapons across the full range of conflict. These examples highlight the role of the Navy-Marine Corps team as innovators—innovators in technology, concepts, and organizations.

Leading through innovation

Both the Navy and Marine Corps have developed the necessary institutions to experiment with and evaluate new ideas and equipment. These institutions ensure that the best of each concept is captured, developed, and efficiently implemented. Some of these institutions and forums include:

Commandant's Warfighting Laboratory (CWL), established in October 1995, serves as the cradle and test bed for development of enhanced operational concepts, tactics, techniques, and procedures that will be progressively introduced into the Fleet Marine Forces in concert with new technologies. The CWL serves as the catalyst for the integration of new technologies and warfighting refinement into the Marine Corps. For example, Sea Dragon is the CWL's open process of technology exploitation and operational concept development. It seeks to build on existing strengths of the Navy-Marine Corps team and exploit innovative, competitive advantages in future combat. The Chemical-Biological Incidence Response Force is one example of CWL experimentation coming to fruition. The CWL developed a Five Year Experimental Plan (FYEP) as the guideline for planning and experimentation. The FYEP is divided into three phases—Hunter Warrior, Urban Warrior, and Capable Warrior. The FYEP is supported by the Sea Dragon Advanced Concept Technology Demonstration, which examines the "Extended Littoral Battlespace." An experimental special purpose Marine air-ground task force serves as a test bed for experiments. The first advanced warfighting experiment, Hunter Warrior, will focus on expanding

the area of naval expeditionary force influence in the early stages of conflict. The emphasis will be on advanced command and control, fires and targeting, innovative combat service support, and operations on an extended, dispersed, noncontiguous battlefield.

"Extending the Littoral Battlespace" advanced concept technology demonstration (ACTD), recently approved by the Deputy Under Secretary of Defense (Acquisition and Technology), provides a means to demonstrate key elements of the Defense Science Board's 1996 Summer Study. The purpose of the ACTD is to demonstrate the efficacy of emerging capabilities, to include theater-wide situational understanding, effective remote fires, and a robust interconnected information infrastructure, in providing significant increases in the effectiveness of naval expeditionary forces. This ACTD seeks joint participation and targets implementation of the advanced warfighting concepts outlined in Forward From the Sea, Operational Maneuver from the Sea, Joint Force 2010, and Joint Vision 2010. The over-arching objective of the ACTD is to demonstrate an enhanced C^2/fires and targeting capability which will enable rapid employment, maneuver, and fire support from the sea of dispersed units operating in an extended littoral battlespace.

CNO's fleet battle experiments, established in October 1996, takes forward-looking programs and integrates them with innovative operational concepts. We continue to exploit modeling and simulation in testing new systems and concepts. Yet, experimentation, through the use of operational prototypes or systems, is required to validate our models and refine our systems and concepts. We are establishing At-Sea-Battle-Labs to dovetail technological advances and innovative operational concepts with real world-training and simulation. Recent innovations operationally tested at sea include the Global Broadcast System and the Cooperative Engagement Concept Mountain Top experiment. In the future we will use the Fleet Battle Experiments to test CJTF/MAGTF Afloat, C^4ISR, Arsenal Ship, naval surface fire support improvements and TMD. These experiments will focus on future programs that align the Navy with Joint Vision 2010 and demonstrate the innovative, yet enduring nature of naval capabilities.

CNO's Strategic Studies Group (SSG) recently was designated as the Navy Center for Innovation by the Chief of Naval Operations (CNO). Each year a dozen hand-picked captains and colonels from the Navy, Marine Corps, and Coast Guard work with top students from the Naval War College and Naval Postgraduate School. These teams conduct ten month studies on issues identified by the CNO. The SSG consults with industrial leaders, scientists, and engineers from leading research and development facilities, fleet operational commanders, and officers developing military doctrine and operational concepts. Their efforts center on the use of new technologies addressing future naval challenges and developing the organizational and operational concepts needed to complement future Navy and Marine Corps systems.

CNO's executive panel (CEP) is designed to provide independent policy and technical advice to the CNO. Composed of leading experts from a variety of areas, the CEP studies significant issues identified by the CNO. One CEP task force continues its partnership with the Strategic Studies Group to foster strong, independent concept-generation teams in the area of naval warfare innovation.

Wargaming continues as a valuable innovation tool. Institutions such as the Naval War College and the Marine Corps' Wargaming Center conducted or cosponsored numerous wargames dealing with evolving concepts and the Revolution in Military Affairs. These wargames identify deficiencies in research-and-development efforts and assist in developing the operational and organizational concepts of the future. Naval wargaming possesses a long, successful history of contributing to innovation. Today's wargames will lead to revolutionary changes on tomorrow's battlefield—changes that will test the employment of systems such as the Arsenal Ship and MV–22.

Improving readiness through modeling and simulation

Providing affordable quality training is the major training challenge. Technologies being explored will enhance skills of ground, sea, and aviation forces. The naval services are full-time partners with the Defense Department in modeling and simulation. These initiatives form the foundation for future education, training, operations, analysis, and acquisition. The Joint Simulations System (JSIMS) represents true innovation and allows all services to benefit from a common framework, facilitated through a joint development effort. Anticipating an initial operational capability at the end of fiscal year 1999, JSIMS will provide realistic and interoperable joint training for naval expeditionary forces. Other simulation efforts and implementing organizations include:

—*Navy and Marine Corps Modeling and Simulation Management Office (NAVMSMO & MCMSMO).*—NAVMSMO and MCMSMO were created to sup-

port technical and management initiatives directed by the Department of Defense and the Secretary of the Navy. These offices bring organization and focus to the development and use of modeling and simulation tools throughout the Navy and Marine Corps. They are the central agencies for formulation and implementation of policy and guidance in modeling and simulation. Both offices are pursuing initiatives that harmonize management, minimize redundancy, sharpen requirements, improve joint program participation, leverage other initiatives, and verify the quality of modeling and simulation across all functional areas. In addition to coordination among the two offices, they also cooperate with the Defense Modeling and Simulation Management Office, to ensure compatible model development and eliminate duplication of effort.

—*Marine air-ground task force tactical warfare simulation (MTWS).*—MTWS is a computer-assisted warfare gaming system supporting Marine Corps commander and staff training. The system provides a full range of combat models to support Marine Corps exercises.

—*Battle force tactical training (BFTT).*—BFTT supports realistic combat systems training in all warfare areas. BFTT allows ships to conduct operator- and unit-level training inport and at sea. Ships, crews, and battle groups use BFTT to exercise in a common synthetic joint warfare theater, regardless of actual location.

—*The indoor simulated marksmanship trainer (ISMT) and infantry squad trainer (IST).*—The ISMT/IST is an interactive videodisk-based system that realistically replicates the firing characteristics of 11 weapons and provides additional training in specified combat skills. The ISMT/IST also provides the capability of using simulation to train Marines in the employment of their weapons and to enhance combat skills. The ISMT/IST can be deployed and used on board amphibious shipping.

—*Interactive multimedia acoustic trainer (IMAT).*—IMAT is used by the surface and submarine communities to provide realistic visualization of complex acoustic theory. This innovative device improves operator understanding of acoustic concepts and increases proficiency in target detection.

—*Combat vehicle appended trainer (CVAT).*—CVAT provides a deployable, high fidelity, full-crew, precision gunnery, networked trainer for the crew of the Marine Corps family of armored vehicles—such as the M1A1 Tank, Light Armored Vehicle, and Amphibious Assault Vehicle. The CVAT will use simulation to train combat vehicle crews in the employment of their vehicle, to include driver, loader, and vehicle commander skills as well as gunnery and unit tactics. Simulation will complement and enhance training by providing more realistic performance conditions.

—*LCAC full mission trainer.*—The LCAC Full Mission Trainer is a simulator that provides realistic operator training at one-tenth the cost of underway operations.

—*Marine doom.*—Marine Doom is an interactive video game patterned after the popular commercial video game "Doom." This game enables Marine fire teams to simulate an attack on an objective in a military-operation-in-urban-terrain environment. Use of Marine Doom teaches teamwork and the importance of mutual support.

EFFICIENCY

Today's fiscal realities clearly call for efficient, responsible use of our precious resources. The Department of the Navy has been steadfast in its efforts to scrutinize every aspect of our operations, infrastructure, and methodology—for efficiencies and cost savings. We also are capitalizing on emerging technologies, employing lessons learned from other successful defense programs, and implementing acquisition policies that stabilize our out-year procurement funding. These efforts are building a foundation for our future success.

Infrastructure reform

Base realignment and closure (BRAC).—The BRAC process is resulting in the most visible infrastructure reform. The Department of the Navy is aggressively implementing BRAC initiatives identified during the 1988, 1991, 1993, and 1995 commission rounds. By the end of fiscal year 1996, 115 of the 178 required BRAC closures and realignments were complete. Remaining actions will be accomplished within the required six-year timeframe. The Department is intensifying efforts to implement BRAC actions to reap the projected savings. Prompt and efficient closure and disposal of excess infrastructure is expected to yield significant savings—in excess of $2.5 billion annually, beginning in fiscal year 1999. These funds can and must be directed to force modernization and support of the remaining infrastruc-

ture. These potential savings make it imperative that BRAC actions remain appropriately funded; otherwise, delays could reduce anticipated savings and create new closure costs.

The fiscal year 1997 funding will complete all remaining BRAC 1991 moves and realignments, leaving the Department with most major closing actions complete and a substantial portion of environmental remediation actions under way. Our fiscal year 1998 budget submission reflects a change in direction, with more funds dedicated to disposal actions than to construction and relocation. This shift ensures that base conversion and redevelopment is accomplished with the adjacent communities in mind. The Department is working closely with local officials to ensure a smooth and efficient turnover.

One of our BRAC implementation goals is to improve efficiency at remaining bases and facilities. We will implement proven business practices and exploit new technologies while consolidating functions, programs, and processes to gain the highest possible returns from BRAC initiatives.

Regional maintenance strategy.—The Navy is implementing a fundamental restructuring and consolidation for ashore maintenance capabilities and capacities to improve effectiveness and efficiency. The objectives of regional maintenance are the elimination of excess infrastructure and the creation of single, accessible, accountable maintenance providers for our customers. The process of integrating or collocating intermediate and depot-level maintenance activities is under way. Eight Regional Maintenance Center pilot programs have been established. The next step is to consolidate ship maintenance engineering and planning functions within Ship Availability Planning and Engineering Centers (SHAPEC's). A SHAPEC pilot program is being conducted at the Portsmouth Naval Shipyard for SSN 688-class overhauls.

Outsourcing and privatization.—All services are pursuing the identification and subsequent implementation of outsourcing and privatizing initiatives. These initiatives are important for two reasons: the reduction of naval personnel, both military and civilian, over the past six years requires some shift in workload; and industrial technology application in critical military areas is faster and more efficient. In response to the Commission on Roles and Missions recommendations, the Department began to commercialize or privatize prudent areas where the largest returns were anticipated. Increasing efficiency through outsourcing and privatization provides potential benefits both to the Department and to the private sector.

Smart base.—Naval and Marine Corps bases are complex activities, similar to small cities. Numerous services are provided at these stations, where costs could be reduced by leveraging commercial technology or methodology. Consequently, testing will begin soon to determine potential cost savings under a concept entitled Smart Base. Experimentation will be conducted under the auspices of an Advance Concept Technology Demonstration and a Reinvention Laboratory, enabling the program to abbreviate acquisition procedures and waive certain regulations, thus speeding implementation. Two installations have been identified as test sites, and in cooperation with industry, academia, and federal and local governments, will evaluate a full array of promising cost reduction initiatives. Success will be judged by resulting efficiencies, such as the cost or manpower savings realized when compared to the initial implementation investment required.

Industrial base.—This year, a significant effort to focus on stabilizing the civilian shipbuilding industry occurred. Commercial shipyards are deeply involved in constructing *Nimitz* (CVN 68)-class nuclear aircraft carriers, *San Antonio* (LPD 17)-class amphibious warfare ships, *Arleigh Burke* (DDG 51)-class destroyers, and *Seawolf* (SSN 21)-class submarines—the pillars of our Navy and the most capable warships ever built. The industrial base is facilitating efficiency by adopting innovative business practices that reduce costs, improve product quality, and strengthen defense partnerships. Government initiatives—such as multiyear procurement contracts and incentives for foreign nations to buy U.S.-built ships—are important parts of stabilizing the industry. For example, foreign purchase of U.S. ships will spur commercial activity and allow direct application of lessons learned to military construction. Continued innovative practices are crucial to achieving a smooth transition into the future.

Acquisition reform

Focus during 1996 was placed on incorporating the tools provided through the Federal Acquisition Streamlining Act and the Federal Acquisition Reform Act; developing Integrated Product Teams (IPT's) and applying Integrated Product and Process Development to program management; expanding the use of Past Performance and Earned Value concepts; creating action teams to work Cycle Time Reduction projects; completing the move to performance-based specifications in the con-

tracting process; and expanding the use of Single Plant Processes. In a report to the Office of the Secretary of Defense this year, we projected significant savings or cost avoidances through the use of these proven business practices. Some techniques, such as use of established material specification modifications or government-owned prototypes during production phases, are simple but highly effective. Other initiatives, such as use of long-lead or multiyear procurement contracts, are more involved. Regardless of the complexity, all efforts contribute to time and fiscal savings and ultimately acquire the best equipment.

Acquisition Reform Office.—The initial emphasis of acquisition reform was on major programs with the greatest potential for significant cost avoidances and cost reductions. We now seek to broaden our focus. The Acquisition Reform Office, organized last year with a 3–5 year charter, continues to serve as a catalyst for acquisition process change. The Department's guiding instruction for acquisition management was rewritten to include only mandatory requirements and allow program managers the freedom to tailor these requirements to their specific program needs. Future initiatives focus on total ownership cost, use of cost as an independent variable and integration of modeling and simulation technologies. As we move towards the 21st century, the Department will move closer to achieving a simulation-based acquisition system.

Acquisition Center of Excellence (ACE).—In a groundbreaking ceremony on 17 October 1996, the Department of the Navy began development of a research facility designed to combine cutting-edge technology with world-class business practices. At the heart of ACE's research capabilities is a collaboratory: a totally reconfigurable working environment utilizing high-powered computing technology. The collaboratory will support virtual prototyping of naval systems from concept and engineering analysis to production and support. The ACE will house the knowledge and combined expertise of hundreds of acquisition professionals, research scientists, management experts, and engineers. It will provide research and resources to assist acquisition professionals, contractors and customers in solving complex systems engineering and management challenges. The ACE will also serve as a host for many coalitions among the Navy, Marine Corps, industry, and academia to bring tools, successes and lessons learned into the Department's acquisition environment. The facility will be operational by Spring 1997.

Acquisition reform success stories.—The Department of the Navy's bold approach and forward-looking strategy continues to accrue results through acquisition reform. Led by the Acquisition Reform Senior Oversight Council, the Department is applying world-class practices to attain cost and time reductions in the defense acquisition process.

—*Multiyear contracts.*—With congressional assistance, multiyear procurement contracts allow industry to offer the most for our investment. The Medium Tactical Vehicle Remanufacture program is an excellent example of significant cost avoidance through multiyear contracting. A total of 7,945 five-ton trucks are planned for remanufacture beginning in fiscal year 1999, with an estimated cost avoidance of nearly $104 million attributable to approval of multiyear contracting. In another example, the Navy is pursuing multiyear procurement of Aegis destroyers through 2001. In 1996, this program authorized a package procurement of six ships over fiscal years 1996 and 1997, followed by multiyear procurement of 12 ships from fiscal year 1998 through fiscal year 2001. This effort provides industrial stability and the most efficient production rates, and will allow the Department to procure 12 Aegis destroyers for the price of 11.

—The San Antonio (LPD 17) amphibious transport dock ship achieved a cost avoidance of $15 billion over the life of the ship class in design, procurement and ownership costs. During the current design phase, the program has reduced military specifications and standards, collocated its integrated product and process development teams, standardized unique systems, used commercial items, and applied modeling and simulation. The LPD 17 will invest in an integrated digital product model and concurrent engineering processes during detailed design and construction.

—The cooperative engagement capability program adopted a streamlined approach to cost estimating which achieved significant research, development, testing and evaluation and procurement savings. The program achieved these savings through reduced administrative costs, program management costs, military specifications and standards, and program documentation.

—The new attack submarine (NSSN) program achieved an estimated cost avoidance of $450 to $650 million. Integrated product and process design is providing measurable lead ship savings through elimination of design hours, preproduction planning, reduced change orders, use of a single design agent, and component savings through use of commercial off-the-shelf and reengineered parts.

The application of contract "teaming" allowed the participating shipbuilders to benefit from a consolidated modular construction "learning curve," eliminated the need to maintain independent design and construction data bases, and reduced duplication of some construction and test facilities. The NSSN command, control, communication and information (C^3I) program won the Secretary of Defense David Packard Award for Acquisition Reform Excellence. This award highlighted one of many management and technological innovations employed by the NSSN program. Notably, it included the unprecedented application of cost as an independent variable, coupled with a technology refreshment process.

—The F/A–18E/F Super Hornet program successfully applied independent variable principles, integrated product teams, government-industry partnering, and concurrent design and manufacturing to achieve a cost avoidance of approximately $3 billion. Implementing acquisition reform initiatives permitted achievement of the aggressive program milestones as the engineering and manufacturing development phase remains on cost and schedule. These efforts resulted in the Super Hornet receiving the first-ever Department of Defense Acquisition Excellence Award in 1996.

—The advanced amphibious assault vehicle is the Department's first major program with nearly all acquisition reform initiatives embedded from the program's start. These initiatives include the use of a system performance specification, virtual elimination of military specifications and standards, use of cost as an independent variable in trade-off analysis, creation of government and industry integrated product teams for system design and development, and co-location of these teams.

Organizational reform

Operational fleet reorganization.—1996 marked the first full year of implementation for the operational fleet reorganization. Adjustments were designed to maximize training efficiency at sea and eliminate non-mission essential training. These organizational changes were critical to meeting increased operational commitments worldwide. Changes included the stand up of 5th Fleet in Southwest Asia, Atlantic and Pacific Fleet reorganization into 12 core battle groups to enhance operational integrity, and establishment of the Western Hemisphere Group to focus on naval operations in the Caribbean Sea and Eastern Atlantic Ocean.

Marine Corps process improvement program.—The Marine Corps continues to improve the combat development system and its business enterprise by adopting proven DOD and industry techniques that reengineer critical internal functions and processes. Specifically, using both a business and an operational focus results in an infusion of readily available technologies, which streamline processes and subsequently realign resources throughout the organization. Mentoring by senior leadership provides a strategic business vision and establishes goals for improving the combat development system. Analysis of key processes such as resource allocation, force structure, and information management yields significant efficiencies that enhance our ability to "make Marines and win battles."

Incorporating innovative business practices

International cooperative programs.—We are making great strides in cultivating international program opportunities that reduce naval technology and system modernization costs. Cooperative research, development, and acquisition activities on such programs as the Joint Strike Fighter, Multifunctional Information Distribution System, and the Evolved Sea Sparrow missile are in progress already. International cooperation results in millions of research and development dollars from foreign nations. Foreign military sales yield another major benefit beyond burden sharing and cost savings. Fielding common equipment with our friends and allies fosters interoperability and directly supports our coalition strategy. Continued pursuit of international activities will minimize duplicative investment and result in a greater number of high-quality, high-payoff cooperative programs in future years.

Lightweight 155 mm Towed Howitzer (LW155).—The LW155 program demonstrates the inherent ability of Integrated Product Teams (IPT's) to create enormous efficiencies. By employing IPT concepts and leveraging data developed from earlier prototype weapons testing, the first three LW155 program milestones were passed within a year. The IPT not only coordinated the planning and documentation efforts but also focused and encouraged team members to meet schedule and performance goals. It also empowered team members with authority to make binding decisions reflecting best business practices and user requirements. The empowerment aspect shortened approval of the milestone package to three months instead of the normal six months. The success of the LW155 program—the recipient of the Department of the Navy's IPT of the Year award—and its application of

multi-agency, multi-service IPT concepts are spurring implementation of IPT's in lower-level programs. IPT's can improve significantly the way we acquire, field, and support systems and equipment.

Predator program.—Using proven business practices, the Predator missile program maximizes the use of existing technology and nondevelopmental components to reduce cost and risk. Predator also takes advantage of modular design to increase versatility for future change. Some of the savings include:

—Estimated savings of $12 million in developmental costs using Tow2B warhead and Javelin rocket motor technology;

—Reduction of more than 1,500 parts to fewer than 300 through a risk-reduction effort during the demonstration/validation stage. This endeavor accelerated production by one year, saving an estimated $12 million;

—Savings of approximately $60 million for an Army program by capitalizing on the Predator efforts.

Program objective memorandum (POM).—The Department of the Navy fiscal year 1998–2003 POM was an important benchmark in the integration of individual Navy and Marine Corps POM's. Coordination between the services began early in the Program Assessment and POM development phase and continued through POM submission to the Secretary of Defense. While each service developed its own POM, integration throughout the process ensured departmental requirements were articulated effectively, resources were better used, and the end product was attained in a more efficient way.

Efficiency through environmental stewardship

Compliance with environmental protection programs requires both effectiveness and efficiency. The Department has achieved success in both areas. The number of known, contaminated sites stabilized at about 4,300 while site close-outs increased. Our total cleanup cost decreased by about $200 million. Field personnel continue seeking and deploying effective new cleanup technologies and business practices in cooperation with regulators. In the area of pollution prevention, our program to minimize hazardous waste through material reutilization is implemented in 85 percent of our ships (frigate-size and larger) and by more than 75 shore installations. Major efforts fully integrate environmental protection into the acquisition process.

The Department serves as the DOD Executive Agent for Clean Air and Clean Water Act implementation. We have achieved a noteworthy record in reaching consensus with regulators while preserving the Navy and Marine Corps mission capabilities. The Department worked successfully with Congress, other federal agencies, regulators, and environmental interest groups to amend the Act to Prevent Pollution from Ships. The new legislation authorizes the use of specially developed shipboard solid-waste processing equipment, which will be procured and installed through 1998.

Protection of wildlife and the land they live on is equally important. The Navy and Marine Corps manage a number of federally protected plant and animal species on their installations. Working with the U.S. Fish and Wildfire Service, endangered species concerns have been integrated into training and readiness requirements. Examples include: fencing of tern and plover nesting areas at Camp Pendleton and the Naval Amphibious Base Coronado, California, to prevent accidental entry during breeding season; protection of woodpecker nesting trees at Camp Lejeune; and requirements for vehicles to stay on roads in some parts of our training areas to protect the desert tortoise. In addition, through the Navy-led Department of Defense Partners in Flight Program, archived weather radar data was analyzed to determine peak neotropical bird migration periods, routes, and stopover locations on Department of Defense lands in order to reduce bird/aircraft strikes. This data is factored into the scheduling of training flights and operational exercises in areas of high bird migrations. These measures have led the U.S. Fish and Wildlife Service to conclude that the Navy and Marine Corps are providing superior levels of protection for sensitive species, thus obviating the need for externally initiated land use restrictions being placed on associated installations.

PROGRAMS

The budget for fiscal year 1998 marks an important transition year. We will be well embarked on our recapitalization strategy to dedicate the increasing resource levels necessary to provide modern, capable platforms and systems for tomorrow's Navy-Marine Corps team. At the same time, we will be reaching the end of our projected resource downslope, and will begin maintaining an essentially level fiscal profile beyond fiscal year 1998. The current budget attempts to negotiate the path from the point Congress will have led us through fiscal year 1997, through the necessary reforms and efficiencies critical to long-term affordability, and to the continued sat-

isfaction of our core warfighting requirements within the President's plan for Defense.

Program summaries

The following programs are key elements in building naval forces capable of protecting U.S. interests around the world today and into the 21st century. They represent an unprioritized, yet integrated, view of the wide range of capabilities necessary for the Navy-Marine Corps team to support and enforce national security objectives.

Shipbuilding and naval weapons programs

Aircraft carriers.—Twelve aircraft carriers form the centerpiece of naval global forward presence, deterrence, crisis response, and warfighting. In addition to their power-projection role, they serve as joint command platforms in the worldwide command-and-control network. *Harry S Truman* (CVN 75) is currently under construction at Newport News Shipbuilding and is expected to be commissioned in 1998. At that time, the Navy's oldest active commissioned ship, *Independence* (CV 62), will transition to the inactive fleet. CVN 76's keel has been laid for a 2002 delivery, and CVN 77 will enter the fleet in 2008, as the two remaining *Kitty Hawk*-class carriers are retired. CVN 77 will act as a transition ship toward CVX, incorporating numerous new technologies and process design changes that will move naval aviation to a future carrier design. Selection of transition technologies will focus on life-cycle cost and manpower reductions. CVX development effort became an officially recognized program in 1996, and currently is examining the future sea-based tactical air platforms and the aircraft carrier that will support those platforms.

Amphibious lift.—Naval amphibious forces provide the most flexible and adaptive combined-arms crisis-response capability today and remain the nation's only self-sustainable forcible-entry capability. The current modernization plan will provide amphibious lift for 2.5 Marine expeditionary brigade (MEB) equivalents. The future amphibious force is being shaped in the correct number and types of ships that will allow the formation of 12 amphibious ready groups (ARG's) to meet our forward-presence, contingency, and warfighting requirements. The plan includes the completion in fiscal year 2001 of the seventh *Wasp* (LHD 1)-class ship—the centerpiece of the ARG—and the delivery of the final *Harpers Ferry* (LSD 49)-class ship in fiscal year 1998. However, a critical piece of our future amphibious force does not arrive until fiscal year 2002. This is the *San Antonio* (LPD 17)-class of ships. LPD 17 will incorporate a major improvement in command-and-control capabilities and enhanced ship self-defense systems, which will increase its ability to operate independently of the ARG when required. Most important, it is a critical link in completing the goal of a 12-ARG amphibious force. LPD 17 replaces the aged LPD 4, LKA, LST, and LSD 36 classes of ships and is key to regaining the full 2.5 MEB lift equivalents. Current amphibious lift is being augmented with a combination of Naval Reserve Force and Naval Inactive Ship Maintenance Facility assets—ships the LPD 17 eventually will replace. Construction of the second ship has shifted from fiscal year 1998 to fiscal year 1999 with future procurement planned for two ships in fiscal year 2000.

Through this modernizing and tailoring of the amphibious fleet, over-the-horizon launch platforms will be provided for the MV–22 aircraft, the short-take-off and vertical-landing variant of the Joint Strike Fighter, the advanced amphibious assault vehicle and the already proven landing craft air cushion—all critical pieces in fully executing operational maneuver from the sea. Ultimately, the amphibious force will be composed of 12 LHA/D's, 12 LPD 17's, and 12 LSD 41/49's; capable of forming 12 ARG's (or operating independently when necessary) and lifting 2.5 MEB equivalents in all five lift parameters (vehicle square foot stowage, cargo cubic capacity, troop capacity, vertical take off and landing capacity, and LCAC capacity).

New attack submarine (NSSN).—The New Attack Submarine (NSSN) is tailored for the 21st century joint littoral operations. The NSSN incorporates the best new technologies, is designed for maximum flexibility and affordability, and will maintain U.S. superiority over all current and projected undersea threats. Its inherent flexibility includes space for mission-specific equipment, carry-on electronics, and remotely operated or autonomous vehicles. Improved electromagnetic and acoustic stealth, along with enhanced sensors and processing, will ensure the NSSN's ability to detect and avoid mines and destroy advanced-capability submarines. In addition, NSSN will be capable of interdicting shipping or defending sea lines of communication, a role that will become increasingly important as the number of our overseas bases is reduced. NSSN's clandestine strike and significant organic special-operating forces capabilities will afford policymakers enhanced military leverage.

The cornerstone of the NSSN program is the design/build process. Using computer-aided design, engineering, and manufacturing techniques, the design process permits rapid assessment and evaluation of new technologies. This innovative process, coupled with new modular-construction techniques and contract teaming plan, fundamentally changes the way this ship will be produced and is the key to its affordability. Other features include:

—*Open systems architecture.*—Using widely available public-domain standards, the combat, communications, and information systems will have industry-standard interfaces that offer portability and software reuse and simplify cost-effective future technology upgrades.

—*Fiber optic cable systems.*—A platform-wide fiber optic cable installation will be sized for future growth. The structure of the network simplifies the attachment and integration of new equipment in a plug-in/plug-out manner.

—*Commercial-off-the-shelf (COTS) electronics.*—Use of commercially available electronics leverages the growth in signal and information processing and display technologies occurring in industry.

—*Isolated deck structure.*—This design facilitates ease of equipment integration, provides shock and acoustic isolation sufficient to allow the use of COTS technology, and incorporates emerging noise-control technologies.

NSSN also plays a pivotal role in the Navy's recapitalization plan. By the year 2011, *Los Angeles* (SSN 688)-class submarines will start to reach the end of their service lives at a rate of three-to-four per year. The Navy needs to achieve a low, continuing, and efficient submarine construction rate to build our next generation of quiet submarines in adequate numbers to counter the proliferation of advanced capability submarines and submarine-related technology worldwide. Starting the NSSN construction in 1998 accomplishes this goal, effectively counters an increasingly sophisticated undersea threat, and is the foundation for future development and technology insertion into the submarine force.

Maritime prepositioning force (MPF).—The 13 ships of the MPF continue to be a vital part of the Marine Corps ability to respond quickly to crisis worldwide. They also improve operational flexibility significantly for combat, disaster-relief, and humanitarian-assistance operations. In 1995, to ensure even better response, Maritime Prepositioning Squadron (MPS) One relocated forward from the continental United States to the Mediterranean. Procurement of three additional ships for MPF, known as MPF Enhancement, will provide Marine air-ground task forces (MAGTF's) enhanced capabilities in naval construction, medical support, and expeditionary airfield construction. The first MPF Enhancement ship is planned for delivery by fiscal year 1999. Funding for the remaining two ships in the program was appropriated by Congress in fiscal year 1997. Although the Aviation Logistics Support Ships (T-AVB) are not members of the MPF squadrons, they are an integral part of the MPF concept. The T-AVB ships provide rapid and dedicated sealift for the sustainment and maintenance of the MAGTF's aviation combat element, both rotary-and fixed-wing aircraft. These ships can provide repair capability onboard or off load their equipment to provide shore-based support.

Arleigh Burke (DDG 51)-class destroyer.—The DDG 51-class ships are the finest multimission destroyers in the world. They play an integral part in power projection, including precision land attack through strike and naval surface fire-support capabilities. The DDG 51 class, along with its companion class of CG 47 Aegis cruisers, provide battlespace dominance to include joint force air defense for carrier battle groups, surface action groups, amphibious ready groups, and joint expeditionary forces. To keep pace with advancing technologies and stay ahead of emerging threats, the Navy constructs Aegis destroyers in flights to introduce improvements in combat capability in a disciplined, yet expeditious process. Eighteen destroyers are already in commission, and another 20 are authorized or under contract. The Aegis destroyers requested under the multiyear procurement plan will continue to incorporate Flight IIA warfighting advancements, including improved surface-to-air missiles (SM2 Block IV and Evolved Sea Sparrow), embarked helicopters, and the battle force tactical trainer. The first Flight IIA destroyer, DDG 79, is currently under construction. Future ships will include such other essential improvements as the AN/SPY–1D(V) littoral radar upgrade, Cooperative Engagement Capability, and Theater Missile Defense Capability. The Burke-class destroyers will represent the largest component of the early 21st century surface combatant force.

Naval fires.—Fire support requirements for the future are being addressed by wedded Global Positioning Systems and gun technologies that will enable surface ships to engage targets ashore more than 60 miles distant. Especially promising are composite-material technology breakthroughs, which could enable gun systems to engage targets beyond 100 nautical miles. Research-and-development funding has been allocated to develop these capabilities for future deployment in the fleet.

The Army's Tactical Missile System, or ATACMS, is a medium-range weapon that provides a quick-response strike capability to support our expeditionary forces within ten minutes of the call for fire. The Navy is evaluating a seagoing version of the Army missile for deployment on board surface ships and submarines. The quick-response strike capability of a Navy TACMS makes it ideally suited to engage mobile command-and-control, air-defense, and cruise-missile launch platforms. In the near future, the TACMS missile could provide an effective means to counter weapons of mass destruction (WMD) by providing the ability to destroy them without warning. A joint Army/Navy project currently under way will develop and test a warhead that will give TACMS the capability of destroying deeply buried or hardened targets, such as those used for WMD production and storage facilities.

The Navy is also investigating the concept of modifying the Standard missile for a surface-to-ground strike role. Studies are under way to determine which missile option is the most cost-effective way to provide a rapid response, all-weather strike capability in support of military power projection ashore.

Arsenal ship.—Arsenal Ship is a technology demonstration program exploring affordable and innovative enhancements to our existing force of carriers and strike capable combatants and submarines. Armed with missiles and with space for future extended range gun systems, Arsenal Ship has the potential to provide massive firepower in the early stages of a crisis, and to augment fire support to landing force or other ground commanders. These platforms could be continuously forward deployed, available for rapid movement upon receipt of warning or changes in the tactical situation. Much like our Maritime Prepositioning Force, Arsenal Ships could remain on station as required for indefinite periods without dependence on host nation support or permission. The program is designed to develop technologies for incorporation in the SC 21 and other future platform types.

Afloat prepositioning force (APF).—The APF is divided into three groups: 13 Maritime Prepositioning Force (MPF) ships loaded with U.S. Marine Corps equipment; 14 Army War Reserve, including 3 ships that support a U.S. Army heavy brigade; and 7 prepositioned ships dedicated to multiservice requirements such as transporting fuel for the Defense Logistics Agency, ammunition for the Air Force, and a field hospital for the Navy.

Seawolf (SSN 21)-class attack submarine.—Seawolf-class submarines were designed to operate autonomously against the world's most capable submarine and surface threats, and these impressive capabilities translate directly into enhanced joint-warfighting performance in high-threat littoral areas. These multimission combatants will set the standard for submarine technology well into the next century.

In addition to their strong capabilities in countering enemy submarines and surface shipping, *Seawolf* submarines are ideally suited for battlespace-preparation roles. Incorporation of sophisticated electronics produces greatly enhanced indications and warning, surveillance, and communications capabilities. These platforms are capable of integrating seamlessly into a battle group's infrastructure, or shifting rapidly into a land-battle support role. With twice as many torpedo tubes and a 30 percent increase in weapons magazine size over the *Los Angeles* (SSN 688)-class submarines, *Seawolf* is exceptionally capable of establishing and maintaining battlespace dominance.

Seawolf's inherent stealth enables surreptitious insertion of combat swimmers into denied areas. SSN 23 will incorporate special-operations force capabilities, including a dry deck shelter (DDS) and a new, specially designed combat swimmer silo. The DDS is an air-transportable device that piggy-backs on the submarine and can be used to store and launch a swimmer delivery vehicle and combat swimmers. The silo is an internal lock-out chamber that will deploy up to eight combat swimmers and their equipment at one time.

Seawolf performed superbly during initial sea trials in July 1996, and demonstrated that it is the fastest, quietest submarine in the world. The addition of *Seawolf* to the fleet will significantly enhance the U.S. margin of undersea superiority against the most capable adversaries.

Surge sealift.—Surge shipping is the immediate transportation of heavy military equipment that our forces will need to meet warfighting requirements. The Navy's role in providing surge capability depends on a mix of sealift, including eight fast-sealift ships, Ready Reserve Force ships, and chartered ships from private industry. As a result of the Mobility Requirements Study, the Navy is currently undertaking a sealift expansion effort, to increase Department of Defense's ability to move military equipment quickly in the event of a contingency or war. The study highlighted a strategic sealift surge and afloat prepositioning shortfall of five million square feet and recommended the acquisition of ships to meet it. A total of 19 prepositioning or surge Large Medium Speed Roll-On/Roll-Off ships will be required to satisfy the

sealift requirements identified by the Mobility Study. Our budget reflects our efforts to meet these requirements through shipbuilding or ship conversion.

Surface combatant of the 21st century (SC 21).—SC 21 is more than a replacement for ships retiring at the end of their service lives. As a land-attack combatant, SC 21 will support the land campaign by being able to operate in the littorals, will carry a mix of strike and close support weapons, and will be designed for joint interoperability. The SC 21 Cost and Operational Effectiveness Analysis (COEA) has begun the process of examining future mission requirements and alternative approaches to meeting those requirements. The COEA has just completed the first part of this effort, characterizing the mission deficiencies of the currently planned forces in the years 2015 through 2025. While the currently planned forces remain quite capable in the future timeframes examined, there are shortfalls in several mission areas, especially in terms of affordability. The second part of the COEA will evaluate alternative ship concepts that will better meet the requirements and affordability measures. Innovative concepts of operation, building from Marine Corps and Army planning, will be combined with joint initiatives and emerging technologies to tailor the new capabilities to the requirements.

SSN 688 class submarine modernization.—The creation of the Acoustic Rapid COTS Insertion (A-RCI) program was based on a detailed review of the U.S. acoustic advantage compared to foreign nuclear and diesel electric submarines. This program is the centerpiece of the *Los Angeles* (SSN 688)-class modernization effort. SSN 688 class submarines, which will comprise 68 percent of the attack submarine force in 2015, must be modernized to ensure that they remain effective when operating against increasingly sophisticated undersea adversaries. The use of COTS and Open Systems Architecture (OSA) will enable rapid (annual) updates to both software and hardware, and the use of COTS-based processors means that sonar system computing power can grow at the same rate as the commercial world.

A-RCI is a four phased transformation of existing sonar systems (AN/BSY–1, AN/BQQ–5, or AN/BQQ–6) to a more capable and flexible COTS/OSA-based system. It also will provide the submarine force with a common sonar system. The process is designed to minimize the impact of fire-control and sonar system upgrades on a ship's operational schedule, and will be accomplished without the need for major shipyard availabilities. Phase I, which will commence in November 1997, will enhance towed-array processing. Phase II will provide additional towed- and hull-array software upgrades. Phase III will upgrade the spherical array, and Phase IV will upgrade the high-frequency sonar system on SSN 688I-class submarines. Each phase will install improved processing and control and display workstations. The current installation plan completes all SSN's through Phase III by fiscal year 2003.

Mine warfare.—This is an essential supporting warfare capability integral to the ability of naval forces to open and maintain sea lines of communication and to dominate the littoral battlespace. An imposing array of modern mine countermeasures (MCM) systems continues to be developed and procured. Our dedicated MCM forces, composed of surface MCM ships, airborne MCM helicopters, and explosive-ordnance-disposal divers are among the best in the world. With the recent addition of the MCM command and support ship *Inchon* (MCS 12), the United States has a true expeditionary mine countermeasures capability.

We also are aggressively developing MCM systems that will be organic to the forward-deployed carrier battle groups and amphibious ready groups. Focused science, technology, and developmental efforts are producing solutions to some difficult mine-warfare problems. For very shallow water, such efforts as the Shallow Water Assault Breaching System and the Distributed Explosive Technology Net System are on schedule in their development. These two complementary systems are designed to defeat mines and obstacles in the difficult surf-zone region. Another example is the Remote Minehunting System, which will provide a surface ship-hosted, mine-reconnaissance capability.

Augmenting dedicated and organic MCM capabilities are contributions from organizations outside of the traditional mine-warfare community. As an example, the Oceanographer of the Navy collects and disseminates environmental data that are essential for effective mine countermeasures. Mine warfare-relevant emphasis in projects dealing with MCM digital-route surveys; maintenance of a global mine-like contact database; and development of mine warfare-specific environmental databases augment our ability to rapidly access, avoid, or neutralize the sea mine threat.

Tomahawk baseline improvement program (TBIP).—The Tomahawk land-attack missile provides Navy surface combatants and attack submarines with a potent long-range precision strike capability from the sea. The TBIP program was restructured in fiscal year 1996 into a two-phase program that will provide a technologically advanced, yet lower-cost missile with an initial operating capability in

2000. The Tomahawk Block IV Phase I development provides a comprehensive baseline upgrade to improve system flexibility, responsiveness, accuracy, and lethality. Essential elements of the program include upgrades to the guidance, navigation, control, and mission-computer systems of the missile, along with the associated mission planning systems and weapons-control systems. Phase I will provide a UHF satellite communication data link to enable the missile to receive in-flight mission reassignment messages, to transfer health and status messages, and to broadcast Battle Damage Indication messages. Phase I also includes the development of an advanced antijam Global Positioning System receiver and antenna system for the missile. The Advanced Tomahawk Weapons Control System and Afloat Planning System will improve tactical responsiveness by allowing for mission planning and modification afloat, thus reducing mission planning timelines in many scenarios. Concepts for the Tomahawk Block IV Phase II include a seeker, an antiarmor variant, and a possible hard-target-penetration variant.

Ship self-defense systems.—The confining geography and proliferation of antiship cruise missiles combine to make littoral operations particularly challenging. Ship-defense systems provide a layer of protection that enables battle groups to position themselves for successful mission execution. Key programs include:

—*Quick reaction combat capability/ship self-defense system.*—The Navy developed a plan to integrate and automate the detect-control-engage sequence to provide a layered defense of electronic warfare and hard-kill weapons. More than 20 acquisition programs comprise this effort to provide a quick reaction combat capability (QRCC) and integrated command-and-control system. The QRCC system architecture integrates several existing stand-alone systems whose contributions to ship defense are combined, processed, and controlled by the Ship Self-Defense System. The system provides multisensor processing, target identification, and an automated detect-control-engage capability. Shipboard sensors are fused to establish accurate, correlated, firm-track criteria as early in the detection phase as possible. Embedded electronic warfare doctrines automate soft-kill and hard-kill weapons to provide a rapid, layered defensive reaction to any detected threat. In late fiscal year 1996 the program underwent testing and was declared potentially operationally suitable and effective. The system is scheduled to complete Demonstration/Operational Testing and achieve Milestone III approval in fiscal year 1997.

—The rapid antiship missile integrated defense system (RAIDS), which complements the antiship missile defense capabilities of the *Spruance* (DD 963) and *Oliver Hazard Perry* (FFG 7)-class combatants, is in production and has been installed in *Spruance* (DD 963). Installation in *Oliver Hazard Perry*-class ships will commence in fiscal year 1997.

—The rolling airframe missile (RAM) complements existing point-defense systems, providing unique capability in adverse electronic countermeasures and advanced threat environments. RAM is a lightweight, low-cost system that uses existing active and passive ship sensors to augment antiship missile defense firepower. RAM, a NATO-cooperative production program with Germany, is in production and has been installed in the LHA amphibious assault ships. Installations also are ongoing in LHD, LSD 41, and DD 963-class ships, and are planned in CG 47 through CG 51, CV/CVN, DDG 993 and LPD 17 classes.

—Phalanx provides a fast-reacting final defensive capability for surface ships against low-flying and steep-diving, high-speed antiship missiles. The High Order Language Computer upgrade will increase computer capacity and provide advanced fire-control processing against maneuvering targets. The Phalanx Surface Mode, which allows engagement of surface craft and low, slow aircraft, will complete testing in fiscal year 1997.

—The advanced integrated electronic warfare (AIEWS) program was accelerated by the CNO on 14 May 1996. Increment 1 of AIEWS is now scheduled for fleet introduction in fiscal year 2001, and Increment 2 will be fielded by fiscal year 2004. As the replacement system for the AN/SLQ–32, AIEWS will use open architecture to lower investment costs and improve system effectiveness. Increment 1 provides improved human-computer interface, emitter processing, and a new receiver package. Increment 2 will include an advanced electronic attack subsystem and off-board countermeasures.

—The evolved Sea Sparrow missile (ESSM) is a cooperative effort among 13 NATO Sea Sparrow nations to improve the ability of the Sea Sparrow missile to counter low-altitude, highly maneuverable antiship cruise missiles. The program evolves the existing RIM–7P Sea Sparrow missile with development of a new rocket motor and ordnance (warhead) upgrade. The ESSM will be installed on DDG 51, LHD, LPD 17, and CVN-class ships.

Common missile development/standard missile.—The Navy continues to build on the proven Standard missile family by adding capability to counter existing and emerging threats. Two new upgrades currently are in production:

—The SM–2 Block IIIB, approved for full-rate production in fiscal year 1996, incorporates a dual-mode seeker to provide the fleet improved capability against countermeasures, and also will be deployed on Aegis vertical launching system (VLS) cruisers and destroyers.

—The SM–2 Block IV will complement earlier SM–2 medium-range variants already on board Aegis VLS cruisers and destroyers. The newest variant, the SM–2 Block IVA, will build on the Block IV missile to provide increased defense against cruise missiles and theater ballistic missiles.

Trident D–5 missile.—The Department of Defense completed the Nuclear Posture Review in September 1994. This comprehensive assessment of the nation's long-term requirements for strategic deterrence concluded that the optimum force structure for the sea-based leg of the strategic triad in a Strategic Arms Reduction Treaty (START) II environment would consist of 14 *Ohio* (SSBN 726)-class submarines, all equipped with the Trident II D–5 missile. To meet this requirement, four *Ohio*-class submarines currently equipped with the Trident I C–4 missile will be upgraded to carry the larger and more capable Trident II D–5 missile. In addition, under the terms of the START II treaty, the Navy's *Ohio*-class submarines will assume a dominant position within the strategic triad by carrying approximately half of the allowable strategic warheads.

Integrated undersea surveillance system (IUSS).—IUSS is comprised of fixed, mobile, and deployable acoustic arrays that provide vital tactical cueing to ASW forces. The IUSS is a model for innovation and the smart use of technology. Work stations, enhanced signal processing, and modern communication technologies enable remote array monitoring, which reduces manpower costs and improves efficiency.

The sound surveillance system (SOSUS) provides deep-water long-range detection capability. Consolidation of SOSUS by array retermination, remoting, or closure will be complete by fiscal year 1997. Recent closures include Bermuda, Adak, and Keflavik. All other arrays will remain operational.

The surveillance towed-array sensor system (SURTASS), a prototype twin-line array, was tested in a variety of locations around the world, with outstanding results. It is far superior to any other shallow-water passive towed-array system. SURTASS processing is being transferred to the AN/SQQ–89 towed-array sonar system to provide an immediate increase in detection capability without the need to modify or procure additional wet-end hardware. The minimum fleet requirement of eight SURTASS ships is funded through the FYDP.

The fixed distributed system (FDS) currently is operational and has successfully demonstrated the ability to detect, classify, and track quiet submarines. The outstanding results achieved to date validate the fact that acoustic ASW remains feasible against advanced-capability nuclear and diesel-electric submarines. New fiber-optic technologies, algorithms, and enhanced signal processing are enabling exploitation of weak signals in environments of high background noise and provide timely and accurate detection and track data to tactical assets.

The low-frequency active (LFA) system has detected submarines at long ranges. The first LFA ship, TAGOS 23, is under construction. In the interim, a leased ship, *Cory Chouest*, is being used as a fleet asset to test and validate LFA technologies. In addition, compact acoustic source technologies are under development that will provide a 50 percent reduction in weight and power requirements. Successful maturing of these technologies will allow LFA-type arrays to be deployed from existing TAGOS 19-class vessels.

The advanced deployable system is a theater-deliverable acoustic surveillance system that will provide continuous acoustic coverage over vast ocean areas for an extended period. This is a theater-surveillance asset that will provide unique surveillance information to tactical forces. It will be capable of detecting quiet nuclear submarines, diesel-electric submarines on the battery, ships exiting or entering port, or mine-laying operations. The importance of this portable capability will intensify as our surveillance requirements increase, owing to the Navy's focus on the littorals, the growing popularity of diesel submarines, and the downsizing of our own force.

The current IUSS program satisfies all military requirements and has been designed to accommodate future growth and capability expansion affordably, as new technologies appear and mature.

Unmanned undersea vehicles (UUV).—The Unmanned Undersea Vehicle (UUV) program will extend knowledge and control of the undersea battlespace through the employment of clandestine off-board sensors. Although significant progress is being made with onboard sensors, it is clearly preferable to have an off-board sensor to accurately image tethered, volume, and bottom mines. Knowledge of the full dimen-

sion of the mine threat, without exposing reconnaissance platforms, is vital to exploiting the tactical benefits of maneuver warfare.

An initial capability, designated the Near-Term Mine Reconnaissance System (NMRS), is a mine-hunting UUV, launched and recovered from a SSN 688-class submarine's torpedo tube. The UUV, in combination with an SSN, represents a long-endurance, clandestine, reconnaissance system capable of mapping the undersea environment and providing time-sensitive information on mining activities to the theater commander. The NMRS will provide an effective and much-needed capability to the fleet in fiscal year 1998.

The Long-Term Mine Reconnaissance System (LMRS) will leverage developing technologies and lessons learned from the NMRS. The LMRS also will be launched and recovered through a submarine's torpedo tube, but it will have enhanced endurance, range, search rate, and total search-area coverage.

Ground weapons programs

Advanced amphibious assault vehicle (AAAV).—Once fielded, the AAAV will provide the Marine Corps a weapon system fully capable of implementing ship-to-objective maneuver as an integral part of the amphibious triad (AAAV, MV–22, LCAC) supporting operational maneuver from the sea. The AAAV, currently in the demonstration/validation phase, will allow rapid, high-speed maneuver of Marine infantry units as they emerge from amphibious assault ships located well beyond the visual horizon. The AAAV will insert forces in a single, seamless stroke, maneuvering to exploit weak points in enemy littoral defenses. Designed to possess more than three times the water speed of the AAV–7A1, it will have mobility equal to or greater than the M1A1 tank, will be one of only two nuclear-biological-chemical collective protective combat vehicle systems in the U.S. inventory, and will have twice the present armor protection. The AAAV is targeted for fielding during fiscal year 2006.

Medium tactical vehicle remanufacturing (MTVR).—The MTVR program remanufactures the aging medium fleet of M809/M939 series cargo trucks to a capability that meets Marine Corps requirements for added mobility and cargo capability. Currently in the engineering and manufacturing development phase of the acquisition process, this effort will integrate industry-standard truck components on the existing five-ton truck. Added mobility is required to keep pace with fast-moving maneuver elements on the battlefield, and to rearm and refuel them without requiring return to a major road network. The combination of mobility and capability enhancements increases allowable cargo weights up to 8 tons off-road and 15 tons on-road. Significant improvements in maintainability and reliability also are expected, as a result of the reduced-shock-and-vibration benefit of the independent suspension. When fielded, the MTVR will be the world's most capable cargo truck in its class.

Lightweight 155 mm Towed Howitzer (LW155).—The LW155 is a joint program, with the Marine Corps as the lead service, and will provide organic artillery fires to Marine air-ground task forces. While retaining the same range as our current howitzer, the LW155 will have significantly improved mobility because of its reduced weight. This will result in increased survivability, responsiveness, and efficiency of artillery units. Capable of being transported by the MV–22, the LW155 is designed for expeditionary operations requiring light, highly mobile artillery, as well as for conventional operations. The program is in the engineering and manufacturing development phase, with a contract expected to be awarded in the second quarter of fiscal year 1997.

Javelin.—Javelin, a soft-launched, medium-range, fire-and-forget antiarmor system, is a joint Army and Marine Corps program with fielding to begin in fiscal year 1999. It will satisfy an antiarmor operational requirement for increased range, improved lethality, and gunner survivability. The Javelin consists of a reusable Command Launcher Unit and a missile, and can be employed as a stand-alone thermal sight. The launch motor allows it to be fired from enclosures and bunkers to enhance gunner survivability. Three training systems have been developed for basic training and field exercises.

Predator.—Predator is a unilateral Marine Corps antiarmor program with fielding to begin in fiscal year 2000. It will fill the Marine Corps requirement for a lightweight, man-portable, disposable, short-range weapon, lethal against current and future main battle tanks. The missile has a soft-launch rocket motor that allows the weapon to be fired from enclosures, and travels in a flyover, shoot-down profile to facilitate warhead penetration into the top of the target.

Aviation weapons programs

F/A–18E/F Super Hornet.—The F/A–18 Hornet is the cornerstone of naval aviation strike warfare. This year's budget request includes continued funding for warfighting improvements to our existing F/A–18C/D aircraft as well as funding for

the procurement of 20 F/A–18E/F aircraft. Procurement of these first low-rate initial production aircraft will begin the orderly transition from the Navy's F/A–18C/D, and in fiscal year 2001 the F–14A, to this improved strike fighter aircraft. Building on the proven design of earlier model F/A–18 aircraft, the F/A–18E/F will have greater range and payload flexibility, an increased capability to return to the carrier with unexpended ordnance, room for avionics growth, and enhanced survivability features. It will increase the capability to conduct night strike warfare, close air support, fighter escort, air interdiction, and fleet air defense. The aircraft program is on cost, on schedule, and 800 pounds under specification weight. Most of the strike fighter assets on aircraft carriers after 2008 will be the F/A–18 E/F.

MV–22 Osprey.—The MV–22 remains the Marine Corps' most critical acquisition priority. A revolutionary approach to power projection operations, the MV–22 tilt-rotor capability provides significant operational advantages over helicopters. The MV–22 is strategically mobile, allowing it to self-deploy globally, enabling greater flexibility in planning. The combination of range, speed, and payload nearly triples the depth of the present-day battle space, complicating a potential enemy's defensive requirements. The designated replacement for the aging CH–46E and CH–53D helicopters, the MV–22 will serve as a critical element of operational maneuver from the sea. Funds were appropriated for procurement of five MV–22's in fiscal year 1997, with an initial operating capability by 2001.

AV–8B remanufacture.—The remanufacture of the AV–8B Day Attack Harrier to the AV–8B Radar/Night Attack Harrier configuration will increase the service life and multimission capabilities of this proven aircraft in the role of offensive air support while saving 23 percent of the costs of a new aircraft. The AV–8B remanufacturing program extends the service life of 72 older Harriers by 6,000 hours. It greatly increases the Harrier's night, reduced-visibility, and poor-weather capabilities for close air support, and also improves the aircraft's combat utility and survivability through standardized configuration and safety enhancements. Still the only tactical aircraft capable of operating from small flight decks at sea or unimproved areas on land, the remanufactured AV–8B is capable of delivering all future smart weapons—such as the Joint Direct Attack Munitions and the Joint Standoff Weapon—in support of ground forces. The first flight was conducted successfully in November 1995 and delivery of the first three remanufactured aircraft occurred this past year.

Helicopter master plan.—The Navy Helicopter Master plan provides for a modernization of active and reserve helicopter forces, while reducing operating costs and infrastructure. This plan reduces eight Navy helicopter types (H–1, H–2, H–3, H–46, H–53, H–60B/F/H) to three (H–53, CH–60, and SH–60R). Antiship and antisubmarine warfare roles will be executed by the SH–60R. The Master Plan stipulates 286 H–60B/F/H models will be remanufactured into SH–60R's to extend the airframe life while upgrading warfighting capabilities to support increased surface ship requirements and improvements. Navy logistics, combat search-and-rescue, special operations warfare support, and utility missions will be performed by approximately 200 CH–60's. Leveraging on their commonality, the H–60 programs will simultaneously reduce costs and increase flexibility in meeting the Navy's tactical helicopter requirements until 2020.

UH–1N and AH–1W four-bladed upgrade (4BN/4BW).—The Marine Corps 4BN/4BW program is a comprehensive upgrade designed to remanufacture 280 existing AH–1W and UH–1N helicopters with identical dynamic components. Included in the upgrade is a newly developed four-bladed rotor system, a performance-matched drive train and tail rotor system, and common T–700 engines. The 4BW (attack version) also will include a new, fully integrated cockpit—designed to reduce pilot workload and increase situational awareness—and structural modifications to accommodate six weapon stations. The 4BN/4BW program reduces life-cycle costs, increases operational effectiveness, resolves existing safety deficiencies, and extends the service life of both aircraft until a joint replacement aircraft is fielded. The Engineering Manufacturing and Development (EMD) contract for the 4BW and 4BN development recently was approved. The contract calls for the delivery of two 4BN EMD and three 4BW EMD helicopters for ground and flight testing. The development phase is scheduled for completion by September 2003.

F–14 update.—The F–14 Tomcat is now being configured as a potent precision strike fighter with incorporation of the Low Altitude Navigation and Targeting Infrared for Night (LANTIRN) Targeting System. With LANTIRN, the Tomcat now has a deadly accurate autonomous designation and targeting capability for delivery of laser-guided bombs. Beginning in 1997, all forward-deployed carrier airwings will have LANTIRN capability. In addition to LANTIRN, two major flight safety improvements for the Tomcat are also underway. The Digital Flight Control System (DFCS) has demonstrated significant improvements in departure resistance/spin recovery as well as much improved flying qualities during shipboard recovery. Instal-

lation of the DFCS will begin in June 1998. The TF30 Engine Breather Pressure Modification incorporates a new sensor in the engine that detects an abnormal increase in breather pressure and allows the pilot time to take appropriate action to prevent catastrophic engine failure. Installation began in November 1996 and will be completed in 1997. With these warfighting and safety improvements, the F–14 series strike fighter will provide Battle Group Commanders with essential warfighting capabilities and additional flexibility until replaced by the F/A–18E/F.

EA–6B Prowler.—This year, the EA–6B Prowler assumed its role as the Department of Defense's primary standoff radar jammer. The Prowler also supports joint operations by providing electronic surveillance, communication jamming capability, and employment of the high-speed antiradiation missile. The EA–6B's expanding role in joint operations requires 125 aircraft and the reestablishment of five additional squadrons in fiscal year 1996 and fiscal year 1997. Navy and Marine Corps EA–6B squadrons deploy to U.S. and coalition air bases overseas in support of joint requirements for tactical electronic warfare. These operations will be conducted in addition to the continuing EA–6B operations with Navy carrier air wings and Marine air-ground task forces. Emphasis in the EA–6B program is on maintaining aircraft safety and inventory levels, achieving a standardized configuration, and improving its warfighting capability.

Joint Strike Fighter (JSF).—The Joint Strike Fighter Program, formerly the Joint Advanced Strike Technology Program, will develop and field a tri-service family of next-generation strike aircraft, with an emphasis on affordability. The family-of-aircraft concept allows a high level of commonality while satisfying unique service needs. JSF will replace both the AV–8B and the F–18C/D, completing the Marine Corps neck-down strategy of an all short-take-off-and-vertical-landing fixed-wing force. For the Navy, the JSF will provide a survivable strike fighter to complement the F/A–18E/F. A primary objective of the JSF Program is the reduction of costs associated with development, production, and ownership. The program is accomplishing this by facilitating the services' development of fully validated, affordable operational requirements, and lowering risk by investing in and demonstrating key leveraging technologies and operational concepts. In November 1996, designs from two contractors were selected to compete in the JSF concept demonstration phase. Transition to engineering and manufacturing development begins in 2001. This joint approach to development is anticipated to produce significant savings, when compared to the costs of separate programs. Additional savings are provided by the United Kingdom's participation in the concept demonstration phase. Participation by other allied countries is anticipated.

CH–53E Super Stallion.—Capable of lifting 32,000 pounds, the CH–53E is the only helicopter in production today that satisfies Marine Corps heavy helicopter lift requirements. It is the ship-to-shore prime mover for the light armor vehicle, M–198 Howitzer, the HMMWV transport vehicle, and most Marine Corps engineering assets. Capable of transporting 55 Marines or 24 casualty litters, the Super Stallion has a secondary assault support mission to augment the medium-lift helicopter fleet. Aerial refuelable, the CH–53E has unlimited range for over-the-horizon special operations such as anti-terrorist missions, embassy evacuations, and other crisis-response missions. Four CH–53E's, funded in the National Guard and Reserve Account in fiscal year 1996 and fiscal year 1997, will continue to provide needed modernization to the Reserve Force's Vietnam era RH–53D fleet.

P–3C Orion.—The P–3C Sustained Readiness Program and Service Life Extension Program will extend the operational service and fatigue life of existing airframes to approximately 48 years, thereby delaying the requirement for delivery of a follow-on production aircraft until 2015. The Antisurface Warfare Improvement Program enhances the aircraft's ability to perform both autonomous and joint battle group missions in the littorals. Improvements will allow the P–3C to collect, correlate, and confirm tactical data and transmit information and imagery to the Joint Task Force Commander in near-real time. Both the active and reserve P–3C fleets are being converted to a common avionics force (Update III) that consolidates maintenance, improves training efficiency, reduces long term logistic support costs, and maximizes reserve forces participation.

Air-to-ground weapon programs.—The most significant joint air-to-ground weapon development initiatives are the Joint Standoff Weapon (JSOW), Joint Direct Attack Munitions (JDAM), and Standoff Land Attack Missile Expanded Response (SLAM-ER). JSOW is a family of air-to-ground glide weapons designed to attack targets from beyond enemy point defenses. JSOW is a Navy-led program and will be capable against a broad target set during day, night, and adverse-weather conditions. JSOW will replace a variety of weapons in the current inventory. JDAM is an Air Force-led program to develop an adverse-weather capability for general-purpose bombs through the use of strap-on Global Positioning System (GPS) guidance kits.

SLAM-ER meets the Navy's requirement for a Standoff Outside Area Defense (SOAD) weapon. SLAM-ER is an adverse weather, precision-guided weapon that simplifies mission planning, increases penetration, and nearly doubles the range of the original SLAM. The SLAM-ER PLUS will add autonomous capability and Automatic Target Recognition (ATR) to the SLAM-ER and will be incorporated into all missiles. Joint Air-to-Surface Standoff Missile (JASSM) is the Navy's potential long-term answer to its SOAD requirement. JASSM is an Air Force-led program focused on developing an autonomous, adverse-weather, precision-guided, SOAD weapon with an ATR feature. The Navy also is planning to increase the quantities of laser-guided bombs through the Skipper conversion program. This program will help alleviate the current shortfall in precision-weapons.

Air-to-air weapon programs.—The AIM–9X Sidewinder and the AIM–120 Advanced Medium Range Air-to-Air Missile (AMRAAM) continue to be the foremost joint air-to-air weapons programs of the Navy and Marine Corps. The Navy-led AIM–9X program upgrades the current missile with an advanced guidance control section, a highly maneuverable airframe, and signal processors that significantly upgrade its infrared counter-countermeasures capabilities. The Air Force-led preplanned product improvements to the currently deployed AIM–120 weapon include enhanced electronic counter-countermeasures and improved kinematics. The AIM–9X and AMRAAM missiles will serve Air Force, Navy, and Marine Corps aircraft well into the 21st century.

Unmanned aerial vehicles (UAV's).—Naval Forces currently are employing the Pioneer UAV system in support of a broad array of expeditionary operations, such as reconnaissance and intelligence support in Bosnia. Pioneer's potential replacement as the tactical UAV is "Outrider." It currently is in the advanced concept technical demonstration phase of development. The new tactical control system will enable broad UAV interoperability and connectivity to the naval command, control, computers, communications, and intelligence (C^4I) architecture.

Advanced tactical airborne reconnaissance system (ATARS).—As the Naval aviation's only manned tactical reconnaissance system for naval combat aircraft currently under development, the ATARS will provide a major increase in timely imagery intelligence information to the theater, operational, and tactical commanders. The digital data-link capability of the system will allow all levels of command to receive time-sensitive imagery simultaneously, providing real-time imagery for accurate intelligence preparation of the battlefield and pre-strike and post-strike planning and analysis. ATARS is a suite of sensors and data-link pods that will be installed in the F/A–18D and associated ground stations. When fully operational, ATARS will be joint data-link capable and will provide support to all services. Due for delivery in fiscal year 1998, ATARS will provide high-resolution, real/near-real time, digital imagery, day and night, in all weather conditions—through infrared, electro-optical and synthetic aperture radar sensors. The imagery will be digitally linked via the Joint Services Imagery Processing System and Tactical Exploitation Groups. The F/A–18F will field reconnaissance capabilities which will capitalize on ATARS off-the-shelf advances.

Command and control and other programs

Navy-Marine Corps C^4ISR.—The naval command, control, communication, computer, intelligence, surveillance, and reconnaissance (C^4ISR) vision, called Copernicus . . . Forward, is designed to support joint and naval warfighting strategies. It enables the Navy-Marine Corps team to expand, adapt, and integrate their C^4ISR capabilities to meet the demands of the new strategic environment, emerging operational concepts, and evolving information technologies. While this vision provides a general naval approach to the implementation of Copernicus . . . Forward, there are, by necessity, unique requirements for Navy and Marine Corps application which make it useful to address these service-unique features in separate development and implementation concepts. Copernicus . . . Forward defines four essential functions of C^4I that are being executed and implemented successfully in the fleet: connectivity; common tactical picture; sensor-to-shooter; and information warfare. The goal in every case is achieving technical and operational interoperability with the joint Defense Information Infrastructure Common Operating Environment as rapidly as possible. Some of the C^4I systems now operational within the Navy or Marine Corps or under evaluation are highlighted below:

—*Connectivity.*—The pipes that carry the information to the warfighter, to include:

Joint maritime communications strategy (JMCOMS) is leveraging commercial technology to reduce costs and improve bandwidth utilization. JMCOMS consists of three technical thrust areas: the Automated Data Network System (ADNS), a secure, interoperable, multimedia intelligent network management

system; the Automated Modular Programmable "Slice" Radio, a programmable commercial hardware technology used with an integrated antenna to reduce topside space and weight that covers all frequencies up to 2 GHz; and the Integrated Terminal Program (ITP), a multiband satellite communications terminal covering the frequencies above 2 GHz. ITP exploits commercial technology to reduce costs by using common electronics, components, and antenna. Two major programs within JMCOMS are the Global Broadcast Service (GBS) and Challenge Athena.

Global broadcast service (GBS) is a revolutionary advancement in joint communications, providing high-speed one-way broadcast, video and data service. It provides high data rate service to many users simultaneously, using point-to-multipoint protocols. GBS becomes operational in February 1998, with the launch of the UFO–8 satellite.

Challenge Athena is a Navy program to provide leased commercial wideband satellite communications services to the ships. Challenge Athena supports near real-time national imagery dissemination for precision targeting, mission planning, and battle damage assessment; national intelligence data-base connectivity; multiple-line telephone connectivity; video teleconferencing, teletraining, and telemedicine; tactical and public-affairs imagery dissemination; and logistic support to numerous other high-volume data systems.

Base-level information infrastructure (BLII) provides the Navy and Marine Corps sustaining base connectivity to the Defense Information Systems Network (DISN). It will modernize shore-based switches and cable plants and shipboard LANS to facilitate seamless connectivity and information flow.

Single-channel ground and airborne radio system (SINCGARS) is a family of VHF–FM, line-of-sight radios built around a common receiver-transmitter. SINCGARS provides the backbone for the single-channel radio net that will be used by all Marine Corps command-and-control and fire-support systems.

Automated digital network system (ADNS) provides timely data delivery service to or from all data user resources. The development of ADNS is based on the incorporation of commercial and government off-the-shelf hardware and software. Three prototype systems are installed in two surface ships and a telecommunications station for testing during fiscal year 1997.

AN/PSC–5 enhanced manpack UHF terminal (EMUT) is a lightweight, Demand Assigned Multiple Access (DAMA), manpack, line-of-sight and tactical satellite communications terminal that will serve as a primary command-and-control single-channel radio for MAGTF's and their elements. Employed down to the battalion level, it provides range extension and reliability. It will be used to transmit intelligence traffic, interface with SINCGARS waveforms, and transmit/receive command-and-control traffic. Initial operational capability will be achieved in early fiscal year 1998.

Other Marine Corps C^4 programs.—Several other important programs in which the Marine Corps is an active participant are in the engineering, manufacture, and development stage, and will increase capabilities in numerous areas. The SHF Tri-Band Advanced Range Extension Terminal (STAR-T), the Secure Mobile Anti-jam Reliable Tactical Terminal (SMART-T), the Digital Technical Control Facility, and the Tactical Data Network System are some of the systems that will improve the connectivity and interoperability of our communications systems internally as well as externally, and in some cases, greatly improve the mobility of our forces.

—*Common tactical picture (CTP).*—The knowledge and situational awareness that enhances combat identification, force coordination, and command and control. Associated programs include:

Global command-and-control system (GCCS) is the single most important command-and-control initiative in the joint arena today. It is the backbone of the "C^4I for the Warrior" concept. GCCS is a joint system that has reached its initial operating capability, replacing the Worldwide Military Command-and-Control System (WWMCCS), and will expand with applications across all functional areas. Full replacement of current WWMCCS capabilities was completed this year, ensuring a strong force deployment planning and execution command-and-control system.

Joint maritime command information system (JMCIS) is the core program of the Navy and Marine Corps' part of the Global Command and Control System (GCCS). JMCIS, the first Copernican program initiated six years ago, combined numerous programs to provide the warfighter a common tactical picture on a common work station. JMCIS provides timely, accurate, and complete all-source C^4ISR information management, display, and dissemination capability for warfare mission assessment, planning, and execution. JMCIS is compliant with the

Defense Information Infrastructure Common Operating Environment and incorporates the MAGTF C^4I software baseline.

Advanced combat direction system (ACDS) is a centralized, automated command and control system, collecting and correlating combat information. It upgrades the Naval Tactical Data System (NTDS) for non-Aegis surface warships, aircraft carriers, and amphibious ships. A core component of non-Aegis combat systems, ACDS provides the capability to identify and classify targets as friendly or hostile, prioritize and conduct engagements, vector interceptor aircraft to targets, and exchange targeting information and engagement orders within the battle group and among different service components in the joint theater of operations.

Tactical combat operations (TCO) system is an automated capability for processing battlefield information. Achieving its initial operating capability in fiscal year 1996 with a purchase of 334 units, the TCO System provides the Marines the same automated operations system currently used by the Navy. This system is built around JMCIS, which brings a major increase in interoperability to the services. Currently, the Marine expeditionary force and Marine expeditionary unit headquarters element have an interim capability, with a full operational capability expected at the end of fiscal year 1998.

SABER provides situational awareness and automatic GPS position reporting for tactical mobile units. SABER information is injected directly into the JMCIS picture.

—*Sensor-to-shooter.*—The process by which connectivity and the common tactical picture combine to provide near real-time targeting information to the shooter, including:

—*Cooperative engagement capability (CEC).*—The increased complexity of emerging threats in the air defense arena makes it necessary to link geographically dispersed sensors of differing capability with all potential firing platforms. CEC harnesses the technology, known as sensor netting, that makes this possible. With CEC, it appears to each shooter's combat system as if every netted sensor is that unit's own sensor. Engagement using remotely provided track data is possible for the first time. In addition, the ability to develop composite tracks means that every participating unit has an identical, real-time picture of the battle space, as well as identical identification information. With the addition of the airborne element of CEC in the E–2C Hawkeye, scheduled for fiscal year 1999, the reach of CEC will be dramatically increased, and the potential for overland engagement of cruise missiles greatly advanced. CEC technology continues to mature. In January and February 1996, CEC was an integral part of the Cruise Missile Defense Advanced Concept Technology Demonstration, known as "Mountain Top," in which the Navy demonstrated, for the first time, an over-the-horizon engagement of a cruise missile through the use of remotely located sensors and illuminators on a simulated airborne platform. Subsequently, in September 1996, the initial operational capability of the first shipborne system was attained. Also during fiscal year 1996, the Army and Air Force each undertook extensive studies aimed at determining the potential application of CEC to their service-unique systems.

—*Theater ballistic missile defense (TBMD).*—Sea-based TBMD is considered essential to protect expeditionary, forward-deployed elements of our armed forces and coalition allies, including population centers. The Navy Area TBMD System, which will field a user operational evaluation system capability in fiscal year 1999, is critical to support littoral warfare and provides for engagement of theater ballistic missiles (TBM's) in the terminal phase of flight. It serves to protect the nation's forcible-entry capability from a TBM attack. The Navy Theater-Wide TBMD System will add ascent and midcourse intercept capability, providing defense of the theater of operations. The Navy TBMD will be: able to operate independently of constraints; highly survivable; rapidly relocatable; self-sustainable; and dramatically cost effective, by leveraging existing capabilities and engineering bases. Both programs, as currently designed, are compliant with the Anti-Ballistic Missile Treaty.

—*Marine Corps aviation C^4 improvements.*—Quantum improvements continue in systems that support the aviation combat element of the MAGTF. Phase One's initial operational capability (IOC) of the Advanced Tactical Air Command Central (ATACC) occurred in fiscal year 1996, and is the integrating link between the aviation element command and control (C^2) and the MAGTF's C^2. The ATACC provides planners and operators with the automated assistance needed to effectively supervise, coordinate, and direct the execution and planning of all MAGTF tactical operations. IOC's also were met

during the year for the Improved Direct Air Support Central (IDASC) Product Improvement Program (PIP) and the Tactical Air Operations Center (TAOC). The ATACC provides great enhancements for interoperability with the Navy's Joint Maritime Command Information System and the Air Force's Contingency Theater Automated Planning System, while mobility is considered the key feature in the IDASC PIP.

—*Joint tactical information distribution system (JTIDS).*—Critical to the ability of Navy tactical aircraft, ships, and Marine air-command-and-control systems to operate in a joint environment, JTIDS is an advanced radio system that provides secure, jam-resistant information distribution, position location, and identification capabilities in an integrated form for tactical military operations. Nineteen have been acquired to date, with five more scheduled for fiscal year 1997. A prototype system for High Mobility Multi-Wheeled Vehicle (HMMWV)-mounted modular JTIDS terminal currently is in the engineering and demonstration stage. JTIDS will be integrated into aircraft carriers, surface warships, and amphibious assault ships and submarines, F–14D and E–2C aircraft, the Marine Corps Tactical Air Operations Center and Tactical Air Command Center. In addition, JTIDS has been identified as the preferred link for Theater Ballistic Missile Defense programs.

—*Marine Corps fire support C^4 improvements.*—The Fire Support Command and Control System (FSC^2S) is an interim system providing semiautomated tactical fire support and technical artillery fire-control functions for MAGTF operations. The follow-on Advanced Field Artillery Tactical Data System, which will completely automate fire support C^2, is scheduled for fielding in fiscal year 1998. The Target Location, Designation, and Hand-Off (TLDH) is a man-portable tool for fire support observers and controllers to locate targets with GPS accuracy, designate them with a coded laser as appropriate, and pass them to the appropriate fire-support system for resolution. This is a key enabling capability, which will maximize the effectiveness of supporting fires by accommodating current and planned laser-seeking precision-guided munitions. TLDH will provide the interface with the Advanced Field Artillery Tactical Data System and with digital delivery systems on board aircraft, and will use existing and planned communication assets for message transmission and receipt.

—*Advanced Tomahawk weapon control system (ATWCS).*—Is a significant upgrade to the current system, and will reduce overall reaction time, enhance training capabilities at all levels, reduce operator workload, and improve Tomahawk strike effectiveness. Improvements will include software, hardware, and firmware modifications that will introduce new capabilities, such as contingency-strike operations planning, embedded training at all levels, and a simplified man-machine interface. ATWCS incorporates an open architecture to provide for future growth, eliminates stand-alone Tomahawk desktop computers, and enhances command and control interoperability.

—*Information warfare (IW).*—Actions taken to access or affect information and information systems, while defending one's own systems. The goal of these activities is to achieve information superiority, the degree of dominance in the information domain that permits the conduct of operations without effective opposition. Programs supporting this objective include:

—*Common high band data link-shipboard terminal (CHBDL-ST).*—Provides a common data terminal for the receipt of signal and intelligence data from remote sensors and the transmission of link and sensor control data to airborne platforms. CHBDL-ST will interface with shipboard processors of the Joint Services Imagery Processing System-Navy (JSIPS-N) and the Battle Group Passive Horizon Extension System-Surface Terminal (BGPHES-ST). CHBDL-ST will process link data from BGPHES or Advanced Tactical Airborne Reconnaissance (ATARS) aircraft configured with modular interoperability data link terminals.

—*Joint deployable intelligence support system (JDISS).*—As a segment of JMCIS, JDISS provides common intelligence, communication, and office automation applications not only for U.S. naval and joint operations, but NATO and coalition operations as well. JDISS provides a responsive, secure exchange between and among intelligence centers and operational commanders, including access to national and theater data bases, and imagery. JDISS gives commanders what they need, when they need it, by providing "demand pull" as well as "smart push" intelligence, and delivers a broad base of training and user support to Fleet Commanders and naval components worldwide who operate in the joint domain.

—*Intelligence analysis system (IAS).*—Is an all-source fusion center that is the hub of the Marine air-ground intelligence system. Operational testing of the system occurred during the year, with an initial operational capability expected in fiscal year 1997. It is a completely mobile system with multiple analyst work stations, which can be configured for the higher commands or down to the battalions and squadrons. IAS hosts the Secondary Imagery Dissemination System and is able to link with other systems, such as Department of Defense Intelligence Information Systems.

—*Tactical intelligence information exchange subsystem-phase II (TACINTEL II+).*—Is a computer-based message communication system for automatic receipt and transmission of special intelligence (SI) and special compartmented information (SCI) messages geared primarily to contact reports and other tactically useful information. TACINTEL II+ implements the Copernicus vision for joint C^4I interoperability using open-architecture standards. The full capability will include voice, message, and data transfer among SCI-capable ships and aircraft, with gateways to shore nodes.

—*MAGTF secondary imagery dissemination system (SIDS).*—Currently undergoing an Operational Assessment with the 15th and 26th Marine Expeditionary Units, the manpack SIDS device provides the capability to electronically collect, manipulate, transmit, and receive imagery products throughout the MAGTF, as well as to adjacent, higher, and external commands and other theater commands, and to receive secondary national collector's imagery. The MAGTF SIDS software is resident in all versions of the Intelligence Analysis System. An initial buy of ten occurred in fiscal year 1996 with an initial operating capability expected in fiscal year 1997.

—*Battle group passive horizon extension system-surface terminal (BGPHES-ST).*—Extends the battle group's line-of-site radio horizon and enhances joint interoperability by controlling remote sensors in an aircraft's sensor payload to relay radio transmissions to the ship's surface terminal via the Common High Bandwidth Data Link (CHBDL). The primary aircraft employed for this task is the Navy's ES–3A Viking; additionally, BGPHES will be interoperable with the Air Force's U–2 reconnaissance aircraft.

—*Marine Corps intelligence programs.*—The Marine Corps' research, development, and acquisition of tactical intelligence systems, as well as aggressive manpower and training initiatives, continue to provide MAGTF commanders and their staffs with enhanced intelligence support. In 1996, the Navy-Marine Intelligence Training Center graduated its first class of multidisciplined MAGTF intelligence officers. MAGTF intelligence and force-protection capabilities will be strengthened with the creation in fiscal year 1997 of the Marine Corps' first Counterintelligence/Human Intelligence Company, by consolidating into one unit the existing Marine Expeditionary Force Counterintelligence Team and Interrogator-Translator Team personnel and equipment assets. Under the joint umbrella, the Marine Corps continues to install the Joint Worldwide Intelligence Communication System (JWICS) at its major bases and the Marine Corps Intelligence Activity, to gain access to the national intelligence community.

Improvements in tactical intelligence capabilities are being addressed through research, development, test, and evaluation and procurement investment in programs within the Joint Military Intelligence Program and Tactical Intelligence and Related Activities. The Marine Corps is addressing shortfalls in its imagery intelligence capabilities. The Joint Services Imagery Processing System National Input Segment provides deployed Marine forces with national imagery support. In addition, each MEF will receive a Tactical Exploitation Group to receive, process, and disseminate imagery from F/A–18D ATARS-equipped aircraft, and imagery downlinked from UAV's and U–2's, as well as other theater and national collectors. The Marine Corps also is completing acquisition of a manpacked digital camera and secondary imagery dissemination systems, to enhance tactical access to imagery and imagery-derived products.

Marine Corps signals intelligence (SIGINT) improvements include procurement of the Radio Reconnaissance Equipment Program SIGINT Suite–1 and product-improvement upgrades to the Mobile Electronic Warfare Support System, the Technical Control and Analysis Center, and the Team Portable COMINT System. We are also pursuing systems that will help the Marine Corps benefit from the latest commercial technology and maintain our signal exploitation advantage over potential adversaries, in projects such as the Navy's Cryptologic Carry-On Program and the Marine Corps/NSA Radio Battalion Modernization and Concept Exploration Project.

—*Information warfare (IW) education and training.*—In fiscal year 1999, the Department of the Navy will reassess its priorities to further improve Defensive IW readiness, in response to the Naval Research Advisory Committee recommendations. Education and training are critical to IW awareness, and the Navy is the joint lead for IW training. IW education and training is conducted at Naval Telecommunications Training Center Corry Station, Florida, at the Fleet IW Center, and at the Naval Postgraduate School.

Norway air-landed Marine expeditionary brigade (NALMEB).—The NALMEB is the Marine Corps' only land-based prepositioned stock and is a cost-effective deterrent to assist in the protection of NATO's northern flank. Through burden-sharing agreements with Norway (renewed this year), the program cost is minimal and the agreement serves as a tangible reaffirmation of U.S. commitment to NATO and to our Norwegian allies.

Asset tracking logistics and supply system (ATLASS).—ATLASS is the Marine Corps operational and retail level supply, maintenance, and material readiness system and is interoperable with joint systems. ATLASS provides comprehensive connectivity to higher, adjacent, and supporting headquarters. This improves asset visibility and logistics status for commanders. The development of ATLASS included functional and technical integration of Marine Corps ground maintenance and supply systems with the Navy maintenance and supply systems under the Naval Tactical Command Support System (NTCSS) umbrella. Subsequent ATLASS initiatives will continue on a migratory path with NTCSS, further standardizing Navy-Marine Corps business processes and resulting in greater levels of interoperability.

Nonlethal weapons.—On 22 March 1996, the Secretary of Defense designated the Marine Corps as the executive agent for the Nonlethal Weapons (NLW) program. Since that date, the Marine Corps has established an integrated product team to develop the framework for a NLW program that will ensure unity of effort among the services and enhance the timeliness of fielding NLW systems to users. To this end, the Marine Corps developed a mutually supportable memorandum of agreement, which addresses the overall conduct of the NLW efforts and codifies responsibilities for NLW management cells, to include: a NLW Directorate, a Joint Concepts and Requirements Group (JCRG), and a Joint Acquisition Group (JAG). The Commandant's Warfighting Laboratory (CWL) continues to coordinate NLW testing within the Sea Dragon Advanced Technology Concept Demonstration, to identify areas of applicability. As a result of the unified effort of all participants, and the coordination of the JCRG, JAG, and CWL, a funding profile has been established to support NLW efforts in the out years.

Nuclear, biological, and chemical (NBC) defense programs.—Numerous enhancements are being pursued that will increase the effectiveness for Marines to operate in an NBC environment. Some of these are: Light NBC Reconnaissance System (LNBCRS); Joint Service Lightweight Integrated Suit Technology; Small Unit Biological Detector; and Joint Warning and Information System.

These programs, in concert with the latest standup of the Chemical-Biological Incident Response Force (CBIRF), highlight the importance the Marine Corps is placing on the future NBC threat to our forces.

CONCLUSION

The ultimate value of any organization lies in its ability to perform when required. In 1996, the Navy-Marine Corps team responded successfully around the globe and across a full range of employment—from peacetime presence, through humanitarian assistance, to crisis response and combat. On any given day, approximately 30 percent of the Navy and Marine Corps' operating forces—more than 50,000 men and women and 100 ships—are deployed worldwide, with nearly half of our ships underway for training or directly supporting our national security goals. For example, the bold movement of carriers *Nimitz* (CVN 68) and *Independence* (CV 62) into the South China Sea during March 1996 provided the appropriate level of national resolve to contain a crisis between China and Taiwan. Simultaneously, *George Washington* (CVN 73) surged from the Mediterranean Sea into the Indian Ocean to maintain vigilance in the volatile Persian Gulf region. In the Eastern Pacific, *Carl Vinson* (CVN 70), completing final training exercises in preparation for deployment, was ready to sail on a moment's notice had the Taiwan Strait crisis continued to escalate. In April, the *Guam* (LPH 9) amphibious ready group and 22d Marine expeditionary unit rapidly repositioned from the Mediterranean Sea on short notice to provide embassy protection and coordinate evacuation operations as the joint task force commander in two separate West African countries. In September, forward-deployed surface ships and a submarine were called upon to attack targets with cruise missiles in a coordinated response to Iraqi aggression. Throughout

the year, naval forces provided vital support for U.N. peacekeeping efforts in Bosnia and counterdrug operations in the Caribbean and Eastern Pacific. Within the continental United States, our Navy explosive ordnance detection teams and Marine Corps Chemical-Biological Incident Response Force supported special requirements of the 1996 Atlanta Summer Olympic Games. Likewise, Marines immediately deployed manpower and equipment to fight forest fires in California, and the Navy supplied the core resources to conduct the recovery operation of TWA Flight 800 off Long Island, New York. As in past years, the Navy-Marine Corps team, with its inherent mobility, firepower, flexibility and self-contained sustainability, showed its ability to respond successfully to a diverse range of missions.

The Department of the Navy has charted a course for the future which combines the finest Sailors and Marines in the world with the proper tools and training to execute our National Security Strategy and National Military Strategy. Because of our continuing emphasis on people, readiness, efficiency, and technology, the Navy-Marine Corps team is on-station, on-call, and provides enduring impact . . . From the Sea: today, tomorrow, and into the 21st century.

Senator STEVENS. Thank you very much, Mr. Secretary.

Admiral, do you have an opening statement?

OPENING REMARKS OF ADMIRAL JOHNSON

Admiral JOHNSON. Just a few remarks if I could. Mr. Chairman, Senator Inouye, members of the subcommittee:

I, too, appreciate the opportunity to appear before you today in my maiden visit. I would just underscore Secretary Dalton's remarks with three brief points. First, as he described, the Navy is, in fact, answering all bells and I believe we are doing that as well as we have ever done.

I can base that on lots of data, lots of things, but I base it mostly on my personal assessment. In the 8 months I have served as CNO, I have spent a great deal of that time out around the world with the fleet, seeing firsthand how they are doing. I, like you, have found them to be very much operationally focused. They are also very much upholding their reputation as the premier maritime fighting force in the world. I also find them to be intensely proud of what they are doing.

The support that this subcommittee has given them is fundamental to all of those things I just described, and on their behalf I would like to thank this subcommittee.

Second, our budget submission. I believe we have submitted a good and a reasonable budget. It will sustain our operational primacy. It will provide for improved quality of life for our sailors and their families, and it will allow us to recapitalize the Navy for the next century at what I would call a prudent pace.

I do not underestimate for a moment the magnitude of the challenge that lies ahead in balancing the needs of today with the obligation to build the Navy of tomorrow. But I am committed to you and to the Navy to see that we indeed strike that proper balance, and the help of this committee will be most important in that endeavor.

Finally, I would like to tell you how strongly I feel about the bond that exists between Gen. Chuck Krulak and myself and, more importantly, among the Navy-Marine Corps team that the two of us proudly represent. Because of the strength of our personal and our professional relationship, we really are able to work the tough ones together, and in so doing I believe we better serve the Secretary, our naval service, and the country.

I thank the Chair for your consideration and I look forward to your questions.

Senator STEVENS. Thank you, Admiral.

General.

OPENING REMARKS OF GENERAL KRULAK

General KRULAK. Sir, I will be very brief, but I would be remiss if I did not thank the committee for their support in three specific areas. The first one is you supported my young marines last year when you plused up by about $27 million the request for initial equipment. That got them Goretex rain gear, boots, and body armor. I can tell you, and you probably saw it, you go out there and $27 million made more of an impact than many of the things that are the big ticket items to those young troops in the trenches. So, thank you very much for that, sir.

Along the same line, the support for the big ticket items, what we call our leap-ahead technology, the AAAV and the V–22, and we thank you so much for that continued support.

Then one on a very personal note, your support for our warfighting laboratory. We promised you that we would give you results, and I think we have certainly kept that promise. There are two areas that I would like to highlight briefly. The first one is the chemical-biological incident response force, the Nation's only consequence management capability. We did not have that. You supported our efforts in that area and, as you know, we stood that unit up.

It went to the Olympics, it went to the inauguration. We are now working hand in glove with the U.S. Air Force to improve its mobility around the country. They have two 141 aircraft basically on alert at all times in order to support this chemical-biological capability for the Nation. Without your support, we would have never been there.

The second is the Sea Dragon warfighting experiments. An example of one of the things that came out of that experiment was, we went off the shelf, got a small drone called the X drone, modified it by putting TV cameras in the nose of it, and flew it out in our latest experiment called Hunter Warrior on the west coast. It provided to the small unit leader, the battalion, and regimental commander a capability to literally see the battlefield over the next couple of hills.

That capability has been shared with the Army. They are now using it in some of their experiments that they are conducting on the west coast. Again, none of that would have been possible without your support. So we thank you so much.

With that, I am prepared to answer questions, sir.

Senator STEVENS. Thank you very much.

Mr. Secretary, Admiral, General, we have a full house here this morning and I know well enough to keep my questions short so they can participate here. Let me ask you to help cooperate with us as we limit each member to 10 minutes during this time, to see if we can get through in the period that is available to us.

My opening comment would be that the trip we have just come back from shows the great facility of having really capable CINC's, such as Admiral Prueher and the Chief of the Navy in the Pacific,

Archie Clemins. Those people are doing a magnificent job for our country in the Pacific, not just in running their particular organizations, but as really being outreach people into the Russian far east and into the areas that we visited beyond that.

But I will tell you, we want to talk to you a little bit further about what we might do to help them cooperate with the Russian navy in terms of the disposal of the nuclear powerplants that will come off of the submarines to be decommissioned there from the Soviet navy. That is a subject for later consideration and we will visit with you on that.

MULTIYEAR PROCUREMENT AUTHORITY

Let me first start off the questions, though, Mr. Secretary. We understand you intend to ask us to modify the multiyear procurement authority we have already given you for the four submarines, the new attack submarines, and I want to ask you, how will that be different from the traditional multiyear authority we have given you in the past?

Mr. DALTON. Mr. Chairman, after last year's congressional decision with respect to our submarine program, which called for competition, the GAO did a study that showed that the cost of that program would exceed $3 billion more than the original proposal that we made to the Congress.

About that time, Newport News and Electric Boat were working together on a teaming approach on the LSV and so we approached them with the idea of considering teaming for the new attack submarine. They found and we have found in working with them that we could save about $500 million over the course of the FYDP in this approach, and thought that it made sense to pursue it based on that.

It meets the requirements of the Joint Chiefs of Staff by having 10 to 12 submarines that meet *Seawolf* stealth quietness characteristics. It maintains the industrial base of those two important shipyards, and it is a cost-effective way to produce quality submarines with great capability.

It also gave us the opportunity to afford the whole shipbuilding plan that we have before you in this year's program. Last year we did not have the CVN–77 fully funded. In this year's program we do. We also have the program that includes the multiyear buy for the DDG's and the LPD–17, and it gave us the opportunity to fit in everything.

But specifically with respect to teaming, what it does gives us the opportunity to have one learning curve instead of two at the two different shipyards. This is possible because one shipbuilder will in most cases build the same modules for each submarine in a successive fashion and one shipyard will be the expert in the bows, if you will, and the other will be the expert in engine rooms, and they will work together in teaming and cooperation and have the benefits of the expertise of both yards.

It will also allow us to eliminate the development and maintenance of two independent design and construction data bases to support the construction activity. We think the construction efforts will be efficiently focused on exploiting the strengths and the experience of both of these shipyards.

So it's a combination of meeting the requirements, of saving taxpayer money, and getting the ships built in a cost-effective capable manner.

Senator STEVENS. Admiral, is it going to be cost-plus or fixed contract price?

Admiral JOHNSON. I believe, sir, that it is fixed contract price. Mr. Secretary?

Mr. DALTON. Yes.

Admiral JOHNSON. That is correct, sir.

If I could just add one point to what the Secretary told you, the key from the requirements standpoint is that it will help us meet the requirements for the overall ship construction plan in a way that, quite frankly, I could not see my way through with the competition. The money we save through this teaming arrangement enables the entire ship construction plan to happen, and that is very important to us, sir.

[The information follows:]

The proposed procurement process for the first four New Attack Submarines (NSSN) will incorporate the use of a cost-plus incentive fee contract.

V–22

Senator STEVENS. Thank you.

General, one of my great interests has been the V–22, and we saw that as one of the first real innovative changes in aviation technology available to the military and, if it proves out, one that is really going to have staggering impact upon our national economy.

We gave you advance procurement funds to buy 12 MV–22's for 1998. But the budget before us now only covers five. We had the advance procurement for 12. It only covers five. Now, I know a lot of things happen after you make up your shopping list and before you get to the grocery store. What happened to my other seven MV–22's?

General KRULAK. Sir, they did not meet the cut on the top line. We were unable to fund them. There is no question that that aircraft in my opinion is critical, not just to the Corps but to the Nation. As an example, we just flew the first engineering, manufacturing, and development [EMD] aircraft. It flew from Dallas-Fort Worth Airport to Patuxent River in 4 hours and 24 minutes. That is with a mandatory stop halfway, shutting the engines down, refueling it, turning the engines back on, and flying the rest of the way.

To give you a comparative, if a national airline jet flew from Dallas-Fort Worth to Baltimore-Washington International, it takes 3 hours and 5 minutes. This V–22 made almost the identical trip in 4 hours and 24 minutes with a stop. This is a tremendous capability.

We would love to have it. We just did not have the dollars, sir.

Senator STEVENS. A lot of my young friends went into the Marine Corps and were on ships and they then went onto beaches in very small craft, and I know how many of them did not come back. I view the V–22 as being the vehicle that would take the marines over the beach and put them behind the people that were on the

beach and would save lives before the whole thing was over with, God forbid we have to do it again.

I consider it to be the No. 1 priority. I notice you made it one of the top priorities for you. Is it still one of the top priorities?

General KRULAK. It is the No. 1 aviation priority for the Marine Corps, without a doubt.

Senator STEVENS. Well, I have some other questions, gentlemen. But I prefer to let these members ask them, and I will probably submit many of mine to you.

Senator Gregg. We follow the early bird rule. That gets people here. Senator Gregg, you are first.

Senator GREGG. I would be happy to have Senator Inouye go.

Senator STEVENS. Pardon me.

Senator GREGG. He is the ranking member, and then I can go after Senator Inouye.

Senator STEVENS. Well, as a courtesy to our friend I am glad you would do that. But he was not one of the early birds this morning. [Laughter.]

RECRUITING GOALS

Senator INOUYE. Mr. Secretary, there has been much publicity about the difficulty the services are having in meeting their recruiting goals. For example, the high school pool continues to decline. The propensity to enlist level is at an all-time low. Are you preparing to lower your acceptance standards to include category IV's?

Mr. DALTON. No, sir, we are not, Senator Inouye. This is an issue that was raised, frankly, in 1994 when we were having a very difficult year with recruiting. Frankly, I had a recommendation that we lower the standards. There was a study done by the Bureau of Naval Personnel that, based on the criteria we had, we were not going to be able to meet our goals without lowering the standard.

But I did not accept that. I sent them back and said: Look, come back and tell me what you need in order to meet our goals without lowering our standards. And we asked this body for additional funds for advertising, and you were supportive in doing that. We have an excellent advertising campaign today, including emphasizing our core values of honor, courage, and commitment.

But we also did some innovative things. For example, I wrote every high school principal in the country twice that year and the following year, making them aware of, for their career counselors and people that advise young people on their future careers, about the opportunities that exist in the Navy and the Marine Corps.

We asked the Reserves, gave the Reserves some incentives to assist our recruiters. We incentivized our Back to School Program where flag and general officers, Presidential appointees, and senior executive service personnel in the Navy Department went back to their high schools and talked to people from schools from which they had come to let them know of what their career opportunities had been and how they had progressed in our service by joining the Navy and Marine Corps upon finishing their education.

We also have visited recruiting stations on a regular basis. When we are out in the field, we go by recruiting stations. I was just at the fourth Marine Corps recruiting district 2 weeks ago to talk

with them and encourage the people that are doing this very tough job.

But it is a tough challenge. The kids today, unlike what many of us experienced, do not have parents or uncles or cousins who are in the military and as a result their propensity to enlist, as you pointed out, is low. We have a big job to accomplish.

But we are meeting our goals. We have not lowered our standards. We have no intention to lower our standards. We are going to do what it takes to continue to get the people, young men and women, to come into the service that we need in order to man the required force levels in the Navy and the Marine Corps.

The Chief of Naval Operations and the Commandant have done a fine job in showing strong leadership from the uniformed military with respect to this, and this is something that we watch very closely. We really, I think, have done a good job and I am pleased with where we are. But we have worked it really hard and we are meeting our goals.

SEXUAL HARASSMENT

Senator INOUYE. Mr. Secretary, recent publicity suggests that you are having problems integrating women in your services. What steps have you taken to educate and train your sailors regarding sexual harassment?

Mr. DALTON. Senator Inouye, we had the benefit of an early wakeup call, if you will, with respect to this issue. We recognized that we had a problem when, 6 years ago, we had an event where people were walking around wearing tee shirts that said "Women are Property" and that was accepted. We knew we had a problem.

We recognized it and we attacked it, and I think that we recognized that there was a problem in our culture and we have gone full-bore to address it. We have set up a Standing Committee on Military and Civilian Women in the Department of the Navy. That was established in late 1992. We set up prevention training, which involved training sailors and marines to prevent sexual harassment from the day they come into the service.

Second, we have annual training, so that everyone is trained with respect to this issue on a regular basis. We came out with a booklet, an informal resolution, the red light, yellow light, green light type of thing, that was considered somewhat of a joke by some when it came out, but now we have seen that it really has made a difference in terms of what is acceptable and what is unacceptable with respect to behavior.

We have commanders' handbooks that make how the command deals with this issue clearly understood by commands throughout the Navy and Marine Corps. We also set up a Department of the Navy equal opportunity-sexual harassment advice line or hot line, and that line has had over 3,000 calls since we have set it up. Sometimes people are just asking for advice, sometimes people asking what to do either as a victim or in command in terms of the proper way to deal with this issue.

We have also set up victim assistance programs in both the Navy and Marine Corps. The Navy's is called the sexual assault victim intervention, or the SAVI program. In the Marine Corps it's the

Family Advocacy Program. These programs provide places for victims to go to get advice on how to deal with a complaint.

We also realized that many of these problems were somewhat related to alcohol. We found that over 80 percent of the problems we were having somehow involved alcohol abuse. So we emphasized our Right Spirit Program for the Navy and Semper Fit in the Marine Corps. We have had positive results from these programs.

There is a DOD survey that is done on this issue every 2 years, and we have seen from that survey that we have indeed made progress. In 1991, 44 percent of the enlisted women personnel in the Navy complained of having experienced sexual harassment. In 1993 that number was down to 35 percent. In the last survey, in 1995, it was down to 29 percent. For officers it went from 26 percent in 1991 to 19 percent in 1995.

Now, am I satisfied with 29 percent and 19 percent? No; I am not. But I am pleased with the trend and the fact that we are indeed making headway in this regard.

When the problem occurred at Aberdeen, rather than relying on surveys, we sent focus groups into the field in both the Navy and Marine Corps to have people sit down and talk with our sailors and marines in informal settings and find out from them exactly how this program was working. I was gratified by the results. Over 85 percent of the people that were surveyed in these focus groups showed that their commands do, in fact, take these complaints seriously and when a complaint is filed, it gets handled by the chain of command in an effective way.

I think the key is to make sure the word gets out. The key is that when there is improper behavior that the discipline is appropriate, effective, expeditious, and fair. The key thing is for the word to get out that we just simply have no room in the Navy Department for anybody that treats their shipmates with anything less than dignity and respect.

In the sixties we had a major problem with race riots aboard ships. Today I think we are a model for equal opportunity in society. In the late seventies and early eighties we had major drug problems. On some commands more than 50 percent of our people tested positive with drugs. Today we have essentially a drug-free Department of the Navy, because people know the standard. If they get tested positively they are going to be disciplined appropriately.

Finally, our goal is to have that same success by having men and women work together professionally in the Department of the Navy, and I think we are on the right track. I feel good about the success that we have enjoyed.

Senator INOUYE. Thank you.

Do I have time?

Senator STEVENS. Take mine.

Senator INOUYE. Admiral.

Admiral JOHNSON. Yes, sir.

HEALTH CARE

Senator INOUYE. Whenever I visit the men and women of your service, in the question period the first question is always on health care. They are all concerned about health needs of their dependents, for example. And I note in the budget that in the budget

that in the last 2 years you have reduced your civilian medical work force by 1,000. Will you be able to provide this type of support for your personnel?

Admiral JOHNSON. Senator Inouye, I share your concern. My answer to you today is yes. I would caveat that by saying that, in my opinion, the TRICARE system being implemented right now will be a good system when we get through full implementation. We are not there yet. I believe—and I speak for myself—we could have done a better job educating the force as to exactly what TRICARE means to the members and their families.

We are hard at work right now to reinvigorate that process to make sure that we demystify TRICARE. We will be very supportive of our sailors and their families. But we are in a period of transition now and I get the exact same resonance when I go out and talk to the sailors.

In fact, I met with the Navy Surgeon General the day before yesterday on that very subject, how to do a better job of articulating exactly what it means, what the options are, and how it relates to them and their families. We are very much committed to doing that, sir.

Senator INOUYE. I thank you, sir.

Mr. Chairman, I have many other questions. I have several questions for General Krulak on the V–22 Osprey and also on recruiting. If I may, I would like to submit them.

Senator STEVENS. Yes, sir.

Senator Gregg.

INDUSTRIAL BASE

Senator GREGG. Thank you, Mr. Chairman. I would like to join with yourself and the ranking member in congratulating the Navy and the marines, and specifically the Secretary of the Navy, who I think has done a superb job of managing the Department and who has brought it continued success and respect, as it deserves.

Mr. Secretary, I was wondering if we could go back to the question which the chairman talked about, which was industrial base. This is a bit of a parochial question, which you might expect. But I am interested in knowing what your thoughts are on the Government shipyards, specifically as they relate to Portsmouth as you look out into the future, and how you expect—if you intend to maintain these shipyards, how you expect to do that and keep them modern and keep them participants in a strong Navy.

Mr. DALTON. Senator, we monitor the workloads of the shipyards, and the Portsmouth shipyard has done a fine job with the overhauls that it has done on the 688's. We are monitoring those workloads. When there have been needs to downsize due to the workload, we have tried to emphasize voluntary programs and avoided RIF's to the maximum extent possible and will continue to do that.

But there is a workload issue with respect to the shipyards and we are certainly monitoring that, and the outlook for Portsmouth is positive in that that shipyard is doing a fine job on the work we have assigned to them and we anticipate that will certainly continue.

Senator GREGG. Do you see Government shipyards as being an integral part of the Navy structure as you look out into the future?

Mr. DALTON. Yes, sir, I certainly do. We have come down significantly in the number of shipyards, Government shipyards that we have. We certainly anticipate we will continue to have the need for that work in the future.

ANTITERRORISM ACTIVITY

Senator GREGG. I was wondering in the area of antiterrorism activity, can you give me a sense of how much money you are spending on antiterrorism activity? First, how much money is being spent, how it is being structured, and the information which you are evolving, what sort of sharing you do with nonmilitary agencies such as the FBI and the CIA and the State Department as you anticipate issues, and what type of sharing you get back from the FBI, the CIA, and the State Department as they see issues that are coming at you, and whether there is a structured way of approaching this or whether this is done sort of on an issue by issue event.

Mr. DALTON. Senator, I will be glad to respond for the record in terms of the dollar amount. I do not remember the figures.

[The information follows:]

The Department of the Navy's fiscal year 1998 request includes $873.2 million for combating terrorism (which includes Force Protection). The appropriation breakout of this funding is as follows:

[In millions of dollars]

	Fiscal year 1998
Military Personnel, Navy	257.6
Reserve Personnel, Navy	11.5
Operations and Maintenance, Navy	270.1
Operations and Maintenance, Navy Reserve	6.0
Research, Development, Test and Evaluation, Navy	3.8
Military Construction, Navy	25.0
Military Personnel, Marine Corps	290.5
Reserve Personnel, Marine Corps	.2
Operations and Maintenance, Marine Corps	8.5
Total	873.2

Mr. DALTON. But I know that this is an area of increasing concern for us. In this past year we have set up the CBIRF, the chemical-biological incident response force, in the Marine Corps with the help of this committee. As the Commandant referred in his remarks, that was used at the Olympics, it was used at the inauguration. I have met with the Director of the FBI and have had conversations with representatives of the CIA and the State Department.

I think the exchange of information is positive. But this is an area of continued concern and increasing concern because of the type of things that we all know we have experienced, both domestically and abroad just in the past year. So we are going to have to devote more attention to this issue and have increased dialog with the other agencies that you mentioned.

Senator GREGG. Is there any formal meeting process that goes on that involves senior Navy personnel with the FBI, with the CIA—well, probably the CIA I am sure there is, but with the FBI, with the State Department, that is on a regular basis, and the purpose

of which is to exchange anticipated—information about anticipation of events versus events which have already occurred?

Mr. DALTON. I know that is done at the OSD level, and the Commandant has a point he would like to make with respect to that.

General KRULAK. Yes, sir, it is done at the OSD level. We on a regular basis, meet with representatives from FEMA and the FBI on this particular issue. We are in the process of trying to put together a memorandum of understanding that would establish what I call a JIATF. Instead of your normal joint task force, this would be a joint inter-agency task force that looks specifically at things like terrorism, counterterrorism, and the CBIRF.

The discussions we have had with the FBI would be that probably the headquarters of that JIATF would be down at Quantico, collocated with their school system and our Combat Development Command. We are getting good support from the Department of Defense in working this very issue, because we believe that this whole environment is not going to get better, it is going to get worse, and the better we are at exchanging information and, more importantly, putting together headquarters that can go out and attack the problem, the better off we are going to be.

Senator GREGG. This chemical-biological incident team, which is obviously a major step forward, I congratulate the marines and the Department for organizing it. To what extent is that structured to anticipate threat, or is it simply structured for the purpose of responding to an incident?

General KRULAK. It is a consequence management capability. Hopefully, we will operate on the intelligence system, which we are, in fact, tied into. Its No. 1 capability is it is the only organization that can take a victim and turn that victim into a patient, and that is where its strength comes from.

So it would—hopefully, if something happened in a New York subway, we would know about it, and another unit would go in and make sure that the incident did not take place. But if that incident took place, this response force would literally be able to go in there with the medical capability to turn the victim into a patient.

DEPOT MAINTENANCE FUNDS

Senator GREGG. Just to get back on the issue of what the Navy's spending, specifically on the depot maintenance funds, 94 percent of the requirement for 1997, but it is projected it will be 88 percent in 1998 and 91 percent in 1999 for the active force requirement. What is the effect on readiness of this reduction?

Mr. DALTON. Senator, we have a backlog right now of aircraft which we need to work down. We plan to work it down. I know the CNO has done some work on it. Let me ask him to talk about depot maintenance for a minute.

Admiral JOHNSON. With respect to ship and aircraft maintenance, Senator Gregg, in terms of the percentage of funding that is allocated to that, I am the new guy in town, so I asked a similar question as to why we fund ourselves at a higher percentage in the execution years than we do in the out-years.

I will tell you that right now inside the Navy we are relooking at that to see if it makes more sense to fund to a higher profile

all the way out. People who know the system better than I say that that may not be the answer. But I take the point seriously.

What we are doing right now, though, is we are looking on the ship maintenance side at a plan in execution for fiscal year 1997 that by fully loading the capacity at our public yards and reconfiguring what we put into our private yards, will allow us to essentially eliminate the ship maintenance backlog for fiscal year 1997. This was not the picture that we were looking at even a few months ago. So that is a giant step forward.

We will do the same thing next year. In fact, it is already in work with Adm. Archie Clemins and the other fleet commanders to deal with that in fiscal year 1998. With respect to the aircraft depot maintenance piece, Secretary Dalton mentioned that we have a backlog measured in numbers of airframes and numbers of engines. We are not convinced today that that metric is the right one. So we are looking at those backlogs in terms of readiness, rather than counting airframes. And we are going to put our focus into specific aircraft type, model, series that will allow us to maintain a higher readiness across the force.

What does that mean in other terms? It means that we are going to put an investment into the aircraft depot maintenance that will bring overall readiness to a higher level, and then we will see what the airframe count is after that. It will be less than it is right now. I think it will probably end up being less than 100 in terms of backlog airframes.

Then, quite frankly, we are going to look at that backlog and see if there is a message there in terms of the number of aircraft we are carrying in our inventory. So a long, somewhat convoluted answer, but we are well up on the problem, I think.

Senator GREGG. Thank you. I appreciate it.

Thank you, Mr. Chairman.

Senator STEVENS. Thank you very much.

Senator Bond.

Senator BOND. Thank you, Mr. Chairman. And as I said, I will join with you in welcoming the Secretary, the Admiral, and the General.

F/A–18E/F

I was most interested to hear the Secretary's comments on the Super Hornet. I thought, Admiral Johnson, I would ask you to describe from an operator's viewpoint why the E/F version of the F/A–18 Hornet seems to fulfill your needs. How do you view it from the operational standpoint?

Admiral JOHNSON. Well, sir, I view it—and I say this very sincerely—I view it as the cornerstone to the future of naval aviation. By the middle of the second decade of the next century, I see our aircraft carrier flight decks filled with F/18–E/F's and Joint Strike Fighters.

As Secretary Dalton mentioned, the program is doing extremely well. It is a model of acquisition reform. It is also a model in terms of going to school on a system that we are very pleased with, and that is the F–18A through D, applying the lessons that we learned there in a very positive way and putting that into a new system.

That airplane looks, as you well know, like a straight-stick Hornet, but it is a very different airplane. I flew it 1½ weeks ago. I spent a lot of time with the test pilots and the people who are working the systems. It is a bigger airplane with a smaller radar cross-section. It brings us great combat enhancement in terms of radius of action.

Also, we talk about the range a lot, but the other thing that I like to mention is the endurance piece of it, because endurance to me conveys being able to support troops ashore, staying on top of troops ashore. So both of those are significant. Nominally, it is a 40-percent increase in the range of the airplane.

You know about the growth capability in the airplane. The C/D for us has 0.2 cubic feet of volume growth available to it. This airplane has over 17 cubic feet. The C/D grew at a rate of 1 pound every 3 days over the extent of the program. So that growth is significant. The payload flexibility with two more stations is significant, and the carrier bringback, which is very important to us, is in the neighborhood of 3,500 pounds of carrier bringback.

So the survivability—it is a balanced, integrated approach to survivability, and the description I give is one that has that centered right in the middle of what I call the affordability box. It takes the enhancements that are on the airplane and uses active and passive sensor combinations, which we call multisource integration. It is a less vulnerable airplane. It has countermeasures in various stages that will keep it more than equal to the threat for at least the next two decades.

So operationally it is our answer.

Senator BOND. How does it rank in terms of affordable stealth?

Admiral JOHNSON. I think it ranks very well, sir. In this forum, I would say that we do believe——

Senator BOND. I realize that there are constraints.

Admiral JOHNSON [continuing]. Very sincerely that it will be ahead of the threat for at least the next two decades.

Senator BOND. Secretary Dalton, there was a rumor running around Washington a couple of weeks ago. I got a call that the Office of the Secretary of Defense was tentatively considering staying with the C's and D's, did not think we need the E and F. Can we count the decision to proceed with the low rate initial production as a strong indication that this rumor was unfounded?

Mr. DALTON. Senator, as you know, there have been a lot of rumors about various aircraft over the past few years. But I can tell you that the Navy Department——

Senator BOND. That one ruined my lunch.

Mr. DALTON. As the CNO stated, we are very, very excited about the E/F and its capability. It is the aircraft for the Navy for today and tomorrow and the future. Clearly, we plan to move forward with it. We were very pleased with the decision that was made by the leadership of the Defense Department with respect to the low-rate initial production issue just in the last couple of weeks. We clearly are moving forward with the E/F. It is the next generation aircraft.

It has been doing very well in the test phase and we plan to move forward with production as scheduled.

Senator BOND. On that line, I ask you, or maybe the question is more appropriately addressed to the Admiral. But as you know, the congressional defense committees have asked the services to define additional programs identified as requirements above and beyond the fiscal year 1998 budget. Can you tell us where additional F/A–18E/F versions would fall on the unfunded requirements list and what would be the cost of the four additional aircraft needed to reach the level identified in last year's budget for fiscal year 1998? Admiral Johnson?

Admiral JOHNSON. The number I believe for the four is $375 million. I can refine this number for the record. But my answer to the first part would be that it ranks very high on the list. But I would tell you, sir, honestly, that how it ended up stacking to me would be dependent on what the amount of the overall enhancement to the budget would be. I would have to look at it in balance with everything else.

[The information follows:]

The cost for four additional F/A–18E/F aircraft in fiscal year 1998 is $375 million. This is the No. 1 priority on the CNO's Priority List of unfunded requirements. The procurement of four additional F/A–18E/F aircraft in fiscal year 1998 would significantly reduce risk for meeting the September 2000 Initial Operational Capability (IOC) and would mitigate the risk for providing fully operational F/A–18E/F aircraft for First Fleet Deployment (currently scheduled for mid-2002). Providing additional aircraft in fiscal year 1998 will ensure that adequate aircraft are available for the Fleet Replacement Squadron (FRS) and will provide greater flexibility to the programs developing systems required for first deployment. If authorized and appropriated for fiscal year 1998, the $375 million should be applied to P–1 line number four. Approximately $308 million would be sent to McDonnell Douglas Aerospace (MDA) for the LRIP airframe contract, $45 million would go to General Electric (GE) for the LRIP engine contract, and $22 million would fund various Government Furnished Equipment (GFE) items and government efforts.

Senator BOND. One of the things that I think we need to look at is the likelihood of cost increases when we do not maintain the production rates. I think that has to be taken into account. If the efficient production rate is 24 and we buy at 20, we could lose an airplane, and I think that is something that we need to consider. I would appreciate knowing your views on what the impact on the cost per unit would be for buying fewer.

[The information follows:]

The following table shows the impact of varying procurement rate on a buy of 1,000 Super Hornets.

These figures are in constant fiscal year 1997 dollars and assume the current LRIP profile prior to achieving indicated procurement rate.

[In millions of dollars]

	Annual Procurement Rate				
	18	24	36	48	Current
Average recurring flyaway cost	46.9	45.2	43.2	42.0	41.4

Note.—Current procurement rate is approximately 48/year until fiscal year 2007 when the rate goes to 60/year. This was the program of record prior to the Quadrennial Defense Review reduction in program size.

AV–8B HARRIERS

Senator BOND. I guess I would have the same question for General Krulak on the budget request for 11 reman AV–8B Harriers. The program plan has long been at a steady rate of 12 reman Har-

riers per year. Is there any reason other than just the budgetary constraints that the rate requested for 1998 dips to 11 and then returns to 12 in 1999?

General KRULAK. Absolutely no reason other than the fiscal reason, sir. We need that aircraft desperately.

Senator BOND. And have you looked at the cost that might be incurred when in essence you would have to shut down the production line for 1 month to limit—since they are producing one a month, instead of buying 12 months, you only buy 11 months; have you looked at the cost of that?

General KRULAK. There is obviously an increased cost per aircraft, sir. I can get you the exact number.

Senator BOND. That would be helpful.

[The information follows:]

The recurring flyaway cost for an 11 aircraft buy in fiscal year 1998 is $23.4 million; the recurring flyaway cost for a 12 aircraft buy would be $23.1 million. Therefore, AV–8B Remanufacture unit cost will increase by $.3 million with an 11 aircraft buy.

SLAM-ER PROGRAM

Senator BOND. Mr. Secretary, what is the status of the SLAM-ER program? Or Admiral Johnson?

Admiral JOHNSON. I would be happy to. The SLAM-ER program right now, sir, is more than a gleam in our eye. It is doing extremely well. We like what we see. It hits the target. It is meeting the specs, and we are very much interested in the downstream potential as we get into SLAM-ER and SLAM-ER-Plus. We believe that it is a very solid program and we are going forward with it.

Senator BOND. How do you view the SLAM-ER as opposed to the JASSM?

Admiral JOHNSON. I would qualify it somewhat, but I would put it to you this way, sir. We believe, with what we see right now, that SLAM-ER may very well satisfy the complete ORD for the joint air-to-surface standoff missile, or JASSM, and we have made that suggestion through the Joint Requirements Oversight Council. We believe that everybody ought to be looking at SLAM-ER right now, quite frankly, just because of the time. It is well ahead, as you know, on the timeline relative to JASSM and it is working so well. We think it is going to answer the bill for JASSM.

Senator BOND. Thank you very much, Admiral.

Thank you, Mr. Chairman. I will give back the seconds remaining.

Senator STEVENS. Yes, sir.

Senator Hollings.

STAFFING

Senator HOLLINGS. Thank you, Mr. Chairman.

Mr. Secretary, I think the Navy and the marines are doing an outstanding job and I am supporting your request generally. But let me ask, Secretary Dalton, relative to the news report in the morning paper to the effect that you are perhaps looking for 20 more admirals. I remember on this committee some 20 years ago we said we had 12 million men under arms in World War II and

at that time with 3 million we were having three times the admirals, three times the generals.

So today we have got 391,000 sailors compared to 4 million, and back in the war we had 3,600 ships and we are going down to 346. The ratio works out to where we used to have 1 general officer for each 10,226 in the Navy, now we are going to have 1 general officer for every 1,100, almost a 10-to-1 ratio.

You have got 290 admirals. With 20 more where are you going to put them?

Mr. DALTON. Senator, where we are with respect to that is, at the end of the cold war there was about a 25-percent reduction that was taken with respect to flag and general officers. I do not remember the year exactly. I think it was the 1990 timeframe. The request for the 20 flag officers to which you referred is to meet the requirements of staffing joint, combined, and Department billets. We have 68 billets and can only fill 48 of those today.

But I do not think anything will be done with respect to this issue until we complete the quadrennial defense review and see where we are precisely with force structure. I think that issue will be addressed at that point.

Senator HOLLINGS. I think the point to be made is that at this subcommittee we are at the tail end of the whip when we finally get to the National Guard and marines. I have found from my experience that that is where we get the real support for the regular Army, Navy, and Air. And when we get to the tail end of the whip, crowding out all those generals and having to get all those billets that you say and get all of those commands, they keep cutting back on the Guard and the Reserve.

So the real concern I have is that we are losing that general support. You look over the floor of the Senate, there are less men in combat, much less in uniform. And that is getting to be a problem, and we are cutting back too much on defense. So it goes right to the heart of support for national defense when you keep adding these admirals.

V–22

Specifically, General Krulak, in this limited time, I know I never have made a landing in a V–22. I take it you have not either?

General KRULAK. No, sir, I have not.

Senator HOLLINGS. I waded ashore in North Africa and I waded ashore in Corsica. I waded ashore in southern France. But I was listening to your wonderful analysis of the capability of the V–22. Instead of wading ashore in southern France, we could have landed in Berlin according to you.

What in the world are we going to do with that? You get too overequipped. I was with General Wald up at the DMZ several times. Have you ever seen a North Vietnamese helicopter? I had not, either.

And I can tell you here and now, the distinguished chairman—I saw you all have the love-in over the V–22, but the truth of it is that you are not going to land over onto the officers club, I mean with the V–22.

General KRULAK. Let me answer that, sir, if I may.

Senator HOLLINGS. Explain this V–22 to me.

General KRULAK. I will, sir. I would love to, because this is a critical, critical issue. Right now we have got the Nassau on Simba Station off the coast of Africa in order to conduct a noncombatant evacuation either in Zaire or in the Bengui Central African Republic. We had to move a carrier out of the Mediterranean, down off the coast of Africa, in order to pull this off.

If you had the V–22, that carrier could have remained supporting the noncombatant evacuation in Albania and still been able to pull that off in either Bengui or Zaire. That kind of capability is remarkable and is going to change literally not just the operational and tactical level of war, but in my mind far more importantly, the strategic level.

The chairman and the Senator just came back from the Pacific. As an example in the Pacific, for that PACOM commander to influence his area of operation he could literally have a marine rifle company lifted off of its location on the island of Okinawa and, instead of training in the northern training area of Okinawa, in the same amount of time could fly to Vladivostok and train with the Soviet naval infantry.

It is this type of strategic use of an asset that, heretofore, was only an operational and tactical capability, that is going to make all the difference in the world. The issue is to not have to go and fight. The issue is to manage the instability in a manner that keeps you from having to fight. And when you have that kind of capability that is demonstrated day in and day out with this system, I think it is going to be a tremendous impact, not only on us, but far more importantly, on our enemies.

Senator HOLLINGS. Well, our enemies. You said you could lift off and train with the Soviet troops at Vladivostok. That is training. But I am talking about the mission of the marines is not to just go around and train with each other quickly, but rather to take the area and hold it. You folks are not running around just to save civilians. They ought to go ahead and listen to the State Department when we give them warning to get out. They just sit there and wait and wait and do not move and everything else of that kind.

I think there is a fundamental mission here, and I know the cost. You folks in the marines never ask for enough in my opinion. But when you get off on this sophisticated equipment that really does not fit to the basic mission, I would like to see—I know how many helicopters we lost in Vietnam. I can see how many V–22's we are going to lose in the next engagement, because you are not going to fly to train. You are going to have to fly to fight sustained and be supported. We were running around saving the equipment for 10 years out there in Southeast Asia. I do not want to get into that again.

General KRULAK. Well, from the tactical standpoint, the ability to have an amphibious ready group 30 to 40 to 50 to 60 miles offshore, out of either surface to surface missile range, and be able to fly your troops deep in, around the enemy, so that you are not having to do an across the beach forcible entry, but that you are using this as an operational maneuver capability, the ability of that system to operate over those distances at the speed allows you to do just what the Senator is talking about—be tactically extremely effective.

The days of being able to fly into the teeth of the enemy are over. They are going to get you if you cannot maneuver. And this system allows that type of maneuver like nothing we have ever had.

Senator HOLLINGS. And they will get you 60 miles offshore. I understand.

Thank you very much, Mr. Chairman.

Senator STEVENS. Some time we ought to discuss that, Senator, because think of the mobility it takes in terms of moving from several different ships rather than from one main troop ship, too. It spreads the attack force out.

Senator Hutchison.

Senator HUTCHISON. Thank you, Mr. Chairman.

I would just add to what General Krulak said to Senator Hollings, that if you look at the hostage rescue, the Iranian hostage rescue operation, I think that is much more the kind of warfare we are going to have in the future. And rather than ship helicopters in and have to put them together, and then they did not work very well, it just seems to me had we been able to fly in and land that it would have been a much smoother capability.

JOINT STRIKE FIGHTER

General Krulak, I would like to get your views on the Joint Strike Fighter. I think that we know that we have this joint effort, but I think the Marine Corps issues are somewhat different, and I wanted to see if you feel like it is a high priority.

General KRULAK. Yes; the Joint Strike Fighter, particularly the STVL version, is critical to our Corps' future aviation needs. The fact of the matter is we have for now 15 years been trying to neck down our fixed wing aircraft to one single type, model, series, and that would be the STVL version of the Joint Strike Fighter. We believe that it is going to be the aircraft for us in the future. As I think everybody in this committee knows, we have, not because we do not think the E/F is a greater aircraft—it is a great aircraft, but for fiscal reasons we have not stepped up to the plate on the E/F. We have not stepped up to the plate on buying a new STVL, such as the AV–8.

We have remanufactured the AV–8 and we are holding the C's and D's because we believe the Joint Strike Fighter is so important to us. It is critical.

F/A–18E/F

Senator HUTCHISON. Well, building on that—and I do not want to put you all at loggerheads exactly, but it does seem that many people are beginning to question the E/F as the best expenditure when we all know that the Joint Strike Fighter is the future for everyone. I would just like to ask either the Secretary or you, Admiral Johnson, if there is some efficiency in using the C/D and adding capabilities to the C/D that would be much more cost beneficial and saving some of that money for an early deployment of the Joint Strike Fighter?

Mr. DALTON. I will just say a word on that and I will ask the CNO, being an experienced aviator, to address that issue in more depth.

The F/A–18E/F is what we need for the future for longer reach, for greater stealth capability, for greater growth. There is no more growth left in the C and D. That aircraft is jam-packed. There is room for additional growth with the E/F and it has greater capability.

It is an aircraft that we need today. And looking at the future—the E/F is here today and it is an advanced capability over the C and D that we need to have. We are looking toward the Joint Strike Fighter at 2010 and beyond timeframe. But we are moving forward with it as well.

Let me ask the CNO.

Admiral JOHNSON. I agree with the Secretary's comments. For us, the E/F is very important. Chuck Krulak and I talk a lot about the C/D versus E/F and why it is OK for him and not for us. The truth is that I believe we are mutually supportive of all this. They have taken the bold step to go directly to the Joint Strike Fighter. We do not believe that we can do that with the legacy systems that we have, and the mission sets that we are asked to cover around the world 365 days a year as the Nation's forward presence strike force.

So E/F is critical, in my view, to our naval aviation plan between now and 2005 to 2010, which is the stage of the game when Joint Strike Fighter is in the fleet.

The way I would describe it, Senator, is that—and I really do believe this sincerely—I believe that this is not the time to make any terminal moves on these tactical air programs because the Joint Strike Fighter, while it looks wonderful to all of us, it is paper right now and we are not there yet.

As we get through the concept demonstration phase, which is happening between now and 2001, that is when we are going to learn the realities of the Joint Strike Fighter. Then I think we will be in a much better position to render those kinds of decisions. But for us, the strength in our program is the E/F because it carries us all the way through for the next two decades.

Senator HUTCHISON. I would just like to ask you to look carefully at enhancements that would give you more capability with the C/D's, and looking at possibly fewer buys, just in the name of efficiency of dollars, because I know there is going to be a squeeze in the budget. And when you look at all of the airplanes that are coming down the line, the sense that I get from most people is that the most likely one to be able to be let go is the E/F. I hope you will look at that in terms of a priority spending of dollars.

Admiral JOHNSON. Well, you and I would agree to disagree on that last point, I am sure.

Senator HUTCHISON. I am sure. I understand. But I hope you will just keep an open mind.

Admiral JOHNSON. Yes, ma'am, we will. We have looked at it. We will continue to look at it. But my comment would be, to go back to what Secretary Dalton said: For us the C/D is out of room. You cannot hang 480-gallon drop tanks on the C/D. It does not work. They carry 330-gallon drop tanks. That is all they can carry. That is all they will ever be able to carry.

That and other realities cause us to come back to E/F every single time. And there is the business of the threat.

FAMILY OF MEDIUM TACTICAL VEHICLES [FMTV]

Senator HUTCHISON. Let me turn to General Krulak. I am also concerned as we are trying to do more joint things with services agreeing to one model, the 5-ton truck requirements for the Marine Corps being so vastly different from the Army medium trucks, the FMTV. I just wondered if you had looked and will you consider looking at your requirements, with the thought that if you and the Army could get together perhaps there could be significant cost savings in the use of the FMTV.

General KRULAK. The FMTV is really just what the name implies. It is a family of trucks. The Marine Corps has never utilized a family of trucks. We are trying again, in the interest of the economics, we are trying to have one truck. It is a rebuild of our current truck. The beauty of it is, it goes on-road at 8 tons, off-road at 5 tons.

The Army's requirement is based upon the European theater and more on-road capability than off, and so when we got down to taking a look at the trucks and the costing the reality was that we could, and we both agreed, we could build a truck, rebuild a truck for the Marine Corps, that would save in the vicinity of $73 million over our entire program.

It was so good that the National Guard is now interested in doing the same thing. So I think we are trying to save the taxpayers dollars. Our numbers compared to the totality of the family of tactical vehicles that the Army is talking about building is really a drop in the bucket. I think that we have got a good system.

We will look at it again, but I will tell you, we are going to save the taxpayers money and we are going to get the right requirement, and it has been recognized by certainly the National Guard because they are going to come on board with us.

TRICARE

Senator HUTCHISON. I would like to just ask one question back to Admiral Johnson, and that is I know we are going to have a health care hearing, but in Corpus Christi we are very concerned that the Navy hospital has been signaled to be closed, and we are having a lot of trouble with TRICARE in other parts of my State. I do not know what the result is in other States, but the slow pay and the low pay to the outside doctors is causing a real hardship on our military families.

We are looking at building up the Mine Warfare Center and closing the hospital at the same time. So I am very concerned about the whole issue of health care for our military families, and particularly would you respond to what your thinking is in Corpus Christi?

Admiral JOHNSON. Yes, ma'am, I would be happy to. I have talked to Mr. Ortiz. I have talked to Craig Reynolds, a retired Navy captain who is working that issue very hard for the community down there. You know, I believe, that the whole relook at the DOD hospitals was what caused the Navy to have four sites to be considered for downgrading or transition from naval hospitals, as you say, to ambulatory care centers.

Part and parcel of that was an investment within the community for the local hospitals then to establish linkages so that there would be no degradation of service. That is the plan, and it was based on lots of things, not the least of which was the inpatient load at those naval hospitals, which for Corpus Christi averaged, in spite of the cachement area, it averaged less than, I believe, four patients a day.

But I very much accept the concern of the community. I believe that the Navy Surgeon General has re-engaged this issue. I know there will be no final decision rendered until we do a lot more dialog with the community, get a lot better understanding of the specific concerns in the Corpus Christi area. And I just assure you that we are not going to do something dumb or something that is counterproductive for the community.

Senator HUTCHISON. My time is up. I do not mind TRICARE as a concept. I think it is terrific. It just has to work if we are going to have this.

Admiral JOHNSON. Yes, ma'am. My points to Senator Inouye convey there. We have some education to do and some informing to do, in better ways than I think we have done thus far.

Senator HUTCHISON. Thank you, Mr. Chairman.

Admiral JOHNSON. It is complex enough and different enough where everybody needs a little more reinforcement than I think we have perhaps given them thus far.

Senator HUTCHISON. Thank you.

Senator STEVENS. Senator Shelby.

Senator SHELBY. Thank you, Mr. Chairman.

CH–53E

General Krulak, I read with interest in your statement that the CH–53E is the only helicopter in production that satisfies the Marine Corps heavy lift mission. Is that true?

General KRULAK. That is correct, sir.

Senator SHELBY. The Congress has added money to buy at least two of these to modernize the Marine Corps Reserves. Could you tell me how these aircraft are performing and how many are needed to complete the Marine Corps requirement?

General KRULAK. We need 19, sir, to complete the requirement. We are obviously trying to make our total force, in fact, total force in reality, and that is we want our Reserves to be equipped the identical way that our regulars are. So it is important that we continue on in the purchasing of those aircraft, and we have 19 left to go, sir.

Senator SHELBY. And if you can move faster than two a year that would help matters in terms of cost, too, would it not?

General KRULAK. Yes, sir.

SMART SHIP SYSTEMS

Senator SHELBY. Admiral Johnson, I understand that smart ship systems recently were installed in the U.S.S. *Yorktown* for an operational assessment.

Admiral JOHNSON. Yes, sir.

Senator SHELBY. What is the assessment, if you know, at this time of the *Yorktown's* commanding officer of this smart ship system?

Admiral JOHNSON. Senator Shelby, it is ongoing right now, so I do not have that answer. I look forward to being able to give you that answer.

Senator SHELBY. Would you give that to me and the committee?

Admiral JOHNSON. You bet. It is about 6 to 8 months of at-sea evaluation, which we are in the middle of right now, and we are very anxious to get the lessons learned and we would be happy to share them with you, sir.

[The information follows:]

Navy's Smart Ship Project (SSP) is focused on rapidly identify commercial technology which could reduce manpower requirements on our future surface combatants and other ships. Results of a pilot program aboard the designated test ship, U.S.S. *Yorktown* (CG–48), are being evaluated, and a full report should be available in September 1997. Our initial assessment is that SSP systems and policies introduced in U.S.S. *Yorktown* performed satisfactorily during deployment and subsequent at-sea evaluations. In the near-term, Navy will evaluate test results with the long-term expectation of implementing many Smart Ship concepts, both technology and policy, into the rest of the Fleet.

To accomplish this, Smart Ship Project will continue to solicit ideas for initiatives from within Navy as well as from industry, academia, and other institutions. The intent is to become self-sustaining by using a portion of resources saved through implementation of approved initiatives with labor-saving potential.

Senator SHELBY. If this works out on the U.S.S. *Yorktown*, then you would—and I will ask this of the Secretary, too—be looking forward to maybe seeing if it would go to other ships?

Admiral JOHNSON. Yes, sir.

Senator SHELBY. Mr. Secretary, do you want to address that?

Mr. DALTON. Yes, sir, Senator Shelby. This is a pilot program, if you will, on the *Yorktown*. We are very positive about what we see happening, in that we are finding that we can reduce watch stations and we can reduce the numbers of personnel aboard that ship.

Senator SHELBY. Saves a lot of money, too.

Mr. DALTON. Yes, sir, absolutely. And as the CNO said, it is not done yet, but the early returns are very positive and we are very hopeful that we can look toward a 15- to 20-percent reduction in manning of ships. You know, when you go to sea and you see one of our ships pass a merchant ship and we have got 15 people on the bridge and they pass the merchant ship that has 2 or 3—granted, they are not a man of war, but there is some savings in there probably. The *Yorktown* is helping us to see how we can indeed keep our warfighting capability where it needs to be and also do it in a cost-effective manner. We hope we can learn some very positive lessons from this smart ship, and similarly from the arsenal ship as we go to the SC–21 program for the future.

Senator SHELBY. You mentioned efficiency, but it could mean a lot of dollar savings?

Mr. DALTON. Absolutely, yes, sir.

Senator SHELBY. Millions, could it not?

Mr. DALTON. Yes, sir, end strength. Our people are our greatest asset and our No. 1 resource. It is also any time we can do things smarter with less people, we are saving money.

Senator SHELBY. So you like what you see thus far?

Mr. DALTON. Yes, sir, I do.

Senator SHELBY. Secretary Dalton, last year, in a different area—this is about helicopters now.

Mr. DALTON. Yes, sir.

CH–60

Senator SHELBY. This committee provided an additional $7.3 million to begin the CH–60 program that you are very familiar with. I understand that the Navy is requesting $32 million for the CH–60. With this additional funding, if you were to get it, I understand the Department of Defense will accelerate the schedule and procurement quantities of the CH–60.

With that in mind, is the $32 million included in the budget sufficient, sufficient, Mr. Secretary, to accelerate the CH–60 schedule or would you need more money?

Mr. DALTON. We think that what we requested is adequate, Senator. The CH–60 is an important program for us. The rapid procurement of the CH–60 is essential for the program's success. But we think that what we have requested is proper, consistent with our other priorities.

Senator SHELBY. Admiral Johnson, it is my understanding there is a requirement for at least 134 CH–60's. I understand you have been working with the Army to execute a multiyear, multiservice H–60 aircraft contract; is that true?

Admiral JOHNSON. Yes, sir; I believe that is still in the works.

Senator SHELBY. That is being negotiated?

Admiral JOHNSON. Yes, sir; and we are very anxious, as the Secretary said, to get the CH–60.

Senator SHELBY. How critical is that to the Navy?

Admiral JOHNSON. The CH–60?

Senator SHELBY. Absolutely.

Admiral JOHNSON. It is integral to us, sir. It is going to replace our H–46 fleet, which, as the Commandant could tell you from his standpoint, is very much an aging airframe. So we are very focused on getting CH–60's into the fleet.

MOBILE OFFSHORE BASE [MOB]

Senator SHELBY. General Krulak, focusing in on the mobile offshore base concept.

General KRULAK. Yes, sir.

Senator SHELBY. Does that play a role in the future operations of the Marine Corps?

General KRULAK. I believe that the mobile offshore base is a concept that needs to be looked at.

Senator SHELBY. To be developed maybe?

General KRULAK. Yes, sir; I think that we need to look to the future in ways that maybe are a little bit different than we look right now. One of them is the ability to use what I would call a lily pad approach, and that might very well be a mobile offshore base.

Senator SHELBY. How does that work?

General KRULAK. Well, not as a substitute for a surface combatant, but as almost a staging area for equipment, a place—as an example, you might have a mobile offshore base sitting off of the Philippines. You could utilize that as your basing train in the Phil-

ippines. It would be moveable. It could move down off the coast of, say, Australia, do some training there, and keep away from having to put a footprint on somebody else's sovereign territory.

So I think it is something that is at least worth looking at, and we have been supportive and I know Admiral Johnson and I have talked about this on several occasions.

Senator SHELBY. Is that perhaps more important that you look at this in the future because of our shrinking bases around the world?

General KRULAK. I think that it has the potential for helping us in that area. I think it has the potential also in the issue of force protection in areas that are a little bit more hostile than the ones I just mentioned.

Senator SHELBY. Admiral, do you want to comment on that?

Admiral JOHNSON. Only to say, sir, that we are indeed studying that MOB concept right now in terms of—and I can get you the proper name of the study, but essentially we are looking at the maritime prepositioning force for the next century. And it is also being looked at as part of the carrier developmental [CVX] cost/operational effectiveness analysis [COEA], as it is called.

So I think the proper course of action is the one we are on right now. Let us go ahead and do the study, do the analysis, see what we learn from that, and then we will make some investment decisions.

Senator SHELBY. I think that makes sense.

Thank you, Mr. Chairman.

Senator STEVENS. Thank you, Senator.

Senator Cochran.

Senator COCHRAN. Mr. Chairman.

SHIPBUILDING

Mr. Secretary, in your statement you make the comment that you are pleased with your shipbuilding plan, and I quote another sentence: "Our shipbuilding plan is an extremely positive and balanced program." But in the next sentence you say: "There is still a long way to go to ensure we have the funding necessary for our ship and aircraft modernization requirements coming into the next decade."

To me that is the most telling statement of all because the budget request, if you believe the Shipyard Chronicle's analysis of the Navy's budget request, says the budget averages five new ships per year for fiscal years 1998 through 2003. It says over the next 2 fiscal years the Navy intends to order only nine new ships, at a total estimated cost of $11.07 billion. If you look at this year's budget request, you are asking for only $7.438 billion for new ship construction.

So it just does not add up. Even though we talk about the plan being optimistic and modernizing the Navy and you are proud of the shipbuilding plan, you are not asking for the dollars to get there.

Mr. DALTON. Senator, we have a relatively young fleet. We were building a lot of ships in the early eighties to build up to the 600 ship Navy, and we are taking advantage of the fact that we do not request ships before we need them. We have, I think, a balanced

shipbuilding plan that we presented to the Congress, that includes funding for the CVN–77, which last year's budget request did not have, the multiyear buy for the DDG's, the four submarines in the FYDP, and the LPD–17.

I do think it is a well-balanced plan, and I think that what we are doing is taking the lessons that we are learning from the smart ship that Senator Shelby talked about and the arsenal ship demonstrator that we have coming down the pike. We are going to be building more SC–21's and learning from the modular technology that will be part of that. There will be more of those built.

The first SC–21 is in the year 2003. We think our shipbuilding plan is on target, it does make sense, and we think we have requested the dollars to fund it.

Senator COCHRAN. We know that the Secretary of Defense has announced the formation of a program management advisory group. This was back in February, with Admiral Sterner heading up a group to analyze what to do about the problems of meeting the needs of the Navy. The 300-ship Navy, 330, 340, is not going to be met under the plan that is the Navy's shipbuilding plan right now.

The industrial base is going to suffer. There is no question that we cannot sustain the shipyards now building ships for the Navy at this rate of shipbuilding.

Do you know what the review of this industrial base problem has concluded in terms of any new strategies or any new plans or any supplemental requests that we might see submitted to this committee?

Mr. DALTON. Senator, the PMAG, or the program management assessment group, did visit shipyards and their view is that the shipyards they visited do look positive for the near term. They did not have any recommendations for change with respect to the review that they conducted recently.

Senator COCHRAN. One of the real concerns in our State was a recent decision by the Navy to choose a group that presented a bid to build the next generation of amphibious ships for the Marine Corps some $100 million over the bid submitted by a group that involved Ingalls Shipbuilding. People cannot understand why that decision was made like it was, and they worry about the impact that it is going to have on the shipyard in our State.

Have you analyzed that and do you have anything you can tell the committee to explain the justification for that kind of decision?

Mr. DALTON. Yes, sir; Senator Cochran, the RFP, the request for proposal for those ships, was reviewed by the shipyards and they gave us their input prior to issuing the RFP. There was about a 1-year process of working through the bids that were submitted. In several cases they were sent back and offered the opportunity to enhance or improve their bids.

The program has been reviewed by the Assistant Secretary of the Navy for Research, Development, and Acquisition. It was also reviewed by the Under Secretary of Defense for Acquisition and Technology, Dr. Paul Kaminski, and he thought that it was a proper decision based on best value.

There was a 1.6-percent difference in price, but the RFP was done on the best value in the overall life cycle cost of the produc-

tion of the ships. It was a process that we think was done properly. But as I am sure you are aware, the process was one that was protested as far as the contract award. The General Accounting Office reviewed that decision and earlier this week found that it was, in fact, a properly awarded contract.

Senator COCHRAN. According to an article that I have seen in Defense Week, one estimate is that over the life of this nine-ship contract, if nine ships are involved as they may be, the Navy is going to end up paying about $1 billion more than it would have if it had taken the lower cost proposal. That is a concern if we are looking for ways to become more efficient and make our dollars go further, and that is why I raise the subject.

T–45

Admiral Johnson, I notice that in your plan for providing trainers and air pilot training there are T–45's that are being purchased to replenish and replace older trainers that have been used and are wearing out. This purchase rate has been at 12 per year and that has been in place since fiscal year 1996.

Admiral JOHNSON. Yes, sir.

Senator COCHRAN. I have heard that the Navy could justify an 18- or a 24-plane buy for 1998, and my question is how many T–45's are needed to keep the pilot training rates up to meet the Navy's requirements?

Admiral JOHNSON. Well, Senator Cochran, I could justify in my own mind an increased rate of production for the T–45's. But again, this is all part of a balanced aircraft procurement program, and we felt that 12 was an acceptable number for us.

I will tell you that the T–2's have caused us some concern of late in terms of relooking at the maintenance on those airplanes, and that has disrupted our pipeline flow a little bit. We are in the process right now of looking at that whole balance, if you will, to see if we need to reassess it in our next program review.

UPPER TIER PROGRAM

Senator COCHRAN. I understand, too, that there is some concern about the content and the wording of the statement that Presidents Clinton and Yeltsin issued on the subject of theater missile defense and the demarcation discussions that are going on in Geneva, as to what impact that might have on the Navy upper tier program. I wonder whether you have had a chance to look at that statement and analyze its possible impact on a demarcation agreement and whether or not the Navy upper tier program would be treaty-compliant if there is an agreement reached, based on the statement that the Presidents issued.

Admiral JOHNSON. Yes, sir; we are in the process of analyzing that right now. What I would tell you this morning, sir, is that the snapshot that I have right now says that both of our systems, the area and theater upper tier systems, are compliant.

Senator COCHRAN. If they are, is there any necessity for reaching an agreement on demarcation?

Admiral JOHNSON. I think I am probably not the person in the position to answer that question, sir. But quite frankly, my concern

is compliance for the two Navy systems that we feel so strongly about, and that has been my focus of effort.

KC–130 AIRCRAFT

Senator COCHRAN. General Krulak, I know that you have talked before about the KC–130's and the need to purchase new KC–130J aircraft. Congress provided $210 million last year to begin the process of purchasing four of these aircraft. But the fiscal year 1998 budget does not provide for additional planes.

What is the status of the need? Is there a justification for additional KC–130J aircraft?

General KRULAK. Sir, there is. It is obviously a far more capable aircraft than the one that we currently have. The one we have now is extremely old. The KC–130J's offer increased speed, range, better avionics. Of the four that we have on order right now, we will get, we are sure, three of those. The fourth, we are looking right now to utilize that money to help with the parts issue that would come with a normal packup of the 130J's.

Once again, the requirement is there. The money, the top line, was not, sir.

Senator COCHRAN. Thank you very much.

My best wishes for fair winds and a following sea to Captain Worley. We are going to miss you a lot, Captain.

Captain WORLEY. Thank you, sir.

Senator COCHRAN. Thank you, Mr. Chairman.

Senator STEVENS. Senator Domenici.

Senator DOMENICI. Thank you very much, Mr. Chairman. I will try very hard in the future to get here early. [Laughter.]

Senator BUMPERS. The last time I am going to be late. [Laughter.]

Senator DOMENICI. Well, I just wanted to share with the committee members that are left and you military leaders that the visit we made to eastern Russia under the leadership of Senator Stevens as our chairman and Danny Inouye as his ranking member, which also took us to North Korea, as you know, that all of you would have been proud of Senator Stevens. He did a remarkable job, and believe you me, it is not easy to talk 5 to 6 hours with North Korean leaders, with the kind of paranoia and redundancies that seem to be in their vocabulary. It is a good thing it was he and not me. He did a very good job and I compliment him for that.

Senator STEVENS. Thank you very much, Senator. Thank you.

Senator DOMENICI. Let me say, obviously I do not have a lot of Navy in New Mexico. We could not get any of you up the Rio Grande River under any circumstances.

Mr. DALTON. We are considering a submarine base there, Senator. [Laughter.]

QUALITY OF LIFE

Senator DOMENICI. But I do have a few questions, only one of which is parochial. I have kind of taken it upon myself to come to these hearings, where I do not have a parochial interest, but I am concerned in the big picture, to perhaps become an advocate for the quality of life of the men and women in the military.

I note—I have pushed my staff to get me more information, and I want to compliment you on your 1997 posture statement.

Mr. DALTON. Thank you.

Senator DOMENICI. Obviously, it contains much beyond quality of life. But I note a couple of interesting facts, and I just want to take off on them for just a moment and then move to a couple of other things.

In 10 short years from 1980 to 1990, it says here that your number of Navy and marine personnel that are with families has dramatically increased. I am not sure I have the year right, but the last year you cite in here 60 percent are with families as compared with just a few years ago with 42 percent.

I gather it is fair to say, from what I have read here and what I found out, that you are both very, very concerned about maintaining the quality of life for these families. Is that a fair statement?

General KRULAK. Yes, sir.

Admiral JOHNSON. Yes, sir.

Mr. DALTON. That is correct.

Senator DOMENICI. Now, I note that you apparently are having a degree of success, because some who are not married are complaining that they are not getting as much attention, and you are at least willing to state that here. I would not be as worried about that right now, but I am sure you are concerned about that also.

Having said that, let me suggest that there are some things that I am reminded of, having heard the distinguished Commandant of the Marines talk about small things and their impacts, and he made a great point of that. Small amounts of money frequently have big impacts. I think in the quality of life, as I tour bases—they are not all Navy bases; I have only been to one of those—it seems to me that the quality of life on these bases is frequently enhanced by very small kinds of things—building a center for the teenagers to participate and have fun together, rather than roaming all over the place, and make it a thing that is modern. Those are not big ticket items.

I compliment the military for going along with the commanders and heads of those bases, and I hope you are all aware that those are very, very important.

But I also think there are a couple of items, like food stamps, that kind of stick in our craw, at least mine. I have been trying very hard to get the military to tell us how we are going to get rid of food stamps as a part of the compensation for men and women in the military. Frankly, I believe we ought to do that.

I do not know whether there is 12,000 now or what the number is; 12,000 seems to fit in my mind at this point. Now, I do not want a long explanation. I would just like to ask you, Mr. Secretary: Is the Navy part of an effort to try to change compensation patterns and housing patterns such that fewer and fewer men and women are entitled to food stamps, with a goal of having none on food stamps?

Mr. DALTON. Yes, sir, we are. We are certainly concerned if one of our sailors or marines is in that position. The fact is we really do have a different military today than we had when I was on active duty in the sixties or in the Reserves in the seventies. Then

about 30 percent of our personnel were married with families. As you point out, it is 60 percent today. So it really has changed a lot.

The personnel that are on food stamps today are the young enlisted in the E–3, E–4 category that have larger families, three and four dependents. That is the area that qualifies for food stamps.

We clearly are looking at it. As your goal is to have none on food stamps, we certainly think that these are outstanding young men and women that are serving our country and they certainly need to be able to hold their heads high and be proud of wearing the uniform and being proud in the Navy and Marine Corps. I know that they are and we certainly would like their compensation to reflect that.

I will say that this is the first time ever that budgets are being submitted that include a pay raise in every year of the FYDP, the future year development plan. The maximum pay raise allowable by law is part of our budget. Every sailor, every marine, knows that if they stay on active duty they are going to get a pay raise whether they get promoted or not.

Now, you know, you do not come into the service for large compensation. But we are taking care of our people in that regard and they know that they are going to get that pay raise. We are not certain that is going to address the 12,000 that you speak to, but we are certainly looking at that and have the same goal that you have described.

Senator DOMENICI. Well, let me say, Mr. Secretary, at least from my standpoint as one member of this committee, I would not like to see policies that would approach men and women with families and say, you know, you are better off if you keep your family small. I do not think that is our business.

Mr. DALTON. I understand that.

Senator DOMENICI. So somebody with four kids ought not to be getting short shrift because you have got a policy that helps those with one kid better. At least I think that. I do not know how the rest of you feel.

Senator STEVENS. I have got six kids. Figure it out. [Laughter.]

Senator DOMENICI. Well, I have eight, so I have got you beat by two.

AIRCRAFT REPLACEMENT

But anyway, let me talk a minute with you about these very expensive new aircraft. And General, Commandant of the Marines, I am not opposed to the V–22. In fact I have studied and I think your analysis is right.

But I am going to tick off a few: the V–22, $40 million a copy; the AV–8B remanufacture, $30 million each; the F–18E/F, $60 million each. Now, I could have some more if I went through the other, the whole aircraft inventory.

I guess I am concerned in this respect. These are replacing airplanes of one type or another that are still very good, still the best in the world, the ones we are replacing. There is nobody who has got better than what we are replacing right now at this moment in history.

What worries me is as we replace the older ones, which are still very good, with new ones that are very expensive, the buys seem

to be rather puny. The numbers we are buying are rather small. Have you analyzed that from the standpoint of what is going to happen in 8 or 10 or 15 years if we do not have any of those that are still good, but then replaced by these brand-new high cost per copy inventory items? What are we going to do?

Are we then going to say we are going to have to build as many of those new expensive ones, or are we going to get by with fewer? Because we still have budget problems, you know. They are not going away, it seems to me.

Could you just comment for a moment on it, any of you?

Mr. DALTON. Go ahead.

Admiral JOHNSON. We are looking very hard at that, sir. And I would tell you that in the case of the F–18E/F, for instance, we have, as you have heard, approval for low-rate initial production, which builds 62 aircraft over a period of 3 years. Beyond that, the plan we have carries us to a maximum production rate of 60 aircraft a year. That is the rampup.

Part of the reality—and you touched on it, Senator Domenici—is that the legacy systems we have today are wonderful machines in most cases, but the timeframe we are talking about is at least a decade away from us, in many cases. So we have to project ourselves out to look at the threat and the age of the legacy systems out there.

I would say the rampup for the E/F right now is appropriate for us. We are looking at that buy rate and we do share your concern.

Mr. DALTON. Senator, I certainly agree with what the CNO said. The E/F is technology that we do need. It is the aircraft that we need. The C/D it is replacing just does not have the growth room, as the CNO pointed out.

The AV–8B reman is a cost-effective way to enhance an existing aircraft, as opposed to going to a new one. The V–22 is replacing the CH–46, which is over 30 years old. The airplanes are older than the pilots that are flying them. So we need this new generation of aircraft.

Senator DOMENICI. I do not argue that point. All I am saying is that when you get out here you are not replacing old ones, how many are we going to have in our inventory of these new expensive ones? And I think that is a pretty important issue.

Mr. Chairman, could I ask a parochial question? Their answers were too long, so I got cheated. [Laughter.]

Senator BUMPERS. I am the only one here that can squawk. It is OK, go ahead.

EF–111 VERSUS EA–6B PROWLER

Senator DOMENICI. I just want to raise a parochial issue, the EF–111 versus the Navy's EA–6B Prowler. Now, this committee has been rather concerned about whether you can do with that Prowler and other things what the EF–111's were doing. Now, I am going to tell you on this trip we heard from one of the four star generals that in the Korean theater it was questionable whether we had capacity under the EA–6B to do what we were doing with an EF–111 assigned to the mission.

I would like very much for you to find out about that and for you to tell us, because we have been trying to keep enough EF–111's

in the inventory so that we are absolutely certain you have got, the military has its capacity replaced. So would you do that for us.

Admiral JOHNSON. We would be happy to.

Senator DOMENICI. We are on a collision course. It looks like you want to get rid of the EF–111 quicker, at least the Air Force does, and we would like to know—I would like to know, and I assume the committee would—what the situation is on that.

Senator STEVENS. I think that requires really a written answer.

Admiral JOHNSON. Yes, sir.

Senator DOMENICI. Yes, sir, I agree.

[The information follows:]

In August 1996 the Secretary of Defense and the Service Chiefs approved a plan to replace 24 Air Force EF–111A Raven aircraft with 24 Navy EA–6B Prowler aircraft. This plan was the result of a Joint Staff sponsored study which concluded the consolidation to a single type radar support jamming aircraft would provide sufficient capability to meet the CINC's warfighting and operations other than war requirements. The Department of the Navy is pleased to report the progress we have made with the EA–6B Prowler assuming the role as the Department of Defense radar support jammer. I would like to address three aspects of this consolidation of the radar support jamming mission into the EA–6B: interservice coordination, force structure increases, and aircraft inventory.

First, in February 1997 the Vice Chairman of the Joint Chiefs of Staff, Air Force Chief of Staff, the Commandant of the Marine Corps, and I signed a Memorandum of Agreement (MOA) on EA–6B Support which is the foundation for a transition to an all EA–6B force as the EF–111A retires. The MOA provides procedures concerning operational and training scheduling, inter-Service aircrew augmentation, and employment of tactical jamming aircraft. The Navy has been abiding by the provisions of this MOA since embarking on the Secretary of Defense approved plan to assume this mission. The following procedures are used to schedule EA–6B expeditionary squadrons: (1) the unified Commanders-in-Chief determine their requirements for radar support jammers, (2) USACOM/PACOM develop a deployment plan, (3) the CINC's and Services approve the plan. In situations where the plan does not meet all the CINC requirements, the Joint Staff (J3), and if necessary, the Office of the Secretary of Defense, arbitrate the plan.

Next, the Navy has already established four of five planned EA–6B squadrons necessary to assume this role. These squadrons are standing up at an aggressive rate with only a 6 month interval. The first squadron stood up the month following SECDEF approval, deployed seven months later, and returned this last November. The second squadron has similarly stood up and is deployed today. The third squadron has replaced a Marine EA–6B squadron previously assigned to an aircraft carrier air wing; now allowing all four Marine Corps EA–6B squadrons to support the joint expeditionary mission. The fourth new squadron just stood up on 1 April, and the last squadron is on track to stand up on 1 October 1997.

Finally, 24 Prowler aircraft, which would have been parked in storage in the desert, are being refurbished to support the mission. We recently contracted Northrop Grumman to upgrade 20 aircraft to the Block 89 configuration with fiscal year 1996 Congressional funding, provided to assist the Navy in assuming the new role. While these aircraft are being refurbished the Navy is meeting all operational commitments through innovative management of the entire EA–6B inventory.

The Department of the Navy is committed to making the EA–6B Prowler program a success as we assume the role as DOD radar support jammer. Today 21 Air Force aircrew have already begun or completed training in the Prowler. The EA–6B community is the epitome of jointness in the Department of Defense; today a fully qualified Prowler crew of four Air Force officers is in a Navy EA–6B squadron forward deployed overseas to a Marine Corps air station, supporting a unified CINC in Korea. We have not yet completed our transition to an all EA–6B jamming force, but have met all our milestones and continue to track on the approved plan to meet the Department of Defense needs.

Senator DOMENICI. Thank you, Mr. Chairman.

Senator STEVENS. Thank you, Senator Domenici.

Senator Bumpers.

ARMY TACTICAL MISSILE SYSTEM [ATACM]

Senator BUMPERS. Thank you, Mr. Chairman.

Mr. Secretary, first of all let me say that I totally agree with your unfunded request for $20 million to develop a Navy tactical missile system [TACM]. When we go to markup on this I will do my very best to persuade the chairman and the ranking member that that is going to be money extremely well spent.

What are you spending this year on that program, $10 million?

Mr. DALTON. Yes, sir; I think that is the number.

Senator BUMPERS. And then there is money programmed for Navy TACM's in 1999. So if we do not put $20 million in for 1998 you are going to have a gap there.

In that connection, do you know how many ATACM's the Army fired in Desert Storm?

Mr. DALTON. No, sir; I do not know that number, but I will certainly provide it for the record.

Senator BUMPERS. General Krulak, do you have any idea?

General KRULAK. No, sir; I do not. I can get that number.

[The information follows:]

Thirty-two Block 1A, ATACM's were fired during Operation Desert Storm.

Senator BUMPERS. It was relatively few, I know. I think we fired over 300 cruise missiles, but I do not think we fired that many ATACM's. But ATACM's is a very fine weapon and the Navy ought to have it, and I will support you on that.

Mr. DALTON. Thank you, sir.

TRIDENT RETROFITTING

Senator BUMPERS. Second, Mr. Secretary, I am sort of like a Johnny one note on this. I have questioned the desirability of taking four of our Trident submarines that now have C–4 missiles on them, and retrofitting them to carry D–5 missiles. It is going to cost $4 to $5 billion to do that.

C–4's are getting up in years and I understand that. But under START III we are going to be limited to, I guess, about 2,000 warheads, and presumably about one-half of those will be on submarines. You are planning on having 14 Trident submarines at that time. But the START II Treaty may permit you to keep only 10 Trident subs.

Of the 14, 10 are now equipped with D–5 missiles and 4 are equipped with C–4's. Now, the C–4 is a perfectly good weapon. There is not any question about it. And as I say, the comparison of the D–5 and the C–4 is minuscule when you are talking about a nuclear weapon with multiple 100 kiloton warheads.

So why are we going to spend that $4 billion, $5 billion, to retrofit those submarines? And then you are also going to be spending an additional $1 billion to redo the power reactors on the submarines.

Mr. DALTON. Senator Bumpers, the request that we have for the D–5's supports the START II limits for the 14 submarines. I think we have asked for over the FYDP 55 D–5's, for a total of $2.4 billion. The nuclear posture review determines the number and the force structure that we need with respect to those missiles.

As you point out, the C–4 is an older missile, and to have the deterrence that is called for, the D–5 is the appropriate system.

Senator BUMPERS. Well, as I say, you are going to be spending all this money. There is a very good possibility you are going to be dismantling those same submarines by the year 2007 in order to come into compliance with START III.

I will not pursue it. I pursued it here for 3 or 4 years and have not gotten anywhere with it, so I do not expect magic to happen next year.

Senator STEVENS. Senator, I want to assure you that we have got to look for some places here now. And Mr. Secretary, I think that we ought to start listening to the Senator on this one. It is time we started——

Senator BUMPERS. Mr. Chairman, I am exhilarated by your response. [Laughter.]

Senator STEVENS. Well, if you want 20 V–22's you are going to have to stop spending money on things that are going to be dismantled just 4 years later.

Mr. DALTON. Yes, sir, I agree. If we had some certainty that START III was going to be ratified, I think that would clearly affect our decisionmaking for the future. But at this point we have not come to closure with START II. I think we are limited, with the world that we live in today and the way things stand today.

Clearly, if we have confidence that we are going to reach a level of agreement with respect to arms control with other nations, then it would definitely affect our procurement.

Senator BUMPERS. The last one of those backfits is going to go into service in 2007, the same year START III begins. Surely to God we are going to have a START III, if not in 2007, hopefully, not very long after that. These are the backfits: 2002, 2003, 2006, and 2007. And I say, $4 billion I think is the calculated cost right now.

Well, I will not pursue that. I am very pleased to hear the chairman's response to that, because we are looking for money any place we can find it.

Mr. DALTON. Yes, sir.

AIRCRAFT BUILDING

Senator BUMPERS. And that brings me to the next subject of money, and that is I am very pleased, Mr. Secretary, with your comments about the F–18E/F, and I agree totally. I am not all that captivated with the E/F, but I can tell you I agree with you there is going to be no fighter threat to the E/F over the next 15 to 20 years. You said two decades. I will certainly accept that.

Mr. DALTON. Yes, sir.

Senator BUMPERS. Now, here is the timeline we are looking at. We are going to do the E/F now, which is going to be superior to any enemy fighter in the world for two decades. And incidentally, the intelligence community says that also. That is not just the Navy's opinion.

Then in 2000, the year 2000, the Air Force is going to start building the F–22. Now, Mr. Chairman, I hope you will listen carefully to this. In the year 2000 we are going to start building 438 F–22's, which is going to cost $86 billion. And I will not be able to stop

it; I might get 25 votes if it is a clear day and everybody's thought processes are working OK.

You count R&D, cost of production—which incidentally, according to the Pentagon's own in-house study, the cost analysis improvement group, is going to be $16 billion more than the Air Force said it would be. When you add that $16 billion in, and the cost of R&D, that is $190 million plus per plane. We are going to start that in 2000.

And what are we going to do in 2005? We are going to start building the Joint Strike Fighter, and we are going to build somewhere around 3,000 to 4,000 of them, at about one-third of the cost of the F–22.

I am not knocking the F–22. I know it will be a magnificent airplane. They are going to roll that sucker out this afternoon, you know, with banners waving and television everywhere, and everybody is going to ooh and ah and say, is that not a wonderful airplane. Well, count me in on that. I could not agree more.

But I am going to debate an Air Force general this afternoon on CNN right after they roll the F–22 out, and I relish the thought.

Incidentally, GAO says the F–15 will be superior to any enemy fighter in the world through the year 2015, despite that magnificent colored brochure the Air Force has put out to the contrary.

So my point is this. The chairman has said we are looking for money. We are not looking for money; we are desperate for money. If we are going to balance the budget and restore people's confidence in the American system of governing, we are going to have to balance the budget. I cannot think of anything other than public financing of campaigns and balancing the budget that will finally get this Nation and its people back on track where they have confidence in the people seated around this table and confidence in our democracy.

You know, it is fine for the Air Force to want the F–22. I would probably want it too if I were an Air Force pilot. But when I look at the superiority we are going to have with the F–15, the F–18E/F, and the Joint Strike Fighter, I see no need to buy an additional fighter plane that is absolutely prohibitively expensive.

We are planning to build 1,000 E/F's. General Krulak, I understand the Marine Corps does not want to take their 300; is that correct?

General KRULAK. That is correct, sir.

Senator BUMPERS. Because you cannot afford it?

General KRULAK. Because we believe that the end game for us, as I have mentioned before, is a single type, model, series that will allow us to have a STVL variant of Joint Strike Fighter. In order to do just what the Senator is saying, be fiscally responsible, we have, one, said we will stick with the C/D, and two, we will remanufacture our AV–8B's, all of them to get to that system.

Senator BUMPERS. Mr. Chairman, if I may, just two quick questions.

Senator STEVENS. You are entitled to such time as you want, Senator.

Senator BUMPERS. Thank you very much.

Mr. Secretary, what is this going to do to the cost of the E/F, if we build 700 rather than 1,000?

Mr. DALTON. I will provide that answer for the record, Senator. Obviously, the cost per aircraft will be higher if we are building the lower number. But in terms of what it would be precisely, I will provide that for the record.

[The information follows:]

The average Unit Recurring Flyaway Cost of the F/A–18 E/F based on 1,000 aircraft is $42.2 million and will increase by $3.06 million in constant year fiscal year 1997 dollars should the Department of Defense procure 700 total aircraft vice the 1,000 currently planned. In then year dollars, the Average Unit Recurring Flyaway cost based on 1,000 aircraft is $55.3 million and will increase by $0.22 million should the Department procure 700 total aircraft vice the 1,000 currently planned.

Senator BUMPERS. Admiral Johnson, if I ask you—this is a difficult question. It is probably an unfair question, but if you want to take a crack at it. How would you compare the advance of the E/F over the C/D, technically, performance, everything, as a percentage? Or however you want to evaluate it.

Admiral JOHNSON. I would put it this way, Senator Bumpers. I have flown them both. You feel—as you walk up to an E/F, you feel like you are walking up to a Hornet aircraft. As soon as you light the afterburners for takeoff and get airborne and feel the flight controls and look at the system response, you know you are not in a Hornet any more; you are in a Super Hornet.

It is a magnificent flying airplane. And I have described the systems enhancements to that airplane that make it truly a different airplane. It is the right airplane for the Navy. So I am very comfortable operationally with what that provides the country, again, for the next two decades?

Senator BUMPERS. Admiral, are you familiar with the Air Force statement that the F–18E/F may be a fine airplane, but it does not provide the air dominance, that it does not provide the suppression of ground forces, such as radar systems and so on, that the F–22 would? How would you respond to that?

Admiral JOHNSON. Well, I would respond this way, Senator Bumpers. The E/F—I described the combat enhancements of the E/F in terms of a combination of a significantly upgraded airplane with stealth capabilities built into it. It is not an all-stealth platform. We all know that. But it does have enhancements.

It is a combination of that enhanced aircraft and the ability of the new weapons systems that we will have in service, the joint weapons systems that we will have in service, the munitions that will allow us to stand off, it is the combination of those, it is the balanced, integrated approach to survivability that I described earlier. I believe very sincerely that that will make us equal to or better than the threat for at least the next two decades.

It is a different approach than General Fogelman's air dominance approach. He and I understand that. We talk about it a lot. But for what the Navy needs, we believe this is the right answer.

Senator STEVENS. Senator, you are again back in some areas that I think when we really get to the time—and I want to assure you we are going to take the time to go upstairs or go into our own facility over here and talk about the classified aspects of these planes, because there are some classified aspects that we would have to discuss to really get to it. But I want you to know, as I said before, I am in agreement with you in terms of—and I think

the cochairman is too—in terms of finding some way to get across this bridge to have the modernization we want.

In my judgment, it is possible to go ahead with the F–22 and to then have what amounts to the same things, the C/D change to E/F, to have the V–22 change into JSF. And we have got to find—if we could bridge that, we could pick up the money we need to meet the difference.

But I want you to know, it would not be a reduction in the budget. We would then be able to fund the things that are in the budget that have to come out now if we do not do something like that.

So it is something that would require consultation with the Secretary and his people and with the service chiefs. But we want to do something like that. But I would urge you, if we are going to get into the differences here, that we keep in mind the classified aspects of some of the things we are talking about.

We will have another meeting. You recall the first one we had up in 407.

Senator BUMPERS. Yes.

Senator STEVENS. We will have another meeting to pursue that further, and the Department's on notice that we intended to have another meeting after that first one to see if we cannot find some common ground before we go to the markup of the bill this year.

Senator BUMPERS. Finally, let me just say this for the record. This is not a question to any of you gentlemen. I assume that you all saw the letter that Secretary Cohen wrote Senator Thurmond, who is chairman of the Armed Services Committee, on the F–22. Maybe you did not. I want this for the record anyway. I think, Mr. Chairman, as unanimous consent, that that letter be inserted in the record for the purposes of this.

Senator STEVENS. Without objection.

[The information follows:]

LETTER FROM SECRETARY BILL COHEN

THE SECRETARY OF DEFENSE,
Washington, DC, April 2, 1997.

Honorable STROM THURMOND,
Chairman, Committee on Armed Services,
United States Senate, Washington, DC.

DEAR MR. CHAIRMAN: Section 217 of the Fiscal Year 1997 National Defense Authorization Act required that the Secretary of Defense direct the Cost Analysis Improvement Group (CAIG) in the Office of the Secretary of Defense to review the F–22 aircraft program, analyze and estimate the production costs of the program, compare this estimate with an earlier program estimate, and describe major changes that have occurred since the earlier estimate. The report containing this estimate and analysis is attached.

The CAIG estimate concludes that the production cost for 438 F–22's of the currently approved configuration, procured on the currently planned schedule, will be $64.4 billion. Adjusted for numbers of aircraft, this estimate is about 11 percent higher than the CAIG's 1992 Milestone II estimate. The more recent estimate presented in the attached report makes extensive use of the costs incurred in production of the first aircraft built in the ongoing development program.

The CAIG estimate is well above the current Air Force estimate of $48.3 billion. Let me explain briefly the difference between the estimates, and how the Department is dealing with this difference. The primary difference between the estimates has to do with the credit given for the success of a number of cost-reduction initiatives planned by the Air Force. The CAIG has concluded there is currently insufficient evidence to justify adjusting its estimate based on these initiatives. The Air Force, on the other hand, believes the cost reductions are achievable and that its contracting approach will motivate the contractor team to achieve them. While I

support this initiative by the Air Force to minimize the cost of these expensive, yet critically important aircraft, we nevertheless must budget prudently and take account of the possibility that such reductions might not be achieved, or that other factors might cause the cost to increase.

The CAIG's estimates have proven to be reliable guides to program costs in the past, so we must accord serious weight to this new estimate. However, we will not know for some time whether the CAIG or the Air Force estimate is more realistic. We will get our first indication this fall, when the Air Force plans to negotiate target prices for the first six production lots. We will learn more in the following year or two, as we begin to see some benefits from the cost-reduction initiatives, and as we see results from initial flight-tests.

The Department will submit the F–22 Selected Acquisition Report reflecting the Air Force's estimate of $48.3 billion. This is consistent with the Air Force's budget, which, over fiscal years 1998–2003 is within six percent of the CAIG's estimate. If we determine that cost savings cannot be achieved, we will, consistent with our cost as an Independent Variable approach, make changes to the program content—quality and/or quantity—so as to keep the program both stable and affordable. We are also in the process of developing a Department policy aimed at improving program stability, perhaps by providing within our outyear budgets and planning projections some reserve funds. We will provide more information on this concept at a later time.

Finally, I note that we have our major tactical aircraft modernization programs under review in the Quadrennial Defense Review (QDR). The CAIG cost estimates for the F–22 will be taken into account as we evaluate alternative tactical aircraft programs in the QDR. Our QDR report will indicate our conclusions with regard to the F–22's need and affordability in the context of that review.

A similar letter has been sent to the Chairmen and Ranking Members of the other congressional defense committees.

Sincerely,

BILL COHEN.

Senator BUMPERS. It is not totally proper, because the Air Force is not here and we are talking about an Air Force airplane.

But Secretary Cohen did something I have never seen before, and I applaud him on the one hand for it and on the other hand it causes me to pause, and I will tell you why. He wrote to Senator Thurmond and said that the cost analysis improvement group, an in-house cost study group at the Pentagon, has determined that the costs of the F–22 has escalated by $16 billion.

Now, the Air Force says: Well, no problem. We will find that. We have got all kinds of things in mind. We can get together with Lockheed Martin and we will find that money. And that is all fine and good.

But the Secretary went ahead to say that—and incidentally, the Air Force finds all kinds of flaws in the so-called CAIG study. But Secretary Cohen says to Senator Thurmond: "We have found this group to be very reliable in their cost studies."

And I want to say that, of course, this takes the cost of production up by $16 billion. So if you add that, as I said a while ago, to R&D and all the other costs of the F–22, you are up to $86 billion, over $190 million per airplane.

And Secretary Cohen says: If the CAIG study proves to be correct and we do not have additional cost overruns, just the $16 billion they have identified so far, that we are not going to spend that money. We are not going to spend the $16 billion. We will cut the quality and/or quantity of this airplane to stay within the dollars we have said we are going to spend.

Now, on the one hand I applaud him. That is a very gutsy thing for the Secretary to say. On the other hand, I have to question. If we wound up building 200 at a cost of $70 billion, instead of 438, that is going to take the cost of that plane to somewhere between

$300 and $400 million each. Of course, once it is underway I know these things never stop. As a matter of fact, I am sure there are exceptions to what I would say—I said on a television show the other day—I was probably in error on it—I have never known the Congress to kill a weapon system the Pentagon wanted.

Senator STEVENS. That is not so.

Senator BUMPERS. Well, I say it probably is not.

Senator STEVENS. There are at least two that I can name right now.

Senator BUMPERS. I can think of a couple that we killed, rather insignificant ones. But by and large—it is like I say on the F–22. I know I am going to lose that battle. We are going to build it. We are going to be $86 billion worse off, and we are going to start it in the year 2000, even though we have got planes that will be superior until the year 2015. And we are going to start building the Joint Strike Fighter in 2005, and by the year 2015 we will have almost 1,000 of them.

Senator STEVENS. Senator. Senator, with due respect, this is the Navy you are talking to now.

Senator BUMPERS. I know.

Senator STEVENS. And I promised them we would be finished 15 minutes ago.

Senator BUMPERS. They were nodding their heads in agreement with me. [Laughter.]

Senator STEVENS. Well, we do appreciate your concern, and I want you to know we are going to work with you and with the Navy and the Air Force to see we can get what they want and what they need, that we can afford.

ADDITIONAL COMMITTEE QUESTIONS

Gentlemen, we appreciate your courtesy. I will be submitting the other questions that I had. Again, I want to commend you. I remember when I first sent two of my kids over to Russia and they came back, and when they got off the plane out there at Dulles the first thing they did was to kiss the ground. We felt like kissing the ground when we got out of North Vietnam—I mean, North Korea.

But we do appreciate everything that you all have done to help us out there and to give some hope to the people there, particularly in the Russian far east, that they will be able to work with us to maintain stability in the North Pacific in the years to come. That is a great relationship we are building, and it is to the absolute credit of the naval forces and the marines that have been out there. They have done a tremendous job as ambassadors of the United States there. We came home very proud of all that they are doing. So thank you very much.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED TO SECRETARY JOHN H. DALTON

QUESTIONS SUBMITTED BY SENATOR TED STEVENS

Question. The Committee understands the Navy intends to ask Congress for "modified" multi-year procurement authority for the first four new attack subs. Can

you tell us when we will receive this request and how this multiyear authority will be different from traditional multiyear authority?

Answer. The Navy is seeking one-time authority to procure multiple New Attack Submarines on a single ship contract beginning in fiscal year 1998. No extended waiver or permanent change in the law is sought. Proposed language to authorize a single contract for the first four submarines will be provided to Congress by the Navy.

The fiscal year 1998 President's budget request balances the Congressional requirement to retain two submarine shipbuilders with the Navy's requirement to fund a balanced shipbuilding plan within limited resources. A key element of the Navy's fiscal year 1998 Shipbuilding Plan is the shipbuilders' proposal to team for the construction of New Attack Submarines. The Navy estimates teaming and a single contract for four ships over five years avoids costs of $450 million to $650 million over like construction profiles without construction teaming and retains two submarine shipbuilders as directed by the Congress.

A single contract for four ships provides a reasonable commitment from the government that four submarines will be procured over the next five years. This commitment provides the business incentive to team, which allows substantial cost avoidance by:

—Allowing the contractor team to economically order multiple ship sets of contractor furnished material;
—Providing the assurance necessary to gain and sustain sub-tier supplier base interest in participation;
—Providing the flexibility necessary for the shipbuilder to level-load schedules and avoid the cost inefficiencies of lay-offs and rehiring/retraining that will be associated with the production gap in fiscal year 2000.

The most prudent approach to the single contract concept is use of a cost-plus incentive fee contract for all four ships. Specific reasons for selection of this type of contract include:

—A cost-plus incentive fee contract avoids problems experienced in 1970's with lead ship fixed-price contracts, which led to massive contract claims and extra contractual relief to settle;
—A cost-plus incentive fee contract will allow negotiation of provisions to change the shipbuilder's focus on data revisions from increasing revenue to mitigating impact on overall ship construction;
—The Navy has put in place effective, demonstrated cost control measures;
—Neither the shipbuilders nor the Navy have return cost data on which to base a fixed price contract;
—Although there is still cost risk, it can be better managed by a cost-plus incentive fee contract (lead ship and teaming risks).

While a lead ship contract with three options allows future flexibility by Congress, it provides no government commitment to build four ships over five years. It is not reasonable to require the contractors to share proprietary production and construction methods and engage in full and open disclosure to construct just one ship without providing an assurance that they will not have to compete for follow-on ships. Consequently, it is doubtful that the shipbuilders would team unless economic order quantity (EOQ) funding and fiscal year 2000 industrial base funding are provided up-front, along with a large termination liability being negotiated into the lead ship contract. The estimated additional cost to the fiscal year 1998 budget to procure the EOQ and advanced construction is more than $350 million. Additionally, if the three options were to be fixed price, it would be premature for the builders to make a fixed price offer with a sufficient high level of confidence. The proposed prices might not be affordable, as the shipbuilders would include a large contingency costs to cover unforeseen costs.

Question. Secretary Dalton, what is the status of the A–12 litigation?

Answer. We expect that a judgment in the amount of approximately $1.1 billion plus interest will be entered against the United States in the near future, which will then provide the opportunity for appellate review in the United States Court of Appeals for the Federal Circuit.

Question. Mr. Secretary, when do you expect this case to be completed and should a judgment be made against the Government, what is the range of likely dollar values involved and how will this judgment be paid?

Answer. We expect a final judgment to be issued by the Court of Federal Claims in the near future, and we expect that appeals will be filed by both parties. It will probably be at least a year before the Court of Appeals issues an opinion. We expect that the case will then be remanded to the Court of Federal Claims for further proceedings in accordance with the decision of the Court of Appeals. It is difficult to speculate when all court proceedings will end. The judgment to be entered against

the United States is likely to be in the amount of approximately $1.1 billion plus interest as computed under the Contract Disputes Act. When the accumulated interest through March 31, 1997 is added to the principal amount of the judgment, the total will be approximately $1.49 billion. The government is not required to pay a judgment until after all judicial proceedings have been completed, including further proceedings in the Court of Federal Claims after any remand. We expect that the judgment will be reversed on appeal.

In general, a judgment under the Contract Disputes Act involving a Navy contract is paid in the first instance from the judgment fund, which is administered by the Department of the Treasury. Treasury then seeks reimbursement from the Navy. Any reimbursement must be made from funds currently available for obligation at the time of the judgment or from funds appropriated by Congress in the future. No judgment in this case will be paid until all judicial proceedings are completed.

QUESTIONS SUBMITTED BY SENATOR MITCH MCCONNELL

Question. Mr. Secretary, as you know, Naval Ordnance Station Louisville, DOD's premier naval gun facility, was privatized in place last fall by the Navy, working with industry and the Louisville community. The Louisville privatization initiative is certain to lower the cost of overhaul and repair of naval guns by right-sizing the workforce and facilities needed for those product lines. Regrettably, the Navy was unable to provide a long-term commitment of workload to the privatized Louisville facility, and contractor rates have been high initially at Louisville because the Navy has provided less workload than originally planned. Adequate funding of the workload contracts executed at Louisville are therefore critical to the long-term success of this first-ever initiative. What funding does the President's fiscal year 1998 budget provide for the important naval gun work now being conducted by private industry in Louisville?

Answer. The President's budget contains $6.6 million for the fiscal year 1998 overhaul of naval guns. All naval gun overhauls are conducted by private industry in Louisville.

Question. Will the Navy place the originally intended work as well as the new gun overhaul work identified by LANTFLT and PACFLT in Louisville if the Navy's fiscal year 1998 budgets are sufficient?

Answer. Louisville is the only place where Navy gun overhaul work is performed. Any gun overhaul work that is required and funded will be done by the Louisville contractors.

Question. What are the Navy's specific objectives and expectations for the Louisville privatization project in the next fiscal year? Over the next five years?

Answer. The Navy's objectives and expectations for the Louisville privatization effort are to achieve the goals the Navy has had for entering into this arrangement: namely to retain the technical capability to support the Fleet, to shrink Navy owned infrastructure, and to save money. The Navy is working with all of the parties associated with the Louisville privatization to achieve these goals.

Question. Cost savings was certainly one of the Navy's key goals in the Louisville privatization. What plans does the Navy have to consolidate other naval gun work at the privatized Louisville facility in order to realize cost savings from the overhead reductions and other efficiencies that such consolidations would effect?

Answer. All naval gun overhaul work is being done currently in Louisville. We have consolidated all of our gun overhaul work there in order to retain the technical capability to support the Fleet, to reduce Navy infrastructure, and to save money.

Question. According to the Office of Naval Research the Military Technology Transfer Center (MTTC) at the Naval Ordnance Station Louisville is fulfilling all aspects of its current contract. Why then has it not received the $6 million earmarked for MTTC in the Defense Appropriations Bill for fiscal year 1997? Please provide a specific date this money will be released to MTTC.

Answer. $3 million of the $6 million has been released, and the remaining $3 million is in-process in OSD. That funding will be forwarded to the Navy Surface Warfare Center when it is made available to the Navy.

Question. I understand that the Atlantic and Pacific Fleets have stated a need for more gun overhauls of the type conducted at Louisville. Would additional funding effectuate the overhaul of adequate numbers of the MK 45 5 inch/54 caliber naval guns to assure the readiness and safety of those weapons and the sailors who operate them?

Answer. The current condition of Gun Weapon Systems (GWS), resulting from previous funding streams, is adequate. However, reductions in overhaul capability resulting from budget reductions and increases in overhaul costs, would necessitate

reducing the number of planned overhauls. In a stable population, this has potential negative impact on gun readiness and safety. If the proposed additional funding were applied primarily to GWS overhauls, fleet readiness of GWS could be improved. In addition, all GWS maintenance, whether depot (overhaul) or organizational (shipboard), is also designed to expose and solve safety problems as well as readiness issues. As part of the Navy's continuing priority emphasis on safety, maintenance and overhauls are critical elements.

QUESTIONS SUBMITTED BY SENATOR DANIEL K. INOUYE

MODERNIZATION DEMANDS

Question. Mr. Secretary, in your posture statement, you list acquisition reform, savings from base closings, and overhead savings as the primary ways you will get the money you need for your modernization programs. Do you think these will be sufficient, or will the Navy budget need to be increased to provide for necessary modernization?

Mr. Secretary, is it the Department of the Navy's position that it requires additional procurement funds in fiscal year 1998 to meet its modernization objectives?

Answer. The fiscal year 1998 budget adequately funds the immediate modernization needs of the Navy. However, if additional funds for modernization were to be made available by the Congress, accelerating procurement of certain platforms and systems already in our long-range program would be desirable in order to further improve the readiness of our forces in the next century.

Question. Admiral Johnson, do you concur with the Secretary's view?

Answer. Yes.

V–22 OSPREY

Question. Mr. Secretary, I am concerned with the price of the V–22. Can the Navy allocate more resources to the program over the next five years to reduce the unit price?

Answer. The Department of the Navy, in the fiscal year 1998 budget submit, increased the planned procurement of MV–22 to 74 aircraft in the FYDP. This plan will procure 24 MV–22 aircraft per year starting in fiscal year 2003. This is an increase of approximately $1.1 billion (then year dollars) and 15 aircraft in the FYDP over the Defense Acquisition Board's approved profile.

Given fiscal realities, the Department would find it difficult to program the additional $4 billion to $5 billion (then year dollars) through fiscal year 2000 to achieve a 3 percent to 7 percent recurring flyaway cost reduction, which would not begin to accrue until at least ten years hence. At this time, the Department has achieved what we believe is the best balance of priorities, resources and requirements. The Department continually evaluates and adjusts resources to achieve a balanced war fighting capability needed by the Naval Service.

NAVY MISSILE DEFENSE TESTING AT THE PMRF

Question. Secretary Dalton, I understand you just visited PMRF. Could you tell the Committee what you learned at the site regarding the advantages to completing Navy missile defense testing at the range?

Answer. PMRF is the ideal operational test facility for Navy Area and Navy Theater Wide theater ballistic missile defense (TBMD) weapons. At other test sites, there are a number of problems arising from increasing ship traffic and growing pressure from businesses to utilize closed sea and air space, which in turn limit test times and flight envelopes. This problem will worsen as the need to test longer range cruise missiles, hypersonic weapons and various ballistic missile defense weapons materializes in the next decade. PMRF provides the largely unrestricted missile firing and flight test space the Navy needs to test our complex ship and aircraft combat systems. Additionally, PMRF is the only training and test range that is instrumented from the ocean's floor to space, allowing simultaneous employment of air, surface, and underwater targets. Moreover, PMRF's topography plays a dual role, providing a permanent, line-of-sight view to all parts of the range, its elevation permits the stationing of tons of equipment at an altitude that otherwise requires heavy-lift aircraft serving as sensor platforms—this is critical in the complex test scenarios envisioned in advanced ballistic and cruise missile defense system test and evaluation. Additionally, its long-range radars were designed to provide mid-course monitoring of ballistic missiles fired from Vandenberg AFB landing in the Kwajalein Atoll, these same radars will play a key role in Navy TBMD testing. All

of these factors make PMRF the best choice for Navy TBMD system test and evaluation.

SHIP DEPOT MAINTENANCE

Question. Mr. Secretary, can you tell the Committee if the ship depot maintenance funding shortfalls will cause additional personnel reductions at the Navy shipyards in 1997?

Answer. The planned workload at the naval shipyards in fiscal year 1998 is fully funded. No personnel reductions at Naval Shipyards are caused by funding the overall ship depot maintenance program at less than 100 percent.

QUESTIONS SUBMITTED TO ADM. JAY L. JOHNSON

QUESTIONS SUBMITTED BY SENATOR TED STEVENS

Question. Admiral Johnson, ship procurement rates for the Navy are at their lowest point in 50 years. To maintain a 350-ship force, the Navy must build nine to ten ships per year, twice the rate requested in your fiscal year 1998 budget request. Does this rate get any better in the out years?

Answer. I am satisfied with my procurement plan today. Eventually, the DON needs to be buying about 10 ships per year once the ships procured back in the 1980's reach the end of their service lives. The current 5 ship per year budget is 4–5 ships per year below that goal. The "procurement holiday" enjoyed in recent years must end. I do not underestimate the immense challenges ahead to recapitalize and invest in the Navy of tomorrow.

Question. Admiral Johnson, the Navy is facing a crucial period of transition in aircraft and shipbuilding programs—the introduction of the F/A–18E/F and the MV–22, the development of the Joint Strike Fighter and the start of several new shipbuilding programs like the Arsenal Ship. Do your outyear budgets fully fund all of these program starts or will something have to slip or be terminated?

Answer. The F/A–18E/F, MV–22 and the Joint Strike Fighter programs are all fully funded in the outyears. The Arsenal Ship, while not a shipbuilding program, is funded to produce a technology demonstrator.

Question. Based on the conclusions of a March 1995 Navy study which stated, in part, that an active Ready Reserve Fleet would cost two to three times less than the current Inactive fleet, Congress appropriated $50 million in fiscal year 1996 to begin the National Defense Features program. What is the status of this program and how much of the fiscal year 1996 funds have been obligated?

Answer. The Military Sealift Command (MSC) is currently in source selection on the National Defense Features program procurement. A Request for Proposals was issued on 13 September 1996. In response to the solicitation, several offers were received which are under evaluation. MSC expects to make an award or multiple awards in June. At this time, the $50 million is in the National Defense Sealift Fund (NDSF), available for expenditure for the immediate solicitation. To date, none of the fiscal year 1996 funds have been obligated.

Question. Admiral Johnson, why do we need the Arsenal Ship? Is there some urgent requirement to build it now?

Answer. We need Arsenal Ship as an affordable way to station massive firepower in forward areas as an enhancement to our existing forces. The initial product of the Arsenal Ship Program will be the Maritime Fire Support Demonstrator (MFSD). With MFSD, we anticipate that substantial benefit in terms of acquisition reform and technology advances will accrue to Navy's next surface combatant, DD–21, our transition carrier, CVX, and future classes of combatants. We are seeking revolutionary advances in joint connectivity and responsive, precise delivery of ordnance in support of land and littoral engagements. There are many technologies approaching maturity which can be incorporated into this ship, and timing allows the Maritime Fire Support Demonstrator to provide a technological bridge to DD–21. Delay of the MFSD would eliminate the best opportunity we have to test key DD–21 technologies together, at sea, in a timely manner. Additionally, the Maritime Fire Support Demonstrator program is a premier example of Navy acquisition reform. Conducting this research and development project under DARPA's Section 845 authority will enable us to learn from this effort and to incorporate successful aspects of acquisition reform in subsequent acquisitions.

Question. Admiral Johnson, won't the Arsenal Ship be more vulnerable than other warships in theater?

Answer. Though the Arsenal Ship will operate in any threat environment under the protective umbrella of the joint battle force, it will be survivable against 21st

century anti-ship missiles, torpedoes, and mines. Passive defense will capitalize on the benefits of mass (tonnage), innovative applications of multiple hull integrity, and signature reduction. Active self-defense, if required, will be roughly equivalent to that of a combat logistics force ship.

Question. Admiral Johnson, does the Navy have the funds available in future procurement budgets to buy all the weapons the Arsenal Ship will require?

Answer. Weapon quantity requirements are derived from CINC contingency and warfighting plans, rather than VLS cell availability. Arsenal ships, if produced, would allow for a significant forward redistribution of weapons in each theater. Funds will be made available, as necessary, for weapons to support CINC requirements.

Question. Admiral Johnson, do you believe the current and future threat require the Navy to have a stealthy air-to-air fighter?

Answer. The F/A–18E/F has countermeasures that will keep it more than equal to the threat for the next two decades. Introduction of the Navy variant JSF will complement the F/A–18E/F air-to-air capability.

Question. Admiral Johnson, with only limited numbers of JSF's, are you concerned that the Navy may not be able to prosecute deep strike missions against heavily defended targets?

Answer. No. The improved range, payload and survivability of the Super Hornet, combined with the assets of the carrier battle group, including Tomahawk, SLAM-ER+, HARM, EW, and electronic attack (EA), will enable the Navy to successfully conduct deep strike missions against threats anticipated through the 2015 timeframe. The Navy's current plan is to begin procuring JSF around 2010 to replace older F/A–18C's resulting in a carrier air wing mix of three F/A–18E/F squadrons and one 14 aircraft JSF squadron. With its improved RF and IR signature reduction, the JSF will most likely be employed against the more heavily defended or the deep strike targets in the early part of a campaign. However, in 2010 and beyond, JSF will not be the only weapon system capable of striking deep targets. All air wing strike fighters will be employed as a system of systems within the carrier battle group providing great flexibility in the prosecution of any mission. There is also flexibility in the Navy's acquisition plan which allows for future modification of the procurement quantities of JSF and the Super Hornet in order to achieve the optimum air wing mix based on threat, mission requirements, and affordability.

Question. Admiral Johnson, are you concerned that other elements of the Navy force structure will suffer if the Navy devotes a historically high percentage of its budget to tactical aircraft?

Answer. Operating within a total Navy funding level that is not likely to increase in the foreseeable future, force structure could be pressured when the funding requirements for tactical aviation build, especially once the Joint Strike Fighter begins procurement. That is why it is critical action be taken now, in the fiscal year 1998 President's Budget, and then in the budgets that will follow decision made in the Quadrennial Defense Review, to drive down the shore infrastructure and force structure operating costs of the Navy. Unless funding can be freed from the support "tail," the force structure "teeth" of the Navy will have to be sacrificed.

QUESTIONS SUBMITTED BY SENATOR PETE V. DOMENICI

BUDGET ISSUES

Question. Both the Navy and the Marine Corps have submitted add-on lists that total $3 billion. Do any of the items on these lists have a higher priority than any item contained in the President's original request for 1998? If so, please explain.

Answer. No. The President's budget request for 1998 represents the highest priority programs of the Navy. The add-on list to which you refer contains high priority programs that were simply not affordable given the total funding available to the Department of the Navy.

Question. What 1997 items have you identified, or would you identify, if Congress approves the President's request for broad authority to reprogram $2 billion for Bosnia operations? What programs have you identified, or would you identify, to permit the $2.8 billion rescission package the President has requested? What are the implications for the 1998 spending for these programs?

Answer. The Navy has not been asked to identify programs for the reprogramming or rescission proposals noted. At this time, we expect these matters to continue to be addressed within the Office of the Secretary of Defense.

Question. In an analysis for the Budget Committee, CBO and GAO identified up to $50 billion in "underfunding" in the next four to five years of the defense budget.

What actions can you tell us about that the Quadrennial Defense Review is undertaking to address this problem?

Answer. The Quadrennial Defense Review (QDR) was a threat and strategy-based review looking at the Department of Defense's ability to carry out its mission in the early twenty-first century. The QDR looked at strategy, force structure, readiness, modernization programs, infrastructure, intelligence, and human resources. Although the QDR was not a budget-based review, the fiscal realities of affordability and living within our means were significant factors in all the QDR reviews. The final QDR decisions have not yet been made, but they will address this issue.

QUALITY OF LIFE ISSUES

Question. The Navy and Marine Corps continue to operate in peacekeeping and other international operations at a historically high rate. What indicators do you use to register the stress that this high operating tempo puts service men and women under?

Answer. In 1985, Navy established the PERSTEMPO program for our Sailors to ensure a proper balance existed between family and the time they spend away from home. The program consists of three established guidelines: a maximum deployment of six months (portal to portal); a minimum Turn Around Ratio (TAR) of 2:1 between deployments (the ratio between the number of months a unit spends between deployments and the length of the last deployment, e.g., a nominal 12 months non-deployed following a 6 month deployment); and a minimum of 50 percent time a unit spends in homeport over a five-year period (three years back/two years forward).

The Navy sets 50 percent time in homeport as the goal for our units. However, these units periodically make cyclical forward deployments for up to six months. During the preparation and deployment period, they are not able to achieve the desired goal of 50 percent time at home. This is why we use the five year average. Units which have recently completed a deployment typically spend a greater percentage of their time at home, which balances the time spent away during deployment, and allows them to meet the 50 percent goal over the five year period. Because the average assignment for our sailors is three to five years, all who complete their entire tours should receive the benefits of the program.

It should be noted that scheduling conferences take place to coordinate the order of what units will deploy next. Additionally, deployment decisions regarding high demand/low density units such as EA–6B, EP–3, special forces (SEAL's) are determined by Global Military Force Policy (GMFP).

The time our people spend away from home and the stress it may cause is of great concern. Maintaining the proper balance between work and family is a quality of life issue that warrants our utmost attention. Navy leadership is briefed monthly on the status of the PERSTEMPO program. I believe this program is the best method of achieving a balance between home and sea.

Question. What measures do you use to measure the stress of their families?

Answer. We are acutely aware of the stress family separation might cause our Sailors and their families. That is why we place extremely high emphasis on our quality of life programs, maintain an OMBUDSMAN program to foster better communication between Navy families and their respective commands, and offer counseling through our Family Service Centers (FSC's). Routinely, FSC counselors are requested to visit deployed units, just prior to their return home, to provide counseling to all Sailors in order to ease the transition of returning home. Additionally, the Family Advocacy Program Management Office is required to provide data on reported/substantiated spouse and child abuse incidents on a routine basis to Navy leadership. In addition to counseling, Family Service Centers also provide education and training courses on stress management. In fiscal year 1996, Navy Family Service Centers reported over 12,000 attendees at stress management courses.

Question. What do these data show?

Answer. The data shows that substantiated spouse and child abuse incidents combined have recently declined 30 percent. The following is the data for the past five years:

Question. What lessons have been learned from Operation Desert Storm and more recent peacekeeping activities to reduce this stress?

Answer. An important lesson learned from the Gulf War is the ongoing need to coordinate post-deployment medical surveillance programs (i.e., systematic health assessment of all returning service members) with comprehensive treatment for sick veterans identified using such surveillance. In response to this need, the Department of Defense directed the development of "Specialized Care Programs" designed to offer high quality, multidisciplinary, and coordinated medical treatment for Gulf

War veterans who, after full medical evaluation, still suffer from persistent disabling physical symptoms of indeterminate cause.

Since March 1995, the Specialize Care Program at Walter Reed Army Medical Center's Gulf War Health Center has provided a 3-week intensive multidisciplinary outpatient treatment for persistently symptomatic Gulf War veterans. These veterans are referred from the Comprehensive Clinical Evaluation Program, DOD's Gulf War illness evaluation program. Additionally, the Specialized Care Program is active in research exploring potential causes and improved systems of health care for veterans' unexplained illnesses. Scientists have now recognized that unexplained illnesses have been prevalent among war veterans dating back at least to the Civil War. This would suggest that the Specialized Care Program concept would benefit veterans returning from future deployments.

Discussions have occurred regarding the merit of a "Deployment Medicine Treatment Center." The mission of a Center for Deployment Medicine would be to: provide treatment for veterans to persistent physical symptoms after any military deployment; define, refine and export systems of health care for ill veterans; and design and implement research into the causes of deployment-related illness.

Question. In past years there was an attempt to reprogram money out of programs to assist military families to pay for operations in Bosnia. Is there going to be any similar attempt to pay for 1997 Bosnia operations with funds intended to help alleviate family stress?

Answer. The Navy has no plans to finance fiscal year 1997 Bosnia operations by realigning funds out of programs to assist military families.

Question. I am concerned that high operating tempos can put stress on military families and can result in higher rates of child and spouse abuse among military families. What trends do the most recent data show on this issue? How do these data compare to recent trends in civilian life?

Answer. High operating tempos may exacerbate dysfunctional family situations, however, there is no evidence that high operating tempos increase rates of child or spouse abuse.

Navy child and spouse abuse incidents reported and rates of reported incidents (per 1,000 children and spouses) have declined each year since fiscal year 1993. Total reported Navy abuse cases increased by 10.3 percent from fiscal year 1991 to fiscal year 1992, remained constant from fiscal year 1992 to fiscal year 1993, decreased 13 percent from fiscal year 1993 to fiscal year 1994, decreased 11 percent from fiscal year 1994 to fiscal year 1995 and decreased 35 percent from fiscal year 1995 to fiscal year 1996. The decline in incident reports from fiscal year 1993 to fiscal year 1996 is partially due to downsizing, improved screening of cases through use of Navy's Risk Assessment Model and/or fear of career consequences. The Abuse Victim Study, required by the Defense Authorization Act for Fiscal Year 1993 (Public Law 102–484) indicated that fear of negative impact was a major disincentive to reporting—this is exacerbated by downsizing.

Family Advocacy Program abuse incident data fiscal year 1991 through fiscal year 1996 follows:

	Fiscal year—					
	1991	1992	1993	1994	1995	1996
Spouse Abuse:						
Cases Reported	5,605	6,345	6,344	6,057	5,228	3,424
Substantiated	3,998	4,323	4,277	4,053	3,586	2,558
Substantiated Deaths	5	4	1	5	2	3
Child Abuse:						
Cases Reported	4,997	5,351	5,368	4,122	3,822	2,435
Substantiated	2,152	2,051	2,179	1,967	1,747	1,356
Deaths	6	7	5	7	5	3

Navy Family Advocacy Program reported/substantiated abuse rates:

[(Rate/1,000) by fiscal year]

	Reported cases					Substantiated cases				
	1992	1993	1994	1995	1996	1992	1993	1994	1995	1996
Child abuse:										
Navy	13.1	13.5	13.8	10.5	7.1	4.9	5.3	4.9	4.8	3.9
DOD	14.2	15.2	15.0	13.8	(1)	6.2	6.6	7.3	6.3	(1)
Civilian[2]	39.0	43.0	43.0	43.0	(1)	16.0	15.0	16.3	14.7	(1)
Spouse abuse:										
Navy	24.0	25.2	24.5	22.4	13.9	16.6	17.2	14.4	15.4	10.4
DOD	23.4	24.7	26.1	25.8	(1)	17.8	18.1	18.8	19.0	(1)
Civilian[3]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Unknown.
[2] Civilian rates are taken from National Child Abuse/Neglect Data System.
[3] National level data base is not available.

Question. I recently wrote to Secretary Cohen supporting his comment that it is "unacceptable" for Military Families to be on Food Stamps. What is your view on this issue? How many Navy/Marine Corps families receive Food Stamps? What actions would you find acceptable and affordable to address this problem?

Answer. It is always unacceptable to have a service member rely on public assistance of any type. Because food stamp eligibility is tied to both income and number of dependents, there are cases of service members receiving food stamps in pay grades as senior as E–7. Service members who require food stamps to support their families have acquired more dependents than they can reasonably expect to be able to support. While the issue is an emotional one, we can surely reduce the very small percentage of service members receiving this assistance by helping them to understand that responsibility includes considering family income when marrying, starting a family, or increasing family size.

Because each state has different requirements for food stamp eligibility, a family on food stamps in one state might not be eligible to receive them in another. For this reason, it is almost impossible to track the actual number of personnel on food stamps by name. However, studies done within the Department of Defense and surveys completed in the Navy over the past few years show the number of service members receiving food stamp assistance is approximately .5 percent. This translates to about 5,000 service members who may be on food stamps in the Navy.

This is a societal problem, and as such, must be tackled on a societal basis. I do not feel it reasonable to raise over 400,000 salaries above any possible food stamp eligibility. A possibility may be to appoint a study group to explore options to resolve this problem within the service or Department of Defense.

HUNTER/JAEGER AVIATION

Question. What is the Navy and the Marine Corps assessment of Hunter/Jaeger Aviation that was demonstrated at the recent exercises you jointly held?

Answer. Hunter/Jaeger Aviation was tested during the Advanced Warfighting Experiment. While a full analysis has yet to be completed, preliminary results from Hunter Warrior indicate the concept of using air as a maneuver element worthy of further exploration. If certain technological questions can be resolved, initial results indicate that this concept may provide significant improvements to ground force combat effectiveness.

Question. What activities do you plan to further test Navy and Marine Corps support for ground forces under this concept.

Answer. The Hunter Warrior detachment after-action report is still in work. Preliminary discussions are currently ongoing regarding future activities.

Question. What other technologies or concepts are you considering that would provide direct combat support for ground forces that would be at least as low in cost and that would provide sustained support as the Hunter/Jaeger concept?

Answer. Jaeger Air was not completely evaluated during Hunter Warrior. Only the command and control function was exercised. The use of air as a maneuver element presents significant training and technology challenges: there is insufficient data to indicate that this approach is a low-cost option. The Automatic Targeting Hand-off System (ATHS) is scheduled to be incorporated in most Navy and Marine Corps F/A–18 and AV–8B aircraft to provide improved Close Air Support (CAS) capabilities. Improvements in air-to-ground sensor capabilities (FLIR, LANTIRN pods,

etc.) and technologies to provide real-time information in the cockpit (RTIC) are ongoing.

Question. Is Hunter/Jaeger Aviation a high or low priority in the Navy and Marine Corps budget and in your thinking for the future?

Answer. Hunter/Jaeger Aviation is not funded in the Navy and Marine Corps budget. The concept of air as a maneuver element remains a priority for the Navy and Marine Corps throughout the Sea Dragon Advanced Warfighting Experiment. New command and control improvements through technology insertions or doctrinal modifications are a medium priority within the OPNAV Command, Control, Communications, Computers, Information, Surveillance, and Reconnaissance (C^4ISR) road map.

Question. Please list the costs you envision for Hunter/Jaeger Aviation for the next two years and compare those costs to other forms of direct support to ground forces from platforms at sea in the budget for the next two years.

Answer. There is no formal Hunter/Jaeger Aviation program in the budget. An estimate to support a 12 aircraft squadron of $1.5 million in year one and $2.7 million in year two has been developed, but has not yet been validated. The concept of employing air as a maneuver element is being investigated within the Sea Dragon Advanced Warfighting Experiment series. Platforms in the budget which could, and do provide direct support to ground forces include numerous aircraft, weapons, and C^4ISR. Detailed costs/funding lines for the next two years are contained in the President's Budget Submit.

EA–6B PROWLER REPLACEMENT TO EF–111

Question. The Department of Defense has made a decision to replace the EF–111 with the EA–6B Prowler. This Committee has had significant reservations about the timing of this replacement, and also about the Navy's commitment to fully fund the necessary upgrades. It is well know that currently 20 EA–6B's are subject to embrittlement of the center sections of their wings (a molecular anomaly in aluminum stock when combined with use of that material in high stress environments such as flying, causes stress corrosion cracks). Replacement center sections in the wings of 20 aircraft manufactured prior to 1976 need to be installed. The Navy has no money in its fiscal year 1998 budget to address this embrittlement issue. The Navy is taking a risk to the operational readiness of the EA–6B.

Why doesn't the Navy have the $100 million required to address the embrittlement of 20 EA–6B center wing sections in its fiscal year 1998 budget?

Answer. The Navy is fully committed to assuming the mission of the EF–111A with the EA–6B Prowler. To accomplish this tasking, the Navy increased PAA from 80 to 104 aircraft. The 24 aircraft required to support the PAA increase were in storage. Of these 24 aircraft, 20 are now undergoing concurrent SDLM, re-wing and Congressionally mandated Block 82 to Block 89 modifications.

Through fiscal year 1997, a total of 32 re-wings have been funded: 12 have already been installed and the remaining 20 re-wings, funded with fiscal year 1997 and prior year funds, begin delivery in fiscal year 1998. These 20 re-wings are for the 20 aircraft, which are undergoing modifications outlined above. Today there are 39 aircraft in service made with the older 7079 aluminum wing, which is subject to embrittlement. Of these aircraft, 8 have had their wings replaced and 10 are in the process of getting their wings replaced while undergoing the concurrent SDLM, re-wing and Block 82 to Block 89 modifications. The remaining 21 aircraft with older wings are fully operational and inspected on a regular basis. Every aircraft removed from service before required impacts the Navy's ability to meet its operational commitments. As long as the 21 aircraft with the older wings are fully operational, it makes both fiscal and operational sense to keep them in the air. All aircraft currently grounded due to embrittlement will have their wings replaced with fiscal year 1997 and prior year funds.

QUESTIONS SUBMITTED BY SENATOR DANIEL K. INOUYE

RECRUITING AND RETENTION

Question. Admiral Johnson, I understand you intend to recruit 47,000 sailors in 1998. What is the goal for high school graduates and for CAT I–IIIA personnel?

Answer. Based on a goal of 47,000 accessions and planned quality standards of 95 percent high school diploma graduates and 65 percent CAT I–IIIA, Navy will recruit 44,650 high school graduates and 30,550 CAT I–IIIA Sailors in fiscal year 1998.

SHIP DEPOT MAINTENANCE

Question. Admiral Johnson, the Defense Department has identified readiness as its number one priority. With that goal, can you explain why ship depot maintenance is only funded at 88 percent of its requirements?

Answer. The Navy's ship depot maintenance program is budgeted at a level that will support critical readiness requirements and will allow us to obtain maximum utility from our organic depot maintenance facilities. We have taken into account the resourcing of all of our readiness programs (material, training, personnel, etc.) and have stricken the best possible balance of resources to achieve maximum readiness at the minimum cost.

Question. Admiral Johnson, how can you adequately maintain the fleet if you are only funding 88 percent of its needs?

Answer. First, it should be recognized that we have budgeted $174.6 million more for Active Forces ship depot maintenance in fiscal year 1998 ($2,040.7 million) than the current estimate for fiscal year 1997 ($1,866.1 million). In addition, our budget includes $1,707.8 million of funding in the Shipbuilding and Conversion, Navy account in fiscal year 1998 for the U.S.S. *Nimitz* (CVN–68) refueling complex overhaul. Second, the Navy relies on two critical maintenance policies to ensure the continued safe and efficient material condition of our ships: Reliability-Centered Maintenance (RCM) and Condition-Based Maintenance (CBM). We require that the maintenance plans for new acquisition ships, systems and equipment be based on RCM principles in order to achieve readiness objectives in the most cost-effective manner. In addition, the Navy requires that the maintenance plans for in-service platforms be reviewed and modified to incorporate RCM principles in areas where it can be determined that the expected results will be commensurate with associated costs. Finally, CBM diagnostics, inspections and tests are utilized to the maximum extent practicable to determine performance and material condition for aircraft, ships, systems and equipment.

NAVY MISSILE DEFENSE TESTING AT THE PACIFIC MISSILE RANGE FACILITY

Question. Admiral Johnson, can you elaborate on the Navy's current plans for completing flight tests of the Navy Area Wide and Theater Wide missile defense systems at the Pacific Missile Range?

Answer. Within the TBMD Area Program the Navy intends to conduct the following T&E events at PMRF:

—User Operational Evaluation System—Second Quarter fiscal year 2000; Three SM–2 Block IVA firings in three events.
—Developmental Testing (DT)—First Quarter fiscal year 2001; Five SM–2 Block IVA and one Block III firing in seven events.
—Developmental/Operational Testing (DT/OT)—First Quarter fiscal year 2001; Six SM–2 Block IVA and two Block III firings in four events.
—Operational Evaluation (OPEVAL)—Second Quarter fiscal year 2001; Fourteen SM–2 Block IVA and three Block III firings in seven events.

In addition, within the Aegis LEAP Interceptor flight demonstration program (Navy Theater Wide TBMD), the Navy will conduct the following T&E events at PMRF:

—Control Test Vehicles—Fourth Quarter fiscal year 1997 to Fourth Quarter fiscal year 1999; Two modified SM–2 Block IV and two SM–3 missiles in four events.
—Guidance Test Vehicles—Second Quarter fiscal year 2000 to First Quarter fiscal year 2001; Four SM–3 firings in four events.

CARRIER BASING

Question. Admiral Johnson, I understand the Navy is examining locations for basing three Pacific Fleet aircraft carriers. Can you tell us whether you believe Pearl Harbor might be a good candidate and why?

Answer. In accordance with the National Environmental Policy Act of 1969, the Navy is currently working on an Environmental Impact Statement (EIS) to evaluate the environmental effects associated with homeporting three U.S. Pacific Fleet nuclear powered aircraft carriers.

Several criteria must be considered when comparing potential home port locations for these carriers. Among the key criteria are the following: clear access to the sea, including channels and turning basins of adequate depth; pier and/or wharf space adjacent to the ship's berth for safe loading and handling of material, supplies, and equipment; access to shore services such as high-voltage electrical power, high-volume steam, water, and sewer; nearby shore space for maintenance facilities, warehousing, and parking; roadway capacity to accommodate daily commuters;

quality of life for the crew and their families, including housing, schools, medical facilities, military grocery and retail shopping, and recreation; utilization of existing naval infrastructure; and cumulative environmental impacts associated with changes in personnel loadings, construction of any required facilities, dredging, etc.

Since Pearl Harbor is one of our major fleet concentration areas and may have the potential to meet the key homeporting criteria, it is appropriate to consider it as a possible alternative in the preliminary analysis for the EIS.

Question. Admiral Johnson, there are some who question whether it makes sense to base a carrier in Hawaii if the air wing was stationed on the mainland. Does this give you concern?

Answer. The environmental and operational impact and efficiencies of the location of the air wing with regard to the carrier's homeport will be evaluated as part of the EIS. The aircraft and air wing personnel do not remain on a carrier while it is in home port. Since the air wing is typically based at multiple Naval Air Stations and flies out to meet the carrier at sea, Pearl Harbor should be evaluated as a possible alternative during the EIS process.

Question. Admiral, I am told that EA–6B aircraft are all based on the West Coast. In order to deploy with an East Coast carrier, they have to fly across the United States and marry up with an air wing there. Is this accurate and does it present any serious problems for the Navy.

Answer. Yes, all of the stateside Navy EA–6B active duty squadrons are located at a single site, NAS Whidbey Island, Washington. EA–6B exceptions are the single forward deployed squadron with the U.S.S. *Independence* in Japan; four Marine Corps squadrons at MCAS Cherry Point, North Carolina; and the single Navy reserve squadron at the Naval Air Facility, Andrews Air Force Base, Maryland.

The EA–6B has supported both east and west coast carriers for 25 years from a single site. There are some minor differences in deploying across the country to the East Coast as compared to deploying the length of the West Coast from Puget Sound to San Diego. For example, the time to truck squadron equipage to and from the carrier increases from 3 to 7 days. With the use of airlift for all personnel movements, the impact on the sailors is minimal because personnel movements are completed in one day. Once aircraft, personnel, and equipage are with the carrier, the Navy provides indigenous intercontinental transportation, that is, the squadron goes with the aircraft carrier.

With the assumption of the radar support jamming mission for Department of Defense, the Navy has stood up four more EA–6B squadrons in the last two years, with a fifth coming in October 1997. These squadrons will deploy around the world in a land based expeditionary role to replace the retiring Air Force EF–111A, and are also based at NAS Whidbey Island. In contrast to squadrons deploying on aircraft carriers, expeditionary squadrons rely heavily on strategic lift and tanking to move personnel, equipment and aircraft from their home base to overseas deployment locations. However, regardless of the home base location in the United States, the same complications of using intercontinental strategic lift would occur.

The Navy experience with a consolidated support structure for the EA–6B at a single base has been very positive for decades, and we see continuing advantages to a consolidated EA–6B force structure at NAS Whidbey Island.

Question. How much more difficult would it be for aircraft to fly to Hawaii to marry up with their aircraft carrier?

Answer. The obstacles presented by basing a carrier (CV/CVN) in Hawaii and its carrier air wing (CVW) in CONUS range from "painful" to insurmountable. What follows is only a sampling of the logistics problems this situation presents.

Each CVW consists of the following types and number of aircraft:

F–14	14
F/A–18	36
EA–6B	4
ES–3	2
S–3B	8
E–2	4
C–2	2
SH/HH–60	6

The C–2 is not air refuelable; however, with the installation of additional fuel bladders, these aircraft could fly from CONUS to Hawaii.

The E–2 is not air refuelable and would require transport to Hawaii. Since the aircraft is too large to put in a C–17 or C–5, the Navy would have no choice but to surface-lift the CVW's four E–2's on a larger amphib (which ties up its flight deck) or some other suitable merchant. Sailing the carrier east from Hawaii to meet

the E–2's is also not an option as the initial "carrier qualifications" of the pilot's each at sea period requires that an alternative landing option (divert field) exist.

The SH–60/HH–60 helicopters would likewise require either an air or surface-lift.

It is anticipated the delays encountered in scheduling the lifts and preparing the aircraft for transport would negate any time advantage homeporting a carrier in Hawaii might provide due to the homeport's location closer to the theater of interest.

The other CVW aircraft could "Transpac" to Hawaii from CONUS; however, this is far from "routine" and creates additional risk. These types of flights are limited by the Navy to those required for operational necessity. Numerous aircraft emergencies that could occur on these extended landing alternative, could eventually result in the loss of an aircraft. Survival of the crews that are required to exit their aircraft due to these emergencies is also complicated by the lack of readily available rescue platforms.

Homeporting a CV/CVN in Pearl Harbor would also increase the operational burden of the carriers that remain CONUS based. Currently, the CONUS-based CV/CVN's share the requirements for the initial "carrier qualification" of Student Naval Aviators and those undergoing training in the numerous Fleet Readiness Squadrons. One less carrier in CONUS increases the requirements on the other carriers.

Likewise, isolating a carrier in Hawaii from all carrier based squadrons limits the exposure of the CV/CVN to flight operations; hence, the efficiency of all personnel associated with the flight deck and related equipment is reduced.

Another consideration is the "Ready Carrier" requirement. CV's/CVN's and their CVW's that are not deployed, but are in either their final stages of pre-deployment work-ups or immediate post-deployment phase are designated the "Ready Carrier," which means they are required to maintain a state of readiness that enables deployment within 96 hours. The logistics associated with getting the aircraft, crews/maintainers, and other equipment on the ship would eliminate a CV/CVN based in Hawaii without its CVW from participating in this rotation.

Homeporting a CV/CVN in Hawaii with its CVW in CONUS creates other "hurdles" which would limit the responsiveness of the CVBG to whatever world crisis may be developing. A CVW consists of approximately 1,980 men and women. All of these people would now require transportation from their home bases in California, Washington, and Virginia (F–14 squadron) to Hawaii. This is much more cumbersome than the current situation—a large percentage of CVW personnel are located at or near San Diego where the CONUS-based carriers pull in for loading and unloading.

The amount of equipment the CVW squadrons are required to transport for operations is also significant. In order to deploy a CVW, approximately 45 semi-trucks/flatbeds of equipment are loaded at the squadron's homebase and driven to the carrier for unloading. Obviously, all of this equipment would require airlift to Hawaii or back if that is where the CV/CVN is located.

NAVY MISSILE DEFENSE TESTING AT THE PACIFIC MISSILE RANGE FACILITY

Question. Admiral Johnson, I was told by General Lyles that the Navy and BMDO are working together to identify the necessary upgrades for PMRF. Can you assure me that the appropriate officials will meet with PMRF representatives to make sure both sides exchange the information necessary to allow test planning and preparation to proceed?

Answer. Yes. The Navy and BMDO recognize the importance of actively engaging the professionals at PMRF to plan for the test and evaluation of Theater Ballistic Missile Defense (TBMD) systems. We have included PMRF personnel in our upgrade initiatives for future TBMD system test and evaluation and expect to do so throughout the service life of these weapons systems.

QUESTIONS SUBMITTED BY SENATOR BYRON DORGAN

USE OF 480-GALLON EXTERNAL FUEL TANKS

Question. These questions refer to the General Accounting Office's report on "Navy Aviation: F/A–18E/F Will Provide Marginal Operational Improvement at High Cost."

The Department of Defense argues that the F/A–18C/D cannot carry 480-gallon external fuel tanks on its inboard wing stations without extensive structural modifications to the plane's pylons and wings. DOD further states that the Canadian CF–18 has used the 480-gallon tanks for ferry purposes only, because the task restricts maneuver capability.

GAO responded that Canadian officials argued that in combat the fuel in external tanks would be used first, emptying the tanks by the time the F/A–18 reaches its target. GAO states that Canada planned to use the 480-gallon tanks operationally in Europe. GAO also cites a 1991 McDonnell Douglas report stating that the 480-gallon tank successfully passed all qualification tests, including a test to withstand acceleration loads due to catapult and arrestment. The report stated that the study demonstrated load carrying capability without damage and that the flying qualities with the 480-gallon tank are equivalent and comparable to 330-gallon tank loadings.

How does the Navy respond to the GAO's account of Canada's plans for the CF–18? Is the Navy familiar with the cited testing record of the C/D carrying the 480-gallon tank? How does the Navy respond to the 1991 McDonnell Douglas report?

Answer. The significant flight restrictions imposed on the CF–18 carrying 480-gallon external fuel tanks, specifically, the flight maneuver limitations cited in the flight clearance issued for this configuration in 1987, remain in place. As the Navy clearly stated in its response to the GAO, the Canadian Air Force required the tanks for ferry purposes only to meet NATO deployment commitments. The Canadian Air Force no longer uses the 480-gallon fuel tank, and is in the process of removing them from inventory at this time. The McDonnell Douglas "report" cited above is, in actuality, a brochure issued by the company's marketing/new business group, and the statements regarding the C/D's ability to carry the 480-gallon external fuel tank in a carrier environment are considered in error by the McDonnell Douglas engineering staff, who still contends they are not carrier suitable for use on the C/D.

COMBAT PERFORMANCE

Question. GAO's analysis concluded that, in a threatening situation, with fuel tanks jettisoned, the F/A–18E/F has 3–10 percent less thrust per pound of aircraft weight and 5–6 percent less specific excess power than the F/A–18C/D. How does the Navy respond to this analysis?

Answer. There are many performance parameters to consider when determining an aircraft's effectiveness in executing a mission in a given scenario. Key Performance Parameters validated by the Joint Requirements Oversight Council on 7 March 1997 for the F/A–18E/F aircraft include required measures of specific excess power and acceleration, which the aircraft's measured performance continues to exceed. System engineering trades made during program development took advantage of the advent of launch and leave agile missiles and off bore sight cueing systems to keep costs in the affordability box. The upgrades made to the airframe and engine for the F/A–18E/F were balanced with systems improvements. An F/A–8C/D powered by an F404–GE–402 Enhanced Performance Engine has a slightly greater thrust to weight ratio than an F/A–18E/F, but this difference is lost in the overwhelming improvement that agile missiles and cueing enhancements bring to the F/A–18E/F Strike Fighter system solution. Given the F/A–18E/F's enhanced range, payload and survivability, it is significantly more capable than the F/A–18C/D in any of the applicable mission scenarios. It should also be noted that fuel tanks are generally not jettisoned as a standard response to anticipated engagements.

AERIAL REFUELING

Question. GAO cited a 1993 Center for Naval Analysis report which concluded that the E/F "would require in-flight refueling to reach a majority of targets in many of the likely wartime scenarios in which the E/F would be deployed." DOD did not respond to the GAO's comments on aerial refueling requirements. Does the Navy have a response on this point? Has anything happened since the 1993 report to raise doubts about its conclusion that the E/F would require aerial refueling for many wartime scenarios?

Answer. The 1993 Center for Naval Analysis (CNA) report referred to above is not clearly cited. However, assuming this is the "Comparison of the F/A–18C and F/A–18E" completed by CNA in April 1993, this particular quote could not be located in the report. In fact, this study clearly states that, "for targets at a given range, the E will have greater flexibility to select its flight profile or to complete the flight without refueling. To compensate for the F/A–18C's limited range, an all-C airwing would require additional tankers."

Unrefueled Interdiction Mission range (two tanks) is 468 nautical miles for the F/A–18E/F, and 304 nautical miles for the F/A–18C/D. This equates to a 54 percent increase in unrefueled range and a commensurate increase in target coverage, providing significantly more flexibility over any target range selected.

While the S–3 is an adequate recovery tanker, it is not a mission tanker, which was the role previously filled by the A–6. With the retirement of the A–6 from serv-

ice, tactical aircraft now have no organic mission tanking. The F/A–18E/F provides that organic tanking capability and provides the strike fighter community with efficient organic tanking which meets the altitude and speed requirement of the mission aircraft without additional fighter escort coverage.

CARRIER RECOVERY PERIOD

Question. Please provide me a copy of the decision to increase the F/A–18C/D's Carrier Landing Design Gross Weight to 34,000 pounds, with restrictions.

Answer. A copy of the flight clearance issued to allow for F/A–18C/D restricted operations at a carrier landing design gross weight of 34,000 pounds is provided. As demonstrated by the severe limitations imposed, this 1,000 pound increase in landing weight comes at an increased risk to flight safety and significant limitation in the Battle Group Commander's operational flexibility.

PTTUZYUW RUEOMCA0279 0952005—UUCX—RUWFLBH.
ZNR UUUCX ZUI RULSNAA1407 0950700
P 042001Z APR 96 ZYB PSN 640266Q24
FM COMNAVAIRSYSCOM WASHINGTON DC//4.3P//
TO AIG ONE SIX FIVE
AIG SIX NINE EIGHT SIX
AIG ONE ONE ONE EIGHT THREE
RULSABU/NAVSTKAIRTESTRON PATUXENT RIVER MD//55SA3AA/55SA10A//
RUNDMCP/NAVWPNTESTRON CHINA LAKE CA//56F000D/56F00D//
RUWFADI/NAVWPNTESTRON PT MUGU CA//56F000D/56CF00D//
INFO RULSABU/NAVTESTWINGLANT PATUXENT RIVER MD//55TW3AA//
RUWFADK/NAVTESTWINGPAC PT MUGU CA//560000E/56F000D//
RULSNAA/COMNAVAIRSYSCOM WASHINGTON DC//5.0D//
RULSADU/NAVAIRSYSCOM DET ACC PATUXENT RIVER MD//MO/AMO/CM–1//
RUCTPOH/NAVAEROPMEDINST PENSACOLA FL//60//
BT
UNCLAS //N03711//
MSGID/GENADMIN/COMNAVAIRSYSCOM//
SUBJ/INTERIM CHANGES TO FA–18 AIRCRAFT NATOPS FLIGHT PUBLICATIONS//
REF/A/DOC/NAVAIR/01AUG95//
REF/B/DOC/NAVAIR/01AUG95//
REF/C/DOC/NAVAIR/01AUG95//
NARR/REF A IS NAVAIR A1–F18AC–NFM–000, (F/A–18A/B/C/D NATOPS FLIGHT MANUAL, DTD 15 JAN 94, CHG 3, DTD 01 AUG 95. REF B IS NAVAIR A1–F18AC–NFM–500, F/A–18A/B/C/D AIRCRAFT (EQUIPPED WITH F404–GE–400 ENGINES) NATOPS POCKET CHECKLIST, DTD 15 JAN 94, CHG 3, DTD 01 AUG 95. REF C IS NAVAIR A1–F18AC–NFM–510, F/A–18C/D AIRCRAFT (EQUIPPED WITH F404–GE–402 ENGINES) NATOPS POCKET CHECKLIST, DTD 15 JAN 94, CHG
01 AUG 95.//
POC/R. PHELAN/CIV/AIR–4.3P/-/TEL:DSN6643400X8607
/TEL:COMM7036043400X8607/TEL:FAX7036043539//
RMKS/1. THIS IS INTERIM CHANGE NUMBER 66 TO REF A, INTERIM CHANGE NUMBER 43 TO REF B, AND INTERIM CHANGE NUMBER 11 TO REF C. THIS MSG MODIFIES THE MAXIMUM ALLOWABLE CARRIER LANDING WEIGHT INFORMATION IN REFS A THROUGH C.
2. CHANGE REF A, CHAPTER 4, PAGE I–4–6, PARAGRAPH 4.1.7, WEIGHT LIMITATIONS:

A. DELETE NOTE AND THE THREE LINES PRECEDING THE NOTE.
B. ADD (REPLACE WITH) THE FOLLOWING TEXT:
LANDING
UNRESTRICTED..... 33,000
RESTRICTED..... 34.000
ARRESTMENTS ABOVE 33,000 POUNDS ARE SUBJECT TO THE FOLLOWING RESTRICTIONS:
(1) ARRESTING GEAR—MK 7 MOD 3 ONLY
(2) GLIDE SLOPE—3.5 DEGREES MAXIMUM
(3) RECOVERY HEAD WIND (RHW)—
(A) 40 KTS MINIMUM—HALF FLAPS ALLOWED
(B) LESS THAN 40 KTS—FULL FLAPS ONLY

(4) LATERAL WEIGHT ASYMMETRY—14,500 FT-LB MAXIMUM (EXTERNAL PYLON STORES, AIM–9 WING TIPS, AND WING FUEL)

NOTE

THE COMBINATIONS OF ARRESTING GEAR, GLIDE SLOPE, RHW, AND THE ASYMMETRY LIMITS LISTED ABOVE WILL ENSURE LANDING STRESSES REMAIN WITHIN TESTED LANDING GEAR STRENGTH SAFETY MARGINS.

3. CHANGE REF B, PAGE 159, WEIGHT LIMITATIONS—
A. DELETE LAST THREE LINES, AS FOLLOWS:
LANDING
AIRCRAFT 161363 THRU 163778 33,000
AIRCRAFT 163985 AND UP..... 34,000
B. ADD (REPLACE WITH) THE FOLLOWING TEXT:
LANDING
UNRESTRICTED..... 33,000
RESTRICTED..... 34,000
ARRESTMENTS ABOVE 33,000 POUNDS ARE SUBJECT TO THE FOLLOWING RESTRICTIONS:
(1) ARRESTING GEAR—MK 7 MOD 3 ONLY
(2) GLIDE SLOPE—3.5 DEGREES MAXIMUM
(3) RECOVERY HEAD WIND (RHW)—
(A) 40 KTS MINIMUM—HALF FLAPS ALLOWED
(B) LESS THAN 40 KTS—FULL FLAPS ONLY
(4) LATERAL WEIGHT ASYMMETRY—14,500 FT-LB MAXIMUM (EXTERNAL PYLON STORES, AIM–9 WING TIPS, AND WING FUEL)
4. CHANGE REF C, PAGE 153, WEIGHT LIMITATIONS—
A. DELETE LAST LINE, QUOTE CARRIER LANDING ..... 34,000 POUNDS UNQUOTE.
B. ADD (REPLACE WITH) TEXT AS IN PARAGRAPH 3.B, ABOVE.//

LANDING GEAR UPGRADES

Question. DOD argues that upgrades to the F/A–18C/D's landing gear are not possible without "stronger metals that are not developed or qualified." However, GAO contends that "according to E/F program data, newer, stronger metals are now available, and will be used in the production of the landing gear for the heavier E/F." Will the E/F use these metals? Have they been developed? If yes, how long would it take to qualify them for the C/D? If no, when does the Navy believe they will become available? Is there any reason why these metals to be used for the E/F's landing gear could not be used to upgrade the C/D's landing gear?

Answer. When addressing shortfalls in F/A–18C/D performance, one must take a total systems approach in arriving at a solution. The identified deficiencies in the F/A–18C/D are in the aircraft's ability to provide the necessary range, payload, and survivability to counter the projected threat into the twenty-first century, and cannot be solved by simply strengthening landing gear. To carry additional payload, the wing pylons and attachment points must be strengthened, which requires additional strength in the structure, which increases weight. This heavier aircraft requires more lift, which would generate the requirement for a larger wing and higher thrust engines. This is a simplified version of the logical thought and study process that led to the requirement for the F/A–18E/F.

Aermet 100 metal used in the landing gear is now used in both military and commercial applications. It provides negligible improvements in static strength, but does provide improved metal fatigue characteristics when compared to the 300M material used in the F/A–18C/D landing gear. A material change from 300M to Aermet 100 for the F/A–18C/D landing gear would not be sufficient to overcome sink speed, wind over deck, and landing weight restrictions currently in place. Measurable improvements in this area would also require new, larger gear, which the current wheel well bay cannot accommodate.

ROOM FOR AVIONICS GROWTH

Question. Does the Navy consider .25 cubic feet of space and above as usable for avionics systems? Are the .9 cubic feet saved by the replacement of APG–65 radar by the APG–73, and the 1.2 cubic feet saved by the upgrade of the SMS weapons management system, space usable for avionics growth?

Does the E/F program still derive avionics growth space from the gun bay, as the McDonnell Douglas F/A–18E/F Baseline Configuration Study suggested? Does the Navy plan to use gun bay space to house the F/A–18D's reconnaissance avionics package?

Answer. .25 cubic feet is a negligible amount of space for avionics integration. Where the F/A–18C/D is concerned, there was .9 cubic feet of space saved in the replacement of the APG–65 and the APG–73, and 1.2 cubic feet saved by the upgrade of the SMS weapons management system. However, these changes affect only a limited number of F/A–18C/D aircraft (257 for the radar upgrade and 184 for the SMS), and therefore cannot be considered a source for avionics growth for the F/A–18C/D overall. Additionally, the utility of the space in this limited number of aircraft would be bounded by the power and cooling available versus that required by proposed systems. Modifying to accommodate systems with greater power and cooling requirements require airframe modifications and redistribution of aircraft power and cooling within an already fixed power/cooling budget. As the radar upgrade and SMS are part of the baseline F/A–18E/F, there are not avionics volume savings associated with their incorporation for the F/A–18E/F.

Although there is space available in the F/A–18E/F gun bay, the environment in this area is generally not appropriate for avionics equipment. As stated in the McDonnell Douglas F/A–18E/F Baseline Configuration Study, the F/A–18E/F aircraft nose barrel design is compatible with the reconnaissance pallet currently being produced for the F/A–18D aircraft. Alternative designs of the nose kit for the F/A–18E/F are being evaluated, and a trade-off study is being conducted to determine if the reconnaissance requirement could be adequately met using a podded design. The study is expected to be completed by the end of the fiscal year, at which time we will decide which configuration for the F/A–18E/F most adequately meets the needs of the Navy.

QUESTIONS SUBMITTED TO GEN. C.C. KRULAK

QUESTION SUBMITTED BY SENATOR TED STEVENS

V–22

Question. General Krulak, your statement says the MV–22 "remains the Marine Corps' most critical acquisition priority." Given this priority, are you comfortable with the current procurement profile that will not meet Marine Corps requirements for 25 years?

Answer. The 22 year procurement profile, as currently budgeted, is not a desirable procurement profile. However, topline constraints have resulted in this plan. As currently budgeted, the last MV–22 aircraft would be received in fiscal year 2020. Given the current MV–22 procurement profile, our CH–46's will be approaching 50 years of age at retirement. I would much prefer a higher production ramp to 36 MV–22's per year, thereby allowing for replacement of our aging CH–46E fleet aircraft several years earlier, saving significant dollars and funding and important capability sooner.

QUESTIONS SUBMITTED BY SENATOR ARLEN SPECTER

ACQUISITION

Question. I am interested in the progress being made toward the development of a Tactical Hand Held Radio for the United States Marine Corps. I am aware of a new hand held radio called the Leprechaun that is compatible with the existing ground and airborne radio system and would provide U.S. Marine Corps infantry squads with reliable, lightweight equipment. To what extent do the Marines intend to evaluate and field test such radios?

Answer. There is no funding in the fiscal year 1998 budget for the acquisition of Tactical Hand Held Radios (THHR), such as the Leprechaun. Accordingly, the evaluation and/or field testing of THHR's is currently not planned.

There is an approved Mission Need Statement (MNS) for the THRR. THHR would satisfy a wide range of missions requiring short range communications in support of infantry team/squad/platoon level communications. Additional funding for RDT&E would be used to support a solicitation and request for competitive bid samples for testing to find the "best value" solution in fulfilling the need. Commercial off-the-shelf (COTS) radios would be thoroughly evaluated/tested with RDT&E funding.

THHR has not been funded due to topline constraints. We will continue to review the requirement as we prepare future budget submissions.

Question. Last year, accelerating the production rate for the V–22 was one of the top underfunded modernization priorities of the Navy and Marine Corps. Congress responded by recommending funding for 12 V–22's this year. However, the Department of Defense includes funding for only 5 V–22's in the fiscal year 1998 budget. Wouldn't there be cost savings associated with an accelerated rate of production, based in part on the limited life of current aircraft, that justify appropriating sufficient funds for a total of 12 V–22's?

Answer. Accomplishing a near term procurement rate of 12 aircraft per year with a vamp up to 36 aircraft per year remains my highest aviation acquisition priority. In constructing the fiscal year 1998 Budget, however, affordability constraints and competition with other Navy priorities precluded the Department from budgeting the approximately $700 million required to procure those additional aircraft in fiscal year 1998.

Increased production of twelve aircraft per year provides for a shorter and more economic production schedule for the V–22 and builds to my priority of procuring 36 MV–22's per year. This rate of procurement is estimated to result in significant overall program cost savings of up to $6 billion while providing more rapid replacement of our aging medium-lift assault aircraft.

QUESTIONS SUBMITTED BY SENATOR PETE V. DOMENICI

BUDGET ISSUES

Question. Both the Navy and the Marine Corps have submitted add-on lists that total $3 billion. Do any of the items on these lists have a higher priority than any item contained in the President's original request for 1998?

If, so please identify and explain.

Answer. No, none of the items on our add-on list have a higher priority than the items contained in our President's Budget submission.

BOSNIA OPERATIONS

Question. What 1997 items have you identified, or would you identify, if Congress approves the President's request for broad authority to reprogram $2 billion for Bosnia operations? What programs have you identified, or would you identify, to permit the $2.8 billion rescission package the President has requested? What are the implications for the 1998 spending for these programs?

Answer. Marine Corps sources for supporting supplemental reprogramming requirements is to take advantage of foreign currency (increasing value of the dollar) and inflation savings. There should be no effect on fiscal year 1998 as the President's Budget submission already reflects lower foreign currency and inflation rates.

QUADRENNIAL DEFENSE REVIEW

Question. In an analysis for the Budget Committee, CBO and GAO identified up to $50 billion in "underfunding" in the next four to five years of the defense budget. What actions can you tell us about that the Quadrennial Defense Review is undertaking to address this problem?

Answer. The Quadrennial Defense Review is being conducted under the purview of the Office of the Secretary of Defense (OSD). Although the Marine Corps is a participant in the process, this question can be more accurately addressed by OSD. The results of the QDR are due to Congress on 15 May and will include the Secretary of Defense's assessment of the needed funding level to support DOD. The QDR results will be the subject of further review by the National Defense Panel and the Secretary of Defense appointed Reform Group. These panels will also recommend appropriate funding levels, efficiencies and risks associated with supporting our National Military Strategy.

QUALITY OF LIFE ISSUES

Question. The Navy and Marine Corps continues to operate in peacekeeping and other international operations at a historically high rate. What indicators do you use to register the stress that this high operating tempo puts service men and women under? What measures do you use to measure the stress for their families? What do these data show?

What lessons have been learned from Operation Desert Storm and more recent peacekeeping activities to reduce this stress?

Answer. The Marine Corps has implemented a consolidated deployment plan to manage DEPTEMPO within its operating forces. This plan enables Marine planners and commanders to monitor DEPTEMPO of subordinate units. Using this plan as a guideline, 34 percent of the operating force on average is forward deployed, with the remaining forces at home station. Historically, Marine Corps' DEPTEMPO has not changed significantly with the exception of Desert Shield/Storm. The Marine Corps is able to manage current DEPTEMPO at present rate provided it maintains its manning strength of 174,000.

"The Quality of Life in the U.S. Marine Corps" study conducted by Elyse W. Kerce, Navy Personnel Research and Development Center, had tools to measure the quality of life for Marine families. There are no known tools used to measure stress for Marine Corps families; however The Kerce study did use a subjective measuring tool entitled "The Marine Corps and Quality of Life: 1993 Member Questionnaire." The questionnaire was partitioned into sections corresponding to the domains of interest (e.g. residence domain, neighborhood domain, marriage and intimate relationships domain, health domain, friends and friendship domain, et al). The results were generally favorable toward the Marine Corps lifestyle. It also showed a positive correlation between married life and retention. Additionally, the Kerce study gave credence and direction for the Marine Corps to develop pro-active quality of life programs.

The Marine Corps also conducted the "Study of Impact of Operation Desert Shield/Storm on Marine Corps Families and Effectiveness of Family Support Programs in Ameliorating Impact." It found that family support programs do help service members and their families better cope with peacekeeping deployments. The general perception is that most services were available to families during Desert Shield/Storm; however, service providers relied on the families to contact them for assistance when needed. Nonetheless, many felt that the Marine Corps did more than they had in the past in supporting families. Commands now realize that family support programs do support the mission and are important to maintain.

Lessons Learned:

That receipt of a predeployment briefing or materials had a positive bearing on families' preparedness.

That family readiness supports the unit mission and clarifies family expectations, both during peacetime and war.

That strong ongoing support programs for families during peacetime help ensure that adequate preparations are in place when needed.

That coordinating family support efforts at all levels of the base/unit structure are important to ensuring that the best support is available to service members and their families during predeployment, while deployed, and during post-deployment periods.

That unit support for families while the unit is deployed positively affects families experiences with separation and the retention of service members.

BOSNIA OPERATIONS

Question. In past years there was an attempt to reprogram money out of programs to assist military families to pay for operations in Bosnia. Is there going to be any similar attempt to pay for 1997 Bosnia operations with funds intended to help alleviate family stress?

Answer. No. Marine Corps sources to fund contingeny operations are related to foreign currency or inflation savings; there are no plans to reduce family programs.

QUALITY OF LIFE ISSUES

Question. I am concerned that high operating tempos can put stress on military families and can result in higher rates of child and spouse abuse among military families. What trends do the most recent data show on this issue? How do these data compare to recent trends in civilian life?

Answer. Caliber Associates just completed and forwarded to Congress within the last week, "The study of spousal abuse in the Armed Forces: Analysis of spouse abuse incidence and recidivism rates and trends." While this document does not include children, but only spouse abuse, it does examine the issues of the frequency of abuse, how widespread it is, the prevalence of reports, profiles of victims and offenders, and an overview of risk factors associated with abuse. Factors identified which are particularly relevant to the military are age, gender, length of marriage, education level, income, residential mobility, social isolation, behaviors and attitudes, and alcohol abuse/use. These factors are relevant to the military because:

—A large portion of the military population is young;

—Males are predominant in the military and are generally more aggressive than females;
—Early marriages are at higher risk;
—Lower levels of education are typically associated with higher risk;
—Lower pay grades are typically associated with higher risk;
—Frequent moves of military families increase risk;
—Social isolation of not being near extended family and friends increase risk;
—Alcohol use/abuse is a definite co-occurrence and therefore seen as a risk factor, but is not considered a causal factor.

Additionally, the Marine Corps sees a tendency, but not an absolute trend supported by research, in the young male who believes he has the responsibility to control his family members being at higher risk for abusive behaviors. If he believes this prior to and during deployment, it may increase his risk for actual abuse upon returning home.

Question. I recently wrote to Secretary Cohen supporting his comment that it is "unacceptable" for military families to be on Food Stamps. What is your view on this issue? How many Navy/Marine Corps families receive Food Stamps? What actions would you find acceptable and affordable to address this problem?

Answer. Eligibility for food stamps should entail no negative stigma. Marines who qualify for food stamps are likely of a very junior enlisted grade, with several dependents, and with a spouse who does not work outside the home. Like any benefit, food stamps help ease the financial burden on these young families. Since promotions (and thus, pay raises) come fairly quickly at the lower ranks, Marines drawing food stamps likely do not do so for extended periods of time.

The question concerning the number of Marines on food stamps has been asked several times in the past three years. While the guidance for the Food Stamp Program is provided by the federal government, each state interprets that guidance and carries out their program according to their interpretation. The Marine Corps has installations in nine different states and personnel in every remaining state. As a result of state interpretation differences, it is virtually impossible to arrive at an accurate figure for the number of Marines participating in the Food Stamp Program.

States sometimes separate participants according to their status of employment (e.g., civilian or military), but most do not. In those cases where participants are categorized according to their status it is possible to determine the number of participants in that state. Other states include BAQ as part of a servicemember's income when he/she lives off an installation. It then becomes possible for a Marine to live on base and have no house payment (forfeit BAQ and VHA) and qualify for food stamps, while a Marine living off the installation collecting BAQ and VHA (with costs exceeding those allowances) may not qualify for the program. This is particularly true in Hawaii.

There is no simple solution to the financial hardships experienced by young families. We have many different programs within our Family Service Centers that support young Marines and their families, including financial counseling. A partial solution is simply to ensure all Marines are aware of the different avenues of assistance available to them.

HUNTER/JAEGER AVIATION

Question. What is the Navy and the Marine Corps assessment of Hunter/Jaeger Aviation that was demonstrated at the recent exercises you jointly held?

What activities do you plan to further test Navy and Marine Corps support for ground forces under this concept?

Answer. The Hunter Warrior Advanced Warfighting Experiment was conducted under the cognizance of the Commandant's Warfighting Laboratory and the Commanding General of the Marine Corps Combat Development Command in March of 1997. Part of the Warfighting Lab's charter is to serve as a test bed for the development of enhanced operational concepts, tactics, techniques, procedures, and doctrine. A detachment of Navy T–34C's, sponsored by the Naval Strike and Air Warfare Center (NSAWC), participated in the Hunter Warrior experiment. The NSAWC detachment, sometimes referred to as Jaeger or Hunter aviation, evaluated the effectiveness of aerial platforms in the limited search and attack role as well as the ability to contribute to decisive results on a dispersed, non-contiguous battlefield as part of a limited deep operations maneuver group. The Marine Corps welcomes Navy efforts to experiment with evolving aviation concepts for supporting expeditionary forces in the littorals and the Jaeger concept is one of a number of ongoing initiatives in this regard. The Center for Naval Analyses is in the process of conducting an independent analysis of Hunter Warrior data for the Commandant's Warfighting Laboratory. The Hunter Warrior final analysis report is scheduled to be completed

on 15 May 1997. Hunter Warrior represents only an initial step in developing an assessment of the Jaeger concept's potential. Further experimentation will have to be conducted in order to draw definitive conclusions about the utility of such a concept.

We will continue to work closely with the Navy to further experiment with advanced warfighting concepts throughout the Warfighting Lab's five year experimentation plan.

Question. What other technologies or concepts are you considering that would provide direct combat support for ground forces that would be at least as low in cost and that would provide as sustained support as the Hunter/Jaeger concept?

Is Hunter/Jaeger Aviation a high or a low priority in the Navy and Marine Corps budget and in your thinking for the future?

Answer. One of the key pillars of the Marine Air Ground Task Force (MAGTF) is Marine Aviation's direct support of the ground combat element and the MAGTF commander. Marine Aviation has always been an innovative organization—from close air support to our development of the MV–22 and STOVL technology—Marine aviators have remained on the cutting edge. We will continue to experiment with new and evolving concepts and technologies in support of our ground forces and the MAGTF commander. Those concepts and technologies that prove promising will be fully vetted through the Marine Corps combat development process.

Jaeger aviation is primarily a Navy initiative and is not part of the Marine Corps budget.

QUESTIONS SUBMITTED BY SENATOR DANIEL K. INOUYE

RECRUITING AND RETENTION

Question. General Krulak, what is the Marine policy regarding the recruitment of category IV personnel; is there a place in the Marines for those of the lower mental categories?

Answer. Mental Group IV accessions are not routinely authorized. Exceptions to this policy are applicants who meet stringent waiver criteria set forth by the recruiting service.

The Marine Corps, after years of detailed analysis that indicated applicants testing in the lower mental categories (CAT IV) have a significantly higher attrition rate than those testing in higher categories, has limited the number of CAT IV accessions to no more than 1 percent of the total requirement. The applicant must also have participated in extracurricular activities, (youth, school, church groups, sports or have established a good employment record) and must be a high school graduate (Tier I). These restrictions are enforced to assure only the most fully qualified lower mental category applicants are accepted.

The Marine Corps does have job specialties available for those who meet the screening and waiver requirements.

Question. General Krulak, do you expect to meet your recruiting goals in 1997?

Answer. Yes, we will meet the recruiting mission accessions and net new contracts to build the delayed entry pool for fiscal year 1998. We will meet the Marine Corps requirement for quality (95 percent Tier I and 63 percent mental group I–IIIA) for the active component.

MODERNIZATION DEMANDS

Question. Mr. Secretary, in your posture statement, you list acquisition reform, savings from base closings, and overhead savings as the primary ways you will get the money you need for your modernization programs. Do you think these will be sufficient, or will the Navy budget need to be increased to provide for the necessary modernization?

General Krulak, what is the Marine Corps' position on this matter?

Answer. While it is true that the Marine Corps is making every effort to bring about efficiencies and "savings" in the way it conducts business, it is important to note that the fiscal year 1998 budget for Modernization accounts represents a 25 year low.

Historically, a procurement funding level of approximately $1.2 billion per year is needed to keep the Marine Corps at an acceptable warfighting capability. While the funding level in fiscal year 1999 doubles from the funding level in fiscal year 1998, the Marine Corps does not attain its goal of $1 to $1.2 billion until fiscal year 2000. This funding level is carried through the out years. Employment of smart business practices, such as acquisition reform, modeling and simulation, employment of commercial off-the-shelf technologies or the use of performance based speci-

fications, and/or multi-year procurement strategies will be key in our effort to overcome modernization deficiencies.

However, it is important to note that present fiscal constraints have a direct impact on modernization for all the services. Furthermore, savings derived from recent efforts, such as acquisition reform, typically represent outyear cost avoidance and not near-term real growth to Marine Corps modernization TOA.

In base closure, the Marine Corps has been part of a larger Department of the Navy effort.

A realistic goal for modernization of the Marine Corps aviation force is approximately $3 to $3.5 billion annually. This amount would fund the Marine Corps' top aviation priorities—the V–22 and the AV–8B Remanufacture at the most economical rate. It would also fund the H–1 Upgrade (4BN/4BW) program, KC–130J procurement to replace our aging fleet of KC–130F and R models, CH–53E's to complete standup of two reserve squadrons, additional F/A–18C/D's to sustain the F/A18 force structure until replacement by the Joint Strike Fighter, and continued investment in aircraft modifications to increase warfighting capabilities and maintain safety.

V–22 OSPREY

Question. General Krulak, last year, the Congress increased advance procurement funding for the V–22 program to accelerate production in 1998 to 12 aircraft. I understand you now want to reprogram these funds because you don't plan to buy 12 V–22's in 1998. Can you explain the situation?

Answer. I have requested authorization to reprogram the $68.4 million in fiscal year 1997 MV–22 advance procurement funding provided by the Appropriations Conference Committee. The subject funding supported advance procurement for twelve MV–22 aircraft expected to be programmed in fiscal year 1998. While we appreciate the strong Congressional support in approving additional funding, which would have moved us toward achieving a more efficient production rate of 36, completion with other Department of the Navy priorities only allowed us to program five of the twelve aircraft in fiscal year 1998.

Reprogramming of the fiscal year 1997 funding will allow the Department of the Navy to apply funding to critical MV–22 Engineering and Manufacturing Development (EMD) phase RDT&E short-falls. Application of this reprogrammed funding will ensure timely and successful completion of the MV–22 EMD.

The MV–22 remains my number one acquisition priority and the Marine Corps will continue to seek funds for increased aircraft procurement and a more desirable rampup.

Question. General Krulak, you have identified the V–22 as your highest priority. Can you identify funding from other programs to purchase more V–22's in the outyears?

Answer. No, I cannot identify funds in other programs to purchase more V–22's. Yes, the V–22 is my highest acquisition priority, however, topline constraints precluded funding additional aircraft in this budget. The fiscal year 1998 budget represents our best attempt at achieving balance among many competing programs while funding near term readiness. As currently budgeted, the last MV–22 aircraft will be received in fiscal year 2020. Given this current 22 year procurement profile, our CH–46's will be approaching 50 years of age at retirement. I would much prefer a higher production ramp to 36 MV–22's per year, thereby allowing for replacement of our aging CH–46E fleet aircraft 5 years earlier; however, as previously stated, present topline constraints precluded funding at this level.

QUESTIONS SUBMITTED BY SENATOR PATRICK J. LEAHY

INITIAL ISSUE EQUIPMENT

Question. General Krulak, sometimes I think we lose track here in Washington with all our focus on stealth airplanes, missile defenses, and airborne lasers, about the very modest needs of our tens of thousands of infantrymen. Can you tell me about the Marine Load System, and the new Body Armor? What will these programs do for our Marine infantrymen?

Answer. The Marine Load System (MLS) consists of an integrated load bearing vest and modular pack system incorporating a drink-on-the-move hydration system. The modular pack will be designed to detach from the vest using a one or two point quick release system. The load bearing vest will consist of hardware to attach the modular ammunition pack designed for small arms that attaches separately, and a padded hip belt that will comfortably support the pack as well as the vest. The vest system will be adjustable to fit the 5th–95th percentile Marine. The modular pack

will consist of a main pack, two attachable side sustainment pockets, a teardrop shaped patrol back and a detachable sleeping bag with compression straps and carrying handle. Both the vest and pack will be able to carry the two liter drink-on-the-move system with gas mask compatible drinking tubes. The system will be capable of tailored loads from 800 to 6,800 cubic inches. The system will use a 350 to 1,000 denier nylon or ripstop nylon Cordura, polyethylene and aluminum hard components. The pack cloth will be woodland camouflage 483. Padded foams will be dual density for optimum performance. The pack will be fully adjustable for comfort and fit and durability for 120 continuous combat days.

The family of body armor is a three piece system consisting of an inconspicuous soft armor vest, outer fragmentation vest, and two ballistic plate inserts that fit in the outer vest. The system will weigh no more than 30 pounds total. The inconspicuous soft armor will be worn under the battle dress utilities. It will offer protection from small caliber handguns or National Institute of Justice (NIJ) Standard IIA munitions. The outer vest will be equal in protection to the current Personal Armor System Ground Troops (PASGT) vest. It will offer better durability, removable armor inserts, and be woodland camouflage in color. It will be front opening and have modular components that protect the throat, neck, and groin areas. It will be able to incorporate both front and back ballistic plate inserts. The ballistic plates will weigh no more than five pounds each and offer NIJ level IV protection. The inconspicuous vest will not be worn with other components. The system should offer better casualty reduction than the PASGT and weigh 20 percent less.

COMMANDANT'S WARFIGHTING LABORATORY

Question. General, last year this subcommittee added funds for your Commandant's Warfighting Laboratory. Can you tell us a little bit about what the Marines have learned from these warfighting experiments?

Answer. Preliminary results from the Hunter Warrior Advanced Warfighting Experiment (AWE) validated the hypothesis that a Marine Expeditionary Unit (MEU), through the employment of enhanced capabilities and technology, could expand its area of influence in an open littoral environment. Tactics, techniques and procedures such as enhanced training and streamlined command-and-control can enhance our warfighting capabilities.

During the Hunter Warrior AWE, the Special Purpose Marine Air-Ground Task Force, Experimental (SPMAGTF(X)) used an Experimental Combat Operations Center (ECOC) concept that linked multi-service units and control systems. The ECOC also included capabilities such as a Commander's Three Dimensional (3D) Workbench that provided 3D map displays of units. Individual Marines employed palmtop computers to track all units and to place digital calls for fire.

A new concept introduced a Cellular Command Element for the SPMAGTF(X) that completely replaced the Napoleonic staff organization. The Cellular Command Element innovations include groups for planning and shaping; engagement coordination; and the "red cell" concept. The "red cell" group provides an initial anticipated enemy response to unfolding friendly actions. These innovations were designed to improve decision making and leverage tempo. We also experimented with the employment of drones in support of forward units to enhance their target acquisition, identification and tracking capabilities.

Hunter Warrior was primarily naval in nature, but a lesson learned for all future joint operations is the need for command, control and communications interoperability and the use of common computer operating environments.

Data from Hunter Warrior is currently being analyzed. Additional lessons learned may emerge as results solidify.

AVIATION

Question. General Krulak, you have stated in the past that the oldest aircraft in your aviation inventory are the KC–130 tankers, and that they need to be replaced. I believe that last year Congress provided $210 million for four new KC–130's to begin that process.

Can you please tell us the status of those funds and how that program is going? And would you also tell us your future plans for the KC–130J?

Answer. Thanks to Congressional support last year, we will begin to replace our aging active force KC–130F's during 1999. These aircraft are approaching 40 years of age and are the oldest aircraft in the Marine Corps inventory. Events over the past year in Liberia, Central Africa, Albania, and most recently in Zaire, continue to demonstrate the important role this multi-mission aircraft continues to play in support of our forward deployed MAGTF's and in the joint arena.

We anticipate receipt of the fiscal year 1997 funding provided by Congress within the next month. In order to create a balanced program, as agreed to by the principles, the plan is written for procurement of 3 aircraft with spares and repair parts support vice 4 aircraft only. NAVAIR is working closely with the Air Force and industry and we expect to have the aircraft on contract by the end of June.

The acquisition objective for the KC–130J is 51 aircraft to replace our aged active duty KC–130F and KC–130R aircraft.

SUBCOMMITTEE RECESS

Senator STEVENS. The next meeting will be at 10 a.m. Wednesday. Thank you very much.

[Whereupon, at 12:19 p.m., Wednesday, April 9, the subcommittee was recessed, to reconvene at 10 a.m., Wednesday, April 16.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1998

WEDNESDAY, APRIL 16, 1997

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:05 a.m., in room SD–192, Dirksen Senate Office Building, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens, Cochran, Inouye, Bumpers, and Harkin.

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE ARMY

STATEMENTS OF:
TOGO D. WEST, JR., SECRETARY OF THE ARMY
DENNIS J. REIMER, GENERAL, CHIEF OF STAFF OF THE ARMY

OPENING STATEMENT OF HON. TED STEVENS

Senator STEVENS. Good morning.

Our subcommittee today will hear from the Honorable Togo West, Secretary of the Army, and Gen. Dennis Reimer, Chief of Staff of the Army. We welcome you both, gentlemen. We look forward to discussing the issues facing the Army for the fiscal year 1998 budget.

Senator Inouye and I recently took a delegation to Korea and to the Russian far east, and we were very impressed by the Army people we met, led by General Tilelli and General Franks. We witnessed a live-fire exercise that was formidable, and the candor and directness of the members of the Army that we met and their discussion on issues that concern them was very valuable to us. The Army could not have better ambassadors than the troops of the 2d Infantry Division that we met in Korea.

Secretary West, General Reimer, we will put your statements in the record. Gentlemen, we hope that that is agreeable to you.

I want to yield to Senator Inouye for any comments he might make.

STATEMENT OF HON. DANIEL K. INOUYE

Senator INOUYE. Thank you very much, Mr. Chairman.

I join you in welcoming the Secretary and General Reimer. We face another very challenging year, as your requirement for new recruits continue to increase, as you are pressed for an increasing

number of overseas deployments, your social problems capture the headlines, and funding pressures squeeze your modernization programs.

Together with the chairman, I spent some time visiting soldiers of the 2d Infantry Division in Korea, and the 25th in Hawaii. I know from these experiences that you have a force unmatched in quality, and extremely high in spirit. Hopefully, you can share with us your thoughts on how we can sustain this during these extremely difficult times.

I, for one, am concerned with those that recommend cutting our forces below the 495,000 end strength, and I am concerned that you plan to reduce your goal for high school graduates by 5 percent. I worry that some may look to reduce benefits, such as health care and other quality-of-life programs to find necessary funding for your modernization programs.

I know that these are your concerns and they are ours. And so, I will be listening to your thoughts as we proceed with the hearing.

Thank you very much, Mr. Chairman.

Senator STEVENS. Yes, sir. I have a statement for the record from Senator Bond.

[The statement follows:]

PREPARED STATEMENT OF SENATOR CHRISTOPHER S. BOND

Thank you Secretary West and General Reimer for speaking to the committee today. I want to echo the statements and concerns of the Chairman, Senator Stevens and the Ranking Member, Senator Inouye. I especially want to emphasize my concerns for the health and readiness of the Army.

As we all know, this year has been a busy one for our armed forces and I see no sign that our commitments and responsibilities are going to slack off in the future. As the President has sent the military on increasingly frequent and tedious missions, many observers have expressed reservations about the readiness and maintenance of our military equipment.

Additionally, I have serious concerns about the level of morale for troops who have increasingly become involved in operations other than combat and combat support. Specifically such duties as nation-building programs and foreign relief work are often onerous. Given certain circumstances, I understand and support the use of American troops for the initial introduction of programs, but I question the role of our Army in the long-term feeding, clothing, and nation-building programs for other countries that we have been involved in recently.

Senator STEVENS. Mr. Secretary.

Mr. WEST. Mr. Chairman, Senator Inouye, it is a pleasure to appear before you once again to talk about the President's budget for the U.S. Army for fiscal year 1998 and also, the posture of your Army. Again, thank you for the support that this subcommittee has provided to the Army and its soldiers, civilians, and families over the past year. A number of examples come to mind: your support on the supplemental for our mission in Bosnia—an issue, of course, with which we seek your support again this year; the additional funding you provided for the Army's truck fleet—about $213 million; and your support of our Force XXI initiatives, which, as you know, are so critical to the Army for our success in the 21st century.

Since the end of the cold war, Mr. Chairman and Senator Inouye, Army end strength has been reduced by some 36 percent and to 10 divisions in the active component, 8 divisions and 15 enhanced brigades in the National Guard, and 10 Reserve regional support commands. Those figures—a loss overall of some 620,000 soldiers and

civilian employees and the redeployment of some 250,000 soldiers, civilians, and family members from Europe—are the result.

Since 1989, we have closed 89 installations in the United States and 664 overseas. This year, for the first year, we will begin to show a net savings of $200 million from that effort.

Our traditional role, of course, continues to be to compel, to deter, to reassure, and to support. You know of the number of deployments we have had over the last year, including Southwest Asia, Operation Intrinsic Action, humanitarian efforts with the Kurds in Iraq, reinforcement of peace in the Sinai, and continuing peace building in Bosnia, while continuing to maintain a forward presence of over 100,000 soldiers and 28,000 civilians in Europe and the Pacific rim.

We serve at home. The Army has supported civil authorities in communities devastated by hurricanes and floods and by wildfires in the Pacific Northwest; provided medical counseling care to communities across the United States; supported the Summer Olympics in 1996; and, of course, is working to interdict the flow of illegal drugs across our borders.

Our first priority, as has been your first priority for the Army over the years, is readiness. Those key elements to readiness are several of which you alluded to, Senator Inouye: recruiting quality people, training to tough standards, providing quality leadership, and sustaining the force. Yes; we are now having to replace 20 percent of the force each year, a one-for-one replacement. That means that in the last 2 years, the recruiting mission for your Army has gone up about 43 percent, to almost 90,000 in the current fiscal year.

The President's budget provides $219 million for recruiting, to include enlisted advertising and 5,200 on-production recruiters. We are targeting increases in educational and enlistment incentives. We are adjusting our requirement for high school diploma graduates so that, Mr. Chairman and Senator, the requirement will be 100 percent high school graduates. Of those, 90 percent will have high school diplomas, down from 95 percent, and the remaining 10 percent will have a GED or some other form of certification of completion of high school requirements, so that we maintain the quality of our recruiting and, thus, maintain the quality of our soldiers.

Unit training continues to be one of our highest priorities, and it is funded at 100 percent of our requirement of $3 billion in this budget. Moreover, the President's budget continues to provide for our combat training centers: 12 rotations at the National Training Center [NTC], 10 at the Joint Readiness Training Center [JRTC], 5 at the Combat Maneuver Training Center [CMTC], and, of course, 5 division and 3 corps staff exercises at the Battle Command Training Program [BCTP].

We will sustain this combat force with $637 million for depot maintenance, in addition to the $1.56 billion for logistic support programs that are in this budget. Those are important programs to us, Mr. Chairman and Senator Inouye, including second destination transportation, supply depot operations, conventional ammunition programs, continued improvement of infrastructure, such as railheads, access roads, and railroad cars, and our continuing com-

mitment to the advances provided by total asset visibility and increased logistic efficiency.

Modernization continues to be a challenge for your Army. This budget provides $11.2 billion for modernization, a combination of $6.7 billion for procurement and $4.5 billion for research, development, test and evaluation [RDT&E]. We continue our strategy of buying a limited number of new, high-payoff weapons, while extending the capacity and capability of existing weapons. We have in this budget continued support for production of our family of medium tactical vehicles, replacing our aging truck fleet with the state of the art. We also will get from this budget 1,500 new trucks and approximately 500 new high mobility multipurpose wheeled vehicles.

We include $44 million in the budget to modify the Apache helicopters to the Longbow configuration, and we include $900 million for new ammunition.

We continue to have as our two priorities for new systems: the Comanche armed reconnaissance helicopter, which will give our commanders the ability to conduct all-weather reconnaissance operations day or night, and the Crusader field artillery system, which will fire faster, more accurately, and with a smaller crew than ever before.

We have continued our efforts at acquisition reform and have seen almost $9 billion in cost reductions to date. Nonetheless, modernization, as you know, continues to be our most fragile area of funding and execution.

In this budget, we continue to support quality of life for our soldiers. Just last month, we concluded another one of our worldwide conferences in which we brought family members here, to Washington, to talk about what matters to them. The pay raise included in the budget is to the fullest extent the law allows, and the $180 million for family initiatives includes child development service programs, which support almost 82,000 children in 176 child development centers. That was one of the priorities identified during the meeting of family members last month.

We hope to continue our efforts for quality housing for our soldiers—almost 2,480 new barrack spaces in the United States, 1,500 in Korea, and another 350 more in Europe. We have included funding for new family housing and for whole-neighborhood projects as well.

Mr. Chairman, I identify a number of other important matters in my written statement, which you have allowed me to submit for the record.

I would like to close with a reference to all of our components—that is, to include the National Guard and Army Reserve. The overall strength and readiness of the Army Reserve and National Guard did improve last year, and the force support packages have reached historical levels of readiness. We continue our commitment within the Army to fully integrate the Guard and Reserve into the active component. The centerpiece of this effort, of course, is the ongoing Army National Guard division redesign initiative.

I remind you that the Guard and Reserve, as you know, serve every day in support of our Army and in support of our national objectives. In the last 12 months, the Army Reserve has supported

nearly 150 missions and deployments around the world and at home. In that same period, the National Guard supported nearly 1,000 missions and deployments around the world and at home. That happy partnership between the Guard, the Reserve, and the active Army continues, even as we go through the QDR process and our assessment of how we will be structured to meet the coming world security situation.

PREPARED STATEMENT

Mr. Chairman, Senator Inouye, the fiscal year 1998 budget reflects fiscal realities of today, but also our Army's commitment to the Nation. Our soldiers, our civilians, and their families have been proud for nearly 222 years to lead our Nation and support it in its position as the dominant leader in the community of nations. Today's soldiers are trained, equipped, and fully prepared for the missions they are called to perform. We look to you and to all the Members of the Senate and the House for the wisdom, guidance, and support that this committee has historically provided to your Army, and we thank you for it.

[The statement follows:]

PREPARED STATEMENT OF HON. TOGO D. WEST, JR.

Mr. Chairman and members of the committee: I am pleased to appear before you today to report on the state of the Army and to talk about the Army's proposed budget for fiscal year 1998.

President Clinton has submitted an Army budget for fiscal year 1998 of $60.4 billion. This budget is the result of a very careful assessment of our needs and priorities and reflects today's fiscal realities. Most importantly, this budget funds the level of readiness necessary to support the National Security and National Military Strategies. Further, this budget balances the demands of recruiting high-quality soldiers, maintaining near-term readiness, preparing for long-term modernization needs, and taking care of soldiers and their families.

The soldiers, civilians, and family members who comprise America's Army continue the legacy of superb service to our nation with an exceptional mix of professionalism, selflessness, and personal sacrifice. On any given day during the past year, the Army has had more than 100,000 soldiers and 28,000 civilians stationed around the world with more than 35,000 soldiers deployed from their home stations in over 70 countries. You, and the nation, can be proud of their achievements.

The current world security environment is complex and uncertain, a mixture of new threats and old animosities in many regions across the globe. The end of the Cold War did not bring an end to international conflict. Many old threats to national security have been replaced by new dangers. This new environment makes the task of providing for America's national security different and, in some ways, more complex than it was during the Cold War period. Army capabilities are crucial to an increasing number of missions in this environment. The Army serves as the nation's contingency force, ready to deploy on short notice to anywhere in the world, and ready to conduct missions across the full spectrum of military operations—from humanitarian assistance, to peace operations, to fighting and winning major regional conflicts.

THE CHANGING ARMY

The Army has changed significantly to meet the challenges of the post-Cold War world. Executing missions now requires a strategically mobile Army that can be deployed rapidly wherever and whenever needed. In the last seven years, we have transformed the Army from a forward-deployed force to a capabilities-based force, based primarily in the United States. The Army has reduced and redistributed its forces, closed and realigned bases, improved integration of active and reserve components, and reorganized and redistributed its equipment pre-positioned overseas. The Army now has 10 divisions in the Active Component, 8 divisions and 15 enhanced brigades in the Army National Guard, and 10 Regional Support Commands in the Army Reserve.

We will continue the integration of the active and reserve components, enabling the Total Force to perform an increased number of missions more efficiently and effectively. Each component of the Total Force—Active, Guard, Reserve, and civilian—provides essential capabilities that give the National Command Authority a range of options when dealing with contingencies.

The world security environment will continue to be unpredictable, volatile, and dangerous; America's Army will remain ready to respond rapidly and decisively to any crisis around the world.

ARMY MISSIONS: ENGAGED WORLDWIDE

As President Clinton has said, "There are times when only America can make the difference between war and peace, between freedom and repression, between life and death." Just as our allies look to America for leadership, our nation will continue to call upon the Army.

As the military's land component, the Army is a critical player with the joint team of the Navy, Air Force, and Marine Corps. The Army's role continues to be fourfold: to compel enemies, deter potential foes, reassure and lend stability, and, in times of emergency, lend support to our communities at home.

In the last year, American soldiers responded to a threat in Southwest Asia as part of Operation Intrinsic Action; supported humanitarian efforts in the Kurdish region of Iraq as part of Operation Provide Comfort; reinforced peace in the Sinai Peninsula; deterred aggression in Korea; safeguarded the evacuation of American citizens from Liberia; demonstrated resolve in the former Yugoslav Republic of Macedonia; and continued to build peace in Bosnia-Herzegovina.

The Army also serves at home. In the past year, Army soldiers and civilians have assisted communities devastated by hurricanes and floods; extinguished wildfires in the Pacific Northwest; provided medical care to under-served communities across the United States; supported the 1996 Summer Olympics; and worked to interdict the flow of illegal drugs across America's borders.

In every instance, the Army has served the nation well.

ARMY PRIORITIES—READINESS, MODERNIZATION, AND QUALITY OF LIFE

For the foreseeable future, America's interests will require the Army to remain engaged around the world. Our challenge in this environment is to balance readiness, quality of life, and modernization, while continuing to execute missions across the full spectrum of military operations.

READINESS

Readiness continues to be our number one priority. High-quality people, both soldiers and civilians, are the defining characteristic of a ready force. The diverse and wide-ranging missions assigned to America's Army require highly capable and flexible soldiers and civilians. They must be capable of adapting to complex, dangerous, and ever-changing situations throughout the world, often while operating in small groups, remote locations, and ambiguous situations. Many factors contribute to readiness. Four key elements are recruiting quality people, training to tough standards, providing quality leadership, and sustaining the force.

Recruiting

Quality people are essential to the Army's success, and we continue to attract quality young people to our ranks. Today's recruits are the best educated and disciplined in the Army's history. However, success is becoming increasingly difficult in the recruiting business. The active Army recruiting mission continues to increase as the drawdown concludes, and we begin to replace losses one-for-one. The recruiting mission rose from 63,000 in 1995 to 73,000 in 1996 and to almost 90,000 in 1997: a 43 percent increase over two years.

We are committed to recruiting top-quality soldiers for our Army, but the challenge remains for us to maintain the quality force we now have as we replace almost 20 percent of that force each year. The fiscal year 1998 President's Budget provides $219.2 million for recruiting. It includes $73 million for enlisted advertising—$2.5 million more than fiscal year 1997—and includes $146.1 million for 5,200 on-production recruiters. These initiatives, coupled with $74.5 million in educational and enlistment incentives, should enable us to meet our recruitment objectives.

We are adjusting our requirement for high school diploma graduates to the Department of Defense goal of 90 percent of our active Army recruits, down from 95 percent. However, all Army recruits will possess either a high school diploma or equivalent certification. Further, we are maintaining our scoring requirements for the Armed Forces Qualification Test, requiring 67 percent of our active Army re-

cruits to score in test categories I–IIIA and no more than two percent in test category IV.

Training

Our quality training is essential to maintaining a decisive battlefield edge. Training is primarily conducted at home stations. Unit training continues to be our highest priority and is funded at 100 percent of our requirement of $3 billion.

Unit training is reinforced in our world class combat training centers. These centers provide soldiers with the most realistic and demanding training short of combat by virtue of professional staffs, battlefield instrumentation, wargames, and feedback. An investment in simulators and simulations has enhanced unit capabilities, and information-age technology will be used in the Army's distance learning program to bring the classroom to the students.

The Combat Training Center program is central to maintaining the Army's readiness. This program allows battalion and brigade-size units to train at the three combat training centers: the National Training Center (NTC) at Fort Irwin, California; the Joint Readiness Training Center (JRTC) at Fort Polk, Louisiana; and the Combat Maneuver Training Center (CMTC) in Hohenfels, Germany. The Battle Command Training Program (BCTP), a computer-driven tactical exercise that provides valuable training without the expenditure of fuel and ammunition, trains corps and division staffs at Fort Leavenworth, Kansas. The fiscal year 1998 President's Budget provides $371.4 million for combat training centers. This provides for 12 rotations at the NTC, 10 rotations at the JRTC, and 5 rotations at the CMTC. Additionally, it funds five division and three corps staff exercises with the BCTP. Our soldiers also participate in numerous joint and combined training exercises to enhance their ability to operate as a member of a joint team with other services and coalition forces.

Through an initiative called "Future Army Schools—21st Century," the Army is establishing a Total Army School System with fully accredited and integrated active Army, Army Reserve, and National Guard schools. Each component is working to reduce duplication, share information and resources, and make tough but necessary decisions on organizational changes. A component of the program, distance learning, will use information-age technology to bring the classroom to the students. Our fiscal year 1998 budget request for training modernization is $97.5 million.

Besides preparing our individual soldiers for combat, our training system plays a key role in redesigning the Army's operational forces for the 21st Century. Through our battle labs program and warfighting experiments, we are testing and refining the components of success on the battlefield: doctrine, training, leader development, organization, materiel, and soldier system requirements. In consonance with the results of the Quadrennial Defense Review, the Army of the 21st Century will be designed and built based on what we learn through these battle labs and warfighting experiments.

Leading

A ready Army is not only well-trained but also well-led. Our professional development system for commissioned and noncommissioned officers combines formal civilian education, military schooling, professional experience in the field, and self-improvement initiatives. With the advent of emerging information technology and realistic simulations, the high-quality and diversity of our officer education system will get even better, and we can project that learning to soldiers around the world using interactive classrooms and teleconferencing.

Our noncommissioned officer corps is the envy of armies around the world and serves as the model for many emerging democracies. It provides the foundation for our success in joint and combined training exercises, in our Partnership for Peace programs, in military-to-military contacts, and in operational deployments around the world. The fiscal year 1998 President's Budget provides $217.2 million for our leader development system—a system that will continue to produce professional military thinkers who will lead our Army to new achievements in both peacetime and war.

Sustaining

The Army distinguishes itself in its ability to sustain its forces deployed worldwide. Providing the fuel, ammunition, food supplies, repair parts, medical care, equipment, transportation, and other forms of support soldiers need is vital to the effectiveness, morale, welfare, and continued readiness of the Army. It requires an extremely complex, but highly efficient infrastructure to acquire, manage, store, move and distribute the required materiel and services the Army needs.

The fiscal year 1998 President's Budget supports the sustainment effort by providing $637 million for the depot maintenance program in addition to $1.56 billion for

logistics support programs, such as second destination transportation, supply depot operations, the Conventional Ammunition Program, and pre-positioned war reserves. Moreover, our efforts have improved infrastructure, such as railheads, access roads, railroad cars, containers, loading facilities, and communications. These initiatives, combined with our continuing efforts at total asset visibility and logistics efficiency, ensure the continued success of our sustainment effort.

MODERNIZATION

Army modernization is focused on the highest priority units and leverages our current technological superiority to ensure that the force continues to achieve full spectrum dominance. The strategy emphasizes integrating new technology, especially technology that enhances information dominance, and upgrading existing systems in order to preserve America's scientific and technological edge.

American soldiers are the best equipped in the world; but the challenge we face is maintaining that status while meeting the fiscal realities of the years ahead. The fiscal year 1998 President's Budget provides $11.2 billion for modernization, consisting of $6.7 billion in procurement and $4.5 billion for Research, Development, Test, and Evaluation. We are buying a limited number of new, high-payoff weapons while extending the capabilities of existing programs.

This budget allows the Army to continue its upgrade of the Abrams tank and the Bradley fighting vehicle. These improvements enhance the mobility, survivability, and lethality of existing systems and are crucial to our ability to defeat all current and foreseeable ground combat threats. The upgrade will also enable these vehicles to interact on the 21st Century digital battlefield.

The budget also supports continued production of our Family of Medium Tactical Vehicles, which will replace our aging truck fleet and provide state-of-the-art automotive technology for our soldiers. The budget provides $209 million for the purchase of over 1,500 new trucks and $31 million for the purchase of more than 500 High Mobility Multipurpose Wheeled Vehicles. The fiscal year 1998 budget also includes $44 million for modifying some basic Apache helicopters to the Apache Longbow configuration, complete with improved radar-guided, fire-and-forget Hellfire missiles.

The modernization budget contains nearly $900 million to procure new ammunition. We will procure the Sense and Destroy Armor to enhance our ability to defeat armored vehicles. Additionally, we will continue the Brilliant Anti-Armor submunitions research and development effort and will procure additional tank ammunition.

These modernization programs, considered together, will increase the Army's combat effectiveness and minimize the threat to our soldiers on the ground.

We are also taking steps to ensure the timely development and transition of technology into weapons systems and system upgrades, and to apply alternate concepts in future warfighting capabilities. Perhaps the most important of these are the Comanche armed reconnaissance helicopter and the Crusader field artillery system. These two programs—budgeted for $282 million and $324 million, respectively—will give commanders the ability to conduct reconnaissance operations in all types of weather during both day and night, and the ability to fire artillery faster, more accurately, and with a smaller crew than ever before.

In addition, acquisition reform is achieving significant savings that are being applied toward the development of the 21st Century force. Through streamlining and re-engineering acquisition programs, almost $9 billion in cost reductions to date have been identified in various programs and have leveraged our ability to maintain an effective modernization program in the face of declining budgets. That notwithstanding, modernization is still our most fragile area in terms of resources, and it requires our constant attention.

QUALITY OF LIFE

We must look after our soldiers and their families. An important part of readiness—of soldiers doing their jobs whether at their home station, at a training assignment here in the U.S. or deployed abroad—is the soldier's ability to go about his or her work with peace of mind: with the knowledge that society values that work; and that his or her family is being provided for. And so, quality of life will continue to be a priority to the Army leadership. We are committed to ensuring adequate pay, housing, health care and retirement benefits for our soldiers.

As we all recognize, adequate compensation is a fundamental requirement for maintaining an all volunteer force. This year's budget requests a 2.8 percent pay raise for our military and civilian personnel.

We have also requested $180 million for family support initiatives such as the Programs for School-Age Teens, Army Community Service programs, and Child De-

velopment Services (CDS) programs. Our CDS programs, for instance, give many working parents much needed support. During the past fiscal year, CDS served approximately 82,000 children in 176 Child Development Centers. The Family Child Care program provided for another 27,000 children and our Programs for School-Aged Children served over 28,000 children.

Quality housing is another important element of the quality of life of our soldiers. The fiscal year 1998 President's Budget contains $338 million for the Whole Barracks Renewal Program, which will improve the living conditions of single soldiers by constructing 2,482 new barracks spaces in the continental United States and nearly 2,000 more overseas. The fiscal year 1998 budget also provides $86.4 million for 583 new family housing units and $44.8 million for the renovation of six Whole Neighborhood projects containing 455 additional units.

Through the Capital Venture Initiative, the Army is pursuing privatization initiatives to increase housing availability and to improve housing conditions. This initiative will convey current housing units to private entities which will, in turn, revitalize the housing for our Army families. The first of these initiatives is scheduled to begin at Fort Carson, Colorado, this summer.

MILITARY CONSTRUCTION

The Military Construction budget continues to focus on the quality of life initiatives mentioned above as well as facilities that upgrade the capabilities of Army installations as power projection platforms. A predominately U.S.-based Army requires modern rail systems, airfield and port operations, and installation storage facilities to ensure that forces can be deployed rapidly to anywhere in the world. The Army is, therefore, improving its deployment infrastructure and converting its installations into world-class power projection platforms.

New facilities include strategic mobility infrastructure, computerized training simulators, modernized barracks and an overseas prepositioning site. The fiscal year 1998 budget requests a total of $687 million for military construction. This includes $23 million for an ordnance support area in Concord, California; $7.7 million for a strategic maintenance complex in Charleston, South Carolina, and $37 million for a strategic prepositioning site in Southwest Asia.

BASE REALIGNMENT AND CLOSURES

The Army is now in the final third of a 13-year implementation effort that spans four rounds of base closures and realignments. We are pleased to report that savings realized from base closures now exceed initial closure costs. We are proud of our success in reducing the cost of infrastructure and returning assets to the private sector. Reducing infrastructure creates savings which in turn increases investment in our forces and bases.

We have nearly completed the first three of four base closure rounds in the United States. The Army has closed over 80 percent of the bases planned for closure in the United States (91 of 112). Over half (15 of 27) of the installation realignments are also complete. The remainder will be completed by 2001 in accordance with the law, but we are accelerating the process when possible in order to realize the savings and permit local communities to gain benefits from the BRAC process as soon as possible. The closure of a base is often very trying for communities, but it also offers new opportunities. The Army works closely with communities to ensure a successful transition. For example, Packard Bell now employs 5,000 people at the former Sacramento Army Depot; 2,000 more than the Army did.

NATIONAL GUARD AND RESERVE

As the Army reserve components are integrated into the Total Army, to this point, I have discussed them in the context of the Total Force.

I am pleased to report that the overall strength and readiness of the Army Reserve and National Guard improved last year. The Army Reserve and Army National Guard's Force Support Package, units that are among the highest priority units in the Army, have reached an historic level of readiness. Evidence of the impact and the importance of the reserve components to the National Security and National Military Strategies is demonstrated by the Army and the nation's reliance on the reserve components to support such operations as Uphold Democracy and Joint Endeavor. Additionally, the Army's reserve components have supported more then 400 missions and deployments around the world and at home in the last 12 months. The Army continues its commitment to the full integration of the Army National Guard and Army Reserve. The centerpiece of this integration effort is the ongoing Army National Guard Division Redesign initiative. The Army views a mission-ready

and integrated Army National Guard and Reserve as essential to the Army's role in the National Military Strategy.

EFFICIENCIES

Through the encouragement of better business practices and innovation and empowerment of the work force, the Army is developing a culture that will ensure it remains efficient in a rapidly changing political, technical, and economic environment. Long-term readiness is linked to the ability to make maximum use of resources. The Army has major initiatives ongoing to divest itself of excess infrastructure and achieve efficiencies. The Army continues to pursue innovative ideas to increase efficiency.

CONCLUSION

This budget reflects the Army's commitment to our nation. Our soldiers are proud to carry out that commitment, which began nearly 222 years ago and has led our nation to a position as the dominant leader of the community of nations. As an Army, we look to you, this Congress, for continued wisdom, guidance, and support as we fulfill our commitment to the nation.

Senator STEVENS. Thank you very much.

General Reimer.

General REIMER. Mr. Chairman, Senator Inouye, thank you very much for the opportunity to appear before your subcommittee and to talk about our soldiers. On behalf of all of them, I thank you and the other members of the subcommittee for not only your great support during a period of uncertainty for the U.S. Army, but also for taking the time to go out and see our soldiers on the front lines. I certainly agree with your laudatory comments about them. But, more importantly, it sends a signal to all of them that you really care, and you care enough to go out and see them on the front lines. And, for that, thank you very much.

As a postscript, I would simply add to your comments that, about 1 week ago today, I visited Hawaii, where I observed a capability exercise being conducted by the 25th Infantry Division at night. It was superb and done very professionally. Not only did I observe it, but the delegates from the armies of 41 Pacific countries also observed it.

I have to tell you and the other members of the committee that I think this does a lot to reassure our friends and deter potential enemies. When you have capabilities and soldiers that are well trained, they send a very powerful message. I could not be prouder of them, and that is why I refer to them as our credentials.

I would like to spend just a couple of minutes to talk about where the Army has been, where we are right now, and where we plan to go. And, in so doing, tie my comments into the Army budget that we have submitted to Congress.

First of all, let me talk about what we have done. I like to say that, for the Army, the 21st century began in 1989. That is when the Berlin Wall came down. What we have done since that time is to change the Army, physically and culturally. And, it has been no small accomplishment. The physical change is very easy to quantify. The Secretary already talked about it; we have taken 620,000 people out of the U.S. Army. That is active and Reserve component soldiers, and Department of the Army civilians—all dedicated people. I think we did it right. We put people first, as we always do. It was a tough thing to go through.

The other changes that we have gone through are also easy to measure. For example, we have closed over 600 bases. Many of

those are in Europe. You can quantify that by saying that all of the bases that we have closed over in Europe is equivalent to closing 12 major bases in the continental United States. So, we have had a tremendous amount of change physically.

But, the change that is hard to quantify is the emotional change that you see out there in the Army. It is the uncertainty that exists in our soldiers. The budget that we have submitted to you this year calls for a stable active end strength of 495,000. I think that stability is very important. This is not a large army. It is only the eighth-largest army in the world. It is the smallest we have had in almost 60 years. So, it is a very important part of our submission to have the stability that we need.

The second part of that change is a cultural change. We have moved the Army from a threat-based force to a capabilities-based force. I have spent 34 years in the Army, and 27 of those were in that threat-based force. It was a very easy time for us in terms of what we had to do. We built the Army against the threat. We trained against the threat. We wrote our doctrine against the threat. We did everything against the threat. Most of us spent a lot of time in Europe, walking, what we called, the general defense plan. We knew exactly how we were going to fight a battle if we had to fight a battle.

What we have found, in the last 7 years, is that we have been involved in a lot of other exercises that we did not expect and that we did not plan for. Although the victory in the cold war has been won, peace is not at hand. The world is still complex. It is unpredictable. It is still very dangerous.

I think the Army, as an institution, reacts well to change. We know how to administer change. We know that it is important to update your doctrine. We have updated our doctrine. It is important to change your leader training programs, and we are in the process of doing that. It does not occur overnight. You have to adjust your unit training programs, and we continue to do that.

I want to assure the members of the committee that we will always train against the most difficult part of our mission, and that is high-intensity combat. Because, if we can do that, then we can do the other missions that we have been given.

The modern equipment, which the committee has helped us in receiving, is very important to us. And, of course, most of all, our quality people continue to be our greatest strength.

I do not care whether you see our soldiers in Korea, as you did, or in Hawaii, as I did, or in Bosnia. They are doing a great job, and I could not be prouder of them. I would tell you that the change which has occurred almost invisibly to the American people is a great accomplishment. We have done it well, but we have not done it perfectly. We did it quickly. We did it over a period of less than 7 years. We did it at a time when the pace had gone up about 300 percent. And there are challenges that we face. Basically, they are in the three R's.

The first R is readiness. As you visit our units, you will see that we often have a shortage of people. Many of our units do not have the required number of people that they need. There is too much turbulence. We are moving them too fast. We understand that. We are undermanned, and we have some imbalance, in terms of our

force structure and end strength, and we know how to deal with it.

I would also tell you that if we were ever pushed to the limit where we were fully committed, we really would need to be able to access the Ready Reserve as quickly as possible. That is the only way we will be able to fill those units that we have in an undermanned status right now.

I should also mention to you that the readiness for this year is very much dependent upon the supplemental for Bosnia. What we have done in the Army is to pay the bills by mortgaging the fourth quarter training funds. That is a tough way to do business, but it is the only way we know how to do business. And, consequently, we are very dependent on and ask for your support of the 1997 supplemental.

The other issue, or the second R, is recruiting. As you mentioned, Senator Inouye, it is a terrifically enormous challenge that we face. The mission is up this year. What we have done is we have drawn down the Army. We suppressed the mission for the Recruiting Command. As we have arrived at our end state, their mission has gone up 20,000 recruits. Consequently, we are having to expend more effort in recruiting the high quality soldier that is so important to us.

We will not compromise quality, but, it is a difficult challenge. Success is not preordained. I can tell you, having looked at it, I think we are going to make it, and we will continue to keep the quality people that we need.

The third R has to do with human relations. We are dealing with some very tough issues. We have been very open. We have been very visible. And, we have been very straightforward in terms of our tackling these human relations issues. We have done that because the allegations that have been made are abhorrent to our sense of values and our sense of decency. They destroy the strength of the Army in terms of teamwork—being able to work together—and the discipline and respect for the chain of command, both up and down the chain.

I would tell you that, when everything is said and done, I think the American people will realize we have done this properly, and we are going to be a better institution because of it.

That is where we are today. But, we are not done changing. Change is hard, but you must change in order to be relevant. The Force XXI process that we are involved in really is evolving the Army from an industrial age organization to an information age organization. We have completed a very successful advanced warfighting experiment [AWE] at the National Training Center.

What we did was to equip a brigade with the most modern equipment available in the information age. We asked them to look at three questions: where am I; where are my buddies; and where is the enemy? If we could answer those questions, we felt we could make a fundamental change to the way we do business.

I will tell you, in all sincerity, that we answered those questions, and I am very, very pleased with the results of the AWE. I think we are onto something really big, and we are going to continue with Force XXI changes.

That will lead us to an Army XXI, which is a product-improved organization over what we have right now. It takes the systems that we have now, with the exception of Crusader and Comanche, and gives us the information age Army that we need.

At the same time, we are looking at the Army that we will need for 2020. That will be a vastly different Army. We have to start driving the research and development efforts right now, to make sure that the technologies are available for us when we need them in the Army after next. As we continue to mature through the Force XXI process, we will develop the other things that I have talked about that are the essence of the Army: the leadership training, the unit training, the doctrine, and those types of things. I think the Army after next and the Force XXI process offer a true revolution in military affairs.

PREPARED STATEMENT

The budget that we submitted this year has the right balance between stability and change. Thank you for your attention, and I look forward to your questions.

[The statement follows:]

PREPARED STATEMENT OF GEN. DENNIS J. REIMER

Mr. Chairman and members of the Committee. Thank you for this opportunity to speak to you about America's Army, the world's best Army. I am pleased to report that the U.S. Army remains trained and ready today, and is proudly serving the nation around the world and at home. In the face of declining resources and increasing missions, the Army must continue to carefully balance readiness, modernization, endstrength and quality of life while executing missions across the full spectrum of military operations. The challenge has not been easy.

PRIORITIES AND CHALLENGES

I would like to address three key issues that are challenging the Army today—they are readiness, recruiting and retention, and human relations. These are critical areas where the Army needs continued support from this Committee and from the United States Congress. I will then talk about how today's Army has changed and will continue to change to meet the challenges of today, tomorrow and the 21st Century.

Readiness

First and foremost, thank you for your support in maintaining the current readiness of the force. Your support for operations and maintenance (O&M) funding has been crucial. Your actions have helped, and will continue to help, save soldiers' lives. Adequate O&M funding has permitted us to maintain forces that were able to answer the nation's call, to maintain peace, prevent wars and serve at home. Within our current funding levels, we have ensured that the "first to fight" units are resourced at levels that allow them to train, deploy, and operate in support of the CINC's. Later deploying units are resourced based on their deployment timelines. The soldiers in our Army appreciate your continued support in this important area.

Today's Army is a successful force that has done the nation's bidding. We have great soldiers led by competent, well-trained leaders equipped with the most capable and best maintained equipment found anywhere in the world. There are some shortages of people and too much personnel turbulence in the field, but we are attuned to these issues and continue to work the force structure balance issues while simultaneously keeping the Army trained and ready.

But, this is a busy force. Given the current geo-strategic environment and our National Military Strategy, an active force of 495,000 soldiers is the minimum necessary to accomplish assigned tasks with acceptable risk while maintaining a personnel tempo that permits us to retain quality soldiers. Brave, selfless soldiers will accomplish all assigned tasks, but if they see the military profession as incompatible

with a reasonably stable family life, then the future of the Army will be in serious jeopardy.

I also ask your support for Army endstrength sufficient to meet the requirements of the National Security Strategy. Numbers do matter. As General Creighton Abrams was fond of saying, "The Army is not made up of people, the Army is people." The most important and the "smartest" weapon in the Army's defense arsenal is the soldier, carrying out the will of the nation. For every unit deployed on an operational commitment, a second is preparing for deployment, and a third, having just redeployed from the mission, is at home station retraining and sharpening its skills. A properly sized force will be able to achieve the objectives directed by the National Command Authority without placing excessive strain on units, soldiers or their families.

Recruiting

The Army continues to enjoy success in attracting and retaining high-quality recruits, but enticing young people to serve, in the numbers that we need, is becoming increasingly difficult. Today's soldiers are the best educated and disciplined in U.S. history. In fiscal year 1996, the active Army met its recruiting goals for both quantity and quality. The active Army recruiting mission continues to increase as the drawdown concludes and we begin to replace losses on a one-for-one basis. The recruiting mission rose from 73,000 in fiscal year 1996 to a projected 89,700 in fiscal year 1997. In order to recruit the numbers we need, we will recruit 100 percent high school graduates, 67 percent Category I–IIIA and no more than 2 percent Category IV. We are adjusting the requirement for high school diploma graduates from 95 percent to 90 percent, the pre-drawdown prerequisite and Office, Secretary of Defense's (OSD's), goal. A high school diploma is an indicator of a soldiers ability to complete his initial service obligation, but it is not the sole measure of quality. Quality is measured by the scores on the Armed Services Vocational Aptitude Battery (ASVAB) and this adjustment will ensure we continue to have a quality force. Even with these changes the statistics are higher than for the force that fought Operation Desert Storm.

Retention

Good people will continue to answer the nation's call; however, we must have the tools and enablers to make the Army an attractive career. A key component in attracting and retaining the caliber of soldiers that we need is quality of life programs. The increased frequency of deployments, promotion slow-downs due to budgetary constraints, and a concern over health care and retirement benefits have the potential to increase uncertainty and adversely affect retention and recruiting. Consequently, the quality of life for both married and single soldiers is a top priority of the Army. Our soldiers sacrifice a great deal to serve their Country. It is our obligation to provide them and their families with fair and adequate pay, quality medical care, safe and affordable housing, and stable retirement benefits.

Human Relations

The most difficult issue we face today is dealing with the human dimension of change. There is a great deal of human emotion associated with all the changes the Army has gone through during the last several years. Sexual misconduct, sexual harassment, and extremism are totally counter to the values in our Army. They directly attack the dignity and mutual respect that give us the cohesion and espirit needed to win on the battlefield. We are addressing them in the context of respect for others—a core value of the U.S. Army.

The operating tempo (OPTEMPO)—the operational pace of our units—and personnel tempo (PERSTEMPO)—a soldier's time away from home station—are both high. The changing demographics have added to this human dimension of change. Today, approximately 63 percent of the Army is married and more soldiers than ever reside off post. The percentage of women in the ranks has also increased over time and now approaches 14 percent of the force.

During the past several months, the most visible of these challenges—and the one that has most negatively impacted on the Army's reputation—is the issue of sexual misconduct/sexual harassment in the ranks. It is easy for people in and out of the Army to get caught up in the drama and hyperbole of current events, but such a reaction is not likely to result in any meaningful changes that will benefit the nation's Army. Real, sustainable progress in the fight against sexual harassment will not occur overnight. However, the leadership of the Army is strongly committed to doing what's right so all soldiers understand three things: the responsibilities they share, the systems that are in place to prevent and report sexual harassment, and the Army's policy of zero tolerance for sexual harassment.

It is critical for the Army to successfully meet and overcome the challenge created by sexual harassment in the ranks. This is because sexual misconduct/sexual harassment undermines the three fundamental elements that serve as the very foundation stones of the Army. These are the values of the Army, military discipline, and teamwork. We have been successful for 221 years because of the strong bond of trust and confidence that is shared by our soldiers. This trust and confidence is based on our commitment to Army values, discipline, and teamwork.

DRAWDOWN UPDATE

In fiscal year 1996, the active Army completed its drawdown to a base force of 495,000 soldiers. In real terms, the ranks have been reduced by 36 percent; and resources have been reduced by 39 percent. Since the drawdown began in fiscal year 1989, the total force has been reduced by 620,000 soldiers and civilian personnel. Today's Army is smaller than at any time since before World War II. In terms of size, our Army is the eighth largest in the world. However, I am proud to report that what our Army lacks in quantity it makes up by the quality we carefully preserved throughout the drawdown.

It was important to take care of the people who served the country so well, and at the same time, to keep the remaining Army trained and ready during the inherent turmoil of the drawdown. In order to accomplish this, the accounts for modernization were reduced, and the most modern equipment distributed across the remaining force. The truly historic accomplishment is that the Army remained trained and ready throughout the drawdown. This unprecedented achievement was accomplished through the dedication and selfless service of great soldiers doing as much or more with less. The Army now needs to maintain adequate funding and stability in personnel endstrength.

It is hard to predict when OPTEMPO and PERSTEMPO will affect retention of quality soldiers, but the time may be growing closer. We are asking a lot more of our soldiers these days, and they have responded magnificently. We must never forget that quality soldiers are our most precious resource, and we must give them the quality of life and stability that we have promised and they have earned by their selfless service.

THE ARMY—GLOBALLY ENGAGED AND COST EFFECTIVE

The Army's fundamental purpose is to fight and win the nation's wars. But the Army also is engaged around the world—protecting the national interests, supporting the national security strategy, and assisting the nation at home. The Army has more than 100,000 soldiers and 28,000 civilians stationed around the world, primarily in Europe and in the Pacific. On any given day in fiscal year 1996, on average, an additional 35,000 soldiers were deployed away from their home stations conducting operations and participating in exercises in over 70 countries. Current missions include the Sinai, Macedonia, Kuwait, Haiti, Partnership for Peace exercises, Joint Task Forces for counterdrug operations, hurricane, and flood relief, and, of course, Operation Joint Guard in Bosnia. Concurrently, units are routinely deployed to our combat training centers, training to maintain readiness for possible regional conflicts.

The Army's most visible ongoing deployment began in December 1995 when NATO, with almost 20,000 American soldiers, deployed into war-torn Bosnia-Herzegovina as part of the Implementation Force (IFOR) to enforce the provisions of the Dayton Peace Accord and try to introduce stability into the region. It was a seemingly impossible mission to help bring peace to an area of the world hopelessly mired in ethnic hatred and civil war. American soldiers on the ground, well trained and with a clear mission, were able to separate the warring parties and have set the conditions for peace to take hold.

Today, some fourteen months into this enormous peace enforcement effort, the Stabilization Force (SFOR) has assumed this important international effort. American soldiers, with NATO and coalition ground forces, continue to successfully enforce all of the military provisions in the Dayton Peace Accords. American soldiers routinely demonstrate their professionalism, technical skill, situational sensitivity, and determination to accomplish a difficult mission in an often dangerous and unforgiving environment. Our successes in helping to stabilize and rebuild Bosnia are clear proof that it takes soldiers on the ground—a visible force of well trained, professional soldiers—to show warring parties that America means business. Once again the United States Army has been at the forefront, clearly demonstrating to the world that we are a full spectrum force—a capabilities-based force—a force of decision.

While the majority of soldiers deployed throughout the year were active duty personnel, the Army could not have accomplished these missions without the support of the Army National Guard and Army Reserve forces. The reserve components provide essential capabilities not found in the active force; they also play an increasingly important role in the National Security Strategy of Engagement and Enlargement, participating in peacekeeping, humanitarian and civil assistance operations, while at the same time responding to domestic emergencies. Reserve component support was essential during Operation Joint Endeavor in Bosnia, which mobilized almost 8,000 National Guard and Army Reserve soldiers. Over 3,000 soldiers augmented or backfilled units in Germany, and over 2,300 deployed to Bosnia and conducted public affairs, fire fighting, fire support, aviation, logistics, maintenance, civil affairs and psychological operations. Today's Army is a seamless blend of active component, reserve components and DA civilians working together to achieve America's goals.

Requirements for U.S. soldiers on the ground continue to increase. Today's Army provides balanced capabilities, but it is stretched. The key to future peace is balanced capabilities sufficient to reassure allies, deter conflict and, if necessary, to compel adversaries who threaten U.S. interests. Balanced capabilities are necessary to pursue the Enlargement and Engagement strategy. For example, last year, American soldiers participated in 16 NATO "Partner for Peace" exercises designed to expand and improve interoperability among NATO and other European nations. Operation Able Sentry, a peacekeeping operation, is a task force that observes and reports from the former Yugoslav Republic of Macedonia as part of the United Nations Preventive Deployment Force. Their presence, manning outposts between Macedonia and Serbia, is terribly important to protect the border and bring stability. Similarly, 61 soldiers stand watch on the border between Ecuador and Peru to assist in the peaceful settlement of the border dispute between those two important U.S. trading partners. American soldiers on the ground around the world serve not only as emissaries advancing the security interests of the United States, but promoting U.S. values.

CHANGING TO MEET THE CHALLENGES OF THE FUTURE

The world recognizes that commitment of American soldiers on the ground is the most emphatic demonstration of resolve that the United States can make. The Army provides capable land forces to the Joint Force Commander to compel our enemies, deter potential adversaries, reassure friends and allies, and, in times of domestic emergencies, to support Americans at home. After the Cold War, we find the world less dangerous, but the challenges much more complex. Former Senator Sam Nunn articulated very well the environment facing us today when he said, "It is a strange and ironic world. In a tragic sense, the world has been made safer for religious, ethnic, tribal, and class conflict."

While the obvious threats to our national security today may be less dangerous, they are much more diverse and complex. Ethnic conflict continues to spread and rogue states pose a serious danger to regional stability. The proliferation of weapons of mass destruction, the threat of terrorism, international crime, and drug trafficking pose a serious danger to the security of the United States and to global stability. During the Cold War, our nuclear deterrent led others to challenge us below the nuclear threshold. Similarly, we are challenged today by rogue actors on the world stage—national, subnational and some without borders. We are also challenged by proxy and by terrorists or others who seek to exploit perceived weaknesses. Those who seek to threaten U.S. interests will continue to do so in the manner that appears to offer the greatest advantage. In this uncertain environment, the Army must have balanced capabilities to deter or defeat a potential foe. Balanced forces provide the broadest range of options to policy makers and offer the most credible deterrent to the wide spectrum of potential threats. The Army has changed and is ready for today's unpredictable world, providing balanced capabilities that joint force commanders can tailor to meet multiple, varying requirements.

The Army is a proud member of the best joint force in the world today. The United States has the best Navy and Marine Corps in the world. They are fully capable of defeating any maritime threat to U.S. access to the sea and providing power projection for its land forces. The United States is also fortunate to have the best Air Force in the world. The U.S. Air Force is fully capable of defeating any adversary to achieve air supremacy and global power projection. The U.S. Air Force's ability to gain and sustain air supremacy, destroy targets on the ground and project land forces around the world, is critical to successful operations in any environment.

For its part, the U.S. Army must continue to provide land forces, trained to a razor's edge and firmly focused on our fundamental role—to fight and win the nation's

wars. Since the fall of the Berlin Wall in 1989, the Army has changed dramatically from a threat based force, primarily focused on defeating the Soviet Empire on the plains of Europe, to a capabilities based force, relevant to the wide ranging needs of the nation. The Cold War Containment strategy was designed to prevent war, and it did that. Engagement and Enlargement is a strategy to ensure success—to help shape the environment—to contribute to global stability and prosperity in the 21st Century. Today, the U.S. Army is a full spectrum force serving around the world and at home, deterring potential adversaries, reassuring friends and allies, trained and ready to compel our nation's enemies, and in times of domestic crisis, to lend assistance to our communities.

Today's Army is the premiere land combat force in the world. Our capability to wage and win high intensity warfare is a primary deterrent to those who would threaten the United States or our Allies. Deterrence is far cheaper than fighting a war. As President Clinton said during his State of the Union Address, "We must be shapers of events, not observers. For if we do not act, the moment will pass and we will lose the best possibilities of our future." Consistent commitment to strong defense by the United States decreases our risk and assures the lowest defense spending over the long-term. Army forces achieve these and other policy goals. We must continue to maintain the appropriate mix of heavy, light, and special operations forces to ensure the continued capabilities of the Army—to help win the nation's wars.

Today's National Security Strategy of Engagement and Enlargement has led to a dramatic increase in the use of the Army as an instrument of national policy. The Army's full spectrum capabilities are uniquely suited to reassure allies and deter potential adversaries, thus supporting the National Command Authority's efforts to enhance U.S. and global security. As the world's only super power, we must recognize that we are indispensable for peace in this tumultuous world. Every Allied officer and foreign military official I meet seeks closer ties and cooperation with the United States Army. We do this primarily through training exercises, student exchange programs and with our Military Attachés. This "boots on the ground" approach develops enduring friendships and understandings and increases the United States' influence worldwide.

Our participation in operations to reassure warring parties and bring stability to an uncertain world is a singularly important aspect in creating global peace and prosperity. In my view, the key to providing the requisite capabilities to the nation is balanced, general purpose forces. If you ask the joint force commanders in the field today what capabilities add the most to their ability to execute the National Military Strategy, I think they will agree that U.S. success and influence in most situations ultimately depends on putting soldiers on the ground.

THE U.S. ARMY—A FULL SPECTRUM FORCE FOR TODAY AND TOMORROW

The Army's current force structure is based on the decisions of the 1993 Bottom-Up Review and the National Security Strategy. It has served us well in the uncertain post-Cold War period. The exact structure of our forces is a subject of continuous analysis and evaluation. Structural change, driven by strategy, requires integration of doctrine, training and technology. Wherever we are on the continuum of change, we must ensure we have the right soldiers with the right equipment and the right training to successfully accomplish the mission. That's why I welcome the top to bottom study of force structure within the framework of the Quadrennial Defense Review (QDR). I believe the QDR is off to a good start because it has focused on defining our strategy first. The size and composition of the nation's military forces must always begin by addressing the requirements that flow from our National Security Strategy. The reality of today is that land forces are highly suitable and versatile tools for implementing the National Military Strategy's strategic enablers—overseas presence and power projection. They provide the most flexible, visible, sustained presence overseas and this ultimate expression of America's power—soldiers on the ground.

The United States Army provides capabilities across the full spectrum of military operations. It is a force that's capable of not only winning the nation's wars but also of preventing wars and shaping the international environment. Soldiers on the ground help provide regional stability. During the President's State of the Union Address, he emphasized the global economy and the world's interdependence and the importance of stability throughout the world. The United States Army is a primary contributor to that stability.

While helping provide stability through overseas presence and power projection, the Army must be prepared for the most dangerous contingency, the requirement to deter an adversary or, if necessary, compel a major enemy in future decades. This

requirement drives recapitalization of balanced ground forces with emphasis on modernization. The current force is designed based on acceptable risk—based on the current threat environment—but further forestalling of modernization will greatly increase risk. Risk may not be measured in a win-lose equation, but rather in casualties, resources and time to achieve victory.

America's Army provides the nation with the capability for full spectrum operations. Soldiers on the ground are America's most visible sign of deterrence and reassurance. Securing peace and stability requires long-term commitment—a role the Army is uniquely structured to fulfill. Every day, the Army meets the demands for forward presence while remaining prepared to project power into any situation threatening the nation's interests. The capabilities to compel, deter, reassure, and support comprise the essence of today's Capabilities based Army—the nation's force of decision. The Army is working to ensure we will have balanced, capable land forces in the future. Army warfighting experiments address mechanized and light warfare as well as command and control and the needs of the individual soldier. Our Force XXI process is showing us better ways to structure our forces for the future.

Additionally, the Force XXI experience demonstrates that enhanced situational understanding provided by new information and communication technologies is terribly important on the battlefield because it will give us an advantage that we have never had before. It allows our soldiers unprecedented ability to answer the battlefield's three key questions: "where am I, where are my buddies, and where's the enemy?" We must continue to leverage the capabilities of the information age, and at the same time, we must be able to deal with industrial age armies. We must have a foot in both ages. It's a tough challenge, but we have to be able to handle it. These experiments will continue to guide us toward the most effective systems, organizations and training techniques. Our goal is to enhance warfighting capability by making faster and better decisions at each level of the chain of command and making soldiers more capable of accomplishing their missions at the lowest risk. While our increased ability to collect, analyze, disseminate, and act upon battlefield information is absolutely critical, soldiers on the ground, directly interfacing with people will always be the key to success.

With the end of the Cold War, a prominent theory arose that there would no longer be a need for land forces, that power projection and national military strategy could primarily be carried out through precision strike using technologically advanced smart weapons. Reality proved that theory to be invalid. History has shown that we cannot counter the human dimension of warfare with purely technological solutions. We must achieve a balance between precision engagement and dominant maneuver. Those two capabilities must be synchronized and complimentary. Precision engagement is great, but there are counter-actions that can reduce its effectiveness. We must realize that, and we must keep precision engagement and dominant maneuver in balance.

The United States Army has taken a very analytical approach in balancing the force. But, in the end, affordability will continue to be a major issue. Consequently, we are working hard to make the Army a more efficient organization. We have emphasized efficiencies during the last few years to get the most out of every dollar that we are given. But we also believe that the nation must take a hard look at the forces it is maintaining. We must ensure that we are funding the right forces—forces with the capabilities we need today and in the future, not those we needed in the past. I believe the QDR effort represents the opportunity to shift to a strategy-based resource distribution paradigm.

MODERNIZATION—THE KEY TO OUR FUTURE SUCCESS

The Army faces tremendous modernization challenges as we look into and prepare for the 21st Century. American history has shown, time and time again, that we have asked soldiers to go into harm's way on short notice to defeat a determined and dangerous foe. When that happens, we must be satisfied that we have done our best to prepare them for the task at hand and ensure that they have the very best weapons and equipment the country can afford. We are providing adequately for the soldiers of 1997, but we have serious concerns about the equipment our soldiers will have as we cross the threshold into the 21st Century. Currently, the Army Research, Development and Acquisition (RDA) budget is only 15 percent of the Department of Defense RDA—in my view, this is the absolute rock-bottom minimum. We are aggressively seeking efficiencies within the Army to address this shortfall through acquisition reform and other measures to reduce operating costs. Balancing the readiness requirements of today's soldiers with the modernization demands of tomorrow's Army continues to challenge us all.

The Army has reshaped the force while maintaining current readiness, in part, by deferring modernization and redistributing modernized equipment across the smaller force. Further deferral of modernization will incur significant risk to future readiness. With a smaller Army, every unit must be able to execute a full range of operations. Our heavy units are general purpose forces that not only can win our wars but can also accomplish other missions, as the 1st Armored Division demonstrated when it deployed to Bosnia as part of the IFOR to separate the warring parties and set the conditions for peace to take hold. We must modernize our equipment to deter, or if necessary, fight mid- and high-intensity conflict. Light forces also need the advantages available from information age technology to enhance their lethality and survivability for the challenges of this unstable world.

Our modernization strategy emphasizes integrating new technology, especially technology that will allow the Army to establish information superiority, and upgrading existing systems in order to preserve America's scientific and technical edge. This strategy seeks to establish a mental agility—the ability to acquire and act on information faster than our adversaries—by integrating critical information management technologies across the force. At the same time, we will invest in key technologies and systems to ensure, that in the future, we have retained the physical agility—the ability to effectively mass and synchronize the effects of our advanced systems across the breadth and depth of any future battlefield. It is the combination of mental and physical agility that will ensure the Army maintains its capability to operate across the full spectrum of possible operations in the future.

The Army's highest priority in the near-term is to increase our ability to establish information superiority—to collect, analyze, disseminate, and act upon battlefield information. This will increase the effectiveness of current systems and organizations, enable new organizational designs, and provide the operational environment for the introduction of new major weapon systems. This includes modernization of our logistics automation systems which will enhance our operational capabilities, allow us to realize efficiencies, and improve readiness. Our second priority is to maintain the combat over-match capability essential to successfully project a force against numerically superior adversaries. The third priority is to develop in the technology base the capability to transition to full spectrum dominance. We will continue to enhance the capability to project combat power, focusing on increasing the effectiveness of light forces and reducing heavy lift requirements, while recapitalizing and inserting technology to extend the life of existing systems. In the out years, the strategy will reorder priorities and focus on full spectrum dominance.

Joint Vision 2010—an operationally based template for guiding the U.S. Armed Services' transition into the 21st Century—is our guidepost for the future. Joint Vision 2010 seeks to achieve full spectrum dominance through the application of four operational concepts: dominant maneuver, precision engagement, full dimensional protection and focused logistics.

Joint Vision 2010 provides a coherent view of the future and the implications for joint operations expressed in terms of emerging operation concepts. Army Vision 2010 is the blueprint for the Army contributions to the operational concepts identified in Joint Vision 2010. The document serves as the conceptual template for how America's Army will combine the vitality and innovation of its soldiers and civilians and leverage technological opportunities to achieve higher levels of effectiveness as the land component member of the joint warfighting team. Army Vision 2010 focuses on the implications that the operational concepts identified in Joint Vision 2010 will have on the fundamental competency of the Army—conducting prompt and sustained operations on land across the entire spectrum of military operations. Army Vision 2010 links Force XXI, the ongoing process to guide the Army's transformation, with the Army After Next, the Army's emerging long-term vision of a capabilities-based Army. Army Vision 2010 provides the azimuth for making the vision a reality.

Force XXI is the comprehensive process for modernizing and preparing for the challenges of the 21st Century. The initial product of the Force XXI process will be a versatile Army with the capabilities America will need in the first decade of the next century—Army XXI, which is forming right now at Fort Hood, Texas. Army XXI is a product-improved force. We are taking the equipment we have today and moving it into the information age. The Force XXI process seeks to exploit revolutionary changes in technology to mitigate the effects of reductions in military funding and endstrength and to provide a quantum leap in capabilities. Digitization, the application of information technologies to acquire, exchange and employ timely battlefield information, is critical to the Force XXI process. It will enhance situational awareness and provide the means for information dominance by enabling friendly forces to share a common picture of the battlefield while communicating and targeting in real or near-real time.

At the same time we are fielding Army XXI, the intellectual energy of the Army is switching to the Army After Next. While Army XXI is a product-improved Army, the Army After Next is a totally different force. We know that it must be more strategically and tactically mobile, more versatile, more lethal and logistically unencumbered. The lessons learned in developing Army XXI combined with continuing technological leaps will provide us the tools to build the Army After Next, a force with the capabilities to conduct simultaneous, continuous, and seamless operations across the full spectrum of military operations.

Some have called for personnel reductions to pay for modernization, but further personnel reductions will incur additional risk. Not only will the Army's capability to execute the National Military Strategy be impaired, the long-term viability of the force could be placed at risk. The Army must maintain sufficient endstrength and force structure to execute assigned missions in accordance with the National Military Strategy without placing excessive burdens on soldiers and families. Rather than cutting endstrength, the Army is reexamining and reengineering systems to save money and provide funds needed for modernization.

REENGINEERING EFFORTS

Constrained resources require the Army to become more efficient as well as make tough decisions and trade-offs. Thus far, we have succeeded in maintaining near-term readiness, but we have sacrificed modernization, one of the keys to long-term readiness.

The Army continues to pursue innovative ideas to increase efficiency and mitigate some of our funding shortfalls. We are streamlining operations, adopting suitable commercial practices, and reorganizing processes and programs to generate savings. These savings will help the Army maintain an endstrength commensurate with operational commitments, increase investment in essential modernization programs, and increase spending on vital quality of life programs. We are working to instill the concept of efficiency within the very fabric of the Army's enduring values. Long-term readiness is linked to our ability to make maximum use of resources.

All major Army commands are working on reengineering and redesign initiatives that will result in more cost-effective and efficient organizations. Efforts to improve business practices include avoiding or reducing costs, streamlining and consolidating operations, and significantly increasing private sector participation in infrastructure improvements. Acquisition reform makes possible significant savings needed to develop a 21st Century force by ensuring that the latest technology, goods, and services are obtained on time and at the lowest cost. In logistics, the Army is evolving from a supply-based to a transportation-based system to reduce or eliminate the costly on-hand inventory of supplies, what we refer to as the "iron mountain." We are committed to a comprehensive redesign and restructuring of all facets of the institution; however, I must tell you that legislated restrictions, such as those restricting the amount of depot maintenance that can be privatized, limit our potential in some of the most promising areas.

The Army also is conducting a thorough review of development and acquisition programs. The Army will retire some older equipment without immediate replacement and accept the attendant risks. We are doing this to save the exorbitant maintenance costs of these older systems. Our intent is to apply these dollars to systems for Army XXI, the force of the first decade of the 21st Century. We are making tough choices in the allocation of limited resources. The Army cannot continue to invest both in legacy systems and in replacement systems. Rather than stretching out systems to uneconomic rates of production, we have cut whole programs. We are attempting to maintain economic production of the essential systems we need and can afford. The alternative, deeper cuts in force structure, will result in increased capability shortfalls in the force.

THE STRATEGIC IMBALANCE—REQUIREMENTS AND RESOURCES

In this unstable and turbulent world, the Army will continually be called upon to meet the nation's needs. However, constrained budgets are threatening the Army's capability to meet future requirements across the full spectrum of operations and achieve swift victory with minimal casualties. Since 1989, the Army's buying power has declined 39 percent in constant dollars. Our share of the Defense Department budget has decreased from nearly 27 percent in fiscal year 1989 to 24.6 percent in fiscal year 1997 and will fall to 24.3 percent in fiscal year 2001.

Current fiscal projections will place tremendous stress on the Army's ability to execute full spectrum operations in support of the National Military Strategy. Reduced infrastructure, other efficiencies, and OSD redistributions allowed for increased modernization investment. Still, with these initiatives, the Army's future

buying power never returns to even the depressed level of today. The fiscal year 1998 President's Budget for the Army totals $60.4 billion. After normalization for supplementals, transfers and inflation, the total obligation authority for fiscal year 1998 is $59.7 billion in fiscal year 1998 constant dollars. This figure represents a loss in buying power of $3.8 billion from fiscal year 1997 and of $5.9 billion from the fiscal year 1996 actuals.

The most significant short-term risk is the impact of the unprogrammed costs of contingency operations. In fiscal year 1996, Congress reprogrammed $1.65 billion to support Operation Joint Endeavor and other contingencies, but the Army still absorbed approximately over $400 million in costs. Although the Army is now budgeting for ongoing operations, unprogrammed missions—whether in response to contingencies or natural disasters—continue to have an impact on the Army's ability to maintain readiness and quality of life programs.

The greatest potential threat to Army readiness is the medium and long-term impact of an increased operational pace and insufficient modernization funding. The first risk is that by failing to modernize and update our equipment, we put tomorrow's soldiers at risk. In the event of conflict, a lack of modern equipment will cost the lives of brave soldiers. Speaking of our failure to modernize after World War II, General Creighton Abrams said, "We paid dearly for unpreparedness during those early days in Korea with our most precious currency—the lives of our young men. The monuments we raise to their heroism and sacrifice are really surrogates for the monuments we owe ourselves for our blindness to reality, for our indifference to real threats to our security, and our determination to deal in intentions and perceptions, for our unsubstantiated wishful thinking about how war could not come."

The second risk is more difficult to assess or to quantify, the risk of loss of future leadership. In the Army today, there are hundreds of young officers and soldiers who will be the senior leaders in 2010. They will set the standards of readiness and training and will set the conditions for the success and survival of the Army in future combat. Those soldiers are out there today serving their country proudly. They are training hard and learning well. They may have deployed to Haiti or Guantanamo or both and may be in Bosnia today. Those soldiers are proud of their units' accomplishments and most want to continue in the Army. But those soldiers have personal goals as well; most notably the desire to have and raise families.

Excessive time away from home is often cited by quality professionals as the main reason for their decision to leave the military. The Army has adapted personnel practices to assure that individual soldiers do not bear a disproportionate share of these requirements and has increased reliance on our Guard and Reserve forces for deployment missions. Still, it is common to find soldiers in today's Army that have been away from home, answering the nation's bidding for 140, 160 or 190 days this past year. These soldiers do not complain—they perform magnificently every day. It also is not uncommon to see spouses who, though proud and supportive of their soldier's past service, believe they have done their part. All of our research shows the views of the spouse to be the most important factor in a soldier's decision to stay in the Army. The Army's future depends on our ability to attract and retain the best soldiers to be tomorrow's leaders.

The Army must have soldiers in sufficient numbers to meet our commitments without placing excessive burdens on individual service members. It is crucial that the Army maintain balanced capabilities. The country owes its soldiers a quality of life sufficient to raise their families successfully and with dignity. We can do no less.

THE WORLD'S BEST ARMY

The quality of America's soldiers has been the key to our success in the past, and it will be the key to our success in the future. Inside the Army, we have sought to keep the right balance among readiness, endstrength, modernization, and quality of life. The Army has retained a trained and ready force through a major drawdown for the first time in history. America's Army is trained and ready today and is working hard to meet the inevitable challenges of tomorrow and the 21st Century.

At the very heart of meeting the challenges in the Army's future is a continuing commitment to a full spectrum force of quality active and reserve soldiers and civilians. The global security environment, the complexity of emerging technologies, and the diverse missions being assigned to the Army will require men and women of intelligence and dedication who are able to adapt quickly to the missions at hand.

Soldiers are our Credentials.

BOSNIA SUPPLEMENTAL

Senator STEVENS. Well, thank you very much, General.

Mr. Secretary and General, as the General has just said, you have done it this past year the way we have always done it in terms of using moneys from other accounts for forces in the field, but we have never done it to the extent we have done it in the last 2 years. It is my judgment that there just has to be a better way, because the chances of our being able to fully repay these accounts in future years, as we hope to be able to do this year, are very slim.

Now, we have before us $2.1 billion for the supplemental. We did give the Department moneys for contingencies for this fiscal year. But the actual expenditures have far exceeded even the estimates that we had of what the contingency would be.

Now, this 1998 budget has a requirement of $1.009 billion for Bosnia. And we have to know how firm these really are. Are those all of the postdeployment costs—reconditioning of gear and equipment, return of personnel to their permanent duty stations—is that really all of Bosnia? Can we say that there is not going to be a 1998 supplemental before us 1 year from now for Bosnia expenses, Mr. Secretary?

Mr. WEST. I would anticipate that it is the fiscal year 1998 costs in that supplemental, Senator.

Senator STEVENS. That is for 1997. I am just saying we have got that before us right now for 1997. But we have also got the 1998 request.

Mr. WEST. Right.

Senator STEVENS. Now, is the 1998 request underfunded, like 1997 was?

Mr. WEST. The answer is that I do not know if there are further postdeployment costs that might occur that are not reflected there.

General REIMER. The only thing I would say, Mr. Chairman, is that it is our best estimate of the cost, based upon the plan. If the plan changes, if something should happen to the June 1998 date, if it is accelerated or slipped, that could affect it. If the force levels that are necessary, based upon the situation on the ground, change, the cost might change. But based upon the plan—and it assumes a getting out date of June 1998—it is our best estimate.

Senator STEVENS. Well, are we losing any possible financial control over these budgets? We do not face supplementals. We do not face reprogrammings under the old Food and Forage Act. The money is just spent from any account that is available for forces in the field. On our trips to Bosnia, Kuwait, Saudi Arabia, and Italy, we saw money being spent by CINC's without any predetermination by anyone on a departmental level of whether they were necessary.

We saw A–10's lined up in Aviano, and there are no tanks in Bosnia. We saw excessive costs in Saudi Arabia and Kuwait, far beyond what were necessary to meet the current threat. And they all come out of other accounts. We are going to have to really dig into other accounts to repay those O&M accounts when we approve this supplemental.

If we face that again next year, I have to tell you, there is not going to be that possibility next year. Next year, if we face a reprogramming, it is going to come out of—really, not a reprogramming, but a supplemental request to repay those accounts—it is

going to come out of force structure. Now, that is a contingency I do not want to live to see, and I think that the committee agrees.

I have to believe that one of the problems is that we are using civilian contractors—and I am not opposed to civilian contractors—we all believe that there is a need for them—but we are using them to pay costs that you cannot pay out of the budget. I do not think that the Food and Forage Act gives you the right to hire civilian contractors to do functions which would otherwise be paid through normal accounts and the use of normal military personnel.

Now, are we looking at a contingency in terms of that type of operation for 1998, as you pull out of Bosnia?

Mr. WEST. If you are talking about our contract, I think we are still planning to use it, yes, sir, Mr. Chairman.

Senator STEVENS. Have you programmed that? Is it in the budget?

General REIMER. That is contained in the estimate that we have submitted.

RECRUITING

Senator STEVENS. I hope so, because we are losing sleep over it right now. Then we are going to have a big battle with the House, I am sure, over where there moneys are allocated that we have to reprogram for this 1997 supplemental.

Now, what about recruiting goals? Where do we stand now in meeting recruiting goals? The Navy and the Air Force have chosen to reduce their end strength because they are not meeting their goals. Are you going to meet your goals?

Mr. WEST. I think we will meet our manning goals, Mr. Chairman. As I said in my opening statement, we have a requirement to recruit about 90,000 this year, which is a 20-percent increase over 1996. That is because we are doing one-for-one replacement.

Our retention is going to be higher than we anticipated, so the number that we will have to recruit is probably going to be less than the 90,000 figure. When we are done, we will have the numbers we need from a combination of retention improvements and our recruiting efforts.

General REIMER. May I say something on recruiting goals and on the quality issue? I certainly agree with the Secretary. I think we are working both on retention and attrition. We are trying to increase retention and trying to reduce first-term attrition. That offsets, a little, the requirement for the Recruiting Command to come up with 90,000 recruits. We think we will meet our required end strength.

I would like to point out that we have reduced the end strength of the active component by 36 percent. The problems we are experiencing in readiness in the field is because, for a 10 division force, we are slightly overstructured and undermanned. We need to be at 495,000, so that we give field commanders the number of soldiers they need. That is why we have units like the brigade in Alaska and the division in Hawaii that do not have all the people that they need.

We are committed to a 495,000 end strength. That is the number we need for a 10 division force, and we will continue to strive to meet that.

As far as quality is concerned, I tried to compare the quality between our criteria right now—with 90 percent diploma graduates, 67 percent category I–IIIA, and less than 2 percent category IV—and what we had during Operation Desert Storm. If you look at the Operation Desert Storm force that we recruited in 1987 and 1988, what you found is that they were about 91.5 percent diploma graduates. They were about 65 percent category I–IIIA and 5 percent category IV.

The quality criteria we have established today is every bit as good as what we had for Operation Desert Storm, and that force fought well.

BRIGADE ALIGNMENT

Senator STEVENS. Well, I will get back to some other questions, but now that you mention the brigade, let me just ask you a provincial question. We were in Hawaii, too. We were briefed by the CINCPAC and your Army of the Pacific. The brigade that is in Alaska, the 1st Brigade of the 6th Division, now I am told it is counted in terms of the manpower strength of the Pacific. I am told it is now aligned with the 3d Brigade of the 10th Mountain Division in New York.

What has happened? That seems contrary to what we were briefed on in Hawaii. And there is a proposal to make that a separate, independent infantry brigade. What is the status of that brigade in my State?

General REIMER. As you indicated, it is oriented and assigned to the Pacific. It represents the 3d Brigade of the 10th Division, in terms of the number of brigades that we have. If we had to deploy with the 10th Division full-up somewhere, then that brigade would probably be assigned to the 10th Division.

Senator STEVENS. Well, is that not going to lead to a tugging and hauling in the event of a crisis that affects both the Pacific and the Atlantic? Who really controls that division?

General REIMER. Who controls the division?

Senator STEVENS. Yes; the CINCPAC things they do pretty clearly. And I thought they did.

General REIMER. They control the brigade, yes, sir. They do, and there has not been a problem from that standpoint.

Senator STEVENS. But if the 10th deploys, it goes with the 10th.

General REIMER. If we needed the 3d Brigade for the 10th Division, then, yes, it would go. That is the one it is aligned with. The issue on the separate infantry brigade is one that we will have to address in the quadrennial defense review [QDR]. But, right now, we have not made that decision.

Senator STEVENS. Well, I do not want it to be an orphan brigade, but I also think we ought not to see the situation where they do not know where they really fit in. They are not part of—they are assigned to the Pacific, but they are part of the 10th.

General REIMER. It may be confusing out there. If it is, I will sort it out. But, the brigade is oriented for the Pacific. They work for CINCPAC. They work for the U.S. Army Pacific Command.

As far as if they had to deploy with a division, they could go with the 10th Division. They participate with them in BCTP and that type of training. But, their orientation is the Pacific.

Senator STEVENS. Senator Inouye.

POLICY ON SEXUAL HARASSMENT

Senator INOUYE. Thank you, Mr. Chairman.

There are 1,000 stories that can be told—positive stories—about our men and women, who are carrying out their peacekeeping mission in Bosnia and the African continent, in the Sinai, the humanitarian missions in Southeast Asia and, most importantly, standing in harm's way, literally, in Korea. And yet, we constantly are confronted with other headlines that anger us and embarrass us. I am speaking of sexual misconduct.

You have taken steps, and I believe you have steps that you will take to bring about an implementation of your zero tolerance policy. Can you tell us what steps have been taken and what steps you propose to take?

Mr. WEST. Well, first of all, Senator Inouye, the ongoing military justice proceedings are underway in various locations. They are proceeding without involvement by us. And, second, we asked the inspector general of the Department of the Army to look at all training bases across the Army to see what circumstances there are, whether we have common conditions that suggest to us further steps need to be taken to deal with the reality and the perception that all soldiers—our women soldiers as well—are to be treated fairly and are to be given the opportunity to perform at their best.

That review by the inspector general is due to be completed this month. He is probably already in a position where he is ready to begin briefing the preliminary results. So, we will know more then.

Third, there is a Secretary of the Army senior review panel on sexual harassment that I empaneled earlier this year, composed of a number of both military and civilians from within the Department, and several from outside the Department, who are looking across the entire Army, visiting a significant proportion of all of our installations in the Army—in the United States, the Pacific, and Europe—to look at the broader questions.

There are things we need to know. Is there something we need to do more in our training—perhaps in our initial entry training—for all soldiers? Do we need to train our noncommissioned officers [NCO's] and officers better in this area? Do we understand the right way to apply law enforcement procedures to complaints that are based on alleged sexual crimes?

So, a whole host of issues are being looked into. They will give the Chief of Staff and me their initial report in May, with their final report in June. Then, we will look to see what steps there are that can be taken.

The Chief of Staff has already implemented a number of steps through his channels. I suppose I ought to let him talk about them instead of saying them for him.

General REIMER. Senator Inouye, I appreciate the question. What we have tried to do is to work with the chain of command. The allegations that were most concerning to me were the ones that alleged abuse of authority by the chain of command. That is a sacred responsibility we give all commanders. When that trust is misplaced, it is wrong. It is wrong, whether it manifests itself in terms of sexual misconduct or prejudicial treatment.

So, we went after the chain of command in terms of making sure they were sensitive to this issue. I have done a number of things besides talking to the division commanders and the people most closely involved, in terms of supervision of the chain of command. We developed a chain teaching packet that went to every soldier in the U.S. Army that talked about this issue. First, the message discusses what constitutes sexual harassment and sexual misconduct; second, that we have zero tolerance for these things; and third, how you report it and how you make it known to the chain of command and the proper authorities.

We have looked at our drill sergeant program of instruction to make sure that, as we bring people into the drill sergeant program, they are given the proper instructions before they become drill sergeants.

We have sent each division commander to the Defense Equal Opportunity Management Institute course in Florida to deal with equal opportunity. It is a week-long course that we send all of them to before they assume command.

We will continue to followup on this issue. We are about to release something called character development XXI, which reemphasizes the importance the Army places in values—duty, honor, country, selfless service, and sacrifice.

We will continue to put a full court press on the chain of command to make sure that we correct this problem. That, in my mind, is where it has to be resolved.

FORCE MOBILITY

Senator INOUYE. Thank you.

On our recent trip to Korea, what we saw and heard reinforced our feeling that, as you put it, this is a dangerous place, and the millennium has not arrived. I know that as a result of the drawdown, General, your forces are pretty thin now. They are spread all over the globe. I believe your testimony says that, at all times, at least 35,000 Conus personnel are elsewhere.

To what degree is mobility a priority in meeting such mission requirements at this moment?

General REIMER. This is one of the things I mentioned, Senator Inouye, in terms of the change from a threat-based force to a capabilities-based force. What we have found is that, as we face this dangerous, uncertain, and unpredictable world, mobility is at a very high premium. We have found ourselves faced with challenges in this area at a number of places. We were able to send a brigade from Fort Hood, TX, to prepositioned equipment in Kuwait in less than 96 hours. That illustrates the mobility enhancements that have been made, because, during Operation Desert Shield, that took us about 28 days.

We also have had units flying from Europe to Africa—Liberia and Zaire. Army units flown in by the Air Force were the first ones there to stabilize the situation. Marines came in, and the complementary nature between the Army and the marines was demonstrated. The same thing was true in Somalia. The marines went in first, initially, because we had the time. Army forces came in for sustainment.

I think as you look at all of the theaters, and particularly an area as big as the Pacific, the idea of being able to move forces in the 25th Division, Fort Lewis, or Alaska around the Pacific by Air Force assets continues to be one of our highest priorities.

Mr. WEST. I think the C–17, which this subcommittee supported, has proven to be an extraordinary asset in that respect. The roll-on, roll-off ship continues to be important to us. We are still in the process, of course, of procuring those.

Senator INOUYE. Do we have enough?

Mr. WEST. Enough?

Senator INOUYE. C–17's.

Mr. WEST. Well, we have a start, I think.

General REIMER. If we buy the 120, it will be very helpful. Whether that is enough or not, I think we need to continue to look at it. But the C–17, as the Secretary said, has been a lifesaver for us. The Army is wholeheartedly behind the C–17 program.

FORCE SIZE

Senator INOUYE. I believe that most Americans, General, believe that the U.S. Army is the largest in the world. And if they were here, they would have been stunned to learn that we are No. 8. How does the quality of the U.S. Army compare to the other armies? And, can you tell us for the record who are Nos. 1, 2, 3, 4, 5, 6, and 7? [Laughter.]

General REIMER. Yes, sir, I can. That is an area that I spend a lot of time on. I think in terms of quality, the Army that we have today is clearly the world's best army. I think our soldiers demonstrate that every day. I mentioned the capability exercise that was conducted at Schofield Barracks. I think the delegates from the 41 nations were not only impressed with the capability to do that at night—we lent them each a night-vision device—but also with the high-quality soldiers that were their escorts.

In terms of the size of armies, obviously, the largest army in the world is in the People's Republic of China. They are considerably larger than any other army. North Korea, the place that you visited, is No. 2. India has the third largest, followed by Russia, who still has a very large army. Then, the Republic of Korea has the next largest army, followed by Pakistan, Vietnam, and, finally, the United States, which comes in as the eighth largest.

QUALITY OF LIFE

Senator INOUYE. Quality of life has become a very important set of words in any discussion we have regarding our military. Are you satisfied with the quality of life that is available to the men and women of the Army, Mr. Secretary and General?

Mr. WEST. We have challenges, Senator. We certainly put quality of life as one of our top three priorities. In fact, we have a tendency in the Army to order the priorities as: readiness, quality of life, and then, modernization. So, we devote a lot of attention to it. I referred to some of the efforts that we had funded. It is why we have family members at an annual conference, to talk to us about what they are experiencing.

I think one of the most important things we can do for a soldier is to give him or her a quiet mind about how their family is being

treated while they are out on the line, and also about how our country values their service.

So, am I satisfied? No; I can think of a number of things in which we have to do more. But, I think we have done a good job of funding it in this budget, and we continue to treat it like the priority it is.

We still are focused on health care, the barracks that I mentioned, and the child care centers. So, I am satisfied that we are giving quality of life the attention it should have, which is a lot of attention, indeed. But yes, we can do more.

General REIMER. Senator Inouye, may I just say I will always fight for more quality of life for our soldiers, because I think they deserve it. And, the high-quality soldiers we have ask for very little. I think the areas that I am most concerned about are, one, adequate pay. We deeply appreciate the support of the Congress in terms of pay raises. But, our soldiers need more. We still have too many soldiers who are eligible for food stamps.

Also, the living conditions for both single soldiers and married soldiers need to be improved. We have a program in the budget that tries to achieve that balance. We are not moving as quickly as we would like. But, we are moving toward improved living conditions for our single and married soldiers.

We find that 63 percent of the Army is married. So, we have to take care of our families. The Army family team-building program was a great success in Europe. It helped the soldiers that went into Bosnia do a better job. They were able to soldier and do the things we asked them to do, because they knew their families were being taken care of.

We are programming resources to meet about 65 percent of the child care needs that we have to take care of in the child development programs.

The other thing I think is very important in terms of quality of life is to make sure our soldiers are never put in harm's way without being adequately trained. That is an important consideration also. The budget that you see attempts to achieve the balance that I think is so important. But, they are all related to quality of life.

Mr. WEST. In your discussion earlier with the Chief of Staff about the fact that we are not the largest army and what it is that makes us the best, this is part of that point. We are an army unlike any other in the world, not just in terms of training, which is vitally important, but in terms of an NCO corps that has virtually unprecedented authority to do their jobs and responsibilities, and performs in a clearly unprecedented way in terms of other services.

By the same token, we probably pay more attention to quality of life than just about anybody else, because we care about our soldiers and their families.

MODERNIZATION PRIORITIES

Senator INOUYE. Mr. Secretary, we are No. 8 in size. So, obviously, we have got to make up the difference with modernization. What are your modernization priorities?

Mr. WEST. Well, certainly, a priority is the technology that was demonstrated recently in the warfighter exercise to which General Reimer referred, that is, the use of information age technology to

equip our forces to answer the three questions he raised: where am I; where are my buddies; and where is the enemy? Also, the technology helps us deny that information to the enemy. So, that technology improves our ability to provide battlefield awareness for our forces and to deny that awareness to other forces.

I think it is critically important and probably one of our highest, if not our highest, modernization priorities. Certainly, another priority is the continuing effort to bring on board the new programs that I described: Crusader and Comanche.

Senator INOUYE. Add the Javelin, too.

Mr. WEST. I will be happy to add Javelin, and also our continuing efforts to modernize our logistics effort. Those are certainly among our highest priorities. I would invite General Reimer to add to that.

General REIMER. I would agree. Certainly, the Javelin was a clear winner during the advanced warfighting experiment, and in the capabilities exercises that we demonstrated. The other area that I would mention as a priority is logistics automation and anything that helps us become more efficient. We have to become more efficient. We have to improve the way we do logistics.

I have often said that there will not be a revolution in military affairs unless we have a revolution in logistics affairs. So, that is why the Secretary talked about total asset visibility and velocity management; those are terribly important programs, in addition to the programs that he already mentioned.

Night vision devices are also another important item, because that gives us the edge over any other army right now.

Senator INOUYE. Mr. Chairman, finally, I would like to say that I was most reassured and impressed with your recruiting goals of not more than 2 percent category IV's. I think we should always remind ourselves that in the seventies, we were recruiting more than 25 percent category IV's. So the worst can happen if we do not watch ourselves. I hope we can keep up with your goal of no more than 2 percent.

General REIMER. That is the highest recruiting priority: having high-quality people. You are absolutely right. During the hollow army in 1979, we were 46 percent category IV's.

Senator STEVENS. Senator Harkin, you are recognized for 10 minutes.

QUALITY OF LIFE

Senator HARKIN. Thank you, Mr. Chairman.

Mr. Secretary and General Reimer, I want to pick up on what Senator Inouye was talking about in terms of the quality-of-life issues in the Army. The Army this year faces not only our deliberations here, but also the quadrennial defense review. And I expect that to spark a pretty lively debate about our priorities.

But I want to focus on just a few things. I want to focus on the quality of life for Army personnel. Again, I still believe you can talk all you want to about readiness, you have got to have training and all of that, but if you do not have a good quality of life for our troops, then they are not well motivated. I do not care what kind of gold-plated weapon systems you have got, it still takes that human being to operate the equipment.

I think there are substantial shortfalls in our troops' quality of life—housing, the medical system, and thousands of troops forced to turn to food stamps and other Federal assistance due to inadequate pay. Your statement, Mr. Secretary, mentioned some initiatives to correct some of these shortfalls, but I cannot tell if these initiatives are new or are just keeping the status quo? Will these initiatives start to close the quality of life gap—food stamps, housing, pay? Will your initiatives start to close this gap, or are we just sort of maintaining things?

Mr. WEST. Well, our purpose is to close the gap, Senator. I think the Chief will want to say something about that. Let me say that in housing, certainly, we should proceed apace, and we do have initiatives. We are looking at different ways of providing housing and different ways of financing it. That is something, I think, of special significance to this committee, in terms of an effort to privatize housing. We have that going forward. We have a pilot program at Fort Carson.

So, yes, we are looking at initiatives to make changes and improvements.

With respect to food stamps, frankly, my view is the way you solve that is to increase pay.

PAY INCREASE

Senator HARKIN. Well, what did you request for a pay increase?

Mr. WEST. We requested the maximum permissible by law.

Senator HARKIN. That is 2.8 percent across the board?

Mr. WEST. Let me just say, Senator, that in so doing, what we have done is something that has never been done or attempted in another administration, which is to commit to that kind of effort across several years, so that our soldiers do not misunderstand the intent, the desire, and the purpose.

Senator HARKIN. Let me ask you, does the law allow—and this is where I do not know the answer to this question before I ask it—does the law allow you at all to structure your pay increases so that those at the bottom ranks, the E–1's, E–4's, E–5's, would get a higher percentage than those at the top?

Mr. WEST. You have that authority; we do not.

Senator HARKIN. Pardon?

Mr. WEST. You have that authority; we do not.

Senator HARKIN. I do not understand what you mean, we have that authority.

Mr. WEST. It would take a statutory change.

Senator HARKIN. So you do not have that authority. In other words, you cannot increase an E–4's pay, for example, at a higher percentage than someone else's; is that true?

Mr. WEST. On that, I would need to check.

Senator HARKIN. Well, that is the question.

Mr. WEST. I think that is true.

Senator HARKIN. Well, that is the question I am asking, and I do not know the answer.

Mr. WEST. I think what we have done is we have increased every level's pay to the extent we can by law.

Senator HARKIN. Well, again, we get back to this whole thing. A 2.8-percent increase, obviously, for a general is a heck of a lot more than it is for an E–3, an E–4, and an E–5.

Mr. WEST. Yes; I think the role we could have in it is that we could submit a proposal to you that says, here is a way to do it. But, I think it would take a statutory change.

Senator HARKIN. Well, I would like to see that. Those in the lower ranks are just not getting enough. A 2.8-percent pay increase is not enough for someone with a family that is existing on food stamps. It simply is not enough.

General REIMER. Senator, may I also just say something on that?

Senator HARKIN. Yes.

General REIMER. I think it is a very critical issue. You are right. The 2.8 percent comes on top of a 3-percent pay raise in 1997. So, we are moving in the direction the Secretary talked about.

The second thing is that the pay business is fairly complicated. When you start to say, "OK, I am going to increase pay at a certain rank," it has to be worked in terms of incentives for reenlistment and retention. I think it is complicated. I am not prepared to go into the details of it right now, except to say that we have had many people look at this issue, to see how we can do better in this area. It is very complicated, in terms of being fair to all concerned.

I would also say that there are senior NCO's that are not receiving as much pay as they should. So, this whole thing has to be looked at as a total package.

As far as the 2.8-percent increase being greater for a general than it is for a private, you are right. But they will not increase a general's pay anymore. We are capped out right now.

INSUFFICIENT ALLOWANCES

Senator STEVENS. Would the Senator yield?

Is not one of the problems, General, that we have increasing size in some of the families of the very younger people that are coming in, and their allowances are not sufficient and because of the size of the family, there is no housing on base—they are living off base—and their rental allowance is what is forcing them into the food stamp situation, not their pay scale?

General REIMER. You are right, Mr. Chairman. The size of families are increasing. I talked to a trainee that was coming in, he was an E–1 or E–2. His pay is somewhere around $800 a month. He had two children. So, given his family's size and the low pay, they automatically qualify for food stamps. Whether they get them or not, we have no way of knowing the exact number. We can only identify the number that are qualified for food stamps.

Senator STEVENS. I think the Armed Services Committee ought to look into that problem about the allowances for the children and its allowance for the family. And when you get past two children up my way, you can hardly find housing on base. And when they move off base, their rental allowance does not increase because of the number of children. It is just the rental allowance for the family.

So I think that the problem that is forcing the food stamps situation is related to other allowances, not pay, Senator.

Senator HARKIN. Well, I guess when I say pay, I include whatever the soldier gets, be it allowances or whatever it might be. To me, it is whatever keeps body and soul together. The figures are startling when you look at it. And I do not have the Army figures, I just have DOD—12,000 military families, 1 out of every 100, on food stamps.

Senator STEVENS. Senator, I think you can find some of our staff on food stamps. But it is because of different circumstances within their family that enables them to be eligible for food stamps, not the salary levels.

Senator HARKIN. With all respect to you, I think you ought to check in your staff pay. None of my staff would be on food stamps. [Laughter.]

Senator STEVENS. I meant Senate staff.

Senator HARKIN. Amazing.

Senator BUMPERS. Well, Ted, you act as if there was some kind of a quirk that would cause this. What was that?

Senator HARKIN. Family size.

Senator STEVENS. Family size.

Senator HARKIN. The number of military families receiving WIC, 11,000. Shortage of child care in the Army—I do have this figure—a 37-percent shortage of child care just in the Army itself.

General REIMER. The 1998 budget will program for 65 percent of the requirement, which is the Department of Defense goal right now.

Senator HARKIN. It is to make 65 percent for child care?

General REIMER. Sixty-five percent of our children who need care will be able to take advantage of child care.

NUMBER OF GENERAL OFFICERS

Senator HARKIN. Let me ask you one other question. I read in the paper the other day that there was a plan for more generals. Under the tentative plan, the Army was going to get 19 new generals; the Navy is going to get 20 more admirals; the Air Force 15 more generals; and the marines are going to get 12 new general slots. Does the Army need 19 new generals, Mr. Secretary?

Mr. WEST. Well, first of all, Senator, that plan has not made its way out of the Department of Defense yet. We do not know how that is going to look until those deliberations are finished. I think they are being delayed, pending the QDR. We will have a better answer for you on that once we have gotten through the analysis.

Senator HARKIN. The quadrennial defense review?

Mr. WEST. Yes, sir.

Senator HARKIN. What do you think, do we need 19 more generals?

General REIMER. The analysis that went into that showed that the 19 generals were necessary. This is a reflection of the coalition business, the NATO business, the joint requirements, and Goldwater-Nichols. To meet the requirements that we have, the analysis would support that recommendation. But, again, as the Secretary said, it is still being worked inside the Department of Defense. Whether it will come to Congress or not, I do not know.

EXCESS INVENTORIES

Senator HARKIN. Well, I think we are probably going to have to take a very close look at that one.

The one last thing that I wanted to ask is on the issue of pay and benefits for the Army. This is something that gnaws at a lot of us. And you can explain it in the way of families and housing and stuff, but it all has to do with how they are living and how they are keeping body and soul together. And, quite frankly, it is simply not adequate. And that has to do with priorities. It has to do with priorities and where you put your money.

Last, let me just ask you a question about inventory practices. I saw a recent GAO report which noted that the Army has more than $4 billion in unneeded supplies, including more than $200 million in items for which it has more than a 50-year supply. Again, why is it that the Army continues to buy items for which it has more than a 50-year supply? Is there any reason for that?

Mr. WEST. Well, I am not sure we do. What we are doing, Senator——

Senator HARKIN. Are you familiar, Mr. Secretary, with the GAO report?

Mr. WEST. I think we all are. It has certainly received a fair amount of publication.

What we are dealing with right now is the question of what inventory we need and how we get over, what I call, the iron mountain mentality, which is that, when the time comes, our—whoever—sergeants or commanders do not want to be caught short on the things they need. That is why our logistics efficiencies improvements are important, such as total asset visibility that allows us to determine what we need and how we can get it quickly.

So, we are aware of the challenge. Actually, I think our Army Materiel Command [AMC] and others are making fairly good strides in dealing with that situation. It is helpful to have the GAO report. But, you should not take away the understanding that we are somehow accumulating masses of things we do not need. On the contrary, we are busily getting rid of the things we do not need, controlling the decisions on what we do buy, and, more importantly, trying to link the place where they will be needed with a source much more quickly, so that we do not have to maintain large inventories, even for the very important assets.

Senator HARKIN. I guess my question is, if you have more than a 50-year supply of some item, why continue to buy it?

Mr. WEST. I do not have an answer to that question, sir.

Senator HARKIN. Well, that must be happening.

Mr. WEST. I am not sure that it is happening.

Senator HARKIN. You do not think it is happening?

Mr. WEST. I would encourage you not to assume it.

Senator HARKIN. We have a Government Accounting Office, we have to rely upon them to do their accounting. If they are wrong, please tell us that they are wrong.

Mr. WEST. We will.

INVENTORY MANAGEMENT

General REIMER. We will come back with details on that. I am not sure that we would sign up to everything that was in that report. We would have to come back to tell you what we do not sign up to.

Let me also say that I do not think we are nearly as efficient as we should be inside the Department of Defense. I have said this very openly inside and outside the Pentagon. We turn over our inventory in the U.S. Army about once every 4 or 5 years. Civilian industry will turn it over four or five times a year. So, obviously, inventory management is something that we are looking at, in how we can do it better.

I would tell you there is a limit to how far we can go. The limit is the Federal acquisition regulation and the time lines associated with it. AMC, if it gets as efficient as it can possibly be, will have to order parts about 200 days in advance before it needs it, based upon the rules in the Federal acquisition regulation.

Now, I do not know if that is the exact number or not, but it is in the ballpark. We are looking at inventory management, because there are big savings associated with it. But, somebody has to help us to become more efficient, in terms of regulations, too.

Senator HARKIN. So the GAO report, you are preparing a response to that?

Mr. WEST. We will see. I have to assume that the inventory you are talking about is some form of ammunition. I do not know of what items you are talking about that we have a 50-year supply.

Senator HARKIN. We had all kinds. The GAO came up with all kinds of different parts for tanks and gun mounts and aircraft. It was not just the Army specifically, it was DOD-wide. It was not just focused just on the Army, it was focused on everything.

General REIMER. I believe this is also a part of changing from the cold war Army to the post-cold war Army. I do not think you will find that we are buying additional parts for those items that we have a 50-year supply of, if that exists. I would be very surprised if that was the case.

Senator HARKIN. Well, I just draw your attention to the GAO report. One of the things they said is there are certain items for which if it is lower than a certain amount of money that just automatically, the computer just keeps ordering it every year. And here is just one.

As of March 1996, the Army had—this is just an item out of the GAO report—had 424 spacer sleeves on hand. I do not even know what the heck that is. But according to the item manager at the Aviation and Troop Command, the sleeves—only three of them were needed to satisfy war reserve, and they received 424 of them. Three were needed to satisfy war reserve and current operating requirements, yet we had 424.

Mr. WEST. We will find the answer to it, Senator.

Senator HARKIN. I mean that is just one example. I have got a lot more—here is camouflage screening systems—the Army had 6,599 on hand and only 712 inventory records were needed. Well, anyway, you get the picture.

I mean something has to be done. I hope you do take a look at this report.

Mr. WEST. We will, indeed.

Senator HARKIN. Thank you, Mr. Secretary.

Mr. WEST. Inventory control is one of our highest priorities. Those make great horror stories, Senator, but we will look into them to see how much fact there is.

Senator HARKIN. I appreciate that very much.

Thank you, Mr. Chairman.

Senator STEVENS. Senator Cochran.

FUNDING FOR MISSILE DEFENSE

Senator COCHRAN. Mr. Chairman, thank you.

It was my pleasure to accompany Chairman Stevens and Senator Inouye on the trip to South and North Korea recently. One of the things that was very clear to me was that we see a threat posed against our own troops who were deployed there by missile capability on the North Korean side of that peninsula.

My question is, under the new arrangement, where you are required to ask for procurement funds for missile defenses rather than depending upon the Ballistic Missile Defense Organization to do it for you, are there sufficient funds being requested in this budget for next year to provide protection for our troops who are deployed in Korea against missile attack?

General REIMER. Senator, as you know, we have a Patriot battalion stationed there. We have beefed up the Patriot battalion in the last 2½ years. The theater high altitude area defense [THAAD] battalion, which is still in the development process, is slated to go there, in what we call, a user/operator initial capability. They will go to Korea, I think, in 1999, assuming that THAAD passes its testing.

The answer to your question is, I think we are moving that as fast as we possibly can, in terms of THAAD, which will provide the upper tier protection that we really need.

The Patriot battalion stationed there will protect our most critical assets, but the upper tier is the one we need. We are moving THAAD as quickly as we possibly can, given its operational record in terms of testing.

Senator COCHRAN. Have the new procurement rules affected you in your ability to, at the same time you are requesting ballistic missile defense funds, having to choose between tanks and ballistic missiles or other modernization, has this presented a problem of any consequence to the Army?

General REIMER. Senator, I am not familiar with the new procurement rules. There is always a tradeoff in terms of having limited funds. The Army gets about 15 percent of the DOD funds for modernization. We are always fighting those battles as to what goes to whom. But, I am not aware of a new procurement rule that has impacted upon us. I will check that out.

Senator COCHRAN. Well, it is my understanding that Dr. Hamre at the Department of Defense has come out with a decision that will require each service to put in its budget request specific requests for missile defense procurement dollars. And so, up until now, my understanding is that the Ballistic Missile Defense Orga-

nization had actually requested those funds. So is that being handled or managed in a way that is going to cause us to have a downturn in procurement requests for ballistic missile defense and jeopardize troops in the field? That is the point of my question.

Mr. WEST. I would expect not. Your point is a good one, Senator, which is that they now will compete with other Army priorities in the Army budget.

Senator COCHRAN. Yes, right.

Mr. WEST. The happy—or maybe not happy—part about that is it is a high Army priority.

LANDMINES

Senator COCHRAN. One other thing we learned on that trip was that mines have been laid out there which provide defense for not only our own troops, but the civilian population of South Korea. Under some decisions made by Congress, use of mines will be limited in the future. Have you looked at this? And is the administration prepared to ask for an extension or a reauthorization of the use of mines where it is clearly in our national interest to use them?

General REIMER. Senator, this has been looked at extensively by the Joint Chiefs, and General Tilelli has briefed, as did General Luck before him, the defense of Korea. My understanding is that it is exempt from the antipersonnel landmine regulations that you mentioned. I think it is very critical to the defense of Korea that the exemption continue.

BOSNIA

Senator COCHRAN. When we were in the Bosnia area—we went on a trip earlier in the year—looking at the specific requests for peacekeeping funds and what we were spending in that area and whether or not it seemed to be justified and the like. We did not get into Bosnia because of the weather conditions. We were in Sarajevo, though, and we were able to get reports from our commanders about the situation in Bosnia.

Are you a part of a process to decide how many troops we should send to that area and whether or not the numbers of troops that we have in that region now are justified on the basis of military necessity or NATO politics or the like? And what is the outlook in terms of Army troops being required to remain in Bosnia for any length of time beyond what we have already heard that the administration has agreed to do?

General REIMER. Any time there is a military mission such as that, the CINC that is responsible for that area, in this case, General Joulwan, and the land component commander, in this case, General Crouch, brief the Joint Chiefs in terms of the requirements. So, yes, we do get involved in the military necessity for those forces.

Any change to those force levels, again, are worked through the Joint Staff, and the Joint Chiefs have an opportunity to provide input. We are very much involved.

I certainly agree with the Secretary of Defense and everybody else who has said that June 1998 is the end date. I cannot comment on NATO's views, because I am not current on their views.

But, certainly, our planning only includes through June 1998. It includes a stepdown in forces as we go toward the June 1998 date. As I mentioned to the chairman earlier, if that holds, then we think our estimate for the 1998 funding is about right.

Senator COCHRAN. We know that in the supplemental request, we are asked to reprogram—in effect, take money away from accounts that have already been funded for this fiscal year—to help make up the costs that the expense of peacekeeping and other operations have required. Is this going to cause any particular problems to specific procurement programs, modernization programs, that are already funded? These are decisions that we are making, but we are making them in consultation with the services, to try to find out where the least painful cuts can be made. Have you submitted your suggestions to the committee for rescissions?

Mr. WEST. We have done a very careful scrub, Senator. Those items are never offered as potential billpayers until we have actually gone through the pain ourselves in the Army—the Chief and I, with the Army staff. We have scrubbed them. Those are not cuts we would want to take, otherwise, we would not have asked for the money in the first place. When you look at our priorities and constraints, the items selected are the ones that are least harmful to us as we try to do everything we have to do.

General REIMER. The only other thing I would say on that, Senator, is, yes, we are working very closely with the Office of the Secretary of Defense staff in identifying those places where it would hurt the least. If we are unable to find the billpayers, it will hurt a great deal, because it will come out from the training funds for the fourth quarter. That will have a significant impact on us in terms of readiness, not only for 1997, but it will carry over into 1998.

RESERVE COMPONENT FUNDING

Senator COCHRAN. One part of the "Quadrennial Defense Review," I know, is to try to decide on an appropriate balance between Army and Reserve and National Guard forces for the future. We have had the enhanced readiness brigades identified as one way to integrate the Guard and Reserve activities—particularly the National Guard—into the Army's defense plans. We are pleased that, in Mississippi, we have the 155th Enhanced Readiness Brigade, formerly Armored Brigade, which was a round-out brigade of the 1st Cavalry.

Are you asking for enough money in this budget to sustain the operation of that brigade and others like it?

General REIMER. From my standpoint, Senator, the enhanced brigades are funded at an appropriate level, based upon the first-to-fight philosophy that we have. We do not fund based upon component, but we look at war plans and fund accordingly.

The enhanced brigades are funded at the operational tempo [OPTEMPO] necessary for them to maintain their readiness posture, as well as to send the proper people to school. The funding concerns you see in the National Guard occurs within the National Guard divisions, which are considerably underfunded in terms of resources. But, again, it is based upon a first-to-fight philosophy.

They are not on the war plans and, as such, they end up at the bottom in terms of funding priorities.

But, the 155th, I think, is funded at the right level.

Senator COCHRAN. Thank you, Mr. Chairman.

Senator STEVENS. Thank you, sir.

M–1 UPGRADES

Senator BUMPERS. Thank you, Mr. Chairman.

Just quickly, Mr. Secretary, we are apparently getting ready to upgrade about 1,060 M–1A1 tanks at a cost of $7.3 billion. That means the cost to upgrade a $3 million tank will be almost $7 million—$6.9 million. Does that sound rather exorbitant to you?

Mr. WEST. I would have to look at the figures more closely, Senator. The upgrade is a very important one for us. It is going to substantially enhance the capability of that weapon system. I think we are doing the upgrade to avoid buying a new model tank. If we are going to continue to have the capability out there, we need to do the upgrades.

Your question is as to whether this upgrade is more expensive than it is worth. I would have to see. I would think that there is justification for it, if those figures are right.

Senator BUMPERS. General Reimer, I know you are just busting to comment on that.

General REIMER. I am not familiar with the exact figures you use. I will get familiar with it, Senator.

I would simply say that comparing the M–1A2 and the M–1A1, the M–1A2 capability is much greater, because you get the commander's independent thermal viewer so you can pick up more targets at the same time. It, obviously, is an enhancement. As the Secretary said, we chose that as a product improvement program as opposed to fielding a new tank.

Senator BUMPERS. General, I am not quarreling with the idea of upgrading the M–1's, but to pay almost 2½ times as much as the tank cost when it was new seems pretty heavy to me.

General REIMER. That is a figure I am not familiar with, and I will get familiar with it.

Senator BUMPERS. Would you, and report it?

General REIMER. I sure will.

Senator BUMPERS. I do not know that the rest of the committee cares, but I would like to get an analysis on that.

[The information follows:]

COST EFFECTIVENESS OF M–1 UPGRADES

The original M–1 tanks were developed in the 1976–1979 time frame and were produced between 1980 and 1985. We paid an average of $3 million each for the 3,268 M–1 tanks when they were bought; however, in today's dollars [considering inflation rates through fiscal year 1998], that equates to approximately $4.1 million per tank. These tanks were produced at an average production rate of 50 tanks per month or 600 per year.

The configuration reflected in the December 1996 Selected Acquisition Report is an M–1A2 tank using reclaimed or overhauled parts from an older M–1 tank, rather than building an entirely new tank. The average M–1A2 cost is $6.86 million per tank over the program at an average rate of 83 upgrades per year; however, this includes a dip in the production rate from 120 to 30 vehicles per year from fiscal year 2002–2005 (substantially increasing the average unit cost). In addition, starting in fiscal year 1999, the M–1A2 includes a major electronics and sight upgrade called the System Enhancement Program. The core electronics and Second Genera-

tion Forward Looking Infrared sight upgrade will enhance the M–1A2 digital capabilities; increase the tank's range, accuracy, and lethality while reducing the potential for fratricide; and maintain our information dominance and battlefield overmatch position.

Comparing our current program of technologically advanced M–1A2's to the M–1 tanks we procured through 1985 is not the most germane comparison. When the Army approved the M–1 to M–1A2 upgrade, we compared the cost of acquiring tanks via an upgrade to the cost of buying new tanks. At equivalent production rates, we conservatively estimate the upgrade program saves at least $800,000 per tank by reclaiming the M–1 tank hull structure, overhauling the engine and transmission, and overhauling various fire control components vice buying new. The end product is an equivalent to a brand new (i.e. zero mileage) tank. The M–1A2 has a new production turret, all new data bussed electronics, a predominately new fire control system with updated software, new track and suspension, as well as a new 120 millimeter cannon. While it is not a fair comparison due to the differences in technology, if we could afford to produce our current program at the fiscal year 1980–85 production rate, we would be close to, if not under, the inflation adjusted M–1 tank unit cost. General Dynamics Land Systems and the many other government hardware and support contractors have done a credible job of constraining cost growth in the face of rate decreases of more than 80 percent.

TRAINING AT FORT CHAFEE

Senator BUMPERS. On a parochial issue at Fort Chafee, when the BRAC Commission closed Chafee, the Army promised that they would provide $6.8 million a year to the Guard to operate it for a training facility. And now, what has happened is the Army put the $6.9 million in the budget, but the 1998 Army budget also cuts the National Guard's base support program to $69 million. And there is a requirement that that be spread evenly, as I understand it, among all Army Guard training sites. That would leave Chafee with $4.6 million to operate that base.

Now, we are looking—perhaps I can persuade the chairman and the ranking member to put a little more money back into that Guard base support. But there is no point in putting $4.6 million in if that is $2 million short of what it takes. Do you agree?

General REIMER. Well, first of all, I have received your letter.

Senator BUMPERS. I have not heard from you. That is the reason I am asking.

General REIMER. We are in the process of responding to it. It is a complicated issue, involving all three components. We have had a couple of meetings in March, and the final response is being drafted.

I am not familiar with the requirement to fund all National Guard training sites at the same, equal level. That is something that the National Guard Bureau has probably put out. I do not question it; I just am not familiar with it.

Senator BUMPERS. I do not think that is a legal requirement. That is something the Guard Bureau did.

General REIMER. Right. We have said, in the case of Fort Chafee, that it is a great training area. I have trained there a number of times myself. I am very familiar with Fort Chafee. It was, obviously, one of the areas that we looked at very carefully, in terms of a JRTC decision.

On the other hand, we have tried very hard in this budget to keep the right balance between the things we have talked about—quality of life, training and readiness of our force, and modernization—and we still have to keep that balance.

In the case of Fort Chafee, it is like a pay-as-you-go type of operation. So, if they want to train there, it costs them to train. That is true of almost any of our training centers.

Senator BUMPERS. This is a comment to both you General Reimer and Secretary West. There is about $17 or $19 billion, I believe, in this budget for the four Reserve and Guard components. And we have 900,000 Guard and reservists. We have 1.4 million active. So the Guard and Reserves represents about 40 percent of our force, or close to it, and we are giving them 7 percent of the total budget.

Now, I know—and this is true of Senator Inouye and Senator Stevens—we are all big proponents of the Guard. And I know this sounds like a Johnny-one-note, but every time I go to Israel, they teach me more about how you can really have an effective fighting force with reserve units. And you know Israel depends almost totally on their reserve forces. And we depend on them a lot, but not as much as we could, simply because we shortchange them all the time.

We have got 3,000 armories in this country—3,100—and 1,400 of them are inadequate. I have been trying to get two in Arkansas replaced since, as we lawyers say, the memory of man runneth not. And the roofs leak. And it does damage to the equipment—40 years old—and two of the best units we have in the entire State. And this is the third straight year that the budget does virtually nothing for the National Guard armory upgrading or rebuilding or replacing of armories.

I am not going to belabor that any further. You know these things as well as I do. But I just think that is a misspent priority, a misplaced priority, that we do not put more money—7 percent of the total budget to supply 40 percent of the people we depend on in case of war. And I have always thought that if you give the Guard or the Reserves 2 to 3 months of good training, like we did in Desert Storm, and they performed very well.

Well, now on to THAAD. As I understand it, so far we have had four tests and no hits. And I am not overly concerned about that. I am sure that this requires time for it to be effective. But what I am concerned about is that, under the present plan, we are proposing, after the first hit—after the first hit—to give Lockheed-Martin an order for 40 missiles. Now, I think General Lyles even has said that the test program is not nearly as robust as it ought to be. And if I were in his position, I would be very reluctant to have the Nation depending on me and these missiles to defend the theater of operations when we have only had one hit.

Would you care to comment on that, General?

THEATER HIGH ALTITUDE AREA DEFENSE

General REIMER. Senator, I would say that—and this relates to my response to Senator Cochran—you have a requirement in Korea for upper tier protection. THAAD is the best system that we have available right now. I certainly agree with you, we would very much like to see a hit. We are trying to field an initial capability as quickly as we can to provide the soldiers in Korea the protection they need. I do not think that will be fielded, obviously, unless we are convinced that it can do the job.

The whole program is very important to our soldiers. We are trying to move it along as quickly as we possibly can. But, it goes to the requirement that Senator Cochran talked about; we have soldiers in Korea that need THAAD. I do not think we will field it unless we are convinced that it will do the job.

Senator BUMPERS. This goes to the heart of my concern about the ballistic missile defense program, of deploying it whether you have proved the technology or not. I mean a lot of my colleagues apparently believe we should. I think the proposal to get the technology right before we start deploying it is 10 times more important. Who cares how many missiles you got out there if you do not know whether they are going to hit anything or not.

So I am just saying—I am not a scientist, so I do not know. Maybe one hit is enough. I do not think it is. And General Lyles, who is supposed to be the guru on this, does not think it is either apparently.

Mr. WEST. That program is being carefully managed, Senator. We are not likely to buy a system that is not going to do the job. That is why the tests are important. I think we have got four more scheduled. We are going to get it right.

Senator BUMPERS. I think General Lyles has testified that when we score our first hit, we are going to buy 40 missiles. I am not saying that that is categorically wrong, but I am saying, commonsense dictates to me that it is wrong.

Mr. WEST. My recollection is that we have got four more tests to do. We will need the results from those.

Senator BUMPERS. Mr. Secretary, would you drop me a note on whether or not we are required to buy 40 or it is just the present program to buy 40?

Mr. WEST. Sure, I would be glad to.

MULTIPLE LAUNCH ROCKET SYSTEM

Senator BUMPERS. Finally, Mr. Chairman, last year we appropriated $41 million for MLRS rockets. Every bit of that, incidentally, is for the ER, the extended-range MLRS rocket. And they are in production right now. Bear in mind, that is $41 million this year, 1997, and the budget request for 1998 is $2.9 million. Now, we are told by the contractor that they hope to sell enough in foreign sales to keep the line hot until 1999, when we really start producing these things in some quantity. But they also say the foreign sales are not coming through.

Now, it would be the height of folly, in my opinion—and I am saying this as much for the benefit of Senator Stevens and Senator Inouye as I am for yours or anybody else's—it would be the height of folly to depend on foreign sales to keep that line hot until 1999 based on foreign sales which may or may not materialize and so far have not materialized. It would be the height of folly for us not to up that $2.9 million figure. Because, I can tell you, the line is going to have to shut down if that is all there is. And I think that would be very foolish, considering the fact that we are going to have to crank it up full time in 1999.

Do you agree with that, General?

General REIMER. I definitely agree with that. I think that is something we would have to work. Hopefully, there will be more

foreign military sales. Our 1998 figure represents the best we can do, given the balance that we had to achieve in all the other things. That is why we cannot solve all the problems for everything that has been mentioned here. So, we have tried to balance it and keep the force together.

Mr. WEST. In fact, I was going to make the same comment, which is that probably you and I can sit down together, go through the budget, and find programs in which we are making uneconomical buys in uneconomical quantities at odd intervals. We do it because we are trying to make the best of a very difficult budgetary situation. We are constrained. I told you that our modernization budget is combined in this budget at $11.2 billion. That will not allow us to make smart buys in every program that we would like to.

Senator BUMPERS. Well, Mr. Secretary, if I could talk you and the Congress into making me king, I promise you I can find all the money in the world, without hurting our defense posture one iota, and still deal with the things that I think are important.

Senator STEVENS. What is the height of folly anyway? [Laughter.]

I mean how do you measure that vis-a-vis your becoming king?

Senator BUMPERS. Well, short guys like you do not understand. [Laughter.]

We are going to find, I think, a couple of billion dollars for you—of course, this is total defense—not retrofitting those Trident missiles with D–5 missiles. We can save $2 billion that way, and absolutely hurt nobody.

And if the chairman would turn this committee over to me for just a short while—[laughter.]

RESERVE COMPONENT RESOURCING

Senator STEVENS. That is why I asked you, what is the height of folly? [Laughter.]

How high do you have to get to make a mistake like that? [Laughter.]

I do think we are going to have to look at that D–5 situation, but I am not sure where the money is going to be placed.

Senator BUMPERS. Think what you could do with that F–22, which is going to make the B–2 look good.

Senator STEVENS. Well, the B–2 looks pretty good to me right now. So, that is not so bad.

Senator BUMPERS. I do not know. I cannot find one with a search warrant. [Laughter.]

Where do you hide those things? I mean these are not Air Force people, so they are not the right people to ask.

Senator STEVENS. That is stealth. You are talking about stealth now, that is true.

Let me add just a couple of questions. We do have some problems about the Guard budget. The others have mentioned it a little bit here. But is not there pretty significant risk in the underfunding of the Guard as far as your current policy of rounding out the regular divisions with Guard and Reserve? I mean it looks like we have stumbled a little bit, if we are going to not fund the Guard and Re-

serve, when they are really the fillers for the divisions that we say we have got. What is the risk of not funding the Guard, in effect?

General REIMER. Mr. Chairman, may I comment on that. You are absolutely right, we would like to have more money for the Reserve component. However, what we have done in this budget is to fund the first to fight. I think you will find the enhanced brigades, in terms of the OPTEMPO money, are funded at the proper level. You will find it for schooling; they are funded at the proper level, because it is based on prioritization.

You will also find that, as a percentage of total obligation authority, the amount of money we are spending on the Guard and the Reserve is greater this year than it has ever been. If you compare it to the mid-1980's, it is about 17 percent versus 12 percent. So, we have tried to do the best we can to balance it. I think where you will find the concern is in, as I mentioned, the National Guard divisions, which are not on a CINC's war plan. Consequently, as we use the first-to-fight philosophy, they are the ones that end up being the billpayer.

Senator STEVENS. Well, we ought to discuss that sometime with you. Because as we have watched—or at least as I have watched it—it seems to me that the first to fight or who were ready in the Haitian circumstance were the people from that part of the country. The first to go if there is a buildup out in Korea are people from the Western part of the country. So the first-to-fight concept, if you get to that point, you are going to end up by taking them from west to east, east to west, if there is a crisis.

I do not know whether we can rely on a basis of the risk of the level we are undertaking, because this is becoming chronic. If we rely on the Guard and Reserve to be there when they are really needed, I mean in a real emergency, and they are the ones that are constantly chronically underfunded, they are not going to be there.

I think we have got to think that one through. I do not know what the answer is.

You mentioned the use of the new systems as far as the recent brigade-level exercise at NTC. We are quite interested in that. What does that exercise really mean with regard to the systems you are pursuing? I think you mentioned that Longbow and Javelin were upgraded. What does it do to the Comanche as far as future planning is concerned?

ADVANCED WARFIGHTING EXPERIMENT

General REIMER. Let me comment on that, and the Secretary certainly can join in if he wishes.

I think there are a number of emerging insights. First of all, we have not been able to completely crunch all the data. It is ongoing, and we are doing the analysis now. We will have a meeting at the end of this month with the Army's uniformed leadership to discuss the military aspects of what we saw at the advanced warfighting experiment.

There are a couple of things that are worthy of note. First of all, the way we fielded the equipment—the teamwork associated with the soldiers, the testers, and the civilian contractors working at Fort Hood, TX—is absolutely a great way to go. It saved us years in terms of cycle time, which results in savings in terms of dollars.

Basically, the contractor would give us a piece of equipment, the soldier would take it out, work on it for a week, come back in and say, "I do not like this part of it." The contractor, over the weekend, would redo it and give it back to the soldier. They would continue to refine it in that manner. That is the way they fielded it. That, in my mind, is a very significant lesson learned from the advanced warfighting experiment.

In terms of the specific systems that worked very well, obviously, anything that had to do with situational awareness was very important. It was important to know where you were on the battlefield and to know where your buddy was on the battlefield. That enabled us to mitigate the risk associated with the uncertainty on the battlefield. So, the applique, which is a system we put on most of the weapons to tell people where they were and to give them a common picture of the battlefield, was terribly important.

Javelin, as was already mentioned, was extremely important. The commander of the operational force, the opposing force, said that the Javelin denied terrain to him that had never been denied before. In other words, it was such a good killing system on the battlefield that he had to avoid the Javelin.

The UAV, the unmanned aerial vehicle, absolutely was a winner. Everybody wanted the UAV. They wanted more of them. It really gives you a clear picture on the battlefield. It provides the battalion and brigade commander, for the first time, the ability to see farther than the line of sight.

The other thing, as was already mentioned, was the Apache Longbow. We had two systems there, because that is all we have. With their standoff capability, they were able to add a new dimension to the battlefield. When you work them in conjunction with the regular A models of the Apache and with the UAV, we begin to have a capability that we have never had before.

Those are the major technology things that were important.

The other thing I learned is that our young soldiers can handle this technology. It is not an issue for young soldiers. They come in, and they know how to use the technology. The challenge that we have is for some of us older fellows, in terms of being able to handle this new technology. But, the young ones identify with it, and they make it do things that are just unbelievable to me.

Senator STEVENS. That reminds me of the time I was down in Huntsville, and I asked this young soldier how he could do that so quickly, he says, Senator, it is easier than Nintendo. [Laughter.]

General REIMER. That is exactly right. It is a Pac-Man generation.

MEDIUM EXTENDED AIR DEFENSE SYSTEM

Senator STEVENS. What about MEADS? It is up to $57.4 million. You appealed to us to protect the program last year. Is that still your position now? And is your position fully funded in this budget?

General REIMER. Mr. Chairman, we continue to support the medium extended air defense system or MEADS, as a mobile protective force for the troops in the field. It is the only system that is mobile enough to do that. As you know, a decision is due in December 1998. It is a tri-nation program. We continue to support it, not

only verbally, but with the resources through December 1998, the decision point.

COMANCHE

Senator STEVENS. And you are still in agreement with our concept in the conference last year, where we put up an additional $50 million to try and accelerate Comanche?

General REIMER. You also mentioned Comanche, and thank you. I meant to comment on that. Although we did not have Comanche at NTC, we could see the advantages it would have provided if we did have Comanche there. It really is, as we have talked about, the quarterback for that digitized force. It gives you the aerial reconnaissance capability and the ability to provide targets very quickly. In conjunction with the UAV and other systems out there, it gives you a synergy that is tremendous.

I also had the opportunity last month to visit the Comanche test. I had an opportunity to observe it in one of its test flights. Talking to the test pilot, he felt the helicopter was in better shape at this stage of its development than any other bird that he had been flying under development, and he was a very seasoned test pilot.

I was tremendously impressed, not only with the capabilities, but with the maintenance concept. So, yes, I fully support Comanche.

Senator STEVENS. We were very impressed with that.

Mr. WEST. It carries much of the technology that was validated at the warfighter exercise, Mr. Chairman. In fact, it was an important part of the package that we did not have there.

FORCE STRUCTURE REDUCTION

Senator STEVENS. Well, gentlemen, I remember so well Secretary Perry's comment that if he got to the point where he had to choose between modernization and research and development on the one hand and force structure on the other, he would opt to reduce force structure. It looks like we are coming very close to that in the budget negotiations we are going through right now. I have not talked to Secretary Cohen about it, but it looks to me like the pressure will be on the Department to make some hard choices in this next Congress in the next budget cycle.

Can you tell me now, and if you cannot give it to us as sort of a paper and explain it, what are the potential savings per 10,000-slot reduction in the Army?

General REIMER. One-half of a million dollars, Mr. Chairman.

Senator STEVENS. One-half of a million dollars?

General REIMER. One-half of a million dollars. I am sorry, $500 million, or one-half of a billion dollars, is correct.

Senator STEVENS. One-half of a billion dollars. You are sounding like Everett Dirksen now. [Laughter.]

General REIMER. A Freudian slip on my part.

You get about 1 billion dollars' worth of saving for 20,000. So, if you took 40,000 out of the force structure of the Army, it would be less than 1 percent of the Department of Defense budget.

I think those people are what give you the opportunity to help shape the world for the 21st century. As I attended the Pacific Army management seminar conference, where 41 nations from the Pacific were represented, I was reminded that in all of those na-

tions, the army is the dominant force. When we talk about military relations bringing stability to that region, we are talking about army-to-army contact. That is why I think people are very important.

I do not differ with Secretary Perry on many things, but, in this case, I have a little different view on it.

DEPLOYMENT TEMPO

Senator STEVENS. Well, I am constrained to say I think that some of the deployments we have seen recently, General, there has been such an overwhelming deployment as opposed to the size of the threat, that we probably spent more money than we should have spent in some of these recent deployments. I would hope that we would find some way to moderate the response to overseas crises, and to have a lesser deployment and subsequent lower cost in these peacekeeping operations. It is the peacekeeping operations that will force this choice that the Secretary is going to have to make.

Senator, do you have any other questions?

Senator INOUYE. No; if I may, I would like to submit a whole set of questions.

Senator STEVENS. Certainly.

We have time if you would like to ask questions. Do you have any further questions?

Senator COCHRAN. No further questions, Mr. Chairman.

Senator STEVENS. Senator Domenici has also been tied up in the Budget Committee. He asked to submit questions. We would appreciate it if you would respond to them.

We do appreciate what you are doing. And as they say in our travels around the world, you have every reason to be proud for your watch. These people are very well trained and they are absolutely in just great shape. And the morale could not have been better where we have traveled.

I could ask you some questions about some of the problems we saw in the Russian far east. For instance, how many people do you think you would keep if your pay was behind for 90 days? They still have full strength. There is a message there for us which is hard to understand. But, in any event, the comparison with what we saw worldwide is just enormous. The Army is ready wherever it is right now, and we congratulate you.

Mr. WEST. Mr. Chairman.

Senator STEVENS. Yes, sir.

Mr. WEST. Can I make one observation in closing. It is not clear that Dr. Perry, in the comment that you referred to, necessarily had Army force structure in mind. [Laughter.]

Indeed, the testimony of his stewardship is, right until the end, that he supported both our force structure and our end strength at its current levels, even in the face of——

Senator STEVENS. Well, we intend to ask the same question of everyone, Mr. Secretary: What is the savings from reduction of a wing? What is the savings from reduction of one ship of the line? And a 10,000-member unit is just a raw figure.

Mr. WEST. I have other components in mind.

ADDITIONAL COMMITTEE QUESTIONS

Senator STEVENS. I do not know what it is, and I think we ought to sort of understand that.

Thank you very much.

Mr. WEST. Thank you.

General REIMER. Thank you, Mr. Chairman.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED TO SECRETARY TOGO D. WEST, JR.

QUESTIONS SUBMITTED BY SENATOR TED STEVENS

BOSNIA CONTINGENCY COSTS

Question. What impact is the Army experiencing as a result of continuing operations in Bosnia, particularly in personnel rotations and unit OPTEMPO?

Answer. The impact of contingency operations, such as Bosnia, is that they require unique packages of force mix from both active and reserve components. Cross leveling of personnel and equipment between deploying and non-deploying units is required to meet deployment standards. This, in turn, can leave some non-deploying units with personnel and equipment shortages and degraded readiness. These are temporary, and marginal, degradations in non-deploying unit readiness.

In the case of personnel deployment tempo, contingency operations exact the most stress on low density support units like Military Police and Engineers. We are closely monitoring personnel tempo to ensure we balance both training and operational deployments to sustain an adequate quality of life for our soldiers and families.

NATIONAL MISSILE DEFENSE

Question. Secretary West: Do you have concerns about the current National Missile Defense (NMD) acquisition strategy?

Answer. No. While the Ballistic Missile Defense Organization (BMDO) is responsible for development of the overall NMD system, the individual elements that comprise the system have been and will continue to be developed by the Services to which they are currently assigned. We will continue to work with the Office of the Secretary of Defense and BMDO to ensure the Service roles in managing NMD system development are clearly defined.

QUESTIONS SUBMITTED BY SENATOR PETE V. DOMENICI

ARMY WESTERN REGIONAL CIVILIAN PERSONNEL CENTER

Question. The Army plans to establish ten geographically based regional civilian personnel centers. The Western Region covers my state of New Mexico. The Assistant Secretary of the Army for Manpower and Reserve Affairs decided to locate the Western Regional Civilian Personnel Center at Fort Huachuca in April of last year. In March of 1996, she rescinded that decision when she became aware that the initial selection had not considered potential environmental impacts as required by NEPA. After several other delays, the Assistant Secretary informed me in a letter dated May 9, 1996, that this process would be completed by October of 1996. It is now January of 1997 and this process has still not been completed. I am concerned that all of the delays may prejudice the impartiality of the decision making process.

Can you please give the committee a final date on which this process will be completed, and will you commit to sticking to it?

Answer. As required by the National Environmental Policy Act, 42 U.S.C. 4321–4370d and Army Regulation 200–2, Environmental Effects of Army Actions, the Environmental Assessment (EA) and Findings of No Significant Impact (FNSI) will be completed on April 24, 1997, for the U.S. Army Garrison, Fort Huachuca, Arizona. The EA and FNSI are available for public review and comment for the period of May 7, 1997, through June 6, 1997. The U.S. Army Forces Command (FORSCOM) and Fort Huachuca will review these comments and determine any significant impact to the published EA and FNSI. The complexity of the public comments will influence when FORSCOM will be able to recommend to the Assistant Secretary of

the Army for Manpower and Reserve Affairs a Civilian Personnel Operations Center location. We anticipate this process may be completed during July 1997.

Question. Can you assure the Committee that the numerous delays that have occurred will not prejudice any of the competitors bidding for the location of the Western Regional Civilian Personnel Center?

Answer. The National Environmental Policy Act (NEPA), 42 U.S.C. 4321–4370d, requires that Federal agencies consider the environmental impacts of proposed actions prior to making a final decision, and the Army's implementation regulation, Army Regulation (AR) 200–2, Environmental Effects of Army Actions, specifies the nature and scope of required environmental analysis and supporting documentation for all Army actions. The environmental analyses completed over the past year bring the Army into compliance with both the NEPA and AR 200–2. The site selection criteria have not changed. The following attributes remain the optimum criteria to meet the operational, functional, and aesthetic needs of the mission: availability; costs; operational considerations; automated data processing infrastructure; and facility infrastructure. The recommendation and final decision will be consistent with the law and the site selection criteria established for determining the location of the Civilian Personnel Operations Center.

QUESTION SUBMITTED BY SENATOR CHRISTOPHER S. BOND

TROOP MORALE

Question. Secretary West, could you please address this issue of troop morale and the role of the United States Army in non-combat and non-combat support missions?

Answer. Experience from recent peacekeeping operations tells us that while these operations are inherently stressful for soldiers, morale remains remarkably high considering the normal difficulties associated with any deployment. Soldiers are certainly under a lot of stress in these operations, but surveys and interviews suggest that our soldiers are highly resilient. Data collected from recent peacekeeping operations provide no reason to believe that the Army's involvement in non-combat missions has had a negative impact on troop morale. Data collected from over 3,000 soldiers in Haiti revealed that psychological distress levels (a component of morale) did not differ from garrison norms. In Bosnia, distress levels collected from approximately 3,500 soldiers were slightly elevated compared to garrison norms but were not so high as to raise serious concerns about health, well-being, and morale. However, despite the admirable way in which soldiers have coped with the stresses of deployment, their comments on surveys and interviews tell us that we cannot guarantee that their morale will remain high with the current operational tempo.

While the overall data indicate no significant problems in troop morale, finer grained analyses also show that within any deployment there is considerable variability in morale among units. Interviews and quantitative data analysis suggest that some types of units, such as Engineer, Military Police, and Military Intelligence, have adapted well to their role in non-combat support missions and that their morale has tended to be good. Other types of units, such as Aviation and Medical, have found the transition to a non-combat role difficult and have suffered in terms of morale. The ability to successfully adapt to non-combat support roles is related, in part, to the type of work soldiers perform while deployed. Soldiers who feel that they are making a positive contribution to the success of non-combat missions and who have a high belief in the mission generally have high morale. In Haiti, for example, Military Police and Engineer units had day-to-day involvement with the Haitians which helped them feel as though they were making a positive contribution to accomplishing the mission. As a consequence, MP and Engineer soldiers tended to report relatively high belief in the value of the mission, and their morale tended to be high.

QUESTION SUBMITTED BY SENATOR ERNEST F. HOLLINGS

GUARANTEED ACTIVE DUTY COMMISSIONING

Question. There has been a long-standing policy permitting our Senior Military Colleges (The Citadel, VMI, Texas A&M, Virginia Tech, Norwich, and North Georgia) some flexibility in bringing on active duty a small number of qualified officer candidates, in addition to their annual quota. This policy, called the Guaranteed Active Duty Commissioning Option, has permitted each of the Professors of Military Science at these schools to commission a half dozen or so extra candidates each year. Several months ago, your Assistant Secretary for Manpower and Reserve Affairs, Sara Lister, apparently set about to remove this special status for the Col-

leges, with little or no input from the affected schools. On March 13, we asked Secretary Lister to come over and explain her intentions, and elicited from her an agreement to go back and reconsider her intentions. Further, she agreed to seek input from the affected schools. The Citadel tells me they have heard nothing further in the ensuing month since that meeting. This program only adds a total of a couple of dozen candidates each year. Why do you feel it necessary to rescind this special status for these outstanding military colleges in a time when we need to be reinforcing them, not tearing them down?

Answer. As requested by Congress, the Assistant Secretary of the Army (Manpower and Reserve Affairs), the Deputy Chief of Staff for Personnel, and the Commander, U.S. Army Cadet Command, will meet with representatives of the Senior Military Colleges on May 28, 1997.

The Army's Competitive Category requirement for second lieutenants has been reduced from a high of about 5,400 in 1989 to a projected 3,800 in 1998. As a result, the Army can place on active duty only the highest quality cadets. In the past, cadets from senior military colleges have displaced those from other Reserve Officers Training Corps programs who were of higher quality as determined by Grade Point Average, Advance Camp Score, and Professor of Military Science Evaluation. For the Army to maintain the highest quality officer corps, it must select for active duty only those cadets who strictly meet these competitive measures.

QUESTIONS SUBMITTED BY SENATOR PATRICK J. LEAHY

SUPPLEMENTAL FUNDING

Question. Mr. Secretary: It is my understanding that the Army has made a forecasting error in its needs for the Hydra-70 rocket, which is used on all combat helicopters. Is it true that the Army has a fiscal year 1998 shortfall of 60,000 training rockets?

Answer. We are currently projecting a shortage of 36,000 rockets.

Question. What will be the effects of this shortage on the following: Combat training for pilots at Fort Rucker, Alabama.

Answer. None. The program for combat pilots at Fort Rucker requires familiarization using smoke signature training rockets. We have a sufficient number of these rockets available to sustain fiscal year 1998 and outyear training.

Question. What will be the effects of this shortage on the following: Effects of a production break on cost of future Hydra 70 buys?

Answer. Because the Hydra 70 is procured by all three Services, we do not anticipate a production break in fiscal year 1998. Starting in fiscal year 1999, our Hydra 70 buys will be at their normal level, and barring any unforeseen events, we do not anticipate any future production breaks either.

Question. What will be the effects of this shortage on the following: Effects, if any, on the price of tank ammunition?

Answer. None. We are currently purchasing our tank ammunition at a fixed price through fiscal year 1998.

OBJECTIVE CREW SERVED WEAPON

Question. Can you tell me about the Army's plan for developing and fielding the Objective Crew Served Weapon? How many of these weapons will the Army require?

Answer. The Objective Crew Served Weapon (OCSW) represents a radical approach to small arms technology by incorporating air bursting munitions and advanced fire control systems. We recently finished a number of studies that were focused on filling technology data gaps associated with the concept of air-bursting munitions. This information was provided to industry who are developing and demonstrating prototype systems. We have planned funding for the Engineering and Manufacturing Development phase (EMD) for the OCSW from fiscal year 2001–2006. Production of the OCSW is currently scheduled to begin in fiscal year 2006 or 2007, depending on the outcome of the EMD phase, with the first unit being equipped in the fiscal year 2007 time frame. We will not determine the actual OCSW quantity required until just prior to the EMD phase in fiscal year 1999.

QUESTIONS SUBMITTED BY SENATOR TOM HARKIN

ANTI-SATELLITE WEAPONS

Question. Does the Army consider the Army's budget for the kinetic energy anti-satellite (KE ASAT) weapons program a priority? If not, what are the higher priority programs that could use this funding?

Answer. The KE ASAT technology initiative is not in the Army budget or the Future Years Defense Plan. This program was directed and funded by Congress to develop KE ASAT technology. As a result, the Army cannot use the KE ASAT technology initiative funding for other non-ASAT Army programs.

Question. Are there other means to counter reconnaissance satellites besides ASAT's? Has the Army, Department of Defense (DOD) or the Administration determined the relative cost and effectiveness of these alternatives compared to ASAT's?

Answer. The DOD Space Architect recently conducted a detailed study to develop alternative options for an integrated space control architecture. It addressed DOD's requirements and potential technologies and techniques to negate an adversary's space control. The results of the space control Architecture Development Team indicate that pursuing KE ASAT technology activities is a viable option. There are other potential solutions that would also deny an adversary's freedom of action in space. The Architect will continue to scrub requirements and the Deputy Under Secretary of Defense (Space) will conduct an acquisition review that will help determine what specific acquisition activities may be pursued in this area.

Question. Has the Army, DOD or the Administration determined that our testing and deploying of an ASAT weapon will spur other nations to deploy their own ASAT? Will this increase the threat from ASAT's that our nation's satellites face?

Answer. The President's new National Space Policy reaffirmed that "consistent with treaty obligations, the United States will develop, operate, and maintain space control capabilities to ensure freedom of action in space and, if directed, deny such freedom of action to adversaries." We are not aware of any historical evidence indicating that U.S. development of ASAT technology spurred other nations to deploy an ASAT or that U.S. restraint halted any other nation's development activities.

QUESTIONS SUBMITTED TO GEN. DENNIS J. REIMER

QUESTIONS SUBMITTED BY SENATOR TED STEVENS

HIGH ENERGY LASER SYSTEM TEST FACILITY

Question. Last year, the Congress provided $50 million for the continued testing and development of the Tactical High Energy Laser (THEL). This program, which is operated jointly between officials of the U.S. Army and the Israel Ministry of Defense, has become an important asset to civilian and military personnel who face constant threats from terrorist-launched ground rockets. Israel also contributed $20 million for this effort.

How has this program progressed and can you comment about any present and future requirements that need to be addressed by the Congress to ensure this program is continued to its successful completion?

Answer. Congress provided $5 million in fiscal year 1996 and $45 million in fiscal year 1997 for the Tactical High Energy Laser (THEL) program. It was established as an Advanced Concept Technology Demonstration (ACTD) by Secretary of Defense William Perry in May 1996 and has progressed very rapidly. In July 1996, a Memorandum of Agreement (MOA) between the U.S. and the State of Israel was signed initiating the cooperative THEL ACTD to evaluate the effectiveness of a THEL to negate the threat posed by Katyusha and other short-range artillery rockets. The initial phase of the program includes the effort necessary to design and fabricate the THEL demonstrator, and to integrate it with an Israeli acquisition and tracking radar. The U.S. commitment at the time of the signing of the MOA was only to support the project to completion of this initial phase, and the President's budget for fiscal year 1998 includes the final funding increment ($16.5 million) necessary to complete this initial phase of the program. Israel provided $29.5 million to support this phase of the program.

On July 23, 1996, a contract was awarded by the U.S. Army Space and Strategic Defense Command to TRW to design, build, integrate, and functionally test the THEL ACTD demonstrator over an 18-month period, later extended to 21 months, in accordance with the initial phase of the MOA. A separate contractual effort will be required to pursue the MOA options described below, dependent upon availability of outyear funding. The system design has been completed. Hardware fabrication

has begun and is scheduled for completion by November 1997. Integration and functional testing are scheduled for completion at the TRW Capistrano Test Site (CTS) in California by March 1998. Currently, the TRW contract does not include THEL engagements of rockets in flight at CTS due to environmental restrictions at that location.

The MOA contains several unpriced options that go beyond this initial phase and allow either country to exercise them unilaterally or as a joint effort, with cost share subject to negotiation. The United States and Israel have recently agreed that it is appropriate to exercise an option to conduct technical testing of the THEL System at White Sands Missile Range (WSMR) in New Mexico. The developmental testing at WSMR will be the first opportunity to actually shoot down rockets in flight with the demonstrator to validate this capability prior to shipment to Israel. The estimated cost of this effort is $47.5 million and the Secretary of Defense has proposed that the United States provide two-thirds of the funds ($31.7 million), and Israel one-third ($15.8 million); all in fiscal year 1998. This option has not yet been negotiated and is not part of the President's budget for fiscal year 1998 and would, therefore, require a Congressional increase to the President's budget. The other options in the MOA in the fiscal year 1999–2000 time frame and their associated rough order of magnitude cost estimates include: operational testing in Israel ($50 million); operational upgrades to the THEL demonstrator design required by the Israeli Air Force and hardware modifications to correct deficiencies identified during testing ($40 million); residual operational capability evaluation in Israel ($10 million); and procurement of a second THEL system ($75 million). Of these options, the operational upgrades to the THEL demonstrator design and hardware modifications will contribute most to delivery of an operational system to Israel in fiscal year 1999. The majority of this option could be conducted concurrently with the Research, Development, Test and Evaluation testing at High Energy Laser Test Facility for an additional $20 million (U.S. share). The extent of U.S. cost sharing, if any, in these additional options is yet to be determined. Israel has a strong desire to continue the program to its successful completion, but to date no commitments have been made by the United States to exercise, or participate in, any of these remaining options.

FAMILY VIOLENCE

Question. According to data I have received from Department of Defense's Office of Family Planning, in 1995 there were 19 "substantiated" reports of military spouse abuse per 1,000 and 6.3 cases (per 1,000) of child abuse. There are two problems with these data:

First, there is no data more recent than 1995, so it is not possible to tell how the Bosnia deployment might have affected the families of troops deployed there.

Second, there is no comparable study of family violence in civilian families to help us determine how military families compare.

Despite the reductions in this year's budget for the Army Research Institute (ARI), don't you agree that this problem is important enough to collect some reliable and recent data?

Answer. The U.S. Army Community and Family Support Center (CFSC), not ARI, is responsible for the analysis of family violence data and has records for fiscal year 1996. The fiscal year 1996 Army rate for child abuse is 6.80/1,000 and spouse abuse is 9.86/1,000.

There is comparable data between the military and the civilian community on child abuse and neglect. The National Committee for the Prevention of Child Abuse reports that the civilian rate is 47/1,000; however, there is no central civilian database which collects and analyzes spouse abuse. Civilian definitions of spouse abuse and data collection vary from state to state.

Question. In whatever manner you deem appropriate, will you require the required study to be performed?

Answer. CFSC will continue to collect and analyze reliable data on family violence. CFSC first incorporated an item on family violence in its 1995 Survey of Army Families III, and will continue to do so. Based on our experience of Desert Storm, we expect that, like divorce, incidents of spouse abuse will increase greatly at the time of reunion and then level off at a lower level.

STRESS FROM DEPLOYMENTS

Question. The Army continues to operate in peacekeeping and other international operations at a historically high rate. What indicators do you use to register the stress that this high operating tempo puts service men and women under? What do these data show?

Answer. Soldiers' psychological and physical well-being are assessed using self-administered standardized surveys. Both the psychological health and physical health status scales are scientifically valid and reliable, and have been used during the Persian Gulf War, and in Somalia, Haiti, Kuwait, and Bosnia. Garrison norms have also been established for these scales and are used in the interpretation of the deployment data.

The data indicate that high operating tempo lowers soldier retention intentions. In Haiti, for example, 10th Mountain soldiers who had been previously deployed to Hurricane Andrew or Somalia indicated that they were more likely to leave the Army than did their peers who had not previously deployed. Interview and survey data from soldiers in high operating tempo environments reveal that one of the main effects of the high operating tempo is an increase in work-family conflict. A recent study showed that this increase in work-family conflict is more pronounced for married officers than for married non-commissioned officers or married junior enlisted personnel. Indications are that work-family conflict is the primary reason why high operating tempo adversely affects soldiers' retention intentions.

The impact of the high operating tempo on soldier well-being and mental health needs further research. Existing data demonstrate that overly demanding work hours are related to poor psychological well-being. In addition, data collected in Bosnia show that psychological well-being decreases as deployment length increases. Both long work hours and lengthy deployments are characteristic of high operating tempo environments. However, we have been unable to detect reliable relationships between the frequency of training exercises in garrison and psychological well-being, or between the number of times soldiers deploy and their psychological well-being. Thus, while high operating tempo is clearly stressful for soldiers, we do not have data demonstrating the mental health consequences of frequent deployments or numerous field training exercises. Additional work of a prospective and longitudinal nature is required to better understand the relationship between high operating tempo and soldier well-being, morale, job satisfaction, and commitment to the Army.

Question. What measures do you use to measure the stress for their families? What do these data show?

Answer. The Army measures family stress and coping by using surveys of spouses and field interviews with spouses, soldiers, unit/installation leaders and support providers. Survey scales consist of reliable measures of family stress, and well-being.

Since Operation Desert Storm (ODS), demographic data has shown a rise in active duty Army marriage rates and in the number of soldiers with dependent children. During recent deployments, three-fifths of the deployed soldiers were married. Half of these deployed soldiers had children at home. Data show that there are few single parents, but dual career Army couples have increased since ODS. More research is needed to assess the impact of high operating tempo on dual career and single parent households.

A spouse survey administered during the Bosnia mission indicated that family distress levels rose as separation time lengthened. This finding was similar to that found during the Persian Gulf deployment and the Somalia deployment. Across these deployments, cumulative stress from "back-to-back" missions has been associated with more family financial problems and greater child-rearing stressors.

Data indicate that high operating tempo adversely affects a family member's well-being. Depression rates are higher among spouses of soldiers who deploy. In addition, these spouses' commitment to the mission and to the Army way of life is lower. Lower commitment to the Army reduces these spouses' desire for soldier retention and an Army career. However, most Army spouses coped well during recent deployments despite high stress levels. Their marital satisfaction remained high, and Army divorce rates stayed low. Additional research data are needed to show possible effects of high operating tempo on Army families' long-term stability.

Question. What lessons have been learned from Operation Desert Storm and more recent peacekeeping activities to reduce the stress?

Answer. In combat situations like Somalia and Operation Desert Storm (ODS), casualty risks from lethal weapons are significant sources of stress. However, the types of factors that lead to stress during peacekeeping missions are similar to the types of factors that lead to stress in garrison training. In both peacekeeping and garrison settings, the primary sources of stress for soldiers are (a) conflicts among unit members and (b) family or personal problems. During deployments, close living conditions and constant exposure to unit members exaggerate unit level conflicts, and lengthy separation from family and friends heightens family and personal problems. Both of these factors amplify stress levels of deployed soldiers.

One lesson that has been learned is that leadership of both officers and non-commissioned officers is one of the primary tools the Army has to reduce stress in peacekeeping and combat operations. Data show that effective unit leadership buff-

ers (i.e. protects) soldiers from other stresses associated with deployments. Continuing command efforts to ensure that the Army trains and retains quality leaders is one of the crucial tools for reducing deployment stress.

ODS and follow-on research has shown that deployed soldiers highly value personal time and personal space while deployed. Consequently, ready access to Army Morale, Welfare and Recreation (MWR) equipment and activities has been shown to be important in reducing stress among deployed soldiers. As a result of lessons learned since ODS, MWR has been made a requirement in operation plans, and has been improved in recent peacekeeping deployments. In Bosnia, for example, volunteer civilian MWR specialists were sent to enhance delivery of MWR activities and recreation using a newly tailored Force Provider package.

Another lesson learned is that deployment stress is reduced when soldiers feel confident that their families are coping well with the separation and that their families are cared for by the Army. Establishing effective Family Support Groups (FSG's), providing pre-deployment command briefings, and staffing effective Rear Detachment Commands (RDC) have all been shown to help spouses cope with deployment separation. Since ODS, expanded regulations have been implemented to enhance FSG's, pre-deployment briefings, and the effectiveness of RDC's. As a result of family problems that emerged in ODS, the Army Preparation for Overseas Movement (POM) process has been expanded to include family members. Soldiers with sole custody of dependent children or disabled family members must prepare approved family care plans in order to be deployable. This initiative is designed to prevent stress in deployed soldiers from severe family problems. Another recent initiative developed to help families cope during deployments is the Army Family Team Building Program (AFTB). The AFTB is designed to help families gain awareness of support resources and learn coping skills. The goal is to make families more self-reliant during deployments and in managing their day-to-day lives. At the installation level, Family Assistance Centers (FAC) have been improved. The FAC's are "one-stop" information points to learn about deployment information and Army programs to assist waiting families. In recent deployments, the FAC has been able to reach more family members. An ODS lesson learned by the Army Chaplaincy was the need to strengthen its presence within each Battalion via the Unit Ministry Team (UMT). The UMT is a spiritual resource to help soldiers and spouses cope with deployment stressors. Other MWR, health, and housing programs at installations also have been improved as a result of lessons learned since ODS.

These family-oriented actions have improved soldiers' confidence that their families are coping well and that their families are cared for by the Army. Continued research is under way to find ways to reduce soldier stress and enhance soldier and family quality of life across the range of missions on which soldiers are deployed.

FOOD STAMPS

Question. I am very disappointed in a recent exchange of correspondence I had with Secretary Cohen after he stated that it was "unacceptable" for military families to be on Food Stamps. It seems that everyone knows this is a serious problem but no one seems willing to take any actions to solve it. How many Army families receive Food Stamps?

Answer. We do not know the actual number of soldiers receiving Food Stamps. Rather, we use survey data to estimate the number of soldiers on Food Stamps. A 1995 Department of Defense survey estimated eight tenths of a percent of service members received Food Stamps. The Army was estimated to have about 6,500 soldiers that received Food Stamps as of September 1996.

Question. Does the Army believe that this is a serious problem? What do you propose to do to solve it in the Army?

Answer. The number of soldiers participating in the Food Stamp Program is of concern to the Army. However, a recent Department of Defense study points to participation in the Food Stamp program as primarily the result of the Department of Agriculture calculation of gross income rather than the adequacy of military compensation. The receipt of in-kind services (i.e. on post housing) is not included in the calculation of gross income. We believe 59 percent of the Food Stamp participants are eligible because of this methodology. Additionally, the personal decisions of soldiers regarding family size affect eligibility. Adjusting the military pay system to account for these participants would be complex, expensive, and unwarranted. Changing the compensation package to eliminate Food Stamp eligibility would change the reason for pay increases from responsibility and performance to family size. It is unfortunate that soldiers run into difficult times and may need help in feeding their families with the Food Stamp program. However, let me assure you

that the Army is committed to its soldiers and is taking care of them through an active quality of life program.

BUDGET ISSUES

Question. The Army has submitted an add-on list that totals $3 billion. Do any of the items on these lists have a higher priority than any item contained in the President's original request for 1998?

Answer. No, none of the items on the list have a higher priority than any item contained in the President's original request for fiscal year 1998. The Army submitted an fiscal year 1998 budget that made the best use of available resources. At the time of submission, all known requirements were covered at a level that resulted in acceptable risk. The $3 billion add-on list includes programs immediately below the authorized level of funding that the Army would have funded in fiscal year 1998 had resources been available. If the entire list were funded, the risk to readiness would be lessened, various modernization programs would be strengthened and/or accelerated, and improvements to our infrastructure would be made.

UNDERFUNDING AND THE QUADRENNIAL DEFENSE REVIEW

Question. In an analysis for the Budget Committee, CBO and GAO identified up to $50 billion in "underfunding" in the next four to five years of the defense budget. What actions can you tell us about that the Quadrennial Defense Review (QDR) is undertaking to address this problem.

Answer. The QDR started with a thorough analysis of our defense strategy and the force structure and level of modernization required to successfully implement that strategy. Some personnel reductions are likely as a result of the QDR, as are the reduction, elimination, or realignment of various modernization programs to better match available resources with validated military requirements. The QDR is also looking closely at infrastructure requirements.

INVENTORY PRACTICES OF THE ARMY

Question. Why does the Army continue to buy items for which it has more than a 20-year supply, as documented in a recent General Accounting Office (GAO) Report (GAO/NSIAD/97–71)? Has the Army considered changing its purchasing practices and adopting so called "best practice" standards, such as those employed by the private sector? If so, what are the next steps planned by the Army for implementing such practices?

Answer. The Army does not purposefully procure items for which there is a 20-year supply. Our determination process for requirements is similar to "best practices" in industry. We project requirements based on customer demand, repair, and return patterns, as well as a series of mathematical models and costing factors. In contrast to commercial organizations, the Army must react to national priorities, which are reflected in changes in force structure, deployment to support both military and humanitarian objectives, and force modernization. This changing scenario causes fluctuation in demand which is reflected in our requirements. The fluctuation in demand can create a potential for having items due-in that exceed our requirements. Our streamlined acquisition techniques and reduced lead-times will shorten the time it takes to react to changing requirements, though it may take some time before we can see the results of these new initiatives.

The Army also holds some items which are not demanded during peacetime but are required immediately to support Military Operations Other Than War and humanitarian efforts. These items do not have commercial equivalents, so the only way to support these emergency situations is to hold assets in our inventory.

Once inventory is on hand, we constantly review that inventory to ensure that it is working for us and that we are not holding it for its own sake. The Army has been extremely successful in reducing its on-hand inventory over the past 6 years. From 1991–1996, we reduced our inventory 36.1 percent. Our on-hand inventory at the end of fiscal year 1996 was $10.77 billion, less than 16 percent of the total Department of Defense (DOD) secondary item inventory. We are still not satisfied with our progress. We have undertaken a new program to reduce contingency retention stocks, one of the approved DOD-holding levels. Specific guidelines are provided for retention and disposal of those assets. Inventory managers are currently justifying all contingency retention stocks from a zero base. The results will be applied to our requirements determination and budget stratification processes.

The Army continues to improve its business processes. For instance, we have reduced the time to award a contract from 439 days in 1992 to 151 days in 1997 and are working with our suppliers to reduce production time.

Although the General Accounting Office (GAO) has authored several reports on adopting "best practices" in the procurement of military equipment, there were no recommendations in the current report. The only "best practice" that has been recommended by the GAO is direct vendor delivery (DVD). The Army has adopted DVD where it makes sense, most notably with tires. Successful DVD requires commercial-type items (most of which we have transferred to the Defense Logistics Agency) and a fairly substantial recurring demand. It is harder to apply DVD techniques to complex, high technology weapon system parts that are unique to DOD and for which there is no robust market in the private sector. In addition, while DVD is a great idea for the right items in a continental United States-based operation, it does not do well in the desert of Southwest Asia or the mountains of Rwanda. The Army has initiated other techniques to streamline our acquisition process, such as flexible long-term contracting and indefinite delivery, indefinite quantity methods. These two methods, along with DVD, have reduced the procurement cycle to one month for items procured via these methodologies.

We have made significant strides in the last several years in reducing inventory and are on target to make the DOD Strategic Logistics Plan goal set for the Army. We will continue to right-size our inventory to meet our Title 10 responsibilities while practicing good stewardship of scarce resources by continually refining our requirement and surgically trimming our on-hand inventory.

Question. The General Accounting Office (GAO) noted that the Army Material Command (AMC) has a policy of not placing orders of less then $2,350 (ibid, pg 15). Has AMC considered changes to its purchasing practices such as modifying the rules governing minimum purchase levels?

Answer. AMC policy does not preclude orders of less than $2,350 from being placed. However, it has a policy that ensures they do not spend more to process a contract than they do to purchase the items under the contract, and the $2,350 figure quoted by GAO does not apply to all items. This "minimum buy" policy varies by item or group of items, by location, and by type of procurement method. It is reviewed annually and is one of the elements being reviewed in an ongoing study to determine the optimum inventory levels for the Army. While AMC has no plans to rescind or modify its policy at this time, they will consider the result of the current inventory study.

QUESTIONS SUBMITTED BY SENATOR PETE V. DOMENICI

COMANCHE PROGRAM

Question. How much additional funding would need to be added to the Army's fiscal years 1998–2002 spending plan to support acceleration of the Comanche helicopter Initial Operational Capability from fiscal year 2006 to fiscal year 2004?

Answer. A two year acceleration of Comanche fielding (from December 2006 to December 2004) will require an additional $1.4 billion from fiscal year 1998 to fiscal year 2002. That funding increase would result in a reduction of funding requirements greater than $2.1 billion in the period of fiscal year 2004 and beyond. Future Years Defense Program funding requirements for the current and accelerated programs are shown below:

[In millions of dollars]

	Fiscal year—				
	1998	1999	2000	2001	2002
Baseline Program	282	372	441	587	738
Accelerated Program	532	672	791	937	924
Difference	250	300	350	350	186

COMANCHE HELICOPTER

Question. Do the threats the Army is likely to face in the next 10 years justify accelerating the Comanche Initial Operational Capability (IOC)?

Answer. A significant battlefield deficiency facing the Army is armed aerial reconnaissance. This deficiency will continue until Comanche is fielded. The sooner we field Comanche, the sooner we fix the battlefield deficiency. However, the threat

does not justify the cost that would be required in the outyears to bring the program forward, given that the Army has other requirements with higher priority.

Question. Why is accelerating the Comanche IOC such a low priority.

Answer. The Comanche program is fully funded and on schedule. Acceleration of the Comanche program would require us to take resources away from other programs that are vitally important to us in the near term.

COMANCHE PROGRAM

Question. Are there any significant technical risks associated with accelerating the Comanche Initial Operational Capability (IOC) to fiscal year 2004.

Answer. There is no significant technology risk in accelerating the Comanche development schedule. The technologies necessary to support Comanche are available or maturing at a rate that supports acceleration. Early, up-front funding is most critical in accelerating the schedule. If the necessary funds are available in fiscal year 1998 and fiscal year 1999 to support parallel development of all the subsystems, the acceleration can be achieved without additional risk.

HUEY HELICOPTER REENGINING PROGRAM

Question. The Army recently signed a Memorandum of Agreement with the Army National Guard to place T801 engines in Guard Huey helicopters. Would you please tell the Committee the rational behind this initiative and how much will this program cost?

Answer. There will be a production gap of more than three years between the date the Federal Aviation Agency certifies the T801 engine for use in the Comanche and the date we will begin producing the airframe. We intend to place the T801 in three battalions of Army National Guard (ARNG) UH–1H helicopters currently being used as the interim aircraft to perform the Light Utility Helicopter (LUH) mission. This initiative offers us the opportunity to avoid a production gap and, at the same time, reduce program risk, because we will prove the engine's effectiveness. This, in turn, will allow us to reduce Operational and Sustainment costs for these aircraft. We expect to spend $10 million in fiscal year 1996 National Guard and Reserve Equipment Account money to reengine two UH–1H aircraft this year. If we find that the T801 engine is successful, we intend to reengine all three ARNG LUH battalions. We project that it will cost us around $108 million to buy the remaining 129 engines to complete this initiative. An important feature here is that as these engines reach 6,000 hours in use, or as the airframes are retired, the engines will be returned to the depot for use as spares for the Comanche program.

Question. Has the Army or the National Guard included funds in this year's budget to begin this program?

Answer. As mentioned earlier, this year we intend to execute $10 million to certify the T801 engine in the UH–1H airframe. If the certification is successful, the intention is to fund the remainder.

Question. Is a reengined Huey as capable as a Blackhawk.

Answer. No, it is not intended to be as capable as the Blackhawk. The reengined UH–1H will have no additional capabilities.

Question. Has the Army done, or does it intend to do, an Operational Requirements Document validating the need for this program?

Answer. The Army does not intend to prepare an Operational Requirements Document. This is not a new program, it is simply a reengining initiative.

ARMY WAR FIGHTING EXPERIMENT

Question. Does the success of Apache Longbow and Javelin argue that the Army must be cautious of pursuing digitization at the expense of weapons technology and firepower?

Answer. Army modernization efforts have demonstrated that digitization (information technologies) integrated into a weapon system/capability leads to increased force effectiveness. As shown during the recent Army Warfighting Experiment, the Apache Longbow is a good example of how integrating digital technology can increase firepower effectiveness over existing systems.

Digitization enables enhanced battlefield situational awareness, thus allowing commanders to maximize employment and effectiveness of weapons systems for decisive results. Pursuing digitization linked with essential weapons technology is key for the Army to fulfill its role in achieving the "Joint Vision 2010" goal of full-spectrum dominance.

Question. Did the Army NTC opposing force use jamming or information warfare techniques against the blue force?

Answer. No. The purpose of the Advanced Warfighting Experiment was to determine if we could apply digital technologies to the fighting force. With active jamming or information warfare, we would not have been able to get an accurate assessment of the technical, system, and operational architectures. Part of the assessment process was a passive evaluation of potential vulnerabilities of the digital systems. Information warfare experimentation will be conducted during the Division Advanced Warfighting Experiment.

NATIONAL MISSILE DEFENSE ISSUE

Question. Do you have concerns about the current National Missile Defense (NMD) acquisition strategy?

Answer. No. Recently, the Secretary of Defense made a decision that, while the Ballistic Missile Defense Organization (BMDO) is responsible for development of the overall NMD system, the individual elements that comprise the system have been and will continue to be developed by the Services to which they are currently assigned. He further stated that this means that the Army will continue to oversee the development of the Ground Based Interceptor, Ground Based Radar, and part of the Battle Management, Command, Control, and Communication elements. The Army supports the Secretary of Defense in his decision on NMD development. We will continue to work with the Office of the Secretary of Defense (OSD) and BMDO to ensure the Service roles in managing NMD system development are clearly defined.

Question. Do you believe there is agreement within DOD on who will man and operate the National Missile Defense?

Answer. Yes. Based upon the Army's historic mission of providing ground-based active defense of the United States against ballistic missiles, there is agreement between the Army and the Air Force that the Army will man and operate the ground-based elements of NMD. There is also agreement that the Air Force will exercise Component Command responsibilities for space-based elements. The JROC, however, has not yet formally designated a lead Service for the NMD program. We will work with the Joint Requirements Oversight Council to formalize designation of the NMD lead Service.

Question. Is there any reason why the Army could not successfully operate an NMD system which uses Minuteman boosters and possibly Minuteman command and control infrastructure?

Answer. The Army supports the most cost and operationally effective system to defend America against ballistic missiles. If the decision is made to incorporate Minuteman components and/or infrastructure into the NMD system, there is no reason why the Army could not successfully operate these ground-based elements.

HUNTER UNMANNED AERIAL VEHICLE PROGRAM

Question. In view of the recent success of the Hunter Unmanned Aerial Vehicle (UAV) system at the Force XXI exercise at Fort Irwin, is the Army reconsidering its decision not to field any of the additional Hunter systems currently in storage?

Answer. During the Task Force XXI Advanced Warfighting Experiment (AWE), the Hunter UAV system served as a surrogate Tactical UAV in support of the brigade and task force commanders training at the National Training Center. A preliminary "lesson learned" from the AWE was the demonstration of the clear potential of a tactical UAV in the hands of a brigade commander to provide responsive, relevant combat information. The Army has used and will continue to use the Hunter UAV system at Fort Hood for development and refinement of UAV operational concepts and tactics, techniques, and procedures. However, the Army's strategy for UAV support to commanders calls for a complementary "Family of UAV's" consisting of the Outrider UAV supporting the brigade commander, the Air Force-operated Predator UAV supporting the division and corps commander, and the High Altitude Endurance UAV supporting the corps and joint task force commander. We do not currently plan to field any additional stored Hunter systems.

Question. The Tactical UAV program is suffering from serious developmental problems which could result in cancellation of the current program. Do you believe the Hunter UAV system could fulfill, at least in the near term, the Army's tactical UAV requirements?

Answer. First, the Army does not plan to field any additional stored Hunter systems. Second, the Hunter UAV system was designed to provide UAV support to division and corps commanders, not brigade commanders. It is not mobile enough, nor capable of operating from brigade areas, and requires an operations and support infrastructure that is not compatible with quick, agile brigade operations. The Hunter is not the system to fulfill Army brigade commanders' needs. The Army supports

the current Tactical UAV Advanced Concept Technology Demonstration as the way forward to ultimately meet those needs.

QUESTIONS SUBMITTED BY SENATOR CHRISTOPHER S. BOND

LOGISTICAL EQUIPMENT

Question. General Reimer, if it is your intent to continue these types of missions, are not the needs for logistical equipment imperative? I find it incredulous that the Army makes no room for the Heavy Equipment Transport System (HETS) in its fiscal year 1998 budget request. The average thinking man would see a disconnect here. Please comment.

Answer. The need for logistical equipment is imperative in any military operation. The Army ensures that soldiers sent on operations have the equipment they need, to include adequate food, clothing, and shelter.

Regarding HETS, because of affordability, the Army was not able to budget for the procurement of HETS in fiscal year 1998, despite their importance in military operations. To date, we have been able to procure HETS for our highest priority units through our budget and with help from Congress. The Army appreciates your support. Our requirement is for 2,412 HETS and, with current funding, we will have 1,617 on hand.

SUPPLEMENTAL FUNDING

Question. General Reimer, wearing my National Guard hat, I am also very concerned about the level of training and the funding stream that has been provided in the budget for National Guard core training requirements as well as advanced tactical training. Could you speak to this concern?

Answer. The Army provides resources based on the first-to-fight principle. The fiscal year 1998 training budget funds Active Component and Reserve Component Operating Tempo (OPTEMPO) in relation to unit deployment timelines. It provides trained and ready forces for warfighting Commanders-in-Chief (CINC's) at levels of readiness specified in the Defense Planning Guidance, provides a continental United States based power projection capability and supports the Army's role in the National Military Strategy. The Army has resourced the National Guard subject to available resources. Early deploying maneuver units are funded at 100 percent of their requirements, based on their deployment timelines. Forty percent of National Guard units are in this category. Pre-mobilization training requirements include gunnery training to Table VIII and maneuver training at platoon level for infantry and armor units, and at the company/battery level for the combat arms, combat support, and combat service support units. Several aviation units are funded at minimum levels to maintain individuals skills only. Later deploying National Guard units receive reduced OPTEMPO funding. Sixty percent of National Guard units are in this category. Current resourcing levels support individual and professional development training requirements for Force Package 1 and 2 units and 3 of 15 enhanced separate brigades.

QUESTIONS SUBMITTED BY SENATOR MITCH MCCONNELL

STATUS OF URBAN WARFARE DOCTRINE AND TRAINING

Question. In the context of October 1993 "shoot down" in Mogadishu; the potential for urban warfare in Bosnia or an incident similar to the seizure of the Japanese Ambassador's residence in Peru; and the potential for urban warfare worldwide, does the Army have adequate doctrine and training capacity to prepare for this threat?

Answer. The Army does have adequate doctrine. Doctrine for conducting these operations is contained in Field Manual (FM) 90–10, Military Operations on Urbanized Terrain (MOUT), and FM 90–10–1, An Infantryman's Guide to Combat in Built-Up Areas. As with any doctrine, the Army must continuously evaluate and update the doctrine to reflect changing conditions. The Center for Army Lessons Learned, at Fort Leavenworth, Kansas, is tasked with collecting, analyzing, and disseminating lessons learned from Somalia, Bosnia, and current training.

The Army recognizes the increasing probability of conducting military operations in urban terrain and is improving its capacity to conduct training for this type of operation. The Army opened a new, state-of-the-art facility at the Joint Readiness Training Center at Fort Polk, Louisiana, in fiscal year 1996. This facility supports battalion task force operations and is fully instrumented to record and document the

training to facilitate the lessons learned for the rest of the Army. The facility offers airfield, urban terrain, and a military compound training sites. The implementation of the phase II instrumentation package will link the three training areas and improve the After-Action Report capability. Role players are used to prepare our forces to deal with noncombatant evacuation operations, peace enforcement, peacekeeping, and humanitarian assistance.

HEADQUARTERS REDUCTIONS

Question. The Army has done very well in reducing overhead, especially at installations across the Army. How well is it doing at reducing its supporting headquarters elements in the Pentagon, Army Materiel Command (AMC), Training and Doctrine Command (TRADOC), Forces Command (FORSCOM), and the overseas commands? Are there plans to trim these headquarters in order to maintain the force in the field?

Answer. The Army continues to downsize the structure of the Army Management Headquarters Activities (AMHA). Since the drawdown began in 1989, we have reduced the number of our AMHA spaces slightly more than 39 percent. Of these reductions, Headquarters, Department of the Army, has been reduced proportionately to the overall Army reduction; AMC, TRADOC, and FORSCOM have been reduced a collective 43 percent during the same period. Our overseas activities were similarly reduced, and we think that they are currently sized appropriately given the supported forces and missions. These are significant reductions to our Management Headquarters structure with more to come through the Future Years Defense Program and Quadrennial Defense Review cuts. We continue to review streamlining initiatives within all of AMHA to further consolidate major commands and reduce HQDA and separate operating agencies. Our operating forces should receive any valid savings that can be obtained from the reduction in infrastructure, but we will need time to make this happen.

FORCE XXI BRIGADE AT NTC

Question. Are there any early results or trends from the Force XXI Brigade tests just completed at the National Training Center (NTC)?

Answer. We found that the employment of the industry/user team is an absolute winner. The experimentation concept is a clear winner in managing change and the substance of change. The Experimental Force is a more coherent, more capable force than what we have seen before.

Situation Awareness (SA) is the ability to know where units and individual vehicles are located and what they are doing (moving, stationary, etc.). Friendly forces SA is the most powerful enabler on the battlefield, and there is great potential for enemy forces SA. The sensors we developed to detect the enemy force worked very well. However, the fusion of the multiple source data into meaningful information and knowledge of enemy intentions is the challenge we must work to solve.

We are only scratching the surface in the Tactics Techniques and Procedures (TTP)/doctrine arena; it changes daily as we learn from our experimentation process. Results indicated that 85 percent of the experimental equipment provides significant contributions to combat operations (including Javelin and Appliqué); 10 percent require more work; and 5 percent will not work at all in supporting combat operations. The Army also must have training capabilities embedded into the systems. Further, leaders must be capable of both shaping the information derived from digitizing the battlefield and using the tools developed to use that information in the best possible fashion to maintain information dominance. We must include information management and digitization training at training institutions.

Finally, wraparound simulation at NTC is a winner. The use of a simulation to replicate and provide a virtual combat environment (wraparound) to the live brigade enhances the situation from which that brigade develops and coordinates its combat operations.

QUESTION SUBMITTED BY SENATOR ERNEST F. HOLLINGS

RESERVE MOBILIZATION INCOME INSURANCE

Question. In fiscal year 1996, the Congress directed the creation of the Ready Reserve Mobilization Income Insurance program, designed to protect our Guard and Reserve members from financial hardship created when they were mobilized and had to be away from their peacetime jobs. That was a good and justifiable idea, but the implementation has fallen short of the mark. As you know, service men and women, who signed up for this program, expecting and planning on being com-

pensated, are now receiving only four cents on the dollar of what had been promised. We now have a belated request for $73 million in the Supplemental Appropriations measure to fix that, but in the interim, is there nothing you could have done in the way of an emergency reprogramming to help those people? I have about 500 families in South Carolina that this is affecting today.

Answer. Under section 12529 of the National Defense Authorization Act for Fiscal Year 1996, the Army was unable to use appropriated funds to mitigate the reduction of payments. We worked with the Office of the Secretary of Defense to explore every option available to pay the full amount to enrolled members when it became due to them and to maximize payments to the extent of funds available. Additionally, we fully supported immediate submission of the supplemental appropriation to capitalize the Fund.

QUESTIONS SUBMITTED BY SENATOR TOM HARKIN

INADEQUATE PAY

Question. What are your current plans to address the problems of Army families whose incomes place them near or at the poverty level?

Answer. Military pay for all grades in fiscal year 1997 is well above the poverty level for an average-size family. However, because there are some soldiers with very large household sizes (an E–1 with a household of five through an E–6 with a household of nine), a small number of members may have household incomes falling below poverty thresholds. We believe that the current military compensation system is fair and equitable, and able to attract and retain the best qualified force in the nation's history. The Army's commitment to soldiers is strong, and we take care of our soldiers with a vital quality of life program. We have worked vigorously to ensure military pay remains competitive and families get the support they need.

Question. Could you submit to the Committee a proposal for changes to pay and benefits which addresses the problems of uniformed Army personnel who are living near the poverty level? Please go beyond a response that simply includes a simple across the board cost-of-living adjustments for base pay. Would these changes require Congress to enact statutory changes?

Answer. As I have stated, only those soldiers who have very large family sizes are near or below the poverty level. Food Stamp eligibility requirements are 30 percent above the poverty level and increase with family size. Thus, an E–6 whose $34,573 salary is above the poverty level will qualify for Food Stamps with a household size of nine members. Additionally, because the Department of Agriculture does not require in-kind services in the calculation of their gross income, 59 percent of soldiers eligible for Food Stamps are living in Government-provided family housing. A recent Department of Defense (DOD) study estimates the cost of eliminating eligibility for the Food Stamp Program to be approximately $20 billion, if basic pay was increased to ensure no member (DOD-wide), regardless of family size, could qualify. An alternative method of providing a supplemental allowance based on family size, so cash pay would exceed the Food Stamp eligibility limitation, would cost approximately $72.6 million (DOD-wide). Adjusting the military compensation system to account for the approximately 2,700 soldiers we believe are receiving food stamps and living off-base with above-average size families is complex, expensive, and unwarranted. DOD does not favor payments to soldiers based upon the number of dependents they acquire. The Army supports this position, as this concept would change the reason for pay from responsibility and performance to family size. The Army also feels that identifying programs targeted for potentially eligible Food Stamp users would be an unwarranted intrusion into a soldier's personal life. It is unfortunate that soldiers run into difficult times and may need help in feeding their families through the food stamp program. However, let me assure you that we remain committed to assist all our soldiers and their families in times of need.

INADEQUATE HOUSING

Question. What is your estimate for when the current problems and shortfalls in housing for military personnel and their families will be corrected by the new initiative cited in your testimony? Please provide statistics showing the current shortfall in housing and a projected timetable for the initiative's affect on the numbers and percentage of inadequate or substandard housing.

Answer. Approximately 76 percent of Army-wide, on-post family housing does not meet the Army's Whole Neighborhood Revitalization standard, and close to 10,000 families who live off post in the United States are unsuitably housed due to cost, condition, or availability. However, the Army cannot afford to fix these problems by

using traditional methods. The Army is aggressively pursuing the use of the fiscal year 1996 legislation that enabled us to implement our Capital Venture Initiatives to remedy some of the housing problems at U.S. installations. The Army is in the process of evaluating its first project at Fort Carson that was solicited under the new legislative authorities. However, it is too early to project how much time it will take to correct the entire housing problem in the United States. Once the Army has evaluated the results and benefits of the Fort Carson project, we will have a better idea of what can be accomplished and how long it will take. The Army plans to use the new authorities to revitalize the housing inventory, and where economically feasible, reduce the shortfall in housing. Fifteen other projects are currently under development. In regard to family housing overseas, the new authorities do not apply. Therefore, the Army is looking at other ways of solving its overseas housing challenges.

INCREASE IN THE NUMBER OF ARMY GENERALS

Question. Does the Army plan on requesting an increase in the number of generals?

Answer. The Army has submitted a comprehensive set of recommendations to the Secretary of Defense. Our analysis indicates that we do not have an adequate number of general officers to support both internal and external active and reserve general officer requirements. The study was not used solely as a venue to increase general officer positions, on the contrary, the Army downgraded, consolidated or civilianized 14 recognized general officer requirements. However, even with these decisions, the continued demand for external requirements coupled with the Army absorbing 50 percent of all the general officer reductions during the drawdown has resulted in internal Army general officer shortages.

Question. If such an increase is under consideration, how does the Army justify this increase considering the "draw down" in the number of Army personnel?

Answer. This is a very valid question that can be answered in a number of ways. Our analysis indicates too much general officer strength was taken out of the Army without due consideration of increased joint and coalition requirements. QDR reductions on both end strength and force structure do not necessarily bring about a corresponding reduction in general officer requirements. For example, there are only three general officers in an 18,000 soldier division. A smaller operating force does not necessarily equate to a smaller command structure on a one to one basis. On the contrary, the increased complexity of operations, the consolidation of organizations, the duration and magnitude of joint and international operations, and the management of systems and programs have actually increased general officer requirements during this same time period. There is no longer an absolute relationship between force structure and general officer strength.

Another unforeseen impact on general officer requirements not directly tied to the force structure are the demands generated within the joint community. The growth in joint requirements, both documented and undocumented, have reduced the Army's ability to meet internal demands. To ensure the Army did not reduce its level of joint participation, we made the decision to leave valid Army general officer positions vacant. We have seen and will continue to see greater reliance on general officers to lead joint and combined operations. The leadership requirements in relations to force size for these operations also defies the historical concept of leader to led ratios mentioned in the proceeding paragraph. We have also seen a growth in undocumented general officer external requirements. For example, for the past two years we have supported an undocumented logistics position in Bosnia, for nine months a general officer coordinated military support and security for the Olympics, and for well over a year, two general officers performed peacekeeping operations in Haiti, all while still assigned to their Army billets. Political considerations, not leader to led ratios, now dictate general officer requirements in numerous joint and combined operations.

Statutory requirements have also added to the demand for general officers. For example, the provisions of the Defense Acquisition Workforce Improvement Act (DAWIA) has had a noticeable impact on general officer skill distribution. Supporting such obligations has forced reductions or vacancies to disproportionately occur in internal Army general officer billets.

Finally, while not an ideal solution, the Army has historically relied on frocked general officers or promotable colonels to fill the delta between general officer requirements and the general officer authorizations. The Army's frocking authority, controlled by statute, is programmed to reduce from a ceiling of 29 to 12 over the next two years. The loss of this management alternative will acerbate the perception of general officer shortages.

Question. Will the Quadrennial Defense Review (QDR) endorse this increase?

Answer. The QDR will outline a force end strength for the Army of the future and provide a framework to define general officer requirements. Upon completion and impact determination of changes to force structure based on the QDR, the Army will reassess its general officer requirements and make appropriate adjustments to the study if warranted.

Question. What are the budgetary implications of adding more Army generals?

Answer. The budgetary implications will be minimal if there is a determination to request an increase in the number of Army general officers. The end strength of the Army's officer corps would remain constant, so any increase in the general officer corps would be offset by a decrease in the colonel population. That cost differential per general officer is less than $12,000 per year. It should also be noted that the study has identified several positions to be downgraded or changed to civilian positions as a result of the study. The cost savings associated with these decisions provide a potential offset to increases in general officer strength.

AIRCRAFT FLEET UPGRADE

Question. Is it true that budgetary constraints are forcing a delay of the navigational upgrades to the Army's C–12 fleet?

Answer. Yes.

Question. How much would it cost to upgrade the fleet with an FAA compliant avionics and communication suite?

Answer. The C–12 upgrade costs $500,000 per aircraft. However, current plans do not call for upgrading the entire fleet. Older C–12's, that will be displaced over the next 1–10 years by new UC–35 and C–23 aircraft, would not be upgraded. With additional funding, the Army would upgrade 12 C–12's in fiscal year 1998 ($6 million) and 12 in fiscal year 1999 ($6 million). As a result of reductions in the number of Operational Support Airlift aircraft, the Army has been able to acquire, by transfer from the other Services, newer C–12F-model aircraft. These aircraft have three different cockpits which result in training and aircrew coordination challenges—a less than optimal situation for the aircrews. Although the aircraft are equipped with a civilian Global Positioning System (GPS) navigation system, it does not have the military coding capability required for wartime operations. The cockpit upgrade of the fleet of C–12F-models will eliminate training requirements and improve flight safety by providing a standard and modernized cockpit configuration. Additionally, the upgrade includes a GPS with the military coding capability required for flight operations in austere wartime theaters of operation.

Question. Do you require any congressional action to facilitate the upgrade?

Answer. An additional $6 million in fiscal year 1998 would provide funds to accomplish the upgrade of the 12 C–12's in fiscal year 1998. Another $6 million would be needed for 12 C–12's in fiscal year 1999.

ADMINISTRATIVE AIRCRAFT FLEET UPGRADE

Question. Assuming the Congress would be willing to upgrade the fleet without delay, how much of a budget increase for the C–12 fleet would this require for fiscal year 1998?

Answer. In fiscal year 1998, a budget increase of $6 million would be required to upgrade 12 C–12's.

Question. Without an increase, how long would the upgrade be delayed?

Answer. The upgrade would be delayed indefinitely, since it is not funded in the Future Years Defense Program.

ROCK ISLAND ARSENAL

Question. I understand that the Army has decided to out-source the M–1A2 tank gun mount and 155 howitzer projects. Why has the Army decided not to allow the Rock Island Arsenal to compete on the contract proposals? Doesn't this contradict the letter and spirit of the Arsenal Act?

Answer. This is really two separate acquisition requirements. First, we have not decided to outsource tank gun mounts. We still procure half from the prime contractor as part of the tank multiyear upgrade program, and we still produce half at Rock Island Arsenal. Last year, we initiated a privatization study under the provisions of Office of Management and Budget Circular A–76 to review those produced at Rock Island Arsenal. We stopped that effort early this year because of an internal Department of Defense legal ruling which reaffirmed Army authority to buy end items and components from private sources but gave priority to Title 10 U.S.C., section 4532, the Arsenal Act, when considering whether to outsource ongoing arsenal

production. In these cases, we will study production costs under Arsenal Act standards.

Referring to your question regarding the new lightweight howitzer program, the Army decided last year to procure the howitzer from private industry rather than produce it at a government facility because excellent prototypes were available from private industry. This decision stemmed from the results of a 1994 market survey. At the time the survey was conducted, Rock Island Arsenal did not have a prototype howitzer or funds to develop one. Moreover, the Arsenal Act is considered inapplicable to the acquisition strategy decision to fulfill a requirement for a new weapon from private industry. Our procurement decisions on both the gun mounts and the howitzer program have been closely reviewed and supported by Army legal counsel.

BOSNIA CONTINGENCY COSTS

Question. Will Brown and Root provide services to the redeployment of U.S. service personnel to Europe or the U.S.? If so, what services would they provide? Do you have cost estimates for this portion of the redeployment?

Answer. Services to support the redeploymnent of U.S. forces is within the scope of the Operation Joint Guard Sustainment Contract currently held by Brown and Root Corporation. This contract was established to provide for a whole host of logistics support activities. If a service falls within the realm of logistics, the services are available under the contract. To date, there has been no requirement identified for Brown and Root to provide services in support of a redeployment. Because no requirement for redeployment has been identified, we are not able to estimate costs.

THEATER MISSILE DEFENSE ISSUES

Question. Is the Medium Extended Air Defense System fully funded in the current DOD budget?

Answer. The program's first phase, known as Project Definition-Validation is fully funded through the first quarter of fiscal year 1999. The Ballistic Missile Defense Organization (BMDO) and the Army will consider funding the remainder of Design and Development phase during the next year's budget development for fiscal years 2000–2005. Because of recent Program Budget Decisions splitting Theater Missile Defense (TMD) program funding responsibilities, BMDO is responsible for Research, Development, Test and Evaluation funding, and the Army is responsible for procurement funding. The first year of procurement is expected to be fiscal year 2003. The Army and the Marine Corps continue to have a compelling need for the only system that can provide air and missile defense for maneuver forces, as well as serve as an effective lower tier TMD system under the Theater High Altitude Defense umbrella.

SUBCOMMITTEE RECESS

Senator STEVENS. We are going to stand in recess until 1 week from today, at 10 o'clock, when we will hear from the Department of Defense health program.

[Whereupon, at 11:47 a.m., Wednesday, April 16, the subcommittee was recessed, to reconvene at 10 a.m., Wednesday, April 23.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1998

WEDNESDAY, APRIL 30, 1997

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:09 a.m., in room SD–138, Dirksen Senate Office Building, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens, Cochran, Domenici, Bond, Shelby, and Bumpers.

DEPARTMENT OF DEFENSE

NATIONAL GUARD BUREAU

STATEMENTS OF:

LT. GEN. EDWARD D. BACA, U.S. ARMY, CHIEF, NATIONAL GUARD BUREAU

MAJ. GEN. WILLIAM NAVAS, JR., DIRECTOR, ARMY NATIONAL GUARD

MAJ. GEN. DONALD W. SHEPPERD, DIRECTOR, AIR NATIONAL GUARD

OPENING STATEMENT OF HON. TED STEVENS

Senator STEVENS. Good morning, Generals. My apologies. There are a few other things going on around here this morning.

It is nice to have you with us again. I look forward to our attempt to acquaint the new members with the situation in Alaska this summer, General.

General BACA. Yes, sir.

Senator STEVENS. We are going to hear from two panels this morning, beginning with the leadership of the National Guard Bureau testifying on their 1998 priorities and followed by several adjutants general who will testify on their respective funding priorities. We are going to commence the morning with the Chiefs of the Guard Bureau, Lt. Gen. Ed Baca, Chief of the National Guard Bureau, Maj. Gen. Bill Navas, Director of the Army National Guard, and Maj. Gen. Don Shepperd, the Director of the Air National Guard.

I believe our committee has long taken a lead in addressing both the readiness and modernization requirements of the National Guard. We have enjoyed working with the Guard Bureau and the adjutant generals. In recent years we have witnessed the results of these investments, the tremendous performance of the National

Guard in every overseas contingency mission, as well as support for national disasters across our country.

I think the state of readiness is better than ever in our history. Beginning with the operation involved in Desert Storm and continuing today in Southwest Asia and Bosnia, the National Guard has demonstrated both their professionalism and their dedication. As we have traveled through the area we have met and seen the groups from various States of our Union who are participating along with the Active Army and Air Force in these missions.

Despite the success story, we have proposed deep cuts in the force structure, the OPTEMPO, school training, and infrastructure support funding for the Guard. In partnership with Senator Inouye and other members of this committee, I assure you that we want to address the priorities that you articulated this year. All of your statements have been included in our record. We welcome your comments on the status of your forces and the priorities that you associate with your funding and suggestions that you have as to how this committee can help you perform your missions.

General BACA. Thank you, Mr. Chairman.

Senator STEVENS. Now, does anyone have an opening statement?

Senator BOND. I will. I have an opening statement. I will save it for the question session, or would you prefer to have it now?

Senator STEVENS. I would prefer to have it now.

STATEMENT OF HON. CHRISTOPHER S. BOND

Senator BOND. All right. Well, let us get it out of the way.

Thank you, Mr. Chairman. Generals, it is a pleasure to welcome you before the committee. I believe, as the chairman has already said, we are united in our belief that the National Guard's missions are crucial to our national and civil defense. As a cochairman of the National Guard Caucus, I am very proud to recognize that, in terms of military readiness, national disaster preparedness, and law enforcement, the Guard has distinguished itself with an unsurpassed level of professionalism, and at a bargain price.

All you have to do is watch the news, follow what is happening that is of importance, and you will see the National Guard there. And we could not be prouder of the Guard and the men and women who serve in it.

From my own State standpoint, the Missouri Guard units as I speak are stationed overseas in Hungary as a part of Joint Guard supporting NATO in the Dayton Peace Accords. Missouri Air Guard F–15's, in accordance with United States directives, are patrolling the United Nations no-fly zones over Iraq, containing and deterring acts of aggression by Saddam Hussein. And I also might point out that it was a National Guard unit which made the initial discovery of the U.S. Air Force A–10 which crashed recently, which has been in the top of the news.

I am very much concerned as we go into this cycle, when distinguished individuals such as the U.S. Army's Assistant Vice Chief of Staff, General Garner, is quoted as he was on April 14: "The Army Guard would bear the brunt of whatever force cuts may occur as a result of the 'Quadrennial Defense Review [QDR].'" Since he is the guy in charge of the QDR, I find that statement very disturbing.

The General went on to say there was a tremendous amount of pressure from Congress arguing that the Guard is too big. I do not know where that pressure is coming from from Congress. Last I counted there are 65 of us who are members of the Senate National Guard Caucus, and I do not see the pressure coming from that 65. Maybe there is among the other 35, but I am pretty good at numbers and I think that our caucus is strong.

I can assure you as well that the Members of Congress from my State of Missouri do not share that opinion. You probably would not find that opinion from Members from North Dakota or Florida or California or any State where disaster has struck and the Guard has responded. I think, rather than being viewed as a billpayer, the Guard should be viewed as a vibrant, vital, and adequately funded part of the Defense Department.

As I understand it, right now we are looking at a $743 million shortfall in Army National Guard operations and pay allowance accounts, no funding for military schools for 12 of the 15 enhanced brigades, nor any of the National Guard divisions, a funding request sufficient for only 3 percent of special training exercise dollars for 1998, 25 percent of the new recruits, more than 6,000 personnel, will not be able to attend basic training.

I look forward to discussing these items with you in the question and answer session.

I thank you, Mr. Chairman.

Senator STEVENS. I am pleased to have that statement, Senator, as cochairman of the National Guard Caucus here in the Senate. We listen to your comments.

Senator Cochran, do you have anything to say?

STATEMENT OF HON. THAD COCHRAN

Senator COCHRAN. Mr. Chairman, I would just like to comment that many of us are concerned about the "Quadrennial Defense Review" and the fact that the National Guard apparently has not been invited to sit at the table or at least to be represented in a way that would have its views and interests reflected in the report that is being submitted to the White House on Thursday.

I do not know what is in the report. We probably will have an opportunity later in this month or next month to review it in some formal way, through hearings or meetings here in the Senate. I hope that this committee will take advantage of the opportunity to carefully review it to be sure it is a proposal for new strategies or new ways of budgeting for military needs that takes into account not just the needs of the military to contribute to deficit reduction, but also to safeguard our Nation's security.

For me this has to be the primary reason for this review, to find out how we can do that more efficiently, more effectively, and those go hand in hand.

Senator Lott and I joined in writing a letter to Secretary of Defense Bill Cohen the other day to express our concerns about these comments that Senator Bond referred to that Gen. Jay Garner made about the fact that the Army was going to have to get its force reductions out of the Guard forces and that that would be where the emphasis would be placed.

Well, we certainly do not want that to be a prejudgment of a decision of the "Quadrennial Defense Review" process. If it is, that is very unfortunate. But we want the Guard's interest to be carefully reviewed, if not by the QDR participants, then certainly by this defense panel that has been assembled by Secretary of Defense Cohen. At least three of those persons on that panel are former staff directors of the Senate Armed Services Committee. Some of them we have worked closely with over the years.

But we are hopeful that we can work through this process and make sure that the Guard forces are treated fairly and that this budget request is also reviewed carefully to be sure it provides the funds to maintain readiness and training and all the things that would keep the Guard an active participant in the defense of our country.

Senator STEVENS. Senator Bumpers, do you have an opening statement?

Senator BUMPERS. I do not.

Senator STEVENS. Senator Domenici.

Senator BUMPERS. I thought we were on questions. You are still doing opening statements?

Senator STEVENS. Yes; yes, sir.

STATEMENT OF HON. PETE V. DOMENICI

Senator DOMENICI. Mr. Chairman, I just wanted to lend an observation regarding the "Quadrennial Defense Review." I mean, it is obvious that the "Quadrennial Defense Review" is not going to be an easy event for the Defense Department. They are going to have a big struggle to fit within the numbers that are assumed for the next quadrennial. I share the concern that the Guard be appropriately represented, because it is pretty easy for those in the standing military to pass on cuts and restraints on to some other group. I am hopeful the Guard is not just sort of an outsider to that.

I would ask a few questions about that when my turn comes, as to where they are. And if they cannot quite give us their views, then I would ask that we ask the Secretary of Defense to assure us that they are properly represented with reference to their mission and their importance. I think that would be very, very important.

I thank you very much.

Senator STEVENS. General Baca.

STATEMENT OF LT. GEN. EDWARD D. BACA

General BACA. Thank you, Chairman Stevens, and thank you, members of this committee, for your considerable support in making the National Guard the force that it is today. I would like to make a few brief and very brief introductory remarks and submit a more detailed statement for the record. I will begin with a short overview of the current status of your National Guard, and my remarks will provide a broad foundation for more detailed discussion by Generals Navas and Shepperd in response to your questions.

I am delighted to appear before you today representing the more than 480,000 Army and Air Guard members located in 3,400 communities throughout America. As citizen soldiers, we are not only

a professionally trained military force, but a military of professionals. We provide the critical link between the American people and our national defense. When the Guard is mobilized, the state of the Nation is also mobilized. We are not just the people's Army or the people's Air Force; we are the people—Americans at their best.

Today's National Guard is a ready and flexible force, prepared to implement our national security strategies across the full military spectrum. Our primary mission has not changed since it was written into the Constitution by our Founding Fathers. It still remains the fighting and the winning of our Nation's wars.

A DUAL-ROLE FORCE

I am proud to report to you that the Guard has answered every call from the President and the Governors, responding within the timelines required and performing to established standards. We have successfully accomplished every mission and task from traditional support to the Active Forces to nontraditional support of the new doctrine of preventive defense.

Our State Partnership Program has become the genesis for the new Marshall plan of the 21st century. Our ability to answer these widely divergent calls is a direct result of the quantity and the quality of training we have been able to provide and the readiness levels that we have been able to maintain to perform that warfighting mission. We have worked very hard to provide the kinds of diversity of training necessary to ensure the utmost accessibility, and it is my view that if we continue to provide the proper levels of training to all members of the Guard we will be able to continue at the current levels and, in fact, make even greater contributions to the full range of military operations.

Mr. Chairman and members of the committee, as I appear before you today I am proud to report to you that we have almost 12,000 members and units of the Army and Air National Guard deployed around the globe in 29 foreign nations, from Bosnia to Honduras, in Antarctica to the northernmost tip of Alaska. They are supporting respective CINC's in Bosnia, resupplying the National Science Foundation at the South Pole, conducting nation building in Central and South America, planning civil emergency exercises in the former Soviet Union, and aiding United States antidrug efforts both domestically and internationally.

Here at home, the Guard is responding at the tip of the spear to the call of 12 Governors for domestic emergencies. That is from providing comfort and relief to the devastated victims of the Red River floods to assisting in the search for the missing Air Force A–10.

But the Guard's active involvement in domestic crisis is not merely limited to on-call emergency response. Every day throughout America, guardsmen and women are involved in a wide range of youth and drug demand reduction programs that are improving the moral, social, and economic fabric of our great Nation.

ADDING VALUE TO AMERICA

Our ability to be decisively engaged in such a wide range of important national and international activities is clear testimony to

the quality of our force. We owe the success to the diversity, strength, and professionalism of the leaders, soldiers, and airmen of the National Guard. We have the finest led and most versatile force in our history. Our commitment to fair and equal treatment for all, combined with sound leadership practice and the best training available, has served the Guard and our Nation well.

I believe our singular recruiting and retention success are the results of that commitment, training, and high operations tempo that we have maintained in the last year. Since the recall of the draft, the National Guard has been one of the few means available for American citizenry to exercise their right to participate directly in their Nation's defense while also serving their State and their local community.

We believe that it is critically important that we be able to continue to provide the best and most meaningful training possible to those citizen soldier volunteers who make the sacrifices necessary to provide for the common defense. Their readiness and effectiveness is a direct function of the resources available to provide them that training.

To date, through innovative leadership, frugal management, and focused training, we have been able to maintain that high standard required to contribute effectively to our national security strategy. But, Mr. Chairman, as the budgets continue to decrease, this is becoming one of our greatest challenges.

NATIONAL GUARD VISION

Finally, my vision of the Guard is to see that it remains the best, most combat-ready Reserve force in the world. We have deliberately invested in our future and, more importantly, in America's future. I believe that we have postured the Guard for the 21st century. We are committed to bringing to the QDR and the NDP a force that can make significant contributions to a cost-effective national defense and fulfill all of the other requirements of our national security strategy.

The Guard stands ready to serve our great Nation in the first line of defense, as it has done continuously for over 360 years.

PREPARED STATEMENT

Thank you, Mr. Chairman. Thank you, members of the committee. We are ready for your questions.

[The statement follows:]

PREPARED STATEMENT OF LT. GEN. EDWARD D. BACA

AMERICA—A MILITIA-BASED NATION

As we move steadily toward the 21st century, the National Guard of the United States is playing a more vital and relevant role in maintaining the nation's security. In this period of fiscal austerity, with uncertain threats beyond the horizon and familiar enemies—domestic emergency and natural disaster—remaining at home, the nation's leaders and the American people alike, now more than ever, can see and appreciate the value of the citizen-soldier tradition that is a national heritage stretching back over 360 years.

The early colonists believed it was both a right and a responsibility for the able-bodied to bear arms on behalf of their communities. They made the citizen-soldier the bedrock of survival, organizing militias to protect their homes and families in the New World. The system spread throughout the Colonies, producing similar cad-

res in each region. Then, as now, militiamen earned the trust and respect of their fellow colonists by stepping forward to provide for the common defense. These same militiamen formed a disciplined nucleus for action on the public behalf when natural calamity occurred. The concept evolved as part of our national character and was embedded in the Constitution by the nation's founders who chose to rely on State militias for Federal defense rather than maintain a large standing force. For most of the Republic's history, those proud and steadfast militias protected the nation with pride, dedication, and uncommon valor.

Following World War II, however, with the emergence of the Sino-Soviet threat, national security strategy developed around the policy of "Containment." This required extensive forward basing of U.S. military forces to physically deter communist expansion. It entailed an enormous shift in the security paradigm of the United States since it was impossible to man under the traditional militia concept. Containment led to the prolonged maintenance of a large standing active duty force and, for a period after the Korean War, reduced reliance on the nation's citizen-soldiers. The Vietnam conflict, though, convinced national leaders like Army Chief of Staff General Creighton Abrams and Secretaries of Defense Melvin Laird and James R. Schlessinger that there were both economic and moral imperatives for restoring volunteerism to national defense. They crafted a Total Force Policy to reinstate the National Guard and Reserve forces as full partners in the national military establishment. The wisdom of this was validated by the heroic contributions of National Guard men and women during Operation Desert Storm in 1991, and its success is now proven daily around the world as National Guard personnel support contingency operations side by side with their Active Component counterparts.

The modernization of the Army and Air National Guard, and the restoration of their rightful place in the defense establishment over the past 25 years, are returning large dividends to the American people. As the U.S. military restructures itself into a smaller, predominantly home-based power-projection force for the post-Cold War national security environment, the National Guard is picking up a larger share of the load. We can and will do even more. A fully committed partner on the Total Force national defense team, we have an active voice in the Quadrennial Defense Review now underway, and are confident our ever-growing capabilities will receive favorable consideration by the National Defense Panel as it determines the structure of America's 21st century defense establishment. Meanwhile, we are continuing to enhance our ability to mesh seamlessly with the Active Components and perform the demanding, highly technical missions that will be required of tomorrow's warriors; find innovative ways to master accelerated operations tempo; and exploit new technologies to improve readiness and effectiveness.

And the National Guard's responsibilities continue to grow. Under current planning, by fiscal year 1999 the Army National Guard will provide over 50 percent of the Army's combat manpower and more than a third of its combat support and combat service support strength. The Air National Guard already provides 100 percent of America's continental air defense and is involved across the full spectrum of Air Force missions, from strategic deep attack and satellite communications to special operations and civil engineering. Across the board, the National Guard is now a more accessible force that the National Command Authority and Unified Commanders-in-Chief expect to see and use on demand. This is a positive trend that we endorse and support wholeheartedly.

NATIONAL GUARD VISION—FORCE OF THE FUTURE

The National Guard is the force of the future—a solution—and not just a force of the past—an honored memory. We have made excellent progress under the Total Force Policy and are continuing to strengthen intraservice teamwork and evolve joint force applications. The road ahead has been mapped out by General John M. Shalikashvili, Chairman of the Joint Chiefs of Staff, in "Joint Vision 2010". It is one to which your National Guard is fully committed.

The following vision keeps the National Guard's view of the future focused and our progress on track: Our Vision—The National Guard—the most ready reserve component in the world—led, trained, equipped, and resourced to accomplish national security and military objectives while providing the States a balanced force of units with organic chains of command capable of performing the military support mission.

We intend to remain the Most Ready Reserve Component in the world. No one does more, better, more often in more places around the world. The National Guard will continue to extract maximum readiness from every dollar expended and maintain indisputable readiness reporting and management systems.

We will maintain a Balanced Force of Units and will continue to be a relevant force capable of performing all missions across the national security strategy spectrum. This will be accomplished by continued integration into peace and warfighting operations.

We will continue to provide Military Support. While the Federal mission remains at the forefront, the National Guard will continue to serve the States during domestic emergencies and support community programs that contribute to the stability, tranquillity, and well-being of this nation.

NATIONAL GUARD PEOPLE AND VALUES

The National Guard's ability to handle missions at home and abroad flows from our people—dedicated men and women who carry on the militia tradition of service to nation and neighbor. It is imperative that we continue to attract talented new members and train them to the highest standards. The National Guard is not a People's Army or a People's Air Force—it is the people. We are proud that half of the signers of the Declaration of Independence were National Guardmembers, as well as 18 of the 41 Presidents, but we are equally proud of the fact that the 475,000 patriots serving today reflect the full demographic scope of modern American society. Representing more than 2,700 communities from all 50 States, the District of Columbia, Guam, the Virgin Islands, and Puerto Rico, these volunteers infuse into the National Guard a diversity that is one of our greatest strengths—diversity of education, political affiliation, vocation, and social and economic status, as well as race, color, creed, and gender. Quality and performance are the only discriminators the National Guard applies for promotion and opportunity, and we are richer for it. By the end of fiscal year 1996, the Army National Guard minority population had increased one full percentage point to 25.6 percent, and the Air National Guard had increased a similar amount. Vermont has recently appointed the nation's first female Adjutant General, and we continue to work closely with State- and national-level councils to identify and develop minority leaders.

Last year was a relatively good one for recruiting and retention as the National Guard proved to be the "force of choice" for patriotic young Americans. Our sincere commitment to fair and equal treatment for all, quality training, and superior leadership all contributed to that success, as did the Montgomery G.I. Bill and the education assistance programs offered by some States. We see challenges ahead due mainly to the turbulence of ongoing military restructuring and the high operations tempo demanded in the current national security environment, but whatever the recruiting climate, our standards will remain high.

The National Guard is more than a job—it is a way of life requiring exceptional commitment as well as performance skill. The core values we nurture as an institution—integrity, loyalty, dedication, service, selflessness, compassion, family, and patriotism—represent the finest qualities of our national character. These values, and the beliefs that inspire them, are steel threads woven into the fabric of American life, strengthening and enriching it. We are confident in our ability to continue drawing talented men and women from our communities into the National Guard Family to perpetuate these values and our militia heritage.

The National Guard is a family business. We extend the same loyalty and care to the families of our soldiers and airmen that Guardmembers themselves receive. Our Family Partnership Program is one of the most extensively networked in the Department of Defense and has proven itself repeatedly during State activations and Federal mobilizations. Reciprocally, there is a high rate of volunteerism and community service by the families of Guardmembers which further perpetuates the National Guard neighbors-taking-care-of-neighbors spirit that has won us public trust.

National Guard military technicians and Active Guard/Reserve (AGR) personnel merit special mention because they provide the full-time support that is critical for our current high state of readiness. They manage the comprehensive training programs necessary to maintain proficiency in the age of high-technology systems, and perform most of the daily equipment and facility maintenance. Their effectiveness and dedication had a direct impact on our ability to fulfill all State and Federal taskings in 1996, and to conduct other domestic programs designed to improve the quality of life for our friends and neighbors.

DUAL-ROLE FORCE WITH THREE MISSION AREAS

In the Federal role, the National Guard is a key element in the President's National Security Strategy. Our mission here is to provide combat-ready forces during crises and contingencies, and engage proactively in Preventive Defense missions to promote democratic practices and values overseas.

During 1996, almost 38,000 National Guard men and women deployed to more than 40 countries for peacekeeping and other contingency operations, and to conduct overseas training. The largest contribution was to U.S. European Command where members of the Army and Air National Guard were instrumental in the success of Bosnian peacekeeping and humanitarian support—Operations Joint Endeavor, Deny Flight, and Decisive Edge—and Kurdish refugee security—Operation Provide Comfort. Complementary support was provided to U.S. Central Command for Operation Southern Watch to deter further Iraqi regional aggression.

In Operation Restore Democracy, the U.S. Atlantic Command continued to call on Army National Guard Special Forces and engineers for rotational peacekeeping support to help rebuild Haiti.

Our ongoing support to U.S. Southern Command covers a broad variety of counterdrug and nation-building missions. National Guard pilots, engineers, medical personnel, and communications experts executed multiple deployments last year to Central and South America for important operations like Coronet Oak and Constant Vigil.

To keep their skills sharp for U.S. Pacific Command contingencies, National Guardmembers performed training deployments and augmentation activities in several Asian and Pacific Rim countries. Hawaii Army National Guard maintenance specialists supported Active Component helicopter operations during Exercise Cobra Gold in Thailand, and the 184th Bomb Wing, the first Air National Guard unit to fly the B–1B bomber, demonstrated its long-range prowess during an exercise in Indonesia.

While the National Guard's primary mission is to fight and win the nation's wars, we also are performing an increasingly important National Security Strategy function through Preventive Defense operations. Foremost among these is our four-year-old State Partnership Program. Working in coordination with the Joint Chiefs of Staff, the National Guard has fostered 21 State partnerships in Eastern Europe and the Former Soviet Union, and 4 State partnerships in Central and South America. The State Partnership Program enhances American security by helping to forge relationships with friendly nations through which we can demonstrate—by the example of the American citizen-soldier/airman—the role of the military in a democratic society. This is possible because the National Guard is both a professional force and a force of professionals, making us uniquely qualified to extend the hand of friendship from grassroots America to any nation in the world where the diverse military and community skills of our people can help foster democratic values. Our Guardsmen and women serve as role models in making a compelling case for the ideals of democracy, professionalism, and deference to civilian authority.

Under the State Partnership Program, Guardmembers visit partner countries in Traveling Contact Teams and provide detailed information on requested civil-military topics such as air search and rescue, medical evacuation, personnel management, budgeting, military law, professional military education, disaster response planning, and family programs. This provides an opportunity to demonstrate both the military effectiveness of militia men and women and their capacity for humanitarian and civil works that enhance the quality of life for all citizens. The program continues to show its potential in Eurasia where many newly democratic governments see our National Guard as a model on which to rebuild their own defense establishments. Last year, in affiliation with the North Atlantic Treaty Organization's Partnership for Peace initiative, National Guardmembers provided peacekeeping training to soldiers from Lithuania, Latvia, and Estonia; flew humanitarian medical airlift missions in Kazakhstan; and helped construct the first military chapel in Moldova, to name just a few of the activities conducted under this valuable bilateral linkage. We were active in our own hemisphere, as well, furnishing engineering, medical, and other support to Latin American neighbors with pressing social problems. Belize, Panama, and Costa Rica were some of the countries in which National Guard men and women employed their military and civilian skills to improve the lives of our neighbors while at the same time receiving excellent training.

In our Constitutionally mandated second role, the National Guard mission is to provide emergency support to the governors of our States and territories. In 1996, we had another record year. On 419 occasions the National Guard responded when our fellow Americans needed help to cope with the ravages of blizzards, floods, hurricanes, forest fires, tornadoes and other disasters, providing military assistance to local civil authorities and easing the load for our neighbors. During the "Blizzard of 1996," Guardmembers answered the call in 11 Eastern Seaboard States to help dig out from under three feet of snow, providing emergency transportation and medical support. When the post-winter melt brought treacherous flooding, many were recalled to rescue stranded victims and remove debris. Three major hurricanes—Bertha, Fran, and Hortense—lashed our coastlines from Puerto Rico and the Virgin

Islands to Virginia. Again, your National Guard met the challenge swiftly and skillfully with assistance that saved lives and helped set communities on the path to recovery from devastation. And in Alaska, California, Colorado, and Oregon, the heroism of the nation's citizen-soldiers and airmen battling forest fires that raged across the countryside helped preserve treasured national timberland resources, personal property, and lives. National Guardmembers likewise provided recovery support and other special skills in responding to aircraft and train disasters, including the tragic crash of TWA Flight 800. On top of all this, nearly 12,000 Army and Air Guardmembers from 47 States and territories supported the Centennial Olympic Games in Atlanta last summer in the largest domestic operation we have ever undertaken, working unheralded behind the scenes to make the most heavily attended games in Olympic history a source of justifiable pride for all Americans.

In discussing our third mission area, it is important to point out that a strong, broadly skilled National Guard is important to this great nation for several reasons. We are a warfighting organization, yes, and a resource of great value to the States and territories for disaster response. But we are also something more, as captured in the phrase: The National Guard "Adds Value to America." The training and discipline that enable our soldiers and airmen to serve country and State so well also equip them to extend helping hands into their own communities to make them better places in which to live and work. Our third mission area derives from the unique character of the National Guard as a hometown organization with deep community roots. In this capacity, we conduct youth programs, provide health care, and perform a variety of other community service activities that promote good citizenship and help ease the burdens of the disadvantaged. These programs focus the talents of our outstanding young men and women—and often their families, as well—on their own towns and cities where they conduct mentoring and educational activities for young people who desperately need firm guidance from caring adults, help adult Americans develop the skills to pursue a better life, and foster the values that strengthen America.

Currently, 29 States and territories are involved in highly successful youth programs. The ChalleNGe program remains one of the National Guard's most effective intervention programs for at-risk youth. Directed at unemployed high school dropouts, it provides academic instruction leading to a General Educational Development (GED) diploma, and training in job skills and life-coping behaviors. ChalleNGe corpsmembers also participate in community service projects where they learn the personal rewards of positive citizenship. ChalleNGe consists of a five-month residential phase followed by a year of mentoring from specially trained individuals in the corpsmember's community. Since its inception four years ago, the ChalleNGe program has graduated almost 10,000 young men and women in the fifteen States where it is now operating. As testimony to its effectiveness, over 80 percent of ChalleNGe graduates have attained their GED, an impressive number considering that all participants originally were high school dropouts.

The Youth Conservation Corps (YCC) is similar to ChalleNGe and is directed at the same at-risk youth population. Employing many of the same instructional components, YCC uses military-based training to improve life skills and enhance the employment chances for students dropping out of secondary schools. It is underway in four States and territories and has graduated over 500 young men and women since its inception four years ago.

The STARBASE (Science and Technology Academics Reinforcing Basic Aviation and Space Exploration) program is oriented primarily towards students and teachers from inner city schools. It exposes them to real-world applications of math and science through experiments and simulations—"hands-on learning" viation and space-related fields. STARBASE is conducted in fourteen States and territories and annually reaches over 20,000 students.

These programs have been highly successful and merit continued support. In addition to producing better citizens, they benefit the American taxpayer in terms of cost avoidance by reducing the burden on social programs.

COUNTERDRUG OPERATIONS AND PROGRAMS

Illegal drugs continue to pose a serious threat to American society and remain one of the country's costliest problems. The men and women of the Army and Air National Guard have entered into a dedicated partnership with other government agencies to fight this scourge of our cities and citizens. We are proud of our role in directly supporting four of the five goals in the President's National Drug Control Strategy.

Counterdrug operations constitute an increasingly important series of functions for the National Guard and range across all three of our mission areas. Under Title

10, Army and Air National Guardmembers support the Commanders-in-Chief in their detection and monitoring mission by providing aerial surveillance, radar tracking, linguist support, and similar assistance outside of the continental United States. The recurring deployments to Panama for Operations Coronet Nighthawk and Constant Vigil are excellent examples.

Under Title 32, the National Guard provides equipment and direct support to law enforcement agencies within the States and territories to battle drug smuggling, distribution, and domestic cultivation. Our assistance to State and local officials employs the superior skills of National Guard personnel in a broad variety of activities that range from providing intelligence analysis, linguistic support, communications support, and marijuana eradication to inspecting cargo, conducting day and night surveillance missions, managing counterdrug operation logistics, and boarding up crack houses. Last year, 900 National Guardmembers from eight States built a network of roads and fences along the California-Mexico border that successfully curtailed cross-border narcotics trafficking in the target area.

And in our community-focused domestic role, we remain engaged heavily in many of the over 8,000 separate drug demand reduction activities underway nationwide. Drug demand reduction emphasizes community coalition building, promoting anti-drug messages, youth encampments, fostering family values, and leadership development. In most cases, the National Guard provides the supporting mechanism and allows local community groups to take the lead. But Guardmembers and their families also play a significant role in contributing to a drug-free community environment by volunteering their time to provide anti-substance abuse education and serving as role models. All of our youth programs have embedded drug-prevention themes. Last year, we entered into partnership with the Community Anti-Drug Coalitions of America, creating a truly formidable combination of homebased counterdrug resources that will extend the fight into thousands of new communities.

Over 3,000 National Guardmembers participated in almost 10,000 counterdrug missions in 1996 and assisted local, State, and Federal law enforcement officials in seizing almost 400 tons of processed marijuana and 90 tons of cocaine; accomplishing over 128,000 arrests; and confiscating more than 16,000 weapons, 8,500 vehicles, and almost $340 million. It is important to note that this support—which the nation's law enforcement agencies now consider an indispensable weapon—was provided on a volunteer basis over and above normal training and mission requirements. As patriots imbued with a community-based set of traditional values, the soldiers and airmen of your National Guard can be counted on to remain at the forefront of the counterdrug effort.

POSTURING FOR TOMORROW—A FORCE IN TRANSITION

As responsible stewards for the American people, we must continue evolving the National Guard cost-effectively into a force that is structured, organized, trained, and equipped for the Federal and State missions of the 21st century. Our first priority is stabilizing and maintaining a balanced force structure and end strength. There will continue to be mission and alignment changes that enhance the National Guard-Reserve-Active Component but these have to be managed smartly to minimize turbulence and ensure the resulting National Guard force can meet its Federal and State mission taskings. The National Guard is a tremendous repository of capability that can make an extremely cost-effective contribution to national security given the stability to plan accordingly.

The National Guard's second priority is the full resourcing of readiness requirements. With a national defense strategy that relies on the contributions of all three elements of the Total Force, it is imperative that each element be funded at levels which meet the modernization, personnel, and operations standards of today. While National Guard modernization in the past has depended heavily on the "cascading" of equipment from the Active Component, this process is nearing completion and our increased role in modern defense operations supports the direct funding of major weapon systems and equipment modernization.

Our third priority is the sustainment of our infrastructure. Current and future missions mandate the modernization of basic infrastructure through both the construction of new facilities and the renovation of older existing ones. Continuation of the current downward funding spiral in this area will result in lower readiness, morale, and retention.

The National Guard will work all of these priorities hard with our Total Force partners to fulfill our joint obligation to provide national leadership and the public with the best trained, most capable and ready defense forces possible.

This year, the Army National Guard is on track to meet its fiscal year 1999 programmed build-down end strength of 367,000. The 15 enhanced Separate Brigades

that will be the centerpiece of our early deployment support for wartime contingencies under the fiscal year 1999 force structure plan have begun transitioning into their new roles and are on the way to establishing the readiness levels that will give them critical combat punch. Other elements of restructuring include the Guard-Reserve force-balancing exchange of 12,000 positions—which was agreed to in the 1993 Offsite and will be completed this year—and a sweeping Division Redesign program that will affect some 50,000 Guardmembers in over 30 States. Under this Army-approved plan—originally proposed by the National Guard—12 combat maneuver brigades will convert to combat support and combat service support units, providing the Active Component with augmentation in vital war mobilization and sustainment fields while ensuring that the National Guard retains the overall force balance necessary to meet mission needs at all levels.

Equipment modernization—which still remains key to readiness—is progressing acceptably within the Army National Guard. Initiatives are in work to further cement the National Guard-Active Component personnel integration process. The first Active Army officer to command an Army National Guard unit since World War II is in place with Louisiana's 141st Field Artillery Battalion, and the National Guard is participating actively in the Army's Force XXI process. On all counts, the Army partners of the Total Force team are in synch professionally and personally, working together to give America the cost-effective combat land force it requires.

The Air National Guard is likewise transitioning through a series of force structure and mission changes in full partnership with the Active Component. Last year, with the assumption of air defense sector responsibility by Washington's Western Air Defense Squadron, the Air National Guard took full control of Air Combat Command's 1st Air Force and all of its subordinate Regional and Sector Operation Control Centers. As 1st Air Force commander, Major General Phil Killey is the first Air Guardsman to command a numbered Air Force. In activating the 137th Space Warning Squadron, the Colorado Air National Guard fielded the Air Force's only mobile, survivable Space Warning Squadron. Kansas's 184th Bomb Wing became the first Air National Guard unit to achieve initial operational capability in a strategic long-range, deep-strike weapon system—the B–1B bomber—and will be followed in the coming year by Georgia's 116th Bomb Wing. Virginia's 192d Fighter Wing, the first of five Air National Guard units programmed to add tactical reconnaissance capability, employed its new reconnaissance pods to excellent effect in Bosnia. Several other units engaged in mission or equipment transitions last year, many are underway this year, and more lie ahead in fiscal year 1998. While the Air Force and the Air National Guard traditionally have enjoyed a highly cooperative relationship, personnel integration will be carried one step further this summer when Connecticut's 103d Fighter Wing becomes the first Air National Guard unit in recent history to be commanded by an officer of the Active Air Force.

POISED TO DOMINATE THE FUTURE

The quality and readiness of today's Army and Air National Guard are indisputably high. As Air Force Chief of Staff General Ronald R. Fogleman testified in February: "Our combatant commanders long ago ceased to ask whether the Air Force units deployed to their theaters are active duty, Guard, or Reserve. Warfighting commanders confidently, and rightly, expect that any unit from across our Total Force can provide the capabilities they need."

Getting there has been painful, though, and the financial challenges are daunting. Our task this year and in the years ahead is to continue developing and refining the skills and capabilities that not only keep us relevant to national strategy and the warfighters' needs but also allow us to help shape that strategy and anticipate those needs. On the threshold of the information revolution, the National Guard is an eager exploiter of new information technology to cut costs, accelerate responsiveness, increase individual and unit effectiveness, and examine potential future missions.

The National Guard now uses distance learning to provide military education and occupational skill training at local units. We are expanding the Distance Learning Network further this year and will continue to do so until we have full linkage between all units. The true value of this exceptionally capable integrated system is becoming more apparent every day as new ways are discovered to exploit its telecommuting and training opportunities. For example, there is strong potential in the system for community-shared usage, and for time-share partnering with other Government agencies like the Federal Aviation Administration and the many agencies involved in counterdrug operations. Under the National Guard's dynamic sponsorship, the Distance Learning Network is rapidly becoming a national telecommunication resource of consequence.

The Reserve Component Automation System, the personal computer network that will be linked to every armory and Army reserve center in the nation to provide automated information management and decision-making support, also continues to develop on track. This valuable tool of the Army Reserve Component greatly simplifies personnel management and resourcing. The Army National Guard also is breaking new ground in the application of technology for simulation. Projects like SIMITAR (Simulations In Training for Advanced Readiness) show great promise, and equipment like the GUARDFIST II (Guard Unit Armory Device Fullcrew Interactive Simulation Trainer II) and ARMS (Aviation Reconfigurable Manned Simulator) have proven they can provide critical training at a substantial cost discount.

The Air National Guard employs the term "CyberGuard" to describe a synergistic system-of-systems approach to the future intended to encompass all aspects of the National Guard of the 21st century. More than just fiber-optic computer linkages, it involves developing new approaches to organizational decision-making, work processes, training, infrastructure maintenance, and management of the National Guardmembers of tomorrow. From producing paperless offices and expanding the employment of the Air National Guard's satellite-based Warrior Network to investigating the employment of the Air National Guard for new missions—such as the management of Unmanned Aerial Vehicles (UAV), or the assumption of responsibility for one or more of the Air Force's Battle Labs—"CyberGuard" is marking a new path into the future.

At the beginning of this testimony, I noted that as the U.S. military continues to restructure itself into a smaller, predominantly home-based power projection force, the National Guard will continue to pick up a larger share of the load. This trend is dictated by the simple economics of defense in our current budget environment. Fortunately, the technologies of today and tomorrow make it possible to strengthen national defense even as new duties are transferred to your militia men and women. While Guardmembers will always be found on the ground or in the skies over distant battlefields when America's national security is threatened, many of their future war preventing and warfighting operations may well be conducted from the American heartland. The same advanced skills and technologies that we are eagerly pursuing to provide more efficient and cost-effective training, and more responsive resource utilization—those that gave us the Distant Learning Network and will soon produce advanced unit training devices and simulators with interactive networking capabilities—will make it possible to conduct much of the business of defense via long distance.

Looking ahead, there are a number of areas where the National Guard can help ease the national security budget burden while fulfilling existing defense needs or meeting emerging ones. One potential future mission area is serving as a Domestic Anti-Terrorism Force, a Constitutional responsibility that harkens back to the earliest days of the Minuteman tradition. Another entails providing domestic and international Anti-Terrorism Training, a field in which the National Guard's extensive experience in interagency and foreign training can be put to excellent use, along with the capabilities of the Distant Learning Network and World Wide Web access. Information Warfare holds particularly promising opportunities. Many traditional Guardmembers are full-time computer professionals and communications experts, working daily at the cutting edge of computer and information technology applications. Information Warfare is a potential future "combat arms specialty" in which expert security specialists armed with only a home computer and modem could prove critical in defending our own capabilities and defeating those of an enemy. Your National Guard has a ready trained force of such experts, waiting only to be tasked.

National Guard men and women also have a greater role to play in Expanded Peacetime Engagement, making use of their combined military and civilian skills to build bridges to America for those who would emulate us. Remote Weapon Systems offer another area in which Guardmembers can employ their military and civilian skills in concert in performing important defense missions like the operation of UAV's and the other unmanned combat systems destined to emerge. There is a greater role for the National Guard to perform in supporting U.S. Space Operations. Satellite and space system management, the ultimate in telecommuting, is a natural for National Guard professionals. And as the nation perfects launch-on-demand and other rapid reaction space systems, the National Guard can field teams of highly trained experts to augment Active Component launch staffs. Further, the diverse professional skills of National Guard scientists and technologists, coupled with their military training and discipline, allow the National Guard to serve as a pool of unique skill resources for America's manned space activities.

Finally, the eventual fielding of National Missile Defense systems promises another excellent National Guard-mission fit, capitalizing on our technical strengths

to provide the defense of America to which America's militia has been dedicated for so long. These and other similar future mission areas, highly technical and predominantly home-based, offer win-win opportunities to satisfy national security needs cost-effectively while providing many dedicated Americans whose occupations would otherwise prohibit it a chance to contribute to their nation's defense.

The future offers exciting new opportunities for expanding the role your National Guard men and women play in America's defense. These militia men and women constitute a low-cost, high-quality, reliable, commercial-off-the-shelf resource that comes ruggedized, missionized, and ready for service. They are proud to be full partners in the Total Force, accessible and ready to serve, and are committed to moving ahead in an era of transition, continuing the proud militia tradition in the unfolding era of cyber-warfare.

STATEMENT OF MAJ. GEN. WILLIAM A. NAVAS, JR.

Senator STEVENS. General Navas.

General NAVAS. Thank you, Mr. Chairman, members of the committee.

I have submitted a statement for the record. I would like to make some brief comments to expand on that comment.

We see the Army National Guard as a Guard in transition, and in that transition period we see basically three functions that the Guard is providing. First is providing highly trained, ready units into high priority units, our force package units; second, to provide a repository of capability as the Army moves from to a capabilities-based force versus a threat-based force; and third, very important, to be able to provide the domestic support to our communities.

It has been a very successful year last year. Fiscal year 1996 we completed our drawdown to the numbers of 367,000 in the Guard. Our budget continued to go down. Yet we maintained our end strength. Last year was a banner year where we made our end strength numbers and our attrition rate went to an all-time low. This year as we speak almost halfway through the year, we are above our end strength. We are making our end strength. We are almost 2,000 soldiers above our end strength, and our attrition rate is an annualized 16 percent.

Our retention is the best ever. We have exceeded our goals of 70 percent goal of first termers. We are at 87 percent retention rate in first termers. Our category is an 80 percent goal; it is at 110. Our quality is very good. We have 100 percent high school equivalency with 83 percent high school diploma graduates. Our category IV is less than 1 percent or less than 2 percent.

PREPARED STATEMENT

So as we evolve and continue in this transition, we will like to maintain that level of readiness, that level of support that we have been providing, not only to our communities but to the CINC's. But we see some challenges ahead that we will have to deal with as we become the good stewards of the public trust placed on us to maintain those levels in the Army National Guard.

I appreciate the opportunity to be before your committee and I look forward to your questions.

[The statement follows:]

PREPARED STATEMENT OF MAJ. GEN. WILLIAM A. NAVAS, JR.

The Army National Guard continues to accomplish ever increasing numbers of missions while simultaneously restructuring/modernizing its force structure;

leveraging resources and infrastructure/installations; and recruiting, training and retaining quality soldiers. Greater reliance on the community-based component of America's Army, in a period of austere defense budgets and high demand for overseas presence, has enabled our soldiers to participate in a broad range of domestic and international requirements traditionally assigned to active forces.

During fiscal year 1996, the Army Guard provided a record 1.6 million workdays in support of both federal and state missions. More than 25,200 soldiers deployed overseas in support of operations and training for a total of 417,506 workdays. Of this total, 331,038 workdays were directed to Operational Mission Support (OMS) in relief of active Army operations/personnel tempo. The OMS missions were supported by the Office of the Assistant Secretary of Defense for Reserve Affairs and funded with $7.3 million in Reserve Component-to-Active Component support funding.

The Army Guard also provided over 389,700 workdays in support of the Presidential Selected Reserve Call-up (PSRC) for Operations Restore Democracy (Haiti) and Joint Endeavor (Bosnia) as well as 19,177 workdays in Temporary Tours of Active Duty (TTAD) to various overseas and continental United States Army commands. Additionally, a record 716,120 state active duty workdays were provided to support 419 state call-ups for various emergencies, natural disasters (Hurricanes "Fran" and "Hortense") and 1996 Summer Olympics requirements.

These mission requirements were accomplished simultaneously with the inactivation of 145 Army Guard units, personnel reductions in excess of 17,700 positions, changes to unit missions as well as individual soldier job reclassifications, and ambitious annual training and equipment modernization programs.

BUDGET

The Army National Guard is funded by three separate budget appropriations: Personnel (NGPA), Operations and Maintenance (OMNG), and Military Construction (MCNG). The President's fiscal year 1998 appropriations budget of $3.2 billion NGPA, $2.25 billion OMNG and $.45 billion MCNG, totaling $5.5 billion for the Army National Guard, represents only about 9 percent of the Army's proposed $60 billion budget. The Guard requires a budget of approximately $17,000 for each Army Guard soldier to train to levels of individual proficiency.

The Army National Guard operates 3,160 owned and 62 leased armories in 2,700 communities in all 50 states, Puerto Rico, the Virgin Islands, Guam, and the District of Columbia. In addition, the Army National Guard federally supports the operation and maintenance of more than 16,000 training, aviation, and logistical facilities located throughout the nation.

During fiscal year 1996, 46 major construction projects authorized from 1992–1996 were awarded for a total of $187 million, of which 21 projects (70 percent of all fiscal year 1996 projects) were awarded in the first year of appropriation. An additional 34 projects are scheduled to be awarded in fiscal year 1997. The fiscal year 1996 appropriations of $137.11 million for 32 projects included $124.402 million for major construction, $7.408 million for planning and design, and $5.3 million for unspecified minor construction.

Congress appropriated $78.086 million for 16 projects in fiscal year 1997. The appropriated amount includes $52.586 million for major construction, $20 million for planning and design, and $5.5 million for unspecified minor construction.

As a result of the DOD-wide Congressional plus-up for Real Property and Maintenance in fiscal year 1996, $234.8 million was provided for real property and maintenance, about $66.8 million more than in fiscal year 1995. This program pays for salaries required to support facility operations and maintenance as well as paying for utilities, minor construction, maintenance and repair projects and supplies required to extend the useful life of National Guard facilities. The federally supported square footage grew from 55.6 to 62.6 million square feet and equipment modernization and aging facilities are increasing overall maintenance requirements. In fiscal year 1988, $3.41 per square foot was available to operate and maintain Army National Guard facilities. In fiscal year 1996, that amount was $3.59 per square foot, or $2.86 in constant fiscal year 1988 dollars.

FORCE STRUCTURE

The Army National Guard is authorized a 405,000 force structure allowance (required spaces) and 366,516 end strength (authorized spaces) for fiscal year 1997. This represents the targeted fiscal year 1999 end state for the Army Guard, a cut of 38,484 positions (resulting from 1993 Off-Site Agreement which restructured the Army's reserve components).

Currently, the Army National Guard is a balanced land force with a force structure allowance comprised of 54 percent combat, 16 percent combat support, 21 percent combat service support and 9 percent training/mobilization support. The mix of forces is projected to remain at current levels through fiscal year 1999.

The Guard's highest priority units are the approximate 200 early deploying Force Support Package (FSP) units, 15 early deploying enhanced Separate Brigades (including one armored cavalry regiment) and two Special Forces Groups. In September 1996, all 15 enhanced Separate Brigades began their transition to achieve fiscal year 1999 readiness goals. All these units are aligned for the warfight and apportioned to warfighting commanders in chief.

Army National Guard enhanced Separate Brigades are organized and, most importantly, resourced to mobilize, train and deploy to the warfight within 90 days after initial notification (mobilization). They are trained to respond to the ever-present threat of regional conflicts and/or to reinforce Active Army forces in crisis. They are presently configured as seven "heavy" brigades (with armored/mechanized vehicles), seven standard infantry brigades and one armored cavalry regiment.

When one considers the overall strength and combat power of these high priority units, the Guard is capable of projecting nearly 110,000 trained and equipped soldiers worldwide.

In addition to the high priority units, the Guard maintains eight fully structured divisions, two separate brigades, and a scout group in strategic reserve along with a complement of support training/mobilization structures in each state. These forces are required to react to extended crises or backfill active forces for an extended period. Additionally, these units can serve in peace operations that would require an extended commitment, serve as a deterrent hedge, form a basis for expansible force structure and provide domestic mission support during civil unrest or natural disasters. The eight divisions are presently configured as four "heavy" (with armored/mechanized vehicles), three "medium" (with mechanized infantry) and one infantry. These organizations are funded and resourced at equipment and personnel levels commensurate with their strategic role. At current levels of resourcing, these divisions are highly cost effective national assets that require less than 4/10ths of one percent of the Department of Defense Budget.

RESTRUCTURE/MODERNIZATION

The modernization of the Total Army's field artillery force resulted in the Army Guard being funded for 16 PALADIN self-propelled M–109A6, 155 mm howitzer battalions. Nine battalions will be placed in echelons above division (EAD) field artillery brigades and six will go into the heavy enhanced Separate Brigades, and one will go to a strategic reserve brigade. Fielding will take place from fiscal year 1998 through fiscal year 2001. Planning for Multiple Launch Rocket Systems (MLRS) battalions to be fielded to Kansas and South Carolina have been finalized and fielding will be completed by fiscal year 1997, bringing the total to 10 ARNG battalions. One field artillery battalion in Florida converted from the eight-inch cannon system to the MLRS. Fiscal year 1996, also saw AVENGER activations in New Mexico. In fiscal year 1997, AVENGER activations will occur in Florida and Ohio and MLRS activations in Florida, Kansas and South Carolina. In Air Defense Artillery, Avenger/MANPADS (Man Portable Air Defense System) battalions were approved for the Army Guard as replacements for current Hawk and Chaparral battalions. Eight battalions will activate in fiscal year 1998.

Other modernization programs included M–1A1 Tanks, Bradley Fighting Vehicles, Multiple Launch Rocket Systems (MLRS), PATRIOT and Avenger missiles, and Single Channel Ground Airborne Radio Systems (SINCGARS). In fiscal year 1996, the Army Guard fielded the M–1A1 Abrams Tanks to the 30th and 81st Infantry Brigades. Three tank battalions and one division cavalry squadron fielded the M–1IP Abrams Tank. The 30th Infantry Brigade and the 31st Armor Brigade received the M–2A0/M–3A0 Bradley Fighting Vehicle. During fiscal year 1997, the ARNG will field the M–1A1 Abrams Tank to the 31st Armor Brigade. By the end of fiscal year 1997, the ARNG will complete the fielding of the M–1 Abrams Tank to all armor and cavalry units.

The Army Guard completed over 800 aircraft movements during fiscal year 1996. We accepted the transfer of 413 aircraft into our units from the production line, refurbishment program, the Army Reserve, and as a result of cross-leveling due to force structure changes within the Army Guard. As the number of modernized systems increased, 397 of our oldest aircraft were retired from service. While aviation fleet modernization continues, the Army Guard is projected to have shortages in UH–60 Blackhawk utility helicopters that will greatly impact the Medical Evacuation (MEDEVAC) mission. The Guard is also planning to field UH–1H aircraft as-

signed to the Light Utility Helicopter Battalions with new Comanche engines, thus providing a "bridge" for future fielding of the Comanche.

During fiscal year 1996, Dedicated Procurement Program (DPP) funds were used to field SINCGARS to 50 Force Support Package (FSP) units. The remaining FSP units will complete SINCGARS fielding in fiscal year 1998. Headquarters, Department of the Army (DA), will field all remaining Echelon-Above-Division (EAD) Artillery, Separate Brigades, all non-FSP and non-Separate Brigade units, and Divisional units. The EAD Artillery fielding starts in fiscal year 1997 and will be completed in fiscal year 1999. Fielding to enhanced Separate Brigades is underway with four Brigades fielded and a fifth to be completed in December 1996. The remaining ten Brigades will receive SINCGARS by fiscal year 2001. The Department of the Army estimates completing SINCGARS fielding to the ARNG by fiscal year 2006.

On May 23, 1996, the Secretary of the Army approved the plan to convert limited Army Guard combat structure to reduce the Army's combat support/combat service support shortfall. The Secretary of Defense accepted the plan on August 26, 1996, and expressed interest in the active Army—Army National Guard Integrated Division concept. If funding is programmed and budgeted, 12 ARNG combat maneuver brigades will convert to CS/CSS.

The ARNG is actively in the Force XXI process through its integration in the redesign of the Army's operational forces and the participation of Guard units in Advanced Warfighter Experiments designed to validate force redesign from brigade to EAD level.

Total Army Analysis 03 also determined that approximately 20,000 personnel spaces of force structure will be converted from Transportation Corps to Quartermaster Corps. The focal point of this conversion was the acquisition of 75 Truck Companies and the conversion of 13 Combat Support Battalion Headquarters Detachments to Petroleum Supply Battalion Headquarters. These conversions represent an overall increase in combat support capabilities for the Army National Guard.

On August 14, 1996 a State Area Command (STARC) Redesign Study was initiated over an 18-month period. In-progress reviews have been conducted and now occur quarterly with the Director, Army National Guard.

By fiscal year 1999, the Guard will comprise more than half the Army's total combat power and more than a third of its combat support/combat service support strength. In field artillery alone, the Guard will comprise 67 percent of the Army's force. These figures illustrate the significance of the Army Guard as part of the Total Force. More and more, America will depend on the Army National Guard to provide its domestic support and global missions alongside the active Army.

RECRUITING

The Army National Guard end strength at the close of fiscal year 1996 was 369,976 or 99.2 percent of the 373,000 authorized positions. This remarkable recruiting effort was achieved at a time when operational requirements for the Guard reached an all time high with 1.6 million workdays in support of federal and state missions.

The compositions of officer, enlisted and minority categories are summarized as follows:

Category	Strength	Percentage
Officer	41,834	97.5 percent of authorized.
Black Officers	2,743	6.6 percent of assigned.
Hispanic Officers	1,615	3.9 percent of assigned.
Other Minority Officers	5,364	12.8 percent of assigned.
Women Officers	3,456	8.3 percent of assigned.
Enlisted	328,142	99.4 percent of authorized.
Black Enlisted	55,254	16.8 percent of assigned.
Hispanic Enlisted	23,373	7.1 percent of assigned.
Other Minority Enlisted	89,234	27.2 percent of assigned.
Women Enlisted	28,362	8.6 percent of assigned.

Non-prior service accessions was 23,511 or 38.9 percent and prior service was 36,933 or 61.1 percent of assigned strength. Of all non-prior service accessions, 100 percent had high school or equivalent degrees with 55.6 percent scoring in the highest test categories. Only 1.7 percent scored in the lowest test categories.

The Army National Guard is projected to cut 6,000 authorized spaces by the end of fiscal year 1997 with an end-strength of 366,516 authorized positions.

SAFETY

In fiscal year 1996, the Army Guard experienced the fewest number of accidents in its history. Both ground and aviation safety experienced milestone years. Much of this success can be attributed to the Army National Guard's accident prevention program "Be A Part of the SafeGuard Team". The program included a videotape by the Director, Army National Guard, explaining his safety philosophy and several other promotional and educational items. Ground accident prevention focused on lightening strike prevention, tactical safety, and safe parachute operations. The aviation accident prevention program emphasized avoiding rotor blade tree strikes while conducting low level flight operations. In occupational health, the Army National Guard instituted a automated tracking program to monitor the health of employees that work in hazardous industrial areas.

Army National Guard aviation experienced zero Class A flight accidents in fiscal year 1996. This exceptional accomplishment was obtained despite an aggressive flying hour program of over 310,000 hours which included challenging tactical training, multi-ship night vision goggle training and operational missions including overseas deployments, support to the states for disaster relief, and support of law enforcement in the war on drugs. The Army National Guard has flown over three years and one million flight hours while experiencing only one Class A flight accident. The three year Class A accident rate is .1 accidents per 100,000 flight hours, the lowest rate in the history of military aviation.

Although the Army National Guard was successful in reducing the number of ground training accidents, this success was offset by a significant increase in fatal automobile accidents. Sixty-five percent of the Army National accident fatalities occurred while soldiers were commuting to and from training in their privately owned vehicles. A comprehensive automobile accident prevent program is now in place.

The Army National Guard's total commitment to soldier health and safety has not wavered during the challenges presented by increased federal and state requirements and missions, downsizing, reorganization, and shrinking resources.

READINESS

In July 1996, the 41st Personnel Services Company, Oregon Army National Guard, tested a Home Station Mobilization and Direct Deployment to Germany for Operation Joint Endeavor. Science Applications International Corporation (SAIC) conducted a study that found Home Mobilization provided at least a five-day advantage over Centralized Mobilization Station and Deployment processing. The 41st also deployed at 100 percent military occupational specialty qualification (MOSQ) using in-state assets, cut down on travel expenses, and arrived earlier and spent more time in the theater of operations.

Trends in the total funds available for schools, special training and annual training has declined for several years prior to fiscal year 1996 and will continue to be one of the more difficult challenges that we face. It becomes apparent in these fiscally challenging times that declining resources require a capitalization of existing assets through greater efficiencies and conscientious stewardship. The National Guard Bureau's Operations, Training, and Readiness Directorate is fielding the Training, Readiness, Operations Unit Planning, Execution and Resourcing System (TROUPERS). TROUPERS links the Training Assessment Model (TAM) with State training plans and provides this information to NGB for resourcing. In addition, TROUPERS generates a unified national training plan than is shared with Forces Command (FORSCOM) and the Continental United States Army (CONUSA).

Unit training was highlighted by the highly successful unit rotations at the Joint Readiness Training Center (JRTC) at Fort Polk, Louisiana and the National Training Center at Fort Irwin, California. Florida's 53rd Infantry Brigade and Georgia's 48th Infantry Brigade (MECH), in the midst of their conversion to enhanced Separate Brigades, made good use of their respective training opportunities. The preparatory leader development training, as well as the exercises themselves, demonstrated the viability of the enhanced Separate Brigade concept and the capability of the Army National Guard to fully meet its assigned readiness goals in a crisis or wartime scenario. As the enhanced Separate Brigades continue their transition, we anticipate similar success stories as the Army National Guard demonstrates its ability to train to the required standards.

The Army National Guard also made great use of command post exercises again this year. As in the past, these constructive simulations provide a stressful environment for commanders and staff to practice those synchronization tasks necessary for

fighting and winning on today's modern battlefield. An added benefit, these exercises, through the application of computer technology, provide the same degree of difficulty attaining the standards as generated by a "full up" field training exercise, and all at a fraction of the cost.

Perhaps the most promising application of technology to unit training is the Defense Advanced Research Projects Agency (DARPA) Simulations in Training for Advanced Readiness (SIMITAR) project. The goal of the SIMITAR project is to change the way an Army National Guard maneuver brigade trains. Through the application of advanced technologies and simulations devices, as well as innovative training strategies, we hope to achieve a 3 fold increase in unit training readiness in less time, when compared to that reported in the 1991 Desert Shield mobilization. Indications of this potential were evident during the 116th Armored Brigade's annual training (AT). On the second day of their AT, five of seven crews qualified on Tank Table VIII—a considerable feat of crew level preparedness and marksmanship. This success followed with platoon gunnery, where all platoons passed the tactical evaluation phase. Observers on site, including active component master gunners, attribute this success directly to the revised training procedures. As the SIMITAR project concludes its final years, we expect to reap similar dividends.

Another unit training initiative involved the integration of Army National Guard divisional units in support of FORSCOM's lane training for the enhanced Separate Brigades during the 1996 annual training period. Divisional units from the 40th Division (California Army National Guard) and 35th Division (Kansas Army National Guard) provided quality opposing forces to assist in the training of two enhanced brigades: the 41st Brigade (Oregon Army National Guard) and the 81st Brigade (Washington Army National Guard). This novel approach to training provides a dual benefit to readiness; as the enhanced brigades train on their missions of attack or defend, the opposing force is given the opportunity to train on the opposite task. This provides an excellent force-on-force training environment in a cost-effective manner. Units received observer comments from the soldiers of the 2nd Regional Training Brigade (Fort Lewis, Wash). In sum, this experience provided a multi-component training opportunity not available elsewhere and its success will lay the groundwork for similar activities in the upcoming years.

Army National Guard simulations delivered quality gunnery and maneuver training with the fielding of the Abrams-Fullcrew Interactive Simulation Trainer (A-FIST), the Engagement Skills Trainer (EST), and the Guard Unit Armory Device Fullcrew Interactive Simulation Trainer II (GUARDFIST II). These devices train critical skills for the mounted and dismounted combat force at a fraction of the cost (saving in terms of ammunition and preparation time for training). However, the cost of these devices prevents their wide-spread use at unit level and limits the opportunities for units to overcome their traditional handicaps: great distance to training areas and available time. Although underfunded by 50 percent, the A-FIST, the success of which was visible during the 116th Brigade's 1995 annual training experience, allows the entire M–1 Abrams crew to train to Tank Table VIII qualification standards without firing a shot or leaving the armory. The GUARDFIST II suffers a similar funding shortfall, and forces a unit fire support team to practice its shooting skills on a live fire range. While the ammunition offset may be minimal, the increase readiness created by having a quality training opportunity available immediately in the armory is more than a mitigating factor. A similar situation exists with the EST; the only method available to train dismounted soldiers in fire control techniques without ammunition constraints. These virtual simulations devices offer the promise of increased readiness at decreased cost and time. They are critical to an efficient, modern training strategy.

The Army National Guard led the force with their participation in a unique distance learning initiative mandated by Congress. The demonstration project involved investing over $7 million in a four-state system, electronically connecting armories and their surrounding communities to provide both education and information. The National Guard and communities benefit from this leap into the information age. In fiscal year 1996 and 1997, the Guard expanded this project as part of a web of primary stations through which further nodes will be connected, expanding its touch. While providing community-based learning opportunities, distance learning will also allow training in military occupational skills (MOS) at the local level, again overcoming the challenges of time and distance while adding to unit readiness.

The Army Guard developed the Aviation Reconfigurable Manned Simulator (ARMS) concept as a cost effective solution to enhance safety and readiness through simulation. ARMS is a flight simulator reconfigurable to each of the Guard rotary and fixed-wing airframes. The first prototype ARMS is expected in fiscal year 1997.

LEVERAGING INFRASTRUCTURE AND FACILITIES

In June 1995, the Base Realignment and Closure (BRAC) Commission announced its findings and recommendations, many of which had a dramatic impact on the Army National Guard. As a result of the BRAC process, the Army Guard will receive four installations transferred from the active component over the next several years. The purpose of creating these enclaves is to provide those facilities necessary for keeping the National Guard trained and ready. Because the National Guard is maintaining a much lower profile on these closing installations, costs will be substantially reduced over current operations. Nevertheless, the necessary land, ranges and facilities will be available for use by all services.

The National Guard is also fielding the Integrated Training Area Management (ITAM) system which can assist in tracking the training impact on these areas. With the information provided by this system, managers can obtain the maximum use from the limited available land resources while minimizing the impact of that use. We intend to have all primary Army National Guard training sites under the system by 1999. As we reduce maneuver damage to these training areas, we also reduce the direct costs while protecting the environment.

In order for the Army National Guard to ensure that it will continue to be able to provide the forces needed to meet the needs of the nation, we need to have quality installations. One of the Army Guard's goals is to provide state-of-the-art, community based power projection platforms that facilitate communications, operations, training and equipment maintenance in which to station, sustain, and deploy the force.

The Army Guard's Environmental Program is an integral part of our ability to provide the quality installations needed. For the past few years, the Army Guard did not receive sufficient funding to meet all its environmental requirements. As a result, the Guard focused its limited funding on ensuring that the most critical facilities it managed complied with environmental laws and regulations.

This year, the Department of the Army programmed $99 million in fiscal year 1998 and $87 million in fiscal year 1999 for the Army Guard's Environmental Program. This increased funding will allow the Guard to complete many deferred projects, as well as continue our shift to a more challenging and proactive approach focused on pollution prevention and environmental stewardship. The Army Guard will have the resources necessary to support and enhance training and to provide power projection platforms from highly dispersed Stateside locations.

The future of the Army Guard Environmental Program faces both opportunities and challenges. Our first opportunity will be to build on our recent successes in pollution prevention. Focusing on solvent substitution as our immediate priority in pollution prevention, the Army Guard will continue to reduce our hazardous waste generation and disposal costs, as well as reduce the exposure risk to our soldiers and civilian work force. The Army Guard will also continue to be aggressive in the area of energy conservation by increasing our participation in the Environmental Protection Agency's Green Light program, already the highest percentage within DOD.

Another opportunity will be to continue our aggressive implementation of Integrated Training Area Management (ITAM) at 54 separate locations with the goal of having all primary training sites under the same system by fiscal year 1999. This system will allow the Army Guard to capitalize on emerging technologies within Geographical Information Systems (GIS), a component of the ITAM program, to better analyze and manage the environmental impacts on training facilities and maneuver areas. This system will ensure that we provide realistic, safe, and environmentally sound training for our soldiers.

The Army Guard's most significant environmental challenge will be the clean-up of past practice contamination. The Army Guard will continue to evaluate our own sites for evidence of past practice contamination per the Superfund law and clean up those sites where contamination is identified. This, combined with the Army Guard inheriting facilities and lands formerly owned by other agencies within the Department of Defense, many of which are contaminated from past DOD practices, will adversely impact the funding of our current programs.

FORT STATE

The Army National Guard is prepared to provide dramatically increased support to the Army under the "Fort State" concept. The ARNG is uniquely postured to provide broad ranging, cost effective alternatives to current sources of many Army needs. As the Army's largest major command (MACOM), located in almost every community in America, the Army Guard is the most physically accessible branch of the Armed Forces.

Army downsizing has critically understaffed many operations while sustaining requirements have not correspondingly decreased; in may situations, they have increased. This dilemma has forced the Army to rely on high cost external providers of services. As budgets and resources continue to decrease, a cost effective alternative to external providers of support is required. We can support Army Guard missions and requirements while additionally providing exceptional services and support to the Army, other DOD and Government agencies.

LOGISTICS AND MAINTENANCE

In fiscal year 1997, Army National Guard Logistics will obtain the complete complement of logistics automation systems components that encompass the logistics Standard Army Information Systems (STAMIS). By 3rd quarter fiscal year 1997 the Standard Army Retail Supply System—Objective (SARSS-O) will be fielded to all authorized users thus eliminating the last of the Guard's antiquated logistics automation systems. As a result, the STAMIS will improve Army Guard logistics day to day operations and further support Army Logistics future objectives.

This radical improvement in automation will help transform the Army Guard supply program from a stockpile or supply based logistics system to a transportation based logistics system. The improved modern support methods rely on high speed automation and transportation to release support operations from large storage sites. Delivering materiel in one-tenth the total time eliminates much of the stockage, improves mobility, lowers inventory value, reduces excess, reduces manpower and facilitates requirements, and improves readiness.

The evolution to this transportation based logistics system is the foundation of many initiatives being developed and implemented in Army Guard Logistics. The State Supply Support Process Review is a valuable reengineering tool that provides the Army Guard with immediate results. Elimination of echelon repair parts stockages, closing of self service supply store operations, and centralizing clothing issue operations are but a few examples of this effort. Logistics leaders are embracing these changes and will reap the benefits of greater efficiency and lower costs.

The Army National Guard's Aviation Systems Division (AVN-A) at the National Guard Bureau closely coordinated with many Department of the Army agencies and Guard units involved in maintaining the operational readiness of over 2,700 Army National Guard (ARNG) aircraft. AVN-A invested a great deal of time and effort increasing the relevancy of the entire ARNG aviation maintenance program. The Aviation Classification and Repair Depot (AVCRAD) 21 Project takes our aviation logistical depots into the 21st Century, creating truly efficient regional support centers of excellence designed to support modernized aircraft. The AVCRAD's will orient on component repairs and their return to the Army Guard supply system, thus avoiding costs incurred from the Army wholesale supply system.

The decreasing trend in funding resulted in a change in the Army Guard aviation logistics approach for the purchase of repair parts. Stock Funded Depot Level Repairables (SFDLR) have always been intensively managed at the national level. Due to financial considerations, we are reorganizing Army Guard aviation supply support through regionalization of the Authorized Stockage Lists, to include the stockage and repair of high cost/high payoff SFDLR's.

The Army Aviation Support Facility (AASF) 2000 Project determined the organization that is required to support the modernized aircraft now being fielded into Guard units. This includes the facilities, support equipment, tools, manning, training and missions necessary to maintain the relevance and readiness of the entire Guard aviation fleet. Selected AASF's will test the project recommendations during fiscal year 1997.

Automation is critical to the management of operational readiness information. Guard aviation fielded the Aviation Logistics Readiness Module (ALRM) 1352 Report to enable the electronic transmittal of real-time aircraft readiness data. AASF's are linked directly to the National Guard Bureau, facilitating the early identification and resolution of readiness issues. The use of the ALRM program resulted in increased readiness, relevancy and a more efficient use of critical resources.

CONCLUSION

The Army National Guard's performance throughout this period of limited defense spending validates the cost effectiveness and vital importance of maintaining a citizen-soldier force to support federal and state missions. With minimal resourcing, the value of community-based military organizations will no doubt prove their worth in both national and domestic arenas. As we face the uncertainties and promise of the next century, the Army National Guard will be well positioned and ready to answer the call to accomplish any mission.

STATEMENT OF MAJ. GEN. DONALD W. SHEPPERD

Senator STEVENS. General Shepperd.

General SHEPPERD. Thank you, Mr. Chairman. It is a pleasure to be here. I have also entered a statement for the record. I would just like to say that as I am speaking there are 6,428 Air Guard men and women deployed around the world side by side with our active duty and Reserve counterparts.

We are proud of our performance. We are proud of our readiness. We are proud of our training. We are proud of our relationship with the U.S. Air Force that organizes, trains, equips us, and respects us.

I look forward to responding to your questions.

[The statement follows:]

PREPARED STATEMENT OF MAJ. GEN. DONALD W. SHEPPERD

Mr. Chairman and members of the committee: Thank you for the opportunity to appear before this committee on behalf of the proud men and women of the Air National Guard (ANG). We ask this committee's support of our fiscal year 1998 budget. As I begin my last year as Director, Air National Guard, I reflect on the accomplishments of the ANG. I am pleased to report the ANG is a highly trained and adequately equipped member of the Total Force. We are actively improving the Air Guard and the Air Force of today while we steadfastly look forward and prepare for the 21st Century.

IMPROVING TODAY

We are actively improving the way we train and operate today while we continue to ease the active Air Force operation tempo (OPTEMPO). We improve by accepting new missions, modernizing our equipment, focusing our organization, participating in exercises, and staying involved in real world contingency operations. We do all of these while we maintain our community involvement.

NEW MISSIONS

The Air National Guard is continuing our transition into new missions. These missions include bomber missions at McConnell AFB, KS and Warner-Robins AFB, GA; a Mobile Ground Station Space mission at Greeley, CO; a tactical manned reconnaissance capability at Richmond, VA; a reimbursable National Science Foundation mission in Antarctica; and 1st Air Force command and control operations at Tyndall AFB, FL. We are also modifying our security mission to reflect today's need for force protection. While all of these areas improve our current operations portfolio, we view space and information warfare missions as a vital part of preparing for tomorrow.

Putting the B–1 in the Air National Guard has proved to be a great decision for the Air National Guard and the country. The ANG has two B–1 units, McConnell AFB, KS and Robins AFB, GA. McConnell AFB, with ten aircraft, has completed conversion and will receive its first Operational Readiness Inspection (ORI) within the next year. Robins AFB will receive its last four (of eight) aircraft in fiscal year 1998 first quarter, completing their conversion process. Both units have adapted to the bomber mission well, introducing highly experienced personnel with varied backgrounds whose insights improve operation and maintenance of the aircraft. These attributes combined with a relatively low OPTEMPO make the mission ideal for the Air National Guard.

Combat capability of our bomber units will be improved within the next year when necessary hardware delivery and training are complete for cluster bomb munitions (CBM) capability. It is crucial that we continue to fund programmed modifications if the B–1 is to remain the backbone of the nation's conventional bomber fleet.

The 109th Airlift Wing at Schenectady, NY will assume a fully reimbursable National Science Foundation mission in Antarctica starting in fiscal year 1999. The Navy is currently performing this mission but it will transition to the ANG over the next two years. The 109th Airlift Wing has the only snow-ski capable aircraft in our inventory. They are the perfect choice to support the National Science Foundation with airlift support for scientific Antarctica missions.

We successfully transitioned the fighter-RECCE mission from the RF–4C to the multi-role F–16. By adding reconnaissance pods to F–16's, we retained cost-effective, manned tactical reconnaissance capability. Such capability provides theater commanders the ability to send reconnaissance aircraft into a combat area to perform battlefield damage assessment or to collect intelligence on short notice. Additionally, current cameras store images digitally. This feature not only provides high quality, high speed images, it does so without the hazardous chemicals that accompany wet film developing.

The Richmond, VA unit used prototype pods in 1996. The unit was "mission capable" in April 1996 and they deployed aircraft and personnel to Air Warrior 96 at Nellis AFB, NV. Air Warrior is an Air Combat Command exercise designed to provide air-land battle training for Army and Air Force combat and theater air units. The unit flew two successful reconnaissance missions each day. This exercise provided the equipment and operations demonstration necessary before the units flew an operational mission.

The unit then deployed to Aviano, Italy to support Bosnia missions in June and July 1996. There, they flew 124 sorties in 45 days without one mission cancellation due to equipment.

Based on this success, the ANG is procuring pods and processing stations for four additional units: 127th FW, Selfridge, MI; 181st FW, Terre Haute, IN; 113th FW, Andrews, MD; and 185th FW, Sioux City, IA. We complete this program in early 1999.

The transfer of all air defense command and control operations clearly is a milestone in our history. By the end of fiscal year 1997, the historic transition of 1st Air Force, its three assigned sectors, the 701 Air Defense Squadron that operates the CONUS NORAD Regional Air Operations Center (RAOC), and the 702 Computer Systems Squadron that operates the NORAD Systems Support Facility (NSSF) to the Air National Guard will be complete. We accomplished this transfer while maintaining continual 24 hour, 7-day alert at all three sectors and at the RAOC. This realignment was "totally seamless and transparent"; accomplished through the joint efforts of the Air Combat Command and the Air National Guard. This successful transfer is another example of the closeness in management and philosophy that has grown over the years through the Air Force's implementation of "Total Force."

This integrated transition required a close-knit team effort between Air Combat Command and the Air Guard. It far exceeded the scope of any previous transfers and sets new benchmarks in the cooperative efforts possible between Active and Guard units. This is also a dramatic example (and precedent) of how the Guard can perform in the day-to-day mission arena to assist the active Air Force in meeting a variety of mission taskings. These new missions make sense for the Air Guard as we respond to changing military force requirements. When properly trained and equipped, we have the skill and capability to cost-effectively execute Air Force missions.

The ANG gained another new mission when the active Air Force established the 820th Force Protection Group at Lackland AFB, TX. Eighty-six Air National Guard Security Police personnel from El Paso, TX, have been assigned to the Force Protection Group to provide the unit heavy weapons support. Within the National Guard Bureau we have established a Force Protection Team which is a multidisciplined team formed to develop Air National Guard force protection policy, programs, and guidance; ensure implementation of DOD and Air Force directives, and to guarantee that force protection considerations are an integral part of our operational planning. Like the Air Force, the Air National Guard values its people and seeks to protect them from all threats.

In conjunction with the Air Force Force Protection Program, the OPTEMPO of our Air National Guard Security Police units has significantly increased as we send security personnel to backfill CONUS Air Force bases and support OCONUS theater locations.

EQUIPMENT IMPROVEMENTS

Our ability to improve and provide properly equipped Guard men and women to operational commanders and warfighting CINC's relies on modernization. Your Guard and Reserve Equipment Account support, along with Air Force equipment transfers, have helped us insure interoperability with modern Air Force systems. Our fiscal year 1998 focus is to continue modernizing aircraft and equipment to provide the greatest capability to our customers. Such efforts include improved self-defense systems, C–130J acquisition, networked training devices, night vision en-

hancements, portable Air Combat Measurement Instrumentation (ACMI) units, precision guided weapons, and theater deployable communications (TDC).

With our Air Guard airlift fleet increasingly called upon to go in harm's way in a host of worldwide contingencies, we enthusiastically support Air Force initiatives to equip our airlift aircraft with defensive systems. The Air National Guard operates 43 percent of the total C–130 theater airlift forces. We have thus far configured 56 aircraft with defensive systems and have Air Force support for additional systems. We must continue this program.

Further, funds provided by Congress to modernize the C–130 theater airlift fleet have allowed us to complete the replacement of the 1950's vintage C–130B models with modern, more capable C–130H and now C–130J aircraft.

The Air National Guard and the Air Force have worked hand-in-hand to develop a unit level training device that supports our F–15 and F–16 units. This low cost device uses off-the-shelf equipment. It replaces existing simulators that are 20 to 30 times more costly. These training devices are more capable and accessible, and provide our pilots user-friendly training. To date, we have received 10 unit level trainers. In the future, we expect to continuously improve by adding visual systems and networking. Each capability enhancement improves realistic training and ensures our aircrews are ready to respond to any tasking. We are also in partnership with the Air Force in investigating the use of low cost, unit level trainers for our larger aircraft, such as the C–130.

In the night operations arena the Air National Guard is working closely with Air Combat Command in testing low cost, off-the-shelf capabilities that will allow our A–10's, F–15's, and F–16's to perform more effective operation at night. The Air National Guard received a proportional share of the Air Force's near-term night capability upgrade for the A–10 fleet. Our testing has been successful and we are moving forward with a similar program for Air National Guard F–15's and F–16's. Overall, we have a working partnership with the Air Force to provide quality warfighting improvements. The Air National Guard goal is to achieve a night warfighting capability and install adequate defensive systems on all our aircraft. We will then have the capability to fly and fight around the clock. The Air Force has pursued a course that allocates new equipment resources to the Guard and Reserve based upon relative share of force structure, response time, and weapon system capability. We support this approach.

Portable ACMI's allow units to use their "backyard" ranges to train on instrumentated missions. Units can then debrief their missions via graphically computed playback without deploying. These cost-effective systems save time and resources. Three of the Air National Guard's four combat readiness training centers (CRTC's) have fixed ACMI sites to enhance training. We plan to fund the fourth. It will allow units deploying to Alpena, MI to get the same type of training that is available at the other three CRTC's. Moreover, the ACMI allows units to train without attending the Nellis AFB, NV Red Flag/Green Flag training cycles that typically occur only once every three or so years. Units may also use portions of this equipment at their home station.

Precision and standoff capability along with improved electronic countermeasures are a must for future warfare environments. Weapons modifications include Joint Direct Attack Munitions (JDAM), Wind Corrected Munitions Dispenser (WCMD), Joint Air-to-Surface Standoff Munitions (JASSM) and Joint Standoff Weapon (JSOW). Electronic countermeasures modifications include the towed decoy in the short term and Defensive Systems Upgrade (DSUP) in the long term.

We are currently equipping our fighter units with targeting pods in order to incorporate precision guided capability. This will further enhance our warfighting capabilities.

With 70 percent of the Air Force's wartime deployable communications capability residing in the Air National Guard, our communication OPTEMPO is high. We constantly provide tactical communications equipment and personnel to meet the deployed warfighter's battle management and communication system needs. To continue to meet this ever expanding challenge, our units require Theater Deployable Communications (TDC) equipment. TDC is the only program the Air Force has to modernize our current communications equipment. TDC offers many advantages over the existing family of equipment. Program features include leading edge digital technologies, efficient centralized management, modular flexible design, fewer people and reduced airlift requirements. Most critical however, is the fact that there is an unambiguous operational imperative behind the need for TDC. The new family of Theater Battle Management systems is predicated on a TDC communications architecture and infrastructure in the deployed environment. The current suite of equipment will not meet the need. TDC is the communications equipment required to support automated command and control (C^2), battle management and informa-

tion dominance on the electronic battlefield of today and tomorrow. With your support of the TDC funding in our current budget, we will be outfitting a few ANG deployable communications units in the near future. However we are only able to fund a small percentage of our total ANG communications capability. We appreciate your continued support in this critically important area.

ORGANIZATIONAL IMPROVEMENTS

As we assume new missions and procure modern equipment, we also strive to focus our organization. Our goal is to embed a culture and environment that promotes continuous improvement, customer orientation, empowerment of people, and measurement.

We've developed a long-range strategic plan that reiterates our vision and values, details our historical foundation, and postulates possible futures based on future world characteristics, common future traits, and joint vision elements as they impact the Air National Guard. We believe we are preparing our organization to meet this future by adhering to our guiding principles.

The first of our guiding principles is "Not for themselves, but for their country." Our business is about the privilege of service, not the joy of personal success—but we can do both and make the Air National Guard the most exciting, empowered, effective, and fun place to work in America.

Next, we must remember we are Guardsmen first. We are citizen soldiers—Guard men and women. That's who we are, not what we do. We are officers, NCO's, airmen, and civilian members of the Guard first—then we are pilots, navigators, boom operators, maintainers, and administrators.

We have an awesome responsibility. "We send young men and women (our kids) into combat. There is no more sobering responsibility * * *." We must never forget that we are not about jobs and units or force structure, or the size of our organization. We have a greater responsibility—making a better world for our children and our nation.

We have two basic responsibilities—take care of the troops and make our units and the ANG better. That's what people in world class organizations do.

We are a learning organization. We commit ourselves to learning something new every day. We can improve ourselves and our organization dramatically by attending PME in residence and participating in self-directed learning programs, leadership training, quality training, and other training. We must stay personally committed to learning something new every day.

We will improve something every day. We commit ourselves to continuous improvement. We strive not just to perform work but to truly improve something every day.

Finally, we embed quality. We use the principles of customer orientation, continuous improvement, empowerment of people, and measurement to continuously and incrementally improve our organization.

We have taken great strides in our quality journey. We have maintained our personnel strength, maintained 94 percent of our units in C–1 or C–2 readiness status, increased our performance on inspections, and achieved our second safest flying year in the history of the ANG in fiscal year 1996—all while also maintaining our highest OPTEMPO. We achieved these successes by implementing our guiding principles and increasing our reliance on cross functional teams.

During the past year we have formalized and improved a new matrix style organization, the integrated process team (IPT). The IPT concept has not replaced our functional organization, rather it offers an additional approach to solving organizational issues which cut across functional lines. IPT's allow us a standing team to bring together people from each functional area to work these tasks. As an example, in the past if a unit commander from an F–16 fighter squadron had an aircraft problem which required headquarters help, frequently they grew frustrated calling each functional area in-turn, without any single area being able to solve their problem. Now, the commander calls the F–16 IPT, the IPT leader calls together the team from all functional areas and together they jointly solve the problem. Although this seems simple, in reality it is a major change in how we do business and a definite step forward.

REAL WORLD CONTINGENCIES (OPTEMPO)

Although we remain engaged in our state and local communities, we also regularly participate in contingency operations. The citizen soldier can and should play a greater role in today's contingencies. We are meeting that challenge. By actively participating in contingency operations, our forces are easing active Air Force OPTEMPO. We can do much through volunteerism, but we must be mindful that

we need to keep employers and families on our team and supportive of our participation. When possible, we need planning and notification time. Removing federal employee military leave or the military compensation for that service will hurt us. Approximately 25 percent of our traditional force are federal, state and municipal employees. Our retention success, in large part, is due to the military compensation for serving. If no longer attractive, federal, state and municipal employees will not come, nor will they stay. We need them in the Air Guard, and we need your help to preserve military leave compensation. We believe the nation will depend more on Guard and Reserve forces in the future. We are an important participant in contingencies, exercises, and overseas presence. We have been involved in every major Air Force operation and exercise, and most of the smaller ones, conducted during fiscal year 1996. Some of the participation highlights included hurricane relief efforts; Operations Joint Endeavor, Uphold Democracy, Deliberate Guard, Joint Guard, Northern and Southern Watch; Partnership for Peace mission in Romania; Exercise Nuevos Horizontes in Honduras; and, providing limited medical support to some undeveloped countries.

The Air National Guard and the Air Force Reserve involvement in peace enforcement and peacekeeping operations included continued enforcement of the no-fly zones over Iraq and Bosnia-Herzegovina and continued airlift support to U.S. forces in Haiti, Bosnia-Herzegovina, and other theaters of operation. During fiscal year 1996, Air National Guard units provided medical services to communities in 18 states under the Medical Innovative Readiness Training (MIRT) program. This program enables National Guard health care professionals to obtain training in wartime clinical skills while concurrently providing medical care to the indigent or underserved civilian population.

The Air National Guard is part of a continuing counterdrug program focused on providing support to national efforts designed to detect trafficking aircraft moving illicit drugs to North America from source countries in South America. In operation Coronet Nighthawk, fighter aircraft intercept and identify suspected narco-traffickers aircraft. The aircraft range in size from small, single-engine airplanes, to multi-engine jet cargo aircraft. At the request of U.S. Southern Command and host nations in South America, Air National Guard personnel have manned counterdrug radar sites since 1992. Operating 24 hours a day, 365 days a year, Air National Guard control units provide the personnel who rotate in and out of the sites on an average of every 30 days. In addition to manning radar sites, the Air National Guard operates and manages a counterdrug logistics support facility at Dobbins Air Reserve Base, near Atlanta, GA. This facility logistically supports Air National Guard counterdrug radar assets in the United States, as well as counterdrug radar deployed in South America and in the Caribbean.

The Air National Guard is working closely with the staff at AMC to find the best fit for ANG crews and assets. ANG presently provides the in-place Northeast Tanker Task Force at Bangor ANGB, ME and Pease ANGB, NH to support overseas movements of U.S. forces. New proposals are being discussed with AMC to expand ANG participation in the AEF missions.

We remain committed to the Total Force Policy and will continue to work with our gaining MAJCOM's, AMC and Air Combat Command (ACC), to find the best fit for ANG crews and assets in the entire AEF. This mission represents the way our Air Force will respond to future contingencies and the ANG stands ready to participate as a full partner.

COMMUNITY ACTIVITIES

Complementing our federal role of preparing for national emergencies, we are a vibrant force in our state and local communities. We have begun youth programs in 15 states. These programs capitalize on our facilities and equipment and take advantage of the experience and training of Guard men and women. We are involved in STARBASE (Science and Technology Academics Reinforcing Basic and Space Exploration) National Guard "ChalleNGe" programs that are financed separately from our primary readiness accounts. Our goal in these programs is to be a positive influence on the youth of America with our Air Guard men and women serving as role models to portray a spirit of pride, tradition, and service to community, state and nation.

In addition to youth programs, we are active participants in military-to-military and civilian-to-military initiatives with foreign countries. Complementing these initiatives is our involvement in humanitarian and civic action programs worldwide, including deployments of civil engineers and medics to assist the CINC's with ongoing initiatives. Fourteen states have formed "nation-state partnership" programs with countries in Eastern Europe or republics of the former Soviet Union. We serve

as positive examples of how citizen-soldiers integrate with active duty militaries in democratic societies.

PREPARING FOR THE FUTURE

Today's Air National Guard is actively preparing for the future by attracting and retaining a quality force of diverse citizens, moving forward in space missions, using technology to improve education and training, and strengthening our Total Force interaction.

QUALITY FORCE

In fiscal year 1996 the ANG met end strength objectives. Our recruiters assessed over 11,000 new members into the Air National Guard, while reducing our attrition rate from 12 percent to 10 percent. We are working with the states to develop initiatives to ensure we continue reaching our strength goals, while filling critical skill vacancies through the extensive use of enlistment bonuses and the highly visible incentives of the Montgomery G.I. Bill (MGIB).

The MGIB continues to be a major motivation for six year enlistments with over 66 percent (72,829) of our Air Guard men and women qualified for benefits and 33 percent (24,190) of those personnel already applying for benefits. Retention of trained members is a continual challenge. Competing demands, higher personnel tempo, and a decreasing propensity to join, make keeping a member's family and employers satisfied a top priority. Additionally, we must ensure we recruit and retain a diverse force.

DIVERSITY PROGRAM

The work force of the 21st Century will be more diverse than that of today by the standard measures of race, gender, and ethnicity. The Air National Guard is conducting a project to improve its ability to manage a diverse work force, called "People Potential 2000 ... and Beyond" (PP2B+). The project is sponsored by the Director, ANG and is being run by the ANG Human Resources Quality Board (HRQB). PP2B+ will be the first true "CyberProject" run under the "CyberGuard" vision of the Air National Guard. As such, the project will use highly innovative methods and new technology to study the issue of future work force diversity and to build strategies for effective management. A core project team, drawn from ANG units across the country, will rely heavily on computer modeling and simulation for its study. Two new methods for building consensus across large organizations, "Future Search" and "Real Time Strategic Change", will be used to formulate the strategies and build local action plans, respectively. Throughout the project the PP2B+ core team and the HRQB remain in contact by employing special Internet software that allows "any-time, any-place" meetings. By project end, PP2B+ will directly involve 500 people in the creation and implementation of new human resources policies. This example of collaborative policy creation will eventually become the norm for the Air National Guard.

SPACE

We are also pursuing potential roles for the Air National Guard in space missions. In January 1996, the ANG activated the 137th Space Warning Squadron in Greeley, CO as the Mobile Ground System for the Defense Support Program satellites. This mission provides survivable, enduring, strategic missile warning to USCINCSPACE and the National Command Authority. The 4th Space Warning Squadron, Holloman AFB, NM has accomplished the mission since 1983. By Summer 1997, the 137th will have assumed the entire mission and reached full operational capability. The Louisiana ANG has also received tasking from Air Force Space Command to provide deployable communications and integration capability in support of the Air Force's space support teams for space-related tools for theater operations.

TECHNOLOGY

We have coined the term "CyberGuard" to embrace all actions being taken to prepare for the 21st century. This term encompasses every aspect of the Air National Guard—our organizations, our people, our infrastructure, our processes, our technology—the way we work, live, train and fight in a new world driven by rapid advances in technology. Toward that end we are investing in the latest computer technology and fiber-optic backbones at all Guard units. This ties us to the worldwide web and positions us for rapid decision-making, communication, training, and education in the CYBER world.

We continue to expand our use of technology to communicate rapidly and efficiently and to improve availability and versatility of education and training programs. For our Warrior Network satellite based system, with one-way video and two-way audio, we are installing the last of our 208 downlink sites. Our uplink site at McGhee-Tyson Air National Guard Base, TN continues to expand its capability and is becoming a World Class production studio. Our uplinks at Andrews AFB, MD and Tyndall AFB, FL have all the necessary equipment in place and will be operating by this summer.

The Warrior Network is fully interoperable with the Air Force's Air Technology Network and the Government Education and Training Network. This allows us to share our system with the Air Force and other Department of Defense, government and community agencies. An example of our shared use is our partnership with Fort Rucker, AL. Fort Rucker is connected to our uplink by a fiber optic line and broadcasts Army courses out of our uplink. The Federal Aviation Agency has used our classrooms and downlink sites in all parts of the country to deliver critical training to their employees. We are also exploring the use of the Warrior Network by local law enforcement agencies throughout the country to help train law enforcement personnel in the counterdrug effort. Finally, we are beginning to join forces with the Army National Guard and local community colleges to realize a larger economy of scale and return on investment for Distance Learning.

These joint and community shared uses are continuing to increase every day. They assure that the American taxpayers will realize a healthy return on their investment in Distance Learning. This will be visible in our communities across the United States as we share with our community agencies to assist in programs such as the counterdrug effort. Partnering with the Army National Guard and other components and agencies assures that we will be able to reach virtually every community, large and small, in every state.

TOTAL FORCE

The Air National Guard has been an essential piece of the Total Force—we will continue to play a vital role in the nation's defense as we look to the future. We want to strengthen our already excellent working relationship with the active Air Force.

Our staff integration initiative supports the Air Force strategic vision statement, "The Air Force will seek new opportunities to capitalize on the synergy of the Air National Guard and Air Force Reserve in an integrated Total Force". This initiative moves Air Guard members to unified commands, the Joint Staff, and the MAJCOM's. This program is vital to the future of the Air National Guard because it puts the right people at the right location where the decisions on force structure, equipment, and force employment are made. By the end of fiscal year 1998, approximately 100 Air Guard personnel will be assigned to various commands. Staff integration is one step toward an increasingly seamless Total Force.

Assigning active duty officers to positions within the Air National Guard is another step toward increased integration. While active duty members have always served with the Guard, we are taking this concept to the next logical level. When and where it makes sense we are opening ANG command billets to active duty officers. We recently selected an active duty Colonel to command the 103rd Fighter Wing, a Connecticut Air Guard unit based at Bradley International Airport. This is a three year tour which we believe will provide new ideas and perspectives to the ANG unit while also teaching an outstanding Air Force officer more about the Air National Guard.

In summary, fiscal year 1996 was an outstanding year for the ANG. We strengthened already strong ties between Total Force components. When and where it made sense we continued to implement new missions. With active Air Force help—and yours—our modernization program remained strong and viable. Our professional, committed people engaged in contingency operations and community service. Our future also looks bright. We move toward the 21st century completely engaged as a full partner in the Total Force.

If we continue the path we have prepared, early in the morning on a calm summer day in the year 2050 the great grandchild of a current Guard man or woman will be strapping into the seat of the first manned mission to Mars. The journey will take two years. If we have stayed our course and managed change smartly our organization will flourish and our nation will thank us—and—as the Guard man or woman touches down on Mars in the year 2052—the message back will be, "Hello to all my Air Guard friends back on earth and thanks for what you did to get us here."

I sincerely appreciate your support during my tenure as ANG Director and I leave "our Air National Guard" in good hands—those of the citizen soldier who has made this a World Class Organization.

AMERICA—MILITIA-BASED NATION

Senator STEVENS. Thank you.

Gentlemen, I was thinking about the days when Senator Stennis and I in the early eighties tried to encourage, as the forces were starting to be reduced in Europe, the insertion of Guard units, both Army and Air Force, for the purpose of training in some of the spots that were being vacated. You have taken this now to a partnership in terms of deployment on a much longer basis than we envisioned.

But I do think you have really raised the level of anticipation for experience and just basic full-time performance for the people in the National Guard to the point where a citizen soldier really can know that he or she is trained for what might come in the event of a real serious crisis. Certainly, as I said in my opening statement the Desert Storm situation demonstrates what the Guard can do.

We do have some questions. I will tell you, I do not know how much support I am going to get, but I am drafting a bill to require that we have a member of the National Guard Bureau on the Joint Chiefs, and that there be a deputy of one service to move into that slot after 3 years. I think this partnership must be recognized by the Congress and by the American people as a permanent thing, because, as you say, General Baca, it is efficient from the point of view of the commitment of our defense dollars to insist on a more robust experience as far as the Guard is concerned in the current crisis and in the planning for the future.

As we face the drawdown—and we do face a drawdown—I think we have to understand the value of the Guard in terms of the economics of that restructured force. We want to work with you. I want to make sure that someone is sitting there articulating that concept that we have tried to drum away on now for almost 20 years.

I think it has been this committee that has done that above all others. That is why I am delighted that Senator Bond is here as one of the cochairmen of the Guard Caucus. It is a very formidable group, with Senator Ford and Senator Bond committing a substantial amount of their time to making certain that what we are intending is carried forward in the total operations as well as the planning of our national defense.

I do have some questions. Notwithstanding what General Navas said, my staff tells me you probably will not meet recruiting goals in 1997. Is that right?

General NAVAS. No, sir; we are above our recruiting goals in 1997. We actually are 2,500 above our end strength now. We will have to come down to the 367,000 to meet our assigned end strength, but we are exceeding all the goals.

Senator STEVENS. Let me apologize. My staff's statement to me was that the Army would not meet its recruiting goals, but you would. Is that right?

General NAVAS. Yes, sir; at present the Army National Guard is the only component that is meeting and exceeding its recruiting goals, that is correct, sir.

General BACA. The Army Guard and the Air Guard.

Senator STEVENS. I understand that, but I am trying to get to the reasons for this. There is an imbalance right now in recruiting. As I understand it, the active components are not meeting their goals, the Guard and Reserve components are exceeding their goals. Now, what are the reasons for that, in your opinion, General? General Baca?

General BACA. Mr. Chairman, I cannot speak for the active component, but I can speak for the Guard and Reserve—for the Guard, excuse me, not the Reserve, but the National Guard, Army and Air. And as I said in my opening statement, Mr. Chairman, there's no question that the increased OPTEMPO is directly related to the fine recruiting and retention that we have.

People, when they have a meaningful mission, when they feel that they are being a part of the national security strategy they seem to be more willing to join and certainly more willing to be retained. I think it has a lot to do, too, with the morale of the Guard as it stands today. In spite of the turbulence that we have had with the downsizing, as we have been downsizing since the end of the cold war, they have been able to maintain a high state of readiness, and that always contributes to recruiting and retention, Mr. Chairman.

FULL-TIME SUPPORT

Senator STEVENS. What is the ratio now of the AGR to the people who are citizens, soldiers, and airmen? What ratio do you have?

General NAVAS. Sir, in the case of the Army National Guard about 11 percent, 11 to 12 percent of our force is full time, either military technicians or active Guard and Reserve.

Senator STEVENS. What is yours, General Shepperd?

General SHEPPERD. Ours is about 27 percent full time, sir, and about 8 percent of those are AGR.

General NAVAS. Sir, if I may——

Senator STEVENS. Now wait a minute. You are telling me two different statistics. What is your full time as opposed to citizen soldiers, General Navas?

General NAVAS. Sir, we are different in the Army and the Air Guard. Our percentage of full-time support in the Army Guard is much lower than in the Air Guard. In my case it is about 11 percent, between 11 and 12 percent of AGR's and military technicians, as a percent of my total force.

Senator STEVENS. Now, have you ever quantified, General Baca, the difference in costs for units of either Air or Army Guard as compared to active?

General BACA. Sir, it largely depends on the type of unit, and I'll let the Directors address the question in more detail, but basically a Guard unit is about one-fifth the cost. It would cost approximately $17,000 per individual to maintain an Army National Guard members, a little higher on the Air side. But roughly about one-fifth the cost, and again depending on the kind of unit.

Senator STEVENS. I am going to run out of time here.

Senator BUMPERS. Is that just on the Air side, General, one-fifth?

COST OF AIR NATIONAL GUARD UNITS

General SHEPPERD. No; on the Air side, a flying unit costs approximately 60 percent of active duty; a support unit costs about 20 percent of the cost of active duty.

The main reason that we are so much higher on full-time personnel is it requires full-time personnel to maintain the airplanes.

Senator STEVENS. Maintenance of systems, yes.

But what I'm looking for is to try and find out how that cost relates now to training and to skill level of attainment. Your people who are not regulars are still basically what we used to call in my day weekend warriors, right?

General BACA. Mr. Chairman, I think that term has become obsolete.

Senator STEVENS. We called them the weekend warriors.

General BACA. If anybody believes that a guardsman just trains on the weekend—now, you understand that every Guard enlisted soldier as well as the officers has to meet all the standards of their active component counterparts in their individual as well as their collective training. So guardsmen spend much, much more than 39 days a year. I would say the average, Mr. Chairman, is probably, even among the lower ranks, is about 60 days a year, and the senior leaders much, much more than that.

Senator STEVENS. Let us be fair now. In Desert Storm we were lucky that we got the time to train some of those units to integrate with the regular force. Now, are you saying that today we would not have to have that delay time to integrate these units with the regular force?

General BACA. Mr. Chairman, if you look at the units that were deployed, the units that were called to be deployed, the artillery units, for example, that were used and deployed in a very quick period of time. They went and performed and they performed, by all accounts, active and Guard, exceptionally well, with very minimal postmobilization training, sir.

I'll let General Navas address it in more detail for the Army and General Shepperd address it in——

Senator STEVENS. Maybe you can do that on someone else's time. My time has run out.

DISTANCE LEARNING INITIATIVES

I have one other question. That is, last year we gave you $35 million for the Army Guard distance learning initiative. General Navas, how has that worked?

General NAVAS. Sir, we have had some rough spots on our distance learning initiative. As you know, this is a new program. It is an investment program. Our vision is to have one distance learning classroom within 60 minutes driving distance of every Guard member. Some of that we have been able to accomplish. We have nine sites already in operation.

The money was held up because of internal issues. It is about to be released. We are making progress, however. In the future years we would like to maintain that momentum, because we think that that is going to be one of the key issues in how we can train our

soldiers and how we can save some dollars, because we are spending a lot of money in travel and in getting individuals out of their jobs to go to resident schools and 2-week training periods. If we can build on this concept of distance learning, distributed training, it is going to pay big dividends down the road.

This is, again, it is a fledgling program. We are very excited about the results we have had initially, but we need to continue supporting that program, sir.

ALTERNATIVES TO FLIGHT SIMULATORS

Senator STEVENS. I lie a little. That is not my last question. This is. General Shepperd, I am told that your people are now using a low-cost alternative to flight simulators using off-the-shelf equipment. Tell us about that.

General SHEPPERD. Yes, sir; we have for years been depending upon very expensive simulators, not only expensive to buy, like $12, $15 million, but expensive to operate, around $1 million a year. We basically started about 6 years ago to develop low-cost simulators that provide off the shelf, with modern computer and visual systems. We have got them up and running for all of our F–16 units. We are introducing them for our F–15's. We are also beginning to design them for our C–130's and B–1's.

It basically enables us to stay current with the aircraft and update quickly. We are using them now in the field. There is essentially very little operating cost and no personnel involved.

Senator STEVENS. What is the cost break?

General SHEPPERD. One of these systems will now cost between $400,000 and $600,000, as opposed to $12 million. And the O&M cost, rather than $1 million a year, is down in the neighborhood of $6,000 to $8,000 a year. Extremely cheap and very effective and better than the old simulators.

Senator STEVENS. You ought to give somebody some bonuses on that one.

General SHEPPERD. Sir, we are working very tightly with the Air Force on this to do it, and the whole idea is to develop a distributed interactive simulation where people in New Orleans can fight people in Portland on a bad weather day when they cannot fly real world, with virtual reality helmets, using the data for real data bases over Bosnia that day. And it is all possible and all there.

Senator STEVENS. Can you bring us a show and tell some day on that?

General SHEPPERD. Absolutely. We will let you fly it, sir.

Senator STEVENS. That is all right with me as long as you—I did that once with a Harrier and I crashed it. [Laughter.]

Senator Bond.

TIERED RESOURCING

Senator BOND. Thank you very much, Mr. Chairman. You covered some of the important questions I had wanted to hear covered, but I do want to ask the General and perhaps the others to focus on this.

General Baca, I understand because of the funding crunch there is a policy of tiering the resources of our defense forces. The first tier goes in, then the second tier. And having said that, in light of

what General Garner has said about the Guard, are you concerned that preparedness too might be tiered and that once you start cutting back on the training and the preparedness of the secondary tiers, the mission's readiness level will atrophy, they would begin to be called inadequate or unable to fill their mission requirements?

I would like to find out how you think this might come about. I am particularly concerned in light of the $344 million that comes out of the statutory requirements in military schools and training funds. It looks like we are setting up a downward spiral in preparedness, and I would appreciate your discussion of that view.

General BACA. Senator Bond, first of all let me thank you for your leadership and thank you for your support on the National Guard Caucus.

Let me just say that, as I mentioned in my opening statement, readiness is directly related to resources, and tiered readiness as far as the Army National Guard and as far as the Army in general is not anything new. The basic element of tiered readiness and when you have tiered readiness is that you try to maintain a force, the ones that are at the higher tier, the ones that are prepared to move the quickest and have to be prepared to move the quickest, are at a higher—are maintained at a higher level of readiness.

But you should always maintain the rest of the force at a C3 level or better. So then what you have then is the haves and the have-mores, rather than the haves and the have-nots, and you never reach a force, as you say, where you get into the downward spiral and you get into a force that is not effective, that goes below the C3 or the C4 level. That is definitely, always definitely a concern.

I would like, if you do not mind, I would like for the Directors both to comment in even more detail with regards to that, sir.

General NAVAS. Yes, sir; in the case of the Army Guard, we had a bottom-up review and an offside agreement in 1993. The first expression of that, of that agreement, was the 1995 budget. At that time we had expected for the budgets to remain stable and we were putting more resources into what we understood would be the high priority units that would be required to fight the two nearly simultaneous MRC's. That is our combat support and combat service support units that had to deploy anywhere between zero and 30 days. Our second tier units which were supposed to deploy between zero and 60 days, and our 15 enhanced brigades were supposed to deploy within the 90-day window.

We made a conscious decision to maintain the rest of the force, which was a strategic hedge, and basically the force that we use for our domestic mission, at a basic level of C3, which meant that they would have 15 days annual training, 48 drills a year, and enough schools money to maintain their professional education and enough OPTEMPO dollars to do collective training at those levels.

As the budgets have gone down, as operations have gone up, and we have still protected those high priority units, we are seeing then that the units at the lower level are getting less resources because we are protecting our high priority units. That is where you find that, compared with the fiscal year 1995 level of funding, we would have today the shortfall that you alluded to.

There is a point there where we must maintain our commitment to our soldiers of providing them the training required to maintain that base level of readiness, and we are in 1997 struggling to maintain that and we see very tough, tough times ahead to maintain that level of readiness.

AIR FORCE TIERED READINESS

General SHEPPERD. Sir, on the Air Force side, our Guard and Reserve in the Air Force are our tiered readiness. We fly one-half as much as our active duty counterparts. Your people in your F–15's in St. Louis will fly 7 to 9 times a month, while their active duty counterparts will fly 17 to 20 times a month.

We get repeated calls to fly them more. We do not need to fly any more than that to maintain our proficiency, because in reality what we do is we spin up for exercises, we spin up for contingencies, and we always have a little time to prepare for war.

I am reluctant to go into any further tiering because when you start taking an F–15 and flying fewer than seven to nine times a month you get into real safety problems, and we will see it almost immediately. But we do tier our readiness with the Guard and Reserve by flying one-half as much, and I think that is a proper way to do it.

ARMY NATIONAL GUARD RESOURCES

Senator BOND. Will the $743 million maintain the level?

General SHEPPERD. Sir, that is not an Air Force issue. That is an Army Guard issue.

General BACA. That is an Army issue.

Senator BOND. That is an Army issue.

General NAVAS. Sir, the answer is the $743 million would bring us back to the fiscal year 1995 levels of funding.

Senator BOND. So that would be——

General NAVAS. That would be to go back to 1995. If we want to maintain the 1997 level, it would be considerably less.

Senator BOND. All right.

Mr. Chairman, thank you. I have further questions I may submit for the record, but I would like to have the other members have an opportunity to question.

ENHANCED BRIGADES

Senator STEVENS. Senator Cochran.

Senator COCHRAN. Mr. Chairman, thank you very much.

One of the ways in which the Army National Guard is involved in combat support and integration activities is through these enhanced brigades that they are now called. At one point when Desert Shield/Desert Storm came along, we talked about a round-out brigade for the First Cavalry, which was one of Mississippi's units.

What is your impression of this enhanced brigade concept and whether it is going to work at the requested levels of funding for the Army National Guard, General Baca?

General BACA. Senator Cochran, first let me say in answer to that question and also to the question that I did not, I do not think

I answered properly to Senator Stevens, with regard to the response during the Persian Gulf war: In those days we did have the roundout brigades, and, of course, the 48th Brigade was called. It was never intended to be mobilized because of the fact that in those days we just had a 90-day deployment time and it would have been useless to deploy them for 90 days and then have to—they could not have deployed with their division anyway.

But they were called and their time was extended, and even during that time they were expected to do it within 90 days, because I recall from the time that they were mobilized to the time that they were certified at the NTC was exactly 91 days. So they were a day off.

I say, with all of the enhancements that we have had since then and with the title 11, with the support that we have got from the Congress, and quoting the Chief of Staff of the Army in his testimony last March, we are very comfortable now with 90 days for the enhanced brigades, a 90-day postmobilization training period for 90 days.

I would like to yield to General Navas for his comments.

General NAVAS. Yes, sir; if you recall, after the gulf war it was decided that, as far as the "Bottom-Up Review," there would be 15 National Guard brigades that would be enhanced in order to provide that hedge and that ability to deal with two nearly simultaneous MRC's.

What we did was, in a multiyear program starting in fiscal year 1996 which will culminate in 1999, in fiscal year 1999, we took a group of units—some of them were the old roundout divisional brigades, some separate brigades—and we came up with 15 separate brigades, and we produced, provided some enhancements.

The enhancements are not structural enhancements, but are basically training enhancements. We manned those brigades at a higher level. We provide full-time support technicians and AGR's at a higher level. That is why when you do the tiered readiness that I mentioned earlier the brigades get a lot more resources to be able to maintain the levels that are required. Those levels are they have to maintain a C1 in personnel, C1 in equipment readiness, and maintain a training level of C3, to be able to train up within a 90-day window after mobilization.

I am happy to report that we are making progress. We are on track with that program and those brigades are on their way by 1999 for all of them to be able to meet the 90-day window after mobilization.

Senator COCHRAN. Does your budget request have a specific line item for these enhancements to be integrated into the training of these brigades——

General NAVAS. No, sir, it is not a specific line item. What we do is we justify our budget based on the requirement for these brigades, and everything is done in our resource allocation model. Of course, when we wind up with lower levels of funding then we need to adjust and that is what happens. Then you are not able to provide the level of funding that would be required to maintain them at those levels.

Senator COCHRAN. But is my suspicion correct that, if this budget request is approved as submitted, that we would not have the

training resources or funds necessary to maintain the enhanced readiness of these brigades?

General NAVAS. Sir, not at the level, not at the highest levels. We would probably, as an illustrative example, we might not be able to provide all the schools training that we need to provide to all of them, because if we would do that then we would be zeroing out the drills and the AT accounts of some of the later deploying units.

Senator COCHRAN. So the point is, unless we do increase the funding levels for these training exercises, we are going to be writing a recipe for failure for the enhanced brigade concept?

General NAVAS. We would not be able to accomplish what we set out to accomplish in 1996 when we established the criteria for the enhanced brigades, yes, sir.

AIR NATIONAL GUARD INTEGRATION

Senator COCHRAN. During Desert Storm we also saw the Air National Guard participating quite actively from our State. The unit at Jackson, MS, flew hundreds of missions in support of that activity. Now that the C–17's have arrived, I was curious to know what the C–141's will be used for. Will they still remain in service at that facility in Jackson, or will you send them to some other units?

General SHEPPERD. We will send them to the boneyard, sir. The idea of the C–17 is to replace 240 C–141's that are aging and need a lot of money to be fixed with 120 C–17's. Your unit is getting C–17's to replace your C–141's. We will be parking the C–141's rather than replacing them as they are phased out.

Senator COCHRAN. Do you have any information you can give us about the likelihood for the use of that unit or those planes in any of the missions that are going on right now in Bosnia or the Middle East or elsewhere?

General SHEPPERD. They will be integrated just like your 141's, which are used in the air mobility, air transportation system wherever they are needed. The same thing will happen to the C–17. Your airplanes at Jackson were the first airplanes from the U.S. Air Force airborne in support of Desert Shield, the first ones, and they will be used in the same way in the C–17 business.

Senator COCHRAN. We are very proud of the record that they have had and we look forward to continued involvement wherever you suggest we can participate effectively.

General SHEPPERD. They lean forward. I do not know how they get as much time off as they do, but they are dynamite people. You can always depend on them. If we need an extra airplane, we call them or Memphis in the 141 business and it is there. Very proud of them.

BILOXI/GULFPORT AIRPORT

Senator COCHRAN. That is good to know.

We also have training activities down at the Gulfport-Biloxi, MS, airport. They have got some runway problems down there. We are trying to work with the local airport authority and the FAA and the Air National Guard officials. The facilities director has written a letter regarding the efforts to rehabilitate some of those runways.

We hope that you will work with us to try to help make that a success. I do not know the extent to which you can become involved through your funding through your budget, but if you can lend whatever support you can that would be appreciated.

General SHEPPERD. Sir, we are heavily involved in that. We are going to fix that runway. We need it to operate off that training site. That training site is very cost effective. It is a bare-base operation where you deploy in, you have got everything you need. It is just like when we go to war. That is the kind of base that we will have when we go to war. We want to maintain it and we will.

TRAINING AT CAMP SHELBY

Senator COCHRAN. I know my time is about out. I just want to put in a plug for continued training at Camp Shelby in Hattiesburg, MS. We are trying to get some funds to improve the gunnery range opportunities. We have a tank gunnery range there which is being designed and looked at. We hope you will be able to support that.

A nodding the head means yes, you will?

General NAVAS. Well, sir, Shelby and the other training sites are critical to the Army Guard. They are a very cost effective means of training the National Guard, and, of course, we are very supportive of those State-operated training sites, Shelby being one of them.

Senator COCHRAN. Thank you very much.

Senator STEVENS. Senator Domenici.

Senator DOMENICI. Mr. Chairman, I have essentially run out of time. Of course, I have to be somewhere at 11 o'clock. I am going to submit seven or eight questions in writing, if you would ask that they be answered as soon as possible.

Let me ask just a couple of quick questions.

Senator STEVENS. Yes, sir.

TELECOMMUNICATIONS LINK TO RURAL AMERICA

Senator DOMENICI. First, I want to talk a little bit about the extension of your participation with civilian groups and with local communities, which has been such a hallmark. You know, one of the things that is really tough for the United States is the issue of rural economic growth, and it turns out that a lot of the armories and facilities that you all run, own, and operate are in rural communities.

It also turns out that you are busy in these facilities expanding the telecommunications capacity of those facilities. In other words, you are adding some of the equipment that enhances that local community's participation in the so-called telecommunications highway. You are bringing in computers, you are going to educate through a series of computers in those facilities, bringing in a lot of the hardware and a lot of the connecting equipment.

I wonder if it would be possible for you to report to us what inhibitions there are in Federal statutes for that kind of capacity to be used by a local community where you have excess, either in private partnerships or community partnerships? You see, I am convinced that rural communities are going to grow in proportion to their having telecommunications capacity. If they have that, you can lo-

cate a service center there and it does not have to be in the big city. You have a lot of the fiber optics being brought into your centers and the like, and I am fully aware that there is a lot of extra capacity.

We are trying to put something together statewide, and the Guard is participating. But I think we need to know if we need to change any laws protecting your needs in the capacity, but permitting the capacity to be used by others in a community environment.

Could you comment on that?

RESERVE COMPONENT AUTOMATION SYSTEM

General BACA. Yes, Senator, I would be more than happy to comment on that. If you recall, when I was the Adjutant General of New Mexico you and I worked on a program with the Defense Evaluation and Support Agency to start, some 4 years ago, to start bringing the information management highway to our rural communities and our armories.

Well, I am proud to say now that during the past 2 years we have refined the Reserve component automation system and we have changed it from the old Unix-based system that was a closed system now to an open system, completely with all of the Internet facilities available to it. And we are installing that in every armory in the United States.

So with that as the base and with the support that we have gotten from the Congress to implement that program, we will have the hardware out there in those communities to be able to do exactly that. We are in the process of testing the system right now. We are doing—our beta test site is in Iowa. Iowa, as you know, is one of the lead States in fiber optics and they actually have a fiber optic network out to all of their armories right to date.

As you recall, we were doing the same thing with DESA using an open architecture system. Maybe we cannot afford to take fiber optics out to Ratone or Clayton or whatever, but using satellite, using microwave, using all other means of communication, we can maybe come up with the same kind of a poor man's Iowa.

SHARING THE TECHNOLOGY OF DISTANCE LEARNING

We are doing that, Senator Domenici, and we are also working our distance learning into these networks. We are establishing a classroom right now in every armory that will be available to the communities. We are looking at using a shared usage approach to where not only the Guard benefits by this, this wide area network and the local area networks in the communities, but that also the communities can ride on the same network. We will have the bandwidth that we will be able to do that.

In your State right now, General Montano is working with the universities, both the University of New Mexico and New Mexico State University, to utilize their satellites to start doing a lot of that right now, Senator.

So I see us as the National Guard being able to bring that information management highway out to all of the communities, and eventually to all our units and to our people in the units, because eventually maybe we might issue a laptop to an individual instead of giving them a $2,500 bonus to enlist.

Senator DOMENICI. Mr. Chairman, I think the issue that I raised is a very important one. I believe many, many rural communities are short of what they need to be on the telecommunications highway. The Government is not going to go pay for it all. But if you have an armory or a Guard facility there that has more capacity than it needs, I would like very much for us to explore whether we could at least give authority to them to share it, because you might immediately build in a telecommunication capacity in a rural community that may never be there otherwise. And if they have excess, I think we ought to see if we can do that.

I have one last question. You know, I am always on the side of let us give defense what they want. I wonder if it would be asking too much—perhaps it is—for you to suggest to us where you might save some money. I do not intend to wait around while you think about that, but—because I have got to decide whether we are going to get a budget that has enough money in it for the next few years for all these things you need.

But it would seem to me that it would be nice, since we are so generous and kind, that if you would occasionally come up here and make us feel good by telling us, well, we looked it all over and, since we have budget problems, we could get by with a little less here or there.

Thank you very much.

Senator BUMPERS. Would you like to address that question to me, Senator Domenici?

Senator DOMENICI. No. [Laughter.]

Senator STEVENS. Later, later, later.

Let me, just while you are here, talk about that question of use of the telecommunications. It would be helpful to this Senator if you would not talk about the information highway. We have fewer highways than King County in Washington, so we do not relate computers to highways up our way.

But I do think the Senator's suggestion has a lot of merit in terms of attracting from the rural area a lot more of these very qualified young people who might see the computerization aspect of your operations as a magnet to them, an opportunity for them to really get into the 21st century ahead of what they might get in their schools or their homes.

So I would like very much to work with the Senator from North Dakota. I am sure we all would.

Before you leave, I hope you realize that General Shepperd just told us how he is saving about $1.6 million on the training simulators he is not buying. We may not reduce him that amount for each one, but at least there is a built-in saving there. His budget will not grow up because of the increased cost of simulators.

Senator DOMENICI. Oh, I heard that. I am very pleased.

Senator STEVENS. I think the Guard and Reserve have been very active in pursuing some cost-saving mechanisms because they had to assume a great deal more of a role in our defense and yet their budgets have not gone up. So I hope when you look at this long-term problem, Mr. Budget Chairman, you keep in mind that the Guard is living within its budget right now and meeting its goals right now.

Senator DOMENICI. Mr. Chairman, I just cannot leave without correcting the record. People on the right and the left are all accusing me in this budget, but you just made me a Democrat.

Senator STEVENS. Did I say North Dakota? I read the paper this morning and I had him in mind. [Laughter.]

REPAIR OF ARMY EQUIPMENT FROM EUROPE

Senator DOMENICI. Thank you.

General BACA. Mr. Chairman, if I could just reply very briefly that there are several initiatives that we have taken together with the Army in the area of cost savings. In the Senator's home State of New Mexico, for example, in the RETROEUR program, we did that program where we repaired all the equipment that was coming back from Europe. Several of the items were repaired there, in Mississippi, as well as in New Mexico, and we did it I think for about $30 an hour using State labor with State Guard members performing it, rather than maybe the $90 or $120 if we had done that elsewhere.

Of course, there in Camp Shelby, as you mentioned, we have got the first controlled humidity preservation site in the United States and one of the best probably in the world, that has a tremendous cost avoidance factor. So anything we can do, Senator, to try to save money jointly with the Army, with the Air Force, with the services, we stand ready to contribute to that.

Senator STEVENS. We want you to go to that meeting, Senator, because I was just reading the press release that said you could get a budget agreement within 24 hours if you put your mind to it. [Laughter.]

Senator DOMENICI. I did not write that thing.

Senator BUMPERS. I saw in the paper this morning that, if Congress does nothing, the deficit still is going to come down by $37 billion, so I would prefer you not even go. [Laughter.]

Senator DOMENICI. Well, we are at least not going to spend more, so that will still work out.

Senator STEVENS. I do not know why I am sweating over the supplemental for, because the President spent $4.8 billion more than we gave him already in one account.

Senator DOMENICI. Yes.

Senator BUMPERS. All very meritorious spending, too.

ANTITERRORISM TRAINING

Senator DOMENICI. Mr. Chairman, before you go on let me just say, you remember, because of your leadership, the Nunn-Lugar-Domenici bill incorporated in your funding last year regarding proliferation of biological and chemical weapons by terrorists. I believe that we are engaged now for the first time in trying to make, trying to begin to prepare some local communities for the eventualities.

I am convinced, as I read about it, that the Guard probably ought to be playing a vital role in that kind of preparation. I did not get a chance to ask that question, but I would say to you that, since you were so interested and instrumental—and we do not know quite how to organize that yet. How do we organize for a potential biological terrorist? It may very well be that the best organi-

zation, institutional organization, might be the Guard. I just leave that before you to think about.

Senator STEVENS. I would like to explore it with you, Senator. I am sure our generation remembers the backyard bomb shelters and a few other things that we spent money on. I would hope that we can find some way to prepare for this contingency by convincing the manufacturers of our raincoats and weather gear to incorporate in them things that are automatic protections against some form of chemical or perhaps even biological warfare concepts.

I think that it is possible for us to be more alert to the threat for the future and to get there without causing a great deal of fear in our society.

Senator Bumpers.

FORT CHAFFEE, AR

Senator BUMPERS. Thank you, Mr. Chairman.

Mr. Chairman, first of all I would like to take up a parochial issue in my own State with General Baca, and I am sorry that General Baratz, Chief of the Army Reserve, is not here this morning because it goes to the Reserve question, too. And I would assume, General Baca, that you and General Baratz have discussed some of the problems that the Reserve sees in training at Fort Chaffee, for example. Has he discussed that with you?

General BACA. Senator Bumpers, no, he has not.

Senator BUMPERS. Well, let me restate it, then. As you know, the Base Closing Commission picked five bases to be turned over to the National Guard—Indiantown Gap, Pickett, McClellan, Hunter Liggett, and Chaffee. Chaffee will be the first one to actually be turned over to the Guard, on October 1 of this year.

But last year General Baratz and Senator Pryor and a whole bunch of other people met here in the Capitol, and General Baratz said he would contribute a little over $2 million to operate Fort Chaffee. He wanted 5,000 of the 71,000 acres there. The Guard said they wanted 61,000. So we had a very amicable meeting, an amicable meeting and a meeting of the minds on how we were going to finance Chaffee as a Guard training base.

Then suddenly just a few months later General Baratz said he was not going to pay his $2 million. You are not familiar with this?

General BACA. No, sir, I am not. I am sorry.

Senator BUMPERS. I hope you will familiarize yourself.

General BACA. It is a separate organization, General Baratz.

Senator BUMPERS. I understand that, but the reason I am asking you—he is the right person to ask about it, which I have done on the phone. But my point is, it took the Reserve and the Guard both to make the financing of Fort Chaffee work, and he was going to contribute $2 million to it in order to have 5,000 acres for his own training, and the Guard was going to put up $6.85 million when it is turned over to them this fall for training.

It is a big bargain because our Guard and many Oklahoma guardsmen would have to travel long distances to train anyplace else.

Well, in any event, I thought you might be familiar with that. But I just wanted to say——

General BACA. Senator, this is the first I have heard of it. I had not discussed it with him, I am sorry.

Senator BUMPERS. Well, it has presented a lot of heartburn to the Arkansas Guard, trying to figure out what they are going to do. I think they can probably make it this year.

Are you familiar with it, General Navas?

General BACA. Let me turn it over to General Navas.

General NAVAS. Sir, the issue is basically a BRAC issue, as you are very aware. The Guard took over from the BRAC Chaffee, Pickett, Indiantown Gap, and McClellan. The first two posts to be taken over in this year, in October 1996, is Pickett and Chaffee, and we are working for the transition coming from the Army Reserve to the Virginia Guard and to the Arkansas Guard.

I am, my staff has been working some of the issues. I have not discussed it personally with General Baratz, because this is basically the end of the Army Reserve tenure at Chaffee and we would be taking that over October 1 of this year.

The issue that we are dealing with is that, with the taking over of Pickett and Chaffee, there was some commitment for some dollars to support Chaffee and Pickett. I think in the case of Fort Chaffee it was $6.6 million a year to maintain the base operating, and in the case of Pickett it is a similar amount.

In the same POM that we put those dollars there, that was the POM that we got caught by $60 million. And we had to then go to an across-the-board cut of about 30 percent to all our installations, to include Shelby and all the other installations, and in addition the two that we were getting. So right now what we have in the 1998 budget is less than that $6.6 million. It is about $4 million some.

We are working very close with the Adjutant General and the staff to see how we can deal with this issue and defer some maintenance and work out some efficiencies to be able to manage the budget.

BASE SUPPORT PROGRAM

Senator BUMPERS. Well, I think they can make it this year, but now we have one small problem and that is the 1998 budget of the President cuts the Army National Guard base support program by $69 million.

General NAVAS. That is right.

Senator BUMPERS. And you have distributed that among all the Guard bases. So as a result, as you pointed out—I think this is what you were saying—Chaffee will only get $4.6 million. So we are going to have to obviously find another $2 million in order to——

General NAVAS. Well, I need to find almost $60 million for all the posts.

Senator BUMPERS. Yes; well, I just wanted to make you aware of that, and also——

General NAVAS. No; I am aware of that part, sir.

"QUADRENNIAL DEFENSE REVIEW"

Senator BUMPERS. Now, Mr. Chairman, if I may just point out, the "Quadrennial Defense Review" report is due Thursday at the

White House and I assume later this month to Congress, and there was a big story in the New York Times yesterday about what is going to happen, and you can hear everything but meat frying about what the Quadrennial Review Commission is going to say.

But I just want to say that when Senator Domenici asked you, are there places where you could save and I made that flip response, my response was based on the Pentagon. I mean, you give me a chance to cut budgets at the Pentagon and I can do it. But so far as I am concerned, Mr. Chairman, the Guard has been living on starvation wages just about ever since I have been in the Senate, and the suggestion that they are going to lose 60,000 billets or something so the Army will only have to take a cut of roughly 5,000 is going to set off a firestorm around here with people like me.

I do not agree with that. We have 900,000 Guard and Reserves. They supply 70 percent of the field artillery, 50 percent of the aviation, 40 percent of the manpower, and they get 7.6 percent of the budget.

So I am not going to ask the Reserves where they can save money. It is quite obvious you cannot save money when you are being treated in such a way.

Well, finally, let me also say that at some point, and I do not know when this is going to happen—I have been screaming like a pig under a gate for the last 3 years about not building any armories. We have 3,100 armories in this country and about 1,400 of them are considered to be inadequate. And at some point—you know, we cannot just keep going that way.

We have armories in my State that leak so badly they ruin equipment. You cannot get the equipment away from the leaks.

STATE PARTNERSHIP PROGRAM

Finally, I will not beat that dead horse any longer, but I also want to just point out to you, so that when it comes to your attention you are familiar with the partnering concept in the Guard. The Arkansas National Guard under its previous adjutant was working on partnering with the Russians. We have a new Adjutant General who has just simply said that he had not had time to pursue that.

But I just want to say, he is going to pursue it, and when that comes to you requesting your permission for the Arkansas Guard to partner with Russia I would hope you would approve it. You are familiar with this partnering?

General BACA. Yes, sir, absolutely, totally familiar with the State partnership program.

Today we have 23 States partnered with 21 of the former Eastern bloc nations. We are establishing five partnerships right now in Central and South America. We have got several States that are waiting in line to establish these partnerships, several of the States, by the way, that have spoken for Russia. I think Russia is big enough, as we have done in other States, that we can partner more than one State to Russia. We have got—even in some of the smaller nations, we have used more than one State and it works exceptionally well.

Senator, let me tell you, that is the—as I said in my opening statement, I see this as the foundation for the new Marshall Plan

of the 21st century. As you partner these States with these nations, it goes way beyond the military-to-military relationship. What happens then is that the State is partnered and the Governor and his cabinet as well as the State legislators then also have an influence on that partner nation.

I could give you example after example as to how that has worked effectively. Just, for example, right here in Maryland with Estonia, the Governor has made the University of Maryland Trauma Center in their medical school available to the Estonians to help them establish their medical center, and also John Hopkins University. They have made leaps and bounds, they have advanced in leaps and bounds in their medical arena, because of that.

Many of them are developing the economic partnerships. They are developing sister city relationships, Birmingham with Bucharest and Montgomery with Constantia, Romania, for example. This is expanding where we are bringing our guardsmen out there, and they are the best Ambassadors you could ever find, Senator Bumpers. What we are doing is we are bringing the grassroots values of America with these guardsmen to these partnership nations, as we have been doing now with our nation-building projects for the last 10 years in Central and South America.

Senator BUMPERS. General, I am very pleased with your enthusiasm, which I share. I think it is a great idea.

Thank you, Mr. Chairman.

Senator STEVENS. Yes, sir, Senator Shelby.

PREPARED STATEMENT OF HON. RICHARD G. SHELBY

Senator SHELBY. Mr. Chairman, I was at another committee hearing and I would like for my opening statement to be made part of the record in its entirety.

Senator STEVENS. Yes, sir, it will be.

[The statement follows:]

PREPARED STATEMENT OF SENATOR RICHARD C. SHELBY

Thank you, Mr. Chairman. I commend you for holding a hearing which for the first time since I have been a member of the Committee is exclusively on the National Guard. The Guard is accomplishing more missions while withstanding the turbulence of force restructuring and financial uncertainty. Considering the increasing number of demands shouldered by the Air and Army National Guard, it is appropriate to highlight force structure and modernization issues facing our citizen-soldiers.

Generals Navas, Shepperd, and Baca state that the Guard is positioned to be the cost-effective force that is relevant to and prepared for future missions. Yet, without adequate resources, training, and modern equipment, the Guard is being treated like the unwanted step-child of the Total Force. Funding for training and education has been cut to the point that Guardsmen are being forced to attend schools while in drill status or annual training status. When a soldier must use drill time for individual training, that soldier is not able to train with his or her unit. This undermines unit cohesiveness and impairs readiness. Unless remedied soon, this trend will become more pronounced as more units are inactivated and more Guardsmen require individual training in order to serve in units that remain in the force structure.

National Guard units have been deployed to support operations in the Persian Gulf, Haiti, and Bosnia. They serve next to active components, but do not come to the fight with the same equipment or capability. For example, the F–16's of the 187th Fighter Group that were deployed to Southern Watch are not equipped with the precision munition capability that their active duty counterparts provide. These planes need to be upgraded so that CINC's and others in the battlefield cannot distinguish between the capabilities of the Guard and Active components.

I look forward to a dialogue with the witnesses on these and other issues with the National Guard. Thank you, Mr. Chairman.

TIERED RESOURCING

Senator SHELBY. And I have several questions.

I am concerned about the National Guard's use of tiered resourcing, as we call it, and with which all three of you are familiar.

General BACA. Yes, sir.

Senator SHELBY. I believe there is a disconnect between funding for the so-called first to fight units and the higher deployment rate of lower tier units. How does your tiered resource model guarantee the readiness of lower priority units that are being called up a lot more frequently to support peacekeeping operations? General, do you want to explain this?

General BACA. Yes; Senator, let me say this. I am going to pass the question to General Navas because it is an Army question and the Army does use, has been using, tiered readiness for many years.

Just let me say that we stated earlier that we understand that readiness is a direct result of resourcing and that if you are not properly resourced you cannot maintain the established level of readiness——

Senator SHELBY. Absolutely.

General BACA [continuing]. To do all those missions, including the one you just mentioned now of those peacetime deployments that are being performed by the lower tiered readiness units. We understand that very well, and so we have been endeavoring to maintain the level of readiness where we maintain a base of at least a C3 level of readiness across the board for the lower tiered units, and at the same time using, resourcing the higher tiered readiness to the levels of readiness that are required for their immediate deployments.

What we have been endeavoring to do is have the haves and the have-mores rather than the have-nots.

With that, I will turn it over to General Navas and let him explain it in a little bit more detail.

Senator SHELBY. General, is that not a problem now?

General NAVAS. Well, we went through this earlier, but let me briefly go over it. What happened here, sir, is in 1993 when we had the bottom-up review and we saw that basically the high-risk low probability would be two major regional contingencies, we tiered our resources to provide higher levels of readiness to those units that would be required from zero to 90 days.

We did not expect to have a lot of the things that we have been doing in the last 6 years. So we thought that we could maintain a basic level of C3 to maintain kind of a warm base in our lower priority units that would take longer to deploy.

That has not come to reality in two counts. The budgets continue to go down. That is why we have today basically a difference from the 1995 levels. And also, we have been involved in the Bosnias, the Somalias, the Haitis, and it is the units in the lower tier that have been picked and called up to do this. So that right now we are at an imbalance.

What we are trying to do is maybe assume some risk in the earlier deploying units, to take some dollars from that to be able to maintain the solid level C3 across the board to be able to provide this repository of capability that we have in the Guard to be able not only to meet the requirements of the services and the CINC's, but also the requirements of the States' Governors in the domestic arena, because when you have an aviation unit at a lower tier level of readiness and you cannot provide enough flying hours to maintain training at the levels required for safety, but that is that same unit that might not be in a high priority for a war fight, but it is a high priority to deal with the citizens of that State in the case of an emergency. We need to provide that level, and that is a challenge that we have, basically where we feel that we have this imbalance and we are trying to come to grips with that.

Senator SHELBY. It is also a challenge for us to fund you. Without the money it is going to be hard to achieve high states of readiness, is it not?

UH–60 BLACKHAWK HELICOPTERS

General NAVAS. Yes, sir.

Senator SHELBY. Regarding the UH–60 Blackhawk helicopters for a moment, just in that area, what is the current shortfall of Blackhawks in the National Guard?

General NAVAS. Yes, sir; right now we have, after all is bought and purchased, the Guard would still have close to a shortfall of 500 UH–60's.

Senator SHELBY. A 500 shortfall.

General NAVAS. Plus about 131 light utility helicopters that we are using Hueys now, that we do not have a program to do that.

We were expecting to get anywhere from 18 to 36 Blackhawks per year under the program.

Senator SHELBY. But the Army is only requesting 12, are they not?

General NAVAS. Yes, sir, because that program has been canceled. Those Blackhawks would have gone to our high priority units, which are the aerial med units and the force package support units, and then later on the 500 would be to modernize our aging Huey fleet in the lower priority units.

Senator SHELBY. How does this lack of enough Blackhawks effect your warfighting and medevac requirements?

General NAVAS. Sir, it would not allow me to modernize all the medevac units in the high priority units, and it would——

Senator SHELBY. It will not allow you to do your job, in other words?

General NAVAS. Well, we would do it with older aircraft, which are more expensive to maintain and to operate. And then it would defer modernization to the lower priority units by maintaining those, the older aircraft there, which again my comment that they might not be a high priority for a Federal mission, but they are certainly high priority aviation assets for our domestic mission.

Senator SHELBY. Have you discussed the implications of this with the senior Army leadership?

General NAVAS. Yes, sir; this has been discussed inside the Army. It is basically a prioritization and dealing with a budget and fiscal realities.

Senator SHELBY. Ultimately, General, what impact will terminating the Blackhawk program have on the Guard?

General NAVAS. Sir, the impact would be that we would not be able to replace—we would not be able to field a requirement for almost 500 helicopters in the Guard. We would have to retain our aging Huey fleet a longer time.

Senator SHELBY. Sooner or later they are going to just by age terminate, are they not?

General NAVAS. Yes, sir.

Senator SHELBY. So it is going to cause you trouble, is it not?

General NAVAS. Yes, sir.

Senator SHELBY. The bottom line.

General NAVAS. If we do not fix this, in the long term it would cause problems. In the short term there might be work-arounds, but it is not a long-term solution.

Senator SHELBY. Thank you, Mr. Chairman.

Senator STEVENS. Yes, sir.

ADDITIONAL COMMITTEE QUESTIONS

Generals, we appreciate your appearance before the committee. This year we are going to do something a little bit different and listen to four of the Adjutant Generals for a while. We will appreciate your responses to the questions that have been submitted. I am going to submit some of mine rather than go into them now. They are questions for the record. We look forward to working with you. I again congratulate you for your work to date. Thank you very much.

General BACA. Thank you, Mr. Chairman. Again, thank you for your support and the support of the committee.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTION SUBMITTED TO GEN. EDWARD D. BACA

QUESTION SUBMITTED BY SENATOR PATRICK J. LEAHY

Question. General Baca, will the impending Quadrennial Defense Review consider the National Guard's state mission in their evaluation of force structure and modernization requirements? Will the congressionally mandated National Defense Panel, in your opinion, consider the state mission in their examination of force structure alternatives?

Answer. In the process of the Quadrennial Defense Review, a series of force allocation exercises were conducted by the OSD and the DOD Joint Staff which considered several domestic emergency scenarios oriented to National Guard forces, including domestic nuclear and chemical terrorist events, as well as hurricanes. The Army has utilized the data from these events in their analysis to imply that National Guard forces would be committed to counter domestic terrorism, and therefore may not be available for overseas deployment. There was no consideration to National Guard modernization requirements in this phase of the review.

Based upon this experience, additional information must be provided to the National Defense Panel to ensure warfighting forces allocated to the Army National Guard are also adequate to respond to state missions.

QUESTIONS SUBMITTED TO MAJ. GEN. WILLIAM NAVAS, JR.

QUESTIONS SUBMITTED BY SENATOR PETE V. DOMENICI

BUDGET ISSUES

Question. Are the Guard and Reserves being accorded full partnership in the deliberations of the Quadrennial Defense Review?

Answer. The Army National Guard Directorate has been involved in the Quadrennial Defense Review, within the Army Staff, from the beginning of the Strategic Synchronization Cell, under the direction of the Assistant Vice Chief of Staff—Army. At the Colonel (06) level and below, the ARNG was afforded the opportunity to participate in Task Force meetings within the Army Staff.

Question. Are you being given every opportunity to express your point of view on questions of the Guard and Reserve force structure and mission?

Answer. No, although National Guard Bureau staff did participate in the QDR process, we have not been afforded the same opportunities to be represented in all decisions and discussions. Many decisions were being made without adequate input from the ARNG. All components must be involved throughout the process to ensure the most feasible and equitable decisions regarding the future force structure of the Army are rendered.

Question. Where, in your judgment, are the places where the Guard and Reserves can offer additional savings.

Answer. There are numerous proposals for efficiencies and cost savings that the Army National Guard submitted for the Quadrennial Defense Review. Some of the most promising are the "Fort State" proposal, Multi-National Force-Sinai, and Environmental Services.

Under Federal law, each state, the District of Columbia and U.S. territories are required to appoint an Adjutant General to lead the National Guard. The Adjutant General has command, control and staff capabilities organized in a State Area Command (STARC). The "Fort State" concept leverages that presence. If a state is viewed as an installation, the concept of AR5–9 support can be applied across a wide range of activities. The ARNG can provide BASOPS support for all Active and Reserve Component military installation within a state. The ARNG can provide construction management for military facilities and by using state contracting procedures, the ARNG can significantly lower construction costs as compared to federal contracting procedures. The capability to manage installations is already inherent in each state National Guard. With additional resources, the ARNG can centralize management and engineering responsibility of Army or all military installations at the state level. The "Fort State" concept can also provide aviation training and aviation logistics support; contracting and comptroller support; and personnel services support to active and retired military personnel in the state. These are just a few of the potential savings that could be achieved.

Under the Camp David accords, the Army is required to maintain an infantry battalion in the Sinai. A different battalion is rotated every six months. The arrangement effectively commits an entire brigade to this mission for 18 months. The use of ARNG forces would allow an existing Active Army brigade to be available for other missions. During fiscal year 1995, the Army successfully conducted a multi-component test rotation with personnel from the Active Army, the ARNG and the U.S. Army Reserve. Under the ARNG proposal, an ARNG division sponsors a six-month battalion rotation.

A last example of efficiencies is in the area of Environmental services. The ARNG has Environmental Management Offices in 54 states and territories. The ARNG can leverage this capability and provide support to active Army installations within a state. With its existing relationship with state regulatory agencies, the ARNG can provide natural resources management for the Department of the Army and as well as serve as the Department of the Army's executive agent for assigned DOD Regional Environmental Offices.

Question. Can the Guard and Reserves streamline headquarters and reduce the number of headquarters units?

Answer. As part of the Headquarters Department of the Army (HQDA) Staff, the Army National Guard Directorate of the National Guard Bureau is part of the ongoing HQDA redesign. HQDA redesign is anticipated to reduce staffing. National Guard Bureau is currently reviewing the organization and functions of the fifty four State and Territorial Area Commands seeking possible ways efficiencies may be gained. This State Area Command (STARC) Table of Distribution and Allowances (TDA) Redesign Study will conclude with recommendations being presented by February 1998. As far as headquarters units are concerned, the ARNG is short of var-

ious doctrinal command and control (C^2) units which administer to their respective subordinate units maintained in the ARNG force, and we cannot afford to lose additional units. Some of the more critical shortages occur in Transportation and other logistics headquarters.

Question. Do you believe it prudent to reduce your force structure to provide funding for procurement of modern hardware?

Answer. No. Force structure reductions impact on the Army National Guard's ability to support the Unified Commands, as well as the needs of the fifty four States and Territories. The cost of retaining Army National Guard force structure is far less expensive than comparable Active Component structure. Forces targeted for possible reduction are the nation's insurance policy during this period of uncertainty. Retaining this structure is analogous to having a whole life policy at term rates.

Question. What is the return on the dollar invested in the Guard and Reserves to states and local government?

Answer. The Army National Guard does not maintain this data at the national level and this is not a standard item reported by the states. However, some anecdotal information is available. Studies by the Alaska National Guard show a direct economic impact of $2.27 for every $1 spent on National Guard payroll or operational expenditures. In many cases, the dollars invested by the Guard are leveraged by the state to garner even greater returns. For example, two National Guard facilities employ 121 employees at a payroll expenditure of $315,360. Using a payroll multiplier of 1.8, their total economic contribution is $567,648. It costs the state of Alaska $68,192 to maintain these two facilities. In this case, the return on Alaska's contribution is greater than 8 to 1. As you can see, the return on the investment in the Guard and Reserve is quite substantial and is a significant contributor to the state and local economy and government.

GUARD/RESERVES MISSIONS

Question. What roles can the Guard and Reserves play in managing and responding to chemical and biological domestic Terrorism?

Answer. The National Guard has a dual role in combating domestic terrorism; response and training. The National Guard is capable of responding to a WMD incident at both the state and federal level. As the first military responder, National Guard forces under the command of their respective governors in a state (non-federalized) status have the primary responsibility for providing military assistance to state, territorial and local governments. National Guard units and personnel can typically respond to incidents within one to four hours after an incident occurs.

All National Guard personnel, both Army and Air, are trained to operate in a chemical and biological environment. Thus, units located in over 3,000 armories country-wide are capable of providing a trained, disciplined force to respond to a WMD incident. The National Guard's role is one of augmentation and as a force multiplier. In a WMD incident, the National Guard can provide additional manpower, equipment and resources to assist the Federal, State and Local civil authorities as appropriate. When assigned a federal mission by DOD, the National Guard can task organize to augment the federal response capability or provide a rapidly deployable operational base of personnel and equipment to receive or support deploying DOD and other federal assets.

Units such as divisional chemical companies (within the ARNG) and HAZMAT teams (within the ANG), can provide the resources, both in training and response, required for the chemical detection, decontamination, and casualty management subsequent to a WMD incident.

Currently, programs are being developed to provide readily accessible, community based training programs for Federal, State and Local first responders in the areas of WMD detection, monitoring, decontamination, and personnel protection. The training programs will be available to first responders and emergency management personnel through Mobile Training Teams, National Guard Bureau National Interagency Counterdrug Institute, and community-based Distance Learning Sites.

With its trained, disciplined and jointly-coordinated staff, the National Guard is best-suited to conduct interagency community training exercises. In 22 states, the Adjutant General is also the agent primarily responsible for Emergency Management. As such, these Adjutants General and their staffs regularly provide training and expertise to their civilian counterparts. Training exercises, a regular part of military operations, can serve to identify community shortfalls in training and response capability as well as to train response agencies in the different aspects of joint interoperability within their areas of responsibility.

NEW MEXICO ISSUES

Question. Has the New Mexico Guard been able to start construction on the Taos Armory that was funded in past years?

Answer. The Army National Guard has funded the Taos Armory, (Readiness Center, add/alt) for 100 percent of the design cost, but Congress has neither authorized nor appropriated funds for construction. This Armory is in the Army National Guard's Future Years Defense Plan for fiscal year 2001.

QUESTIONS SUBMITTED BY SENATOR PATRICK J. LEAHY

Question. General Navas, isn't it true that the Army has only included 19 Black Hawk helicopters in the fiscal year 1998 budget request—none of which are designated for the Army National Guard, and that in fiscal year 1999, the Army is requesting only 12 more Black Hawks and is then planning on terminating the Black Hawk program?

Answer. It is true that the Army will terminate production of the UH–60L Black Hawk helicopters after procuring 18 in fiscal year 1998 and 12 in fiscal year 1999. The Army has not indicated to the Army National Guard their intention to field any additional UH–60L or UH–60A Black Hawks to the Reserve Component beyond the current UH–60 fiscal year 1997 Congressional "add on".

Question. What impact will terminating the Black Hawk program have on the National Guard and your aircraft modernization program?

Answer. The termination of the UH–60L Black Hawk program will have a significant effect on the Army National Guard. The Army National Guard has a requirement for 872 UH–60 Black Hawk helicopters and 457 are on hand. After the completion of current fielding plans, the Army National Guard will be short 406 UH–60L. Currently, Black Hawk requirements are being filled with aging UH–1 "Huey" helicopters. The UH–1 has significant operational limitations and is becoming increasingly difficult to support logistically. The future deployability of Army National Guard UH–1 aviation units is questionable.

Question. How does this shortfall impact your warfighting and medevac requirements?

Answer. The Army National Guard currently has a shortfall of 105 UH–60's for warfight and medevac requirements, specifically; 58 for medevac, seven for assault, eight for general support aviation, 10 for command aviation support and potentially 22 for aviation intermediate maintenance. The Army National Guard is currently developing plans to move modernized UH–60 Black Hawk helicopters from strategic reserve missions to warfight and medevac missions. This is a monumental task, considering the sensitivity of the Adjutants General reference UH–60's. Any UH–60 movement from the strategic reserve to warfight and medevac requirement, will reduce the 105 UH–60 shortfall.

Question. Finally, General Navas, I would like to ask a question about Army technician pay. I have heard from Vermont's adjutant general that the Army Guard's budget request does not provide enough funding to pay for the complement of civilian technicians who perform critical maintenance work. In my state, that will mean that the adjutant general will have to divert funding from other activities to pay the technicians, further exacerbating the problems in operations and maintenance. General, is this a problem in other states? How can DOD underfund personnel accounts like this?

Answer. Vermont is not alone in having to adjust to this adverse situation. States were Congressionally funded to support a current expenditure rate of nearly 98 percent of what was authorized; thus, virtually all states shared in enduring the technician payroll shortfall.

In accordance with recognized DOD costing models, the fiscal year 1997 ARNG technician pay program was budgeted at 25,500. However, data entered into the federal costing models did not adequately reflect the actual historical execution. This historical execution coupled with projected inflation factors forms the baseline for our technician funding and thus our two percent shortfall.

Efforts are ongoing to include involvement of contractors and the Army Budget Office to more correctly capture and analyze pay data submitted to these costing models to ensure a more accurate depiction of actual usage, thereby ensuring adequate funding.

QUESTIONS SUBMITTED TO MAJ. GEN. DONALD W. SHEPPERD

QUESTIONS SUBMITTED BY SENATOR PETE V. DOMENICI

GUARD/RESERVE MISSIONS

Question. The Air National Guard has been assigned the relatively new B–1B bomber. What problems are you encountering with this assignment that provide useful lessons for the assignment of new aircraft in the future?

Answer. Moving a portion of the B–1B fleet into the ANG has taught us that we're very capable of accomplishing the bomber mission and stand ready to accept more B–1B's in the ANG if that is what the Air Force decides. The B–1B bomber has been a great addition to the ANG and adding this mission to the ANG has been a great decision for our country. We're having great success with this weapon system. Our two units include the 184BW at McConnell AFB, Kansas and the 116BW at Robins AFB, Georgia. The 184BW has completed their conversion to the B–1B and will receive their first operational readiness inspection this fall. The 116BW will complete their conversion in fiscal year 1998/2001. Both units, like their active duty counterparts, are participating in exercises, deployments and Global Power missions that span the globe.

Question. When will the B–1B be able to perform all relevant conventional missions?

Answer. As a Total Force partner, ANG B–1B aircraft and aircrews are capable of performing all of the same relevant conventional missions our active force partners are performing. We are currently tasked to provide forces in several potential areas of conflict and regularly participate in exercises, deployments and Global Power missions which span the globe. The airplane today is capable of carrying Mark 82 and cluster bomb munitions (CBU's). ANG B–1B capability will only improve as we receive programmed improvements which include precision and standoff weapons, communications, navigation and defensive system upgrades. We look forward to the B–1B remaining the backbone of the conventional fleet well into the future.

NEW MEXICO ISSUES

Question. Please describe the requirements that would be addressed with new Squadron Operations and Composite Support Facilities at Kirtland AFB. What are the problems with the existing facilities?

Answer. The Air National Guard (ANG) unit at Kirtland AFB has identified two Military Construction (MILCON) projects to alleviate severe space deficiencies and replace antiquated facilities. The first project will alter the existing Squadron Operations facility and construct an addition to the building. Besides the degraded conditions, the existing facility is undersized as a result of two recently assigned missions—Low Altitude Navigation and Targeting Infrared for Night (LANTIRN) and Defense Systems Evaluation. The Composite Support Facility will house the unit's communications and audio visual functions, and New Mexico National Guard Headquarters. The project also alters vacated space for the unit's Operations and Training (O&T) function. The existing facilities are unsatisfactory; contain numerous operational, health, and safety deficiencies; and negatively affect training and quality of life. Due to constrained funding neither project could be included in the President's Budget, but both projects are in the ANG's Future Years Defense Plan.

QUESTION SUBMITTED BY SENATOR JUDD GREGG

RADAR WARNING RECEIVERS

Question. The Air Force active F–16 fighters are equipped with the AN/ALR–56 radar warning receivers which provide the aircraft and pilots warning of impending missile attack. The Air National Guard (ANG) F–16 aircraft are currently equipped with less capable radar warning receivers. Does the Air National Guard support upgrading its fleet of F–16 fighters with the AN/ALR–56M radar warning receiver? To what extent is the self-protection capability of the ANG F–16 aircraft improved with such an upgrade?

Answer. The earlier model of F–16's assigned to the Air National Guard must be kept compatible with Total Force requirements by continuing the F–16 Modernization, Survivability and Combat Capability Improvement Program. The tactical effectiveness of all front-line fighters is directly linked to their ability to survive through use of electronic countermeasures integrated through modernized avionics. Early model F–16 aircraft operated by the Air National Guard are limited against current

threats and fail to cover anticipated future threats. Survivability modifications which provide warning, denial and deception across the threat spectrum are absolutely necessary and should be pursued with the AN/ALR–56M upgrade or follow-on improvements to the existing AN/ALR–69.

ADJUTANT GENERALS

STATEMENT OF MAJ. GEN. RICHARD C. ALEXANDER, ADJUTANT GENERAL, STATE OF OHIO

WELCOMING REMARKS

Senator STEVENS. My apologies, gentlemen.

We are now going to hear from the Adjutant Generals: Maj. Gen. Richard Alexander of Ohio, Maj. Gen. Raymond Rees of Oregon; Maj. Gen. Jake Lestenkof of Alaska; and Brig. Gen. Daniel James of Texas. I do welcome you all here, gentlemen. I am sorry about the interruption of the votes. I am not sure that any of my colleagues are going to come back under the circumstances of the votes on the floor, but I do want to proceed with our proposal that you would make your statements. We will print all of your statements in the record and I look forward to hearing your comments today and may have some questions, please.

Let us see. Who would go first?

NATIONAL GUARD TODAY AND IN THE FUTURE

General ALEXANDER. Bill Alexander. Mr. Chairman, good morning, and members of the Senate Subcommittee on Defense. On behalf of the Ohio National Guard and the Governor of Ohio, the Honorable George V. Voinovich, I thank you for the opportunity to offer my views regarding the National Guard today and its prospects for the future. I have submitted a statement and ask that it be submitted for the record. In the interest of brevity, I would like to revise and extend my remarks.

The committee's support of the National Guard over the past several years has earned its gratitude of every member of the National Guard. Your support is further evidenced by the fact that we are here today at a hearing dedicated to issues relating to the National Guard that will become increasingly important as the Department of Defense attempts to define the requirements of our national military strategy and alternative force structures to meet that strategy.

With me today are three other Adjutant Generals: Major General Rees, the Adjutant General of Oregon; Maj. Gen. Jacob Lestenkof, the Adjutant General of Alaska; and Brig. Gen. Daniel James III, the Adjutant General of Texas.

Mr. Chairman, I believe that hearing directly from these Adjutant Generals on issues facing the National Guard will provide an invaluable insight to you and members of the committee. We are here to provide the committee with information regarding the National Guard readiness, training, and accessibility for mobilization and to discuss the impact of the fiscal year 1998 budget on the Department of Defense request for important National Guard personnel and readiness accounts.

As you know, the National Guard is proud of its history, accomplishments, and service to our Nation and to the States and territories in which we serve. We are anxious to continue to provide those services today and hope to remain a cornerstone of our national defense for the years to come. As you have heard from Generals Baca, Navas, and Shepperd, the contributions of the National Guard over the past year have been notable. I would like to highlight a few examples of the role the National Guard has played over the past year.

The Army National Guard has contributed over 892,000 man-days in support of various military operations around the world. Mobilization and deployments of both Army and Air National Guard units in response to Federal missions requirements have increased significantly since the end of the cold war. State mission requirements have also increased.

The National Guard's response to recent State and local emergencies relating to flooding and other natural disasters has been nothing short of heroic. All in all, a total of 716,000 man-days have been provided by the Army National Guard over the past year in support of our domestic and emergency response missions requirements. In my home State of Ohio, the National Guard contributed more than 15,000 of those man-days during one single incident, the southern Ohio floods of 1997.

The level of National Guard participation in recent peacekeeping operations, missions designed to support the warfighting commanders in chief, Partnership for Peace, nation-building programs, and domestic and State-related missions is reason to give all of us a sense of great pride. It also reaffirms our belief that during periods of reduced threat or economic constraints the dual Federal and State domestic roles of trained, ready, and accessible National Guard provide the Nation with the highest return on defense personnel, readiness, equipment modernization investments.

I am concerned, however, that the funding levels requested for the National Guard for fiscal year 1998 are not adequate to maintain readiness, operations tempo, or modernization programs that are required to accomplish assigned Federal and domestic missions. In short, we cannot sustain the capabilities of the National Guard as you know them today within the fiscal year 1998 budget request.

READINESS FUNDING

Despite the considerable capabilities and leadership of the Chief of the National Guard Bureau, Lieutenant General Baca, and his Directors to achieve and maintain high readiness levels in this environment of declining resources, the fiscal year 1998 Department of Defense budget will not be sufficient to ensure minimum readiness levels in the Army National Guard. Over the past few years Lieutenant General Baca and his Directors have done an outstanding job managing the declining resources afforded the National Guard. In fact, General Baca and his staff have provided us the leadership to achieve unprecedented levels of readiness over the past few years. Under the leadership of the National Guard Bureau, the National Guard has done more with less.

Severe funding shortages in important National Guard readiness accounts, namely pay and allowances and operations and maintenance, have now jeopardized the recent readiness improvements made by the National Guard. Despite efforts by the Congress to increase readiness funding throughout the Armed Forces, those accounts are still greatly underfunded. With the growing requirements for peacetime support of the active components and the need to provide combat-ready forces for contingencies, these readiness accounts are becoming more critical.

Readiness funding shortages are particularly acute in this year's budget request for the Army Guard. When compared to fiscal year 1995, the last year when resources provided for the Army Guard were commensurate with assigned missions, the fiscal year 1998 budget falls $743 million short of meeting readiness funding requirements.

The Department of Defense budget request does not adequately fund important Army National Guard personnel accounts, including funding for military schools, special training, and initial entry training for our new recruits. Many schools and special training accounts for the Army Guard are funded at only 11 percent of what is required. As a result, soldiers in 12 of our enhanced brigades and our 8 Army National Guard divisions will be unable to attend military schools in fiscal year 1998, 25 percent of our recruits will be unable to attend basic training, and over 27,000 National Guard troops will be unable to attend annual training for fiscal year 1998.

While the fiscal year 1998 budget request provides operations and maintenance funding for tiered readiness to support some early-deploying Army National Guard units, funding is not provided to maintain minimum readiness levels for later deploying units, many of which are being called upon to serve in Bosnia and other peacekeeping missions.

Base operations, real property maintenance, and depot maintenance are also severely underfunded, thus adding to the future base operations and real property maintenance costs by delaying near-term maintenance requirements.

Given the increase in operations tempo for many of these units, any reduction in readiness could have a long-term impact on the Guard's capability and accessibility. Operations tempo funding poses a significant problem for the Army National Guard in fiscal year 1998. For example, funding levels provide only 11 miles for tanks in the National Guard versus 288 miles required to maintain a C3 readiness level.

The fiscal year 1998 Defense budget request again proposes a reduction in the number of aircraft for several airlift units in the Air National Guard. The Congress reversed the proposed reductions from 12 to 10 primary aircraft in these units last year. The fiscal year 1998 funding level provides for only eight primary authorized aircraft in those same units. These reductions will place an increased burden on the Air National Guard in their support of the Air Force and the CINC's.

A total of $17 million is required in the fiscal year 1998 budget to maintain existing primary authorized aircraft levels, a relatively small price to retain the equivalent of two additional airlift units. A funding shortage of this severity will have a devastating effect

on the National Guard and our ability to respond to our State and Federal missions will be severely degraded.

We are convinced the Army and the Air National Guard represents the most cost effective and capable components of the U.S. military.

ECONOMIC BENEFITS OF THE NATIONAL GUARD

Mr. Chairman, the chart to my immediate left reflects the Army National Guard provides 55 percent of the combat forces, 46 percent of the combat service support forces, and 25 percent of the combat service support forces of the total Army, while accounting for only 9 percent of the total Army budget or, as depicted on the chart, 2 percent of the DOD budget.

The Air Guard provides 30 percent of the fighter and attack forces, 43 percent of the air refueling forces, and 45 percent of the theater airlift forces, and a high percentage of the combat communications, engineering, and installations capabilities, with only a 6-percent share of the Air Force budget.

At a time when reduction in different spending appears to be imminent and maintaining a robust national security posture seems increasingly difficult, the National Guard should not be viewed as a billpayer, but rather a solution. The economic benefits of the National Guard are both quantifiable and indispensable.

PREPARED STATEMENT

Mr. Chairman and members of the committee, we appreciate the past support of this committee for the National Guard and thank you for the opportunity to express our views regarding our national security and the National Guard. I ask you to encourage the Department of Defense to provide the readiness funding necessary to maximize operational effectiveness of the National Guard force structure and to ensure that unique capabilities and affordability of the National Guard are fully leveraged in our national military strategy.

Mr. Chairman, with your permission I will be followed by Major General Rees.

[The statement follows:]

PREPARED STATEMENT OF MAJ. GEN. RICHARD C. ALEXANDER

Good morning, Mr. Chairman, and members of the Senate Appropriations Subcommittee on Defense. On behalf of the members of the Ohio National Guard and the Governor of Ohio, the Honorable George V. Voinovich, I thank you for the opportunity to offer my views regarding the National Guard today and its prospects for the future. The committees support of the National Guard, over the past several years, has earned it the gratitude of every member of the National Guard. Your support is further evidenced by the fact we are here today at a hearing dedicated to issues related to the National Guard, and will become increasingly important as the Department of Defense attempts to define the requirements of our National Military Strategy, and alternative force structures to meet that strategy.

With me today are three other Adjutant's General, Major General Raymond F. Rees, the Adjutant General of Oregon, Major General Jacob Lestenkof, the Adjutant General of Alaska, and Brigadier General Daniel James III, the Adjutant General of Texas. Mr. Chairman, I believe that hearing directly from these Adjutants General, on issues facing the National Guard will provide an invaluable insight to you and the members of the Committee. We are here to provide the committee with information regarding National Guard readiness, training, and accessibility for mobili-

zation, and to discuss the impact of the fiscal year 1998 Department of Defense budget request for important National Guard personnel and readiness accounts.

As you know, the National Guard is proud of its history, accomplishments and service to our nation, and to the states and territories in which we serve. We are anxious to continue to provide those services today, and hope to remain a cornerstone of our national defense for the years to come.

As you have heard from Generals Baca, Navas, and Shepperd the contributions of the National Guard over the past year have been notable. I would like to highlight a few examples of the role the National Guard has played in this post cold war era. Over the past year, the Army National Guard has contributed over 892,000 man-days in support of various military operations around the world. Mobilizations and deployments of both Army and Air National Guard units in response to federal mission requirements have increased significantly since the end of the cold war. State mission requirements have also increased. The National Guard's response to recent state and local emergencies, related to flooding, and other natural disasters has been nothing short of heroic. In all, a total of 716,120 of man-days have been provided by the Army National Guard over the last year in support of our domestic and emergency response mission requirements. In my home state of Ohio, the National Guard contributed more than 15,000 of those man-days during one single incident, the southern Ohio floods of 1997.

The level of National Guard participation and their success in recent peace-keeping operations, missions designed to support the war-fighting Commanders-in-Chief, and domestic and state related missions, is reason to give all of us a great sense of pride. It also reaffirms our belief that during periods of reduced threat, or economic constraint, the dual federal and domestic roles of a trained, ready, and accessible National Guard provide the nation with the highest return on defense personnel, readiness, and equipment modernization investment.

I am very concerned, however, that funding levels requested for the National Guard for fiscal year 1998 are not adequate to maintain readiness, operations tempo, or modernization programs that are required to accomplish assigned federal and domestic missions. In short, we cannot sustain the capabilities of the National Guard as you know them today, within the fiscal year 1998 budget request.

Despite the considerable capabilities and leadership of the Chief of the National Guard Bureau, LTG Baca, and MG Navas the Director of the Army National Guard, to achieve and maintain high readiness levels in this environment of declining resources, the fiscal year 1998 DOD budget will not be sufficient to ensure minimum readiness levels in the Army National Guard. Over the past few years, LTG Baca, and his Directors have done an outstanding job managing the declining resources afforded the National Guard. In fact, General Baca and his staff have provided us the leadership to achieve unprecedented levels of readiness over the past few years. Under the leadership of the National Guard Bureau, the National Guard has "done more with less". Severe funding shortages in important National Guard readiness accounts, namely Pay and Allowances, and Operations and Maintenance now jeopardize the recent readiness improvements made by the National Guard. Despite efforts by the Congress to increase readiness funding throughout the armed forces, these accounts are still greatly under-funded. With the growing requirement for peacetime support of the active components and the need to provide combat ready forces for contingencies, these readiness accounts are becoming more critical.

Readiness funding shortages are particularly acute in this years budget request for the Army National Guard. When compared to fiscal year 1995, the last year when resources provided for the Army National Guard were commensurate with assigned missions, the fiscal year 1998 falls $743 million short of meeting readiness funding requirements. This years Department of Defense (DOD) budget requests does not adequately fund important Army National Guard personnel accounts, including funding for military schools, special training requirements, and Initial Entry Training (Basic) for new recruits. Military schools and special training accounts for the ARNG are funded at only 11 percent of what is required. As a result, no soldiers in 12 of the 15 Enhanced Readiness Brigades, or the 8 ARNG divisions will be able to attend a military school in fiscal year 1998, and 25 percent of new recruits (6,633 soldiers) will be unable to attend basic training in fiscal year 1998. Over 27,000 National Guard troops will be unable to attend Annual Training in fiscal year 1998.

While the fiscal year 1998 budget request provides operations and maintenance funding for tiered readiness to support some early deploying ARNG units, funding is not provided, to maintain minimum readiness levels for later deploying units, many of which are being called upon serve in Bosnia and other peace-keeping missions. Base Operations (BASOPS), Real Property Maintenance (RPOM), and Depot Maintenance are also severely under-funded thus, adding to future BASOPS and RPOM costs by delaying near-term maintenance requirements.

Given the increase in operations tempo (OPTEMPO) for many of these units, any reduction in readiness could have a long term impact on National Guard capabilities and accessibility. Operations tempo funding poses a significant problem for the Army National Guard in fiscal year 1998. For example, funding levels provide only 11 miles of OPTEMPO for tanks in the National Guard Divisions, versus a 288 mile requirement to maintain C–3 readiness levels.

The fiscal year 1998 defense budget request again proposes a reduction in the number of aircraft in several airlift units in the Air National Guard. The Congress reversed the proposed reduction from 12 to 10 Primary Aircraft Authorized (PAA) in those units last year. Fiscal year 1998 funding provides for only 8 PAA in those same units. These reductions will place an increased burden on the Air National Guard in their support of the Air Force and CINC's. A total of $17.063 million is required in fiscal year 1998 to maintain existing PAA levels, a relatively small price to retain the equivalent of two additional airlift units.

Funding shortages of this severity will have a deleterious affect on the National Guard and our ability to respond to state and federal emergencies and a reduction in National Guard capabilities.

One other area of concern for the National Guard is the ongoing Quadrennial Defense Review and National Defense Panel examination of alternative force structures. During the past six years, significant force structure changes in the National Guard have been proposed by the Department of Defense (DOD), and other agencies. These changes are in response to the rapidly changing global threat, and federal budget constraints stemming from growing public and political support for deficit reduction and balancing the federal budget. Potential cuts in defense spending have already become a factor in several reviews and independent analyses of force structure and readiness including the Quadrennial Defense Review (QDR), as the military services attempt to maintain force structure and stake out their positions in the debate over future roles and missions. Recent attacks on the Army National Guard's combat structure can be partially attributed to that debate, despite the obvious cost advantage these units provide the nation, at approximately one quarter of the cost of similar sized active units, and the fact that these units are operated annually at one-half of one percent of the DOD's budget.

In addition to their cost effectiveness, National Guard units remain trained, ready and accessible. According to General Dennis Reimer, Chief of Staff of the Army, in testimony before the House National Security Committee, March 13, 1996, when asked about the ability of the National Guard Enhanced Brigades to mobilize in response to their wartime mission, "I would say that I am comfortable that the Enhanced Brigades can be counted on given a post-mobilization training period of 90 days." With regard to larger, divisional units, the Institute for Defense Analysis has concluded, in a recent study, that Army National Guard Divisions can be ready within 143 days of being mobilized, or about the same time that sea or airlift can be made available to move the a National Guard division to a theater of operations.

In recent history, the Army National Guard deployed 398 units from 51 states and territories to Operation Desert Storm, and thousands of soldiers to peacekeeping operations in Somalia, Haiti, the Sinai, and Bosnia.

Despite its cost and operational effectiveness, defense-wide downsizing over the past several years has resulted in significant force structure reductions in the National Guard. During that period, the Army National Guard has been reduced in size by over 475,000 to 367,000 and the Air National Guard has made a series of force structure changes that realign units to match Air Force mission requirements. For example, the Air National Guard has been reduced from 18 to 24 Primary Aircraft Authorized (PAA) in general purpose fighter units to as low as 15 PAA in these units.

We remain convinced that the Army and Air National Guard represent the most cost-effective, and capable components of the U.S. military. The Army National Guard provides over 55 percent of the combat forces, 46 percent of combat support forces, and 25 percent of the combat service support forces of the Total Army while accounting for only 9 percent of the total Army budget. The Air Guard provides 30 percent of the fighter and attack forces, 43 percent of the air refueling forces, 45 percent of the theater airlift forces, and a high percentages of the combat communications, engineering, and installation capabilities with only a 6 percent share of the Air Force budget. At a time when reductions in defense spending appear to be eminent, and maintaining a robust national security posture seems increasingly difficult, the National Guard should not be viewed as a "bill-payer", rather, they represent a solution. The economic benefits of the Army National Guard are both quantifiable and indisputable.

Mr. Chairman, members of the committee, we appreciate the past support of this committee for the National Guard, and thank you for the opportunity to express our

views regarding our national security and the National Guard. I ask you to encourage the DOD to provide the readiness funding necessary to maximize the cost and operation effectiveness of the National Guard force structure and to ensure that the unique capabilities and affordability of the National Guard are fully leveraged in our National Military Strategy.

OREGON NATIONAL GUARD

STATEMENT OF MAJ. GEN. RAYMOND F. REES, ADJUTANT GENERAL, STATE OF OREGON

Senator STEVENS. General Rees.

General REES. Good morning, Chairman Stevens. I too will abbreviate my comments that were submitted for the record. I am Major General Rees, the Adjutant General of Oregon, and I am speaking on behalf of the Honorable Gov. John A. Kitzhaber and the more than 9,000 members of the Oregon National Guard.

I want to express my gratitude at having the opportunity to share the successes of the Oregon National Guard with you and your committee. Your continued support of the National Guard is a key factor in our success and we are very grateful for it.

Oregon is fortunate in two respects. First, we have a large percentage of high priority units assigned to the State. In fact, 77 percent of our Army National Guard force structure is categorized as high priority. With that structure and those resources comes the responsibility to achieve the highest readiness levels.

With the add-backs provided by Congress in 1996 and 1997, we have been able to manage these resources well enough to attain levels of readiness comparable to those seen in the Air National Guard. And as you are well aware, we consider the Air National Guard to be the best Reserve force in the world. As an example, we have achieved the premobilization goal set for the 41st Enhanced Separate Infantry Brigade.

The enhanced brigades were conceived by the Army to be a cost-effective solution to increasing missions and fewer resources. Through focused hard work, the 41st has been one of the first enhanced brigades to attain the mandated readiness criteria in personnel, equipment on hand, equipment readiness, and in training readiness.

The second area where we are fortunate is in our force mix. We have the proper forces for warfighting and State requirements, to both administer and perform our everyday missions, as well as respond to State and Federal emergencies. At the heart of those operations are 41st Brigade combat units with their inherent command, control, and communications. During our State emergencies, embedded units of the 41st are further supplemented by force multipliers from echelon above division, Army National Guard, aviation engineers, and transportation units. This provides us with a truly balanced and effective force of combat, combat support, and combat service support units.

In the past 18 months we have had more than ample opportunity to assist the citizens of Oregon in responding to a wide variety of natural disasters. During that period of time we have mobilized over 5,000 citizen soldiers. A windstorm in December 1995, the worst flooding in over 30 years in February 1996, major fires in 1995 and 1996, and yet another major flood this past January—

modern equipment and training provided by congressional directive has directly contributed to saving lives during these calamities.

During the flood of 1996, helicopters with night vision devices and thermal imagers evacuated 68 persons from extremely hazardous circumstances. This is a stark contrast to similar flooding in 1964, in which over 70 lives were lost.

Concurrently, proper funding has allowed the Oregon National Guard to mobilize and deploy units and individuals to support a wide variety of Federal military operations around the globe, from Desert Shield and Desert Storm to Operation Joint Endeavor and Joint Guard. Included in that is the first ever home station mobilization for Operation Joint Endeavor.

OPTEMPO FUNDING

We are proud of our accomplishments, but are very concerned that funding levels requested for fiscal year 1998 will have a crippling effect on our ability to accomplish our assigned missions. Even with our high priority status, we will have an overall shortfall of $4.5 million in pay and allowances and $20 million in operations and maintenance. In the personnel readiness area, we will be unable to qualify approximately 425 soldiers in their assigned military occupational specialties, and we will be unable to send approximately 15 newly commissioned officers to their basic branch schools.

We will not have adequate funds to conduct training required for promotion of our enlisted soldiers, and all special training, such as air assault, Ranger, and battle staff refresher courses, will be curtailed or eliminated.

Our OPTEMPO funding will not support required aviator readiness levels, equipment readiness, nor maintenance of existing facilities. The purchase of any modern equipment necessary to maintain the required compatibility for these high priority organizations with active forces will be virtually impossible.

We have fought hard to be given the opportunity to deploy nearly two-thirds of our Oregon Army National Guard to either the Joint Readiness Training Center or the National Training Center in 1998. However, there will be a significant shortage of money necessary to prepare and execute those events. Our estimate is about a 23-percent shortfall in what we require.

All of these issues strike to the heart of our success in achieving early deployment readiness levels for these high priority organizations. In order for Oregon and every other State and territory to keep our guardsmen at the level of training and professional development required, it is absolutely essential that restorations are made in the National Guard Bureau budget. Our soldiers and airmen deserve it and the citizens we serve expect it.

In my State, the National Guard is the face of the defense community. There is no significant active component presence in Oregon and other Reserve component presence is minimal.

The citizens of the United States pay a significant percentage of their taxes to provide for a common defense. At 2 percent of the total different budget, the Army National Guard's dual domestic and Federal mission provides our citizens with the best return on their investment. Our enhanced brigades and early deploying units

can meet or exceed the premobilization requirements for deployment. Moreover, as we have seen with the spate of recent natural disasters, the public values of the National Guard's presence more than ever. Whether it is fires or floods in Oregon or North Dakota, earthquakes in California, hurricanes in Hawaii, the Guard is saving lives and property.

Your continued support is an investment that will directly affect thousands of citizens in the future. In my opinion, no other defense spending does this. I believe this is truly the best bargain in defense dollars for America.

PREPARED STATEMENT

Mr. Chairman, I thank you for all of your support you have already given us and, respectfully, ask that the Congress provide necessary funding to maintain our readiness levels and continue our unique dual role of providing national defense and service to the citizens of this great Nation. I thank you, and I will be followed by General Lestenkof.

[The statement follows:]

PREPARED STATEMENT OF MAJ. GEN. RAYMOND F. REES

Good morning, Mr. Chairman, and members of the Senate Appropriations Subcommittee on Defense. As the Adjutant General of Oregon speaking on behalf of the more than 9,000 members of the Oregon National Guard, I want to express my gratitude at having the opportunity to share the successes of the Oregon National Guard. Your continued support of the National Guard is a key factor in our success and we are very grateful for it. We also thank you for your willingness to listen to our concerns during this period of redefining national defense requirements.

Oregon is fortunate in two respects. First, we have a large percentage of high priority units assigned to the state. In fact, 77 percent of our Army National Guard Force Structure is categorized as high priority units. This provides us with relatively more resources than many other states. With that structure and those resources comes the responsibility to achieve the highest readiness levels. With the add backs graciously provided by Congress in 1996 and 1997, we have been able to manage these resources well enough to attain levels of readiness comparable to those seen in the Air National Guard—the best reserve force in the world.

As an example, we have achieved the pre-mobilization goals set for the 41 Enhanced Separate Infantry Brigade. The Enhanced Brigades were conceived by the Army to be a cost effective solution to increasing missions and fewer resources. After the National Guard Bureau selected the 41 Separate Infantry Brigade for Enhanced status in 1994, we developed a detailed plan to achieve the much higher readiness levels required. Through focused hard work the 41st has been one of the first enhanced brigades to attain the Department of Defense mandated readiness criteria of P1 in personnel, S1 in equipment on hand, R1 in equipment readiness and T3 in training readiness.

The second area we are fortunate in is our force mix. We have the proper forces to both administer and perform our daily missions and respond to state emergencies. At the heart of our operations are 41st and 116th Enhanced Brigade combat units with their inherent command, control and communications. During the floods, their Table of Organization and Equipment support units of engineer, medical and MP's were supplemented by force multipliers from echelon above division ARNG aviation, engineers and transportation units and ANG support units. This provides us with a truly balanced and effective force of combat, combat support and combat service support units. In the past 18 months we have had more than ample opportunity to assist the citizens of Oregon in responding to a wide variety of natural disasters. We mobilized over 5,000 citizen soldiers to assist Oregonians in a major wind storm in 1995, the worst flooding in over 30 years in February 1996, major fires in our valuable National Forests in 1995 and 1996 and yet another major flood this past January. Modern equipment provided by congressional directive has directly contributed to saving lives during these calamities. For example, during the flood of 1996, helicopters with night vision devices and thermal imagers evacuated 68 persons from extremely hazardous circumstances. Unfortunately even

with these heroic efforts, four people perished in this flood. However, that is a stark contrast to similar flooding in 1964 in which over 70 lives were lost. This is a clear example of what a well trained force equipped with modern equipment can do for our citizens in times of crisis.

Proper funding has allowed the Oregon National Guard to enjoy a prominent role in several precedent setting areas in the past two years. We conducted the first Home Station Mobilization/Direct Deployment of an Army National Guard unit to overseas theater of operation in support of Operation Joint Endeavor. The initiative has met with wide spread acceptance by both the Active Component and National Guard and has the potential to provide considerable cost savings for future operations. Proper funding has allowed the ORNG to mobilize and deploy units and individuals to support a wide variety of military operations around the globe to include Desert Shield/Storm and Operation Joint Endeavor/Guard. Oregon provided the first Reserve Component combat arms force to conduct a bilateral exercise with the Japanese Ground Self Defense Force during Operation Northwind. This exercise has also led the way for an expansion of the National Guard's role in international exercises with Japan. Reserve Component participation in these international exercises helps reduce the Active Component OPTEMPO—a reduction the AC says it needs.

We are proud of our accomplishments but are very concerned that funding levels requested for the National Guard for fiscal year 1998 will have a crippling effect on our ability to accomplish our assigned missions. Without some significant add backs to the current budget we will be unable to sustain the current high levels of readiness we have achieved. Even with Oregon's high priority status, we will have an overall shortfall of $4.5 million in pay and allowances and $20 million in operations and maintenance based on shortfall between what we were funded in fiscal year 1997 and we're scheduled to receive in fiscal year 1998.

In the personnel readiness area we will be unable to qualify 423 soldiers in their assigned military occupational specialties. We will be unable to send 50 newly commissioned officers to their Basic Branch schools. We will not have adequate funds to conduct training required for promotion of our enlisted soldiers and all special training, such as air assault, ranger and battle staff refresher courses will be curtailed or eliminated.

Our OPTEMPO funding will not support required aviator readiness levels and equipment readiness will surely suffer due to a lack of funds to purchase repair parts. We will not have adequate funds to maintain our existing facilities. Moreover, the purchase of any modern equipment, necessary to maintain the required Title XI compatibility with active forces, will be virtually impossible.

Our high priority has given us the opportunity to deploy nearly two thirds of the ORARNG to either the Joint Readiness Training Center or the National Training Center in 1998. However, there will be a significant shortage of money necessary to move our soldiers and equipment to local and regional training areas for crew served weapons qualification and essential collective training events for CTC preparation. Annual Training funds necessary to send these soldiers to a CTC is inadequate. Present estimates indicate a 23.3 percent shortfall in what we require. This and all of the above mentioned factors are critical to our units success at upcoming Combat Training Center rotations. We have fought hard to receive excellent CTC opportunities but the lack of funding will reduce the quality of this rare training experience significantly.

All of these issues strike to the heart of our success in achieving early deployment readiness levels. The demand for capable and trained soldiers to assist the active component in the ongoing commitments of the nation has never been greater. Additionally, as I mentioned earlier, we have been called into state active duty on more occasions, for longer periods of time, over the past two years than at any other time since World war II.

In order for Oregon and every other state and territory to meet these requirements while simultaneously keeping our guardsmen at the level of training and professional development that the American people expect, it is absolutely essential that restorations are made in the National Guard Bureau budget. Our soldiers and airmen deserve it and the citizens we serve expect it. In my state, the National Guard is the face of the defense community. There is no significant Active Component presence and other Reserve Component presence is minimal.

Let me leave you with one last thought. There is much talk and discussion taking place about the future of American defense policy. After all the smoke has been cleared away, there is only one bottom line. The citizens of the United States pay a significant percentage of tax money to provide for a common defense. The National Guard's dual domestic and federal mission provides our citizens with the best return on their investment. Our Enhanced Brigades and early-deploying units can meet or exceed the pre-mobilization requirements for deployment. Moreover, as we have

seen with the spate of recent natural disasters, the public values the National Guard's presence more than ever. Whether it is a fire or flood in Oregon, snow and flood in North Dakota, earthquakes in California or hurricanes in Florida, the National Guard is saving lives and property. Your continued support is an investment that will directly affect thousands of citizens in the future. In my opinion, no other spending on U.S. defense does this.

Mr. Chairman, members of the committee, I thank you for all the support you have already given us. Again, thank you for the opportunity to relate my views on the National Guard and America's future. I respectfully ask that Congress provide necessary funding to maintain our readiness levels and continue our unique dual role of providing national defense and service to the citizens of this great nation.

ALASKA NATIONAL GUARD

STATEMENT OF MAJ. GEN. JAKE LESTENKOF, ADJUTANT GENERAL, STATE OF ALASKA

OPERATIONAL AREAS FUNDING

Senator STEVENS. Jake, nice to see you here.

General LESTENKOF. Good morning, Mr. Chairman and members of the subcommittee. I am Jake Lestenkof. On behalf of the Governor of Alaska, Tony Knowles, I thank you for the opportunity to appear before you. I have submitted written testimony for the record. For the purpose of brevity, I would like to revise and extend my written comments here today.

I appreciate that the administration and the Congress are working to balance the national budget and we in the National Guard must participate in that effort. For the past 2 fiscal years, we have experienced reductions in our Army Guard budget. But as TAG of Alaska, I feel that the proposed reductions for fiscal year 1998 are reaching a critical point that will surely impact our readiness and effectiveness.

We have always considered our Army Guard units in Alaska as being unique. They certainly were during the cold war, when they acted as the eyes and ears on our northern frontier. Because of the remoteness of most of our Guard communities, where only 7 out of 74 are connected by roads, the Guard is a center of influence and a catalyst for transition for our own Native people who live in these many remote villages.

In the short time I have before you, I wish to touch on three operational areas—flying hours, school funding, and RPOM—which will be seriously impacted by further reductions.

First, our flying hour program will be reduced to a critical level. We may be unable to support Arctic Care, which is an OSD humanitarian training program that over the past 3 years has served over 7,000 citizens with medical and dental care, all in our remote villages. Additionally, I anticipate I will have more aviators unable to meet Army minimums than the 14 who were unable to meet the minimums in fiscal year 1997.

Second, the continuing erosion of school funding is fast creating an Army National Guard force of filler soldiers rather than capable, cohesive military units. During the current and the previous fiscal year, for example, commanders have had to choose whether unit members would attend annual training or required military schooling. In each of the past 2 years, at least 25 percent of the soldiers went to school to satisfy an essential individual training

requirement rather than training with their units at annual training.

This also means a high percentage of our junior leaders cannot train with their units. Lacking key leaders, units are unable to conduct effective collective training.

Third, in terms of real property operations and maintenance, I estimate the fiscal year 1998 funding level to represent an overall reduction of nearly 40 percent of fiscal year 1995 funding levels. Meanwhile, the requirement to assume operational control of Bryant Army Air Field at Fort Richardson due to the closure by the Army added over 130,000 square feet of additional facilities to our support base. This space is absolutely critical to support our aviation operations.

PREPARED STATEMENT

In conclusion, I feel we have now reached a turning point where we in the Army Guard are not going to be able to do what is expected by the citizens of our State and our country.

I thank you for this opportunity to speak to you and the committee today, and I will be followed by General James.

[The statement follows:]

PREPARED STATEMENT OF MAJ. GEN. JAKE LESTENKOF

Mr. Chairman and members of the Senate Appropriations Subcommittee, as you know, the Army National Guard portion of the Defense Appropriations Bill before Congress has a reported shortfall of $743 million. I certainly believe this issue represents a significant challenge to the national defense of our nation. Today, however, I would like to demonstrate the general impact on the National Guard by addressing the more specific impact on the Alaska Army National Guard and the State of Alaska.

We know that the primary role of the National Guard in America is to support the National Military Strategy. The National Guard responds to governors and states when not in a federal status. In Alaska, I may add, the National Guard, particularly the Army National Guard, has executed a crucial role in support of nation building. The many remote villages throughout Alaska make our situation unique. The Army National Guard has been a catalyst for transition for our own native people living in remote areas. I am sure that each state and territory has its own story about the value of its National Guard. For Alaska, these proposed further funding reductions will have serious, long range social and economic impacts.

This shortfall will be realized directly in the readiness level and training of Alaska units. Due to funding shortfalls experienced in the fiscal 1996 and fiscal 1997 programs, my commanders had to decide whether their soldiers attended required military schools or participated in unit annual training. In each of the past two years, approximately 25 percent to 30 percent of Alaska Army National Guard soldiers performed duty to satisfy essential individual training requirements other than training with their units. This resulted in a high percentage of our junior leaders who cannot train with their units. Lacking key leaders, our units were not able to conduct effective collective training. This continued erosion of schools funding is creating an Army National Guard force of filler soldiers rather than capable, cohesive military units.

Individual and collective training are both important if the Army National Guard is expected to be ready to answer the call of either the President or Governor. The projected fiscal 1998 program reduces funding for both critical military schooling and annual training. Individual and unit readiness objectives will not be met.

This shortfall is especially visible in Alaska's aviation units as they modernize and the units must send pilots and crew members to schools to meet transition requirements, in addition to attending required professional development courses, and annual training. Our aviation battalion has been identified to participate in Joint Task Force 6, a counter drug support program in fiscal 1998. Projected funding for the National Guard annual training account will preclude the unit from supporting the task force and prevent these soldiers from making a major contribution in the

war against drugs. This program also provides a superb training opportunity that improves unit readiness and enhances retention.

The fiscal 1998 funding shortfall will also impact on a vital area of special significance to Alaska, the Army National Guard Flying Hour Program. The State of Alaska is unique in that it has a very limited road network. We place a considerable reliance on air operations and support at a cost considerably higher than most other states. Funding reductions in recent years have been especially painful as we have continued to modernize our aircraft fleet. The safety and improvement in operational capability of modernization are not without a price in terms of flying hour cost.

In the past two fiscal years, the Alaska Army National Guard participated in a Joint Innovative Readiness Training Program supported, in part, by the Office of Secretary of Defense. While OSD supported many of the operational costs associated with Operation "ARCTIC CARE," it did not support the flying hour costs. Through the superb cooperation of many organizations, OSD, the Public Health Service, the Marine Corps Reserve, and the Alaska Army and Air National Guard, medical care was brought to nearly 7,000 Alaskans in remote and rural locations since 1995. This type of state and nation building training not only provides a valuable service to our citizens, but provides an exceptional training opportunity to the reserve components. Missions to support this exceptional humanitarian effort and valuable training experience utilized over ten percent of my limited flying hour program. The continued support of Operation "ARCTIC CARE" by the Alaska Army National Guard will be in serious jeopardy without restoration of funding for the flying hour program to previous year levels.

Limited training funds in fiscal 1998 will prevent the Alaska Army National Guard from providing a 120 man OPFOR company at the Joint Readiness Training Center at Fort Polk, Louisiana, in fiscal 1998. The funding shortfall I project for Alaska next year will deny these soldiers a rare opportunity to participate in the "Super Bowl" of Army training exercises for light units. The Alaska Army National Guard must have adequate training funding to ensure that our soldiers maintain and enhance their warfighting and survival skills.

The Alaska Army National Guard serves as a center of influence in 74 communities throughout the State. All but seven of my units are located in remote and rural locations not connected to the State road network. The facilities that provide the infrastructure to support these organizations have experienced reduced levels of support in recent years. In terms of real property operations and maintenance, I estimate the fiscal 1998 funding level to represent an overall reduction of nearly 40 percent of fiscal 1995 funding levels. Meanwhile, the requirement to assume operational control of Bryant Army Airfield due to pending closure by the active component has added over 130,000 square feet of additional facilities to our support base. This space is absolutely critical to support our aviation operations. I am facing difficult decisions regarding these continued reduced support levels affecting the quality of life for our membership as well as facility closures denying continued membership to the dedicated members of the Alaska Army National Guard.

I thank this Committee for providing the opportunity to address the matter of continued funding reductions to the Army National Guard programs which I believe we all recognize with great concern as a significant issue. The continued readiness of the Army National Guard is not only important to our overall national defense but, as unfortunately too often demonstrated in recent years, by its response to natural and manmade disasters critical to the welfare of the citizens of our country. While many may view the National Guard as only a national defense insurance policy with a premium too expensive to afford, citizens throughout the State of Alaska see the Alaska National Guard as an organization of professionals who have time and time again been there in their time of need.

In just the three most recent major disasters in the State of Alaska, the Alaska National Guard expended State funded mandays responding to the emergency needs of the citizens of our State. Rescuing lost children and injured individuals, supporting homeless veterans, fighting the war on drugs, and turning young people at risk into productive citizens is also what the National Guard is about. To accomplish this, it is imperative that National Guard readiness not be allowed to deteriorate. It would be an unwise business decision.

The role the citizen soldier plays in the daily lives of the citizens of our State is one of the great things that makes this country different from other democracies and governments throughout the world. All of America must be truly represented in the military. The volunteer force, while it has proven itself to be effective, may not be representative of America. The Guard, as a community based force, is indeed representative and will remain so as long as it receives adequate funding.

Thank you.

TEXAS NATIONAL GUARD

STATEMENT OF BRIG. GEN. DANIEL C. JAMES III, ADJUTANT GENERAL, STATE OF TEXAS

Senator STEVENS. Thank you.

General James, I am familiar with your father. It is nice to see you here following his great tradition.

General JAMES. Thank you, Mr. Chairman.

I also would, in the interest of brevity, would like to revise and extend my prepared statement for the record that was previously introduced.

I bring greetings from Gov. George W. Bush, the citizens of Texas, and the 24,000 soldiers and airmen of the Texas National Guard. And again, thank you for this opportunity to speak to you today about the National Guard and the impact of the fiscal year 1998 budget.

Texas National Guardsmen have fought alongside their active counterparts in all of our World Wars, World War I and II, and other major conflicts in Korea, Vietnam, Desert Storm, in fact, in every deployment since World War II under the spectrum of war.

But we have also participated in what we call the spectrum of peace. Most recently, our soldiers have been deployed in Haiti, in Bosnia, and our airmen were deployed in Panama, Honduras, Colombia, Venezuela, Saudi Arabia, Asia, Germany, and Bosnia also, Italy and Korea. This summer our soldiers will be involved in nation building in Central America. Last Saturday a task force from our divisional engineering battalion returned from spending 2 weeks of annual training supporting the Southwest border project initiative, intended to counter the flow of drugs into the United States. And only 7 weeks ago our soldiers hosted another contingent from the army of the Czech Republic, continuing with our proud participation in the Partnership for Peace Program.

Across the spectrum, the National Guard has been very busy. Yet, Texas has gone from the largest State in the National Guard in population today to ranking third. Though we represent 5 percent of the total National Guard force, Texas is 54th among 54 States and territories in resource base per capita.

The 49th Armored Division comprises 84 percent of the Texas total personnel strength, one of the largest, if not the largest, in the Army's inventory, with 15,469 soldiers and 468 South Carolina soldiers in the air defense artillery battalion.

Mr. Chairman, my State will be devastated by the fiscal year 1998 budget. Once again, Texas will suffer a larger burden than any other State because of the divisional structure. Now, this is the same division which has recently documented its capability to train, mobilize, and completely deploy in theater within less than 140 days of the mobilization date. This is also the same division that is currently deploying some of its units in Bosnia for peacekeeping missions.

The burden is best defined this way. My statewide operations and maintenance appropriations will decline from this year's barebones budget of $72.6 million to $49.6 million in fiscal year 1998. That is a 32-percent decline. The pay and allowances account

will be reduced from $26 million actual costs in 1996 to just $20.5 million in fiscal year 1998.

My units are still in high demand for missions throughout the world. At a time when the national military strategy demands joint operations and readiness to a single standard, the fiscal year 1998 budget inhibits the ability of some States to train to any standard at all.

Unlike Oregon, my State has many lower priority units. In fact, 51 of my 66 units will not be trained to standard with this budget. Since 1986 the military establishment has informed us that our role within the force was integral to the national military strategy. Consequently, our soldiers and airmen have consistently trained and met the Army and Air Force standard.

Through our historic roles in warfighting and peacekeeping, the Texas National Guard has proven that, with proper resourcing, we can train our soldiers to the same levels as the active component, we can deliver the same capability as the active component, not only as follow-on forces, but as a full-time partner fighting side by side. But to accomplish this we must have a level playing field. We require modernization, the same level as the active component. We require the same access to simulations and exercises with the active component. We require training in schools in the same classrooms as our active counterparts. The National Guard requires access that can only be granted by an equal opportunity to serve through proper resourcing.

EQUAL READINESS STANDARDS

There has been much discussion today about the impact of the "Quadrennial Defense Review." I will not go into that at this point since the review is not yet complete. However, the fiscal year 1998 budget gives me and especially our divisional counterparts in the other States—California, Kansas, Minnesota, New York, Indiana, Pennsylvania, Virginia, and Maryland—little choice but to tell our story in a forum such as this.

We have expanded, not reduced, our capability and remain committed to delivering trained and deployable units to perform our Federal mission while serving the warfighter commander in chief. We have maintained readiness standards equal to our active counterpart—one force, one standard.

However, the fiscal year 1998 budget begins the erosion of that capability as never before. One has only to look at Texas and see the actual statewide reduction from $98 million plus to a $69 million level within a single operating year. That says it all.

In summary, Mr. Chairman, I petition your active involvement and support in obtaining any relief in the fiscal year 1998 budget to allow the States to continue to operate at least at the 1997 levels, especially in view of the additional missions and capabilities that we have sought and demonstrated successfully.

PREPARED STATEMENT

Again, I thank you for the opportunity to provide this input, this hearing, and this process at this critical time in the evolution of

our National Guard as a military force as our Nation returns to a militia Nation.

[The statement follows:]

PREPARED STATEMENT OF BRIG. GEN. DANIEL C. JAMES III

Mr. Chairman, committee members, thank you for the opportunity to speak to you today.

As the Adjutant General of Texas, I deal in the day-to-day realities of manning, training, retraining, providing facilities and modern equipment to soldiers and airmen who sincerely intend to use them in support of their state and nation.

I represent 5 percent of the total National Guard force within this nation, yet have the lowest resource level per capita within the 54 state and territory system. My state contains the 49th Armored Division, the largest division within the army's inventory, and the only single state division in the National Guard. We want the best for the men and women in our force and the global commanders that we serve but are faced with certain challenges.

The 49th Armored Division in 1997 was funded at only 25 percent of its OPTEMPO requirement. Since 1992, we have accumulated a shortfall of $2.8 million in ground maintenance repair parts. Our repair parts requirements to begin 1998 are for $6 million. Yet the 1998 budget further reduces the 49th Armored Division OPTEMPO from the 1997 25 percent level to only 8 percent. Let me take a moment to explain what we have done in what we call class IX (repair parts) since 1992 to maintain readiness during budget shortfalls and what this implies. If I may, I think this maintenance example best explains the transition in the way we are required to do business to meet combat readiness requirements.

In 1992, my systems had a $26 million combat load in repair parts minus full-up power packs. This means that to meet mission capability, I was required to warehouse or stockpile an inventory of $26 million in repair parts. That requirement has not changed drastically since 1992; yet I have consumed almost all of my inventory of repair parts, and will zero my inventory [prescribed load list (PLL)] prior to fiscal year 1998. This procedure saves money today, during a time of peace; and postpones it to mobilization. We have reduced our order to ship time from 77 days to 17 days, and will continue to demand further improvements.

How have we met our deployment obligations in Bosnia? First, we haven't sought missions that required heavy combat loads in repair parts and supplies. This means Texas units, in large part, have deployed in support of other National Guard States. We mobilized and deployed our units at U.S. Army mission capable standards (100 percent fill of equipment and combat load) by aggressive management of the supply system. Today, my staff is being informed that as of the first of October, we will not maintain an inventory of repair parts; but will order parts on demand (whenever the equipment breaks). As of now, Texas units will require both the added time and money to build a combat repair parts inventory prior to deployment. Senator Domenici, Senator Hollings, and Senator Bond, you all are painfully aware of the "pay me now or pay me later" implications this approach creates.

If we are required to mobilize any unit, regardless of size; we are totally at the mercy of a private supply sector that may not be capable of reacting within combat timelines to fill our required needs. Does the Active Component intend to employ our full partnership through mobilization? We feel they must, since the reserve component makes up 52 percent of the Total Army Force. If so, what are the total deferred costs which will be charged to mobilization? Have we priced ourselves out of the "seamless" force? Have we reduced the total force pool; while restricting the flexibility of WarFighter Commanders? Is the Military Industrial Complex involved in planning for a "surge" requirement of all repair parts and supplies, in case of War? We feel this issue is the "Achilles heel" of Joint Vision 2010. Without casting blame at any partner within the Total Force, The National Military Strategy and General Shalikashvili's Joint Vision 2010 are perilously placed in jeopardy, due to the disconnect between policy and resources.

My soldiers and staff have sustained readiness standards as prescribed by regulation by prioritizing repair parts to the primary systems (Abrams tanks, Bradley fighting vehicles) which measure readiness on the Unit Status Reports. I should note that these indicators only measure 12 percent of the total systems that we must maintain.

Prior to "Joint Vision 2010," this indicated readiness. But the demand of the WarFighter Commander-in-Chief today in peacekeeping and WarFighting missions cannot be addressed with such simplicity. By definition, my units today meet the standards of readiness, without being capable of performing sustained peacekeeping

and WarFighting missions. In order to follow regulations, we have deferred maintenance on lower priority or non-reporting systems for readiness, and for repairs on equipment that do not reflect on readiness standards; yielding a readiness report stronger than the enhanced brigades. That report says that we have met standards, but as we strive to meet our mission requirements, it becomes obvious that the fiscal year 1998 budget does not fund air and ground operations tempo at required levels to maintain minimum readiness and poor sustainability for later deploying units such as the 49th Armored Division.

We have been required to follow a similar approach of "cross-leveling" personnel resources within the State in order to continue to provide required full-time staff assistance for administration, maintenance, and training.

Budget shortfalls that will not allow us to train our soldiers and airmen, that will not allow us to maintain our equipment at minimal standards, create a hollow force reminiscent of the post-Vietnam era.

How hollow is the force? In 1997, readiness as indicated by primary systems was at standards within all Texas units except my Army combat aviation units. In 1998, my aviation assets, most in demand to the peacekeeping efforts like Bosnia, will be less mission capable due to an escalating shortfall of dollars and availability of repair parts and flying hours. It will be impossible to sustain required readiness standards within other non-Major Theater War (MTW) units without borrowing from system-to-system (cross-leveling); and then some units will be required to be used as billpayers. Beyond the implications of deferred combat loads which decrease the flexibility and increase both the response time and cost of conducting military operations when called. The projected 1998 DOD budget no longer implies turbulent change—it forces triage among units where we must decide which units live and which die.

This creates turbulence in the ranks and destroys stability among the force. Unit commanders spend less time developing innovative plans for more beneficial training. Soldiers lose their intended focus, knowing that their future is uncertain. Community support of the Guard erodes as we are forced to move and/or eliminate community-based units, primarily in rural areas; and in rural areas, National Guard armories are also community centers. Facility maintenance deteriorates through a series of postponements of maintenance and repair (Again, Senator Domenici, Senator Hollings, and Senator Ford "pay me now or pay me later"). Turnover rates of personnel within units rise, forcing us to spend even more money to replace or retrain rather than train our people.

Over the past year my staff and I have invested in developing one of the more in-depth strategic analysis within the military structure; one that is being duplicated throughout the National Guard. Throughout this ongoing process, we have focused on an "end state" of General Shalikashvili's Full Spectrum Dominance as delineated in his "Joint Vison 2010" and projected throughout General Reimer's "Army Vision 2010." We have focused on moving the Texas National Guard's focus from training to doing.

However, if we are to be a full partner as compared to a limited partner within the defense strategy, we must be funded accordingly. We are moving rapidly to support the Texas National Guard's role as that full partner within the National Military Strategy. But our basic commitment of support to federal WarFighting and peacekeeping missions, and to state and community service, is not funded sufficiently in 1998 nor beyond, for us to perform these missions and survive as a viable force.

Since 1990, the Army has deployed on 25 major overseas missions: 19 of these 25 missions were within the spectrum of peace. In comparison, in the previous 40 years the Army deployed only ten times, six of which were within the spectrum of peace. The National Guard is taking an increasingly important role in both WarFighter and Peacekeeper operations, yet the units that are most in demand for peacekeeper missions are precisely the ones that receive the lowest priority of funding.

The terms "joint" and "seamless" direct the theoretical policy we currently know as the National Military Strategy. But the resourcing policy of the Policy, Planning and Budget System (PPBS) process does not reflect that same "joint" and "seamless" approach. Directing a solution to the $743 million shortfall will address the 1998 needs of Texas and the National Guard for only a year. But have we fixed the problem?

I think not. We cannot fix the problem until the roles and missions are more closely linked to requirements and funded to train and deliver the services required. We must get out of the business of playing the annual "shell game" and visit to Congress about "plus ups" on resources.

Texas is a full partner; not a limited partner. What I require as a full partner is the ability to deliver services concurrently to my customers—the WarFighter Commander, my Governor and the people of Texas. This means the ability to train my soldiers with the same generation of equipment and to the same standard as my active counterpart. We know we can't always complete force-on-force training; we don't expect that. But retracting from force-on-force training requires individual and collective simulations exercises in order for us to deliver our competency within the WarFighter mission, our capability as a peacekeeper, and our delivery of this combined and trained capability to our state's citizenry.

We don't do business the way we did even five years ago. Over the past year, for example, I mentioned that we have begun practicing a principle that has streamlined the private sector. It is called * * * "just in time" delivery. We are moving toward this approach as an imperative to survival—yet we are saving time and money, at least for today. I am proud to share our success in improving our order to ship time from 77 days to 17 days; and we are aggressively seeking further improvement in this and other processes. Let me assure you ladies and gentlemen, we in the Texas National Guard and the National Guard Community as a whole are not sitting idly waiting for appropriations to solve our every problem.

General Reimer's envisioned "knowledge-based" Army of 2010 will require thinking "out of the box": placing increments of both the active and reserve components within natural service roles, such as the National Guard within the Command and Control (C^2) protect mission. Within this role we must examine new threats of terrorism and previously unconsidered scenarios which could impact our critical infrastructure, including information systems. Whether our role is as a WarFighter, a peacekeeper, or in disaster or community assistance—the most natural fit and core competency of the National Guard is as the Infrastructure provider to the total force.

Last summer while I had C–130's flying daily missions in support of training and deployments, while my F–16's were conducting their daily (7 day per week, 365 day per year) air defense missions along the Gulf Coast and Southern Border, while I had units deployed to Bosnia in support of "Operation Joint Guard", while I had units in Central America in Nation Building, while I had units along the Southwest Border supporting the national counterdrug effort, I also had soldiers and equipment flying support missions to stop range fires that ravaged our State. To us at the State level, this is business as usual. Naturally, with 19 of the 25 deployments since 1990 for peacekeeping (three of which were in support of the Guard in JTF–LA (LA Riots, May 1992)), Hurricane Andrew (FL/LA, Sept. 1992), Firefighting (Western U.S., Aug. 1994), we can easily examine the demand focus for the Total Force of the Future. Yet the resource model has not reflected that use, and the funds required to continue to provide units to standards and missions required, have not followed the requirements.

My Guardsmen are serious about their commitment to serve. They know and relish the increasing roles and missions; but they must know and feel your support. The commitment is the same as felt at the Alamo 161 years ago; the same as demonstrated throughout the campaigns of World War One and Two, the Korean Conflict, Vietnam, Desert Storm and every deployment under the spectrum of War. In every deployment we have fought and died alongside our active counterpart.

Just as important to the Total Force, however, my soldiers have demonstrated their commitment alongside our active counterparts in deployments under the spectrum of peace. We have continued since the inception of the militia concept to export the community-base of the trained structure in peacekeeper missions throughout the globe as well as facing the ravages of hurricanes, floods, blizzards, fires, and civil disturbances. When the true need for peace and a return to order within our communities was the requirement, the National Guard was called.

Within the 1998 DOD budget, the community base will become more urban because of required consolidation of armories and facilities into higher population areas. The National Guard will compound readiness deficits through deferred maintenance and training requirements to dangerous levels; which will weaken the "joint" and "seamless" force of "Joint Vision 2010."

We suggest that it may be time to address the systemic causes of these annual shortfalls by linking resourcing to a combination of missioning toward both the spectrums of War and Peace and the delivery or deployment of that capability. Let's put the money behind those who do the job every day yet provide for those who potentially provide capability in times of War. We are encouraged by Army Vice Chief of Staff General Ronald Griffith's committee to explore active and reserve component integration and mission sharing responsibilities. But the systemic solution will not be found until we synchronize resources to policy. I petition your support for

solving this year's $743 million shortfall while bringing all of us to the table to answer the systemic defaults.

BIOGRAPHICAL SKETCH OF BRIG. GEN. DANIEL C. JAMES III

Brigadier General Daniel James III is the Adjutant General of the State of Texas. He assumed that position on November 16, 1995. He is presently stationed at Camp Mabry, Austin, Texas.

Prior to his appointment as the Adjutant General, he was the Vice Commander and the Operations Group Commander of the 149th Fighter Wing, Texas Air National Guard, Kelly Air Force Base, Texas. He is a command pilot with more than 5,000 hours in fighter and trainer aircraft. He is a combat veteran with over 300 missions in Vietnam. His most recent aircraft flown was the F–16 Fighting Falcon.

General James was born on September 7, 1945 in Tuskegee, Alabama. He is one of three children born to General and Mrs. Daniel "Chappie" James, Jr. General "Chappie" James was the nation's first African-American to attain four-star rank. As a member of a military family, General James lived in a variety of states and countries. He graduated from the American High School in Lakenheath, England in 1963. Following his graduation, he enlisted in the U.S. Air Force Reserves and spent a year on extended active duty before continuing his education. He was awarded a bachelor of arts degree from the University of Arizona in 1968 with a major in psychology. He was a distinguished graduate of the Air Force Reserve Officer Training Corps program and received his regular commission as a second lieutenant.

General James immediately entered undergraduate pilot training, completing the course a year later. The first of two active duty tours in Southeast Asia followed, during which he served as a Forward Air Controller and F–4 Phantom Aircraft Commander. Other assignments included instructor pilot in the T–38; Air Staff Action Officer, Headquarters USAF; and enemy weapons and tactics instructor pilot at the prestigious aggressor squadrons at Nellis AFB.

In 1978, General James separated from active duty to pursue a career as a commercial airline pilot. That year he joined the 182nd Fighter Squadron. He has served in a number of positions within the squadron and group before his assignment as the Vice Commander of the 149th Fighter Wing.

General James' awards and decorations include the Distinguished Flying Cross with one oak leaf cluster; Meritorious Service Medal; the Air Medal with six oak leaf clusters; the Air Force Commendation Medal; Air Force Achievement Medal; the Vietnamese Gallantry Cross with Silver Star Device; the Vietnam Service Medal; Lone Star Distinguished Service Medal; the Texas Outstanding Service Medal; and the Texas Medal of Merit.

He is married to the former Dana Marie Williams of San Diego, California.

Senator STEVENS. Thank you very much.

I think part of the problem that the regular forces have is that they are paying the price for overdeployment. I remember some conversations I had overseas with some of the people who had been deployed away from home for more than 9 months for 2 years in a row. That does not seem to have impacted you yet, though. Have you felt the impact of overdeployment? It does not seem to be hitting you in terms of recruiting capability or retention capability.

HIGH RETENTION IN DEPLOYED UNITS

General ALEXANDER. Mr. Chairman, I would like to field that question if I may. A survey of the units in the Army National Guard that have deployed in support of our overseas operations will show that their retention is high. We have several units in the Army National Guard who have been deployed more than once, an array of military police units and other combat service support units that we have.

The very fact that the Army National Guard has the privilege of being involved is the means by which we attract and retain young men and women who want to make a contribution to this Nation's defense.

Senator STEVENS. It has to be harder, though, because your citizen soldiers have jobs that they must leave, and if they are away too long it is very difficult, even under the Soldiers and Sailors Relief Act, to save their jobs for them. I have a feeling that there is a delayed hit coming at all of you here because of the deployments that I have seen overseas. We saw them in Bosnia, Italy, Kuwait. I have seen them all over the world deployed with regular forces.

Now, the regular forces have been hit both in retention and in recruitment.

General ALEXANDER. If one would sample the pulse of the employer support for the Guard and Reserve officials, I would suggest that you would find a spectrum of complaints that would exist. However, based upon the number of men and women that have been deployed and the number of complaints that we are now receiving—I am speaking for Ohio now—those are quite minimal.

It is gratifying to know that employers do, in fact, support the Guard in their efforts. They know for a fact that having people in the Guard and in their workplace is a bonus for them, and I think our employers need to be praised for the way they are treating the men and women of the Guard.

Senator STEVENS. Am I correct that we really have not seen any real impact of overdeployment on either your recruitment or your retention?

General ALEXANDER. Last year the Army National Guard had its highest rate of retention, as General Baca mentioned earlier. It also had its highest rate of worldwide deployments, and that has spawned the ability to recruit to the level that we are recruiting now.

Senator STEVENS. Is the duration of your deployment, General James, shorter than the regular forces? When your forces go over and deploy in—I do not care whether it is Italy. I saw them in Italy. How long will they stay in Italy?

General JAMES. Generally, the deployment on the Army side is for the 270-day statute limit that they are allowed to bring our soldiers on active duty. The Air National Guard utilizes a different approach to that. They will get three units involved and deploy their airmen and technicians for 90 days, as opposed to the full 270 days, thus lessening that impact, as you pointed out, on the airman when he returns to his job, time away from family. And it actually has, as General Alexander pointed out, a positive effect on morale and retention.

My soldiers in the Texas Army National Guard have been involved in deployments, generally at the company size or less, often 17, 30 soldiers, around that ballpark figure, and, therefore, the impact on the retention rates has not been statistically seen and evaluated. However, you are correct when you say that there has to be a point—I think the active forces are realizing that—when, in fact, it has a negative effect on retention. And that is where the Guard can be very helpful.

That is how the Air National Guard got invited to participate in these worldwide deployments in the very beginning, because we started out as spelling or relieving some of the contingency requirements for the active duty. They found that we could perform the mission as well as they could and they invited us to get involved

more and more. As General Shepperd pointed out, we have some 6,400 people around the world right now deployed.

But yes, there will become a time, if the OPTEMPO is high enough and the deployments are long enough, that it will eventually have a negative impact on retention. Where that point will come in the future we really cannot predict right now.

ABILITY TO MANAGE REDUCTIONS

Senator STEVENS. You know, I understand what you are saying, you are all saying, about the level of the funding request, and we will do our best and I think we will be able to restore some of that. But it will be a reduction, I think, by necessity, depending on the budget that Senator Domenici is negotiating.

But do you find that we have set too many priorities for you? Do you have enough flexibility to determine where you apply those cuts, or are they overlay mandated in terms of where you will place them?

Jake, what do you think about it? You told us about how you are going to get cut 34 percent.

General LESTENKOF. Yes, sir, Mr. Chairman. We do have limited flexibility within our States in how we manage these reductions. But as I have mentioned in our statement, I feel that we have reached the critical point in 1998 with those reductions where our flexibility is pretty much removed.

Senator STEVENS. Your readiness to handle disasters is one of your mandates, and yet that is not the same type of readiness that you would have for deployment, some of the things we have seen like Kuwait or Aviano in Italy or on Haiti. It does seem that there is an inflexibility there as far as your priorities, particularly in a period of shortage of funds.

Did you start to say something, General James? No.

General JAMES. I was just going to comment that force structure—as you point out, the readiness to handle our national mission demands a certain amount of readiness and force structure and, therefore, resourcing. The interesting part is, the more force structure you have for that capability, it also enhances your ability to handle those types of contingencies at home in your State in terms of emergency missions.

The problem I see from a divisional State point of view is the difference in the level of resourcing. Unlike Oregon, I do not have an enhanced brigade, and some of the other States. I have a division and it is resourced at a much lower level. My OPTEMPO, however, when you look at those units that are brought into theater for the warfighter CINC, often they are not the higher priority resource units. They are not your SFP1 and 2 units. They are, in fact, the lower priority resource units that the warfighter CINC's are using.

Right now I am being resourced at a rate of approximately 8 percent of the OPTEMPO, so I am having to prioritize my resources very carefully to be able to keep the readiness level, which is C3 for my units in the Army National Guard, provide the warfighter CINC with what he needs when he has a shopping list that is unfilled in terms of some of the units that he needs, and support the State mission.

Senator STEVENS. You started to say something, Jake, and I cut you off.

General LESTENKOF. No; I think you pretty much covered it.

PARTNERSHIP PROGRAM

Senator STEVENS. We just took the committee over to the Russian far east and we found that the regulars there were 90 days behind in pay. We found that they had lost almost all of their modernization funding. Surprisingly, their recruitment was still staying up. It is an interesting sidelight.

You are working with some of those people there now, are you not? As a matter of fact, I think this concept that General Baca was talking about started in Alaska when we used that search and rescue crowd to join in on the operations with the people from Providenya, what, 5, 6 years ago. You have an increased tempo with that now with Russia, do you not, Jake?

General LESTENKOF. We do, Mr. Chairman. The rescue operation, we had a joint operation in the Soviet Union—or in Russia, this past year, and that will continue to work. We are also working with the border units, the national border units, and the Coast Guard and the Guard. We just had a recent visit with a delegation from the border guard.

Senator STEVENS. It is probably cheaper for us, but you all have relationships with other countries. How do you handle that financing?

General ALEXANDER. It is a matter of——

Senator STEVENS. Where is yours, General Alexander?

General ALEXANDER. We have a partnership with the Nation of Hungary, who, hopefully, will be competitive in NATO entry. We have had that relationship for the last 3 years.

In funding that, it is a factor of moving dollars from one account to another. And as General Lestenkof mentioned, the ability to continue that with the budget as proposed is going to cause some severe restraints on how aggressive we are in that Partnership for Peace Program.

Senator STEVENS. We visited with them, too. They are a very proud force, Hungary, and are ready to become part of NATO if that decision is made.

How long do you stay over there?

General ALEXANDER. We stay, depending upon the type of cell that goes over, no longer than 1 week.

Senator STEVENS. Do you finance their coming to our country?

General ALEXANDER. They pay for that. That comes out of the EUCOM budget, I am sorry. It does not come out of my account.

INNOVATIVE USES OF SIMULATORS

Senator STEVENS. You heard this comment about the innovations as far as the use of simulators. I think that is very commendable. Do any of you have any other examples about how you are trying to do the same job with less money? General Rees.

General REES. Yes, Senator Stevens. I have been fortunate to observe the Scimitar project that has been used with the 116th Brigade and the 48th Brigade. Oregon has a battalion that is part of Idaho's 116th Brigade, and I have truly seen some marvelous

things transpire in the last 3 years at the battalions and brigade staff level using JANUS exercises. They are light-years ahead of where we were 10 and 15 years ago in their capabilities.

In fact, this battalion from Oregon using the JANUS exercises frequently then flew to Fort Knox and got into what is known there as a VTP or Virtual Training Program, and essentially all the battalion leadership was put into simulators there and did an outstanding job.

We are seeing that at battalion and brigade staff levels. We are seeing simulators in conduct of fire trainers and mobile conduct of fire trainers that are being proliferated throughout the Guard, and that is getting tremendous results. We are seeing it, for example, in tank gunnery. Where it used to be that you would go to annual training and maybe by the end of annual training have your tank crews qualify, the tank crews are either qualified before they arrive at annual training or are able to complete it in short order and move on to higher levels of training.

It is a real delight to be able to see the effect of the investments here.

NATIONAL GUARD MODERNIZATION

Senator STEVENS. That is good.

What about modernization? We tried for several years to allocate a portion of the modernization budget to the Guard and Reserve.

I have two last questions. One is, what is your backlog in maintenance in each of your States? We find a tremendous backlog throughout the Government as a whole. Do you really keep track of that? Can you tell me what your backlog is?

And second, what about your modernization requirements? What percentage of those have really been funded? General James. Why do you not start from that end this time.

General JAMES. In terms of modernization, we are involved in the Bradley NET program, modernization new equipment training for our Bradleys. I believe we are on line for that, but it took some readjustment in funding, and we got some cooperation from the National Guard Bureau for this past year.

We are approximately $1.6 million, I believe, behind in funding for next year. We are going to need about $1.6 million in Bradley NET, new equipment training, for next year.

In terms of maintenance backlog, that number is probably the very worst in terms of our class 9 parts for my Apache attack helicopters.

The two primary assets that it seems that the warfighter CINC is going to want to use are our aviation and our artillery resources and assets, and yet, being a divisional State, we have a very low priority in resourcing on those. My mission ready status on my attack helicopters is in the 30's, 31 to 36 percent, as opposed to—and this is because of parts as much as personnel to put the parts on—as opposed to what I am able to maintain with my tanks, which is 80 to 86 percent fully mission ready capability.

So what I have had to do is reprioritize who gets what money for parts and maintenance, so that I can bring the level of those aviation and artillery assets up so they will be ready if called on by the commanders in chief. And I may have to accept a lower mis-

sion ready capability in my armor and my Bradley. I do not want to touch my Bradley situation because of the new equipment training. I want all of that to be completed before I can consider lowering that priority to help raise the priority on the other two assets.

But right now those are the figures that we are looking at in Texas in terms of a backlog and in terms of a mission capability.

Senator STEVENS. Jake, what is your situation?

General LESTENKOF. On the modernization, as you know, aviation is very important to us up in Alaska. So we have been concentrating on modernizing our air fleet with our air units with the UH–60 aircraft. We are receiving three this year and I think we are slated for five more to finish up in our rotary companies, the new aviation unit.

Fielding of the C–23's will be completed, hopefully, by the end of this fiscal year. So we are very happy with how we are moving forward with the modernization of our air assets.

As far as backlog in maintenance, since we do not have a great amount of ground equipment up in Alaska, we have managed pretty well on our maintenance backlog.

Senator STEVENS. General Rees.

General REES. Yes, sir; in base operations and real property maintenance, we have a requirement in 1998 for about $13 million. The budget that we are expecting is going to be about $2 million, so that is around an $11 million shortfall. That is a pretty dramatic shortfall.

In the area of modernization, in stock funded secondary items the budget request was for $12 million. We are going to get about $6 million because of this high priority situation in Oregon. Now, we have gotten a lot of dedicated procurement items and items that have been cascaded down, major end items, to help us achieve the higher readiness levels. But on the other hand, there are compatibility issues where you have to buy them through the stock funded secondary items, and literally that is going to stop. We are not going to be able to continue to move forward and achieve the goals that we are required to have by 1999.

REAL PROPERTY AND LOGISTICAL SUPPORT

Senator STEVENS. General Alexander.

General ALEXANDER. Mr. Chairman, in the area of base support and real property maintenance, we were funded at $4.1 million in fiscal year 1995, $5.8 million in fiscal year 1996, down to $2.3 million in fiscal year 1997, and the proposal for fiscal year 1998 is $2.5 million, roughly one-half of what we had experienced in fiscal year 1995.

In logistical support, we have gone from $9.1 million in fiscal year 1995 down to $6.7 million in fiscal year 1998. We also continue to take major reductions in these accounts. Our training sites, logistical support activities, our OMS shops, unit training equipment sites, and aviation flight facilities in some cases fail to even meet the electrical and safety code standards due to insufficient funds to support these facilities.

Continued cutbacks in this area could impair the quality of life for our full-time technician work force employed at these facilities.

I would also like to say that Ohio, as I may have said earlier, is a State that does not have a large number of tier one high priority units. But those that we do have, if a truck breaks in a tier one unit, it has to be fixed by a tier three unit. It has to go to maintenance shops that are funded at less than 50 percent of the manning that it takes to repair the equipment that goes in and out of there.

We have gone to the point now of attempting to take maintenance units and on the weekends program in there to repair equipment that is there to be maintained by a technician force that is severely undermanned. That has been the history of the Guard in terms of its maintenance function, and this fiscal year 1998 budget will further exacerbate those conditions.

Senator STEVENS. Gentlemen, it is not an easy story to deal with that you all tell.

We appreciate your coming. We are going to start this process of listening to members of your group each year in connection with these matters. I hope that, as I said, that we can find a way to solve some of this. But unless you have got a magic wand or a printing press in your basement, I cannot guarantee you we will get it done. But we will do our very best.

ADDITIONAL COMMITTEE QUESTION

And we are very proud of what you are doing. I am serious when I tell you, our committee does travel a great deal to look and see what is going on in terms of these deployments. I have some question about the tempo of deployment when they are overseas and I have discussed that to the Chairman and the Joint Chiefs and to some of your people, too. But I do think that the procedure we are following now in utilizing more and more of your people in our deployments is cost effective and we have got to do our best to see that you have the capability to continue to carry out the missions when you get those calls.

So thank you very much for coming.

[The following question was not asked at the hearing, but was submitted to the Adjutant General for response subsequent to the hearing:]

QUESTION SUBMITTED TO MAJ. GEN. RAYMOND F. REES

QUESTION SUBMITTED BY SENATOR THAD COCHRAN

Question. I understand that the recently concluded Army Warfighter Experiment at the National Training Center was successful in demonstrating the value of digital information distribution systems and that the Active Army leadership is very enthusiastic about pressing forward with digitization of its forces. This raises the question of the interoperability of National Guard units (especially the highly mobile Heavy Armor, Mechanized and Cavalry units) with the active units they might be called upon to fight with. What is your opinion of these digital systems and how do we fix the interoperability problem?

Answer. The Brigade Task Force Advanced Warfighter Experiment conducted in March 1997 had some implications on digitizing the Army National Guard. However, the Division Advanced Warfighter Experiment, to be completed in November 1997, will help determine the minimum digitization requirements to achieve command, control and communications connectivity between digital units (mostly Active Component) and analog units (including Reserve Component units). Four Army National Guard units are participating in this experiment to help the Army determine these interoperability requirements.

One of the major objectives of the Task Force Advanced Warfighter Experiment was to assess Force XXI digitized operations at the Brigade level. The emphasis was to assess two of the three components of the Force XXI digitized force—Force XXI battle command brigade and below appliqué (on the vehicles) and the tactical internet.

The Division Advanced Warfighter Experiment will emphasize the third component of the digital system—the Army Tactical Command and Control System by looking at digitized Tactical Operations Centers and how they operate from the Brigade to Corps level. Army National Guard units will interact with digital Headquarters.

Using various Army Tactical Command and Control System devices, digitized Tactical Operations Centers are supposed to achieve functional integration across the battlefield operating systems.

The devices performed at varying levels of success during the Task Force Exercise. Reportedly the most successful device was the air defense system. All the other devices had some problems but showed potential and will get a closer look during the Division Exercise.

Army National Guard units are on current fielding schedules for some of the digital devices and fielding has already begun for some units. This includes important major systems such as the M–1A2 as well as Appliqué Products.

Cost estimates to digitize a Division range from $45 to $80 million, so the Army is acknowledging that it probably will not be able to afford to digitize the entire force, including the Reserve Components. Therefore, it must prioritize when and what elements (what tactical level) will be digitized.

The National Guard Bureau Force XXI Task Force is in the early stages of developing a digitization strategy that should support the Army's program, maintain the relevancy of Army National Guard combat units, and be the most cost effective.

SUBCOMMITTEE RECESS

Senator STEVENS. We are going to stand in recess until next Wednesday, when we will have the defense business operating fund and the depot operations people before us.

Thank you very much.

General ALEXANDER. Mr. Chairman, on behalf of us all, we thank you very much for giving us the opportunity to have this hearing with you.

Senator STEVENS. Thank you very much.

[Whereupon, at 12:32 p.m., Wednesday, April 30, the subcommittee was recessed, to reconvene at 10 a.m., Wednesday, May 7.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1998

WEDNESDAY, MAY 7, 1997

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:44 a.m., in room SD–192, Dirksen Senate Office Building, Hon. Daniel K. Inouye presiding.

Present: Senators Domenici, Hutchison, Bennett, and Inouye.

GENERAL ACCOUNTING OFFICE

NATIONAL SECURITY AND INTERNATIONAL AFFAIRS DIVISION

STATEMENT OF HENRY L. HINTON, JR., ASSISTANT COMPTROLLER GENERAL

ACCOMPANIED BY:

JACK L. BROCK, JR., DIRECTOR, DEFENSE INFORMATION MANAGEMENT SYSTEMS

JULIA DENMAN, ASSISTANT DIRECTOR, DEFENSE MANAGEMENT ISSUES, NATIONAL SECURITY AND INTERNATIONAL AFFAIRS DIVISION

OPENING STATEMENT OF HON. DANIEL K. INOUYE

Senator INOUYE. On behalf of Chairman Stevens, who as you know is managing the supplemental appropriations bill, I would like to welcome all of you here this morning to discuss DOD's depot maintenance programs and its progress on reforming its financial management. As some of you are aware, this program began during the tenure of former Comptroller Sean O'Keefe, who was also our chairman's former chief of staff. Mr. O'Keefe recognized that the depot maintenance system in DOD needed reform and restructuring. It was he who initiated the defense business operations fund and set us on this course to clean up our maintenance system.

Following on this lead, the current Comptroller, Dr. John Hamre, has continued the crusade to correct the many weaknesses in our DOD financial management system, trying to lead our public depots to a more cost-effective and efficient performance. Under DOD's current plan it is now up to the services to put all these reforms into practice. The GAO has worked on overseeing this effort, and has been instrumental in helping Congress understand the progress and the many areas where additional work is needed.

This morning the subcommittee will hear from two panels regarding the services' working capital funds and depot operations. The first panel includes Mr. Henry Hinton, GAO's Assistant Comp-

troller General for the National Security and International Affairs Division. Mr. Hinton is accompanied by Mr. Jack Brock and Ms. Julia Denman, who will discuss GAO's recommendations in detail.

Mr. Hinton, we appreciate you and your staff being with us this morning to update the committee on the progress being made and to identify the areas where GAO believes additional work is required. Your full statements have been included in the record, and you may proceed as you wish, sir.

PREPARED STATEMENT OF SENATOR BENNETT

Before I do, I would like to apologize to all of you for my strange sounding voice, but every year at about this time, when the pollens fall, my voice disappears.

I have a statement from Senator Bennett that I would like to put in the record at this point.

[The statement follows:]

PREPARED STATEMENT OF SENATOR ROBERT F. BENNETT

I want to thank Chairman Stevens and Senator Inouye for holding this hearing on depot maintenance. I believe it is an area in need of Congressional attention, especially in light of the costs involved as outlined by the GAO. I am concerned specifically with the failure of the Air Force to respond to BRAC directives to reduce excess capacity. In addition, it appears that they are pursuing a haphazard policy without a solid vision of where they are going, or concern about the consequences. Unfortunately, we are short on detail today from the Air Force.

Mr. Chairman, I believe it is reasonable to expect the Department of Defense to outline a detailed, coherent depot maintenance policy. I expect the Air Force to do so. As a member of the full committee, I will find it difficult to support a funding request that is not based on a clear policy, complete with cost analysis. I would hope the Air Force will be cooperative in providing this information to the committee.

SUMMARY STATEMENT

Senator INOUYE. Please proceed, sir.

Mr. HINTON. Thank you, Senator. We are pleased to be here today to discuss financial management and logistics management issues relating to the effectiveness and efficiency of DOD's operations. As you mentioned, Mr. Brock and Ms. Denman are accompanying me today. Mr. Brock has directed all of our work in the working capital fund area, and Ms. Denman has managed all the work that we have done on depot maintenance operations.

Today we will focus specifically on the operations of DOD's working capital funds, which collect and disburse over $65 billion annually, and on DOD's management of its $13 billion depot maintenance program. DOD has consistently experienced losses in the operations of various working capital funds, including the depot maintenance activity group. This issue has been an area of concern to the committee. Let me give you a brief overview of the conditions we see, and then I will turn it over to Mr. Brock and Ms. Denman for more details.

First, concerning the working capital fund's cash management and operations, there are four points I would like to make. One, the working capital funds have not yet accomplished the goal of operating on a break-even basis. DOD estimates the funds will have an accumulated operating loss of about $1.7 billion at the end of fiscal year 1997. Notwithstanding this loss, however, we believe that the funds have achieved a measure of success because the services are

doing a better job of identifying the cost of doing business and including those costs in the prices charged its customers.

Second, we agree with DOD's decision to place responsibility for managing the working capital funds cash at the military service and the DOD component level. We believe this approach places accountability at the right level, that is the military services. Also, each service now has an incentive to more accurately price the goods and services that its working capital fund charges customers, since inaccurate prices could lead to not having enough cash to cover the day-to-day operational costs.

Third, since 1993 the working capital funds have advance billed customers to cover cash shortages. As of January 1997, the outstanding advance billing balance was $1.6 billion.

Last, our analysis of the fiscal year 1998 prices for five business areas indicates that they are probably too low to recover the expected fiscal year 1998 operating costs and/or recover the prior year losses by over $300 million.

Now, let me turn to the various factors that we see that contribute to inefficiencies in DOD's management of its depot maintenance activities. Excess capacity is the No. 1 problem. It stands at about 40 percent today, and significantly contributes to the losses in that area. The Navy has made the greatest progress in dealing with excess capacity, however the Army and the Air Force have been less successful. Both services are incurring rising prices because they have too much depot infrastructure for the available workload. Further, DOD's privatization-in-place of selected depots has contributed to the excess capacity problem and ultimately will continue to drive up maintenance costs.

Additionally, the Air Force plans to compete workloads at two closing depots may be more costly than redistributing workloads to other depots. The Air Force believes that the competition will demonstrate if outsourcing these workloads will result in the best value. DOD has made overly optimistic assumptions about cost savings that can be achieved from outsourcing depot maintenance activities. When outsourcing results in increasing, rather than decreasing, cost, expected savings will not be realized. To the extent projected savings are not built into the billing rates, losses will occur.

In addition, other factors also impact the efficiency and cost of depot maintenance operations. These include, one, high material cost, two, lengthy depot repair cycles, and three, ineffective information systems.

In closing, it is important to emphasize that the conditions I have discussed are masking inefficiencies in DOD's working capital activities. This means, and I will use the depots as an example, that the Congress, one, does not have accurate data on the actual cost of depot maintenance activities because the rates charged customers do not always reflect the costs, and two, even in those cases where the rates do reflect the costs, they are likely higher than necessary due to factors such as costly excess capacity.

In the final analysis, DOD will ultimately have to request funds to offset its losses through either direct appropriation or by increases to the rates charged military customers, and this will result in higher O&M appropriations requests. That is why we have rec-

ommended that DOD develop an overall plan for dealing with the inefficiencies in its infrastructure activities such as depot maintenance.

PREPARED STATEMENT

Senator, this completes my summary of the issues that are contained in my written statement. Mr. Brock will now provide more details on the working capital fund operations, and Ms. Denman will follow to provide a more in depth look into the inefficiencies in the depot system.

[The statement follows:]

PREPARED STATEMENT OF HENRY L. HINTON, JR.

Mr. Chairman and Members of the Subcommittee: We are pleased to be here today to discuss financial management and logistics management issues relating to the effectiveness and efficiency of the Department of Defense's (DOD) operations. Specifically, we will focus on the operations of DOD's working capital funds, which collects and disburse over $65 billion annually, and on DOD's management of the $13 billion depot maintenance program. It is important to note that these areas fall within defense financial management and infrastructure activities, 2 of the 24 areas we identified as high-risk areas within the federal government.[1]

These issues have significant impact on the efficiency and effectiveness of how DOD spends its operations and maintenance funds. DOD has consistently experienced losses in the operations of various working capital funds, including the depot maintenance activity group, and has had to request additional funding to support their operations. This issue has been an area of concern to this subcommittee and other congressional committees. Before we get into specifics, I will briefly summarize our key points.

WORKING CAPITAL FUNDS' CASH MANAGEMENT AND OPERATIONS ISSUES

Our work on working capital funds cash management and operations shows the following:

—To date, the working capital funds have not yet accomplished the goal of operating on a break-even basis, and DOD estimates the fund will have an accumulated operating loss of about $1.7 billion at the end of fiscal year 1997. However, we believe that the funds have achieved a measure of success because the services are doing a better job of identifying the costs of doing business and including those costs in the prices charged customers. Setting prices to recover more of the costs of providing goods and services to customers gives managers a window into the costs of DOD support operations—including costs for direct labor, material, overhead, and contracts. With a more complete cost picture, managers can account for past activities, manage current operations, and assess progress toward planned objectives. Further, more accurate identification of costs enables those responsible for providing oversight to make more informed policy decisions by highlighting the cost associated with those decisions.

—When the Defense Business Operations Fund was established in 1991, DOD consolidated the cash balances of the nine industrial and stock funds into a single account that was managed centrally by the Office of the Secretary of Defense (Comptroller). In February 1995, DOD devolved the responsibility for cash management to the military services and DOD components. We agree with DOD's decision to place the responsibility for managing the working capital funds' cash at the military service and DOD component level because it makes each individual DOD component directly accountable for its respective cash balance as well as their decisions that impact cash. Each DOD component now has an incentive to more accurately price the goods and services that its working capital fund charges customers since inaccurate prices could lead to not having enough cash to cover day-to-day operating expenses.

—Since 1993, the working capital funds have had a cash shortage. To ensure that the cash balances remained positive, the funds have advance billed their cus-

[1] "Defense Financial Management" (GAO/HR–97–3, Feb. 1997) and "Defense Infrastructure Management" (GAO/HR–97–7, Feb. 1997). In 1990, GAO began a special effort to report on the federal program areas its work identified as high risk because of vulnerabilities to waste, fraud, abuse, and mismanagement.

tomers. While the three services have liquidated $3.6 billion of outstanding advance billings from February 1995 to January 1997, the outstanding advance billing balance is still $1.6 billion. Further, the Navy and Air Force advance billed their customers about $2.9 billion during calendar year 1996 to ensure that their cash balances remained positive.

—Our analysis of the fiscal year 1998 prices for five business areas indicates that they are probably too low to recover expected fiscal year 1998 operating costs and/or recover prior year losses by over $300 million.

CHALLENGES FACING DOD IN IMPROVING THE COST-EFFECTIVENESS OF DEPOT MAINTENANCE OPERATIONS

Various factors contribute to inefficiencies in DOD's management of depot maintenance activities.

—Excess capacity—which is currently about 40 percent in DOD's depot maintenance system—is a significant contributor toward the inefficiency and high cost of DOD's depot maintenance program and is generating significant losses in the depot maintenance activity group of the service's working capital fund. The Navy has made the greatest progress in dealing with excess capacity through its implementation of base realignment and closure (BRAC) recommendations. Through consolidations, interservicing actions, and outsourcing some noncore workloads the Navy expects to reduce its operating rate by about $10 per hour. Based on a forecast of 13 million direct labor hours for fiscal year 1999, the Navy expects to produce a savings of about $130 million. However, Army and Air Force's plans for implementing BRAC recommendations will do little to reduce excess capacity and will likely result in increased depot maintenance prices.

—DOD has made overly optimistic assumptions about cost savings that can be achieved from outsourcing depot maintenance activities. When outsourcing results in increasing, rather than decreasing costs, expected depot maintenance savings will not be realized. To the extent projected savings were budgeted, losses will occur. For example, privatization in-place of the Aerospace Guidance and Metrology Center was justified based on achieving savings. However, the Air Force projects that for 1997, costs in the privatized facility will be $9 million to $32 million more than the cost of the same work before privatization. Similarly, the Air Force is also projecting savings from planned competitions of workloads at two closing Air Logistics Centers. If the savings from these competitions are not achieved, a similar situation will occur.

—Material cost increases are generating losses for the depot maintenance capital fund. Material costs represent about 40 percent of the Air Force depot maintenance costs and during the first half of fiscal year 1997, material costs for Air Force depots have been about $32.7 million, or 5.4 percent higher than planned. Our work also shows that weaknesses in DOD's inventory management system such as inadequate visibility over items and purchasing of unneeded stocks have contributed to rising material costs. In addition, inadequate control of government-furnished material to contractors has also led to losses in contract depot maintenance. For example, in April 1996, the Air Force Audit Agency found problems at Warner Robins Air Logistics Center with government-furnished property financial statement balances misstated by up to $2.3 billion.

In conclusion, the inefficient operation of depot maintenance activities results in a reduction of the military services' purchasing power through their operations and maintenance funds. Stated another way, more operations and maintenance funds will be required to perform the same level of maintenance. Depot maintenance privatization should be approached carefully, allowing for evaluation of economic, readiness, and statutory requirements that surround individual workloads. If not effectively managed, privatizing depot maintenance activities, including the downsizing of the remaining DOD depot infrastructure, could exacerbate existing capacity problems and the inefficiencies inherent in underutilization of depot maintenance capacity.

In addition, other factors also impact the cost-effectiveness of depot maintenance operations. These include such things as inventory management practices, repair processes, and readiness requirements. We have encouraged DOD to aggressively seek new management practices to meet these challenges. To their credit, each of the military services have programs underway to improve depot maintenance and other logistics activities. While it is too early to assess the results of these programs, we believe they are addressing several key problems, such as the reduction of repair cycle time.

In closing, it is important to note that reducing depot maintenance cost and improving depot maintenance efficiency are complex and challenging tasks that are compounded by force structure downsizing. We have presented some of the key factors that must be addressed and continue to believe the DOD should develop an overall plan for improving depot maintenance efficiency and effectiveness that clearly defines how it will deal with this set of complex issues.

Mr. Chairman, this completes the summary of issues contained in my statement. Mr. Brock and Ms. Denman, as requested, will now provide more details on these issues.

APPENDIX I.—WORKING CAPITAL CASH AND OPERATIONS MANAGEMENT ISSUES

The Department of Defense (DOD) established the Defense Business Operating Fund (DBOF) in 1991 in an attempt to fundamentally alter the way DOD managed its resources by fostering a more business-like culture within selected Defense operations, which include depot maintenance, transportation, supply management, and finance and accounting. DBOF consolidated the nine existing industrial and stock funds operated by the military services and DOD, as well as the Defense Finance and Accounting Service, the Defense Industrial Plant Equipment Service, the Defense Commissary Agency, the Defense Reutilization and Marketing Service, and the Defense Technical Information Service into a single financial structure. The military services and DOD components continued to be responsible for managing and operating business activities within the financial structure.

On December 11, 1996, the Under Secretary of Defense (Comptroller) reorganized DBOF and created four working capital funds: Army, Navy, Air Force, and Defense-wide. This was done in order to clearly establish the military services and DOD components responsibilities for managing the functional and financial aspects of their respective business areas. The recently established working capital funds continue to operate the same way they did under DBOF.

The primary goal of DBOF and the recently established working capital funds is to focus the attention of all levels of management on the total costs of carrying out certain critical DOD business operations and the management of those costs in order to encourage support organizations, such as depot maintenance facilities, to provide quality goods and services at the lowest costs. Focusing attention on costs is important, given the size of the working capital funds. For fiscal year 1998, the four funds are expected to generate about $69 billion in revenue and employ about 220,000 civilians and 24,000 military personnel.

The working capital funds are supposed to generate sufficient revenues to recover expenses incurred in their operations and are expected to operate on a break-even basis over time. However, setting prices to ensure that the funds do break even is a complex and difficult task. DOD policy requires working capital fund business areas to establish prices prior to the start of each fiscal year and to apply these predetermined (stabilized or standard) prices to most orders and requisitions received during the year. The process that the business areas use to develop their stabilized prices begins as early as 2 years before the prices go into effect, with each business area developing workload projections for the budget year. After a business area estimates its workload based on customer input, it (1) uses productivity projections to estimate how many people it will need to accomplish its work, (2) prepares a budget that identifies the labor, material, and other expected costs, and (3) develops prices, that when applied to the projected workload, should allow it to recover operating costs from its customers. Because sales prices are based on expected rather than actual costs and workloads, higher-than-expected costs or lower-than-expected customer demand for goods and services can cause the business areas to incur losses. Conversely, lower-than-expected costs or higher-than expected workloads can result in profits.

To date, the working capital funds have not yet accomplished their goal of operating on a break-even basis and DOD estimates that they will have an accumulated operating loss of $1.7 billion at the end of fiscal year 1997. However, we believe that the funds have achieved a measure of success because they are doing a better job of identifying the costs of doing business and including those costs in the prices charged customers. This provides managers and decisionmakers two important benefits. First, setting prices to recover more of the costs of providing goods and services to customers gives DOD managers a window into the costs of Defense support operations—including costs for direct labor, material, overhead, and contracts. With a more complete cost picture, managers can account for past activities, manage current operations, and assess progress toward planned objectives. Second, more accurate identification of costs enables those responsible for providing oversight to make

more informed policy decisions by highlighting the cost associated with those decisions.

Over the last several years, various congressional Defense oversight and appropriations committees have expressed concern with the management and operations of the funds. To address these concerns, Defense was required to conduct a study of its working capital funds as directed in the National Defense Authorization Act for fiscal year 1997. Not later than September 30, 1997, the Secretary of Defense is required to submit to the Congress a plan to improve the management and performance of the industrial, commercial, and support type activities that are currently managed in the working capital funds. We are hopeful that DOD will use this plan as a mechanism to continue to strengthen its commitment to improving the management and operations of the working capital funds as well as identifying the total costs of providing goods and services to customers and including those costs in the prices charged customers.

WORKING CAPITAL FUND CASH MANAGEMENT

Since 1993, the working capital funds have had a cash shortage. To address this problem DOD has taken two actions. First, in February 1995, DOD devolved the responsibility for cash management to the military services and the DOD components to better align accountability and responsibility for management. Second, to ensure that the cash balance remains positive, the working capital funds have advance billed their customers since 1993.

The importance of cash for working capital funds

Cash plays an extremely important role for DOD's working capital funds since they collect and disburse over $65 billion annually. Cash generated from the sale of goods and services is the primary means by which the working capital funds maintain an adequate level of cash to pay bills. Where the cash balances start each year depends on the outcome of many decisions made during the budget process with regard to (1) projecting workload, (2) estimating costs, and (3) setting prices to recover the estimated full cost of the goods and services. During the execution of the budget, they operate much like a checking account: collections increase the funds' account balances and disbursements (such as salaries and purchases of inventory) reduce the account balances. To the extent that the decisions made during the budget process are reasonably accurate, the funds' cash balances should fall between the minimum and maximum amount required by DOD. However, if the decisions are not accurate, the funds could have too much or not enough cash.

DOD's policy requires the funds to maintain cash levels to cover 7 to 10 days of operational costs and 4 to 6 months of capital asset disbursements which is about $2.3 billion to $3.4 billion for the four funds. If the level of cash becomes low and there is a possibility of incurring an Antideficiency Act[2] violation, immediate actions will be taken to resolve the cash shortages by advance billing customers.

Before DBOF was established, each industrial and stock fund had a separate cash balance and managers were responsible for ensuring sufficient cash was available to cover fluctuations in collections and disbursements that occurred from one month to another. When DBOF was implemented, DOD consolidated the cash balances of the nine industrial and stock funds into a single account that was managed centrally by the Office of the Secretary of Defense (Comptroller). The Office of the Secretary of Defense (OSD) centrally managed DBOF's cash for about 3 years. In February of 1995, DOD devolved responsibility for cash management as well as Antideficiency Act responsibilities to the military services and the DOD components.

GAO's views on DOD's decision to devolve the cash management responsibility

We agree with DOD's decision to place the responsibility for managing the working capital funds' cash at the military service and defense agency level and to likewise devolve the Antideficiency Act responsibility. In our view, decentralized cash management should result in better cash management and more responsible business decisions.

According to DOD officials, the cash management responsibility was devolved to the Army, Navy, Air Force, and defense agencies to better align accountability and responsibility for managing cash. DOD pointed out that the operational control of actions taken by each fund activity, which results in cash disbursements and collections, always has resided and continues to reside with the individual DOD components.

---

[2] The Antideficiency Act, 31 U.S.C. 1341(a)(1), 1517, provides that no officer or employee of the government shall make or authorize an expenditure or obligation exceeding the amount of an appropriation of funds available for the expenditure or obligation.

We believe that there are a number of benefits associated with the decentralization of cash management responsibilities. The decentralization makes each individual DOD component directly accountable for its respective cash balance as well as their decisions that impact cash, including any violation of the Antideficiency Act. One DOD component cannot spend money generated by another DOD component. When cash management was centralized, DOD did not have reports that showed the cash balances for the individual DOD components—the reports only provided information on (1) DBOF's overall cash balance and (2) collection and disbursement data for each of the DOD components. With the decentralization of cash management, the Department of Treasury provides DOD with a cash balance for each of the five DOD components.

There are still other advantages associated with the decentralization of cash management:

—Each DOD component now has an incentive to more accurately price the goods and services that its working capital fund charges customers since inaccurate prices could lead to not having enough cash to cover day-to-day operating expenses.

—The management of cash is closer to where cash decisions are made—the business area and the activity level.

—OSD and the DOD components have started working more as a team to resolve cash problems. Under the centralization of cash, there was less incentive for the DOD components to respond to cash problems since OSD was responsible for cash and there was only one cash balance. When the DOD components became responsible for their individual cash balances, they raised more questions on the accuracy and timeliness of the information on collections and disbursements. Such increased attention should help improve the accuracy of collection and disbursement data reported in the working capital funds' financial statements, which are prepared under the Chief Financial Officers Act of 1990.

DOD has advance billed customers to alleviate cash shortage

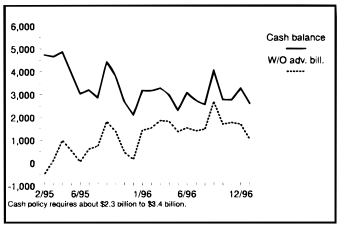
Since 1993—with the transfer of $5.5 billion from DBOF as required by the National Defense Authorization Act for Fiscal Year 1993—the funds have been advance billing customers because they have not been able to generate enough cash to pay their bills. In July 1994, the Comptroller of Defense stopped the advance billing at all activities except for the Naval shipyards and research and development activities. Although these activities had been tentatively scheduled to stop advance billing in January 1995, this did not occur.

DOD officials informed us that when the responsibility for cash management was returned to the DOD components in February 1995, the amount of cash returned to the services was not sufficient to cover outstanding DBOF liabilities. DBOF's financial reports indicate that this was the case, with each service facing cash shortages. Therefore, according to DOD, it was necessary for the military services to continue to advance bill customers so that their cash portion of DBOF would not go negative.

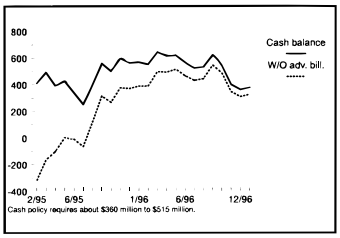
Since 1995, the military services have made some progress in liquidating (working off) their outstanding advance billing balances. However, the Navy and Air Force had to advance bill customers again during calendar year 1996 to ensure that their cash balances remained positive. Specifically, the Navy advance billed customers about $1.7 billion and the Air Force advance billed customers $1.2 billion during calendar 1996. Further, the Navy has advance billed their customers $100 million in February 1997. The following figures show the reported (1) cash balances for the Army, Navy, Air Force, OSD, and Defense agencies portion of the funds and the (2) cash balances for these components if they did not advance bill their customers from February 1995—when DOD returned the responsibility for cash to these five DOD components—through January 1997.

Table I.1: Working Capital Fund Cash Balances (Dollars in millions)

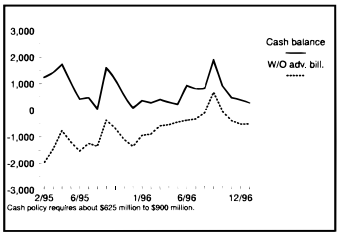
Overall Working Capital Fund



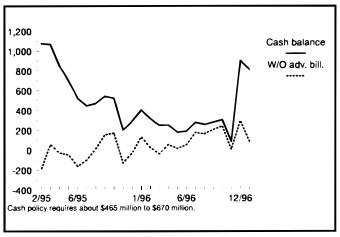
Army Working Capital Fund



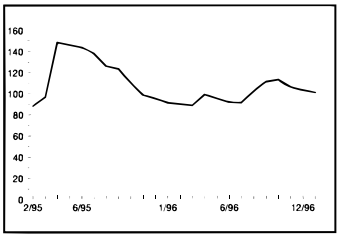
Navy Working Capital Fund



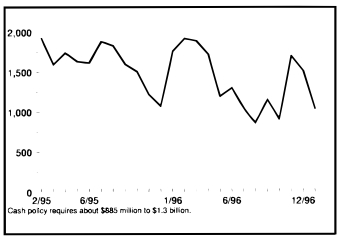
Air Force Working Capital Fund



Office of the Secretary of Defense (which does not advance bill)



Defense Agencies (which do not advance bill)



Note to above figures: We did not independently verify the financial information shown in the figures, which was taken from DOD and Treasury reports.

As the above figures show, the Army, Navy and Air Force would have had negative cash balances when they received the responsibility for cash in February 1995 had they not advance billed customers. The figures also show that:

—the three services have liquidated $3.6 billion of outstanding advance billings from February 1995 through January 1997;

—as of January 1997, the outstanding advance billing balance was $1.6 billion;

—the Army has liquidated almost all of its outstanding advance billing balance;

—the Navy's cash balance would have been negative for most of the time period from February 1995 through January 1997 if it had not advance billed customers; and

—the Air Force liquidated most of its outstanding advance billing balance until it needed to advance bill customers over a billion dollars in December 1996 to ensure that its cash balance would remain positive.

According to Army and Air Force officials, they plan to liquidate all their outstanding advance billing balances by the end of fiscal year 1998. Navy officials in-

formed us that they now plan to liquidate the Navy's outstanding advance billing balance by the end of fiscal year 1999.

Cash Outlook for fiscal years 1997 and 1998

DOD's cash plans, dated January/February 1997, show that the working capital funds will disburse about $2.3 billion more than they collect during fiscal year 1997. To offset most of the cash drain that DOD expects to occur during fiscal year 1997, DOD plans to increase fiscal year 1998 prices to recoup losses and generate cash. DOD plans also show that it expects to collect about $2.2 billion more than it disburses during fiscal year 1998. This information is summarized below.

TABLE I.2.—DOD'S WORKING CAPITAL FUND ANNUAL CASH PLANS DATED JANUARY/FEBRUARY 1997

[In millions of dollars]

Component	Estimated fiscal year 1997 collections less disbursements	Estimated fiscal year 1998 collections less disbursements
Army	(173.4)	27.2
Navy	(1,427.7)	984.5
Air Force [1]	(154.5)	493.4
Defense Agencies	(511.0)	669.4
Total	(2,266.6)	2,174.5

[1] Air Force fiscal year 1998 figure includes United States Transportation Command's net collections of $102.6 million.

Based on our analysis of DOD's cash plan and past trends, we believe that the Navy may have to advance bill customers during the remainder of fiscal year 1997 in order to ensure that its cash balance remains positive. Based on our review of the cash and outstanding advance billing balances for the period October 1996 through March 1997, it is too close to tell if the Army and the Air Force will have to advance bill their customers during the remainder of fiscal year 1997.

WORKING CAPITAL FUND OPERATIONS

The four DOD working capital funds have added surcharges to their fiscal year 1998 sales prices in order to recoup the $1.7 billion accumulated operating loss that they expect to have at the end of fiscal year 1997. As a result of this accumulated operating loss, the customers will need $1.7 billion in appropriated fiscal year 1998 funds so that they can reimburse the working capital funds for prior year losses rather than buy goods and services.

Our limited review of five business areas and the assumptions used to develop their fiscal year 1998 prices (which could change as fiscal year 1998 approaches) indicates that the price increases may not be enough to eliminate the $1.7 billion accumulated operating loss. Based on the requirements in the National Defense Authorization Act for Fiscal Year 1997, we reviewed the fiscal year 1998 prices for Army depot maintenance, Air Force depot maintenance, Navy shipyards, Navy ordnance, and Navy research and development. In performing our work, we reviewed DOD's assumptions—which were finalized about 9 months before the beginning of fiscal year 1998—on the fiscal year 1998 estimated revenue, costs, operating results, and workload (direct labor hours) to determine if the prices are likely to (1) recover fiscal year 1998 operating costs and (2) achieve a zero accumulated operating result at the end of fiscal year 1998.

Our analysis indicates that the fiscal year 1998 prices for four of the five business areas reviewed are probably too low to recover expected fiscal year 1998 operating costs and/or recoup prior year losses by over $300 million. The results of our work is summarized below.

TABLE II.3.—*Estimated impact of fiscal year 1998 pricing assumptions on end-of-year accumulated operating results*

Business area	*Estimated end-of-year accumulated operating result*
Army depot maintenance	Greater than $100 million loss.
Air Force depot maintenance	Greater than $100 million loss.
Navy shipyards	Between $25 million and $100 million loss.
Navy ordnance	Between $25 million and $100 million loss.
Navy research and development [1].	On target for zero accumulated operating result.

[1] Naval surface warfare center and Naval undersea warfare center divisions only.

Our previous reports [3] have identified some of the primary causes of business area losses. For example, several reports have identified such long-standing and well-documented causes as (1) overly optimistic productivity assumptions, (2) unrealistic cost reduction goals, and (3) lower-than-expected workloads. As illustrated below, we believe that the funds will incur losses in fiscal year 1998 for the same reasons:

—The Army depot maintenance business area is likely to end fiscal year 1998 with an accumulated operating loss of more than $100 million. The expected loss is due, in large part, to significant changes made to the depot-level budget, resulting in cost reduction goals that we believe will not be fully realized. Specifically, the Army's Industrial Operations Command proposed a composite fiscal year 1998 sales price of $107.03 per direct labor hour, which would have been a 19 percent increase over the fiscal year 1997 price. However, this price was reduced by $10.18 per hour by the Army Materiel Command in an effort to hold down prices and reduce the cost of depot operations. The fiscal year 1998 price reduction has created a situation where expected revenues for fiscal year 1998 will be significantly less than originally expected by the depots. In order to offset this revenue reduction, the depots need to reduce operational costs by about $68 million in fiscal year 1998. The Army was aware of the potential for significant losses and is attempting to identify areas where it can reduce its costs.

—The Air Force depot maintenance business area is likely to have an accumulated operating loss of more than $100 million at the end of fiscal year 1998 primarily because disruptions related to on-going actions to close two Air Logistics Centers will probably prevent its work force from achieving productivity goals that were incorporated into budget estimates for fiscal years 1997 and 1998. In fact, our review of other closure actions and the business area's actual productivity for the first 5 months of fiscal year 1997 indicates that the work force's actual productivity is much more likely to decline significantly than to improve. For example, when the Air Force Aerospace Guidance and Metrology Center was closed in September 1996, its work force's productivity had declined about 26 percent during the preceding 2 years. Similarly, the productivity of the Air Force depot maintenance business area's work force for the first 5 months of fiscal year 1997 is about 6.5 percent below budgeted levels for fiscal year 1996 and 8.5 percent below the budgeted levels for fiscal year 1997.

—It is likely that the Naval shipyard business area will have an accumulated operating loss between $25 million and $100 million at the end of fiscal year 1998. This is due, in part, to workload delays and cancellations—two problems that have adversely affected the shipyards' operations in the past [4] and are likely to affect their operations in fiscal years 1997 and 1998. For example, the Navy's February 1997 budget submission was based partly on the assumption that repairs and alterations for one ship would require about 491,000 direct labor hours (DLH's). However, in April 1997, about 4 months before work was scheduled to start, a major portion of this work was deferred. As a result, the workload estimate for the ship has been reduced by about 71 percent to about 144,000 DLH's. A Naval Sea Systems (NAVSEA) Command official stated that the shipyard cannot reduce its direct personnel and overhead costs in sufficient

[3] "Air Force Depot Maintenance: Improved Pricing and Financial Management Practices Needed" (GAO/AFMD–93–5, Nov. 17, 1992); "Financial Management: Navy Industrial Fund Has Not Recovered Costs" (GAO/AFMD–93–18, Mar. 23, 1993); "Defense Business Operations Fund: Improved Pricing Practices and Financial Reports Are Needed to Set Accurate Prices" (GAO/AIMD–94–132, June 22, 1994); "Financial Management: Army Industrial Funds Did Not Recover Costs" (GAO/AIMD–94–16, Nov. 26, 1993); and "Navy Ordnance: Analysis of Business Area Price Increases and Financial Losses" (GAO/AIMD/NSIAD–97–74, Mar. 14, 1997).

[4] "Defense Business Operations Fund: Improved Pricing Practices and Financial Reports Are Needed to Set Accurate Prices" (GAO/AIMD–94–132, June 22, 1994).

time to offset the lost revenue, which we estimate at about $20 million for direct labor, overhead, and surcharges.

In another instance, our analysis of budget documents identified a change in workload estimates for a ship scheduled to begin repairs in May 1998. Budget documents indicated that Navy customers planned to spend about $16 million for ship repairs, while the shipyard planned to receive about $36 million in revenue for working on the ship. A NAVSEA official stated that workload was reduced about 68 percent from 400,000 DLH's to 128,000 DLH's, but the change was not reflected in the workload estimates used to set fiscal year 1998 prices. In this case, the shipyard has 1 year to reduce its costs, renegotiate the workload reduction, or find additional revenue sources. Otherwise, a significant reduction in workload can result in significant losses.

—It is likely that the Navy ordnance business area will have an accumulated operating loss between $25 million and $100 million at the end of fiscal year 1998. As part of an initiative to restructure its ordnance business area and reduce costs, the Navy plans to drastically reduce the scope of operations at selected ordnance weapons stations. Accordingly, when it developed the prices that the business area will charge customers in fiscal year 1998, the Navy reduced weapons stations' cost estimates for overhead contract costs (for such things as utility bills and real property maintenance) from $126 million to $87 million, a reduction of $39 million, or 31 percent. However, the Navy has historically underbudgeted overhead contract costs for the weapons stations. For example, the reported actual overhead contract costs exceeded budgeted costs for fiscal years 1994, 1995, and 1996 by $33 million, $81 million, and $43 million, respectively. Furthermore, the Navy has not yet developed a detailed plan to achieve the budgeted cost reductions. Consequently, we believe it is very likely that the Navy ordnance weapons stations' actual overhead contract costs will exceed budgeted costs.

Because the budget process used to develop business areas' stabilized prices begins as long as 2 years before the prices go into effect, some variance between budgeted and actual operating results is inevitable. However, in some business areas, sales prices have yielded revenues that have been lower than actual costs for several years in a row. This indicates that there may be systemic problems with either the operation of the business areas or the methodology and assumptions used to estimate future costs and workloads. Until these problems are corrected, some business areas will continue to incur losses from their day-to-day operations and will need to increase future prices to recover these losses.

APPENDIX II.—KEY FACTORS IMPACTING THE COST-EFFECTIVENESS OF THE DEFENSE DEPOT MAINTENANCE PROGRAM

DOD's depot maintenance program, which costs more than $13 billion annually and involves an extensive public and private sector industrial base. Depot maintenance is one of the areas where DOD plans to achieve savings that can be used to fund shortfalls in modernization accounts. However, DOD is not achieving expected cost reductions in its depot maintenance program. In some instances, depot maintenance costs, in general, and unit repair costs, in particular, have actually increased and are expected to go higher. The waste and inefficiency in DOD's logistics system, including its depot maintenance program, is one of the key reasons we identified DOD's infrastructure activities as 1 of 24 high-risk areas within the federal government.[5]

A number of factors are preventing DOD from achieving expected savings in its depot maintenance costs. First, excess capacity in the industrial repair and overhaul capability of the public and private sectors contributes significantly to inefficiencies and higher costs in both sectors. Second, DOD is not achieving expected savings from outsourcing. Third, inefficiencies in DOD's supply system, along with other factors, increase the cost of material, yet, because needed parts are often not available, cause disruptions in depot maintenance operations. Also, other factors such as inadequate information systems and readiness requirements can influence depot inefficiencies and increase costs. To the military services' credit, each has programs underway to improve the effectiveness and efficiency of its depot maintenance activities.

---

[5] "Defense Infrastructure" (GAO/HR–97–7, Feb. 1997). In 1990, GAO began a special effort to review and report on the federal program areas its work identified as high risk because of vulnerabilities to waste, fraud, abuse, and mismanagement.

BACKGROUND

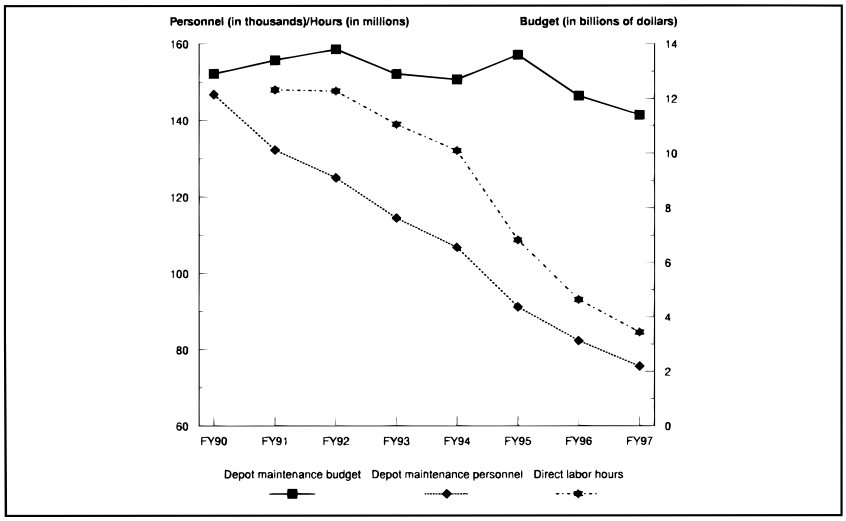
Depot maintenance is a key part of the total DOD logistics system that supports millions of equipment items, over 52,000 combat vehicles, 351 ships, and over 17,000 aircraft. Depot maintenance is a vast undertaking that requires extensive shop facilities, specialized equipment, and highly skilled technical and engineering personnel to perform major overhauls of weapon systems and equipment; completely rebuild parts and end items; to modify systems and equipment by applying new or improved components; manufacture parts unavailable from the private sector; and program the software that is an integral part of today's complex weapon systems. This work is done in both military depots and the private sector. DOD facilities and equipment are valued at over $50 billion. A large but unknown amount of government-owned depot plant equipment is used by private contractors—many of them are original equipment manufacturers of weapons or major systems and components. DOD spends about $13 billion—5 percent of its $250 billion fiscal year 1997 budget—on depot maintenance activities. Over $1 billion of this amount is procurement funding rather than operation and maintenance funding for contractor logistics support, interim contractor support, and some software maintenance.

Workload and personnel have been reduced since the cold war ended

DOD's depot maintenance workload has declined significantly in recent years, in large part because of the downsizing of the military force structure and reductions in spending for new weapon systems and equipment that followed the end of the Cold War. Other factors that have contributed to this decline, and which must be shared among all potential sources of repair—both public and private, include efforts by some services to do more repairs in field-level maintenance activities and the increased reliability, maintainability, and durability of some systems and equipment.

The defense depot system employs about 76,000 DOD civilian personnel, including laborers, highly trained technicians, engineers, and top-level managers. As shown in figure II.1, the number of depot maintenance personnel has been reduced by about 71,000 personnel—a 48-percent reduction since 1990. Over the same period, the organic depot maintenance workload had a similar decline of about 43 percent, while the total depot maintenance budget declined by a margin of only 12 percent.

Figure II.1: Reductions in DOD's Depot Maintenance Budget, Depot Maintenance Personnel, and Direct Labor Hours



Excess capacity exists in the public and private sectors

DOD has extensive excess capacity in the form of large numbers of underutilized buildings and equipment. While DOD has substantially reduced depot maintenance requirements and the number of depot maintenance personnel has been similarly

reduced, the DOD has not completed complementary reductions in its depot maintenance infrastructure—despite four rounds of base closures. Also, private sector production workload for new systems and equipment has generated significant excess production capacity—which the private sector estimates to be about 57 percent for military work and 56 percent for commercial work.

We identified excess capacity by determining maintenance facilities' potential for doing more work than they are programmed to accomplish. This approach, which assumes that additional trained personnel would be available to accomplish the added workloads, is the same approach that was used during the Base Realignment and Closure (BRAC) process to identify opportunities to consolidate similar workloads and to thereby, improve capacity utilization and reduce redundancies. However, DOD normally uses an approach that constrains a facilities' capacity based on (1) the availability of trained personnel and the organization of work stations and (2) the facility will only be operated on one 8-hour shift each day, for a 5-day workweek. The private sector usually considers a maximum potential capacity utilization between 75 and 85 percent to be an efficient operating level. Using maximum potential capacity estimates, DOD is predicted to have excess capacity in fiscal year 1999 of about 50 percent. Figure II.2 shows excess capacity using both the maximum potential capacity and DOD's available-capacity approach.

Figure II.2: Comparison of Depot Capacity and Workload

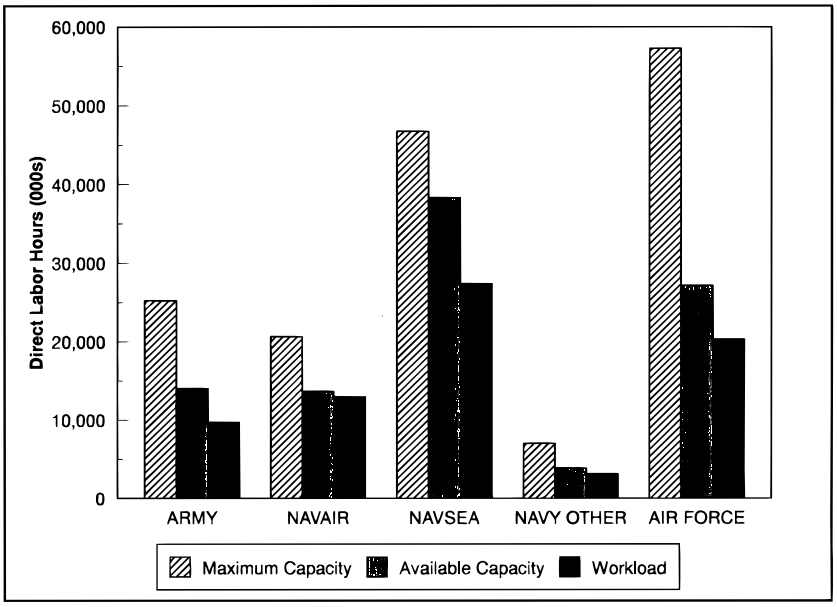


Table II.1 provides projections of each military depot's workload and excess capacity for fiscal year 1999 using maximum potential capacity and available capacity for 1999.

TABLE II.1.—CAPACITY AND WORKLOAD FORECASTS FOR DEFENSE DEPOTS FOR FISCAL YEAR 1999

[Direct labor hours in thousands]

Maintenance depot	Maximum potential capacity	Available capacity	Workload	Maximum capacity excess	Available capacity excess	Percentage excess of maximum capacity	Percentage excess of available capacity
Naval aviation:							
Cherry Point	5,735	3,797	3,620	2,115	177	37	5
Jacksonville	7,158	5,572	5,355	1,803	217	25	4

TABLE II.1.—CAPACITY AND WORKLOAD FORECASTS FOR DEFENSE DEPOTS FOR FISCAL YEAR 1999—Continued

[Direct labor hours in thousands]

Maintenance depot	Maximum potential capacity	Available capacity	Workload	Maximum capacity excess	Available capacity excess	Percentage excess of maximum capacity	Percentage excess of available capacity
North Island	7,772	4,318	4,027	3,745	291	48	7
Subtotal	20,665	13,687	13,002	7,663	685	37	5
Naval shipyard:							
Norfolk	15,851	12,000	8,723	7,128	3,277	45	27
Pearl Harbor	8,032	5,320	3,739	4,293	1,581	53	30
Portsmouth	7,996	7,028	3,209	4,787	3,819	60	54
Puget Sound	14,919	14,000	11,717	3,202	2,283	21	16
Subtotal	46,798	38,348	27,388	19,410	10,960	41	29
Other Navy:							
Albany	1,883	1,215	1,089	794	126	42	10
Barstow	1,563	1,037	928	635	109	41	11
Crane	2,451	974	583	1,868	391	76	40
Keyport NUWC	1,141	672	555	586	117	51	17
Subtotal	7,038	3,898	3,155	3,883	743	55	19
Air Force:							
Oklahoma City	12,863	7,881	7,624	5,239	257	41	3
Ogden	9,005	8,371	4,596	4,409	3,775	49	45
San Antonio	15,220	1,575	1,606	13,614	(31)	89	−2
Sacramento	10,291	1,724	989	9,302	735	90	43
Warner Robins	9,913	7,605	5,508	4,405	2,097	44	28
Subtotal	57,291	27,156	20,323	36,968	6,833	65	25
Army:							
Anniston	4,512	3,192	2,614	1,898	578	42	18
Corpus Christi	4,714	4,009	3,338	1,376	671	29	17
Letterkenny	3,707	213	164	3,543	49	96	23
Red River	4,684	1,534	898	3,786	636	81	41
Tobyhanna	7,606	5,091	2,736	4,870	2,355	64	46
Subtotal	25,223	14,040	9,750	15,473	4,290	61	31
Total	157,016	97,129	73,618	83,398	23,511	53	24

WORKLOAD CONSOLIDATION PROVIDES SIGNIFICANT OPPORTUNITIES TO REDUCE COSTLY EXCESS CAPACITY

There are essentially two options for reducing a maintenance depot's excess capacity: downsizing-in-place or increasing the volume of workload. Downsizing-in-place by mothballing or tearing down buildings and disposing of equipment may reduce the cost of maintaining some facilities and equipment, but it does not eliminate the costly infrastructure that supports the operations of a military installation. Also, it does not promote the efficiencies that can be achieved through consolidation. During the BRAC process it was generally the case that the most cost-effective way to reduce maintenance costs was to close some depots and to consolidate their workloads at the remaining depots or in existing private sector capacity. This approach allowed the remaining facilities to achieve production efficiencies and to spread their fixed overhead over an increased volume of work.

The defense depot system currently has about 40-percent excess capacity. With the exception of the Navy's privatization-in-place efforts, our work shows that the Navy has been the most successful at addressing the issue of closing excess industrial capacity and consolidating it to achieve economies of operation. On the other hand, the Army and the Air Force have not succeeded in making significant reduc-

tions in their excess capacity. Both services are incurring rising prices because they have too much depot infrastructure for the available workload. Further, DOD's privatization of selected depots has contributed to the excess capacity problem and ultimately will continue to drive up maintenance costs. Additionally, the Air Force plans to compete workloads at two closing depots may be more costly than redistributing the workload to other depots. Such cost increases mean that military service customers can buy less depot maintenance with available operation and maintenance dollars.

Navy is saving by expeditiously closing aviation depots and shipyards, but is missing savings opportunities by privatizing workload

The Navy has closed three of its six aviation depots and has consolidated most of their workloads at the three remaining depots to improve capacity utilization and reduce excess capacity. These actions, while costly and difficult, will significantly increase utilization and reduce excess capacity in the remaining three naval aviation depots. Specifically, following the 1993 BRAC Commission's approval of a recommendation to close aviation depots at Pensacola, Florida; Alameda, California; and Norfolk, Virginia, the Navy completed the closures in about 3 years versus the 6-year period allowed under the BRAC legislation. The Navy estimates that these closures and workload redistribution actions, along with interservicing actions and outsourcing some noncore workloads, will reduce its projected operating rate by about $10 per hour. Based on a forecast of 13 million direct labor hours for fiscal year 1999, this forecast is expected to produce a savings of about $130 million.

Our work shows that based on maximum potential capacity and fiscal year 1999 workload forecasts, the three remaining naval aviation depots will have an average excess capacity of 37 percent, substantially lower than the other services. Further, because the Navy reallocated most of the closing depots' workloads and specialties to its remaining aviation depots, and reengineered work spaces in the process, Navy officials state that given the availability of depot maintenance personnel, capacity utilization will be about 95 percent. This represents an increase of 36 percent after the workload transition is completed.

The Navy has closed four of its eight naval shipyards, significantly reducing excess capacity in the public sector. However, excess capacity remains, particularly in nuclear capability. The amount of that excess capacity depends on how much depot level ship repair work the Navy assigns public shipyards.

The Navy's privatization-in-place of the Louisville depot was less cost-effective than redistributing the workload

The Navy's privatization of its Louisville depot was not the most cost-effective choice—it could have saved more through consolidation of workloads and improved use of capacity in remaining industrial activities.[6] The Louisville, Kentucky, Detachment of the Naval Surface Warfare Center, Crane Division, a depot recommended for closure by the 1995 BRAC Commission, supported the overhaul and remanufacture for naval surface ship gun and missile systems. In analyzing the cost of privatizing the Louisville workload in place versus transferring it to another depot, the Navy estimated that the contract alternative would cost more on an annual recurring basis and the one-time cost of transferring the workload to another depot would be prohibitive. However, we found the Navy's analyses understated the annual savings of transferring the workloads to other underused facilities and overstated the one-time transfer costs.

Our analysis shows a one-time cost of $243 million and an annual savings of $59 million by transferring the workload. The annual savings would offset the one-time cost in about 4 years. The Navy's annual savings estimate recognized that transferring the workloads to underused facilities would reduce the overhead cost for those production units being considered for transfer. However, the per unit savings were applied only to the workloads transferred and not to existing workloads at receiving locations. So while privatizing the workload in place avoided short-term cost for transitioning the workload, it is likely to be more costly for the Navy over the long run.

Operating with costly excess capacity is resulting in increased prices for Army depots

Based on the actions taken thus far, the Army has not effectively downsized its depot maintenance infrastructure to significantly reduce costly excess capacity.[7] We

[6] "Navy Depot Maintenance: Cost and Savings Issues Related to Privatizing-in-Place at the Louisville, Kentucky, Depot" (GAO/NSIAD–96–202, Sept. 18, 1996).

[7] Although the Army closed the Lexington-Blue Grass, Sacramento, and Tooele Army depots, excess capacity was still 42 percent in 1995.

reported in September 1996[8] that tentative plans for implementing the 1995 BRAC decisions by allocating some workloads from realigned depots to remaining depots will likely achieve some reduction in excess capacity and savings at two remaining depots. However, the Army's failure to follow through with the closure of the Letterkenny Depot, the consolidation of repair workloads at other Army depots, and the retention of the Red River Depot as directed by the BRAC Commission is expected to increase costly excess capacity in the Army depots, from 42 to 46 percent over the next 3 years.

This increase is caused by several factors including: (1) a forecasted decrease in future year depot-level workload; (2) the Army's preliminary plan to retain most depot operations for missiles at Letterkenny, while privatizing or transferring to Tobyhanna Army Depot only about 14 percent of the workload; and (3) the delay in the transfer of the ground communications-electronics workload from the Sacramento depot to the Tobyhanna depot. In our September 1996 report, we recommended that DOD reassess this delay, which is costing the Army about $24 million annually. Subsequently, on March 13, 1997, the Defense Depot Maintenance Council approved the Air Force's proposal for a 3-year workload transfer beginning in 1998 with the transfer of 20 percent of the workload in the first year, and 40 percent each in the second and third years with full-operational capability at the Tobyhanna Depot in 2001.

Delay in implementing depot closure is increasing Air Force depots maintenance costs

The Air Force has the most serious excess capacity problem. Delays in closing two depots identified for closure during the 1995 BRAC extends the period that the Air Force will operate five depots. During this period, each depot will operate with declining workloads, excess facilities, and personnel. This situation will increase the cost of Air Force depot maintenance operations and result in projected losses of about $90 million in its depot operations during fiscal year 1997. Three of the six Air Force depots that existed in 1992 were recommended for closure during the 1993 and 1995 BRAC processes. The Air Force has opted to privatize-in-place one of these depots and is in the process of using public-private competitions to decide where the workloads from the other two closing depots will be performed.

BRAC decisions and how DOD is approaching implementation

Despite major force structure reductions and significant excess capacity in the Air Force depot maintenance system, none of the Air Force's five large, multicommodity logistics centers or their maintenance depots were recommended by DOD for closure during the first four BRAC rounds. These five depots have about 57 million direct labor hours of capacity to accomplish about 32 million direct labor hours of work, leaving about 26 million hours of excess capacity—or about 45 percent. Also, the Air Force maintenance depots' workloads are projected to decline to about 20 million direct labor hours of work in 1999. At this workload level, the Air Force depots would have about 65 percent unused capacity. Although the commission identified depots at the Sacramento and San Antonio centers for closure during the 1995 BRAC process, the executive branch, citing readiness, up-front costs, and potential effects on the local community, indicated that these workloads should be privatized-in-place or in the local communities. Subsequently, DOD announced that it will use public-private competitions as a means for determining who will perform the workload from the closing depots.

In December 1996, we reported that if the remaining depots do not receive additional workloads, they are likely to continue to operate with significant excess capacity and to become more inefficient and expensive as workloads continue to dwindle due to downsizing and outsourcing initiatives.[9] Our analysis indicates that redistributing 8.2 million direct labor hours of work from the two closing Air Force depots to the three remaining depots would (1) reduce the projected excess capacity in 1999 from about 65 percent to about 27 percent, (2) lower the hourly rates by an average of $6 at receiving locations by spreading fixed cost over a larger workload, and (3) save as much as $182 million annually as a result of economies of scale and other efficiencies. This estimate was based on a workload redistribution plan that would relocate only 78 percent of the available hours to Air Force depots. About one-half of the remaining 22 percent was captured in savings the Army projected would be achieved through consolidating ground communications and electronics

[8] "Army Depot Maintenance: Privatization Without Further Downsizing Increases Costly Excess Capacity" (GAO/NSIAD–96–201, Sept. 18, 1996).

[9] "Air Force Depot Maintenance: Privatization-in-Place Plans Are Costly While Excess Capacity Exists" (GAO/NSIAD–97–13, Dec. 31, 1996).

workload at Tobyhanna Army depot. Table II.2 shows an overview of the projected savings achievable through consolidation and increased use of capacity in the remaining three Air Force depots.

TABLE II.2.—POTENTIAL SAVINGS FROM AIR FORCE DEPOT CONSOLIDATION

Depot location	Direct labor hours	Labor/overhead rates	Cost
Before consolidation:			
Oklahoma City	7,122,421	$59.11	$421,006,305
Ogden	4,939,623	65.47	323,397,118
Warner Robins	6,763,218	59.55	402,749,632
Sacramento	3,222,409	63.81	205,621,918
San Antonio	5,000,190	58.24	291,211,066
Total cost			1,643,986,039
After consolidation:			
Oklahoma City	12,214,902	50.22	613,432,378
Ogden	6,626,348	59.68	395,460,449
Warner Robins	8,206,611	55.17	452,758,729
Total cost			1,461,651,556
Total potential savings			182,334,483

According to management officials at the three remaining centers, it would cost about $475 million to absorb all of the Sacramento and San Antonio workload. Using our estimate of $182 million in projected annual consolidation savings, net savings could occur within 2.6 years of the consolidation.[10] The Air Force believes that the competition process will demonstrate if outsourcing or workload redistribution is the best value.

MATERIAL COST INCREASES ARE GENERATING LOSSES FOR THE DEPOT MAINTENANCE ACTIVITY GROUP

While material costs vary for different commodities and depot maintenance actions, the cost of repairable and consumable parts is a significant portion of the cost of depot maintenance activities and of the composite rates charged depot maintenance customers. For this reason, inefficiencies in the DOD supply system and inaccurate information about the quantity and price of spare and repair parts required in the repair processes may lead to increased costs and losses in the depot maintenance capital fund. For example, about 40 percent of Air Force depot maintenance costs are material costs. During fiscal year 1997, Air Force depots are experiencing a 9-percent loss due to increased cost of material. The total effect of awaiting parts on the depot repair cycle process is not known because its measurement is said to be incomplete and inconsistent. However, one study reported that partial data indicates that it is a pervasive and serious problem—in one case as much as 12 percent of an annual negotiated program was not completed because parts were not available.[11]

Inventory management inefficiencies to contribute to high-maintenance costs

Since 1992, we have reported that DOD had wasted billions of dollars on excess supplies, including spare and repair parts used in the depot maintenance repair process. We reported that the problem resulted because inherent in DOD's culture was the belief that it was better to overbuy items than to manage with just the amount of stock needed. Had DOD used effective inventory management and control techniques and modern commercial inventory management practices, DOD would have had lower inventory levels and would have avoided the burden and expense

[10] In addition, the Army estimates that the BRAC Commission mandated transfer of about 1.2 million hours of ground communications workload from the Sacramento depot to the Tobyhanna Army Depot will save an additional $24 million annually.

[11] "The Depot Repair Cycle Process: Opportunities for Business Practice Improvement," LG406MR1, May 1996, The Logistics Management Institute.

of storing excess inventory. In a 1995 report, we stated that managing DOD's inventory presented challenges that partially stemmed from the downsizing of the military forces.[12] We reported that DOD needed to move aggressively to identify and implement viable commercial practices and to provide managers with modern, automated accounting and management systems to better control and monitor its inventories.

More recently, we reported that while DOD has clearly had some success in addressing its inventory management problems, much remains to be done.[13] DOD has made little progress in developing the management tools needed to help solve its long-term inventory management problems. It has not achieved the economies and efficiencies hoped for from the Defense Business Operations Fund and the Corporate Information Management initiatives. As a result of the lack of progress with some of the key initiatives, it has become increasingly difficult for inventory managers to manage DOD's $69 billion spare and repair parts inventory efficiently and effectively, including determination of budget requirements. Large amounts of unneeded inventory, inadequate inventory oversight, overstated requirements, and slowness to implement modern commercial practices are evidence of the lack of progress. For example:

—In our 1995 report, we stated that DOD's 1994 strategic plans for logistics called for improving asset visibility in such areas as in-transit assets, retail-level stocks, and automated systems. Although the asset visibility plans were to be completely implemented by 1996, DOD currently does not project to complete the total asset visibility initiative until 2001. Further, the lack of adequate visibility over operating materials and supplies substantially increases the risk that millions of dollars will be spent unnecessarily.

—In 1992 and 1995, we reported that DOD had problems in accurately determining how much inventory it needs to buy. Our recent work shows that this continues to be the case. For example, we reported that DOD had made limited progress in reducing acquisition lead times and that DOD could reduce its lead time by 25 percent over a 4-year period and save about $1 billion.[14]

—We have found that despite DOD's huge investment in spare and repair parts, depots often do not have the spare and repair parts to perform required maintenance. For example, we recently reported that inadequate consumable parts that are used in large quantities to repair aircraft components were the primary cause for repair delays at the Corpus Christi Army depot.[15] Also, we found that not having required parts has delayed the installation of the night vision modification for the F–16 aircraft because required parts had not been procured—resulting in a production loss of 31,000 hours. According to Air Force officials, if this work had been contracted out, the contractor would file a claim to be reimbursed for lost production time where nonavailability of parts impacted contractor performance. As a result of this and other production changes, Ogden officials stated the depot is currently 126,000 below planned 1997 production levels, causing a net loss of about $5 million.

Inadequate control of government-furnished stocks can contribute to losses in contract depot maintenance

Long-standing problems in managing government-furnished property, government-furnished equipment, and government-furnished material are adding millions of dollars to DOD's depot-level maintenance contracting costs and resulting in losses in the Air Force's contract maintenance portion of the working capital fund.

DOD buying commands can choose to provide contractors property, equipment, and materials for use in repairing items. Contractors are to report annually to the services the amount of property and equipment they have on hand that was furnished by the commands, and the commands are to reconcile these reports with their records. Material for use in the repair of items is to be furnished timely and monitored for proper use. Failure to provide government-furnished material in a timely manner can result in a claim for compensation from the contractor. Further, since the Air Force, unlike the other military services includes contract depot maintenance in its working capital fund, increased costs over what is budgeted will lead to losses in the working capital fund.

---

[12] "High Risk Series: Defense Inventory Management" (GAO/HR–95–5, Feb. 1995).

[13] "High Risk Series: Defense Inventory Management" (GAO/HR–97–5, Feb. 1997).

[14] "Defense Supply: Acquisition Leadtime Requirements Can Be Significantly Reduced" (GAO/NSIAD–95–2, Dec. 1994).

[15] "Inventory Management: The Army Could Reduce Logistics Costs for Aviation Parts by Adopting Best Practices" (GAO/NSIAD–97–82, Apr. 15, 1997).

Management and accountability has not always been effective

DOD's problems in managing and accounting for government-furnished stocks have been long-standing. For example, in 1993, the former Secretary of the Army requested the Army Audit Agency to examine controls over government-furnished property because we identified this as a weakness during our audit of the Army's fiscal year 1991 financial statements. The Army Audit Agency found many problems Army-wide, including the inability to determine the accuracy of contractors' reports. For instance, at the Missile Command, contractors reported having about $1.3 billion in government-furnished property for which the command's annual summary report of property in the custody of contractors did not identify. In April 1996, the Air Force Audit Agency found similar problems at Warner Robins Air Logistics Center with government-furnished property financial statement balances that could have been misstated by up to $2.3 billion. The following are three cases we found where inadequate control over government-furnished equipment resulted in increased depot maintenance costs:

—The Warner Robins Air Logistics Center experienced a $113-million cost overrun on F–15 maintenance work. Since the early 1980's, the Center has contracted with Korean Airlines and Israel Air Industries for maintenance on this aircraft overseas. In 1989, the Center began experiencing cost overruns, which it determined were directly related to government-furnished material. Our review shows that the F–15 programmed depot maintenance managers had sufficient information about the government furnished material issue from reports that were periodically generated from the Center's automated systems. However, no actions were taken to resolve the government-furnished material problem until the contract was being administratively closed out in 1996. The Center maintains that some of the problems have been corrected but that others have not. We observed the government-furnished material status on the current F–15 contract and found that a similar pattern of cost overrun is occurring.

—In another case, the Air Force paid $24.9 million to settle claims related, in part, to its failure to provide the contractor, PEMCO, timely government-furnished material. PEMCO had filed claims for compensation between November 1994 and June 1996 for alleged problems related to programmed depot maintenance for the KC–135 aircraft and had planned to file additional claims. In September 1996, the Air Force and PEMCO reached a "global settlement" of $24.9 million where the Air Force conceded fault in several areas, including the failure to provide material on time.

—According to program office officials, increased costs resulting from the contractor's use of government-furnished material is one of several factors leading to losses resulting from the privatization of the Aerospace Guidance and Metrology Center (AGMC) in Newark, Ohio.

OVERLY OPTIMISTIC ASSUMPTIONS OF COST SAVINGS FROM OUTSOURCING COULD LEAD TO FURTHER PRICE INCREASES

Unanticipated losses in outsourced workloads are another factor influencing cost growth in the depot maintenance program and losses in the working capital fund. Reported projections of 20-to 40-percent savings from outsourcing depot maintenance and other logistics operations have influenced DOD assumptions that outsourcing will lead to significant savings. Because assumptions about outsourcing savings were overly optimistic, expected savings are not being achieved.

AGMC outsourcing illustrates how overly optimistic saving assumptions lead to losses

The Air Force reported to the Congress that the privatization of the AGMC would result in savings, and it did not budget for increased costs for post-privatization operations. Customers of the privatized facility—the Boeing Guidance Repair Center—are not paying enough to recoup the costs of ongoing repair work and the Air Force Working Capital Fund is therefore expected to incur losses during fiscal year 1997. The Air Force has recognized that costs will be higher during fiscal year 1998 and is increasing its prices by $19 million. Nonetheless, a just released Air Force Materiel Command study, which was undertaken at our request, states that privatized repair operations for missile and aircraft inertial navigation systems could range between about $9 million and $32 million—a 12- to 47-percent increase—with a most likely increase of $17.1 million.

Assumptions regarding outsourcing savings are based on competition, but many current depot maintenance contracts are sole source

Facing large shortfalls in its modernization accounts, DOD plans to reduce costs and generate savings for modernization through the outsourcing of support activi-

ties, including depot maintenance. DOD's projected savings level is based largely on estimates made through studies by the Commission on Roles and Missions (CORM) and Defense Science Board that outsourcing depot maintenance and other activities will save 20 to 40 percent. Our review shows that savings of this magnitude are questionable for several reasons. For example, (1) projections were based on the Office of Management and Budget Circular A–76 competitions between the public and private sector, with the public sector winning about half of the competitions; (2) the activities being competed were simple, commercial activities like mowing grass, maintaining buildings, and operating motor pools where requirements could readily be identified and for which there were many private sector offerors who could compete for the work; and (3) savings estimates were estimated, not actual, and where audited, savings estimates were not achieved. While we believe savings may be achieved from outsourcing some depot maintenance workloads, our analysis indicates that little or no savings would result from outsourcing depot maintenance in the absence of competition.

However, our April 1996 testimony and July 1996 CORM report noted that much of the depot work contracted to the private sector was awarded sole source and that obtaining competition for remaining noncore workloads may be difficult and costly.[16] For example, to test for the extent of competition, we sampled 240 contracts, totaling $4.3 billion, that 12 DOD buying commands had open during 1995. Of these 240 contracts, 182, about 76 percent, were awarded on a sole-source basis—about 45 percent of the total dollar value.

Recently, we asked the DOD buying commands to classify as competitive or sole source all the new contracts awarded from the beginning of fiscal year 1996 to date. As shown in table II.3, of the 15,346 contracts totaling $2.2 billion, 13,930—about 91 percent—were awarded sole source. The sole-source contracts totaled about $1.5 billion, or about 68 percent of the total dollars awarded.

TABLE II.3.—DOD DEPOT MAINTENANCE CONTRACTS AWARDED FROM FISCAL YEAR 1996 TO DATE

[Dollars in millions]

Command	Competitive		Sole source		Total	
	Number	Value	Number	Value	Number	Value
Army	2	$1	40	$540	42	$541
Air Force	1,263	443	1,268	336	2,531	779
Navy	151	253	12,622	638	12,773	891
Total	1,416	697	13,930	1,514	15,346	2,211

Table II.4 compares the services' use of competition for contracts we sampled in 1995 with that used in contracts awarded since the beginning of fiscal year 1996. The Air Force had the greatest percent of competitive contracts in 1995 and 1996. The Army's use of competition decreased, and the Navy's use was low for both periods.

TABLE II.4.—DOD'S USE OF COMPETITION FOR DEPOT MAINTENANCE WORK

[Numbers in percent]

Service	Competitive contracts open in 1995		Competitive contracts awarded from fiscal year 1996 to date	
	Total number	Total value	Total number	Total value
Army	23	53	5	0.2
Air Force	39	62	50	57.0
Navy	8	39	1	28.0

[16] "Defense Depot Maintenance: Privatization and the Debate Over the Public-Private Mix" (GAO/T–NSIAD–96–148, Apr. 17, 1996) and "Defense Depot Maintenance: Commission on Roles and Mission's Privatization Assumptions Are Questionable" (GAO/NSIAD–96–161, July 15, 1996).

Competition cited as reason for sole-source awards

Our review also showed that, for existing weapon systems, obtaining a competitive market may be costly for DOD because it has not acquired the technical data rights for many of its weapon systems. In examining the reasons for sole-source contracting, we observed that the justification most often cited was that competition was not possible because DOD did not own the technical data rights for the items to be repaired. Officials from the DOD buying commands told us that DOD would have to make costly investments to promote full and open competition for many of its weapon systems. Also, we found that savings through competition may be adversely affected by private businesses that choose not to compete for maintenance workloads that have (1) small volumes, (2) obsolete technology, (3) irregular requirements, and (4) unstable funding. DOD may be able to encourage more competition through bundling common work and offering contracts with terms and conditions such as multiple options and multiyear performance periods.

OTHER FACTORS EFFECTING DEPOT INEFFICIENCIES AND COSTS

In addition to the factors we have already discussed, there are a number of others that impact the efficiency and cost of depot maintenance operations. In particular our work shows that: (1) lengthy depot repair cycles are costly; (2) DOD has been unsuccessful in implementing effective information systems to adequately support its depot maintenance; and (3) defense depots must support inefficient workloads and changing budgets and requirements of their customers. It is important to note that each of the services has initiated programs to improve their depot maintenance operations. However, while these programs are concentrating on key problems, it is too soon to assess effectiveness of these initiatives.

Reducing repair cycle days can reduce costs

Reducing the length of the depot repair cycle process is of vital importance in reducing costs. Reducing repair cycle time reduces the number of items that must be purchased to support weapon systems and equipment. One study estimated that for depot level reparables, the dollar-weighted organic/contractor depot repair cycle time is 86.8 days, with a resultant repair cycle level investment requirement of $4.4 billion. That requirement would be decreased an average of $51 million for each day the repair cycle time is reduced.[17]

In our April 1997 report, we stated that the Army's efforts to improve its logistics pipeline for aviation parts and reduce logistics costs could be enhanced by incorporating best practices we have identified in the private sector. The Army's current repair pipeline, characterized by a $2.6 billion investment in aviation parts, is slow and inefficient. For example, in one case we examined, it took the Army 4 times longer than a commercial airline to ship a broken part to the depot and complete repairs. Also, for 24 different types of items examined, we calculated it took the Army an average of 525 days to repair and ship the parts to field units. The Army estimates only 18 days (3 percent) should have been needed to repair the items. The remaining 507 days (97 percent) were used to transport or store the parts or were the result of unplanned repair delays. Because of this lengthy pipeline time, the Army buys, stores, and repairs more parts than would be necessary with a more efficient system. We reported that implementing industry best practices can be used to achieve significant improvements and cost reduction. These practices are the prompt repair of items, the reorganization of the repair process, the establishments of partnerships with key suppliers, and the use of third-party logistics services. Our work in the Navy and Air Force depot activities found similar opportunities for improvement exist.[18]

Timely and accurate information systems are essential to improve depot operations and costs

Current information systems used to manage the depot repair process do not provide timely and accurate information essential for improving depot operations and reducing costs. In 1989, DOD established the Corporate Information Management Initiative to dramatically improve the way DOD conducts business, primarily by adopting best business practices used in the public and private sectors and building the automated information systems to support those improved practices. In Novem-

[17] "The Depot Repair Cycle Process: Opportunities for Business Practice Improvement," LG406MR1, May 1996, Logistics Management Institute.

[18] "Inventory Management: Adopting Best Practices Could Enhance Navy Efforts to Achieve Efficiencies and Savings" (GAO/NSIAD–96–156, July 12, 1996) and "Best Management Practices: Reengineering the Air Force's Logistics System Can Yield Substantial Savings" (GAO/NSIAD–96–5, Feb. 21, 1996).

ber 1992, DOD adopted a plan for identifying the best operational logistics information systems and deploying them among all the services and defense agencies. This strategy failed to produce the dramatic gains in efficiency and effectiveness that DOD anticipated.

Our review of depot maintenance systems envisioned under this plan found that even if the migration effort was successfully implemented as envisioned, the planned depot maintenance standard system would not dramatically improve depot maintenance operation in DOD.[19] DOD planned to invest more than $1 billion to develop a depot maintenance standard system that would achieve less than 2.3 percent in reduced operational costs over a 10-year period. Such incremental improvement is significantly less than the order of magnitude improvements DOD has said could be achieved through reengineering business processes—efforts that were being postponed until after the development of the standard systems.

DOD subsequently terminated the Depot Maintenance Information System and the depots had to write off their investment in this effort. Air Force depots wrote off about $34 million of their investment in this program in 1996, adding to their depot activity group losses that year.

Organic depots' mission is to support military customers' programs, which contain some inherent inefficiencies

While the organic depots can and must implement improvements to reduce the cost of their depot maintenance operations, they have some mission requirements that are inherently inefficient. However, performing these missions is necessary to meet the readiness and support needs of their customers. For example:

—Many of the depot level reparable components that organic depots must be prepared to repair have uncertain and infrequent repair requirements. For example, a contingency response or special training exercises may require expedited and/or increased repair needs to support key weapon systems and equipment. Likewise, depots are required to maintain repair capabilities to support end items and components that may be obsolete, are maintained in low quantities and/or have infrequent, sporadic requirements. Neither of these situations are conducive to supporting low-cost operations, but are necessary to meet the readiness needs of the customer.

—Changing operational requirements and changing budget requirements frequently result in changes to the production schedules. Production changes would result in losses when the volume of work declines or the mix of resulting work generates less revenue than planned. As previously discussed, budgets are developed 2 years in advance. Depot officials stated that changes in the production schedule that impact projected versus actual revenues are significant.

All services have initiatives to improve depot operations

Each of the military services have individual programs designed to address some depot maintenance inefficiencies. We have recommended such actions and are encouraged by these efforts. While it is too early to assess the specific results, our initial impression is that the programs are focusing on key problem areas, such as reducing repair cycle time. Some examples of the services improvement initiatives over the past few years include:

—The concept of regional maintenance in the Navy focuses on properly sizing the shore maintenance infrastructure to support a smaller naval force while maintaining the Fleet in a high state of readiness.

—The Air Force's Lean Logistics Program is designed to maximize operational capability by using high velocity transportation and just-in-time stockage principles to shorten cycle times, reduce inventories and cost, and shrink the mobility footprint, and providing flexibility to manage mission and logistics uncertainties.

—The Integrated Sustainment Maintenance Program in the Army regionalizes the repair of components to achieve efficiencies and cost savings.

—The Marine Corps' Precision Logistics Program is a change in culture and a pursuit of smart business practices regarding the speed and accuracy of information, speed and fluidity of distribution, and reduction in support cycle times.

Mr. Chairman, this concludes our statement. We would be pleased to answer any questions you or the Subcommittee may have at this time.

---

[19] "Defense IRM: Strategy Needed for Logistics Information Technology Improvement Efforts" (GAO/AIMD–97–6, Nov. 14, 1996).

SUMMARY STATEMENT OF JACK BROCK

Senator INOUYE. Thank you very much, Mr. Hinton. Mr. Brock.

Mr. BROCK. Thank you very much. You will have to excuse me, Senator, if occasionally I lapse into defense business operations fund [DBOF] rather than working capital fund. DBOF rolls off the tongue, working capital fund is a little harder to say.

A few months ago the Department changed the name of the defense business operations fund to the working capital fund. At this point it really did not change the way the operations work, but it is a name change. DBOF, and I am now correctly talking about DBOF, was established in 1991 by consolidating nine existing stock and industrial funds. The concept behind DBOF was very simple. We want to break even. We want our revenue minus the expenses to equal zero.

The thought was, by establishing the fund and having this concept of breaking even, it would put pressure on the individual functional components within DBOF to operate more efficiently and try to drive prices down or to stabilize prices. As a result of doing so, by making the functional areas more efficient, it would then free up funding for the warfighter, for activities that directly support the warfighter. This is a very good concept. GAO has consistently supported the concept, and we think that DBOF and now the working capital fund is very effective as a messenger to Congress and to managers within DOD. Sometimes the message is not very pleasant to hear, but as a messenger it has worked.

As I mentioned, the working capital fund was established in December 1996. It is essentially a rename, but it was done to clarify and to clearly establish that the services and components were responsible for managing the functional and financial aspects of their respective business areas. As we have discussed today and I am going to go into a little bit further later, that part of the original DBOF concept has been successful. The fund itself and the numbers that go behind it have opened windows into the operations of the various working capital fund activities that allow, again, both DOD managers, and people in oversight positions such as yourself, to really take a look at what is going on.

Quite simply, when you look at the fund, there is a simple financial formula you need to keep in mind, that revenue minus expenses equals zero. And that is zero over time. When you break this apart, revenue is a factor of the price of individual units of work times the work in inventory units being serviced or sold. So, if you want to increase revenue you either have to raise the price or you have to get more work. The expenses are a function of direct labor costs for direct labor, material, overhead, and functions like that. So on that side of the formula, if you want to reduce costs you have to lower those factors. So price is always the plug figure. If you have higher expenses, you raise the price. If you have more revenue than expected you can lower the price. It is that simple. It is sometimes difficult to implement, but the concept itself is very expensive.

When you do not break even, when you lose money, you incur a loss, which is supposed to be made up in the ongoing years. If you get a surplus, if you make money, then you distribute that in the

out-years. So, over time DBOF, and now the working capital fund, is expected to work as a break even concept. Now, on top of that they have to maintain a certain level of cash. Typically this is between 7 and 10 days of working cash, and this is just to be able to pay the bills on a day-to-day basis.

So, with that as background, I would like to spend just a few minutes talking about the results. By the end of this fiscal year DOD estimates that the funds will have an accumulated operating loss of about $1.7 billion, and this is since 1991. They have not achieved their goal of breaking even over time. By service and component, the three major components, the Army has lost $3 million, Navy $381 million, and the Air Force $317 million, and DOD-wide, $976 million. I would like to put a little caveat on the Navy $381 million. This includes about $1.5 billion in congressional assistance. In 1997 they got a $512 million transfer, which was, in effect, a subsidy to DBOF, and in 1996 they got a $595 million direct appropriations to help compensate for the costs of closing some of the shipyards and aviation depots.

The working capital funds have also had quite a problem with cash management. Until 1995, cash was managed centrally. That is DBOF managed cash as an entity. In February of that year, cash management was devolved to the individual components, largely to promote increased accountability and to put responsibility for cash management closer to the point where decisions were being made that would, in turn, affect cash balances.

Collectively the funds require between $2.3 and $3.4 billion in cash to operate. That is their safety net. As of March this year, the working capital fund had $2.5 billion in cash, just slightly above the minimum. However, the Army and Navy working capital funds are below the minimum, and without advanced billing both the Navy and Air Force would have negative cash balances and would be in violation of the Anti-Deficiency Act. Advance billing has, in effect, been a stopgap measure for the funds. At the time of the cash management devolvement in February 1995, cash advances were at $5.2 billion collectively. Since then, the working capital funds have worked off about $3.6 billion, but still have a balance of $1.6 billion outstanding. That was in January 1997. I think the balance now is a little closer to $1.3 billion. The Navy and Air Force had to advance collectively $2.9 billion last year, and the Navy had another advance billing of $100 million earlier this year.

Right now, just to recap that, in March 1997 the Army has $47 million in advance billing outstanding, the Navy has $715 million outstanding, and the Air Force has $534 million outstanding. Both the Army and the Air Force plan to liquidate their advance billing balances by the end of fiscal year 1998. The Navy has plans to liquidate its balance by the end of fiscal year 1999. To do this, the working capital funds plan on raising prices next fiscal year fairly substantially, to not only recover prior year losses but also to increase the cash balances for Air Force by $141 million and for the Navy by $500 million. So current plans show that next year they intend to collect $2.2 billion more than they plan to disburse.

Based on our review of the current account balances and projections of expenses and revenue, we think the Navy will have to con-

tinue to advance bill this year, and we are on the fence, it could go either way, for the Army and the Air Force.

When we look ahead to next fiscal year, we did a very limited review as part of our response to a provision in last year's Defense Authorization Act. We looked at how the five business areas determine their fiscal year 1998 prices. We looked at Army depot maintenance, Air Force depot maintenance, Navy shipyards, Navy ordinance, and Navy R&D. The goal for all five of these areas was to end fiscal year 1998 at a zero balance, that is, their accumulated operating results over time would be zero. We do not think this is going to occur. In fact, we think that these five entities will likely have an accumulated loss of around $300 million at the end of fiscal year 1998.

We believe that the Navy R&D facilities that we looked at are going to be close. We think they will come close to a zero balance. We think that the Army depot maintenance will likely have over $100 million accumulated loss at the end of fiscal year 1998. And we think that the Air Force depot maintenance will also have a loss in that same neighborhood. The Navy shipyards and the Navy ordinances we believe will have accumulated operating losses of between $25 and $100 million. So collectively this is about $300 million. Now, what this means is, by not correctly determining what the prices will be, there will be additional increase on prices in the out-years and it will further increase the possibility of advance billing in those out-years.

Just to conclude my remarks, again I want to emphasize that we think first DBOF and now the working capital funds are really very effective at giving you information that you need to manage. Without this kind of information you cannot tell how you are operating, you cannot look at how you set prices, you cannot really take a look at what your overhead is or what your direct labor hours are, you cannot do as good a job of estimating what your potential workload will be. The problem has been that they have not worked to achieve their objective of having a zero balance.

At this point, sir, I would like to turn it over to Ms. Denman who will go into our work on depots.

Senator INOUYE. Thank you. Mrs. Denman.

SUMMARY STATEMENT OF JULIA DENMAN

Ms. DENMAN. I appreciate the opportunity to be with you today to speak about factors influencing the cost effectiveness of DOD's depot maintenance programs. The factors that I will focus on in my oral statement include one, excess capacity and its impact on the cost of the program, two, inefficiencies within the depots themselves, and three, outsourcing without assuring that the private sector is the most cost-effective source of repair.

The growing impact of excess capacity is a key factor affecting depot maintenance efficiency as well as its cost. The key condition contributing to this situation is the 58 percent decline in depot maintenance workload since 1987, when the 38 depots in operation at that time had about a 200 million direct labor hour program. Declining depot maintenance work and increasing excess capacity in the depot system have translated into increased unit repair cost, as fixed costs must be spread over fewer units of production.

Improved capacity utilization can only be achieved by adding work. Since DOD is now in a downsizing mode, there are very limited ways in which to accomplish this facility utilization improvement. Closing some facilities and consolidating the workload in the remaining facilities appears to be the optimal solution in that it allows you to achieve economies of scale and reduce the overhead burden that must be allocated to each individual unit of work. This option represents the kind of decisionmaking that has resulted in plant closures throughout this country, both in the military and commercial private sector market, where companies have had to adapt to the realities of balance sheets and profit and loss statements. This same rationale has been forced on the DOD community as it has begun to adopt a more business-like mode of operation.

The Navy aviation community has been the most effective in using the base realignment and closure process to reduce its excess capacity, improve its capacity utilization, and get its remaining depots in a position to operate more efficiently in the future. While closure in 3 years has not been without problems, it has accomplished what it was intended to accomplish. However, the Air Force and the Army are now struggling with their depot maintenance balance sheets, and their customers are struggling with their pocketbooks. While prior BRAC recommendations in these services could have been implemented in such a way as to reduce this excess capacity in each of the service's depot systems, this has not occurred.

The Air Force depot system has the most serious excess capacity problem. Three of the six Air Force depots that existed in 1992 were recommended for closure during the 1993 and 1995 BRAC processes. However, the Air Force privatized one depot in place, and is now involved in a closure strategy that may result in privatization-in-place of the workloads at the other two depots. The Air Force now has about 57 million direct labor hours of capacity to accomplish about 32 million direct labor hours of work, leaving about 26 million hours of excess capacity, which is a level of about 45 percent. This is expected to increase to about 65 percent by 1999.

Our analysis indicates that by reallocating about 8.2 million direct labor hours of work from two closing Air Force depots to the remaining depots would reduce this projected excess capacity from about 65 percent to about 27 percent. It would lower the hourly rates by an average of $6 at receiving locations by spreading fixed costs over a larger number of units, and it would reduce the cost of operations at the receiving locations by as much as $182 million annually.

A similar situation exists in the Army as a result of its excess capacity and the way BRAC decisions have been implemented. These conditions are expected to increase costly excess capacity in the Army from 42 to 46 percent over the next 3 years.

Certainly excess capacity is not the only problem that the DOD depot system has. For example, we have reported problems in DOD's management of inventories, noting that these problems have led to excessive inventories while required parts are not on the shelves to support depot maintenance operations. Since material costs comprise about 40 percent of depot maintenance costs, efficiencies and cost reductions in the Department's management of

the supply system will certainly reduce the cost of the depot maintenance program. Further, by improving the depot maintenance repair process itself through reengineering and other cost saving initiatives, the cost of the depot maintenance program can be further reduced.

Essential to the achievement of improved efficiency and cost effectiveness, however, is the existence of a reliable and accurate management information system. The Department has not been successful in achieving such a system over the last few years, and, in fact, has recently terminated its most recent investment of about $270 million. In fact, Air Force depots last year had to write off almost $35 million that they invested in this program, which added to their losses during 1996.

In recognition of the need to improve the efficiency of their depot maintenance systems, each of the military services has implemented various improvement programs. While we have not evaluated these programs, we are encouraged that they are being implemented.

Finally, outsourcing without insuring that the private sector can accomplish workloads more cost effectively is another factor which can contribute to increased depot maintenance cost and to unanticipated losses in the services working capital funds. Reported projections of 20 to 40 percent savings are not likely to be realized. We have found that because these assumptions were overly optimistic, expected savings will not be achieved. For example, the Air Force reported to Congress that the privatization-in-place of its maintenance depot at the Newark, OH, facility would result in savings. The Air Force did not budget for increased cost, and, in fact, this year will incur losses as a result of cost increases of up to $30 million. This, in fact, represents about a 12- to 47-percent increase in the cost of operations prior to the privatization of the Newark facility.

Based on expectations of achieving significant savings from the privatization of depot maintenance, DOD plans to significantly increase its outsourcing of depot maintenance activities. We have found that the assumptions about savings are largely based on estimates made by the Commission on Roles and Missions and the Defense Science Board that savings of 20 to 40 percent would be realized. Savings of this magnitude are not likely, particularly because of the lack of competitiveness of the depot maintenance market. Our work shows that of depot maintenance contracts that have been let since 1996, about 91 percent of them were awarded on a sole source basis.

In closing, the depot maintenance business area is highly complex and intermingled with other logistics functions. Although DOD says it needs to generate savings from its depot maintenance programs in order to support DOD's modernization, this will be a difficult challenge. While there are many opportunities, meaningful cost reductions cannot be achieved over night and are more likely to take years.

We are now prepared to entertain your questions.

Senator INOUYE. Thank you very much. Pursuant to the policy established by Chairman Stevens for the conduct of hearings, the Chair will recognize members according to their time of attend-

ance. Additionally, there will be a time limit of 10 minutes per round established by the clock. With that in mind, I would like to proceed.

VIABILITY OF SUPPORT STRUCTURE TO SUSTAIN CONFLICT

Today, whenever one discusses the uniformed services of the United States, the one word that comes up most often is readiness. Are the men and women in uniform physically and mentally ready to stand in harms way? Are they ready to place themselves in jeopardy, and if necessary, make the supreme sacrifice for their country? Is the support structure or infrastructure of our Nation sufficient to assist and sustain a long-term conflict if such is necessary? Without a doubt, readiness applies to the whole system of our military.

As we all know, during World War II we had over 13 million men and women in uniform in active service and in the Reserves, and on the civilian sector in the shipyards there were over 140,000 men and women working—it was 380,000 during the height of the war. Today we have less than 22,000 in the civilian sector, and our Armed Forces consist of only 1 million men and women in active duty and about 1 million in reserve.

The question that I ask very likely cannot be quantified in numbers, but, Mr. Hinton, at what point do you believe that we should begin to worry whether we have the ability to respond to a crisis or a conflict? Have we reached that point where we should begin worrying that we have cut out all the muscle in our military and we are down to our bare bones, or do you believe that we can further cut our military without damaging our readiness capabilities?

Mr. HINTON. Senator, I think this is an area that we as an agency are as concerned about as you are, as we watch the drawdown that has occurred over the years. One of the areas that we have been really concerned with is the whole area of infrastructure and what it would take to support the troops that we have, the warfighters that are out there. We are concerned that we have not seen a clearly articulated policy that is going to lead us into the decisions that the Department needs to come up with, such as how much core capability is needed in the depots. It is the war time requirement that you are going to need to support your military force.

In the absence of that, what our concern is is that we have a lot of important decisions that are quickly approaching us as to how to make decisions around source of repair on a lot of our systems for which we do not have a clear picture of the path that we are going to go down. That is a concern that we have had, that is a concern that I think we will continue to have until we see what that policy is.

On the readiness side, in all of our work we have watched that. We followed the readiness indicators as they have come about from the reporting system over at DOD. We have seen pockets of some readiness concerns in the system. We have not seen them in a systemic way, but we have seen some pockets of readiness concern out among the active forces. So I do share your concern. It is something that we watch through all the work that we do at GAO.

One of the areas that we think that we need to concentrate on right now is the area of infrastructure. I think that it is an area that offers a lot of inefficiency, and if we can achieve that efficiency the dollars will go further. The $1 spent of O&M money in an inefficient way is one less dollar that we could have had to work in a more productive way in supporting the military fighter.

DEPOT INEFFICIENCIES

Senator INOUYE. Your presentation this morning would suggest that there is rather widespread inefficiency in our system which results in shortages and costs that cannot be covered. Are you in essence recommending that we close shipyards and depots?

Mr. HINTON. I am not at a point that I would say that at this point, Senator. Our concern here right now—and I think one of the things I want to do is applaud DOD in moving to get on top of its cost, because once you have your information on all your costs you are in a much better position as a decisionmaker to make the right decisions. We are not there right now, and I think as DOD moves forward and gets a handle more around the cost around infrastructure it may allow us to see where you need to put your dollars as opposed to bringing down more of the infrastructure. I think there is a lot of infrastructure that is out there that DOD needs to take a hard look at. It is beyond shipyards, I think. It is beyond depots. It is the entire infrastructure that we need to focus on.

There has been, as you know, from the Base Closure Commission, including Senator Dixon, indications that there would need to be, at some point down the road, another base closure commission. The question is the timing of it. I think that that is where I would sit. At some point I think we are going to have to visit that and make a decision, but that is going to be a call that is going to be a policy decision that is going to be up here.

Senator INOUYE. In other words, notwithstanding your report of inefficiencies, you believe that DOD is making much progress?

Mr. HINTON. I think DOD is making progress in identifying the cost of its operations. Once it gets its cost, I think that they are going to have to make some tougher decisions about the infrastructure. And to the extent that those decisions do not get made, that may lead you down the path for the need for another base closure commission.

Senator INOUYE. According to your report, the workload in Navy shipyards has dropped by 50 percent, but employment levels have fallen by 63 percent. How would I interpret the discrepancy between those numbers? Are the shipyards getting more efficient?

Ms. DENMAN. Within the shipyards there are two distinct factors that have to be recognized. One is the excess capacity in the nonnuclear area, and the other is the excess capacity in the nuclear area. Within the nonnuclear area, excess capacity has been brought down considerably. However, in the nuclear area there is still extensive excess capacity, and that, in fact, could grow if certain requirements are not generated over the next few years.

With regard to personnel, we do indeed say that the personnel have been drawing down faster than the infrastructure itself, and the services have attempted to adjust their personnel assignments based upon the downsizing of the workload.

Senator INOUYE. How do we determine excess capacity in the nuclear area when the determination of nuclear proliferation and nuclear power throughout this world is still to be resolved?

Ms. DENMAN. In assigning the excess capacity, certain assumptions have to be made based upon where we are currently within that policy and based upon what the requirements are for nuclear ships. What the workload requirement is should generate the capacity requirement within the shipyards. As long as there is some question about what will be generated, I would assume they would not take down this nuclear capability because you really cannot afford to build it back up again. It requires years and years to accomplish such a rebuild.

Senator INOUYE. I have many other questions to ask, but I notice that my light is on. If I may, I would like to call upon the distinguished Senator from Texas, Mrs. Hutchison.

Senator HUTCHISON. Thank you, Mr. Chairman. If you wanted to finish a line of questioning, I am here for the duration.

Senator INOUYE. We can come back to me later.

POTENTIAL IMPACT ON READINESS FROM CLOSING DEPOTS

Senator HUTCHISON. I want to explore a couple of areas. First I want to ask you, in your mission to look at these numbers, if you looked at the effect on readiness of trained workers not moving? Have you looked at the studies, Mr. Hinton, that show how many workers move when a depot or—I would not say a base is closed because that would not be exactly the same effect on readiness. But did you take into consideration those factors, and do you have a measurement that would?

Mr. HINTON. Senator, we are aware of people movements in all the closures and I am aware that this is one of the areas that you have asked us to take a look at. We have not gotten into that study, but it is an important area that we want to delve into. I would ask Julia to comment on what she has done in terms of looking at some of this, but it is an area that you have asked us to look into that we owe you a report back on that.

Senator HUTCHISON. Would you say then that in your studies that you are quoting that you did not look at the readiness issue of trained work force, that that was not in your mission?

Ms. DENMAN. Within our review of workloads that have been transitioned as a result of prior base realignment and closure decisions, we did look at what happened as a result of those consolidations in a general sense. Depending on where the closing depot was and what the receiving depot was, there were different percentages of people who moved. We saw some general areas where the transition went more smoothly than others. In particular, we saw that when workload was transferred to locations that were subsequently identified for base closures, it was very difficult for the workers to get their feet on the ground.

Another difficulty in making this assessment is that in some situations, particularly for Navy workloads, there is a terrific supply problem right now and this drives readiness indicators that might seem like they reflect untrained personnel but indeed the problem is a supply problem.

So I guess, in answer to your question, we looked at readiness indicators. We did not see significant problems. We spoke to the services about the results of their transitions to see to what extent they identified them, and we expect to do a more detailed analysis of the trained personnel as a part of our review from your request.

Senator HUTCHISON. I would just say that I do not think that what you looked at would be determinative of readiness, particularly if you are looking to the military to make that decision. It does not seem that you have enough information, from what you have said, to really know what the readiness would be, especially of technical depot maintenance such as aircraft and equipment that goes into an aircraft would be. So I just want to ask you if you do not feel that there is more input necessary to really make the determination of readiness, if you do not know anymore about who would move and what kind of experience you would lose.

Ms. DENMAN. The difference——

Senator HUTCHISON. Mr. Hinton.

Mr. HINTON. I will let her, then I will add to it.

Ms. DENMAN. The number of trained personnel that are needed in a transition depends a great deal upon the similarity of the workload that is being transferred. So it would be very difficult to make an overall assessment for every individual workload. What we would intend to do with regard to responding to your request is identify those particular areas where you have concern and do a more detailed analysis. With respect to engines, and I know you have particular concern about engines——

Senator HUTCHISON. If I could just, before you finish that point, say that I would like to make sure that it is clear in the record that you will be looking at this in more detail and that what you have done is not dispositive of the readiness issue.

Mr. HINTON. The point that I was going to add, Senator, is that throughout all of our work I think if we had heard a lot of noise about major readiness problems on any of the redistribution of work or that problem, we would have delved into that. We have not heard that right now, but I think we need to take a more detailed look into the issues you have raised for us to look at. But we would hear that as part of our work, and I do not think we would let that go unnoticed because I am concerned about if we do have readiness problems in this area that they do not get put off to the side.

I cannot sit here conclusively to you and say that there are not any, just that we have not heard a certain noise level out there that would indicate that there are some major ones that are happening. It might be, as Ms. Denman has said, as we go through some of the various commodities and compare those, maybe we would find some pockets of that, but I am not seeing overall through the system a major readiness problem that has been raised.

Senator HUTCHISON. Well, I would hope that you would look at it before you make a determination because if you have not heard it, I have.

Mr. HINTON. I understand your point.

Senator HUTCHISON. I certainly hope that—I am not sure that the GAO is really qualified to make the determination anyway. I mean, just that it is not in your mission and that it really should

be in the military function, which is no reflection on you, just that it seems that readiness should be a question for the military.

Mr. HINTON. There is a military judgment associated with that, no question about that. We come across that in our work all the time, and I do respect the professional opinions of the military. We factor those into our work, as well as the analysis that we do in these areas. We also go out to a lot of folks who have experience in these areas in collecting views of folks as we do our analysis so that we can be as complete and thorough and provide to you and the other Members of the Congress the more accurate information around these issues. We will do the job. I do not want you to think that we are not going to do that. We are going to do it. I think it is an issue that we need to focus in on.

But based on all the readiness work that we have done over the last several years as part of the drawdown in total and looking at the readiness indicators through DOD's reporting system has not revealed major readiness problems related to the depots as we have brought the forces down. Now, there may be some there, and we will get to that, and I commit to get back to you on that.

Senator HUTCHISON. Well, I certainly hope you are going to be even handed and also consult with the military. And if you are not able to cover a question of readiness, I hope you will just say so rather than making a determination that you——

Mr. HINTON. We will. We will do a fair, objective job on this.

60/40 WORKLOAD MIX

Senator HUTCHISON. Another question I would have is that we have this artificial 60/40 limitation that does inhibit or will inhibit the ability to have options. I will just ask you, what is wrong with options? What is wrong with a public-private sector competition? What is wrong with putting it out for bids and taking the lowest bids? You are making points about the other depots not having workload, but have you looked into other uses of the three depots, the Air Force depots I am talking about that are still there, and perhaps letting them have the ability to compete and also have other private sector work come in that would increase their efficiencies and their capabilities to do work on a competitive basis either with the depots that are to close and be privatized or in the free market?

Mr. HINTON. Senator, the 60/40 is grounded in legislation that is out there, along with other legislation that requires competition when you go to move workloads of over $3 million. We are not opposed to competition. In fact, GAO has always pushed competition, both in the public side and the private side. It would drive prices down. But what we need to see as we go through in this whole area is that the most cost-effective decisions are being made, and we are capable and have available to us the data for us to go in and look at these analyses and see if we are making the right decisions. I think that as we watch the debate here——

Senator HUTCHISON. Let me just interrupt you because my time is up. Have you looked at efficiencies that could be obtained by making the pie bigger and letting the depots that are at 50 and 60 percent capacity now take in private workload just like the others are to help make them more efficient?

Mr. HINTON. I do not think in exactly the way you are describing, largely because of the legislative impediment that is there right now. That has been part of DOD's efforts, trying to work with the Congress to see if there is potential to repeal that legislation, but we have not done that analysis that would look at that completely.

Senator HUTCHISON. I would just hope we would open our vistas and try to come up with something that maintains readiness, that is more creative in making the depots that are still in place more efficient, and yet keep the ability of the military to privatize the two depots that the BRAC said could be privatized, and keep faith with everyone and do what is best for our military as well as our taxpayers. I would like to ask you all maybe to open your sights a little more and see what we could do.

Mr. HINTON. I understand your point. The difficulty that the Department faces is that it has an excess capacity problem. It is the No. 1 problem that is driving up its rates right now, and we have got to find ways to deal with that in order to make the rational decisions that you need as you manage the depot area.

Senator HUTCHISON. That is just what I am saying. We are saying the same thing. We need to find ways.

Ms. DENMAN. If I might add, the difficulty is also that the private sector has excess capacity. Indeed, a survey that the Department of Defense did late last year revealed that the private sector has about 56 percent excess capacity with regard to their military capability, and a similar number for their commercial work.

Senator HUTCHISON. You mean military capability in commercial work?

Ms. DENMAN. Defense contractors who do military work reported excess capacity in the neighborhood of 56 percent, and in so doing expressed lukewarm interest in some of the partnering arrangements that DOD was trying to implement. We are, in fact, however, trying to identify all of the partnering arrangements that each of the military services has attempted, and, as a part of various requests, will be looking at them over the next few months.

My point in mentioning the excess capacity in the private sector is that in various studies, such as the Defense Science Board, the private sector contractors indicated that their concern was with the privatization of excess capacity. It does not solve the overall industrial excess capacity that currently exists when you add together both.

Senator HUTCHISON. My time is up. I will be back.

Senator INOUYE. Senator Domenici.

Senator DOMENICI. Thank you very much, Senator Inouye. Let me again for the record indicate what a pleasure it was to travel to eastern Russia and North Korea and South Korea and your home State just a few weeks ago. I think for those who wonder whether those kinds of trips are meaningful, from my standpoint, I never learned more about a current event in my 25 years here and never learned more about something that was important such as what is going on in North Korea. Had we gone nowhere else, it would have been a worthwhile trip. We will all be much more articulate and participatory when this Nation gets involved in what we should do about North Korea's situation regarding their food needs and others. I hope you thought it was as good as I did.

Senator INOUYE. Absolutely. I concur.

ISSUES REGARDING MILITARY COSTS AND READINESS

Senator DOMENICI. I have a couple of questions with reference to the DBOF, but let me talk a minute about base closures in the BRAC Commission. This may be my first opportunity, Mr. Hinton, to be in front of you, and for that I apologize. I missed some subcommittee hearings where you testified. What I am hearing about another BRAC and that we need to close more bases and lessen our inventory of infrastructure. I would suggest that from this Senator's standpoint, and I say this to my good friend the Secretary of Defense, they better tell us how the next one is going to work better than the last two, or from my standpoint I am not going to be voting for it.

First of all, we by now should have learned how to tell us how much the savings are really going to be. I think you would acknowledge that we have made some flagrant overestimations on what we are going to save. But for the most part we did not anticipate the effect of our own American laws on these closures. Had we talked to some American businesses about closing down a plant, they would have told you about all of the various environmental requirements and how clean it had to be when you decided that you were now going to turn it over to a city or up for sale, and how long it takes to get through a NEPA evaluation, and all the other things that go on.

Second, it would seem to me that one way or another we are left with more bases in certain areas than the military was telling us they needed. We were left with more in some States than anybody thought would be there. Again, it is not for me to make allegations, but I think we had better be very sure that the next time through we can have some assurance that politics will play the least possible role in which bases get closed or which bases stay open. I think we need some absolute assurance that we are not making bad estimates up front, only to find that things were just left out of the evaluation which made it a charade once it gets to the Commission and it was easy as could be to convince them that somebody had goofed and that this was not a cost beneficial closure.

All in all, I can tell you, having just put together the budget, where the Defense Department has its share of people who come and say we must give them everything they want. I hope the military does not think that every Member of Congress feels that way. There are many Members of Congress that feel we are not handling the money very well. We set up this capital, private sector fund that Mr. Brock had difficulty saying—which is the part that you had difficulty saying.

Mr. BROCK. Working capital fund. It just does not roll off the tongue, sir.

Senator DOMENICI. OK. Well, for some of us, working capital fund rolls off our tongue very nicely. For others it is difficult. It sounds too much like private sector for some, but for us it sounds kind of nice. But to see it fail, as it has, in terms of the arguments between the services and who is using more and who is not using enough, you know, they may be rather insignificant in terms of total cost to the military. But I tell you, it provides great fodder

for those who wonder what this whole thing is about in terms of how we get where we are.

Mr. Hinton, we heard arguments as we were putting together this budget of why should we give the Treasury the money that is going to be saved, because the inflation rate built into these long-term contracts is noticeably lower now than when the contracts were let. Most people say if that is the case, take the money away from DOD. If you have a 12-year contract and you estimated inflation at 3 percent or 3.5, and it is going to turn out at 2, one would say that ought to cost less. Just plain old arithmetic. We did not decide to take all of that out and say it is gone because we figure they should get a benefit there because of some areas where things did not work out so well.

From my standpoint, I thought I ought to let it be known today that DOD is going to have to do better. It is going to have to be more consistent at predicting base closures savings and excess infrastructure.

I want to add another part to this. I think we made a very bad mistake in the build up in the 1990's when we had some real money to spend. I think we should have fixed some of the infrastructure problems at old bases that we are going to keep. I will not dare ask for a general inventory of how many buildings, water and sewer facilities, dormitories that we have across this land in areas that we are going to keep, and how many billions of dollars are going to be necessary to modernize those over the next few years, including housing. There is no question that we have had some major programs for housing, but it is pretty slipshod when we just take this base and say in the next 15 years our men and women are not going to be living in decent housing. We ought to do better. Part of that is your job, and part of it is some other people's job.

But I tell you, if the "Quadrennial Defense Review" does not start to address some of those issues, then it is not going to be given a lot of credit when it comes up here and people look at it.

My last comment is we all want readiness, and what we are doing in our quest for readiness, we are not taking into account that readiness also involves the most modern equipment. So we are giving the troops the benefits they deserve and that their families deserve, but what is getting the short end of the stick is new equipment and new R&D applied to new things. That is bothering DOD in the "Quadrennial Defense Review," there can be no doubt about it. They are trying to pay for that in the out-years and they are finding we are not giving them enough money in those out-years for that. If you come up here and say you are shortchanging the men and women in the service for long-term equipment, we are going to tell you this is a tough balancing act and we know that it is tough.

It did not give you a very good opportunity to answer these questions, but I came here because I had something to say. I have said it, and if you would like to comment on any of the ideas that I have stated, I would greatly appreciate it. If you would choose to make your comments more comprehensive, fine.

Sooner or later, Mr. Chairman, we are going to have to ask what have we learned from the BRAC closures, and what we learned

that did not work right, how do we fix it if we are going to have some more closures. I think you would agree with that. It did not help you in your budgets when you were chairing this committee. It did not help at all.

So I stop on that, and thank you very much.

Mr. HINTON. Senator, I would just make one comment. In terms of what worked well and what did not work well, we have undertaken a job to look at lessons learned from the base closure commissions. We have that work in progress right now, and I expect in the next couple of months we will be in a position to come back up and share with the members what we have learned. We are covering all the bases, all the participants, both DOD, the outside participants, communities, and everything to get that perspective in there. I think that that will go a long way helping the decision-makers up here to make decisions if we are faced with another round that we have to go through.

Senator DOMENICI. Mr. Brock, did you have any comment?

Mr. BROCK. No, sir. I think Mr. Hinton covered that very well.

Senator DOMENICI. Thank you very much, Mr. Chairman.

Senator INOUYE. Thank you. The subject matter we are discussing may seem dull and boring to the uninitiated, but what we are discussing this morning is rather fundamental. The decisions we make today may impact upon our readiness and our preparedness.

I am one of the dinosaurs in the U.S. Senate. I have been around for awhile, and as a little hobby I do some reading. I noted in one of my readings that after every major conflict in which we have been involved there is a great public outcry to reduce the military, if not put it out of commission. After the great revolution in which General Washington led his forces, numbering about 30,000, and then later on became President, he requested the Congress to at least give him a Continental Army of some size so that he could protect the borders. Congress, after much heated debate, made a decision and created a Continental Army that consisted of 85 men. He requested over 1,000, but he got 85; 55 at West Point and 30 in Pittsburgh, which was the headquarters for the Continental Army. And we wonder why the British came back again and nearly whacked us.

After World War I there was a huge outcry to just wipe out everything, so on the eve of World War II, about 1 year before we experienced Pearl Harbor, Brigadier General Patton was assigned to Fort Benning and given the assignment of revving up an armored corps. There were 365 vehicles which they called tanks at Fort Benning. Of that number, about one-half could not move because of either no tracks or no bolts. He called up the War Department, and the War Department told him that what you have is what you get, and that is what you will make do with. Fortunately, as you know, General Patton was a multimillionaire, so he took his staff to Atlanta, GA, to Sears, believe it or not. He went into the parts department, he signed a check, and as a result we got our first armored corps.

And now we have this situation of two BRAC's and a suggestion for a third BRAC. I am beginning to get a bit concerned that maybe history is repeating itself. To suggest that the millennium has arrived and we have no problems in this world is not only fool-

hardy, it is suicidal. Like all of my colleagues, I do not wish to spend money, but I would hope to prevent war. It costs a few dollars, but when one thinks of yellow ribbons and gold stars, I would prefer spending a little more than just having gold stars and yellow ribbons. I hope that you will keep that in mind.

Up until now this committee has adopted the policy of readiness. For example, it would be cheaper I suppose to have one shipyard build submarines, but we have made a deliberate policy to maintain two shipyards so they would compete. I suppose it is cheaper to have one or two air depots in the United States, but we have made a conscious decision to keep five open at this time. The DOD has suggested we keep Texas and California open, and so I hope that if we are to make a decision, and I expect we will soon be called upon to make a decision, you will be able to provide us with information that we can act upon. In coming up with that information I hope you will very closely consult the Air Force and DOD. Because none of us relishes the thought of voting for Texas or against Texas, or for Oklahoma or against Oklahoma.

As the Senator from Texas has suggested, keeping in mind readiness and preparedness, it should be possible to have some sort of system where we can maintain all of our air depots.

With that, I would like to once again call upon the Senator from Texas.

Senator HUTCHISON. You have stated the case very well, and I think we probably ought to go on to the next panel. Maybe I will be able to talk about readiness with some of the people who have been really dealing with this issue.

I would just say that I think saying that there is excess capacity in the private sector is not really bearing on what we could do if we are more creative and innovative about the use of the facilities that we have, because right now we have got bids out the window for work to be done at Kelly, privatized work, and I think maybe some private sector companies that have excess capacity might see the benefit of doing public work and private work in the same place and closing a private facility. That is an option. I just want the options to be there and I want competition to be there, and I hope the GAO will not foreclose the issues of readiness or use just numbers to determine readiness when we are looking at these issues. I think we can make the three in place and the two that are authorized by BRAC to be privatized work to the benefit of everyone, and I would just ask for GAO's help in looking for ways to do that.

Mr. HINTON. Senator, we will continue to follow the issues and provide our analysis, and I will take into consideration everything that has come up today. You know, I think the subject that we are dealing with and talking about here is one of inefficiencies right now. It is how do you overcome that and make that dollar go further. One dollar that is spent in an inefficient way is one less dollar we have to give the warfighter, that is kind of the way we look at it and that is why our work has been directed to try to find ways we can overcome the inefficiencies in the system.

Senator HUTCHISON. Thank you, Mr. Chairman.

Senator INOUYE. Senator.

Senator DOMENICI. I have no further questions. I have talked enough.

ADDITIONAL COMMITTEE QUESTIONS

Senator INOUYE. Mr. Hinton, Mr. Brock, Ms. Denman, on behalf of the committee, I thank you for spending time with us this morning. If I may, on behalf of some of my colleagues I would like to submit questions to which I hope you will respond.

Mr. HINTON. We sure will. Thank you very much, sir.

[The following questions were not asked at the hearing, but were submitted to the Office for response subsequent to the hearing:]

QUESTION SUBMITTED BY SENATOR RICHARD C. SHELBY

Question. Mr. Hinton, in your statement, you indicate that GAO analysts recognize that the nature of some of the service depot work is inherently inefficient. If the depots are privatized, how would mission critical readiness be provided by a private enterprise in a competitive marketplace if such missions are inherently inefficient?

Answer. In reality, it may not be practicable to provide these services competitively under the present conditions. It is easier and more efficient to provide industrial capability, including repair and overhaul, for equipment that is commercially available and off-the-shelf, than it is for military unique systems and equipment that form the foundation of DOD's weapons inventory. Acquiring depot maintenance and repair services by contract for military unique items—particularly where demand is infrequent, the volume of work is small and/or inconsistent, the technology is old, parts availability is uncertain, or the capital investment required to go into the repair business is large—is often done in a non-competitive environment for a number of reasons. For example, the government may not be in a position to offer the work competitively because it does not own the technical data and must rely on the original equipment manufacturer. Additionally, because of the market conditions surrounding these workloads, it may not be economical to have multiple repair sources. Further, multiple repair providers may not be interested in bidding on the work. Our research has determined that 91 percent of the nonship depot maintenance repair contracts were awarded non-competitively during the past two years.

DOD has stated that it would like to increase the amount of contractor logistics support contracts, which are generally long-term sole source awards to the original equipment manufacturers. Historically, the Department has been able to count on these contractors to provide required maintenance services. The question that must be answered is whether privatizing depot repair and overhaul under these conditions is economical. Third party providers would like to have more of DOD's repair business, and indeed when outsourcing has been used successfully by the private sector, it has usually been through the use of third party providers. However, using third party providers would likely provide a greater risk and may not be a practicable alternative for many complex military unique systems. Traditionally, the organic depots have provided an effective and ready alternative source of depot maintenance capability. As DOD begins to consider the extent to which it plans to privatize depot maintenance in the future, it will be important to consider the value of this capability and whether the same service can be achieved in terms of quantity, timeliness, quality, and cost by relying on the private sector.

QUESTIONS SUBMITTED BY SENATOR ROBERT F. BENNETT

Question. Mr. Hinton stated that he hasn't seen a clear articulated policy regarding depot maintenance. How does the absence of a clear policy impact how the Air Force is managing its depot maintenance from your view? Do you believe it is realistic for the Congress to expect the Department of Defense to clarify its policy?

Answer. Let me take the second point first. It certainly is realistic for the Congress to expect DOD to clarify its depot maintenance policy. Such a step is essential to the accomplishment of any business activity. Without having a clear depot maintenance policy, it is uncertain how DOD intends to approach its depot maintenance mission in the future and what is the future role of the public depots and the private sector in providing that mission. Although DOD issued a policy report to the Congress in March 1996, this report was not well-received. Since that time, DOD has not clarified that policy so that the Department's plans regarding future performance of depot maintenance between the public and private sectors is clear. After implementation of prior Base Realignment and Closure (BRAC) decisions, DOD will be left with 19 major depots and other smaller industrial activities that perform

maintenance activities, all having significant excess capacity and rising overhead rates caused by this excess capacity. Likewise, other maintenance facilities that are either government-owned and contractor-operated, owned and operated by contractors, or owned by reuse authorities and leased to defense contractors also have costly excess capacity that is increasing their rates. There is too little workload to efficiently spread among the available sources. Moreover, there is no approved plan to improve the efficiency of remaining depots, including the elimination of excess capacity.

Further, the uncertainty of DOD's policy extends beyond depot maintenance to other aspects of weapon system support such as material management and program management. DOD has expressed a preference for using contractor logistics support for new systems. This management approach generally was used in the past for commercial derivative systems that have established infrastructure in the private sector. It is not clear that this approach would be the most cost-effective for DOD weapon system management of military unique systems, particularly since it would involve continued sole-source contracting with the original equipment manufacturers. Further, DOD needs congressional support before making significant shifts of these functions and activities from public sector performance to private sector performance. We have reported that we believe DOD should develop a strategic plan that provides a clear framework for reducing defense infrastructure. This plan needs to be presented to the Congress in much the same way that DOD presented its plan for force structure reductions in the Base Force Plan and the Bottom-Up Review. This would provide a basis for the Congress to oversee DOD's plan for infrastructure reductions and allow the affected parties to see what is going to happen and when.

Until DOD clarifies its policy and reaches a consensus with the Congress with regard to the respective roles of various public and private sector entities in implementing that policy, it will be difficult to resolve the disparities that currently exist, including how best to eliminate excess capacity in the public and private sectors and how to derive the most cost-effective support system.

Question. You have described excess capacity as being one of the biggest problems facing DOD. The Air Force seemed to be saying they are addressing excess capacity by privatizing. From your perspective, how effective is privatization in reducing excess capacity? Why or why not?

Answer. Although prior BRAC decisions resulted in some improved efficiencies and cost reductions in DOD's infrastructure, DOD continues to have too much infrastructure to support its downsized force structure and support requirements. While decreasing the civilian workforce by 26 percent and the military workforce by 29 percent, commensurate reductions have not been made to DOD facilities. As long as this condition exists, DOD will be paying more than needed to accomplish required operation and support missions. This condition is particularly troublesome since DOD wants to increase its investment in new and upgraded weapon systems and hopes to help pay for these planned initiatives by reducing infrastructure costs.

Outsourcing or privatization is often recommended as an approach for reducing the costs of some DOD activities, including depot maintenance. We have noted that particularly where a military function or activity is already performed in the private sector and there is a highly competitive private sector market, there is a strong likelihood that savings from outsourcing can be realized. We have also noted that when privatization occurs without reducing excess capacity, it is more difficult to achieve savings through privatization—particularly privatization-in-place. We have examined the costs at an Air Force depot closed as a result of a 1993 BRAC decision and found that maintenance costs in the privatized facility are 12 to 47 percent higher than the costs prior to privatization. We also found that costs at a privatized Navy depot are more than the costs of performing the same work in remaining Navy depots. The current Air Force plan to compete the workload from the two closing Air Force depots could result in reductions to public sector excess capacity if the public sector wins the competitions. If the private sector wins and the work is privatized, excess capacity would not be reduced at the remaining public depots. With respect to the impact on excess capacity in the private sector, a recent Defense Science Board study team concluded that privatization-in-place should be avoided, since it tends to preserve excess capacity. A privatization task force comprised of top executives from the aerospace industry concluded that privatization-in-place "inhibits the realization of cost savings intended from base closures and the performance goal improvements that privatization is intended to achieve. Privatization-in-place, therefore, does not solve the excess capacity problem within either the public or the private sector of the defense industrial base."

Question. You mentioned that the private sector has a problem with excess capacity. There are some that indicate that this does not impact the Department of De-

fense. Please explain a little more clearly how excess capacity in the private sector impacts the Department of Defense, and more specifically the Air Force.

Answer. As a result of defense downsizing, private sector firms report they have significant excess capacity. In a survey recently requested by the Deputy Undersecretary of Defense (Logistics), defense contractors reported they had 57 percent excess capacity for military work and 56 excess capacity for commercial work. We have reported that excess capacity in the private sector is particularly acute for fixed-winged aircraft; communications, electronics, and avionics equipment; and engines.

Excess capacity in the private sector increases the cost of the goods DOD procures from private sector firms having this excess capacity. When workloads are reduced, fixed overhead costs must be covered by fewer production units, increasing the cost of each item produced. Recognizing the impact of these costs, DOD supports defense contractor downsizing efforts by allowing the costs of contractor acquisitions and mergers to be charged to defense contracts.

Question. There have been some accusations that the data you obtained was unreliable. Please describe the process wherein you gather your data. In addition, have there been any difficulties or irregularities in obtaining requested information from the Air Force regarding the cost and criteria of Air Force privatization efforts?

Answer. To the extent possible we used approaches, methodologies, and data developed by DOD. For example, to estimate the potential overhead savings from transferring the closing depots' workloads to the remaining depots, we looked at similar evaluations the Air Force performed in evaluating alternatives for consolidating workloads at various locations during its 1995 BRAC process. Much of the data we used was certified during the BRAC process. We decided to base our analysis on 8.2 million hours of work—or about 78 percent of the projected fiscal year 1999 workload. We did this because the Joint Cross Service Group BRAC distribution would have transferred 22 percent of the Sacramento and San Antonio workloads to another service's depot or to a private sector firm. While these actions would have generated consolidation savings to other DOD depots or to the private sector, they would not have benefitted the remaining Air Force depots. We believe this approach resulted in a conservative savings estimate, and provided flexibility for less workload being generated without reducing the savings estimate we computed. We used a scheme developed for BRAC 1995 by the DOD Joint Cross Service Group for Depot Maintenance to identify the post BRAC location for repair; however, we modified it slightly to reflect more current workload distribution information that indicated the C–5 would be transferred to Warner Robins rather than Oklahoma City. We provided each center a breakout of the transferring workload they potentially would receive by commodity group. We then asked center personnel to estimate how additional workloads would affect their hourly rates by analyzing fixed- and variable-cost categories, excluding material, which we assumed would not change. In making their assessments, the three centers used the approach and assumptions developed by executive business planners from all five centers in developing the downsize-in-place Air Force proposal developed during the 1995 BRAC round as an alternative to closing depots. Air Force officials certified the data developed using this approach to the BRAC Commission. We discussed this methodology with workload and privatization officials at the Air Force Materiel Command. They agreed that our approach was sound for assessing the impact of additional workload on a depot's rate structure. We also provided the closing centers with an opportunity to comment on our methodology. San Antonio center officials agreed with the general approach, but commented that increases in variable costs were subjective. Sacramento center officials chose not to comment. Subsequent to our analysis, Air Force Materiel Command personnel provided us a document indicating that they had independently analyzed potential savings from workload consolidation. This document noted that annual savings of $367 million could be achieved through consolidations and an additional $322 million could be saved by relocating workload to depots that already had lower hourly rates. Air Force officials later stated that this information was only one of several excursions developed to determine how our consolidation savings were developed. Air Force officials have stated that they do not agree with our cost analysis, but to this point has not provided specific data or an alternative analysis to support its position.

Question. If DOD pursues privatization of excess capacity without consolidating the workload, is there any evidence that this could increase costs to the Department? Does the failure of the Air Force to reduce excess capacity prior to competing the workload impact savings that could come from privatizing?

Answer. Privatization would increase DOD's costs unless the costs of performing the work after privatization are so much less than the current costs that the savings would offset the savings that could be achieved by consolidating the workloads at remaining Air Force depots to improve utilization, increase efficiencies, and spread

the fixed overhead costs at the remaining facilities over a larger number of production units. We estimate that savings of about 30 percent would be required over the current cost of depot operations at the two closing depots facilities.

Question. Your report states that the Air Force retains over 50 percent excess capacity. Please explain the definition or measurement of excess capacity from the perspective of GAO, BRAC, the Air Force, and the private sector.

Answer. Excess capacity is the difference between the capacity of a facility to perform work, usually measured in direct labor hours, and the amount of work that is actually performed in that facility. We refer to capacity that is derived by determining what is the potential for doing more work after the programmed work is accomplished, assuming the production capability will be used to the maximum extent, which would require the availability of additional trained personnel. This same measure, which is sometimes referred to as maximum potential capacity, was used in the BRAC process to identify the potential for consolidating like workloads to improve capacity utilization of underutilized facilities and reduce redundancies that existed among depots. DOD normally measures capacity by an analysis that constrains facility and equipment availability by the availability of trained personnel and the organization of work stations, assuming an 8-hour workday, for 5 days a week. Private industry uses the maximum potential capacity approach for measuring facility utilization. A maximum potential capacity utilization of about 75 to 85 percent is generally considered by commercial companies to be an efficient operating level.

Question. I believe the Air Force is ignoring the BRAC directive to consolidate work. In addition, I am also concerned that the "public-private" competition has been set up to accomplish a predetermined outcome. How would the GAO characterize the current "competition" for the workload at Kelly and McClellan. Would you say it is a fair competition to both sides? Have there been any irregularities of which the Congress should be aware?

Answer. The only solicitation that has been finalized at this time is that for the C–5 workload at the San Antonio depot. We have stated that this acquisition has all the requisites of a competition. Nonetheless, both public and private sector offerors have raised certain concerns about this competition. For example, the private sector has raised concerns about whether the public offeror will include all relevant costs. Depot personnel have questioned whether the private offerors will "buy-in" and are concerned that public depots cannot partner with a private firm and cannot protest an award through us. Until the competition is completed, it will not be possible to make an assessment of this competition process. Since the solicitations for the other two competitions have yet to be issued in final form, we cannot comment on them at this time.

DEPARTMENT OF DEFENSE

DEPOT OPERATIONS

STATEMENTS OF:

GEN. HENRY VICCELLIO, JR., COMMANDER, U.S. AIR FORCE MATERIEL COMMAND

GEN. JOHNNIE E. WILSON, COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND

VICE ADM. DONALD L. PILLING, DEPUTY CHIEF OF NAVAL OPERATIONS, U.S. NAVY

Senator INOUYE. Our next panel consists of the Commander of the Army Materiel Command, General Wilson, the Deputy Chief of Naval Operations, Vice Admiral Pilling, and the Commander of the Air Force Materiel Command, General Viccellio.

Senator HUTCHISON. Mr. Chairman, as we are welcoming this new panel, I want to say that General Viccellio is using his very last day in the military to be with us. I think it is pretty special that he has chosen to go back to God's country in his retirement. I just want to say how pleased I am to acknowledge his wonderful service to our country, and that he would spend his last day with us is probably not his first choice but nevertheless we appreciate the fact that he is doing that.

Senator INOUYE. Senator, I thank you very much for advising us of that. I wish to join you in expressing the gratitude not only of this committee but of the U.S. Senate for the many years of great service you have rendered to our Nation.

General VICCELLIO. Mr. Chairman, thank you very much. I doubt if you remember it, but I would like to follow on Senator Domenici's comments about your travels. Twenty-five years ago I worked here in this building as an Air Force liaison officer and I got the opportunity to travel with you to the Middle East just following the 1973 war, and indeed that was a learning experience, certainly for me and I think for both of us.

Senator INOUYE. See what happens when you travel with me, you get stars. [Laughter.]

Senator HUTCHISON. I am sure everyone has taken note of that.

Senator INOUYE. General Wilson, General Viccellio, and Admiral Pilling, you have heard the comments of GAO. You each have the opportunity to express the views of your Department, and naturally we hope to hear from each of you on what your service is doing to improve its management of our depots and how you are coping with downsizing. Your formal statements have been made part of the record.

So, in recognition of General Viccellio's last performance here, I call upon you to open the debate, sir.

General VICCELLIO. Thank you very much, Mr. Chairman and distinguished members of the subcommittee. Indeed I have a pre-

pared statement, but in the interest of time and in anticipation of some great discussions here later this morning, I think I would just submit it for the record, with your concurrence.

PREPARED STATEMENT

But I would like to say on behalf of everybody in my command, and I am talking about our uniformed members and our civilian work force who, as you know, are a big part of AFMC, how much we appreciate the continued support of this subcommittee in ways that not only help us in a mission perspective but help us with quality-of-life issues that are so important in an all volunteer environment. As much as anybody on either side of Capitol Hill, your continued support and perspectives have been instrumental in our ability to get the mission done, and we appreciate that.

[The statement follows:]

PREPARED STATEMENT OF GEN. HENRY VICCELLIO, JR.

Good morning Mr. Chairman, members of the Defense Subcommittee. It's a pleasure to be here; we appreciate the continuing support of this subcommittee for our mission, the initiatives that bolster our force's readiness, and your care for the people working hard to sustain our capabilities in the field.

The subject of evaluating the disposition of selected portions of our depot maintenance activity and structure through public/private competition is both important and timely. It is important in the sense that our Nation's commercial sector has traditionally played, and today continues to play an important and productive role in our depot capabilities. It is timely in that a dramatically changed world situation is driving corresponding changes in both our force sustainment needs and the manner in which we might best meet those needs.

Today's Air Force depot structure and logistics support philosophy were forged by the experiences of WWII and shaped through more than four decades of Cold War challenges. We faced the imperative of sustaining large air forces, deployed worldwide against a formidable foe in potential conflict envisioned to occur on a global scale and be of a protracted nature. We established a robust organic depot infrastructure that at one time included 11 Air Materiel installations, sized to overcome time-consuming transportation and uncertain logistics command and control systems by pushing, producing, manufacturing, and repairing large amounts of supplies and equipment to our fielded forces. Faced with a perceived risk to our very national survival, we emphasized policies, and were supported by legislation that ensured substantial organic logistics production capacities.

The fall of communism and the ensuing decline of the Soviet Union presents our nation with a fundamentally altered set of national security imperatives. For the foreseeable future, we'll face the possibility of regional conflicts not unlike Desert Storm, as well as the "operations other than war" that have captured so many headlines over the past five years. Our success in recent contingencies has illustrated, among other things, the potential for technology to transform logistics needs through dramatic improvement in the reliability of our modern weapon systems and the impacts of intransit asset visibility and a focused, responsive transportation system.

As we look toward the future, several observations are worth mentioning. First, day-to-day readiness, or preconflict logistics support, has replaced mass sustainment, or support during the conflict as the predominant contribution and principal focus of our logistics activity. Second, the government owned and operated infrastructure supporting that activity is excessive and needs reduction—an initiative given both direction and timing by the 1995 BRAC Commission. Finally, the role and contribution of our nation's commercial sector in this activity—already substantial by any measure—warrants renewed consideration and review.

It is the confluence of all these trends and factors that make reconsideration of the organic/contracted mix in our depots through the public/private competition process the right step for both our nation and our Air Force. An important point to add is that this would be the case BRAC or no BRAC, closure or no closure. This process, fueled by pressures of the competitive marketplace will allow us to explore the capabilities, costs and cost avoidances associated with alternative approaches to our activities, and may offer important command-wide advantages while helping to

mitigate the costs of our depot closures. All this makes competition something we want to pursue; we intend to do so with due caution and in consideration of all applicable statutes and policies.

Mr. Chairman, there are many strongly-held opinions that play on the issues we'll discuss today. There are those who would propose wholesale consolidation of our depot workload into non-closing organic facilities without careful consideration of the substantial costs and cost avoidances involved, or without any attempt to explore the potential that a competitive marketplace might offer. I feel this is shortsighted. In contrast, there are those who advocate wholesale privatization of our Air Force depot infrastructure, without regard to the cost and capability factors. I do not subscribe to this view. There are those who feel that additional involvement by the commercial sector in our defense depot activity puts America's security at risk. I do not agree. There are even those who feel that increased participation by our nation's businesses would lead to the eventual dismantlement of our organic logistics infrastructure. Not only do I disagree, but I feel that innovative partnering arrangements with industry could well prove to be a principal tool, not just to share the costs of sustainment, but to grow the size, increase the tempo, and improve the efficiency of our non-closing installations.

Mr. Chairman, members of the Defense Subcommittee, the concept of exploring the options for disposition of carefully selected portions of our Air Force logistics activity through the process of public/private competition is not some misguided venture. In our view, it offers distinct opportunities and potential advantages which we are exploring with due caution, and which I look forward to discussing with you. I know I speak for my colleagues alongside me when I thank you each, once again, for your continued support for our Air Force men and women, both in and out of uniform.

PREPARED STATEMENT

General WILSON. Good morning, distinguished Senators. Sir, since General Viccellio has been my mentor over a number of years, I am going to follow his lead and be brief. So I will just say thanks for having the opportunity to be here. On behalf of the young men and women that serve in your Army, I appreciate the support that you all have given us as well. I will stand by for any further questions.

[The statement follows:]

PREPARED STATEMENT OF GEN. JOHNNIE E. WILSON

Good morning, Mr. Chairman and distinguished committee members. Thank you for inviting me to address the status of the Army's maintenance depots. I hope that I can provide a helpful perspective on the impact of the depot level maintenance mission in the reshaping of the federal civilian workforce, the impact of constrained funding of depot workloads, and the effect of current laws and statutes concerning the outsourcing and privatization of depot workloads.

The mission of the Army Materiel Command is to research, develop, acquire, supply and maintain the equipment required to meet Army, and in some cases, joint service warfighting requirements. Accomplishing this task means nurturing a viable and responsive industrial and depot maintenance base balanced between private and government capabilities. Our government and contract employees are the best in the world and are dedicated to producing quality products for our service men and women. Let me begin by discussing the overall state of the Army's depot maintenance base.

BACKGROUND—BRAC DECISIONS

Depot maintenance has seen significant changes since my predecessor at the Army Materiel Command last spoke to this distinguished committee several years ago. The biggest impacts have resulted from the decisions of the last Base Realignment and Closure (BRAC) Commission. Our original proposal, as detailed in the Army stationing strategy, was to retain core maintenance depots to perform ground combat, communications-electronics, and rotary-wing aircraft maintenance missions. However, BRAC, now being implemented, realigned two of the Army's five maintenance depots and retained the three core maintenance depots as well. To be specific, Letterkenny Army Depot, in Chambersburg, Pennsylvania, will cease work on artillery systems. This mission is transferring to Anniston Army Depot in Anniston, Ala-

bama. Letterkenny's missile guidance and control maintenance mission will be transferred, either to Tobyhanna Army Depot—also in Pennsylvania—or to the private sector if it is the better value. Red River Army Depot, in Texarkana, Texas, is also being BRAC realigned. BRAC left Red River Army Depot with only one major depot maintenance mission—the Bradley family of fighting vehicles, which includes the multiple launch rocket system (MLRS). The depot maintenance for the M–113 family of vehicles and the M–9 armored combat engineer vehicle is moving to Anniston Army Depot. In addition to the Bradley mission, Red River retains its ammunition mission, rubber production facility, and missile recertification office. Corpus Christi was unchanged by the last BRAC decisions, except for the absorption of Navy helicopter work as a result of BRAC 93. Further, Tobyhanna Army Depot, under the BRAC decision, is set to receive the electronic maintenance mission from Sacramento Air Force Logistics Center.

STRATEGY

Several challenges result from changes brought on by BRAC decisions, plus the general downturn in workload due to the Army reshaping. We are now faced with challenges to keep our remaining depots running efficiently and cost effectively while retaining the viable capabilities needed to support America's Army. Because of this, we have developed a depot strategy for the Army which will get us to the right size. The strategy was developed to provide the most economically efficient and militarily effective rebuild facilities in the world in terms of numbers of people, distribution of workload, sizing of facilities, and plant equipment. We will accomplish this by prudent investments, smart divestitures and a deep sense of responsibility for the workforce, the community, and our Army. To successfully implement our strategy we will: Maintain a viable depot maintenance capability; provide the depots with maintenance workload; assure the public-private split complies with existing statutes—and results in best value for the military; size the work force to funded workload; and size the facilities to funded workload.

Our first and foremost goal is to maintain a viable Army depot maintenance system, which effectively provides the depot maintenance support required for warfighting. The reason for this is the mission critical role of a depot—that is, the depot supports pre-deployment, deployment, and reconstitution of the weapon systems and equipment used by the Army in conjunction with the Army's force projection capability. Our depot system for the foreseeable future consists of five maintenance depots, two with somewhat limited missions as I have already described and three with full, distinct missions.

The next major piece of our strategy is to correctly workload the Army maintenance depots. To retain the capability to perform essential maintenance, the depots must be given adequate work. This consists of depot maintenance of major items and depot level maintenance of reparable components.

In choosing and prioritizing maintenance requirements to be accomplished in a particular year, we have to select the source for the work to be performed. At times—for economic, preservation of the industrial base, or other reasons—the source of repair may be in the commercial sector. We include in our decision-making process the assurance that we are complying with all existing statutes for performance of depot maintenance; in particular, the core logistics, "60–40," and the "$3 million" statutes.

The first three elements of our depot strategy deal with the depot maintenance dollars we receive from Congress. The last two concern sizing the depots to perform the work we need to accomplish today and in the future. The most difficult task concerns the people part of this sizing equation. I want to stress that people are our most important asset. However, during the cold war we kept excess depot capacity as a hedge against risk. Depots were sized to support the fight in two, three, and sometimes four simultaneous theaters. Those days are gone. However, everywhere we have a depot there are thousands of employees who have dedicated their careers to the Army. In our depot community they are invaluable. I am proud of each and every one of them. They are our unsung heroes in supporting our young soldiers in the field. However, when you look at the picture of how many people we need for our long-term workload, there are more people at the depots than are required for the shrinking funded workload. Therefore, the placement of the work—considering all the constraints of the defense budget, BRAC, other laws, and efficient management of the mix of skills needed, tells us where we must make the painful decision to decrease people at our depots. As we critically look at each maintenance depot for the future, we are creating a stable work force to efficiently accomplish the work to be done. First, we will reshape the workforce at our depots to align with funded workload. In the near term, Red River and Letterkenny Army Depots are

projected for significant workload reductions, as they have had large portions of their mission removed by BRAC. At this point in time, Corpus Christi Army Depot has more total people on board than their funded workload supports. Both Anniston and Tobyhanna Army Depots will retain a level of employment approximating where they are today due to steady funded workload and previous BRAC decisions. As we achieve these steady-state levels of employment at each depot, our plan is to balance any workload "peaks" above the normal amount of work with temporary, term, or contract employees. Finally, as part of the reshaping of the work force to match the workload, we must achieve the most efficient combination of skills—to include the mix of direct and indirect employees. The cost of not reshaping our work force now would be to make it less likely that our depots can be the best value choice for depot work. Additionally, we currently have a variety of on-going initiatives to review our management processes to make the necessary changes to upgrade our efficiency. Such actions are geared to enhance our competitiveness. I truly believe competitive balance is the key.

As a final element of our strategy for the future stability of the Army depot system, the depots themselves must be sized internally to retain sufficient plant equipment to perform the required workload. In doing so, depot shops will, by necessity, be identified which are excess to the needs of depot maintenance. In order to keep the maintenance depot affordable, the excess shops will be either laid away, dismantled, or put into some other productive use. There are two key ways to achieve productive use. For BRAC-affected depots, we are working with the local re-use authorities to turn over excess real property to the local community as quickly as possible. In these cases, the more quickly users outside the Army can take these over, the sooner savings can be garnered by the Army from lower overhead expenses. Of course, our environmental responsibility will play a part in the decision. For other facilities which might be needed in the future, or which cannot be physically excessed from the rest of the depot, leases can be arranged to commercial users. These can be either Army contractors performing depot maintenance or upgrade work—usually in partnership with the depot also performing a portion—or purely commercial ventures. This lease arrangement can remove much of the cost of maintaining these facilities from the Army and at the same time bring more commercial activity and employment to depots that might be losing government jobs.

CONCLUSION

The reshaping of the Army's depot system, which I have laid out for you today, is not easy. However, the alternative is to put the depots into a glide path of higher costs, fewer customers, and ever decreasing lower productivity. By reshaping now, our depots can remain the efficient, economical, and productive source of vital support for the fighting forces that we have come to expect. In closing, I welcome any questions you may have.

PREPARED STATEMENT

Senator INOUYE. Admiral Pilling.

Admiral PILLING. Sir, as the junior service member up here, I had better follow the lead of my seniors and keep my remarks very brief.

Senator INOUYE. Nothing junior about you, sir.

[The statement follows:]

PREPARED STATEMENT OF VICE ADM. DONALD L. PILLING

INTRODUCTION

Good morning Mr. Chairman and members of the Senate Appropriations Defense subcommittee, I am Vice Admiral Donald L. Pilling. I am currently serving as Deputy Chief of Naval Operations for Resources, Warfare Requirements, and Assessments.

I am pleased to appear before you this morning to address the current status and capabilities of the Navy's ship and aircraft depots and to discuss some recent changes in the way they operate, particularly with respect to the Navy Working Capital Fund, formerly the Defense Business Operations Fund.

IMPACT OF DECREASED FORCE STRUCTURE ON DEPOTS

In recent years the Navy's depot maintenance requirements have decreased substantially due to a number of factors, primarily a declining force structure which dropped from nearly 600 ships to about 350. A corresponding reduction in aircraft inventory, revisions to maintenance strategies, and smaller budget toplines have also contributed. These changes have occurred rapidly and have had significant effects on our depot infrastructure. By the end of this year we will have gone from eight to four public shipyards and from six to three aviation depots. In terms of our depot workforce we have seen similar reductions. Naval shipyard employment levels have gone from over 72,000 in fiscal year 1987 to less than 21,000 by the end of this year. Our aircraft depot workforce drops from 15,000 in fiscal year 1995 to 12,000 in fiscal year 1997. We believe we have reached the right level of aviation depot capacity to ensure that we can perform our core related workload. By retaining core related capacity we ensure that we maintain the critical capabilities and skills to perform depot level repair in support of JCS warfighting scenarios. These skills and capabilities are crucial to maintaining readiness and ensuring that we can sustain our required warfighting capability. In the case of shipyards, the current level of new ship construction leads us to conclude that there is more capacity in the public and private yards than will be needed in the foreseeable future. If further near term force structure changes occur, the Navy will be faced with some difficult choices in how best to support repair and new construction infrastructure within the already fragile balance of combined public-private ship maintenance capacity.

CURRENT WORKLOAD AND PERFORMANCE

During fiscal year 1996 the naval aviation depots performed overhauls to 258 fleet aircraft and 938 engines. They repaired almost 110,000 components. By comparison, we plan to overhaul an additional 131 airframes this year. Engine and component workload remains relatively stable. We are forecasting the overhaul requirement to increase slightly in the outyears due to the fact that we are retaining aircraft in the inventory longer.

The naval shipyards performed four overhauls and 26 other availabilities in fiscal year 1996. The public yards also performed a significant amount of ship inactivation and modernization work. By contrast, the private sector accomplished three overhauls and 86 other maintenance availabilities, primarily on surface ships. We intend to perform four overhauls and 28 other availabilities in public shipyards in fiscal year 1997. Workload planning for public and private shipyards requires careful balancing of ship operational schedules, quality of life considerations, workload capacity, and compliance with the 60/40 workload statute.

DEPOT EFFICIENCIES AND INITIATIVES

As we have consolidated our depots over the past few years we have been aggressively pursuing ways to improve efficiency. We have reduced overhead at the NADEPS by 44 percent and the ratio of overhead cost to total cost has dropped from 40 percent to 34 percent as a result. Similarly, naval shipyards have reduced their overhead to total cost ratio from 46 to 38 percent in the span of two years.

The Navy is continuing to seek additional efficiencies in the way we operate and manage our depots to maximize the amount of work we can perform in the current fiscally constrained environment. Regional maintenance is one approach to achieving these savings. Regional maintenance is the shared use of maintenance capacity and facilities which have been right-sized and level workloaded. This helps to eliminate excess infrastructure; provides customers with a single, accessible, accountable provider of maintenance and strengthens battle force intermediate maintenance activities.

Other initiatives in process for ship maintenance include the Joint Industry–Navy Improvements Initiative which partners the Navy and the ship building and repair industry to improve common business and technical processes. The goal is to reduce the costs to build and maintain Navy ships. Aircraft Carrier Partnering is joining Newport News Shipbuilding with the Norfolk and Puget Sound Naval Shipyards to identify best practices in planning, managing, and performing carrier availabilities and nuclear propulsion work. The Naval Sea Systems Command is conducting extensive self-assessments of headquarters and field activity performance to recommend areas for improvement and facilitate strategic planning for future ship maintenance requirements.

The naval aviation maintenance community is actively working to incorporate new business and technical processes to reduce the cost of aircraft maintenance.

They are initiating Reliability Centered Maintenance (RCM). RCM is a maintenance philosophy designed to determine product reliability and prevent costly damage, rather than to inspect and repair after the fact. We have made real progress at our three depots in reducing the turnaround time for aircraft repair. This means aircraft are out of service (and thus not available to the fleet) for shorter periods of time. Other initiatives, such as industry partnering, reliability incentive warranties, and in-service maintenance improvements are intended to help us do more maintenance at stabilized funding and personnel levels. This is expected to reduce backlog and absorb increased work content as the age of our aviation equipment increases.

WORKING CAPITAL FUND ISSUES

At this point I would like to address the Navy's management of the Working Capital Fund, especially in the areas of advance billing and rate setting. The Navy works very hard to maintain the financial integrity of its Working Capital Fund activities and, to that end, was proactive in our fiscal year 1998 budget submission.

The fiscal year 1997/1999 Navy Working Capital Fund (NWCF) budget includes a plan to generate a total of $1.6 billion in cash (through rates and surcharges) to liquidate outstanding advance billings and to re-establish a sufficient operating cash corpus. This plan considers the $512 million cash surcharge directed by the Congress for fiscal year 1997. That surcharge was resourced, in accordance with Congressional direction, and has already been collected by the NWCF to reduce our need to advance bill this fiscal year. For fiscal year 1998, rates increase by $408 million to recover prior year losses and by an additional $500 million to generate cash. $150 million is included in preliminary fiscal year 1999 rates to achieve the DOD goal of 7–10 days of operating cash. These efforts are expected to result in a sufficient cash corpus to sustain operations and eliminate the need to advance bill by the end of fiscal year 1999.

Fiscal year 1998 rates are structured to cover all budgeted operating costs, in addition to generating the cash discussed above. The NWCF should "break even" by the end of fiscal year 1998. It should be emphasized, however, that during budget execution, a number of factors could contribute to unanticipated operating losses or gains. The most common and significant contributors are changes from the budgeted amounts/levels/timing of workload from customers. Changed customer requirements and priorities during a fiscal year often reduce the revenue received by NWCF activities to cover budgeted costs. Since most NWCF costs are fixed (vice variable) in the short term (such as civilian salaries), the NWCF absorbs losses or gains in the year of execution and recovers them (or rebates them in the case of a gain) in a subsequent fiscal year by increasing/decreasing rates. Each budget makes refinements and, if necessary, reductions to budgeted costs to ensure the NWCF activities are structured to fulfill only budgeted customer requirements.

Just over half of the $408 million in loss recovery in fiscal year 1998 rates is for the Naval Weapons Stations which are part of the Naval Ordnance Center business area. These losses are the result of a sharp decline in customer funded workload and reflect the carrying costs of significant excess capacity. A surcharge of $224 million has been included on Navy Receipt, Segregation, Storage and Issue workload to recover the accumulated losses associated with the large overhead required to support this program. Our budget restructures the weapons stations to stem future losses. Actions include elimination of the Atlantic and Pacific management divisions, tailoring weapons stations operations, and decreasing capacity to match reduced workload levels.

The newly created Defense Working Capital Fund Improvement Study Group has been working aggressively to generate initiatives which should result in improvements to Service working capital fund operations. Every Navy Working Capital fund manager in the chain-of-command is focused on cost containment, process improvements, and achieving budgeted operating results. These study group initiatives address their concerns and offer them opportunities to make a difference. The study group is reviewing a wide range of proposals to improve operations. We are hopeful that it will result in many significant improvements.

Mr. Chairman, thank you again for this opportunity to share with the committee the innovative concepts we are incorporating into the area of aircraft and ship maintenance and the strides that we are making in working capital fund fiscal management.

EXCESS CAPACITY

Senator INOUYE. If I may, I would like to begin with the questioning. One of the major subjects looked into by GAO was excess

capacity. General Wilson, how many organic depots do you believe the Army needs, and if the Army is left with five underutilized depots, how will the Army bring down the costs of the depot maintenance program? What is the likelihood of success in your efforts?

General WILSON. Sir, in the BRAC 95 process, as you know, the Army recommended that we retain three core maintenance depots. First, the decision from BRAC was to maintain the three core and two realigned depots, these being Letterkenny and Red River Army Depots. We are currently doing our best in each one of the locations to compress the excess capacity and to insure that we right size them based upon the funded workload we have. Second, if we have to retain the five, it is our view that we need to have the flexibility to bring in private sector companies to partner inside the depot complex, similar to what we are currently doing at Letterkenny. We have a little of that that is ongoing at Anniston as well.

Senator INOUYE. Have you considered that partnership to be successful? Do you believe increased partnering might be the answer to some of the problems?

General WILSON. Sir, I believe, in fact, that is one of the options that we need to continue to pursue.

Senator INOUYE. Let me now turn to General Viccellio.

DEPOT PARTNERING

The GAO report states that closing depots and consolidating workloads to reduce excess capacity is the most effective way of improving the efficiency of your remaining Air Force depots. You have stated in your formal report that excess capacity can be reduced through partnering. Can you identify the extent that partnering has already reduced excess capacity in the Air Force, and give me estimates for the future?

General VICCELLIO. Yes, sir. With respect to the effect of partnering on excess capacity, partnering is one of four things that we are doing which will have a beneficial effect on the underutilization of the three depots that will continue to operate as Government installations following the successful completion of the BRAC 95 directives.

Partnering is authorized under title X, 2471, and it allows us to offer to a commercial operator excess capacity in our depots, equipment facilities, et cetera, on a lease basis, and I think that this could apply to two types of activity. Partnering with the commercial offer or doing something for us as a customer working side by side with us in the depot, or a commercial offer or doing work for a commercial customer side by side with us in the depot. This is a concept that we have been pushing for some time.

How much potential there is out there and how much interest there is, I believe remains to be seen. We have today approximately 8,000 contractor personnel operating in or near our depots, in other words colocated with our depots, many of them on base. They perform a wide range of activities, ranging from helping us maintain the installation to helping us do depot work. Whether we can double that or triple that in the next 5 years is difficult to say.

A few examples are underway. At Warner-Robins in Georgia we are looking to bring a Lockheed LANTIRN night infrared pod repair line on base to work directly with us. They do predominantly

foreign customer work, we do work for our own customers, but we could probably save in the cost to either customer by working together and sharing supply sources, et cetera.

On a larger scale, but yet at Warner-Robins, is the idea of bringing aboard a depot for our new JSTARS surveillance aircraft. Warner-Robins will be the sole home operating location of that aircraft. As we have learned with AWACS at Oklahoma City, at Tinker Air Force Base, there is tremendous synergy when we can have the operating location of an airplane, that is small in number, colocated with the depot. That is what we would like to do with JSTARS at Warner-Robins. We expect some kind of a proposal in the near future from the prime contractor on the JSTARS, Northrop-Grumman, about a concept where they do a portion of or all of the depot activity, but at Warner-Robins. That would have partnering potential on a larger scale.

At Oklahoma City, for some time, we have been forced to take a portion of our large aircraft and, during the middle of our overhaul cycle, move them off base to get either depainted or repainted, an expensive procedure both in terms of cost and in terms of the time that we have to work the airplane and keep it out of the warfighters' hands. We went out to industry with an idea of establishing a commercially operated large aircraft paint facility in addition to the one we operate on Tinker Air Force Base.

We only got one bid, and that was from the Boeing Corp. Unfortunately, the original offer placed too much of the risk and the assumption of a certified or guaranteed workload on the service. In other words, we felt that Boeing was not willing to bet on the availability of a commercial market in addition to our workload. So we sent the bid back to them for reconsideration, and that is where it is today. It remains to be seen yet how successful that might be, but it is both a requirement and an opportunity from our point of view.

At Ogden, UT, a couple of interesting possibilities, including some from a variety of companies that would like to use our landing gear facility. No formal, firm proposals yet, but we have a world-class facility there that does work for all three services in the landing gear overhaul area. There is one company that plans to manufacture booster rocket fuel tanks for space launch vehicles, and has talked to our commander at Ogden about possibilities. This would involve composite material with activity on base at Ogden.

So those are some of the concepts that we are talking about and some of the leads that we are trying to develop. But with respect to a company coming in with a firm proposal, the only one we have thus far is the one that Boeing gave us for the paint facility at Tinker, and, as I said, we had to send that back to them for reconsideration. I think there is real potential here. The Army has shown that it can work in the ammunition depots, and I think it is probably something that we all need to pursue.

I hope that is responsive to your question.

Senator INOUYE. General Viccellio, do you believe that the GAO report is realistic from the perspective of maintaining readiness?

General VICCELLIO. Our depot structure today is doing its job, I feel, very well. We have some financial problems in execution this

fiscal year, as was pointed out by Ms. Denman, and I would be willing to discuss those in more detail if you would like.

But with respect to providing our forces with the wherewithal, the spare parts, and the overhaul support needed to keep them ready, I think we are doing a very good job. To some degree we are coming out of a period in which we took advantage of the strong logistics budgets of the early eighties, and then followed that by a drawdown during which time we retired force structure but kept the spare parts that were on hand to support that force structure. Now the drawdown is somewhat leveling off and we need to step up our logistics budgeting and financing requirements to sustain our current level of support.

LEAN LOGISTICS

With respect to cash management accountability, and getting our job done from that perspective, we are making a fundamental change in the Air Force that we call lean logistics. We are moving from a World War II philosophy of a large manufacturing and repair capability that pushes extensive goods and services out to a fielded force in an era of uncertain and slow transportation and limited management information about what those folks out in the field really need today. Desert Storm showed us the value of focused transportation for high priority parts and the capability of knowing exactly what a deployed flying unit needs on a daily basis. A big part of making this transition is helping our depots become more accountable about what they are doing.

In the days of appropriated funds for logistics support, the measure of merit was to spend your money, hopefully, on what it was appropriated for. In today's environment, we need to change our mindsets, so that the measure of merit is to make sure that as we obligate from our working capital fund for labor, or for materiel, or for overhead, we do it in a way that produces something that the user needs and buys, producing revenue to a zero sum gain. This is a fundamental mindset change for us that, and I will be honest, we are struggling with it but I think we are making progress.

So there are some challenges ahead, but I think we have our eye on the target, and I think as we make these changes we will be able to continue providing the logistics support to our forces that they need, sir.

ORDNANCE CENTERS

Senator INOUYE. Thank you very much, General. Admiral, one of the ideas being considered is to remove the ordnance stations from the Navy working capital fund in 1999. First, are you supportive of this plan? And if you do, why do you think the ordnance stations should be treated differently from aviation depots or shipyards?

Admiral PILLING. Well, sir, in response to the first question, we are supportive of the idea of moving the ordnance centers out of the Navy working capital fund for a variety of reasons. As you know, we have incurred losses over the last several years because of the loss of workload as the fleet size and ordnance inventories have come down. We are also transferring some functions that they previously performed to the fleet. With the smaller operation and with many of their functions transferred out, it just seems that mission

funding it makes more sense to us because we no longer have the customer relationship that we had before with the level workload.

NUCLEAR SHIPYARD CAPACITY

Senator INOUYE. Do you have any comment to make on GAO's assertion that there is excess capacity in nuclear shipyards or nuclear activities?

Admiral PILLING. Well, sir, as you know, we have come down in shipyards from eight depots to four. The four we retained were the nuclear capable shipyards. If you look at the forecast of nuclear work in the submarine area over the next several years, you can see there is a real decline in that level of work because we are bringing the force structure of nuclear submarines down. I do not think they put any strategic value, though, on nuclear rework capability that we have inherent in our four remaining yards, not only because we have four of them, but where they are located is vital to the way we operate as a global maritime force. Having them in Conus and in Hawaii provides us a lot of strategic value that is very difficult to quantify in dollar terms.

Senator INOUYE. Thank you very much. Senator Hutchison.

Senator HUTCHISON. I think Senator Domenici was actually here first, so I will say that since Senator Domenici has a birthday today that is a very important one, which I will not mention in any further detail, I will respect the rights of my elders.

Senator INOUYE. I recognize you, sir.

Senator DOMENICI. Mr. Chairman, Mr. Vice Chairman, I have been accused by those who think the budget that I helped work out did too much for seniors——

Senator INOUYE. Oh, really?

Senator DOMENICI. I have been accused of having a vested interest——

Senator HUTCHISON. A conflict of interest.

Senator DOMENICI [continuing]. In that I turn 65 today. It is interesting to think that 40 or 50 years ago, somebody of my age probably would not be up here working this way. We have come a long way in wonderful kinds of health preventive things, so I feel very, very good and thank you for yielding to me.

I do not have a lot to say. I guess I would just focus on three things real quick for you. First, I think with reference to how we consolidate and save money, whether it is through closure or consolidation, I think the one thing that many of us would be interested in is what are the statutory impediments to it. We entered into the first round of consolidations and closures, and we were pretty naked in terms of what laws were going to apply. We would get reports at the end of a year, well, we are not there yet because we have not complied with this law and it is going to take 2 more years. I think it would be very good if at some point as a preamble to consolidation efforts and closures if you went through and scoured the laws to say which ones cause long delays. We ought to be prepared, where those kind of rules are not in the genuine public health and interest, we ought to be prepared to waive some of them in an effort to get things done.

Second, it is now quite obvious, and my staff confirmed it for me in between my last comments and this, that what is happening in

consolidations and closures is that there is a spike, and the spike is a very inordinate cost, not savings, for *x* years before the savings start. That is not a little bit. It is a big chunk of money, so that you almost draw a pyramid with the costs going up, some 3 years, and then you start getting savings. Well, I think it is very important that somebody square with us if we are going to add a new closure commission. General Wilson, clearly we ought to know how much do we have to add in the early years in order to get the savings in the out-years. Because what we will end up with is our appropriators, headed by Senators Stevens and Inouye, will be in a bind trying to give you the rest of the things you want and ordered and needed, because we need an extra $1 billion on this upward front end increase.

Last, I do not know how we can prevent this and how you can prevent it, and I guess as I say it about you, you can say it about us, but I do not think there is any question that certain generals and admirals have preferential bases and preferential facilities for a lot of reasons—they grew up in them, they became warfighters at them. I know human nature and I would never, ever, ever ask if anything like that is true, but I do believe that just as we are going to be asked to be objective and let go regarding our States, that we have got to make sure somebody in this military is asking generals and those who are patrons of facilities to let go too.

I already note in some preliminary exposures on the "Quadrennial Defense Review" that great ends are being made within certain parts of the military to move things here and there so we can preserve this, or take this away from the Army. Now, nobody is going to admit that, but I think you all understand what I am talking about. I would really hope that if you ask that we really be objective, then I believe you ought to get all your subjectivity based upon preferential treatment and likes and dislikes that are not necessarily related to the warfighting machine, that you ought to do your best to do something about that too.

General Wilson, from the Army's standpoint, let me just say I assume you read and are participating with great dismay in the situation that is occurring in the Army with reference to drill sergeants. The only thing I want to comment about is somebody that now wants to lay blame on the Army for this misconduct just says well, you should have taught them moral values. You know, that is not so easy. Our society is what is teaching people moral values. I do believe you have got to have some better screening mechanisms, but nobody is expecting you to totally change the behavior patterns of a grown up person, other than if they do not comply with your rules they are out. I hope that we get this squared away. You come from a very, very historically respected organization, and I hope this too passes.

Thanks, Mr. Chairman.

Senator INOUYE. Thank you. Senator Hutchison.

PRIVATIZATION

Senator HUTCHISON. Thank you, Mr. Chairman. General Viccellio, I think that the Base Realignment and Closure Commission [BRAC] was very clear in its last session about the Air Force depots. It said that three would stay open and two would be closed,

but privatization was an option that should be left to the military. I think it is fair to say that people from the three open depots are fighting the ability to fulfill the privatization of Kelly and McClellan, because they are concerned about capacity and would like to think that they would be able to take jobs from Kelly or McClellan if they were not privatized. I would just like for you to address in a general way if you think that the Air Force in its decision to try to work with all five, in the two privatization and in the three to maintain the Government workload, if this is feasible, if it is good for the Air Force as well as the taxpayers? And if so, how can it work, and if not, say so at your peril.

General VICCELLIO. Senator, obviously I have to say that since it is our plan, you can assume that I support it. But let me kind of take it from the top. As you point out, in the BRAC Commission report recommendations having to do with Air Force depots, it is clearly stated that we should close two ALC's, we should close one base where the ALC exists and we should realign the other, which is Kelly. That realignment reflected the fact that there are substantial tenant units there, to include two flying operations which will eventually become part of Lackland Air Force Base. We had that option at Kelly, so that was a reasonable recommendation.

CONSOLIDATION OF DEPOTS

With respect to the disposition of the workload, as you point out, it is very clear that we should consider consolidating it into the remaining depots or look at options that involve the commercial sector. There is a process directed by statute called public-private competition that is the way we should go about handling workload that has been done organically in an Air Force depot but which we are considering moving to the commercial sector. That is the mechanism through which we are pursuing the competitive consideration of these various options.

There are strong points of view about this, as you well know. There are those who say we should consider privatizing everything in the Air Force depot structure. I do not subscribe to this, and I think it is clear by now that OSD continues to subscribe to a concept of core workload to help us maintain technical competence in depot maintenance and insure that the wartime mission gets done. There are those who say that based on this problem of excess capacity and how grave that is, that we should consolidate and ignore the forces of the competitive marketplace. We do not subscribe to that either.

We are doing our very best as we consider all possible outcomes; a commercial operation in place, a commercial operation somewhere else, or consolidation into the three remaining depots or some other public entity, to capture all the risks, all the costs, all the savings, and all the cost avoidances, in a way that will allow a source selection authority, and we have a good one, to compare them side by side and determine what is really the best value. I certainly subscribe to the notion, to the reality, that if you are going to move workload into an underutilized depot, you will gain in efficiency and you will reduce your costs. What I do not subscribe to is an analysis that touts hundreds of millions of dollars of savings by doing that based on an assumption that you can move

that workload with no additional production overhead and no additional G&A.

SOURCE SELECTION

We are currently in source selection for the C–5 competition. I do not want to get into much detail about the public bid, but I will say that even in the opinion of those who had the most to gain, which are the folks in my command who built that bid, we showed that in considering what it might cost and what it might save to move the workload, the C–5 workload to Warner-Robins, that a significant portion of the production overhead that was involved at Kelly would be needed at Warner-Robins. A lesser percentage, but some of the G&A would have to be moved as well. I know I am getting into details here, but I guess my point is we have confidence that this process will truly show us costs, benefits, savings, and cost avoidances in a way that supports the right decision, and it gives all players a chance to put their cards on the table, in the format of a formal proposal.

Senator HUTCHISON. Do you think this competition that we now have for workload is going to be in the best interest of the Air Force and the taxpayers? And, General Viccellio, do you believe that this can work in the way that the Air Force is now going, that you can make the best use of the three open depots and continue to privatize at the other two?

General VICCELLIO. I absolutely feel it will. I have no way of predicting the outcome, or the potential for privatization-in-place. That option has costs and it has benefits. One of the benefits that I presume will show clearly in the bid is the fact that the American taxpayer over the years has made tremendous investment in these depots, and if there is a way to continue to capture those past investments in terms of someone's exploitation to our benefit the facilities and the equipment and the trained work force that is there, in San Antonio in this particular case, that is good news for us.

Said another way, people tend to expect me to feel that privatization would be a loss and continued organic operation would be a win. To me the win is getting the best deal for the Air Force and achieving the cost reductions we need, as was pointed out by our earlier panel, to become better business people about our depot business.

Senator HUTCHISON. Do you think that the fact that you are able to have bids in itself is going to bring the costs down, the fact that you are able to have competition?

General VICCELLIO. Oh, absolutely. People often ask me what do you expect the outcome to be. As you might suppose, I am a bit more optimistic than the GAO witnesses that were just here. What do I base that on? I base it on observation across many years that when we do have competition the right things happen. Our command has been a champion of competition in the depot business. Back in the early nineties when we did some of this, irrespective of who the successful offeror was, whether it was a depot or commercial offeror, we saw substantial savings, and I think we will in this case. I will tell you again, I cannot say much about our public bid in this ongoing source selection, but if it is successful it will

represent substantial savings. And if a commercial offeror tops us, then we will see even more savings.

PARTNERING

Senator HUTCHISON. Do you think you could make better use of the three open depots by opening things up to allow them also to take in Government workload, but allow private workload to be done in the same place where it does not conflict with any kind of security?

General VICCELLIO. Definitely. As I answered in the earlier question from the chairman, I would love to borrow on the example of the Army munitions plants and do as much partnering as we can interest industry in doing. The earlier panel talked about excess capacity in the commercial sector. Indeed it is there, but we have had interested folks talk to us about leaving their facilities and installations where they are doing their work elsewhere to come and colocate with us. Again, I feel our depots offer world-class infrastructure that represents business opportunity for people. We just need to learn to be good salesmen of that fact.

Senator HUTCHISON. I want to come back to you on a different issue, but I would like to ask General Wilson if you see the potential for building up some of the Army depots to make them also more efficient and viable by using privatization within an existing depot? Is that something that you are looking at?

General WILSON. Yes, ma'am. That is one of the many options we are looking at. As a matter of fact, I took UDLP to Red River to see if there was a way we could do some upgrades there. I am not sure we are going to be able to do that, but we have been working with the local reuse authority down there to move the fence line and to assist them with bringing in some commercial work. But as General Viccellio mentioned, I think there is a great potential for us to continue to pursue, just like we have been able to do in the ammunition plants. Most of our ammunition plants, as you know, Senator, are Government-owned, contractor-operated, and they are doing very well. We have a few, because of the drop in the workload, that are having some challenges. But we really need to try and explore that as best we can.

Senator HUTCHISON. Thank you. Did you have anything to add, Admiral?

LOUISVILLE PRIVATIZATION

Admiral PILLING. We have privatized one depot in Louisville. There is a disagreement between the Navy and the General Accounting Office [GAO] on whether that was a savings or a cost to us. We believe it was a savings, obviously. We are pleased with what we have been able to accomplish in Louisville.

Senator HUTCHISON. Why do you see this discrepancy between what the GAO says about cost savings and what the military is saying?

Admiral PILLING. Well, I think part of it is the ground rules on how you do cost comparisons are very, very technical, and I know there are disagreements on the Louisville issue with the GAO on whether they have double counted BRAC savings or not. We think they might have. And also on, for example, a technical point on

whether portability of pension should count as a cost of privatization. So those are fairly technical issues that accountants get into.

GAO FINDINGS

Senator HUTCHISON. General Viccellio, is that also what GAO is doing, they are saying the same thing about Ohio, that privatization is not saving?

General VICCELLIO. Our concern about using the analysis that we did in Ohio this early in the contractor performance period, and it is just into the first few months of performance, is that trying to extrapolate their performance, their cost performance in a period when they are on a learning curve as what is to be expected in perpetuity, or even for the rest of this year, is a bit premature. The GAO asked us to do these analyses, and they are underway. There are three parts to the Newark workload, and we are working on the third analysis right now. But our point is that since starting performance, this contractor has done very well in terms of quality and productivity. In terms of cost, he is on a cost reduction curve that he thinks will take him below contract cost by the end of the year.

Our suggestion to anyone who is interested, to include the GAO, is to wait and give the contractor at least a full year of production to get through any transition effects, and see how they are doing before we make a prognostication about whether this is a success or a failure.

Senator HUTCHISON. Let me go on to the readiness issue, because that was something that I do not feel comfortable can be measured in numbers, and I hope the GAO will give a lot of consideration to what the military is saying, because obviously that is what the military expertise is. On the issue of moving trained workers, I think it is fair to say that San Antonio and Kelly are different in that you have third generation Kelly workers and the experience factor I think is great and the possibility of moving those workers is probably much less because of the ties to family and community. So what do you lose? Is there a readiness factor that is not being measured when you lose trained work force for engine maintenance or technical types of depot maintenance work that is done?

PRODUCTION BREAKS

General VICCELLIO. I think absolutely. When workload is relocated you are going to see an effect on production that is very real. Perhaps I can best illustrate by relating my experience. When I was in the Air Education and Training Command we closed four bases, two or which were large production bases, one in Chanute, IL, and one in Denver, CO. They were totally different operations than a depot, but they were production entities. They produced trained airmen and officers.

When we closed those installations, despite our very best efforts, we had breaks in production lasting from 4 to 14 months because you had to take the training materials, and the depot equivalent would be your equipment, and break it down in one location, facilitize or renovate your facilities to be ready to accept it in the receiving location, move it to that location, set it up, and then train the work force. Experience tells us that depending on the situation

and how far the move is, somewhere between 20 and 30 percent of our work force may consider moving, but the others will not. You pointed out there are factors in San Antonio that might even make that number lower.

It is unavoidable. You are going to see a break in production. We can plan carefully, we can phase transition in and phase it out, but we are still going to see some sort of what we call a bathtub in production. We are dealing with that right now in the move of the workload in communications electronics from Sacramento to Tobyhanna. How do we do that best? We will probably have to step up and get some contractor support to help us shallow that bathtub so we can preserve readiness. It is truly a factor.

Senator HUTCHISON. Let me just ask you, one of the previous panel members said that there is excess capacity in the private sector and, therefore, she felt that you would not be able to make the pie bigger and, therefore, help the existing depots. I think perhaps all the factors in how a private contractor might approach the ability to do Government work plus private sector work within one place might not have been considered. Do you think that the fact that there may have been a survey saying there is excess capacity in the private sector will have a bearing on whether you could add private sector to the existing depots?

General VICCELLIO. It is my observation, having talked to industry extensively over the last 2 years, that most of the claims about excess capacity in the private sector come from the industry associations that portend to represent industry as a whole. Indeed there are companies that have more capacity, more physical plant capability than they need, but there are others who do not. It is those who do not who would be looking to perhaps come and do work for us in a location that is either closing, like Kelly, or perhaps under the partnering concept at one of our depots that is remaining open, on a competitive basis.

Senator HUTCHISON. Have you had a lot of interest from private sector companies? You are the one that has been really——

General VICCELLIO. Well, absolutely. As I indicated earlier, there are a few examples at all three depots remaining open that we think will lead to something. As I said earlier, I have talked to industry representatives who indeed have excess capacity, but they talked to me in terms of divesting themselves from that capacity and coming to work with us.

60/40 RULE

Senator HUTCHISON. Just a final question I would like for each of you to answer, and that is the 60/40 rule obviously is constraining, or will be soon, for the flexibility to do what the Department believes is in the best interest of the Department in getting the best price and the best readiness. What do each of you think we ought to do with that 60/40 rule?

General WILSON. Senator, from the Army's standpoint I think that we need to relax it a little bit, and by doing that it will give us much more flexibility to increase our partnering that is currently ongoing. This year the Army will finish at about 66/34 or thereabouts, so we have been very close over the last 3 years. I just think as we look for more creative ways to try and compress the

excess capacity, we just need all the flexibility within the framework of the law to execute our business.

General VICCELLIO. From an Air Force point of view, Senator, we sit today at about roughly 70/30. We are faced with workload disposition decisions concerning Kelly and McClellan of some magnitude. Having looked at our workload at those two locations and talked to industry, we feel that there is more potential for savings through public-private competition than what we have in that 10 percent headroom remaining. That is why last year we asked the Congress to consider relaxing the rule and allowing us to at least go through the competition process to deter the outcome. We would certainly still endorse that kind of approach.

Admiral PILLING. I think I would second their endorsements. The Navy would still like some flexibility on 60/40. Of the three departments, we are actually the closest, I think. We are down around 63 or 62 percent in-house. The more flexibility we can get, the more efficient we will be.

READINESS ISSUE

Senator HUTCHISON. Do any of you have any concerns about readiness, if it is opened up that the core workload will somehow not be held in the depots?

General WILSON. I think from our standpoint, Senator, we are very careful in terms of watching the readiness of the fleet. As you know, General Reimer each month receives a briefing on the 16 top warfighting systems. Each time we determine an item that we think we should privatize and outsource, we go through a pretty rigorous process to insure that the private sector is robust enough to have the surge capacity if needed. So readiness is No. 1 with us, and I suspect with the other services.

Senator HUTCHISON. Any other comments on that issue?

General VICCELLIO. No; that is exactly the way we see it.

Admiral PILLING. We see it the same way. In fact, on loss of readiness you can actually make a case if you could use the original equipment manufacturer. On several of our aircraft, for example, we might be able to increase the readiness because they are so much more familiar with the new type of aircraft, for example.

Senator HUTCHISON. Well, thank you very much. I think this has helped bring the readiness issue forward, and certainly you are the arbiters of that and should be, and I hope as we are discussing these things that we can work for all of the depots toward making them more efficient and for giving you the flexibility to use your defense dollars the way they would be best used from your judgment standpoint. I think the artificial constraints of 60/40 should not be left in place by Congress when you are trying to prioritize your spending in the shrinking defense dollars that you have.

Thank you, Mr. Chairman.

ADDITIONAL COMMITTEE QUESTIONS

Senator INOUYE. Thank you very much. Before recessing I would like to convey to all of you the regrets and apologies of the chairman of the committee for not being able to be with us today, but, as you know, he is managing the emergency supplemental appro-

priations bill. I would also like to request that questions submitted by Senator Bennett of Utah be studied and responded to.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED TO GEN. HENRY VICCELLIO, JR.

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

A–76 COMPETITIONS

Question. I am aware that the Department of Defense intends to hold A–76 competitions for some of the Defense Logistics Agency's work. Is DOD planning to compete depot maintenance work it the same manner? If so, how would DOD propose holding this competition considering current law such as 10 U.S.C. 2464, 10 U.S.C. 2466, and 10 U.S.C. 2469?

Answer. It is the AF intention to hold public/private competitions in accordance with all applicable laws.

DEPOT MAINTENANCE COMMAND STRUCTURE

Question. Since 1970, maintenance depots have down-sized at approximately the same rate as private industry in the defense sector. The depot command overhead structure, however, has remained largely intact during this same period. Has DOD looked at the depot maintenance command structure for potential savings?

Answer. Yes, DOD has looked at the depot maintenance command structure for potential savings. The AF depot maintenance overhead structure has downsized by 28.3 percent from 1988 through March 1997. The depot maintenance overhead structure will continue to downsize as workloads from the two closing depots are competed and transferred.

CORE WEAPONS PLATFORMS

Question. According to GAO testimony before the House National Security Committee, each of the military Services is identifying the core weapons platforms that are used to calculate the work for the service depots. When does DOD intend to provide this list to Congress?

Answer. The Air Force addresses core as a depot capability required to ensure organic support for the weapon systems tasked for the contingency. The contingency plan identifies specific weapon platforms and the Air Force determines the core depot capability using the DOD Core Methodology. Core is reported to DOD in direct labor hours. Air Force depots are technical repair centers that support multiple weapon platforms, i.e. all landing gear repair at OC-ALC, engines at OC-ALC and SA-ALC, airborne electronics at WR-ALC, etc.

One requirement of the core methodology is an assessment of the commercial capability to provide depot repair services for weapon platforms that are tasked for the contingency. Incrementally, the Air Force is evaluating the commercial sector's capability to support the mission requirements. Capability assessments have been completed for some of the workloads and all of the remaining workloads will be completed incrementally by July 1998. After the commercial capability assessment is completed, a final core posture will be reported based on the existing contingency plan.

This requested workload breakout will only be available following the completion of a core determination process on all USAF depot workloads. Until such time as all workloads have been evaluated, workloads previously rated as core will remain so for reporting purposes. Using that caveat, USAF core capability projections are as follows:

[Direct product actual hours in millions]

	Fiscal year—			
	1996	1997	1998	1999
Core Workload	25.5	23.1	23.1	23.1
Total Workload	31.6	30.9	31.1	30.2

AGE OF WORKERS

Question. I am told that without any change to current policy the average age of workers at the service depots will be approximately 50 to 51 years old within the next three years. Are the military services aware of this problem, and if so, how do the services propose correcting this situation?

Answer. Our current data indicates that within the command, the average age of our work force at the depots is 46.7. The average years of service at our depots is 19. This compares with the entire Air Force Materiel Command work force where the average is 46.2 years old and 18.2 years of service. This information reflects that we have an experienced and capable work force with the ability to accomplish our mission in a most effective manner.

QUESTIONS SUBMITTED BY SENATOR ROBERT F. BENNETT

INFRASTRUCTURE REDUCTION

Question. General Viccellio pointed out in his testimony that infrastructure needs to be reduced. What are the Air Force specific plans to do so?

Answer. Two of the five ALC's are scheduled for closure in 2001 (Sacramento ALC and San Antonio ALC), which will eliminate their infrastructure costs. Workloads that support core capability and workloads won during competitions will be transferred to the remaining depots. AFMC is also exploring partnering opportunities with private industry which should result in better utilization of the infrastructures at the remaining depots.

AFMC performed a comprehensive study on workload consolidation, which resulted in the Technical Repair Center (TRC) concept. Completing the implementation of this concept will decrease the infrastructure costs at the remaining centers.

DEPOT WORKLOAD CONSOLIDATION

Question. BRAC recommended that depot workload be consolidated. GAO says the failure of the Air Force to consolidate is costing money. Please provide the committee with specific analysis that demonstrates the cost-benefit of consolidation vs. privatizing. (General Viccellio referred to an analysis in the April 17, 1996 Senate Armed Services Committee hearing.)

Answer. The outcome of the public/private competitions should provide the true costs and savings associated with transferring workloads to another depot or to the private sector. GAO can review this actual data after the source selection process. GAO's earlier audits were based on unrealistic assumptions, rather than actual proposal data and postulated workload consolidation without increasing overhead.

Question. Much of the discussion about consolidation and privatizing implies that these are mutually exclusive. Did the Air Force look at consolidating workload FIRST, and then holding a public-private competition? Why or why not?

Answer. The Air Force is looking at consolidating workload. The Air Force is developing a strategy for moving the workloads that must remain in public depots, and will not be competed under public-private competition, to other DOD centers.

For the workloads that are not required to move, the Air Force plans to use public-private competition to determine the true costs and savings associated with the various approaches. In preparation of the public bids associated with ongoing public-private competitions, the real impacts of workload movement and consolidation will be considered.

EXCESS CAPACITY

Question. Please explain how privatizing at McClellan and Kelly Air Force Base address the problem of excess capacity at the three remaining depots in the short and long term? If not, how does the Air Force plan to increase utilization and production rates at these depots?

Answer. The Air Force is not pursing a privatization plan, but rather is pursuing a public/private competition process to ensure mission readiness and obtain best value. Capacity is only one of many factors affecting the outcome.

Substantial workloads will relocate from McClellan and Kelly to the remaining depots. In addition, if the depots are successful in the competitions, other workloads will transfer. The Technical Repair Center (TRC) concept will then be used to further consolidate workload among the depots and allow the Air Force to divest itself of duplicate capabilities and capacities.

The Air Force is also exploring dual and joint-use initiatives with the private sector to use more effectively the existing industrial capacity at the remaining ALC's. These initiatives will allow the DOD to share its operating costs with industry.

Each ALC continually looks at its excess capacity and searches for opportunities to divest itself of unneeded facilities and equipment. We are currently reviewing and prioritizing projects to consolidate workloads at the remaining ALC's and both reduce excess capacity and increase the efficiency of the production operations. The projects with the greatest return on investment will become part of our fiscal year 2000/2001 budget submission.

DEPOT MAINTENANCE SYSTEM INEFFICIENCIES

Question. What specific types of inefficiencies, other than excess capacity, do you have in the depot maintenance system? What type of inefficiencies do you hope to correct by privatizing?

Answer. The private sector can expand and contract its workforce and capital investment plans more rapidly than the public sector. The Air Force does not plan to privatize the depot maintenance system.

CURRENT EXCESS CAPACITY

Question. By Air Force figures, what is the current excess capacity at the five Air Force Depots? How does this excess capacity differ from five years ago? How does the Air Force measure excess capacity?

Answer. The Air Force follows the procedures in DOD 4151.18–H, Depot Maintenance Capacity and Utilization Measurement Handbook. Excess capacity is the capacity, in direct labor hours, that is available in a shop or depot, but for which no funded requirement exists. It is calculated by subtracting the funded workload from the total capacity. The utilization percentages shown are defined as the funded workload divided by the total capacity, measured in direct labor hours.

ALC	Fiscal year 1992		Fiscal year 1997	
	Excess capacity	Utilization (percent)	Excess capacity	Utilization (percent)
Oklahoma City	572,000	93	843,000	89
Ogden	275,000	96	831,000	54
San Antonio	742,000	92	898,000	87
Sacramento	1,210,000	84	2,604,000	66
Warner Robins	1,029,000	87	2,071,000	73

All data shown is for a peacetime scenario, and does not include the reserve capacity required for wartime surge. Capacity data for fiscal year 1997 was taken from the fiscal year 1996 capacity data call to the ALC's; funded workload for fiscal year 1997 was taken from the fiscal year 1995 workload review.

JOB PROJECTION

Question. How many jobs do you project to be at Kelly, McClellan, Hill, Warner-Robins, and Tinker for the next five years? Does the Air Force have a minimum job level guarantee at any of these bases?

Answer. Projecting employment levels over the next five years at the Air Logistics Centers is a difficult task because it necessarily requires the Air Force to make assumptions about the outcome of competitions for the workloads currently performed at Kelly and McClellan Air Force Bases. Since the Air Force is attempting to conduct those competitions as fairly as possible, it is not appropriate to make any assumptions about the outcomes of these competitions. The Force does not have a minimum job level guarantee for any ALC.

COST/NEGATIVE SIDES OF PRIVATIZATION

Question. General Viccellio mentioned that there were costs and benefits to privatizing Air Force installations. We have heard about the benefits today. I would be interested to know what the costs and negative sides are to privatizing?

Answer. The Air Force is not pursuing the privatization of Air Force installations. Instead the Air Force is conducting public/private competitions for workloads at closing bases that no longer need to be performed in a public depot to maintain a core logistics capability. The potential costs and negative aspects of contracting with the private sector for those workloads will be assessed ruing the competitions.

CO-LOCATION OF PRIVATE COMPANIES

Question. General Viccellio said the private companies are leaving their own facilities to co-locate at an Air Force installation. What incentives does the Air Force provide for the commercial sector to do this?

Answer. There are both tangible and intangible incentives for the commercial sector to co-locate at an Air Force installation. Over the years, the Air Force has invested heavily to develop and maintain state of the art facilities and equipment. From a financial perspective, leasing excess Air Force facilities and equipment enables the commercial sector to expand its business base without additional capital investment. This improves private firms' ability to compete and to provide the DOD with quality services and products. Co-location to Air Force installations may also provide a synergistic effect among companies resident on the Air Force installation. Co-located companies will be able to develop alliances with one another which could lead to further business opportunities. All of these factors ultimately improve a company's opportunities for profit.

PUBLIC/PRIVATE COMPETITION

Question. Describe how the Air Force has "leveled the playing field" between public and private bidders.

Answer. The Air Force has tried to level the playing field between public and private bidders by using impartial evaluators, separating public sellers from public buyers, providing equal access to information to both public and private bidders, applying the same evaluators criteria and standards to offers from both public and private bidders, validating the accounting systems of both public and private bidders, and making cost adjustments according to predefined cost comparability procedures where required.

CORE WORKLOAD

Question. How did the Air Force determine what workload would be available to be competed?

Answer. The Air Force is reviewing the workloads at Kelly and McClellan to determine which workloads must continue to be performed at a public depot to maintain a core logistics capability. Those workloads that need not be performed in house to maintain a core capability are available to be competed, to the extent permitted by the 60/40 rule.

PRIVATE/PUBLIC COMPETITION

Question. Please outline the process the Air Force used in determining how the workload would be "bundled" for competition. What were the cost considerations?

Answer. In determining what workloads would be included in each competition, the Air Force grouped together those workloads in which economies could be realized by obtaining offers to perform the workload as a whole. Where backstops or other efforts supported multiple workloads, those workloads tended to be grouped for competition saving bid and proposal costs, and cost savings from the allocation of overhead to a wider base were considerations.

MOVING WORKLOADS

Question. It was mentioned today that moving workload is a problem, has a negative impact on production, and impacts readiness. Is moving workload a new problem in the Air Force Materiel Command and can this problem be overcome?

Answer. The Air Force has never transferred such a large amount of work as that which exists in the depots at Kelly and McClellan Air Force Bases. Through the public/private competition process, the Air Force is reviewing and evaluating how that might be done, and at what cost. The Air Force must be careful to assess the risk and impact to readiness of any transfer plan that is proposed to the public or private sector.

Question. Would it be appropriate for Congress to prohibit moving workload between depots because of readiness concerns?

Answer. The Air Force is reviewing and considering the impact on readiness in evaluating public and private proposals.

Question. In the event a commercial bidder won a bid to move the workload, how would the Air Force address the readiness issue?

Answer. The Air Force intends to address the risk to readiness of each offer in a competition. A private offer would not be accepted if it posed an unacceptable risk to readiness.

Question. How does the Air Force currently get around the readiness issue related to moving workload?

Answer. The Air Force does not get around the readiness issue when moving workloads. Readiness is addressed whenever depot maintenance workloads are moved.

CURRENT COMPETITION STRUCTURE

Question. Please explain how the competition is currently structured, including: Do the requirements of the competition give any preference to the bidder who does the work in place?

Answer. The Air Force is not requiring that the workload be performed at Kelly AFB or McClellan AFB. The Air Force is using acquisition strategies that avoid favoring particular offeror performance strategies. The competitions are structured to reflect the technical work requirements and leave maximum flexibility for offerors to propose innovative methods to effect performance. This full and open process does not attempt to favor or temper any particular competitive advantage that may accrue to a specific performance strategy.

Question. Does the competition require all the work to be done in a single location?

Answer. No, all work is not required to be done at a single location.

Question. What is the time line?

Answer. Final decision on the C–5 Programmed Depot Maintenance workload is scheduled to be made in September 1997. Final decision on the Sacramento Maintenance workload and Propulsion workload are scheduled to be made next year.

Question. What type of contract will be used at McClellan and Kelly? Does this type of contract provide the maximum benefit to the government and taxpayers?

Answer. The Air Force will award a fixed-price award fee contract for the C–5 Programmed Depot Maintenance workload. This contract type provides maximum protection for the taxpayer against cost growth while providing the ability to influence contractor performance. The remaining public-private competitions are in the strategy development phase and the contract types have not been announced.

Question. How much money is being made available for contractors to study the workload?

Answer. The Air Force awarded two contracts for $750,000 each to study the workload. Ogden Air Logistics Center was also provided $750,000 to study the workload.

COMPETITION SAVINGS

Question. General Viccellio said that "substantial savings" result when conducting competitions. Would the Air Force provide those figures demonstrating these savings?

Answer. Substantial savings did result from the previous round of competition. The savings totaled $353.7 million over the life of the contracts as shown in the following table:

Competition savings for competitions held during fiscal year 1991–93

	In millions
Projected Cost Without Competition	$717.1
Award Value	353.6
Gross Savings	363.5
Cost of Competition	9.8
Net Savings	353.7

Projected Cost Without Competition is the budgeted cost of the workload before competition.

Award Value is the actual value at the time of award.

Cost of Competition is all of the costs associated with preparing the bid and include bid preparation costs, facilities modifications, equipment costs, transportation costs and any other costs necessary to be able to perform the work.

These savings may not be representative. True savings from the current competitions will not be known until the source selections are completed.

TEAMING REQUIREMENTS/OPPORTUNITIES

Question. Please outline the teaming requirements and opportunities. Can Air Force depots team with commercial industry? Can the Air Force depots team with each other? Why or why not?

Answer. Public offerors may propose to team with another public depot or depots to perform the required work. Public offerors may not propose to subcontract major portions of depot maintenance workloads to private contractors. Subcontracting by public offerors is permissible for those supplies or services normally contracted for in support of depot maintenance operations.

CORE MAINTENANCE

Question. What is the criteria that the Air Force uses to determine "core maintenance" for fiscal year 1997. What workload is considered "core" for fiscal year 1997? What workload was considered "core" in fiscal year 1995? Please outline how the criteria has changed? (Gen. Viccellio alluded to the change in philosophy in his testimony.)

Answer. In fiscal year 1997, the Air Force used the revised DOD core methodology which was developed by the services and approved by the Defense Depot Maintenance Council (DDMC) in January 1996. This methodology includes the 2 Major Regional Conflicts (MRC's) and a risk assessment of accomplishing a specific workload by the private sector. The DOD's risk assessment process has been applied to several Air Force capabilities including major aircraft and associated commodities at the two closing ALC's. Based on the existing commercial capabilities and other DOD sources, these workloads were determined not needed to be performed in a public depot to maintain a core logistics capability.

In fiscal year 1995, the methodology was based on a 2 MRC scenario, but did not include a risk assessment of the private sector to accomplish workloads.

CORE WORKLOAD

Question. General Viccellio referred to the "dynamic" nature of core workload. Exactly how "dynamic" will this definition be, and how will the Air Force alert Congress to the status of what workload is considered core? Does this pose any difficulty in long-term planning and readiness considerations?

Answer. The "dynamic" nature of core is influenced by a variety of elements. First, the war contingency plan, two Major Regional Conflicts (MRC's), can change over time and is not static in nature. This plan may change from year to year. Second, core is influenced by changes in the weapon system inventory. The C–17 replaces the C–141 and the F–22 will replace the F–15. Depending upon the role of the new weapon system in the war contingency plan, core can increase or decrease. Lastly, prior to the approval of the revised DOD core methodology in January of 1996, core was influenced entirely by the war contingency plan. Presently, core is influenced by the war contingency plan and an assessment of the commercial base to accomplish the workload. If the risk to DOD is low, the workload can be accomplished by private contractors.

The "dynamic" nature of core does not pose any difficulty in long term planning and readiness considerations. In contrast, it enhances the Air Force ability to be more exact in determining the correct depot skills, facilities and equipment needed to support the war contingency plan.

QUESTIONS SUBMITTED TO GEN. JOHNNIE E. WILSON

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

A–76 COMPETITIONS

Question. I am aware that the Department of Defense intends to hold A–76 competitions for some of the Defense Logistics Agency's work. Is DOD planning to compete depot maintenance work in the same manner? If so, how would DOD propose holding this competition considering current law such as 10 U.S.C 2464, 10 U.S.C. 2466, and 10 U.S.C. 2469?

Answer. The Army is not planning to hold A–76 competitions for depot maintenance work in the way that the Defense Logistic Agency is competing some of their work. Any competitions held for depot maintenance work would be conducted in accordance with all applicable statutes.

DEPOT MAINTENANCE COMMAND STRUCTURE

Question. Since 1970, maintenance depots have down-sized at approximately the same rate as private industry in the defense sector. The depot command overhead structure, however, has remained largely intact during this same period. Has DOD looked at the depot maintenance command structure for potential savings?

Answer. The depot command overhead structure within the Army has been subject to the same force structure downsizing as any other segment of the workforce. In addition, under Base Realignment and Closure 1991, the Army eliminated its U.S. Army Depot Systems Command Headquarters, then located in Chambersburg, Pennsylvania, and realigned and combined the residual workforce with ammunition management personnel located at Rock Island, Illinois, to form the U.S. Army Industrial Operations Command. This action resulted in the elimination of about 500 personnel from the overhead structure.

CORE WEAPONS PLATFORMS

Question. According to GAO testimony before the House National Security Committee, each of the military Services is identifying the core weapons platforms that are used to calculate the work for the service depots. When does DOD intend to provide this list to Congress?

Answer. I am not aware of a requirement to provide DOD with a list of CORE Weapons Platforms used to calculate the organic workload for the depots. However, a core analysis is done biennially. The fiscal year 1998 core analysis update is ongoing with a projected completion date of 2nd quarter fiscal year 1998.

AGE OF WORKERS

Question. I am told that without any change to current policy average age of workers at the service depots will be approximately 50 to 51 years old within the next three years. Are the military services aware of this problem, and if so, how do the services propose correcting this situation?

Answer. Current average age at the U.S. Army Materiel Command depots is 47.49 years. Assuming present workforce with no input of new employees, the average age is projected to reach 50.49 years in three years. Offsetting actions that impact projected average age increase include external (entry and mid-level) hiring and use of Voluntary Separation Incentive Programs (VSIP) as part of the Command's reshape strategy. VSIP offers retirement eligibles a pay incentive as a means to retain younger (years of service) workers while achieving essential reshape objectives.

QUESTIONS SUBMITTED TO VICE ADM. DONALD L. PILLING

QUESTIONS SUBMITTED BY SENATOR RICHARD C. SHELBY

A–76 COMPETITIONS

Question. I am aware that the Department of Defense intends to hold A–76 competitions for some of the Defense Logistics Agency's work. Is DOD planning to compete depot maintenance work in the same manner? If so, how would DOD propose holding this competition considering current law such as 10 U.S.C. 2464, 10 U.S.C. 2466, and 10 U.S.C. 2469?

Answer. The Navy is not planning to hold A–76 competitions for depot maintenance workload. As you indicated, 10 U.S. Code has numerous provisions which restrict competition under Circular A–76 procedures.

DEPOT MAINTENANCE COMMAND STRUCTURE

Question. Since 1970, maintenance depots have downsized at approximately the same rate as private industry in the defense sector. The depot command overhead structure, however, has remained largely intact during this same period. Has DOD looked at the depot maintenance command structure for potential savings?

Answer. The Navy's depot maintenance command structure has downsized significantly over the past 20 years. The Naval Sea Systems Command (NAVSEA), which manages naval shipyards, has reduced its headquarters staff from 5,268 in fiscal year 1989 to a planned 3,221 in fiscal year 1999. The Naval Air Systems Command (NAVAIR), which oversees naval aviation depots, has undergone a similar reduction. In 1977, several depot command activities which had 1,115 civilian and military personnel were closed or consolidated and reduced the number of on-board employees to 733. In 1987 this headquarters group again downsized to approximately 350 civilian/military personnel. A further consolidation took place as a result of BRAC 95 which reduced the number of personnel managing depot operations to under 200.

CORE WEAPONS PLATFORMS

Question. According to GAO testimony before the House National Security Committee, each of the military Services is identifying the core weapons platforms that

are used to calculate the work for the Service depots. When does DOD intend to provide this list to Congress?

Answer. The Navy quantified its organic core depot maintenance requirements and submitted them to the Office of the Secretary of Defense (OSD) in March 1996. I understand that OSD submitted a list of all Service core requirements in response to a question for the record from the House National Security Committee hearing on depot maintenance that was held 16 April 1996.

AGE OF WORKERS

Question. I am told that without any change to current policy, the average age of workers at the Service depots will be approximately 50 to 51 years old within the next three years. Are the military Services aware of this problem, and if so, how do the Services propose correcting this situation?

Answer. The average age of workers at the naval aviation depots tends to fluctuate between approximately 40 and 50 years of age. The average age at naval shipyards is currently 45 and is expected to rise to 48, then level off. In a continual downsizing environment it is difficult to rejuvenate the workforce. However, this is not considered to be a major problem, since the average retirement age for Federal workers is approximately 60, and rising. In addition, there is a ready and available labor pool should the need arise.

Although the Navy operates under a number of regulatory constraints that limit our ability to control the age of our workforce, we have aggressively recruited at major college and university campuses, established intern programs, on the job training, and apprentice programs.

SUBCOMMITTEE RECESS

Senator INOUYE. With that, we would like to thank you all for your participation this morning. The subcommittee will stand in recess until Tuesday, May 13 at 10 a.m. At that time we will receive testimony from DOD on environmental issues.

[Whereupon, at 12:40 p.m., Wednesday, May 7, the subcommittee was recessed, to reconvene at 10 a.m., Tuesday, May 13.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1998

TUESDAY, MAY 13, 1997

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:01 a.m., in room SD–192, Dirksen Senate Office Building, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens and Inouye.

DEPARTMENT OF DEFENSE

ENVIRONMENTAL PROGRAM

STATEMENT OF HON. ROBERT M. WALKER, ASSISTANT SECRETARY OF THE ARMY (INSTALLATIONS, LOGISTICS, AND ENVIRONMENT)

OPENING STATEMENT OF HON. TED STEVENS

Senator STEVENS. Good morning. Today we are going to focus on environmental programs that are managed by the Department of Defense, and we welcome the three officials of the military services responsible for these programs, the Assistant Secretary of the Army, Mike Walker, Assistant Secretary of the Navy, Bob Pirie, and the Assistant Secretary of the Air Force, Rodney Coleman.

The fiscal year 1998 budget request for the Department of Defense environmental programs is $4.8 billion. In an era of diminishing budgets and downsizing, we want to ensure that we are good stewards of both our Nation's environment, but also of the taxpayer's dollars. This subcommittee has advocated several initiatives to improve the management of the Department's environmental programs, such as the devolvement and creation of restoration advisory boards, or RAB's.

We are very pleased that the services do feel that these need to play a larger role in the administration of this program. The coordination and communications with local communities impacted by the cleanup projects I think have already paid real dividends. Much work needs to be done to clean up all of the active and BRAC installations as well as the formerly used defense sites, which we call FUDS.

We want to be a partner in the responsible, effective, and well-managed cleanup initiatives, and we at the same time urge the Department to join in the fight against waste and excessive spending.

Today, we hope we will receive an update on the status of these efforts, and the views of these gentlemen on further steps the com-

mittee could take to enhance the Department's environmental programs.

Gentlemen, your statements will be made a part of our record in full, as though read. We welcome any comments you want to make to us today, and let me turn to the vice chairman now, Senator Inouye.

STATEMENT OF HON. DANIEL K. INOUYE

Senator INOUYE. Thank you very much. Secretary Walker, Secretary Pirie, and Secretary Coleman, I wish to join my chairman in welcoming all of you here. The Department has come a long way in the past 10 years in creating a comprehensive and result-producing environmental program. It has been a work in progress, with DOD and all the services fine-tuning and expanding upon both the successes and failures to find the most fiscally responsible and acceptable solutions to the Department's environmental responsibilities.

I think all of us will conclude that environmental restoration is relatively new ground to most of us. It began in earnest only about 20 years ago, with regulations and standards continually changing.

It is pleasing to see the services so amenable to constructive criticism and positive change. In fact, over the last 3 years you have moved from studying projects to actual cleanup and restoration.

Furthermore, you have taken to heart the concerns of the community in developing a system of priorities and joint partnerships, and so we are moving in a positive direction in which funding is stabilizing, pollution prevention initiatives are moving to the forefront, and complete installation environmental restoration is actually a goal in our near-term sights.

However, there are still matters that need to be ironed out, including the handling of unexploded ordnance, oversight of all services' environmental management systems, the cost effectiveness of partnering contracts, and the fiscally frugal development of new technologies, so I look forward to your views this morning.

Thank you very much.

Senator STEVENS. Gentlemen, I think we should keep in mind someone told me once it costs less than $1 billion to maintain a division. We are talking about 4½ divisions here, so the money we spend on this program is directly related to the reduction in our force structure if we are not careful.

Secretary Walker.

Mr. WALKER. Thank you, Mr. Chairman, Senator Inouye.

Mr. Chairman, we are very mindful of exactly what you say. For the Army, our program is about $1.6 billion this year. That is a great deal of money, and since my report last year before this committee we have continued to emphasize innovation and efficiency in the program, and I think we have made some progress.

Simply put, I will tell you that our emphasis is in trying to get the biggest bang out of the environmental buck. We are expanding our partnership with regulators and communities, and we continue to refocus the program on pollution prevention, because we believe that is the best way to reduce future cost.

Mr. Chairman, we know that the world's best Army can only remain the best if we are able to train. We have to conduct realistic

and rigorous training, and we are learning how to do that every day, to provide soldiers with that kind of training while at the same time mitigating potential environmental damage.

We have a very complex environmental program. As I said, it is $1.6 billion this year. We have 12 million acres that we are stewards of. We have 153 endangered species on Army bases. We have 35 Superfund sites, and these are just some of the challenges that we face.

But we are engaged in this complex program not only because it is the right thing to do for future generations, but simply because it is good business. The less we pollute, the less we will have to pay in the future to clean up, so our environmental program is an investment in the future effectiveness of the Army.

ENVIRONMENTAL CLEANUP

Mr. Chairman, if you read the Army's most recent annual financial statement you noted that we believe it will cost us an additional $8 billion to clean up all the remaining contaminated sites on Army bases. In addition, as you know, the Army is the Department of Defense executive agent to clean up formerly used sites, or FUDS, for all the military services. That cleanup is estimated to be another $5.3 billion.

Well, $13 billion is an enormous amount of money just to clean up past pollution, so we are committed to providing the best management possible for the Army's environmental program.

As Senator Inouye alluded to, 3 years ago, the Army was devoting less than 50 percent of its cleanup money to actually cleanup. More than 40 percent of the budget was being spent just to study cleanup. A lot of lawyers and consultants were making a lot of money and there was still pollution in the ground.

Well, in the budget before you, almost 75 percent of funds for restoration will be used for actual cleanup. We have cut the cost of those studies more than one-half, and we have also reduced the amount that we spend for program management from 12 percent to less than 10 percent, and our goal is to continue to reduce management costs until they are well under 8 percent.

Mr. Chairman, we have also reduced the number of annual new enforcement actions from 360 to 221. That is a reduction of almost 40 percent in 3 years. We have also reduced the number of fines from 51 to 11, and the amount of those fines, what we have to pay to regulators from $6.3 million to $400,000. We have reduced solid waste by 30 percent, and we have reduced hazardous waste by 31 percent, and we are on track to meet the statutory deadline for underground storage tanks.

Since last year, we have petitioned the Environmental Protection Agency to take three installations off the Superfund list. One of those installations, Senator Inouye, that we have petitioned to take off the list is Schofield Barracks in Hawaii.

Mr. Chairman, we are continuing with our plans to take innovative approaches wherever possible. As I indicated, last year we issued a policy to require that natural attenuation be considered at all possible sites that require cleanup. We found that we can literally save millions of dollars if we adopt innovations such as natural attenuation instead of traditional pump-and-treat systems.

Last year, I also reported that we were testing phytoremediation, the use of plants to break down contaminants in the soil. Well, based on the tests that we are currently undertaking at Milan Army Ammunition Plant in Tennessee, we are considering using this technology in Iowa, Hawaii, Kansas, and Minnesota.

We have recently completed a review of weapons systems to identify military specifications which require the use of hazardous materials, and we have identified more than 1,000 specifications where nonhazardous materials can be substituted.

PARTNERING

Mr. Chairman, I think we all agree that an effective environmental program can only succeed if we have the confidence of the regulators, and especially if we have the confidence of impacted communities.

Since last year, we have issued a partnering policy memo to the field and we have encouraged the development of more restoration advisory boards, or RAB's.

Since last year, we have doubled the number of RAB's in the Army. Today we have 48, and we are working with another 25 communities to establish RAB's before the end of the fiscal year.

Mr. Chairman and Senator Inouye, I believe very strongly, as you do, that through partnering we can have a more viable and a more cost-effective environmental program. We certainly found that true at Fort Bragg this year when we signed an agreement with the Fish and Wildlife Service on the red-cockaded woodpecker, an agreement that freed up 7,000 acres of training land, an agreement that will assure that the 82d Airborne Division will be able to maintain readiness while at the same time protecting the habitat of that endangered species.

We are finding that partnering works everywhere we make an effort. At Fort Riley and Fort Campbell we are routinely inviting regulators to participate with us to review environmental action plans at those bases, and we found that partnering especially worked at Rocky Mountain Arsenal when we signed the record of decision in June of last year, which significantly cut projected cost of that most complex defense cleanup.

We know that establishing partnerships builds trust. It lays the foundation for cost-effective cleanups, and one of the best examples of partnering just happens to be in Alaska, Mr. Chairman. The Army gave its environmental cleanup award to Fort Wainwright this year because of that partnering effort. They developed there a one-of-a-kind, a very successful restoration program that is actually grounded in a close communication with the local community and with partnering with Federal and State regulators.

I believe that the success of the Army's environmental program in Alaska, in Hawaii, and throughout the Army is due to the professionalism of thousands of soldiers and civilians in the Army, so if you will permit me on behalf of Secretary West I would like to recognize their hard work and dedication, and I thank them for their efforts.

PREPARED STATEMENT

So, Mr. Chairman, again I thank you for the opportunity to provide this report on the Army's environmental program, and I look forward to your questions.

[The statement follows:]

PREPARED STATEMENT OF HON. ROBERT M. WALKER

Mr. Chairman and Members of the Committee: It is a pleasure to come before the subcommittee today to discuss the Army Environmental Program. The Army's Environmental Program includes military and civil responsibilities. My testimony will address the military environmental program requirements, the Army's commitment to environmental stewardship, our vision for the future, and our accomplishments to date.

ARMY ENVIRONMENTAL COMMITMENT

The Army's Environmental Program serves two primary functions: (1) it is essential to military readiness and quality of life for our soldiers; and (2) it fulfills a public trust to manage funds in natural and cultural resources in accordance with Federal, state and local laws. Our focus is on improving business practices, preventing pollution before it occurs, complying with laws and regulations, and conserving natural and cultural resources, while continuing to clean polluted "active sites" and closing bases.

Business processes are being improved through continuing strategic planning, reinvention, refocusing organizational roles and missions, emphasizing pollution prevention, partnering with the public and other governmental agencies, and using new technologies.

MISSION ESSENTIAL SUPPORT

Readiness

Our soldiers value the land on which they train. In no other military service is mission success so closely linked to the land. The Army must provide soldiers with tough, realistic, battle-focused training in preparation for a wide variety of missions. Our commitment to environmental stewardship supports readiness through: Conserving training lands, preventing pollution, complying with laws and regulations, partnering with local communities, and cleaning up contamination at active sites.

Force Modernization

Modernization is essential for the Army as it prepares to enter a new century. The Army's modernization strategy enhances our soldiers' warfighting capabilities and their ability to survive in combat by taking advantage of technology and state of the art weapon systems. An important part of this strategy is to design weapon systems in a manner that reduces the generation of wastes and minimizes pollution during their life-cycle.

The Army has expended a great deal of effort and resources during acquisition to replace toxic and hazardous substances with more environmentally friendly materiel. Through our use of new technologies and material substitution we intend to reduce the generation of waste throughout all phases of the acquisition process beginning with concept development and continuing through final disposal. In 1996 the Army completed its review of weapon system documentation under Executive Order 12856 to identify military specifications that required the use of hazardous materials. This year we began the revision process of identifying acceptable substitute materials and in 1998 we will implement recommendations. The Army's acquisition program managers are committed to integrating pollution prevention into the acquisition process. They recognize that the most cost effective way to manage waste is to avoid generating it. Environmental support of force modernization and acquisition includes: Life cycle environmental analysis, compliance with the National Environmental Policy Act (NEPA), and aggressively pursuing opportunities to integrate pollution prevention into the Army's acquisition program.

The Public Trust: Environmental Stewardship

The Army has an obligation to soldiers and their families, surrounding communities, the nation and to future generations to care for the environment and resources that have been entrusted to us. The Army is committed to this obligation. Army stewardship responsibilities include: Managing 12 million acres of land, protecting a half million soldiers and their families, protecting 153 endangered species

of plants and animals, managing more than 36,000 known cultural resource sites, ensuring cleaning up of DERA, BRAC, and FUDS sites, and complying with all federal, state and local laws.

THE ARMY'S FISCAL YEAR 1998 BUDGET REQUEST

Fiscal Year 1998 Environmental Budget

I've indicated the approaches and major areas of innovation we will apply to keep Army environmental programs tightly focused and responsive to national policy and law. The Army Environmental Program is directed at supporting warfighting and other specialized missions by enhancing the training environment, removing environmental threats to soldier health at home and on the battlefield, removing compliance distractions from commanders' shoulders and fostering continued national support for an environmentally attuned Army.

We are determined to do what we must do now to accomplish urgent, current requirements expeditiously before costs escalate, particularly in the two high expense areas of compliance and contaminated site restoration. We are further determined to accomplishing work of coming years with effectiveness and resource efficiency. To that end, we must apply the management process change, technology transfer and pollution prevention groundwork. This budget provides for lean, but effective program implementation and investment in both corrective and preventive actions to continue eliminating past problems and preventing future ones.

DEPARTMENT OF THE ARMY FISCAL YEAR 1998 ENVIRONMENTAL BUDGET

	Fiscal year 1996		Fiscal year 1997		Fiscal year 1998	
	Amount	Percent	Amount	Percent	Amount	Percent
Technology	40.3	2	64.2	5	30.4	2
Prevention	80.1	5	72.7	5	108.3	7
Compliance	582.6	34	572.3	40	606.7	39
Conservation	54.6	3	30.8	2	49.6	3
DERA:						
Army	416.3	24	338.8	24	377.3	24
FUDS	209.4	12	256.1	18	202.3	13
BRAC	345.7	20	85.9	6	198.6	13
Total	1,729.0	100	1,420.8	100	1,573.2	100

It is critical to continue moving forward on: Defense Environmental Restoration Account (DERA), DERA-Formerly Used Defense Sites and Base Realignment and Closure, which are all concerned with returning precious land resources to productive use. We have turned the corner, the pace of actual cleanup is accelerating, in response to congressional pleas to get past the studies and on with the work. These three areas constitute 50 percent of the budget, a 14 percent increase from the 1997 budget, and are the non-negotiable legacy of former times, that we must resolve.

The Compliance item, at 39 percent of the requested budget, a 6 percent increase from the 1997 budget, pays for direct responses to legislated requirements that are not voluntary on the Army's part. We must fix the things regulators say are broken, and we must install the programs, renovations and new facilities mandated by current law and regulation to meet deadlines. Otherwise we will face new rounds of expensive, legal actions to force compliance. We routinely include a maximum of cost-saving, cost avoiding and pollution preventing features in compliance remedies to keep overall compliance costs down. Nevertheless, the Army also has to invest the requested technology and pollution prevention dollars in physical plants, processes and materiel as cost-effective ways to indirectly reduce waste generation that would otherwise manifest itself "down stream" in the form of pollution and entail costly mitigation costs.

Additionally, pollution prevention (limits exposure) and conservation (integral to quality training and stewardship responsibilities) both support readiness. Pollution prevention reduces risks of soldier illness at critical times in training and deployment. Conservation ensures high quality training realism that is critical to survival and victory on the battlefield. The budget increase for pollution prevention is almost 34 percent from 1997 to 1998, indicating the shifting emphasis from reaction to prevention. The budget for conservation increased 61 percent increase from 1997 to

1998. All requested line items in the table are in balance with the others. Elimination or reduction of any will seriously harm achievement of the entire suite of national environmental policies and goals to which the Army is mandated to respond.

PROGRAM MANAGEMENT AND ORGANIZATIONS

Management

Goals of the Environmental Program include the improvement of business processes to include planning, execution, and measuring program performance. The revised Army Environmental Strategy continues to focus on improving management and leadership, integrating environmental responsibilities into planning, training, operations, and acquisition while highlighting pollution prevention, employing new technologies and increased use of partnerships.

Integrating Environmental Stewardship into the Army Mission

The Army has developed comprehensive guidance for integrating environmental considerations into Army training and operations. The Army's Environmental Training and Doctrine Action Plan (ETAP) develops an aggressive, systematic approach to address environmental issues in the same way that the Army addresses any new operational challenge or weapons system. This plan represents a significant milestone towards accomplishing the difficult goal of conducting training while exercising sound environmental stewardship practices.

The Army's Integrated Training Area Management (ITAM) program integrates training land needs with sound land management principles. Land management and conservation ensure the long-term availability of land for tough, realistic training needed to achieve military readiness. ITAM helps the Army make smart decisions as we plan, develop, and operate our training ranges and maneuver areas. There is further discussion of ITAM's contribution later in the Conservation section.

Another important Army initiative supporting readiness is the Theater Army Medical Laboratory (TAML) recently activated in 1995. The TAML helps identify and evaluate health hazards in the area of operations through unique medical laboratory analyses and rapid health hazard assessments of nuclear, biological, chemical, endemic disease, occupational health and environmental health hazards. By knowing regional and localized contamination problems prior to deployment, the Army can better protect its soldiers and equip them to do their jobs to protect American interests overseas.

Cost-Effectiveness through Pollution Prevention

The Army's strategy will focus on pollution prevention to reduce the cost of environmental compliance. This strategy includes the ENVEST initiative, which provides procedures for improvement suggestions at the installation level; designing new processes, substitution of non-hazardous materials for those that are hazardous; recycling and reuse of wastes; education and awareness training; and the development of new materials and using new technologies when possible.

The Army leadership promotes pollution prevention by recognizing success and sharing lessons learned. The Army uses annual Environmental Lessons Learned Workshops as a vehicle for sharing information and improving business practices. The workshops break out into small workgroups to discuss innovative approaches to implement business practices that result in significant cost savings and pollution prevention.

Pollution prevention requires innovative thinking. To encourage innovative thinking, the Army provides opportunities for our workforce to step out of the box to examine their processes and procedures from a different perspective. The Army participates in the National Conference of the American Planning Association and in the Joint Federal Planners Workshop in order to partner and share lessons learned with the Air Force, Navy, other federal agencies, and the public. This type of planning and information sharing results in continuous process improvements. Exchanging perspectives on environmental issues in workshops such as these, provides an opportunity for the Army to build bridges between our installations and members of local communities.

Army Environmental Quality Technology (EQT)

The Deputy Assistant Secretary of the Army for Environment, Safety, and Occupational Health co-chairs the Environmental Technology Technical Council (ETTC). This Council provides management oversight of environmental technology with a view to using technology to achieve Army environmental objectives. One of the objectives of this technology program is to integrate environmental factors into the acquisition process. The goal is to achieve, through technology, environmentally compatible systems and installations without compromising readiness or training.

In response to users' environmental requirements, the EQT program is structured around the following thrusts: energetic materials and processes; sealants and adhesives; organic coatings and removal; cleaning and degreasing; reduction of low level radioactive wastes; plating and metal finishing; batteries and alternate energy sources; packaging; textiles, composites and automotive/petroleum products; and life cycle environmental cost assessments and modeling. These efforts can significantly eliminate toxic materials, reduce volatile organic compounds (VOC's), and eliminate ozone depleting chemicals by addressing pollution at the source. Current "green initiatives" underway address the elimination of lead in small caliber ammunition, elimination of toxics and reduction of solvents used in the manufacture of missile propellants, and reduction of VOC's in the formulation and application of Chemical Agent Resistant Coatings (CARC paint). Planned fiscal year 1998 efforts include Green Gun Barrel (elimination of chromium plating wastewater) and Green Packaging (minimization of hazardous and non-hazardous solid wastes).

Last year the Army announced that Milan Army Ammunition Plant, TN is field testing phytoremediation, the use of certain species of plants to break down contaminants in soil. This field test was successful, and we are now considering the use of this technology at ammunition plants in Hawaii, Iowa, Kansas, and in Minnesota at Twin City Army Ammunition Plant. Last year I also discussed the use of natural attenuation at the Sierra Army Depot. Following up on this success, the Army recently issued an interim policy encouraging the consideration of natural attenuation at all cleanup sites as an alternative to costly cleanup methods such as groundwater pump-and-treat systems.

Partnerships

Next, I would like to discuss an important element of our revised strategy, the establishment of partnerships. Partnerships, or cooperative teamwork, expedite implementation, improve cost-effectiveness, and enable us to anticipate and prevent conflict. Army partnering efforts have evolved dramatically over the past year. In July 1996, the Army, as the leader of the Tri-Service Committee, published the "Partnering Guide for Environmental Missions of the Air Force, Army, and Navy." This guide has been distributed Army-wide and will be available on the World Wide Web. In addition, an "Army Partnering Policy Memo" issued to the field this year endorses partnering at the policy, program and project level with federal, state, and local agencies, the regulatory community, tribes, non-governmental organizations, and the general public. One example of significant partnering is the agreement between the Army, other federal agencies, and the State of Alaska, which establishes pollution prevention as the preferred environmental strategy, and fosters the use of innovative pollution prevention technologies. Several other excellent examples can be found within the Restoration section.

International.—Internationally, the Army has been a partnering leader for many years through theatre commander outreach programs in Europe, Central and South America, and Asia. More recently, the Army has supported DOD's preventive defense initiative to enhance regional environmental security. This effort established environmental collaborations with the Hungarian and Czech Republic Ministries of Defense, and included a collaborative pollution prevention opportunity assessment at Hungary's premier fighting base in Kecskemet. We believe that these relationships are important for building stronger bonds with other militaries. This not only helps build trust and understanding between individuals, the very foundation of sound diplomacy, but also support each element of our National Military Strategy—enhancing our security, supports our economy, and promoting democracy.

Other Federal Agencies.—The Army has maintained a long standing program with EPA to provide liaisons with various offices. HQ EPA and my office are currently exchanging a person for each office. Additionally the U.S. Army Environmental Center (USAEC) has formal partnerships with six federal agencies that enable the Army to be a more effective manager of natural and cultural resources. This type of partnering fosters a mutual understanding of each officials role in the environmental arena. This win-win situation enhances the ability to develop environmental policies that are cooperative and cost-effective.

DOD Regional Environmental Offices (REO's).—The Army is executive agent for managing four REO's established to support the Army/DOD mission through coordination, communication, and facilitation of regional environmental issues and activities. As a critical link in facilitating partnering initiatives, the REO's are directly supporting the DOD Range Rule and Munitions Rule partnering initiative with the states and tribal communities by providing open and continuous communication among all parties during review of DOD's draft regulation.

The REO's have been invaluable in identifying and resolving issues between installations and regulators. In May 1997 the Southern REO is co-hosting "Progress

through Partnering" the second DOD and EPA Region IV annual meeting. It promotes further partnership formation among military installations, the Regional EPA, the states, and local communities. The Central REO has promoted better business practices and increased communication between the DOD/Army installations and regulators within the region. This interaction has resolved regional issues around land easements, Record of Decision (ROD) review and remedial action prioritization. The Western REO has hosted roundup meetings, enabling installations to understand the impact of evolving legislation and regulations, and thus facilitating planning, budgeting, and programming efforts. The Northern REO has provided partnering training to its installations within its region to fulfill the spirit of true implementation of the "Partnering Guide for Environmental Missions of the Air Force, Army, and Navy." Overall the REO's have served as the Army's catalyst to approach environmental issues with regional partnering.

Army Environmental Policy Institute (AEPI).—AEPI supports management of Army environmental issues, and identifies concerns the Army will face in the future. AEPI has enhanced attainment of Army environmental mission goals by partnering with federal government agencies, major research institutions, and Historically Black Colleges and Universities and Minority Institutions (HBCU/MI's). AEPI has formal memoranda of agreement (MOA's) with Clark Atlanta University (CAU) and Georgia Institute of Technology, enabling the Army to obtain unique expertise. CAU evaluated Environmental Justice (EJ) issues at three installations: Ft. McClellan, Memphis Defense Depot, and Oakland Army Base. This analysis serves as the basis for recommended guidance on incorporating environmental justice into the Army NEPA process. AEPI is partnering with CAU to develop an Army environmental justice training manual for use at Army installations.

AEPI has partnered with DOD and other services to produce a multi-service video on EJ. The video uses "real life" examples of on-going activities at military installations addressing environmental justice issues (e.g., Restoration Advisory Boards, Local Reuses Authorities, etc.). The video focuses on public involvement and outreach; Native American issues; subsistence fishing, farming and gaming; and environmental impact assessments.

AEPI has also initiated a study with the Army War College on managing environmental issues in contingency operations, such as Bosnia or Somalia. This study will improve decision-making and will help prevent international legal and political problems as well as promote standards for protection of U.S. personnel.

Though the use of AEPI's unique ability to reach out to these organizations for partnerships, the Army has been able to utilize the Nation's best experts in its strategic planning and policy studies. These partnerships provide the Army an ability to anticipate impediments and to develop cost-effective solutions to address environmental issues.

OVERVIEW OF THE ARMY'S ENVIRONMENTAL PROGRAM

In 1992, the Army Environmental Strategy into the 21st Century divided Army environmental responsibilities into four pillar areas: Pollution Prevention, Compliance, Conservation, and Restoration (Cleanup). Before I discuss our budget request, I will provide a brief overview for each of these areas. Later I will provide a detailed discussion of our accomplishments and new initiatives for each pillar.

Pollution Prevention focuses on how to eliminate pollution to the greatest extent possible through the elimination or modification of processes that generate wastes. Some examples of pollution prevention initiatives include substituting non-toxic materials for hazardous materials, giving a preference to recycled or recyclable materials in procurement, and encouraging recycling to reduce the waste stream. The Army recognizes that pollution prevention is clearly the best long-term solution for reducing risks to human health and the environment from pollution and is the most cost effective approach. The Army is instilling an environmental ethic in soldiers of all ranks and supporting pollution prevention by changing its behavior to avoid future compliance and restoration problems.

Compliance recognizes the Army's responsibility to comply with all federal, state, local, Army, and applicable host-nation environmental requirements. This is a challenging task, but one that has the total commitment of the Army leadership. The Army accepts its responsibility as a federal agency to comply with all federal laws and accepts its obligation as a member of the local community to comply with state and local requirements. Command emphasis on compliance at our installations has significantly reduced the dollar amount of assessed fines/penalties and number of enforcement actions brought against them.

Conservation focuses on managing our natural and cultural resources to enhance the quality of life and to support readiness. Implementing sound land management

practices maximizes the long-term availability of our lands for realistic field training exercises. While force modernization is increasing the Army's requirement for land to support training, the availability of land for this purpose is decreasing. It is an Army imperative to ensure that the tough, realistic training needed to achieve military readiness is balanced with the important requirement to preserve and enhance our limited land resources for long-term use.

Restoration focuses on cleaning up contaminated sites in order to protect the health and safety of our soldiers, their families, and the residents of the local communities surrounding our installations. The Army cleanup program consists of active sites, Base Realignment and Closure (BRAC) sites, and Formerly Used Defense Sites (FUDS). We continue to use risk analysis and innovative technology to determine the most efficient and cost effective remedial alternatives.

As we move forward with our new vision and strategy it is important to acknowledge the solid accomplishments of the Army during the past year. While maintaining readiness, the success of the Army's environmental program, in pollution prevention, compliance, restoration, and conservation, is due to the dedication and hard work of our soldiers and civilians.

POLLUTION PREVENTION

The Army recognizes that pollution prevention (P^2) is clearly the most efficient and effective long-term solution for reducing risks to human health and the environment. The Army is making a paradigm shift from the end-of-pipe compliance to eliminating or reducing pollution at the source. The Army is actively partnering with other federal agencies and regulators to institutionalize P^2 as the preferred environmental protection strategy to meet compliance requirements.

Budget

In order to maintain our current focus on development of pollution prevention initiatives, integration of environmental issues throughout the Army readiness program, innovative technologies, and establishment of partnering programs to gain significant savings and improve effectiveness and efficiency, the Army requests $108.3 million for its fiscal year 1998 pollution prevention program.

P^2 Strategy and Prioritization

Major Command-level Army Pollution Prevention Business Investment Strategies are in development. The Army will begin collecting cost and benefit data for all P^2 projects in our annual Environmental Program Requirements (EPR). Beginning in the fall of 1997, this report will be used to assist in establishing priorities for applying limited resources.

Integration in Acquisition

The Army also is aggressively pursuing acquisition reform and the integration of acquisition P^2 into all phases of the Army's acquisition program, from concept development to final disposal.

In 1996, the Army completed reviewing weapon system documentation. To prevent pollution and reduce environmental costs by substituting safe material for hazardous materials, the Army must modify 1016 specifications and 4,300 unique applications. The Army Acquisition Pollution Prevention Support Office (AAPPSO) provides centralized program management for hazardous material (HAZMAT) elimination in acquisition. AAPPSO developed a methodology to review and revise technical documentation mandated under Executive Order 12856 and isolated a list of military specifications and standards that still require hazardous materials. The Army extended the methodology to review other key forms of weapon system documentation and is incorporating the results into a single integrated effort.

For example, the Program Manager, Bradley Fighting Vehicle Systems (PM BFVS), MI incorporated the Bradley Program Pollution Prevention Program into the Bradley Program Environmental Planning Guide. The PM BFVS has successfully integrated the environmental "cradle to grave" process and developed Life Cycle Environmental Documents for the BFVS A2, BFVS A2 Operation Desert Storm, Command and Control Vehicle, and Bradley Fire Support Team Vehicle weapons systems. The PM BFVS finished reviewing all required uses of hazardous materials in fourth quarter fiscal year 1996 and will start identifying alternate materials in fiscal year 1997.

National Defense Center for Environmental Excellence (NDCEE).—The National Defense Center for Environmental Excellence (NDCEE) supports the Army and DOD in analyzing environmental consequences of major DOD acquisitions. Support included requirements analysis, validation of Pollution Prevention technologies, and environmental cost analyses.

The NDCEE is involved in supporting the Army and DOD in a number of important areas. An example is the successful Joint Group on Acquisition Pollution Prevention (JG–APP) Program. The focus of the JG–APP initiative is to integrate pollution prevention issues and alternatives acceptance into a commonly shared point in the acquisition process—the contractor location.

The JG–APP Objectives are to reduce or eliminate hazardous materials, foster joint services cooperation, provide single interface to weapon systems program managers, and to provide a bridge to the Sustainment Community.

Installation Operations

At the installation level, the Army has made fundamental adjustments to move away from end-of-pipe treatment and control of waste, revising policies where possible to eliminate processes and activities that generate wastes or emissions.

Pharmacy Concept for Issuance of Hazardous Materials.—The Army is in the process of implementing the DOD "pharmacy" concept (centralized hazardous waste and materials management). This program improves material management practices while meeting environmental listing and reporting requirements for hazardous materials/wastes.

Hazardous Substance Management System (HSMS).—HSMS is the DOD standardized automated hazardous substances tracking system to automate the management and implementation of the pharmacy concept. HSMS was deployed to four sites in 1996. In 1997 we will field HSMS at several sites. One shining example is Fort Campbell's (KY) operational Hazardous Material Control Center (HMCC) with HSMS at five satellite locations, supports a geographically dispersed host of units. This management system was implemented in the fort's Aviation Brigade. Also created was a post-wide inventory and substitution program, shelf-life management and rotation program, and centralized recycling operations.

P^2 Planning and Execution.—Fort Lewis, WA built evaluation and feedback into its P^2 program. The program prioritizes P^2 products, extends a broad outreach to all installation organizations, and applies high quality technical solutions to minimize waste streams. The plan resulted in 95 percent reduction in paint booth waste with a savings of $236,000 annually. Fort Lewis also saved $2 million in 1995 from a variety of P^2 process modifications, including $175,000 annually from its used oil waste management program and fuel reclamation program.

Broad Spectrum Technology Application.—Corpus Christi Army Depot (CCAD), TX implemented a broad array of P^2 technologies and process modifications, providing savings of over $6 million annually. CCAD's hazardous material control program saves $2.3 million a year. These successes are attributed to CCAD's excellent working relationship with regulatory agencies.

Toxic Release Inventory

To meet the requirements of Executive Order 12856 (Compliance with EPCRA and Pollution Prevention), the Army will publish a Toxic Release Inventory (TRI) Strategy the third quarter of fiscal year 1997. The strategy incorporates weapon system and installation P^2 initiatives. The Army reduced its toxic releases 30 percent from 1994 to 1995. Examples of installations that implemented process modification P^2 initiatives and reduced reportable TRI releases are:

Installations	*Actions/Results*
Forts Campbell (KY), Hood (TX), and Lewis (WA).	Contracts to recycle antifreeze.
Fort Hood, TX	Various with total TRI reduction of 21 percent.
Alaskan Installations	"Smart washers" using non-toxic, non-flammable degreasing agent.
Anniston Army Depot, AL	Various, including high power pressure washers in lieu of vapor degreasers. Reduced TRI, despite increased production levels. Planning further reductions by changing paint stripping operations. Total TRI reduction of 22 percent.
Letterkenney Army Depot, PA.	Initiated elimination of primers with hazardous air pollutants and volatile organic compounds (VOC's).
Aberdeen Test Center at Aberdeen Proving Ground, MD.	Firing Impulse Simulator enables test firing without using live rounds, thus reducing noise and powder emissions. Installed full scale "Superbox" for total capture of all emissions and wastes from large caliber live fire testing.

Installations	*Actions/Results*
Aberdeen (MD) and Yuma (AZ) Proving Grounds.	Installed Depleted Uranium (DU) Catch Boxes to capture DU projectiles during soft target testing.
Corpus Christi Army Depot, TX.	Ozone Depleting Chemical (ODC) Solvents Elimination Program.
Tank-Automotive Res., Dev. and Engineering Center, MI.	Halon (an ODC) Elimination Program. Substitute identification almost completed will reduce risk to mission and costs.

Recycling

Army policy mandates recycling. In 1994, the Army achieved its 1999 solid waste recycling goal, five years early. I am pleased to report an over 100 percent increase in recycling in 1996 from 1992. A 1996 survey of all Army installation reports that over 90 percent have or participate in recycling, over 70 percent operate a formal "qualified recycling program", the average recycling rate is approximately 22 percent of the total waste stream, and an average of $250,000 is saved annually.

Army recycling efforts emphasize waste stream reduction, closed-loop approaches, resale of materials, and innovative technology developments. Tobyhanna Army Depot, PA, received the Army's 1996 recycling award. Their accomplishments as well as some other installation achievements are listed below.

Installations	*Actions/Results*
Tobyhanna Army Depot, PA	Reduced solid waste by 70 percent eliminating need for 90,000 cubic yards of landfill space. Implemented Residual Waste Source Reduction strategy prevented 205 tons of waste and saved $20,090 in fees. Implemented technology to recycle coal fly ash to encapsulate coal mine refuse and prevent drainage into area streams saving $25,000 annually.
Fort Hood, TX	Implemented 3-tier recycle incentive program. Recycled 13,000,000 lbs in five years with savings of $1 million annually. Programs integrated into various military and civil activities.
Fort Carson, CO	Instituted "closing the loop" recycling regulation integrating recycling into procurement.
Fort Irwin, CA	Instituted technology recycling contaminated soil in paving saving $500,000.

COMPLIANCE

The new vision for our Compliance program is to achieve environmental compliance through a proactive pollution prevention program. Pollution Prevention has been and continues to be the preferred means of achieving compliance. In the past, we have focused on engineering end-of-pipe solutions and reactively complying to a strict set of regulations and standards imposed on us by states and the Federal Government. The nature of our military operations and industrial support for our maintenance and manufacturing activities necessarily includes the use of hazardous materials. We know that these materials can increase cost and impose compliance obligations. In addition, restraints on our access to training areas, because of a breach of environmental standards, impact our military readiness. The Army is continuing to develop innovative pollution prevention initiatives; however, we still have many issues that must be resolved by our compliance program.

Budget

The Army requests $606.7 million for fiscal year 1998 compliance program costs. Funding will be used for upgrading infrastructure such as drinking water and waste water treatment plants, and meeting new Clean Air Act (CAA) requirements; and recurring costs such as permits, management and administration, corrective action, monitoring, manpower, and hazardous waste management and disposal.

Reporting and Monitoring

The Army has developed a reporting and monitoring system to ensure that installations are managing environmental requirements properly. The Environmental Compliance Assessment System (ECAS) initiated in 1992, is being updated for the

third time and the Installation Status Report (ISR), Part II (Environment) initiated in fiscal year 1996, will be revised this year.

ECAS.—ECAS, involving external and internal assessments, allows Army commanders to identify environmental compliance deficiencies and develop corrective actions to address the deficiencies. The ECAS program is continuously reviewed and improved to streamline the process and enhance the quality and usefulness to installation commanders. The Army has initiated planning for the third revision of ECAS, ECAS III which will be used in fiscal year 1998 with many improvements. ECAS III will integrate pollution prevention measures into the compliance assessment process, develop an improved programmatic evaluation approach within the assessment, improve Reason and Root Cause determination and develop a tier structured format of causation, consider feasibility of the International Standards Organizations (ISO) 14001 concepts being integrated into the Army ECAS process, and evolve Army ECAS software into a more user-friendly Windows format.

ISR.—The ISR is a status reporting system that established Army-wide standards to assess environmental compliance and program performance. The ISR provides a summary of the environmental condition, measurement of environmental mission impacts, and report on resource shortfalls and outcomes. The Army fielded ISR Part II to all CONUS installations in fiscal year 1996. During fiscal year 1997, we will field test newly developed standards that are more quantitative and specific. These modifications will allow the Army to capture the macro-level status of the environmental programs at Army installations to improve the justification and prioritization of limited resources.

Enforcement Actions

The Army's commitment to environmental compliance has resulted in a significant reduction in the number of enforcement actions (ENF's) brought against our installations. The results exceeded the fiscal year 1996 goals. The Army contributes much of this success to the management of the ECAS program. As a result, the Army has achieved a significant reduction in its assessed fines. From fiscal year 1994 through fiscal year 1996, the dollar amount of the fines has decreased by 94 percent and the number of fines has decreased by 62 percent. From fiscal year 1994 to fiscal year 1996, new ENF's have been reduced by 39 percent.

Fort Campbell, KY.—Fort Campbell's environmental division looked for common causes of compliance problems and developed a long range plan to minimize the impact of post operations on the environment and to overcome the installation's history of violations. Fort Campbell identified the root cause of most violations and negative environmental impacts as poor training and/or lack of knowledge. Fort Campbell developed an environmental management program which also fit in Army organizational constraints.

Partnering Initiatives.—The Army has established many important partnerships with state, local, and regulatory agencies, and other organizations to achieve compliance requirements or improve performance.

The U.S. Army Soldier Systems Command (SSCOM).—SSCOM environmental staff have teamed with researchers to produce a practical training manual for environmental and safety compliance. SSCOM developed a "Seven Step Solution" to integrate environmental protection considerations and safety into laboratory practices, which they are sharing with high schools, colleges, and universities.

Fort Carson, CO.—Fort Carson is working with Colorado regulators to resolve particulate matter and opacity concerns. This relationship resulted in an operating agreement between the state and the installation allowing limited fog oil training as long as a strict Fort Carson Standard Operating Procedure (SOP) is followed.

Aberdeen Proving Ground (APG), MD.—APG has a Memorandum of Understanding with the State of Maryland Department of the Environment. This is a cooperative agreement to foster sound environmental stewardship in the ecologically sensitive upper Chesapeake Bay.

Privatization

The Army is seeking regional solutions to installation water issues. The Army is also initiating privatization efforts for utilities where feasible and cost effective. The privatization program ranges from partial to complete divesting of water treatment operations. Facilities can be contracted or services purchased from off-post sources. In a privatization, the installation attempts to transfer both ownership and operation/maintenance of Army utility plans and system to a municipal, private, local, or regional utility authority. The end result being major reductions in the cost of operating and maintaining the utility systems while ensuring the highest levels of environmental compliance. Major Commands and installations have identified a

total of 45 drinking and wastewater privatization initiatives for funding through fiscal year 2001 and have funded 18.

RCRA Implementation

As the DOD executive agent for Resource, Conservation and Recovery Act (RCRA) implementation issues, the Army has analyzed several EPA initiatives which may have significant impacts on DOD installations. The Army chairs the DOD Hazardous Waste Management (HWM) subcommittee. The HWM has developed the "RCRA Rule Matrix" to track concurrent RCRA related rule-makings and initiatives. Some of the more important rulemakings for which comments have been prepared include the Land Disposal Restrictions Phase IV, the Hazardous Waste Identification Rule for process waste, the Hazardous Waste Identification Rule for contaminated media, the hazardous waste combustor rule, and an advanced notice on RCRA corrective actions.

The Army is working to reduce RCRA Part B permitting expenses by requiring a "Needs Analysis" (AR 200–1 and DA PAM 200–1) to justify the pursuit or renewal of any Treatment, Storage, Disposal (TSD) permit. New or renewed RCRA Part B permits will require HQDA approval.

The Army is on track to meet its December 1998 statutory deadline of RCRA–I regulated Underground Storage Tank compliance. The Army is also on track to meets its 1999 solid waste disposal reduction goal. There has been an approximate 30 percent reduction of solid waste disposal from 1992 to 1995 as a result of pollution prevention recycling and source reduction efforts. The Army has achieved a 31 percent reduction in hazardous waste since 1992.

Military Munitions Rule

The Army is the DOD Lead Agent for coordinating with EPA on the implementation of the Military Munitions Rule (MMR) and for development of the DOD Range Rule. The MMR was signed on February 3, 1997 and will become effective August 12, 1997. The establishment of the DOD Munitions Rule Partnering Team allowed the Army to successfully educate state, tribal, and interest group representatives on DOD management of munitions with on-site visits to installations.

DOD Range Rule

The DOD Range Rule will set forth the process for evaluating and responding to unexploded ordnance at closed, transferred and transferring military ranges. The Army and service and DOD representatives have been coordinating with other federal agencies (principally the Departments of Agriculture and Interior) over the language for the DOD Range Rule. In November 1996, the services began a partnering effort with state, tribal and interest group representatives (similar to that conducted on the MMR) to seek their input/concerns regarding the DOD Range Rule. Although the original schedule was to promulgate the DOD Range Rule in conjunction with the EPA MMR, the timeline for the Range Rule has been delayed to permit more time for the partnering effort with the states. The Army/DOD now plans to propose the Range Rule in the Federal Register in the summer of 1997, with final promulgation by the spring 1998.

Environmental Awards

The Army has recognized two Army installations for their outstanding environmental quality programs by awarding them the 1996 Environmental Quality Award. Fort Eustis demonstrated its effective environmental program as a leader in environmental stewardship through its implementation of innovative programs and technology; implementation of the National Environmental Policy Act (NEPA); integration of military mission and environmental programs; excellent environmental management; partnering with regulatory community. Kwajalein Atoll's extensive environmental program has also achieved many successes. Kwajalein completed 96 percent of the mitigation actions required by an Environmental Impact Statement (EIS) and Record of Decision (ROD) on time and at a saving of almost $6 million. The installation also decreased its air pollution by 90 percent by using multi-chamber incinerators instead of burning its solid wastes. Water pollution has been reduced by installing dockside receptacles on the Kwajalein pier for collecting all sewage from ships.

CONSERVATION

Program Challenges

Conservation includes the sound management of Army natural and cultural resources to sustain the military mission and protect access to land used for munitions testing, development of weapon systems, and combat training exercises. The Army

must maintain the resources upon which it depends. With stewardship responsibilities for more than 12 million acres of land, the Army must protect the land and the natural, historical, archeological, sacred and cultural resources thereon. On these lands, the Army is training half a million soldiers, housing their families, protecting approximately 153 endangered species of plants and animals, and preserving approximately 36,000 known cultural resource sites. The Army supports programs that help us make smart decisions as we plan and develop training ranges, maneuver areas, and other capital improvements.

Budget

The Army has continuously developed and implemented effective management practices that will ensure the sustained use of our natural and cultural resources in support of both Army missions and public needs. The fiscal year 1998 budget request of $49.6 million will allow the Army to continue to execute its natural and cultural resources protection programs by (1) developing land and resource information, (2) integrating environmental land management throughout Army operation, (3) developing management plans, and (4) fostering of partnering efforts to leverage funds available.

Land Management Programs

The following examples demonstrate the Army's approaches to land management.

Integrated Training Area Management (ITAM).—The Army's ITAM program helps us monitor environmentally sensitive areas, rehabilitate those that have become damaged, and properly manage all land resources. The Office of the Deputy Chief of Staff for Operation and Plans (ODCSOPS) is now the program proponent.

ITAM demonstrates how to successfully apply environmental protection to support essential Army training, by integrating sound land management principles into training and testing requirements. ITAM has increased realistic training, improved training safety, minimized environmental degradation, and increased our readiness posture.

Fort Carson, CO was the first installation to fully implement the ITAM program and now more than 80 installations are using at least one element of ITAM to manage land resources.

Range Management with use of Range XXI.—The USAEC and the Army Training Support Center (ATSC) have developed a series of key initiatives using innovative technology for range managers called Range XXI.

—*Management Tools*.—We have developed an operation and maintenance manual and computer software to test munitions migration.

—*Bullet Traps Feasibility Study*.—The Army used a shock-absorbing concrete at West Point, NY and Fort Knox, KY to collect bullets, preventing the need to remediate lead contamination. This successful study has been completed and will be transferred to other installations.

—*Redesign small arms ranges*.—An eroded small arms range at Fort Rucker, AL was reengineered with environmentally friendly alternative technologies to identify the best techniques for designing ranges that avoid erosion, stabilize lead from bullets, and reduce lead migration. This successful model will be used for redevelopment of other ranges.

—*Range cleanup*.—At Fort Polk, LA, soil washing and soil leaching technologies were used to demonstrate the effectiveness of range cleanup technique. This demonstration model was successful.

—*Green Ammo*.—The Army Research and Development Engineering Center (ARDEC) developed small arms service ammunition to eliminate lead and other toxic metals on training ranges. The new formulation and material development has been completed; qualifying tests will follow.

The Army emphasizes the continued development of these technologies to sustain our range resources while allowing the Army to train for readiness requirements.

Natural Resources Management.—Integrating natural resource data with military training information has been challenging for the Army. To facilitate this effort, the Army National Guard (ARNG) and Utah State University partnered to incorporate standard national and state data, satellite remote-sensing data, and site-specific surveys. This joint effort integrated a Geographic Information System (GIS) with Army-standard natural resources and military training information (ITAM and Range Facility Management Scheduling System). The project demonstrated that natural resources and military data can be integrated to determine relationships between military activity and land condition, to better manage both.

The Integrated Natural Resource Management Plan (INRMP).—Army installations must not only manage the land for training but protect the natural resources on the land as well. The Integrated Natural Resource Management Plan (INRMP) de-

fines management goals and determines actions required to achieve those goals. The Army has determined that 148 installations merit an INRMP. As of the end of fiscal year 1996, 35 installations have approved plans, 26 installations need updated plans, and 87 installations have plans under development.

Fort Carson, CO.—The Army has presented Fort Carson, CO, with the 1996 Natural Resource Conservation Award. The installation has integrated natural resources management with military training by using engineer battalions to perform erosion control work as an Army training exercise. Fort Carson also developed a tree planting project that enhances both training realism and provides a habitat for wildlife.

Newport Chemical Depot, IN.—Newport Chemical Depot (NECD), IN serves as an Army model for the natural resources conservation program. This installation was the small installation 1996 Natural Resources Management Award winner in the small installation category. Partnering efforts by this installation have developed its INRMP, supported by an array of approved cooperative agreements with various other agencies.

Fort Bragg, NC.—Cooperative efforts with the U.S. Fish and Wildlife Service (USFWS), The Nature Conservancy, and other local partners have resulted in a win-win solutions for Fort Bragg, NC and endangered species protection. Restrictions on Army training activities are eased while the Army agrees to manage and enhance red-cockaded woodpecker (RCW) habitat to the maximum extent compatible with training. On 3 June 1996, Mr. George T. Frampton, Jr., Assistant Secretary of Interior for Fish Wildlife and Parks commended the Army for its "pivotal role in the Sandhills Initiative." Mr. Frampton's memo concludes that "we can implement cooperative solutions to our mutual and dual missions—that is, recovering endangered species and ensuring our military readiness and national security."

Ecosystem management

The Army's approach to managing its land has now taken on a regional focus so that we can successfully balance the need to provide adequate training lands while protecting habitats and working closely with the surrounding communities. Taking a regional approach, Army land managers, as well as those from other federal, state, and private entities, understand the characteristics and limits of a given ecosystem. Examples like the Mojave Desert Ecosystem Initiative (MDEI), and initiatives by the Missouri Army National Guard (MOARNG) and Fort Carson, CO, (discussed below), demonstrate the potential for broader Army application.

Mojave Desert Ecosystem Initiative (MDEI).—Development around Army installations, such as Fort Irwin, CA, requires the Army to look at its neighbors in new ways. The Mojave Desert is under increasing pressure to serve conflicting uses: population growth, Army training lands, Department of Interior parks and wilderness areas. The Departments of Defense (and affected service installations/bases) and Interior are cooperating with California state agencies under the auspices of the MDEI to apply the latest in scientific data-gathering and analysis of ecosystem management principles. Fort Irwin, CA, serves as the executive agent for management and coordination of the MDEI. On May 21, 1996, in recognition of the success of this initiative, Secretary of the Interior Bruce Babbitt presented a Vice Presidential "Hammer Award" to Brigadier General William S. Wallace, commander of Fort Irwin. The Mojave Desert Ecosystem Initiative has dramatically improved communication among the federal landowners in the Mojave Desert.

Missouri Army National Guard (MOARNG).—The Missouri Army National Guard (MOARNG) completed an INRMP for the 1,287 acre Camp Clark Training Site. This plan was a significant benchmark because it was among the first to integrate ecosystem management with the military training mission. This plan has reduced costly Land Rehabilitation and Maintenance (LRAM) projects and minimized environmental impacts by tailoring mission requirements to inherent land capabilities.

Fort Carson, CO.—A concept called "watershed management" is the key element in the evolving range management philosophy that will provide training sites for future generations of soldiers. Fort Carson is in the process of employing watershed management technology. The technology involves strategically placing water control features within the watershed to prevent excessive runoff of water or sediment, despite disturbances from armored vehicles.

Cultural and Historic Resources

We recently issued a new policy on cultural resources (Army Regulation 200–4) and are in the process of developing implementing guidance to support the new regulation to protect approximately 36,000 known cultural, historical, archeological and Native American sacred sites on Army lands. The Army's cultural resources program is being developed in a partnership with the Advisory Council on Historic

Preservation by means of an Interagency Agreement between the federal agency and the U.S. Army Environmental Center (USAEC).

To manage these resources and still sustain combat readiness, the Army has initiated a program for Integrated Cultural Resources Management Plans (ICRMP). Currently, 52 installations have approved plans and 109 installations have plans under development. This year Fort Carson, CO, was awarded the Cultural Resources Award for its comprehensive cultural resources management program. The program effectively manages numerous historic districts and archeological sites, curates extensive archeological collections, and preserves Native American sacred sites while continuing to support combat readiness and training missions.

Removing historic quarters from Army Responsibilities.—The Army is pursuing a three-part strategy to reduce the costs of managing historic quarters: reduce inventory, reduce maintenance and repair costs, and streamline regulations (28 March 1997 report to Congress).

Advisory Council on Historic Preservation (ACHP).—The Army is partnering with ACHP to streamline the National Historic Preservation Act (NHPA) Section 106 review process.

U.S. Army Military District of Washington (MDW).—The MDW Historic Building Preservation Program and the State Historic Preservation Offices for Renovation of Quarters signed an MOU to reduce the time and cost of renovating historic structures. MDW is working to develop a long-range maintenance plan for each set of quarters to help schedule maintenance and provide an historical record of expenditures. Renovation contracts for 12 historic quarters have been awarded and will serve as prototypes for all 171 historic building renovations within MDW.

Coordination among Native American groups: Three Initiatives.—Many regulations and executive orders require consultation with Native Americans, Native Alaskans, and Native Hawaiians before engaging in activities that may affect resources of interest to them. USAEC coordinated the first national workshop between the Army, Native American tribes and Native Hawaiian organizations at Fort Sill, OK, in March 1996. The workshop was a major success, and a second is planned for May 1997.

Another key Army initiative to aid in Native American consultation is the preparation of draft Native American consultation guidelines to assist Army installations. The guidelines will provide basic protocols for establishing working relationships with Native Americans. USAEC will distribute the revised guidelines to the Army and participating Native American tribes in fiscal year 1997 as part of the new DA Pamphlet AR 200–4, Cultural Resource Management.

The Army is required to comply with the Native American Graves Protection and Repatriation Act (NAGPRA). USAEC has developed a centrally managed and centrally funded NAGPRA compliance program. All Army installations have been provided material to conclude their consultation responsibilities with Native American tribes. In addition, 167 installations and facilities have received reports and compliance documents that meet NAGPRA Section 6. The Army is the first military department to complete this report. Completion of Section 5 requirements is programmed for the end of fiscal year 1998. This centrally managed program approach has saved the Army $3 million due to its economy of scale.

RESTORATION (CLEANUP)

The Army's environmental restoration program continues to accelerate cleanups and reduce costs. The Army has completed restoration actions at 7,765 sites out of a total 12,185 in its cleanup program to date. The Army and other components implemented the Relative Risk Site Evaluation system in fiscal year 1996 that ranks all sites in three categories high, medium, and low relative risk. Our program and budget reflects a commitment to emphasize cleanup of High Relative Risk (HRR) sites.

Budget

We strongly encourage Congressional funding of our budget requests for our fiscal year 1998 environmental cleanup programs. Reduction of funding results in fewer and slower cleanups, as we saw in 1996. Although the Army will take action to address all immediate threats to human health and the environment, reduced funding stretches out the life of the cleanup program and increases total cost. That often means that contaminants will remain longer as potential hazards to drinking water supplies, and beneficial reuse of land will likely be delayed. The Army needs this Subcommittee and the full Congress to provide support and help to defend our fiscal year 1998 budget request of $377.3 million for Army cleanup, $202.3 million for FUDS cleanup, and $198.6 million for BRAC cleanup.

Cleanup Program Priorities

The Army maintains a policy of "worst first" prioritization supported by the relative risk site evaluation process described above. The numbers of sites under investigation continue to decrease while sites in actual cleanup or completed cleanup are increasing. The Army's focus is on moving sites into remedial action and response complete phases, and out of non-evaluated phase.

The number of contracts issued for cleanup is a significant challenge to manage. The Army is the only service that has implemented the use of an environmental tracking code to accurately track environmental contracts and provide specific answers regarding cleanup costs. The Army implemented this database using available technology and resources. The database tracks money spent to cleanup sites and funds provided to each contractor from October 1994 to present.

Currently the Army has three petitions submitted to EPA to delete installations from the EPA's National Priorities List (NPL):

—Riverbank Army Ammunition Plant, CA, petition was submitted 4th quarter fiscal year 1996.

—Schofield Barracks, HI, petition was submitted 1st quarter fiscal year 1997.

—Petition to delist a small portion of Rocky Mountain Arsenal, CO, was submitted to EPA in late fiscal year 1996.

The Army continues to seek additional sites for deletion from the NPL. In order to delist, the Army must demonstrate to EPA that all necessary remedies are in place and operating properly.

To complement the Army's integrated environmental restoration oversight program, the Army adopted the Air Forces' technical review process. This peer review process allows Army installations to obtain outside unbiased technical expertise to ensure the most effective and efficient use of the Army's environmental restoration funds. The purpose of peer review is to evaluate the rationale for selecting remedies, ensure proper use of risk assessment and application of risk-based decisions, evaluate technical merits of selected remedies, and provide improvement or alternative technical recommendations for remedies.

Success at Rocky Mountain Arsenal, CO

The environmental cleanup program at Rocky Mountain Arsenal (RMA), our most complicated and largest cleanup site, continues to progress. Dynamic community involvement, partnering with the USFWS and Shell Oil Company, and regulatory participation resulted in agreement on future cleanups and a structure to manage those efforts. The Army, EPA, and state regulators signed the On-post Record of Decision (ROD) in June 1996, specifying the selected cleanup remedies within the installation boundary. The final remedies reflects a balance among risk management, future land use, public concerns and cost. Remediation actions were grouped into 31 cleanup projects based upon practical implementation considerations such as geographical proximity to one another. These projects will protect the public from current or future exposure to contaminated soil or structures, reduce contaminant migration into the groundwater, and treat contaminated groundwater at the boundary to meet remediation goals.

In fiscal year 1997, the Army will award a Program Manager Contract (PMC) to supervise the execution of the 31 remediation projects. The contract will include a performance award that will reward the contractor for cost avoidance and schedule acceleration. This will assist the Army in meeting public expectations to complete cleanup of all remedial high risk activities ahead of the 14-year current schedule.

Pursuant to Public Law 102–402, and upon EPA certification of remedy completion, the RMA will be transferred to the Department of Interior and become the Rocky Mountain Arsenal National Wildlife Refuge. To provide overall management and execution of the final remedy, the Army, Shell Oil, and USFWS have entered into a cooperative partnering agreement and created the Remediation Venture Office (RVO). This innovative tri-party arrangement will be responsible for the planning, design, construction, operations, procurement, and oversight of the RMA cleanup. The RVO partnering concept brings together the Army and Shell as service providers with USFWS as the final customer to efficiently and effectively accomplish the remediation. As an active member of this partnership, USFWS is fully engaged in decisions up-front, thereby and preventing future issues with the end-state of the remedy.

Base Realignment and Closure (BRAC) Activities

Over the course of four BRAC rounds, the Army is closing 112 installations and realigning 27 others. At these affected installations, approximately 268,000 acres are available for reuse by local communities. To date, we have earmarked approximately $1.2 billion toward cleaning up those areas in need of environmental remedi-

ation and have programmed another $980 million for our BRAC Environmental Program in the fiscal year 1998/1999 President's Budget. Our main goal is cleaning up property identified for reuse as quickly as possible in support of the President's Five Part Program. In that regard, the priority for the limited funds available goes to the sites where there is imminent beneficial reuse.

Success Stories.—The Army is making steady progress toward cleanup goals, evidenced by the 38 installations reporting Response Complete or Remedy-in-Place. We feel our past and future successes are due to the existence of strong BRAC Cleanup Teams, consisting of the Army's BRAC Environmental Coordinator, state regulator and representative from the Environmental Protection Agency (EPA). All 39 Fast Track Installations have active BRAC Cleanup Teams. Strong partnering with the state and EPA is often responsible for our successes.

Cameron Station, VA.—In December 1996, the Army transferred 101 acres of Cameron Station, VA to Greenvest Incorporated, a private developer, for $33 million. By the time we turned on the pump and treat system, it was only a matter of weeks before the regulators judged the system was operating "effectively and successfully" so a final transfer could take place. Within weeks of the transfer, the developer received permission to modify this pump and treat system to conform to their planned development. Cooperation between the regulators and a hard working Army team made it possible for successful redevelopment while protecting the integrity of the remediation system.

Woodbridge, VA.—Over 580 acres of woods, marshes and meadows, formally used as a radio transmission and electromagnetic research facility will be open to the public later this year. The refuse harbors one of the richest concentrations of bird life in Virginia. More than 214 species of raptors, songbirds, wading birds and waterfowl have been counted.

Tooele Army Depot, UT.—At Tooele Army Depot, UT, the Army was successful in getting regulators to issue an "operating effectively and successfully" determination in less than three weeks to permit transfer of the consolidated maintenance facility to the Tooele City Redevelopment Authority for Detroit Diesel and its over 300 employees. We hope to see another "partnering" success at Tooele where we plan to use new legislative authority for the first time and defer the covenant under CERCLA 120(h)(3) and transfer property before cleanup is complete. The BRAC Cleanup Team is making steady progress in preparing the documentation necessary to support the transfer. Current indications are that the regulators support the use of this new authority.

Fort Ord, CA.—At former Fort Ord, CA, the Army continues to issue Findings of Suitability to Transfer for turning property over to the community after a large pump-and-treat system was accepted as operating "effectively and successfully" in January of this year. The Army will save $10 to $14 million by using an innovative approach for disposing of lead from beach ranges at an existing landfill project.

Umatilla Depot, OR.—By using innovative technology, the Army was able to save $2.6 million at Umatilla Depot, OR. Instead of using costly incineration, and in consultation with state and EPA regulators, the Army selected bioremediation with composting as the remedy. This project involved the use of biological organisms in compost piles to degrade explosives. The contractor successfully completed this project a year and one-half ahead of schedule. We intend to use this composting method at other installations that have explosive residuals in their soils.

Jefferson Proving Ground, IN.—At Jefferson Proving Ground, IN, the Congressional directed technology demonstrations in the north area have resulted in improved commercially available technologies. The ability of detection systems to find subsurface ordnance increased 20 percent from the baseline best probability. We continue to have problems discriminating between buried metals in general and unexploded ordnance. The funds appropriated last year for a fourth phase will be used to develop improved data fusion and software integration technologies rather than detection hardware.

Unexploded Ordnance.—Cleaning up unexploded ordnance remains one of our toughest challenges in the BRAC environmental program. The Army has archive search reports underway at BRAC installations. These reports are the first step in identifying the potential for unexploded ordnance at an installation. Our current cleanup approach parallels the draft Range Rule and will help us make good decisions. We still expect that there will continue to be areas similar to portions of Jefferson Proving Ground, which will neither be economically nor technically feasible to clean using today's technology. These properties will have to remain in federal hands. We hope to make the most out of these properties and welcome arrangements with agencies such as the Fish and Wildlife Service for wildlife refuges like the one at Jefferson Proving Ground.

Other BRAC Projects.—The BRAC environmental program differs from the DERA program in that the BRAC account pays for BRAC-related compliance and conservation as well as restoration projects. The Army is proud of its accomplishments for transferring historic property. After over a year of negotiations with the Advisory Council on Historic Preservation, we developed a boilerplate agreement that will assist Army installations with consultations with the State Historic Preservation Offices and the necessary steps for compliance with Section 106 of the National Historic Preservation Act (NAPA). The agreement will cut down on consultation time and protect historic property while giving reuse authorities the flexibility to consult further on changes in their reuse plans.

Formerly Used Defense Site (FUDS) Program

The Army is the DOD executive agent for the Defense Environmental Restoration Account (DERA) funded FUDS program. The goal of the FUDS program is to reduce, in a timely and cost-effective manner, the risk to human health, safety, and the environment resulting from past DOD activities at formerly used defense sites. Meeting environmental goals at FUDS properties depends on strong communication, partnership, and community involvement among DOD and program stakeholders. Priority setting for the FUDS program is based on the evaluation of relative risk, along with other factors such as legal agreements, stakeholder concerns, and economic considerations.

The scope and magnitude of the FUDS program is significant, with 9,029 potential properties identified. Environmental cleanup procedures at FUDS are similar to those at active DOD installations. However, information concerning the origin and extent of the contamination, land transfer information, past and present property ownership, and program policies must be evaluated before DOD considers a property eligible for the FUDS program. Despite a reduced level of funding in fiscal year 1996, the FUDS program made significant progress. Preliminary assessments to determine property eligibility were completed at 934 properties in fiscal year 1996. About two-thirds of those (619 properties) were determined to be either ineligible for the program or require no further action.

Innovative Technologies for Cleanup

Based on the success at Sierra Army Depot in reducing cost and effectiveness cleanup, the Army has developed an interim policy to require that natural attenuation be considered at all cleanup sites. Natural attenuation refers to the use of naturally occurring processes within the context of a carefully controlled and monitored site cleanup approach which will reduce contaminant concentrations to levels that are protective of human health and the environment within a reasonable time frame. The "natural attenuation processes" that are at work in such a remediation approach include a variety of physical, chemical, or biological processes that act without human intervention to reduce the mass, toxicity, mobility, volume, or concentration of the contaminants. Where applicable natural attenuation will yield major cost savings. The Army established a groundwater modeling Center of Expertise at the Waterways Experiment Station in Vicksburg, MS, to advise installations on the use of natural attenuation. The Center of Expertise will also provide expert consultation to Army installations to support 5 year reviews and demonstration of natural attenuation.

A new technology relying on plant life to absorb and break down contaminants, phytoremediation, is still undergoing field testing at Milan Army Ammunition Plant, TN. This technology successfully uses certain species of plants to remove explosives from affected waters. This process is not toxic and does not result in a hazardous waste. We estimate the cost of phytoremediation to be one-third that of activated carbon pump and treat systems, the conventional treatment technology for explosives contaminated groundwater. The Army is considering exporting this technology to Schofield Barracks, HI; Iowa Army Ammunition Plant; Twin Cities Army Ammunition Plant, MN; and Sunflower Army Ammunition Plant, KS.

Partnerships

Partnering initiatives have been extremely beneficial to the cleanup program. For example partnering by three installations has resulted in a total of $38 million in cost avoidance. These partnerships resulted in reduced requirements, less conservative cleanup levels, greater acceptance and use of innovative technologies, and expedited processes through joint planning and concurrent reviews. Specifically, Iowa Army Ammunition Plant gained acceptance for the use of phytoremediation and natural attenuation from EPA. Fort Bliss, TX, negotiated reduced groundwater monitoring requirements. Fort Campbell, KY, also experienced similar cost avoidance savings through an aggressive partnership with EPA and state regulators.

Many other Army partnerships resulted in more efficient and cost effective cleanups. The Army joined EPA Region IV in a three tier partnering effort. This effort includes military services, Secretariat level staff, and EPA branch managers. The partnership develops trust and builds confidence, fosters regional level consistency among states, allows for better cleanup decisions, facilitates sharing of experiences and solutions, and limits cleanups to those necessary to protect human health and the environment. Partnering initiatives at Jefferson Proving Ground, IN, and Fort McClellan, AL, started in fiscal year 1996. These partnerships involved formal partnering agreements with EPA and state agencies to resolve regulatory conflicts. Early progress reports are positive. At the former Fort Ord, CA, coordinated efforts of the Army, EPA, California Department of Toxic Substance Control (DTSC), and Regional Water Board allowed for use of an innovative Corrective Action Management Unit (CAMU) that will save $11 million. Fort Lewis, WA, partnered with the Ecological Society and federal agencies resulting in significant streamlining of the cleanup programs that saved 18 months and $80,000. Fort Wainwright, AK, was awarded the 1996 Environmental Cleanup Award because of its exceptional partnering efforts with regulators and the community that allowed for an innovative technology program. The installation's program also integrated environmental cleanup with the Army training mission.

Some of our installations have taken an extra step in partnering by inviting regulators to participate in annual reviews of installation action plans for cleaning up contaminated sites. By participating in such reviews, the regulatory community gains a better understanding of Army funding allocations and constraints for environmental restoration. For example, Fort Riley, KS, invited regulators from the State of Kansas and EPA Region VII to its annual review soliciting their views on issues ranging from technical matters to funding and scheduling of projects. The regulators appreciated the opportunity to participate in setting priorities and planning cleanup activities for the next five years.

Fort Campbell, an installation that straddles the states of Kentucky and Tennessee, invited regulators from both states to the annual review of its installation action plan. The state regulators found the meeting positive and informative. One of the regulators complimented Fort Campbell on a meeting that, "allowed unique regulatory relationships to be developed between the Kentucky and Tennessee agencies" and offered "all parties * * * an opportunity to be true partners in the protection of the environment." Establishing partnerships with regulatory agencies during the planning process builds trust and lays the foundation for cost-effective cleanups based on risk.

The Defense-State Memoranda of Agreement (DSMOA) program helps us to build these partnerships with the states by providing funds to support state participation in Defense restoration activities. This funding ensures the availability of dedicated state and territorial personnel to participate in cleanups at active and closing installations as well as Formerly Used Defense Sites (FUDS). Our investment resulted in cost avoidances, expedited cleanups, and improved community relations. The DSMOA program supported the partnership between the former Tarheel Army Missile Plant and the State of Tennessee. Through this partnership the plant was able to reduce requirements to repeat field activities, maximize the use of environmental data, and move the project into the active remediation phase.

Restoration Advisory Boards (RAB's) and Technological Review Committees (TRC's) continue to demonstrate the Army's active pursuit of public participation in our cleanup program. They serve as a forum for partnering among Army, federal and state regulators, and the community. The RAB's are successful because they provide an opportunity for all stakeholders to review cleanup progress, participate in decision making, acquire understanding of cleanup issues and progress, and build trust and credibility. As of January 1, 1997, 48 Army installations have established RAB's. This past year, I issued a new RAB policy that implemented the recommendations of the Federal Facilities Environmental Restoration Dialogue Committee. The Army Staff also published more specific guidance incorporating this new policy.

CONCLUSION

Mr. Chairman and Members of the Committee, it has been a pleasure to discuss with you and the distinguished members of this committee the accomplishments of the Army's environmental program. Our focus is on reducing costs and increasing efficiencies. We are committed to the Army mission of providing our soldiers with realistic training that ensures readiness. At the same time, we recognize our responsibility to protect the health and safety of our soldiers and the environment of the communities in which they live. Our program is mature. Our funding levels are sta-

ble. Our challenge is to fully integrate environmental management into all aspects of Army operations and decision-making.

In conclusion, I want to emphasize the commitment of the Army leadership to the Army's environmental program. The Army environmental program enjoys full endorsement and support by both the Secretary of the Army and the Chief of Staff of the Army. Both of these key senior leaders, together with field commanders at all levels, continue to reinforce the importance of integrating environmental considerations into all aspects of mission accomplishment. The Honorable Togo D. West, Jr., the Secretary of the Army, views the environment as one of the Army's most valuable resources, "America's Army is constantly challenged as we approach the 21st century. How the Army meets the challenges and protects our most valuable resources—our soldiers and the environment—will determine the nation's future."

General Dennis J. Reimer, the Chief of Staff of the Army, has specifically expressed his commitment to environmental responsibility: "Environmental responsibility involves all of us. The Environmental ethic must be part of how we live and how we train. We must seize the opportunities to do things smarter and better. By working together, we can forge a premiere environmental stewardship program. Protection of the environmental is the key to ensuring we can continue to conduct tough, realistic training and keep the Army trained and ready in the future."

As we move forward with our new vision and strategy it is important to acknowledge the solid accomplishments of the Army during the past year. The success of the Army's environmental program is due to the dedication and hard work of our soldiers and our civilians. Their commitment to wise environmental stewardship is the reason that we have been able to achieve so much in the areas of compliance, pollution prevention, restoration, and conservation. Their commitment is the reason we all continue to achieve new management and technical innovations for gaining even greater effectiveness.

STATEMENT OF HON. ROBERT B. PIRIE, JR., ASSISTANT SECRETARY OF THE NAVY (INSTALLATIONS AND ENVIRONMENT)

Senator STEVENS. Thank you very much. Mr. Pirie.

Mr. PIRIE. Thank you, Mr. Chairman, Senator Inouye. I appreciate the opportunity to speak to you today about the Department of the Navy's environmental program. The main message of my written statement is that our environmental programs have settled down into a regime of fairly stable funding. We are proceeding with them in ways that we believe will address the highest risk areas first.

Our overall environmental budget has stabilized at a level of about $1.6 to $1.7 billion per year. Stabilization is a significant change from the annual growth of the past. And I might say, Mr. Chairman, that for the Defense Department overall we are perhaps talking about four Army divisions, and from the Navy's perspective that looks like a nuclear aircraft carrier to us.

Congress devolved the environmental cleanup program to the military departments in fiscal year 1997, and we have stabilized cleanup funding in the Navy at about the $300 million level throughout the 5-year defense program. Devolvement has increased management attention to this program at all levels within the Department of the Navy. Cleanup at bases being closed because of action in one of our four earlier rounds of BRAC is accomplished with funding from the BRAC account, not the "Environmental restoration, Navy" account.

Our guiding principles for this cleanup are that we are obligated to clean up existing contamination at these bases, and we will do so. We will accord priority to those bases having near-term reuse plans, and we will avoid having cleanup interfere with ultimate closure, conveyance of the property, and reuse by the community.

We must prioritize in this way, because we do not have the money to do all of the cleanup at once. Some communities have expressed concern that cleanup actions may not be funded in time. However, to date no base reuse has been delayed or impeded because cleanup was not complete.

Environmental quality is comprised of compliance, pollution prevention, and conservation programs. We have added a total of $51 million in our fiscal year 1998 program for environmental quality above the fiscal year 1997 level.

Growth is primarily driven by one-time compliance projects to meet existing clean air standards; procure and install pulpers and shredders to manage nonplastic solid waste aboard surface ships; install crossconnection controls and backflow prevention devices for the Safe Drinking Water Act; and eliminate electrical transformers with more than 50 parts per million of PCB's by 1998, as required by the Toxic Substances Control Act regulations.

The Fiscal Year 1997 Defense Authorization Act approved Navy plans to install solid waste pulpers and shredders in surface ships of frigate size and larger and to use these devices in special areas and elsewhere to process and discharge waste paper, cardboard, metal and glass, and the like.

Under the act to prevent pollution from ships, pulpers, and shredders must be installed and in use aboard surface ships by the end of the year 2000 except for those ships being decommissioned on or before the year 2005.

A total of 205 surface ships will receive pulpers and shredders by the time we complete the program in December 2000.

PREPARED STATEMENT

Mr. Chairman, there is much other material about Navy and Marine Corps programs in my formal statement, and I would be glad to answer any questions you may have about them.

Thank you.

[The statement follows:]

PREPARED STATEMENT OF HON. ROBERT B. PIRIE, JR.

Good day, Mr. Chairman and members of the Committee. I am Robert B. Pirie, Jr., Assistant Secretary of the Navy (Installations and Environment). I appreciate the opportunity to speak to you today on the Department of the Navy's environmental program.

My statement covers a number of areas: How our environmental program supports military readiness; an overview of our fiscal year 1998 environmental budget request; a more detailed discussion of our environmental cleanup, compliance, pollution prevention, conservation, technology development, and base realignment and closure (BRAC) environmental efforts; and an fiscal year 1998 legislative proposal.

We in the Department of the Navy understand that the Nation's agenda includes both a strong Navy and Marine Corps and a protected environment. As I will discuss, our environmental expenditures are constrained to compliance with enforceable requirements, using the most cost-effective strategies to achieve results. Timely compliance supports the Department's primary mission of national defense.

ENVIRONMENTAL PROGRAM IN SUPPORT OF MILITARY READINESS

Complying With The Law

Our environmental program, like that of corporate industry, mirrors the greater attention environmental issues have had at the national, state, and local levels over the past two plus decades. Congress has enacted over 40 environmental laws since 1970 that impact private industry and the Federal Government. These laws can be

substantially revised and new requirements added during periodic reauthorizations. Federal agencies such as the Environmental Protection Agency, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service, then must issue implementing regulations for each of these statutes. Further, each state enacts its own environmental statutes and implementing regulations which can be even more stringent than federal requirements. This legislative growth has created an increasing need for people, management attention, and financial investments to meet tighter environmental standards. Failure to comply with environmental statutes and regulations can result in fines, penalties, criminal and civil suits, administrative proceedings, court orders, cease and desist orders against the Department of the Navy or our people. In short, environmental compliance is the law of the land and the sea, and we must obey.

Ensuring Access

The Department of the Navy is the steward for 3.5 million acres of land in the United States. By maintaining compliance with all environmental standards, we ensure our access to training and operating ranges on land, in the air, and at sea. We recognize that many of our actions, whether it is to train new Sailors or Marines, maintain readiness of combat forces, or test new weapon systems have an impact on the natural environment. We need to understand those impacts, and take appropriate actions to minimize them. Beyond the strict interpretation of the law, we have an ethical responsibility to conserve the natural resources entrusted to us.

Taking a Business Approach

While we must and will comply with environmental standards, we want to do so in a businesslike manner. We want to identify, evaluate and select the most cost-effective alternatives for achieving compliance. We need to establish benchmarks, set goals, and track progress toward meeting these goals.

We strongly support the need to balance environmental costs and benefits and to use risk, where appropriate, to set priorities with regulators and other stakeholders. We are working very closely with the Deputy Under Secretary of Defense (Environmental Security), the other military Services, private industry, regulators, environmental organizations, and community groups to use this approach. We must understand the scientific basis for actions and carefully weigh short and long term investment requirements against the expected benefits to be derived. We need to be flexible to change our operating practices when necessary, yet also identify and seek relief from those situations which would compromise our operational ability and national security mission. As I will point out in this statement, we have often found that environmental investments prove to be a win-win situation for the environment and for our operations.

> Environmental investments can shorten maintenance cycles, reduce costs, improve reliability, reduce air emissions, reduce hazardous waste, and improve safety in the workplace.

Innovation and Analysis

My statement will discuss a number of innovative prospects we are pursuing. Some cross wide boundaries. The Chief of Naval Operations established the Navy Environmental Leadership Program (NELP) in 1993 to test innovative technologies and management practices; and to export successful experiences throughout the naval shore establishment. Naval Air Station North Island, California and Naval Station Mayport, Florida were selected because of the wide scope of operations conducted at these two locations. Numerous technologies and management techniques in environmental cleanup, compliance, conservation and pollution prevention have been tried and perfected, and are now being spread to other bases. NELP initiatives support our business approach to meeting environmental standards by helping us do more, faster, and at less cost than by using current practices.

We have also engaged the considerable talents of the Center for Naval Analysis (CNA) and the Naval Audit Services (NAS) to evaluate current practices and alternative approaches.

FISCAL YEAR 1998/99 ENVIRONMENTAL BUDGET OVERVIEW

The Department of the Navy's fiscal year 1998 environmental budget will allow us to cleanup contamination at active and reserve bases, comply with current environmental standards, invest in pollution prevention, conserve our natural and cul-

tural resources, develop new environmental technologies, and perform the necessary environmental actions at base realignment and closure (BRAC) locations.

[In millions of dollars]

	Fiscal year—			
	1996	1997	1998	1999
Cleanup	362	287	277	287
Compliance	895	763	820	823
Pollution Prevention	88	140	126	124
Conservation	24	21	29	26
Technology	67	55	65	71
BRAC	291	354	374	289
Total	1,727	1,620	1,691	1,620

Our overall environmental budget has stabilized at the level of $1.6 billion to $1.7 billion per year. This is a very significant change from the past. The environmental budget had nearly doubled in size since we first identified it as a part of the Department of the Navy top line budget. As this committee recognizes, this growth in the environmental program had come at a time when the overall Department of the Navy budget had been cut by more than 16 percent over the same period of time. I believe that our ability to contain the growth of environmental funding is a direct result of our business approach to meeting environmental needs.

Stabilized Cleanup Funding

The Congress devolved the environmental cleanup program to the Military Departments in fiscal year 1997. I am very pleased with our efforts under devolvement. The Department of the Navy's cleanup funding for active (i.e., non-BRAC) bases is in the Environmental Restoration, Navy (ER,N) account.

We have stabilized cleanup funding at about the $300 million level through fiscal year 2001. This funding level reflects the Department of the Navy's share of the Defense Environmental Restoration Account funding as it was devolved to us by the Secretary of Defense in 1995. We have neither added money nor taken any out. We have, however, taken numerous steps which I will describe later to live within this level of funding. We believe that this level of funding will protect human health and the environment, allow us to better focus funding on actual cleanup of contaminated sites using risk management, and ensure consistent and predictable funding levels in the future.

Funded Environmental Quality

Environmental quality (EQ) is comprised of compliance, pollution prevention, and conservation programs. We have added a total of $51 million in fiscal year 1998 for environmental quality above the fiscal year 1997 level. Growth in the EQ program is primarily driven by one-time compliance projects to: meet existing Clean Air Act standards, particularly for Title V permits, hazardous air pollutant (HAP's) control, and volatile organic compound (VOC) emissions; procure and install pulpers and shredders to manage non-plastic solid waste aboard surface ships; install cross connection controls and backflow prevention devices for the Safe Drinking Water Act; and eliminate electrical transformers with more than 500 parts per million of PCB's by 1998 as required by the Toxic Substances Control Act. We have also added funds for conservation to meet natural resource management obligations under a number of protective statutes.

These program increases have been partially offset by funding declines in other areas of the EQ budget, particularly those dealing with the Resource Conservation and Recovery Act (RCRA), Clean Water Act (CWA), and pollution prevention. These budget reductions were possible due to: the completion of one-time projects; savings achieved from past investments; and reduced requirements due to base closure. Some individuals may be alarmed when they see the reduction in pollution prevention funding. Let me assure you that we have not diminished our efforts in this area. To the contrary, the reduction is due to BRAC closures of our shipyards, depots and other industrial facilities that are part of the Navy Working Capital Fund

(NWCF), previously known as the Defense Business Operations Fund (DBOF). We have actually added pollution prevention funds in our Operations and Maintenance (O&M) accounts in fiscal year 1998 to meet compliance standards.

Added Technology Development Funds

We have added $10 million for technology development in fiscal year 1998 to initiate the development of a pulper for submarines; to begin development of technologies to reduce nitrous oxide emissions from Navy gas turbine engines; to continue shipboard hazardous material substitution; and to evaluate pollution prevention equipment on our ships.

Advanced BRAC Funding

We have advanced fiscal year 1999 BRAC funding into fiscal year 1998 to support priority cleanup needs at closure locations with firm community reuse plans. This funding also supports the removal or closing of underground storage tanks; closing hazardous waste accumulation areas and storage facilities; performing radon, asbestos, lead-paint assessments; and conducting cultural and historic preservation surveys.

Other Sources of Environmental Funds

The environmental program benefits from several other sources of funds. The Strategic Environmental Research and Development Program and the Defense Environmental Security Technology Certification Program enhance our technology development efforts. Revenues generated from agricultural leasing and timber harvesting support natural resource management programs on our bases. Recycling revenues from the sale of cans, bottles, and newsprint sustain recycling programs on our bases and reduce solid waste disposal costs, while recycling profits can fund recreational and environmental projects.

I will now discuss specific aspects of our program.

CLEANUP

Program Overview

The installation restoration program, more commonly called cleanup, is designed to discover, investigate, characterize, and clean up contaminated sites on Navy and Marine Corps installations. Two federal laws are the primary drivers: the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and RCRA, which includes cleanup from leaking underground storage tanks (UST's). Since the Department of the Navy cleanup program began in 1980, we have examined nearly 270 Navy and Marine Corps bases and identified over 3,398 potentially contaminated sites. The primary contaminants found on our bases are, in order of frequency: petroleum products, solvents, heavy metals, and PCB's.

Site Status as of September 30, 1996

	Active Bases
Response Complete	1,198
Remedy in Place	41
Study Underway	1,201
Cleanup Underway	228
No Current Action	730
Total	3,398

Through preliminary studies, investigations and cleanups, we have been able to "close out" 36 percent of our sites as being Response Complete, or Remedy in Place by the end of fiscal year 1996. Due to funding constraints, execution concerns, relative risk priorities, and other reasons, a total of 730 sites are awaiting future studies or cleanup actions. Based on current funding, we expect to be able to close out 42 percent of our sites at active bases by the end of fiscal year 1997, and 57 percent of our sites by the year fiscal year 2002.

Department of the Navy Cleanup Policy

Devolvement of the cleanup program by Congress has increased management attention to this program at all levels within the Department of the Navy. Last year I established a number of cleanup principles under which we would conduct our cleanup efforts. These principles continue to guide our efforts. Under this policy, we

will invest funds in cleanups that bring us the most relative risk reduction. We want to have an open dialogue with regulators and the communities through our partnering efforts. We support the continued use of negotiated legal agreements, but new agreements must reflect relative risk evaluations and must fit within our existing budget. Existing legal agreements are to be revisited with regulatory agencies and amended to reflect funding controls and risk management factors wherever possible.

DON CLEANUP PRINCIPLES

Evaluate and close-out all sites;
Use risk to prioritize cleanup;
Maintain a stable funded program;
Plan and execute program in open dialogue with regulators and public stakeholders;
Use partnering to expedite cleanups.

This year, I have added 3 areas of emphasis:

Site close-outs.—We will use site close-outs and installation close-outs as a cleanup performance indicator.

Cost control.—We have established a Cost-to-Complete Index to measure progress in controlling changes in the total estimated cleanup costs. This will allow us to see how our actions and policies affect our cleanup bill over the long-term. At the start of fiscal year 1996, the baseline, we had invested $2 billion for cleanup and our cost to complete estimate was $5.1 billion. At the start of fiscal year 1997, our cost to complete estimate is $4.6 billion, the result of $362 million of work budgeted and performed in fiscal year 1996 and $200 million in cost avoidance.

Defense State Memorandums of Agreement (DSMOA).—We are taking steps to ensure that DSMOA funds are directly tied to the projected workload included in our budget. DSMOA's provide ER,N funds to state regulators to assist them in reviewing technical documents and monitoring our field work.

"PARTNERING"

Open and cooperative decision-making with regulators and communities is an important tool for success in our environmental programs. We recently negotiated language for a model Federal Facility Agreement with EPA headquarters. This new language incorporates the recommendations from the Federal Facilities Environmental Restoration Dialogue and consideration for the Department of the Navy funding controls. The model language is expected to greatly speed up negotiation of site specific FFA's.

Restoration Advisory Boards (RAB's) are an important part of our partnering effort. RAB's are jointly chaired by a Navy official and a citizen selected by the community. They are open forums for citizens to better understand the nature and severity of contamination on our bases, and to have a voice in the decision-making process. RAB input had added valuable common sense to the cleanup process, and has contributed to cost avoidances at some locations. We now have 88 RAB's in place covering 110 active and BRAC installations. We spent a total of $2 million in ER,N and BRAC funds last year for RAB's, and plan to spend the same amount this year.

SUCCESSFUL PARTNERING EXAMPLES

Agreement to use natural attenuation as the remedy for a contaminated aquifer at NAS Jacksonville, Florida will take 15 years and cost $116,000. The previous plan was to pump and treat for 6 years at a cost of $1.6 million.

Agreement at Marine Corps Base Camp Lejeune, North Carolina to change the cleanup standard in a signed Record of Decision from residential to industrial use will not endanger health or safety and save $800,000.

Agreement to use Global Positioning System (GPS) to locate wells instead of using survey crews at NAS Cecil Field, Florida saved $100,000 in one year. GPS meets accuracy needs.

More Cleanup, Less Study

We continue to execute a larger portion of our ER,N budget on actual "shovel in the ground" cleanups. We are limiting the amount of money spent for management to 11 percent. In fiscal year 1998, we plan to spend 76 percent on actual cleanup and 13 percent on studies. We have accomplished this by early identification of cleanup opportunities, wise use of our cleanup contracts, and the cooperation and support of regulators and the community. That is not to say that we can do without studies.

Cleanup percent increasing, fiscal year 1991–1998

[Cleanups as a percent of total program]

Fiscal year	*Percent*
1991	13
1992	14
1993	30
1994	48
1995	59
1996	64
1997	87
1998	76

Studies are an integral part of the cleanup effort, not just some paperwork shuffling. We must first understand the types, locations, severity, and geophysical characteristics of the contamination before we can decide what we should do, if anything. Thorough preliminary investigations can prevent unnecessary cleanup expenses. We are at the top end of how much we can reasonably limit investments on studies versus cleanup. The bottom line is that our goal is the safe close-out of sites, not necessarily just spending money on cleanup. Our goal is to make cost-effective decisions about the need for analysis, and proceed to immediate active remediation only where protection of human health and the environment require it.

Risk Management

The Department of Defense adopted a new prioritization scheme in 1995 based on risk management and the relative risk of sites. Relative risk considers the relationship between the contaminant(s), the pathways(s) that the contaminant may travel, and the receptor(s), i.e., human, animal and plant, that can be adversely affected. Sites are then grouped in categories of "high," "medium," and "low" to assist in establishing priorities. Since we cannot reasonably and financially do everything first, relative risk seeks to identify for first action those sites that pose a greater health and safety risk.

Fiscal year 1998	No. Sites	Percent of Funds
High	501	90.7
Medium	49	2.7
Low	32	3.4
Not Evaluated	31	3.2
Total	613	100

While we give priority to high-risk sites, we remain flexible within a stable funded program to cleanup selected medium and even low-risk sites when it makes sense to do so. For example, the marginal cost of having the remediation contractor take care of a low-risk site adjacent to a similarly contaminated high-risk site may make better business sense than bringing a contractor back years later.

Tiger Teams

Last year, the Naval Facilities Engineering Service Center established a Cleanup Review Tiger Team to find ways to better manage risk, minimize cost, accelerate

cleanup, and still protect human health and the environment. The team, comprised of technical experts from the Naval Facilities Engineering Command, the U.S. Army Corps of Engineers, the U.S. Geological Survey, the Western Governors Association, and private sector consultants met with 150 remedial project managers and reviewed data on 460 sites over a 9-month period of time. The Tiger Team report, issued last month, highlighted the need to improve skills, strengthen technical support, increase peer review, and expand technology dissemination.

Perhaps more importantly, the Tiger Teams helped to focus attention on where the greatest opportunities are for cost control. Conventional wisdom has looked at cost saving alternatives during remedy selection, i.e., choosing whether to use innovative technologies in place of more conventional cleanup solutions. In reality, the opportunity for cost avoidance is far greater in the earliest phases of investigation, where geostatistics, sampling plans, data quality objectives, exposure values, land use assumptions, health risk assessments, and ecological risk assessments can drive cleanup standards. These factors frame the level of cleanup that is required to maintain human health and the environment, and what cleanup remedies can be considered to meet those needs.

For example, we asked CNA to evaluate the utility of ecological risk assessments (ERA's). ERA's are used to determine the risk that contaminants pose to the environment. Conducting an ERA can be costly, and can stretch out the cleanup process. CNA reviewed ERA's at 80 sites on 17 Navy and Marine Corps installations. They concluded that ERA's had a minimal impact on remedy selection, and that expanding the scope of ERA's would not likely lead to more precisely quantified risk. CNA also noted unique problems associated with ERA's conducted in estuaries. Such ERA's cannot distinguish between Navy and non-Navy contaminants (a particular concern given that many Navy bases are located in heavily industrialized estuaries with significant levels of non-Navy contamination), and that there are few active remedial options available for contaminated sediments. We are sharing the results of this analysis with regulators. We are also developing Department of the Navy guidance on ERA's.

COMPLIANCE

Program Overview

The compliance program supports our efforts to meet existing environmental requirements for our current operations and industrial processes. The principal challenges here are under: the Clean Water Act, which regulates wastewater treatment and other discharges into waterways; the amended Clean Air Act, which regulates air emissions from most of our operations; the Toxic Substances Control Act, which regulates the management and disposal of PCB's; and RCRA, which regulates hazardous waste, solid waste and underground storage tanks. Compliance programs are implemented at every major Navy and Marine Corps activity.

We have implemented new environmental quality budget exhibits which distinguish annual recurring costs from one-time project costs. Recurring costs, which we call Class "0," cover salaries and benefits for the base's environmental staff; operating permits and fees; sampling, analysis and testing; and hazardous waste handling and disposal.

Department of the Navy Recurring vs. One-time Costs

	Percent
One-time	59
Recurring	41

NOTE.—Fiscal year 1998 O&M accounts equal $550 million.

The remainder of the compliance budget consists of one-time projects that must be done to meet an existing environmental standard. Class I projects are those required to meet a compliance deadline that has already passed; Class II projects are required to meet a specific future deadline; Class III projects provide an environmental benefit, but are not required by law or regulation. Our policy is to fund all Class I projects as soon as they can be accomplished, and to fund all Class II projects "just-in-time" to meet regulatory standards. Due to funding constraints, we do not budget for Class II projects that can be deferred and still meet the deadline, nor any Class III projects. We now track all one-time compliance projects greater than $300,000. Examples of compliance projects in our fiscal year 1998 budget in-

clude: $998,000 to close a landfill at Marine Corps Combat Development Center, Quantico, Virginia; $340,000 to remove underground storage tanks at Naval Shipyard Pearl Harbor, Hawaii; and $25 million to construct an oily waste collection, processing, and treatment facility at Naval Station, Pearl Harbor, Hawaii to provide dedicated collection, transmission, and processing facilities for bilge and other oily waste and correct a Class I environmental violation.

Maintaining Compliance

Funding for the compliance program represents nearly one-half of our entire environmental budget. There is an enormous effort taken to ensure that we properly identify requirements. Our decentralized management approach places the primary responsibility for maintaining environmental compliance with the commanding officers of our bases. They must identify the requirements and execute the program.

There are a number of tools available to assist them. Both Navy and Marine Corps use 3-tiered environmental compliance evaluations to find and fix compliance problems before a regulator does. Headquarters' staffs monitor compliance trends to spot installations with problems and help them improve their performance. Both Navy and Marine Corps also use a Navy developed "Environmental Cookbook" to help the base commander recognize all environmental standards. The cookbook approach fosters greater awareness of specific compliance standards, and provides typical solutions and their expected cost, which must then be tailored to local conditions.

NO COST COMPLIANCE

Some environmental compliance efforts just need a bit of common sense. Marine Corps Mountain Warfare Training Center Bridgeport, California reduced waste oil disposal costs by simply changing to the manufacturer's recommended oil change interval of 7,500 miles instead of government schedule of 3,000 miles.

We fully understand that environmental requirements compete in the budget process with direct operational requirements such as weapons system maintenance and modernization. Our careful scrub of all requirements, environmental and otherwise, ensures that appropriate priority is given to each.

To ensure that funds are being used properly, we asked the Naval Audit Service (NAS) to review environmental compliance expenditures to ensure that they were used to meet documented, existing regulatory standards, and that funding could not have been deferred. NAS reviewed fiscal year 1994 and fiscal year 1995 expenditures at 11 Navy and Marine Corps bases and found that, with only a few minor exceptions, all expenditures were needed to meet existing environmental requirements and could not have been deferred.

NEW ENFORCEMENT ACTIONS

	Fiscal year—			
	1993	1994	1995	1996
Navy	278	188	161	146
Marine Corps	142	13	22	13
Total	420	201	183	159

One measure of the success of our environmental effort is reflected in the significant decline in the number of new enforcement actions issued by regulators.

Training

Environmental training is a critical ingredient to maintaining compliance. The training must be timed to meet the individual's environmental duties, and provide both compliance standards and the range of technological and management solutions to achieve compliance. Both Navy and Marine Corps have taken steps to identify training needs and strengthen opportunities to receive the necessary instruc-

tion. The Chief of Naval Operations implemented a Navy Training System Plan last year that established minimum training requirements for military and civilian personnel, and approved 31 courses of instruction. The training plan was coordinated with the Inter Service Environmental Education Review Board to maximize joint training opportunities.

The Marine Corps continues to fully implement the Comprehensive Environmental Training and Education Program which ties together public outreach initiatives with integrated environmental training requirements into Marines' basic military occupational training.

Shipboard Compliance

The Congress has passed several pieces of legislation in the last few years concerning environmental issues on Navy ships.

The Fiscal Year 1994 Defense Authorization Act prohibited the discharge of all plastic waste from surface ships by 31 December 1998 and codified an installation schedule for Plastic Waste Processors (PWP's). The PWP was developed by the Navy and reduces plastic waste volume 30:1. It shreds the plastic into small chips, melts, sanitizes and compresses the plastic into sterile round discs weighing about 15 pounds. These discs can be safely stored aboard ship for recycling or disposal when the ship returns to port.

The PWP program is fully funded and on track. Production contracts were awarded in 1995 to two manufacturers. Two hundred and one surface ships will receive the PWP. We have met all legislative milestones to date, including completing 25 percent of all PWP installations by 1 March 1997. We are on track to meet the remaining legislative dates of 50 percent completed by 1 July 1997, 75 percent completed by 1 July 1998, and 100 percent completed by 31 December 1998. The total cost for research, development, procurement and installation of PWP's is $259 million.

The Fiscal Year 1996 Defense Authorization Act approved a process for developing uniform national discharge standards for effluents from military vessels. The Navy and EPA are currently developing joint regulations identifying the military vessel discharges for which some control is necessary. Once this process is complete, we anticipate by early in 1998, Navy and EPA will jointly promulgate standards for such discharges. A multi-agency executive steering committee is overseeing this effort. A representative from the Environmental Council of States is also on the Committee. The end result of this effort will be to establish clear and uniform U.S. discharge standards for Armed Forces vessels that apply at all military and commercial port facilities across the United States. With such standards in place, we can design, develop, and install effective control technologies aboard Navy ships to meet these standards.

Last month, the U.S.S. *John C. Stennis* (CVN 74) became the first Navy ship to receive all the equipment necessary to manage its solid waste stream at sea.

The Fiscal Year 1997 Defense Authorization Act approved Navy plans to install solid waste pulpers and shredders (P&S) in surface ships of frigate size and larger, and to use these devices in special areas and elsewhere to process and discharge waste paper, cardboard, metal and glass. Under the Act to Prevent Pollution from Ships, P&S must be installed and in use aboard surface ships by the end of the year 2000, except for those ships being decommissioned in or before the year 2005. A total of 205 surface ships will receive the P&S. The total cost for research, development, procurement and installation of these devices is $318 million. The Navy announced its intention to contract for the manufacture of P&S in the Commerce Business Daily last summer, and plans to award a contract this fall. We plan to complete P&S installation by the December 2000 deadline.

Because of unique space limitations, atmospheric concerns, and other issues, the Fiscal Year 1994 Defense Authorization Act set a compliance deadline of 2008 for submarines to meet plastic waste and non-plastic waste discharge restrictions. Under the direction of an Executive Steering Committee chaired by the Deputy Assistant Secretary for Environment and Safety, the Navy is analyzing alternatives for solid waste management aboard submarines. I expect to submit a report to Congress by the end of this calendar year that will describe our preferred alternative for submarine solid waste management.

The Navy is working with EPA and the Association of Metropolitan Sewerage Agencies (AMSA) to establish nationwide guidance for Vessel Collection, Holding, Transfer (CHT) system discharges to Sewage Plants. CHT's store a ship's sewage

and gray water (showers, laundry, galleys). Some municipalities wanted to treat CHT effluents as hazardous waste because of the presence of traces of heavy metals. Doing so would have dramatically escalated our treatment and disposal cost. Navy studies provided conclusive evidence that the metals were the result of normal corrosion in pipes and would not harm normal sewage plant operations. AMSA and EPA have supported our findings and conclusions.

Clean Air Act

As the designated Department of Defense lead for Clean Air Act (CAA) issues, the Navy has participated in numerous working groups with EPA and OMB. Our objective is to ensure that EPA recognizes and considers unique military concerns before establishing compliance standards.

NAVY AS THE DOD LEAD ON EPA CLEAN AIR ACT COMMITTEES

EPA Subcommittee for Ozone, Particulate Matter and Regional Haze Implementation Programs;

Mobile and Area Source work group on the Ozone Transport Assessment Group;

EPA Steering Committee on Prescribed Burning;

Industrial Combustors Coordinated Rule Making Committee.

The Navy led Department of Defense negotiations with EPA on the development of Major Source Determination Guidance for military installations under CAA programs for Air Toxics, New Source Review, and Title V Operating Permits. The guidance identifies what sources must be aggregated to determine emission control and permitting requirements. Compared to most industrial sources, military installations include a wider variety of functions and activities including residential housing, schools, churches, shopping centers, hospitals, and fire stations. The guidance assures that military installations are treated consistently under regulations that are applied to nonmilitary stationary sources.

EPA has recently proposed new National Ambient Air Quality Standards (NAAQS) rules for ozone and particulate matter. If new standards are set, states will have up to 3 years to prepare implementation plans, and EPA will consider new rules for mobile sources. The substance and extent of these implementation plans will determine how our operational practices will be affected. Our concerns with this proposed regulation centers on its potential impact on training. Smoke generators are used to simulate combat conditions, and tracked vehicles used on training ranges produce significant quantities of particulates. Both of these operational practices could be dramatically affected by the proposed particulate matter standard. We are also concerned about the cost of acquiring and maintaining permits, and the cost and complexity of equipment upgrades. We need to ensure that emissions and operating limits on military tactical equipment will not impede military readiness and operations. We are engaged with EPA on implementation issues, and are represented by our Regional Environmental Coordinators as the states do their work.

Munitions Rule/Range Rule

Section 107 of the Federal Facilities Compliance Act (FFCA) of 1992 required EPA, in consultation with the Department of Defense (DOD) and State governments, to issue regulations on when conventional and chemical military munitions become hazardous waste subject to regulation under RCRA. Section 107 also requires that these regulations provide for the safe transportation and storage of waste military munitions.

DOD has worked extensively with EPA on this issue. The Military Munitions Rule (MMR) was published as a final rule on February 12, 1997. It takes effect on August 12, 1997. We are generally satisfied with this new rule. It clearly defines when military munitions become a hazardous waste under RCRA, provides regulatory control and oversight of these munitions, and properly reflects safety concerns during transportation and storage.

States may still adopt more stringent rules than that contained in the MMR. We are working with the states to try to maintain a level of MMR uniformity. As this is a new rule, and it is not yet clear what action the states will take, we have not identified an implementation cost; there is no funding included in our budget for MMR.

The MMR also allows the Department of Defense to use existing statutory authority to develop a process for cleaning up Unexploded Ordnance (UXO) on ranges that

were once used by DOD. This process, called the DOD Range Rule, identifies appropriate response actions for UXO that will address safety, human health, and the environment. The development of the Range Rule has incorporated the input of state regulators, community activists, tribal leaders, the EPA, and OMB. We hope to publish a proposed rule in the Federal Register during the summer of 1997. DOD will be holding public meetings throughout the U.S. to educate the public about the rule, listen to stakeholder concerns, and answer any questions.

POLLUTION PREVENTION

Program Overview

P^2 program requirements are primarily driven by Executive Orders 12856, 12813, the CAA, the Montreal Protocol banning production and import of ozone depleting substances into the U.S., and the hazardous waste minimization aspects of RCRA.

P^2 is also good business decision-making, and the principal tool for cost-effective compliance. Instead of using traditional "end-of-the-pipe" waste management collection and treatment, P^2 seeks to eliminate the contaminant "at the source" through process changes, recycling, and substitution of non-hazardous or less hazardous materials. Money invested in this effort can avoid costs for permitting, sampling, testing to ensure that permit standards are met, and hazardous waste disposal. It can also improve safety and occupational health in the workplace and still maintain weapon system capabilities.

We continue to make progress in shifting from a compliance mode to a P^2 mode. One of our greatest challenges is to ensure that program managers and decision makers think about P^2 up-front—not as an after thought—in acquisition, facilities management, and operations. We issued a comprehensive Department of the Navy pollution prevention strategy in 1995 to reinforce the paradigm shift from compliance to P^2.

A "RAGS TO RICHES" P^2 SUCCESS

Ships at Naval Station San Diego, California and Naval Station Everett, WA have begun using recycled rags instead of baled rags. The recycled rags cost 50 percent less to buy, have no disposal costs, are 5 times as absorbent, and will divert 75 tons of HW disposal per year. NAVSUP is expanding the use of recycled rags to other fleet locations.

CHRIMP

The Navy's Consolidated Hazardous Material Reutilization and Inventory Management Program (CHRIMP) provides centralized life cycle control and management of all hazardous material (HM) and hazardous waste (HW). It establishes a chain of authorized ownership for each use of HM from procurement, receipt, distribution, use, return, redistribution, to any final disposal. The Navy has developed software, which has now been designated as the joint Service HM/HW management system, to facilitate CHRIMP program management on ships and at shore installations. The Naval Supply Systems Command is implementing CHRIMP and the associated software. Implementation began in 1994. It has now been fielded at 92 shore activities and 145 ships, with implementation to continue through 1999. The Navy tested a regional CHRIMP model in the Seattle area last year and will now begin similar efforts in Norfolk, Virginia and Pearl Harbor, Hawaii this year. We estimate that CHRIMP has cut HM procurement and reduced HW disposal costs by $23 million in fiscal year 1996.

P^2 Information Sources

One of the major hurdles we have had to overcome is how best to advise willing program managers on what P^2 alternatives exist to meet their specific applications. The Naval Facilities Engineering Service Center (NFESC), working with the Air Force Center for Environmental Excellence and the Army Environmental Center, developed a joint Service P^2 Opportunity Handbook that identifies off-the-shelf P^2 technologies and management practices. It is accessible via the Internet.

P² SUCCESS STORY

Naval Surface Warfare Center Crane, Indiana adopted digital photo processing (DPP) instead of conventional means. DPP has eliminated 5 chemical processes and 28 HM's. It is 3 times faster than conventional photo developing, and allows for digital storage and electronic transmission. The equipment cost $190,000 and is expected to save $210,000 per year in labor, material and disposal costs.

Naval Air Warfare Center, Aircraft Division, Lakehurst, New Jersey developed a P² equipment book that identifies commercially available equipment that is being purchased or evaluated by the Navy. It includes equipment summaries, operating characteristics, implementation requirements, a list of benefits and costs, and a point-of-contact for further assistance.

The Navy and Marine Corps have published P² planning guides and model P² plans to help installations assemble their own P² plans. All major Navy and Marine installations now have P² plans that they are working to implement.

Centralized P² Procurement

The Navy created a centrally managed Pollution Prevention Equipment Program (PPEP) to purchase and install P² equipment for non-DBOF Navy Activities. The program provides commercial off-the-shelf technologies, but also allows for the demonstration and evaluation of promising new equipment. Centralized procurement provides economy of scale for purchasing and simplifies logistics support. The Navy budget includes $21 million in fiscal year 1998 and fiscal year 1999 in the Other Procurement, Navy appropriation for this effort.

CENTRALIZED P² PROCUREMENT EXAMPLES

Isopropyl Alcohol/Cyclohexane Vapor Degreaser is a self-contained system to degrease, clean, and dry precision instrument bearings without the use of ozone-depleting substances. The return on investment is 0.6 years.

High Pressure Water Jet System removes paint, corrosion, and marine growth from underwater mines. The return on investment is 0.9 years.

Aviation Fuel Recycler recycles JP–5 aviation fuel samples for reuse in aircraft and support equipment. The return on investment is 2 years.

PACE

The Marine Corps is implementing a new program called Pollution Prevention Approach to Compliance Efforts (PACE) to prioritize compliance projects which use pollution prevention solutions. PACE allows the Marine Corps to identify those P² projects that contribute the most to meeting current compliance standards, and that promise to alleviate future compliance costs. The Marine Corps has shifted fiscal year 1998 compliance funds to fund P² investments practices and one-time projects.

Toxic Release Inventories

Congress passed the Emergency Planning and Community Right-to-Know Act (EPCRA) in 1986. EPCRA requires facilities that handle significant quantities of HM to make available to the public the types of HM being used and to conduct annual toxic release inventories (TRI). Although federal facilities were not originally included under EPCRA, Executive Order 12856, signed by President Clinton in 1993, directed federal agencies to comply with EPCRA. It also established a goal to reduce the release and off-site transfer of toxic chemicals by 50 percent over a five year period, using 1994 as the baseline.

Both the Navy and Marine Corps have now completed 1994 and 1995 TRI reports. A total of 35 Navy and 9 Marine Corps facilities reported in 1994, yielding a total baseline of 2.3 million pounds for Navy and 1.3 million pounds for Marine Corps. To ensure the accuracy of the data, the Chief of Naval Operations asked CNA to analyze 1994 Navy data and confirm its validity as a baseline. According to CNA:

—Ninety-eight percent of the releases were to the air.

—The leading Navy facilities release about 1/100 as much as the leading commercial facilities.

—The 10 leading Navy facilities account for 84 percent of the Navy total. Three of these facilities are government-owned, contractor-operated facilities.

—Navy releases are overwhelmingly associated with aircraft maintenance activities such as painting, paint stripping, and degreasing.

CNA validated the 1994 Navy baseline data, and recommended that the Navy take steps to standardize some reporting practices.

We are optimistic about meeting the 50 percent reduction by fiscal year 1999. Two major contributors which account for one-third of the 1994 baseline (1,1,1-trichloroethane and freon–113) are Class I ozone-depleting chemicals that are being phased out. Commercially available substitutes are being tested at Navy facilities for Dichloromethane, which is primarily used as a paint stripper and accounts for 15 percent of the baseline. We have been pursuing efforts to reduce methyl ethyl keytone, which is used as a paint thinner and wipe solvent and accounts for 12 percent of the baseline.

TOXIC RELEASE INVENTORY UPDATE

The 1995 TRI data shows a reduction of 41 percent for Navy and 31 percent for Marine Corps from the 1994 baseline.

P^2 Afloat

The Navy has embarked on a major effort to bring P^2 to sea. The P^2 Afloat Program will reduce HM procurement costs for ships, improve safety and health aboard ship, improve quality of life and reduce operation and support costs. Since HW is off-loaded in port, it will help shore installations meet the Executive Order 12856 goal of a 50 percent reduction in HW by 1999.

Efforts are underway to document waste streams and HM usage on different classes of ships. Some waste streams, such as oily rags, solvents, and paints, are common among all ships, although their usage will vary. Other waste streams are unique to ship missions, i.e., aircraft carriers. We want be able to tie each waste stream back to the ship's work center that generates it, and then apply P^2 solutions at the work centers to reduce or eliminate the use of HM. We are initially focusing on low cost investments that yield large savings.

The U.S.S. *Carl Vinson* (CVN 70); U.S.S. *WASP* (LHD 1); U.S.S. *John Hancock* (DD 981); U.S.S. *George Washington* (CVN 73) are serving as test beds for the P^2 afloat program. The *Carl Vinson* recently completed a 6 month deployment with a suite of 19 pieces of P^2 equipment, alternate materials, and process improvements. The Navy is now evaluating the results of this first test. The U.S.S. *Hancock* (DD 981), U.S.S. *Kearsarge* (LHD 3), and the U.S.S. *Arctic* (AOE 8) are set to deploy this month with similar suites of P^2 equipment.

The Smart Ship Project is an effort by the Surface Warfare Community to reduce crew workload, and thus reduce manning requirements for the future. The U.S.S. *Yorktown* (CG 48) is the designated test bed for this effort. P^2 afloat principles are being included as part of the Smart Ship project. The *Yorktown* deployed in December with a suite of P^2 initiatives and will undergo test and evaluations at sea through this month. The Smart Ship Project motto of "working smarter, not harder" fits right in with the P^2 afloat program.

P^2 in Acquisition

There is no better way to control future environmental costs than through effective planning for pollution prevention in the acquisition process. We can save significant time, money, and future effort if we factor in environmental considerations now for the weapons systems and platforms of the future.

The Joint Strike Fighter being developed jointly by the Navy and the Air Force is testing a fluorinated polymer applique that would eliminate the need for painting and paint stripping; reduce weight; and eliminate paint HM and HW. Potential savings of up to $4 billion in life cycle costs are projected.

The Assistant Secretary of the Navy (Research, Development and Acquisition) is working closely with us to instill within the acquisition community the need to consider life cycle environmental factors. Acquisition program managers are now far better versed on how P^2 investments can reduce or eliminate future environmental compliance problems and improve weapon system performance, simplify maintenance processes, and improve operator safety. All acquisition program milestone re-

views specifically address environmental issues and the status of National Environmental Policy Act documentation.

Nowhere is the P^2 philosophy better embraced than in the Navy New Attack Submarine NSSN, the Navy's next generation of nuclear-powered attack submarine. NSSN will begin sea trials in the year 2005 and is expected to become operational in 2007. The NSSN Team, comprised of Navy program managers, Electric Boat Corporation, Newport News Shipbuilding, Lockheed-Martin, and a multitude of subcontractors, have scored numerous environmental successes so far. For example, NSSN will:

—Use recycled lead and recycled chromated water from inactivated submarines, reducing current disposal costs;
—Reduce the number of paint products and solvents used in manufacturing and maintenance by 30 percent and 75 percent, respectively;
—Not use any Class I ODS's for cooling or refrigeration;
—Use zero PCB's, which will result in a 90 percent reduction in the amount of HW to be disposed;
—Be designed not to discharge plastics waste, in compliance with the Act to Prevent Pollution from Ships;
—Include an HM map to identify the location and type of HM that could not be eliminated from the submarine design; and
—Include dismantling procedures to efficiently recycle and dispose of the submarine at the end of its 30+ years of duty.

Ozone Depleting Substances (ODS's)

As a result of the 1987 Montreal Protocol, a ban on the production of ODS's went into effect for industrialized nations in January 1996. At that time, ODS's were used in virtually every weapon system and facility operated by the Navy. We were very concerned that the elimination of ODS's could compromise Navy readiness in the future. We use ODS's in three primary applications: air conditioning and refrigeration (CFC–11, –12, –114); fire fighting agents (Halon 1211, Halon 1301); and solvents (CFC–113, methyl chloroform). We have taken a number of steps to manage this situation.

> The Navy CFC and Halon Clearinghouse lists ODS alternatives, military specs and revisions, Navy ODS elimination programs, and other ODS news. It is accessible via the Internet, and through a quarterly newsletter. Technical inquiries are routinely received from international militaries and environmental organizations.

We have now converted a total of 168 CFC–12 based air conditioning plants and 177 CFC–12 based refrigeration plants on 82 Navy ships to ozone friendly HFC–134a. We plan to complete the conversion on remaining ships by the year 2000 at a cost of approximately $90 million. Conversion of existing CFC–114 air conditioning plants on surface ships to non-ODS HFC–236fa is currently scheduled from 1999–2010.

Last September, the Specification Review Board approved the use of the Navy Oxygen Cleaner (NOC) for precision cleaning and testing of oxygen life support systems. NOC is a jointly patented industry/Navy product that will eliminate 95 percent of the CFC–113 used by the Navy for cleaning oxygen systems.

We are also looking to remove ODS's from future weapon systems. The F/A–18E/F and V–22 aircraft programs were awarded a 1996 EPA Stratospheric Ozone Protection Award for their pioneering work in ODS alternatives for fire suppression. The amphibious transport dock ship LPD–17, the aircraft carrier CVN 76, and the New Attack Submarine NSSN, and the Marine Corps' Advanced Amphibious Assault Vehicle (AAAV) will all be ODS-free systems.

The Defense Logistics agency is maintaining a strategic reserve of ODS compounds for mission critical needs on ships and aircraft that will not be converted to non-ODS substances.

CONSERVATION

We are committed to protecting the natural and cultural resources on our bases. We want to comply with both the letter and the spirit of all conservation statutes, including the Endangered Species Act, the Marine Mammal Protection Act, The Migratory Bird Treaty Act, the National Historic Preservation Act, the Sikes Act, and the Archeological Resource Protection Act.

The Navy and Marine Corps manage some of the nation's most ecologically important sites. There are federally designated critical habitats on four Navy and two Marine Corps installations. There are 160 endangered and threatened species on Navy bases, and 47 on Marine Corps bases. Our natural resources professionals routinely work with private, state, and federal conservation organizations to coordinate efforts in forest management, cultural resources management, soil and water conservation, fish and wildlife management, and outdoor recreation opportunities for our Sailors, Marines, and their neighbors in the community.

While we have a legal and moral obligation to conserve the natural resources entrusted to us by the American people, we also have a military need to ensure continued access to and use of these resources. Our goal is to make every acre support our national defense mission, while still taking the protective measures that the law requires.

We are preparing integrated natural and cultural resource plans for all our installations. Since some training and testing activities can affect protected natural and cultural resources, we need to inventory these resources and understand the applicable requirements. Creative solutions, arrived at in partnership with regulators and conservation advocates, make win-win situations for the national defense and the environment.

A few examples of our recent conservation efforts:

—Last year, the Navy's Atlantic Fleet initiated a special program to monitor and protect North Atlantic right whales, one of the most endangered of the whale species. Less than 350 remain in the Atlantic Ocean. It's preference to use the waters off the southeastern U.S. as its calving area during late winter and early spring required military and commercial vessels operating in the same vicinity to exercise particular care to avoid harming these animals. We are working with the Coast Guard, the Army Corps of Engineers, the National Marine Fisheries Service, state wildlife agencies and private conservation groups to protect the calving areas off the coast of Florida and Georgia. Naval aviators and bridge lookouts aboard ships report whale sightings. This information is relayed to ship traffic in the area to minimize the chance of a collision.

—The Department of the Navy last year adopted new policies in implementing the requirements of the National Environmental Policy Act (NEPA). The focus of this effort was to more fully integrate environmental planning into the earliest stages of decision-making, particularly in the operations and weapon system acquisition area, and to use the NEPA process to make environmentally informed decisions, not merely to confirm or defend decisions already made. As an example, the Navy has been working with the National Marine Fisheries Service to prepare an Environmental Impact Statement for ship shock trials of the New Attack Submarine.

—The Marine Corps is finalizing a programmatic consultation with the U.S. Fish and Wildlife Service for protection of the threatened desert tortoise at Marine Corps Air Ground Combat Center Twentynine Palms, California. MCAGCC supports an increasing population of this species. To highlight our commitment and celebrate our successes, the Marine Corps and USFWS jointly produced an endangered species poster featuring the desert tortoise and M–1A1 tank at MCAGCC. The poster was unveiled at MCAGCC by Mr. Bruce Babbitt, Secretary of the Interior, on 24 Mar 97 its slogan was "Armored Threat and Threatened Armor, the Marines, We're Saving a Few Good Species."

An article in the Washington Post last month recognized that our bases are often a Mecca for wildlife and plants in a sea of urban, commercial, and industrial sprawl. We are justifiably proud of our conservation efforts.

TECHNOLOGY

The environmental technology program supports our cleanup, compliance, conservation and pollution prevention efforts. Our technology development efforts focus on satisfying technology needs for the military applications of today and tomorrow. We first look to the marketplace to supply us with our technology needs. When there is no off-the-shelf technology available, we try to adapt existing technologies, perform the necessary research and development in our laboratories, or contract with universities or commercial labs. Some technologies we develop also have commercial applications—so-called dual use technologies.

I have already mentioned several prominent environmental technology efforts—the development of PWP's, P&S, and our efforts with chemical manufacturers to find ODS alternatives. Another example of a technology that has successfully transitioned to the fleet is the SCAPS–LIF (Site Characterization and Analysis penetrometer System-Laser-Induced Fluorescence), a truck mounted technology de-

signed to obtain real-time, in situ subsurface data on petroleum contamination. Cost and time savings can exceed 40 percent compared to drilling wells. SCAPS–LF was developed jointly by the Navy and Army. Last year, EPA, California, and the Western Governors Association agreed that SCAPS–LF was a proven technology suitable for use at sites within their jurisdiction. This certification is an important step toward nationwide use of this cost saving technique.

We recently asked the Naval Audit Service (NAS) to assess how well our technology investments translate into real applications being used in the field. The NAS found some evidence that our investments had resulted in technology transfers that benefited the Navy, and that there was evidence that benefits outweighed costs. However, they cited the need for better management controls to document and quantify all technology transfer projects. The Navy is implementing the NAS recommendations.

BRAC ENVIRONMENTAL PROGRAM

BRAC Implementation

The base closure process is a challenging one for the Department of the Navy and for the many communities who have hosted our ships, aircraft, Sailors and Marines for so many years. Yet it is one we must pursue if we are to properly size our shore infrastructure to reflect the smaller force structure of the Post Cold War era. As you know, excess capacity in our shore facilities creates a significant financial drain on the Department of the Navy's budget.

We are implementing four rounds of base closure as directed by law, the first was in 1988 under the Defense Authorization Amendments and Base Closure and Realignment Act of 1988 (Public Law 100–526), and three additional rounds in 1991, 1993, and 1995, under the Defense Base Closure and Realignment Act of 1990 (Public Law 101–510). As a result of these decisions, we are implementing a total of 178 actions consisting of 46 major closures, 89 minor closures, and 43 realignments.

BRAC Implementation Strategy

Our implementation strategy focuses first on achieving operational closure at each military installation selected for closure as quickly as possible. By that, I mean all mission equipment and military personnel (with the exception of a small caretaker cadre) have been disbanded or relocated to the "receiving" location and the military mission has ceased. Second, we seek to expeditiously cleanup and dispose of BRAC property to support local communities in their conversion and redevelopment efforts.

Rapid operational closure also provides base closure communities with early opportunities for economic redevelopment. Effective community involvement and planning are central to conversion and redevelopment of our bases and to the retention of a skilled labor force in the base closure communities. Our conversion and redevelopment efforts are guided by President Clinton's Five-Point Plan for Revitalizing Base Closure Communities: Job-centered property disposal as an economic incentive; Fast track environmental cleanup to facilitate reuse; Base Transition Coordinators to reduce red-tape; Ready access to redevelopment assistance; and Larger redevelopment planning grants.

BRAC Implementation Status

The Department of the Navy has completed two-thirds (118 of the total 178) of the closures and realignments required under the 4 BRAC rounds. We plan to complete 31 more BRAC actions this year, 14 in fiscal year 1998, 12 in fiscal year 1999, two in fiscal year 2000, and one in fiscal year 2001. Major closures planned in fiscal year 1997 are Naval Air Facility Adak, Alaska; Naval Air Station Alameda, California; Long Beach Naval Shipyard, California; Naval Training Center San Diego, California; and Naval Station Treasure Island, California.

Fiscal year 1996 was the Navy's single largest year for the construction and O&M funds that were required to relocate forces. Fiscal year 1996 and fiscal year 1997 are our largest years for completing major closures and realignments. Our emphasis is now shifting from closure and realignment to environmental cleanup and property disposal.

Supporting Economic Redevelopment

In implementing BRAC closures, we want to convey property to communities expeditiously to advance their economic recovery—but not so quickly that we fail to protect the public from contaminated soil, air and water, lead-based paint, and friable asbestos. We are also required by law to consider the impact of property disposal on the protection of wetlands, the coastal zone, endangered species, and archeological and historic sites. A final, approved reuse plan from the Local Redevelopment Authority (LRA) is critical to the process.

This process takes time, and in many ways, is far more challenging than the closure and relocation actions. We can provide interim leases of base closure property to promote redevelopment, but as stewards of Federal land, we are required first to prepare an environmental document known as the "Finding of Suitability to Lease" (FOSL). To accelerate this process, we have been working with LRA's to identify the most attractive leasing prospects and to prepare the required documentation ahead of time. We also prepare the required "Finding of Suitability to Transfer" (FOST) as soon as the property is environmentally suitable to convey title. We have conveyed 7,835 acres of land to local LRA's and other federal agencies at 27 activities to date.

	FOST	FOSL
Number Completed	25	533
Number Acres Covered	7,234	4,696
Projected in fiscal year 1997:		
Number Completed	134	332
Number Acres Covered	5,417	5,038

Proceeding with Environmental Cleanup

Several communities have expressed concerns about the pace at which the Navy is able to cleanup contamination on closing bases. Navy has occupied these Bases for 50 to 100 years or more, many of them as industrial areas. We now know that disposal practices that were acceptable in the past are no longer practiced because of the environmental contamination they leave behind. However, environmental problems posing an imminent risk to health and human life are rare, and in fact, we give these problems immediate priority in our cleanup efforts. Cleaning up these sites will be expensive—an estimated cost of $2.5 billion—and time consuming.

We have established BRAC cleanup teams comprised of Navy personnel and environmental regulators to assess, prioritize, and expeditiously perform the necessary cleanup. We are working with regulators to tie cleanup standards to the nature of the reuse. This will speed cleanup, save money, and still protect human health and the environment. We have established detachments of former shipyard workers and trained them to do the necessary cleanup work. We have put into place both national and local contracting authority to perform the work.

Nevertheless, budget constraints limit our ability to accomplish the cleanups which do not pose an imminent threat but still must be performed before the property can be conveyed. There is simply not enough money to clean up every base at once. Our goal is to target cleanup dollars on those sites that have the most immediate and definitive prospect for reuse. Those sites that are supported by approved reuse plans with feasible reuse will get top priority for cleanup funds. Our intent is to not let cleanup get in the way of reuse. We are also working with EPA and state regulators to use the new Section 334 Amendments to CERCLA, which permits the conveyance of property before the cleanup has been completed, unless such a conveyance would harm human health or the environment.

The Department of Defense has categorized the environmental condition of property under the Comprehensive Environmental Response Facilitation Act (CERFA) to provide a convenient breakout of the current status of our BRAC property. CERFA categories 1–4 properties are environmentally suitable for transfer. CERFA category 5 indicates analysis is underway. CERFA category 6 includes property where the actual cleanup is underway. CERFA category 7 property has not yet been completely evaluated.

As of 30 Sept 1996	*Acres (All BRAC)*
CERFA Cat 1–4	107,833
CERFA Cat 5	11,260
CERFA Cat 6	7,572
CERFA Cat 7	39,194
Total	165,859

FISCAL YEAR 1998 LEGISLATIVE PROPOSAL

Before concluding, I would like to ask your support for a legislative proposal on air emission credits.

Retention of Proceeds from CAA Emission Reductions

The 1990 amendments to the CAA encouraged the states to create economic incentive programs to meet air quality standards. The objective was to create a market for buying and selling emission credits to help drive compliance with CAA standards. Many states have already done so. The military Services, however, presently lack clear authority to sell CAA economic incentives in non-BRAC situations and, if such incentives were sold, would have to remit the proceeds to the U.S. Treasury. (The BRAC legislation provides that all proceeds from the sale of assets be deposited into the BRAC account.)

Our proposal would put the Department of Defense on the same footing as private industry. It would allow the sale and transfer of CAA emission credits and permit the installation or Service to retain the proceeds. For example, we could trade an excess of VOC credits for NO_x credits to meet air quality standards. The proposed legislation is patterned after Public Law 97–214, 10 U.S.C. Section 2257, Disposal of Recyclable Materials, which created an economic incentive for military installations to recycle by allowing them to keep the proceeds for use in pollution abatement, energy conservation, or morale and welfare programs.

CONCLUSION

Our environmental program supports readiness, satisfies our legal obligations, and sustains our civic role to protect the Nation's health and welfare. We must approach environmental issues from a business perspective. We are finding ways to identify, analyze, and select the most cost-effective solutions. Across the cleanup, compliance, pollution prevention, conservation, and technology programs, we are taking both small steps and large ones to reduce operating costs while still meeting environmental standards.

It is important to recognize that often our environmental investments, particularly those for P^2, yield cost avoidances or true savings outside the environmental accounts, but in the base operations and mission accounts. Regardless of where they occur, these savings are real, and help the Navy and Marine Corps modernize weapons systems and other priority needs.

That concludes my statement. I would welcome any questions.

STATEMENT OF HON. RODNEY A. COLEMAN, ASSISTANT SECRETARY OF THE AIR FORCE (MANPOWER, RESERVE AFFAIRS, INSTALLATIONS, AND ENVIRONMENT)

Senator STEVENS. Thank you very much. Mr. Coleman.

Mr. COLEMAN. Thank you very much, Mr. Chairman, Senator Inouye.

About 3 years ago when I appeared before the committee just after being sworn in I pledged to help build on the Air Force's outstanding record of environmental programs, and today I can say to you, Senators, that our record on the environment is better than ever.

Three years ago we had 236 notices of violation [NOV], and in the second quarter of fiscal year 1997 our NOV's were down to 28. Our goal is to have zero violations, and we intend to drive to that goal.

Three years ago we had no long-term plan for completing the environmental cleanup of our installations, and today more than about 45 percent of the restoration of our sites on active installations has been addressed.

Seventy-five percent of our program funding goes to actual cleanup activity, and given stable funding for our restoration account we have a plan to remediate all but two of our active installations by the year 2007, and we plan to have those two remediated by the year 2014.

BASE CLOSURE CLEANUP COSTS

At our closing bases environmental cleanup costs are down by nearly 25 percent, and remedies will be in place for all but the Sacramento Air Logistics Center by the year 2001.

Three years ago it seemed that we were measuring our programs on how many documents we could generate. Today we are focusing on innovation and results, with programs that measure performance. At Vandenberg and Elmendorf Air Force Bases the Air Force is building partnerships with regulators and the community to invest dollars in pollution prevention rather than in costly and time-consuming administrative processes.

Three years ago we were just learning about the impacts of our use of hazardous materials. Today, I can report that by using different materials, and changing some of our processes, we have avoided approximately $36 million in operations and maintenance costs and reduced our toxic release inventory by more than about 900,000 pounds.

Three years ago our use of airspace needed for training pilots in Alaska and Idaho, for instance, was being challenged. Today we have reached agreement with the State of Alaska, Native Alaskan leaders, and the community, to use more than 60,000 square miles, about the size of Kansas, to keep our pilots and navigators ready to fly and to fight.

AIR FORCE PARTNERSHIP PROGRAMS

We are investing in a new high tech range in the State of Idaho. That range requires that only 300 acres of land be set aside as a target area, and will eventually save millions of dollars in reduced O&M cost. In Nevada and Arizona we are building partnerships with the community to find a balanced approach to keep training at the Nellis and Goldwater ranges.

These examples all demonstrate that the success of our environmental programs lies in partnerships with our regulators and our communities. Three years ago we were just beginning to understand the significance of actively involving regulators and the community in our programs.

Today we have 87 restoration advisory boards at 106 installations, providing advice in pragmatic, commonsense solutions to environmental issues in their communities.

Partnerships save time. A joint venture between the Air Force's 611 Civil Engineering Squadron at Elmendorf and two Alaskan Native-owned businesses saved the Federal Government $500,000, sped the cleanup at King Salmon, and provided great benefit to the local economy. Fifty percent of the labor force were Native shareholders and another 15 percent were other local residents. Thirty percent of the project purchases were made locally, and 69 percent were made within the State of Alaska.

Mr. Chairman and members of the committee, the Air Force is walking the talk in environment. In the past 3 years, because of your support, our programs have matured beyond expectation. We can see the light at the end of that long tunnel in our environmental cleanup program.

Our compliance violations have virtually disappeared. We are building pollution prevention into every aspect of our operations. We are building partnerships with our regulators and our communities to ensure our ability to train while protecting the health and safety of our forces and our neighbors.

We intend to keep marching to this new environmental drummer into the next century. I pledge that we will keep a tight rein on our environmental programs now so that we can all reap rewards in the future.

I think that in the next 10 years, with stable funding we will see our environmental cleanup program virtually completed. We will see pollution prevention as the keystone to compliance. We will see training ranges that allow us to maintain our readiness while also allowing recreational access and preservation of natural and historical resources.

PREPARED STATEMENT

Mr. Chairman, Senator Inouye, together we have met the challenges in the last 3 years, and with your sustained support we will leave our legacy for tomorrow, an environmental program that has helped build a better Air Force and a cleaner, more beautiful America.

Thank you very much, and we will respond to any of your questions.

[The statement follows:]

PREPARED STATEMENT OF HON. RODNEY A. COLEMAN

Mr. Chairman and members of the Committee, I appreciate this opportunity to talk with you today about a subject crucial to maintaining our ability to respond to major regional conflicts and protecting America's interests globally. The Air Force's Environment, Safety and Occupational Health (ESOH) program elements are essential to meeting the Air Force's operational requirements by improving performance, reducing costs, sustaining combat readiness and protecting the health and safety of both the Air Force community and the American public.

ESOH is more than a series of specific programs. ESOH is a mindset—a corporate ethic focused on giving our Air Force personnel the wherewithal to maximize the capability of weapons systems and to be the captains of their workplaces. Our mindset focuses on making the best possible organizational decisions, chooses to spend resources on pollution prevention now to avoid unnecessary compliance expenses later, relies on continuous dialogue with all stakeholders to reach higher levels of understanding, and instills sound science into all environmental practices that maintain readiness.

I want to take a few moments to explain how ESOH is integral to the Air Force's ability to protect American interests globally, while protecting this nation's precious natural resources and the health and safety of her citizens. And I want to ask this Committee's support in continuing the sound organizational practice that ESOH provides to prepare our Air Force for the challenges of the next century.

AIR FORCE ESOH

The core purpose of the Air Force ESOH program is to develop and implement innovative, integrated, comprehensive ESOH solutions that protect and enhance the Air Force's ability to project air power globally at levels of affordability previously not imagined or achievable.

Our commitment is to explore new technologies, processes, methods, relationships and paradigms, while anticipating and supporting the change necessary to meet our operational requirements into the next century. We believe that teamwork—within the Air Force, with regulators, with our neighbors, and with the Congress—is essential to meet our environmental, safety and occupational health commitments, while enhancing the Air Force's ability to maximize readiness for every dollar spent.

The Air Force ESOH program is already improving our performance and minimizing costs by reducing pollution from our operations, initiating innovative approaches to protect the health and safety of our people and our neighbors, and establishing partnerships enabling the use of resources from other sectors in support of the Air Force mission. In addition, the Air Force has made significant strides in recent years to enhance trust and credibility with our partners by providing an open and inclusive process in planning and implementing our ESOH programs.

However, we in the Air Force, and we in this nation, have just scratched the surface. By using our ESOH knowledge and skills in new ways specifically designed to assist our other functional areas meet their requirements more effectively, we enter a new universe of possibilities. The possibilities include pilots capable of performing beyond current physical limits, and dramatic improvements in productivity. The extension of physical capability will pay off in the context of pilots having skills and physical endurance sufficient to master the full lethality of new aircraft. Integration of ESOH into our processes will lead to significant cost and performance improvements.

MEETING THE CHALLENGE

Our guiding principles in meeting the challenge before us continue to be those set by the Secretary of the Air Force and the Chief of Staff in March of 1995 Sustaining Readiness, Leveraging Resources, and Being a Good Neighbor:

Sustain Readiness

The Air Force maintains its combat edge through intensive and realistic training. As we relocate more of our forces to the continental United States, it is imperative that we clearly define requirements for air and land space to provide realistic training opportunities for our flying forces. We must remain cognizant of and responsive to our civilian neighbors' need for safety and quiet, we must clean up contamination from past practices, and we must protect the cultural and natural resources entrusted to us. Without the ESOH approach, these opportunities, so very critical to mission readiness, will be significantly reduced, if not lost altogether.

Leverage Resources

In the current constrained fiscal environment, the Air Force is challenged to meet the increasingly difficult goal of providing the world's best air and space force with reduced resources. We are redesigning our ESOH program to be an essential element of productivity improvement and cost reduction efforts in the Air Force. I am asking the Air Force to formally integrate ESOH into our processes to improve productivity. We will measure our productivity improvements in terms of reduced cost. We intend to accomplish this by offering the Air Force a suite of ESOH skills and professionals to assist all functional areas in meeting their goals more effectively. The special skills our ESOH professionals have to offer include pollution prevention and environmental stewardship, "process-task analysis" used by our uniformed occupational health specialists, and operational risk management which is the province of our safety specialists. I am asking the functional areas such as operations, logistics, acquisition and installation management to let our ESOH specialists join them to improve performance and reduce costs through new efficiencies.

Be A Good Neighbor

In order to ensure that we are fully protective of human health and the environment, it is essential that we institute a comprehensive risk management approach to our ESOH programs. Key to this approach are community-based environmental programs based on sound science and informed stakeholders. Our 87 Restoration Advisory Boards serve as very effective forums for the dialogue that is essential to make pragmatic, common-sense decisions in our cleanup program. This year we intend to begin discussions with our stakeholders on the benefits of using an enhanced site-specific risk assessment process to determine common-sense approaches to environmental cleanup levels. Enhanced site-specific risk assessment is a tool that will allow our bases and our RAB's to more accurately establish cleanup levels that are fully protective of public health and the environment, while not breaking the bank.

Our primary goal in the Air Force restoration program is to protect human health and the environment by completing the cleanups at all of our installations. Installation cleanup completion will also allow us to reinvest resources now needed for restoration into maintaining our readiness to protect American interests globally. We believe that the partnerships we form with our regulators and our communities will lead to faster, more cost-effective cleanup completion, which, in turn, will lead to strong public support for the Air Force's mission. For example, close partnering at

Eielson AFB in Alaska among the installation, the RAB, state and federal regulatory agencies, and industry saved time and reduced cleanup costs because the team agreed to eliminate requirements for an expensive and ineffective groundwater pump and treatment system at two sites, while still protecting public health and the environment.

I will now describe in more detail the status and promise of, first, our environmental programs and, second, our safety and occupational health programs as we meet our mandate to sustain readiness, leverage resources, and be a good neighbor.

THE ENVIRONMENT

The viability of and continued access to training ranges and supporting bases depend upon: conservation through enhancement of biodiversity and sound ecosystem management; completing cleanup of contaminated sites through the Installation Restoration Program (IRP); full compliance with environmental regulations; and emphasis on pollution prevention to enhance productivity while eliminating future cleanup and compliance problems.

We will continue to integrate environmental, safety and occupational health considerations into our planning process to assure they maximize mission readiness and safety.

CONSERVATION

The Air Force has nine million acres of land, most of which consists of ranges providing a wide spectrum of environments. Two-thirds of these lands are encompassed in the Goldwater Range, Arizona, and Nellis Range, Nevada. Stewardship of Air Force lands is essential to maintaining the integrity of military training areas and preserving environmental quality for future generations. The Air Force is providing leadership through fostering biodiversity and application of ecosystem management on its ranges. Included in our nine million acres of land are over one-half million acres of forests and 1,100 miles of streams and rivers. Air Force land, used to fulfill our training needs, provides habitat for endangered and threatened species and other species of great value.

The Air Force, in partnership with The Nature Conservancy, has issued a comprehensive biodiversity guide for natural resource managers. This effort embodies the community-based environmental program teamwork necessary to achieve common understanding and mutually acceptable solutions that maintain the airspace and ranges we need, while minimizing adverse impacts on our neighbors, the wildlife and the environment.

Land Withdrawal.—Particularly critical to Air Force readiness are the land withdrawal actions for the Goldwater and Nellis ranges. Many of the air combat tactics so successfully used in Operation Desert Storm were developed at Nellis. The ranges are withdrawn under Public Law 99–606 which limits our withdrawal to 15 years and requires costly paperwork before we can extend our tenure on these ranges. The Air Force is presently conducting an extensive environmental analysis process in preparation for renewing the withdrawal of these six million acres which expires in 2001. We estimate the cost to complete this study to be $20 to $30 million; money that could be used to accomplish significant conservation and management projects on the ranges. To reduce the costs of this expensive study, we are working with other agencies to see how we can integrate biodiversity and ecosystem management as day-to-day functions of our ranges in the hopes of eliminating unnecessary studies to support land withdrawals.

We believe there is a smarter way to preserve nature and protect national security at the Nellis and Goldwater Ranges. We have embarked on a thorough dialogue with our stakeholders to develop bi-partisan, multi-interest support for a longer tenure, with enhanced management and accountability of our activities on these ranges. The dialogue we are engaged in is another example of how our community-based environmental program supports readiness, nature, and the community, simultaneously.

Budget.—In 1998, we are requesting $33 million to invest in our ability to sustain readiness while protecting this nation's cultural and natural resources.

CLEANUP

The Air Force is on the Superhighway to Installation Restoration Program (IRP) completion. Of the 4,074 restoration sites in the Air Force management inventory, more than 45 percent have been remediated or assessed to require no further action. Of these, the regulators concur with almost half of our assessments. We are well on our way to completing action on our remaining sites. Our primary IRP investment is in construction of cleanup systems. Seventy-five percent of program funding

is now used directly for actual cleanup activity. We believe getting the job done and completing cleanup at our installations in the near-term is the right focus. By completing our cleanup program, we can permanently return funds to the Air Force for readiness and modernization in the long-term.

Along with our regulatory and community partners, we have developed a schedule to complete the cleanup program (Figure 1). This chart indicates when we estimate remedial systems commencing operation as the final cleanup action at each of our installations. Although operations, maintenance, and monitoring of the remedies will continue for some time, it is important to understand that this milestone represents a significant step in the cleanup process. At that point, we have fulfilled the major investment of manpower, management, DSMOA funding, and remedy construction.

FIGURE 1.—*Final Cleanup Systems in Place Non Closure Facilities as of May 17, 1997*

Fiscal year:	*Number of Installations*
1996	1
1997	5
1998	7
1999	15
2000	7
2001	6
2002	9
2003	11
2004	6
2005	7
2006	3
2007	4
2010	1
2014	1

The key to completing cleanup is stable funding of our restoration account over the Future Year Defense Plan (FYDP). Stable funding allows us to plan, make commitments, and most importantly, meet those commitments. Stable funding builds confidence with our regulator and community partners and allows the Air Force to practice sound program management through long-term and rational, risk-based schedules.

With our community and regulatory partners on the Restoration Advisory Boards, we intend to establish a mutual commitment to support our schedule goals and to execute performance-based actions leading to final cleanup. With that commitment and shared accountability, we can work together to effectively allocate the finite amount provided in stable funding. This, coupled with ensuring we accomplish our scheduled activities, provides confidence that we will complete our cleanup program. We can manage the inevitable changes that are inherent in the cleanup program and communicate impacts to you. The tools we have developed over the past year will allow us to assure you, as well as our regulatory and community partners, that our cleanup program is managed toward timely, cost-effective and final solutions.

Budget.—In 1998, we are requesting $379 million, a figure representing the stable funding that will allow us to continue down the Superhighway to completing our restoration program.

BASE REALIGNMENT AND CLOSURE

The Air Force is making impressive progress in cleaning up our BRAC closure bases. We've been pursuing accelerated cleanups at our earliest BRAC sites since 1990. In the short span of seven years, we have completed nearly all the studies at BRAC 1988, 1991, and 1993 bases. On our current schedule, we plan to have all remedial actions in place at 24 of the 26 installations by the end of fiscal year 1999 as shown in Figure 2. McClellan AFB is scheduled to construct its final remedies in fiscal year 2016. As with the cleanup of active bases, a period of Operation and Maintenance (O&M) follows the construction of a remedy. We are currently working with our regulator and community partners to reduce this O&M "tail" to the absolute minimum. This plan reflects the past investments that we have made in the

protection of our neighbors and the environment, while allowing the Air Force to permanently transfer property, which is a primary objective of the President's Five-Part Plan for rapid conversion of these closing military installations.

FIGURE 2.—*Final Remedy in Place Closure Facilities*

Fiscal year:	*Number of Installations*
1996	1
1997	3
1998	11
1999	7
2000	4
2001	1
2016	1

By working with our regulatory partners and communities through the RAB's, we are finding better solutions and economies in the cleanup program. By fiscal year 2000, the majority of our BRAC cleanup investment will be in long-term monitoring and maintenance of our remedial systems. Our efforts in BRAC are proof that by focusing on cost reductions through productivity improvements based on performance-oriented partnerships, we save significant funds for the U.S. taxpayer.

Shortly after my arrival in 1994, we initiated a concerted effort to streamline and improve our BRAC cleanup process. By 1995, we had devised a series of improvements designed to reduce costs by 25 percent while reducing the time needed to complete our cleanups. Between 1995 and today, the results are $50 million in savings and $120 million in cost avoidance.

The figures speak for themselves. In fiscal year 1998, we project our environmental bill for cleanup and compliance at $263.5 million. The bill drops to $140.6 million in fiscal year 1999. Our cleanup costs drop even more dramatically by fiscal year 2001. When BRAC authority expires, our cleanup costs will be near $50 million annually, exclusively for long-term monitoring and operations, except at McClellan AFB, California. McClellan is a special case with an estimated cleanup bill and program so extensive that it will have to be reabsorbed into our Environmental Restoration Account program for completion. The good news is that at McClellan, we have reduced the time to cleanup from 2034 to 2016 and the cost is now under a billion dollars, at an estimated $750 million.

COMPLIANCE

Full environmental compliance is an important factor in sustaining the readiness of our fighting force. Our compliance with environmental laws is important to Americans. We earn their trust and vote of confidence for our continued membership in the American community. With that membership comes the use of and access to training and support facilities, maintenance of operational flexibility, and productive use of resources. The Air Force's Environmental Compliance, Assessment, and Management Program (ECAMP) proactively identifies where potential violations exist and allows the Air Force to take corrective action immediately, avoiding fines and penalties that might be levied if the situation is left untended. This program is paying off. Open enforcement actions have dropped markedly from 236 in the first quarter of fiscal year 1993 to 35 in the first quarter of fiscal year 1997. The Air Force's goal is to have no open enforcement actions or notices of violation.

The Air Force fully supports innovative programs like the environmental investment initiative (ENVVEST) at Vandenberg AFB, California, which is built on community-based partnerships that allow scarce environmental funds to be used for real pollution reduction projects rather than costly administrative procedures associated with traditional environmental compliance. These innovations will lead to a better environment, and sound program management for Air Force compliance programs in the future.

Budget.—In fiscal year 1998, we are requesting $407 million to continue our outstanding compliance programs that keep our forces, their families, and the American people safe and healthy.

POLLUTION PREVENTION

Pollution prevention (P^2) is the cornerstone of our ESOH paradigm. P^2 is the key to an Air Force investment strategy that focuses on avoiding pollution, eliminating hazards, and reducing costs. It provides the tools to empower our work force to make environmentally sound, technically solid, and financially responsible decisions. P^2 is a key to increasing productivity.

We are institutionalizing pollution prevention into all phases of the weapon system life cycle, as well as incorporating P^2 concepts into all aspects of installation operations. We are doing this by providing our work force with the education and tools to recognize and implement pollution prevention measures in their every day work. Further, we are upgrading our ability to develop and transition innovative pollution prevention technologies to the field. Finally, we are in the early stages of developing and implementing a quality-based management system that allows Air Force workers and managers to plan, implement, check, review and improve how we execute our ESOH stewardship.

Institutionalize Pollution Prevention into All Phases of Weapon System Life Cycle.—Weapon systems production, operation, and maintenance drive approximately 80 percent of DOD's generation of hazardous wastes. Consequently, we are focusing our P^2 effort in the weapon system area. Our goal is to institutionalize pollution prevention into the weapon systems life cycle so that P^2 measures become an integral aspect of weapons development. We want every weapon system program manager to consider the cost of pollution as part of their normal decision making process.

Incorporate Pollution Prevention into all Aspects of Installation Operations.—Probably the most significant move we are currently making is to refocus programs from compliance to pollution prevention. This is being done by teaching workers how to identify better ways to prevent pollution in their processes and providing incentives for installations to modify those processes. The Air Force is working closely with our EPA and state partners to seek common sense ways to encourage this approach. Our ENVVEST project at Vandenberg AFB, CA will soon become the first installation to develop a Final Project Agreement that will move administrative compliance costs to pollution prevention projects. The result will be a cleaner environment, a safer, healthier community, and protection for our civilian neighbors, at a reduced cost. Our corporate Air Force has taken cooperative leadership for cradle-to-grave management of hazardous materials with a goal of ensuring worker protection, reducing costs, and reducing emissions.

Improved Education, Training and Awareness.—We will empower our workers to take ownership of the processes where they work. We will train our people on the pollution prevention ethic, how processes create pollution, and how the workers can bring about changes to those processes to prevent pollution in the future.

Develop and Transition Innovative Pollution Prevention Technologies to the Field.—The Air Force is facilitating improved communication between those organizations requiring new or off-the-shelf technology and those organizations who develop and understand technology. With other federal agencies, we are compiling a directory of our requirements and a second directory of the available technologies. This effort will significantly reduce costs and improve productivity by eliminating duplication of effort and bringing innovative technical solutions to difficult problems.

Systematic, Quality-based Management System.—We plan to examine how the International Organization for Standardization's standard, ISO 14001, might be used to help improve how we provide ESOH services. This standard is a systematic, quality-based management system for how to plan, implement, check and review our programs. We believe better management practices exemplified by ISO 14001 will further improve our ability to make the best possible industrial process and life-cycle decisions that will lead to cost savings, cost avoidance and improved productivity.

Budget.—In fiscal year 1998, we are requesting $49 million to invest in pollution prevention.

I want to talk to you now about an area that is crucial to our national security and to the health and safety of the American people.

OCCUPATIONAL SAFETY AND HEALTH

The USAF Occupational Safety and Health Program is oriented directly towards enhancing the productivity of the war fighter. The program consists of four primary thrusts: prevention of disease and injury, prevention of loss or damage to equipment, sustained enhancement of human performance, and integration of humans into weapons systems. Each of these thrusts are integral to the occupational safety and health of aircraft crew members and ground personnel. With programs aligned

with these thrusts, we strive, with noted success, to provide Air Force commanders with fit and healthy people capable of highly effective performance both during peacetime and wartime.

At the same time, we strive to eliminate threats to the safety and health of our forces. Such threats can be environmental, physiologic, toxic exposures, infectious disease, chemical/biologic warfare agents, conventional weapons, and intentional, unintentional, or accidental, injuries. These are also direct threats to the productivity and performance of our forces. We counter these threats with: safety and health standards in our weapons systems, facilities, and processes; risk management programs designed to identify, assess, and minimize hazards; sound operational procedures; training personnel on proper use of the systems and equipment entrusted to them; engineering changes in the work environment; improved life support and personal protective equipment; altered work/rest cycles; medical intelligence; health education and surveillance; vaccines; health promotion and fitness programs; and protected food and water sources.

Our efforts are paying off. Our civilian occupational injury and illness program continues to be the best among the Services. In fiscal year 1996, Air Force expenditures for workmen compensation claims decreased by 2 percent, the largest percentage in DOD. This alone represents a cost avoidance of over $2 million.

On July 1, 1995 The USAF School of Aerospace Medicine received provisional approval from the American Council on Graduate Medical Education (ACGME) for a practicum year in occupational medicine. This approval will allow residents trained in aerospace medicine to also receive the full scope of training required of an occupational physician. The additional training will allow aerospace medicine physicians to manage the full range of occupational medicine needs at the Air Force bases to which they are assigned upon completion of their training. Currently, the Air Force is the largest provider of occupational medicine training in the United States, a fact that demonstrates our commitment to this core competency.

Several initiatives were introduced in the Air Force in fiscal year 1996 to enhance prevention of accidents. An Operational Risk Management (ORM) program is being implemented throughout the Air Force. The ORM program provides commanders, supervisors, and individuals with a process for assessing risk and making well-informed decisions to ensure mission success.

The Air Force Safety Center is developing a robust capability to better understand and analyze the root cause of injuries. Through an epidemiological approach, the Air Force can better target and implement intervention strategies.

The Advanced Tactical Anti-G Suit (ATAGS) developed at the Human Systems Center at Brooks Air Force Base is another example of the Air Force's commitment to protect its forces while maintaining productivity and performance. ATAGS is the most significant improvement in the anti-G suit since World War II. Anti-G suits are garments worn like trousers that contain inflatable bladders.

With ATAG's, when a fighter pilot experiences high G forces, compression from the aircraft systems inflates the bladders, which squeeze the legs and lower abdomen, keeping the pilot from losing consciousness. This reduces the strain required by the pilot to avoid losing consciousness, thus reducing the risk of fatigue-induced injury and increasing the war fighter's ability to perform in combat.

We are further assuring the safety and health of USAF aircraft crew members through Crew Resource Management Training. Crew members of all types of USAF aircraft are given this initial and refresher training to enhance team skills in the cockpit, diminish lapses in concentration, increase ability to prioritize and manage multiple tasks while flying, and improve communications. This training undoubtedly contributed to our excellent flying safety record in fiscal year 1996, which produced the second lowest flight mishap rate in Air Force history.

The Air Force safety staff has revitalized the Bird Aircraft Strike Hazard (BASH) program, revised the mishap investigation process, and increased safety education. The Weapons Safety Program developed and fielded the Base Explosive Exceptions Matrix (BEEM) software program. This program allows commanders to more accurately assess the hazards that stored weapons pose to the surrounding community, both Air Force and civilian. This allows us to prioritize and build investment strategies for the implementation of any additional safety measures that are necessary. It also identifies where risks are negligible, and where waivers may be appropriate to prevent unnecessary spending.

The Air Force's stellar flight mishap rate of fiscal year 1996 was matched by the outstanding performance in the Ground Safety Program with a staggering 53 percent decline in on-duty Class-A mishaps during the period fiscal year 1994–1996. Equally impressive was a decline of 30 percent in our off-duty mishap rate. Records such as these contribute significantly toward mission accomplishment by preserving the health of our personnel and by protecting other Air Force resources.

As we move towards replacing the T–37 Primary Jet Trainer with the Joint Primary Aircraft Training System (JPATS) in fiscal year 2000, we are anticipating the ability to accommodate students of shorter stature, primarily women. In preparation for this change, we will perform detailed studies of Air Force cockpits using clearly defined upper and lower limits of body size required to safely and effectively operate the aircraft. By ensuring the pilots we train are matched to an aircraft that is most compatible with their physical size, we are enhancing the pilot's effectiveness, lessening the risk of mishap and better assuring that the Air Force peacetime and wartime missions will be accomplished.

Occupational health and safety efforts extend to deployed operations also. The Air Force Aerospace Medicine Program holds occupational medicine as a core competency. The Program operates to protect the force and provide our commanders the performance their units need to meet their mission. The Headquarters Air Combat Command Surgeon developed a state-of-the-art health and injury surveillance system which is currently being pilot tested in Southwest Asia. By analyzing the theater-wide health surveillance data early and regularly, we enhance our ability to detect trends and counter the factors leading to disease and injury before they have a significant impact on our readiness. Furthermore, deployed aerospace medicine personnel perform ongoing monitoring of potential environmental threats and working conditions which could increase the risk of deployed operations.

CONCLUSION

In conclusion, I want to leave you with the assurance that the Air Force is moving in new directions that protect American interests around the world by integrating ESOH concepts and principles into our processes and management approaches. Through ESOH, we are building a stronger, more flexible Air Force. Our success lies in partnerships within the Air Force, with you, and with all of our stakeholders. Together, we can and will meet the challenges of the next century.

Senator STEVENS. Thank you very much. One of our goals, obviously, is to find some way to have the total amount of these programs decline annually rather than increase. We are now up, as you mentioned, with the $2 billion that is in the BRAC account annually to $6.87 billion a year. That is too much. We are going to have to decline it in this period. It has to be trend-lined down in this period of 5 years when we are trying to get to a balanced budget.

One of the reasons for the devolvement to take the Department out of it and put it to the services was, at least in our judgment, that the Department was tending toward very large contracts which had enormous overhead and devolvement gave us a chance to get down to the services. We would like to get it down even further.

Some people think we are being political and that we are looking to just employ local people around the bases because of politics. It has nothing to do with it.

I can tell you time and time again that before I came to the Senate, when I knew what the cost was of moving into the State of Alaska contractors that were going to do various types of work for the private sector as opposed to employing the local contractors—there were no moving costs, there were no termination costs, no travel time to go out and visit families. The concept of cost reduction was to use the people that were there to do the job.

Now, have these advisory groups given you any ability to even reduce down further from the command level down to the base level the administration of some of these contracts?

Mr. WALKER. Mr. Chairman, we took advantage of devolvement in the Army to take it one further step. We actually decentralized the restoration program and pushed it down to the major command level and the installation level, so this is our first year of doing it

that way, and we believe that certainly over time it will have that effect.

Senator STEVENS. Well, certainly I have seen it at the bases we have visited not just in my State but around the country.

The people that are the current occupants of these bases have a real desire to be part of the community, and when they are involved particularly on the prevention side—now, I particularly enjoyed what you were saying, Secretary Walker, and the other gentleman, too, about the concept of prevention.

We are both going to be here for a while yet. I would hate to think that 3 or 4 years from now we are going to be talking about new sites that will have to be remediated. I think there ought to be some sort of a penalty involved somehow for any service that brings us a new site on that Superfund list.

Those ought to soon be a thing of the past, and I do not see any reason why we should ever have a site that needs remediation except in the event of some terrible disaster on a military base. I think you all agree with that.

But are you putting enough of this money into prevention? The money we are talking about here is environmental restoration, but is part of that going into prevention and training, teaching people how to avoid these costs for the future?

Mr. WALKER. Yes, sir, Mr. Chairman. As you know, we did have an increase in our overall environmental budget this year. One reason is because we increased by 40 percent our amount of funding for pollution prevention activities. We will spend around $110 million this coming year, which is considerably more than we have been spending in past years.

Senator STEVENS. Are you getting the manpower to do these jobs? Is there any shift in the utilization of manpower within the services to be involved in these?

Mr. COLEMAN. No, sir; we are steady with our environmental folks at base and at MAJCOM level.

Senator STEVENS. What about compliance? By the way, what do you include in the concept of compliance? The compliance sector of the budget is $2.1 billion. What is included in that? What do you look at, Mr. Pirie?

COMPLIANCE

Mr. PIRIE. Well, it includes such things as compliance with the Clean Air Act. That is, putting scrubbers to remove emissions from furnaces, boilers, things of that kind; wastewater treatment compliance; all manner of things that have to do with the Clean Water Act, Clean Air Act, the Safe Drinking Water Act, and things of that kind. Generally they are projects involving the infrastructure of the base, the water supply treatment and that kind of thing.

Senator STEVENS. Well, that, too should be a declining account, should it not be? I mean, assuming we are putting in new facilities, they are going to be designed to comply to begin with, right?

Mr. PIRIE. Very much so, and, in fact, that is the thrust of the pollution prevention business, is to put in things that just do not create the kind of waste stream that we have had in the past.

Senator STEVENS. I have been very critical of the amount that has not gone into actual remediation. You have all mentioned how

you have come from the old days, and in the old days we found that $2 out of $3 were going to architects, planners, lawyers, and various court costs. I just cannot believe that we should allow that to continue to happen.

Has devolvement reduced the potential for future costs of that kind?

AIR FORCE WORK WITH THE REGULATORS

Mr. COLEMAN. In the Air Force not only has devolvement helped but also our push to work with the regulators. As I said, we have evolved a very aggressive approach to working with the regulators to reduce the burden that we have to spend on compliance.

What the rule says in the States and by the USEPA that we have to remediate to *x* level. We are working with the regulator to try to get to a level that makes sense, in our opinion, as to what is going to be the reuse of that property or the constant use of that property. We do not want to have to dig up all of this material that may be on a fuel spill when the land is not going to be used for anything but an airplane apron, or out at the back 40 of some Air Force base.

As I say to my staff, let God be our helper on this and let it naturally bubble up and work out, and we have to work with the regulators in the States to do that, and in the Air Force I think as well as in the other services we are very aggressively approaching that, working with the RAB's also to help us go to the State EPA's and to the USEPA to get us to do it at less cost, and in quicker time and less cost.

Mr. PIRIE. Devolvement helps us in at least two major ways, Mr. Chairman. First, it allows us to get our hands on each fiscal year's money early in the process, and we know what we have to spend so we can make appropriate plans for that fiscal year rather than waiting for it to trickle down through the Office of the Secretary of Defense.

Second, we have a stable funding line. As I said, it is about $300 million for the Navy, and having stability in the program is really important because you can make plans for the longer run and make much better use of the money over time than if it goes up and down constantly and you have to change the plans.

Senator STEVENS. What about the requirement that we put in last year's log requiring notification to State and local officials in terms of the draft solicitations and requests for proposals to deal with these environmental restoration accounts. Is that working? Are you doing that?

ENVIRONMENTAL RESTORATION ACCOUNTS

Mr. PIRIE. I believe we have made these notifications, Mr. Chairman. I am not certain the degree to which—you know, what the measures of merit are.

Senator STEVENS. We did that because we had the impression that at times solicitations were actually being put out on a five, six State basis and the local people did not even know that these programs were going to go forward and that the State and local governments are also involved in remediation, and many times that you can join together various operations.

Particularly that is true with regard to the FUD sites. We believe there ought to be notification, and if you have proper notification you will have more local interest in participating and achieving the objective, but the reports I have had are not too good about notification.

Mr. WALKER. Well, Mr. Chairman, I must tell you that your reports are correct as it relates to reports directly submitted by the Corps directly to State and local communities and to the Congress for that matter.

The Corps puts together, puts all the information together, but it routinely has not been getting out. It is on the World Wide Web now, so it will be getting out better.

Your report language last year, when we started looking into it as we were preparing for this hearing we found out that our lawyers had said, well, you do not have to comply with it because the threshold is $5 million, not $1 million, so I hope our lawyers and the Corps read my testimony and understand we will comply with this requirement.

Senator STEVENS. Well, I hope you do, because I really think that the people who have a long-term interest on what happens on these lands are the people in the area. We are closing down more bases. We are reducing the size of operations, and clearly it is the local people that are going to have to live with whatever is permanent that we cannot deal with.

I think it is particularly a problem with regard to the overall compliance process. I have been thinking we ought to get involved in that, too.

Tell me about that, Mr. Coleman. You mentioned the cooperation between regulators.

AIR FORCE COOPERATION WITH REGULATORS

Mr. COLEMAN. Yes, sir, working with the State EPA's.

Senator STEVENS. Do the States have a higher standard than the Federal Government?

Mr. COLEMAN. Some. Not necessarily all. Wherever we find that there is, we approach that issue sometimes with the RAB, sometimes going out and making a foray to the statehouse and working with the people to show that here in some other base we did it this way and expedited the process.

It takes a long time when you are talking about approximately 106 installations in the United States and about 40 or so States that you have work with them all. Again, this approach is new in the Air Force. We just used to comply, and now we are complying but we are aggressively trying to comply in the most cost-effective manner.

Senator STEVENS. You mentioned 2007, Mr. Coleman.

Mr. COLEMAN. Yes; for Sacramento Air Logistics Center.

Senator STEVENS. Do you expect to have all your sites cleaned up by then?

Mr. COLEMAN. Underway. Those are the BRAC sites, sir.

Senator STEVENS. Do you have a projection of costs over the period between now and 2007?

Mr. COLEMAN. For the BRAC sites we have already spent approximately $1.2 billion. We have about $900 million to go on BRAC sites in the last four rounds.

Senator STEVENS. Senator Inouye.

Senator INOUYE. Thank you very much, Mr. Chairman. As I sit here listening I could not help but do a little recollection. Twelve years ago when the services and this committee began walking into this strange, new area of environmental cleanup, we actually knew very little. The technology of prevention was still in its infancy.

In fact, we had no idea as to how to determine what a pollutant was, and, in fact, Mr. Chairman, I think you may recall that about 10 years ago when we suggested $300 million to the Department for this purpose, the Department said maybe that is too much.

Senator STEVENS. Would the Senator yield? As a matter of fact, I requested the first $50 million to take the ordnance from the Aleutian Islands that was shot at the islands by the Japanese but was still there and was impeding our occupancy of those lands, and it was still—40 years after World War II we still had unexpended ordnance there, and we were trying to get it removed. That was the beginning of DERA.

Senator INOUYE. Since then, Mr. Chairman, I think we have come a long way.

At that time, I must confess rather facetiously, I made a wild estimate that when the dust settles we may have spent in excess of $30 billion for the cleanup process. God forbid, I now think it may exceed that. But I would still like to commend all of you.

Secretary Walker, you were saying before we started the hearing that you have not been back to Hawaii. I think the time is ripe for that.

Mr. WALKER. It has been about 6 months, and I need to go back to Hawaii, sir.

Senator INOUYE. Especially Schofield Barracks. The officers and men there are absolutely delighted with your leadership, because it was a stain on them to have the barracks on the EPA national priority list. They are happy to see that they are going to be cleared of that contaminant list.

Second, the Pacific Ocean Division is obviously delighted to work under your command, and they are looking forward to your visit. I hope you will make it.

The Navy is also a recipient of many accolades in the State of Hawaii. You may not be aware of this, but when Midway was turned over to the Fish and Wildlife Service, the Fish and Wildlife Service, who can be real nit-pickers, as you know, came back and just sang songs of praise about what the Navy has done in the cleanup process there to the point where I felt that I should write to Secretary Dalton and point out that there was another agency who thinks highly of you people.

In fact, I singled out Mr. Randolph Hoffman, your conversion manager. I want the record to show that he has done an extraordinary job.

We are also pleased with Kaho'olawe. I do not know if you are aware of this, but a few weeks ago Kaho'olawe received the No. 1 national award for its cleanup plan. I am no expert in this area, but apparently the Navy has done an excellent job in laying out a

plan of cleaning up this island. So why do you not visit Hawaii—I think you have a few friends down there.

Mr. PIRIE. I am very happy to accept your kind invitation, Senator Inouye. I will put it right on the schedule.

Senator INOUYE. Are you going to come out to Hawaii?

Senator STEVENS. I will be happy to visit you, but I think I have other things to do this summer.

Senator INOUYE. In the Air Force, Secretary Coleman, we are absolutely delighted, because I think you have been leading the pack recently in the number of sites that have been cleaned up.

A question I have for you is, you suggested in your prepared remarks that some of the regulators do not agree with your assessments on restored sites. Do they feel that you are too tough or too soft on your assessments?

AIR FORCE RISK ASSESSMENT

Mr. COLEMAN. They feel that we are too aggressive. To naturally allow the material to dissipate sometimes does not meet with approval at the higher reaches of the State environmental protection agencies. Pump-and-treats, the way that we want to do some other things, does not necessarily meet with their approval because they have never seen it before. They have never allowed it before.

But we want to do risk assessment throughout our environmental programs and make sure that the taxpayer's dollars are being spent very wisely on what we know can happen and is not going to impair the health, safety, and welfare of people. So there is no need to engage in a big contract to dig it up immediately. We can just let it percolate out.

To get a State to understand that oftentimes it has taken more than one trip to the statehouse.

Senator INOUYE. As the chairman pointed out, it would appear that the most promising aspect of the work we are involved in here is prevention. In fact, a few years ago I questioned the Navy about pulp shredding. I thought it had great promise. Now I learn that it is planned for installation on over 200 ships. Is that correct, sir?

POLLUTION PREVENTION

Mr. PIRIE. We plan to have 205 ships done by December of the year 2000, Senator Inouye. This will allow us to operate in special areas and not have to collect the trash on board. It will be basically very beneficial to the ships, even when they are operating outside of the special areas, since they will be able to get rid of the glass and metal waste and the paper waste rather than just throwing it over the side. We will be able to just pulp and shred it and have it sink to the bottom and become essentially neutral.

Senator INOUYE. We have been trying to convince the Merchant Marine to study this themselves because of ocean pollution. Do you have any other prevention-type technology under consideration at this time?

Mr. PIRIE. There are a variety of things going on. One of the things we are trying to encourage the acquisition community is to think ahead in the acquisition of new systems, new vehicles, about what they might do, and the new attack submarine, in fact, won the Department of Defense environmental prize for pollution pre-

vention for plans for recycling of lead, for use of non-PCB-containing materials and insulations and paints and things of that kind.

This will be a ship that, in fact, is designed to create a very small waste stream in its manufacture, and then at the end of its service life there are actually plans of how to put it out of commission and reduce the amount of waste that is created by that process, too.

Senator INOUYE. Mr. Coleman, you have a whole array of prevention programs. Can you tell us about them?

AIR FORCE PREVENTION PROGRAMS

Mr. COLEMAN. Yes, sir; much like the Army and the Navy we changed the way that people on an installation conduct themselves with the use of paints and solvents. We have Hazmart's, a pharmacy that would dispense the solvents and paints that any unit may want, as opposed to each unit having their own supply of paints and solvents and varnishes.

We are changing our depots, our depot maintenance on our aircraft. We were using new technology, bead-blasting by means of dry ice as opposed to a solid bead to take the paint off, new collection methods—everybody is more aware of their surroundings now because the command level has just inculcated everybody with this attitude of recycling, prevention, and then if you prevent and recycle you will not have as much to clean up.

But we are starting after about 50 years or so of disregard for the environment as we have been in the past few years, so it is going to take some time, but we hope that we will aggressively change our processes, change our thinking, and ultimately change the amount of money that we have to come up here and ask for for environmental programs.

Senator INOUYE. Before I call upon Secretary Walker to tell us about the Army's prevention program, I forgot to tell you that thanks to your command in Hawaii, I think we will have a major joint project of wastewater management that includes Schofield Barracks. We are very pleased with that.

Secretary Walker, what is your section doing on prevention?

Mr. WALKER. Well, Mr. Chairman, in the last 3 years we have increased the pollution prevention budget from about $30 to $110 million, and we are projecting in the current program, remaining years of the program through the year 2003 to spend about $500 million for prevention. That is a big investment, but we believe it is the correct investment for us to make.

The Assistant Secretary of the Army for Research Development and Acquisition and I recently signed a joint letter to the field indicating that we have got to do better in the acquisition process, in particular because probably 80 percent of pollution comes through the acquisition process, so we need to do a better job in that arena, and we are going to be focusing on that more in the future.

ENVIRONMENTAL MANAGEMENT COMMITTEE

Senator INOUYE. Mr. Chairman, I have one more question now if I may, and I would like to submit the rest to all of you for the record. The inspector general reported recently that it would improve the whole operation if a DOD-wide environmental manage-

ment system of some sort was established, and in response to that DOD came up with this Environmental Management Committee. Is this working, or is it a waste of time? Secretary Pirie.

Mr. PIRIE. Well, I think it is useful for us to get together and exchange ideas about how to get a grip both on the costs but also the kinds of problems, and to have a forum in which to discuss kind of emerging issues. For example, uniform national discharge standards for wastewater and things of that kind. So from that point of view I think it is working.

I think we have an opportunity to comment on emerging departmental policy in environmental matters and discuss things amongst ourselves. I do not view it as necessarily another layer of management. I think it is more a council in which we can exchange views and opinions. I do not know how my colleagues feel about it.

Mr. COLEMAN. I feel the same way. We get together and share what we are doing in the Air Force and also transferring that information to our MAJCOM. For instance, the Pacific Group at all the bases, the engineers, the commanders are looking at doing an environmental management group like that to talk about Pacific issues. Then we will have one for European and so forth and so on, because there is commonality between what it is that is going on within that command: proper utilization of funding, transferring the issues that we were able to do in Alaska, for instance, the same methodologies over to Hawaii, Japan, Okinawa, wherever they could apply.

So that transference of understanding is very valuable, and when we get together and talk about what is going on among our respective services, it is a great aid to us all.

Mr. WALKER. Senator, I would add a perfect example of that is in the Army we have adopted a peer review process which is identical to the peer review process in the Air Force. They actually showed us the way to do that.

But I will also add the environmental programs of the three services are very different from each other. We all have three different unique challenges, and it is important that we continue to manage those challenges in our services.

Senator INOUYE. For a long time you have already been carrying on collaborative programs. You confer with each other all the time. So is this just a new level of bureaucracy?

Mr. COLEMAN. It is formalized. It is important that we have a defined medium in which we are discussing this as opposed to me just calling Robert and saying, hi, let us have lunch and discuss something.

Mr. PIRIE. In some ways our programs are quite different. I mean, I am concerned primarily about water. My colleagues are concerned about the air and the land, primarily.

In some ways we share some pretty important issues, and the issues of ranges and waste munitions are particularly important to all three of us, and there is a place where we really have to coordinate and have our act together because we are quite interested in the rules under which we will have to, for example, dispose of waste munitions.

Senator INOUYE. Finally, Secretary Walker, you pointed out very correctly that all services have different problems. You have mines, and none of the other two services have mines.

In recent years Members of Congress have become exceedingly concerned about the danger of undiscovered mines throughout the world, and apparently the Army has now come forth with some technology that can detect the location of these mines. Are we sharing this information with other countries like Bosnia?

Mr. WALKER. I believe that yes, sir, we are, and I think more is going to be done in that regard in the future. For instance, in the environmental program we actually have a demonstration program at Jefferson Proving Ground on unexploded ordnance. This year will be the fourth phase. We are spending about $3 million just to work on that technology using environmental technology funds.

Senator INOUYE. Well, gentlemen, I am very pleased with what you have been doing. I think we are on the right track, but as the chairman pointed out very wisely, we are at a time in our history when money is not too plentiful so if we can carry on our mission without spending too much it would please my chairman from Alaska.

Thank you very much, Mr. Chairman.

Senator STEVENS. It is my Scots heritage he is talking about.

I was just thinking about the cost, you know, the total cost of the Department of the Interior's $3.6 billion. The accounting cost for this program and the Department is $6.8 billion. I think it is a lot more than that. You are not putting in the cost of the people in uniform doing maintenance of the bases.

Mr. WALKER. No; just cleanup.

Senator STEVENS. And all the other things that are involved in environmental protection and control, it is a sizable amount of money we are looking at now.

Mr. WALKER. Just in the 6-year program for the Army we will spend $10 billion, for all the program.

AIR FORCE PROGRAM SAVED MONEY

Senator STEVENS. I am reminded of old Everett Dirksen. You talk about $1 billion here, $1 billion there, pretty soon you are talking about real money, right? What is being done to set up some basic incentives to save money.

Next year when you come I would like you to tell me how many people in these programs received awards or recognition for saving money. I will still tell you, Mr. Coleman, I think that Sam Johnson up in Alaska ought to be the pin-up boy of this program because of the way he saved money. He really went at that project at King Salmon and put his mind to it. I think he reduced the cost down to less than 25 percent of the original cost.

Do you all still have that concept of rewarding people if they accomplish the job for less money? Has it been applied to this program?

Mr. PIRIE. I do not know of specifics, Mr. Chairman. We need to look into that.

Mr. WALKER. It is an intriguing idea. I think it deserves merit, for sure.

Senator STEVENS. I have to tell you, an annual cost of $6.8 billion in this budget, the difference between the President and the Congress over 6 years now in defense is $7 billion.

Senator INOUYE. If the chairman would yield, there is a program ongoing in just about every Department of the U.S. Government that is called the suggestion box. If someone makes a suggestion that results in the saving of money, I think he or she should get a bonus or something akin to that.

Senator STEVENS. I am prepared to defend a few million prizes to reduce contracts that would cost $200 or $300 million down to $100 million. I should think the incentive for really saving ought to be involved in this program. It is getting out of hand.

Mr. WALKER. Well, I will tell you that devolvement is helping us as an incentive for this reason. Now that the program has devolved down to the services these costs have to compete with everything else that we buy, every tank that we buy, every aircraft that we buy, every ship that we buy, and all of our training.

That is the best incentive that we have had in a long time, because by forcing these dollars to compete in the Army we are seeing our overall cost go down from about $1.7 billion to about $1.5 billion, $1.6 billion this year. It is going to go on down to about $1.2 billion by the end of the program period, so we think that kind of competition for resources is helping us as well.

AIR FORCE AWARD-WINNING PROGRAM

Mr. COLEMAN. I was just reminded, Senator, that we have a number of what we call award-winning bases and instances where we have saved money.

Davis-Monthan, for instance, I was just handed this restoration program line item with a $12.5 million cost and time-saving program with about 98 percent of the sites on the base finished. We implemented a $2 million cleanup project which included the treatment and disposal of 27,000 tons of solid waste, and saved $19 million in design and construction cost by using a risk-based approach, which is the risk assessment approach I talked about earlier in my remarks.

The ability to give an individual or a unit a monetary award other than a pat on the back, which we do, recognition in the base newspaper and recognition for the DOD environmental awards and stuff like that, that is what we do now.

If we were performance based, merit based such as where I came from at General Motors, if you save that amount of money you are rewarded pretty handsomely in the pocketbook. If there was an opportunity to do that, I think it would go a long way in spurring others to keep on doing it.

But we do this on our own anyway because we are charged to save the taxpayer's dollars. The pat on the back from the Secretary or the Chief means as much, or from you, Senator Inouye at Hickam, means as much to those folks as getting that check sometimes.

Senator STEVENS. I am belaboring it. While you were talking I asked Mr. Cortese to find out the EPA budget—this year is $6.8 billion, for all that we do in the whole Nation in terms of environ-

mental matters. It is the same as your budget to clean up past mistakes.

I mean, I am not trying to embarrass you or anything else. I just think there is something missing in terms of the involvement of more people at the local level.

Now, that is one thing, but I think we ought to institute a program. Let us take the personnel from the winning base or vessel or airport or Army base, Navy, too, and give them a week in Senator Inouye's place in the middle of January.

I am serious. There has to be some incentives here to bring this budget down. We have this amount, and it is really in addition to O&M costs, is it not? In O&M costs is compliance normally, would it not be, but here it is an additional budget to make sure that what is done in the O&M accounts is done right.

There is a redundancy in these expenditures that bothers me considerably, and that is primarily because of some of the figures we saw a few years ago about how much of that is going into these, what I call hand-holding costs. You know, I do not see why you need an architect to tell you how to pick up contaminated dirt. I do not think we ought to have lawsuits over the question of whether we are doing it right or wrong.

Somehow we have to get down to where this one is under control. Of all the places where I can see in the Department where the need is greater, this is it. Clearly there were mistakes in the past.

I do not want you to misunderstand me. We are not going to cut your budget. We have been increasing your budget to try and urge you to get it done quicker, because I think the longer they continue, the greater the cost ultimately.

Let me ask you a little mundane question. Secretary Walker, what is the situation with that defense fuel supply center down at the Whittier tank facility? Do you know anything about it?

Mr. WALKER. Yes, sir, Mr. Chairman. As you know, I was there last year, and as a matter of fact, today the Corps will be notifying the district engineer of the notice of availability to proceed with a lease there. We believe that that will be advertised on June 2, and we hope to award that contract on July 2.

Senator STEVENS. That is good. That will turn what was a liability into an asset for the Army.

Well, gentlemen, I do thank you for sharing your progress reports with us. I should tell you that we do not have as bountiful a supply of sunshine year-round as my friend here does, but he cannot match my salmon this year. This is the record year of all years for salmon.

We sample the returns as they are coming in, and we are told this will be twice the level of the record year, which was about 3 years ago, so if your duties happen to bring you up my way I will be happy to point out to you the best places to go.

You know, we used to have a place there right near King Salmon where we took people who were the outstanding performers from bases throughout the country and let them have a week on that river.

Senator INOUYE. We will also take them to a restaurant called Humpy's.

Senator STEVENS. It is time to end the hearing. Thanks very much for your help.

If you have any suggestions of how we provide incentives for people to pare down those cleanup costs, because this is the place where savings really mean additional money for O&M—think of the things we could do with this money if we could just channel it in the right way as far as the Armed Services are concerned.

ADDITIONAL COMMITTEE QUESTIONS

So we look forward to working with you, gentlemen. Thank you very much. We are going to have a hearing this afternoon at 2 o'clock on counterterrorism.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED TO HON. ROBERT M. WALKER

QUESTIONS SUBMITTED BY SENATOR DANIEL K. INOUYE

POLLUTION PREVENTION—NEW TECHNOLOGIES

Question. What steps is the Army taking to develop new pollution prevention technologies that target high risk or high cost problems on Army installations?

Answer. The Army pollution prevention technology program has been based primarily on user-identified requirements since 1993. At that point, an initial database of environmentally related operational problems was developed from input by both installation and weapon system managers. These requirements were then prioritized at the HQDA level, with high risk/cost being critical prioritization criteria. The database of technology needs is updated by the user community at least once per year, to include re-prioritization if necessary. A HQDA level pollution prevention technology team comprised of stakeholders from installations, major commands, weapon system programs, and research and technology transfer communities then jointly develops a recommended technology investment strategy targeting the highest priority needs. This strategy is ultimately approved by senior leadership, just recently institutionalized in the Environmental Technology Technical Council.

Regarding specific technology needs, the research and technology transfer representatives on the pollution prevention technology team try to identify existing technologies either within the Army, other services, or the private sector, thereby minimizing the need for new research. The Army is also developing a methodology to quantify costs and benefits of pollution prevention technology implementation through activity-based and life-cycle costing approaches. Finally, as Executive Agent for the National Defense Center for Environmental Excellence, the Army demonstrates, validates and transitions technologies addressing high risk/cost operations (e.g., ion beam processing targets hexavalent chrome, and ultra-high pressure waterjet targets costly stripping of turbine engines).

Question. I understand the Army is considering using phyto-remediation, a new technology relying on plant life to absorb and break down contaminants, at Schofield Barracks (among others). Can you comment on this technology, and what expectations you have?

Answer. Phyto-remediation is either the use of plant enzymes to breakdown a contaminant, or the use of plants to uptake contaminants. Phyto-remediation technology is gaining broader application, along with other biological remediation approaches. For example, at Milan Army Ammunition Plant phyto-remediation is being used to degrade explosive contamination in groundwater. Plant enzymes, along with naturally occurring microbes in soil, are breaking apart and degrading TNT and RDX. The ongoing demonstrations at Milan shows that a combination of plants and anaerobic microbes very effectively destroy both TNT and RDX contamination.

The Army is working to exploit phyto-remediation in other applications as well. At Schofield Barracks, phyto-remediation is being considered to put a final polishing on wastewater effluent. The final polishing will bring the present wastewater effluent to an R1 water quality. Finally, phyto-remediation is being looked at to remedi-

ate heavy metal contamination from surface soils. This is the use of plants to uptake into themselves metals in the soil. The plants are harvested along with the extracted metals and either disposed of in a landfill or the metal can be recycled by ashing the plant and extracting the metals. The Army is in the process of developing a project to demonstrate this metals remediation technology.

Question. Are any of you finding that the lengthy timeframe for environmental technology, demonstration, validation and application has become a big bottleneck in the fielding of new technology in your services?

Answer. The Army finds that the actual time required to demonstrate a new technology for cost and performance purposes is not a limiting function. We find, rather, that the factors limiting new technology implementation are (1) funding to conduct field scale demonstrations, (2) regulators who require years of data before considering the technology as a viable alternative, and (3) lengthy qualification testing to prove that a new technology is acceptable for use on a weapon system. Field scale demonstrations are necessary since it is not always possible to take laboratory data and apply it directly to field applications. Also, private sector vendors often have limited data on the effectiveness of their products or make claims of effectiveness which often have no relationship to how the Army would use the product.

MILITARY MUNITIONS RULE/RANGE RULE

Question. Secretary Walker, I understand the Army is executive agent for managing Regional Environmental Offices that are directly supporting the DOD Range Rule and Munitions Rule partnering initiative with the states and Native American Tribal Communities. Have you found this situation of involving the community in establishing new policy to be beneficial and negotiated with the interests of all respected?

Answer. Involving states and Native American Tribal Communities in the rule making process has been very beneficial and has greatly facilitated the identification and consideration of the interests of all parties. DOD has undertaken partnering initiatives for both the EPA Military Munitions Rule, including the DOD Implementing Policy, and the DOD Range Rule. These efforts have enhanced partner understanding of DOD munitions management and range operations and identified and resolved major issues concerning the rules, resulting in improved rules and policies. The Regional Environmental Offices, managed by all the Services, have been especially helpful in facilitating DOD efforts to work with the states and Native American Tribal Communities in implementing the rules once they are promulgated. Thus, partnering efforts have not only benefited policy development but also implementation.

Question. Secretary Walker, can you comment on how the process for developing the Range Rule is coming along, and what we may expect?

Answer. In April, a draft of the proposed Range Rule was prepared for submittal to OMB. After final DOD internal review, the draft proposed rule was submitted to OMB on 12 June 1997 for review. The OMB review process takes 30 to 90 days, after which the rule will be proposed by publishing it in the Federal Register. The rule provides for a 90-day public comment period. DOD plans to hold four Public Information Forums throughout the country to allow members of the public to obtain detailed information, talk to technical experts, and comment on the rule. DOD currently projects that the final rule would be published in the Federal Register in the Summer of 1998.

Question. Secretary Walker, has there been any correlation or push to use the technology used with unexploded ordnance in our efforts to handle landmines?

Answer. There are concerted efforts underway which take advantage of technology development, demonstration, evaluation and application for both unexploded ordnance (UXO) and landmines. Major organizations (Army Communications-Electronics Command, Army Environmental Center, Naval Explosive Ordnance Disposal Technology Division, Army Corps of Engineers' Laboratories, Army Research Laboratory, etc.) involved with these efforts meet routinely to share information regarding technological application, advancements and lessons learned. Additionally, many existing commercial companies are involved in supplying and/or utilizing technology and equipment for both subsurface UXO detection and landmine detection. For example, many of the companies which demonstrated as part of the Congressionally-directed UXO Technology Demonstration Program, held at Jefferson Proving Ground, IN over the past three years, are also involved in mine detection.

PARTNERING

Question. Secretary Walker, I understand the Army has recently published the "Partnering Guide for Environmental Missions of the Air Force, Army, and Navy."

Could you briefly highlight the types of initiatives that are recommended in this publication?

Answer. Partnering is cooperation among the DOD Components, regulators, contractors, and communities that is characterized by: (1) decision through consensus, and (2) a formal process to resolve disputes. There is no limit to the types of cooperative initiatives that may constitute partnering.

Real examples of partnering include Restoration Advisory Boards, funding and development of training materials, formal committees of state agencies and DOD Regional Environmental Offices, local reuse committees for installations that are closing, ecosystem management such as the Chesapeake Bay Initiative, and advisory committees for Chemical Demilitarization.

Question. Secretary Walker, in your testimony you list many successful examples of partnering initiatives, such as Fort Carson, CO and Aberdeen, MD. These are shining examples, but can you tell me how wide-spread this practice is?

Answer. Currently, partnering covers many types of cooperative undertakings from the local through Headquarters levels. Real examples of partnering include Restoration Advisory Boards, funding and development of training materials, formal committees of state agencies and DOD Regional Environmental Offices, local reuse committees for installations that are closing, ecosystem management such as the Chesapeake Bay Initiative, and advisory committees for Chemical Demilitarization. Through time, less formal cooperative arrangements will become true partnering, with more efficient utilization of scarce resources, personnel, and time.

LEGACY FUNDING

Question. Secretary Walker, several years ago this Committee initiated the Legacy program to protect sensitive historical, culture and environmental sites on military bases. Last year, Congress provided $12.5 million for this program. Is the Army receiving any of these funds, and if so, how are they being put into use?

Answer. In fiscal year 1996 Army received $2.6 million in Legacy funds. All of these funds were used to implement the Mojave Desert Ecosystem Initiative.

Question. Secretary Walker, one idea within DOD is to use your existing resources to pay for Legacy projects. Does the Army have funding within its fiscal year 1998 budget request set aside specifically for Legacy projects, and if so how much?

Answer. Army has not budgeted for Legacy projects. However, Army will be using its appropriated funds to conduct Legacy-type planning level surveys, which include surveys of wetlands, threatened and endangered species, soils, surface waters, flora, plant communities, topography, and fauna.

QUESTIONS SUBMITTED BY SENATOR TOM HARKIN

RESTORATION ADVISORY BOARDS

Question. Restoration Advisory Boards have proven to be quite successful. When will the technical assistance funds be available for community members of RAB's? What steps are the services taking—or will take—to ensure that RAB's will be able to hire independent technical experts to advise its community members?

Answer. Assuming publication in the Federal Register of the final Technical Assistance for Public Participation Rule (TAPP) in September 1997, as scheduled, funds will be available for TAPP assistance in fiscal year 1998. The Army has already incorporated the principles in the TAPP proposed rule in RAB guidance for active and BRAC installations published this fiscal year. Army installations must identify TAPP requirements as a sub-set of their request for RAB administrative funding in their annual work plan submission. Major Army Commands allocate RAB administrative funds as a sub-set of the installation program management requirement. Installation commanders will consider the TAPP requests based on the criteria provided in the proposed TAPP rule, and incorporate legitimate requirements into their plans.

UNEXPLODED ORDNANCE

Question. The DOD is working on the range rule, which is expected to call for a national survey of artillery and bombing ranges, including those on Formerly Used Defense Sites (FUDS). What kind of resources will be necessary to implement the survey phase of the range rule? When will the funding need to be in place?

Answer. The proposed DOD Range Rule requires that within 18 months of the effective date of the Rule, each DOD component develop a list of all known Closed, Transferred, and Transferring Ranges controlled at any time by that DOD component. The Army is already examining available data sources to identify ranges in-

cluding those on Formerly Used Defense Sites (FUDS). However, a more in-depth and complete process will be necessary to ensure all ranges are identified and to gather required data on those ranges. The Army estimates the cost for a detailed inventory of Army closed and transferred ranges could be as much as $3 million. The cost of inventorying FUDS ranges could be as much as $5 million. In order to get an early start on the inventory, funding would need to be in place by the summer of 1998.

Question. Are the Services looking at sustainable management of active ranges? Are the Service (sic) planning and implementing strategies to minimize range contamination and minimize the risk to personnel and other range users?

Answer. The Army manages its training lands for sustainable use through its Integrated Training Area Management (ITAM) program. However, ITAM may not always directly affect active firing ranges. Other programs do aim to improve the Army's management of active ranges for sustained use. The Army's Range XXI initiative is providing a life-cycle approach to managing active ranges. The present focus is on small arms ranges. The intent is to provide guidelines for range site location, design specifications, and maintenance procedures to reduce the potential for offsite migration of munitions constituents such as heavy metals from entering surface and groundwater resources. In addition, a Tri-Service working group has completed studies on several configurations of toxic free 5.56 mm ammunition. Field testing and certification will have to occur before such ammunition could be adopted. These Army pollution prevention strategies can potentially be transferred to other Services for implementation. In addition, the Army's increasing use of training simulators and simulations has a positive effect on sustained management of active ranges. Although simulators and simulations cannot ever completely replace "live" training and live firing practice using service ammunition, they do reduce some of those activities. When proven effective, simulators and simulations can replace the number of rounds required to be fired for soldiers to remain qualified on certain weapons systems. They can also offset some of the maneuver training which must be carried out to sustain readiness standards.

DERA BUDGET

Question. Last year, Congress suggested a cap on studies as a percentage of the DERA budget. How does a cap on studies limit the ability of the services to use monitoring to define the most appropriate and cost-effective remedies? Could this cap negatively impact on effectively employing natural attenuation methods for cleanup?

Answer. In general, the Army is winding down its studies and therefore a cap on studies should not have a great impact. It may draw out the program some, but overall impact to determine appropriate and cost effective remedies should not be affected. There would not be a negative impact on effectively employing natural attenuation methods for cleanup since monitoring in conjunction with natural attenuation is considered as cleanup costs, not as study costs.

Question. It appears that cleanup will not be completed at many of the sites before the BRAC funding is scheduled to end. What will the service do to ensure adequate budgeting for remediation of these facilities? Through DOD accounts?

Answer. The Army will address requirements for post fiscal year 2001 BRAC environmental cleanup in POM 99–03. Funds will be programmed in the Army's environmental restoration account.

AMMUNITION PLANTS

Question. Currently, the Services use some funds to keep inactive ammunition plants "mothballed?" A recent GAO report recommended that these plants be closed. Couldn't the funds used to maintain these plants in "mothball" status be used instead for cleanup and reuse of the facilities?

Answer. The Army does not feel that to be prudent. To keep our Government Owned/Contractor Operated (GO/CO) active and inactive ammunition plants operational, costs vary widely due to size. Inactive standby ammunition plants annual costs range from approximately $2.5 million to $3.7 million per year. The cost to complete cleanup estimates for up to 13 AMC inactive ammunition facilities is in excess of $1 billion. Any value gained from closure would not produce viable savings for many years.

Our reasons for "mothballing" rather, than closing include the following:

—Allows the Army to maintain the production base at reasonable cost. In the event of mobilization/war those plants could be at production levels within twelve months, whereas to build a plant from scratch could take more than five

times as long, and cost ten times as much, assuming that the necessary production line materiel were available.

—It costs less to keep a plant "mothballed" then to clean it up since, closing a plant would require it to be cleaned to EPA or State standards immediately, thus, incurring additional costs.

The Army uses Production Base Support (PBS) funds to maintain inactive ammunition plants in a "mothballed" condition. Mothballing includes any necessary rehabilitation and layaway of industrial facilities upon release from current production when those facilities are required for mobilization or future production. If, after an ammunition plant has been in a laid-away status, it is determined that the plant should be cleaned up and closed and prepared for reuse, with no further mobilization requirement, PBS funds can pay those costs that bring the plant to closure. This includes equipment dismantling and relocation for mobilization—where required, cleanup efforts that relate to production—created contamination, and other efforts to de-inactivate the plant. This does not include costs incurred after the plant has been sanitized from a mobilization condition. Caretaker costs of property leading to future reuse is not a PBS cost. Also some residual environmental costs that are not directly linked to production would not be PBS funded.

POLLUTION PREVENTION

Question. The Services have complied with the deadlines of Executive Order 12856, which requires each federal agency and facility to establish a pollution prevention plan. Have individual commands and facilities adequately funded the pollution prevention strategies established by these plans?

Answer. Army Major Commands and subordinate installations are complying with the requirements established in Executive Order 12856. Detailed installation pollution prevention strategies or plans have been completed and reviewed by Headquarters, Department of the Army. Issues arising from the review have been forwarded back to the Major Army Commands for action. Overall, these plans portrayed pollution prevention strategies which shift the focus from compliance actions to prevention efforts to attain compliance. Numerous pollution prevention projects were identified for funding to achieve future savings through compliance cost avoidance.

Army policy requires Major Army Commands to implement pollution prevention projects instead of compliance projects where the former can be used in lieu of the latter to achieve compliance to a regulatory driver. Unfortunately, pollution prevention projects that change how we sustain and/or achieve compliance with environmental laws and regulations compete directly for funding with "control and treat" projects that address "out of compliance" situations. These compliance projects typically have a higher priority for funding because a regulatory driver with enforcement/penalty provisions often accompanies a failure to implement them. Although the pollution prevention projects provide a sound alternative, they are not tied to an "out of compliance" situation, and thus in the current resource-constrained budget environment, commands and installations can defer or delay these projects until adequate funding is available to address these additional investments. The Army is working this issue in developing the current Program Objective Memorandum.

Question. At times, implementing pollution prevention plans requires a short term cost increase to an agency or facility in order to realize longer-term savings in the costs of complying with environmental laws and regulations. In the Services' view, does Congress need to clarify budgeting rules or policies in order to encourage implementing federal pollution prevention plans?

Answer. Congress does not need to clarify budgeting rules or policies to encourage implementing pollution prevention plans. Army policy requires the use of pollution prevention projects to achieve compliance if economically feasible. Efforts are ongoing to develop pollution prevention plans and better costing models to support this effort.

The challenge facing Army commands and installations is funding prevention projects which would achieve future savings through compliance cost avoidance but are typically changes in practice/procedure not needed to meet immediate or projected noncompliance situations. Unless overall BASOPS funding increases, it will be difficult to achieve the level of pollution prevention investment desired.

QUESTIONS SUBMITTED TO HON. ROBERT B. PIRIE, JR.

QUESTIONS SUBMITTED BY SENATOR MITCH MCCONNELL

Question. Mr. Pirie, I want to thank you for meeting with a Kentucky delegation last week to discuss the Navy's commitment to privatization-in-place of the work at the Naval Ordnance Station in Louisville. I apologize for not being able to attend, but I had to chair a hearing at that exact time.

I want you to know that I am watching these developments closely. Specifically, I am worried that the Navy has repeatedly withheld or reduced funding for several contracts at Louisville. Frankly, I can't understand how this behavior demonstrates the type of commitment necessary for privatization to succeed. You can be sure that I will be watching closely as the Navy, the contractors and the community continue their efforts toward resolving these difficulties.

I want to follow up on some of the issues discussed at that meeting Mr. Pirie.

Is the Navy committed to the effort to privatize-in-place at Louisville? Is the Navy prepared to commit to working with the contractors and the Redevelopment Authority in order to solve the current problems, and how specifically do you plan to work toward this goal?

Answer. The Navy remains committed to working to make the Louisville privatization a success. Success to us has always meant that our requirements are met, at acceptable price and quality. Right now "acceptable price" is being questioned. While we recognize that costs are going to be higher initially because of startup costs, learning curve, and reconfiguration for more productive operations, it is our expectation that costs will come down.

The Navy is continuing to work with both the contractors and the Redevelopment Authority. Since early this calendar year we have significantly increased our partnering efforts, focusing on reducing costs. VADM Sterner has also recently established an Integrated Process Team with participation by all the customers and other Navy stakeholders as well as United Defense. We hope that by working cooperatively these teams can achieve their goals of increased customer satisfaction and improved communication enabling United Defense to make prudent business decisions.

Question. The contractors cannot be expected to reduce costs if their volume of work continues to be decimated by Navy decisions. How can the Navy expect privatization to succeed if it continues to drastically reduce the level of funding for its contracts? In fact, these reductions began occurring after only three months of privatized operations. Again, this hardly seems like an endorsement of the privatization concept.

Answer. The workload at Louisville had been in decline for several years prior to privatization and has always fluctuated, depending upon Navy requirements. Louisville workload continues to be a high Navy funding priority. We are continuing to send work associated with all the product lines previously operating at Louisville to the privatized facility.

One of the factors in our decision to privatize was the private sector's ability to rapidly adjust work force to workload. Another factor was the ability of the private sector to take on additional work from within the competitive market. The majority of the difference between the expected level of work and what has materialized is foreign country work. United Defense must and is working to try to secure that foreign work. Through our partnering efforts and our integrated process team, we hope that both United Defense and the Redevelopment Authority will have the flexibility to adjust to peaks and valleys in workload from individual customers.

QUESTIONS SUBMITTED BY SENATOR DANIEL K. INOUYE

POLLUTION PREVENTION—NEW TECHNOLOGIES

Question. Secretary Pirie, in your testimony you noted that at NAS Cecil Field, Florida, the Global Positioning System is being used to locate wells instead of using survey crews, saving over $100,000 in one year. Are the Services looking at other DOD technologies like GPS as possible environmental solutions?

Answer. Yes. The Navy is constantly looking for, both within and outside the DOD, technology solutions to meet Navy requirements and solve environmental problems. Specifically, in the area of Pollution Prevention (P^2), the Navy acknowledges that using more efficient technologies and processes in the production, operations, and maintenance of Navy systems will reduce the amount of hazardous waste generated, toxic chemicals released, and hazardous materials used. Additionally, labor reductions and cost avoidances are realized by implementing many of

these alternative technologies. Successful P^2 technology examples include monitoring systems such as the Infrared Camera Leak Detector which will identify spills and leaks real time in order to mitigate the pollution quickly, and the Hydraulic Fluid Electronic Particle Counter which provides a more reliable, faster and more objective method to quantify particle contamination in hydraulic fluid. Another successful P^2 area of endeavor is material substitution where hazardous materials are replaced with alternative solvents and coatings that are more efficient and less hazardous to the worker and the environment. Re-engineering existing processes is a third means of using technology to prevent pollution. Using water based methods for cleaning and coating removal increases productivity, decreases labor, and are less hazardous to the environment.

MILITARY MUNITIONS RULE/RANGE RULE

Question. Secretary Pirie, in your testimony you state that the Navy is "generally satisfied with the new Military Munitions Rule." Can you highlight what reservations you may have regarding this?

Answer. We have two concerns. First, we are concerned about the extent to which states will adopt the rule in lieu of establishing more stringent state standards; and second, the extent to which EPA will honor the provisions of the rule which state that our active and inactive ranges are not regulated by Resource Conservation and Recovery Act (RCRA).

For the past several months, service representatives around the country have been meeting with their state counterparts to explain how military munitions are managed within DOD, and how the munitions rule will impact munitions activities. From our early discussions, it appears that most States are willing to adopt the munitions rule in its entirety so that we would have the uniform national standard we need to manage all our munitions waste and non-waste. Some states have indicated that they will adopt all or part of the federal rule. However, in all but three states, DOD would have to wait for the States' regulatory adoption process, which could take two or more years. Some states have voiced concerns about the munitions rule, and are reluctant to let the rule go into effect this August. We will continue to work with these states over the next few months, however, in the hope of resolving their concerns so that we can have the kind of national waste military munitions standard that Congress intended in its passage of the Federal Facility Compliance Act of 1992.

As for our second concern, EPA stated that the use of ordnance at active and inactive ranges constitutes use of products for their intended purpose, and thus, that use is not regulated by RCRA. EPA said this was so even when these products have landed on the ground, appropriately recognizing that this is part of the natural life cycle of ordnance use. However, in May 1997, at the Massachusetts Military Reservation an active range EPA Region I declared that the ordnance being used on the range was a matter over which EPA had control under RCRA (and the Safe Drinking Water Act) because it was perceived to pose an "imminent and substantial endangerment" to health and the environment. EPA ordered training to cease at the range. When this determination was appealed to the Environmental Protection Agency Headquarters (HQ EPA), the RCRA allegations were ordered removed. As it stands right now, the Military Munitions Rule does not protect the vital training that goes on at our ranges from regulatory control under either the Safe Drinking Water Act or RCRA. We intend to work hard with our regulators to insure that other ranges are not closed down by addressing legitimate environmental concerns when they are raised.

AIR EMISSION CREDITS

Question. Secretary Pirie, in your testimony you discuss in detail a legislative proposal that would allow DOD to retain proceeds from CAA emission reductions. Can you estimate what level of proceeds we may expect should this legislation become part of public law?

Answer. We have no estimate at this time as we have only limited experience to date, primarily in the context of closing bases. We understand that the current version of the legislation being considered would initiate a pilot program and limit the proceeds retained to a maximum of $500,000 for all of DOD.

Question. Secretary Pirie, do you know why the Department of Defense was not included for the receipt of proceeds in the original CAA Emission Reductions Act?

Answer. It is not a question of DOD being left out of the original CAA; the Act itself simply authorizes states to implement emission trading programs. Whether or not DOD can retain proceeds from the sale of emission credits is determined by Federal fiscal and property laws. Emission credits are best characterized as intangible

personal property. As such the proceeds from the sale of personal property are currently required to be deposited in the U.S. Treasury rather than retained by the Department. This is a limitation DOD shares with all other federal agencies. The legislative proposal, modeled after the recycling legislation of a few years ago, would allow DOD to retain at least some portion of the proceeds as an incentive to further reduce air pollutant emissions.

PARTNERING AGREEMENTS/CONTRACTS

Question. Secretary Pirie, do you find that partnering contracts established by the Navy are tailored to be site specific—such that the contracting mechanism is the most financially frugal?

Answer. We have not found partnering to be a problem in accomplishing our mission in the most cost-efficient manner. Partnering has improved relationships among regulators and the Navy, and has served to halt the former process of building a "paper wall" to prepare for potential litigation. Partnering solves problems. Partnering usually includes Navy entities, U.S. EPA, State regulators, and Navy contractors. Since much of our environmental program is accomplished through contractors, there is considerable potential for partnering with contractors throughout the environmental mission. We maintain our responsibility to choose and enforce efficient contracts, which may be cost-plus-award-fee or fixed-price, depending upon the site-specific requirements and schedules.

KAHO'OLAWE CLEANUP

Question. Secretary Pirie, I understand the Navy is reviewing the proposals of several contractors for cleaning up the island of Kaho'olawe, and expects to award a contract this July. Is everything on track for a July contract award?

Answer. Award in July is still planned. The selection process is on-track to make this happen.

Question. I understand that the Navy is planning to obligate $37.8 million for Kaho'olawe this year. However, I am told that the Navy is basing its work on the amount of funding available. Is it correct that more would be done if additional funding were appropriated for the project?

Answer. Yes, it is correct that more could be done if additional funding were appropriated.

Question. Mr. Secretary, Congress provided $60 million to the Navy for Kaho'olawe, in addition to the $85 million which has been appropriated to date to the Kaho'olawe Trust Fund. The Navy has obligated $14.5 million of $60 million. What are the Navy's plans for using the balance of this amount?

Answer. Unexploded military ordnance will remain on Kaho'olawe and in the surrounding waters following the effort authorized by Title X of the Fiscal Year 1994 Defense Appropriation Act, which is financially supported by the Kaho'olawe Island Conveyance, Remediation, and Environmental Restoration Trust Fund. The $60 million not in the Trust Fund is presently used to cover Navy expenses caused by actions on the island not related to the Title X effort. For example, pursuant to a Consent Decree in 1980, entered as a final judgment in *Noa Emmett Aluli, et al.* v. *Harold Brown, et al.*, United States District Court for the District of Hawaii, Civil Action No. 76–0380, funds are used for transportation of Navy staff who provide escort to members of the public going to the island for purposes not related to the ordnance removal effort, such as those seeking cultural education experiences with the Protect Kaho'olawe Ohana. Any funds remaining following the Title X effort will support the ordnance response effort when previously undetected ordnance is located or unearthed as a result of erosion.

LEGACY FUNDING

Question. Secretary Pirie, I understand that a portion of the 1997 Legacy funding was expected to be used for re-burial of remains at Kaneohe. Can you tell us whether you have received funding from OSD for this project?

Answer. The Department of the Navy did not request, nor do we expect Legacy funding for re-internment of native Hawaiian remains at MCAS Kaneohe Bay. A decision by the Commanding General, Marine Corps Base Hawaii on who will receive the native Hawaiian remains is anticipated in October 1997.

Question. Secretary Pirie, does the Navy have any Legacy funds budgeted for fiscal year 1998?

Answer. The Legacy Resource Management Program is a Department of Defense (DOD) managed program, administered by the Deputy Under Secretary for Environmental Security. Since the inception of the program, all Navy Legacy funding has been budgeted and allocated through DOD. The Navy has not independently sub-

mitted a budget request for Legacy funds. The DOD did not request any funding for Legacy in the fiscal year 1998 President's Budget.

In preparing the environmental conservation portion of the fiscal year 1998 budget request, both the Navy and the Marine Corps assumed there would not be any Legacy funds and included critical legacy type project requirements within the Operations and Maintenance appropriation request.

QUESTION SUBMITTED BY SENATOR PATRICK J. LEAHY

Question. Please describe the process for Department of Defense (DOD) allocation of funding and remediation support for Superfund sites, both on and off DOD facilities, where DOD has been named a potentially responsible party (PRP). Has DOD contributed funds to environmental clean-ups if the Department has not yet been named a PRP? Please provide brief descriptions of sites, if any, which have been funded in this manner.

Answer. The Department of the Navy participates in funding and remediation of EPA Superfund sites just like any private company or individual that has been named a potentially responsible party (PRP) by EPA. Once identified as a PRP, the Department does a records search to determine if the EPA allegations can be substantiated. If there are indications of Navy involvement, we then work to determine a fair Navy share and are willing to pay for that share. Funds for our share comes from the Environmental Restoration, Navy account.

The Navy has not contributed to environmental cleanups of Superfund sites if we have not been named a PRP by EPA.

QUESTIONS SUBMITTED BY SENATOR TOM HARKIN

RESTORATION ADVISORY BOARDS

Question. Restoration Advisory Boards have proven quite successful. When will technical assistance funds be available for the community members of RAB's? What steps are the Services taking—or will take—to ensure that RAB's will be able to hire independent technical experts to advise its community members?

Answer. DOD is currently proposing a Technical Assistance for Public Participation (TAPP) rule that will allow RAB's to seek funding to assist them in reviewing and commenting on the cleanup program. The funding will come from the installation's RAB support funds and should be available starting in fiscal year 1998. If the RAB chooses to use its limited support funds for technical experts, the Navy will ensure via the implementing policy and guidance that the community will be able to hire independent technical experts.

UNEXPLODED ORDNANCE

Question. The DOD is working on the range rule, which is expected to call for a national survey of artillery and bombing ranges, including those on Formerly Used Defense Sites (FUDS). What kind of resources will be necessary to implement the survey phase of the range rule? When will the funding need to be in place?

Answer. The resources necessary to implement the survey phase of the range rule for the Navy is expected to be minimal. The proposed Range Rule is expected to be published in the Federal Register in late summer of 1997 for a 90 day public comment period. The rule can take effect any time following the comment period, when comments have been addressed and the Final Rule published. The date of final publication depends on the type of comments received during the public comment period. The Navy has 18 months to identify all ranges which fall under the jurisdiction of the Range Rule after the rule has been published. There is no funding identified in the fiscal year 1998 budget for the Range Rule.

Question. Are the Services looking at sustainable management of active ranges? Are the Services planning and implementing strategies to minimize range contamination and minimize the risk to personnel and other range users?

Answer. The Services have implemented programs to identify potential weapons impact areas around ranges and to work with local and state governments, as well as other federal agencies, to minimize encroachment and incompatible development in the vicinity of ranges. The Department of the Navy has promulgated range planning policy guidance for its air-to-ground training ranges which will help range commanders formulate plans to quantify safety impacts. The Navy has initiated range needs assessments to address long-term range requirements.

The Marine Corps has developed a Site Management Model (SMM) to assess risks associated with unexploded ordnance. SMM tracks ordnance from deployment to cleanup. It incorporates historical records and site data on ordnance types, configurations, densities and locations for active ranges. Range clearance assessments developed by SMM are uploaded to the Range Facility Management Support System (RFMSS), an overarching range management system that considers all environmental and safety factors for efficient range use. RFMSS has been adopted by the Marine Corps as the single automated information system for ground ranges and will be used by all Marine Corps installations by next year.

DERA BUDGET

Question. Last year, Congress suggested a cap on studies as a percentage of the DERA budget. How does a cap on studies limit the ability of the Services to use monitoring to define the most appropriate and cost-effective remedies? Could this cap negatively impact on effectively employing natural attenuation methods for cleanup?

Answer. A cap on studies as a percentage of the Environmental Restoration, Navy (ER,N) budget limits effective use of the funds. While a cap may increase the percentage of budgeted funds dedicated to cleanup for a year or two, if sufficient studies are not performed, future cleanups would be limited until the prerequisite studies are completed. Further, study work can often lead to closing out a site without the need for doing a cleanup. If study efforts are curtailed, an unnecessary cleanup might proceed just because cleanup funds are the only type of funds available. The use of natural attenuation methods and new technologies often require a little additional study before the regulators and the public are willing to accept the cleanup remedy. Thus, a cap on the amount of study funds could curtail employing new, less costly solutions.

Question. It appears that cleanup will not be completed at many of the sites before the BRAC funding is scheduled to end. What will the Services do to ensure adequate budgeting for remediation of these facilities? Through what DOD accounts?

Answer. The Department of Defense has not yet established a policy on this issue. In the absence of specific DOD guidance, the Navy has increased the ER,N account starting in fiscal year 2002 to accommodate cleanup of BRAC bases that will not be completed by the time BRAC funding is scheduled to end.

AMMUNITION PLANTS

Question. Currently, the Services use some funds to keep inactive ammunition plants "moth balled?" A recent GAO report recommended that these plants be closed. Couldn't the funds used to maintain these plants in "moth ball" status be used instead for clean up and reuse of the facilities?

Answer. The Navy has no inactive ammunition plants.

POLLUTION PREVENTION

Question. The Services have complied with the deadlines of Executive Order 12856, which requires each federal agency and facility to establish a pollution prevention plan. Have individual commands and facilities adequately funded the pollution prevention strategies established by these plans?

Answer. It is Navy policy to fund all legally driven environmental requirements, and the Navy considers Executive Order requirements to be legally required. As part of Executive Order 12856 and CNO policy, all Navy Installations were required to develop Pollution Prevention (P^2) Plans by December 31, 1995. The Navy feels it has budgeted enough resources to adequately fund strategies established by the P^2 Plans.

Question. At times, implementing pollution prevention plans requires a short-term cost increase to an agency or facility in order to realize longer-term savings in the costs of complying with environmental laws and regulations. In the Services' view, does Congress need to clarify budgeting rules or policies in order to encourage implementing federal pollution prevention plans?

Answer. No. Executive Order 12856 provides sufficient latitude for testing and implementing pollution prevention initiatives. Other opportunities exist to make compelling cases for pollution prevention investments which yield future savings during POM and budget preparation. The acquisition community has made great strides in factoring-in environmental considerations in weapons system life cycle analyses.

QUESTIONS SUBMITTED TO HON. RODNEY A. COLEMAN

QUESTIONS SUBMITTED BY SENATOR DANIEL K. INOUYE

AIR EMISSION CREDITS

Question. Secretary Coleman, is the Air Force aware and in support of this legislation?

Answer. The Air Force is aware of and fully supports the Senate proposal allowing DOD to retain proceeds from the sale of economic incentives for air emission reductions.

PARTNERING AGREEMENTS/CONTRACTS

Question. Secretary Coleman, has the Air Force had success in establishing fiscally frugal partnering agreements in its environmental cleanup and restoration efforts?

Answer. Yes, the Air Force has been very successful in partnering with state and federal regulators in the environmental cleanup program. Partnering has enabled installation personnel and regulators to operate in a much more open atmosphere, working towards common goals.

We made considerable progress at several Florida installations by bringing the regulators in early to help develop work plans and review reports before the reports were finalized. We reduced the number of overall documents needing review and significantly reduced the number of review cycles because we understood what the regulators wanted. This yields significant savings in time and money, and allows the available funds to go towards cleaning up sites instead of preparing documents.

Partnering is also creating an environment where we can better convince regulators and the public that our new technologies are as effective, or more effective, than more expensive alternatives. This has been critical to gaining acceptance for natural attenuation of petroleum products in lieu of expensive pump and treat systems.

Partnering in environmental cleanup is extended to all stakeholders through the Restoration Advisory Boards (RAB's). The investment we made in the RAB's allows us to better educate the public so they can understand and make informed decisions on environmental issues.

LEGACY FUNDING

Question. Secretary Coleman, what are the Air Force's priorities for Legacy Funding in 1997?

Answer. The Air Force received $992,000 for Legacy funding in fiscal year 1997 from OSD. The Air Force recommended projects based on DOD criteria and DOD approved the following projects:

Endangered Species Monitoring in support of operations at the Goldwater Range, Luke AFB, AZ	$45,000
Study of disturbance levels for Military Training, Holloman AFB, NM	143,000
Predicting Turkey Vulture Bird Aircraft Strike Hazard (BASH), Kirtland AFB, NM	100,000
Archaeological Survey, Maxwell AFB, AL	70,000
Inventory and Monitoring of protected plant species, Elgin AFB, FL	124,000
Inventory of Rare and Endangered Species, Arnold AFB, TN	138,000
Reuse Assessment of Historic Buildings, Wright-Patterson AFB, OH	100,000
Protecting Biodiversity and Native Habitats, Vandenberg AFB, CA	99,000
Phase II Archaeological Survey, Andrews AFB, MD	100,000
Biological Inventory and Ecological Study of Pine Barrens, New York Air National Guard, Long Island/Suffolk County, NY	19,000
Threatened and Endangered Neopaleotropical Bird Inventory, Cape Romanzoff, AK	54,000

Question. Secretary Coleman, does the Air Force have any Legacy funds budgeted for fiscal year 1998?

Answer. No, the Air Force does not budget for Legacy funds. The Office of the Secretary of Defense budgets for Legacy funds for all of DOD.

QUESTION SUBMITTED BY SENATOR PATRICK J. LEAHY

SUPERFUND SITES

Question. Please describe the process for Department of Defense (DOD) allocation of funding and remediation support for superfund sites, both on and off DOD facilities, where DOD has been named a potentially responsible party (PRP). Has DOD contributed funds to environmental clean-ups if the Department has not yet been named a PRP? Please provide brief descriptions of sites, if any, which have been funded in this manner.

Answer. The Air Force allocates most of its resources toward sites on, or originally on, installations where we were the only Potentially Responsible Party (PRP). The Air Force allocates funds and remediation support at Air Force Superfund National Priority List (NPL) sites according to risk category and negotiated agreements with regulatory agencies. Our clean-up process assesses risk to human health and the environment, then allocates funding to the highest risk sites first.

At non-DOD facilities where the Air Force has been named as a PRP, our practice is to negotiate resolution. Resolution is accomplished through settlement of actual or threatened litigation or through sharing costs for a response action. There is no record the Air Force has contributed funds to environmental clean-ups where the DOD has not yet been named as a PRP.

QUESTIONS SUBMITTED BY SENATOR TOM HARKIN

RESTORATION ADVISORY BOARDS

Question. Restoration Advisory Boards have proven quite successful. When will technical assistance funds be available for the community members of RAB's? What steps is the Air Force taking—or will take—to ensure that RAB's will be able to hire independent technical experts to advise its community members?

Answer. Technical assistance funds will be available in fiscal year 1998, providing the Department of Defense's Technical Assistance for Public Participation Final Rule is published and requirements are identified.

The Air Force will establish a procedure by which a list of eligible technical assistance providers will be identified. The procedure will entail the Air Force consulting with, and considering advice from, the Restoration Advisory Board community members for determining the basic qualifications required of prospective technical assistance providers in the areas of biochemistry, toxicology, environmental science, engineering, and hazardous and toxic waste issues/laws. After basic qualifications are established, a list of eligible technical assistance providers will be established in accordance with applicable Federal Acquisition Regulations.

UNEXPLODED ORDNANCE

Question. The DOD is working on the range rule, which is expected to call for a national survey of artillery and bombing ranges, including those on Formerly Used Defense Sites (FUDS). What kind of resources will be necessary to implement the survey phase of the range rule? When will the funding need to be in place?

Answer. The Army is the lead Service for implementation of the Department of Defense Range Rule and has the responsibility to compile the range inventory for the Services.

Question. Is the Air Force looking at sustainable management of active ranges? Is the Air Force planning and implementing strategies to minimize range contamination and minimize the risk to personnel and other range users?

Answer. The Air Force routinely cleans ordnance from active ranges. The frequency of and procedures for clearance activities are accomplished to minimize safety concerns for personnel and other range users.

DERA BUDGET

Question. Last year, Congress suggested a cap on studies as a percentage of the DERA budget. How does a cap on studies limit the ability of the services to use monitoring to define the most appropriate and cost-effective remedies? Could this cap negatively impact on effectively employing natural attenuation methods for cleanup?

Answer. The cap prevents the most efficient execution of the cleanup program because it defers sites requiring study. The Air Force inventory of sites reflects that 80 percent of our closed sites were completed during the study phase. Monitoring

costs are not considered a study cost by the Air Force. Therefore, the cap on studies does not impact the implementation of natural attenuation as a remedy for cleanup.

Question. It appears that cleanup will not be completed at many of the sites before the BRAC funding is scheduled to end. What will the Air Force do to ensure adequate budgeting for remediation of these facilities? Through what DOD accounts?

Answer. The Air Force has fully funded the environmental cleanup of BRAC bases using BRAC funding through fiscal year 2001. The Last Remediation In Place is scheduled for fiscal year 2001 for all BRAC bases except one. Funding for remediation and long term operations and maintenance of environmental systems at BRAC facilities beyond 2001 has been planned. Those costs will be covered through Air Force BRAC Appropriation and under the Air Force Total Obligation Authority. The Air Force has projected future cleanup costs at BRAC bases in the out years and will continue to include them in the Defense Resource Allocation Process.

AMMUNITION PLANTS

Question. Currently, the Services use some funds to keep inactive ammunition plants "moth balled?" A recent GAO report recommended that these plants be closed. Couldn't the funds used to maintain these plants in "moth ball" status be used instead for clean up and reuse of the facilities?

Answer. The Air Force does not have any ammunition plants.

POLLUTION PREVENTION

Question. The Services have complied with the deadlines of Executive Order 12856, which requires each federal agency and facility to establish a pollution prevention plan. Have individual commands and facilities adequately funded the pollution prevention strategies established by these plans?

Answer. Yes, the Air Force has adequately funded its pollution prevention strategy. The Air Force is on target to meet its waste reduction goals (toxic release inventory, hazardous waste disposal and solid waste disposal).

Question. At times, implementing pollution prevention plans requires a short term cost increase to an agency or facility in order to realize longer-term savings in the costs of complying with environmental laws and regulations. In the Air Force's view, does Congress need to clarify budgeting rules or policies in order to encourage implementing federal pollution prevention plans?

Answer. No, we do not need Congress to clarify current budgeting rules and policies.

SUBCOMMITTEE RECESS

Senator STEVENS. If there is nothing further, the subcommittee will stand in recess.

[Whereupon, at 11:05 a.m., Tuesday, May 13, the subcommittee was recessed, to reconvene subject to the call of the Chair.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1998

WEDNESDAY, MAY 21, 1997

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:06 a.m., in room SD–192, Dirksen Senate Office Building, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens, Cochran, Specter, Domenici, Bond, Hutchison, Inouye, Bumpers, Harkin, and Dorgan.

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE AIR FORCE

STATEMENT OF SHEILA E. WIDNALL, Ph.D., SECRETARY OF THE AIR FORCE

ACCOMPANIED BY RONALD R. FOGLEMAN, CHIEF OF STAFF

OPENING STATEMENT OF HON. TED STEVENS

Senator STEVENS. Thank you very much for being here, Madam Secretary and General Fogleman.

We are going to conclude our hearings on the military service budget requests today, and hear from the Secretary of the Air Force and the Chief of Staff of the Air Force. Today's session also provides us with our first opportunity to hear from senior officials of the Department since the publication of the "Quadrennial Defense Review," the QDR. I know the committee is going to ask for and welcome your thoughts on the QDR and what it means to the Air Force.

The year 1997 is the 50th anniversary of the Air Force. Since I was in the Air Corps when it became the Air Force, I want you to know I share with pride your anniversary. The next 50 years will pose a great many challenges, and Strom Thurmond and I are looking forward to them. [Laughter.]

We hope that you will seek to move into new generations of tactical aircraft, the F–22 and the Joint Strike fighter [JSF]. The F–22 has been very much in the news of late, and I am sure you are going to have some questions from the committee, and we hope to gain a better sense of where the program stands in terms of costs and tactical status. Space represents the other growing focus of the Air Force, and we will welcome your comments on the space system priorities for the Air Force and how those programs will help you meet combat requirements.

Your statements will be entered in the record in full, and we appreciate any comments you would like to make.

Let me first turn to the vice chairman—actually he is the committee chairman and he is the boss—Senator Inouye.

STATEMENT OF HON. DANIEL K. INOUYE

Senator INOUYE. I thank you very much, Mr. Chairman.

Madam Secretary, General Fogleman, I join my chairman in welcoming you to this hearing.

As the chairman noted, earlier this week, DOD released its report on the "Quadrennial Defense Review." If the QDR recommendations are implemented, the Air Force will shrink by one active fighter wing, reduce the purchase of F–22's, cut six air defense squadrons from the Reserves—albeit changing some to new missions—and reduce your bomber force by 7.5 percent. In total, according to that review, the Air Force would cut nearly 27,000 active military, 18,300 civilians, and 700 reservists.

There will be many who will question these reductions, while others might contend that not enough has been done. Our chairman wants to know what the impact of these decisions will be on your fiscal year 1998 budget request and whether the subcommittee should adjust your funding to account for these proposals. I will admit that I am very skeptical that we should cut bombers and air defense squadrons, but perhaps, Madam Secretary and General Fogleman, you can convince all of us here that your plan represents the best alternative for our Air Force.

So I look forward to listening to your views this morning on this and other matters relating to the readiness and morale of your forces.

And I thank you very much, Mr. Chairman.

Senator STEVENS. Does any member have any opening statement?

Senator BUMPERS. No opening statement, Mr. Chairman.

Senator BOND. Yes, Mr. Chairman.

Senator STEVENS. Senator Bond.

STATEMENT OF HON. CHRISTOPHER S. BOND

Senator BOND. Thank you, Mr. Chairman.

Madam Secretary, General Fogleman, I join with my colleagues in welcoming you to address the issues facing the Air Force. And we see, as has been indicated, the Air Force is being assailed in the press and on television concerning Lieutenant Flinn. Madam Secretary, I know I join with my colleagues when I say I am sure you have and will continue to do the right thing and that you will ensure that the Uniform Code of Military Justice is fairly and justly enforced for males, females, officers, and enlisted alike.

That said, we recognize the awesome burden facing our Armed Forces, both in terms of increase in mission requirements and concurrent defense funding available—decreases in the funding available to meet the missions. For many years this committee has warned the Department of Defense about the policy of low balling funding requirements, which only exacerbates the fiscal problems facing all of the services' ability to conduct the myriad of operations required of you.

Over the past 5 years, Congress has increased the defense budget a few billion dollars. Critics have attacked us for those increases, but the Department and the administration have routinely come back to us pleading for more through emergency supplementals, primarily because of burgeoning contingency operation costs—some of these operations whose contingencies we here, quite frankly, have contested.

As we look to meet your fiscal requirements and your operational requirements, we recognize the need to coordinate and integrate our combat forces now, more than ever. And, Madam Secretary and General, as someone deeply concerned about the integration of our Active and Reserve forces, I congratulate you for the manner in which the Air Force leadership has dedicated itself and been able to integrate the Active, Reserve, and Guard components into a unitary fighting force.

If they were here, I would call upon the leadership of your sister services to take note of how you have done it so successfully, and to see if they cannot emulate it.

I do have some concerns regarding the upgrading of National Guard general purpose squadrons, to ensure their viability for the future force of the 21st century. I draw attention to this because of the fact that the St. Louis Air Guard F–15 unit is currently conducting front-line deployed operations overseas, and many of our Nation's most experienced fighter aviators reside in Guard units. This same unit in my home State is, in fact, home to the gulf war three-time Mig killer, and I am sure the service would benefit from ensuring his continued full integration into the fighter force.

General Fogleman, when it comes time for me to question you, I would like you to address how the Air Force intends to ensure this and maybe speed up the integration of the F–15C into Guard units, or upgrade the electronic suite of the F–15A's to keep them front-line viable.

I congratulate both of you on your dedication to providing the Air Force with a program to ensure that the service will continue to meet its airlift mission requirements well into the future, and I expect to be able to address this, too, during the question and answer period.

And, Mr. Chairman, thank you very much for allowing me this chance to express some views.

Senator STEVENS. Yes, sir.

Senator, do you wish to make a statement?

STATEMENT OF HON. BYRON L. DORGAN

Senator DORGAN. Mr. Chairman, I do not know that I will get an opportunity during the question period, but I did want to make a statement.

As you know, our State has gone through a very severe disaster of blizzards and floods. And there are two Air Force bases in North Dakota, one in Minot, one in Grand Forks. Recently, when the floods came and forced the evacuation of the city of 50,000 people in North Dakota and 9,000 people across the river in Minnesota, the Air Force base nearby became home, almost overnight, to 4,000 people. They were sleeping in airplane hangars at Grand Forks Air Force Base. And we could not have had a better neighbor in the

world than to have had an Air Force base ready and available to take evacuees from the hospital that had to close and the thousands of evacuees from the town that had to come and make a temporary home at the base.

And I wanted to say a special thank you. Secretary Widnall came to Minot and Grand Forks prior to the last blizzard and the flood to thank the servicemen and women, but I wanted to especially say thank you. We deeply appreciate what the Air Force and what the men and women have done for our State.

As you know, Mr. Chairman, we have had two air bases in North Dakota, one a B–52 base, the other a B–1—now a tanker—base, and 300 ICBM's with Mark 12 warheads. We used to say that if we were to secede from the Union in North Dakota, we would be the third-largest nuclear power in the world, which was literally true. We are proud of the Air Force's presence in our State.

I am going to ask some questions, if I get the opportunity today, about B–52's and about base closings and some of the nervousness I and others have about holding communities hostage for a number of years under base closing rounds. But I wanted to say a special thank you this morning for the Air Force being in our State and playing such a major role in responding to the disaster that the people of North Dakota and Minnesota faced.

Senator STEVENS. Senator, that is not new. I remember after the 1964 earthquake in Alaska, when it was the Air Force and the Army that moved in and brought us not only stability but provisions—even fresh water for over 1½ months, in tanks. We had tanks on about every third corner in our major city, where people went to get their water that was safe. And the military people not only were great neighbors—and they were affected also by the earthquake—without them, I do not think we would have been able to get through that period as we did.

So we all welcome you, and I think we have witnessed, on the national news, the reporting of the impact of the military in this latest disaster area there in the Midwest.

Thank you, Madam Secretary.

Oh, pardon me, Senator Hutchison has a statement.

STATEMENT OF HON. KAY BAILEY HUTCHISON

Senator HUTCHISON. Thank you, Mr. Chairman. I will not take long. But I just want to say that I have appreciated the visits that both the Secretary and the General have made to my State. We do have very important bases. We not only train our own Air Force pilots, but we also train NATO pilots. And we are appreciative of the Air Force presence in Texas. And I have just recently been able to give an award on behalf of the Frontiers of Flight Museum to General Fogleman for his work in maintaining the history of aviation.

I am chairman of the history of aviation at the Frontiers of Flight Museum in Dallas because of my love of aviation, and I just appreciate what you have done. I will have questions on some of the Air Force issues, but I thank you for all the work you are doing and look forward to working with you in the future.

Thank you, Mr. Chairman.

Senator STEVENS. Madam Secretary.

Dr. WIDNALL. Thank you. Well, thank you all for your kind and supportive words.

Mr. Chairman, members of the committee, thank you for the opportunity to appear today to discuss our plans and priorities. I find the timing of this hearing fortuitous, in that it permits us to view the Air Force's program through the prism of the recently completed "Quadrennial Defense Review." The authors of the QDR report deserve high praise for their efforts in conducting an effective examination of defense options, and our service stands ready to support the strategy articulated in the report.

The written statement we have submitted provides a detailed discussion of our programs. I would like to open today with a brief summary of its main points. Over the year, since we last met, the Air Force has built on its legacy of achievement by helping us to shape the international environment and respond to crises around the world. The warfighting CINC's have taken advantage of our responsiveness and flexibility in a wide variety of operations.

WORLDWIDE OPERATIONS

We have engaged around the globe as we executed the NEO effort in Liberia, where Air Force people rescued over 2,400 citizens of 68 nations. We sustained theater air operations over Bosnia and Iraq. We executed the B–52 strike against the Iraqi air defenses, exploiting the flexibility of our CALCM air-launched cruise missiles. We conducted global airlift operations that reached all but seven nations on the face of the Earth.

We deployed air expeditionary forces to three nations. We executed 33 space launches, strengthening this Nation's unique global awareness and connectivity. These operations, to a remarkable degree, capture the core competencies that define our contract with the American people—the capabilities that our air/space force must provide to the joint team. These core competencies—air and space superiority, global attack, rapid global mobility, precision engagement, information superiority, and agile combat support—are not just concepts, but very real requirements for our operational CINC's.

The program we have submitted reflects a very careful balance between sustaining our readiness for such operations over the near term and building our forces to ensure that future CINC's will have the tools they need to accomplish their missions. We have constructed a careful plan to build the next air force, and are now executing that plan with your support.

Our operational commanders have identified strategic lift as their most urgent need. And the C–17 that we are now fielding to meet that need has proven its worth repeatedly since it first entered operations early last year.

Over the midterm, we continue to upgrade our bomber forces and our conventional munitions, focusing on those capabilities needed to provide our CINC's a rapid-response capability, the tools to join the fight while the other forces are still deploying.

Our B–1 now has a conventional operational capability, and we have demonstrated an incredible precision capability with our B–2 in testing last summer. We are working to provide our commanders those capabilities as rapidly as feasible, and ask your support

of the accelerated buy-back of the B–1 that is aimed at that objective.

AIR AND SPACE SUPERIORITY

Over the long term, our most pressing priority is to modernize our theater capabilities. Only by doing so can we ensure that future CINC's will enjoy the air and space superiority they need to maneuver, to attack and to protect their forces. Three systems now under development will ensure that our commanders have those essential capabilities.

First, the F–22 is the centerpiece of our theater warfare strategy and will be a revolutionary, unmatchable adversary in the battle for air dominance that we have come to expect from American air forces. Our ability to provide that command of the air is the linchpin to success, not just for the air battle, but for all theater forces.

As the F–22 establishes that condition, it will provide the secure arena necessary for the range of information platforms—the Joint STARS, the AWACS, the RIVET JOINT—to provide our commanders the information dominance they rely upon to win. Its combination of stealth, supercruise, and integrated avionics will ensure air dominance, simplifying the force packaging requirements for all theater air forces.

This key program has progressed steadily over the past years and will soon be ready for its first flight. It will replace the F–15, which for years has been the world's finest fighter, but which will be entering its fourth decade of front-line service by the time its replacement appears. Over that time, the nations around the world have developed aircraft roughly equivalent to the F–15, and parity is not something we can tolerate in the contest for air dominance.

The Joint Strike fighter will complement the F–22, both operationally and technologically, just as the F–16 complements the F–15, providing a lower cost, multirole partner. So the Joint Strike fighter will work in tandem with the F–22.

The F–16 that the Joint Strike fighter will replace will also be entering its fourth decade of active service by the time the Joint Strike fighter comes on line in the first decade of the next century. The F–16 lacks the JSF's reduced signature and advanced avionics needed for mission success in the decades ahead.

Finally, we are developing the airborne laser [ABL] to provide protection for our forces against the theater ballistic missile threat. That threat has already taken American lives. It is proliferating around the world, and it is one we must counter. The ABL will provide a key component in the architecture necessary to nullify this deadly threat. And in doing so, it will usher in a new era of warfare.

Across this time horizon, we will be upgrading the space-based capabilities central to the Air Force's growing capabilities in space. The Evolved Expendable Launch Vehicle Program will replace the family of ICBM-based launch vehicles that we now employ, and in doing so, will dramatically reduce launch costs, while improving reliability. This program remains on track toward first operational flight for the medium-lift vehicle in 2002, and the heavy-lift vehicle following in 2003.

The low component of our space-based modernization program, the space-based infrared system, has been accelerated from a planned deployment date in 2006 to 2004, and it remains on track toward that date. We are well aware that this is an aggressive program and that we will face serious resource constraints as we complete it. So we are placing continuous emphasis on the management efforts that will be necessary to bring us success.

There are four major components to this effort. First, as I discussed a moment ago, we have constructed a time-phase modernization plan that smooths the flow among our major priorities, and stays within the Air Force top line. Second, we must manage our individual programs effectively, with margins for error that are vanishingly small when compared with those of the past.

REVOLUTION IN BUSINESS PRACTICES

Third, we must press ahead aggressively with the ongoing revolution in business practices across the range of outsourcing and privatization, off-the-shelf technologies, and acquisition reform initiatives that are now well underway.

And finally, we must step up to the tough decisions to pare away nonessential capabilities that drain our resources and provide little leverage to our commanders.

In that light, I ask that you support the tough force structure decisions that are reflected in this budget. All these initiatives aim toward providing the right equipment to our people. But we should never forget that unless we recruit and retain the right people, all that equipment is just so much inert material. We are a technologically based service, and we rely heavily on retaining our experienced, highly trained men and women.

AIR FORCE PEOPLE

That, in turn, rests on our ability to provide our personnel and their families an acceptable quality of life. We have prioritized the various elements that combine to build the quality of life. Our strategy defines the following seven key priorities: Compensation and benefits, housing, health care, balanced personnel tempo and operations tempo, community and family programs, retirement, and educational opportunities.

Over past years, this committee has shown strong support for our people, support which is deeply appreciated and which has measurably strengthened our force. This year's program supports each of these priorities. We are particularly focused on continuing to attack the issue of personnel tempo, and on the upgrading of our housing, both in the dormitories and for families.

And finally, in closing, I want to point out that the program I have just outlined is the result of an extensive long-range planning effort that has guided and shaped us as we continue to shape our air and space forces for the future. The QDR process has been extremely useful in this effort, by further clarifying the role that our service will play in the 21st century as a member of the joint warfighting team. We realize that it is just one of many steps on what will likely be a long and challenging evolutionary process, the success of which depends on an informed dialog and a commitment

by everyone to remain open to new ideas and new ways of doing business.

PREPARED STATEMENT

I promise this committee that the Air Force is anxious to participate in this process, to ensure our Nation has the tools it needs to deal with the challenges that lie ahead.

Again, thank you for the opportunity to meet with you today, and I am eager to address any questions that you might have. Thank you.

[The statement follows:]

PREPARED STATEMENT OF HON. SHEILA E. WIDNALL AND GEN. RONALD R. FOGLEMAN

INTRODUCTION

Mr. Chairman, members of the committee, on September 18, 1996, the Air Force entered its 50th Anniversary year, celebrating it with the theme "Golden Legacy—Boundless Future". Throughout this coming year, Air Force members past and present, along with American citizens, young and old, will celebrate our five decades of service to this nation.

As we celebrate our past, we remain focused on building an air and space force with the capabilities to meet the nation's needs, now and in the future. Since the fall of the Berlin Wall, we have worked to reshape the Cold War Air Force from one primarily focused on a single adversary, to a balanced force with strong forward presence combined with continental United States (CONUS)-based forces able to rapidly deploy around the world and conduct operations across the spectrum of conflict. In 1990, we devised a map to guide us along that path: our strategic vision for the start of the post-Cold War period, Global Reach—Global Power.

Global Reach—Global Power articulated the capabilities the Air Force provides for our national security and gave a first look at how they would apply in the post-Cold War environment. For the past six years, this document has guided the Air Force draw-down, reorganization, and modernization and enabled the Air Force to preserve its readiness during a major reduction in force. Over the past few years, we have built upon the foundation put in place by Global Reach-Global Power and accelerated our planning to build the Air Force for the twenty-first century.

In recognition of trends developing in the post-Cold War world, the Air Force embarked on an unprecedented 18-month long-range planning effort in 1995 to craft a vision to meet the challenges of an uncertain future. This vision comes to life in our strategic vision document—Global Engagement: A Vision for the 21st Century Air Force. This document flows from the National Security Strategy, and the National Military Strategy of the United States, and is in concert with the chairman of the Joint Chiefs of Staff's vision for future military operations—Joint Vision 2010 (JV 2010). It extends across the range of Air Force activities—operations, infrastructure, and personnel, and provides a comprehensive map for our future growth as defined by the expertise and experience from all elements of our force. Over the coming year, we will focus on converting this broad vision into an actionable plan, and implementing a series of initiatives directed by our civilian and military leadership.

Global Engagement is a blueprint for how the Twenty-first Century Air Force will complement the joint warfighting team. It builds on our core values—Integrity First, Service Before Self, and Excellence in All We Do, and is based on an understanding that each Service provides the nation with unique capabilities that stem from specialized core competencies. For the Air Force these include: Air and Space Superiority, Information Superiority, Global Attack, Precision Engagement, Rapid Global Mobility, and Agile Combat Support. Although core competencies may be shared by more than one Service, what distinguishes the Air Force from the other Services—and provides unique leverage for combatant commanders—is our responsiveness and global perspective made possible by the air and space mediums in which we operate. These characteristics provide the National Command Authorities with a wide variety of options to respond to regional crises.

As always, people are at the heart of our military capabilities. As such, the Air Force of the twenty-first century will continue to place a high priority on recruiting and retaining high quality men and women and continue to provide them with the training and quality of life they need to fulfill their missions in this new era.

As we accomplish these missions and consider increasing future demands for air and space power, the Air Force must change the way it does business. Continuing pressure on resources will make increased efficiency and reduced infrastructure costs necessary for success. Our Service has long recognized the importance of responsible stewardship of taxpayers' dollars, and we will strive to achieve the highest standards of efficiency. We understand that the real penalty for inefficiency is not just wasted dollars, but unmet demand for military capabilities.

WORLDWIDE OPERATIONS

Current Operations

Over the past year, the unique capabilities offered by Air Force core competencies have often made the Air Force the instrument of choice in operations around the world. From global attack operations in Iraq to humanitarian response in the Caribbean, we have met the needs of combatant commanders and our nation. Our impact around the world has been spectacular—at times, it's even headline news. Much of the time however, our people perform their missions quietly, away from the glare of publicity—and it seems clear that this quiet, steady work will, in the long run, have as profound an effect on this world as our more visible feats. The global engagement we provide is gradually helping to transform the world and prevent future conflicts. Because much of what we do is away from the eyes of publicity, it is useful to briefly discuss the range of operations that we have conducted over the past year.

Long-Range Strike

On September 3, 1996, the United States military demonstrated its ability to operate from the CONUS to the far reaches of the globe during Operation Desert Strike, a joint operation against Iraqi air defense facilities using both Air Force and Navy assets. In the first strike, B–52's from Barksdale AFB, Louisiana, staged out of Guam on a 34-hour mission and fired 13 Conventional Air-Launched Cruise Missiles (CALCM's) while the Navy fired an additional 14 Tomahawk Land Attack Missiles (TLAM's) from the U.S.S. *Shiloh* and the U.S.S. *Laboon*. During this mission, the B–52 and CALCM weapon systems demonstrated their capability for rapid enroute retargeting, providing the joint force with additional target coverage and strike flexibility that would have otherwise been unavailable.

Sustained Theater Operations

Beyond global responsiveness, the Air Force offers a unique ability to sustain high-tempo air operations over extended periods of time. Throughout 1996 for example, we sustained the air occupation of Iraq and Bosnia with Operations Southern Watch over southern Iraq, Provide Comfort over northern Iraq, and Joint Endeavor over Bosnia. In each operation, with superb support from the Air Force Reserve and Air National Guard, we worked hand-in-hand with our coalition partners and forces from our sister Services.

The Air Force continued an important role in Bosnia by deploying and protecting NATO's implementation force. As of January 31, 1997, we have flown more than 5,000 sorties over Bosnia, providing the full range of theater air capabilities. At the peak of operations in 1996, there were over 4,100 Air Force people deployed to five nations supporting NATO-led contingency operations by providing airspace control; on-call close air support; command and control; intelligence, surveillance and reconnaissance; airlift and special operations. Although this in itself was no small task, as 1996 drew to a close, we had a total of approximately 80,000 Air Force men and women forward stationed and 13,000 deployed in support of operations around the world. Of these, over 6,000 were deployed in support of the coalition air operation over southern Iraq, Operation Southern Watch. Air Force aircraft and crews have flown 68 percent of the total sorties at the end of January 1997—amounting to over 28,800 sorties flown in support of this coalition effort since 1991. Similarly, the Air Force executed the bulk of the missions over northern Iraq in Operation Provide Comfort, flying over 4,500 sorties in 1996—about 60 percent of the coalition total since 1991.

Global Mobility

Our airlift and aerial refueling forces provide us with the capability to rapidly deploy, employ, and sustain our nation's armed forces in operations around the world. Beginning in December 1995, U.S. and allied nations deployed peacekeeping forces to Bosnia in support of Operation Joint Endeavor. In just three months, Air Force mobility forces flew 3,000 missions; carried over 15,600 troops; and delivered more than 30,100 short tons of cargo. While U.S. fighters patrolled the skies over northern Iraq enforcing the no-fly zone, Air Force airlift and air refueling aircraft transported troops and equipment in support of these ongoing operations.

In June 1996, mobility aircraft demonstrated their flexibility by serving in their aeromedical role and flying medical personnel to Dhahran, Saudi Arabia to provide timely care, treatment and movement of injured personnel after the Khobar Towers bombing. Shortly thereafter, our mobility crews were called upon to fly Hurricane Bertha relief missions from the U.S. to St. Thomas, Virgin Islands in support of the Federal Emergency Management Agency.

Later, in September 1996, our airlift and air refueling assets were vital to the success of Desert Strike, enabling strike aircraft to reach targets in Iraq. On top of all this, our mobility crews and aircraft continuously supported critical Air Expeditionary Force operations in the Southwest Asia theater and sustained NATO operations in Bosnia—not just supporting Air Force movements and operations, but those of our sister Services, allies, and coalition partners as well.

Force Protection

The June 1996 bombing of the Khobar Towers in Saudi Arabia accelerated ongoing Air Force efforts to protect its forces operating around the globe and gave the entire Department of Defense (DOD) new insights into the operating methods of world terrorist organizations. Responding to this tragedy, the Air Force, in conjunction with the United States Army, assisted in the repatriation of over 900 DOD military members, civilian personnel, and their families. At the same time, we relocated the majority of our Southern Watch forces to Al Kharj Air Base and instituted an aggressive series of force protection measures throughout U.S. Central Command's area of responsibility.

To help us combat this increased terrorist threat, the Air Force will stand up a field organization at Lackland AFB, Texas, called the 820th Air Force Security Forces Group. This organization will integrate force protection programs and provide trained and ready forces capable of deploying base force protection capabilities. The Group will also have a force protection battlelab focused on exploring and integrating technology, tactics, and training to increase our force protection readiness. We expect this organization to achieve Initial Operational Capability (IOC) in July, 1997.

We are also undertaking a variety of measures to provide clearer force protection guidance to commanders in the field, and we are reviewing Air Force instructions and doctrine documents to ensure force protection guidance is added where appropriate. Recurring assessments of risk, mission, and environment are also being instituted, and we are developing a staffing plan to augment command staffs with properly trained force protection personnel. The bottom line: the Air Force values its people and will protect them from all threats.

The Air Expeditionary Force (AEF)

As America's military forces become more CONUS-based, we look to the AEF to provide a flexible, tailored, quick-response force to fill theater needs across the spectrum of conflict. The Air Force exercised the AEF with deployments to Bahrain, Qatar, and Jordan in 1996. Each AEF flew their first combat sorties with less than 72 hours of notification to deploy and provided a balanced capability for air superiority, precision attack missions, and suppression of enemy air defenses. This rapid response capability is key to winning the air battle and ensuring the success of the Joint Task Force. The fourth AEF will arrive in Qatar in early 1997.

In the near-term, we are developing AEF's capable of conducting both lethal and non-lethal operations for deployment to areas outside the Middle East and will use them during some of our upcoming exercises. For the long-term, we expect AEF's to mature into a significant component of our global engagement and shaping capability. We will adapt our operational and logistics systems to more easily accommodate their widespread use, making them a force theater commanders can count on for a variety of operations. The key to successful AEF operations hinges on the synergistic effect of the global reach and global power characteristics of our Air Force.

Space Launches and Operations

Space is an essential element of U.S. military operations. A combination of military and commercial systems provide our forces with the command and control, communications, intelligence, surveillance, reconnaissance, weather and navigational capabilities necessary for success in all aspects of modern military operations.

During 1996, our Service supported 33 successful space launches using Air Force launch, range, and support facilities. The Eastern Range, headquartered at Patrick AFB, Florida, supported 25 space launches while the Western Range, headquartered at Vandenberg AFB, California, supported another eight. Of particular note, we launched five Titan IV heavy-lift vehicles, all on the first attempt; all achieved successful orbital entry. Two of these launches were three weeks apart, demonstrating improved turn-around capability of the launch facility. The Delta II launch vehicle

continued its string of successful launches with another 10 in 1996. This brings the total number of Delta launches from October 1977 to February 1997 to 107, with only two failures that destroyed the launch vehicle.

The Air Force Satellite Control Network (AFSCN) controls over 95 satellites daily with greater than 400 individual contacts with satellites per day, totaling approximately 148,000 contacts per year. Aside from routine communications with our satellites, the AFSCN, along with Air Force Space Command, have kept our space assets flying while providing uninterrupted service to the user.

The Global Broadcast System recently demonstrated critically needed, increased global situational awareness capability during operations in Bosnia when direct satellite feeds were used to transmit live Unmanned Aerial Vehicle (UAV) images to theater commanders and supporting forces via the Joint Broadcast Service. Efforts are currently underway to provide a nearly identical capability, globally, using military satellites.

In the area of survivable military satellite communications, we increased our on-orbit capability by launching the second MILSTAR satellite. This satellite is providing commanders in the East Atlantic and European theaters with nuclear survivable, jam-resistant, communications connectivity between subordinate combat forces in the field, key military leaders, and national-level authorities residing in the United States.

We have also expanded our space support to our allies. The Air Force and the DOD began providing missile early warning data to NATO and Japan, and we have extended this service to other nations as well.

Non-combatant Evacuation Operations (NEO)

During the first week of April, 1996, as a result of intense street fighting during the ongoing civil war in Liberia, about 500 people sought refuge on American Embassy grounds and another 20,000 in a nearby American housing area. On April 6, the President approved the U.S. Ambassador's request for security, resupply, and evacuation support. Air Force Special Operations Forces led the evacuation effort, Operation Assured Response. Air Force KC–135 tankers and C–130 transports were put on alert in Europe to support 24-hour operations, while other mobility aircraft began to deliver critical medical supplies, food, water, fuel and communications gear.

On April 9, less than 72 hours after the decision to deploy U.S. forces, the first MH–53 helicopter landed in Monrovia to begin the operation. Those evacuated continued on our helicopters through Freetown, Sierra Leone, then on MC–130's to Dakar, Senegal, all under the cover of AC–130 gunships. Throughout the rest of the week, the evacuation continued, as well as airlift of critical supplies to sustain the effort. By April 14, the evacuation was essentially complete, however, security and sustainment operations continued through August 3. In this operation, Air Force Special Operations Forces safely evacuated over 2,400 civilians representing 68 countries.

Domestic Assistance

The Total Force, active duty, Air National Guard (ANG), and Air Force Reserve (AFRES), provides a key service assisting in disaster relief operations within the U.S. For example, we responded with airlift support following Hurricane Fran and provided food, shelter, and clean-up assistance to west coast flood victims. When fires raged out of control across the western U.S. last summer, our ANG and AFRES crews and aircraft flew over 400 sorties, dropping more than one million gallons of water and an additional 10 million pounds of fire retardant to help control the blazes.

Training Programs/Modeling and Simulation (M&S)

The pace and complexity of air warfare places special demands on our people—not just those who operate our air and space systems, but on those who plan, command, control, and support our forces as well. It is essential that we continue the sort of aggressive, realistic training that has been a distinguishing characteristic of the Air Force for decades. State-of-the-art modeling and simulation is leveraging exercises like never before. We use our exercises not just to train, but to develop operational concepts and tactics, adjust to new missions, and test new approaches. For example, this year we expect to structure some of our training exercises to build expertise in employment of the Air Expeditionary Force.

One of the more exciting war games we've run so far was Strategic Force 1996 conducted at Air University's Wargaming Center at Maxwell AFB, Alabama. During November 1996, this joint operational war game demonstrated the true value of air and space power for the first time by modeling air and space power capabilities more realistically. This breakthrough was accomplished, in part, by the capabilities

of our newest wargaming technologies to enable near-real-time analysis of each move throughout the game. More importantly though, this war game set the stage for future war games to incorporate the real value of air and space power throughout the spectrum of future operations.

Strategic Force 1996 will serve as an integral component in the Air Force's continuing long-range planning process. Using JV 2010 and Global Engagement as a baseline, Strategic Force allowed us to test some of our assumptions about the future in a joint environment, while also providing a "hands-on" opportunity to employ future weapon systems. Through cooperation with our sister Services and the unified commands, we were able to test strategies and operational concepts in the 2010 time frame. Using advanced modeling and simulation, we employed the airborne laser, the F–22 air superiority fighter, as well as other advanced systems from all the Services. Ultimately, all Services benefit from this structured test of strategies and the refinement of operational concepts allowed by vastly improved modeling capabilities.

These same kinds of breakthroughs in modern technology are enabling us to move some of our training toward simulator systems. We are proceeding with care and with the understanding that there is no substitute for field training—but also with the understanding that advanced simulation offers enormous potential we can exploit. We are employing these systems not just for training, but to help with our planning and execution while building a true understanding of the capabilities and contributions of air and space forces to the joint team.

Engagement

The ability of the Air Force to engage globally is vital to America's current National Security Strategy and is of growing importance at a time when the number of our forward-stationed forces is dwindling. We recognize that coalitions are a key strategic feature in today's world, and that global access and influence ultimately depend on the bonds of alliances and international cooperation.

Partnership for Peace (PfP) is one of the many initiatives the Air Force supports that underscore our commitment—strengthening and developing cooperative military relations through joint planning, training, and exercises. Thousands of airmen are engaged in military-to-military activities around the globe—from the Joint Contact Team Program in Central and Eastern Europe to Constructive Engagement with China. In 1996, Air Force units from across the Total Force participated in 11 PfP exercises with 28 nations.

Further illustrating our commitment to building strong international ties are the efforts of Air Force personnel engaged in political-military activities, such as Foreign Military Sales (FMS), cooperative research and development, International Military Education and Training (IMET) programs, and Euro-NATO Joint Jet Pilot Training (ENJJPT). Last year, nearly 4,000 students from 110 countries took part in Air Force training through our FMS and IMET programs. Over time, Air Force education and training have a significant impact on U.S. access and influence, promoting military-to-military relations and exposing international military and civilian officials to U.S. values and our democratic process.

At the close of 1996, our FMS picture showed total Air Force sales contracts valued at approximately $105 billion. System sales account for 78 percent, and support for new and established systems accounts for another 21 percent. While training accounts for only 1 percent, or $1 billion, it is extremely important to the overall success of the other sales—and growing more so as we come to rely on our ability to build capable coalition partners.

Today, the United States uses its military forces in a much broader range of operations than ever before. As a matter of fact, United States forces are involved in more operations of greater duration than at any time in the past 20 years. Air Force assets and personnel have conducted Military Operations Other Than War in over 90 countries since 1989. The scope and scale of these operations demand that we continually balance the tempo at which our people and systems operate, with the overall readiness we must maintain for our nation's continued security.

Operations and Personnel Tempo (OPTEMPO/PERSTEMPO)

Since the end of the Cold War, the Air Force has stepped up to an operational tempo four times that demanded prior to the fall of the Berlin Wall—while reducing force structure by about 40 percent across the board and with 32 percent fewer people. That increase in demand for Air Force capabilities has, of course, increased demands on our people, our units, and our weapon systems. Over and above our permanently forward-stationed forces (over 80,000 people on an "average" day over the past year) about 13,700 Air Force men and women were deployed on missions ranging from sustaining combat and humanitarian operations in Iraq, peacekeeping in

Bosnia, and humanitarian aid in Africa and the Caribbean. In a very real sense, this is a direct result of our providing the precision and flexibility our nation needs across the diplomatic and political spectrum—Air Force capabilities are in demand around the world to achieve our national objectives and meet our nation's requirements.

We have taken a series of steps to share the burden of these taskings and posture the force to sustain this tempo. We established the goal of limiting the time our people spend deployed to no more than 120 days per year and are refining the system we use to track this data. We also structured a strategy to meet that goal: first, share the burden of these taskings across the Air Force so that temporary duty (TDY) days are more equitable between major commands (MAJCOM); second, eliminate or find alternative capabilities where taskings allow; and third, adjust our forces where appropriate to meet the need using the ANG and AFRES when possible.

Both the Air Force and the Office of the Secretary of Defense (OSD) have made efforts to reduce taskings on our highest demand systems. In 1995, the Air Force instituted an annual Global Sourcing Conference to balance the deployment burden for all our systems throughout the MAJCOM's. To help manage the demand for our specialty systems such as AWACS, reconnaissance, special operations, and rescue, in July 1996, OSD implemented the Global Military Force Policy to prioritize the allocation of these assets for crises, contingencies and long-term Joint Task Force operations.

We have also been able to reduce the load on some units by relying on our sister Services or our Allies to fill some mission requirements, for example, Navy EA–6B's and E–2C's. In some cases, we have reduced taskings where the balance of operational requirements in theater, versus the long-term health of our force, demanded.

As we sought to share the wealth between active duty units, we have also counted more on the services of the ANG and the AFRES. Their units now support a greater share of contingency taskings and have increased their participation in joint-sponsored exercises. Our combatant commanders long ago ceased to ask whether the Air Force units deployed to their theaters are active duty, Guard, or Reserve. Warfighting commanders confidently, and rightly, expect that any unit from across our Total Force can provide the capabilities they need.

Finally, we have taken steps to strengthen some portions of our force which are facing particularly heavy demands. As an example, we established a reserve associate unit for our AWACS wing at Tinker AFB to reduce personnel tempo in that highly tasked system. We have also begun the procurement of two additional RC–135 RIVET JOINT aircraft along with some of the manning for the additional airframes to help lessen the worldwide TDY mission load on the current fleet of 14 airframes. Using AEF's offers the potential to help relieve the heavy PERSTEMPO load as well. Through the careful use of AEF's, we will be able to provide a rapid response capability anywhere in the world, while reducing the need for standing deployments.

This aggressive range of management actions has already begun to have a positive effect. In 1994, personnel operating more than 13 of our weapon systems exceeded the 120-day goal for deployed time; in 1996, that number was down to four. Our specialized systems and capabilities are those most stretched—our electronic combat aircraft; command, control, communications, computers, intelligence, surveillance, and reconnaissance (C^4ISR) systems; our Special Operations Forces; our Special Tactics Teams; and our tactical airlift control elements. We will continue to work this issue to enable us to provide these capabilities while maintaining reasonable PERSTEMPO into the future.

We also recognize the imperative to take care of the families of our deployed personnel. For example, the Family Support Center (FSC) Family Readiness Program aided our families impacted by the Khobar Towers bombing and arranged for food and lodging for those families living in low-lying areas near Pope AFB, North Carolina—getting them to a safe shelter before Hurricane Fran hit.

Our 84 FSC's are doing an excellent job of supporting the families of our members. The FSC Career Focus Program provides information on career and employment opportunities as well as strategies for job searches for our families when they relocate. This helps ease the burden on our people and their families as they move from base to base during their careers. We remain committed to continuing this kind of support for those who serve our nation and for their families.

Of course, keeping our forces honed, easing the burden of deployments, and caring for Air Force families are essential to maintaining our overall operational readiness, ensuring we are always ready to step up to our role as the world's premier air and space power, and to serve in that capacity as part of our nation's joint team.

Joint Vision 2010

Perhaps the most exciting movement in today's military is our progress toward a joint vision—a vision that will meld the Services' contributions in the decades to come in order to meet America's security needs. General Shalikashvili's JV 2010 provides exactly that. It creates a broad framework for understanding joint warfare in the future, and for shaping Service programs and capabilities to fill our role within that framework. JV 2010 defines four operational concepts—Precision Engagement, Dominant Maneuver, Focused Logistics, and Full Dimensional Protection. These combine to ensure American forces can secure Full Spectrum Dominance—the capability to dominate an opponent across the range of military operations. Furthermore, Full Spectrum Dominance requires Information Superiority, the capability to collect, process, analyze, and disseminate information while denying an adversary the ability to do the same.

The Air Force has long believed in the concept of operations articulated in JV 2010. Over the past fifty years, we have continued to optimize the use of air and space mediums which naturally support these operational concepts. Our core competencies are based on the unique characteristics of air and space power and are essential to the success of the goals outlined in JV 2010.

Air Force Core Competencies

It is the Air Force's central responsibility to develop, organize, train, equip, sustain, and integrate the elements of air and space power to maximize the effectiveness of our unique core competencies and meet the needs of the Nation. As a result, we have formed a clear vision for the future so we can continue to provide the full range of air and space capabilities for our combatant commanders. Each Service has certain core competencies which naturally flow from the medium in which it operates and enable it to execute its missions.

The Air Force's core competencies—Air and Space Superiority; Information Superiority; Global Attack; Precision Engagement; Rapid Global Mobility; and Agile Combat Support—stem from the unique characteristics associated with operations in the air and space mediums. It bears repeating that these core competencies are not proprietary. For example, each Service will need to build forces capable of providing information superiority for operations within its own medium.

Air and Space Superiority

Establishing control over the entire vertical dimension—the domain of air and space power—provides every member of the joint team the freedom to operate, freedom from attack, and freedom to attack. It allows friendly forces to take away enemy sanctuaries, strike enemy forces wherever they are located, and dictate to the enemy where they can and cannot move their forces. This level of control gives our military forces air dominance—the same kind of air dominance we enjoyed in Desert Storm and that saved so many lives. As General Chuck Horner noted about air superiority after the Gulf War in 1991, "Everything is possible if you have it; little is possible if you lose it." Simply put, air and space superiority enables us to achieve the level of air dominance that is the key to winning wars with the fewest casualties.

Air and space superiority is a fundamental requirement for all operational concepts in JV 2010 and is a prerequisite to achieving Full Spectrum Dominance. It diminishes the risks to all friendly military forces and shapes the battlefield so Dominant Maneuver can be used effectively by all members of the joint team to achieve war-winning advantages. This has always been the case. As Erwin Rommel noted in 1944, "Anyone who has to fight, even with the most modern weapons, against an enemy in complete command of the air, fights like a savage against modern European troops, under the same handicaps and with the same chances for success."

The JV 2010 requirement for Full Dimensional Protection recognizes that our adversaries command capabilities across the entire spectrum of military operations that pose a deadly threat to our people. Here again, air and space superiority is a prerequisite to secure this portion of the JV 2010 tenet.

The Air Force has executed its responsibility to control the air so effectively over the past decades that this superiority is often taken for granted as an American birthright. Unfortunately, this is not so. We must be prepared to win freedom of action in any arena—against any adversary. We have no intention of creating a fair fight.

We expect to dominate the air and space arena and deny our adversaries any sanctuary. We must do exactly that to permit the joint force to accomplish its mis-

sion. Our next generation of tactical fighters will ensure we achieve air dominance in all future conflicts. The key component in this effort is our new air superiority fighter, the F–22—successor to the F–15. This aircraft will bring a revolutionary combination of stealth, supercruise, and integrated avionics to the fight. The F–22 provides an overwhelming advantage against sophisticated air- and land-based threats. Such threats will increasingly proliferate around the world in the years to come.

The F–22 remains on course for its first flight in the spring of 1997, and for introduction into service in 2004. The F–22, combined with the Joint Strike Fighter (JSF), which will be fielded about 2008, will replace the mix of F–15's, F–16's, and A–10's that has served the nation so well over the past decades. The JSF, like the F–22, is on track toward its initial operational capability. In November 1996, we down-selected to two contractors: Lockheed Martin and Boeing.

In addition to the risk of attacks by advanced enemy aircraft, deployed U.S. forces face a dangerous theater missile threat as well—a threat that has already taken American lives and is proliferating around the world. Attacking and destroying missiles while they are on the ground is the best option for defense. Additionally, we have found great promise in the prospect of destroying these weapons while they are in the boost phase; still vulnerable and predictable. We are developing the airborne laser, a truly revolutionary weapon, to meet that need.

The Air Force is pursuing the Airborne Laser (ABL) not only for its revolutionary combat potential, but also as part of an overall system of theater missile defense capabilities. The most effective way to combat missile threats is with a layered capability: offensive counter air and attack operations to find, fix, and destroy launchers and their support equipment as well as enemy command and control; boost-phase interception of missiles in flight; and mid-course and terminal interceptors. The layered systems will receive the best intelligence, surveillance, and reconnaissance possible and link with an effective theater-wide command and control system. The Air Force is working to extend this expertise to shape the architecture for counter-missile operations by supporting emerging technologies in Cruise Missile Defense and National Missile Defense.

In 1996, the ABL program transitioned from a technology demonstrator into a key acquisition program, to counter the theater ballistic missile threat. We demonstrated the required laser power and chemical efficiency of an ABL laser module while making significant strides in maturing the tracking and beam control portions of the ABL. In November 1996, Boeing was selected as the contractor to bring this revolutionary system into service in the first years of the next century. With the ABL, the Air Force steps across a threshold and into a new era of directed-energy weapons. More significantly, we will provide our forces a boost-phase theater ballistic missile intercept capability—a true weapon of deterrence. By attacking theater ballistic missiles early in the boost phase, the enemy faces the potential of having his own weapon fall back upon his homeland.

To ensure our domination of the furthest reaches of the vertical dimension, the Air Force is now executing a transition of enormous importance: the transition from an air force to an air and space force, on an evolutionary path toward a space and air force. Space is already inextricably linked to military operations on the land, sea and in the air, and the capabilities provided by Air Force space-based assets have become essential to the success of operations conducted by all elements of America's joint forces.

The Air Force of the twenty-first century must be able to protect U.S. and allied space systems and assure their availability to national leaders and U.S. warfighters. In addition, we must be able to deny any adversary the use of space systems or services when used for hostile purposes, while ensuring freedom of action for our space forces. Toward that end, we will invest in key research and development technology areas that will enable space control capabilities.

Spacelift is fundamental to our achieving air and space superiority in the future. The Air Force is currently taking the necessary steps to move beyond the current family of Intercontinental Ballistic Missile-based vehicles for our launch capabilities, and we expect to reduce launch costs by 25 to 50 percent as a result. In December 1996, the Air Force downselected the Evolved Expendable Launch Vehicle (EELV) program competitors from four to two, keeping the program on track for a 2001 first test launch for the medium launch system, and 2003 for the first heavy test launch. This program offers clear advantages not just for the Air Force, but for other national security users and for the commercial sector as well.

Another major continuing effort over the past year was the Space-Based Infrared System, or SBIRS. This system will replace the Defense Support Program early warning system and will provide more rapid detection and warning to theater forces of strategic launches, improved capability to detect and track theater ballistic mis-

sile launches, and a cueing capability for missile defense systems. Together, these Air Force assets are part of our "system of systems" that enables us to dominate the air and space medium in such a way that the joint team will be able to achieve JV 2010's overarching goal of Full Spectrum Dominance.

Information Superiority

The ability to collect, control, exploit and defend information while denying the adversary the same is critical to ensuring successful military operations in the future. In no other area is the pace and extent of technological change as great as in the realm of information. Success on the battlefield demands we use and protect our own information as well as disrupt or eliminate the enemy's use of their information. While information superiority is not the Air Force's sole domain, it is, and will remain, an Air Force core competency. The strategic perspective and flexibility gained from operating in the air and space medium make airmen uniquely suited for information operations.

Information superiority is a keystone laid in the foundation of JV 2010's concept of Full Spectrum Dominance. Without it, operations grind to a halt, and success turns to failure. The absolute need for information superiority is a common thread through all military operations—this will remain as true in the future as it has for thousands of years. As Sun Tzu observed, "Know the enemy as you know yourself and in one hundred battles you will not be in peril." However, with the revolution in information technologies now in progress, the pace of operations has quickened to a point unimaginable only a few years ago—offering a huge advantage to the side ready to exploit these capabilities.

Providing Full Spectrum Dominance requires a truly interactive common battlespace picture. The Air Force is committed to providing an integrated global and theater air, space, surface and subsurface picture of the battlespace to the twenty-first century Joint Force Commander. We will ensure our systems enable real-time control and execution of all air and space missions and are fully interoperable for seamless integrated battlespace management.

The Air Force's contribution to joint force integration will be accomplished with the Theater Battle Management Core Systems (TBMCS). As the designated C^4I architecture for Air Operation Centers and combat flying units, TBMCS will provide: command and control and Air Tasking Order generation (including weather information) through the Contingency Theater Air Planning System; situational awareness and current intelligence data using the Combat Intelligence System; and a common wing-level communication network, the Wing Command and Control System. These three pillars of TBMCS will become part of an overall DOD common operating environment, and will enhance joint force operations well into the next century.

As the corporate knowledge of the Air Force continues to grow in the field of information dominance, we are beginning to exploit some of these new technologies in new ways. For decades the Air Force has pushed the state of the art in the information arena, with our air- and space-based platforms ranging from manned and unmanned aircraft, to overhead sensors, to the command and control capabilities that pull all this together. Today, the Air Force also plays a significant role in our nation's efforts to prevent the spread of weapons of mass destruction through the Air Force Technical Applications Center's operation of the U.S. National Data Center. This is the focal point for U.S. monitoring of the recently signed Comprehensive Test Ban Treaty and relies on the center's ability to process large volumes of data required by the treaty.

The Air Force has long fielded some of the heavyweights of the information war, systems such as the Airborne Warning and Control System (AWACS), U–2, Joint Surveillance Target Attack Radar System (Joint STARS), and Rivet Joint. These aircraft are among those most in demand around the world today, as our Joint Force Commanders seek to gain the information superiority that they need to execute their missions. During this past year, the RC–135 Rivet Joint fleet flew its 1,000th mission supporting operations in Bosnia, while the U–2 continued to meet theater, national-level, and even United Nations requirements around the world.

The Air Force is exploiting new capabilities to improve the flow of timely, useful information to the warfighter. As an example, we recently fielded the Rapid Targeting System, which builds on the capabilities of our Contingency Airborne Reconnaissance System and enables near real-time transmission of U–2 imagery to the cockpit of airborne fighters. In the not-too-distant future, we will standardize our network of linked systems, command and control and intelligence, surveillance, reconnaissance platforms—increasing our commanders situational awareness and avoiding any blindspots.

The Air Force crossed a historic threshold this past year, assuming operational control of the Predator Unmanned Aerial Vehicle (UAV). This system moved into operation directly from its advanced concept technology development phase, which generated problems with support and operational flexibility. Despite growing pains, Predator has been a workhorse over Bosnia and has provided a wealth of information to our joint forces. In 1995, we established our first UAV squadron, the 11th Reconnaissance Squadron, at the Nellis AFB complex in Nevada, to speed the maturation of our efforts in the employment of UAV's. We expect to exploit the technological promise of UAV's across the full range of combat missions, including communications relay and suppression of enemy air defenses. We are committed to make UAV's a routine reconnaissance platform in the Air Force of tomorrow.

Recognizing the critical need for responsive, daylight, under-the-weather imagery support to the combatant commander, the Air Force equipped ANG F–16's with reconnaissance pods. These aircraft flew over Bosnia and conducted 116 missions against 447 targets, helping to provide the essential capabilities of target validation, new target identification, and battle damage assessment, especially in a high threat environment or adverse weather.

The Air Force is also committed to fully exploiting our space-based information superiority systems. SBIRS will provide more rapid detection and warning of strategic launches to theater forces, improved capability to detect and track theater missile launches, and a cueing capability for theater missile defenses. Eventually, we will move to a standard network of linked Information Superiority systems, air-, space-, and ground-based.

Our relationship with the National Reconnaissance Office (NRO) is a key enabler to achieving this all-source link up. In addition to our space operations forces, the Air Force provides over 1,200 military and civilian personnel to the NRO. This past year, the NRO provided intelligence support through our range of operations—Joint Endeavor, Desert Strike, disaster relief, and other humanitarian missions. In addition, the NRO is a key player in Project Strike II, an exercise that demonstrates the operational utility of providing real-time information to the cockpits of a variety of aircraft including the F–15E, F–117, AWACS, and Joint STARS.

It has become readily apparent that success in the twenty-first century requires that we rely more and more on the ability to use and protect our information systems and technologies. The pace and volume of the flow of information enabled by modern technology provides advantages to the nation's military forces. But with these advantages come vulnerabilities as well. Information Warfare (IW) in particular will grow in importance in the twenty-first century. The Air Force must aggressively expand its efforts in defensive IW as it continues to develop its operational and tactical offensive IW capabilities. We are in the lead in developing IW policy, doctrine, and techniques. In 1993 for example, we created the Information Warfare Center to work IW issues across our Service.

The top IW priority is to defend our own increasingly information-intensive capabilities. On October 1, 1995, we stood up the Air Force's first information warfare squadron (IWS), the 609th IWS at Shaw AFB, South Carolina. The 609th IWS will help ensure we can protect our own information systems, both in garrison and when deployed, as we develop the ability to attack those of our adversaries. On the offensive side, the Air Force is emphasizing operational and tactical IW and continues, in conjunction with other federal agencies, to support strategic information operations.

Global Attack

The Air Force has the unique ability to project power rapidly, precisely, and globally—to quickly find and attack or influence targets worldwide from air and space. This capability is essential to the JV 2010 tenets of Dominant Maneuver and Precision Engagement. In fact, the ability to engage at various places around the globe in minimum time describes a flexible Dominant Maneuver force of global proportions. We demonstrated this in the B–52/CALCM strikes against Iraq in the summer of 1996. The ability to rapidly re-target weapons en-route provided the flexibility the Joint Force Commander needed to conduct that joint strike.

During the Cold War, the majority of the Air Force's Global Attack assets were dedicated towards the nation's highest priority, deterring nuclear war. Although nuclear weapons no longer play as central a role in America's national security strategy, we recognize the dangers posed by the efforts of rogue states and others to acquire them. As a result, we will sustain our efforts in the nuclear arena with two legs of the Triad—our long-range bombers and Intercontinental Ballistic Missiles (ICBM's). The Air Force will also sustain its commitment to support the nuclear requirements of the theater CINC's. We remain determined to maintain our record of

excellence as the custodian of nuclear weapons, ensuring their safe and secure operation.

Today, we have been able to improve the conventional response capability of our bomber force while continuing to maintain our nuclear capability. Our B–1 force now has the capability to drop cluster bomb munitions, and is undergoing further upgrades to improve combat capability. The B–2 has also shown steady progress toward assuming a conventional role with the Global Positioning System (GPS) Aided Targeting System/GPS Aided Munition (GATS/GAM) giving it a much improved capability at low cost, relatively fast. During a test mission in Nevada in October 1996, three B–2's destroyed 16 targets with 16 bombs using this system—vividly demonstrating the ability for individual aircraft to engage and destroy multiple targets on a single pass. As a result of the resounding success of this mission, the B–2 achieved limited operational capability and is on track to achieve IOC in the spring of 1997.

As America reduces the number of military forces it permanently stations overseas, our power projection capabilities will be even more important to the Joint Force Commander and our national leaders. Even today, theater commanders increasingly rely on forces from outside their area of responsibility to respond to crises. We expect our ability to project power globally will become an increasingly prominent requirement in the future. As a result, the United States Air Force is becoming more expeditionary to improve its rapid global engagement capability.

Over the past year, the Air Force has put together a template for this responsive, tailorable force—the AEF. Because it is designed to deploy rapidly when needed and provide immediate offensive and defensive capabilities in theater, the impact on the host nation is less than with permanently based forces and may eventually allow for fewer forward-stationed forces. In addition to its operational capabilities, the AEF has provided powerful opportunities for working with host nations and improving military-to-military relations—essential ingredients when laying the foundation for future coalitions. As discussed earlier, our forces demonstrated the power of the AEF in providing a rapid, tailored capability to fill theater requirements on three occasions over the past year. We will refine our ability to deploy both lethal and non-lethal forces as we employ it across a wider range of missions around the world.

Precision Engagement

The ability to reliably and selectively apply the full range of precision capabilities to achieve the desired effect with minimal risk and collateral damage is the essence of this Air Force core competency. Grounded in the JV 2010 definition, Precision Engagement is: "The capability to locate the objective or target, provide responsive command and control, generate the desired effect, assess our level of success, and retain the flexibility to reengage with precision when required." Past definitions of "precision," in the context of military operations, have focused on the accurate delivery of munitions—an integral aim of Air Force planning and procurement strategy for many years. But new demands placed on our military forces in the post-Cold War environment have broadened our understanding of precision. In General Shalikashvili's words, precision employment demands a "system of systems." It is much more than just the weapons.

The "system of systems" which supports the Air Force core competency of Precision Engagement must be just as capable in precisely airdropping humanitarian supplies as it is in delivering a bomb down the air vent of an enemy command bunker. Therefore, we are working hard to enhance the range of our precision engagement capabilities to meet future taskings. For example, the Air Force is moving toward a precision delivery system for our airlifters to provide the same accuracy in dropping supplies as we now have in dropping weapons. The ability to drop cargo from aircraft and steer it to within a few feet of the intended landing zone is on the horizon.

But the requirement for our operational commanders to employ air forces as a dominant maneuver force and strike the enemy in times and places of our choosing with precise and lethal force remains a critical capability. Our ability to conduct asymmetric warfare through air and space power demonstrated in Iraq, and most recently in Bosnia, preserves American lives and plays a key role in fulfilling America's strategic objectives.

Therefore, we are pressing on with our programs to extend our precision capabilities into the night, the all-weather realm, and with greater stand-off capabilities. We are well along in our efforts to develop an all-weather precision capability with the next generation of conventional weapons. For the most part, these are joint munitions programs which enable us to effectively leverage resources as budgets decline. These weapons, the Joint Direct Attack Munition (JDAM), Joint Air-to-Surface Stand-Off Missile (JASSM), and Joint Stand-Off Weapon (JSOW), will provide

a complementary mix of capabilities and create a range of options for joint forces. We are upgrading our bomber force with these weapons to strengthen our ability to provide rapid and global responsiveness.

However, the public's growing intolerance for collateral damage in military operations makes effective employment of these weapons extremely challenging. An excellent example of this is Operation Deliberate Force—the air campaign that brought about peace talks among the warring factions in Bosnia. Although this air operation was militarily robust, it was politically fragile. The first report of civilian casualties or collateral damage would have placed extreme pressure on the NATO coalition that authorized the strikes—tying the operation's success to the precise application of force. Despite the high technology of the aircraft and weapons involved, this operation would not have been possible without the effective integration of intelligence, command and control, weather, and training programs that led to our bombs impacting on the right spot.

Perhaps the most effective illustration of this type of integration was our aircrews' use of a revolutionary system known as Power Scene. This system translates imagery from various sources along with other data into detailed, real-life, computerized, three-dimensional images. Our crews used the Power Scene system to practice their missions before they ever stepped to the jet—reconfirming the old adage, "the more you sweat in peace, the less you bleed in war."

At the Combined Air Operations Center in Vicenza, Italy, where we executed the very complex multinational air campaign, there was a real-time fusion of operations and intelligence, as well as real-time retasking capabilities for our intelligence assets. General Mike Ryan, who led the coalition's air operation over Bosnia, was able to watch real-time fused pictures of the air operation through our Joint Forces Air Component Commander (JFACC) Situational Awareness System (JSAS). The real-time interplay of our space-based and air-breathing reconnaissance systems could also be seen in the intelligence cell behind his command center. The cycle time to capture, analyze, and act on information had been reduced from weeks to seconds—a major reason for the effectiveness of the air operation in Bosnia. Due to the integration of JSAS into the Global Command and Control System (GCCS), real-time information is immediately available to anyone with access to GCCS.

Air Force information systems are the assets that our operational commanders call on first, making them the cornerstone of our joint theater capability. These systems include the Rapid Targeting System which provides near-real-time information to the cockpit (sensor-to-shooter), and leading edge information platforms such as the AWACS, Joint STARS, U–2, Rivet Joint, and Predator.

In fact, as the NATO force was first establishing a presence in the theater, Admiral Smith, the NATO commander, took to slapping pictures taken from the Joint STARS down in front of the factions when they met as if to say: "See, there isn't anything you can do without our knowing!" One could see this capability in action at the 1st Armored Division in Tuzla. Sitting in the Joint STARS control van were an Air Force and an Army NCO sitting side by side watching situations develop, ready to respond should the factions violate their commitments.

Precision Engagement yields operational and strategic effects that assure victory for our joint team in all theaters of operations. It will enable the Air Force to continue to deliver precision effects to meet the nation's future political and military objectives.

Rapid Global Mobility

The unique ability to rapidly and flexibly respond to the full spectrum of contingencies—from combat operations, to humanitarian relief, to peacekeeping, with the right force, at a decisive time and place, is a capability no other nation in the world has. Air mobility forces enable warfighting commanders to influence operations throughout the theater. Our airlift and tanker fleets can build an air bridge to move joint and allied forces for combat or peacekeeping operations or to airdrop or insert troops and equipment. Our tanker fleet enables support forces, such as C^4ISR aircraft, to remain airborne longer and combat forces to strike deeper. Our airlifters sustain operations by providing a steady flow of equipment and supplies, as well as ensuring short-notice, critical needs are met and life saving emergency aeromedical evacuation is available.

One group of "silent warriors" often employed in contingency operations is Air Force Special Operations Forces. These forces use rotary and fixed wing aircraft armed with technically superior avionics suites to provide the specialized mobility capabilities to move into and out of denied airspace. This small but potent air arm is capable of responding in all types of weather and threat scenarios to deliver special operations forces to hot spots anywhere in the world. The CV–22 will provide these forces long-range combat search and rescue as well as deep battle airlift. The

CV–22's speed, extended range and survivability will significantly increase the Joint Force Commander's ability to conduct operations in denied territory.

Rapid Global Mobility will remain the future Joint Team's most reliable combat multiplier. It is a prerequisite for winning future conflicts and is a key requirement for the JV 2010 tenet of Dominant Maneuver, assuring the timely arrival of forces or supplies needed to deter a conflict or allow our forces to engage the enemy. The speed, range, and flexibility that are unique to air and space forces, like our air mobility fleet, are essential ingredients for military success, and we continue to aggressively pursue systems and processes that increase our capability to respond anywhere, anytime with decisive influence.

The C–17 will be the backbone of our airlift fleet far into the future, and 1996 proved to be a remarkable year for this aircraft. Its very existence in doubt a few years ago, it has successfully demonstrated its capability in deployments around the world. Perhaps its most dramatic exploit was the insertion of 15 Bradley Fighting Vehicles and floating bridge sections into Tuzla in late December 1995 to bolster ground presence and enable the U.S. Army troop crossing at the Sava River in Bosnia. Recognizing its maturity, the Air Force signed a multi-year procurement contract that will ensure stable funding as we bring on this essential system.

While procuring our newest airlifter is important to the CINC's, maintaining our overall lift capability with improvements to the C–141 and C–5 fleets and reducing lift requirements, are just as critical. For example, drastically reducing the numbers of aircraft required to move and support our next generation systems, such as the F–22 and Joint Strike Fighter, will greatly enhance our capability to successfully respond to any crisis around the globe, while dramatically increasing the speed of our response. We are also ensuring our tanker fleet remains viable with improvements to the KC–135 fleet to improve aircraft performance and reduce maintenance time and operating costs.

Agile Combat Support

Improving transportation and information systems to allow time-definite resupply and total asset visibility, reducing the mobility footprint of deployable units to decrease the lift requirement, and streamlining the infrastructure providing parts and supplies to reduce cycle times are all important aspects of Agile Combat Support. Together, they greatly improve the combat capability of all joint forces.

Our current and future rapid, responsive, and flexible forces require an agile support system for them to be effective. Improvements in information and logistics technologies make this possible. Since 1994, the Air Force has been developing and refining practices supporting our core competency of Agile Combat Support and JV 2010's operational concept of Focused Logistics. With time-definite resupply, we reduce the mobility footprint of early arriving forces, which not only optimizes available lift and reduces cost, but makes it possible to reduce the size, and therefore the vulnerability, of our forces, contributing to another tenet of JV 2010, Full Dimensional Protection. Providing for force protection is not just a matter of air base operability and security; it also involves redesigning our power projection forces to reduce the size of the force protection needs.

Historically, the logistics system has "pushed" the nation's wartime support to forces in the field to compensate for imperfect resource information and planning systems, resulting in an expensive and wasteful stockpile of materiel in U.S. warehouses and forward locations. The Cold War model of globally pre-stocking huge quantities of materiel forward and then flowing equally massive quantities from home bases is untenable in today's austere environment—politically, economically, and operationally.

Our nation is moving away from deploying masses of materiel to support its forces. To compensate for this, the Air Force is now using high-velocity, high-reliability transportation and information systems to get the right parts to the right place at the right time. Through this approach, we increase our operational capability while reducing both our mobility footprint and our costs.

When combatant commanders require an item, integrated information systems "reachback" to U.S. locations and "pull" only the resources required. Depot processes—streamlined and incorporating state-of-the-art business practices—are able to release materiel in a much more timely fashion. Time-definite transportation completes the support cycle by rapidly delivering needed resources directly to the user in the field. Integrated information systems provide total asset visibility throughout this process, tracking resources throughout their delivery cycle with the capability to re-direct them as the situation dictates. We are extending the concept of "reachback" to include elements ranging from C^4I, logistics, and personnel, thus exploiting information technology to reduce our footprint in the deployed location. Time-definite resupply will be an important part of improving this capability in the

future. This, coupled with a combined logistical architecture of lighter, more reliable equipment designed for support from an agile information based logistics system, will yield the revolution in combat support envisioned in JV 2010's tenet of Focused Logistics.

Focused Logistics and its forerunner, Lean Logistics, will provide the Joint Force Commander with an Air Force that is more mobile, responsive, efficient, and significantly more potent. It may never completely turn the logistician's art into a pure systems-based science, but the future of Air Force logistics will maximize both technology and resource management reinvention insights to achieve and provide unparalleled combat power to the joint warfighter.

Foundation for the Future Air Force

Together, these core competencies outline our contract with the joint team—and with the American people. We are responsible to ensure we can execute them under any circumstances, and against any adversary. In these times of declining budgets, it is essential that we construct a solid program that properly prioritizes across these requirements. We have built a time-phased modernization program to do so—filling our airlift requirements, our CINC's' greatest need, with the C–17 in the near-term; upgrading our bomber force to carry a wider range of conventional weapons and "smart" munitions in the mid-term; and upgrading our theater forces with the acquisition of the F–22 and the JSF to ensure air dominance, in the long-term. Across this fifteen-year horizon, too, we will be bringing on the EELV and SBIRS, the systems necessary to ensure space and information superiority. This carefully balanced modernization program, coupled with responsible stewardship of individual programs, will build the right mix of capabilities into the force of tomorrow. We can afford to do no less.

REVOLUTION IN BUSINESS PRACTICES

If the Air Force is to succeed in its modernization and Quality of Life initiatives, we must free up resources through a revolution in business practices. The Air Force cannot afford to continue traditional means of doing business in acquiring and supporting our forces. Therefore, we have instituted an aggressive series of reforms that extend across the range of our infrastructure and acquisition practices.

Acquisition Reform

The Air Force is beginning to move beyond the Lightning Bolt initiatives that jump started our acquisition reform process. These initiatives have been highly successful and are generating the cultural change across the force that is essential for their long-term effect. The Air Force has already identified about $17 billion in savings and cost avoidance through these measures, and we are expecting much more in savings to follow. The Joint Direct Attack Munitions program provides a vivid example of the benefits we are reaping from acquisition reform. We will acquire that system at $14,000 per unit instead of our projected $40,000; we will buy out the program in 10 years instead of the projected 15; and we will receive a warranty increase from five years to 20. An equally successful program is the Wind Corrected Munitions Dispenser (WCMD) for the B–52 fleet. By using commercial practices, WCMD will be delivered 18 months early with the average unit production price reduced 64 percent—from $25,000 to less than $9,000—resulting in a program savings and cost avoidance of $850 million.

Throughout 1997, we will focus on reform through the development and execution of a new strategic business management plan. Our goal is to provide a seamless transition from the highly successful Lightning Bolt initiatives to a culture of Continuous Process Improvement. This business plan will describe Chief Executive Officer level goals, objectives and measures and will establish the foundation to support our vision of Twenty-first Century Air Force acquisition—lean, agile buyers and sustainers of more affordable warfighting capability.

Outsourcing and Privatization

Outsourcing and privatization is an essential means of freeing resources to apply toward modernization and other priorities. More than that, these steps enable the Air Force to harness the expertise of the commercial sector for our needs and allow us to focus more consistently on our core responsibilities.

The Air Force has made considerable progress in this very complex arena. We successfully transitioned the depot work at Newark Air Force Station to private contractors. We are in the early stages of depot maintenance competition for a large portion of the Sacramento Air Logistics Center's workload and the C–5 business area at Kelly AFB, Texas. We have progressed toward completing a strategic plan covering the range of our outsourcing and privatization initiatives and expect to fin-

ish that in 1997, and we have identified those areas where we expect to find the most near-term payoffs: support functions, depot maintenance, and military family housing.

The key to our success in the support area is competition between the public and private sector. Our most notable example, and also our largest competition to date, is a recent cost comparison of aircraft maintenance at Altus AFB, Oklahoma. The competition, completed in only 16 months, was won by a streamlined in-house organization which reduced its manpower by 49 percent, resulting in a $95 million savings over five years.

Commercial Off-The-Shelf (COTS) Technology

The distinction between military technology and commercial systems has become increasingly blurred over recent years. The line that once divided the commercial sector from the defense industry, too, has faded. As a result, it has become increasingly attractive to employ off-the-shelf commercial technologies in our systems. The Air Force is aggressively pursuing those technologies—and we are abolishing old prohibitions that limit our ability to take advantage of them.

One vivid example is what is now called the Global Broadcast System, which is currently used to provide an upgraded flow of data to our deployed forces. By using an existing commercial satellite constellation to provide an interim operational capability, we were able to field a high data rate capability quickly, without spending an extraordinary amount for a unique military solution.

The Air Force has used this same approach to structure its acquisition of our next-generation long-range executive transport, the VC–32A. By using commercially available off-the-shelf technologies, in this case four Boeing 757 aircraft, we have saved almost $40 million per aircraft and reduced acquisition time by about one-third.

Financial Management

Ultimately, the success of all these measures relies on sound financial management practices and good business sense. The Air Force financial management community has worked hard to improve business practices, quality of management accounting data, and financial reports required by the Chief Financial Officers (CFO) Act of 1990. These financial reports not only provide meaningful information to senior Air Force managers, but also assurances to the public that the Air Force is a good steward of its financial resources.

The Air Force has made fast moving progress in shaping reform and bringing about change. We have reduced problem disbursements by up to 90 percent since 1993 and antideficiency violations are down nearly 80 percent since 1994. Nearly 70 percent of the CFO audit recommendations have been corrected, and generally the remaining corrective actions represent the critical, long-range financial system improvements required for CFO Act compliance. Corrective actions required for existing financial and other systems are being prioritized and implemented. In instances where systems are being replaced, the Operational Requirements Document now stipulates that the new system be compliant with Federal Generally Accepted Accounting Principles.

The Air Force also developed an Automated Battlefield System (ABS) to improve our ability to accomplish those financial transactions that must be done during overseas operations. The ABS, which consists of a simple piece of software that works with ground-based communication equipment or a portable satellite transmission device, permits the user to access all financial information resident in stateside computers. The ABS avoided the need to procure costly new software for use during contingency operations.

Small Business Management

Our Small Business Program continues to serve as the catalyst for economic vitality among the nation's small businesses. Despite the recent suspension by DOD of minority business set-asides, the Air Force once again surpassed the mandated goal of 5 percent awards to minority businesses by awarding more than $1.65 billion to minority owned firms.

Our efforts in support of women-owned businesses are unparalleled. The Secretary of the Air Force serves as the DOD representative on the Interagency Committee on Women's Business Enterprise and introduced the Air Force's "rule of one" for women-owned businesses, pioneered mentor-protégé opportunities and was a significant contributor to the committee's report to the president entitled: "Expanding Business Opportunities for Women." Additionally, the Air Force participated in the first ever Women Owned Business Research Agenda held at the Kellogg School at Northwestern University, and subsequently chaired a round table on procurement opportunities for women at the Women Owned Business Summit 96.

In April 1996, the Air Force Small Business Office launched its own Internet home page to give small businesses maximum access to information. This electronic outreach forum provides the Air Force Marketing Information Package by Internet, including the Long-Range Acquisition Estimate; Selling to the Air Force; Diversification for Small Business; and the Mentor Protégé Handbook. Additionally, focus forums, useful marketing tools and links to many other important resources are also available.

As we move toward increasing the use of outsourcing and privatization, we will continue to rely upon our strategic planning process to provide the framework for maintaining and improving small business participation in the future.

AIR FORCE PEOPLE

When people think of the Air Force, they rightly think of high technology: of supersonic aircraft, satellites orbiting overhead, and computers and communications networks at the leading edge of technology. But it is not just our technology that makes us successful—it is our people. To provide a common frame of reference for understanding and employing air and space forces, we have decided to create a new Air and Space Basic Course for all newly commissioned officers and selected civilians which focuses on the history, doctrine, strategy and operational aspects of air and space power. This course will also provide them a shared understanding of the core values by which they live and work.

Core Values

Our core values are essential to our very existence as an institution. These fundamental and timeless values—integrity first, service before self, and excellence in all we do—form the bedrock of our force. It is crucial that our members share a common understanding of these values, and live by them.

Integrity First is the keystone of military service. Integrity is the moral touchstone that is the foundation for always doing the right thing for the right reason, even when no one is looking. Our military force operates on the basis of trust—we expect our people, throughout the ranks, to live up to the highest standards of integrity.

Service Before Self is at the heart of the military profession. It represents the absolute need to put our nation, our Service, our unit and our mission before ourselves. There can be no room for personal agendas at the expense of the institution or the nation.

Our push for Excellence In All We Do fuels our endless drive to improve ourselves and our capabilities. Mediocrity is not tolerated in our profession; the stakes are too high. The Air Force has learned never to relax or rest on past laurels, because we must be prepared to face tomorrow's challenges.

These values are for life, not just for working hours. We ensure our people understand and embrace them because they are essential to our effectiveness as a military force. Across the vast range of expertise necessary to operate and sustain the Air Force, these values provide a unifying element, bringing us together in the service of our nation.

Leadership Initiatives

Leadership has always been an art and has always been at the heart of military effectiveness. Today, Air Force leaders at all levels are being challenged by new responsibilities as they operate in an increasingly complex environment. So, over the past two years we have fundamentally restructured our approaches to select, train, and support our leaders—and we will continue to refine these processes.

In 1995, the Air Force conducted the first command screening board in order to identify eligible colonels and colonel-selects best suited to fill wing commander and group commander vacancies. This process ensures those officers most qualified to command are identified so that the future leadership of our Air Force is comprised of the best people.

An essential element in effective leadership is preparation for command. Once selected, all wing, group, and squadron commanders now receive formal resident training prior to assuming command. These courses emphasize command responsibility, accountability, and discipline. In addition to these fundamentals, the courses include case studies and time-sensitive topics for effective command in this very complex environment—with a focus on issues ranging from equal opportunity and diversity, to violence in the workplace, to outsourcing and privatization.

The Air Force has long focused on bringing front-line technology into its weapons systems. We have now begun to apply that same logic to leadership development. Last March the Air Force hosted a conference for the Service Secretaries which focused on modeling and simulation. As the Service Secretaries toured the Air Force's

Theater Battle Arena, the Joint Training and Simulation Center run by U.S. Atlantic Command and the Joint Staff's Joint Warfighting Center, they were all impressed by the potential at these facilities for training our leaders and battle staffs. There is almost no end to the utility and potential of these technologies, and we are pursuing them with vigor.

Quality of Life (QoL)

The Air Force traditionally works at the leading edge of technology, and it goes without saying that we rely on highly trained and disciplined people throughout the ranks as the foundation of our strength in sustaining that approach. The success of this strategy depends on our ability to recruit, train, and retain quality people—ultimately, to provide a reasonable quality of life for them and their families as they serve this nation.

Service members' quality of life, to a large extent, tends to influence the decision to stay in or leave the service. Retention across the force remains healthy, but we're beginning to see indications of a slight decline. Our response is to continue to emphasize quality of life issues as a top priority and smartly use targeted incentive programs such as Aviator Continuation Pay for officers and Selective Reenlistment Bonuses for enlisted personnel. We will continue to emphasize quality of life as a positive influence on retention, and therefore, a vital element in ensuring our readiness.

The Air Force Quality of Life strategy is to pursue a balanced approach supporting our 7 priorities: fair and equitable compensation; safe, affordable housing; quality health care; OPTEMPO/PERSTEMPO considerations (the demands our operational tempo places on our people); increased community programs; preservation of retirement systems and benefits; and continued support to educational programs.

Air Force QoL initiatives rank compensation and benefits as our first priority in ensuring the right quality of life for our people. Congress has already taken steps necessary to embed pay adjustments in our program, so that in future years there will be no surprises, and adjustments can be made within a planned framework. The 3 percent pay raise authorized in fiscal year 1997 helped close the private sector pay gap, but clearly we have some distance yet to travel in this area.

The report by the Marsh Commission framed then-Secretary of Defense Perry's priorities, and with congressional support, the Air Force made gains in many of these areas. For example, the Air Force maintains its emphasis on upgrading housing throughout the force. Over 1996, the Air Force began a long-term effort to improve the quality of housing for unaccompanied enlisted members with initiatives ranging from new construction and assignment standards to renovation of old dormitories. We also began construction of our first-ever Dormitory Master Plan to establish a common yardstick for our installations and improve our management oversight in this crucial area. We expect to complete this effort by the summer of 97.

Already these initiatives are bearing fruit. The Air Force began implementing the new DOD one-plus-one dormitory standard, with 28 such dormitories approved for construction in the fiscal year 1996 Military Construction Program. We will follow these with another 20 projects in fiscal year 1997. We also established an institutional goal of eliminating all gang latrines in dorms for permanently assigned personnel by the year 1999. All of these initiatives, and this considerable capital investment, represent our commitment to meet our single and unaccompanied members' highest priority concern in quality of life: privacy.

For Air Force families, we need to revitalize over 58,000 housing units. With the average age of our housing units now over 34 years, this is a major requirement as we seek to improve living conditions for our people. Privatization offers a real opportunity for improved quality with limited investment of Air Force resources. The Air Force's first project in this area will be at Lackland AFB, Texas, where we identified a deficit of 580 units and another 521 units which need major renovation or replacement to meet adequacy standards. To address this problem, the Air Force has funded a 420-unit project including construction of new units, demolition of existing substandard units, and ownership and operation of the new housing. We expect this innovative approach to provide a pattern for others to follow.

We also realize that medical care is a key concern for our people, so we will continue to emphasize the provision of quality health care for Air Force members and their families. In this regard, TRICARE is the best option to ensure this kind of care for dependents as we cut back on what can be provided by Service medical treatment facilities. We will also sustain our support for Medicare Subvention for military retirees over the age of 65 because it is the right thing to do.

Finally, the Air Force is continuing to focus attention and resources on providing our people the child care they need to enable them to perform their duties. High PERSTEMPO and the demands of changing society where more of our families have

both parents employed have expanded the demand for child care. We need about 86,000 child care spaces to meet these demands and have begun to meet this challenge by adding an additional 325 trained personnel.

CONCLUSION

As we embark on our journey into the next 50 years and beyond, the Air Force is postured to build on our golden legacy and shape our boundless future. We have defined a strategic vision that will take us into the next millennium and continue our Service's transition from an air and space force to a space and air force.

The key to our future success rests on the Air Force's ability to continue to fully exploit the unique characteristics of the air and space mediums—the foundation upon which our core competencies rest. From our core competencies flow the capabilities that make us an integral and indispensable member of the joint team and are key to achieving the overarching goal articulated in JV 2010—Full Spectrum Dominance. Maintaining this level of expertise will require an ongoing commitment to innovation and aggressive integration and exploration of the most advanced and promising technologies.

Smart business practices have put the Air Force out in front in the efficient management of precious resources needed to procure our systems, maintain the infrastructure that supports them, and ensure a reasonable quality of life for our people. Combined with our time-phased modernization program, our acquisition reform efforts have allowed us to put better, more reliable equipment into the hands of our people faster and cheaper than ever before.

Air Force people are engaged around the globe and are continuing to build the capabilities our nation will need from its air and space force in the future. The Air Force is proud of its golden legacy of service over the past 50 years, and its current role in support of our National Security Strategy of Engagement and Enlargement. We stand ready to work as part of the joint team to secure our country's security for the next 50 years and beyond.

Senator STEVENS. Thank you, Madam Secretary.

General Fogleman.

General FOGLEMAN. Mr. Chairman, distinguished members of this committee, it is a privilege once again to appear before you on behalf of the men and women of the U.S. Air Force and, as you noted, Mr. Chairman, particularly on this, our 50th anniversary year.

Our 1998 budget request really focuses on people and on modernization. And at the same time, we have tried not to lose sight of the near-term readiness equation. I believe that we have presented and developed a sound program. I think it is a balanced approach to a rather uncertain future. I believe it is on the right course. And I am very pleased to report to you and to the people of the United States that you have a strong, ready, and dedicated Air Force, and it is doing its job for the Nation.

GLOBAL ENGAGEMENT

As the Secretary has already stated, over the past year, the Air Force has been globally engaged around the world, supporting our national interests. That global engagement is really made possible by the 380,000 plus active duty people, the 192,000 guardsmen and reservists; and the roughly 165,000 civilians that we have in our Air Force, 80,000 of which are permanently forward deployed in the Pacific, in Europe, or in Southern Command.

This morning when I looked at my ops summary, I had 11,400 troops who were TDY in support of a major contingency or crisis. And of that number, of that 11,400, roughly 2,000 were guardsmen or reservists, 99.9 percent of whom were volunteers. So it is a total air power team effort.

It is a team made up of members like the following. For instance, I would just bring to your attention a senior airman by the name of Joe Sampson, who was recently awarded a medal. He is a load master in the 16th Airlift Squadron at Charleston Air Force Base. And he risked his own life to save an Army jump master, who had his reserve chute deploy while he was still inside the airplane. Seeing what had happened, this airman jumped into the door, managed to retrieve the parachute, and potentially saved the life of this jump master. This is the kind of people that we have serving.

We have already had the Senator from the State of North Dakota tell us about the people at Grand Forks, who delivered that flood relief and opened up their base. In addition to providing billeting for 4,000 to 6,000 folks, those people at Grand Forks were serving 30,000 meals a day for the community. These people reflect the very best of American society. And I would tell you that we strive to recruit the very best, but it is getting tougher.

QUALITY FORCES

Last year in the Air Force, we brought in just over 30,000 enlisted troops. Over 99 percent of them have a high school diploma; 82 percent scored in the top one-half of our Armed Forces qualification test. But our recruiters are working harder and harder to be able to keep that quality up.

Another part of our equation is how do we retain that quality once we train it. And in this we generally have very good news. Our first-term reenlistment rate is currently 59 percent. That is down slightly, but it is still well above our goal. Our second-term and our career reenlistment rates are at near all-time highs.

On the other hand, in the rated retention area, we are starting to see a downturn. This is driven, as we go out and survey, by a couple of things we believe. One is the OPTEMPO that we are driving our people to. And that is resulting in less quality of life for them and their families. The other thing is that in this country, we are undergoing an extraordinary period of hiring by the airlines. And from a monetary standpoint, we just simply cannot compare with the airlines and the kind of stability that it will give to families.

Now, one of the things that we do need some help on is the aviation bonus program. And all the services are united on this. DOD has put forth some proposed legislation to OMB that would allow us to increase our pilot bonus and recover some of the money that has been lost due to inflation in this. So we would ask your support whenever that gets to the Hill.

The other priorities that we have in this budget include taking care of our people, keeping our modernization programs on track. We talk a lot about quality of life. The Secretary mentioned the seven categories that we talk about. Certainly, I believe that one of the key things that we can do for our troops is we can take care of them when they are in the field—force protection.

FORCE PROTECTION

You know, the bombing at Khobar Towers introduced a significantly more sophisticated and powerful level of terrorism. And here we are, 1 year later, and still no one has been brought to justice.

But yet we had all these people who were telling us how precise the intelligence was and how everybody should have been prepared for this.

I think we have some work to do in this area. And so we have instituted some new organizations to deal with force protection. The headquarters has stood up a force protection group and a force protection battlelab.

When we look at the more traditional perspectives—good quality of life—that are essential to combat effectiveness, that this committee has supported. We have asked for a 2.8-percent pay raise for fiscal year 1998. We have a dormitory master plan, as well as a military family housing privatization plan. Certainly, quality health care remains a concern, and implementation of Tricare is important. And Medicare subvention for our retirees is extremely important.

We worked hard to try and manage the OPTEMPO and PERSTEMPO, and particularly, we tried to make use of Guard and Reserve forces to do this. And as the Secretary pointed out, we, as a service, made some very hard decisions early in the 1990's so that we would, in fact, have a time-phased, affordable modernization program. The most urgent need in the near term is strategic lift. And the C–17 is what will provide this Nation rapid global mobility. And so we are in the midst of executing that multiyear program that you approved last year.

In the early midterm, our priorities have been on our bomber force and conventional munitions. We are trying to take these three nuclear bombers and upgrade them and give them greater conventional capability. And what we see that this will do for us is it will give us the capability to put some of these bombers on alert here in the States. And that will relieve some of the requirement to have forward-deployed forces on temporary duty in various locations. We can respond very quickly.

In the midterm, we are talking about our airborne laser, we are talking about the space modernization of the evolved expendable launch vehicle, and the space-based infrared system.

And then, of course, in the long term, the most critical program that we are looking at is the overall TACAIR modernization, not just for the Air Force, but for the Nation. And so, the F–22 and Joint Strike fighter.

REVOLUTION IN BUSINESS PRACTICES

Now, a key part of making this modernization program a success is, in fact, continuous improvement of how we go about acquiring things and managing it. Reforms in business practices, outsourcing, privatization, commercial off-the-shelf technology, acquisition reforms, and retaining a viable and an efficient depot system. And we think that the public/private competition strategy provides the best value, without jeopardizing support for our combat forces. Noncore activities competed under full and open conditions.

As the Secretary pointed out, during the past year, we concluded the first part of our long-range planning effort to produce a vision to meet the needs of the Nation in the first quarter of the 21st century. That vision, of course, is called "Global Engagement." It defined those core competencies that the Secretary talked about.

I would tell you that we are committed to integrating air and space into all the operations, and reinvigorating within the Air Force a spirit of creativity. We have created focused battlelabs and centers of excellence to embrace technology developments. Battle management efforts are being put forth that will provide an integrated picture of the battle space for the joint force commander. And we believe the time is right to prepare our people and our equipment, our infrastructure, and, in fact, change the culture where it needs to be changed so we can meet the challenges of the 21st century.

So, Mr. Chairman, I would like to request, respectfully, if I could, to have this copy of "Global Engagement" entered into the record as a formal statement of the Air Force vision. It is very important, I think, because it also provided the game plan that the Air Force used as we went into the "Quadrennial Defense Review." And so the rationale for the kinds of proposals and options that we made in the "Quadrennial Defense Review" are found in this document. We were able to take that vision and present it, and we feel comfortable with the results.

[The information follows:]

GLOBAL ENGAGEMENT: A VISION FOR THE 21ST CENTURY AIR FORCE

DEPARTMENT OF THE AIR FORCE,
Washington, DC.

Welcome to the United States Air Force vision into the first quarter of the 21st Century. This vision is one of air and space power and covers all aspects of our Air Force—people, capabilities, and support structures. It charts a path into the next century as an Air Force team within a joint team.

While Global Reach-Global Power has served us well, extraordinary developments in the post-Cold War era have made it essential that we design a new strategic vision for the United States Air Force. As a result, we embarked on an intensive 18-month effort to develop a comprehensive vision to shape the nation's Air Force during the first quarter of the 21st Century. This endeavor culminated in a week-long meeting of senior Air Force leaders who agreed on the future direction of our Service.

Global Engagement: A Vision for the 21st Century Air Force flows from the National Security Strategy and is our continuing commitment to provide America the air and space capabilities required to deter, fight and win. This vision is grounded in the Chairman of the Joint Chiefs of Staff concept of how we will fight in the early 21st Century—Joint Vision 2010. Moreover, it embodies our belief that in the 21st Century, the strategic instrument of choice will be air and space power.

In the end, our success in implementing this vision will depend on the outstanding men and women who make up the nation's Air Force.

RONALD R. FOGLEMAN,
General, USAF, Chief of Staff.

SHEILA E. WIDNALL,
Secretary of the Air Force.

INTRODUCTION

Change in the world around us requires change in the Air Force.

The end of the Cold War swept away national security requirements that had appeared to be fixtures of the global security landscape. The Air Force anticipated the change and produced a vision for dealing with the post-Cold War world in the ground-breaking document, Global Reach—Global Power. This vision has guided the restructuring and modernization of the Air Force for the past six years. Because the change and uncertainty of the immediate post-Cold War era will endure, the Air Force must forge a new vision that will guide it into the 21st Century.

To enable the Air Force to meet the challenges of change, the Secretary and Chief of Staff of the Air Force initiated a rigorous, systematic, multi-faceted examination of future demands on the Air Force as a member of America's joint military force.

This revolutionary effort has had the deep involvement of Air Force leaders. It was guided by a Board of Directors consisting of senior military and civilian leaders, and chaired by the Air Force Vice Chief of Staff.

After extensive study and discussion, the Air Force senior leadership began to build this Air Force vision for the 21st Century. It was shaped by Joint Vision 2010, the new guidance published by the Chairman of the Joint Chiefs of Staff. Air Force leaders understood that their new strategic vision must meet the national security needs of the nation, and a national military strategy that has as its focus an increasingly U.S.-based contingency force. The Air Force also recognizes the emerging reality that in the 21st Century it will be possible to find, fix or track and target anything that moves on the surface of the earth.

Global Engagement: A Vision for the 21st Century Air Force is based on a new understanding of what air and space power mean to the nation—the ability to hit an adversary's strategic centers of gravity directly as well as prevail at the operational and tactical levels of warfare. Global situational awareness, the ability to orchestrate military operations throughout a theater of operations and the ability to bring intense firepower to bear over global distances within hours to days, by its very existence, gives national leaders unprecedented leverage, and therefore advantages.

This strategic vision addresses the entire Air Force—people, capabilities and infrastructure—and charts the course of the Air Force into the first quarter of the 21st Century. The vision is the first step in the Air Force's back-to-the-present approach to long-range planning. Although this strategic vision document establishes overall direction, the Air Force will develop a Long-Range Plan to make the vision come true. Formulating a coherent, shared strategic vision is a critical step, but the real challenge is to make the vision actionable and implementable.

The Security Environment Is Changing

Yesterday	*Tomorrow*
Known adversaries and understood threats.	Unpredictable opponents, unknown challenges.
National survival at stake	Vital interests at risk.
Homeland at risk of Soviet nuclear attack.	Homeland at high risk of limited terrorist attacks.
Humanitarian and "lesser" operations a sideline.	Multiple humanitarian and "lesser" operations the norm.
Limited access to "leading-edge" technologies.	Global technological proliferation.
Slow spread of nuclear, biological and chemical (NBC) weapons.	Rapid spread of NBC weapons.
Combat oriented to open plains, deserts.	Conflict also likely in cities, jungles and mountains.
Extensive forward-basing structure	Project power increasingly from the U.S.
Information an adjunct to weapons	Information as a weapon/target.

TODAY'S AIR FORCE

Explorations of the future must proceed from where the Air Force stands today: the world's most powerful air and space force. New technology and new operational concepts already offer an alternative to the kind of military operation that pits large numbers of young Americans against an adversary in brute, force-on-force conflicts. This new way of war leverages technologically superior U.S. military capabilities to achieve national objectives. It is a strategy of asymmetric force that applies U.S. advantages to strike directly at an adversary's ability to wage war. It offers potentially decisive capabilities to the Joint Force Commander to dominate the conduct of an adversary's operations across the spectrum of conflict.

But technology and tactics only go so far. Our core values, history, mission and the professionalism with which they are brought together are what make us the institution we are today. Our core values are simple and forthright: Integrity first, service before self, and excellence in all we do.

These values are both a guide and source of great pride to the men and women of the Air Force team. As we plan for the future, it is important to remember that what makes the Air Force successful will not change. Quality people define the Air Force. From the flightline to the depot to the workstation transmitting on-orbit satellite repair instructions, it is the professionalism and dedication of our people that makes the Air Force the preeminent air and space force to meet the nation's needs.

The men and women of the Air Force can build upon a tremendous heritage. They are the beneficiaries of an Air Force forged in World War II by the vision of airmen such as General Henry H. (Hap) Arnold. We have the opportunity today, on the eve of the 21st Century, to build a new vision that will ensure the future vitality of our force. Our challenge is to dominate air and space as a unique dimension of military power. Global Engagement provides the strategic blueprint for meeting that challenge.

PLANNING INTO THE NEXT CENTURY

For all the transformation the world will undergo in the next 30 years, fundamental U.S. national security objectives will remain largely as they have been for the past 220 years: to ensure our survival as a nation, secure the lives and property of our citizens, and protect our vital national interests.

Securing those vital interests under future conditions, however, will significantly change the demand for U.S. military capabilities into the 21st Century. In Joint Vision 2010, the Chairman of the Joint Chiefs of Staff has provided a common direction for our Services into the next century. The Chairman's vision calls for the capability to dominate an opponent across the range of military operations—Full Spectrum Dominance. The plan to achieve this goal comprises four operational concepts to guide future joint warfare development—Dominant Maneuver, Precision Engagement, Full-Dimensional Protection and Focused Logistics. In addition, Full Spectrum Dominance requires Information Superiority, the capability to collect, process, analyze and disseminate information while denying an adversary's ability to do the same.

Joint Vision 2010—Guidance toward 2025

These concepts form a lens through which the Air Force looks to the first quarter of the 21st Century.

WHAT THE NATION WILL NEED FROM ITS MILITARY IN 2025

What?

Protect the nation's interests, wherever and however they are threatened.
Respond to new challenges and new missions.
Hedge against surprises.
Support national information needs.
Provide strategic and operational choices.
Respond to changing science and technology.

Where?

In non-traditional environments.
In the shadow of NBC weapons, or after the use of NBC weapons.
Increasingly from the CONUS.
Global infosphere.

How?

To win the nation's wars decisively by dominating the battlespace.
With minimal human losses.
With minimal collateral damage.
With reasonable demands on the nation's resources.
In accordance with the nation's values.
As partners in joint-combined and regional operations.

When?

Immediately, when called upon.

AIR AND SPACE POWER FOR THE NEXT CENTURY

Full Spectrum Dominance depends on the inherent strengths of modern air and space power—speed, global range, stealth, flexibility, precision, lethality, global/theater situational awareness and strategic perspective. Air and space power also contributes to the level of engagement and presence necessary to protect and promote U.S. national interests by augmenting those forces that are permanently based overseas with temporary or rotational deployments and power projection missions.

Ensuring that air and space power continues to make its unique contributions to the nation's Joint Team will take the Air Force through a transition of enormous importance. We are now transitioning from an air force into an air and space force on an evolutionary path to a space and air force. The threats to Americans and American forces from the use of space by adversaries are rising while our depend-

ence on space assets is also increasing. The medium of space is one which cannot be ceded to our nation's adversaries. The Air Force must plan to prevail in the use of space.

Space is already inextricably linked to military operations on land, sea and in the air. Several key military functions are migrating to space: Intelligence, Surveillance and Reconnaissance (ISR); warning; position location; weapons guidance; communications; and, environmental monitoring. Operations that now focus on air, land and sea will ultimately evolve into space.

All the Services depend heavily on space assets to support their missions. The Commander-in-Chief of U.S. Space Command (USCINCSPACE) is already tasked with the missions of space control and force application in support of the joint warfighter. The Air Force will sustain its stewardship of space and will fully integrate Air Force space capabilities in joint efforts to support the needs of the nation.

The Air Force recognizes that any further use of space will be driven by national policy, international events, threats moving through and from space, and threats to U.S. space assets. However, the nation will expect the Air Force to be prepared to defend U.S. interests in space when necessary.

CORE COMPETENCIES

Our core competencies represent the combination of professional knowledge, airpower expertise, and technological know-how that, when applied, produces superior military capabilities. A particular core competency is not necessarily unique to the Air Force. Speed, flexibility, and the global nature of its reach and perspective distinguish the Air Force's execution of its core competencies.

The first quarter of the 21st Century will demand that the Joint Force Commander field robust, flexible capabilities to cope with a wide range of contingencies. Each military service must present to the combatant commander a set of relevant and complementary capabilities. This presentation allows the Joint Force Commander to consider all options available, and to tailor campaign plans to best meet the military objectives of the mission.

The Air Force contribution to the Joint Force Team is graphically depicted as an arch. It begins with a foundation of quality people. Air Force men and women carry out the core competencies of Air and Space Superiority, Global Attack, Rapid Global Mobility, Precision Engagement, Information Superiority, and Agile Combat Support. These are represented as an arch because they are all mutually supporting and provide synergistic effects. These competencies are brought together by global awareness and command and control to provide air and space power to the Joint Force Team.

Within the Air Force, core competencies provide a bridge between doctrine and the acquisition and programming process. In the context of long-range planning, defining future core competencies provides strategic focus for the vision. Each core competency illuminates part of the strategic vision that will guide decisions and set the course toward the Air Force of the 21st Century.

AIR FORCE COMMITMENT TO INNOVATION

The key to ensuring today's Air Force core competencies will meet the challenge of tomorrow is Innovation. Innovation is part of our heritage as airmen. The Air Force was born of a new technology-manned powered flight. Innovation will enable the Air Force to evolve from an air force to an air and space force on its path toward space.

The Air Force is committed to a vigorous program of experimenting, testing, exercising and evaluating new operational concepts and systems for air and space power. It will provide additional emphasis in six areas of ongoing activity in Air Force centers of excellence. That will be accomplished with a series of focused battle laboratories for space, air expeditionary forces, battle management, force protection, information warfare and unmanned aerial vehicles.

These new battle labs will be aimed, both institutionally and operationally, at our core competencies. Creating focused battle labs will explore new ideas and foster innovative technologies that will improve the capabilities of our core competencies.

The rate of technological change has accelerated and the nation's future force must keep pace to maintain its military edge. We must reinvigorate the spirit of innovation and creativity that has long been the hallmark of the United States Air Force.

Air and Space Superiority

Superiority in air and space—control over what moves through air and space—delivers a fundamental benefit to the Joint Force. It prevents adversaries from

interfering with operations of air, space or surface forces, and assures freedom of action and movement. The control of air and space is a critical enabler for the Joint Force because it allows all U.S. forces freedom from attack and freedom to attack. With Air and Space Superiority, the Joint Force can dominate enemy operations in all dimensions—land, sea, air and space.

Gaining Air and Space Superiority is not just operationally important, it is also a strategic imperative for protecting American lives throughout a crisis or conflict. It is the precursor for Dominant Maneuver and is also the basis of Full-Dimensional Protection. Strategic attack and interdiction—crucial to the outcome of any battle—are not possible without air superiority. Effective surface maneuver is impossible without it. So is efficient logistics. The bottom line is everything on the battlefield is at risk without Air and Space Superiority. Moreover, if air dominance is achieved and joint forces can operate with impunity throughout the adversary's battlespace, the Joint Force Commander will prevail quickly, efficiently and decisively.

Defense against ballistic and cruise missiles is an increasingly important element of Air and Space Superiority. The rapidly growing theater and global threat posed to Americans and America's interests by cruise and ballistic missiles is one of the developments which is accelerating warfare along the air-space continuum. The Air Force is moving aggressively to counter this threat. Although the global and theater missile threats are now addressed separately, over time they will merge into a common missile defense architecture, becoming a single counter air and space missile defense mission.

Global Attack

The ability of the Air Force to attack rapidly anywhere on the globe at any time is unique. The military utility of air power, particularly its speed, range, and flexibility prompted creation of the Air Force as a separate Service following World War II.

With the advent of the Cold War, Air Force long-range bombers and later intercontinental ballistic missiles began their vital roles in the nation's first priority of deterring nuclear war. Although nuclear weapons no longer play as central a role in America's national security strategy as they did during the Cold War, we recognize the dangers posed by the efforts of rogue states and others to acquire them. The Air Force will sustain its efforts in the nuclear area and strengthen its response to the growing risk of proliferation. To this end, the Air Force will maintain the bomber and land-based ballistic missile legs of the Triad while remaining prepared to undertake further reductions as circumstances require. The Air Force will also sustain its commitment to support the nuclear requirements of the theater CINC's. Moreover, the Air Force remains absolutely determined to maintain its record of excellence as the custodian of nuclear weapons by ensuring the safe and secure operation of those weapons.

Air Force short- and long-range attack capabilities continue to support the deterrence of conventional warfare by providing versatile, responsive combat power able to intervene decisively when necessary. The ability of the Air Force to engage globally, using both lethal and non-lethal means, is vital to today's national security strategy of Engagement and Enlargement. At present, almost a quarter of Air Force personnel are deployed overseas at any one time. The Air Force will maintain that level of commitment and will employ air and space power aggressively to meet the nation's needs for presence and power projection. Over time, however, technological change, threats to forward bases, asymmetric strategies by adversaries who seek to deny entry to U.S. power projection forces, and growing budgetary pressures will likely change the way the Air Force carries out its presence and power projection missions.

The Air Force has developed and demonstrated the concept of an Air Expeditionary Force (AEF) rapidly deployable from the United States. This expeditionary force can be tailored to meet the needs of the Joint Force Commander, both for lethal and non-lethal applications, and can launch and be ready to fight in less than three days. The Air Force will develop new ways of doing mobility, force deployment, protection, and sustainability in support of the expeditionary concept.

Air Force power projection and presence capabilities today are a complementary mix of long-range and theater aircraft, based in the United States and forward-based. The Air Force has relied heavily in the past on the elements of that mix that were permanently forward-based overseas. Currently, the Air Force is increasing the role of expeditionary forces to maintain its global engagement capability. In the future, capabilities based in the continental United States will likely become the primary means for crisis response and power projection as long-range air and space-based assets increasingly fill the requirements of the Global Attack core competency.

Rapid Global Mobility

Rapid Global Mobility provides the nation its global reach and underpins its role as a global power. The ability to move rapidly to any spot on the globe ensures that tomorrow, just as today, the nation can respond quickly and decisively to unexpected challenges to its interests.

As the number of forward-deployed forces declines and the need for immediate response to overseas events rises, the Air Force's global mobility forces will be in great demand by future Joint Force Commanders. When an operation must be carried out quickly, airlift and aerial refueling will be the key players. Rapid Global Mobility may build an air-bridge for joint forces, enable multi-national peace efforts, or speed tailored support to forces already on the scene.

Rapid deployment will remain the future Joint Team's most reliable combat force multiplier. Fighter forces paired with precision weapons provide formidable capabilities that our mobility fleet can deploy worldwide and sustain at high in-theater sortie rates. In other cases, such as delivery of humanitarian relief, the rapid delivery of material is the focus of effort.

In the 21st Century, Rapid Global Mobility will be multi-faceted. Better use of commercial carriers will be made to increase the efficiency of Air Force mobility. The speed with which forces are moved will increase, and airlift and air refueling capabilities must be able to deliver tailored forces operating with a smaller footprint.

Precision Engagement

Joint Vision 2010 defines Precision Engagement as the capability "* * * that enables our forces to locate the objective or target, provide responsive command and control, generate the desired effect, assess our level of success, and retain the flexibility to re-engage with precision when required." The Air Force's core competency of Precision Engagement is grounded in the Joint definition. Its essence lies in the ability to apply selective force against specific targets and achieve discrete and discriminant effects. The nation needs the precise application of military capability to meet policy objectives. The Air Force's Precision Engagement core competency provides the nation with reliable precision, an ability to deliver what is needed for the desired effect, but with minimal risk and collateral damage.

Technology has driven each military era's definition of precision. In the 21st Century, it will be possible to find, fix or track and target anything that moves on the surface of the earth. This emerging reality will change the conduct of warfare and the role of air and space power. As Air Force members, we have a responsibility to understand, develop and advocate new ways that air and space power can serve the nation and the Joint Force Commander. We must develop new operational concepts that clearly address how air and space power can achieve directly or contribute to achieving the full range of joint campaign objectives. Our ideas and doctrine must be as creative and flexible as the instrument itself.

When conflict occurs, the Air Force of the 21st Century must be able to offer options for the employment of force in measured but effective doses. To do so, the Air Force will rely on global awareness capabilities to support national decision-making and joint operations to determine military objectives and enable precise targeting. Air and space forces will then apply power that is no less overwhelming because it is also discriminating. Discriminating effects are selective; they aim for efficiency and steer away from unwanted collateral damage. The Air Force core competency of Precision Engagement will remain a top priority in the 21st Century.

Information Superiority

In no other area is the pace and extent of technological change as great as in the realm of information. The volume of information in joint warfare is already growing rapidly. The ability of the future Joint Team to achieve dominant battlefield awareness will depend heavily on the ability of the Air Force's air- and space-based assets to provide global awareness, intelligence, communications, weather and navigation support. While Information Superiority is not the Air Force's sole domain, it is, and will remain, an Air Force core competency. The strategic perspective and the flexibility gained from operating in the air-space continuum make airmen uniquely suited for information operations.

Providing Full Spectrum Dominance requires a truly interactive common battlespace picture. The Air Force is committed to providing the integrated global and theater air, space and surface picture of the battlespace to the 21st Century Joint Force Commander. Moreover, its future Battle Management/Command and Control (BM/C^2) systems will enable real-time control and execution of all air and space missions. The Air Force will also ensure that its information systems will be fully interoperable for seamless integrated battlespace management.

The Air Force will exploit the technological promise of Unmanned Aerial Vehicles (UAV's) and explore their potential uses over the full range of combat missions. The highest payoff applications in the near-term are Intelligence, Surveillance, Reconnaissance (ISR) and communications. A dedicated Air Force UAV squadron will focus on operating the Predator medium-range surveillance UAV, which also will serve as a testbed for developing concepts for operating high altitude, long endurance UAV's. In the mid-term, the Air Force expects that suppression-of-enemy-air defense (SEAD) missions may be conducted from UAV's, while the migration of additional missions to UAV's will depend upon technology maturation, affordability and the evolution to other forms of warfare.

Information Operations, and Information Warfare (IW) in particular, will grow in importance during the 21st Century. The Air Force will aggressively expand its efforts in defensive IW as it continues to develop its offensive IW capabilities. The top IW priority is to defend our own increasingly information-intensive capabilities. Already dedicated and operational in the garrison defense of computer systems, the Air Force will continue to invest in defensive IW, and move to defend its forward-deployed assets, particularly in BM/C^2. On the offensive side, the Air Force will emphasize operational and tactical IW and continue, in conjunction with other Federal agencies, to support strategic information operations.

Agile Combat Support

Agile Combat Support is recognized as a core competency for its central role in enabling air and space power to contribute to the objectives of a Joint Force Commander. Effective combat support operations allow combat commanders to improve the responsiveness, deployability, and sustainability of their forces. The efficiency and flexibility of Agile Combat Support will substitute responsiveness for massive deployed inventories.

Combat operations in the 21st Century will require highly responsive and agile forces. The Air Force leadership adopted the concept of time-definite resupply, a fundamental shift in the way we support deployed forces. Resupply of deployed forces will begin upon arrival, reducing their initial lift requirement. Time-definite delivery will form the basis for all resupply in the theater, thus reducing total lift requirement. When combat commanders require an item, the system will reach back to the continental United States and deliver it where and when it is needed. This reach-back approach will make it possible to deploy fewer functions and personnel forward for the deployment and sustainment processes. This, in turn, will reduce the size and therefore the vulnerability of our forces forward. Providing for force protection is not just a matter of airbase operability and security, as important as they are. It also involves the redesign of our power projection forces to reduce the size of the force protection problem.

To provide Agile Combat Support, information technology must be leveraged to improve command and control which is key to accurate and timely decisions. As an example, the ability to know the location of critical parts, no matter which Service or agency holds the parts, will allow enormous gains in efficiency. The Air Force depot system will continue to reduce cycle times and streamline its infrastructure. Outsourcing and privatization, as well as other Services' capabilities, will be major tools in helping to move the materiel required for deployed forces from "factory to flightline." These concepts will be pursued, first in the context of the Air Expeditionary Force and, once matured, for the 21st Century force.

Agile Combat Support's essential contribution to air and space combat capability complements the Joint designation of Focused Logistics as an operational concept, which is indispensable to achieving Full Spectrum Dominance.

AIR FORCE PEOPLE

People are at the heart of the Air Force's military capability, and people will continue to be the most important element of the Air Force's success in capitalizing on change. The Air Force of tomorrow and beyond must encourage individuals to be comfortable with uncertainty and willing to make decisions with less than perfect information. Accordingly, our people must understand the doctrine, culture and competencies of the Air Force as a whole—in addition to mastering their own specialties. Emphasis on creating an Air Force environment that fosters responsiveness and innovation, and rewards adaptability and agility will be crucial as we move into the early part of the next century. Many things may change, but the Air Force of the first quarter of the 21st Century will continue to place a high priority on maintaining the high quality of its men and women, and on providing quality of life for Air Force members and their families.

The Total Force of the Future

One sign of change in the Air Force will be how the definition of the Air Force operator develops in the future. At its birth, all Air Force operators wore wings. Future definitions of operators will change as the Air Force changes. Moreover, all combat operations in the 21st Century will depend on real-time control and employment of information, further broadening the definition of the future operator. In the future, any military or civilian member who is experienced in the employment and doctrine of air and space power will be considered an operator.

The composition of the future Total Force will change as the nature of air and space power changes. As a result, the Air Force is committed to outsourcing and privatizing many functions now performed internally. The force will be smaller. Non-operational support functions will increasingly be performed by Air Force civilians or contractors. Most uniformed personnel will be operators and a greater percentage will be from the Reserve components.

To prepare for the changes ahead, the Air Force has reviewed, generally reaffirmed and initiated some adjustments to its career development patterns for its officers, enlisted and civilian force. To ensure its future leaders all share a full and common understanding of air and space operations, the Air Force decided to create a new Air and Space Basic Course. This course will focus on the history, doctrine, strategy and operational aspects of air and space power. The desired outcome is for each new officer and selected senior NCO's and civilians to have a thorough knowledge of the day-to-day capabilities of combined air and space operations. Most officer graduates from this course will go directly to operational jobs as their first assignment before performing their functional specialty.

The Air Force will seek new opportunities to capitalize on the synergy of the Air National Guard and Air Force Reserve forces in an integrated Total Force. In its effort to maximize and improve operational effectiveness and efficiency, the Air Force will explore additional opportunities for new Guard and Reserve missions as well as expanding the use of Individual Mobilization Augmentees (IMA's). The Air Force's ability to rely upon and integrate its Reserve components is already a fundamental strength, one that will continue to play a major role for the nation in the next century.

A Force Grounded in Core Values

The ideals embodied in the Air Force core values are: Integrity first, service before self, and excellence in all we do.

They are universally prescriptive. Despite the uncertainty of the future, the Air Force can say with certainty that today and tomorrow, it must live up to these ideals or it cannot live up to its responsibilities. Our core values are fundamental and timeless in nature, and reach across the entire force. Our core values are values for service, values for life, and must be reflected in everything that we do.

A values-based Air Force is characterized by cohesive units, manned with people who exhibit loyalty, who want to belong, and who act in a manner consistent with Air Force core values, even under conditions of high stress. To ensure this values-based Air Force, three elements—education, leadership and accountability—provide a framework to establish the strongest imprint of shared Air Force core values. In the Air Force of tomorrow, as in the Air Force of today, these stated and practiced values must be identical.

The Air Force will continue to reinforce its core values in all aspects of its education and training. The goal is to provide one hundred percent of the Total Force with core values education and training continually throughout a career. The Air and Space Basic Course will also ensure that the Air Force's future leaders, military and civilian, have a common, shared foundation in core values, doctrine, and operations.

KEY ELEMENTS OF AIR FORCE INFRASTRUCTURE

Defining our future core competencies tells us what business the Air Force will be in as it enters the 21st Century. But the Air Force must change the way it does business if it is to meet the future demands for air and space power. Continuing pressure on resources will make increased efficiency and reduced infrastructure costs necessary for success.

The Air Force has long recognized the importance of responsible stewardship of taxpayer dollars and will strive to achieve the highest standards for efficiency. Ensuring the nation has capabilities to hedge against unforeseen and multiple threats across the full spectrum of conflict puts a premium on efficiency. The real penalty for inefficiency is not just wasted dollars, but unmet demand for military capabilities.

Our warfighting activities will be designed for effectiveness and our support activities will be designed for efficiency. All support activities will be run more like businesses, using the "best practices" gleaned from top performers. Air Force personnel will focus on preparing for and conducting military operations—their competence—while support activities not deployed for combat will be performed by a robust civilian and competitive private sector. The Air Force is committed to the organizational and cultural change to make this vision a reality.

The Air Force will increase the efficiency of its modernization process through the focused exploitation of emerging information technologies and by accelerating its ongoing acquisition reform program. It also will strengthen the concept of integrated weapon system management by clarifying relationships between single-product managers, their customers and the depot and contracted activities that support them.

The Air Force is committed to the aggressive reduction of infrastructure costs. The role of commercial industry will be maximized to ensure "best-value practices" throughout the development and production process. These activities—research, development, testing and evaluation (RDT&E), and sustainment—will be consolidated into Centers of Excellence encompassing mission areas directly related to Air Force core competencies. The Air Force will also explore teaming with the other services to form Joint Centers of Excellence for RDT&E.

Inefficiency drains resources needed for the capabilities the nation needs from its future joint force team. The overlap and redundancy of test and evaluation facilities must be reduced through streamlining, integration, outsourcing and privatization. New technologies, particularly in testing through modeling and simulation, must be exploited to reduce costs and improve effectiveness.

The Air Force's determination to become more efficient will also affect the composition of its future workforce. Its commitment to an aggressive program of civilianizing many combat support functions, as well as outsourcing and privatization, will push more support functions into the civilian workforce and, in many cases, into the private sector.

The Air Force believes that one of its most important attributes is a sense of community among its members and their families. Far more than simple "pride in the team," this factor builds the motivational identity and commitment that underlie our core values, career decisions, and combat capability. The excellence of our installations and Quality of Life standards contribute to this, and to the general well-being of the members of the Air Force family. The Air Force is rededicating itself to both maintaining this sense of community and finding new and more efficient ways of providing it.

LOOKING BACK TO THE PRESENT TO PLAN FOR A NEW CENTURY

This document sets out a new Air Force strategic vision for the 21st Century. It provides a vision of the future and a path back to the present to guide today's planners. Following this path requires a revitalized and institutionalized long-range planning process.

The Long-Range Plan will identify those initial steps and transition decisions which are necessary to reach the goals outlined in this strategic vision document. Transition decisions are critical to formulating meaningful divestment and investment strategies, to making transitions from sunset to sunrise systems and capabilities, and to providing the milestones and feedback mechanisms that ensure accountability. The Long-Range Plan will further guide the Air Force's other planning and resource allocation processes.

FINAL THOUGHTS

Global Reach—Global Power prepared the Air Force to deal with the challenges of the transition era following the Cold War. Global Engagement: A Vision for the 21st Century Air Force charts a course that will take the Service beyond this transitional period and into the future. It is a future in which dramatic changes wrought by technology will be the norm. It is also a future in which the core values of service, integrity and excellence will continue to sustain the men and women of the Air Force. Most importantly, the Air Force's devotion to air and space power will continue to provide the strategic perspective and rapid response the nation will demand as it enters the 21st Century.

Our Vision Statement remains: Air Force people building the world's most respected air and space force * * * global power and reach for America.

General FOGLEMAN. And, of course, we are prepared to address the details of this study during this hearing or in the near future.

But I think the important consideration is not the exact numbers of specific systems, but whether the contributions of each piece were adequately considered and how they shape the way that we are going to provide for capability for America in the future.

RESTRUCTURING AND DOWNSIZING

Since the end of the cold war, we have focused on restructuring and downsizing. We, in the Air Force, we took our cuts early. We invested in readiness, and we started a time-phased modernization program. Just a real short review.

Since 1990, we have reduced from 139 to 87 major installations. Our fighter wings have gone from 36 to 20. During the QDR, we took one of our active fighter wings and transferred it to the Guard and Reserve—just what we said we would do as we looked at how we went into the future.

In our bomber force, since the early 1990's, we have gone from 301 to 138. In the ICBM's, we are programmed to go from 1,000 to 550.

In the end, Mr. Chairman, we are interested in combat capability. We are not interested in numbers. We are not interested in end strength. There is a difference between end strength and combat capability. And there is a difference between end strength and combat forces. And so we look forward to addressing any questions that people may have on end strength. We think that we have done what is smart, what is reflected is a maturation of the BUR process and the QDR focus.

We have shaped forces carefully to balance our force structure, our modernization, and our readiness. Fifty years ago, in the immediate aftermath of the Second World War, with the experiences of that war fresh in our minds, your predecessors created the U.S. Air Force. This was a force that was forged in fire. It was formed in the crucible of combat. It has become a great source of pride for the entire Nation.

The Berlin airlift, the Korean war, the cold war, all of those troops, sitting nuclear and air defense alert, manning radar sites out there, Vietnam, Libya, Grenada, Panama, Desert Storm, and Bosnia, throughout this whole thing, we have always tried to stay focused on what the national security objectives were. Our priorities in this budget continue to focus on that—that is, people, modernization, and a vision that we believe prepares us for the future, that will ensure that the U.S. Air Force remains a key part of the joint team, and continues to be the pride of the Nation and the envy of the world.

And so I thank you again for allowing me to be here on behalf of the men and women of that Air Force.

Senator STEVENS. Well, thank you very much, General.

I want to, on the record, thank you for loaning us your airplane when we went to North Korea. Flying on the Speckled Trout is an experience in the test bed of aviation. It was an interesting trip, and we have discussed that trip with the Secretary and its implication to our defense.

General and Madam Secretary, on our visits to Italy and to Kuwait and to Saudi Arabia, we did find an extreme level of tempo and really had the feeling of an overdeployment. I would urge that

as you review the QDR's implementation we find some way to assure that the CINC's, the regional commanders, have the same type of advice that you all have with General Stringer sitting behind you. I am sure he tells you what your allocation is, in terms of money, and puts controls on the expenditures. But we did not find that in the regions.

And we are talking to the Armed Services Committee about that, and would like to visit with you and the other chiefs and secretaries about it. But it does seem to us that one of the missing links, right now, is some sort of fiscal awareness on the part of the activities in the regions under the command of the CINC's.

I am just going to make that statement today and hope that my colleagues will be willing to sit down and have some discussions before we take any action. We would not want to take any action that would be counterproductive, but there certainly ought to be some way to put some restraint on CINC's from obligating us to spend money before it is really reviewed by you and by us in terms of its long-range implications.

One of the QDR's recommendations is to reduce the F–22 buy, as you said, from 438 to 339. Now, I have a series of questions about that.

Will we still be able to meet the Air Force requirements into the future? Will that reduction mean that we will have to buy actually more of the Joint Strike fighters? Do we have an impact of what that reduction will mean in terms of unit cost increase as we reduce the buy? We normally see an increase in cost. Has that been estimated? And can you tell us why the fly-away unit costs on the first two production aircraft has increased almost more than twofold?

I mean we are looking at an escalation of costs here that I want to make sure that we have taken into account when we deal with the F–22. Would either of you, or both of you, like to address that issue?

F—22 PROGRAM

General FOGLEMAN. If I could, sir, I will take the question first.

Relative to will we be able to do the mission with 339 versus 438, we will be able to do the mission, but we will do it with higher risk. We were not replacing our air superiority fighters on a 1-for-1 basis at 438; 438 was far fewer. It did not include the replacement for the aircraft that Senator Bond just talked about, the A and B models that we have out there. So we already had a certain amount of risk. But what we are doing by going down to 339 is saying that we are going to increase the level of risk to do this job.

Now, given everything that we know about this aircraft and what we are seeing as it comes along in the process, we have a fairly high degree of confidence that this is truly a revolutionary airplane. And we have resisted those who have put out this siren call that says the way you ought to save money on this airplane is to take capability out of it. We think the way you ought to save money on this airplane is you ought to take advantage of modern manufacturing technology, you ought to take advantage of the reforms that we have seen in acquisition. And that makes a lot more sense to us as we go down the road.

To answer your second question relative to have there been any credible analysis done in terms of what this will do to the cost per unit, I would have to tell you that the answer is no. We have had some rough order of magnitude kind of estimates on this. But, clearly, the Air Force restructured the F–22 program earlier this year.

And we put together a program based on a joint estimating team that took advantage of extending the engineering, manufacturing, and development phase. And then, after looking at that, we looked at how we could do things differently as a result of some initiatives that have appeared within the last year or so having to do with lean manufacturing, et cetera, to keep the cost of production down.

So, I think it is those combinations of things that we thought we had a pretty good program when we had the 438, and we had negotiated a MOU with the folks at Lockheed and Pratt and Whitney. Clearly, as we change this—and we understand the rationale for the change in the QDR—as we do that, we need to then go back and look and see what this is going to do.

My fear on this is that we are taking a well managed, executable program and starting a self-fulfilling prophesy on all those who have been prophets of doom on this thing. They are going to take a program that is well along its way, needed by this country, and they are going to turn it into another B–2 as they start to reduce the numbers, and the cost per unit is going to go up. Because there is a set cost associated with the R&D that goes into this before you get the first airplane.

And I think that is the answer to the question on why the first two production models of this thing cost so much. It is because, as we slow it down, you run the costs up.

Senator STEVENS. Secretary Widnall.

Dr. WIDNALL. Well, I could adjust one or two things to that. Obviously, we need—the QDR recommended several changes in the F–22 program, not just the numbers, but having to do with the profile. So clearly we have some work to do in order to assess the impact. I certainly would join General Fogleman in making the point that the early production aircraft—you know, obviously, those are almost—those are really initial flight test articles, and you learn a lot at that stage.

Senator STEVENS. Could you pull that microphone closer to you? Some people back in the back are indicating they are not hearing you.

F–22 PRODUCTION COSTS

Dr. WIDNALL. So I think we, as General Fogleman said, I think we believe the program is well managed and that we are on track. As I looked at the numbers in the QDR, going from, say, you know, the 400 to the 338, it is in the nature of aircraft procurement that if you run the numbers based on the program at that point, that if you cut 25 percent of the airframes, you only save 8 percent of the money. So clearly it is not a linear relationship. So we do expect that the unit costs will go up.

Now, we have been in contact with industry, and I think they are prepared to make the same kind of commitment to streamlining, working with us, management reforms, on the shop floor improve-

ments in manufacturing, so that they can meet aggressive cost-reduction targets. And we expect that they are committed to that and will do that.

Senator STEVENS. Well, that was to be my next question. Can we find any way to keep some of these escalating costs down? And are we going to change the avionics or change any of the software because of this increased cost? I, for one, do not want to see the F–22 become a lesser airplane because of the QDR. It may cost more because of the lower buy, but it ought not to be stripped. Are there plans to reduce its avionics or any of the software or any of the systems?

Dr. WIDNALL. No; not at all. I mean really, the most important thing at this point is the program stability. This aircraft is technically successful. It will have a great engine. It will have great avionics. It will have a great airframe. So I do not think that we intend to make changes in that.

We will continue working with the contractor to manage the production costs. And we fully expect them to meet their commitment to aggressive cost-reduction targets.

Senator STEVENS. I am out of time. We are going to go on the early bird rule. I will now turn to my colleague, Senator Inouye.

Senator INOUYE. Thank you very much, Mr. Chairman.

The QDR calls for the reduction of our Reserve defense squadrons from 10 to 4. What is the rationale for such a drastic reduction?

FORCE CONVERSION

General FOGLEMAN. Sir, it was driven primarily by two things. As we approached the QDR, we were trying to determine if there were portions of the force structure that had less utility than others. And so when we were looking at the OPTEMPO and the PERSTEMPO and the mission of the dedicated air defense squadrons, it was clear that these squadrons, while they have a mission associated with our air sovereignty, associated with drug interdiction and these types of things, that on the main, they were not as critical to the overall force mix as general purpose forces.

And so the decision was made to take six of these units and convert them to general purpose forces. They would become the backfill for the active general purpose wing that we would take down, and we would retain four of these air defense units—sort of—taking the approach of looking at four corners. And the assessment of the CINCNORAD was that, with these four squadrons and with some assistance from the general purpose forces, he could continue to conduct his air sovereignty mission, and we could continue to support the war on drugs.

Senator INOUYE. When will the announcement be made on the reclassification of missions or the elimination of units for the six that are going to be changed?

General FOGLEMAN. Sir, I believe that, again, as the process is to unfold, in the "Quadrennial Defense Review," now that the—once the hearings are completed this afternoon and tomorrow, then the next step in this process will be to have the DOD staff issue defense planning guidance. And when that defense planning guidance document comes out from the OSD staff, it should have in it

the detailed instructions to the services as to how they are supposed to go execute that.

So I would—and we were told that we should see that within a couple of weeks. And then that will become part of the POM process that goes through the budget process, and all that will eventually bubble up in the December 1997 timeframe, whenever the national defense panel rolls in with its recommendations, and when Secretary Cohen's reform panel has an impact. And so I would anticipate that this will become open information with the submission of the 1999 budget.

Now, I may be wrong on that, but that is the way I understand the game plan to be.

Senator INOUYE. If I could be a bit parochial, one of the squadrons is in Hawaii. Can you give us any indication as to what will happen to it?

General FOGLEMAN. Sir, I would be fairly confident that the squadron in Hawaii, one, will not go away because of its strategic location, and I quite frankly, cannot remember if it is one of the four squadrons that stays in the air defense business or whether it goes general purpose. But—and I am not trying to be evasive. I am generally a pretty straight shooter, and if I could remember the information, I would tell you, sir.

C–17 BASING

Senator INOUYE. On another subject, whenever the chairman and I travel to our respective States one question is always asked: Why can't we have airlift or C–17's based in Alaska and Hawaii? Because, for example, in the case of Hawaii, the marines and the Army would like to use some of the facilities in Alaska for training, because they have the best facilities. But the costs of bringing a deadhead aircraft all the way to Hawaii is just outside their budget.

So the cost factor is a very serious one. Madam Secretary or General, do you have any response to that?

General FOGLEMAN. Sir, I believe that really has to do with just the tradeoff between the finite number of C–17's we are getting, which is 120, and the attempt to bed them down in the most efficient manner that we can, looking at long-term life cycle costs.

I have talked with General Kross, CINCTRANS, and the commander of our Air Mobility Command, about some kind of a scheme where we may be able to get the efficiencies of the consolidated beddown—that is, we have tried to build an east coast location, Charleston, a west coast location, McCord Air Force Base in Washington, but then we need to look if we can gain some efficiencies, maybe of not having them permanently assigned there, but some kind of a detachment that would marry up with the needs and desires of the other services in joint exercises, et cetera.

Senator INOUYE. One of the matters that very few Americans are cognizant of is that Alaska is nearer to Bosnia than any other location in the Continental United States, and for that matter, the same thing with Hawaii to Asia. Taking that factor into consideration, do you not think it might make sense to have, as you say, a detachment or some permanent assignment of C–17 aircraft in Alaska and Hawaii?

General FOGLEMAN. Sir, again, that is one of the things I have asked General Kross to look at. And while I thought I was very well aware of the geography involved in that, it was one of our previous commanders in Alaska, a man who just recently died, Dave Nichols, who dramatically demonstrated that when he took a fighter deployment and was able to deploy it to Europe in a day, flying out of northern Alaska. But the issue, sir, really comes down to not just where the aircraft are located, but where the bulk of the forces are that have to be picked up to be taken somewhere.

So if we do not have the right balance, then we end up deadheading these aircraft back to the lower 48 and then picking up and moving from there. So there is a combination that we need to work, sir.

Senator INOUYE. Your prepared testimony today does not say much about recruiting. Are you concerned that with the QDR and other factors, that recruiting and retention may become exceedingly difficult?

RECRUITING UPDATE

General FOGLEMAN. Sir, I believe, first of all, right now recruiting is difficult. As you know, the U.S. Air Force is the only service that spends zero dollars on TV advertising. We have no TV advertising budget at all. The other services have a TV advertising budget. We do get some benefit from a centralized DOD advertising budget. But what my recruiters are telling me, and I visit with them virtually every time I go out to a major metropolitan area, is that they are beginning to be squeezed by this lack of visibility, if you will, out there. We depend upon public service radio and television to tell our story.

In spite of that, we have been able—we were last year, which was a very difficult recruiting year, and this year—we were able to make our goal. Some of that comes about as a result of some plus-ups that this committee was part of. You did increase the number of recruiters that we had. You gave us some money that allows us to do things in a smarter way for our recruiters, to share information, et cetera. But, yes, sir, we have a concern about recruiting. But, for us, it has not yet become a critical issue.

The issue of retention is one, as I mentioned. We have seen a downturn in our first-term reenlistments. So we have done a lot of survey work to try and determine what is causing that. But more—the biggest problem we have with retention is in our rated force. And while today it has manifest itself primarily in the pilot force, we also see that we have a problem with our navigators. We also have a very large enlisted force.

And so one of the things that the Air Force is doing is taking and relooking its whole rated management scheme. You know, an AWACS aircraft without weapons controllers in the back is not of much value. And so while in the past we have always focused on the people in the front end of the airplane as our rated management issue, we have now started to examine what it means to look at this entire crew on the aircraft.

So our biggest concern in the retention area is in the rated management area.

Senator INOUYE. Will this review, with the call for further drawdown and reduction and possible BRAC, will that have an impact upon retention?

RETENTION

General FOGLEMAN. Yes, sir. Clearly—and it is one of my biggest concerns—one of the things I am trying to do in a proactive way as the Chief of Staff—and the Secretary and I have talked about this—is trying to share the information with the troops in the field as fast as we can. Because the biggest thing that causes concern is instability, is turbulence.

Our troops are magnificent. If you tell them what is going to happen, they can live with that. They will make decisions, personal and professional, and they can live with that. But what is going to happen with this QDR is we have now submitted it to the Hill. So the debate will begin on the Hill. The debate will begin with the national defense panel and defense intellectuals. And as these debates swirl and different proposals pop up, there will be headlines in the professional journals. And all that will be there to try and—it will end up having a very destabilizing impact on the force.

We saw it during the last drawdown, where people got this idea that maybe we were going out of business. And so why should I stay with an outfit that is going to go out of business?

So we have got a real challenge, to try and get the information out there to the troops about what career fields will be impacted by outsourcing and privatization. Today, I have in my briefcase a product that we think is about 80 percent accurate, that I hope to be able to put out in the field within the next 2 weeks, so that people will be able to see and be able to start making decisions early on.

Senator INOUYE. Thank you very much.

Thank you, Mr. Chairman.

Senator STEVENS. Senator Specter.

Senator SPECTER. Thank you very much, Mr. Chairman.

I join my colleagues in congratulating the Air Force on 50 years of outstanding achievement, and I note my own participation. I volunteered for Air Force Reserve officer training in college and served 2 years in the Office of Special Investigation.

I have grave concerns about what happened at Khobar Towers. And since I have not been able to get many responses, I am going to use my time today to move on that subject. The only time a Senator has an opportunity on oversight of responses is when we have the appropriations process or when we have an oversight hearing. And in my capacity last year as chairman of the Senate Intelligence Committee, I made considerable efforts in writing to you, Secretary Widnall, without responses, on a series of the five letters which I will ask to be put in the record. And I have noted your comments, General Fogleman, earlier in testimony this year. And before asking the questions, I want to review the facts.

[The information follows:]

UNITED STATES SENATE,
COMMITTEE ON VETERANS' AFFAIRS,
Washington, DC, April 25, 1997.

Honorable SHEILA WIDNALL,
Secretary, Department of the Air Force,
Washington, DC.

DEAR SECRETARY WIDNALL: I have noted repeated press accounts on an Air Force report on the responsibility, if any, for the terrorist attack at Dhahran on June 25, 1996.

As you know, I have made repeated requests for copies of all DOD, including Air Force, reports on this incident.

According to press reports, Secretary of Defense William Cohen is personally reviewing this matter.

I would very much appreciate it if you would promptly provide to me a copy of any report on assessing responsibility for the Dhahran terrorist attack of June 25, 1996.

Sincerely,

ARLEN SPECTER.

UNITED STATES SENATE,
SELECT COMMITTEE ON INTELLIGENCE,
Washington, DC, December 12, 1996.

Honorable SHEILA E. WIDNALL,
Secretary of the Air Force, The Pentagon,
Washington, DC.

DEAR SECRETARY WIDNALL: Please reference my letters to you of October 17, November 5, and December 5, 1996.

According to The New York Times today, selected portions of the Air Force report on Dhahran have already been made available to the news media by representatives of the Air Force who are favorably disposed to the Air Force report.

I would like your prompt advice as to whether that news report is accurate.

In any event, this is a formal demand that the report be turned over to the Intelligence Committee forthwith.

Sincerely,

ARLEN SPECTER.

UNITED STATES SENATE,
SELECT COMMITTEE ON INTELLIGENCE,
Washington, DC, December 5, 1996.

Honorable SHEILA E. WIDNALL,
Secretary of the Air Force, The Pentagon,
Washington, DC.

DEAR SECRETARY WIDNALL: I want you to know that I consider the letter from Brig. Gen. Lansford E. Trapp, Jr., of November 6, 1996, totally insufficient in response to the letter from Senator Kerrey and me to you dated October 17, 1996, and the copy of the letter which I sent to you dated November 5, 1996, with the original going to Secretary Perry.

Sincerely,

ARLEN SPECTER.

DEPARTMENT OF THE AIR FORCE,
Washington, DC, November 6, 1996.

Honorable ARLEN SPECTER,
Chairman, Select Committee on Intelligence,
United States Senate, Washington, DC.

DEAR MR. CHAIRMAN: This is in response to your joint letter of October 17, 1996, regarding what you describe as a document concerning force protection in Southwest Asia that was referred to in a Washington Post article on October 10, 1996.

Contrary to the implications in the article, the Air Force has not issued a report entitled "Force Protection in Southwest Asia, An Air Force Perspective." Rather, a preliminary briefing was prepared by the Office of the Deputy Chief of Staff, Plans and Operations, for internal use on the consideration and evaluation of the protec-

tion of our forces against terrorism following the bombing of Khobar Towers in Saudi Arabia. That preliminary briefing has now been given to Lieutenant General Record for his use in reviewing this matter and considering issues of accountability. When Lieutenant General Record's process is complete, we will be glad to provide the Committee with the results of his review and related official documents.

A similar letter is being provided to Vice Chairman Kerrey who joined you in your letter.

Sincerely,

LANSFORD E. TRAPP, Jr.,
Brigadier General, USAF, Director, Legislative Liaison.

UNITED STATES SENATE,
SELECT COMMITTEE ON INTELLIGENCE,
Washington, DC, November 5, 1996.

Hon. WILLIAM J. PERRY,
Secretary of Defense, Department of Defense,
Washington, DC.

DEAR SECRETARY PERRY: This letter constitutes a formal complaint on the obstruction by you, others and the Department of Defense on the inquiry by the Intelligence Committee to determine whether there was an intelligence failure relating to the terrorist attack in Dhahran on June 25, 1996 on the following:

Prohibiting key witnesses from being interviewed by this Committee (Brigadier General Terryl Schwalier, Colonel Gary Boyle, Lt. Colonel James Traister).

Prohibiting General Downing from testifying before this Committee except on your terms in closed session.

Refusing to give this Committee access to an Air Force report which, as reported in the Washington Post on October 10, 1996, contradicted a major conclusion of the Downing report.

In the Intelligence Committee hearing on September 19, 1996, I emphasized the gross impropriety on the part of Secretary Widnall in ordering the specified Air Force personnel not to speak to this Committee and asked for a response. None has been received.

On October 17, 1996, I personally raised my strong objection to Acting Secretary Hale about his refusal to provide this Committee with a copy of a report which was the subject of the extensive Washington Post story of October 10, 1996.

Comity between the Executive and Legislative branches is indispensable if our system of government is to work. In any judgment, there has been no comity between you/Department of Defense and this Committee on this important subject. In the absence of such comity, the sole recourse of the Senate or a Senator is through the confirmation and appropriations processes, which will be pursued.

I am sending a copy of this letter to the chain of command involved in these decisions so they will know my views on this subject because they, as well as you, are individually responsible.

Sincerely,

ARLEN SPECTER.

UNITED STATES SENATE,
SELECT COMMITTEE ON INTELLIGENCE,
Washington, DC, October 17, 1996.

Honorable SHEILA E. WIDNALL,
Secretary of the Air Force, The Pentagon,
Washington, DC.

DEAR SECRETARY WIDNALL: As you know, the Committee is reviewing the adequacy of intelligence support and its use by consumers in the context of the recent terrorism incidents affecting your forces in Saudi Arabia. Recently it came to our attention that the Air Force completed a report entitled "Force Protection in Southwest Asia, An Air Force Perspective," dated 17 September 1996. This report was quoted in Washington Post article appearing October 10, 1996.

Since we have been unable to obtain a copy of the report through your legislative liaison office, we are forwarding our request for a copy of this report directly to you and ask for your assistance. Given the widespread coverage of the report in the

media and its importance to our ongoing oversight responsibilities, there can be little justification for not promptly providing a copy to the Committee.

Sincerely,

ARLEN SPECTER,
Chairman.

J. ROBERT KERREY,
Vice Chairman.

Senator SPECTER. On June 25 of last year, a truck bomb went up against a perimeter fence, 80 feet from Khobar Towers, killing 19 airmen and wounding more than 400 others. According to Secretary of Defense Perry, that bomb was 3,000 to 5,000 tons. On a Defense Intelligence Agency report issued 8 days earlier, there was an alert as to Khobar Towers, with the language specifically—a pattern appears to be developing that warrants improved security efforts—and a big picture of Khobar Towers on the front.

There had been, in January, an OSI report, which emphasized the particular vulnerability of perimeter security, given the proximity of the outside fence to many of the buildings. Secretary Perry said that it was a surprise to have a bomb 3,000 to 5,000 pounds. And you, General Fogleman, said that this was, "a significantly more powerful level." I believe that not to be the case, based upon the attack by the terrorists in Beirut on October 23, 1983, killing 283 marines, where the Long Commission found a bomb of some 12,000 pounds. Now, that is the Mideast. And that is not unexpected.

You have Secretary Perry articulating a series of standards as to what the Secretary should do. And when I posed those to General Downing after he filed his report, he found the Secretary derelict in two of the Secretary's own standards. First, the Secretary said establishing policies and guidance for our commanders, including the policy and guidance for force protection. General Downing said that was not done. And the second standard by Secretary Perry himself, organizing and structuring the Department of Defense in such a way that force protection is optimal. And again, General Downing said that was not done.

General Shalikashvili was in the area a few weeks before the Khobar Tower attack. In the visit, he saw Khobar Towers and made no effort to take a look at any terrorist problem, notwithstanding two warnings from the OSI in January and notwithstanding the fact that there had been a car bombing in Riyadh, killing four Americans on November 13, 1995.

General Peay, four-star General Peay, testified before a Senate committee last July. And when asked about the proximity of the fence being close—it was estimated at that time at 100 feet—asked if it should have been farther, said, I don't know, I just don't know.

The Downing report came to the conclusion that General Schwalier was responsible in a number of particulars. And I will not take the time to read them now. And I really am sympathetic to the report, which singles out Brigadier General Schwalier without holding accountable General Peay, General Shalikashvili, and the Secretary of Defense.

But this report, a voluminous report, which is more than General Downing's report—it is the Secretary's report to the President—concluded that other vulnerabilities were not addressed adequately. Intelligence indicated that Khobar Towers was a potential terrorist

target, and incidents from April through June 1996 reflected possible surveillance of the facility.

General Fogleman, when you testified on February 25 of this year, you said: "It is criminal for us to try to hold somebody accountable or to discipline somebody for political correctness or because the media has created a frenzy based on partial information and not the full facts."

Now, obviously there are very severe time limitations here today. I have told the chairman earlier this morning that I would be questioning in this area. And with that setting, I want to—I do ask these facts.

Secretary Widnall, Senator Kerry, in his capacity as vice chairman of the Senate Intelligence Committee, and I, wrote to you last October 17, and received a response from a subordinate, dated November 6. I wrote back promptly in November, saying that that response was insufficient. And I have since written to you on December 5, December 7, and April 25 of this year.

And let me give you a series of questions which I would like responses to. This Defense Appropriations Subcommittee must obviously evaluate this $61 billion request, and the competency of this Air Force Department to administer this very important duty. And my question to you, No. 1—and I am going to go on to some others before asking for a response here—is do not you have a duty to respond so that we can have an adequate basis for evaluating your competency and whether we ought to give you $61.3 billion?

The second question that I have relates to stories in the New York Times—and I have the documents here—where they have disclosed on two occasions that the Air Force released copies, or portions of the report, to try to justify the Air Force position that no one ought to be held accountable. And my second question is: How is it that the New York Times has a copy of your reports when I cannot get a copy, Senator Kerry cannot get a copy, the Intelligence Committee cannot get a copy, or even a response for the letters?

And the questions that I have for you, General Fogleman, are in more of a military line, although obviously the Secretary is free to comment. Was not it dereliction of duty when no action was taken to move that fence beyond 100 feet? I have paced it myself at 80 feet, and I went to the scene and talked to people.

The second question for you, General Fogleman: Was Secretary Perry derelict according to his own standards? Was General Shalikashvili derelict? Was General Peay derelict? Was General Schwalier derelict?

And when you raise the question in your testimony that it is criminal for us to try to hold somebody accountable or to discipline somebody for political correctness or because the media has created a frenzy based on partial information and not the full facts, why do you characterize or challenge motives on grounds of political correctness? There are plenty of critics out there, one of which is me. And I have spoken up on it at considerable length. And I think I have the facts. I have been there and I have talked to people, and I have read a lot of documents.

My question is: Why is it necessary to challenge critics, including me, on grounds of political correctness? And why do you say that the media has created a frenzy based on partial information and

not the full facts, where you have this voluminous Downing report? I know you said you read it. I saw your testimony on the record report. You have the benefit of that. I do not.

Let me start with you, Secretary Widnall.

Senator STEVENS. Senator, let me tell you, we are on a 10-minute limitation. I am going to put on the 10 minutes to let them answer your question. But we will have a separate hearing if you want. This is a hearing to talk about the procurement request before us. And I have to tell you, there are others waiting here to ask questions. I think this subject is another subject. But I think, in fairness, they ought to be able to answer the questions. But I have to limit you and your time just so everybody can get time before we have to go back to the floor.

So if there is no objection, I am going to put this back on green now and you all have 10 minutes to answer his questions.

Senator SPECTER. Mr. Chairman, that is fine with me. I just took my 10 minutes on the question. I know it leaves a lot to be answered. And if there were a better way—I have been searching for it for about 1 year.

Senator STEVENS. Well, I think you have the power in the Intelligence Committee to subpoena someone to come before the Intelligence Committee. This is not our issue here. Our issue here is funding. But I think it is relevant. Do not misunderstand me. So change it to put the green up, please.

Senator SPECTER. Mr. Chairman, that is fine with me to get the answers at a separate hearing. And perhaps I would take you up on that suggestion, if there is not adequate time here. And I do not wish to impose upon my fellow members. And if I had an alternative course, I would have pursued it.

Senator STEVENS. Well, I will leave it to you all. Would you prefer to have 10 minutes now or come back at another time to deal with this question? It sounds to me like it is not a 10-minute question. But beyond that, you take your choice. We will have a separate day for review of this.

KHOBAR TOWERS

General FOGLEMAN. I would prefer to answer the questions.

Dr. WIDNALL. Yes.

Senator STEVENS. Go right ahead.

Dr. WIDNALL. I mean I can say a few things. As I say, in my responsibility as sort of the——

Senator STEVENS. Do you want to pull that microphone up again? People in the back cannot hear.

Dr. WIDNALL. With my responsibilities as the review authority in the military justice system—and not having your background as a lawyer and prosecutor, I am never quite sure what I can say.

Senator SPECTER. Secretary Widnall, I am a Senator asking questions.

Dr. WIDNALL. Right.

Senator SPECTER. I am not a lawyer or a prosecutor here.

Dr. WIDNALL. No, I understand. But I worry about my own responsibilities. That is all I am saying.

Yes; I do believe I have a duty to respond, but to the extent of my capability. As you know, the Air Force has had processes un-

derway. We had an article 32, the record report as you refer to it. That report has been submitted to the Secretary of Defense. My understanding is it has not been released. The Secretary—at the request of Dr. White, had followed that report with an administrative look at the issue by our inspector general and our JAG. That report has been completed, and that has also been submitted to the Secretary.

But I believe those reports have not been released. So my ability to respond to you, I think, basically stops at that point.

I know nothing about the release of any report to the New York Times. So I guess that is all I can say.

Senator STEVENS. General.

General FOGLEMAN. I was going to—even though that question was not directed to me, there has been no Air Force release or no official Air Force release of—that I am aware of—or any sanctioned unofficial Air Force release of a report to the New York Times. Things get released all the time in this town. And normally, they are released out of frustration. They are released, quite frankly, because, as you said, you have not had the benefit of all the facts. Through no fault of your own, you have not been provided the record report.

The record report is a very comprehensive, documented report that was specifically charged to go look at the assertions made in the Downing report. And so when I speak about being in possession of the facts, I talk about not only having the Downing report, but the record report as well. I think I have had the opportunity to balance the two and to see the documentation that appears in the record report.

INVESTIGATION REPORT EVALUATION

And based on that, I will answer your first question. No; I do not think that General Schwalier was derelict, nor was General Peay, nor General Shali, nor Secretary of Defense Perry.

Twenty/twenty hindsight is a wonderful thing. But when you are a commander in the field you have responsibilities not only to protect your troops, but accomplish the mission, and you have this plethora of intel and all these other inputs that are coming in to you, and you have to sift through them, and you have to make the very best decisions that you can make, and you make those decisions—in this case, General Schwalier took over 130 different actions throughout the year that he was there.

He responded to both an OSI vulnerability assessment that was done in the summer of the previous year and that vulnerability assessment that was done in the January-February timeframe. He very carefully went through those things. He made corrective actions and chose to ignore—not ignore, but really chose to evaluate and put into a different category two suggestions out of the whole group that were given in that vulnerability assessment.

In spite of that, everything we saw—you go back and cite the Beirut bombing—that was not a perimeter bomb. That was a penetrating bomb. That helps lead to the mindset that says these people do penetrating bombs. And so that is what he was working on over there. He focused on that. He did not ignore the perimeter. He ac-

tually took actions, went to the Saudis. They actually moved the barriers in various parts.

The one part that he was not able to get moved was the northern part of the boundary, where there was a parking lot that was a public use item. He had people in his command who were working that issue. He is a man on the scene contextually. You make progress a little bit at a time when you are out there in the field working with host nation people. And he thought he was making progress. He got increased security surveillance. He had a lot of things that he was working on.

And the mindset relative to the size of the bomb—I think it was Downing's assessment that this bomb was somewhere in the magnitude of 5,000 pounds.

Senator SPECTER. Perry's.

General FOGLEMAN. I think that when we went to the weapons effects people, they told us they thought this bomb was closer to 20,000 pounds, which was a significant increase over what we had seen. And even if you go back to the OSI vulnerability assessment, in that, they talk about a 400- or 500-pound bomb, a vehicle bomb—all of these things are playing on the minds of a commander in the field.

And so my concern about this is that—this is not about Schwalier. This is not about the Air Force. This is about the future for all the commanders that we will send out there. And they will do everything in their power, to the best of their ability, to protect their forces. That was not an accident. This was an act of war. This man was targeted. He was targeted. People who lead people in combat, we are going to lose people. We try to do everything we can to lessen that chance.

And in virtually every case, if you go back, in 20/20 hindsight, start putting something together, you will be able to say, if you did not get out of bed that day, you would not have gotten killed. But the fact of the matter is you have to get out of bed. You have a mission you have to do. And you have got to protect your troops while you are doing it. And when you go do that and you do it to the best of your ability, then you deserve to have the chain of command stand up, once they have seen all the facts, and make a value judgment. And that is all I ask, Senator.

I am embarrassed that you do not have the facts. But it is not in my power to release those to you. But I am embarrassed that you do not have them. I am embarrassed that we have not had this thing out in the open.

One year later, we still do not know who did this. One year later, I have got an officer that is just twirling over there. He is a fine officer. But it is not about him. It is about all those lieutenant colonels and colonels that we are going to send out there to be commanders in the future. And whether or not the power of this Government stands behind them when they go out there, or whether we sit back here in Washington and we persecute them or prosecute them whenever something goes wrong and they are trying to do the mission, that is with what this is about, Senator.

Senator STEVENS. We have to go on. We have 40 minutes left and four people still have not asked their questions. Senator, we have just got to leave this now. This is not the function of this commit-

tee. There is the Armed Services Committee and the Intelligence Committee. I have tried to keep this committee, and so has Senator Inouye, on course regarding funding and the adequacy of the funding and the need for funding. We are not going to spend anymore time on this now.

If they will not hold hearings in those other committees, as I said, we will later.

Senator Bond.

Senator BOND. Thank you very much, Mr. Chairman.

General Fogleman, to come back to some of the things that I mentioned earlier about the National Guard general purpose squadrons. I understand that there are restrictions on upgrading the F–15A's because of the imminence of their retirement, the same thing that happened to the Navy A–6's. But I understand that there are A's out there which still have a lot of life left on them, even more life than some of the early model F–15C's. Now, is there anything that we can do to help with either an F–15A system upgrade or the replacement of A's with F–15C's?

And specifically, do you see any way to speed up the process to take advantage of the experience of Guard pilots when they are asked to integrate with other deployed units?

AIR NATIONAL F–15 FORCE UPGRADE

General FOGLEMAN. What I would tell you, Senator, is until we did the QDR, I would not have had much of a positive answer to this thing. I think that we are constantly trying to balance our modernization accounts with our modification accounts. But one of the things that gets called into question is if you are going to go down to three air superiority wings of F–22's, then you are going to have to keep some F–15's around longer. And so the projected trickle down that we could have had of C models into the Guard and Reserve will not occur in all likelihood, at least not on the schedule that was there. And so this will cause us to go back and relook this whole area.

Senator BOND. If they need waivers or something, we would look forward to working with you. Because it seems to me that this is one of the possible avenues that we need to pursue.

Let me ask—and I address this to either of you, General, or to the Secretary—the Air Force has a continuing requirement for 18 attrition replacement F–15E aircraft. The committee has funded 12 through the current fiscal year. The current strategy from the Air Force calls for funding three F–15E's in 1998, three in 1999, for $165 million. But I understand that that strategy would force a break in production, resulting in an increase in the cost of the final aircraft. If the Air Force were to request procurement of all six in fiscal year 1998, I understand that the total to the program would be $271 million, a savings of almost—of over $64 million.

Would it make sense to—would that kind of saving make sense, to get the same aircraft in one year for $64 million less that you could get them for two?

General FOGLEMAN. Yes, sir; this really became a question of affordability. In fact, these aircraft—this additional attrition reserve buy was dual listed on our 1998 unfunded priority list that we sent over here to the Hill. Now, I will confess it was not very high, but

it was on the list of things that, if we had more money, it would make sense to do.

Senator BOND. Let me ask a tough question, General. The Air Force and the Navy are currently involved in a joint program to develop the subsonic midrange cruise missile, designated as the joint air-to-surface standoff missile, or JASSM. I understand that the Navy has already developed the weapon. And I am familiar, or reasonably familiar, with the SLAM-ER, which could be modified into a SLAM-ER-plus variant at minimal cost, I understand, to incorporate the Air Force's unique requirements, such as overall missile length, eliminating the man in the loop element of it, and the bomb impact assessment capability.

And it is my understanding that if the JASSM program were to be terminated today, it could save $900 million. The SLAM-ER program is fully funded and in production. If these modifications were to be made to the SLAM-ER, is there any reason that the Air Force could not meet its mission specification requirement for JASSM with the SLAM-ER-plus, and gain a savings of about almost $1 billion?

MIDRANGE CRUISE MISSILE PROGRAMS

General FOGLEMAN. Sir, I would have to go back and get a more detailed answer to this. But I would tell you that there are two dimensions to this program. First of all, you are correct in saying that there is a SLAM-ER program, but there is no SLAM-ER-plus program that is in existence today. So that needs to become reality. And currently, the SLAM-ER will not fit in the bomb bays of our aircraft.

[The information follows:]

JOINT AIR-TO-SURFACE STANDOFF MISSILE REQUIREMENTS

In defining the Joint Air-to-Surface Standoff Missile (JASSM) requirements, the Key Performance Parameters were kept to a minimum to allow the two competing contractors maximum flexibility in designing a solution to the JASSM need. As such, there are three Key Performance Parameters—Missile Operational Range, Missile Mission Effectiveness (or the expected number of missiles to kill one of each target types) and Carrier Operability in the JASSM Operational Requirements Document (ORD). The contractor may trade other items in the ORD; however, each significant trade of a functional/performance requirement is assessed as to its impact on the mission execution capability and the operational limitation. Specific criteria to determine if the system performance meets the needs of the jointly developed JASSM requirements are mission planning; integration with the threshold aircraft; compatibility with the objective aircraft; projected launch, carriage and jettison envelopes for objective and threshold aircraft; autonomy; insensitive munition requirements; time on target; and bomb impact assessment. In addition, affordability is a key driver in this program with the Average Unit Procurement Price (AUPP) included in the system performance specification for the JASSM.

The Standoff Land Attack Missile-Extended Range Plus (SLAM-ER+) version is a modification to the SLAM-ER to incorporate an Automatic Target Recognition (ATR) seeker. The SLAM-ER+ needs further modification to meet JASSM requirements and be suitable for Air Force use. These modifications include shortening the weapon by four inches for carriage in the B–1B, a fuel tank surface tension screen and folding fins for carriage on rotary launchers, strengthened fins for external carriage on the B–52H, removal of Man-in-the-Loop Data-Link, and addition of a bomb impact assessment capability.

The AF SLAM-ER+ variant cannot meet the minimum acceptable operational range requirement. JASSM will have an operational range well beyond the minimum, providing the warfighter with greater operational flexibility in employing the weapon.

The AF SLAM-ER+ variant would not equal JASSM in the area of Missile Mission Effectiveness. The JASSM will have a 1,000 lb.-class warhead versus a 500 lbs.-class warhead for the SLAM-ER+. The JASSM has better penetration and blast/fragmentation, stealthy design, and capability against Global Positioning System jamming. In addition, JASSM is designed to defeat the 2010 surface-to-air missile threat. These JASSM features result in a Missile Mission Effectiveness that is significantly better than that of the SLAM-ER+. The AF SLAM-ER+ would require many more missiles and increased sorties to accomplish the mission.

The JASSM ORD has a requirement that the missile be an all up round (no build-up required) with an expected 20 year service life. The JASSM contractors will provide a 15–20 year warranty to cover the costs of all failures including redesign and retrofit. The JASSM system will require no Government or depot maintenance. In contrast, the SLAM-ER+ will require spares and recurring Government depot repair. The SLAM-ER+ has an estimated life of only 10 years with a follow-on weapon required in 2010 timeframe.

Most important is the JASSM concept of Cost as an Independent Variable. To date this concept has resulted in a reduction from $600,000 to less than $360,000 as an Average Unit Procurement Price (AUPP) for the JASSM. In the Engineering and Manufacturing Development phase, the selected contractor will be further incentivized to reduce costs and move the schedule to the left through the use of a Cost Plus Incentive Fee arrangement. In contrast, the AUPP for the SLAM-ER+ is estimated to be a higher figure than the JASSM objective requirement of $400,000. With a lower AUPP, a predicted lower life cycle cost (which includes a warranty for the life of the system), and its anticipated superior effectiveness, the JASSM projects to be the overall better alternative.

The cost estimate which shows a savings by canceling JASSM in favor of the AF SLAM-ER+ variant does not take into account any life cycle costs, nor does it account for any performance differential which would require an estimated 1,100 additional AF SLAM-ER+ to equal JASSM effectiveness. With these additional factors taken into account, the JASSM SPO estimates that to procure an AF SLAM-ER+ variant would actually cost over $1 billion more than JASSM.

Senator BOND. Yes; but you can reduce it to—well, the length—reduce the missile length if you take out the man in the loop.

General FOGLEMAN. And then the issue becomes, will it meet our requirements in terms of range and in signature? And quite frankly, what we are encouraging is that, as we look at part of the JASSM review process, that there will be a joint Navy evaluation of this, that it will actually be put on the table and evaluated.

Senator BOND. Well, I would ask you to do that, and keep us advised. Because it seems to me that this may be—if, in fact, there are certain things that could be done, if you could save $900 million or $1 billion and get the same capability, given what you are going through, it obviously makes a lot of sense.

General FOGLEMAN. Yes, sir.

Senator BOND. Finally, are you satisfied with your joint work with the Navy and the flight officer training program? Is that working well?

General FOGLEMAN. Yes, sir; it has worked well. And we hope to do more of this, not only with the Navy, but more joint training. There are several dimensions to this that benefit both the Air Force and the other services. But that program has been, to date, a success; yes, sir.

Senator BOND. All right. Well, thank you very much. And we look forward to working with you to see if there are these possible avenues for interservice cooperation which can lead to some savings. We would like to see the capability maintained to the greatest extent possible, and I appreciate your willingness to look at those.

General FOGLEMAN. Yes, sir.

Senator BOND. Thank you, Mr. Chairman.

Senator STEVENS. Thank you, Senator.

Senator Domenici, who is carrying a great load on the floor right now, has come in and wants to ask a question. We will yield time to him at this time, with the concurrence of Senator Bumpers.

Senator DOMENICI. Thank you. I have a number of questions. But I will submit them, Mr. Chairman. I just want to ask one about a particular facility in New Mexico that I was rather excited about and I wondered if General Fogleman had any comments today about it.

On March 17, I wrote to you about an idea that I believe fits nicely into your privatization efforts, and it would save the Air Force a few million dollars. As you know, Gerald Champion Memorial Hospital in Alamogordo, NM, proposed the creation of a shared hospital facility. They are prepared to build a new hospital, and they are excited about the prospects of it being a partnership relationship with the Air Force, since you are in need of some facilities there also.

At your direction, and I thank you for it, your Surgeon General has been meeting with officials from Gerald Champion regarding the initiation of the construction for this new facility, which again, would be private. Can you tell us whether any agreement has been reached about—and anything you might share—about the merits of this proposal for the Air Force?

General FOGLEMAN. Yes, sir.

SHARED HOSPITAL FACILITIES

Dr. WIDNALL. I would be happy to do that. We are very excited about the program. It is everything you say. It is a good example of privatization and very innovative. I think we are moving closer to reality. It does have to be examined by legal and others. But we do not see any showstoppers to being able to do this. And it is a wonderful example of a community stepping forward and getting both their needs and our needs met. So our medical people are very excited about it.

General FOGLEMAN. I think, Senator, that the two biggest hurdles at this point—and one is we have got to go through this legal review. Because my Surgeon General now is excited about this, and we think that we have got a winner here. So I do not anticipate a great problem with that. But the other minor hurdle that we have is the funding is not currently in the Defense Health Program—that we need to work our way through that. But those are the only two issues that we have got that we see that will slow this process down.

Senator STEVENS. Senator, we want to work with you on that. We have a similar prospect now in Fairbanks, with the Bassett Memorial Hospital being replaced for the Army. We hope that we can find a way to have the on-base hospital be the trauma center for the interior of Alaska and have the community hospital be the one that handles family problems for the military and an outpatient Indian Health Service facility to handle outpatient facilities for all others.

So I think we can get some real savings on such an arrangement. We would like to work with you on yours to make sure it also produces savings and improves the quality of service at the same time.

So I commend you and I hope you can work it out, Secretary Widnall.

Senator DOMENICI. Thank you.

Fellow Senators, what it amounts to is the community has a bond that they have already issued, and they are ready to build a new hospital. And it turns out that the Air Force needs a facility. Rather than build a whole new one, it looks like there is some partnering that can take place, where the Air Force will save money and they will be using a facility jointly that belongs to the citizens of the community, and the Air Force will have some claim to use some partnership arrangement.

Senator STEVENS. Well, I can commend to you the Fairbanks Community Hospital. Back 20 years ago, Senator Stennis and I worked out an arrangement whereby we had a sharing of that hospital by the Indian Health Service, rather than building an Indian Health Service hospital. We actually made a grant to the community to reserve 16 beds in that hospital permanently, and it has worked out wonderfully. So it is a concept I think we should pursue.

Senator DOMENICI. Thank you very much.

Thank you, Madam Secretary.

Senator STEVENS. Senator Bumpers.

Senator BUMPERS. Thank you. Mr. Chairman.

General Fogleman, first, let me compliment you in your answer to Senator Specter's question. I thought it was open, candid, and right on target. And let me just say that one of the things that makes this such a hostile environment to work in is it has gotten to where simple mistakes in judgment, negligence, and even political differences are becoming criminal offenses in this Capital City. So I appreciated your response to that question. Some things just happen.

Having said that, let me ask you, Madam Secretary, if you have seen this insert that appeared in many national publications on the F–22?

PUBLICATION ON THE F–22

Dr. WIDNALL. No; I have not seen it.

Senator BUMPERS. You have not seen it?

Dr. WIDNALL. I have not seen that.

Senator BUMPERS. Inside is a simulated postcard. This was—there are literally millions of these things that were distributed in national publications. And here is what the postcard said—it is supposedly from a female soldier to her husband, and it is dated June 18, 2007.

Dear Rick and the Jakester—well, we are here and I am OK. Everybody in the battalion is pretty tense, though. The situation is extremely complicated, and I am sure the diplomats are really earning their paychecks right now. I think about you and Jake constantly. I cannot say much about what is going on except that you guys should not worry. I am surrounded by great people. We have got great equipment. And we know what we are doing. We also have those F–22's upstairs totally ruling the sky and covering us like Jake's big, fuzzy blue blanket. Give the little guy a big kiss for me. I will write again soon. Love Katy.

Can you tell us for sure that the Air Force is not paying for any of this? [Laughter.]

Dr. WIDNALL. I have never seen that. I know nothing about it.

Senator STEVENS. I am sad that they did not ask me to sign it. I would have signed it for them. [Laughter.]

Dr. WIDNALL. But it is a nice story. It is a nice story.

Senator BUMPERS. I wish they would just give me three lines at the bottom of the postcard. It borders on being sick, in my opinion. You can always tell when a weapon system is in some difficulty. Of course, when you have got a $50 to $70 billion contract riding, I can understand why they are trying to sell the American people on the F–22.

But, in any event, let me just say, General Fogleman, that I am not going to reiterate all of my reasons for opposing the F–22, none of which have much to do with its technical capability. It is a matter of cost and whether there is a mission for it and why we are building the FA–18E/F, and also the Joint Strike fighter, and sandwich this in between.

But on the cost figures, the cost analysis improvement group at the Pentagon and the CBO, and now the GAO in the draft which you have probably seen and the final product of which will be released sometime maybe next week, all of them say that the cost of the program would increase by $16 billion. Now, this whole questioning is based on the proposition that we are going to procure 438 aircraft. We are not going to procure that many, but just for argumentive purposes, let me say that this is all based on that. They all say that the cost is going to be $16 billion more than the original projected $48 billion.

And my question is: What does the Air Force know that all of those people do not know?

F–22 COST ESTIMATES

General FOGLEMAN. Well, sir, I would answer that in I guess two ways. We think, as we go back and look at all their cost projections—and particularly we know this from talking to the people in DOD, in the CAIG—that what they are using for cost projections are old models, predicated on the way we have manufactured airplanes back in the seventies and eighties, that they have really not taken into account the results of the so-called joint estimate team that has gone in and looked at not only new manufacturing technology, but also procurement reform in general.

Let me give you a couple of examples. The CAIG estimate that was given for the JDAM, the joint direct attack munition—granted, not nearly as technical as an F–22—their estimate was that we would end up paying $24,400 a copy for that munition. The fact of the matter is, with the new manufacturing technology, with acquisition reform and turning the contractors loose, we saved 44 percent on that thing. It came in at $13,700.

The C–17, the CAIG estimate was $213 million a copy. When we were done with the multiyear and all the things that John Deutch initiated, it came in at $188 million a copy. Granted, only 12 percent, but it is 12 percent.

The space-based infrared system that the Secretary talked about, the SBIR's-high system, again, the life cycle cost [LCC] estimate was $11.9 billion by the CAIG. When the contract was let for that, the LCC estimate had dropped to $7.2 billion, a 39-percent savings. The wind-corrected munitions dispenser, while not a CAIG esti-

mate but the estimate using the normal approach, was again $25,000 a copy. We are now on contract for $8,900 a copy, a 64-percent savings.

So we know that this is stretch. We know it is going to be a challenge. The contractor knew that, too. But Mr. Norm Augustine, who is a man who I do not think normally puts his signature on the line lightly, signed up in a memorandum of agreement with us that his company, working with our folks, would identify the savings that would result in not having that cost growth. That is really the basis of our position, sir.

Senator BUMPERS. I understand that, General Fogleman. Let me make this observation. Secretary Cohen has said that CAIG's estimates have normally been very reliable. Now you point out a couple of instances where they were not. But when you have CAIG, GAO, and CBO all going into this program in some depth—now here is a chart, let me show you a chart from the GAO—let me stand up here for you—this is in the GAO report. Can you see this OK, General?

General FOGLEMAN. I can see it fine, sir.

Dr. WIDNALL. He can see it, but he is going to let me answer the question. [Laughter.]

Senator BUMPERS. Here is some history. You mentioned the C–17, which has had, what was it, a 12-percent cost reduction.

General FOGLEMAN. Yes, sir.

Senator BUMPERS. Here is 100 percent of initial costs of various aircraft, including the F–22. This is what the initial production was. And, of course, they always go down. We anticipate that. But here is 100 percent right here of the initial cost of the F–15 and the F–16. It goes out to about right here. And the reduction in the F–15 and F–16 from the initial cost was 35 percent—a 35-percent reduction in regular production. Then here is the F–18 program—here is 100 percent of the cost of it. And it has gone down 69 percent. That is pretty impressive.

Now, the F–22, in order to make the money fit at the cost you are going to have, the $48 billion, here is 100 percent, $400 million for the first few airplanes, and it goes down right here. All of a sudden, by the time they procure about 90 aircraft, the cost goes down 82 percent and stays at that level during the entire production.

Now, General, my question is—we have never even come close to approaching an 82-percent cut in production cost from the initial cost. And it seems to me that this is a real stretch in order to make these figures fit $48 billion. I simply do not think that can happen, but I would make one other observation. And that is, when you consider that the F–16, for example, those are metal airplanes, they are not stealthy airplanes—you mentioned the C–17, which the cost reduction was rather admirable—but, by the same token, there were virtually no really big, innovative technological leaps with the C–17. That is a cargo airplane, not an advanced fighter.

And when you look at our experiences in the past—and, in the case of the F–22, you are dealing with a much, much more sophisticated aircraft, with stealthy qualities and all kinds of avionics—and yet you are saying that you can reduce the initial cost by 82

percent for the full production costs. I do not think that is even remotely possible.

F–22 PRODUCTION COST DECREASES

Dr. WIDNALL. Well, Senator, let me make two comments on that, because I think, in some sense, you have made your own point. We would expect, for a stealth aircraft, a highly sophisticated aircraft, that the cost of the first airplane would be high. I mean this is almost an experimental airplane at this point. And the way you have your number scale, that, of course, is your baseline. That is your 100 percent.

General Fogleman mentioned the term "12 percent" in connection with the C–17. That is the cost of quote, the program, as we worked the later stages of it to get the costs down. But I recall very specifically, when I came in as Secretary of the Air Force, the unit cost of the C–17 was $338 million a copy.

Senator BUMPERS. I remember well.

Dr. WIDNALL. And now it is, well, $188, $175 million, you know there is—so, you know, that is almost a factor of two. So I really do believe that—and I will obviously do some numbers and try to put C–17 on this same chart that you have your numbers on—but I really do believe, with modern aeronautical engineering, technology, manufacturing technology—sure, it is an aggressive program, and we have really signed up the contractor to be aggressive, and that is exactly what we expect him to be. And so he is committed to this. We are committed to this.

My view of the CAIG and the CBO is that, you know, they are basically in the forecasting business, and so, at this point, everybody has made their forecast. And I think what we believe is now is the time to get some real data, to really start building airplanes and really track those cost reduction curves. And we are obviously going to keep some very aggressive looks at that program.

Do you want to add anything?

Senator BUMPERS. Thank you, Madam Secretary.

Mr. Chairman, my time is up. General, I would like to say, I want to submit a question to you in writing on the B–2. You have not asked for anymore B–2's.

General FOGLEMAN. No, sir.

Senator BUMPERS. But there may be a move to add some whether you want them or not. And I would just like to ask a few questions on that.

Thank you, Mr. Chairman.

Senator STEVENS. If I could find a printing press, I would give you some more B–2's, but I do not think it is in the budget. We cannot get them right now.

Senator Dorgan, we want to recognize you, but I want to state a policy for the future. When a Senator comes in and then leaves, they get on the early bird roster when they come in the second time. Because people come and go, it is not fair to those who sit and wait. I have checked with Senator Hutchison, and she is not in any rush, so I do recognize you.

Senator DORGAN. Mr. Chairman, I am not in a rush either. I was simply inquiring whether I was going to be called on next.

Senator STEVENS. We recognize you, please.

Senator DORGAN. Mr. Chairman, I would like to ask a couple of questions of the witnesses.

First, on the missile defense plan of the Air Force, last year's authorization act required the Department to report on the plans costs and effectiveness. That report was to have been done in January of this year. When might we expect that report?

MISSILE DEFENSE PLAN

General FOGLEMAN. I would tell you, sir, that we—the Air Force submitted its input on that report in February of this year. And it is my understanding that the report is in the Office of the Secretary of Defense, awaiting his signature, to come out.

Senator DORGAN. So it is done?

General FOGLEMAN. Oh, yes, sir.

Senator DORGAN. Do you have any idea on when we might get it?

General FOGLEMAN. No.

Senator DORGAN. All right. We will ask the Secretary.

General Fogleman, we have visited and you have made some comments on an unsolicited proposal that has been made on reengining the B–52 to extend the reach of the B–52. And it is an exciting and an interesting proposal. And I am wondering what the status is with respect to the Air Force evaluation of that proposal.

B–52 REENGINING PROPOSAL

General FOGLEMAN. Yes, sir, we formally debriefed the folks who made the proposal. I believe it was on May 7 or 8. And unfortunately, the analysis shows that it would cost us about—I believe the number is—$1.3 billion more to operate over the life of the weapon system using this than just continuing the way we are going. I was very disappointed personally in that, because I not only wanted to see the increased capability that would come from the reengining, but I thought it would also set a precedent for a good way to use commercial practices to upgrade other aircraft.

While we have said that it does not look practical under the proposal we have, we have also said if the contractors want to come back to us with another proposal, we are willing to listen. But that particular original proposal, at this point, we are not doing anything more with it, sir.

Senator DORGAN. And is the contractor, to your knowledge, working to come back with another proposal?

General FOGLEMAN. Yes, sir, they are working hard to try and meet that.

Senator DORGAN. Madam Secretary and General Fogleman, I would like to ask about the issue of base closings once again. You are familiar with the Secretary's discussion of it and the recommendations of the "Quadrennial Defense Review" that the Congress authorize two more base closing rounds. I have great concern about implementing new rounds of base closing for a number of reasons.

We have been through four rounds of base closings. What happens during these rounds, and has happened especially to the two air bases in North Dakota, is we create enormous uncertainty, especially with targeted bases that will be on some list almost any

time you start these discussions. The result is there is a stunting of economic growth, a ceasing of investments in regions, because people do not know what the future holds.

We are very appreciative in North Dakota of having two wonderful Air Force bases, and we certainly want to keep them. But they are a much larger part of our economic existence than they would be, for example, of California or Texas or other States. We have 640,000 people. Either base being closed in North Dakota, in previous rounds it was estimated, would cause about 25 to 30 percent unemployment in a region of our State. That is a huge economic crater.

And is there a way to go through base closings and downsizing without again using a commission, without painting a bull's eye on all of these gates, saying, by the way, this is not a good place to invest until somebody makes a decision 1 or 2 or 3 years from now? I would like to get your comments about that. Because I have great concern about whether this is something that is advisable for the Congress to do.

BASE CLOSURE

Dr. WIDNALL. Well, let me say that I think we all share the concern. It is the most difficult process. It is difficult for communities. It is certainly difficult for you. It is difficult for us.

I think Secretary Cohen has certainly indicated his desire to work with the Congress to get legislation that would make this possible and yet improve it. I guess on the issue of economic impact, I would only note that economic impact is one of the criteria as we look at bases. It is certainly not ignored. And that is certainly out of recognition of the fact that for some communities the presence of a military installation is a much more important part of their economy.

So that is clearly factored in. But I share with you the concern about how difficult it is for the communities that are involved.

Senator DORGAN. What kind of excess capacity exists that would urge or encourage a base closing round on behalf of the Air Force, for example, General?

General FOGLEMAN. Well, I would tell you, Senator, that just from a military perspective only—not using any of the base closure criteria, but just from a military perspective—we would be able to save a considerable amount of money by consolidating our force structure on fewer bases. And if we were to do that, I would think that we probably have about five or six major installations that could become excess.

Now, I have some concern about that number, because, quite frankly, I think that we need to keep some kind of a contingency capability in our basing. So you mentioned the idea of, you know, what is the construct that you might go about? Would we want another BRAC in its traditional form?

That will certainly be decided above my pay grade. But if somebody were to ask me for a recommendation on it, I would—I am a little naive perhaps on this, but would rather take an approach that says I believe that there is a way that we could put some bases in a contingency status.

Now, the pain in that is the bases are still going to lose the people and the missions. What we will end up doing is maybe putting a Reserve unit or something there to keep the facilities operating so that—but rather than inflict this base disposal process onto a community, which may not be able to absorb it or does not want it, at least we would maintain the facility. In the event we had to bring force structure back from overseas or we built up again or whatever, you would have some surge capacity as you do that.

But you do not—and we could maintain those bases, I think, relatively cheaply—and you would not have the up-front cost associated with environmental and all that. The problem would be getting the agreement that we could take the force structure off the base to bring it down and downsize it. So that is one scheme. So there are a lot of different ways, I think, that we end up going about this.

I would only make one other observation. And that is that if there is another round of BRAC, I will be long gone before that, but my proposal would certainly be to whoever is in my position—or my advice to the Secretary would be do all of your base closures in the first round that you can in the Air Force because of the very thing you talk about. Dragging it out just extends the pain for our own people, and it adds to the uncertainty of the communities.

So I think the number of closings that we need to do or the downsizing ought to be manageable in the first round. And so my recommendation would be, whatever we do in the Air Force, we ought to do in the first round. It is best for our people. It is best for the communities that have supported us.

Senator DORGAN. Well, General, I am not sure there should even be one round. And your implication that maybe there ought to be one round and you make the choices you have to make in that round is something I guess I understand. Because I think the minute you begin this process—we have now demonstrated with BRAC that you essentially freeze an economy, especially in a State that is a largely rural State with not much population—you freeze economic investment, you create uncertainty. It often lasts for a number of years.

Then we have lists and a base goes on the list, then off the list, then maybe back on the list. It had a devastating impact on the local economy, even if, in the end, the base stays open. The process can stunt economic growth for a couple of years.

So I do not know exactly how this is going to come out, but I am going to have a pretty aggressive discussion about the Secretary's recommendations about base closing. Downsizing, certain institutions being excessed in certain conditions, I understand all that. I mean we cannot deny that we need to make some changes here and there. But the BRAC process has become an institutional process that I think has some significant down sides to it as well. And I think the Senate would be well advised to move very, very carefully before it triggers another round or another two rounds of a BRAC process.

General, I appreciate very much your candid response. As always, you are very candid. And, Madam Secretary, I again appreciate your comments, as well.

Dr. WIDNALL. Thank you.

Senator STEVENS. I think the Senator has a point. And having lived through the efforts to reduce deployment overseas, starting with Senator Mansfield, and then the attempts to reduce deployments then to the Korea area. It seems to me that the decisions with regard to the necessity for bases ought to be made sometime into the next century—not too late into it—but on the basis of what the next generation wants to do.

I hear talk as I travel throughout the country of asking why it is necessary to maintain troops in Europe if we are going to have an expansion of the NATO. I hear questions about why should there be so many forces deployed in the Pacific. We get that considerably. I believe they should be there. But the point is that you are right, the contingency of bringing forces home has to be looked at. What will it cost to build new bases later if we do end up with a deployment-based concept basing in the United States, with temporary participation overseas in maneuvers? That could well be the mode of operations in the next century, the way I see it.

Senator Hutchison.

Senator HUTCHISON. Thank you, Mr. Chairman.

And just going along that same line, I am not against considering BRAC again, but I do raise questions. And one of the questions would be, is the downsizing of the force recommended in the QDR realistic? Should we be downsizing as we are putting troops out in the field in so many missions, some of them nonmilitary? And is this a time to downsize bases? Because once you do close a base and you go to the expense of it, it would be a huge, terrible burden to have to reopen or build new ones.

And second, I just wonder if we know yet what the real cost of closing bases is. And I do not think we are going to know until the year 2001, when all of this last round is really finished, what the costs are. As you know, I just wrote you a letter where there has been reported in a base that was closed about 20 years ago in Amarillo, that perhaps there was material buried there that is perhaps toxic.

So you know, how long do you go before you really know what the real cost is? So I would just say that I think we ought to look at all of these issues before we go to base closures. And I would like to know what you think of the force structure downsizing as well as the base closure issue.

CAPABILITY SHAPING

Dr. WIDNALL. Well, let me respond, and I am sure General Fogleman would like to as well.

I guess I do not think we think of it as force structure downsizing. I think we think of it as capability shaping. And we are continually modernizing and upgrading our capabilities in the Air Force. And we are paying attention to, basically, providing those in the most cost-effective way possible. But we do have number of operations—privatization, outsourcing—a number of examples of replacing military maintenance personnel with civilian personnel in cases where it is warranted. So the net effect of all of that tends to lower end strengths. But that is fundamentally not why we are doing it. We are doing it because we want a more capable force.

General Fogleman, do you have a comment?

General FOGLEMAN. I think, Senator, that your question is a good one. And it was one that really weighed heavily on the minds of all the service chiefs as we went into this QDR and we looked at some of the proposals that were coming forward. Early on in the process, there were people that were proposing the standard sort of salami slice—let us take two divisions from the Army, a carrier from the Navy, two fighter wings from the Air Force. And the chiefs said, wait a minute, you know, given what we are being asked to do, with the strategy and everything else, this really does not make a lot of sense to us.

We all have spent a lot of time—in the case of the Air Force, we went through this 18-month-long, long-range planning process—and in the process of doing that, the senior leadership sat down and very carefully made deliberations about what kind of combat capability would be needed and what were the things that we could do to preserve that combat capability, that OPTEMPO/PERSTEMPO kind of thing that needed to be there. And in our case, we said we think that in the base operating support side of the house, where we have already had some significant successes, particularly with the Air Education and Training Command, that we think we can do more of this.

And the reason you would do this—interestingly enough, I am an old programmer, you know, so every time I have ever been involved in any kind of an effort to identify offsets, it has been because the Defense Department's top line has come down, and, therefore, our top line was coming down. This was not that kind of a drill. Our top line is not coming down.

What the QDR was about was how to rebalance the money within our top line so that we could ensure that the procurement accounts would be funded and we would not see migration out of those procurement accounts like we do every year. So we were asked to go identify ways that we could stop spending money in some places and make sure that this stayed in procurement. And so, for us, when we did this study and we were done, we said, outsourcing, privatization, changing the way you do business, in terms of combat support or combat service support, would be the way.

So the numbers look massive for the Air Force—26,000 active duty, less than 1,000 Reserve and Guard, and about 18,000 civilians. But the fact of the matter is, of all those numbers, when you add it up, there is only about 5,000 of those that are directly associated with bringing down some kind of combat force structure. When we combine the bomber forces on fewer bases, when we combine our fighter forces on fewer bases, you save direct combat manpower when you do that.

But where we really get our savings is when you look at the rest of that manpower number, we contract them out. And historically, what we have discovered is when you contract out a blue suit or a DOD civilian, you do it on a ratio of about 7 to 10. Or, put another way, for every 10 folks, if you do the contracting, you end up with seven contractors, and you save about 30 percent. And that 30 percent is what we are going to try and push over to keep the procurement account from migrating.

So that was sort of the philosophy. That is why, when it is done, the Air Force still has 20 TAC fighter wings. We actually have slightly more, but one more of them is in the Guard and Reserve.

Senator HUTCHISON. Well, let me, go into—you mentioned contracting out—part of your assumptions, and in the QDR, you ask for relief from the 60/40 rule on depot maintenance—I think there has been a lot of misinformation on privatization and the possibilities for saving money. In fact, the GAO keeps saying that your numbers are not right, that it will not save taxpayer dollars. The GAO seems to try to assess the readiness factor, which I think is above their pay grade. I think they need to refer to you for the readiness issues.

But I would like for you to speak on the record about what you think it costs taxpayers to keep the 60/40 rule in place, and, second, if you believe that you can save dollars that you are trying to put into other missions by using Kelly and McClellan and allowing them to take—do privatization work for the Air Force.

PUBLIC/PRIVATE COMPETITION

Dr. WIDNALL. Clearly what we are conducting with respect to those workloads is a public/private competition. There have been a lot of studies, there has been a lot of forecasting, but I really do believe that it is through that competition that we actually get real numbers. In other words, we get real numbers of people who are prepared to do a job and are giving us a price to do that job.

I think that is probably the most accurate kind of study that you could get with respect to what is it going to cost you to do this workload. Because you actually have somebody who has costed it out and is prepared to step forward and put their reputation and their commitment on the line to do the workload.

We are, as you know, engaged in a series of steps, RFP initiatives, where we will exactly get those kinds of proposals to do those workloads. And I think that that is how we will find out how to get best value for the American taxpayer. I cannot give you a number as to what the net savings will be if we get rid of the 60/40 provision, because my fundamental principle is we will find that out through having the ability to do these public/private competitions. And so we will make those decisions on the basis of what is best for the American taxpayer and for the Air Force.

Senator HUTCHISON. So you are saying competition is needed for you to be able to be more efficient?

Dr. WIDNALL. I believe that. I believe that has been shown time and time again.

Senator HUTCHISON. General Fogleman.

Dr. WIDNALL. Every time we have had success in acquisition reform it has been because there has been a competitive environment, where we have challenged contractors—really challenged the Air Force—to deliver the product for less. And that is the only way I know how to make these things happen.

Senator HUTCHISON. Why cannot you convince the GAO that this seemingly commonsense approach is the right one?

Dr. WIDNALL. Well, I guess I do not want to really comment on GAO. I view them as they are in the studies business. They are in

the forecasting business. And they do have a methodology that they apply to making those forecasts.

Senator HUTCHISON. Well, what are they missing?

Dr. WIDNALL. I think it is maybe a little like the discussion we just had of the CAIG numbers. They are using sort of past experience to sort of forecast future behavior. They are being very conservative. I will not say they are using worst-case scenarios, but they are——

Senator HUTCHISON. So you think they are forecasting behavior necessarily——

Dr. WIDNALL. They are giving us a range of what they might think would happen, all the way from a best-case scenario to a maybe-not-so-good scenario. And again, my position is I just prefer to get on with the competition. Because I really do think that is when you get the sharpest pencils and the most accurate numbers. So I am excited about the direction we are going in, and I really do ask the support of Congress to take us to this next step, so that we could get the best value for the taxpayer.

Senator HUTCHISON. General Fogleman, do you think that GAO is looking at the readiness issues? And do you believe that 60/40 should be done away with for you to have more options?

General FOGLEMAN. Well, I have not seen a lot of consideration or understanding of the readiness issue in the analysis that has been done by GAO. Not only do we advocate doing away with the 60/40, but I think very clearly the Secretary of Defense and the "Quadrennial Defense Review" says that this is one of those enablers that really needs to be put in place for us to be able to move forward, and not just as the Air Force, but as a whole department. And so it is something we have been saying for sometime now that I think has been picked up on at the Department level.

Senator STEVENS. I will have to recognize Senator Harkin now, Senator.

Senator HARKIN. Thank you, Mr. Chairman.

Secretary and General, I just have two lines of questioning, both quite divergent. The first has to do with how much money is being spent in the Air Force to go after what I call a holdover of blue laws in the States. I am talking about what I consider to be the parallel of old blue laws, and I am talking about Lt. Kelly Flinn and her case.

I understand from the press it has been put on hold now. And I am sure that any response you would make on that would be that I cannot talk about it now because it is in review—unless you would like to make a comment.

But I am reading in the paper that Flinn was one of almost 70 people the Air Force has court-martialed for adultery since 1996. That must take a lot of manpower, a lot of lawyers. I am wondering if that is a wise use of taxpayers' dollars. Hundreds more, it says, were punished nonjudicially for the same crime.

My question is: How many people did the Air Force investigate on charges of adultery in the last year? I am sure you do not know that question, but I would like to have that for the record.

Dr. WIDNALL. We will certainly get that to you.

[The information follows:]

ADULTERY CHARGES

In 1996 the Air Force Office of Special Investigations conducted 29 investigations in which adultery was one of the offenses alleged. All of those cases also involved allegations of other offenses. There exists no central database that can identify all other inquiries involving allegations of adultery.

Senator HARKIN. Second, I would like to know, of the almost 70 people cited here—I do not know if that is correct; I am only telling you what is in the paper—I would like to know how many of those were of the rank of Lieutenant Flinn or higher?

Dr. WIDNALL. I would have to supply that for the record.

Senator HARKIN. I would like to know the answer to that.

[The information follows:]

ADULTRY CHARGES—RANK OF PERSONNEL

The following charts break down by gender and rank, courts-martial and non-judicial punishments for calendar years 1993 through 1996 that included a charge of adultery under Article 134 of the Uniform Code of Military Justice (UCMJ). The "Adultery Only" chart shows cases in which adultery was the only charge. The "Including Adultery Charges" charts also include cases in which adultery was charged together with other offenses. You will note that very few members are tried by court-martial on charges of adultery alone. We do not track administrative actions by specific precipitating offense and thus cannot determine how many may have been based on adultery.

The data in the charts do not include cases in which an officer was charged with conduct unbecoming an officer under Article 133, UCMJ, as a result of misconduct involving adultery.

COURTS-MARTIAL INCLUDING ADULTERY CHARGES

(By Rank, 1993–96)

Year/rank	Male	Female	Total
1993:			
AB	1	1	
Amn	2	2	
A1C	6		
SrA	7		
SSgt	8		
TSgt	4		
MSgt	2		
SMSgt	1		
2Lt	2		
1Lt	1		
Capt	1	1	
Maj	2		
Total	37	4	41
1994:			
AB	1		
Amn		1	
A1C	5		
SrA	11		
SSgt	5		
TSgt	2		
MSgt	1		
SMSgt	1		
CMSgt		1	
Capt	4		

COURTS-MARTIAL INCLUDING ADULTERY CHARGES—Continued

(By Rank, 1993–96)

Year/rank	Male	Female	Total
Lt Col	5		
Total	35	2	37
1995:			
AB	2		
Amn	3		
A1C	8		
SrA	8		
SSgt	7		
TSgt	3		
MSgt	1		
Capt	5	2	
Maj	3		
Total	40	2	42
1996:			
Amn	2	1	
A1C	10		
SrA	10	1	
SSgt	13		
TSgt	2		
MSgt	2		
CMSgt	1		
1Lt		3	
Capt	7		
Maj	5		
Lt Col	6	1	
Col	3		
Total	61	6	67

ADULTERY ONLY COURTS-MARTIAL

(By Rank, 1993–96)

Year/rank	Male	Female	Total
1993			
1994			
1995			
1996:			
Amn	1		
SrA	1		
Total	2		2

ARTICLE 15'S INCLUDING ADULTERY CHARGES

(By Rank, 1993–96)

Year/rank	Male	Female	Total
1993:			
AB	3		

ARTICLE 15'S INCLUDING ADULTERY CHARGES—Continued

(By Rank, 1993–96)

Year/rank	Male	Female	Total
Amn	12	3	
A1C	29	7	
SrA	55	10	
SSgt	27	2	
TSgt	6	1	
MSgt	12	1	
SMSgt	1		
CMSgt	4		
2Lt		1	
1Lt	2		
Capt	5	2	
Maj	3		
Lt Col	3		
Col	2		
Total	164	27	191
1994:			
AB	2	3	
Amn	10	8	
A1C	29	8	
SrA	59	11	
SSgt	34	4	
TSgt	12	1	
MSgt	7	1	
SMSgt	2		
CMSgt	1		
2Lt		1	
1Lt	2		
Capt	4	2	
Maj		1	
Lt Col	3		
Col	1		
Total	166	40	206
1995:			
AB	4	2	
Amn	15	3	
A1C	31	13	
SrA	64	14	
SSgt	37	1	
TSgt	14		
MSgt	14		
SMSgt		1	
CMSgt	1		
1Lt	1		
Capt	7		
Maj	2		
Lt Col	2		
Total	192	34	226
1996:			
AB	4	4	

ARTICLE 15'S INCLUDING ADULTERY CHARGES—Continued

(By Rank, 1993–96)

Year/rank	Male	Female	Total
Amn	19	3	
A1C	38	15	
SrA	70	23	
SSgt	49	8	
TSgt	16	1	
MSgt	14	3	
SMSgt	1		
CMSgt	5		
2Lt	1	1	
1Lt	1		
Capt	10	3	
Maj	3		
Lt Col	3		
Col	2		
Total	236	61	297

Senator HARKIN. And I would like to know the figure for how many were punished nonjudicially for the same crime, article 15's. Mr. Spinner, her attorney, said he had requested that Flinn's case be handled this way, but was turned down. And I am wondering why. Why would that be turned down? Why would not this be an article 15?

How many attorneys do you have in the Air Force, running around trying to find out how many people are committing adultery?

UNIFORM CODE OF MILITARY JUSTICE VIOLATIONS

General FOGLEMAN. Senator, I do not think we have very many people in the Air Force running around trying to figure out who is committing adultery. In most of these cases, what you discover is adultery is an incidental thing. To start with, adultery is a crime under the Uniform Code of Military Justice. That is a set of laws that was enacted by the Congress for the military to abide by.

Senator HARKIN. Yes, sir; I understand that.

General FOGLEMAN. So when—what we are interested in, in the U.S. Air Force, is not trying to regulate the sexual mores of America. We have got plenty of important things to do.

Senator HARKIN. I agree with you.

General FOGLEMAN. But what we are very much interested in is a thing called improper relationships that end up undermining the morale and discipline of an organization. And so the *Lt. Kelly Flinn* case is very much like the *Khobar Towers* case. I would really like to see people not comment so much on it until they have all the facts. And we cannot get the facts out until you either have a court-martial or you have a resolution of the affair so that you can put the facts out. And the facts have not come out.

Some of them are starting to come out. And I think that, in the end, this is not an issue of adultery. This is an issue about an officer who is entrusted to fly nuclear weapons, who disobeyed an order, who lied. That is what this is about.

The adultery thing is the fabric—that is the thing that has been spun up in the press. That is not what the Air Force is interested in.

Senator HARKIN. So the Air Force is not court-martialing her for adultery, then?

General FOGLEMAN. No; there is a specification of the charge of adultery, because that starts the chain of events here, where she ends up being charged with lying and——

Senator HARKIN. General, is not lying and disobeying orders also punishable under the UCMJ?

General FOGLEMAN. Yes.

Senator HARKIN. Then why was not she charged with that?

General FOGLEMAN. She is.

Senator HARKIN. I thought she was just charged with adultery. No; she is charged with lying and disobeying an order?

General FOGLEMAN. Yes, sir; it is this fact thing, sir. It is the fact thing.

Senator HARKIN. OK, then why was the adultery thing thrown in? I mean why were 70 other people and hundreds more punished nonjudicially for the same crime, or is that not true?

General FOGLEMAN. No; I am sure that those numbers are reasonably accurate. And it has not to do—it has to do with this idea that we must make sure that we have—let me go back and start it this way.

Are you offended by what happened at Aberdeen? I suspect you are.

Senator HUTCHISON. Yes.

Senator HARKIN. Absolutely.

General FOGLEMAN. My position on that and our position is if you do not have standards and if they are not universally known and uniformly applied, then the result will be incidents like Aberdeen. So, 2 years ago, the U.S. Air Force rewrote a regulation that had to do with a judgment that was, quite frankly, not very well understood. It was called fraternization. And everybody thought that that had somehow to do with a superior officer of one sex exploiting a subordinate of another sex.

Fraternization is much broader. It could be a female/male or a male/male or female/female, but the whole essence behind fraternization is if somebody in a military organization thinks that somebody else is getting special favor or curried, it undermines the trust and integrity and morale.

Senator HARKIN. I understand that. And that is very legitimate. But what I am reading in the paper and what I am understanding in this case is that 70 were court-martialed for adultery. It seemed to me that there are other options that you could pursue—I think the Air Force is looking ridiculous on this, and I think the military is, too.

Now, you used the word "incidental." You said it was incidental to what happened. Then why was she even charged with it? Why not charge her with more egregious crimes, which I consider to be much more detrimental to the service, lying and disobeying orders?

General FOGLEMAN. Sir, if we did that, somebody would drop a quarter on us and ask us why we were not charging this person for violating the Uniform Code of Military Justice. The wife of the young man involved in this has already written the Secretary a letter on this, asking this question. There is more than one victim as you get into these things. And so, when you start to talk about good order and discipline——

Senator HARKIN. No; but when it comes to things that get to things like adultery or fornication and things like that, it seems to me the best thing to do is to refer them to the chaplain, that is the proper people to handle something like that.

General FOGLEMAN. Sir, we do.

Senator HARKIN. You can note it in their record, and you can do the article 15's, but to spend time and money to prosecute people for this, I think is making us look ridiculous.

General FOGLEMAN. Sir, that is what we do. And unfortunately, I agree that it makes us look ridiculous because people do not have the facts. You start out with—you take this person who does this and you say, look, this is wrong, cease and desist.

Senator HARKIN. But, you see, a lot of States still have blue laws. That is what I was referring to, Madam Secretary.

General FOGLEMAN. I grew up in a State that had blue laws.

Senator HARKIN. Yes; they do. And I am sure, in some States, it is still a crime to commit adultery. But they do not enforce it because they have got better things to do with their time.

General FOGLEMAN. Yes, sir.

Senator HARKIN. And I am saying if you have got adequate charges against someone of disobeying an order and lying, then that is what you go after, not the adultery. Forget about the adultery. I do not know, it seems spiteful.

General FOGLEMAN. The chain of events starts—once the chain of events starts and you call someone in and you say cease and desist, and instead of ceasing and desisting, they continue——

Senator HARKIN. That is a violation of an order.

General FOGLEMAN. Exactly.

Senator HARKIN. Well, then you put them down for violating an order.

General FOGLEMAN. You do that.

Senator HARKIN. Then you court-martial them on that, too, or an article 15 or whatever you want to.

General FOGLEMAN. And you also—because somebody has been aggrieved by the original act, that becomes part of the specifications. You have to look at the totality of the thing.

Senator HARKIN. Any time you are involved in anything like adultery, there is always going to be some aggrieved party. I understand that. And I certainly do not condone adultery or fornication or anything else. But I am just saying that with all of the things that you have to do—you have got things like rape and sexual harassment and all the other things—disobeying orders, the things that really have to do with the form and structure and discipline of a military organization, but to throw in this adultery

thing, it just seems to me just makes us look ridiculous. And I will just end on that.

And to whatever extent we can send directions through the Appropriations Committee as to the expenditure of taxpayers' dollars in this regard, I would like to look at that. There are plenty of other things to investigate. And I am glad you have enlightened me on the other aspects of this case, but it seems to me that—if that had been done and that had been the charges—you would not have any of this stuff happening in the press.

General FOGLEMAN. Sir, those have been part and parcel of these charges since the very first day.

Senator HARKIN. But I say, should they have been part and parcel? Should you have a reexamination of how your lawyers and your investigators are spending their time if, in fact, hundreds—how many hundreds, I do not know—were punished for the same crime? I am beginning to wonder who is running around doing what and looking at this. And darn it, I did not even get to my second question which I really wanted to talk about, which was the F–22.

Now, I do not know who paid for this insert. I assume Lockheed Martin. I do not know. But I do know who paid for this. I do know who paid for this brochure, publicizing the "F–22 Raptor, the Keystone of Air Dominance." It has General Fogleman's picture. It has Dr. Widnall's picture. And it is a wonderful brochure about the F–22, and it must have cost a fortune to produce. And it is put out by the Air Force, paid for by taxpayers' dollars.

"GLOBAL ENGAGEMENT" BROCHURE

General FOGLEMAN. Yes.

Dr. WIDNALL. Yes.

Senator HARKIN. I wrote you a letter—oh, you have got another one.

Dr. WIDNALL. This is our document "Global Engagement," which we issued to let our Air Force know what we believe the Air Force would look like in the 21st century.

Senator HARKIN. Are you hawking a certain weapon system in that book?

Dr. WIDNALL. Well, I think we are laying out a whole range of military capabilities.

Senator HARKIN. Oh, yes.

Dr. WIDNALL. And I am sure there is a picture of the F–22 in here, although I cannot swear to it.

Senator HARKIN. Well, this book is dedicated to only one thing, and that is to try to sell to the public and to Congress a certain aircraft manufactured by a private business in America.

Now, I know times and conditions change. I wrote you a letter 1 month ago, asking about the use of Air Force planes to fly down for the F–22 roll out ceremony. And I just got a response yesterday.

Dr. WIDNALL. Yes, right.

Senator HARKIN. I am going to have to respond again, because I did not get all my questions answered. But I know those used to be done in the past.

There is a lot of things we used to do around here all the time that we do not do any longer because times change and cir-

cumstances change. There is no way you are going to convince me that taking an Air Force plane and taking Members of Congress and members of the press down for a rollout of a private aircraft from a private entity somehow enlightened them about the team and the program and the characteristics, et cetera, et cetera. That could be done in hearings. That is why we are paid to sit in hearings like this.

Senator STEVENS. Senator, I am going to have to tell you your time is up.

Senator HARKIN. Excuse me, Mr. Chairman, I know. I need to know——

Dr. WIDNALL. And we will supply that information to you.

[The information follows:]

F–22 PUBLICATIONS

Three thousand copies of the brochure "F–22 Raptor: The Keystone of Air Dominance for the 21st Century" were printed at a cost of $12,200.

Senator HARKIN. I have a feeling that there is a fine line that has got to be walked here. And I understand the Air Force, General Fogleman; you have got to do what you think is in the best interest of the future defense of our country. On the other hand, I do not know if it is right and proper for secretaries of any military organization or generals to be putting their picture in a brochure that is basically hawking a certain procurement of a certain aircraft that is kind of contentious right now.

You could talk about the need for the military structure, what the defense projects——

Senator STEVENS. Senator, I am really going to have to ask you to stay within the boundaries here. Now, Senator Cochran has been waiting a long time, and we agreed to be over by noon.

Senator HARKIN. I know. And I appreciate it. I am sorry. I really wanted to get into the F–22. I will submit my questions to you in writing about this and how much this cost and under what authority you felt that you could spend taxpayers' money to put that out.

Senator STEVENS. Well, I suggest you write the Secretary of Defense, because we do the same thing when we christen vessels. We do the same thing when we launch every kind of vessel we buy, and that F–22 is already approved by the Congress. It has now been—money has been spent. It is official policy of the United States that you disagree with. But it is nothing wrong with the official policy of the United States.

Senator Cochran.

Senator COCHRAN. Mr. Chairman, thank you very much.

Madam Secretary, General Fogleman, we appreciate very much your patience and your cooperation with our committee.

I know that in the "Quadrennial Defense Review," one of the areas of concern was whether or not we were getting enough money planned for modernization. And one of the areas of modernization which we have to fund is the improvement of our current fighter trainers. We have a line of new trainers being funded in this legislation. I know they are going to be assigned to various pilot training facilities. Columbus Air Force Base in Mississippi is one of four pilot training facilities.

We were very pleased to see that in the last BRAC round, the Air Force had rated that pilot training facility the No. 1 flight training facility in the Air Force. Is it on schedule to receive these new trainers?

I understand that they are going to be assigned on a schedule that would have the trainers going to Columbus last among all of the pilot training facilities. That has scared the hell out of the people in Columbus. You know, the base closing round experience has traumatized folks all over the country. If they see one signal that indicates that you are not in the first row or the first rank, or you are not a valued part of the Air Force infrastructure, the rumors start flying around that you are going to be on the list for the next base closing round.

And so they start calling and wondering what is going on, what is the problem. Is there an explanation for that that will satisfy the people in my State that you have not all of a sudden decided that instead of the No. 1 pilot training facility in the country, that now we have the least favored pilot training facility in the country?

COLUMBUS AIR FORCE BASE PILOT TRAINING FACILITIES

General FOGLEMAN. Well, sir, I guess there would be two dimensions to that. There was nothing sinister in the deployment plan as they unfolded this thing.

Quite frankly, I wish we were buying the JPATS at a faster rate so that we could be, in fact, putting it into the bases faster—all of the bases. I would tell you that there is almost a reverse psychology at work here. And that is Columbus, because of its air space proximity, relative lack of crosswinds, all of these kinds of things, makes it a lot more viable to operate the T–37 out of there longer than it does some other places. And so the JPATS kind of flowed to other places.

The other part of the dimension is I will tell you that as we try to spin up our pilot training from the low numbers that we had in the past, up to about 1,000 to 1,100 a year, I cannot imagine us being able to close any pilot training facility when we are facing the problem we are with pilot retention, not only in the Air Force but all the other services.

So you know, I do not know how a BRAC would unfold. I do not know what the criteria were. But if somebody were to ask me today, do we have any excess capacity in the pilot training business, should we be looking to close a base, my answer would be absolutely not. And so that is about as good as I can do probably, Senator.

Senator COCHRAN. Well, I am reassured. I hope folks back home will be, too. Because I have understood all along that this is a modern facility and there has been a lot of money spent at that facility to upgrade simulators and all of the other equipment. The computerized training capacity there is very impressive. And all of my visits confirmed the fact that the Air Force has invested a lot of money there, and for a purpose—to keep it modern and keep it up to date. And I just wanted to be sure that something had not changed while I was not looking.

FUTURE BRAC

General FOGLEMAN. No, sir; in fact, as we talked about how much you shape a future BRAC, you know, to keep some of this anxiety down. One of my recommendations would be to go to the military departments and get this kind of military judgment that says, you know, this is where we are at on these kinds of bases or whatever. And if we have a category of bases, like pilot training or something, that it makes no sense to go through all this pain, because there is no payoff at the end, we ought to just take them off the table upfront, I think.

Senator COCHRAN. Well, that is one of the problems with the base closing process. The service can recommend and can put out the facts about what they think would sway the decisionmakers, and then the decisionmakers—in this case a commission that is independent, unaccountable, no appeal can be taken, not subject to cross-examination by anybody, but just sitting there and making these decisions, they get appointed by folks—but it is an unusual process. And because it is, it tends to frighten and traumatize—I used that word a while ago.

And so I am not very impressed with the recommendation that we are going to get to go through another one of those experiences. Because what happens is the communities invest hundreds of thousands of dollars to help support the presence of a facility that they know is important to the Air Force, has been recommended to be kept open, not on a hit list of any kind, and zoning is undertaken, all the public officials are mobilized to do everything they can to demonstrate their support for the service that is involved, and then to say we are going to get to go through this all over again, you all, don't you look forward to it?

I mean every town in America that has a military facility you can be assured is searching for ways to deal with this all over again. People contribute money, voluntarily, to help support the effort. Groups organize. People are hired—staff members, lobbyists. I mean if we took all the money that went into protecting communities from the possible effects of a base closure round, we could buy a lot more trainers, we could upgrade a lot more facilities.

I am not sure that this is a money-saving operation at all. I think it is a huge expense. And why is it even undertaken? Because the perception is that Members of Congress cannot make rational or good decisions based on facts and evidence, in concert with testimony and advice from the military services and the Commander in Chief and his staff. I think we are making a big mistake, saying that our governmental institutions are so incapable of functioning that we have to turn to these independent commissioners and trust that they are going to make the wisest decisions.

I am not impressed with that recommendation. I guess you can tell.

General FOGLEMAN. Yes, sir.

Senator COCHRAN. And I would vote against it if it were on the floor of the Senate today. But that is not our committee's responsibility to make that recommendation. The Armed Services Committee has had a hearing on it. They are looking at it. And I am

sure they will make a recommendation to the Senate, and then we will have an opportunity to debate it in the Senate.

What we are having to do here is to allocate scarce resources among a lot of competing interests and needs for the Air Force. And it seems to me that we are stretching the dollars pretty thin over the global reach that the Air Force has under its responsibility.

This air expeditionary force, for example, we looked at in Saudi Arabia and northern Italy to see what was being done there to carry our share of the burden for peacekeeping operations in Bosnia, as well as enforcing the no-fly zone in Iraq. And the big supplemental appropriation is supposed to offset some of those costs. But I wonder whether or not we are taking money from things like upgrading pilot training, trainers for the pilot training, or modernizing at Keesler.

For example, we have a need for new air traffic control equipment that will help improve the quality of training of air traffic controllers in the Air Force. The 2d Air Force is there. We are happy that they are a resident of our State. And Keesler has been one of the long-time training facilities of the Air Force, and we are very proud and honored that it is located in our State of Mississippi.

But my question is: Are we letting things like that slide? Is that one of the practical results of our ambitious effort to keep peace in the world and to send our planes and build facilities overseas? Are we putting in jeopardy those investments that we ought to be making here at home, in pilot training and training air traffic controllers at facilities that are important to our local economies as well as our national defense?

AIR TRAFFIC CONTROLLER TRAINING

General FOGLEMAN. Well, I think that what we are always trying to do is reach the balance in that. We try not to have any greater number of forces forward deployed than what we think we need to do the job. But clearly, I think the QDR gets at the heart of this.

Because what happens historically is we have the money in the procurement. We migrate it out of the procurement to pay either these contingency bills or we let a system, like this air traffic control training system, slip. And it is really kind of covered in an account called other procurement. And we will let it slip until it reaches a crisis. And then, when it reaches a crisis, we have to go in and pull money out of another account and transfer it there.

So in this QDR process, the way that it is supposed to work for us is, again, we stay within the top line. We have to identify some offsets that we can use to go work on these kinds of issues, to go fix things that would become migration candidates in the future. And that was one of the commitments that the Secretary of Defense made to the service chiefs as we went and worked this deal—that these dollars that we would identify would be available to us, as services, to go fix these kinds of things.

And I think all of us have seen—and I mentioned it in my introductory statement—that we have seen some erosion in near-term readiness in some of these things, because we tend to be trying to

get on with preserving our long-term modernization, and we tend to push some of these things out longer than we would like.

Senator COCHRAN. Thank you very much.

Senator INOUYE [presiding]. Senator Hutchison.

Senator HUTCHISON. Thank you, Mr. Chairman.

F–22 CONSTRUCTION

I just wanted to ask one other question. Do you think it would be more efficient or save money if the F–22 were made all in one place?

Dr. WIDNALL. I guess I would not want to give a quick answer to that, because, at this point, we sort of are where we are. It is a teaming arrangement. We have a whole variety of subcontractors. And it is sort of a common way that one builds aircraft, to do the large sections at different manufacturers and bring them together. So I guess I really do not have an opinion on that. But I could sort of get back to you on that.

[The information follows:]

F–22 CONSTRUCTION

The F–22 program is structuring the production program to incentivize the contractor to produce the F–22 at an affordable price. The contractors are responsible for structuring efficient production operations to reach the established program pricing goals. Currently, the F–22 undergoes final assembly at a single site—Lockheed Martin Aeronautical Systems (LMAS), in Marietta, GA. Major structural sections are assembled at LMAS, Lockheed Martin Tactical Aircraft Systems (LMTAS), Fort Worth, TX, and Boeing Military Aircraft (BMA) Seattle, WA.

A decision to abandon the Tri-Company (TRICO) organization at this point in the program would have immediate, significant cost, schedule, and industrial base impacts. First, the industrial business base would suffer as employment would be reduced at two of the three sites. The losing facilities would be directly impacted by reduced employment and indirectly impacted by lost learning which would have kept them competitive for future contracts (i.e., the Joint Strike Fighter). Secondly, the program would experience some level of added nonrecurring cost to reacquire unique production capabilities previously performed at the other sites. Examples of these include the Precision Drill Center and automated composite tape lay-up machine at Boeing. A third impact would be the necessity to relocate/recreate tooling from the other sites. The program team decided early to invest in production ("hard") tooling to prove tooling concepts in Engineering and Manufacturing Development (EMD). This large, complex tooling would have to be relocated/recreated at the single production site. Finally, as we proceed with flight testing of the EMD aircraft and into initial production, we anticipate some level of design change to ensue. Given that each of the primes bring unique engineering talent to the team, there would be an added level of learning loss impact as we implement these changes into the production design.

AIRCRAFT MANUFACTURE

General FOGLEMAN. I think I would have to defer to the Secretary on that.

One of the things that makes this type of a manufacturing process more viable today than it ever was in the past is the fact that we are, in fact, using CAD/CAM systems out there. In the past, when you were building airplanes off of paper and you were essentially constructing metal parts, we spent a tremendous amount of time trying to match up wings and fuselages and things like that. And what we are discovering now is that we do have centers of excellence, you know, that certain manufacturers have made tremendous investments, many of them associated with their commercial activities or whatever. They have large autoclaves.

And so you save having to replicate things or bring that, by taking advantage of the expertise that has been developed at these various centers. And with the CAD/CAM systems, we very quickly seem to be able to pull this stuff together and it works well. So, that is my only observation.

Senator HUTCHISON. Well, it is just a thought that I thought I would throw out there. And it might be something you might consider asking if you are looking at saving money down the road and making it more efficient.

Thank you.

Thank you, Mr. Chairman.

Senator INOUYE. Thank you very much.

Before recessing, if I may, I would like to make a couple of observations. First, on the concern expressed by my colleague from Iowa, I have always felt that it is your responsibility to communicate with Members of Congress in the best way possible. You could send us a volume of single-spaced memos, and you know very well that very few if any Members of Congress would read them. At the same time, you could do the same for personnel in the Air Force or any other service. You know that most airmen and officers would not read them. Communication is very important and I hope that you will continue doing this.

Just a few weeks ago, I was privileged to participate in the launch of a very small ship, a Coast Guard ship. The unit price was less than a single F–22. From the standpoint of the budget, it is not that important. But yet the color guard was there, the Coast Guard band was there, and 3,000 people were assembled. It was a big event. And I suppose a few thousand dollars were spent for that purpose.

But I think it is all part of the process, part of morale. And I consider that to be an important function on your part. So I hope that you will not stop communicating with us. I think it is very important that you issue your report to the troops and to the Members of Congress.

The other observation I would like to make is the one that the chairman and I had the privilege of participating in on your aircraft. I thought I knew as much as anyone on what was happening on the Korean Peninsula. I have always considered that a sensitive area. But I left there feeling that this was a very dangerous place. Here you have a force up north that has about 10,000 artillery pieces aimed directly at one city, Seoul. They have the second largest army in the Pacific and Asian rim, second only to China—larger than ours, larger than Korea and the United States combined.

And at the same time you have a regime that is almost religious in nature. And then you add to this dangerous formula, starvation. I can understand why, in our visit to Osan, your commanding general there suggested that they should step up their training program, to make certain that they are ready. And I must commend you, sir, for sending those instructions to the people. I just hope that the people of the United States sense that it is not all peaceful in the Korean Peninsula, that the potential for an explosion is real, and one mishap could bring this about.

ADDITIONAL COMMITTEE QUESTIONS

I know I speak for the chairman when I say thank you very much for your presence this morning and your testimony.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED TO SECRETARY SHEILA E. WIDNALL

QUESTIONS SUBMITTED BY SENATOR TED STEVENS

F–22 FIRST FLIGHT AND DEVELOPMENT STATUS

Question. Secretary Widnall, are you anxious about progress on avionics and integration and software development for the F–22?

Answer. The F–22 will feature capabilities not previously achieved in a fighter weapon system. The development risks are well understood. However, program risks for avionics and software development, integration and interface are being mitigated by using common interface definition tools, performing integration incrementally beginning with subsystems and continuing to total systems integration, using a single set of software/hardware development tools, prototyping and benchmarking software, making extensive use of the avionics integration laboratories and simulators, and carefully evaluating progress using metrics.

The avionics capabilities required to support the F–22 first flight are ready. Equipment operational/flight clearance (EOFC) have been issued, the necessary avionics hardware and software have been installed in the aircraft and have passed functional tests. However, these are only a subset of the suite of avionics equipment that will be the final F–22 configuration.

The F–22 program restructure added development time, expanded ground test facilities, and added flight test time due to the anticipated complexity of the efforts. The Air Force is committed to and has fully-funded the F–22 program, and has high confidence that it will deliver on time and within budget.

Question. Secretary Widnall, can you describe the prime contractor's planned investment in the F–22 EMD program?

Answer. The bulk of the contractors' investment, some of which will begin now while the program is in the Engineering and Manufacturing Development (EMD) phase, is targeted for the Production program, which is scheduled to begin next year (fiscal year 1998). The planned investments are not needed or required to meet the EMD contractual requirements. The contractor plans to implement numerous producibility improvement projects, coupled with lean manufacturing initiatives and performance-based contracting to ensure costs remain within budget.

The Lockheed-Martin/Boeing/Pratt & Whitney industry team, with Lockheed-Martin and Pratt & Whitney as the prime contractors, is taking numerous steps to continue the F–22's history as a model acquisition program.

F–22 PERFORMANCE

Question. Secretary Widnall, what F–22 systems and technologies are important to the joint strike fighter program?

Answer. The F–119 is the core engine for the Joint Strike Fighter (JSF) aircraft. The JSF F–119 derivative engine supportability will significantly increase from F–22 lessons learned because reliability and durability anomalies will be worked out during F–22 testing and operational usage. When the JSF enters service, the F–119 will have already experienced approximately 750,000 hours of use.

F–22 avionics are important to the JSF. To date, $2.2 billion has been spent within the F–22 avionics program that has a direct benefit to JSF. Additionally, $1.3 billion of the work to go will have direct benefit to the JSF.

QUESTIONS SUBMITTED BY SENATOR ARLEN SPECTER

STATUS OF MC CLELLAN/TOBYHANNA MOA

Question. On March 13, 1997, the Defense Depot Maintenance Council approved the plan to transfer the ground communications-electronic workload from McClellan Air Force Base to Tobyhanna Army Depot. The DDMC directed the Army to prepare a Memorandum of Agreement to transfer workyears and authorizations so that

Tobyhanna could start hiring Air Force Personnel. Please inform me if the MOA is proceeding under an acceptable time frame and when Tobyhanna will be able to hire?

Answer. The Memorandum of Agreement (MOA) is proceeding under an acceptable timeframe. As of June 9, 1997, the last iteration of the draft MOA was sent to Air Force Materiel Command for approval with a high expectation of full agreement. After the MOA is signed, the Army will stand up some form of Forward Operating Agency at McClellan AFB, CA, and begin transferring people, as practical. Twenty-two percent of the current workload will transfer in phases over the following fiscal year beginning on Oct. 1, 1997. With the signed MOA, the Army should be able to hire people who are willing to transfer or hire against vacant positions.

TRANSFER OF FUNDS TO TOBYHANNA

Question. The Defense Depot Maintenance Council also directed the Air Force to reprogram BRAC funds for the necessary renovations at Tobyhanna, which I understand will total about $13.6 million. I understand that the Army needs fiscal year 1998 military construction funds to accommodate the transfer of the ground communications-electronic workload in fiscal years 1999 and 2000. Has the Air Force requested funding for the transfer yet, and, if not, when will it do so? If military construction funds are not available, will the Air Force request a reprogramming of Operations and Maintenance funds to MILCON funds in order to complete the transfer as soon as possible?

Answer. We are in the process of determining whether Military Construction or Operations and Maintenance funding will be the best source to meet facility and property requirements for this action, considering the tight authorization levels imposed on the Army. We expect to resolve this issue within the quarter.

QUESTIONS SUBMITTED BY SENATOR PETE V. DOMENICI

AIR FORCE RESEARCH LABORATORY/IMPACT TO PHILLIPS LAB

Question. On April 1, 1997, the Air Force announced a plan to reorganize its laboratory organizational structure under a single commander based at Wright-Patterson AFB, Ohio. The final organizational structure is scheduled to be implemented by October 1997. We have considerable concerns about how this will effect manpower levels at Phillips Lab. Will you please provide the Subcommittee within 15 days, a report detailing the consolidation of the Wright, Armstrong, Rome and Phillips Laboratories into a single Air Force Laboratory?

Answer. The new single laboratory, formed on April 8, 1997 and called the Air Force Research Laboratory (AFRL), is headquartered at Wright-Patterson AFB, Ohio. The primary goal of this organizational realignment is to reduce management overhead while improving the focus on technical activities. Additional goals include organizational alignment of similar technologies which are now distributed among multiple laboratories, as well accountability for all laboratory resources (funding and people) under a single commander. The expected result will be a streamlined laboratory structure that better meets the needs of the warfighter and our other customers.

The mission of the single laboratory has not changed from that of the previous laboratories and the Headquarters Air Force Materiel Command (HQ AFMC) structure. The realignment to a single laboratory is strictly organizational in nature. There is no intent to close any sites or move any mission-related (research and technology development) activity from current locations.

Under the currently implemented first phase of the realignment, the four existing laboratory structures remain intact, but now report to the new AFRL commander (AFRL/CC), instead of the four product centers to which the laboratories were previously assigned. The Air Force Office of Scientific Research (AFOSR), which manages our basic research program, also reports to AFRL/CC. In Phase II (to be implemented in October 1997), our intent is to disestablish the four existing laboratories as organizational entities and reorganize their current technology directorates (over 20) into about 10 larger technology directorates. The directors of the new technology directorates, along with the director of AFOSR, will report to AFRL/CC.

Several of these new technology directorates will have components in more than one location since there is no intent to move mission-related work or close sites. The number and content of the new directorates will be carefully formed such that similar technologies are grouped together under a single manager so as to maximize technical synergy and, thereby, promote the most efficient application of dollars and people. The recommendation for the number of directorates and their technical con-

tent will be the result of a special task force composed of senior representatives from our current four laboratories who will examine various options over a period of several weeks.

The current HQ AFMC Science and Technology (HQ AFMC/ST) staff is the core of the new AFRL staff, and will be augmented by staff personnel currently assigned to our four existing laboratories as we approach the October 1997 implementation date for Phase II. The new AFRL staff will provide support for both HQ AFMC (the old HQ AFMC/ST job) and the AFRL commander. The exact size of the single laboratory staff has not yet been defined, but will be smaller than the current sum of the HQ AFMC/ST staff and our four current laboratory staffs. In order to populate the headquarters with a representative group from all the laboratories, a small number of staff positions may be moved from current laboratory sites to Wright-Patterson AFB.

There are approximately 7,100 authorized positions in the science and technology community today. While we expect manpower reductions to result from this reorganization due to organizational streamlining and reduced layering, we are still defining how large this reduction will be and where it will occur. Reductions resulting from the single laboratory realignment will focus on overhead (support and management) positions rather than on the scientists and engineers performing research.

Question. As part of that report will you also include detailed information about the proposed organizational structure, changes in location, funding and staffing of directorates and programs, and potential impacts to the States involved (Texas, New York, California, Ohio, and New Mexico)?

Answer. There are no plans to move people (with the exception of a few staff positions), technical programs, or funding from current locations. Overhead position reductions realized by the organizational streamlining will probably occur at all current locations. The exact number of positions which may be reduced has not yet been determined. Similarly, the exact effect of the organizational streamlining on any specific state cannot be determined at this time.

IMPORTANCE OF KIRTLAND AFB

Question. During the last base closure process Kirtland AFB was the only base in the history of base closure that the Secretary of Defense wrote to the BRAC Commission and said that he had made the wrong decision in recommending a major realignment of the base. Since long before that time, we had been working diligently to make Kirtland a "sunrise" base and not a "sunset" base. Can you tell us why Kirtland is so important to the Air Force and your views about the role it will play in the future?

Answer. Kirtland AFB, NM offers a unique combination of units that provide the necessary oversight, implementation, modification and storage of United States nuclear assets. The nuclear units at Kirtland—Department of Energy, Defense Nuclear Agency, Kirtland Underground Munitions Storage Center, high explosive testing, and Radiation Simulator operations enhance nuclear synergism. It is also the location of one of the Air Force's premier laboratory facilities, Phillips Laboratory. The consolidation of Space Test and Experimentation from Los Angles AFB, CA offers the high-tech laboratory interaction needed to succeed in space. The base is also home for one of the Air Force's Special Operations Units, the 58th Special Operations Wing, and provides the unit with excellent training opportunities and support. Continued operations of these units at Kirtland will provide the Air Force with the research, tools and warfighters needed to achieve the objectives of Global Engagement.

USAF TRAINING FOR THE GERMAN AIR FORCE

Question. Many know that Holloman Air Force Base is home of the famous F–117 Stealth Fighters, however, not many know that Holloman is also home to a training mission of the German Air Force. That mission is expanding soon to include an additional 30 Tornado aircraft and 500 military personnel and their families. Can you tell us whether that mission remains on schedule and why relationships like the one we have formed with the German Government serve the interests of the Air Force and of the United States?

Answer. Yes, the mission remains on schedule for the planned operational start date of October 1999. The Environmental Impact Statement (EIS) expanding the German Holloman AFB, NM operations is on schedule for completion in December 1997. No show-stoppers have been identified at this time. The construction program is scheduled to begin immediately following a favorable Record of Decision on the EIS. All projects are on schedule in the design phase.

This relationship with the Germans serves the interest of the Air Force and of the United States, both militarily and economically. The drawdown in Europe and Germany continues to reduce the daily contacts our Services enjoyed for the past 50 years. This relationship further strengthens our military-to-military contacts directly contributing to the Peacetime Engagement component of our current National Military Strategy. The results of these contacts help build mutual trust, effective communications and interoperability, and doctrinal familiarity. The success of the allied forces in Desert Storm is, at least in part, attributable to the close and effective military-to-military working relationship fostered by training and working together. Germany, a key ally and coalition partner, is taking on more and more responsibilities outside their own country as demonstrated by their current contribution to NATO's Stabilization Force and Joint Endeavor. The training that the Germans receive from this arrangement makes Germany a more capable and reliable partner which translates into committing fewer U.S. troops to meet future contingencies around the world.

Economically, the Germans are fully funding all construction costs associated with the Holloman beddown. They have already spent $35 million on infrastructure projects and the next phase of construction will be over $100 million. They also pay for all base operating costs associated with being at Holloman AFB. Lastly, this relationship has had a positive economic impact for the local economy in the Alamogordo, NM community.

AIR FORCE PAY AND BENEFITS

Question. What changes are being made in Air Force pay and benefits under the QDR?

Answer. There are no final recommendations at this time from the Quadrennial Defense Review regarding Air Force pay and benefits. Many proposals and ideas have been surfaced and will receive further study.

FOOD STAMPS

Question. How many Air Force families receive food stamps?

Answer. The results of a 1995 Office of the Secretary of Defense food stamp survey found that approximately 11,900 active duty Department of Defense military personnel (0.8 percent) are eligible to receive food stamps. Based upon the DOD estimate, the Air Force estimated that approximately 1,200 active duty Air Force members (0.3 percent) may be eligible to receive food stamps. More than half of the members eligible to receive food stamps are only eligible because the United States Department of Agriculture does not include in-kind housing (forfeited Basic Allowance for Quarters/Variable Housing Allowance) as cash income. If on-base families were excluded, the food stamp population would be reduced from 0.8 percent to 0.3 percent of the total DOD force (from 11,900 to 4,500 members) and from 0.3 percent to less than 0.1 percent of Air Force population (from 1,200 to 400 members). Typically, those eligible for food stamps are junior enlisted members with larger-than-average families.

Question. Does the Air Force believe that this is a serious problem? What do you propose to do to solve it in the Air Force?

Answer. While the food stamp issue warrants attention, we do not consider it a serious problem at this time.

The Air Force always emphasizes a full range of quality of life programs to complement other Governmental programs and to provide for a reasonable standard of living for all ranks. Most recently, we successfully sponsored Variable Housing Allowance locality floors to assist our younger members with their housing expenses in high-cost areas. We have maintained a mix of community programs to help our enlisted families meet financial challenges, such as spouse employment placement and personal financial management programs within our Family Support Centers in addition to the interest-free loans and grants available through the Air Force Aid Society. Also, our fee structure for such things as child care and youth before- and after-school programs are adjusted, based on total family income, to make such essential services affordable for everyone. Another area where our younger families face steep expenses is when they are reassigned through a permanent change of station. We have taken deliberate steps to ease their financial burden by providing tiered temporary lodging facility rates and by waiving the surcharges for family members in our enlisted dining facilities. Finally, in addition to quality of life initiatives, military personnel must continue to receive statutory pay raises or higher to keep pace with private sector wage growth.

F–22 RADAR CROSS SECTION

Question. What are the Air Force's current plans to measure the F–22 radar cross section at the RATSCAT facility at Holloman AFB? Is it correct that initial measurement will only be available from F–22 contractors?

Answer. There are no plans to measure the F–22 radar cross section (RCS) at the RATSCAT facility at Holloman AFB, NM. During the previous Demonstration and Validation phase, a full scale pole model was evaluated at the RATSCAT Advanced Measurement System (RAMS) facility at Holloman AFB. The F–22 full scale pole model will be measured at Lockheed-Martin's Helendale Measurement Facility, which is the predecessor (and nearly identical in design) to the RAMS facility. The program determined that testing at Helendale would be more cost effective. During the Demonstration and Validation phase of the program, full scale pole model data taken at both Helendale and RAMS were in agreement. Also, Air Force representatives will be present during the bulk of the F–22 pole model measurements taken at Lockheed-Martin's Helendale facility to ensure proper data collection procedures are followed.

QUESTIONS SUBMITTED BY SENATOR DALE BUMPERS

B–2 COST PER FLYING HOUR

Question. I have heard that each B–2 flight hour costs about $120,000, when you include the cost and time of repairs and maintenance? Is that true?

Answer. No, the direct incremental costs of each B–2 flying hour is approximately $16,000. This includes the costs for aviation petroleum, oil, and lubricant; supplies, parts, and maintenance which is the traditional method used by the Air Force to measure the operation and maintenance cost per flying hour. The higher number referenced in the question is an approximate measure of the annual B–2 funding in all appropriations divided by the programmed flying hours.

B–2 DEPLOYMENT REQUIREMENT

Question. Is it true that the Air Force recently eliminated the requirement that B–2 bombers be able to deploy to bases overseas? Why?

Does that mean that, in the case of a war in the Middle East or Korea, B–2's would have to make day long round-trips from Whiteman AFB to deliver a load of bombs?

Does that mean that B–2 will not be forward-deployed as part of an Air Expeditionary Force?

Answer. It is true the B–2 Block 20 aircraft are not planned to deploy to forward locations. Several months prior to the B–2's Block 20 Initial Operational Capability (IOC), Air Combat Command (ACC) reviewed the results of low observable testing and maintenance of the low observable characteristics at Whiteman AFB, MO. Based upon the difficulties encountered in maintaining the B–2's signature at the main operating base—maintenance process documentation, materials availability, material properties, and manpower availability—ACC determined that it would be unrealistic to expect that the signature could be maintained at austere, forward locations and that it would not be cost effective to try to overcome the problem prior to IOC. Therefore, ACC deleted the requirement for the Block 20 B–2 to conduct operations from a forward location, committing the aircraft to support combat operations, including those in Korea or the Middle East, from Whiteman AFB. The Air Expeditionary Force (AEF) is being supported by the B–1 and B–52; the B–2 is not currently included in AEF planning. The current B–2 Operational Requirements Document (ORD), a document that outlines a weapon systems expected operational capabilities, requires the ability to deploy to a forward operating location for the mature, Block 30, B–2 fleet. ACC is presently finalizing the deployment concept of operation for the Block 30 aircraft through the on-going requirements review process.

F–22 TIER 1 AND 2 INITIATIVES

Question. The Joint Estimate Team said that a major reason for F–22 cost growth is because making the first three of nine development aircraft was taking more touch labor than planned. Specifically, how will the Tier 1 and Tier 2 initiatives solve this "touch labor" problem?

Answer. The Joint Estimate Team (JET) estimated increase for production touch labor (prior to initiatives) was due to the higher than expected realization factors (actual time to complete work was greater than originally predicted). The JET recommended producibility initiatives and a Government/Contractor investment agree-

ment on how to fund the initiatives. The contractors have since composed Production Cost Reduction Business Plans (PCRBP) which implement the JET recommendations to reduce cost. The specific initiatives to reduce touch labor cost are included in the following two PCRBP categories. First is the Producibility Investment Plan (PIP) which is designed to primarily reduce work content and improve productivity. The PIP investment requires a $107 million contractor investment. Lockheed has approved 23 projects to date requiring an investment of $31.5 million that will result in production savings estimated at $604.4 million, a multiple return of 20:1. Examples of the PIP include single pass drilling and waterjet machining. Second is the Lean Aircraft Initiative which reduces touch labor and overhead costs. Examples of Lean Aircraft Initiatives include variability reduction and process improvement programs (such as six sigma at Lockheed Martin Aeronautical Systems), inventory control projects, and lead time reduction efforts.

F–22 PROGRAM RESTRUCTURING

Question. According to the GAO, the JET's tier 1 and tier 2 initiatives primarily consist of techniques that have been used on prior programs. Why were such initiatives not part of the F–22 program before you restructured it in February 1997. Weren't you concerned about saving money before then?

Answer. The program has considered various cost reduction techniques all along. However, it had not determined the specific projects nor was funding available for initiatives that were identified. The concepts for these initiatives have matured as the program has progressed based on actual data from building the first aircraft. Furthermore as the design has been developed into part drawings and manufacturing processes, producibility enhancement initiatives were able to be identified to improve the manufacturing and management processes to reduce the cost. These initiatives were reflected in the average unit production cost, and the annual affordability cost estimates used to develop the program budget estimate. Funding for these initiatives requires Government and Contractor investment. A major contribution of the Joint Estimate Team was to develop a memorandum of agreement between the Government and Contractor to define a strategy to jointly fund producibility investments.

QUESTIONS SUBMITTED BY SENATOR TOM HARKIN

AIR FORCE INVESTIGATIONS OF ADULTERY

Question. There has been a great deal of press attention on the case of Lt. Kelly Flinn and the accusations of her alleged adultery and other charges. I am curious as to how special a problem is the Lt. Flinn case. I understand that about 60 men and 7 women were court-martialed for adultery during the past year. How many Air Force cases during the past five years of personnel who committed adultery and related charges did not face court-martial and instead were handled administratively? What is the breakdown, by rank and gender, of the number of cases of adultery charges that ended in court-martial? What is the breakdown by rank and gender of the cases of adultery charges that were instead handled administratively?

Answer. The following charts break down by gender and rank, courts-martial and nonjudicial punishments for calendar years 1993 through 1996 that included a charge of adultery under Article 134 of the Uniform Code of Military Justice (UCMJ). The "Adultery Only" chart shows cases in which adultery was the only charge. The "Including Adultery Charges" charts also include cases in which adultery was charged together with other offenses. You will note that very few members are tried by court-martial on charges of adultery alone. We do not track administrative actions by specific precipitating offense and thus cannot determine how many may have been based on adultery.

The data in the charts do not include cases in which an officer was charged with conduct unbecoming an officer under Article 133, UCMJ, as a result of misconduct involving adultery.

COURTS-MARTIAL INCLUDING ADULTERY CHARGES

(By Rank, 1993–96)

Year/rank	Male	Female	Total
1993:			
AB	1	1	

COURTS-MARTIAL INCLUDING ADULTERY CHARGES—Continued

(By Rank, 1993–96)

Year/rank	Male	Female	Total
Amn	2	2	
A1C	6		
SrA	7		
SSgt	8		
TSgt	4		
MSgt	2		
SMSgt	1		
2Lt	2		
1Lt	1		
Capt	1	1	
Maj	2		
Total	37	4	41
1994:			
AB	1		
Amn		1	
A1C	5		
SrA	11		
SSgt	5		
TSgt	2		
MSgt	1		
SMSgt	1		
CMSgt		1	
Capt	4		
Lt Col	5		
Total	35	2	37
1995:			
AB	2		
Amn	3		
A1C	8		
SrA	8		
SSgt	7		
TSgt	3		
MSgt	1		
Capt	5	2	
Maj	3		
Total	40	2	42
1996:			
Amn	2	1	
A1C	10		
SrA	10	1	
SSgt	13		
TSgt	2		
MSgt	2		
CMSgt	1		
1Lt		3	
Capt	7		
Maj	5		
Lt Col	6	1	

COURTS-MARTIAL INCLUDING ADULTERY CHARGES—Continued

(By Rank, 1993–96)

Year/rank	Male	Female	Total
Col	3		
Total	61	6	67

ADULTERY ONLY COURTS-MARTIAL

(By Rank, 1993–96)

Year/rank	Male	Female	Total
1993			
1994			
1995			
1996:			
Amn	1		
SrA	1		
Total	2		2

ARTICLE 15'S INCLUDING ADULTERY CHARGES

(By Rank, 1993–96)

Year/rank	Male	Female	Total
1993:			
AB	3		
Amn	12	3	
A1C	29	7	
SrA	55	10	
SSgt	27	2	
TSgt	6	1	
MSgt	12	1	
SMSgt	1		
CMSgt	4		
2Lt		1	
1Lt	2		
Capt	5	2	
Maj	3		
Lt Col	3		
Col	2		
Total	164	27	191
1994:			
AB	2	3	
Amn	10	8	
A1C	29	8	
SrA	59	11	
SSgt	34	4	
TSgt	12	1	
MSgt	7	1	
SMSgt	2		
CMSgt	1		
2Lt		1	
1Lt	2		

ARTICLE 15'S INCLUDING ADULTERY CHARGES—Continued

(By Rank, 1993–96)

Year/rank	Male	Female	Total
Capt	4	2	
Maj		1	
Lt Col	3		
Col	1		
Total	166	40	206
1995:			
AB	4	2	
Amn	15	3	
A1C	31	13	
SrA	64	14	
SSgt	37	1	
TSgt	14		
MSgt	14		
SMSgt		1	
CMSgt	1		
1Lt	1		
Capt	7		
Maj	2		
Lt Col	2		
Total	192	34	226
1996:			
AB	4	4	
Amn	19	3	
A1C	38	15	
SrA	70	23	
SSgt	49	8	
TSgt	16	1	
MSgt	14	3	
SMSgt	1		
CMSgt	5		
2Lt	1	1	
1Lt	1		
Capt	10	3	
Maj	3		
Lt Col	3		
Col	2		
Total	236	61	297

Question. Why does the Air Force spend so much time and resources addressing the adultery question? Does the Air Force judicial system have enough resources to handle all judicial or moral problems facing the Air Force? Please provide, for the record, the number of personnel that have been assigned to investigate and handle the legal deliberations for cases of adultery and related charges? What is the financial cost for the investigation and legal work related to adultery cases and related charges?

Answer. The Air Force judicial system does have sufficient resources to handle disciplinary problems. It is not designed for nor tasked to handle "moral" problems. Adultery is a matter of command concern, and is punishable under the Uniform Code of Military Justice, only when the conduct, under the circumstances, is to the prejudice of good order and discipline in the armed forces or is of a nature to bring discredit upon the armed forces.

No investigative or legal personnel are assigned specifically to handle adultery cases; they are handled, as necessary, by the Air Force's existing command, investigative and legal resources. There is no way to isolate the cost of processing such cases, but they make up a very small proportion of total disciplinary actions—cases in which adultery was the only charge comprise about one-tenth of one percent of courts-martial.

Commanders don't normally seek out information regarding adultery. When information comes to the attention of a commander about an adulterous relationship that could impact morale and discipline the commander addresses the behavior. In most cases, efforts to correct the behavior through verbal or written counselings or orders to refrain from contact are successful, and further disciplinary action is unnecessary. Those few cases in which disciplinary action may be necessary usually involve other charges in addition to adultery.

F–22 AIR FORCE PUBLICATIONS

Question. In keeping with Congress' oversight function, I would like to ask a couple of questions regarding the Air Force's role in publicizing the F–22 program. I would like to know the costs of other efforts by the Air Force to publicize the F–22 program, including the recent publication "F–22 Raptor: The Keystone of Air Dominance for the 21st Century." Under what authority does the Air Force publicize an aircraft, including the aforementioned publication? How many similar publications on individual weapon systems or programs does the Air Force publish each year? During the past five years?

Answer. The objective of the brochure "'F–22 Raptor: The Keystone of Air Dominance for the 21st Century" is to increase public awareness of how the F–22 supports the Joint Vision 2010 established by the chairman of the Joint Chiefs of Staff, and the Air Force mission of providing air superiority and air dominance for our military forces. Three thousand brochures were printed at a cost of $12,200. The F–22 Raptor is the only AF brochure solely dedicated to the F–22.

Air Force Policy Directive 35–2, which governs Air Force public affairs, states "The Air Force will conduct comprehensive, active public communication programs at all levels of command to earn the public understanding, acceptance, and support of the Air Force mission." The number of similar publications published by the Air Force in the past five years is not readily available. The Air Force sponsors many different types of publications on an annual basis in support of local community air shows, displays, demonstrations, and the Air Force recruiting mission.

F–22 PROGRAM COSTS

Question. I understand that the Quadrennial Defense Review advocated that the Air Force scale-back the F–22 purchase from 438 to 339 planes. Given the fact that the total purchase number of F–22's has been cut by the QDR, will the cost per plane now go up? How much will the per unit cost be? Will this put additional pressure on the Pentagon to push for overseas sales of the aircraft? If the goal of the F–22 program is for the U.S. to be the pre-eminent fighter force in the world, wouldn't overseas sales be contradictory?

Answer. Due to the reduction of the total purchase of F–22's, the unit cost will increase. An F–22 program restructure team has been formed to determine the specific cost and schedule impacts of the Quadrennial Defense Review (QDR) revisions, namely a decreased total buy from 438 to 339 aircraft, a maximum production rate decrease from 48 to 36 aircraft per year, and a slower production ramp. The F–22 per unit cost increase as a result of the QDR will not put additional pressure on the Pentagon to pursue Foreign Military Sales (FMS). We are assessing the feasibility of F–22 foreign sales and formulating an Air Force position on F–22 FMS which will ensure that the F–22's air dominance objective is preserved. Ultimately, the FMS decision will be made by the U.S. State Department.

B–2 BOMBER PROGRAM

Question. As we all know, the number of B–2 bombers for the U.S. Air Force now stands at 21. However, some of our colleagues in the House of Representatives are pushing for the purchase of additional B–2 bombers. Some want as many as nine additional bombers. Do you agree with the QDR analysis that the Air Force is better off by not buying more B–2's? If Congress does force the Air Force to buy more B–2's, what types of programs would you cut to fund the additional planes?

Answer. The Air Force believes the B–2 to be an extraordinary bomber—especially valuable in deterring and defeating distant armed aggression. However, funding for additional B–2's within the Air Force topline would unbalance the Air Force budget and deprive future Joint Force Commanders of other needed capabilities. The Air

Force would not expect to fund additional B–2's at the expense of other Air Force programs.

CIVIL AIR PATROL

Question. The Civil Air Patrol has proven both a valuable and cost-effective program. As recently demonstrated during the search for the missing A–10, CAP planes performed much of the search. The volunteer pilots' contribution of flying time saved the Air Force a lot of scarce funds. In fact, CAP performs about 85 percent of all search missions. The Iowa CAP and the Congressional Squadron based at Andrews Air Force Base are good examples of useful and effective CAP units. Does the Air Force plan to continue its long history of cooperation and support with the Civil Air Patrol? How can Congress assist the Air Force in working with and supporting CAP?

Answer. Yes, the Air Force plans to continue its cooperation with the Civil Air Patrol. The Air Force appreciates Congress' strong support of this program. Continued financial support for Civil Air Patrol programs and public advocacy of Civil Air Patrol missions are invaluable.

QUALITY OF LIFE FOR AIR FORCE PERSONNEL

Question. Quality of Life for Air Force Military Personnel is a key element of readiness. However, I think it is clear that there are some substantial shortfalls in our troops quality of life, including inadequate housing, shortfalls in the military medical system and even the thousands of troops forced to turn to food stamps and other forms of federal assistance due to inadequate pay. At the same time, I notice that the AF is considering a move to increase the number of generals by 15. Yet, I have seen no specific Air Force proposal to reduce the number of military families forced to draw on federal assistance programs. Do you consider the number of Air Force families who turn to federal assistance programs such as food stamps a serious problem? What are your plans to address the problem of Air Force families whose incomes places them at or near the poverty level?

Answer. Data regarding actual number of military members receiving food stamps is unavailable. It's not maintained by the United States Department of Agriculture (USDA) or Department of Defense (DOD). The results of a 1995 Office of the Secretary of Defense food stamp survey found that approximately 11,900 active duty DOD military personnel (0.8 percent) are eligible to receive food stamps. Based upon the DOD estimate, the Air Force estimated that approximately 1,200 active duty Air Force members (0.3 percent) may be eligible to receive food stamps. More than half of the members eligible to receive food stamps are only eligible because USDA does not include in-kind housing (forfeited Basic Allowance for Quarters/Variable Housing Allowance (VHA)) as cash income. If on-base families were excluded, the food stamp population would be reduced from 0.8 percent to 0.3 percent of the total DOD force (from 11,900 to 4,500 members) and from 0.3 percent to less than 0.1 percent of the Air Force population (from 1,200 to 400 members). Typically, those eligible for food stamps are junior enlisted members with larger-than-average families. While this is an issue which warrants attention, we do not consider it a serious problem at this time.

No data or study exists as to the actual or estimated number of members who fall below the poverty line. Based on the number of personnel who qualify for food stamps (qualification is 130 percent above the poverty level) we can hypothesize that considerably less than 0.3 percent of our members are at or below the poverty line.

The Air Force has always emphasized a full range of quality of life programs to provide for a reasonable standard of living for all ranks. Most recently, we successfully sponsored VHA locality floors to assist our younger members with their housing expenses in high-cost areas. We have maintained a mix of community programs to help our enlisted families meet financial challenges, such as spouse employment placement and personal financial management programs within our Family Support Centers in addition to the interest-free loans and grants available through the Air Force Aid Society. Also, our fee structure for such things as child care and youth before- and after-school programs are adjusted, based on total family income, to make such essential services affordable for everyone. Another area where our younger families face steep expenses is when they are reassigned through a Permanent Change of Station and we have taken deliberate steps to ease their financial burden by providing tiered temporary lodging facility rates and by waiving the surcharges for family members in our enlisted dining facilities. Finally, in addition to the quality of life initiatives, military personnel must continue to receive annual statutory pay increases or higher to keep pace with private sector wage growth.

Question. How does the Air Force justify the increase in the number of generals considering the "draw down" in the number of Air Force personnel? Considering the increase in cost for pay and benefits, what are the budgetary implications of adding more Air Force generals? Couldn't these funds be better spent on addressing the problem of military families on federal assistance?

Answer. Today's Air Force is more sophisticated and operates in a much different environment than in the past. Our force is smaller, but more complex and lethal. As history has shown, general officer requirements are not tied directly to personnel strength. Our general officer requirements are based on missions, organizational complexity, and command structures which have changed dramatically over the last 10 years. The number of contingency operations, as well as the overall operations tempo, has increased significantly. This resulted in a need for more general officers to serve in commander, staff, and task force positions to provide leadership, oversight, and management. To provide general officers for these new requirements we have been forced to fill some wing commander and important staff positions with colonels, even though the positions are validated as general officer positions.

The budgetary implications of providing adequate general officer leadership are relatively small when compared to the cost of possible mission failure and loss of life from inadequate leadership.

Providing a reasonable standard of living for our troops is a priority for the Air Force, and we will continue our efforts to take care of Air Force people and their families. Our primary purpose, however, is protecting the national interests of the United States. This requires that we have high quality visionary leadership.

QUESTIONS SUBMITTED TO GEN. RONALD R. FOGLEMAN

QUESTIONS SUBMITTED BY SENATOR TED STEVENS

F–22 FIRST FLIGHT AND DEVELOPMENT STATUS

Question. General Fogleman, can you give us an update on Air Force plans for the First Flight of the F–22?

Answer. The F–22 contractor continues to make progress towards First Flight of the F–22 in Marietta, GA. However, a single fuel leak in the F–1A fuel tank, behind the pilot's seatback, and an unsuccessful Auxiliary Power Unit (APU) run delayed First Flight beyond the planned May 29, 1997 date. The F–22 team has moved ahead with other ground testing and has since repaired the F–1A fuel tank leak and corrected the problem with the APU. The team has optimized the schedule to ensure the F–22 First Flight experiences a minimal delay while ensuring a safe flight.

F–22 PERFORMANCE

Question. General Fogleman, the Navy has testified that the F–18E/F can carry it into the future. Why does the Air Force need the added capabilities of the F–22?

Answer. America needs the F–22 because it will serve as a powerful deterrent, and, if necessary, shorten conflicts, reduce friendly equipment losses, and minimize the loss of her most precious resource our soldiers, sailors, and airmen. From a mission perspective, the need for the F–22 is driven by the state of air superiority required to realize Joint Vision 2010, and the total threat picture that must be overcome to achieve that state. The chairman's goal of full-spectrum dominance requires air dominance the total control of the enemy's airspace. The challenges to air dominance include advanced surface-to-air missiles (SAM's), fighter aircraft, and air-to-air missiles. The proliferation of "double digit" SAM's has created an environment in which current aircraft like the F–15 are unable to operate without a protracted and potentially costly roll-back campaign. The result is a sanctuary for the enemy, allowing him to harbor weapons of mass destruction and key strategic targets—the very targets that must be serviced quickly to minimize total force risk and shorten the conflict. The Defense Intelligence Agency (DIA) estimates the number of countries with this SAM capability will nearly double from 1995 to 2005, from 14 to 22. The F–15 is at rough parity today with the SU–27 and Mig-29; by 2004, it will be at a disadvantage with the fielding of the SU–35 and export versions of the Rafale and EF–2000, and the proliferation of advanced air-to-air missiles such as the AA–11, AA–X–12, and the MICA. DIA expects over 60 countries will possess these advanced aircraft in 2005; and 25 countries will possess advanced air-to-air missiles comparable to our best missile the AIM–120 Advance Medium Range Air-to-Air Missile. The F–22 has been designed from the ground up to answer both these near term challenges and future challenges well into the 21st century. While the Navy believes the F–18E/F meets their requirements, the F–22 has been designed to ful-

fill the needs of the Air Force providing air dominance for the entire joint battlefield. The F–22's attributes of stealth, supercruise, and integrated avionics allow it to operate throughout enemy airspace from day one. It will dominate the air threat creating a permissive environment for less capable aircraft.

JOINT AIR-TO-SURFACE STANDOFF MISSILE REQUIREMENTS

Question. General Fogleman, do you believe that the JASSM requirements should be reviewed; reevaluating whether modest upgrades of existing systems can meet most of the JASSM requirements?

Answer. The acquisition process in place for major development programs analyzes system requirements prior to periodic Milestone reviews. Each acquisition phase culminates in a Milestone review which must be accomplished before the system can proceed to the next development phase. The Milestone I review for Joint Air-to Surface Standoff Missile's (JASSM's) entry into the Program Definition and Risk Reduction phase was accomplished in June 1996. The Milestone II review for JASSM's entry into Engineering and Manufacturing Development will be accomplished in July 1998 and the Milestone III production review is scheduled for April 2001. The Milestone review process is sufficient for the JASSM program.

Evaluation of existing systems for the JASSM development is accomplished as part of the Analysis of Alternatives (AoA) process prior to each Milestone review. The AoA is now in progress and will be available in July 1998 for the JASSM Milestone II decision. This AoA will provide a technical and performance comparison of the JASSM and SLAM-ER+ (Standoff Land Attack Missile-Extended Range Plus (SLAM-ER+) (upgraded SLAM-ER to meet JASSM requirements) concepts to include standoff range, missile mission effectiveness and a comparison of cost effectiveness. At the Milestone II decision, the government will select the best solution to the JASSM need based on "Best Overall Value". It is noted that the SLAM-ER+ is produced by McDonnell Douglas. In competing for the JASSM contract, McDonnell Douglas chose not to offer the SLAM-ER+ as the solution for the JASSM requirement, but rather to offer a different design to meet the need.

JOINT AIR-TO-SURFACE STANDOFF MISSILE—SLAM-ER

Question. General Fogleman, what do you believe are the specific deficiencies to SLAM-ER in meeting the JASSM requirement?

Answer. In defining the Joint Air-to-Surface Standoff Missile (JASSM) requirements, the Key Performance Parameters were kept to a minimum to allow the two competing contractors maximum flexibility in designing a solution to the JASSM need. As such, there are three Key Performance Parameters—Missile Operational Range, Missile Mission Effectiveness (or the expected number of missiles to kill one of each target types) and Carrier Operability in the JASSM Operational Requirements Document (ORD). The contractor may trade other items in the ORD; however, each significant trade of a functional/performance requirement is assessed as to its impact on the mission execution capability and the operational limitation. Specific criteria to determine if the system performance meets the needs of the jointly developed JASSM requirements are mission planning; integration with the threshold aircraft; compatibility with the objective aircraft; projected launch, carriage and jettison envelopes for objective and threshold aircraft; autonomy; insensitive munition requirements; time on target; and bomb impact assessment. In addition, affordability is a key driver in this program with the Average Unit Procurement Price (AUPP) included in the system performance specification for the JASSM.

The Standoff Land Attack Missile-Extended Range Plus (SLAM-ER+) version is a proposed modification to the SLAM-ER to meet JASSM requirements and be suitable for Air Force use. These modifications include shortening the weapon by four inches for carriage in the B–1B, a fuel tank surface tension screen and folding fins for carriage on rotary launchers, and strengthened fins for external carriage on the B–52H.

The SLAM-ER+ is projected to barely meet the minimum acceptable operational range requirement. JASSM will have an operational range well beyond the minimum, providing the warfighter with greater operational flexibility in employing the weapon.

The SLAM-ER+ does not equal JASSM in the area of Mission Missile Effectiveness. The JASSM will have a 1,000 lb.-class warhead versus a 500–750 lbs.-class warhead for the SLAM-ER+. The JASSM has better penetration and blast/fragmentation, stealthy design, and capability against Global Positioning System jamming. In addition, JASSM is designed to defeat the 2010 surface-to-air missile threat. These JASSM features result in a Mission Missile Effectiveness that is sig-

nificantly better than that of the SLAM-ER+. The SLAM ER+ would require many more missiles and increased sorties to accomplish the mission.

The JASSM must have an expanded carriage and launch envelope in order for it to be employable from a diverse group of platforms such as F–16's and B–2's. SLAM-ER+ release limits do not meet these requirements.

The JASSM ORD has a requirement that the missile be an all up "wooden round" with an expected 20 year service life. The JASSM contractors will provide a 15–20 year warranty to cover the costs of all failures including redesign and retrofit. The JASSM system will require no Government maintenance. In contrast, the SLAM-ER+ will require spares and recurring Government depot repair. The SLAM-ER+ has an estimated life of only 10 years with a follow-on weapon required in 2010 timeframe.

Most important is the JASSM concept of cost as an Independent Variable. To date this concept has resulted in a reduction from $600,000 to less than $360,000 as an Average Unit Procurement Price for the JASSM. In the Engineering and Manufacturing Development phase, the selected contractor will be further incentivized to reduce costs and move the schedule to the left through the use of a Cost Plus Incentive Fee arrangement. In contrast, the AUPP for the SLAM-ER+ is estimated to be a higher figure than the JASSM objective requirement of $400,000. With a lower AUPP, a predicted lower life cycle cost (which includes a warranty for the life of the system), and its anticipated superior effectiveness, the JASSM projects to be the overall better alternative.

REENGINING COST VERSUS CAPABILITY

Question. General Fogleman, can the B–52 and AWACS aircraft meet their current mission requirements with existing engines?

Answer. Yes, the B–52 and AWACS aircraft can meet their current and projected mission requirements using the existing TF33 engines. There are operational/mission benefits to re-engining the B–52 and AWACS such as increased time on station/loiter time, fuel efficiency, reduced engine removals, increased radar surveillance coverage (AWACS). However, studies on B–52 and AWACS re-engining submitted in April 1997 showed that there was no expected payoff over the life of the B–52 (2040) and AWACS (2025).

Question. General Fogleman, does the capability added by re-engining the B–52 justify the upfront cost of leasing new engines

Answer. No. The Air Force was interested in leasing engines for the B–52 because of the significant improvement to the B–52's operational capability, and the precedence it would have set for long-term leasing of military equipment, and solutions to issues such as budget scoring, indemnification, and termination liability that this long-term lease would present. However, the improvements to the B–52's operational capability do not warrant the $1.3 billion increased costs over our projected, risk adjusted B–52 budget.

Question. General Fogleman, we are re-engining the KC–135 tankers. What is the difference between the KC–135 and the B–52 and AWACS cases?

Answer. The KC–135 was re-engined because the cost to re-engine the airplane was less than the cost to buy new tanker aircraft to cover the shortfall in tanker assets. The primary difference between the KC–135 and the AWACS with regards to re-engining is that economies of scale do not favor the extensive engineering manufacturing and development (EMD) work required to re-engine a small fleet such as the AWACS (32 operational + 1 test aircraft). The B–52 program was able to absorb the EMD into the proposed program, however the proposed lease and contractor logistics support costs exceeded the cost to fly and maintain the current TF33 engines.

NMD MINUTEMAN OPTION

Question. General Fogleman, do you believe that the Minuteman booster is a viable competitor as a booster for the National Missile Defense ground based interceptor?

Answer. Yes. A number of technical analyses, including studies completed by the Air Force, Ballistic Missile Defense Organization (BMDO), and RAND, have concluded that modified Minuteman ICBM's could perform effectively in a National Missile Defense (NMD) ground-based interceptor role. The existing Minuteman missile stages and guidance system have the capability to provide all required NMD interceptor booster functions. Minuteman-derived interceptors could be configured with any of the various front-end kill vehicles being considered for the NMD mission.

Minuteman has a record of proven reliability demonstrated in over 35 years of deployed alert service, as well as hundreds of operational flight tests. The Minuteman system's expected life span continues through at least 2020, with funded programs for replacement of aging propellants as well as guidance system upgrades.

Under the Department of Defense's "3 + 3" Deployment Readiness Program acquisition strategy, the NMD Joint Program Office has hired Lead Systems Integrator teams to conduct cost and performance analyses of alternative ground-based interceptor designs. These studies must specifically examine options based on Minuteman boosters. The Air Force believes the study results will confirm that Minuteman provides an attractive, cost-effective solution to the NMD interceptor requirement.

NMD MINUTEMAN OPTION—FLIGHT TESTS

Question. General Fogleman, do we need flight tests of the Minuteman booster to make an informed decision on how Minuteman would perform as the booster for National Missile Defense?

Answer. Based on Minuteman's demonstrated reliability and performance in more than 35 years of flight testing, the Air Force has great confidence in the ability of the system to perform National Missile Defense (NMD) boost functions. Of course, if a Minuteman-derived design is selected for development by the Joint Program Office, it would be necessary to conduct additional integrated testing of Minuteman with the NMD kill vehicle and modified command and control elements prior to deployment. Such testing would be needed with any of the ground-based interceptor alternatives now under consideration as well.

NMD MINUTEMAN OPTION

Question. General Fogleman, will the existing Minuteman command and control infrastructure provide an adequate building block for the National Missile Defense command and control system?

Answer. We believe most of the Minuteman infrastructure, including existing command and control elements, could contribute significantly to a National Missile Defense (NMD) architecture. Minuteman employs multiple communications systems that link the National Command Authorities, through the Commander in Chief, U.S. Strategic Command, to the missile launch control centers (LCC's). Within the Minuteman squadrons, a redundant, hardened communications network furnishes secure command and control communications, remote targeting, operational testing, and missile launch capability. The Rapid Execution and Combat Targeting console in the LCC, the duty station of the missile launch crew, provides the requisite interface between higher authorities and squadron command networks. In addition, Military Strategic and Tactical Satellites offer a jam-resistant nuclear hardened communications link to support kill vehicle guidance.

Depending on the specific architecture system design, our analyses indicate most of these elements could be adapted to an NMD role. The Air Force is currently conducting a series of operational evaluations of NMD battle management command control and communications concepts. These tests, capitalizing on scheduled ICBM operational flight tests, have thus far shown promising results which indicate Minuteman command and control systems could be modified to meet the timelines and other operational requirements of an NMD system.

QUESTIONS SUBMITTED BY SENATOR PETE V. DOMENICI

GERALD CHAMPION MEMORIAL HOSPITAL [GCMH]

Question. On March 17, 1997, I wrote to you about an idea that I believe fit nicely into the Air Force's privatization efforts and would save the Air Force millions of dollars. As you know, Gerald Champion Memorial Hospital in Alamogordo, New Mexico, proposes creating a shared hospital facility with Holloman Air Force Base. At your direction the Surgeon General has been meeting with officials from Gerald Champion and has been examining this proposal very carefully for some time. Can you tell us whether any agreement has been reached about the merits of this proposal and your personal views about why this proposal will be a great benefit to the Air Force at Holloman?

Answer. We continue to work with Gerald Champion Memorial Hospital to develop a mutually beneficial sharing arrangement. I believe their most recent proposal provides the basis for agreement; however, we must complete our legal review before I can offer my full endorsement. Further, the 1998 President's Budget does not include the proposed grant funds. So while the proposal may pass the legal review, I cannot commit to initiating this proposal until funding is made available.

With this sharing arrangement, the Air Force benefits both financially and operationally. To summarize the proposal, Gerald Champion would receive a $7 million grant towards construction of the shared hospital and, in return, provide us a 37 percent discount off of their billed charges. Our healthcare providers would operate on and care for our beneficiaries in the new shared hospital while providing outpatient care in a clinic on Holloman AFB, NM.

AIRBORNE LASER [ABL]

Question. The President's budget contains $157 million for the Airborne Laser Program (Managed by the Phillips Laboratory). The ABL will attack theater ballistic missiles, which are already in the hands of several Third World states, in the most vulnerable stage of flight, the "boost-phase." The ABL will also enhance terminal defenses by reducing the number of objects presented to the warfighter in those final stages. Some have said that the ABL will change the face of warfare forever. Can you tell us why the ABL is so important to the Air Force and the United States national security interests?

Answer. The Airborne Laser (ABL) will provide the warfighter a needed Theater Ballistic Missile Defense (TBMD) capability that, as alluded to in your question, complements our sister Services' terminal and midcourse systems. It is also in keeping with our desire to pursue leading edge technologies as a means to maintain our combat edge in a time of shrinking budgets and forces. In terms of our National Security interests, ABL's rapid deployment and stand-off employment characteristics will afford our civilian and military leaders flexible response options in times of crisis. In addition, ABL will confront a potential enemy with the prospect of his Theater Ballistic Missiles, possibly tipped with Weapons of Mass Destruction, falling on his own territory forcing him to think twice before launching them in the first place. It follows, therefore, that the development and ultimate fielding of ABL has inherent counter-proliferation value—a potential enemy may not want to invest in a weapon he could not employ without fear of it, in effect, being used against him.

EF–111 REPLACEMENT WITH THE EA–6B

Question. The Department of Defense has made a decision to replace the EF–111 with the EA–6B Prowler. This Committee has had significant reservations about the time of this replacement, and also about the upgrades. It is well known that currently 20 EA–6B's are subject to embrittlement of the center sections of their wings (a molecular anomaly in the aluminum stock when combined with use of that material in high stress environments such as flying, causes stress corrosion cracks). Replacement center sections in the wings of 20 aircraft manufactured prior to 1976 need to be installed. The Navy has no money in its fiscal year 1998 budget addressing this embrittlement issue. The Navy is taking a risk to the operational readiness of the EA–6B. Why doesn't the Navy have the $100 million required to address the embrittlement of 20 EA–6B center wing sections in its fiscal year 1998 budget, and how does this square with their commitment to ensure that it will be able to adequately handle the Air Force's electronic warfare requirements?

Answer. The Air Force is aware of the Navy's program to re-wing some of the EA–6B fleet; however, it does not appear this program will stop the Navy from meeting its Electronic Warfare responsibilities. Information made available to the Air Force indicates that the Navy has already purchased 20 sets of EA–6B center wing sections (CWS); 10 CWS were ordered in fiscal year 1995 for delivery late in calendar year 1997; and 10 CWS were ordered in fiscal year 1997 for delivery in fiscal year 1999.

The Air Force's interest in the health of the EA–6B program has been clearly expressed to the senior leadership in the Navy. EA–6B program reviews and compliance with the Tri-Service Memorandum of Agreement on EA–6B support are regularly scheduled to ensure the EA–6B can accomplish the Department of Defense radar jamming mission.

MANPOWER REDUCTIONS

Question. Under the QDR, the Air Force will reduce active duty manpower and the National Guard. What assurance can you give us that these reductions will occur only in headquarters or other bureaucratic functions and not in combat units.

Answer. The majority of the Air Force Quadrennial Defense Review active duty reductions will be achieved through outsourcing infrastructure functions where historically the Air Force saves over 30 percent through the public/private sector competition process. The remaining reductions will be achieved through force structure consolidations/restructure and streamlining overhead functions. The Air National Guard manpower reductions are driven by force structure changes which will con-

vert dedicated Air Defense units to the general purpose mission and modernizes Air National Guard fighter units with newer aircraft and increased capability. The conversion to the general purpose mission and aircraft modernization require less maintenance and associated support.

EF–111

Question. In your prepared statement you state that "electronic combat aircraft" are among those that are "most stretched" in terms of deployment time for peacekeeping and other foreign missions. As you know, this would include EF–111 aircraft such as those that are stationed at Cannon Air Force Base and are to be retired in 1998. If these assets are so important for peacekeeping and other foreign missions, and if this type of aircraft is among the most deployed, why are the EF–111's being retired before their useful life-cycle has expired?

Answer. We acknowledge that the EF–111 is among the high demand, low density assets within the Department of Defense (DOD) inventory, and as such have maintained an above average OPSTEMPO. The Air Force is complying with DOD direction, Program Direction Memorandum 1, dated August 1995, to retire these aircraft prior to the end of fiscal year 1998. The Air Force is satisfied that efforts by the Department of the Navy will meet all DOD radar jamming requirements previously addressed and agreed to during the 1995 Defense Resource Board.

Question. Won't the remaining electronic warfare assets be even more "stretched" if the EF–111's are retired early in 1998?

Answer. No. Prior to the Office of the Secretary of Defense Program Direction Memorandum 1 (PDM 1) in 1995 the Navy EA–6B force structure was drawing down to 80 Primary Authorized Aircraft (PAA) and the Air Force EF–111 force structure was 24 PAA. During the time from the 1995 Defense Resource Board and PDM 1 until the EF–111 retires, the total number of radar jamming Electronic Warfare (EW) aircraft will not change from 104. The issue of how to best support EW aircraft requirements and reduce OPTEMPO for these aircraft is currently under study by the Joint Staff.

STRESS FOR DEPLOYMENTS

Question. General Fogleman, the Air Force continues to operate in peacekeeping and other international operations at a historically high rate. What indicators do you use to register the stress that this high operating tempo puts service men and women under? What measures do you use to measure the stress for families? What do the data show?

Answer. The Air Force monitors several indicators for adverse impacts to personnel resulting from high operation tempo. One measure is personnel tempo (PERSTEMPO), which reflects the average number of days a member spends on Temporary Duty in a 12 month period, for any reason (contingencies, exercises, Professional Military Education, etc.). The Air Force's maximum desired PERSTEMPO is 120 days per year. Since implementing this standard in 1994, the Air Force successfully reduced the number of weapons systems exceeding the benchmark from 13 to four in fiscal year 1996. However, recent data reflects the numbers are once again on the rise with nine at or above 120 days for the 12 month period ending in March 1997.

Another indicator of stress to service members is retention rates. Our first term reenlistment rates are running approximately 59 percent, which is lower than in recent years but still above the Air Force goal of 55 percent. Enlisted accessions are on target for this year, but our recruiters tell us that it is getting harder to meet their goals. One area of growing concern is our rated retention numbers, which are down across the board, but most significantly for pilots. Over the next five years, airline hiring is expected to be dramatically higher than previously and the bonus take rate is down below 40 percent this year. Clearly, we cannot compete with the airline pay scale or family stability and must therefore seek alternative incentives to keep these valuable resources onboard.

The Air Force collects data on divorce rates, reported incidents of spousal abuse, juvenile crime, etc., and no conclusive relationship has been shown to exist between high Operations Tempo/PERSTEMPO and changes in those indicators.

STRESS FROM DEPLOYMENTS

Question. Are you familiar with the results of recent surveys taken at Hill, Pope, Shaw, and Seymour Johnson Air Force Bases that show the problem of stress from deployments, lack of real training, and other issues to be extremely serious?

Answer. Yes, we have seen the feedback from the surveys you mention. Even before they were done, we had initiated several measures which we feel confident will

improve many of the areas highlighted in these surveys. Following recent senior leadership meetings at Nellis AFB, NV, most of the Air Force Major Commands instituted post-deployment standdown policies to allow personnel an opportunity to recuperate and reacquaint themselves with family following long deployments. The Air Staff is investigating several other issues including options for improving aircrew continuation training during deployments. U.S. Air Forces, Central Command hosted a conference in late May to identify shortfalls and propose changes necessary to enhance training opportunities in Southwest Asia (SWA). Additionally, we are working to reduce the length of unit deployments to SWA. Global sourcing is implemented wherever feasible to share contingency taskings. An Air Combat Command Aircrew Retention Tiger Team is reviewing reported factors in lowered retention and means of reversing the current trend.

F–22 RADAR CROSS SECTION

Question. Will there be measurement of F–22 RCS by operational threat radars of a combat loaded F–22 in flight?

Answer. Yes, the F–22 will be tested in the baseline configuration (internal weapons carriage only—no external stores) during developmental testing and operational testing using Air Force-owned operational threat air-to-air radars and surface-to-air radars.

QUESTION SUBMITTED BY SENATOR DALE BUMPERS

B–2 MAINTENANCE

Question. Is it true that the average B–2 flies for one day and then is down for six days while it is repaired and maintained?

Answer. The 509th Bomb Wing has planned its B–2 flying schedule based upon a fly one day (scheduling 3 flights per aircraft into that one fly day), and then scheduling down for six days for low observable systems maintenance. This was initiated to support maintenance of the B–2's low observable systems, and generated by the wing's Interim Operational Capability requirements. Aircraft have been, and will continue to be, returned to the flying schedule early from maintenance as repairs are completed. In the future, improvements in B–2 scheduling will result with the fielding of Block 30 full production aircraft (which provide improved designs in low observable systems), application of more durable low observable materials, incorporation of diagnostic support equipment into the B–2 maintenance concept to support maintainability of low observable systems, and planned construction of a new two-bay paint facility at Whiteman AFB, Missouri to enhance low observable systems' maintenance production. In the interim, the 509th Bomb Wing is evaluating the fly one, fix six day scheduling policy for possible adjustments based upon current operational taskings and experience to date in maintaining the B–2's low observable systems.

QUESTIONS SUBMITTED BY SENATOR TOM HARKIN

F–22 JUSTIFICATIONS FOR AIRCRAFT

Question. I note that the Lockheed-Martin Corporation justifies the F–22 based on the fact that we live in a "dangerous world." The Lockheed-Martin Corporation prepared a chart last year that describes threats to the U.S. of tactical aircraft. I notice that on this chart, they list a number of high-performance planes in the hands of enemy nations. This includes the F–15 and the F–16. These nations include Canada and some nations that the Administration wants to include as part of an expanded NATO. What are the threats that the F–22 is designed to counter? Do these threats include nations which now use U.S. designed aircraft? Do you agree with the Lockheed-Martin characterization of the threat?

Answer. Senator, let me begin by answering your last question first. Yes, I do believe we are living in a dangerous world a world where regional peace has evolved where it did not previously exist. Yet several other regions in the world have undeniably become unstable and unpredictable. The Secretary of Defense addresses this very issue of regional instability and unpredictability in his opening remarks in the May 1997 Report of the Quadrennial Defense Review. I believe it is a dangerous world now and probably will be in the future. We must be prepared to fight for national interests. We must equip our forces to make our next fight a decisive victory.

The F–22 is designed to ensure theater air superiority by dominating the enemy in his air space at the outset of battle. The need for this capability is driven by the

state of air superiority required to realize Joint Vision 2010. The chairman's goal of full-spectrum dominance requires air dominance the total control of the enemy's airspace. To do so requires an aircraft not only superior to the air threat, but an aircraft capable of operating effectively in a highly integrated air defense environment.

Let me address operations in a highly integrated air defense arena first and then I will comment on air-to-air threats. The proliferation of state-of-the-art Surface-to-Air Missiles (SAM's) has created an environment in which our current air superiority fighter, the F–15, is unable to operate without a protracted and potentially costly roll-back campaign. The result guarantees the enemy a sanctuary within his territory, allowing him to harbor weapons of mass destruction and key strategic targets the very targets that must be serviced quickly to minimize total force risk and shorten the conflict. The Defense Intelligence Agency (DIA) estimates the number of countries possessing this SAM capability will nearly double between 1995 and 2005, from 14 to 22.

With respect to the air threat, the F–15 is at rough parity today with the SU–27 and Mig-29; by 2004, it will be at a disadvantage with the fielding of the SU–35, export versions of the Rafale, the EF–2000, the fielding and proliferation of advanced air-to-air missiles such as the AA–11, AA–X–12, Future Medium-Range Air-to-Air Missile (FMRAAM), and the MICA air-to-air missile. DIA expects over 60 countries will possess these advanced aircraft in 2005 and 25 countries will possess advanced air-to-air missiles with lethality comparable to our best missile the AIM–120 Advance Medium Range Air-to-Air Missile. F–22 has been designed from the ground up to answer both these near term challenges and future challenges well into the next century.

The F–22 will serve America well into the 21st Century. Who our friends and enemies will be in the future is uncertain. As a result, we could very well face advanced western equipment, including F–15's and F–16's. Iran, with their F–14's, is but one example.

INVENTORY MANAGEMENT

Question. I recognize that the Air Force is striving for better efficiency in its inventory management. However, I believe more can be done. I was surprised to see that a recent General Accounting Office report noted that the Air Force has more than $19.1 billion in unneeded inventory. For some of these inventory items, there is more than a 50 year supply. Why does the Air Force continue to buy items for which it has more than a 50 year supply?

Answer. The Air Force does not continue to buy items which are in long supply. In fact, the system that, quarterly, computes our requirements and determines where we are short and where we have overages takes into account all items already in our inventory and on-order and does not compute buys for items in long supply. The real issue being addressed in the General Accounting Office (GAO) report and the area of primary disagreement between the Department of Defense (DOD) and the GAO has to do with how to categorize inventory being held beyond that needed for immediate use—essentially two years of operations. The DOD holds inventory already owned beyond that needed for the next two years if we can foresee a future potential need. For example, until the late 1980's we operated over 200 B–52 bombers with an inventory of parts sufficient to support their operations. Today, we operate less than half that number but we intend to operate them well into the foreseeable future. It wouldn't make sense to throw away all of the old inventory we hold today just to have to try to buy it back at some future point in time. That is why we disagree with the GAO's categorization that all of the inventory we are holding beyond that needed for the next two years is "excess". Even the GAO has previously testified that they wouldn't propose throwing away all of this old inventory nor are there great potential savings in disposal. What we do buy are parts that have a projected future shortage. For the most part you simply can't use old B–52 or F–4 parts on B–2's or F–15E's. The bottomline is that the Air Force doesn't knowingly buy unneeded items. At the time we buy them we have a valid computed need for the item as best as we can determine.

Question. Has the Air Force considered changing its purchasing practices and adopting so called "best practice" standards, such as those employed by the private sector?

Answer. The Air Force has a very aggressive program designed to take advantage of commercial practices wherever we can in both the purchase and management of our inventory. In fact, we have assumed $798 million in savings in the fiscal year 1997–2001 period due to our "Lean Logistics" initiatives. These initiatives involved three major thrusts. First, we re-engineered the process for handling the inventory

we own. This re-engineering features commercial like expedited movement of materiel, streamlined processing, and rapid on demand repair in order to reduce inventory. Second, we are moving to take advantage of commercial type contracting arrangements such as Direct Vendor Delivery orders, third party sources, and catalog type contracts wherever possible. Third, we are adapting "Acquisition Reform" practices to spares purchases. We have eliminated base service stores across the Air Force and told the customers to rely on increased usage of the International Merchant Purchase Authorization Card purchase procedures. We have also implemented programs to eliminate mil-standards and are moving to performance type specifications whenever possible. We believe that we are moving very aggressively to implement "best commercial practices" in every facet of our inventory management activity.

SUBCOMMITTEE RECESS

Senator INOUYE. And this subcommittee will stand in recess until Wednesday, June 4. At that time we will receive testimony from public witnesses. Thank you very much.

General FOGLEMAN. Thank you.

Dr. WIDNALL. Thank you very much, Mr. Chairman.

[Whereupon, at 12:38 p.m., Wednesday, May 21, the subcommittee was recessed, to reconvene at 9 a.m., Wednesday, June 4.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1998

WEDNESDAY, JUNE 4, 1997

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 8:58 a.m., in room SD–192, Dirksen Senate Office Building, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens, Cochran, and Inouye.

NONDEPARTMENTAL WITNESSES

STATEMENT OF WILLIAM C. HOWELL, Ph.D., AMERICAN PSYCHOLOGICAL ASSOCIATION

OPENING STATEMENT OF HON. TED STEVENS

Senator STEVENS. Let me welcome all of the witnesses who have come here today. We have a large number of organizations and we must ask that you recognize we have to limit your remarks this morning, unfortunately, to 3 minutes or less. We have a special function today in honor of Senator Thurmond and all Senators will be there. So we will have to conclude the hearing by 10:15.

I am sorry for this problem. It is one of the things that happens when leadership tells you that you will be there. So we will be there. We want you to know that we will print your statements in the record.

We have a great many witnesses today. They are raising concerns about the Defense Health Program. We are working very hard on this problem to insure that active and retired military personnel and their dependents will continue to receive the best medical care we can make available.

I want you to know that at the beginning. We thank you for coming.

If you have any particular questions after the hearing is over, I would be pleased to have your comments to a member of the staff and we will respond. I will respond to you personally. But I do hope the you will understand the limitations on us today.

We expect Senator Inouye soon. But he said to continue. So I welcome you, Dr. Howell, as the first witness.

Dr. HOWELL. Mr. Chairman, I am Dr. William Howell, science director for the American Psychological Association speaking on behalf of that organization. As a former Air Force chief scientist for human resources and current member of several DOD technical ad-

visory boards, I also have a deep personal interest in military behavior research investment.

I am concerned that it is shrinking at a time when the demands on our warfighters are increasing exponentially.

As I am sure you are aware, our military is facing a host of new challenges. Forces are downsizing, women are playing an increasingly prominent role, an entirely new function, peacekeeping, has been added to the mission, the sophistication of weapons and information technology has dramatically changed skill requirements, and so on.

What has not changed is that success in military operations still depends on people—in every level, in every unit. The Air Force alone loses the equivalent of one fighter squadron a year through accidents. Around 80 percent of those involve human error. It is not because we don't have the world's best and most highly trained aviators. It is simply because we have allowed hardware and software to get too far ahead of humanware.

Similarly, teams and leaders are facing new demands that we are only beginning to understand. Need I mention gender integration issues?

The situation will not improve without serious investments in behavioral and social research, and currently that investment is appalling. Consider that personnel and training costs account for one-third of DOD's total budget. Yet DOD invests less than 1 percent of its science and technology budget in personnel and training research.

To put it another way, for every $4 we spend on equipment, we spend $1 on R&D to make it better. For every $4 we spend on people, we invest about 3 cents.

Nowhere is this more apparent than in the case of the Army Research Institute for the Behavioral and Social Sciences, ARI. This organization was established explicitly to conduct research on the kinds of issues that are of concern, and it is the principal source of expertise for all of the services in these critical areas. Yet the Army continues the major downsizing of ARI. In the past 2 years their budget has been cut one-half, from $50 million in 1995 to less than $24 million in 1997.

We appreciate the efforts of this committee to save ARI. That has been very helpful.

The ARI crisis is just the most immediate and vivid example of what we consider DOD's underfunding of human-oriented research. Our written statement includes specific requests for ARI as well as other important Army, Navy, and Air Force programs in the behavioral and social sciences.

Finally is the matter of the psychopharmacology demonstration project, which has come under some unjustified criticism recently.

As you know, DOD undertook this project to see if psychologists specially trained in prescribing mental health drugs could be used to increase access for military personnel to appropriate high quality mental health care at lower cost. According to a May 1996 report by Vector Research, commissioned by DOD, the answer was an unequivocal yes. For a fuller description of that report, I refer you to our written statement.

A recent General Accounting Office report unfortunately missed the point on this. GAO admitted that clinical psychologists could be trained to prescribe and that this would save DOD money. But the report claimed there was no shortage of psychiatrists in the military, so there was no need for psychologists to prescribe drugs. It also grossly misrepresented the costs.

The fact is that the Air Force and Navy have both reported serious shortages of psychiatrists. But, more to the point, DOD is running a health care business. The bottom line should not be the number of military psychiatrists available but whether psychologists, trained to prescribe, can increase the availability of quality mental health service at reduced cost.

PREPARED STATEMENT

The demonstration project clearly showed this to be so as both the Vector report and an analysis by Coopers and Lybrand document. Therefore, APA urges the committee to support making such training a permanent option for psychologists in the military.

Thank you, sir.

[The statement follows:]

PREPARED STATEMENT OF WILLIAM C. HOWELL

This testimony is submitted to the Subcommittee by the American Psychological Association (APA), a professional and scientific organization of 151,000 members and associates, many of whom conduct behavioral research relevant to the military. This statement addresses three issues of relevance to the Subcommittee: the continuing need to invest in psychological research in the Department of Defense; the need to sustain support for the Army Research Institute for the Behavioral and Social Sciences; and the APA's continuing support of the Department's demonstration program that is training psychologists to prescribe psychotropic medications.

DOD's support of psychological research dates from WWII when the efficient testing and classification of new recruits was critical to the rapid buildup of U.S. forces after Pearl Harbor. Today, the contribution of psychological research ranges from improvements in the selection and assignment of personnel, to the training and maintenance of skills, to the design of the human-machine interface, to the efficient and safe operation of complex systems. As our military forces streamline, downsize, and become more diverse, data-based ways in which to enhance human performance, train for complex tasks, and identify and build leadership, become even more important. For that reason, APA supports maintaining or increasing spending on behavioral research in the Department of Defense.

THE RDT&E BUDGET

Maintenance of DOD's technology base must include 6.1 (basic), 6.2 (exploratory development) and 6.3A (advanced development) research on manpower, personnel selection, training, human factors, cognitive science, and other areas of behavioral research. Although less widely publicized than advances in military hardware, these contributions have been critical to sustaining our combat superiority. They have been possible only because the services have maintained closely coupled 6.1, 6.2, and 6.3A research programs on key human resources, training, and human factors issues. With systems growing more sophisticated and demands on the human operator more complex, we can ill afford to cut back on the research that is necessary to preserve our "combat edge." With the support of this Subcommittee, U.S. leadership in these crucial areas of behavioral research—in the service laboratories and in the nation's universities—will be assured.

We want to highlight the 6.1 portion of the RDT&E budget, and those programs in the Army, Navy and Air Force that support psychological research. This research fuels equally valuable 6.2 and 6.3A programs which are managed and conducted by the service laboratories.

BASIC RESEARCH (6.1)

The 6.1 budget has dropped for the past two fiscal years. This has led to the curtailment of promising research programs and increased uncertainty about the commitment to long-term research projects. APA realizes these cuts might have been deeper without the support of this Subcommittee, and would like to thank you for your support of these programs. We urge you to support the fiscal year 1998 request for 6.1 research of $1.164 billion—a much-needed 7.8 percent increase over the fiscal year 1997 level.

The 6.1 budget funds basic research to support our national defense needs—current and future. Right now we are enjoying the fruits of research conducted in the late 1970's through the 1980's, when support for DOD research was expanding. It is not possible to maintain this growth rate, but it is important to maintain DOD's capacity to respond to future needs. More than ever, careful and prudent planning for future defense needs must be done. DOD supports research that other federal agencies or industry cannot fund, but which is essential to maintaining the world-class status of our military.

The Army, Navy, and Air Force each support basic psychological research to meet their particular needs. The services cooperate to eliminate unnecessary duplication of research efforts and actively share research results.

Air Force Office of Scientific Research (AFOSR)

APA urges the Subcommittee to support, at a minimum, the 7.6 percent increase to $226.8 million requested for basic research in the fiscal year 1998 DOD request for the Air Force. This money supports AFOSR, which contains five research directorates that fund basic research both in the Air Force laboratories and through grants to academic institutions and other contractors. The Air Force laboratories compete for these funds through the submission of research proposals that are evaluated in competition with proposals from the civilian sector. This ensures that the best and most relevant research is funded.

The Human Performance Project.—The fiscal year 1998 plans for AFOSR include $9 million for the Human Performance Project, an increase of $.3 million over the 1997 level. Through a broad-based research program, the Human Performance Project supports Air Force personnel readiness and technology development for Command and Control and Information Systems. This research focuses on how individuals and small teams process information to learn, solve problems, and make decisions. The work has several objectives. One is the development of models that can accurately predict the limits and potential of individual recruit performance. Other objectives include: improved computer-based training systems; research on communication and decision-making in teams to aid the automation of command and control functions; and development of models of human vision and hearing to improve the human/machine interface in the complex technology of the modern Air Force.

An example of the work being supported through the Human Performance Project is research on developing "intelligent," or interactive, tutoring systems. The Air Force and other services train thousands of men and women each year to perform vital and complex technical tasks—tasks that allow no room for error. The development of intelligent tutoring systems not only allows this training to take place in remote locations, but most importantly, improves human learning by "interacting" with the trainee in ways that conventional computer aids cannot. This research is not only contributing to improvements in military training, but has the potential for applications in the civilian sector as well.

Office of Naval Research (ONR)

The Navy's current investment in basic research is $352 million. APA supports the Administration's request for an 8.5 percent increase to $382 million. This increase would help restore previous funding cuts and sustain vital ONR research programs.

The Cognitive and Neural Sciences Division (CNS) in ONR was particularly hard hit by the fiscal year 1996 and 1997 reductions in the Navy's 6.1 budget. Its budget, like other research programs under the RDT&E portion of DOD's budget, was tapped to help pay for overseas campaigns in Bosnia. APA urges the Subcommittee to recommend $16 million for CNS's fiscal year 1998 budget—which would not account for losses due to inflation, but would maintain spending at the current level.

CNS supports research to increase the understanding of complex cognitive skills in humans; aid in the development and improvement of machine vision; improve human factors engineering in new technologies; and advance the design of robotics systems. An example of CNS-supported research is the division's long-term investment in artificial intelligence research. This research has led to many useful "products," including software that enables the use of "embedded training."

Many of the Navy's operational tasks, such as recognizing and responding to threats, require complex interactions with sophisticated, computer-based systems. "Embedded training" allows shipboard personnel to develop and refine critical skills by practicing simulated exercises on their own workstations. Once developed, embedded training software can be loaded onto specified computer systems and delivered wherever and however it is needed.

Embedded training is particularly valuable for the Navy because naval personnel are often required to maintain high proficiency and readiness levels during lengthy, uneventful deployments at sea—far from land-based training facilities. One example of this training technology is the shipboard Combat Information Center (CIC), where a team of experts, supported by complex technology, is charged with identifying and responding to every perceived threat. Such threats arise only rarely, but must be handled with great skill when they do. Embedded training is used to sustain both the individual and team skills needed in critical situations.

Army Research Institute for the Behavioral and Social Sciences (ARI)

APA recommends a fiscal year 1998 funding level of $21.4 million for ARI and the allocation of 165 full-time equivalent positions. While this is $3.65 million and 46 positions more than requested for fiscal year 1998, it is lower than the 1997 funding level of $23.7 million. Despite ARI's strong record in funding research essential to the training and performance of Army personnel, the Institute's funding continues to erode. We urge the Subcommittee to stop this erosion in fiscal year 1998.

About half of the Army's budget, about $45 billion, is spent on personnel. But less than $18 million is now spent on research to help those personnel work more effectively. In comparison, $16.2 billion is spent on material procurement and about $4.3 billion on research to make the equipment operate more effectively. It appears shortsighted to invest such a disproportionately small amount in the Army's human resources. ARI works to build the ultimate smart weapon: the American soldier. And its efforts deserve your support.

The ARI was established to conduct personnel and behavioral research on such topics as minority and general recruitment; personnel testing and evaluation; training and retraining; and leadership. Reliable data about these issues is critical, as you know from today's headlines. While the Army seeks to solve the problem of sexual harassment within its ranks and establish workplace ethics and procedures that bring out the best from a diverse workforce, good data collected for the Army from scientists who understand how the Army works, will help the Army plan and execute reasonable policies.

ARI is the focal point and principal source of expertise for all the military services in leadership research, an area critical to the success of the military. Research that helps our armed forces identify, nurture, and train leaders is critical to their success.

PSYCHOPHARMACOLOGY DEMONSTRATION PROJECT

APA remains strongly supportive of psychopharmacology training for psychologists in the Military Health Services System. We bring to the Committee's attention a DOD-funded report that found such training to be cost-effective and to enhance the quality of care for military personnel and their families.

In a May 1996 report commissioned by DOD, Vector Research, Inc. extensively analyzed the Psychopharmacology Demonstration Project (PDP). The PDP is a project within DOD that has trained a small number of military psychologists to prescribe "psychotropic," or mental health-related, medication when appropriate. Vector showed the benefits of having "pharmacopsychologists" in the military, 10 of whom will have graduated from the two year fellowship by mid-1997.

Vector stated, "[I]f pharmacopsychologists are utilized as prescribing psychologists more than 59 percent of their time after entering PDP training they are less expensive than the combination of clinical psychologists and psychiatrists that would be necessary to provide the same mental health care as the pharmacopsychologists" (at ES–5, 2–38; amended by Addendum of 28 June 1996).

"If pharmacopsychologists are utilized in lieu of some physicians on deployment, their contribution would be the safe and effective treatment of service members with psychotropic medications at a lower cost than could be achieved by utilizing physicians in that role" (at 4–4).

"The most frequent benefit cited by respondents was increased access for mental health care treatment, both to active duty personnel and their dependents as well as in more remote locations worldwide" (at 3–15).

A recently released General Accounting Office (GAO) report unfortunately missed the point, ignoring the beneficial effect on the military health system overall of psy-

chologists prescribing psychotropic drugs. APA has serious concerns with the methodology used in this study, and with the fact that GAO ignored its own evidence that contradicted its conclusions.

GAO admitted in its report on the demonstration project (PDP) that clinical psychologists could be trained to prescribe psychotropic medications and that this could save DOD money. In fact, GAO's own cost analysis of the demonstration project showed that when the original start-up costs were removed and it was assumed the training program would become stable, the use of pharmapsychologists was cost-effective if they could prescribe 84 percent of the time (p. 21).

According to a Coopers & Lybrand analysis using data in the GAO report, training 10 classes of psychologists to prescribe would yield net savings to DOD of $3.3 million, based on the lower costs of maintaining pharmacopsychologists in the DOD. Using Vector data, which calculated lower training costs than GAO at the Uniformed Services University of the Health Sciences (USUHS) in the same case scenario, there would be a projected higher net savings of $8.57 million.

GAO's assessment that there is no shortage of psychiatrists in the military, and hence no need for prescribing psychologists in the military, completely missed the point and did not respond to Congress' charge. DOD is running a health care business, and the bottom line is what skills are needed and which providers can most efficiently provide those skills. GAO should not have asked only whether there were enough psychiatrists, but whether psychologists trained to prescribe could provide quality mental health treatment at less cost than psychiatrists. The Vector study said yes. The GAO report failed to address this central question in any depth, although the agency acknowledged that potential savings could result (p. 22).

The GAO report repeatedly painted pharmacopsychologists as "non-psychiatrists" and, therefore, found fault with the PDP. The fact is that pharmacopsychologists were never intended to be psychiatrists, but GAO forced this comparison repeatedly. The GAO report was replete with irrelevant statements that inappropriately compared prescribing psychologists to psychiatrists when equality between the two professions was not the purpose of the PDP.

As with the pharmacopsychologists, the prescribing ability of nurse-practitioners, physician assistants, and optometrists in the military (all of whom have less training than PDP graduates) is not intended to replace physician services, but to supplement military medical capabilities while delivering quality care. In fact, the PDP clearly demonstrated that military medical mental health services could be supplemented with quality care at a lower cost. The PDP's goal to train psychologists to "issue appropriate psychotropic medications under certain circumstances" was met, a point GAO conceded (p. 22).

APA urges Committee members to recognize the value to the Military Health Services System of psychopharmacological training and to support making such training a permanent option for psychologists in the military.

SUMMARY AND RECOMMENDATIONS

It is sometimes easy to overlook the important contributions of behavioral research to the missions of the Army, Navy and Air Force because the results usually do not translate directly into new weapons systems or hardware. Yet behavioral research has provided and will continue to provide the foundation for tremendous savings through increased personnel efficiency and productivity. This work is vital to the military for identifying critically needed improvements in human resources development, training, and human error reduction.

Increasingly sophisticated weapons systems place more, not fewer, demands on human operators. We must ensure that military personnel are as well prepared as their machines to meet the challenge. This is not possible without a sustained investment in human-oriented research.

STATEMENT OF SYDNEY T. HICKEY, ASSOCIATE DIRECTOR, GOVERNMENT RELATIONS, THE NATIONAL MILITARY FAMILY ASSOCIATION

Senator STEVENS. Mr. Hickey is associate director, Government relations, of the National Military Family Association. Please, begin, sir.

Ms. HICKEY. Good morning, Mr. Chairman, Senator Inouye.

Senator STEVENS. My apology. It is not "Mister."

Ms. HICKEY. That's quite all right, sir.

Mr. Chairman and members of the subcommittee, NMFA and the families we serve remain indebted to you for the strong support you have given their quality of life. Uniformed service families are well aware of the needs of the country and the needs of the members' parent services must come often before family concerns. However, the current PERSTEMPO and OPTEMPO combined with what NMFA has termed "they only sleep here" is wearing away at the fabric of family life.

Families are asking how long and are perceiving that it may be forever.

While military spouses are spending more and more time, in effect, as single parents, the services are investigating contracting out, privatizing, and regionalizing the very services that families depend upon to alleviate some of the problems and stress occasioned by lengthy and frequent separations.

If family support services are not available at the local installation or if the services provided are no longer the responsibility of the local commander but overseen by some contracting officer hundreds or thousands of miles away, one must question how responsive the providers will be to the concerns of the military family members.

To military families, compensation is not only what comes into the bank account but what does not have to go out for the basics of life, such as food, shelter, clothing, and the care of their children. A cut in savings at commissaries, a 20-percent increase in child care costs, as envisioned in the Navy's program to subsidize bases' and civilian child care centers, and housing privatization initiatives where families may end up paying out of pocket for some of their costs will be viewed as compensation cuts by military families.

Continuing to depress active duty pay raises will put military families further and further behind their private sector peers and continue the upward spiral of those eligible for food stamps and the WIC Program.

Health care continues to deteriorate under the TRICARE Program. This week, NMFA received calls from recruiters in southern Louisiana. They are having to pay the full costs of the health care for their children. The physicians are refusing to file CHAMPUS claim forms, and when they bring it up their chain of command, they are simply told by the line to go back and tell those doctors to file the claim forms.

Well, you cannot force a doctor to file a claim form. There are no pediatricians in southern Louisiana that will see our children. Our active duty families are either going without health care or are paying the full costs themselves.

NMFA believes that the underlying problem with the DOD health care system is that the benefits provided, the costs to the beneficiary of those benefits, and the eligible populations covered by the benefits are constantly subjected to yearly budget battles within the Pentagon.

NMFA believes that military beneficiaries should have a health care plan that is not subject to a single agency's budget problems. If, as with the Federal Employees Health Benefits Program, a economic change is necessary, the change should be debated in the Halls of Congress and not the halls of the Pentagon.

PREPARED STATEMENT

Therefore, NMFA continues to support having an FEHBP option for all beneficiaries with the exception of active duty members.

Thank you, Mr. Chairman.

[The statement follows:]

PREPARED STATEMENT OF SYDNEY T. HICKEY

The National Military Family Association (NMFA) is the only national organization whose sole focus is the military family and whose goal is to influence the development and implementation of policies which will improve the lives of those family members. Our mission is to serve the families of the Seven Uniformed Services through education, information and advocacy.

Founded in 1969 as the Military Wives Association, NMFA is a non-profit 501(c)(3) primarily volunteer organization. NMFA today represents the interests of family members and the active duty, reserve components and retired personnel of the seven uniformed services: Army, Navy, Air Force, Marine Corps, Coast Guard, Public Health Service and the National Oceanic and Atmospheric Administration.

NMFA Representatives in military communities worldwide provide a direct link between military families and NMFA staff in the nation's capital. Representatives are the "eyes and ears" of NMFA, bringing shared local concerns to national attention.

NMFA receives no federal grants and has no federal contracts.

NMFA has been the recipient of the following awards: Defense Commissary Agency Award for Outstanding Support as Customer Advocates (1993); Department of the Army Commander Award for Public Service (1988); and Association of the United States Army Citation for Exceptional Service in Support of National Defense (1988).

Various members of NMFA's staff have also received personal awards for their support of military families.

The National Military Family Association (NMFA) remains deeply grateful to this Subcommittee for its strong support of military families and appreciates this opportunity to express its views.

COMPENSATION

Compensation for military families comes from several sources. The servicemember's base pay, allowances and special pays or bonuses are direct income to the family. So too, is any income derived from a "moonlighting" job by the member, or income from a spouse's employment. Compensation also comes from "in kind" sources, such as when military housing is provided for the family or health care is provided at low or no cost.

Military families also consider as compensation funds which they do not have to spend. Groceries and school supplies procured at reduced prices keep more money in the family pocketbook. Child care, dance lessons, car repairs and physical fitness programs obtained at reduced costs, also help stretch the family's budget. Subsidized life insurance and adequate survivor and retirement programs are viewed as compensation by families.

Unfortunately, some military families also depend on Food Stamps, the Women's Infants' and Children's Nutrition Program (WIC) and the Earned Income Tax Credit for additional family compensation.

Single servicemembers are likely to be most concerned about the amount of dollars deposited in their banking account. Families are more likely to look at the entire compensation package—the amounts deposited in their bank accounts and the amounts they do not have to spend for food, shelter, housing, health care, clothing and financial security for future years. Families look at increased costs for, or decreased access to, these nonpay compensation items in the same light as a decrease in direct pay. Increased costs of health care, closure of a commissary, or downgrading the value of retired pay are considered pay cuts by most military families.

Families are also more likely than single members to be affected by out of pocket costs when they move due to a permanent change of station and when the servicemember is absent from the home.

Pay Raise.—The proposed 2.8 percent active duty pay raise will put servicemembers further behind their private sector peers since it is 0.5 percent lower than the Economic Cost Index. Only a small percentage of the active duty population qualifies and accepts Food Stamps. NMFA believes it important, however, to note that the redemption rate at Commissaries increased by 7.1 percent last year, the first

increase in four years. Redemption of WIC vouchers at the Commissary increased from fiscal year 1995 to fiscal year 1996 by 13.8 percent. WIC voucher redemption has increased each year since it has been tracked (fiscal year 1992).

Housing.—The expected Department of Defense (DOD) proposal to consolidate the Basic Allowance for Quarters (BAQ) and the Variable Housing Allowance (VHA) into one independently verified housing allowance will stop the VHA death spiral. However, without raising the actual dollars of the allowance to cover 85 percent of housing costs, families will continue to be forced to find housing in the civilian sector that is inadequate, unsafe and at significant commuting distances.

The backlog of on-base/post family housing construction continues to create lengthy waiting lists. However, the concern most often expressed by families is the inability to secure timely and adequate repair and maintenance of existing government housing. The current condition of government housing attests to DOD's fiscal irresponsibility as a landlord. The volume of complaints from family members leads to the conclusion that DOD is continuing this practice. Families are not living in these homes for free; they forego their housing allowances. They should have a responsive landlord.

Basic Allowance for Subsistence.—The intent of the expected DOD proposal to provide all servicemembers with a Basic Allowance for Subsistence (BAS) tied to the Department of Agriculture's rate is excellent. The anticipated method to accomplish this aim is flawed. Suppressing raises in BAS for 800,000 members (including all of the career force) to provide 400,000 members, primarily junior personnel, with a cash allowance is literally "robbing Peter to pay Paul." Those due to lose BAS increases should have their basic pay raised by a like amount.

Health Care:

Medical Care

In instituting the Tricare Program, DOD stated that Tricare would provide a uniform benefit to the eligible population; increase access, decrease and control costs, and eliminate claims hassles for those enrolled in Prime; and continue to offer choice through the Extra and Standard options.

Tricare Prime is not offered in all areas of the up and running regions, and is not even offered in some areas with significant beneficiary populations. Some enrollees in Prime receive almost all of their care at military treatment facilities (MTF's) for free. Others must enroll in the civilian Prime network and pay copayments of $12 per contact ($6 for families of active duty E–4 and below). A family with three children, one of whom is diagnosed with a contagious illness such as strep throat, may well find itself paying $108 in one month for the children's care. The family will incur a $12 doctor visit fee plus $12 lab fee for the diagnosis of each child and an additional $36 for three follow up visits. The goal of a uniform benefit does not appear to have been met.

Many of those enrolled in Prime at MTF's have found their access to care has increased. However, the stated access standards for Prime are not being met at most MTF's. Beneficiaries enrolled in Prime in the civilian network find their access to care has increased if adequate networks have been developed. Many family members report being unable to find civilian providers within the stated driving time access standards. It is interesting to note that for the first time in NMFA's history, we are receiving calls from family members stating that the servicemember does not have adequate access to care. The goal of increased access does not appear to have been met for many beneficiaries.

Family members who were receiving their health care through the CHAMPUS program report that many of their physicians have refused to accept the discounted Prime reimbursement rates. These family members have to make the choice of continuing care with their current provider at high out of pocket costs, or choosing another provider from the network in order to obtain reduced costs. Sometimes the choice within the network has been so limited that families felt they could not choose the lower cost option.

Even families enrolled in Prime find that they are liable for non-Prime costs when providers within a network hospital are not all Prime providers. It seems a bit ludicrous to require families to ascertain if pathologists and anesthesiologists used by a network hospital are also Prime providers. Beneficiaries enrolled in Prime also report being charged expensive "point of service" fees even when they have been referred to specialists by their primary care manager.

Beneficiaries executing permanent change of station orders must disenroll from their current region and are unable to enroll in the new region until they have checked in at the new duty station. These families are left at financial risk for costly deductibles and copayments while in transit or on leave. Families enrolled in Prime who make extended visits to family members when the servicemember is deployed,

find themselves tied to a 1–800 number for care or facing the "point of service" copayments. Retirees who have family members (e.g. college students) who do not live in the same region are paying two or more family enrollment fees to cover all their dependents. The goal of decreasing and controlling costs (at least for the beneficiary) appears not to have been met for many beneficiaries.

Prime enrollees report having to continually fight the battle when they have been erroneously charged "point of service" copayments or when their providers claims are not paid in a timely manner. Certainly, claims hassles for some have not been eliminated.

Limiting physician payment to 115 percent of the CHAMPUS Maximum Allowable Cost (CMAC) even when the beneficiary has primary insurance; requiring all providers to submit claim forms; and CMAC's below Medicare and Medicaid payments have led many providers to refuse to see CHAMPUS patients. A retired Naval officer called NMFA last week. His wife has seen the same opthamalogist for fifteen years. She now needs cataract surgery. The opthamalogist refuses to file CHAMPUS claim forms. The officer has been told that the doctor has therefore been dropped from the list of authorized CHAMPUS providers. The continuing requirement to obtain nonavailability statements for inpatient treatment limits a Tricare Standard beneficiary's choice. No one wants to be forced to change physicians when they are sick enough to be admitted to a hospital or need surgery. The goal of providing choice through the Extra and Standard options is not being met for many beneficiaries.

Public Law 104–106 effective February 10, 1996, allowed DOD to cover well-baby visits up to age 6 vice age 2 under Tricare/CHAMPUS. Sixteen months later the coverage is still not available. Is implementation of the Tricare Support contracts allowing DOD to stall or thwart the will of Congress and deny Congressionally approved benefits to military families?

Even if Tricare were meeting all of its goals, the oldest and sickest segment of the military beneficiary population would still remain out in the cold. Tricare was designed to exclude the dual Medicare-military beneficiary. Many of these beneficiaries are veterans, or survivors of veterans, of World War II, Korea and Vietnam.

How can an institution purposely design a health care program that leaves out its oldest members and does not offer portability and reciprocity for a known mobile population?

NMFA's greatest concern for the health care program has remained the same since 1992. The health care benefit, and the population to which it will be offered, will be subject to annual budget debates within DOD. The shortfall in the medical budget as presented last year and the one again this year, reinforce this concern. As the budgets for readiness and modernization are squeezed, every likelihood is that the health care benefit and/or the populations offered the benefit will be negatively affected. It is for this reason, in 1992, NMFA first proposed that military beneficiaries be offered the option of enrolling in the Federal Employees Health Benefits Program (FEHBP).

In 1992, we were the sole voice calling for such an option; most other military associations were still asking for free health care for life. In the ensuing years a significant number of other associations have joined NMFA in supporting the FEHBP option for all but active duty members. The Military Coalition and the National Military/Veterans Association both support the FEHBP option for the dual Medicare-military eligible population. NMFA's proposal would require DOD to budget for medical readiness including what is necessary for Graduate Medical Education, overseas rotation base, recruiting and retention incentives and peacetime health care for the active duty force. Once the size of the structure necessary for readiness is determined, the number of nonactive duty beneficiaries who can be treated can be ascertained. Those not able to be treated within the readiness structure and/or those wishing choice can be offered a plan within the FEHBP. Active duty families should be provided a health care allowance. The allowance should be enough to cover a basic HMO premium which would be forfeited when beneficiaries enroll in an MTF plan. Retirees and their family members should pay the same level of premium as their federal civilian retiree peers.

Dental Care

NMFA notes with interest the February 1997 General Accounting Office report on the Family Member Dental Plan. The report indicates the contractor, United Concordia Companies, Inc., despite some initial start up problems, is currently meeting the requirements of the contract. The report seems to indicate that meeting the requirements is not too difficult, since not many specific requirements are included in the contract. DOD's oversight of the contract is described in the report as "hands off." The contents of the report, and the slippage of the date for the re-

serve dental contract to October of 1997 from the original date of October 1996, leaves NMFA to wonder if the retiree dental insurance plan will ever come on line. If it does, what kind of oversight will DOD perform on a plan that it does not subsidize, since it considers a "hands off" oversight adequate for a plan it does subsidize?

Commissaries.—The current projected shortfall in commissary funding, reported as $23 million to $48 million, certainly appears to be another attack on the benefit from within DOD. Proposals to close commissaries at active installations or to turn them into BXMarts are viewed by military families as proposals to reduce compensation. Suggesting that families living at one active duty station should drive one hour to another to do their grocery shopping is unacceptable. NMFA supports BXMarts at closed installations only as an alternative to having no facility available. BXMarts, which increase the costs of nonfood items from commissary prices to exchange prices, should never be considered as replacements for full service commissaries at active installations. Since approximately 40 percent of the items on a normal commissary shopping list are not "items edible by humans," the loss in compensation would be 40 percent or more of a family's grocery budget.

Active duty families, as well as retirees and their families, view a retiree's access to the commissary as part of retiree compensation. Suggestions to limit or eliminate such access are seen as attempts to reduce promised retiree compensation.

Exchanges.—During a March 25th on-line military family "chat room," a heated discussion was held on the savings available at exchanges. Some were adamant that the exchange had the best prices in town, others felt discount stores could beat some of the prices. It was fairly obvious however, that at remote stateside installations and overseas, the exchanges are absolutely necessary. Most also recognized that the profits from these "company stores" went back into the military community to enhance and reduce costs for Morale, Welfare and Recreation activities.

NMFA also supports lifting some of the fifty year old restrictions on what the exchanges can carry. The Army and Air Force are recruiting members with families. An E–1 with dependents has a household goods weight allowance of 5,000 lbs. These newly recruited families often must sell all of their furniture to meet the 5,000 lbs. weight limit. Both the new recruit's family and the young servicemember getting married should be able to buy durable furniture at the "company store." When, as in the course of most moves, a piece of furniture is destroyed the family would be able to replace it at the exchange. Furniture bought at a local store may not be replaceable at the new duty station.

Morale, Welfare and Recreation.—NMFA understands the necessity to be "business wise" with many of these activities, but cautions that the Morale and Welfare of the servicemembers and their families should not be overlooked in the struggle to make business decisions. Recently, some commanders have found it financially necessary to close their installation libraries. NMFA is concerned that the safety of the area where the off installation library is located should be of paramount concern in such decisions. We are also concerned that single servicemembers without cars, and families with only one car, will be barred from using such facilities. Servicemembers are strongly encouraged to further their education. Limiting access to educational resources creates an unnecessary obstacle in their pursuit of this goal.

MILITARY COMMUNITY

As the September 1996 issue of The Research Digest, published by the Military Family Institute of Marywood College, so eloquently stated: "Housing is more than just physical structures made of so much brick and mortar. Housing anchors people in a broader environment which contains various services through which people access material necessary for living. This environment includes the people, organizations and institutions that provide sustaining social relationships and support, and a sense of community."

A military community is not just brick and mortar but a living organism. At a hearing regarding commissaries in 1994, a young Navy spouse, married to an enlisted member, was describing what the commissary meant to her. She spoke of the military installation as her "home," and taking away the commissary as "taking away the walls of my home and leaving me vulnerable to the elements." This Navy spouse had never lived on an installation and was in the process of transferring to another duty station where she would again not live in Navy housing. Having the stability of this "home" at the end of each permanent change of station move is extremely important to a constantly mobile population, whether or not they actually live on the installation. The value of having this "home," and the institutions, organizations and people of which it is made, increase as the Personnel/Operational TEMPO increase.

The Installation

The chapel, Child Development Center, library, fitness center, playgrounds, homes, sports fields, youth services, auto hobby shop, arts and crafts center, school, and the hospital or clinic are the institutions found at military installations. Army Community Service, Navy and Marine Corps Family Service Centers, and Air Force Family Support centers are paramount among the organizations which serve the unique needs of the military community. And military communities are unique. As General George A. Joulwan, USA, Commander-in-Chief, United States European Command, stated in testimony on March 19, 1997: "In USEUCOM, military communities serve as both our operational spearhead and as our home." NMFA believes it would be rather unusual to find a civilian community that thought of itself as the "operational spearhead."

The Children

The overriding concern for military parents, just as for parents in the civilian community, is the well being of their children. While children are affected by total well being of the family, certain aspects of the military community affect them more.

DOD Schools

DOD schools, whether overseas or stateside, provide education for military children. The drawdown overseas has created many small schools struggling to provide reasonable course offerings. As MTF's in overseas areas have closed, the school nurse and school counselor have become community assets. As these professionals struggle to serve the wider community, the time they have to devote solely to school related concerns is shortened. The Department of Defense Educational Activity has several ongoing initiatives to attempt to meet some of these concerns. School based management and school home partnership initiatives will allow decision making at the lowest level and encourage parents to be part of the process. Implementation of the Department of Defense Education Activity's Technology Plan will increase student access to information available to stateside peers through the Internet. With improved technology, overseas schools can also expand long distance learning programs designed to ameliorate the problem of limited course offerings in small schools.

DOD is implementing a new program for stateside schools in three states. Instead of having a superintendent at each installation, one superintendent will serve the schools in the entire state. The question arises of how the current parent elected installation school boards will function in this kind of situation. The three states currently implementing the program each have one installation with one very small school and one installation with several schools. NMFA does not object to the concept of one school superintendent in these particular situations. However, we have seen no guidance on how the school boards are to function. Do they become a state school board? Will DOD provide travel and transportation for state school board meetings? How will state school boards be elected? If the school boards are to remain local, can they institute policy for their school(s) that don't affect the school(s) in another part of the state that are under the guidance of the same superintendent? How will the selection of a new superintendent be accomplished? Will the school board from the installation with the one small school have as much input as the school board from the installation with several schools?

NMFA also has concerns on how this program will be implemented in states that have more than one installation with several schools. We suggest the concerns of school boards and parents must be addressed before any extension of this program is contemplated.

Impact Aid

Most military children attend public schools located either in the civilian community or on the military installation. The local education agency (LEA) receives Impact Aid funding from the federal Department of Education for these children. Impact Aid funding is to meet the federal obligation for educating military children since the installation pays no real estate taxes and military personnel are excused from many local taxes because of the Soldiers' and Sailors' Civil Relief Act. Children who reside on the installation with their military sponsor are considered "a" or "1" children. LEA's significantly impacted with "a" children receive approximately $2,000 per child. LEA's receive only $200 per child for children who reside off base with their military sponsor, "b" or ".1" children. While the impact of "a" children is recognized in the administration's budget, albeit at a level much lower than the authorization requires, the impact of "b" children is consistently denied.

Privatization initiatives for military family housing may significantly increase the current problem of underfunding Impact Aid. If the underlying land on which mili-

tary homes are built is not owned by the federal government, the children residing in them will be considered "b" children. Since the privatization initiative's stated goal is to more quickly alleviate the shortfall in military construction of family housing, these children should be considered "a" children. Without Congressional intervention, NMFA is very concerned that housing will be built through privatization initiatives without thought to the education of military children. In fact, military families living in new housing projects not built on federal land, may find themselves thought of as very undesirable neighbors by the tax paying civilians in the community.

NMFA has consistently supported full funding of the Impact Aid program out of the Department of Education's budget. We are most grateful, however, to this Subcommittee for making up the deficit out of DOD funds when DoEd's funding has fallen short. We do not view Impact Aid as a DOD obligation, but realize that the quality of education military children receive has been dependent for many years on supplemental DOD funding. In addition to being grateful for the sake of the children, NMFA is also aware that current demographic statistics would indicate that these children are more likely to be part of the military force of the future than are other children. DOD should have a concern for the education of a significant portion of its future force. If DOD became a stronger advocate for the program at the highest levels of the government, perhaps it would not need to provide supplemental funds.

Child Care

The Military Child Care Act has guaranteed that military Child Development Centers (CDC's) are among the best in the country. By subsidizing the center fees, DOD is able to offer its workforce quality childcare at affordable prices. NMFA is aware the Navy is acting as DOD's executive agent to explore contracting out child care. Extreme caution must be used when evaluating the cost effectiveness of such an enterprise. It is NMFA's understanding that the only bids that have been received are for preschool care. The care for infants and toddlers is the most expensive care to provide. In military CDC's this expensive care is subsidized by the less expensive care provided to preschoolers. If the only care that can be cost effectively contracted out is care for preschoolers, the military CDC's will have to start charging exorbitant rates for infant and toddler care. In addition, the Navy has stated in Congressional testimony that such contracted care may cost military members up to 20 percent more than care in DOD facilities.

NMFA is extremely pleased with the emphasis the Army has placed on hourly care. The alternatives to care in centers offered at most Army Posts are quite extensive. The Army is considering additional resources to provide this necessary care for its volunteers, for those with medical appointments, and for respite care. NMFA is disappointed that the Air Force remains the only service that is not subsidizing its family day care providers. The subsidy provided by the other services allows in home provider charges to be competitive with the fees in the CDC's.

Youth Services

The number of military children in the 6–12 age group has escalated in recent years. Concerns have increased regarding latch key children and the growing problem of youth violence on military installations. DOD is moving to address both of these issues, through installation level regulations concerning children at home alone, and pilot demonstration programs for youth activities. NMFA fully supports these initiatives.

The Challenges

A military family's life is full of challenges.

Children are forced to constantly leave old friends and make new ones. The "new" math they took at their last school is not the "new" math at their current one.

With each move military spouses return to the bottom of the employment ladder. Unemployment among military spouses in general is more than twice that of their civilian peers, and up to four times as high for the spouses of the most junior personnel.

Cherished family heirlooms are damaged or lost in moves. The time and paperwork to make a claim is almost never worth the small reimbursement.

Military orders to that perfect job overseas require wrenching family decisions. Do we go together to stay together, or do we separate so our son who is the starting quarterback as a high school junior has an opportunity for a sports scholarship to college? Do we go together to stay together, or do we separate because the overseas school does not offer the courses our daughter needs to be competitive for a scholastic college scholarship? As the drawdown in Europe has ended, both DOD and fami-

lies are faced with small overseas schools that cannot offer full sports programs or full academic courses.

It is not unusual for military spouses to make the next Permanent Change of Station (PCS) move by themselves. Up to eleven thousand Navy families may be facing that prospect this summer. Shortfalls in PCS funding, and the desire to enroll children in school at the new duty station before the term begins, are on a collision course.

Young couples face parenthood for the first time far from the support of their own extended family.

The Separations

When servicemembers deploy or go on training exercises, the uniqueness of the military community becomes even more apparent. The military installation becomes a community of "temporary single parents." Young spouses may face paying the family bills and balancing a checkbook for the first time. Working spouses may be faced with finding another child care provider since the couple managed to work alternate shifts when the servicemember was home. The spouse may have to change jobs in order to meet financial or child care needs. Studies show that spouses who are employed during deployments have higher self esteem and satisfaction than those who are not. Caring for a new infant or meeting the challenges of the independence-seeking-adolescent can be formidable when done alone. Long distance care for elderly parents and parents-in-law may fall solely on the military spouse's shoulders. Decisions on what to do about the flat tire, the broken washing machine or the son who is failing math, must be made solely by the military spouse. Family reunions after lengthy deployments are not the "honeymoon" often expected. In fact, incidences of family violence go up as deployments end.

A smaller force has increased the OPTEMPO and PERSTEMPO of many active duty personnel. Families also report what NMFA calls, "they only sleep here." Servicemembers who are not deployed or away on training missions are working longer and longer hours and longer and longer weeks. Twelve and even sixteen hour work days are reported as routine for many as are six and often seven day work weeks. Spouses report their children only see the military parent on Sundays, and sometimes not even then. Both increased nights away from home and nights when the servicemember is only home to sleep, eventually wear away the fabric of family life.

The Assistance

Family centers (Army Community Service, Navy and Marine Corps Family Service Centers and Air Force Family Support Centers) were instituted to assist with the unique needs of the mobile and young military population. The need for these services escalates significantly when the military mission requires family separation.

Relocation counselors help families obtain information about the new duty station, and assist military spouses forced to make a move on their own. Financial counselors provide assistance in learning the basics of family budgeting, how to balance the checkbook, and planning for the future. Family life counselors offer classes and individual assistance dealing with adolescents trying to grow their own wings. Information on locating elder care resources thousands of miles away is available at family centers. Employment counselors provide job search and skill training. At this moment DOD is piloting several demonstration programs in an attempt to more effectively meet the employment needs of mobile military spouses.

Deployment briefings give families the tools to handle both separation and reunion. When needed assistance is not available at the family center, resource and referral counselors marry the needs of the family with the resources in the broader community. Child Development Services coordinators help families find the right child care in on base centers, family care homes or the civilian community. Before and after school care and youth services, whether provided by the family centers or through MWR activities, address the needs of this somewhat neglected population. DOD is piloting several youth programs worldwide in order to ascertain innovative and cost effective ways to meet the growing concern regarding the safety, educational, and recreational needs of these children. New parent support counselors provide the education and information needed by new mothers and fathers. When the end of the paycheck comes before the end of the month, family assistance centers, loan closets and Airmen's Attics are available to provide food or other necessary items to tide the family over.

Family centers teach the skills necessary to enable servicemembers and their families to cope with the demands of military life and the safety net to assist them when their coping skills are not enough.

NMFA believes a direct correlation should exist between increased separations and funding for the family center programs. When one goes up so should the other.

Privatization and Outsourcing Initiatives

NMFA believes privatization and outsourcing initiatives may assist in providing both needed family housing and services at lower costs to the government. However, before rushing to implement these initiatives, the full ramifications of such programs should be considered. If either initiative begins to destroy the unique community of the military installation, the support structure for the military family will collapse.

If family support functions are contracted out, the work performed must still be under the supervision of the local chain of command. Installation and unit commanders must be able to ascertain the quality of the service provided. Commanders must have the authority, as well as the responsibility, to provide the services needed by the families within their communities.

If child care spaces are contracted out, the decision must prove cost effective for the full range of care. Otherwise, on installation centers will be forced to charge unaffordable rates for the more expensive infant and toddler care. Contracting out only the less costly services will also result in fewer spaces for hourly care needed for medical appointments, respite care and volunteer work. If fees charged servicemembers for child care in contracted facilities are up to 20 percent higher than in DOD facilities, who actually benefits from such an enterprise? Military families should not bear the cost of contracting out.

Housing areas built under privatization initiatives in the private sector must not just be brick and mortar. They need to be recognized as military communities and appropriately supported. Particular attention needs to be paid to the funding for children's education if such housing is not built on federally owned land.

CONCLUSION

Military families view compensation as both what comes in and what does not go out. Therefore, the benefits derived from Commissaries, Exchanges, MWR activities, CDC's, on-installation housing and affordable health care can be as important to the family's economic well being as what is deposited in the bank account.

The Military Community which includes the installation, the organizations, the institutions and the people, is viewed as "home" by military families, whether or not they actually live on the installation. It is easy to see how mission oriented commanders faced with constrained resources for training and weapons modernization, would view child care, family housing and family support as things that could, even should, be provided by the civilian sector. However, it has become obvious that an all volunteer force is a "married with children" force. The price of the readiness of that force includes the programs necessary to support its demographic structure. Servicemembers who are concerned about their families' well being cannot be totally focused on the mission at hand. Privatization and outsourcing initiatives have the potential to increase quality of life at reduced costs. Care must be taken that such initiatives reinforce the military community and do not, no matter how inadvertent, lead to the destruction of the community and its support infrastructure.

Family life that is consistently compromised by separations due to deployments and training, and then further strained by long work days and work weeks, will eventually begin to fray. It is not unreasonable to speculate that this fraying will turn into negative retention decisions.

Senator STEVENS. Thank you. That was very interesting.

We have looked at that and will continue to look at it, Ms. Hickey. It is a very difficult problem financially to take a system that is sort of wavering now and expand it that dramatically. However, we really are looking at it and we will be glad to follow up on your suggestion.

Thank you very much.

Ms. HICKEY. Thank you, sir.

STATEMENT OF JERRY M. WIENER, M.D., PAST PRESIDENT OF THE AMERICAN PSYCHIATRIC ASSOCIATION AND AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY AND CHAIRMAN OF THE DEPARTMENT OF PSYCHIATRY AND BEHAVIORAL SCIENCE AT GEORGE WASHINGTON UNIVERSITY

Senator STEVENS. Next is Jerry M. Wiener. Dr. Wiener is chairman of the Department of Psychiatry and Behavioral Science at George Washington University.

Good morning.

Dr. WIENER. Good morning, Senator Stevens, and thank you.

I am here representing the American Psychiatric Association and the American Academy of Child and Adolescent Psychiatry.

The American Psychiatric Association maintains its longstanding commitment to insuring that military personnel and their dependents will have unrestricted access to the best quality and most appropriate care for their mental health needs. I will address our support for the 1996 congressional decision to terminate the Department of Defense psychopharmacology demonstration project, known as the PDP, the coverage in delivery of mental health services in the military medical system, and the confidentiality of patient records.

First, we urge that the Congress and this subcommittee respect the findings and recommendations of the GAO report and do the right thing by the taxpaying public and by the military personnel and their families: do not reinstate any aspect of this program. Do not alter your previous decision to terminate this unneeded, unrequested, wasteful, and expensive program.

I offer you the following considerations. This program from its inception was created for the DOD by an unrequested appropriation bypassing the authorization process which would require hearings and public input.

The GAO report documents that this program never had any basis in military need or readiness. Its only real purpose was to use the public funds to finance a professional guild agenda, an agenda to provide a basis for various initiatives for psychology prescribing privileges at the State level, none of which, so far, has been successful. No country in the world, no State in this country, allows psychologists to prescribe psychoactive medications for serious and severe mental illness. There is a good reason for that.

Further, the GAO report itself was requested by organized psychology. But yet, beginning a month before its official release, an intensive campaign to discredit the GAO report was mounted. The campaign cites another study, the so-called Vector study, and a study of that study, which was prepared for the chief psychologist of the Air Force. Unfortunately, but not surprisingly, not only is the Vector report itself badly flawed, but it does not address the questions asked by the Congress: is the program needed, is it cost effective, should it be reinstated.

The GAO's report answers no, no, and no, each "no" accompanied by extensive documentation.

In another assessment, this program was featured on the NBC "Nightly News" show as an example of the fleecing of America.

On the issue of costs, even if start-up costs are removed from the GAO report, which was a criticism in the Vector report, it finds

that the expense comes if not to $610,000 for each of the 10 graduates of this program, that it still would be and would have been far less expensive, far more cost effective, and far more quality conscious, either to increase the number of psychiatrists or, preferably, even make a relatively modest investment in upgrading the training of military primary care physicians. You already have the physicians trained to prescribe.

If military needs and the best interests of active duty personnel and their dependents were the real concerns, this program would not have been conceived, much less been born and paid for.

Finally, the GAO finds that, even if trained to prescribe drugs, psychologists cannot be substituted for psychiatrists in terms of military needs and military readiness.

We urge you to stick by the decisions that have already been made to terminate this program.

In the delivery and coverage of health service in the military medical system, we have concerns about the equity that the CHAMPUS program will provide for the treatment of mental illness.

In trying to shorten this, let me say that CHAMPUS now has fully implemented what is called the TRICARE Program, which moves CHAMPUS into the managed care arena. For mental illness more than other areas of medical care, managed care systems pose a number of additional barriers for service personnel and their dependents who need clinical care for mental illness.

While they generated savings, the managed care systems, they do so by limiting access to adequate care. We are concerned that TRICARE will follow this path.

PREPARED STATEMENT

There is no scientific, clinical, or even economic rationale for these discriminatory levels of coverage and denial of access. The decisions about treatment should be made.

[The statement follows:]

PREPARED STATEMENT OF JERRY M. WIENER

My name is Jerry M. Wiener, M.D., Past President of the American Psychiatric Association (APA) and the American Academy of Child and Adolescent Psychiatry (AACAP) and Chairman of the Department of Psychiatry and Behavioral Science at George Washington University. I am testifying today on behalf of the APA, a medical specialty society representing 42,000 psychiatric physicians nationwide. The APA maintains its longstanding commitment to ensuring that military personnel and their dependents have unrestricted access to the best quality and most appropriate mental health services. My testimony will address:

—Our support for the 1996 congressional decision (Public Law 104–106) to terminate the unneeded and wasteful Department of Defense (DOD) psychopharmacology demonstration project (PDP) which proposed to train military clinical psychologists to prescribe psychoactive medications, and our support for the April 1997 GAO Report conclusion: "Given DOD's readiness requirements, the PDP's substantial cost and questionable benefits, and the project's persistent implementation difficulties, we see no reason to reinstate this demonstration project;"

—The coverage and delivery of mental health services in the military medical system, and;

—Confidentiality of patient records.

The GAO Report and the Psychopharmacology Demonstration Project (PDP)

When Public Law 104–106 ordered termination of the PDP program no later than June 30, 1997, it also required the GAO to produce a report evaluating the cost-effectiveness of the program and recommending whether or not the program should be reinstated. This report, entitled, "Defense Health Care: Need for More Prescribing Psychologists Is Not Adequately Justified," (GAO/HEHS–97–83). (A copy of the report can be found on GAO's World Wide Web Home Page at http://www.gao.gov.) It validates the decision made last year by the Congress and President Clinton to terminate the program.

The report is a clear, thorough, and dispassionate examination and analysis of the PDP and documents that the program is exactly what the APA has been saying since the program's inception. It is a major boondoggle which was never needed and never requested—except by one powerful Senate aide who, not coincidentally, happens to be a psychologist—which has wasted millions of taxpayer dollars while exploiting the care of military personnel and their families to achieve a self-serving agenda. It was a lose-lose program from the beginning. The GAO found that "training psychologists to prescribe medication is not adequately justified because the MHSS (Military Health Services System) has no demonstrated need for them, the cost is substantial, and the benefits uncertain."

In its blunt assessment of the PDP, the GAO found that there is no shortage of psychiatrists to justify training psychologists to prescribe drugs. "The MHSS has more psychiatrists than it needs to meet its current and upcoming readiness requirements. * * * Therefore, the MHSS needs no prescribing psychologists or any other additional mental health providers authorized to prescribe psychotropic medication."

GAO did a thorough evaluation of the costs of the program—previously unavailable to Congress or the public—and found that $6.1 million has been spent on a program that has produced only ten "graduates" who are "prescribing psychologists" and notes each one prescribes under a psychiatrist's supervision. That comes to about $610,000 per each "prescription-writing" psychologist and does not include, for those psychologists who have finished the program, the cost of the time by the psychiatrist physician to supervise (i.e.; support or disapprove) the psychologist's "prescription-writing" decision. It would be far less expensive and far more cost-effective either to increase the number of psychiatrists or to make a relatively modest investment in upgrading the training of military primary care physicians.

Among the GAO's other major findings are the following:

—"None of the services needs additional mental health providers capable of prescribing medications to meet either current or upcoming medical readiness requirements. * * * Each service has more than enough psychiatrists, as well as clinical psychologists, to care for its anticipated wartime psychiatric caseload. Given this surplus, spending resources to provide psychologists with additional skills does not seem justified."

—"Because psychiatrists practice medicine, they can diagnose organic as well as mental conditions and treat each with medication. They consider a full range of possible organic causes for abnormal behavior * * * Therefore, they can distinguish between mental conditions with an organic cause * * * and organic conditions which have symptoms that mimic a mental disorder. Organic mental disorders are best treated through a combination of medication and psychotherapy * * *."

—In contrast, "Because medical training is not required to practice clinical psychology, psychologists are not qualified to prescribe medication * * * Clinical psychologists practice psychology, not medicine."

—Psychologists cannot be substituted for psychiatrists * * * Even if trained to prescribe drugs, psychologists are not as equipped as psychiatrists to distinguish between actual combat stress and certain neurological disorders that appear to be combat stress. Psychiatrists are also better able to treat more severe or complicated combat stress cases."

The GAO concluded—as I noted in my opening—"Given DOD's readiness requirements, the PDP's substantial cost and questionable benefits, and the project's persistent implementation difficulties, we see no reason to reinstate this demonstration project."

Nearly a month prior to the GAO report's release, the Assistant Secretary for Defense Health Affairs, Stephen C. Joseph, M.D., M.P.H., informed Senator Joseph I. Lieberman (D-CT) that "the Department [of Defense] has no plans to extend the program after the termination date of June 30, 1997." However, as you each may be all too aware, a major lobbying and advertising campaign is being waged to have Congress reinstate this costly and needless program which, from its inception, was only a sad monument to a psychologist's wish to be a physician.

Organized psychology itself requested the GAO report and, since GAO's conclusions are unfavorable from the psychologists' viewpoint, the psychologists have mounted a drumbeat of criticism of the GAO. Psychology is now relying heavily on the so-called Vector Study and its review by Coopers & Lybrand—a study commissioned by and for the Chief Psychologist in the Air Force—a study which makes selective assumptions leading to an outcome which, by highly selected excerpts and statements taken out of context, provides support for the psychologists' position.

It is also most interesting to note that when NBC "Nightly News" showcased the PDP, NBC concluded that "psychologists are defensive, doing everything they can to keep their Pentagon program alive and continue what many critics call a prescription for the fleecing of America."

The reinstatement of the PDP in any form defies the GAO, the federal government's own independent watchdog group, and an independent news organization's conclusion that the PDP is unneeded and of questionable benefit. No funding should be provided to continue any program to train clinical psychologists to prescribe medications.

Delivery and Coverage of Mental Health Services in the Military Medical System

Reliable and accurate studies repeatedly document that diagnosable, serious, and treatable mental disorders are as prevalent and costly as heart disease, diabetes, and cancer, and that they may be even more so for mental illness in children and adolescents. However, mental illness insurance coverage is distinctly different than coverage typically offered for other illnesses.

The Civilian Health and Medical Program of the Uniformed Services (CHAMPUS), like the private sector, covers mental health benefits differently than it does medical and surgical benefits. Furthermore, the delivery system for mental health benefits under the CHAMPUS program differs from that for other illnesses.

These differences have contributed to the appearance that CHAMPUS has higher and faster-growing mental health costs than in the civilian sector. However, psychiatric services are generally provided off-base, therefore incurring an additional charge against the CHAMPUS program. Unlike psychiatric services, more than 75 percent of all other medical services provided to CHAMPUS beneficiaries are provided on a military base, but only 38 percent of inpatient psychiatric services for CHAMPUS-eligible beneficiaries are provided on-base. The other 62 percent are provided off-base because the military either does not have the capability to provide them or has not structured the military medical care system to provide direct treatment. This, in part, is due to the military's mission on the one hand and concern for the sensitive confidentiality issues rooted in treatment of mental illness and substance abuse on the other.

Moreover, in general, military life is more stressful than civilian life, especially for children and adolescents. There are long periods of separation from one's family, and very few types of employment require the employee to be prepared to give his or her life. In addition, frequent moves, especially overseas, add additional emotional strain on children. In fact, the DOD's own assessment of the various CHAMPUS demonstration projects points out that rising CHAMPUS mental health benefit costs are largely attributable to the service needs of child and adolescent CHAMPUS beneficiaries.

As noted, CHAMPUS' mental health delivery system is different than that of the private sector. However, CHAMPUS now has fully implemented the TRICARE program which moves CHAMPUS into the managed care arena. For psychiatry, more than other areas of medicine, managed care systems pose a number of additional barriers for service personnel and their dependents who need clinical care for mental illness.

While managed care systems require cost containment and generate savings on the part of the insurer, these benefits require limiting access to quality mental health care. We know that the financial incentives lead to denial and under-provision of services, deterioration of the quality of services, and subsequent adverse effects on patient management and health. We are concerned that TRICARE will follow this path.

In the final rule implementing the TRICARE program, it is clear that mental health services are covered differently in comparison to other medical services. Across the board, whether TRICARE standard, TRICARE extra, or TRICARE prime, mental health services are assessed higher copayments and deductibles than other medical or surgical benefits. The same holds true for hospitalization for mental illness and substance abuse.

Arbitrary limits on psychotherapy sessions are a problem under TRICARE. After eight sessions, permission to continue to have more psychotherapy sessions is usually required. This is a serious intrusion into the physician-patient relationship. The

decisions about treatment should be made by the physician in consultation with the patient. Decisions should not be made by a remote and/or untrained third party. Patients should receive the medical care they require—no more and no less. Optimally, this should be the premise under which managed care programs operate, and it is APA's hope that TRICARE will strive to achieve this goal.

APA supports inclusion of point-of-service alternatives in TRICARE. This provision allows the patient to seek services from non-network professionals and institutions while permitting the plan to establish reasonable higher copayments and an annual deductible for such services. Finally, we strongly support explicit regulations that assure patient access to the patient's choice of medical specialist.

Confidentiality of Patient Records

Confidentiality of patient records is a priority for the APA and nowhere even more so than when military dependent crime victims need treatment for the trauma they have experienced. The recent Elmendorf Air Force Base incident is an unfortunate example of the military's failure to respect the privacy of the physician-patient relationship and the confidentiality of patient records. At Elmendorf AFB, in Anchorage, Alaska, the 20-year-old daughter of a military counter-intelligence agent was allegedly raped by an airman. Later, she sought therapy at the base to help deal with the incident, and the records detailing her sessions with the Elmendorf Air Force psychiatrist treating her were requested by military lawyers to defend the airman charged with the rape because the records are considered government property.

While we recognize that our Armed Forces must weigh conflicting priorities with regard to active-duty personnel and their dependents, the APA finds it appalling that both prosecution and defense attorneys are routinely permitted access to patient records not only to prepare for trial, but also for use at trial should the attorney believe it useful. This practice creates an untenable hazardous situation that must be remedied.

More than eight months ago, the APA formally requested the DOD to implement policy changes that would strengthen the protection afforded to the medical records of military dependents who seek mental health treatment. This can be accomplished by amending the Military Rules of Evidence (MRE) to create a privilege that would be consistent with the June 1996 U.S. Supreme Court decision of *Jaffee* v. *Redmond*. While there was a sympathetic reception at DOD to our concerns, there has yet to be a remedial action.

We would respectfully remind the Subcommittee that the Supreme Court majority in *Jaffee* v. *Redmond* stated this balance of interest as follows): "Effective psychotherapy depends on an atmosphere of confidence and trust, and therefore the mere possibility of disclosure of confidential communications may impede development of the relationship necessary for successful treatment. The privilege also serves the public interest, since the mental health of the Nation's citizenry, no less than its physical health, is a public good of transcendent importance. In contrast, the likely evidentiary benefit that would result from the denial of the privilege is modest."

Moreover, the DOD Assistant Secretary for Health Affairs, Stephen Joseph, M.D., recommended on September 9, 1996 that "non-active duty patient/DOD psychotherapist communication should be privileged, as it is in the civilian sector," and that the MRE should be amended to create this privilege. The Members of the 104th Congress who wrote to DOD Secretary William Perry last October requesting the implementation of Dr. Joseph's recommendation also have not received a reply.

In the Armed Forces' vital role of protecting the nation's security, commanding officers need to be assured that their personnel are ready to carry out their mission and may, at times, need to weigh the physical and mental health of active-duty personnel and their dependents. However, protecting national security does not necessarily apply to military dependents who are not themselves on active duty. The knowledge that a dependent's mental health records are discoverable by military courts interferes with the ability of military dependents to obtain needed mental health treatment. Fear of exposure or humiliation will dissuade individuals from seeking such treatment. Those who of necessity do seek treatment are likely to withhold information that may be vital for accurate diagnosis and effective treatment.

The morale of our active duty forces has an important impact on their mission readiness. Concerns about the mental well-being of dependents can have an adverse impact on active-duty military, particularly if these problems are not being addressed through proper health care. It is in the interest of the military to afford the family members of active-duty personnel the same right and access to effective health care that they would enjoy if they were not members of a military family. It is essential that military dependents who have a mental disorder, or need to deal with the stress of being a crime victim, have assurance of confidential mental health treatment if they are to have the same opportunities for recovery. We urge the Sub-

committee to request the DOD to amend the Military Rules of Evidence to create this privilege.

Conclusion

Congress should continue to embrace the GAO's recommendation to continue the termination of the PDP; the TRICARE program should have mental health benefits (e.g. copayments and deductibles) that mirror those offered for other medical benefits and establish a point-of-service option to allow beneficiaries to access care outside the network; and the DOD should implement Dr. Joseph's recommendation that "non-active duty patient/DOD psychotherapist communication should be privileged, as it is in the civilian sector," as upheld by the U.S. Supreme Court in *Jaffee* v *Redmond*.

In closing, the APA wishes to thank the Subcommittee for the opportunity to testify.

Senator STEVENS. I am going to have to say thank you very much. We have looked at it. I have looked at your comment concerning the rules of evidence also. We are working on that with Senator Lieberman, as you know, and we will listen to your advice on that also.

Dr. WIENER. Thank you very much, Senator.

Senator STEVENS. Senator, do you have any comments?

Senator INOUYE. No; thank you.

Senator STEVENS. Thank you very much. We appreciate it.

STATEMENT OF MICHAEL D. MAVES, M.D., MBA, EXECUTIVE VICE PRESIDENT, AMERICAN ACADEMY OF OTOLARYNGOLOGY—HEAD AND NECK SURGERY

Senator STEVENS. Dr. Maves of the American Academy of Otolaryngology is our next witness. Would you say that for us, please.

Dr. MAVES. It is the American Academy of Otolaryngology—Head and Neck Surgery, sir. Thank you.

Senator STEVENS. Thank you very much.

Dr. MAVES. Mr. Chairman, I am Dr. Michael Maves, executive vice president of the American Academy of Otolaryngology—Head and Neck Surgery, the organization that represents the approximately 11,000 ear, nose, and throat physicians in this country. I want to thank you for the opportunity to return to this committee to give testimony today.

I would like to deal with three issues, sir. The first of these is tobacco cessation in the military. The American Academy of Otolaryngology—Head and Neck Surgery has been opposed to the use of tobacco for many decades. We are the physicians that, for the most part, take care of patients who have cancers of the head and neck, which we find are directly related to the harmful use of tobacco among our patients every day.

For this reason, we were pleased to see that several years ago the Department of Defense announced a policy banning smoking in all DOD work facilities worldwide. This far reaching initiative makes DOD workplaces free of harmful secondhand smoke and I believe will improve the health of all military personnel.

We do know, however, that many military personnel have substituted the use of smokeless tobacco to avoid disciplinary actions when smoking tobacco cannot be used. We know full well again that smokeless tobacco has significant, harmful effects, and we are concerned about this change.

We also are concerned that in a way tobacco use is still indirectly supported by the military through subsidized sales of tobacco prod-

ucts at military commissaries and PX's, where cigarettes and other tobacco products can be bought at a much lower price than would otherwise be charged.

We have expressed our concern to the Department of Defense about this and would like to see the sale price of these products in the commissaries at least brought to parity with civilian prices.

Finally, we also urge that the Department of Defense support tobacco cessation programs with military personnel and their families, but especially in relationship to mothers and children concerning the hazardous effects of secondhand smoke as well as tobacco.

The second area I would like to speak about is UV irradiation and sun exposure. Last year, our academy indicated its strong support of the Environmental Protection Agency, the National Weather Service, and the Centers for Disease Control and Prevention in putting together a UV index to alert members of the public to the dangers of excessive radiation which can cause skin cancer. It is our understanding that one of your colleagues, Senator Connie Mack, of Florida, has begun an effort with the National Association of Physicians for the Environment to survey selected Federal agencies to determine the extent of educational programs regarding skin cancer.

We would like to see this program supported and expanded. I think this would obviously be a very good program for the Department of Defense, particularly for our military personnel who are outdoors, by the nature of their profession, much of the time.

We would urge this committee that, once the report is made by Senator Mack, it would contact us to determine how we could help participate with the Department of Defense in insuring that all military personnel and their dependents are educated regarding ultraviolet exposure.

Last, let me deal with the issue of noise reduction.

Our academy, from its beginning, by the very nature of our treatment of ear disease, has been concerned about the effects of excessive noise exposure on the structures of the ear, particularly when these noises are excessive. We know that noise is a natural part, a necessary part, of daily military life. But we would urge that continued educational programs be promoted by the Department of Defense for military personnel to use appropriate noise protection and hearing protection in their daily activities.

PREPARED STATEMENT

Mr. Chairman, we have raised a number of issues with you. We would be happy to work with your staff on any additional followup. I appropriate the opportunity to participate in this discussion and I thank you once again.

[The statement follows:]

PREPARED STATEMENT OF MICHAEL D. MAVES

Mr. Chairman, I am Michael D. Maves, MD, MBA, Executive Vice President of the American Academy of Otolaryngology—Head and Neck Surgery, Inc. (AAO-HNS). Thank you for the opportunity to present this testimony to you on behalf of our Academy. The AAO-HNS is the largest medical society of physicians, with over 10,000 members, dedicated to the care and treatment of patients with disorders of the ears, nose, throat and related structures of the head and neck. We are sometimes referred to as ENT physicians.

If, after hearing our views, you would like your staff to discuss these issues with us, perhaps with the view to developing bill report language, we would be pleased to work with them.

Mr. Chairman I will deal with several issues.

Tobacco

The first of these is tobacco use cessation in the military.

The American Academy of Otolaryngology—Head and Neck Surgery, Inc. has been opposed to the use of tobacco for many decades. We are the physicians who care for most of the patients with cancer of the head and neck, and we see the harmful affects of tobacco use among our patients every day.

Increasingly there are news reports of tobacco companies admitting to the adverse impacts of tobacco on users. We also know that there can be significant impacts on individuals, especially children, who happen to be in the vicinity of toxic smoke from tobacco products used by others.

We were pleased to see that several years ago the Department of Defense announced a policy banning smoking in all DOD work facilities worldwide. This far-reaching initiative makes DOD workplaces free of harmful secondhand smoke as well and thus will improve the overall health of all military personnel.

We do know, however, that many in the military have substituted tobacco smoking with smokeless tobacco to avoid disciplinary action where smoking itself is prohibited—smokeless tobacco also has very serious medical effects.

Even with all of the scientific information we now have about the negative impacts of smoking and secondhand smoke on individuals, we find that tobacco use is still indirectly encouraged by the military through subsidized sale of tobacco products at military commissaries and PX's where cigarettes and other tobacco products can be bought at much lower prices than otherwise would be charged. The Academy has expressed its concern that the DOD would likely not ban sale of tobacco products in the commissary system. We strongly support the concept of bringing tobacco prices at least to a parity with civilian prices to help cut down on use.

We especially urge that the Department of Defense promote tobacco cessation programs with personnel and their families, but especially in relation to mothers and children, about the hazardous affects of secondhand smoke as well as tobacco.

Skin Cancer and UV Radiation

Last year the Academy indicated its strong support of the Environmental Protection Agency (EPA) and the National Weather Service (NWS) and the Center for Disease Control and Prevention (CDC) in developing a nationwide UV Index to alert members of the public to the dangers of excessive radiation from the sun, potentially resulting in skin cancers (especially of the head and neck), eye damage and immune system damage.

It is our understanding that one of your Senate colleagues, Senator Connie Mack of Florida, has begun an effort with the National Association of Physicians for the Environment (NAPE) to survey selected Federal agencies to determine the extent of educational programs regarding skin cancer as affected by excessive ultraviolet radiation from sunlight. Those Federal agencies would include those which have employees and clients (such as farmers served by the Department of Agriculture) routinely exposed to occupational and recreational sunlight far more than the general public.

Of course, the major agency which has such personnel is the Department of Defense. Millions of our young men and women are routinely exposed to excessive sunlight for long periods of time in carrying out their duties. Senator Mack has requested from the DOD a report on its educational activities, and will follow up, we are sure, with recommendations for necessary actions to be taken.

Our Academy members, of course, deal with many of the skin cancers of the head and neck, where many of the skin cancers occur. We urge that this committee consider, once the report is made available by Senator Mack, how it might participate with the Department of Defense in insuring that all personnel and their families are educated in this regard. One excellent instrument of education is the so-called UV Index, widely made available by the National Weather Service and by private weather reporting companies, which indicates, particularly in the summer, in a range of 1–10, the severity of UV radiation from the sun, at given localities throughout the United States. This excellent tool has been used by our Academy to inform members of the public about the extent of sunlight and have warned the public about the dangers of excessive sun exposure. Both the Centers for Disease Control and Prevention and the U.S. Environmental Protection Agency support the effort on skin cancer and use of the UV Index. Although these agencies are not funded by

this committee's recommendations, nevertheless we note here their commendable activities in this regard.

Along those lines we would be remiss if we did not report how pleased we are to see that a large number of military units have been receiving awards from the EPA Stratospheric Protection Division for their work in reducing the use of CFC's and other atmospheric ozone depletion chemicals in their activities, leading to stratospheric ozone layer protection.

As you know, the stratospheric ozone layer protects us from excessive UV radiation harmful to the skin, and potentially causing skin cancer.

In this activity and in so many others that the Department of Defense has become a leader in, we have seen the "greening" (environmental improvement) of the Department facilities.

Noise Reduction

Finally, Mr. Chairman, let me deal with the issue of noise reduction.

Our Academy, from its beginning, has been concerned about the affect of excessive noise on the structures of the ear, particularly those noises which are extremely excessive. We know that noise is a necessary part, frequently, of daily military life, and particularly so in wartime. Nevertheless, we believe that many of the noise affects on military personnel can be reduced by the appropriate use of noise-reducing and prevention activities.

Summary

Mr. Chairman, we have raised several issues with you involving the interface between the Academy's concerns and military activities.

I would be happy to answer any questions you may have.

Senator STEVENS. Thank you very much.

We will contact you after we get Senator Mack's report. I think it is a good suggestion and we would welcome your help.

I think the two of us could hear you better if we had known about those things in World War II.

Dr. MAVES. I understand. Thank you much, sir.

Senator STEVENS. So we thank you very much.

STATEMENT OF MARTIN B. FOIL, JR., CHAIRMAN OF THE BOARD, BRAIN INJURY ASSOCIATION, INC.

Senator STEVENS. Next is Martin Foil, of the Brain Injury Association.

For those who have just come in, I announced at the beginning that we do have to have a limitation on the testimony today because of the Thurmond event that all of us will attend. We must leave here at 10:15. So we are limiting your statements to 3 minutes. But we will put your statements in the record and we have examined them in advance. Please believe me on that.

Mr. Foil.

Mr. FOIL. Thank you.

Good morning, Chairman Stevens and members of the committee. Thank you for allowing me to be here today. My name is Martin Foil and I come before you today as the father of Philip, a young man with severe brain injury.

I serve as a volunteer chairman of the Brain Injury Association, but in my work life, I am the chairman and chief executive officer of a yarn manufacturing company in Mount Pleasant, NC. I receive no personal benefit or monetary gain from the program about which I am testifying.

I am here because I really care about the 9 million Americans living with brain injury and their families. The Defense and Veterans Head Injury Program, DVHIP, and the violence and brain injury project under the DOD are critical to improving the lives of

people with brain injury and to the prevention of brain injury. This is the only known cure—prevention.

Our project not only serves all active duty military personnel who sustain a brain injury, over 12,000 a year and their families, but it also serves the civilian population as well. It is, indeed, an exemplary case of dual use funding.

The DVHIP also serves veterans who have sustained a brain injury.

I am proud to tell you today that these collaborative efforts between the Departments of Defense, Veterans Affairs, and the BIA continue to pay off.

Programs have done the following: established a patient registry treatment and referral network, including 20 medical centers. It established toll free help lines for patients and caregivers, a multicenter patient evaluation program, prevention and educational programs for people with brain injuries, families, and caregivers, including our Head Smart Program and the multimedia interactive resource center now at place at more than 20 civilian and DVHIP centers.

In addition, the programs have furthered an international traumatic brain injury research and education effort in collaboration with the World Health Organization.

Brain injury is, indeed, a silent epidemic. It is the single largest killer and cause of disability among our young people. We need your support, Senators, for the $8.5 million so that the Brain Injury Association, the DVHIP, and the VBIP can carry on this unique partnership.

This year, the Defense and Veterans Head Injury Program and the violence and brain injury project were included in the DOD's proposed funding for the uniformed services system. However, it is not at this time a separate line item.

Last year and in years before, it was. It is important that the committee make clear that the funding for DVHIP and the violence project is used for its intended purpose. In addition, it should be made clear that the $8.5 million is needed to continue these programs. This is level funding. Any reduction in those fundings would undermine the effectiveness of these important programs.

PREPARED STATEMENT

Thank you very much. If you have any questions, I will attempt to answer them.

[The statement follows:]

PREPARED STATEMENT OF MARTIN B. FOIL, JR.

Mr. Chairman and Members of the Senate Appropriations Defense Subcommittee: Thank you for the opportunity to submit my testimony for the record, regarding two important programs under your jurisdiction. My name is Martin B. Foil, Jr., and I am the father of Philip Foil, a young man with a severe brain injury. I serve as volunteer Chairman of the Brain Injury Association, and in my work life as Chief Executive Officer and Chairman of Tuscarora Yarns in Mt. Pleasant, North Carolina.

The Brain Injury Association is a national, non-profit advocacy organization dedicated to improving the quality of life of persons with brain injury, as well as promoting research, education and prevention of brain injuries. It is composed of individuals with traumatic brain injury, their families, and the professionals who serve them. What began as a small group in a mother's kitchen has blossomed into a na-

tional organization with 44 state association, over 400 local support groups and thousands of individual members.

Both of the programs that I will discuss address the prevention and treatment of traumatic brain injury. The first program is the Defense and Veterans Head Injury Program (DVHIP), which is a successful collaborative effort between the Departments of Defense and Veterans Affairs and the Brain Injury Association. Anyone who has access to military health care as well as any eligible veteran who sustains a brain injury is being helped by this brain injury research, treatment and service program.

The second program is the Violence and Brain Injury Project, which investigates the neurophysiological link between violence and brain injury and has established military/civilian community-based programs for the prevention of violence and brain injury.

DEFENSE AND VETERANS HEAD INJURY PROGRAM

I would like to first discuss the Defense and Veterans Head Injury Program (DVHIP). As this Committee is aware, whether in peacetime or during military action, brain injuries account for a significant proportion of all injuries to military personnel. Last year alone, over 8,000 active duty military personnel were admitted to military and VA hospitals. In the past, these individuals had no access to the coordinated brain injury treatment, rehabilitation and follow-up they needed. They had no access because these services were generally not available.

As a result of the DVHIP, this is no longer the case. I am happy to report that the collaborative effort between the Departments of Defense and Veterans Affairs and the Brain Injury Association continues to pay off. This program, Mr. Chairman, is one that contributes to our nation's preparedness by helping service members return to work, as well as providing the critical support necessary to keep families together during the difficult times after a brain injury. We are well underway in all three phases of the program, and I am excited about the results we are realizing.

In phase one, the registry phase, over 4,800 active duty personnel, veterans and civilians have been entered into the DVHIP registry to date. Most of these individuals sustained brain injury resulting from motor vehicle crashes or falls, and about 25 percent have moderate to severe brain injuries. This is a patient tracking and cost-analysis program in addition to a brain injury incidence surveillance system. We are excited about this component because we are able to both follow along and document the course of treatment received by individuals with traumatic brain injury and use the data to better identify the need for services and gaps in service delivery. In conjunction with information gained through phases two and three, we will be able to clearly see which treatments are most effective. In this era of cost containment and managed care, with reduced inpatient hospitalizations and a over-reliance on outpatient and home care, this is vital information.

We have developed a referral network of 25 military and VA hospitals, and provided special training about brain injury treatment and rehabilitation to personnel at these sites. In cooperation with the VR&C Service of the VA, we have trained vocational rehabilitation counselors for the Department of Veterans Affairs to assure that they have current information to assist the veterans they serve through Chapter 31 in identifying and succeeding in jobs. This year, we also trained Brain Injury Association Information and Resource Specialists from 40 states about the nature of military health care services and processes to foster improved linkages for individuals and their families between military and community services.

In phase two, the evaluation program, I am pleased to tell you that over 1,700 standardized evaluations have been completed to date. This includes both initial and follow-up evaluations. Through this program, comprehensive standardized evaluations of the individual's status and progress in physical, cognitive and functional areas is assessed over time. Clinical management is provided for individuals undergoing evaluations as individual needs require.

In phase three, the treatment phase, two models of rehabilitation treatment with and without adjuvant pharmacological intervention are being studied for efficacy. This is a randomized controlled multi-center study of a neuro-functional and a cognitive treatment model. Accessions began in August, 1996. Currently, there are 26 individuals participating in the protocol. Accession rates are accelerating. The results of this third phase will provide vital information about the relative efficacy and cost-effectiveness of these treatment models which will guide decisions about the type, nature, and duration of treatment needed by military personnel and veterans with brain injury.

Other important aspects of the DVHIP are collateral studies including a Mild Traumatic Brain Injury study which is being conducted at San Diego Naval Medical

Center. This study is researching factors affecting return to work among active duty military personnel after so-called "mild" brain injury. To date, many of these individuals are returning to their duty stations after acute treatment but experience difficulties resuming work at the level they had previously attained. The results of this study will help protect the expensive and extensive training investment made by the military by enabling the development of strategies which can assist active duty military personnel with mild brain injury to achieve their former level of success. Specific recommendations about command management of active duty personnel who sustain a mild traumatic brain injury to maximize successful return to work will be made.

In a related effort, we have just convened a multidisciplinary core workgroup on mild traumatic brain injury to develop practice guidelines. Representatives of over 15 major physicians and allied health professional organizations are participating in this effort. An international working group will be convened to participate in the development to ensure worldwide acceptance of the practice guidelines. The guideline development process developed by the American Academy of Neurology and the American Association of Neurological Surgeons is being used.

There are numerous other collateral studies underway, including a collaborative effort with the National Institute of Neurological Disorders and Stroke at the National Institutes of Health to conduct studies on specialized testing and therapeutic modalities in traumatic brain injury and frontal lobe injury patients, a rehabilitation study for individuals with moderate brain injury at Walter Reed Army Medical Center, and several clinically related laboratory research studies.

Another important part of the DVHIP is the dissemination and updating of the Brain Injury Resource Center™, an interactive multimedia computer system which educates people about all aspects of brain injury. The Brain Injury Resource Center™ has become a vital information source at DVHIP primary and network sites where it is being used by family members, patients and staff to gain better knowledge about what is happening and what they can expect. It is presently available at over 15 military and veterans hospitals, with a total of more than 40 civilian and military sites and will be available at over 60 by the end of 1997. We intend to update content and to translate the content into Spanish.

While I have highlighted some of the important progress in the DVHIP to date, there is no substitute for the impacts the program has had on people's lives. I will share two short examples so you can have a sense of the real-life importance of the Defense and Veterans Head Injury Program.

The mother of a 24 year old woman who sustained a severe brain injury in 1994 as a result of a motor vehicle crash while on duty contacted the Brain Injury Association for help. Her daughter had been medically discharged and following treatment, was discharged into a skilled nursing facility near her parents home in a rural state, funded by the Department of Veterans Affairs. The parents were concerned because they continually have been told there is no hope for their daughter although she last received a comprehensive evaluation over a year and a half ago. They believe there is potential to improve but because the nursing home is not providing any rehabilitation, that she will fail to attain her potential. They were asking for a comprehensive re-evaluation. We were able to arrange for the DVHIP evaluation team at the Minneapolis VAMC to conduct this evaluation. Results are pending.

A 32 year old active duty Air Force E–4 who had sustained a moderate traumatic brain injury contacted the Brain Injury Association for assistance. After being treated at a civilian hospital, she was transferred to the Air Force Academy Hospital where she had a cranioplasty performed. She returned to active duty three months after her brain injury. She received no rehabilitation. At the time she called, she was at home awaiting admission for a second surgery and awaiting decision about a medical board. She was registered in the DVHIP, was referred to Wilford Hall for the necessary surgery which has since been done. Her medical board is expected this week and she will be relocating to the Tampa area, where the Tampa VA will evaluate her rehabilitation needs and provide such services as are necessary.

These two examples demonstrate how the resources this Committee has supported to date have been put to good use. Individuals who had fallen through the cracks of the system now have a chance to receive the services needed to maximize their recovery. Others, like the young man in the first example, are receiving rehabilitation in a more cost-effective manner than would have been possible in the civilian sector. At the same time, the perception of the Department of Veterans Affairs Medical Centers is changing for the better.

In order to continue this important work, I urge the Committee to appropriate the $7.25 million necessary to keep the program on track. This is level funding. I know you are well aware of the potential this program has of saving millions of dollars in productivity of individuals successfully rehabilitated and returned to work. This

program helps to protect and preserve the investment made by the Department of Defense in training these young men and women, and contributes to ensuring the preparedness of our military forces.

VIOLENCE AND BRAIN INJURY PROJECT

I would next like to turn to the Violence and Brain Injury Project. The challenges we face in this country responding to the injuries related to violence is overwhelming in personal and economic cost. We always hear about the violent event, but as Paul Harvey would say; we don't sufficiently hear the "rest of the story." The Violence and Brain Injury Project's mission is to focus on the "rest of the story." The rest of the story is: brain injury is the number one killer and cause of disability among America's young people. Among children ages 1–4 years old, homicide is the fourth leading cause of death, and among children ages 5–14 years, homicide is the third leading cause of death. In 1990, the number of deaths from traumatic brain injury caused by firearms exceeded the number caused by motor vehicles. Approximately 70 percent of children less than one year of age who are abused sustain a traumatic brain injury. These facts are sad and frightening. Brain injury caused by violence is clearly a serious threat to our children's future and the well being of our military and civilian families and communities.

The second part of the story of brain injury is a more insidious process. It is the attack on a child's normal brain development between 1–12 years of age by: threatening home and community environments, lack of appropriate brain stimulation, witnessing violence in the home and in the media, and lack of proper nutrition. Central to the project's successful performance to reduce the number of brain injuries related to violence, is to increase military and civilian communities' awareness that brain injury is the most fatal and disabling injury sustained from violence. The only cure for brain injury is prevention.

In collaboration with civilian and military injury prevention and public health programs, we have promoted brain building strategies as a first line of defense against violence and brain injury. Studies confirm the importance of early experiences on brain development. The brain is even more susceptible to environmental influences than was previously believed. The importance of a safe and stimulating environment is crucial for healthy brain development. Brain building increases a child's protective factors to combat the effects of violence which will reduce the risk of the individual becoming a victim or perpetrator of violence.

The following objectives are being implemented to successfully meet the projects prevention mission:

—Education of professionals, paraprofessionals, and community leaders about brain injury and violence prevention.
—Increase awareness of the link between risk factors associated with brain injury and the increased probability of violence.
—Build military and civilian coalitions to implement violence and brain injury prevention programs in collaboration with the Brain Injury State Associations.
—Promote the public health approach by identifying and creating remedies for reducing risk factors associated with brain injury and violence.
—Demonstrate the importance of including a brain building component as part of violence and brain injury prevention programs.
—Train civilian and military health care providers in the identification and treatment of brain injuries sustained from intentional injuries.
—Collaborate with the World Health Organization to replicate the Violence and Brain Injury prevention and advocacy program to support the World Health Organization's initiative on violence as a health issue.
—Implement prevention programs for high risk populations to reduce risk factors that contribute to violence and brain injury.

I would like to report on the progress of the prevention and advocacy programs developed and implemented by the Violence and Brain Injury Project:

Be HeadSmart® Community

The Be HeadSmart® Community Project builds a military and civilian partnership for the prevention of violence and brain injury. Currently there are four Be HeadSmart® military/civilian community partnerships located at Ft. Campbell, Ft. Knox, West Point and Wright-Patterson Air Force Base. A fifth Be HeadSmart® Community is planned for Ft. Carson. The collaborative relationships established between Brain Injury State Association's staff and the military communities have enhanced public awareness and education initiatives for the prevention of violence and brain injury. These community partnerships have enabled the participatory Brain Injury State Associations to collaborate with military elementary school personnel, community health nurses, family advocacy, family support personnel, and

military police. The community partnerships have enabled the Brain Injury State Association to provide prevention resources and expertise to support installation special events, such as: bike rodeos, health fairs, school assemblies focusing on conflict resolution, family advocacy workshops, public service announcements, and shaken baby syndrome. The goal is to use these five Be HeadSmart® Military Community Programs as models for replication at other military installations. The Be HeadSmart® Community program is easily integrated with the military's family advocacy programs, child care, youth service, and safety programs, and exceptional family member programs. This integration makes support services more readily available to individuals who have sustained a brain injury and to their families.

HeadSmart Schools

The HeadSmart School Program provides elementary and preschool educators with the tools to teach children about the brain as well as prevention of violence and brain injury. HeadSmart Schools provides knowledge and awareness about brain injury prevention early in the child's educational process. HeadSmart has both immediate and long term potential in reducing the incidence of brain injury. This is true not only because elementary age children represent a high risk population for brain injury, but also because life-long behavior modification is more easily achieved at this age. HeadSmart lessons are designed to be integrated into the regular elementary school curriculum so that brain injury prevention is learned over time as a basic, rather than a "special" one time event. The HeadSmart Schools teaches messages about violence and brain injury prevention such as: the brain is vital and unique, the brain is vulnerable, and people are responsible for their behavior toward others. HeadSmart lessons and materials enable the teacher to accomplish two goals simultaneously: teach grade level skills and subject material, and promote the development of injury prevention values and healthy attitudes. HeadSmart messages can be repeated over and over to promote behavior change and responsible attitudes that will be shared with the child's family. HeadSmart Schools are established in 21 states including the District of Columbia. There are 108 HeadSmart Schools, 30 percent of these schools educate predominantly military elementary age children. Military HeadSmart School Regional Training programs have been conducted in Florida, Kentucky, New York, North Carolina, Texas and Tennessee.

HeadSmart School Benefits

Supports two of the eight National Educational Goals: Establishing a safe environment conducive to learning; and promoting partnerships that increase parental involvement.

Supports the school's strategic plan for health and safety requirement (if one exists).

Provides a flexible program where prevention lessons are easily integrated into existing curricula (HeadSmart Schools is not a set curriculum).

Provides a flexible implementation approach (the program can be applied at selected grade levels or in selected subject areas such as physical education, language or the arts).

Teachers receive teacher-developed lesson plans and materials, but more importantly, a day of intensive training on how to use them.

The cost of the training, materials, and substitute fees are paid for by the Violence and Brain Injury Project.

Training materials include guidelines for initiating a HeadSmart special event should the school choose to stage one.

The one-day teacher training addresses intentional and unintentional causes of brain injury including automobile safety, pedestrian safety, bike safety helmet use, and playground safety.

Training includes two very informative sessions on brain building and the development of learning, and violence prevention that are unique among prevention programs.

Lesson plans are fun and interactive—not a lecture or a workbook.

Is not a one-time special event, but is designed to be incorporated into the regular school curriculum throughout the year.

Provides a school the opportunity to affiliate with a national agency, The Brain Injury Association, whose primary mission is brain injury prevention.

Be HeadSmart Ambassador Thumbs—Up Program

This program provides a powerful message about the importance of prevention of brain injury through the Ambassador's personal story of injury and recovery. The Brain Injury Association Ambassadors reach out to audiences dispelling misconceptions and presenting effective education and advocacy programs. Ambassadors pro-

mote prevention awareness and empowerment for people affected by brain injury. Materials for implementing Ambassador programs have been developed for the Brain Injury Association's Prevention Program Coordinators. Individuals who serve as Ambassadors are individuals who have sustained a brain injury or a family member. By sharing their experiences they underscore the importance of habits, attitudes, and values which serve to reduce one's risk of death or injury. The lessons they convey range from the simple to the complex; exhortations to "Always buckle up" along with encouragement to cultivate a respectful and positive orientation to life, which rules out behaviors such as drug use and violence. Involvement in prevention efforts also provides an important outlet for individuals who, because of their impairments, have limited opportunities to satisfy the basic human need to be productive and helpful. All Ambassadors are provided with support materials to assist them in organizing their presentation. In April, one of our Ambassadors (a 1988 West Point graduate) will be speaking to the West Point Cadet Corps about the events leading to his brain injury and how this injury changed his life. Trained Ambassadors are providing valuable support to our Be HeadSmart Community and the HeadSmart Schools programs.

World Health Organization International HeadSmart Program

A model for the international development and implementation of the HeadSmart Schools program has been distributed to eight NATO countries who have indicated an interest in its implementation. The World Health Organization Violence Prevention Initiative has selected the HeadSmart School Program as its primary school based strategy to address the prevention of violence and brain injury in elementary and pre-schools around the world because of its comprehensive and flexible approach.

Forensic Institutes Conference: Violence, the Epidemic of the 1990's

The Violence and Brain Injury Project in collaboration with the University of Virginia's School of Nursing have organized a Forensic Institute Program that will focus on violence as a public health issue. Key presentations relative to violence and brain injury include: missed abusive head trauma, shaken baby syndrome, media violence, blunt and penetrating head trauma, brain building basics, and the role of the new parent support programs in the prevention of violence. Military personnel who work in the Family Advocacy Programs, New Parent Support Programs, medical personnel who treat injuries related to abuse, military investigations and teachers have been invited to participate in the Institute. The Violence and Brain Injury Project will continue to collaborate with the University of Virginia School of Nursing's Forensic Institute to develop multi-disciplinary training to address the health care issues related to violence.

Brain Building Basics: A Parenting and Literacy Skills Program

Child abuse and neglect has been regularly identified by professionals in many fields as a significant contributing factor in the development of subsequent violent behavior. There is also a clear link between ineffective parenting, child abuse, and criminal behavior. Child abuse is experienced on a continuum from neglect based from ignorance to willful physical and/or sexual abuse. The National Center on Child Abuse and Neglect estimate that around three times as many children suffer from neglect as deliberate physical abuse. Much physical abuse is also misunderstood by the perpetrator as "discipline." Parenting through harsh discipline techniques has been associated with the greatest violence among both youthful and adult offenders. It is common for abusive parents to reveal histories of inadequate and abusive parenting themselves. Brain Building Basics has been developed for female and male offenders and pilot tested at the D.C. Department of Correction's Correctional Treatment Facility and at the Alexandria Detention Center in Virginia. These pilot programs will be competed in May of 1997. The Violence and Brain Injury Project will expand the Brain Building Basics to high risk populations in early childhood education programs and the military's exceptional family member program. It will also offer a "Train the Trainer" model to correctional facilities upon request to assist with implementation of Brain Building Basics at their facility.

Changes, Choices and Challenges: Violence Prevention for the Young Adolescent

Changes, Choices and Challenges is a violence prevention program that provides educators with integrated learning units which are designed to enhance the social, moral and intellectual development for young adolescents. In a position paper developed by the National Middle School Association (1995) the prerogatives for education for the middle years is set down as providing a curriculum that is challenging, integrative and exploratory, that provides opportunities for young adolescents to focus on issues of personal concern, and that provides opportunities to learn "how

to learn" from a variety of techniques and individual learning styles. CCC can be integrated into the regular middle school curriculum as a self-contained, multi-faceted course; as a component of English, Science, or Social Studies; or it can be used as an after school mentoring program for at risk youth. CCC provides the learning experiences necessary for young adolescents to be successful in school in a variety of ways so that children at high risk can develop resilience to choosing a violent life-style. Changes, Choices and Challenges is currently being pilot tested in middle schools in New Jersey. Plans for 1997–98 include expansion for the pilot program to schools in Florida, Texas, Virginia, and other interested states.

I am requesting the same level of funding as last year, $1.25 million: this level of funding will enable the Violence and Brain Injury Project to support its current initiative and allow for expansion of Be HeadSmart military communities, HeadSmart Schools, and Brain Building Basics.

I sincerely appreciate your support and commitment to these programs to reduce mortality and morbidity due to preventable brain injury. Without your support, the rest of the story would be difficult to tell. Adequate funding will enable us to maintain our essential role in demonstrating the essential link between brain injury and violence. Your involvement in these programs makes the reduction of the pain, misery, and economic burden caused by brain injury a reality.

Thank you and God Bless you.

Senator STEVENS. We will line item it again for you and I congratulate you for the work you are doing. We follow a lot of the problems in terms of the "Decade of the Brain" and the research that is being done. I think you are on the right track and we are pleased to be of assistance.

Mr. FOIL. Thank you, Chairman Stevens.

Senator STEVENS. If there is more money available, we will provide more money. I am not sure there will be, but we will try.

Mr. FOIL. We appreciate it.

Senator STEVENS. Thank you very much.

Now we have a representative of the American Indian Higher Education Consortium. Is that person here? We were not provided a name.

[No response.]

STATEMENT OF DENNIS M. DUGGAN, ASSISTANT DIRECTOR, NATIONAL SECURITY-FOREIGN RELATIONS DIVISION, THE AMERICAN LEGION

Senator STEVENS. If not, next will be Dennis Duggan, assistant director of the national security-foreign relations division of the American Legion.

Good morning, sir.

Mr. DUGGAN. Good morning, sir.

Chairman Stevens and Senator Inouye, on behalf of its 3 million members, the American Legion is extremely grateful for the opportunity again to appear before both of you as distinguished veterans. We, as well as members of the Armed Forces, owe you a debt of gratitude for your continuing efforts to maintain a strong national defense and to enhance quality of life features for men and women in uniform. We know that you and your subcommittee will do your very best.

We had to prioritize, sir. The American Legion's greatest concerns at this point include military quality of life features, closely followed by readiness and then modernization.

A marked decline in quality of life features for the active force and military retirees, coupled with heightened operational tempos, we believe can only adversely impact on both retention and recruiting.

As Chairman Floyd Spence noticed in his review and report, "Military Readiness 1997: Rhetoric and Reality," there is a widespread perception that not only is the military having to do more with less, they are also getting less. Good soldiers, sailors, marines, and airmen are questioning the desirability, we think, of a career in uniform, and our youth will question the sincerity of military services which provide diminishing health care, closing commissaries, paying less than inflation pay raises, living in substandard housing, and enduring frequent family separations.

Most civilians we know would not endure a fraction of the sacrifices that our military and their families are currently undergoing. Again, this is a perception that we are led to believe.

Many military retirees can no longer recommend a military career or perhaps even military service. They themselves are seeing the promise of lifetime military health care, for example, being broken. We support a broad array of options, particularly to help the Medicare eligible military beneficiaries to include, for example, Medicare subvention, the option of enrolling in the Federal employees health benefits plan regardless of age or health or status, and, of course, a GI bill of health.

We also support correcting the long list of inequities imposed upon the military retiree, to include concurrent receipt, however limited, of both military retirement pay and veterans disability compensation, and, as always, attempting to remove the automatic age 62 Social Security offset of the survivors' benefit plan or SBP.

Mr. Chairman, we think there is an obligation to do better. We have always believed that military service represents and still represents honorable and noble service to the Nation, as it not only fulfills American patriotic obligation but is a privilege and responsibility that has always embodied the highest form of service to the Nation.

PREPARED STATEMENT

It is also the only form of service which may call upon our men and women to pay the ultimate price, if need be, for the common defense of the United States. We believe, therefore, that the U.S. Government—and I know you will—must continue to honor its obligations to all service members, to veterans, to military retirees and their dependents, or else we think we may stand to lose the finest military in the world.

Thank you very much, sir. I am ready for your questions.

[The statement follows:]

PREPARED STATEMENT OF DENNIS M. DUGGAN

Mr. Chairman, The American Legion is pleased to appear before this Subcommittee to express its concerns over the fiscal year 1998 Defense Appropriations. The American Legion knows only too well what can happen when diplomacy and deterrence fail. As history has demonstrated, it is important for the President and Congress to continue to uphold their constitutional responsibilities to provide for the "common defense" of the American people in a highly uncertain world.

The world is still a dangerous place. There is unrest in the Middle East, in Bosnia and eastern Europe, and on the Korean peninsula. A revitalized Red China is exercising its military and maritime prowess by reaching into the Pacific and to our very shores and cities. Russia is still armed with at least 7,000 intercontinental missiles. The continuous proliferation of weapons of mass destruction along with the increase in ethnic and nationalistic wars brought about by the end of the cold war, and the

shift from a bipolar to a multipolar world, are prompting more U.S. contingency operations which continue to demand attention. Additionally, the United States faces the challenges posed by international terrorism, fundamentalist religious movements and drug cartels, none of which operate within the basic rules of international law.

The American Legion has always adhered to the principle that our nation's armed forces must be well-manned and equipped, not to pursue war, but to preserve and protect the hard-earned peace. The American Legion strongly believes the current military downsizing is based more on budget targets and budget deficit reduction than on current and foreseeable threats to the national security well-being of the American people and America's vital interests. Mr. Chairman, The American Legion is convinced that the United States is returning to the days of the "hollow forces." Once Army divisions, Navy aircraft carrier battle groups, and Air Force fighter wings are cut from the force structure, they cannot be rapidly reconstituted without the costly expenditures of time, money, and human lives. History has demonstrated that it has been safer to err on the side of preserving robust forces to protect America's interests.

This budget continues the shift of funding from defense to domestic social programs. The President's budget for fiscal year 1998 totals over $1.5 trillion and allocates 15 percent for defense and over 50 percent for social programs and entitlement spending. The American Legion believes the Defense budget continues to bear the brunt of deficit reduction. The fiscal year 1998 Defense budget continues the steady reduction in defense spending and is 40 percent below the 1985 Reagan budget which led to the end of the Cold War.

The Administration's proposed fiscal year 1998 defense budget supports an Active Duty force of 1.431 million, down 21,000 from last year and a National Guard and Reserve force of 892,000, a reduction of 10,000 from fiscal 1997. Additionally, the Quadrennial Defense Review would further reduce active endstrengths by 60,000 and those of the Reserve components by another 55,000. The currently authorized force structure for each service is well below the manpower level designed by former Chairman of the Joint Chiefs of Staff General Colin Powell during the Bush Administration. At the time, the manpower level of 1.65 million was considered the lowest force level the Nation could maintain and still meet its global requirements. The rapid, deep reductions in defense spending are also making it increasingly difficult to keep the promises made to our current and former warriors and to insure that the United States maintains a first-class All Volunteer Force which is imperative for a strong national defense.

The American Legion receives letters daily from veterans citing the string of broken promises, and the growing list of benefits under attack. Medicare-eligible military retirees and their dependents are prohibited from enrolling in the TRICARE program; military hospitals may charge dependents and retirees for outpatient treatment; some 58 military medical facilities have closed down or are closing and another 17 facilities are identified for closure, The Department of Defense is again proposing the closure of the cost-effective military medical school, the Uniformed Services University of Health Sciences; the Defense Commissary Agency may have to close 37 commissary stores and cut back on operating hours of other stores to makeup for budgetary shortfalls and there is the proposal of the Quadrennial Defense Review (QDR) that two more rounds of base closures will be conducted to pay for modernization of the Services.

The American Legion's greatest concerns include quality of life issues such as the steady decline in funding and support for the military health care system and the fact that there is no comprehensive plan to provide care to all 8.3 million military beneficiaries. The marked decline in quality of life features for the Active force and military retirees, coupled with heightened operational tempos, will adversely impact on both recruiting and retention. If these benefits, like health care, commissaries, adequate pay and quarters all of which were taken for granted in the past, are funded at significantly reduced rates, or are privatized or eliminated completely, they will undermine the United States Government's effort to honor its obligations to its active and retired warriors.

READINESS

The Administration asserts that the fiscal year 1998 defense budget protects readiness. The same claim was made regarding previous defense budgets as well. Overoptimistic assumptions about actual funding requirements coupled with multiple unbudgeted contingency operations have resulted in a series of unit readiness problems: training goals have not been met; and military readiness ratings have plunged due to reductions in operations; and maintenance accounts as a result of unpro-

grammed peacekeeping operations. If the 1997 Defense Supplemental Appropriations bill is not immediately passed, readiness may be reduced again. The Army, as an example, is having difficulty meeting its recruiting goals and the quality of recruits has been dropping. Personnel turbulence and the erosion of quality of life are weakening each of the military services. Personnel readiness problems place our ability to maintain high operational tempo at risk.

QUADRENNIAL DEFENSE REVIEW

Since the collapse of the Soviet Union in 1991, the United States has conducted two substantial assessments of the strategy and force structures of the Armed Forces necessary to meet the national defense requirements of our Country. The assessment by the Bush Administration ("Base Force" assessment) and the assessment by the Clinton Administration ("Bottom-Up Review") were intended to reassess the force structure of the Armed Forces in light of the changing realities of the post-Cold War world. Both assessments focused attention on the need to reevaluate the military posture of the United States; but the pace of global change necessitates a new, comprehensive assessment of the current defense strategy for the twenty-first century.

The American Legion supports the force structure proposed by the Base Force strategy. The United States must maintain 12 active Army combat divisions, 12 Navy aircraft carrier battle groups, 15 active Air Force fighter wings and three Marine Corps divisions.

The American Legion believes the "win-win" two-war Bottom-Up Review strategy is delusional. The United States cut forces to the extent that we were incapable of waging and winning two wars on the order of the Persian Gulf and Korean Wars nearly simultaneously, especially with the diversion of division-size forces to Bosnia and Southwest Asia. With growing worldwide commitments, and with only 10 Army combat divisions and three Marine divisions, the U.S. has a "win-hold" strategy at best.

The Quadrennial Defense Review retains the two-war strategy but reduces the current force structure even further. The National Defense Panel noted that there is insufficient connectivity between strategy and force structures, operational concepts and procurement decisions. The United States faces an even greater array of challenges today, with even fewer resources than were available four years ago. Unfortunately, we are "robbing Peter to pay Paul" by further cutting manpower and bases to pay for modernization.

The American Legion believes the U.S. can no longer afford to be the world peace enforcer by dispatching forces using unfunded mandates every time the United Nations passes a resolution to do so. The American Legion believes Congress, as the representatives of the American people, needs to become more involved in the decision-making process regarding the commitment of United States military forces. U.S. forces should be committed only when vital national interests of our country are at stake and only when such deployments are supported by the will of the American people.

Our past and current National Military Strategies have not matched increased military missions, including military operations other than war, with the required resources. Like the Bottom-Up-Review, the QDR provides neither the forces, lift capabilities, nor budgets to fight two nearly simultaneous major theater conflicts and win. Peacekeeping operations do not train our combat forces for war.

ACTIVE FORCE PERSONNEL ISSUES

The American Legion is concerned that a number of influences, to include the military drawdown, pose significant—and often underestimated—retention and readiness risks for the remainder of the decade.

Mr. Chairman, The American Legion and the Armed Forces owe you and your subcommittee a debt of gratitude for your strong support of military quality of life issues. Your assistance is needed now more than ever. Pro-active Congressional action is needed in this budget to overcome old and new threats to retaining the finest military in the world. Servicemembers and their families have endured physical and psychological risks to their well-being and livelihood. Many endure substandard living conditions, and forfeiture of personal freedoms that most American civilians would find unacceptable. Worldwide deployments have increased significantly, and a smaller force, Active Reserve and National Guard, has had to maintain high optempo with longer work hours, increased family separations and less tangible benefits.

Throughout the drawdown years, military members have been called upon to set the example for the nation by accepting personal financial sacrifices. Their pay

raises have been capped for years, and their health care system has been overhauled to cut costs, leaving military families with lessened access to proper health care. The American Legion congratulates Congress for the quality of life enhancements contained in the Fiscal Year 1997 National Defense Authorization Act. But more must be done now.

Full Military Pay Raises.—Since 1982, military raises have lagged a cumulative 12.9 percent behind private sector wage growth. The Bureau of Labor Statistics measures private sector wage growth with a tool called the Employment Cost Index (ECI). Before 1994, federal civilian and military raises were supposed to match the ECI. But in 1994, new legislation took effect, capping federal civilian raises at one-half percentage point below the ECI. The difference was used to fund a "new locality pay" additive for federal civilians that varied by geographical location. When the pay raise standard for federal civilians changed to "ECI minus one-half percent," service members got stuck with the half-point reduction in their pay raises, even though they are not eligible for the civilian locality pay.

The only way to fix the problem is to change the pay raise process to link military basic pay raises to the ECI, the full ECI. The military drawdown is about over and the economy has improved. A smaller force with a high operations tempo will be extremely retention-sensitive. Service members have earned and deserve a raise at least equal to the average American's for every year not just during an election year. It is time to put that standard into law.

The administration's budget describes the proposed fiscal year 1998 2.8 percent raise, which is one-half percentage point smaller than the 3.3 percent private sector wage growth, as "the maximum raise allowed by law." Mr. Chairman, 11 pay caps in 15 years are already too many, and continuing this practice is a sure prescription for eventual retention disaster. Mr. Chairman, The American Legion also strongly believes this subcommittee should exert every effort to adequately compensate those hundreds of military families from having to rely on monthly food stamps and women's' and infants compensation (WIC).

Housing Allowances.—Two years ago, Congress took on the challenge of restoring these allowances to be more consistent with their original intent of covering 65 percent of service members' median housing expenses, by grade and location. Thanks to this subcommittee, much progress has been made to ensure housing allowance stability for the duration of a servicemember's tenure at a duty location and to provide allowances at each location sufficient to obtain adequate quarters for junior personnel. But there is still some distance to go. The military is two years into what was intended as a five-year program to restore the Basic Allowance for Quarters (BAQ) to the standard originally set by Congress—an amount that would offset 65 percent of the national median housing cost for each grade.

Now the Department of Defense has proposed "cost-neutral" legislation to combine the BAQ and VHA into a single housing allowance that would vary by location within the United States. DOD also proposes linking annual adjustments of the new allowance to an independent measure of housing cost growth rather than to the ECI-based basic pay increase. The American Legion believes combining the allowances is a reasonable administrative technique, and that the proposed adjustment mechanism will better track future allowance increases to actual housing cost increases. Should the subcommittee elect to pursue this administrative change, it should do so in the context of restoring the combined allowances to the level originally intended by Congress.

Subsistence Allowance Reform.—The Department of Defense is also proposing legislation that would establish the U.S. Department of Agriculture's (USDA) "moderate food plan cost" as the standard for the Basic Allowance for Subsistence (BAS), with future annual BAS increases linked to USDA food plan increases rather than basic pay raises. DOD proposes to transition to the new standard by capping both officer and enlisted BAS increases at 1 percent per year for five years. Depressing BAS growth in this way would allow the USDA standard to gradually "catch up" with the enlisted BAS rate. DOD envisions using the savings from the depressed BAS increases to pay a new "partial BAS" to single first-term members who do not receive BAS, but are required to use military dining facilities for their meals.

Underlying DOD's proposal is an assumption that members currently receiving BAS do not need the full pay and allowances raises they would otherwise receive. DOD proposes to make all BAS recipients forfeit part of their annual pay raises over the next five years in order to "plus up" the next five annual pay raises for those members who are provided free meals in military dining facilities. In "robbing Peter to pay Paul," the DOD plan would give junior enlisted personnel additional annual pay raises at the expense of the career force. The American Legion believes DOD implementation plan for this BAS reform would prove highly divisive and detrimental to morale. Any incremental increases should be additive to the normal across-

the-board pay raise, and should not be extracted from the raises of their comrades in arms.

The American Legion also urges this subcommittee to continue its strong support for needed improvements in military housing renovation and construction, child care facilities and religious support programs.

Commissaries.—The Department of Defense is considering closing some 37 commissary stores worldwide and reducing operating hours in order to resolve a $48 million shortfall in the Defense Commissary Agency. Such an effort to reduce or dismantle the integrity of the military commissary system would be seen as a serious breach of faith with a benefit system that serves as a mainstay for the active and reserve components, military retirees, 100 percent service-connected disabled veterans, and others. The American Legion urges the Congress to preserve full federal funding of the military commissary system and to retain this vital non-pay compensation benefit which, we believe, is essential to the morale and readiness of the dedicated men and women who have served, and continue to serve, the national security interests of the United States. Furthermore, The American Legion fully supports the full-time usage of commissary stores by members of the reserve components.

Surveys consistently indicate that the career incentive value of the commissary benefit is second only to military retirement and health care. The commissary benefit also provides significant additional "psychological value" that reinforces the sense of reciprocal commitment between the military institution and its members and plays a clear role in retention decisions.

DOD HEALTHCARE FOR MILITARY RETIREES

Today, there are approximately 8.5 million beneficiaries in the military health care program. Military retirees and their dependents make up nearly one-half of that number, and over 500,000 retirees have lost or will lose their access to military health care as a result of the closure of approximately 45 percent of military treatment facilities. Access to affordable health care, regardless of age or health care status, represents the number one concern among military retirees. The Sense of the Congress resolution in the Fiscal Year 1993 National Defense Authorization Act reaffirms the basis of health care promised in law and tradition dating back more than 100 years. Until recently, military retirees were always led to believe that they were entitled to free lifetime health care as a major promise made in exchange for meager pay received and after having served 20 or more years in the most demanding and dangerous of professions.

Military retirees are the only group of Federal "employees" who lose their health care benefits when they become 65 and are no longer eligible for CHAMPUS or TRICARE but become Medicare-eligible. Medicare covers much less than TRICARE, and must be supplemented by expensive health care supplement insurance which many military retirees cannot afford. There is the tendency to forget that the average military retiree is an E–6 Staff Sergeant or Petty Officer and not a Lieutenant Colonel. Despite its concerns, The American Legion supports full-funding of the TRICARE program, and it strongly believes that Medicare-eligible military retirees and their dependents should continue to have access to and treatment at military treatment facilities. Furthermore, all military retirees and their dependents should continue to receive free prescriptions from military medical centers.

The American Legion has a number of concerns, however, with the DOD TRICARE Health Care System as it affects military retirees, namely, that military retirees and their dependents are required to pay annual "registration fees" and copayments which are likely to increase over time. In addition, questions remain concerning out-of-pocket expenses and the viability of Medicare reimbursement for treatment in DOD facilities; and TRICARE Prime health care requires both portability and reciprocity. Many military retirees do not reside near TRICARE providers. The American Legion believes that, as a minimum, the following guidelines should be incorporated or retained as part of the TRICARE package or any reform of military health care for active duty families, military retirees and their dependents and military survivors:

—Timely access to military medical treatment for a continuum of quality, comprehensive and equitable health care benefits covering the full array of services ranging from preventive health care and dental treatment plans to prescription services for all military retirees, their dependents, and military survivors regardless of age and health care status.

—Preservation of the space-available system in military treatment facilities for CHAMPUS/TRICARE and Medicare eligible military retirees and their dependents.

—TRICARE coverage should continue for the lifetime of military retirees and not end at age 65. Additionally, military retirees who become 100 percent disabled before 65 should continue with CHAMPUS/TRICARE coverage for their lifetimes with Medicare as second payer; as an absolute minimum, the requirement for 100 percent disabled military retirees to pay Part B Medicare premiums should be discontinued.

—DOD health care treatment facilities should be reimbursed by the Health Care Financing Administration for care provided to Medicare eligible military beneficiaries (Medicare subvention). Medicare subvention should be implemented nationwide on a fee-for-service basis, and Medicare eligible retirees should be allowed to participate in the TRICARE program.

—No further military medical facilities should be closed or downsized, and adequate military medical personnel, to include graduates of the Uniformed Services University of Health Sciences, should be retained on active duty to provide health care for active duty personnel and their dependents, and retired military personnel and their dependents.

—Authorize military retirees and their dependents the opportunity to voluntarily enroll in the Federal Employee Health Benefits Program, regardless of age or health care status. For this program to be cost effective for the government and military retirees, The American Legion believes it would have to be offered as an option to TRICARE for service members entering retirement.

—Enrollment fees and cost-sharing in TRICARE plans should be reasonable and statutorily fixed by law.

—Pharmacy networks and mail-order pharmacy programs should be extended beyond the 40-mile radius of closing military bases and they should operate on a flat-rate basis rather that one based on percentage of costs.

—There should be no restrictions to preclude military retirees and their dependents from receiving treatment or prescriptions from TRICARE providers outside 40-mile catchment areas.

—The imposition of penalty assessments should be waived for those military retirees who elected not to enroll in Part B of Medicare as they believed they would receive continuing military health care from DOD facilities which were subsequently identified for closure.

—Implementation of the GI Bill of Health: The use of Department of Veterans Affairs medical centers by non-service-connected military retirees and their dependents who are CHAMPUS/TRICARE or Medicare eligible should be authorized. As TRICARE and Medicare providers, VA medical centers should be authorized to bill the Departments of Defense and Health and Human Services for medical care provided to these veterans. Unlike military treatment facilities there are VA medical care facilities in all the states to include Alaska and Hawaii.

—Transferring TRICARE coverage for active duty families and families of military retirees should be facilitated when they transfer or move between TRICARE regions.

—The American Legion opposes any further efforts to privatize medical care delivered in military treatment facilities.

As indicated in these points, The American Legion is supportive of a broad array of options to provide medical care to military retirees and their dependents particularly those who are age 65 and older. As mentioned, these military beneficiaries should have access to military treatment facilities with the implementation of Medicare subvention. The major drawback to Medicare subvention, of course, will be access to military medical treatment facilities (MTF's). The drawdown of MTF's, and their usage by active duty personnel, their families, and TRICARE retirees and their dependents, will exacerbate the existent space problem that would be faced by dual eligible Medicare eligible military retirees and their dependents. These retirees and their dependents could, however, be treated by TRICARE civilian providers using TRICARE cost-shared rates.

Mr. Chairman, the nation has an obligation to do better. The American Legion believes there is a moral obligation for the government to find a way to provide at least the same level of health coverage to military retirees that it already provides to every other federal retiree.

OTHER MILITARY RETIREE ISSUES

The American Legion believes strongly that quality of life issues for retired military members and families also are important to sustaining military readiness over the long term. If the Government allows retired members' quality of life to erode over time, or if the retirement promises that induced them to serve arduous military

careers are not kept, this will undoubtedly inhibit retention in the current active duty force.

Accordingly, The American Legion believes Congress and the administration must place high priority on ensuring that these long-standing commitments are honored. They include maintaining regular military retiree pay COLA's and insuring that military retirement pay systems are not further diminished; deleting Social Security offsets to the Survivors' Benefits Plan; authorizing the concurrent receipt of both military retiree pay and VA disability compensation for the most severely disabled retirees; and conducting hearings on the Uniformed Services Former Spouses Protection Act.

In conclusion, the true measure of whether a defense policy adequately protects our national security interests is not necessarily how much is spent on defense, but whether the armed forces will have the means to fight and win when conflict arises. America's national security well-being cannot be separated from the overall national well-being. The American people cannot view themselves from a position of relative weakness in the world. If the United States fails to lead, our own future will be shaped by others.

Mr. Chairman, this concludes The American Legion statement.

Senator STEVENS. Thank you. We welcome you as the representative of the Legion and we do express our appreciation, that of the Congress, for the work you do.

I would just make one statement. I have not talked to my colleague about this, but I would like to see the Legion do something about the excessive tempo of activity in deployments abroad. It seems to me that we have no real cost control over the activities of our people once they are deployed overseas. That is what is eating up the money we have provided for quality of life initiatives. We are facing that in the conference we will go to this afternoon.

We are reprogramming a massive amount of money to pay for the deployments to Kuwait, Saudi Arabia, Hungary, Bosnia, and Italy. The question of the deployments is one thing. The rate of activity once the deployments are undertaken is excessive. It is like Haiti. We sent 40 percent of the military down there to quiet down one of the smallest nations in this Hemisphere. That is what is eating up the quality of life money in my judgment. We would urge you to help us find some way to put some constraints on that because that is where your quality of life is affected, with the excessive deployments of months away from home at a very high rate of activity. And they come back just for a few minutes before going off again.

It is just too hard. The reenlistment rate is bound to go down if this keeps up. So we need your help on that.

Mr. DUGGAN. Yes, sir; we will continue to work on that. Thank you for your time and your comment.

Senator STEVENS. Thank you very much.

Next is Charles Calkins, national executive secretary of the Fleet Reserve Association.

STATEMENT OF CHARLES L. CALKINS, NATIONAL EXECUTIVE SECRETARY, FLEET RESERVE ASSOCIATION

Mr. CALKINS. Mr. Chairman and distinguished members of your committee, thank you for the opportunity to present the Fleet Reserve Association's fiscal year 1998 priorities with regard to personnel issues.

I am Charles Calkins, national executive secretary of the Fleet Reserve Association and am proud to represent over 162,000 active duty, retired, and Reserve shipmates. I am joined today by my di-

rector of legislative services, Joe Barnes, and by our legislative counsel, Mac McKinney.

I also wish to express appreciation to you and members of the subcommittee for your tremendous support of the men and women of our Nation's uniformed services. Thanks to your commitment and leadership, the quality of life of our military personnel and retirees has significantly improved in recent years.

My statement has been submitted, Mr. Chairman, and I could spend probably 20 minutes on each of the issues in there. But I am just going to try to briefly touch on one of the priorities that affects all of us, and you practically covered that in your closing remarks with my predecessor.

At the outset, the Fleet Reserve Association directs your attention to the impact of continual high operational tempo within the uniformed services. End strengths have been reduced by roughly 25 percent during the drawdown, yet deployments have increased significantly, resulting in considerable strain on personnel.

Despite this, additional personnel cuts are under consideration to free up money for maintenance and procurement.

The Fleet Reserve Association is concerned that this will result in greater demands on severely stressed personnel, negatively impact retention and readiness, and ultimately lead to return of the hollow forces.

The FRA stands opposed to further personnel reductions.

We especially want to thank you for your opening statement to protect the health care benefits for our active duty, retired members, and their families.

PREPARED STATEMENT

Mr. Chairman, again in my closing I want to express the gratitude of the Fleet Reserve Association shipmates, who salute you and the other distinguished members of this subcommittee, for your outstanding support of active duty, Reserve, and retired men and women of our Nation's sea services.

Thank you and I stand ready to answer any questions that you may have.

[The statement follows:]

PREPARED STATEMENT OF CHARLES L. CALKINS

INTRODUCTION

Mr. Chairman and distinguished members of the Subcommittee: Thank you for the opportunity to present the Fleet Reserve Association's (FRA's) priorities with regard to personnel issues for fiscal year 1998. The FRA is the oldest and largest enlisted military association representing the men and women of the Navy, Marine Corps, and Coast Guard. Our membership of more than 162,000 Shipmates is comprised of active, reserve, and retired components of those services.

At the outset, our members also wish to express sincere appreciation to you and members of the Subcommittee for your tremendous support of the men and women of our Nation's Uniformed Services. Thanks to your commitment and leadership, the quality of life for our military personnel has significantly improved in recent years.

INCREASED OPTEMPO AND PERSONNEL REDUCTIONS

Prior to addressing specific issues, FRA wishes to emphasize the impact of continued high operational tempo within the uniformed services. End strengths have been reduced by roughly 25 percent during the draw down, yet deployments have increased significantly resulting in considerable strain on service personnel. Long

work weeks, back to back deployments, and deferred maintenance and/or training are common and exact a toll not only on military units but on individuals and their families.

Despite this familiar scenario, the services are considering additional personnel reductions below established end strength floors in order to pay for maintenance and the procurement of hardware and high-tech equipment. Increased reductions may free up needed funds for these important functions, however, this move will add to the demands on severely stressed personnel and negatively impact on retention and subsequent overall readiness. Rumors about additional reductions, limited advancement opportunities and extended sea duty rotation requirements contribute to uneasiness in the ranks and frustration with the services.

Accordingly, FRA stands opposed to further personnel reductions without corresponding reductions in operation tempos. (Since 1989 manpower strengths have been reduced 28 percent while operation tempos increased 143 percent.) To support this recommendation, FRA again directs the Subcommittee's attention to the PersTempo Section of the October 1995 Report of the Defense Science Board Task Force on Quality of Life.

FRA established the following issues as priorities to be funded during fiscal year 1998. Many issues parallel those adopted by The Military Coalition (TMC) and brief comments follow each of the recommended proposals.

PAY AND ALLOWANCES

Full Employment Cost Index (ECI) active duty/reserve pay increases.—Competitive pay is especially important to maintaining the all-volunteer military, yet pay adjustments have been capped below the Bureau of Labor Statistics' ECI for 11 of the last 15 years resulting a pay gap in excess of 12 percent when compared to private sector wage growth since 1982.

The gap continues as long as recommended pay hikes are based on the current formula, ECI minus .5 percent, with implementation delayed for 15 months. Addendum 1 provides additional information on pay comparability and includes Attachment A charting dramatic differences between military and civilian pay raises and the 15-month lag between survey data and the actual pay adjustments. Unless Congress provides higher increases to military pay than determined by the ECI or Administration, or amends the current formula, military pay will always lag behind comparability with the civilian sector.

Sustain housing allowance reform.—The Subcommittee is to be commended for the significant progress that's been made on restoring housing allowances to the intended 85 percent of total costs during the past two years. In addition to the increased BAQ and the VHA floor, DOD is proposing combining BAQ and VHA into a single allowance that would vary by location within the United States. FRA supports this proposal since it will be linked to an independent measure of housing costs, rather than annual ECI-based pay adjustments, thus making it more reflective of actual housing costs. The new allowance must also be set at levels that offset the intended 85 percent of the civilian housing cost for each pay grade and duty location.

Reform the Basic Allowance for Subsistence (BAS).—FRA supports adoption of the USDA's "moderate food plan cost" as the standard for calculating future BAS adjustments. This will disconnect BAS increases from annual ECI-based pay adjustments and more accurately reflect actual costs.

However, FRA objects to DOD's plan to hold BAS increases to 1 percent annually over the next several years until the allowance catches up with the USDA moderate food plan cost standard. The DOD plan results in decreased total compensation for the career force enlisted personnel while first-termers reap a net compensation increase despite generally having access to meals in military dining facilities. Although the DOD proposal is cost neutral, it results in career personnel forgoing a portion of their compensation package over six years despite a pay gap of nearly 13 percent.

FRA supports the Seventh Quadrennial Review of Military Compensation (QRMC) plan for revamping BAS in a more equitable manner. That proposal establishes a single BAS rate for all personnel that is based on, and indexed to the USDA Moderate Food Plan with basic pay adjusted in all cases to preserve the present value of cash compensation.

Adequately fund the Transition Assistance Program (TAP).—FRA continues to be concerned that Congress may terminate TAP before the completion of the current draw down. The program is valuable for uniformed members departing the military services as a result of "downsizing." And as long as Congress continues to endorse DOD's requests to reduce military manpower strengths, the TAP is necessary to as-

sist young men and women who volunteered to serve their country but find that their respective service no longer needs them. FRA believes that it is wrong to send them back to civilian life with little or no experience seeking employment or an understanding of the skills necessary to help them find employment. The program actually generates cost-savings in unemployment compensation because TAP provides job counseling and placement for most of those being discharged or released from active duty. FRA strongly urges Congress to keep this program intact until DOD has completed the "downsizing" of military manpower strengths.

Fully fund the Relocation Assistance Program.—The Relocation Assistance Program should not be confused with the Transition Assistance Program (TAP). They are distinct programs with different objectives.

The Relocation Assistance Program assists uniformed personnel when transferring from one military installation to another. Personnel assigned to a new duty installation know little about the who, what, where, why, or how of their new assignments. In addition, the Program is there to guide the member and his/her family throughout the transfer process. Members and spouses are advised of housing availability, where to go, and how to have utilities turned on or hooked up, child care, community and family services, the location of MWR facilities and other important programs. The Program helps ensure that each service "takes care of its own." The program is a great retention tool, and the morale and readiness of the uniformed military family is enhanced since wherever they go they'll always be welcomed.

Sea Pay or Partial BAQ for Junior Enlisted Military Personnel Assigned to Sea Duty.—(This item is not yet endorsed by The Military Coalition but is of paramount interest to FRA as an ombudsman for Sea Services personnel.) Under current law, sea pay is authorized for members in pay grade E–4 and above assigned to sea duty. Members in pay grades E–1 through E–3 are not so entitled and FRA believes this to be a Congressional oversight. These young men and women normally face more arduous duty and cramped quarters than those experienced by their shipmates in pay grade E–4. If they were incarcerated prisoners, the concern about such "deplorable conditions" would surely produce an almost immediate response. FRA urges Congress to review the current policy toward these young Sea Service members and adopt an amendment to Sea Pay allowances that includes E–1's through E–3's.

Appropriate funds to provide uniformed service retirees a Cost-of-Living Adjustment (COLA).—FRA was one of the organizations to testify in the 1970's against favoring COLA's over the "recomputation" method (increasing military retired pay based on pay increases applied to active and reserve pay). Congress at that time believed the "recomputation" method would be more costly than using the COLA formula. Instead of reverting to "recomputation" when the impact of this decision became known, Congress began the almost annual process of reducing the amount of the adjustment resulting in smaller COLA's for the retired pay of Uniformed Service members than COLA's for Social Security and Veterans Pension and Compensation recipients. FRA strongly objects to the singling out of military retirees as "budget busters." The Association encourages this distinguished Subcommittee to appropriate funds for uniformed members' COLA's at the same level authorized for retired federal employees, Social Security recipients and veterans and survivors in receipt of pensions or compensation and at the same time as the latter group becomes eligible for their adjustments (December 1 of each year).

Protect the Commissary Benefit.—The commissary benefit is a major component of the military compensation package and is again under attack. Proposals to reduce federal support for the benefit include privatizing, closing commissaries, consolidation with exchanges and increasing prices.

The only benefits ranked ahead of the commissary benefit as career and retention incentives are the military retirement plan and health care. Given the importance of the benefit, FRA supports initiatives to improve management of the Defense Commissary Agency (DeCA) that do not erode the value of the benefit, reduce services to patrons or increase commissaries' vulnerability to privatization or consolidation with exchanges. Accordingly, FRA opposes reductions in appropriated fund support for DeCA that reduce the value of the commissary benefit.

Increase the number of days Reserve members may access commissaries.—FRA supports the expansion of commissary access to members of the Reserve preceded by a test of the concept at selected military installations. The test will ease concerns that the expansion would either increase government costs, or adversely affect the benefit for other beneficiaries. Unlimited commissary access would serve as a positive recruiting/retention tool, and recognize the increased contributions of Reservists to the defense of our nation. Lifting the restricted access will also eliminate $17 million expended annually to administer the current ration card system.

MILITARY HEALTH CARE

Congress enacted the Civilian Health and Medical Program for the Uniformed Services (CHAMPUS) in 1966 in order to improve the delivery of health care to military beneficiaries. At the same time, it adopted language terminating the use of CHAMPUS for those beneficiaries 65 years of age or older. The objective was to have this group utilize military treatment facilities (MTF's) or Medicare. Remembering the promises of "free" medical care for life made to them by military officials, most chose to retire near military installations where they and their eligible family members could use MTF's.

Over the years, the reduced availability of care in MTF's for older beneficiaries forced many to seek health care services elsewhere. However, they still prefer to receive care at MTF's, and for those continuing to be seen in these facilities, most are contributing to Medicare and paying premiums for Medigap coverage yet MTF's are unable to recover any of the funds paid for either program.

FRA and the other associations of The Military Coalition seek authorization for payments from the Health Care Financing Administration (HCFA) for care given to Medicare-eligible military beneficiaries in MTF's. FRA supports legislation authorizing a Medicare-subvention demonstration test and requests the Subcommittee's endorsement of same. Since DOD's care is less costly than private sector care, this will save Medicare money a "win-win-win" situation for Medicare, the taxpayers and Medicare-eligible beneficiaries.

Hopefully, the progress made on this issue last year in the form of an agreement between DOD and HCFA can serve as the basis for test legislation this year.

FEHBP–65.—Since Medicare subvention will only benefit about one-third to one-half of Medicare-eligible military retirees (those near military installations with MTF's), the need exists for another plan to benefit the remaining beneficiaries. Accordingly, FRA supports legislation authorizing Medicare-eligible military retirees the option of enrolling in the Federal Employees Health Benefits Program (FEHBP) the same program offered to every other Medicare-eligible federal retiree. The government subsidizes 72 percent of the premium expense with the member paying the remainder. Note that this recommendation is for any Medicare-eligible uniformed services beneficiary, regardless of age, in order to cover under-age-65 beneficiaries who are disabled.

As with Medicare-subvention, a demonstration of FEHBP–65 will provide data on the number of beneficiaries who would take this optional coverage if offered. FRA understands the cost of implementing this program, but reminds the distinguished Subcommittee that the Federal government now spends $4 billion annually on FEHBP for federal civilian retirees. It is only fair for Medicare-eligible military retirees to receive the same level of health coverage as that provided to other federal retirees.

Expand the mail-order pharmacy program.—Military retirees loose government-sponsored prescription drug coverage when they become eligible for Medicare. Many of these beneficiaries elected to live near military installations in order to be near MTF's and associated pharmacy services. However, four rounds of base closures and realignments coupled with budget cuts affecting the remaining formularies have left many with severely limited access to government-provided prescription drugs.

While Congress has authorized a mail-order pharmacy program for base closure sites, eligibility is limited to members residing in designated closure areas, thus leaving hundreds of thousands of retirees with no prescription drug coverage. FRA urges the Subcommittee to expand eligibility for the DOD mail-order pharmacy program to include all uniformed services beneficiaries, regardless of age, status or location.

SURVIVOR BENEFIT IMPROVEMENTS

The Survivor Benefit Plan (SBP) was enacted by Congress in 1972 and was intended to have a 40 percent government subsidy level which is comparable to that of federal employees' SBP. However the actuarial projections at that time have proven to be overly conservative and the Office of the DOD Actuary recently estimated that the current subsidy is only 26 percent for non-disabled retired members. This means that retirees participating in SBP are paying excessive premiums for their coverage. To correct this and add other improvements to SBP, FRA supports the following proposals.

Allow Paid-Up Coverage.—Authorizing "paid-up" SBP coverage after a specific length of time (25 to 30 years) would make SBP more attractive to qualified participants. This would also be a means of recognizing the past "overpayments" discussed above.

Minimum SBP Payment for "Forgotten Widows".—The 1972 SBP open enrollment period inadvertently created a category of "forgotten widows" widows of retirees who died before SBP was enacted, or during the open enrollment period before making a participation decision. The total number of these "forgotten widows" is estimated at between 5,000 and 7,000.

And in 1978, Reservists were allowed to participate in SBP after completing 20 years of qualifying service. However, the law did not provide coverage for widows of Reserve retirees who died prior to its enactment—thus creating a second category of "forgotten widows." There may be about 3,000 widows in this category.

These "forgotten widows" deserve at least the minimum SBP annuity allowed under current law and FRA believes the minimum $165 a month annuity is essential to addressing this inequity. The Civil Service Survivor Benefit Plan resolved the problem of its "forgotten" widows nearly 39 years ago (June 25, 1958).

Efforts by Sen. Strom Thurmond last year to address this problem were unsuccessful and the language was dropped from the 1997 Defense Authorization Act during conference deliberations. FRA strongly supports Sen. Thurmond's reintroduction of legislation this year to address this inequity.

SBP Coverage for all Active Duty Deaths.—Current SBP regulations stipulate that only survivors of retired members or those of active duty members who have served over 20 years are eligible for SBP. This can create inequitable disparities in benefits for the survivors of two members of equal grade who die as the result of illnesses or injuries while on active duty. Note that personnel with less than 20 years service who die, only qualify for life insurance and certain veterans benefits.

A casualty situation such as an airplane crash provides an example of this, and the difference hinges on whether the member survives for a time following the accident.

Permanently disabled members are entitled to retirement with a 100 percent disability rating which subsequently entitles them to retired pay (75 percent of base pay) and SBP eligibility, regardless of the years of service. By contrast, the survivors of those killed instantly with over 20 years service, are awarded SBP as if they had retired for longevity (2.5 percent basic pay times years of service) with no disability. Their benefits can be hundreds of dollars per month less than those who survive to be retired for disability.

SBP Withdrawal Option.—Before retiring from active duty, uniformed service members must make an irrevocable decision regarding participating in SBP. The reluctance of many prospective military retirees to make this commitment could be reduced if they were permitted to reevaluate their estate plans after a reasonable period of transition into second careers. A limited exit option could therefore increase SBP participation, and FRA recommends approval of a one-year exit window option with no premium reimbursement between the second and third retirement anniversary.

Survivor Enrollment in the Retiree Dental Program.—FRA salutes the Subcommittee for its support of the new retiree dental program included in the Fiscal Year 1997 Defense Authorization Act and we look forward to successful implementation of this program later this year. However, survivors of members who die on active duty are omitted from coverage. While these survivors retain their active duty dental plan coverage for up to one year, it also seems reasonable to allow them the option to enroll in the new retiree dental program following that transition period. Therefore, FRA recommends that survivors of members who die on active duty be extended eligibility to enroll in the DOD dental program for retired members and their survivors.

CONCURRENT RECEIPT

A continuing concern of FRA members is the VA disability compensation offset to military retired pay. The rationales for these two types of pay are very different. Longevity retirement pay is a force management tool designed to attract high quality personnel to pursue military careers, and disability compensation is for injury or disease incurred in the line of duty. FRA understands that cost is a major obstacle in revamping the offset requirement, however this is an inordinate penalty to disabled retirees especially to those most severely disabled.

FRA supports S. 657 sponsored by Sen. Tom Daschle, plus H.R. 303, H.R. 65 and H.R. 44, all sponsored by Rep. Michael Bilirakis. The latter (H.R. 44) would provide at least some relief to those rated 70 percent or greater disabled. Although FRA remains committed to relief for all disabled military retirees, at a minimum, this legislation deserves the support of your distinguished Subcommittee.

CONCLUSION

Mr. Chairman. This concludes FRA's funding priorities for fiscal year 1998. I close by again expressing the gratitude of FRA Shipmates who salute you and the other distinguished members of the Subcommittee for your outstanding support of active duty, reserve and retired men and women of our Nation's Uniformed Services. Thank you ever so much.

ADDENDUM 1

PAY COMPARABILITY

The Department of Defense (DOD) defines one of the principles of military pay equity as follows: "The basis for determining the approximate pay level for the service-specific aspects of compensation of the uniformed services shall be comparability with the American economy." However, since fiscal year 1982, the pay gap between Private Sector Pay (PSP) and Military Pay (MP) has widened in fiscal year 1997 to an estimated 12.9 percent. For every $100 received in the pay check of the military service member, a civilian employee earns $112.90.

For more than a decade and a half, the Administration's requests for military pay raises (MPR's) have fallen below "projected" private sector raises (PSR's) or Employment Cost Indexes (ECI's). This has not escaped the attention of Congress. In 1986, the Senate expressed concern for the pay lag. "As measured by the Employment Cost Index of the Bureau of Labor Statistics (BLS)," reads Senate Report No. 99–331, p. 225, "military pay trails civilian wages by 8.3 percent." As the concern heightened, Congress for the first time since fiscal year 1982, authorized for fiscal year 1989 a greater MPR than the 3.5 percent recommended by the Administration. Again, last year, Congress increased the MPR above the Administration's "projected" request.

The word "projected," highlighted above, may require an explanation. Administrations, for years have used an estimate of the PSR/ECI for the same fiscal year that it recommends the MPR. This method hasn't, nor will it ever produce comparability. Only the employment of true PSR's/ECI's will cause MPR's to come nearer to the goal of achieving comparability but only if the MPR occurs the January of the following year the PSR/ECI is announced.

Under the current method, even using true PSR's/ECI's to determine MPR's would cause a gap of 15 months. PSR's/ECI's are determined in October of any given year based on data compiled by BLS between October 1 of the preceding year thru September of the following year. If the true PSR/ECI is used as a measure for requesting the next MPR, as noted in the above paragraph, the latter should occur the following January after the BLS data is released. Instead, the MPR occurs 15 months after the BLS publishes its latest ECI. Why? Because the Administration requests the MPR in January, which is approved by Congress sometime during the year it is requested, but not made effective until the following January.

In the chart attached, prepared by FRA, comparisons of annual pay raises and indexes for fiscal years 1990–1997 are depicted. The diagonal lines indicate the delay described in the preceding paragraph. If true ECI's were used to determine MPR's, in lieu of "projected" or DOD's "keeping military pay competitive with the private sector" requests, military pay would now be 4.3 percent better than it is currently as of January 1, 1997.

Unfortunately, the only answer to comparability is for Congress to occasionally take the same action it did in fiscal year 1982 and boost military pay by double-digit increases.

RATIO OF PAY

(Note: The Pay Grades used in the examples below were the highest grades existing prior to the inauguration of the new "super-grades" in 1958).

In a recent appearance before the House Appropriations National Security Subcommittee, the Sergeant Major of the Marine Corps called attention to the disparity of pay between his pay grade and that of a Marine private. He had good cause to do so. The ratio of pay of a senior Master Sergeant/Chief Petty Officer (now pay grade E–7) and a recruit private/seaman (now pay grade E–1) has gone from a pre-All Volunteer Force (AVF) high of 4.5:1 to today's current low of 2.6:1. It was even lower, 2.4:1, prior to the fiscal year 1982 MPR that provided larger increases in pay for career noncommissioned/petty officers than for other enlisted and officer grades.

In the 1970's, the concern for recruiting the All Volunteer Force nudged Congress to increase the pay of junior personnel, officer and enlisted, including recruit sea-

men and newly commissioned officers. Although such increases were recommended by defense officials, FRA never subscribed to higher pay for new military accessions. The same defense officials also short-changed the pay increases for noncommissioned and petty officers.

On the other side of the page, the ratios of pay between Admirals/Generals (now pay grade O–8) and newly-commissioned officers (now pay grade O–1) went from a high of 5:1 in the pre-AVF era to the current 4.6:1 as of January 1, 1997. Whereas, the senior commissioned officers' pay in the AVF era suffered a small ratio loss of 0.4:1, senior enlisted members witnessed a deficit nearly 5 times greater, 1.9:1.

For these ratios and others please review the chart below.

PAY RATIO CHART

[To the nearest one-tenth]

Year	Time period	E–7:E–1 [1]	O–8:O–1 [1]
1971	Pre-AVF	4.5:1	5.0:1
1980	Pre-fiscal year 1982	2.4:1	4.5:1
1981	Fiscal year 1982	2.6:1	4.5:1
1997	Current	2.6:1	4.6:1

[1] The Pay Grades of the E–7 and O–8 above are for 20 years service.

FRA questions the rationale for (1) paying senior enlisted service members only at a ratio of 2.6:1 above the pay of a new recruit, and (2) paying senior enlisted personnel at a much lower ratio than what senior commissioned officers now earn when the former began the AVF-era at a ratio of pay just a bit less than that of the latter. Congress, in the near future, will need to address this problem as it did in fiscal year 1982, offering a greater MPR increase to senior petty officers/NCO's than to more junior enlisted personnel.

ATTACHMENT A.—MILITARY PAY RAISES

[Compared to private sector raises, employment cost and consumer price indexes]

	1990	1991	1992	1993	1994	1995	1996	1997
Military pay raise	.....	4.1	4.2	3.6	2.2	2.6	2.4	3
Private sector raise	.....	4.4	4.2	3.7	2.7	3.1	2.9	.....
Consumer price index	5.4	3.1	3.2	2.7	2.6	3.1	2.9	.....
Employment cost index	4.4	4.4	4.2	3.7	2.7	3.1	2.9	.....

Source: Department of Labor, Defense Finance and Accounting Center.

Senator STEVENS. I have no questions. I thank you, though, for your comparisons of rates of pay. I think we are going to go into that, probably this year, and it has been very helpful.

Mr. CALKINS. We would be ready to help you with that.

Senator STEVENS. Thank you.

We will now hear from Dr. David Johnson of the Federation of Behavioral, Psychological and Cognitive Sciences.

STATEMENT OF DAVID JOHNSON, Ph.D., EXECUTIVE DIRECTOR, FEDERATION OF BEHAVIORAL, PSYCHOLOGICAL AND COGNITIVE SCIENCES

Dr. JOHNSON. Mr. Chairman, Senator Inouye, I am testifying today primarily on the 6.1, or basic behavioral research budget, and particularly on support for that budget. I will speak mainly of proposed cuts at the Army Research Institute and rely on my written testimony to outline the substance of our views on the naval and Air Force behavioral research budgets.

Senator STEVENS. We are printing all of your statements in full in the record.

Dr. JOHNSON. Thank you.

We support the administration's request for a 7.8-percent increase for 6.1 research. The increase recovers some losses suffered in the last 2 years and provides an inflation area adjustment.

While most of the research budget is consumed by hardware and electronics development, a small part of 6.1 funding, only about $30 million across all the service branches out of the $1.164 billion request for 6.1 research is devoted to research aimed at improving human performance. Much mission relevant research is supported by that meager allocation.

The Army in particular is supporting research to understand the factors leading to sexual harassment in the military. We regret that the requests for the 6.1 behavioral research at the Navy and Air Force are zero percent and 3.5 percent respectively, far from the 7.8-percent increase sought for 6.1 research overall.

Nevertheless, we ask the subcommittee to support at least the funding levels requested for behavioral research at the Navy and Air Force. Those levels are $16 million for the Navy and $9.057 million for the Air Force. But we are most deeply troubled by the requested 25 percent cut in the overall research funding and a planned single year staff reduction of 53 percent for the Army Research Institute.

The concept known as reliance is important in the downsizing of military research. The approach designates a lead service as the provider to all the services of research in a given area. All research on social and organizational issues is assigned to the Army Research Institute. The Army is the only service doing research on leadership, on the integration of recruits from diverse backgrounds into well functioning teams, on sexual harassment, and on the training of troops for peacekeeping missions.

The cuts proposed for 1998 will cripple ARI. We must plead with this subcommittee to give ARI the minimum tools to do its job. Without your intervention, fiscal year 1998 will see a precipitous and, we believe, ultimately fatal plunge for ARI.

PREPARED STATEMENT

We urge the subcommittee to support a fiscal year 1998 funding level of $21.4 million and a staffing level of 165 full-time equivalent positions. Both represent painful, but survivable, cuts from their 1997 levels.

I thank the subcommittee for allowing us to present our views.

[The statement follows:]

PREPARED STATEMENT OF DAVID JOHNSON

Mr. Chairman, members of the Subcommittee, my name is David Johnson. I am Executive Director of the Federation of Behavioral, Psychological and Cognitive Sciences, an organization of 16 scientific societies. The scientists of the Federation carry out behavioral research, including research of value to the Armed Services. I am testifying today on behalf of the 6.1 or basic research budget, and particularly on behalf of the basic behavioral research support contained in that budget. While my focus is on the 6.1 budget, I would note that basic research is the beginning of a process that culminates in application. Thus, the 6.2 and 6.3a budgets must be seen as going hand-in-hand with basic research. Strong support of the whole research pipeline—research, development, testing and evaluation—is necessary to assure that basic research achieves its ultimate purpose which is to assure our national defense.

The 6.1 Basic Research Budget

The Administration is seeking a 7.8 percent increase in the basic research budget for fiscal 1998, and we wish to lend our support to that request. Defense basic research has lost ground over the past two years. The requested increase is meant to recover some of those losses and to provide an increase for 1998 that allows the budget to stay even with inflation. It is legitimate to ask why the basic research budget should have an opportunity to recover steady-state funding when other areas of the defense budget see real cuts. There is just one reason to preserve basic research support: It enables future preparedness. The military systems in use today were enabled by basic research carried out decades ago. Two decades from now if U.S. forces are to have the superiority they have today, then the groundwork to maintain that superiority must be laid now with a strong program of basic research. If such research is not sustained, the knowledge necessary to improve technology, processes, and procedures will not be available. We appreciate that it is difficult politically to plan for the future in the face of many current needs, but responsible leadership demands decisions that will make it possible to defend the country well not just today, but over time.

Basic Behavioral Research Within the 6.1 Budget

There is a tendency when thinking about military research funding to think only of hardware and electronics development. And it is true that this work does consume a major portion of the research budget. But there is a small part of 6.1 funding—only about $30 million across all the service branches out of the $1.164 billion request for 6.1 research—that is devoted to research aimed at improving human performance. It is a pittance, less than 3 percent of the basic research budget. Yet an astonishing array of highly mission-relevant research has been supported by that meager allocation to the human element in defense.

At the Air Force, it supports research to understand how to keep pilots functioning in top form in the face of an onslaught of complex information that is difficult to interpret. Members may recall that during the Vietnam War, pilots often reported that they turned off or ignored many of the cockpit devices supplying them information. Why? There was simply too much information to process—so much information that paying attention led to a degradation of their performance. Air Force behavioral research is helping to determine how much and what kind of information is needed to assure top performance of pilots in life and death combat situations.

At the Navy, behavioral research is helping perfect systems and techniques for embedded training that will reduce training costs while improving the quality of training, especially training for rare but highly exacting and critical tasks such as threat recognition and follow through. When embedded training is perfected, it will be possible to use the long hours spent uneventfully at sea to train crews for every type of combat situation under very realistic conditions on the equipment they would be using in actual confrontations. The Navy is also investing behavioral research dollars in advanced robotics so that, eventually, ships can be operated at full capability with crews that are a fraction of the size they are today.

At the Army, behavioral research dollars support efforts to understand the factors leading to sexual harassment in the military. They go to improving the ability of recruits from different racial, ethnic and gender backgrounds to work together productively. And Army behavioral research dollars are spent to understand the nature and variation of leadership characteristics and to apply that knowledge to the selection, training and placement of leaders for optimum performance.

Simply looking at this selection from the array of projects supported by 6.1 behavioral research dollars is enough to make it clear that the investment-to-payoff ratio for military behavioral research favors the payoff side overwhelmingly. It doesn't make good sense to neglect investments that pay back many times the initial investment.

Recommended 6.1 Behavioral Research Funding Levels for the Navy and Air Force

We regret that the requests for 6.1 behavioral research at the Navy and Air Force are 0 percent and 3.5 percent, respectively, a far cry from the 7.8 percent increase sought for 6.1 research overall. And we question the tendency of the Defense Department to budget much more generously for research leading to hardware development than for research to see that the humans operating the hardware are able to use it well. Nevertheless, we are relieved that these requests represent only an inflationary loss for the Navy and a steady-state budget for the Air Force rather than actual cuts. Thus, we ask that the Subcommittee support at least the funding level requested for behavioral research at the Office of Naval Research and the Air Force Office of Scientific Research. Those levels are $16 million for the Navy and $9.057 million for the Air Force.

Recommended Research Funding and Staffing Levels for the Army Research Institute

We are much more deeply troubled by the requested 25 percent cut in overall research funding, and a planned single year staff reduction of 53 percent, for the Army Research Institute. Within that 25 percent cut, the reduction for 6.1 research would be 31 percent.

As you know, one important element of downsizing with respect to military research has been implementation of the concept known as reliance. Under this program, many military research labs have been closed, and research that seemed duplicative across the services was assigned to a single service branch as the lead provider of research on that topic. It is expected that all the services will look to the leader for scientific knowledge in that service's assigned areas of research. Like the research offices of the Navy and Air Force, the Army Research Institute has defense-wide responsibilities under the reliance program. All research on social and organizational issues has been assigned to ARI. Thus, the Army is the only service carrying out research on leadership. It is the lead on research aimed at learning how to see that recruits from a diversity of backgrounds are integrated into teams that work efficiently and productively together. The latest scandals over treatment of women in the military are an example of one kind of problem ARI research is aimed at addressing. But the research extends to integrating recruits from diverse ethnic, racial, economic, social, and educational backgrounds as well. If units fail to function as teams, it won't matter how sophisticated their weaponry is.

The Army is also the only service branch carrying out research on the training of peacekeepers. Since the end of the Cold War, peacekeeping has become a much more regular mission of U.S. forces. Little in our military history, however, has prepared us to keep peace well, especially in extremely volatile environments that could require an almost instant transformation of peacekeepers into combatants. We just don't know yet how best to train people for those complex roles. The Army is doing the research to provide the answers to all the service branches.

The cuts that are contemplated for fiscal 1998 will cripple ARI. Both the contemplated staffing level and the requested funding level are well below what ARI would need to fulfill its responsibilities at an acceptable level of quality. We must plead with this Subcommittee to give ARI the minimum tools it must have to do its job. At the height of its funding, ARI received about $50 million for its 6.1 through 6.5 research. That funding has been chipped away slowly year by year. Without your intervention, fiscal 1998 will see a precipitous and, we believe, ultimately fatal plunge for ARI. The request for 1998 is $17.75 million with 6.1 research comprising a mere $2 million of that total. By comparison, its current funding level is $23.7 million with 6.1 research accounting for $2.9 million of the total. Its current authorized staffing level is 254 positions. The planned staffing level for 1998 is 119 positions.

We understand that the Subcommittee is facing having to find ways to make up a several billion dollar shortfall in military funding. So we know that it is not realistic to ask even for an inflation-adjusted or steady-state budget. What we ask is that the Subcommittee support sufficient funding to enable ARI to continue to fulfill its mission. We urge the Subcommittee to support a fiscal 1998 funding level of $21.4 million for ARI and a staffing level of 165 full-time-equivalent positions. Both represent painful but survivable cuts from their 1997 levels.

Much of the work ARI is doing is unique, and yet it addresses problems that several service branches have found particularly difficult to handle. If ARI goes, not just the Army, but the Navy, and the Air Force as well will have lost a critically important tool to address problems as current as tomorrow's headlines.

I thank the Subcommittee for this opportunity to present our views, and I thank the Subcommittee for its continuing leadership in support of the nation's defense.

Senator STEVENS. Thank you for your time. We will do our best. That is a very difficult proposition in view of the reduced request that is in the budget. But we will take a good look at it.

Thank you very much.

Dr. JOHNSON. Thank you.

Senator STEVENS. Next is Frances Visco, president, National Breast Cancer Coalition.

STATEMENT OF JANE REESE-COULBOURNE, EXECUTIVE VICE PRESIDENT, NATIONAL BREAST CANCER COALITION, FOR FRANCES M. VISCO, ESQ., PRESIDENT

Ms. REESE-COULBOURNE. Thank you, Mr. Chairman and members of the Appropriations Subcommittee on Defense. I apologize that Frances Visco was unable to make it this morning. She had a family emergency.

I am Jane Reese-Coulbourne, a 7-year late stage breast cancer survivor, a wife, a mother, an engineer, and executive vice president of the National Breast Cancer Coalition.

On behalf of the National Breast Cancer Coalition and the 2.6 million women who are currently living with breast cancer, I would like to thank you for your past support of the Department of Army Peer Reviewed Breast Cancer Research Program. We urge that you continue your support of this important program.

The National Breast Cancer Coalition and the majority of your colleagues in the Senate believe that this program is vital to the eradication of breast cancer. Shortly you will receive a letter in support of this program from at least 52 of your colleagues in the Senate.

The unparalleled efficiency and skill with which the Army has administered this groundbreaking research effort in the battle against the epidemic of breast cancer has been unprecedented. Your leadership in supporting this program is an example of the innovative approach that is needed to combat this disease. And, in fact, many countries, such as the United Kingdom and Canada are now using this program as a model for similar programs in their countries.

The coalition and its membership are dedicated to working with you to insure the continuation of funding for this program at a level that allows this research to forge ahead.

On May 6 of this year, we presented a petition to the congressional leaders with over 2.6 million signatures for $2.6 billion in funding for breast cancer research by the year 2000. Women and their families across the country worked hard to gain those signatures.

Funding for the Department of Army Peer Reviewed Breast Cancer Research Program is an essential component of reaching the $2.6 billion goal that so many women and families worked hard to gain. Despite our best efforts and your leadership, breast cancer is still the most common form of cancer in women. We still do not know the cause or have a cure for this dreaded disease.

This, the peer reviewed research of the DOD program is essential and must continue. I appear before you today urging you to appropriate $175 million to the Department of Defense to continue its mission against breast cancer.

Breast cancer policymakers and scientists agree that the DOD Peer Reviewed Breast Cancer Research Program is essential to the fight on breast cancer.

One of every eight women is at risk of getting breast cancer. In addition to the fact that the DOD program provides desperately needed, excellent quality, peer reviewed breast cancer research, it also makes extremely efficient use of its resources. In fact, over 90 percent of the funds went directly to research grants.

The Federal Government can truly be proud of its investment in Army breast cancer research. The overall structure of the system has streamlined the entire funding process while retaining traditional quality assurance mechanisms.

We ask you, the Defense Appropriations Subcommittee, to recognize the importance of what you have initiated. What you have done is set in motion an innovative and highly efficient approach to fighting the breast cancer epidemic. What you must do now is continue to support this effort by funding research that will help us win this very real and devastating war against a cruel enemy.

PREPARED STATEMENT OF FRANCES M. VISCO

Thank you again for inviting me to testify and giving hope to the 2.6 million women, such as myself, living with breast cancer.

Thank you.

[The statement follows:]

PREPARED STATEMENT OF FRANCES M. VISCO, ESQ., PRESIDENT, NATIONAL BREAST CANCER COALITION

Thank you, Mr. Chairman and members of the Appropriations Subcommittee on Defense. I am Fran Visco, a breast cancer survivor, a wife and mother, a lawyer and President of the National Breast Cancer Coalition.

The National Breast Cancer Coalition is a grassroots advocacy organization dedicated to the eradication of the breast cancer epidemic. The Coalition is made up of 400 member organizations and more than 40,000 individual women, their families and friends. Our national network extends to every state where we have state coordinators who respond to our calls to action.

On behalf of the National Breast Cancer Coalition and the 2.6 million women who are now living with breast cancer, I thank you for your past support of the Department of the Army peer-reviewed breast cancer research program and I urge your continued support of this important program. The National Breast Cancer Coalition believes that this program is vital to the eradication of breast cancer. I am a member of the Integration Panel that implements this program, and I have witnessed the unparalleled efficiency and skill with which the Army has administered this groundbreaking research effort in the battle against the epidemic of breast cancer. Your leadership in supporting this program is an example of the innovative approach that is needed to combat this disease.

The Coalition, and its members, are dedicated to working with you to ensure the continuation of funding for this program at a level that allows this ground breaking research to forge ahead. On May 6 of this year, we presented a petition to the Congressional leaders with over 2.6 million signatures for $2.6 billion in funding for breast cancer research by the year 2000. Women and their families across the country worked hard to gain those signatures. Funding for the Department of the Army peer-reviewed breast cancer research program is an essential component of reaching the $2.6 billion goal that so many women and families worked to gain.

Many of the women and family members who supported the campaign to gain the 2.6 million signatures came to our Annual Advocacy Training Conference in Washington, D.C. in early May. We were joined by over 600 breast cancer activists from around the country to continue to mobilize behind the efforts to increase breast cancer research funding. The overwhelming interest and dedication to eradicate this disease continues to be evident as people are not only signing petitions, but are willing to come all the way to the Capitol to deliver their message about the importance of our commitment to peer-reviewed research. They recognize that the Department of the Army peer-reviewed breast cancer research program has forged a new path for breast cancer research, creating an innovative program that is efficient, flexible, and innovative.

Despite our best efforts and your leadership, breast cancer is still the most common form of cancer in women. We still do not know the cause or have a cure for this dread disease. Thus, the peer-reviewed research of the DOD program is essential and must continue. I appear before you today urging you to appropriate $175 million to the Department of Defense to continue its mission against breast cancer.

We are committed to the DOD program in every effort. NBCC has created a ten-point Breast Cancer Policy Platform. The second item on the platform is: The U.S.

Congress and the President must continue support for the Department of Defense peer-reviewed breast cancer research program, under the strategies recommended by the Institute of Medicine.

In addition, breast cancer policy makers and scientists agree that the DOD peer-reviewed breast cancer research program is essential in the fight against breast cancer. Over the past two years, there have been incredible discoveries at a very rapid rate that offer fascinating insights into the biology of breast cancer. Examples of these discoveries include the isolation of breast cancer susceptibility genes, and discoveries about the basic mechanisms of cancer cells. These discoveries have brought into sharp focus the areas of research that hold promise and will build on the knowledge and investment we have made.

The Innovative Developmental and Exploratory Awards (IDEA) grants of the DOD program have been critical in the effort to respond to new discoveries and to encourage and support innovative, risk-taking research. The IDEA grants have been instrumental in the development of promising breast cancer research. These grants have allowed scientists to explore beyond the realm of traditional research and have unleashed credible new ideas and concepts. IDEA grants are uniquely designed to dramatically advance our knowledge in areas which offer the greatest potential.

Therefore, we have devoted a majority of the DOD funds to these types of grants, yet there were many promising proposals that could not be supported because of a lack of funds. It is disheartening to think that lack of funding could be the only factor stalling scientific research that could save so many lives. IDEA grants are precisely the types of grants that cannot receive funding through more traditional programs such as the National Institutes of Health, and academic research programs. It is vital that these grants are able to continue to support the growing interest in breast cancer research—$175 million for peer-reviewed research will help sustain the IDEA grant momentum.

The scientists who have seen, first hand, the benefits of the DOD breast cancer research program, have issued a strong statement, that in their scientific judgement the program should continue:

> * * * we urge that this program receive ongoing funding. This program has been broadly defined such that the research performed will be of benefit not just for breast cancer, but for all cancers and other diseases.

The Army's program has not only increased current research, but has also inspired new efforts on the part of some of the nation's best and most experienced researchers who have never before been attracted to breast cancer research.

Continuation of the Army's breast cancer research effort is important to all American women, but especially for the women who receive their health care from the military. One of every eight of these women is at risk of getting breast cancer.

In addition to the fact that the DOD program provides desperately needed, excellent quality breast cancer research, it also makes extremely efficient use of its resources. In fact, over 90 percent of the funds went directly to research grants. The federal government can truly be proud of its investment in Army breast cancer research. The overall structure of the system has streamlined the entire funding process, while retaining traditional quality assurance mechanisms.

Since the very beginning of this program, in 1993, Congress has stood in support of this important investment in the fight against breast cancer. The 1993 Defense Appropriations report language read:

> The Committee commends the Department of the Army for its fine management of the breast cancer research program * * * The Committee understands that the program has had a positive effect on recruiting new scientists into the field, developing needed infrastructure, and bringing innovative proposals to the fore, and that its continuation is necessary to build on these advancements.

In the years since then, Mr. Chairman, you and this entire Committee have been leaders in the effort to continue this innovative investment in breast cancer research.

We ask you, the Defense Appropriations Subcommittee, to recognize the importance of what you have initiated. What you have done is set in motion an innovative and highly efficient approach to fighting the breast cancer epidemic. What you must do now is continue to support this effort by funding research that will help us win this very real and devastating war against a cruel enemy.

Thank you again for inviting me to testify and giving hope to the 2.6 million women living with breast cancer.

Senator STEVENS. The news this morning says we will have a vaccine for breast cancer within 5 years.

Ms. REESE-COULBOURNE. I have not seen that news. I don't know about that. I would be surprised if that were true.

Senator STEVENS. It would be interesting news. In any case, we will do our best for you.

Ms. REESE-COULBOURNE. No one would like that more than myself.

Senator STEVENS. I started that research at $25 million. It is up to $125 million. And you want a $50 million increase this year?

Ms. REESE-COULBOURNE. Yes.

Senator STEVENS. That will be difficult with the cuts in the budget in our other areas. But we will do our best.

Ms. REESE-COULBOURNE. Thank you.

Senator STEVENS. Our next witness is John Guckenheimer, professor of mathematics at Cornell University

STATEMENT OF JOHN GUCKENHEIMER, Ph.D., PROFESSOR OF MATHEMATICS AND MECHANICS AT CORNELL UNIVERSITY AND PRESIDENT OF THE SOCIETY FOR INDUSTRIAL AND APPLIED MATHEMATICS, JOINT POLICY BOARD FOR MATHEMATICS

Dr. GUCKENHEIMER. Good morning, Mr. Chairman and Senator Inouye. I am John Guckenheimer, professor at Cornell University and president of the Society for Industrial and Applied Mathematics. I appreciate this opportunity to comment on the fiscal year 1998 appropriations for the Department of Defense and will be speaking on behalf of the Joint Policy Board of Mathematics [JPBM], which represents three associations of mathematical scientists.

Mr. Chairman, JPBM once again calls on Congress to provide full support for DOD's investment in basic research, especially research conducted at universities. The buying power of DOD's support for research is down over 30 percent compared to 30 years ago, and nearly 10 percent since fiscal year 1994.

We urge the subcommittee to stem the erosion in these critical investments and provide DOD's full fiscal year 1998 funding request for basic research 6.1 activities.

We ask this because basic research is essential to maintaining the technological superiority of our forces. The origins of many key defense technologies can be traced to DOD's support for basic research conducted at U.S. academic institutions.

Rigorous decisionmaking processes within DOD guide these investments to insure both scientific excellence and consistency with DOD's strategic priorities. These thoughtfully planned investments need stable year to year funding.

Let me describe my experience with DOD's investment in basic research. I conduct research in dynamical systems. My goal is to reveal universal patterns in dynamical processes on phenomena ranging from neural behavior to fluid flows.

Today I shall describe research that is leading to new mathematical technologies for use in the design of jet engines.

Designers attempt to optimize engine performance and fuel efficiency, thrust, emissions, and longevity. My research addresses limits on engine performance due to harmful mechanical oscillations or combustion instabilities.

Computer models that incorporate many variables are used in engine design. My research produces tools that automate the analysis of these models. These reduce the need for time-consuming simulation and provide a framework for understanding engine instabilities.

Fifteen years ago, the Air Force Office of Scientific Research helped stimulate my interest in computation. The research I described today began after a foresighted mathematical scientist at AFOSR introduced me to a group of United Technologies' Research Center. This project and others sponsored by AFOSR are outstanding examples of how the Federal Government, universities, and industry can work together on matters of importance to the national defense and economy.

Basic research supported by DOD is making an impact within our defense industry.

PREPARED STATEMENT

I would also like to emphasize the importance of Federal investment in basic research. I strongly urge you to continue your support of DOD's investment in basic research and for the contributions of the university-based researchers.

Thank you for this opportunity to express our views for the record regarding fiscal year 1998 appropriations.

Thank you.

[The statement follows:]

PREPARED STATEMENT OF JOHN GUCKENHEIMER

Good afternoon, Mr. Chairman and Members of the Subcommittee. I am John Guckenheimer, Professor of Mathematics and Mechanics at Cornell University and President of the Society for Industrial and Applied Mathematics. I appreciate this opportunity to comment on fiscal year 1998 appropriations for the Department of Defense. I speak on behalf of the Joint Policy Board for Mathematics, which represents three associations of mathematical scientists whose concerns encompass fundamental and interdisciplinary research; the applications of the mathematical sciences in science, engineering, and industry; and mathematics education at all levels.

Mr. Chairman, I am here today to speak in support of DOD's investment in basic research, in particular research conducted at universities, as JPBM strongly believes it is an integral and foundational part of DOD's overall R&D efforts undertaken to meet the Nation's defense needs. We urge the subcommittee to provide the full funding request for this investment, approximately $1.16 billion, including about $800 million for Defense Research Sciences, in fiscal year 1998.

Mr. Chairman, the buying power of DOD's support for research is down by over 30 percent compared to 30 years ago. Since fiscal year 1994, DOD's investment in research has dropped nearly 10 percent in real terms. We urge the subcommittee to stem the erosion in these critical investments in our Nation's future. Recently the other two JPBM presidents and I joined a coalition of more than 40 presidents of scientific organizations who united to express their belief that the budgets of key federal research agencies—including DOD—need to increase by 7 percent in fiscal year 1998 so that science and technology can meet the challenges of the next century. JPBM concurs with this assessment and is especially committed to ending the decline in support for basic research conducted to advance the defense mission.

The United States relies on superior military technologies to achieve its national security objectives. Basic research is essential to the development of new technologies, to improving existing ones, employing them as effectively as possible, and therefore maintaining technological superiority over the long term. By engaging the Nation's research universities in this process, DOD has access to first-rate researchers and the latest discoveries in pursuit of its R&D objectives. The origins of many key defense technologies can be traced to DOD support for basic research conducted at U.S. academic institutions.

The defense agencies that sponsor basic research—the Army Research Office, the Office of Naval Research, the Air Force Office of Scientific Research, and the Defense Advanced Research Projects Agency—have an excellent track record for making decisions about which areas are vital to DOD's technology goals and which researchers are best able to mine the scientific opportunities for contributions to national security. Rigorous internal decision-making processes guide these investments to ensure both scientific excellence and consistency with DOD's strategic priorities. They take full advantage of the robust U.S. research system, supporting work at a mix of universities, governmental laboratories, and sometimes in cooperation with industry.

These thoughtfully planned investments need stable year-to-year funding to avoid curtailing the scope of promising research that DOD has identified as relevant to its mission.

Let me describe how DOD's investment in basic research contributes to the national defense with some examples from my own experience as a mathematical scientist. The area of research in which I work is called dynamical systems theory, sometimes called chaos theory. The goals of this research field have been to reveal underlying, universal patterns in the behavior of dynamical processes. The theories that have been developed are of astonishing generality and relevance to questions ranging from the stability of the solar system to the mixing of chemicals in industrial processes to the study of animal locomotion and its neural control. Today I shall describe research that is leading to new "mathematical" technologies for use in the design of jet engines.

There are several aspects of engine performance that designers attempt to optimize, such as fuel efficiency, thrust, emissions and longevity. The limits on engine performance also have different sources. My research addresses the control of harmful oscillations caused by mechanical or combustion instabilities. For example, oscillations of the air flow through an engine compressor result in phenomena termed stall, surge, and flutter and reduce engine efficiency dramatically. The resulting engine vibrations induce fatigue, leading eventually to catastrophic engine failure.

Computer simulation and analysis is an important part of engine design. It can be a bottleneck for the entire design process. Computer models are constructed to enable simulation of an engine and its components with varying degrees of fidelity. The models incorporate many design parameters, and exploring the behavior of the models as these multiple design parameters vary is an enormous task. Therefore, the simplest possible models that embody design principles are desired. Comparison of the behavior of different models with each other and with test data is critically important. My research is directed at the development of computational tools that automate the analysis of models. In particular, we are looking for faster, more efficient ways to determine the parameter values that are most likely to lead to stable operation in the model engines; the tools created through this research will greatly reduce the need for time-consuming simulation. Dynamical systems theory provides a framework for the creation of procedures that accomplish this task as well as a sound guide to understanding the types of unsteady behavior that result from instability.

There are several aspects of my research that bear upon DOD support for basic research. The Air Force Office of Scientific Research helped stimulate my interest in the early 1980's in the practical implementation of ideas originating in dynamical systems theory. The research I described today began after a foresighted mathematical scientist at the AFOSR took the initiative to introduce me to a group at United Technologies Research Center working on active control of engines. I think that this project and others sponsored by AFOSR are outstanding models of how the federal government, universities, and industry can work together to bring the results of basic mathematical sciences research to bear upon matters of importance to the national defense and economy. Basic research supported by DOD is making an impact within our defense industries.

I would also like to emphasize the importance of maintaining a basic research portfolio in an era when government demands greater accountability and industry is focused on short term profits. University-based researchers have more flexibility in tackling fundamental scientific problems than most industrial research groups.

In the computational science that I have been describing, mathematics is essential in the translation of physical problems into forms amenable to computational analysis, and it is essential to the development of computational methods that produce accurate solutions. Improvements in computer hardware are not enough to solve challenging problems. As the size and scope of problems we seek to solve by computers grow, old methods and software are unable to keep up. More effective algorithms and software are required. We are entering an age in which we have the ability to collect, store and transform data in quantities that were hardly imaginable even a

decade ago. Mathematics can contribute enormously to the development of efficient, productive tools for enriching our lives and enhancing our national security.

I strongly urge you to continue your support for DOD's investment in basic research and for the contributions of university-based researchers. Thank you for this opportunity to express our views for the record regarding fiscal year 1998 appropriations. I would be pleased to answer any questions you might have.

Senator STEVENS. Thank you, Doctor. That is a very interesting project.

Dr. GUCKENHEIMER. Thank you. It is very exciting.

Senator STEVENS. We appreciate your coming to tell us about it and we will do our best to give you support.

Thank you very much.

Dr. GUCKENHEIMER. Thank you.

STATEMENT OF BOBBY HARNAGE, NATIONAL SECRETARY-TREASURER, AMERICAN FEDERATION OF GOVERNMENT EMPLOYEES, AFL–CIO

Senator STEVENS. Next is Bobby Harnage, the national secretary-treasurer of the American Federation of Government Employees [AFGE].

Good morning.

Mr. HARNAGE. Good morning, Mr. Chairman.

I understand that the time has been moved up, so I will dispense with the introductions. I want to say that I appreciate the opportunity to testify this morning on the 1998 appropriations bill and AFGE feels particularly indebted to you, Chairman Stevens, for all that you have done for Federal employees on the Appropriations Committee and the Governmental Affairs Committee.

In the interest of time, I will limit my statement today to the three most important issues for AFGE. The 60/40, $3 million, and core workload safeguards protect our depots by retaining a federally controlled core workload which is capable of meeting the maintenance needs of our Armed Forces in times of war and peace.

These safeguards are critically important for the following reasons. Without these safeguards, misguided administrators in pursuit of short-term or even illusory savings would be tempted to disinvest the depot's infrastructure until these important installations became incapable of meeting the exacting requirements of our Armed Forces, particularly during emergencies.

There is no viable alternative to the 60/40 safeguard, which has historically enjoyed bipartisan support because it has consistently proven to be the only fair way to provide for our national defense, insure depot readiness, and, at the same time, equitably allocate work between the private and public sectors.

If the 60/40 safeguard is abolished, what will take its place? AFGE strongly recommends that the subcommittee continue in the absence of any viable alternative to strongly support the statutory safeguards which insure that our depots are ready when called upon to support our men and women in the Armed Forces.

Like many of our lawmakers, even some who have no air logistics centers in their States and districts, AFGE believes that the workload at Kelly and McClellan should be relocated to the three surviving depots, as was recommended by the BRAC. GAO reported earlier this year that the Pentagon's scheme for Sacramento and Kelly will privatize, rather than eliminate, excess capacity and

could be about $182 million per year more expensive than redistributing that workload to the other already underutilized Air Force units.

AFGE urges the subcommittee to deny funding to the Pentagon for any privatization in place that is attempted contrary to BRAC. We realize that some contractors and Pentagon officials want to do away with A–76. They don't want the strong competition from the public sector that is necessary if DOD contracting expenses are to be prevented from skyrocketing out of control.

It is imperative that lawmakers remember that the way to generate efficiencies in savings is not contracting out, outsourcing, or privatizing. Rather, what is key is insuring real and genuine competition between the public and private sectors.

AFGE urges the subcommittee to resist any attempt to exempt DOD from the competitive requirements of A–76.

AFGE urges the subcommittee to reaffirm its commitment to full and fair public/private competition and deny appropriations for conversion to contractor performance for all activities involving 10 or more employees until a commercial activity performance analysis has been completed in accordance with A–76.

AFGE also urges the subcommittee to include language in this year's bill which will require DOD to conduct a postcontract award audit to insure that the Government is fully receiving the savings or efficiencies promised by the contractor in his bid. In the event promised savings or performance are not realized or in cases of contract nonperformance or default, DOD would be required to report what action, such as recompetition or conversion to in-house performance, it is taking to correct this situation.

In the fiscal year 1996 Defense authorization bill, the Congress instructed DOD to stop managing by FTE ceilings. However, that mandate has been defied again and again. Personnel ceilings are forcing some military bases to lay off their civilian employees and then contract out their work at a higher cost. This problem is especially noticeable at service depots where Federal employees are getting reduction-in-force notices while planes, tanks, and ships await repairs.

But don't take our word for it. A senior DOD official just wrote to AFGE's national president and admitted that he had discovered that some managers have been establishing FTE spaces on some depot maintenance activities. However, he insisted that he was taking corrective action.

I would be happy to share this correspondence with you or your staff. I didn't include this letter in my testimony because a deviation from the Pentagon line that management by FTE's is never, ever practiced at DOD would surely invite retribution. And, since he is one Pentagon political appointee who is trying to be part of the solution, I would not want that to happen.

Senator STEVENS. I have to stop you because we have such limited time.

Mr. HARNAGE. That concludes my testimony and I appreciate your time.

Senator STEVENS. We did read your testimony and I saw that comment about the correspondence. We can talk to you about that later.

PREPARED STATEMENT

Mr. HARNAGE. I would appreciate the opportunity and would be glad to get with you at a later time. Thank you.

Senator STEVENS. Thank you, sir.

[The statement follows:]

PREPARED STATEMENT OF BOBBY HARNAGE

INTRODUCTION

Mr. Chairman and Subcommittee members, my name is Bobby Harnage. I am the National Secretary-Treasurer of the American Federation of Government Employees (AFGE), AFL–CIO, which represents over 700,000 government employees working worldwide, including 300,000 employed by the Department of Defense (DOD). I am also the chair of AFGE's Privatization Committee, which has jurisdiction over many of the issues I will discuss today.

I would like to begin my testimony by thanking the Subcommittee for this opportunity to testify on the fiscal year 1998 Appropriations Bill for DOD. I also welcome this opportunity to work with the Subcommittee in addressing the needs and concerns of our federal workforce. AFGE and its members are justifiably proud of our past service on behalf of America's defense. As both Americans and federal employees, we take seriously our role in keeping the nation's defense strong. While there are many important issues affecting our federal workforce which this Subcommittee will consider, I will limit my statement today to the issues which are the most important to the American men and women who do so much to ensure our nation's defense: safeguarding America's depots, upholding the competitive framework of OMB Circular A–76, ensuring a thorough Congressional review of DOD's wasteful policy of managing its civilian workforce by arbitrary FTE ceilings, and safeguarding the security of the nation's defense installations.

SAFEGUARDING THE NATION'S DEPOTS

10 U.S.C. § 2466 ("60/40 safeguard"), § 2469 ("$3 million competition safeguard"), and § 2464 ("core workload safeguard") protect our depots by retaining a federally-controlled, core workload which is capable of meeting the maintenance needs of our armed forces in times of war and peace. These safeguards are critically important for the following reasons:

—They protect the national defense by ensuring that a core workload is performed by the depots. Without these safeguards, misguided administrators, in pursuit of short-term or even illusory savings, would be tempted to disinvest the depots' infrastructure until these important installations became incapable of meeting the exacting requirements of our armed forces, particularly during emergencies.

—There is no viable alternative to the 60/40 safeguard, which has historically enjoyed bipartisan support because it has consistently proven to be the only fair way to provide for our nation's defense, ensure depot readiness, and, at the same time, equitably allocate work between the private and public sectors. If the 60/40 safeguard is abolished, what will take its place? Without a quantifiable, concrete alternative to the present definition of core, there will be continuous turmoil and debate regarding what is core and who should perform core work. Such a condition inevitably leads to disruption and inefficiency.

—The government will not harvest savings by privatizing the core workload now protected by the safeguards. Despite years of debate and countless studies, no one has been able to prove privatization actually results in any savings. Far from it, in the absence of competition from the depots, the cost of meeting our defense maintenance requirements will skyrocket.

AFGE's recommendations

AFGE strongly recommends that the Subcommittee continue, in the absence of any viable alternative, to strongly support the statutory safeguards which ensure that our depots are ready when called upon to support our men and women in uniform.

AFGE also asks this Subcommittee to work to ensure that the nation's depots are given maintenance assignments for new weapons systems. As Mr. Robert T. Mason, the Deputy Undersecretary of Defense for Maintenance, Policy, Programs and Resources, told a Congressional delegation in early 1996, "If the depots don't get any new work from new weapons systems or from closing depots," a scenario that at

least some senior officials in the Pentagon would actually like to bring about, "they will all be closed in nine years."

Privatization-in-place of depots is wrong

Like many other lawmakers, even some who have no Air Logistics Centers (ALC's) in their states and districts, AFGE believes that the workload at Kelly and McClellan should be relocated to the three surviving depots as was recommended by the Base Realignment and Closure Commission. The General Accounting Office (GAO) reported earlier this year that the Pentagon's scheme for Sacramento and Kelly will privatize rather than eliminate excess capacity and could be about $182 million per year more expensive than redistributing that workload to the other already underutilized Air Force depots. GAO estimates that annual savings from transferring the work to other depots rather than privatizing would offset the one-time transfer costs in about two years.

AFGE'S recommendation

AFGE urges the Subcommittee to deny funding to the Pentagon for any privatization-in-place that is either illegally implemented, as is the case at Newark Air Force Base, or attempted contrary to BRAC, as would be the case at Kelly and McClellan ALC's.

UPHOLDING THE COMPETITIVE FRAMEWORK OF OMB CIRCULAR A–76

Mr. Chairman, we know that the options of contracting out, outsourcing, and privatization are generating more attention than ever. For AFGE and its members, the central issue which should drive the discussions surrounding this debate is readiness—how we can get the most effectiveness, efficiency, and reliability for the taxpayer dollars invested. It would be wrong to assume that AFGE's only interest in these discussions is to preserve federal jobs. AFGE has a long-standing policy to follow outsourced work into the private sector once a decision to contract out has been made. For example, earlier this year, we signed a contract with a private sector firm, Hughes Aircraft, which allows AFGE to continue its representation of the employees at the recently converted Naval Air Warfare Center, in Indianapolis, IN. So those defense contractors whose claims of savings are based not on innovation and ingenuity but instead on nothing more than paying their employees poorly and providing them with few if any benefits had better watch out. AFGE is not anti-privatization. We are, however, unreservedly and non-negotiably pro-competition. And we will not cave or compromise on this principle.

AFGE was extensively involved in the 1995–1996 reform of OMB Circular A–76. This effort resulted in a revised Supplement that, while permitting more flexibility to contract out, also enables federal employees greater involvement in the competitive process, and makes contracting out a "two-way-street" by permitting work to return back in-house when it is more cost-effective to do so.

We realize that some contractors and Pentagon officials want to do away with A–76. They don't want the strong competition from the public sector that is necessary if DOD's contracting expenses are to be prevented from skyrocketing out of control. The National Defense Panel has even demanded that the Congress do away with the safeguard against contracting out a function involving ten or more employees without first conducting an A–76 competition.

It's imperative that lawmakers remember that the way to generate efficiencies and savings is not contracting out, outsourcing, or privatizing. Rather, what's key is ensuring real and genuine competition between the public and private sectors.

AFGE'S recommendations

AFGE urges the Subcommittee to resist any attempts to exempt the Department of Defense from the competitive requirements of the recently-reformed OMB Circular A–76 and its Supplement. So much work is already contracted out by DOD without any public-private competition. We must not exacerbate this situation by gutting A–76.

AFGE urges the Subcommittee to reaffirm its commitment in Section 8015 to full and fair public-private competition and deny appropriations for conversion to contractor performance for all activities involving 10 or more employees until a commercial activities performance analysis has been completed in accordance with OMB Circular A–76 and its Supplement.

AFGE also urges the Subcommittee to include language in this year's bill which would require DOD to conduct a post-contract award audit to ensure the government is truly receiving the savings or efficiencies promised by the contractor in his bid. In the event promised savings or performance are not realized, or in cases of contract non-performance or default, DOD would be required to report what action—

such as recompetition or conversion to in-house performance—it is taking to correct this situation. The information required by the audit is already included in A–76's new Supplement, so this report could be provided with a minimum of cost or administrative burden. However, we also need to compile this important information for all contracting out resulting from direct conversions and A–76 waivers and then allow DOD's contract administrators to bring this work back in-house in the event of poor performance and/or excessive costs. Mr. Chairman, we are eager to assist the Subcommittee in drafting the necessary language.

ENSURING A THOROUGH CONGRESSIONAL REVIEW OF DOD'S WASTEFUL POLICY OF MANAGING BY ARBITRARY FTE CEILINGS

AFGE members are extremely concerned about the effect of Full-Time Equivalent (FTE) personnel ceilings on our federal defense workforce's competitive capability and on our nation's readiness. Personnel ceilings are forcing some military bases to lay off their civilian employees and then to contract out their work at higher costs. This problem is especially noticeable at service depots where federal employees are getting reduction-in-force notices while planes, tanks, and ships await repairs.

But don't take our word for it. The personnel directors of the four branches of the armed forces in their March 16, 1995, testimony before the Senate Armed Services Personnel Subcommittee bemoaned the fact that civilian ceilings—not workload, cost, or readiness concerns—are forcing them to send work to contractors that could have been performed more cheaply in-house. The representatives asserted that their services' depots must turn away valid, funded workload requirements because of the FTE ceilings, limiting the flexibility of our depots to adjust and to meet quickly the critical, unprogrammed, surge requirements of our operating forces.

In the fiscal year 1996 Defense Authorization Bill, the Congress instructed DOD to stop managing by FTE ceilings. However, that mandate has been defied. Earlier this year, I was given a copy of the attached correspondence between General George Fisher, the Commander, Army Forces Command at Fort McPherson, GA, and the Commander, III Corps and Fort Hood, Killeen, TX. In his letter, General Fisher informs the Commander of Fort Hood that the installation's FTE installation quota has been increased from 645 to 767 spaces. To soften the blow a bit, General Fisher added a personalized note at the bottom of the correspondence: "Tom, we're required to meet the Army's assigned requirement. For each function you select, a study leading to a contract-out decision. You're ahead of most everyone; just need a few more in 1998. George"

Mr. Chairman, as a representative of federal employees, I am shocked and offended by valuable federal workers being treated impersonally as "spaces" in an anonymous quota system. As a taxpayer, I am offended to see the prostitution of the competitive system. The outcome of any competition at Fort Hood or elsewhere within Forces Command for that matter has already been decided in advance. The determinant criteria of the best provider will not be cost. It will not be efficiency, and it certainly will not be based on federal policy contained in A–76. As dictated by General Fisher, it's FTE's, not competition, that are key. Why go through the expense and the time involved in a Commercial Activities study if the outcome has already been preordained?

I wish that I could say that this is an isolated case. Unfortunately, while it may be one of the more blatant cases, it is by no means unique. DOD's own IG reported two years ago that "the goal of downsizing the Federal workforce is widely perceived as placing DOD in a position of having to contract for services regardless of what is more desirable and cost effective."

AFGE'S recommendations

AFGE urges the Subcommittee to require DOD to manage by budgets, rather than FTE ceilings. AFGE also urges the Subcommittee to ask the GAO to determine whether the Pentagon has compiled with the Congressional prohibition against management by FTE ceilings.

SAFEGUARDING THE SECURITY OF THE NATION'S DEFENSE INSTALLATIONS

As we learned to our sorrow during the tragedy of Oklahoma City, disaster strikes without warning or without consideration for our capacity to respond. In prior years, AFGE has reported to this Subcommittee about DOD's alarming practice of understaffing its fire fighter units. Now, DOD has completed its own staffing survey and found that not a single installation world-wide is staffed according to law. What a risk this imposes on lives and property. Military base commanders often assign untrained and unqualified active duty personnel to fill civilian fire fighting positions which have been frozen or eliminated due to budget reductions. Unfortunately, this

situation has not been changed for the better. In fact, in this time of dwindling defense budgets, the temptation to lift the prohibition against contracting out fire fighting and security guard functions is threatening to become worse.

The functions of fire safety and fire suppression are not budgetary "nice-to-haves" or budgetary luxuries. In fact, we cannot afford to fail to fund the staffing levels of our federal fire fighters. Fire prevention and suppression are critical core defense functions. Lives are risked, readiness threatened, and public property endangered when such core functions are chronically understaffed. Our federal fire fighters possess the rescue, fire prevention, safety inspection, hazardous and explosive material training skills that are absolutely necessary to meet the unique requirements of the military environment. For reasons of safety and security, fire prevention and suppression services should not be contracted out. Experience has shown that contractor and off-base fire departments are not as responsive as the federal fire fighting teams and not trained to handle responses and incidents involving sophisticated defense armament.

AFGE'S recommendations

AFGE urges the Subcommittee to support funding of DOD fire fighter staffing levels at those required by law, regulations, and DOD's own directives. We also ask that the Subcommittee oppose any legislative initiatives which would eliminate the safeguard against contracting out federal fire fighting and security guard functions.

CONCLUSION

Mr. Chairman, this concludes my testimony. I appreciate the opportunity to appear before the Subcommittee today. I would gladly answer any questions.

STATEMENT OF JAMES E. LOKOVIC, CHIEF MASTER SERGEANT, USAF (RETIRED), AIR FORCE SERGEANTS ASSOCIATION

Senator STEVENS. Next is Chief Master Sergeant Lokovic of the Air Force Sergeants Association, please.

Sergeant LOKOVIC. Good morning, Mr. Chairman, Senator Inouye. I left my written statement behind because we don't have much time. But I would like to point out four things to you that were listed in my written statement. They are particularly important to the enlisted men and women of all components of the U.S. Air Force.

We visit bases quite frequently. At McGuire Air Force Base I recently had a chance to talk to the enlisted flight crews. I can tell you that for peacetime, it is rather amazing to us that we are working our people the way we are.

It is most impressive. I spoke with one young man who, for the last 60 days, had 3 days during which he was not tasked military duty. The stress indicators that are being reported to us from senior enlisted advisors and first sergeants indicate increased instances of family abuse and other indicators are like that. Therefore, the point I am getting to is it is extremely important, as Ms. Hickey said earlier on, that we continue to appropriate dollars, whenever possible, to support family support centers, child development centers, and those kinds of things that help keep families healthy as our troops are deployed.

Second, I think it is very great that this committee last year provided the support that it did for our troops. You took very good care of us in exceeding the ECI minus 0.5 percent pay raise mandated by Congress and increasing BAQ to further close the gap of the congressionally intended VHA and BAQ combination, accounting for 85 percent of costs of housing.

We ask that you do that again this year.

In the area of our Reserve forces there is an elimination of a program within the President's budget that we ask you to make sure

we are able to counter, and that is the elimination of the 15 days paid leave for our military technician force. Currently, we have Federal employees that also make a choice to become members of our Reserve forces and when they do so, they are paid for their 15 days of duty—when they do that each year. The President's budget seeks to get rid of that.

We think that is a very, very bad policy. It is going to eliminate the primary incentive that currently exists for former active duty people that then choose to become civil servants and then say well, let's use our military training—we're already trained—and let's go in and work for the Reserves or the Guard. What this possibly would do is eliminate that incentive.

We think it is going to hurt recruiting and hurt retention.

Finally, temporary living expenses for first-time PCS we have detailed in our statement and I ask that you consider funding that this year.

Thank you very much, sir.

PREPARED STATEMENT

Senator STEVENS. Thank you very much. We appreciate your courtesy.

[The statement follows:]

PREPARED STATEMENT OF JAMES E. LOKOVIC

Mr. Chairman and distinguished committee members, on behalf of the 155,000 members of the Air Force Sergeants Association and the active and retired enlisted members of all components of the United States Air Force, I commend this committee for the important quality-of-life gains made during the last session of Congress. These improvements were particularly important for our enlisted (noncommissioned) men and women whose pay and retirement are considerably less than their commissioned counterparts. The raise in military base pay above the legally mandated level was particularly beneficial. The Basic Allowance for Quarters (BAQ) increase that was higher than the raise in base pay helped bring the combined BAQ/Variable Housing Allowance (VHA) reimbursement rate a step closer to covering 85 percent of housing costs. The increase in the dislocation allowance from two months BAQ to two and one-half months BAQ that helped to reduce unreimbursed out-of-pocket expenses for those military members who are reassigned was particularly appreciated by enlisted members who are paid less, yet incur the same moving expenses as military members of all ranks. Enlisted military retirees appreciated the on-time, January 1997 cost-of-living adjustment. Members of the guard and reserve applaud the increase from 60 to 75 of inactive duty training points creditable annually toward retirement and legislation to help protect them during drill weekends. Sir, again we thank you for those gains.

Each of these wise efforts demonstrated an appreciation of those serving our nation. However, it is important to build upon these gains. At a time when the nature of military service is changing, when the operations tempo is extremely taxing on the quality of the lives of military members and their families, and when the administration forecasts further personnel cuts—while maintaining worldwide operations—we must make sure the needs of our current and past military members are met. Medicare subvention legislation should be passed now to honor the promises our government made to those who served during World War II and the Korean and Vietnam conflicts. Subvention, if implemented properly, would allow the Health Care Financing Administration (HCFA) to reimburse the Department of Defense for medical care provided to Medicare-eligible military retirees and save the American taxpayer money at the same time. Also, the current budget proposal has several areas that we are very concerned about: once again underfunding military health care; seeking to revise the Basic Allowance for Subsistence (BAS) in a way that is detrimental for our enlisted members; and the ill-thought-out effort to delete the 15 days paid leave for our reservists/guardsmen who are also civil servants. Mr. Chairman, we understand that budgetary considerations drive many decisions, but we

ask that you protect, and where possible expand, quality-of-life benefits so important to our enlisted members.

HEALTH CARE

There is no non-pay, quality-of-life program more important to military members, families and retirees than health care. Until recently, it has been a major career incentive for those serving to endure a long career until retirement. Yet, the administration's annual budget submissions consistently underfund military health care. This year's request underfunds health care by between $350 and $600 million, depending on various estimates. AFSA is grateful for the diligence shown in the past by Congress to restore these funds, and respectfully asks that this Congress do the same. However, such consistent, intentional underfunding serves to make many active and retired military members skeptical about any promises made to them at all, and about health care promises in particular. Certainly, these cuts, if not countered, would most affect military retirees who will find less and less care available to them.

The situation for those over 65 is most troubling. This group which most needs the care is today largely excluded from the military health services system. To them, the promise of free lifetime health care for them and their spouse is a bitter memory. Few facilities now will treat the Medicare-eligible population because of cost. The solution to this problem is Medicare subvention which would bring these retirees back into the military health services system. Subvention has been proposed in the past but has never been implemented due to cost fears and the potential effect it would have on the Medicare Trust Fund. AFSA has long contended that providing these patriots medical care in the military system will cost the taxpayers less than through the Medicare system. In that sense, subvention would take less money out of the trust fund. In fact, in a recent change from previous cost figures provided on Medicare subvention, a General Accounting Office (GAO) briefer testified before the House National Security Committee, Military Personnel Subcommittee, that the GAO believes that Medicare subvention could be accomplished with no additional cost to the taxpayer, and would probably be cost beneficial. DOD and HCFA now both believe that DOD can provide the care, saving taxpayers eight cents on the dollar. Mr. Chairman, AFSA asks that you support this cost-savings initiative and, at the same time, do what is right for our most vulnerable retirees—pass Medicare subvention legislation now.

However, subvention will not care for all Medicare-eligible retirees, only those living within TRICARE catchment areas would benefit. To care for the rest, we need to give them the option to enroll in the Federal Employees Health Benefits Program (FEHBP). After all, each of them were government employees for many years. Why should those who served at mortal risk not have as comprehensive a program as federal employees who faced no such risk. As we pointed out earlier, many of these retirees served our great nation in World War II, Korea and Vietnam. Denying them military health care now is unjust and shameful.

Many military retirees living near a military treatment facility turned down Medicare Part B when they became eligible because free care was available to them on a nearby base. As more facilities close, and as the military transitions to TRICARE Prime, access to military treatment facilities has become and will increasingly become less available. AFSA asks that you support legislation to waive the late enrollment penalty for these Medicare-eligible military beneficiaries who now must buy into Medicare Part B to protect themselves.

AFSA has generally supported DOD's TRICARE initiative, periodically making suggestions and working to protect enlisted interests. However, active duty family members' and retirees' support is beginning to wane, especially for those dependent on TRICARE Standard (the old CHAMPUS). AFSA believes that as a minimum, TRICARE Prime and TRICARE Standard should be improved to match the level of care, efficiency and comprehensiveness provided by the Federal Employees Health Benefit Program (FEHBP). The military beneficiary's plan should also include, as a minimum, preventative care, dental care, and a universal (including mail-order) prescription drug service.

COMPENSATION

The fiscal year 1998 DOD budget proposes to link Basic Allowance for Subsistence (BAS) reimbursement rates to the United States Department of Agriculture Moderate Food Plan Cost. This change would be instituted over several years by limiting the growth in BAS to one percent per year until BAS and the USDA Food Plan Cost equalize. The plan also would provide a "partial" BAS to those not currently entitled to BAS. In effect, the plan would significantly reduce BAS for many to provide a

minimal BAS to those in the dormitories who would still be required to pay for their meals even if not eaten in the dining facility. Why take more money out of the pockets of enlisted people who are already receiving pay at the lowest levels? While we applaud the initiative to expand BAS to all members, we do not believe that those currently receiving BAS should be forced to pay for this initiative. And if there is a sincere desire to provide BAS to those in the dormitories, give them a full allowance and let them decide where to eat. It is very likely that most would choose the dining facilities as their place of choice due to reduced cost meals. For enlisted members, BAS is a part of the total compensation package; any decrease in BAS should be offset by a corresponding increase in military pay. To do less would financially harm enlisted personnel.

The fiscal year 1998 DOD budget proposal also includes a request for a 2.8 percent pay raise for active duty and air reserve component military members. This raise is in keeping with current law that limits pay raises to the Employment Cost Index (ECI) minus one-half of one percent, a law that will always ensure that military pay falls further behind inflation. This law should be changed to allow, at least, full inflation-protected annual raises. Until the law is changed, AFSA asks that you provide a pay raise, at least for enlisted military members, that keeps pace with or exceeds the ECI. Military pay is already 13 percent below private sector pay and, if the trend continues, will fall even further behind. Full ECI raises are needed to fairly compensate our military members, especially enlisted members, if we are to continue to attract and retain the top quality military personnel needed for the twenty-first century.

Mr. Chairman, DOD and service leaders will tell you that the enlisted corps today is increasingly intelligent, skilled and key to the success of our military. While the ratio of enlisted pay to commissioned pay (two different pay charts, one significantly higher than the other) has remained steady for many years, the relationship of the responsibility held by enlisted (non-commissioned) members and officers has not. The Air Force, in particular, has converted many jobs from commissioned to enlisted, greatly raising the level of responsibility of enlisted members without a commensurate raise in pay. Given the increased levels of responsibility, AFSA believes it is now time to provide several years of disproportionately higher pay raises for enlisted members to bring the enlisted/commissioned pay charts back into line with the changing levels of responsibility held by these groups.

For enlisted military members, permanent change of station moves cause significant financial damage. It must be remembered that these are, in most cases, government-directed moves. Clearly, reimbursement for members being reassigned needs to be increased. Actions last year to increase the dislocation allowance help, but they do not go far enough. Military members absorb approximately $1 for every $3 spent on a permanent change of station (PCS) move. The situation for most junior enlisted members is even more severe. A young airman moving from technical training to a first permanent duty station may experience temporary living expenses of $75 to $100 per day for which there is currently no provision for reimbursement. Extending the authority to pay a temporary lodging expense (TLE) for first permanent duty station moves will provide reimbursement for these expenses.

With bases closing, dental care now nonexistent for military retirees, and health care opportunities declining, many benefits that were expected as part of military retirement are increasingly at risk. It is, therefore, even more important to protect the heart of the military retirement system; retired members should be provided with timely, full Consumer Price Index (CPI) cost-of-living allowance (COLA) adjustments. Retired pay is deferred compensation that recognizes the sacrifices made and the low pay received during one's military career. The 1980's reforms of the Military Retirement System have diminished the lifetime value of military retired pay by 25 percent. As the "battle" over whether, and by how much, the CPI overstates true inflation heats up, we ask you to protect this vital military benefit. Anything less would break faith with those who faithfully served our nation. Further, it sends one more signal to those currently serving that military retirement benefits cannot be depended upon.

RESERVE/GUARD

Mr. Chairman, as you know, our reserve component is increasingly important in the everyday business of carrying out military missions at home and abroad. We believe there will never again be any significant military undertaking without our reservists being key players. It is therefore important that we fairly recognize the work that these citizen soldiers do by increasing their benefits whenever possible. We should support programs that provide full benefits for these men and women

from the first day of duty. Current law limits benefits for those serving less than 31 days. This can and has resulted in considerable expense and hardship.

Additionally, many federal civilian employees also honor this nation with their service as members of the Air National Guard or the Air Force Reserve Command. The administration's proposed budget includes an ill-conceived provision that would eliminate the 15 days of fully paid "military leave" to federal civil servants who are also in the guard or reserve. This pay is well worth the investment and is a major incentive for federal civilian employees to also serve as reservists. AFSA asks you to support preserving this reserve component benefit that has paid good dividends. The proposed change would, in effect, cost most members their military pay by limiting the total compensation to the higher of civilian pay or military pay, versus the current practice of paying both. We believe that any such limitation will significantly harm reserve component recruiting and retention of former, already-trained, military members who separate and become civil servants. Recruiting of non-prior-service civil servants into our reserves would also suffer. Undoubtedly, the technician force that is so very important to the guard and reserve would cost considerably more to train and maintain. Perhaps equally as important is the unknown effect this change would have to the extremely vital "civilian employer" support provided to guard and reserve personnel. Eliminating this 15-day military leave program would clearly send the wrong message. We urge that funding be found to continue this program.

The Reserve Mobilization Income Insurance Program was a commendable effort to protect the income of those members called to active duty. However, from the beginning enrollment has been very, very low. Because of the current Bosnian deployment, may reservists have been called to duty. Accordingly, the government owes those enrolled in the income insurance program the protection they bought. However, as of now, the program can pay only four cents on the dollar. This needs to be corrected with appropriated monies. Is it the fault of reserve/guard members who bought this insurance that the program was ill designed? In the longer term, a comprehensive review should be ordered to look at methods to fix the monetary problems, create a fair mechanism that would allow reservists to periodically change their level of protection, and to expand the program to cover members voluntarily deployed.

CONCURRENT RECEIPT

Mr. Chairman, veterans receiving VA disability pay who served in the military for a relatively short period of time rightfully draw full disability pay. After all, their service resulted in damage to the human body—and the resultant effect on future lifestyle, life span, and earning ability. They should rightfully be so compensated. However, those who are able to serve until they earn a military retirement (earned strictly for honorable service longevity) who are also evaluated with a level of disability don't get paid full retirement along with their disability compensation. In fact, they experience a dollar-for-dollar offset of military retired pay when receiving VA disability pay. This is illogical and certainly unfair; these benefits were "earned" separately and exist for completely different reasons. While DOD no doubt views the current system as a money saver, it is grossly unfair that military retirees have to pay their own disability compensation. We urge your support in allowing the concurrent payment of VA disability compensation and full military retired pay.

COMMISSARY

The commissary is consistently cited by enlisted people as one of their best non-pay benefits. Maintenance of this important benefit is well worth our nation's investment as part of the military lifestyle; it is one of the costs of military compensation. For the lower-paid enlisted members, the commissary is a place where they can stretch their hard-earned dollars. AFSA applauds the initiatives to improve the management of the commissary system; however, experimentation in such efforts as privatizing or evaluation as a performance based organization should do nothing to undermine the value of the commissary benefit. Full appropriated funding is required to protect this benefit that is so important to the enlisted members of the Armed Forces.

FAMILY SUPPORT CENTERS

AFSA asks your continued support for Family Support programs for active and reserve component members. As the nation's military transitions from a forward-based force to a contingency force that deploys from bases in the United States, support programs to help military members and their families become increasingly im-

portant. These centers coordinate the efforts of in-house and base-level services in Family Readiness Programs. These programs provide deployment preparation for the entire family, family support during separations, and expert guidance when the deployed member reunites with the family. With the high number of deployments, these services have become essential at many bases. Enlisted first sergeants and senior enlisted advisors tell us repeatedly that the increased operational tempo has placed significant pressures on the well-being of military family members and marriages. These "must fund" programs are critical components of maintaining readiness and managing the stresses of extraordinarily high military activity for active and Reserve members and their families. The importance of Family Support Centers cannot be overstated and they deserve continued funding.

CONCLUSION

Mr. Chairman, AFSA appreciates the difficult decisions that this committee has to make, and we thank you for this opportunity to share our thoughts on these important issues. We ask you to keep in mind the promises, both oral and written, that were made to those who serve and have served our great country. In this 50th year of the Air Force as an independent service, we ask you to keep in mind active duty, reserve and retired enlisted airmen of all components.

We are very concerned that the services have faced difficulty in making recruiting goals this past year. The Air Force, with the highest retention rates of any service, is starting to see signs that retention among those most experienced (over ten years of service) is beginning to decline. We as a nation cannot afford to return to the hollow force that occurred in the late 1970's. The continued strength of the Air Force, and all services, will depend on the ability to recruit, train, and retain quality people. We can achieve these goals by providing a reasonable quality-of-life for our members and their families as they serve our nation. We believe that the decision to leave is based in large part on an unreasonable operations tempo and the perceived decline in benefits. Providing a reasonable quality of life is becoming increasingly difficult in these fiscally austere times, yet to keep a fit fighting force for the twenty-first century, we as a nation must be willing to pay for it.

Again, thank you for this opportunity to express AFSA's concerns. As you face the tough issues ahead, we trust that you will do what is right for active, reserve component, and retired military members and their families. They deserve no less. As always, AFSA is ready to assist you on matters of mutual concern.

STATEMENT OF MAJ. GEN. ROGER W. SANDLER, AUS (RETIRED), RESERVE OFFICERS ASSOCIATION OF THE UNITED STATES

Senator STEVENS. Maj. Gen. Roger W. Sandler of the Reserve Officers Association is next.

General SANDLER. Mr. Chairman, thank you very much for allowing the Reserve Officers Association to testify before your committee.

Senator Inouye, it is good to see you again.

Senator INOUYE. Thank you.

General SANDLER. The "Quadrennial Defense Review" has been recently released to the Congress and it stresses that the review is strategy driven and that the end-strength of the services will be reduced in order to free up money for modernization.

We all agree that we have been living on borrowed time regarding modernization and that we are falling behind by up to $20 billion a year in recapitalizing our inventories in modernizing the force.

We believe that if the Active Forces are reduced to provide modernization dollars, we must either stabilize or increase the Reserve components to leverage what we will lose from the active components.

Today, your Army Reserve components are operating under the 1993 offsite agreement of 575,000 Guard and Reserve personnel. This stability has proven invaluable in turning the attention to the very important tasks of unit readiness.

Over 11,000 Army reservists have been deployed to Haiti and Bosnia during the last 2 years. Yet, with a significant contribution to the Army's mission, they and the Guard are being asked to reduce 45,000 soldiers below the 1993 offsite agreement.

Army deployments, including the Reserve components, are up over 300 percent since Operation Desert Storm. There is clearly a need for the Army to leverage the strength of its Reserve forces. The Navy and the Marine Corps are also eyeing their Reserve forces for cuts, which will make their total forces less capable than they are today. Four thousand one hundred Navy Reserve and four thousand two hundred Marine Corps spaces are being targeted for elimination.

The Navy is removing critical Reserve missions and equipment and at the same time eliminating 18,000 of their active duty forces. Even more questionable is the programmed Reserve personnel cut in the Marine Corps. The corps is reducing its active force by only 1,800 spaces, slightly more than 1 percent, and yet they have decided that a 10-percent reduction in the Reserve force is necessary.

It should be noted here that the Marine Corps Reserve has had a steady state end-strength of 42,000 for at least 4 years. There is nothing presented in the QDR that would justify taking a 10-percent reduction in the Marine Corps Reserve end-strength.

The Air Force Reserve is the only service in which there has been a conscientious effort to balance requirements with assets. While the Air Force leadership clearly were mindful of the budgetary restrictions, their QDR decisions were based on the plan to modernize their force and purchase a fleet of F–22 aircraft. To accomplish this objective, the Air Force has opted to remove 26,900 of their own active duty personnel but only 700 Reserve component personnel, and transfer a fighter wing to the Reserve component.

In the case of the Coast Guard, most of this is not your responsibility. But I would just urge this committee to fund $15 million to support the port security equipping requirements which have been requested by the CINC's around the world.

ROA urges this committee to fund the Reserve component end strength at current or higher levels.

Mr. Chairman, the DOD has determined that they must procure at a rate of $60 billion a year in order to modernize the force into the next century. It has been recognized for at least 3 years that the budget request has been submitted for $40 billion. We are concerned that almost $1 billion has been eliminated from the Reserve portion of that $60 billion submission in the QDR.

Finally, Mr. Chairman, we understand that you and three of your Senate colleagues have introduced legislation that is calling for the Chief of the National Guard Bureau to be promoted to four star general and become a member of the Joint Chiefs of Staff. We would ask that you expand your legislation to include all of the citizen reservists of the Ready Reserve component.

As of September 30, 1996, there were 1,536,641 Ready Reserve component personnel, of which approximately 485,707 were in the Army and Air National Guard.

PREPARED STATEMENT

ROA would be happy to work with your staff to craft language to expand your legislative proposal.

Mr. Chairman, thank you very much for your time.

[The statement follows:]

PREPARED STATEMENT OF MAJ. GEN. ROGER W. SANDLER

Mr. Chairman and Members of the Committee: On behalf of the many members of the Reserve Officers Association from each of the uniformed services, I thank you for the opportunity to present the association's views and concerns relating to the Reserve components and the Defense Appropriations Bill for fiscal year 1998.

Today, our nation is charting a new course for its defense. The threats to national security have been altered by the demise of the Soviet Union and the end of the Cold War. The danger of an East-West confrontation has essentially disappeared, but the world has at the same time become more volatile with the rise of ethnic and religious hostilities, regional instabilities, nuclear proliferation, and terrorism. All of these external developments take place against a domestic backdrop of constant economic and political pressures to reduce defense spending as a means of shrinking the deficit. As East-West tensions have decreased, Defense expenditures have come to be viewed ever more frequently through the glass of economic affordability.

QDR AND NDP

While the results of the Quadrennial Defense Review have only just become available, the NDP's Alternative Force Structure Assessment will not be available until the fiscal year 1999 budget cycle, it is reasonable to assume that significant changes to the national defense strategy will be forthcoming as a result of the studies' conclusions. Evolutionary or revolutionary, these changes will largely hinge on affordability and the prudent acceptance of risk. Absent a fundamental shift in national priorities, increases in the defense share of the annual budget will be marginal at best.

Although these reviews are intended to be threat-based rather than budget-driven, common sense and experience says that both of these factors will play a large part in developing the "final product" in both cases. Ultimately the recommended solution will bear evidence of pressure from both ends of the equation. To achieve balance in the face of unyielding economic constraint, force structure will be modified and so, too, will the definition of the perceived threat.

Clearly, this is not the way to develop a national defense strategy for the next century; nevertheless, the actual product is more likely to resemble this model than not. What may be salutary in this process will be the necessity of modifying significantly the structure of the Total Force to integrate components and to eliminate as much as possible the current unnecessary redundancies that exist, both inter- and intra-service and component. However the structure is finally crystallized, one thing is virtually certain: our Reserve forces will play an increasingly significant role in it and its employment.

RESERVE COMPONENT COST-EFFECTIVENESS

ROA maintains that a proper mix of Active and Reserve forces can provide the nation with the most cost-effective defense for a given expenditure of federal funds. Reservists provide 35 percent of the Total Force, but cost only 8 percent of the DOD budget. They require only 23 percent of active-duty personnel costs, even when factoring in the cost of needed full-time support personnel. Over a 4-year period, 100,000 Reservists cost $3 billion less than 100,000 Active duty personnel. If the significant savings in Reserve unit operations and maintenance costs are included, billions more can be saved in the same period. ROA is not suggesting that DOD should transfer all missions to the Reserve, but the savings Reservists can provide must be considered in force-mix decisions. It is incumbent upon DOD to ensure that each service recognizes these savings by seriously investigating every mission area and transferring as much structure as possible to the Reserve components.

ARMY RESERVE

The Army and its Reserve components continue to be the world's premier land combat force, serving the nation every day at home and around the world. Since the end of the Gulf War in 1991 the Army has transformed itself from a forward de-

ployed, primarily European based force to a Conus-based, power projection Army capable of projecting power worldwide to protect U.S. interests.

Today's Army is smaller now than at any time since before WWII and yet its pace of operations continues to increase. Since 1990 the Army has conducted operations in such places as Kuwait, Saudi Arabia, Iraq, Haiti, Bosnia, Rwanda, and Somalia, and conducts these and like missions at a level 16 times that of the much larger Army in place prior to 1990. In 1996, on any given day, more than 35,000 soldiers, from all Army components, were deployed from their home stations participating in exercises and conducting operations in more than 70 countries.

As missions continue to increase, available budget resources, ironically, continue to decrease. For fiscal year 1998 the Army's total obligation authority (TOA) for its Active, Guard and Reserve components is $60.4 billion. The Army estimates that after normalization for supplements, transfers, and inflation, its TOA for fiscal year 1998 is $59.7 billion in fiscal year 1998 constant dollars, representing a loss in buying power of $3.8 billion from fiscal year 1997 and of $5.9 billion from fiscal year 1996 actuals costs.

In the administration's effort to reduce the budget, today's readiness and OPTEMPO requirements are being funded at the expense of procurement, upkeep of existing facilities, and future force modernization. The administration's decisions to use defense as a billpayer and the desire to convert defense spending to the long-sought peace dividend continue to put Total Army readiness, modernization, and the defense of our nation at too great a risk. The Armed Services, today, are so dependent on their Reserve forces that they can no longer conduct their expanding missions or go to war without them. By the end of fiscal year 1998 the on-going post-Cold War downsizing will reduce the Total Army by nearly 500,000 personnel—approximately 285,000 from the Active, 90,000 from the Guard, and 111,000 from the Reserve components. The QDR recommends still further reductions, including an additional 45,000 from the Army's Reserve components.

These reductions and the Army's decision to transfer much of its combat service (CS) and combat service support (CSS) into the Reserve have placed much greater reliance on its Army Reserve. Today's Army Reserve is a full partner in every Army operation. The Army Reserve is 20 percent of the Total Army and is structured and missioned to perform 46 percent of the Army's combat service support and 32 percent of the Army's combat support missions. Approximately 350 Army Reserve units are part of the Force Support Package (FSP)—Active, Guard, and Reserve units that support America's Army Crisis Response Force and Early Reinforcing Force. Unlike many Army Reserve units of just a few years ago, these units are required at the start of any contingency operation.

During the 1980's the Army and the Army Reserve enjoyed dramatic increases in readiness. During the 1990's the Army Reserve, like the Active Army, is experiencing severe underfunding for many of its required programs, negatively affecting current and future readiness.

The Army Reserve's share of the Army budget request in the fiscal year 1998 DOD budget request is $3.2 billion or 5.3 percent of the entire $60.1 billion request. Separated into the Reserve Personnel, Army (RPA) and the Operation and Maintenance, Army Reserve (OMAR) accounts, the request is for $2 billion RPA and $1.2 billion OMAR. Both accounts could use considerable plus-up to fully fund known requirements. Critical funding shortfalls in these two areas alone exceed $400 million.

Included in this $400 million shortfall are necessary training funds to support training for troop program unit personnel. We believe that the special training account for TPU personnel is critically underfunded by at least $100 million. Additional funding will allow the Army Reserve to better train its personnel by supporting Army Reserve related projects that maintain and improve individual mobilization skill proficiency and unit readiness. Soldiers require additional training days to retain critical individual competencies so that their time during annual training can be utilized for collective training essential to unit cohesion and readiness. Soldiers, currently forced by these RPA shortages to attend schooling in lieu of collective training with their units during AT, would be given the opportunity to train and become educationally and professionally qualified, enhancing unit readiness.

Reserve personnel, Army

Fiscal year 1998 continues to be a restructuring year for the Army Reserve as it downsizes from 215,000 Selected Reserve (SELRES) personnel in fiscal year 1997 to a programmed fiscal year 1998 end strength of 208,000. Even with the downsizing, we believe the President's RPA budget request for $2 billion is insufficient to provide adequate funds to train, educate, man, and support Army Reserve personnel and units. We believe the Army Reserve budget request for training understates the actual requirement by at least $160 million.

Training/professional development education

We estimate that the fiscal year 1998 training budget for the Army Reserve is underfunded by at least $120 million. This critical RPA shortfall forces the Army Reserve to limit, or not offer, professional development education (PDE), required for promotion to some unit, and many IMA and IRR personnel; limits training time available to teach critical individual skills; and dramatically reduces IRR mobilization training. We urge Congress to increase the Army Reserve RPA training budget by an additional $120 million.

Full-time support

The lack of adequate RPA funds once again keeps the Army Reserve full-time support (FTS) level below 9 percent, the lowest level of FTS manning within the Reserve components. This full-time force of MILTECH's, AGR, DA civilians and Active component soldiers who administer, manage, plan, recruit, and maintain equipment for Army Reserve units allowing the drilling Reservist to take full advantage of limited training time and is the key to factor to Army Reserve unit readiness. This FTS force offers the most flexibility in improving and maintaining unit readiness.

The Army Reserve is being forced to manage its force with minimum essential full-time support requirements negatively affecting readiness and training. We urge Congress to stop any further reductions to Army Reserve FTS. An addition of $16 million will maintain the fiscal year 1997 AGR level.

We urge the Congress once again to increase the number of Army Reserve AGR personnel and to increase the fiscal year 1998 authorization and appropriation bills by 304 AGR positions and $16 million. This wedge will help to reverse this adverse trend to Army Reserve FTS and readiness. AGR soldiers are crucial to unit success and are the key to ready units required for the warfight.

Office of Management and Budget withhold

A Reserve personnel account shortfall of $20.4 million could soon exist because of an Office of Management and Budget initiative. This amount has been withdrawn from the Reserve personnel account and placed in a contingency fund, pending passage of the fiscal year 1998 President's budget. Should the ill-advised legislation to limit military pay of federal civilians performing annual training not pass, and we strongly support its defeat, the $20.4 million must be returned to avoid this additional RPA shortfall. This funding should come from non-Reserve accounts.

Operation and maintenance, Army Reserve

The fiscal year 1998 DOD budget request for the Army Reserve operations and maintenance (OMAR) account is $1.2 billion. We believe there is at least a $300 million OMAR shortfall in the fiscal year 1998 budget request that will force the Army Reserve to compensate by further reducing equipment and facility maintenance, OPTEMPO, and supply purchases. Backlogs for maintenance and repair continue to grow at the alarming rate of 20 percent, and necessary support to essential training continues to deteriorate, decreasing readiness. We urge the Congress to add $300 million to fund these neglected and critically underfunded Army Reserve OMAR programs.

Army Reserve equipment, National Guard and Reserve equipment request

The Office of the Secretary of Defense in its February 1997 National Guard and Reserve Equipment Report for fiscal year 1998 states that the Army Reserve has approximately 78 percent of its required equipment-on-hand (EOH). This represents an equipment shortfall that exceeds $1 billion. Realistically, the EOH includes substituted equipment—some that is not compatible with newer equipment in the Active Army inventory.

The greatest source of relief to Army Reserve equipment shortages is the National Guard and Reserve Equipment Appropriation. Since 1981 the Army Reserve has received, through the oversight of Congress, nearly $1.4 billion in equipment through the NG&REA. Without the appropriation the Army Reserve would still be struggling to reach 50 percent equipment on hand (EOH). The NG&REA works and works well. Unfortunately, so far this year in fiscal year 1997, DOD is holding the NG&RE funds hostage to offer as a recision package. We urge the Congress to direct DOD to immediately release these funds so that needed equipment can be purchased.

Due to the interest of Congress and the success this appropriation has made in increasing the level of EOH in the Army Reserve, the readiness of the Army Reserve has increased significantly over the past decade. We urge the Congress to continue the NG&REA and to fund the following high priority equipment requirement.

U.S. ARMY RESERVE FISCAL YEAR 1998 NGREA

Item	1998 NGREA request	Item cost	Item total
HEMTT wrecker	44	$277,000	$12,188,000
HEMTT bridge trans kits	53	105,000	5,565,000
M–915A2 tractor, line HL	50	112,000	5,600,000
HEMTT, fuel tanker kits	23	70,000	1,610,000
M–915 glider kits	61	45,000	2,745,000
5 ton ESP	250	60,000	15,000,000
3KW generator kits	625	2,000	1,250,000
5 TN cargo/drop side kit	100	5,000	500,000
M–101A2 and M–101A3 kits	825	4,300	3,547,500
ROWPU 3K GPH	24	285,000	6,840,000
HMMWV contact mnt trk	120	57,000	6,840,000
Foodlight set trl mnt	300	4,500	1,350,000
Trailer hmt	300	7,500	2,250,000
Generator 5KW tqg	300	10,500	3,150,000
Tractor, yard	30	67,000	2,010,000
M–871 semi trlr, FB, 22.5 t	75	17,100	1,282,500
All-terrain forklift 10	45	100,000	4,500,000
Hydraulic excavator	20	260,000	5,200,000
All-terrain crane 20 tn	25	250,000	6,250,000
Roller vibratory type I	6	130,000	780,000
Roller vibratory type II	20	130,000	2,600,000
FMTV/FLTV	120	138,000	16,560,000
MG grenade M40, MK 19	200	16,000	3,200,000
PLS trailer	100	41,400	4,140,000
Small arms simulators	5	200,000	1,000,000
Medical equip, misc	100	10,000	1,000,000
Steam cleaner	55	20,000	1,100,000
Fuel system supply PNT	50	32,000	1,600,000
Night vision PVS–7	600	2,000	1,200,000
IFTE	5	1,000,000	5,000,000
Push boat	1	2,500,000	2,500,000
Base shop test facility	2	2,000,000	4,000,000
Barge derrick, 115 ton	1	16,000,000	16,000,000
CH–47, cargo, helicopter	2	18,000,000	36,000,000
Total			184,358,000

AIR FORCE RESERVE

Without doubt, the single most important piece of the Fiscal Year 1997 National Defense Authorization Act for the Air Force Reserve is legislation found in Title XII raising this former field operating agency to the status of a major command, or MAJCOM, of the Air Force. ROA is grateful to the Congress, because, as this legislation formalizes a successful working relationship of many years' duration, it also protects this most valuable national resource from possible future adverse actions of individuals or institutions not in agreement with the reality of the citizen-soldier policy.

ROA also notes with appreciation and relief that AFRC end strength numbers appear to have bottomed out in fiscal year 1997 and are on the upswing with the President's Budget estimating 73,431 participants in fiscal year 1998. If the AFRC drawdown is, indeed, nearly finished, the command will be able to enjoy a period of relative stability, even if its OPTEMPO remains high. While some in the Pentagon believe the concept of compensating leverage has not yet been stretched as far as possible and that there is more the Reserve can do to relieve the fearsome OPTEMPO of the Active component, many of our members in the flying units tell us it is no longer a concept, but a policy and that they are coming close to maximum output.

If properly resourced, however, the Reserve component can participate in any Air Force mission at the current OPTEMPO. Proper resourcing includes sufficient authorizations in end strength, RPA, O&M, equipment, and MILCON. The fiscal year 1998 budget gives AFRC $2,453.8 million, or 3.3 percent of the total Air Force TOA of $73,893.5 million to support missions performed by 73,431 personnel. Six percent, or $4,371.1 million is devoted to the Air National Guard and its force of 107,000. Ninety-one percent of the TOA goes to support the Active component—that is, $67.1 million.

What does the Total Air Force get for 3.3 percent of its budget? It gets aircrews who put in from 95 days per year in the C–9 medical evacuation mission to 140 days per year in C–17, B–52, MC–130, and HH–60 missions. It gets 100 percent of DOD's weather reconnaissance, aerial spray, and helicopter space shuttle support. It gets 67 percent of Air Force's total medical crews; 62 percent of its special operations "Talon 1" capability; and 50 percent of the KC–10 tanker aircrews and maintenance through its associate program, where the aircraft are owned by the Active component and the tasks of flying and maintaining them are shared evenly with AFRC. And it gets 45 percent of the strategic airlift C–141, C–5, and C–17 aircrews and maintenance, also through the associate program. AFRC itself owns 25 percent of the C–5 and C–141 assets of the Total Air Force. It owns 25 percent of DOD's aerial fire fighting capability, 23 percent of the tactical airlift C–130 force, 15 percent of the B–52 bomber force, and 13 percent of the KC–135 tanker force as well. Additionally, it owns 5 percent of the fighter force, 4 percent of the AWACS mission, 3 percent of the associate KC–135 tanker force, and it is developing its instructor force for the T–38 specialized undergraduate pilot training mission.

With contributions of the magnitude of those above, it is not difficult to view AFRC as a leveraging resource—almost bottomless. Up to a point, it is very effective leverage at a very reasonable cost. But it is not bottomless. Further increases in operations tempo will likely reach the limits of what a volunteer force can do, while still fulfilling obligations to civilian employers and families, if it does not grow. With growth comes the ability to decrease personnel tempo at a cost much lower than that of increasing the size of the Active component. In short, the aircraft will be able to fly at the same high rate, but with more crews and maintainers to accomplish the mission.

Unfunded O&M requirements

As may be expected with such a budget proposal, there are shortfalls. Among them is depot-level maintenance of AFRC's 400-plus aircraft. Based on Air Logistics Command pricing adjustments and increases in engine repair requirements, AFRC will be short $22 million in depot maintenance funding. The majority of the command's aircraft are early models requiring more maintenance. Satisfaction of the $22 million shortfall will support 90 percent of the executable maintenance requirement.

Unfunded requirements

A Reserve personnel account shortfall of $8.2 million could soon exist because of an Office of Management and Budget initiative. This amount has been withdrawn from the Reserve personnel account and placed in a contingency fund, pending passage of the fiscal year 1998 PB. If legislation limiting the military base pay of federal civilian employees, who are also drilling Reservists, while they are on military leave from their civil service jobs, should not pass, the $8.2 million must be returned to avoid the shortfall. This funding should come from non-Reserve accounts.

Unfunded equipment requirements

The following equipment listing represents ROA's estimate of those hardware items necessary to maintain readiness and ensure compatibility with the Active component in fiscal year 1998.

	In millions
WC–130J × (4)	$194.5
WC–13J conversion, spares and support equipment × (2)	22.3
C–20G × (1)	30.0
KC–135R re-engining kits × (2)	60.0
C–5 simulator	27.0
F–16 Situational Awareness Data Link (SADL)	3.45
F–16 Laser Designator/Targeting Pods	12.0
A–10 Situational Awareness Data Link (SADL)	4.8
Laser Guided Bomb Support Equipment	.71
A–10 Electronic Warfare Management System	3.0
F–16 Upgraded Data Transfer Unit (UDTU)	1.65

	In millions
HH–60 Self Protection System	3.19
F–16 Electronic Warfare Management System	3.68
Night vision devices	1.93
ALQ–131 mux bus interface	.63
C–130 night vision cockpits	3.0
C–130 integrated electronic warfare	1.50
Enhanced flightline security systems	3.71
A–10 unit training device	3.0
Combat arms training equipment	.24
MC–130 UARRSI refueling mod	7.0
Motor vehicles for medical UTC's	.85
Trunked Land Mobile Radio (LMR) systems	3.27
Modular Airborne Firefighting Systems (MAFFS)	2.4
Aircraft paint spray booth	.6
C–130 unit training devices	13.5
C–130 towed decoy	8.0
Total	415.91

NAVAL RESERVE

The funding issues facing the Naval Reserve are similar to those facing the Navy's active duty force and the entire Department of Defense. The Department of Defense's budget remains in decline when adjusted for inflation. Decisions regarding the Department's budget continue to be driven by arithmetic rather than being based upon force structure requirements and the number of people required to do the job.

Recognizing the foregoing, the Department of the Navy is to be commended for its recognition of the vital importance of today's Naval Reserve force as a true force multiplier in the Total Force policy. In this respect, the fiscal year 1998 budget request, although omitting any funding for equipment modernization, does not make any drastic cuts in Reserve personnel strength. Nevertheless, the Naval Reserve budget should not be driven solely by the requirement to reduce the Navy budget and the perceived requirement to "share the pain" with the Active component.

The fiscal year 1998 budget request projects a decline in the personnel strength of the Naval Reserve, to 94,294 in fiscal year 1998 and 93,500 in fiscal year 1999. This reduction is a marked improvement over the sharp cuts that were typical of the requests of the early 1990's when the Naval Reserve force experienced a draw down disproportionate to that of the Active force. Notwithstanding, the decline in the Naval Reserve force continues despite the significant and well-recognized compensating leverage offered by today's Naval Reserve. In this regard, the Naval Reserve represents 20 percent of the Navy, yet encompasses only 3 percent of the Navy's budget.

Operations and maintenance funding

The budget also proposes a decline in operations and maintenance funding for the Naval Reserve from $885.3 million to $834.7 million in fiscal year 1998. It does not appear that this entire decrease in funding is supported by the proposed decrease in end-strength. Furthermore, the Naval Reserve provides continual OPTEMPO/PERSTRMPO relief for the Active force beyond that which occurs during annual training periods. There is, however, no reimbursement from the Active component for this additional support. Given the increasing reliance on the Naval Reserve as a cost-effective force multiplier, previously discussed, it is urged that any decrease in operations and maintenance funding be strictly correlated to any reduction in end-strength.

Funding shortfalls

In addition to the previously addressed shortfalls, there is a particular need for additional funding for real property maintenance. At least $35 million of additional funding is needed to keep the critical backlog of real property maintenance from increasing above the current level. This appropriation also needs approximately $35 million in additional funding for aircraft depot maintenance, base operating support, and recruiting.

The Naval Reserve could also effectively use $15 million more in the RPN appropriation to fully fund Special Duty Assignment Pay for recruiters, to support additional periods of contributory support to the Navy, and to offset the estimated $8.5 million cost of proposed legislation to limit military pay of federal civilians performing annual training. These latter funds should come from non-Reserve accounts.

Equipment modernization

ROA continues to advocate assignment of modern fleet-compatible equipment to the Naval Reserve. Of particular concern, the fiscal year 1998 budget does not include any funding for equipment in the Naval Reserve. As a result, when it comes to equipment modernization, it does not appear that the Department of the Navy has recognized the Total Force Policy.

ROA has identified unfunded Naval Reserve equipment requirements for consideration by Congress for addition to the administration's request for fiscal year 1998 in either the National Guard and Reserve Equipment appropriation or as earmarked additions to the Navy's traditional procurement appropriations.

Among the top priorities are C–9 replacement, the F–18C upgrade, the H–60B helicopter transition to level III and the continuation of the P–3 upgrade.

Naval coastal warfare capabilities are entirely resident within the Naval and Coast Guard Reserve. This includes surveillance, harbor clearance, port and coastal patrol, mine clearance, and command and control. Funds are needed to fill the existing shortfalls and for replacement equipment.

Civil engineering support equipment in trucks and other rolling stock will provide for the acquisition and replacement of aged equipment that is becoming increasingly difficult and costly to repair and maintain.

The addition of the precision strike upgrade to Reserve F–14's provides the same long range surface target acquisition, precision strike, laser guided and conventional ordinance delivery capability as the fleet.

No ALQ–126B equipment exists in the Naval Reserve. This vital equipment increases aircraft survivability against radar controlled weapons systems. The provision of such equipment will enhance survivability under wartime conditions.

ROA recommendations for fiscal year 1998 NG&RE

Naval Reserve

	In millions
C–9 Replacement Aircraft (3 aircraft @ $50 million)	$150
SH–60B Aircraft (5 aircraft @ $28 million)	140
E–2C (Plus) (4 Aircraft @ $75 million)	300
Naval Coast Warfare (11-MIUW Van upgrade, 9-MAST, SHF SATCOM, Dive Unit)	91
F/A–18 Upgrade Program (Precision Strike)	92
CESA TOA	25
F–14A Upgrade (Precision Strike)	34
P–3 Modifications	116
ALQ–126B	25.00

MARINE CORPS RESERVE

The Administration's budget proposes an end strength of 42,000 Selected Marine Corps Reserve (SMCR) personnel for fiscal year 1998. This request is consistent with the views of Congress to maintain a Marine Total Force of 174,000 Active force and 42,000 Reserve personnel.

This year, the administration's request is to maintain the Marine Corps Reserve at 42,000 personnel, including 2,559 Active Reserve personnel for fiscal year 1998. In light of the fact that facility closures, consolidations, and associated unit relocations have made it very difficult for the Marine Corps Reserve to achieve its authorized personnel strengths, ROA supports the administration's request as a reasonable method of ensuring needed growth of quality personnel in both the Selected Reserve and Active Reserve portions of the force. ROA recommends that the Marine Corps Reserve be authorized and funded for an end strength of 42,000 Selected Reservists, including 2,559 FTS personnel for fiscal year 1998.

Funding shortfalls

The request to support the Marine Corps Reserve appears to be underfunded by approximately $40 million in the Operation and Maintenance, Marine Corps Reserve (O&M,MCR) and Reserve Personnel, Marine Corps Reserve (RP,MCR) appropriations.

Modern equipment is critical to the readiness and capability of the Marine Corps Reserve. Although the Marine Corps attempts to implement fully the single acquisition objective philosophy throughout the Marine Corps Total Force (Active and Reserve), there are significant unfilled Reserve equipment requirements that have not been met because of funding shortfalls.

In keeping with the goal of fielding new equipment to both Active and Reserve Marines to enhance Total Force integration, Marine Forces Reserve has begun an orderly transition from the older RH–53D to the newer, frontline, CH–53E. In support of that effort, Congress has added CH–53E's to the Marine Corps budget in each of the past two years. This ongoing transition remains a top aviation equipment priority. The requirement is to reequip two Marine Forces Reserve squadrons with the CH–53E. Not only will CH–53E provide better reliability, but it will also give the Marine Reserve for the first time the capability to lift heavy engineering equipment and organic M–198 howitzers of Marine air/ground task forces. Finally, the Marine Corps Reserve is in need of one T–39 replacement aircraft, similar to that provided to the Naval Reserve.

ROA recommendations for fiscal year 1998 NG&RE

Marine Corps Reserve

	In millions
CH–53E (2 aircraft)	$63.0
T–39 Replacement	4.5
F/A–18D (4 aircraft)	164.0
Miscellaneous Equipment	60.0
Total Marine Corps Reserve equipment for consideration in fiscal year 1998 NG&RE	291.5

COAST GUARD RESERVE

Selected Reserve strength

We strongly support the fiscal year 1998 authorization request to maintain the Coast Guard Selected Reserve end-strength at the 8,000 level. While recognizing that the Coast Guard Reserve's end-strength is below currently 7,600, we have serious concerns regarding the administration's proposal for an appropriated end-strength of only 7,600.

The plans of just a few years ago to reduce the personnel strength of this key part of the Coast Guard's Total Force below the post-World War II low of 8,000 Selected Reservists now authorized was a source of major concern for this association. Since that time the Congress, the administration, and Coast Guard leadership have ever increasingly recognized the unique capabilities of the Coast Guard Reserve. It is now well-recognized that the Coast Guard Reserve has clearly become a value-added resource for peacetime day-to-day operations, as well as a highly cost-effective source of needed trained personnel to meet military contingency and other surge requirements.

In view of the foregoing, we are particularly concerned that the administration and the Coast Guard allowed the Coast Guard Reserve's end-strength to fall below the authorized and appropriated level for fiscal year 1997. We attribute the end-strength shortfall to a failure to devote the requisite assets to recruiting Coast Guard Reservists.

Port security unit requirements

As part of the continuing review of mission requirements, the Coast Guard must establish three additional port security units (PSU's) to meet validated war-fighting CINC requirements. This action has been coordinated with the Chairman of the Joint Chiefs of Staff and the Chief of Naval Operations and stems from war-gaming at Total Force 1993 and 1994 as well as development in several CINC deliberate planning processes.

PSU's are manned by 115 selected reservists and 2 active duty personnel. Each unit has six transportable boats, of Boston Whaler type design, with twin outboard engines, a .50 caliber machine gun forward and two M60 7.62 mm machine guns aft. These units are air deployable worldwide within 4 days' notice. The units provide waterside security of ports and high value assets and fill the security perimeter gap between the land side security force and coastal assets.

The three existing units performed critical mission-essential functions during Operation Desert Storm and during Operations Support and Uphold Democracy in Haiti. The major lessons learned from these operations are: The port security unit mission is logical for the Coast Guard Reserve; three additional PSU's are needed to meet CINC requirements; and equipment is needed to replace what has been consumed by the high tempo of operations by the three existing units and to outfit the three additional PSU's.

ROA recommendations for fiscal year 1998 NG&RE

Coast Guard Reserve

	In millions
Refurbishing existing PSU's	$4.6
Equipping three additional PSU's	9.9
Total Coast Guard Reserve equipment for consideration in fiscal year 1998 NG&RE	14.5

Unfunded equipment needs include transportable PSU boats, secure communications equipment, organizational outfitting and facility equipment, personal equipment and replacement parts.

We recommend that the fiscal year 1998 National Guard and Reserve Equipment (NG&RE) appropriation include funds for port security unit equipment for the Coast Guard Reserve.

Fiscal year 1998 proposal

ROA is fully aware that this committee is not directly responsible for funding the Coast Guard Reserve. Full funding of this Reserve Component is, however, necessary to ensure that the Coast Guard Reserve is capable of providing needed personnel and capabilities to DOD for contingency operations.

The administration has requested $65 million for the Reserve Training (RT) appropriation for fiscal year 1997. ROA supports this request as the minimum needed to fund a full training program for 7,600 personnel.

Additional funding required to support the full 8,000 level authorized is only $2 million. This additional funding would allow sufficient resources, with additional efforts in recruiting, to attain the 8,000 level. Such additional funding would also have a positive morale-building effect on Reservists by avoiding the negative signal that Reserve strength is again in jeopardy.

This committee's support of the Coast Guard has been critical to maintaining its military capability. Your continued support is vital.

GENERAL PERSONNEL ISSUES

The Reserve Officers Association greatly appreciates the many things the Congress has done for military personnel, both Active and Reserve and their dependents, and we would like now to call your attention to some specific areas that we believe still need to be addressed.

GULF WAR ILLNESSES

Since the Persian Gulf War in 1991, there has been clear and mounting evidence of numerous apparently disparate medical problems among those who served in the Persian Gulf area of operations during that time. Medical experts, both within and outside government have been unable to identify any single cause for the numerous clinical symptoms that Gulf War veterans and some members of their families have presented. Moreover, many Gulf War veterans, especially members of the Reserve components, have been unable to obtain military medical treatment pending thorough scientific investigations.

While, as a result of DOD's earlier handling of this issue, there has grown up a significant degree of skepticism, the department's recent initiatives, particularly the establishment and the activities of the Office of the Special Assistant on Gulf War Illnesses, have been both welcome and encouraging. We recognize this renewed commitment to assisting our veterans who served with such distinction in the Persian Gulf, and we encourage DOD to continue its vigorous support of this effort. ROA urges the Congress to ensure that appropriate health care and support are provided to veterans and their families with Gulf War illnesses without charge, pending medical determination of the causes of those illnesses. ROA also urges the Congress to provide supplemental appropriations to pay for such health care and support.

READY RESERVE MOBILIZATION INCOME INSURANCE PROGRAM

The Ready Reserve Mobilization Income Insurance Program, authorized by the Fiscal Year 1996 Defense Authorization Act, and first implemented by DOD in the fall of 1996, is underenrolled and undercapitalized. As a result, those Ready Reserve members who have enrolled in the program will be paid only four percent of the benefit they contracted for until sufficient funds are available in the program to pay out the full, contracted amount. DOD has requested additional funds from the Con-

gress to cover the liability, and has identified various Reserve accounts, especially the National Guard and Reserve Equipment Appropriation, as bill payers. Decrementing these accounts, which are already severely constrained, would be as harmful to Reserve component readiness as not paying the contracted insurance benefits in full in a timely manner. The Administration's supplemental budget for the Bosnia operation is the appropriate source for these funds. ROA urges the Congress to provide quickly the funds necessary to restore mobilization income insurance fund's solvency without recourse to existing DOD accounts.

MILITARY LEAVE FOR GOVERNMENT EMPLOYEES

The Administration has proposed a major change in the long-standing policy of providing paid military leave in addition to full military pay to federal government (civilian) employees who are members of the Reserve components and are ordered to serve tours of active duty. Under the Administration's proposal, Reservists who are also federal employees, would receive only civilian pay for their annual 2-week tour of active duty. Their military pay would be withheld unless their civilian pay was less than their military pay, in which case they would receive only enough additional military pay to make up the difference. ROA recommends that the Congress once again reaffirm its support for federally employed Reservists (as it did in the Fiscal Year 1997 Defense authorization Act) and disapprove the DOD proposal. We also recommend that the Congress direct DOD to reallocate from nonreserve accounts the funds required to support the traditional federal military leave policy for Reservists on active duty.

CONCLUSION

Thank you for the opportunity to represent the Reserve Officers Association's views on these important subjects. Your support for the men and women in uniform, both Active and Reserve, is sincerely appreciated. I'll be happy to answer any questions that you might have.

Senator STEVENS. You just killed my legislation. Thank you very much.

Our next witness is Russ Molloy of the University of Medicine and Dentistry of New Jersey.

I might say that we are going to have to schedule another session today. We have to leave here at 10:15 a.m. If there are any of you that can come back at a later date or a later time today, please let our assistant know now. We will schedule it for later and will listen to you a little bit longer this afternoon.

But we do have to get out of here, both Senator Inouye and I, at 10:15 a.m. So those of you on the list, and there are 10 more on the list, if we can get at least one-half of you to come in later, we probably could make our time limits.

Please go ahead, sir.

STATEMENTS OF:

RUSS MOLLOY, ESQ., DIRECTOR OF GOVERNMENT RELATIONS, UNIVERSITY OF MEDICINE AND DENTISTRY OF NEW JERSEY

DR. WILLIAM HAIT, DIRECTOR OF CANCER INSTITUTE OF NEW JERSEY, UNIVERSITY OF MEDICINE AND DENTISTRY OF NEW JERSEY

Dr. HAIT. Mr. Chairman, Senator Inouye, my name is Dr. William Hait and I am the director of the Cancer Institute of New Jersey.

I respectfully present testimony in behalf of the University of Medicine and Dentistry of New Jersey, the largest health sciences university in the Nation.

I appreciate the opportunity to bring to your attention two of the university's priority projects. The first is the New Jersey Women's Environmental Health Act or breast cancer initiative, which focuses on New Jersey's breast cancer crisis.

New Jersey has the fourth highest incidence, 110 per 100,000, and highest mortality rate, 31 per 100,000, from breast cancer in the Nation. The American Cancer Society estimates that there will be 6,400 new patients diagnosed in New Jersey in 1997 and that 1,800 patients will die from breast cancer this year.

From 1989 to 1993, 8,378 New Jersey women died of breast cancer.

New Jersey is also one of the most polluted States in the Nation, having 107 Superfund cleanup sites and over 3,000 other contaminated sites listed in the State's department of environmental protection.

New Jersey is the most densely populated State in the Nation with almost 8 million people living in less than 7,500 square miles. New Jersey has no large cities and, therefore, represents a large suburban sprawl that is the likely predecessor to population centers developing throughout the country.

As a result, millions of people live on top of or next to highly contaminated areas known to contain carcinogens and mutagens with a high probability of escaping into the air or contaminating the water, leading other States to ask, "Is there a New Jersey in our future?"

Therefore, it is a reasonable and testable hypothesis that the high breast cancer rate in New Jersey is due to the exposure of its population to environmental hazards. In this regard, Senator Frank Lautenberg has been highly effective in focusing the Nation's attention on the linkage between the environment and disease.

PREPARED STATEMENT

The University of Medicine and Dentistry of New Jersey is ideally suited to conduct critically needed research in this area. The university is only one of seven in the United States that houses both an NCI designated cancer center, the Cancer Institute of New Jersey, and an NIEHS designated environmental research center, the Environmental and Occupational Health Sciences Institute.

[The statement follows:]

PREPARED STATEMENT OF RUSS MOLLOY, ESQ.

The University of Medicine and Dentistry of New Jersey (UMDNJ) is the largest public health sciences university in the nation. The UMDNJ system consists of seven schools on five academic campuses throughout the state and includes 3 medical schools, and schools of nursing, dentistry, health related professions and biomedical sciences. It is a system that involves over 100 affiliations with other hospitals, community centers and clinics, and education and research entities throughout the entire state.

UMDNJ respectfully requests support for two initiatives of national importance and significance which are consistent with the mission of the Department of Defense and its biomedical research agenda: the International Center for Public Health through the collaboration of the renowned Public Health Research Initiative (PHRI) and the model University Heights Science Park project, and the New Jersey Breast Cancer Epidemiology, Surveillance and Prevention Initiative.

UNIVERSITY HEIGHTS SCIENCE PARK AND THE CREATION OF THE INTERNATIONAL CENTER FOR PUBLIC HEALTH

Infectious diseases now pose a profound threat to national and international security. Changing international conditions, post-Cold War deployment of U.S. troops to new geographic areas, and an increasingly global economy have contributed to a re-

surgence of infectious microbes. The rapid and repeated exposure to diseases arising in any part of the world is now a reality for military men and women as well as our citizens at home. In 1980, there were 280 million international travelers, including military personnel. By the year 2000 this number will double. In response, many federal agencies are developing infectious disease initiatives to address the emergence of new infectious agents as well as the re-emergence of known infectious agents in drug resistant form. The creation of the International Center for Public Health is a direct response to this emerging public health crisis.

The International Center for Public Health is a strategic initiative that will create a world class, infectious disease research and treatment complex at University Heights Science Park, Newark, New Jersey. Science Park is located in a Federal Enterprise Community neighborhood. The Center will have substantial local, regional, national and international impact as it addresses many critical social, economic, political and health-related issues. The International Center is a $70 million anchor project that launches the second phase of the fifty acre, $300 million mixed-use urban redevelopment initiative, University Heights Science Park. The facility will total 144,000 square feet and house two tenants: the Public Health Research Institute (PHRI) and the University's National TB Center, one of three Federally funded TB centers. The International Center for Public Health is a priority project for UMDNJ, Rutgers University, New Jersey Institute of Technology, Essex County College and the City of Newark.

PHRI, the core tenant for the International Center, is a nationally prestigious, 55 year old biomedical research institute that employs 110 scientists and staff in the research of infectious diseases and their underlying molecular processes. This facility will permit them to double their size to 220. Presently they conduct research programs in tuberculosis, AIDS, drug discovery, diagnostic development, and the molecular pathogenicity of a broad range of infectious diseases. A major focus of PHRI research is the study of antibiotic resistance of life-threatening bacterial organisms, and the development of the next generation of antibiotics.

Joining PHRI to form the International Center will be UMDNJ's National Tuberculosis Center. The TB Center is one of three Model Tuberculosis Prevention and Control Centers in the country funded by the CDC. It will add an important clinical component to the International Center for Public Health, since many TB patients also manifest other infectious diseases. The TB Center was founded in 1993 in response to a national resurgence of antibiotic resistant tuberculosis strains. At that time, Newark had the nation's second highest rate of TB cases for a major city. Together, PHRI and the National TB Center will create a world class research and treatment complex.

Other collaborators in the development of the International Center include the New Jersey Department of Health & Senior Services (NJDHSS) and the state's pharmaceutical industry. Responsible for overseeing all statewide public health initiatives, NJDHSS will contract with the International Center to have cutting edge molecular epidemiology services provided to the State of New Jersey. Expanding the strategic use of molecular epidemiology to direct public health activities will facilitate prompt identification and containment of emerging and re-emerging pathogens. New Jersey's major biomedical companies will also participate in the International Center. An infectious disease consortium will be developed to serve as a forum for disseminating fundamental research on the underlying molecular processes of infectious disease organisms. This research will contribute to pharmaceutical industry development of new drug therapies for antibiotic resistant microorganisms. Private industry R&D facilities contiguous to the International Center are also being explored.

The International Center for Public Health will be located in University Heights Science Park (UHSP). UHSP is a collaborative venture of Newark's four higher education institutions, the City and Community of Newark, and private industry designed to harness university science and technology research as a force for urban and regional economic and community development. The university sponsors, New Jersey Institute of Technology (NJIT), The University of Medicine & Dentistry of New Jersey (UMDNJ) and Rutgers University at Newark, annually conduct nearly $100 million of research in Newark, much of it federally funded. Essex County College trains technicians in eleven science and technology fields and prepares Newark residents for employment with Science Park technology companies. Four Newark-based companies also sponsor the Park: Public Service Electric & Gas, The Prudential Insurance Company, First Union National Bank and Bell Atlantic of New Jersey.

Located in a Federal Enterprise Community neighborhood, UHSP is designed as a 50-acre, mixed-use, science and technology park in Newark's Central Ward, adjacent to its four higher education sponsors. At buildout UHSP will include one mil-

lion square feet of technology commercial space, 75,000 square feet of technology incubator space, up to 20,000 square feet of retail business opportunities, an 800-student technology high school, two blocks of new and rehabilitated housing, and a community day care center. The $10 million first phase of Science Park has been completed, and includes the NJIT Enterprise Development Center 2 (a technology business incubator), a 100-child day care center and the CHEN Building (housing the industrial laboratories for the Center for Biomaterial and Medical Devices). CHEN is the acronym for the Council for Higher Education in Newark, the coalition of the four universities that founded Science Park. For almost two decades CHEN has jointly sponsored educational, housing, and retail/commercial projects in Newark's public schools and the neighborhoods of University Heights. The NJIT technology incubator was completed in Fall 1996, and is now 80 percent leased. More than half of the incubator companies are minority and/or women owned technology business enterprises. In addition, over half of the children in the Science Park day care center are from the surrounding community, and the majority of day care center staff are from Newark.

The construction of the International Center will anchor the second phase of Science Park, and serve as a magnet to attract pharmaceutical, diagnostic and other biomedical companies to Science Park. The Center will have the same impact on the Park as an anchor store does in a retail shopping mall.

The DOD is vitally concerned with the impact of infectious diseases on combat readiness and the subsequent health of armed services personnel. Troops deployed in new geographic areas always encounter new infectious disease threats. For example, two-thirds of all hospital admissions in Vietnam were due to infectious disease. Medical counter-measures in a combat zone require rapid microbial diagnostics and the development of vaccines and therapies for a wide range of infectious diseases likely to be developed in global deployment. Of particular concern are new and re-emerging diseases, food-borne diseases, and drug-resistant organisms. The International Center will contribute to the achievement of these objectives in the following ways:

—Through a grant from the U.S. Army, PHRI is presently conducting AIDS vaccine research. The vaccine is now moving from rat to monkey trials and looks very promising.

—PHRI is presently in discussions with the U.S. Army to collect and fingerprint TB samples from military bases and laboratories around the world.

—PHRI has the capacity to develop nucleic acid probes to match DOD inventories of infectious agents. These diagnostic probes and techniques permit rapid-in-the-field detection of microbial pathogens. Currently, PHRI is pursuing discussions for the potential use of these probes by DOD personnel in combat locations.

—PHRI has initiated discussions with the Armed Forces Institute of Pathology regarding research collaborations in the area of infectious diseases.

Although not directly related to DOD activities, national security concerns are also addressed by the U.S. Agency for International Development (USAID). USAID recognizes that disease and endemic ailments often overwhelm and disrupt developing countries, posing a strategic challenge to the United States. The spread of HIV/AIDS, drug-resistant tuberculosis, and other infectious diseases consume resources needed for long-term investments. Without long-term investments, long-term stability cannot be achieved. USAID is actively seeking to implement health-related programs it considers vital through partnerships with non-governmental and private organizations. The International Center will contribute to the achievement of these objectives in the following ways:

—The Center will develop cooperative programs with foreign governments to implement molecular epidemiology techniques as a means of focusing public health priorities and programs in those countries. PHRI is presently engaged in a 13 nation European Economic Community DNA TB fingerprinting project, and is in discussions with Egypt, Indonesia, and Russia to provide similar and expanded infectious disease services. UMDNJ's National Tuberculosis Center is currently consulting with the Singapore government to develop a TB Elimination Plan, with the Center's Executive Director chairing an international advisory panel. Staff training will also be provided during the implementation phase of the Elimination Plan. The National Tuberculosis Center currently provides international fellowships to physicians from China, India, the Netherlands and Singapore.

—The International Center will help establish molecular epidemiology laboratories in foreign countries.

—The National TB Center currently collaborates with the International Union Against Tuberculosis and Lung Disease (IUATLD, an NGO) and WHO, providing them with ongoing consultations and TB staff training.
—The International Center will raise private funding to supplement governmental funding for these programs.

The University Heights Science Park is requesting $9 million from the Senate Defense Appropriations Subcommittee for fiscal year 1998 to support the Phase II development of Science Park: the construction of the International Center for Public Health. Such support will leverage Phase II development that totals $130 million, and creates nearly 3,000 direct and indirect construction and permanent technology jobs. These funds will be used specifically for construction related project costs. This project is a top priority for UMDNJ, Rutgers University, New Jersey Institute of Technology, Essex County College and the City of Newark.

NEW JERSEY BREAST CANCER EPIDEMIOLOGY, SURVEILLANCE AND PREVENTION INITIATIVE

Breast cancer is the most prevalent cancer in women in the United States. Approximately one in eight women will be diagnosed with breast cancer in their lifetime; 46,000 die each year. New Jersey has the fourth highest incidence of breast cancer in the country and ranks second in mortality from this dreaded disease. The American Cancer Society estimates that there will be almost 6,500 new breast cancer patients identified in New Jersey during the coming year, and that nearly 1,800 women will die of this disease. The ultimate causation of breast cancer is unknown but several factors have been identified that are clearly associated with onset and prognosis of this disease. Some of these factors include the early onset of puberty, late onset of menopause, specific gene mutations, lifestyle factors, and possibly exposure to known and unknown environmental agents. The cancer statistics of New Jersey are of great concern because the incidence surpasses the national and regional incidence. This finding begs the questions of differences in New Jersey. Is the population that much different from New York or Pennsylvania? Are the poverty levels considerably different from surrounding states? Are occupational and environmental exposures potential causes of these cancers?

New Jersey is a paradox. It is one of the most affluent states in the nation, but it is also a state that is widely contaminated by municipal and industrial wastes—much of which is from past disposal policies and practices. New Jersey has 107 Superfund Sites, the greatest concentration in the nation, scattered throughout the State, and over 3,000 other contaminated sites that are listed by the State's Department of Environmental Protection. Many of the chemicals in these sites have not been characterized as to the toxicity, carcinogenicity or teratogenicity. It is known that most of these sites contain one or more carcinogens, and that these chemicals pose a threat to the citizens through potential water and air pollution.

The New Jersey Tumor Registry has recently been updated to gather and tabulate the most current cancer incidence data from physicians in the State. The Registry does not have the capability to gather complete occupational, lifestyle, and environmental histories on the patients, and the gathering of genetic information (which is highly sensitive), as it applies to breast cancer, is just in its infancy.

What is needed to attack the high incidence of breast cancer in New Jersey is a multifaceted approach that includes better and more rapid detection, diagnoses, and treatment. More importantly, to prevent new cases in future generations there needs to be a program to elucidate the causative factors, be they inborn or environmental or both, to establish biomarkers of susceptibility and biomarkers of exposure to carcinogenic agents, and to establish a broad outreach program to educate women of the State and their pre-teen and teenage daughters as to measures that can be taken to prevent breast cancer.

New Jersey is the site of the nation's newest National Cancer Institute's Clinical Cancer Centers. The Cancer Institute of New Jersey (CINJ), based at the UMDNJ-Robert Wood Johnson Medical School in New Brunswick, received the designation as an NCI Center after completing a four year period as an NCI Planning Site, during which time it established outstanding clinical oncology specialties and expanded an already outstanding basic cancer research effort. CINJ is the only NCI designated Center in the State and as such is the only site able to generate and carry out investigator initiated protocols for treatment of breast cancer patients. The physicians and scientists at CINJ have established a major program for the study of breast cancer. This program brings together medical oncologist, radiation oncologists, surgical oncologists. social workers, specialty nurses, basic scientists, geneticists, nutritionists and toxicologists to address the encompassing issues of breast cancer in New Jersey. CINJ serves as the focal point for patients, their families and

the support groups. The basic research of the breast cancer program is multifaceted. The issues of causation and prevention are major emphases.

New Jersey is also the site of one of 18 National Institute of Environmental Health Sciences Centers of Excellence. The NIEHS Center is based at the Environmental and Occupational Health Sciences Institute (EOHSI), a joint venture of the UMDNJ-Robert Wood Johnson Medical School and Rutgers, the State University. The NIEHS Center is the home of the researchers dealing directly with the role of the environment and human diseases. The researchers in this Center are closely affiliated with CINJ, in fact the Director of the NIEHS Center is the Scientific Director of CINJ. This unique arrangement gives the clinicians at CINJ direct access to the scientists who are engrossed in the study of environmental causes of cancer. The NIEHS Center and EOHSI support the largest academically-based exposure assessment research team in the country. This group of dedicated scientists and physicians are studying the types of pollutants being emitted from the many toxic waste sites in New Jersey and they are developing molecular markers of exposure and risk. The toxicologists and experimental oncologists at the NIEHS Center are focusing on mechanisms of carcinogenicity and the potential for anticarcinogenicicity of some dietary components.

The combination of the CINJ and the NIEHS Center at EOHSI presents a unique opportunity to address breast cancer at many levels, from molecular markers of environmental exposures to clinical evaluation and treatment. This combination offers the citizens of New Jersey new hope to combat this dreaded disease.

The interaction between the environment and the human genome is one of the most promising new approaches to elucidating the true causes of human malignancies. In the past, epidemiologists were hindered by the lack of sensitive markers of cancer susceptibility and were tied to descriptive parameters of research. Today, the field of molecular epidemiology provides more powerful tools to define causation and will be applied to the breast cancer problem in New Jersey through the collaborative efforts of the EOHSI and the CINJ. In this way, we plan to investigate the link between specific environmental exposures and specific genetic mutations that predispose individuals to the development of cancer.

The needs of the research and clinical programs are urgent. To accomplish the goal of markedly diminishing breast cancer in New Jersey, the Centers (CINJ and EOHSI) need to expand the efforts in Epidemiology, Surveillance and Prevention. UMDNJ and Rutgers do not have the resources to develop a major program in cancer epidemiology. The plan(s) of the Centers Directors has been to work with the Universities' administrations, the State Health Department, as well as other interested parties in the State such as the NJ Commission on Cancer Research and the American Cancer Society to markedly enhance cancer epidemiology in the State. To do this, we must attract several key research teams to the Centers. The three foci of research are: (1) Molecular Epidemiology, (2) Population-based Epidemiology, and (3) High Resolution Molecular Analyses.

We have developed a five-year budget plan for the three core components of this New Jersey Breast Cancer Epidemiology, Surveillance and Prevention Initiative and the New Jersey Cancer Registry of $10.5 million. This initiative will be well-grounded through the work of two federally designated centers of excellence, where we have already secured an extensive range of state, public, private sector and foundation support. We see the federal participation in this initiative as a true partnership. In the first year we would focus on the recruitment and support of a five-member team to work with us to implement these three core initiatives, and for the most critical instrumentation essential to this unique epidemiological challenge, including the High Resolution Mass Spectrometer technology and High Resolution DNA Display Instrumentation. We see this initiative as a unique opportunity to serve as a national, model demonstration project in the application and utilization of these cutting-edge technologies in the breast cancer race. Our fiscal year 1998 request for these components of this initiative would be $3.6 million.

On behalf of UMDNJ, I would like to thank the Members of the Subcommittee for their long-term leadership in supporting nationally and internationally critically needed research and development initiatives. This Subcommittee is to be commended for its staunch support of the universities and research institutions of this country. Your particular role in the support of many biomedical research initiatives must be especially recognized.

Senator STEVENS. I am going to have to interrupt you.

We have money in the bill, as you know, that is going to NIH for that. We are not going to carry specific appropriations in the

Department of Defense bill for any particular State. We would soon have 50 of them if we did.

So I am sorry to tell you we cannot do that. As you point out, none of this is DOD related. We have appropriated money for general research in breast cancer because of the fact that a substantial portion of the military population are women now. But we are not going to get into putting this bill into a direct State-by-State or university-by-university appropriation. I am sorry. I will fight that. We just cannot do what you ask.

You should go to NIH and present your case.

Thank you very much.

Dr. HAIT. You're welcome.

Senator STEVENS. Dr. Mundy is our next witness.

Is Dr. Mundy here?

[No response.]

Senator STEVENS. Then we will hear from Commander Lord, please.

If some of our witnesses have made agreements with staff to present later, I wish you would let me know.

Commander Lord.

STATEMENT OF COMDR. MIKE LORD, USN (RETIRED), COMMISSIONED OFFICERS ASSOCIATION OF THE U.S. PUBLIC HEALTH SERVICE, INC., CO-CHAIR, HEALTH CARE COMMITTEE, THE MILITARY COALITION

ACCOMPANIED BY COMDR. VIRGINIA TORSCH, MSC, USNR, THE RETIRED OFFICERS ASSOCIATION, CO-CHAIR, HEALTH CARE COMMITTEE, THE MILITARY COALITION

Commander LORD. Good morning, Mr. Chairman and Senator Inouye.

As the executive director of the Commissioned Officers Association of the U.S. Public Health Service, I am pleased to represent the views of The Military Coalition.

Our written statement provides the details of our health care concerns and I will just highlight a couple of our key initiatives for you.

First is Medicare subvention, which would authorize Medicare to reimburse DOD for care provided to Medicare eligibles in DOD medical facilities. A demonstration program was nearly passed by Congress last year following an agreement which was signed by DOD and HCFA on September 4. Unfortunately, it did not pass. But we are encouraged by the appointment of a joint task force by congressional leaders this past March to develop a consensus subvention proposal.

Our one concern in this regard is that a proposal which some are calling affinity subvention, is being seriously considered by the task force. This concept, which is not the Medicare subvention which the coalition has been pursuing and which this Congress nearly passed last year, would allow Medicare HMO's to form affinity relationships with MTS, thereby including them within their network of service providers.

While we have many concerns about the concept, chief among them is that it requires the collocation of a military treatment facility and a Medicare HMO, thereby leaving out many, many loca-

tions without Medicare HMO's, among them the States of Mississippi and Alaska.

One final point. I would urge this subcommittee to support and fund a limited demonstration program to test the concept of FEHBP 65, which would authorize Medicare eligible uniformed service beneficiaries to enroll in the Federal employee health benefit plan, the program available to all Federal employees and annuitants and Members of Congress.

We feel strongly that a limited test would alleviate many of the cost concerns that have been raised about the program.

PREPARED STATEMENT

In conclusion, Mr. Chairman, I want to express my sincere thanks to both you and Senator Inouye and to the rest of the committee for the support you have shown all of the uniformed services in the past and for the future support we anticipate.

Thank you.

Senator STEVENS. Thank you very much. We will talk to the DOD about the release of that money that you mentioned. But we'll have to wait for that.

Commander LORD. Thank you, sir.

[The statement follows:]

PREPARED STATEMENT OF COMDR. MIKE LORD

Mister Chairman and distinguished members of the committee: On behalf of The Military Coalition, we would like to express appreciation to the Chairman and distinguished members of the Senate Appropriations Committee's Subcommittee on Defense for holding these important hearings. This testimony provides the collective views of the following military and veterans organizations which represent approximately 5 million members of the seven uniformed services, officer and enlisted, active, reserve, veterans and retired plus their families and survivors.

Air Force Association
Army Aviation Association of America
Association of the United States Army
Chief Warrant Officer and Warrant Officer Association, United States Coast Guard
Commissioned Officers Association of the United States Public Health Service, Inc.
Enlisted Association of the National Guard of the United States
Fleet Reserve Association
Jewish War Veterans of the United States of America
Marine Corps League
Marine Corps Reserve Officers Association
National Guard Association of the U.S.
National Military Family Association
National Order of Battlefield Commissions
Naval Enlisted Reserve Association
Navy League of the United States
Reserve Officers Association
The Military Chaplains Association of the United States of America
The Retired Enlisted Association
The Retired Officers Association
United Armed Forces Association
United States Army Warrant Officers Association
United States Coast Guard Chief Petty Officers Association
Veterans of Foreign Wars

The Military Coalition does not receive any federal grants or contracts from the federal government.

DESPITE LIFETIME COMMITMENT—CARE IS SECOND TO MOST

Mr. Chairman, we would like to underscore why quick and judicious intervention by Congress to strengthen the Military Health Services System (MHSS) with new initiatives is so important to our members. Fundamentally, uniformed services beneficiaries have always been led to believe they have a right to medical care in military hospitals for the rest of their lives following retirement. (A historical perspective of the lifetime health care commitment is provided in Attachment A.) Unfortunately, the American public—and many in Congress—have the misperception that uniformed services retirees have better-than-average health care benefits. This is a myth. The uniformed services are virtually the only large employer that, except for rapidly diminishing space available care, terminates its retirees' health coverage when they turn 65.

In contrast, nearly all of the largest U.S. corporate and government employers provide their retirees substantial employer-paid health coverage in addition to Medicare. Data from a 1994 survey by Hay Associates (one of the nation's most respected firms in the area of employee benefits), indicate that the majority of corporate employers provide at least some employer-paid coverage in addition to Medicare—and the larger the employer, the more provided. For example, the four largest U.S. corporations either fund virtually the entire health care premium (including heavily subsidized prescription drug benefits) or cap their retirees' out-of-pocket medical expenses at modest levels.

HEALTH PLANS OF THE FOUR LARGEST U.S. CORPORATIONS FOR THEIR RETIRED MEDICARE-ELIGIBLE EMPLOYEES

Corp.	No. of Ret	Employer Subsidized Health Plan		Employer Paid Share of Premium (percent)	Retiree Deductible Single/Fam	Retiree Cost Share	Other Prescrip	Subsidized Dental	Coverage Vision
		Ret	Fam						
GM	350,000	Yes	Yes	75–80	$300/600	Zero [1]	Yes	Yes	Yes
Ford	90,000	Yes	Yes	100	$200/250	20 percent off visits; $500 out-of-pkt cap for all other.	Yes	Yes	Yes
IBM	74,000	Yes	Yes	100	$250 ($340 hosp)	20 percent outpatient; 0 percent inpatient.	Yes	Yes	Yes
Exxon	36,000	Yes	Yes	95	$250/500	20 percent copay; $2,500 out-of-pkt cap.	Yes	Yes	No

[1] GM plan pays all charges above Medicare payment.

In a similar vein, the United States government provides significantly subsidized health care insurance coverage for retired Federal civilian employees and their families—including retired Members of Congress and retired Congressional staff members. Yet, over the years, Administration and Congressional cost containment efforts have progressively stripped older uniformed services retirees of nearly all DOD-funded health benefits.

BAD NEWS FOR RETIREES—IT'S GETTING WORSE

The greatest problem facing all retirees, especially Medicare-eligible retirees and their families who rely on military medicine for their health care, is the rapid decline of access to care in military treatment facilities (MTF's), and with each passing day, it's getting worse. Approximately 1.168 million uniformed services beneficiaries age 65 and older (projected to increase to 1.436 million by 2002) are entitled to Medicare insurance coverage. These individuals are also eligible to receive health care in MTF's, but only on a "space available" basis. Although exact figures are not available, DOD estimates that an equivalent of about 27 percent, or 323,000 of these dual-eligible beneficiaries, receive space available care in the military health care system. In fiscal year 1997, DOD will pay an estimated $1.2 billion per year out of its annual appropriations to deliver health care services to this population. However, as the retired population ages, facilities are closing or being downsized, and the lock-outs are getting dramatically worse. The downward spiral is not lost on uniformed services beneficiaries. As the media is quick to note, some beneficiaries have picketed recruiting stations, while others have flocked to the judicial branch for relief by joining in the health care equity lawsuits being pursued by the Class Act Group, led by Medal of Honor recipient Col. George "Bud" Day, USAF (Ret.) in Florida, and the Council of Retired Military Veterans (CORMV) in South Carolina. The Class Act Group recently had its day in District Court in Pensacola, Florida, where a standing room only crowd (with countless others turned away), rallied behind Col. Day in his effort to have the government provide retired servicemembers free medical care for life. The judge in the case has indicated he will issue a written ruling on whether or not he will allow the case to proceed. That decision is expected momentarily.

To best summarize the feelings of uniformed services retirees, particularly those who are older, we would like to quote from a letter we recently received from an 81 year old veteran of World War II.

"I can't help but believe that half of those in the Pentagon and Congress can't wait for us to hurry up and die."

That's a sad commentary, Mr. Chairman, and should serve as an imperative for immediate action now, rather than waiting for a miraculous recovery of the MHSS.

MEDICARE SUBVENTION WOULD OPEN SOME DOORS

In order to better manage the Military Health Services System (MHSS), Congress directed DOD to implement the Tricare program throughout the CONUS by September 1997. Although Tricare was predicted to provide improved access to health care in the MTF for CHAMPUS eligibles who enroll in Tricare Prime, recent reports suggest the jury is still out on the real value of Tricare. To make matters worse, Medicare-eligible beneficiaries have not been given the opportunity to enroll in the Tricare program.

One of the alternatives strongly endorsed by The Military Coalition is Medicare subvention (where Medicare is authorized to reimburse DOD for care provided to Medicare-eligibles in DOD medical facilities). The principle behind the proposal is that, if DOD is reimbursed for such care, it would be able to allow Medicare-eligibles to use military facilities and enroll in Tricare Prime. Since DOD's care is less costly than private sector care, it will actually save Medicare money—a win-win-win situation for Medicare, the taxpayers, and Medicare-eligible beneficiaries. The Coalition has pushed the Medicare subvention idea for years, but it was not until 1995 that the first subvention bills were introduced. On January 19, 1995, Rep Joel Hefley (R-CO) introduced H.R. 580 to allow Medicare to reimburse DOD for the care it now provides to Medicare eligible uniformed services retirees. The Congressional Budget Office (CBO) initially contended that H.R. 580 would increase Medicare expenditures by $1.4 billion per year. To overcome this funding dilemma, DOD expressed a willingness to maintain its current level of effort and to seek reimbursement only for new beneficiaries who have not previously used the military health system, but have opted instead to use their Medicare benefits in the civilian sector at Medicare's expense.

After many months and considerable effort, several bills were introduced in Congress calling for a demonstration project to test the financial viability of subvention

and the methods for documenting the savings of subvention to DOD and Medicare. The Coalition was greatly encouraged that language was included in the Fiscal Year 1997 Defense Authorization Act, directing DOD and the Health Care Financing Administration (HCFA) to deliver a detailed plan for a Medicare subvention test program to Congress by September 6. On September 4, DOD and HCFA signed an agreement for a Medicare subvention test, and subsequent hearings on the plan were conducted by three House Subcommittees. However, despite favorable reports, at the very last possible minute, Congressional leaders decided not to include Medicare subvention in the fiscal year 1997 omnibus spending bill.

To pick up where we left off, Rep. Hefley (R-CO) has introduced two new Medicare subvention bills in the 105th Congress. H.R. 414 calls for Medicare subvention nationwide; H.R. 192 would establish a Medicare subvention demonstration program to test the concept at selected sites.

On March 12, a high level meeting between House and Senate Republican leaders paved the way for a Medicare subvention demonstration in fiscal year 1998. Among the participants were Senators Trent Lott (MS), Phil Gramm (TX), William Roth (DE) and Strom Thurmond (SC). At the meeting, a decision was made to press on with Medicare subvention as soon as possible. To expedite the process, a joint task force, comprised of Senators Roth and Gramm, and Representatives William Thomas (CA) and Joel Hefley (CO), has been charged with the responsibility of developing a consensus subvention demonstration proposal, on a priority basis. The Military Coalition requests your Subcommittee's strongest support for a true Medicare subvention test, based on the agreement entered into by the Departments of Defense and Health and Human Services last September.

FEHBP—A BRIDGE TO HEALTH CARE EQUITY

Mr. Chairman, The Military Coalition would like to express its deepest appreciation for your leadership and strong support last year for one of our most important legislative initiatives, FEHBP–65 (opening the Federal Employees Health Benefits Program to Medicare-eligible uniformed services beneficiaries). Although efforts to work out provisions for a demonstration of the FEHBP–65 initiative in the conference on the Fiscal Year 1997 Defense Appropriations Act fell short of its goal, considerable progress was made. Significantly, Section 8129 of the Conference Agreement directed the Department of Defense to submit a report to you and the House Committee on Appropriations by February 1, 1997, on a demonstration project offering Medicare-eligible retirees, who do not have access to Tricare, the option of enrolling in FEHBP. This report is to include an assessment of the benefits which could be derived from such a demonstration program, the anticipated costs to both the government and potential enrollees, the potential impacts on military medical readiness, and recommendations regarding the size and scope of a demonstration program.

As far as we can determine, the DOD report has not yet been released to the public. Even then, unless the draft report we have seen undergoes significant revision, it will not satisfy the requirements of Section 8129.

Given this disappointment, these hearings take on added significance. First, DOD may require a legislative imperative to design and set up an FEHBP–65 demonstration program. Second, the Tricare program is not measuring up to expectations. In many areas of the country—notably Florida, and more recently, Colorado—physicians are refusing to participate in Tricare because of unacceptably low reimbursement rates. The obvious outcome is that even if Medicare subvention (Medicare reimbursement to DOD for care provided to Medicare-eligible uniformed service beneficiaries in the Military Health Services System) is enacted, hundreds of thousands of Medicare-eligible uniformed services beneficiaries will still be denied the medical care promised to them in return for serving arduous careers in uniform.

A point worth underscoring now is that even if Tricare Prime is a resounding success, there is little likelihood that its doors can be opened to more than 40 percent of the Medicare-eligible uniformed services beneficiaries. Of the other 60 percent, data available to the Coalition suggest that: about 10 percent are enrolled in Medicare at-risk Health Maintenance Organizations (HMO's) and would likely remain in these programs; another 10 percent already participate in FEHBP or comparable private sector insurance plans; and the rest—about 40 percent, or 480,000, would be given short shrift and would not have any access to the government sponsored health care program DOD promised them as an integral part of the lifetime health care commitment.

Mr. Chairman, uniformed services retirees receive considerable literature from organizations like the Coalition extolling the health care advantages Federal civilian retirees and retirees from large corporations have when they become eligible for

Medicare. Military retirees are well aware that DOD and other agencies in the Federal government will spend more than $4 billion in fiscal year 1997 to provide federal civilian retirees health care that is second to none. Military retirees do not understand, and neither do we, why they should not be given the opportunity to participate in this extraordinary program as well. Therefore, The Military Coalition is seeking your support to authorize Medicare-eligible uniformed services beneficiaries, including those eligible for Medicare due to disability, to enroll in the Federal Employees Health Benefit Plan (FEHBP), the health care benefit available to 9.6 million Federal employees and annuitants, including Members of Congress. The Coalition is of the firm belief that Medicare-eligible uniformed services retirees have earned the right to participate in FEHBP–65 and that it is a viable means of satisfying the lifetime health care commitment. We believe our members would consider this option a reasonable alternative to the virtually non-existent military health care because FEHBP premiums are less expensive than most Medicare supplemental policies, and most FEHBP plans provide better coverage, including a prescription drug benefit, at less cost than Medicare supplements.

Mr. Chairman, last year, two bills that would have allowed FEHBP to be offered to Medicare-eligible uniformed services beneficiaries on a nationwide basis were introduced in Congress. H.R. 3012 was introduced by Rep. Jim Moran (D-VA) on March 5, 1996, and S. 1651 was introduced by Senator John Warner (R-VA) on March 28, 1996, as a companion to H.R. 3012. Although we were unsuccessful in getting these bills enacted, we accomplished a critical first step when this Subcommittee directed DOD to examine and report on the merits of an FEHBP–65 demonstration program.

Senator Warner has now introduced a new bill for FEHBP–65 nationwide (S. 224) and Representative Moran has introduced the House companion bill (H.R. 76). Although The Military Coalition strongly endorses implementation of FEHBP–65 nationwide, we recognize there are many unanswered questions that need to be addressed to raise the comfort level about the viability of the initiative. Therefore, the Coalition strongly urges this Subcommittee to spearhead the enactment of a demonstration program to test opening the FEHBP program to Medicare-eligible uniformed services beneficiaries. A test of FEHBP–65 would provide concrete information on the number of uniformed services beneficiaries who would avail themselves of the option if offered. If the number of enrollees is less than the 95 percent participation rate predicted by the Congressional Budget Office (CBO)—an estimate we believe is extremely high—the actual cost of the FEHBP–65 option would be considerably less than current estimates. Secondly, since a separate risk pool would be established, there is every likelihood the cost to DOD would be further reduced. One fundamental reason is that the vast majority of uniformed services beneficiaries are covered by Medicare. According to CBO, when FEHBP is combined with Medicare Part B, the health care outlays for FEHBP insurers is only 70 cents for every dollar of premiums paid. CBO estimates that for individuals age 65 and older who are not eligible for Medicare—frequently the case for federal civilians—FEHBP insurers pay out $2.50 for every dollar of premiums paid.

The Coalition, therefore, supports a test of FEHBP–65 as a critical bridge to health care equity and requests that this Subcommittee appropriate an amount not to exceed $50 million to test this program at two sites in fiscal year 1998. Given the reality that Congress will approve more than $4 billion to provide FEHBP to Federal civilian retirees, some with as few as five years of service, it does not seem unreasonable to ask this relatively insignificant sum be allocated to those who sacrificed to keep the nation free as long ago as War World II.

SHORE UP THE TRICARE PROGRAM

While the Coalition recognizes that Tricare Prime is generally consistent with managed care plans being adopted all over the country, the Coalition also believes there are many "bugs" in the Tricare program that must be worked out in order to make this program an effective health care benefit for uniformed services beneficiaries. Our major concerns are summarized below.

Tricare does not provide a uniform health care benefit for all uniformed services beneficiaries.—Medicare-eligibles cannot enroll in Tricare Prime; bare bones reimbursement rates, plus the statutory requirement to file claims, are causing providers to reject participation in Tricare; Tricare Prime will not be implemented in all areas of the U.S.; and DOD is planning to implement an "alternative financing" methodology in several Tricare regions which will create a "civilian" Tricare Prime and a "military" Tricare Prime.

There are problems with the fee structure and payment policies in Tricare Prime.—Prime enrollees are often charged separate co-payment charges for lab tests and x-

rays when such services are provided separately from an office visit; Prime enrollees are being charged the higher Tricare Standard fees by some civilian health care providers, such as anesthesiologists and pathologists; and Prime enrollees have occasionally been referred to non-network providers, thus invoking point of service charges (with copayments of 50 percent), without being informed about these extraordinary copayments.

Tricare Standard (CHAMPUS) Access and Quality are Diminishing.—Reimbursement levels are frequently too low to attract quality health care providers; there are unreasonable delays in reimbursement to providers and beneficiaries; the change in law (eff. 1 Oct 96) mandating that all providers now have to file claims has caused many providers to decline CHAMPUS patients, thus providing access-to-care problems for many beneficiaries residing outside Tricare Prime service areas; and the 115 percent billing limit, especially in the case of third party insurance, has resulted in increased out of pocket costs for beneficiaries.

There are problems that arise with the implementation of Tricare in each region.—Access standards for Tricare Prime are not being met; DOD has yet to implement a policy to provide portability and reciprocity for Prime enrollees in different Regions; Prime benefits are sometimes changed in the middle of an enrollment year; and DOD has not established an effective Ombudsman Program for each Tricare Region.

There are problems with the regional Managed Care Support contractors.—Health care provider lists are not adequately developed in several Regions; contractors often provide beneficiaries the wrong information; contractors are not notified of changes in CHAMPUS benefits and policy; and contractors have not established an adequate system of communication with beneficiaries.

The Military Coalition recognizes that many of the problems outlined here could result from "growing" pains as Tricare is implemented for the first time throughout the country. We are concerned, however, that if current trends continue, or if budgetary constraints inhibit the necessary remedial action, the problems will not lessen as Tricare matures. It will take a team effort involving Congress and DOD to enable Tricare to provide a uniform health care benefit for all military beneficiaries. Implementation of Medicare subvention to allow Medicare-eligibles to enroll in Tricare Prime, and FEHBP–65 to bridge the gap for those who do not or unable to enroll in Prime, will help correct this inequity.

The Coalition urges DOD, with the assistance of Congress, to take immediate measures to strengthen Tricare so that it becomes a meaningful program instead of a substandard health care benefit. The Military Coalition is ready to assist DOD and Congress in whatever way possible to make the Tricare program a superb health care plan for all military beneficiaries regardless of their age, status or location of residence.

PRESCRIPTION DRUG PROPOSALS ARE NOT A SUBSTITUTE FOR COMPREHENSIVE HEALTH CARE

Mr. Chairman, the Coalition would now like to address what some have suggested would go a long way toward reassuring Medicare-eligible uniformed services beneficiaries that Congress and DOD are genuinely interested in addressing the tremendous inequity in the military health care benefit. This proposal—the establishment of a worldwide mail-order prescription program for all retirees regardless of age or location—would provide welcome relief to countless retirees who have lost access to prescription drug coverage upon becoming eligible for Medicare. Nevertheless, although it would be greatly appreciated, in and of itself, the proposal falls far short of the more comprehensive coverage (like FEHBP–65) that is inherent in the lifetime health care commitment.

Even before the advent of Tricare, MTF commanders were gradually limiting access to the MTF pharmacy. Medicare does not provide drug coverage, and only three of the ten standardized Medicare supplemental insurance policies provide a prescription benefit. These Medigap policies are relatively expensive and only provide limited coverage ($250 deductible and 50 percent copayment). Some, but not all, of the Medicare "at-risk" HMO's offer a prescription benefit. However, only about 11 percent of all Medicare-eligible beneficiaries (7–10 percent of uniformed services beneficiaries) belong to one of these HMO's, which are not currently available in all regions of the country. With the high cost of pharmaceuticals, it is little wonder that the Coalition has anecdotal evidence that military retirees have been willing to drive long distances to fill their prescriptions at an MTF.

As pharmaceutical budgets have been cut back, MTF commanders have begun to drop some of the more expensive, less widely used pharmaceuticals. Some MTF commanders have also restricted access by honoring only those prescriptions written by

military physicians, instead of also accepting prescriptions written by civilian physicians. And some MTF commanders have rather liberally, and, erroneously, interpreted a recent DOD memorandum on prioritization for care in the MTF to mean they have carte blanche authority to "ration" some pharmaceuticals by withholding them from retirees and only offering them to active duty members and their family members.

The Coalition was pleased to receive DOD's briefing on its initial proposal for expansion of DOD's mail-order program to cover all Medicare-eligible uniformed services beneficiaries. However the Coalition cannot support the proposed program as it was initially presented. In particular, the Coalition is concerned that to make the proposal cost neutral, DOD would terminate filling civilian prescriptions at an MTF for Medicare-eligible retirees who now have that benefit and additionally require users to pay a premium (or enrollment fee) of $11 to $14 per month. This lockout from the MTF for civilian prescriptions is guaranteed to create an understandable uproar from beneficiaries who would correctly interpret it as a further breach of the lifetime health care commitment.

The Coalition applauds DOD's efforts to create a more comprehensive prescription benefit, and would like to continue to work with DOD and with this Committee to structure the program in such a way that it does not penalize current users of the prescription benefit.

CLOSING COMMENTS

This Nation has the daunting challenge of restoring health care for uniformed services beneficiaries to a level comparable to that of Americans employed by large corporations and of all retired federal civilians. In this regard, Mr. Chairman, the Coalition respectfully requests that you follow up on last year's initiative and forcefully champion an FEHBP–65 demonstration program. The 81-year old World War II retiree we mentioned earlier, and thousands more of his comrades, cannot afford to wait for Tricare to run its course before relief is forthcoming. They need the health care benefit they earned through years of dedicated service and they need it now. We, therefore, urge you to include provisions and appropriations in the fiscal year 1998 Defense appropriations bill for an FEHBP–65 demonstration program at a minimum of two sites. One final point, Mr. Chairman, since DOD facilities will be operating at maximum capacity under Tricare and subvention, there will be no impact on medical readiness if FEHBP–65 is enacted. FEHBP–65 will begin the bridge to honor the commitments that were made to those who served their country so bravely and honorably when called to do so. They did not equivocate then and this Nation should not equivocate now.

Mr. Chairman, in closing, we wish to express our profound appreciation to you and this Subcommittee for the opportunity to present our views on this critically important topic. We will be glad to answer any questions you may have.

ATTACHMENT A.—COMMITMENT TO LIFETIME HEALTH CARE

In brief, this lifetime right to health care had its genesis in the U.S. Navy and U.S. Marine Corps, in 1798, when service members made a monthly contribution to pay for such care over a period of 145 years—a contribution that continued after retirement. When the contribution was discontinued in 1943, the hearings made it clear that members were to retain the right to care. It is equally clear that members of the other services have been similarly led to believe they would be provided care for life in military treatment facilities. The assurance of such care was one of the important factors in inducing service members to endure the extraordinary demands and personal sacrifices inherent with a career in uniform.

In 1965, Congress enacted Medicare legislation. One year later, Congress established the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS). In adopting this legislation and limiting CHAMPUS to those under age 65, the House Armed Services Committee reasoned " * * * military retirees would continue to have two medical programs upon reaching age 65—the use of the military medical facilities on a space-available basis and the Social Security Medicare program. Under the circumstances, it appears that the two remaining medical sources would provide a fair program of assistance."

Key officials have also acknowledged that the government has a responsibility to provide a lifetime health care benefit. It was clearly affirmed by the Deputy Assistant Secretary of Defense for Special Projects, Office of the Assistant Secretary of Defense for Manpower, during hearings on the 1963 military pay bill. And as further evidence of the lifetime health care commitment, it is instructive to reflect on a 1991 study by the Congressional Research Service, titled Military Health Care/

CHAMPUS Management Initiatives, prepared by David F. Burrelli, an analyst in National Defense, Foreign Affairs and National Defense Division, on May 14, 1991.

"* * * The Dependents' Medical Care Act (Public Law 84–569; June 1956; 70 Stat. 250) described and defined retiree/dependent eligibility for health care at military treatment facilities (MTF's) as being on a space-available basis. Thus, for the first time, the dependents of active duty personnel were entitled to health care at MTF's on a space-available basis. Authority was also provided to care for retirees and their dependents at these facilities (without entitlement) on a space-available basis. * * * Although no authority for entitlement was extended to retirees and their dependents, the availability of health care was almost assured, given the small number of such persons. Therefore, while not legally authorized, for many the 'promise' of 'free' health care 'for life' was functionally true. This 'promise' is widely believed and it was and continues to be a useful tool for recruiting and retention purposes."

More recently, this obligation was reaffirmed in remarks made by Dr. Stephen Joseph, MD, then Assistant Secretary of Defense for Health Affairs, at a hearing on September 12, 1995, before the House Government Reform and Oversight Committee's Subcommittee on Civil Service. Dr. Joseph acknowledged that recruiters and commanders had led members to believe that they had a lifetime commitment to military health care. Dr. Joseph was resolute in his belief that the government has an implied moral commitment to provide health care to those currently serving and those who retired following their service careers.

A review of recruiting and retention literature further corroborates the implied, if not real, commitment to lifetime health care by the Services to all uniformed services beneficiaries. The following provides indisputable evidence that the lifetime medical promise was being made as late as 1993.

Marines, Life in the Marine Corps—(Undated, but in use)

"Benefits * * * These are only a few of the great extras you'll find when you join the Marine Corps. And the nice part is, should you decide to make a career of the Corps, the benefits don't stop when you retire. In addition to medical and commissary privileges, you'll receive excellent retirement pay * * *."

Air Force Pre-reenlistment Counseling Guide. (Chapter 5 Medical Care, Section 5–2.f., dated 1 April 1986)

"One very important point, you never lose your eligibility for treatment in military hospitals and clinics."

United States Coast Guard Career Information Guide. (USGPO 1991–)

"Retirement benefits mean more than pay too. You continue to receive free medical and dental treatment for yourself plus medical care for dependents."

Guide to the Commissioned Corps Personnel System, March 1985

"Noncontributory medical care during active duty and retirement for both officer and dependents."

Army Recruiting Brochure, "Army Benefits (RPI 909, November 1991) (Still in use by recruiters in 1993).

"Superb Health Care. Health Care is provided to you and your family members while you are in the Army, and for the rest of your life if you serve a minimum of 20 years of active Federal service to earn your retirement."

STATEMENT OF MASTER SERGEANT MICHAEL P. CLINE (RETIRED), EXECUTIVE DIRECTOR, ENLISTED ASSOCIATION OF THE NATIONAL GUARD

Senator STEVENS. And now we will hear from Master Sergeant Cline.

Sergeant CLINE. Good morning, Mr. Chairman, Senator Inouye. As you have heard this morning, as the active component suffers from increased deployments, the Army has turned to the Guard and Reserve to assist in the deployments, thereby relieving the stress on our active duty brothers and sisters.

The Guard is faced with a serious $743 million shortfall in the fiscal year 1998 President's budget proposal. The President's proposed shortfall will reduce funding and 60 percent of the Army Guard's units will not have school funds. OPTEMPO in 60 percent

of the units will be reduced to 8 percent of requirements. A tank driver will only be allowed to drive his tank 23 miles in 1 year.

The Air Guard is also having shortfalls and $6.1 million is needed for the Montgomery GI bill education benefit that is required by law. We are also short $17.1 million that is required to maintain 5 C–130 units and 12 primary authorized aircraft.

The Army also needs $185.5 million for the procurement account and it is necessary to add four MLRS batteries that the Army wants to put into the National Guard.

There is also a proposal in the administration's budget to eliminate paid military leave for Federal Civil Service employees who are in the Guard and Reserve. Some 154,700 Government employees are members of the Guard. One out of eight members of the Guard are Government employees.

Paid military leave was enacted in 1968 to have the Federal Government set an example for private employers of Guard and Reserve personnel as well as provide a small compensation to offset the personal sacrifices of family separation, increased stress, physical damage, and loss of civilian career opportunities.

Eliminating this now would also decrease compensation to Guard and Reserve members, but would also send a message that the Federal Government has lessened its support of Guard and Reserve members.

All State and local governments, as well as private employers who currently provide paid leave, will soon follow the Federal Government's example. The result would most likely be that qualified, trained personnel will fail to reenlist in the Guard and Reserve.

Mr. Chairman, I want to make it quite clear that our association actively supports our active duty brothers and sisters. We believe that they must be 100 percent funded as our Nation's first line of defense. The enlisted association goes on record as opposing any additional cuts to our active, Guard, or Reserve forces.

Although our Air Force and Navy can deploy anywhere in the world and literally bomb the heck out of a potential enemy, it takes trained, educated, and well disciplined and motivated soldiers and marines to occupy the real estate to say we now have full, undeniable control.

PREPARED STATEMENT

Mr. Chairman, again, thank you for letting the Enlisted Association of the National Guard present its views on the fiscal year 1998 Defense budget.

Senator STEVENS. Thank you very much, sir. We appreciate your courtesy.

[The statement follows:]

PREPARED STATEMENT OF MASTER SERGEANT MICHAEL P. CLINE

INTRODUCTION

Mr. Chairman, Members of the Defense Subcommittee of the Senate Appropriations Committee: I am honored to have this opportunity to present the views of the Enlisted men and women of the National Guard of the United States. Our members are very appreciative of the support extended to them in the past, and are very confident that you will, through your diligent and conscientious efforts, give serious consideration to the most critical issues facing the National Guard today.

During fiscal year 1996, the Army Guard provided a record 1.6 million workdays in support of both federal and state missions. More than 25,200 soldiers deployed overseas in support of operations and training for a total of 417,506 workdays. Of this total, 331,038 workdays were directed to Operational Mission Support (OMS) in relief of active Army operations/personnel tempo. The OMS missions were supported by the Office of the Assistant Secretary of Defense for Reserve Affairs and funded with $7.3 million in Reserve Component-to-Active Component support funding.

The Army Guard also provided over 389,700 workdays in support of the Presidential Selected Reserve Call-up (PSRC) for Operation Restore Democracy (Haiti) and Joint Endeavor (Bosnia) as well as 19,177 workdays in Temporary Tours of Active Duty (TTAD) to various overseas and continental United States Army commands. Additionally, a record 716,120 state active duty workdays were provided to support 419 state call-ups for various emergencies, natural disasters and 1996 Summer Olympics requirements.

These mission requirements were accomplished simultaneously with the inactivation of 145 Army Guard units, personnel reductions in excess of 17,700 positions, changes to unit missions as well as individual soldier job reclassifications, and ambitious annual training and equipment modernization programs.

The Air National Guard (ANG) has been involved in every major Air Force operation and exercise, and most of the smaller ones conducted during fiscal year 1996. Participation highlights included hurricane relief efforts; Operation Joint Endeavor; Operation Uphold Democracy; Operation Southern Watch; Partnership for Peace mission in Rumania; Exercise Nuevos Horizontes in Honduras, and providing limited medical support to some undeveloped countries.

The Air National Guard was involved in peace enforcement and peacekeeping operations including continued enforcement of the no-fly zones over Iraq and Bosnia-Herzegovina and other theaters of operation. During fiscal year 1996, Air National Guard units provided medical services to communities in 18 states under the Medical Innovative Readiness Training (MIRT) program. This program enables National Guard health care professionals to obtain training in wartime clinical skills while concurrently providing medical care to the indigent or under-served civilian population.

The citizen soldiers of today are truly the finest ever. You may ask yourself, Mr. Chairman, why are NCO's and Enlisted people so concerned about the budget? This is the bottom line: It is the NCO's' direct responsibility to train the troops that the administration and Congress want to deploy around the world. If the National Guard does not have adequate funding to train their people, they are placing them in harm's way. They must be adequately prepared and resourced to complete the varying missions that they so gladly accept. Not only that, Mr. Chairman, but without adequate funding and training, the Guard will succumb to the criticism of adversaries who say that the National Guard is not prepared. Without these additional funds, the National Guard will fall into the hollow force that is being predicted by some individuals in the military community.

As the drawdown of the active forces continues, the Guard is being called upon more and more to provide peace time and combat-ready support for contingencies around the world. Shortages in specific areas are becoming acute. While we assert that the use of the National Guard is the most cost effective means of implementing a strong national defense strategy during these financially constrained times, we also believe that we must have adequate funds to maintain the best possible services to our nation.

ARMY NATIONAL GUARD

Mr. Chairman, based on information received from the Department of Defense and on the budget submission presented by the administration, the Army National Guard has a major shortfall in the fiscal year 1998 appropriations.

The current fiscal year 1998 funding level for the ARNG will not maintain the minimum readiness level necessary to fulfill our obligation to National Defense. The funding in fiscal year 1995 was adequate to maintain the minimum required readiness levels. Therefore, the fiscal year 1998 unfunded requirements are based on the ARNG maintaining the same level of effort in fiscal year 1998 that was attained in fiscal year 1995. Fiscal year 1995 funding levels for each program were adjusted according to the inflation rates and personnel strength changes to produce the required fiscal year 1998 funding level.

Annual Training is underfunded due to the legislative proposal that will limit the amount of military basic pay a federal civilian employee receives while on military leave. The proposal has not passed, but the funding was taken from the National

Guard Pay, Army Appropriation (NGPA) by the Office of the Secretary of Defense (OSD). If it does not pass, 27,000 National Guard soldiers will not be able to attend Annual Training. We believe this is an issue that the Pentagon itself does not support; this initiative was part of Vice President Al Gore's "Reinventing Government."

Following is a list detailing the funded levels from fiscal year 1995 through fiscal year 1997 and the requested funding for fiscal year 1998 for underfunded programs (UFR). The "Req. fiscal year 1998" column represents the amount of funding in fiscal year 1998 necessary to maintain the fiscal year 1995 level of effort. The "'UFR fiscal year 1998" column is the additional fiscal year 1998 funding necessary to achieve a fiscal year 1995 level of effort.

	Fiscal year—			Request fiscal year 1998	Req. fiscal year 1998	UFR fiscal year 1998
	1995	1996	1997			
Annual Training	499	549	50	480	513	33
IDT/Overstrength (Drill Pay)	1,044	992	1,031	1,061	1,081	20
IET (Basic Training)	144	124	157	132	174	42
Schools	164	111	64	50	174	124
Special Training	190	184	26	7	95	88
Bonuses/GI Bill/Disability	102	98	146	124	161	37
Total National Guard Personnel Account	.....	.....	.....	.....	.....	344
OPTEMPO/FHP	417	387	449	420	449	29
Base Operations/Real Property Maintenance	281	327	188	203	32	117
Depot Maintenance	104	46	41	54	111	57
SFSI	145	123	58	56	154	98
Info Manage	66	66	54	32	79	47
AT/IDT Sup. and Services	75	69	57	35	74	39
NGB Support	20	22	15	15	18	3
Medical Support	27	25	19	27	36	9
Total OMNG	.....	.....	.....	.....	.....	399
Grand Total	.....	.....	.....	.....	.....	743

IDT (Drill Pay) funding falls short of requirements because the Guard is surpassing its minimum end strength objective. The Guard is required to pay all soldiers for 48 drill periods per year and critical funding shortages in the rest of the appropriation prevent transferring funding from another program.

The Initial Entry Training (Basic Training) funding shortfall will prevent 6,633 soldiers who will be recruited into the Army National Guard from attending Basic Training. Serious retention and readiness problems will result if recruits cannot attend Basic Training within a reasonable amount of time from their enlistment date.

Current fiscal year 1998 school funding covers only 20 percent of the requirements for Military Occupational Specialty (MOS) Qualification and career development courses. Current funding will cover the Force Support Package (FSP) unit requirements and three of 15 Enhanced Brigades. No School funding is available for 60 percent of Army National Guard units. The inability of Guard soldiers to attend MOS and career development training will seriously undermine the Guard's readiness. Retention will become a problem as soldiers cannot be promoted because they cannot receive qualification.

Special Training is funded at only 3 percent of special training requirements. The only Special Training funding available is for selected Intelligence units and some Special Operations units. Lower priority units cannot maintain the current readiness level without additional training funding. Again, this will seriously impact readiness and retention.

Currently the ARNG operates under a reduced requirement of OPTEMPO of the active duty Army. Whereas an active duty unit may be required to drive and train with an M–1 ABRAMS tank 1,200 miles per year; the ARNG requires only 288 miles per year. Based on the fiscal year 1998 budget, 60 percent or more of ARNG units will be reduced to 23 miles per year. This reduction in OPTEMPO will put

soldiers in harm's way. A young tank crew cannot train on a 69 ton tank and become proficient in such a short time. Professional truck drivers receive more training than this. How are these military personnel, part of the Total Force and America's Army, to be prepared to answer the call, when it comes? Dedication and conviction are not substitutes for quality training. As they say, more sweat in training is less blood shed on the battlefield.

AIR NATIONAL GUARD

The Air National Guard (ANG) has proven to be one of the most cost-effective means of maintaining Total Air Force capability within the constraints of a shrinking defense budget. This is evident with the continued involvement in worldwide contingencies by the ANG C–130 airlift forces.

Air National Guard units are more involved today than ever before. Last year, former Secretary of Defense Perry recognized the Air National Guard units for their participation in support of the Bosnia peace effort. He made special reference to the C–130 airlift units participating in Provide Promise which was the longest ongoing airlift in history. ANG airlift units are also supporting Southwest Asia (SWA), Southern Command and Army airdrop missions. The Air National Guard's participation in airlift roles continues to increase.

Based on Congressional direction, the United States Air Force and the Air National Guard agreed to maintain 12 Primary Authorized Aircraft (PAA) in those units in fiscal year 1997. However, the fiscal year 1997 President's Defense Budget contained only enough funds to continue a reduction from 12 PAA to 10 PAA. In fiscal year 1997, Congress reversed the reductions by providing manpower and operating resources and directing that the PAA level be maintained at twelve. The fiscal year 1998 President's Defense Budget reduces all five units to eight PAA.

To retain these five units at 12 PAA through fiscal year 1998, Congress must restore a total of $17.1 million in ANG accounts and authorize manpower increases above the budget request of 55 AGR's, 625 drill, and 100 military technician positions.

Following is a breakout of funding necessary to maintain the five ANG units at fiscal year 1997 levels of 12 PAA each during fiscal year 1998. Funding accommodates restoration of four PAA at each of the five units.

[In millions]

	Fiscal year 1998
O&M Costs:	
Civilian Pay (50 workyears)	$2.950
Depot Maintenance (20 aircraft)	3.060
Flying Hours (6,160)	7.043
Total O&M	13.063
Military Personnel Costs:	
10 Officer and 45 Enlisted AGR	1.710
85 Officer and 540 Enlisted Drill	2.290
Total Military Personnel	4.000
Grand Total	17.063

Personnel Authorizations.—Maintaining ANG C–130 force structure at fiscal year 1997 levels requires the following additional personnel authorizations: 55 AGR's—Two Officers and nine Enlisted at each of five units; 625 Drill—17 Officer and 108 Enlisted at each of five units; and 100 Technicians—Twenty at each of five units.

EANGUS believes that the Air National Guard force structure should remain stable until such time as a new national security review is concluded. In addition, we feel that the C–130 airlift units for 12 PAA in West Virginia, Kentucky, North Carolina, Tennessee and California should be retained at the 12 PAA and a total of $8.7 million be restored to Air National Guard accounts.

MOBILIZATION INSURANCE

Another issue worthy of attention is the Ready Reserve Mobilization Income Insurance Program. This program was enacted in the Defense Authorization Act for Fiscal Year 1996 to provide Reservists protection from economic losses when mobilized. The program was designed to be self-funded from member premiums. Almost immediately after the implementation of the program on October 1, 1996, major

flaws became apparent. During the enrollment period, a third rotation for Operation Joint Endeavor (Bosnia) was announced and there was insufficient time to accumulate the funds to cover the immediate expenses.

OASD/RA made a supplemental request of $72 million to shore up the fund and this has been included in the fiscal year 1997 supplemental appropriation currently in conference. Thank you for recognizing the need for these funds and continuing the support the Guard and Reserve with the supplemental appropriation.

MONTGOMERY GI EDUCATION BILL—AIR NATIONAL GUARD

Mr. Chairman, the Montgomery GI Education Bill (MGIB), Chapter 1606, is also shorted in the President's Budget. The Air National Guard received a new factoring formula last year which pays for MGIB differently than in the past. Anyone who enlists/reenlists for six years is considered "eligible" for MGIB at the date of enlistment and the Air National Guard must budget for the funds. Prior to last year, eligibility began after the first 6 year enlistment/reenlistment of eligible members.

With the new factoring formula, the Air National Guard Military Personnel account for fiscal year 1997 was approximately $2.8 million short but the ANG was able to reprogram their budget to pay these members. This year the ANG Military Personnel Account is $6.2 million short. The Air National Guard needs these funds to fulfill its obligation to its members. Requiring the ANG to continue to reprogram these funds will cause a shortage in other areas.

PAID MILITARY LEAVE

Paid military leave for federal civilian employees was authorized by Public Law 90–588 and was enacted in 1968 (Title 5, Chapter 63, Section 6323). The Public Law was intended to have the federal government set an example for private employers of Guard and Reserve members. This also provided a small compensation to offset the personal sacrifices of family separation, increased stress, physical damage and loss of civilian career opportunities by Guard and Reserve members who are also federal employees.

The Presidential budget submission for fiscal year 1998 excludes funding for all government employees who currently receive 15-day paid military leave. This action will result in a direct decrease in income to all Military Technicians and government employees in the Guard or Reserve.

Agency/Department	Number of Reservists	Percent of Work Force
Defense	100,300	11.6
Veterans' Affairs	11,000	4.3
Justice	5,100	5.2
Transportation	2,200	3.4
Agriculture	2,000	1.9
Health and Human Services	1,400	1.1
Interior	1,300	1.8
Labor	300	1.8
Other Agencies	31,200	2.3
Total	154,700	5.2

This proposal may cause a variety of problems for the National Guard, as many Guard members may decide not to attend drill. The National Guard may become unable to accomplish non-mobilization airlift missions. Sixty percent of day-to-day missions are flown by Guard members and Reservists, mainly full-time Technicians. Efficiency and performance would drop. Readiness would surely diminish. It is expected that loss of this entitlement will cause a large exodus of federal employees from the Reserve forces.

Military Technicians, who are required to hold military positions to hold civilian positions, would be required to work two jobs and receive basically very minor compensation for the second job (military duty). It would create two categories of Guard and Reservists who attend 15 days annual training: those who are paid their military pay and those who are not, except for small benefits such as BAS and BAQ.

This proposal may also cause recruiting problems. Prior service recruiting efforts, as required by law, are already maxed out. A change by the federal government would be seen as a lessening of support of all Guard/Reservists. This change could cause significant degradation in civilian support for Reservists. There will be a tre-

mendous effect on state and local governments which currently provide paid military leave.

FULL-TIME SUPPORT

The National Guard's role under the Total Force Policy is substantial; it requires high levels of readiness. The ability of Guard units and personnel to mobilize, deploy, integrate and operate was amply demonstrated during Operation Desert Shield/Desert Storm and now Bosnia. The level of full-time support manning has a direct and demonstrated influence on readiness capabilities and is dictated by mission and equipment levels rather than by end strength. Full-time support manning is a pivotal element in day-to-day operations and functions in administration personnel, supply and training preparation and in enhancing the quality of training by making inactive duty training periods and annual training more efficient and effective. A need exists for full-time spaces to support organizing and maintaining state health and dental clinics.

CONTROLLED GRADES

Enlisted grades E–8 and E–9 are controlled grades; Congress authorizes controlled grades in the annual Defense Authorization Act. Controlled grades are frequently under-authorized, not meeting requests from National Guard Bureau (NGB). Many airmen and soldiers have been selected to hold controlled grade positions, performing the duties at or above standard without proper monetary compensation and have to wait for a controlled grade to be released from NGB. Additional Controlled Grade Authorizations for AGR's in the Air and Army National Guard need to be authorized.

Full Time Support (FTS) positions in the Army National Guard units were previously authorized to be filled by AGR or Military Technicians. In fiscal year 1997, the unit FTS positions will only be authorized to be filled by AGR's. This policy will cause Military Technicians to be displaced or lose their full-time employment. The loss of full-time positions will cause dedicated and valuable military members to become unemployed or retire at a reduced annuity. The displacement of Military Technicians will cause severe financial hardship as well as individual embarrassment. Funding for FTS positions at unit level to be filled with either AGR or Military Technician personnel should be reinstated.

STUDENT LOAN REPAYMENT PROGRAM

The Federal Student Loan Repayment Program provides an incentive to many soldiers to reenlist in the National Guard to obtain assistance in paying off student loans. Many soldiers and airmen could not attend or complete college without this program. The program assists in meeting the Armed Forces' goal of obtaining and retaining educated, quality soldiers, thus maintaining a quality force. Also, it is expected that it will cost DOD a significant dollar amount to reprogram computers.

RCAS

Another area of concern is the Reserve Component Automation System (RCAS).

It seems evident that in any future armed conflict, the Army National Guard must be prepared to respond, along with the active Army, not only with combat support and combat service support units, but with first-line combat forces as well. This will require that the National Guard achieve much higher levels of preparedness and much shorter reaction times. With these new demands and expectations, the fielding of the RCAS infrastructure assumes critical importance and a new sense of urgency.

There is an urgent need for automated information management in the Army National Guard that will simplify and expedite all administrative functions, and reduce the time and expense of preparing, maintaining and processing personnel, pay, inventory and other such planning. RCAS, which is being developed and fielded under the direction of the National Guard Bureau, is the answer to these pressing concerns. The resulting database will ensure more accurate and accessible data for the generation of routine reports as well as special requirements for information. Yet, its development is being hampered by funding restraints. The current funding profile does not allow for completion of fielding of the RCAS infrastructure until year 2002. This fiscal year, only 7,633 of its 46,194 workstations will be fielded, and the system will be fully deployed to only 16 of the 94 Army National Guard and Reserve commands.

Mr. Chairman, this automation equipment is needed now. We ask for your support in mandating expedited fielding of the RCAS system, and that sufficient out-

year funding be shifted to fiscal year 1998 and fiscal year 1999 to ensure successful accomplishment. This will save tax dollars and also relieve manpower restraints that currently exist in units.

MLRS

In its first combat deployment in Operation Desert Storm, the Multiple Launch Rocket System (MLRS) dominated the artillery battlefield. The Army National Guard units from Oklahoma and Arkansas performed admirably utilizing the capabilities of MLRS. These units not only performed magnificently, but also assisted coalition forces from the United Kingdom and France during the advance into Iraq. From January 17, 1991, until February 26, 1991, units from the 1–158 Field Artillery MLRS fired more than 934 rockets at Iraqi defenses. The overwhelming success of MLRS in Desert Storm emphasizes the importance of a modernized artillery force.

Today, the National Guard represents two-thirds of the total Army's artillery. MLRS is a mission which the Army National Guard can reasonably train and be prepared in short notice to assist the regular Army in future contingency missions. Modernization with MLRS is far from complete; 11 National Guard battalions and seven National Guard divisions are unfunded. The Army's limited budget would stop National Guard modernization, denying MLRS's firepower to many units who would be called to serve in national emergencies. $185.5 million in additional appropriations to the Army's procurement account is necessary to add four MLRS batteries in fiscal year 1998.

YOUTH CHALLENGE

The National Guard has begun youth programs in 19 states. These programs capitalize on National Guard facilities and equipment and take advantage of the experience and training of Guard men and women. The National Guard is involved in Starbase and National Guard "Challenge" programs which are financed separately from primary readiness accounts. The goal in these programs is to be a positive influence on the youth of America with National Guard men and women serving as role models to portray a spirit of pride, tradition and service to community, state and nation. To date, none of the graduates of the "Challenge" program have been in trouble with the law.

CLOSING

Mr. Chairman, it is our association's belief that the National Guard, in conjunction with the active component, represents the most cost-effective weapon at our disposal to defend our nation. The National Guard's potential has barely been tapped. Yet, it stands ready, willing and accessible to meet our defensive needs. It is imperative to ensure that the Guard has support to fully develop into an integral part of the Total Force. This can only be accomplished through modernization of equipment, a stable force strength, and training. Shortchanging any one of these areas could prove fatal to the effectiveness of the National Guard in defense of our country.

Mr. Chairman, the National Guard is your next door neighbor, he or she may be a truck driver, your lawyer, your son or daughter or your grandchildren's teacher. When the National Guard is called, America goes to war. The Guard is family, Americans at their best. The National Guard—protectors of freedom and defenders of peace.

I would like to thank the Chairman and Members of this committee for the opportunity to provide testimony on the fiscal year 1998 funding requirements for the Army and Air National Guard. Thank you.

STATEMENT OF CAPT. JOHN GODLEY, LEGISLATIVE DIRECTOR, NAVAL RESERVE ASSOCIATION

Senator STEVENS. Next is Captain Godley of the Naval Reserve Association.

Good morning, Captain.

Captain GODLEY. Good morning, Mr. Chairman and Senator.

I apologize for Admiral Carey not being here. He is on his way. I will just fill in for him and make it very brief, sir.

You have Admiral Carey's statement for the record which we appreciate.

We would like to start out by focusing on the fact that the Naval Reserve provides 20 percent of the naval forces for only 3 percent of the Navy's budget. We believe that this is a very good deal, indeed.

Our association, the Naval Reserve Association, is composed of about one-half of retired members of the Naval Reserve and the other are drilling reservists. So we are split in our views of what needs to be done for the Naval Reserve. One focuses on what needs to be done for the Selected Reserve, the other for the retirees.

We fully support the position of the other associations that have spoken here on health care for retirees. We will not go into that.

This morning, I would like to focus more on what is in the budget and what is happening to the Naval Reserve today.

First of all is manpower. It has been determined that to meet the operational commitments that are placed on the Naval Reserve, the Naval Reserve force has to be between 100,000 and 96,000 personnel. The President's budget reduces that down to 94,300, without any change in missions applied to the Naval Reserve.

The QDR, which has recently come out, reduces that figure down below 90,000. We do not believe that the Naval Reserve can meet the needs that the Navy is placing on it, the demands that the Navy is placing on it, with this force structure.

We request that your committee look into it and support a Naval Reserve of between 96,000 and 100,000 personnel.

Regarding National Guard and Reserve equipment money, we realize that money is tight this year. What we ask for is that the Naval Reserve receive their fair share of NG&RE money. The Navy, once again, has not budgeted for Naval Reserve equipment. We look for your continued support for replacement C–9 aircraft. We look for support for the MIUW and the coastal warfare programs.

On the topic of military construction/Navy, last year the budget had $38 million in it. This budget that has been presented to you is at the $40 million level. Our facilities are decaying rapidly. This is becoming a safety issue for our reservists in where they have to drill and work.

Operations and maintenance money has been cut by $50 million without any change in the mission requirements. We ask that your committee restore the $50 million to the budget.

Very briefly, on the Reserve Mobilization Insurance Program, we believe that this fiasco of a program should be revamped but also that there is a definite need for the program and we ask you to charge DOD to revise the program and make it a viable program that will provide the income protection to our reservists.

PREPARED STATEMENT

In closing, I have three point papers which I will provide to your staff that discuss these issues.

I thank you for the opportunity to allow us to testify before you.

[The statement follows:]

PREPARED STATEMENT OF REAR ADM. JAMES J. CAREY, U.S. NAVAL RESERVE (RETIRED), NATIONAL PRESIDENT, NAVAL RESERVE ASSOCIATION

Mr. Chairman, distinguished members of the Committee, it is a privilege to present the views of the Naval Reserve Association to the Committee for your consideration. Our more than 22,000 officer members include drilling Selected Reservists, Reservists on active duty, and retired Reservists, who all share the same goal—a strong Naval Reserve which is seamlessly integrated into One Navy with the active Navy. Our Naval Reserve is a strong and viable maritime force thanks to the past support of this committee, and we continue to provide 20 percent of the entire Navy for 3 percent of the Navy budget. We in the Naval Reserve Association want to work with you and the rest of Congress and with the Department of Defense and Department of the Navy to ensure that our Naval Reserve remains strong, viable and capable of meeting the increasing requirements that it faces. Additionally, along with other associations that are members of the National Military/Veterans Alliance, we advocate keeping the faith with the millions of active duty and retired service members by maintaining the pay and benefits which our nation has promised.

Unfortunately, the Naval Reserve Association does not see in the President's Budget the support required to maintain a strong Naval Reserve or to provide the pay and benefits that our members believe they have earned.

NAVAL RESERVE MANPOWER

Four years ago, the Naval Reserve began a drastic reduction in Selected Reserve and Full-Time Support (TAR) end-strength as part of the Navy Department's efforts to right size. Unlike the active component, the Naval Reserve programmed a rapid reduction from an end-strength of 153,400 in fiscal year 1991 to a bottom end-strength of 96,000 in fiscal year 1997. After fiscal year 1997, the Naval Reserve was to maintain a Selected Reserve/TAR end-strength between 96,000 and 100,000 members. These levels were determined by the study, "The Future Naval Reserve: Roles & Missions, Size and Shape," which was presented to Congress by the Assistant Secretary of Defense (Reserve Affairs), and further validated by the Bottom-Up Review. In previous testimony, the Chief of Naval Operations and the Assistant Secretary of Defense (Reserve Affairs) assured Congress that the Naval Reserve would level out at 96,000 to 100,000 end-strength in fiscal year 1997 and beyond. Our members and members of the Naval Reserve took this testimony as a commitment by the Administration to maintain a Naval Reserve size within these boundaries. Surprisingly, and without tangible justification, the proposed President's budget shows a further decline to 94,294 in fiscal year 1998 and to 93,582 in fiscal year 1999. This unexplained reduction comes at a time when fleet and shore commanders are requesting increasing support and participation by Naval Reservists. The Naval Reserve Association urges the members of this committee to support restoring this end-strength along with the appropriate funding to the budget.

NATIONAL GUARD AND RESERVE EQUIPMENT ACCOUNT

Last year, Congress directed the Department of Defense to submit a budget with separate line items for Guard and Reserve Equipment requirements. This requirement has not been complied with in the fiscal year 1998 budget proposed by the President. The Naval Reserve Association concurs with Congress that the Naval Reserve, and the other Reserve components, should be specifically budgeted for its equipment needs and that these requirements should be spelled out in budget proposals submitted by the Department of Defense. For years, the Naval Reserve has been forced to seek Congressional support for its equipment needs by asking for supplemental funds through the NG&RE account. While this practice must be abolished, it can only happen after DOD and the Services have shown their commitment to adequately provide Reserve equipment through separate line item funding in their budget submissions. Unfortunately, again this year, the Naval Reserve Association must come to you with our assessment of what is missing from the President's budget, and request that Congress again resort to providing this required equipment through the NG&RE account. The following table represents our association's assessment of the Naval Reserve's unfunded equipment needs.

Fiscal Year 1998 Unfunded Naval Reserve Equipment Requirements

[Dollars in millions]

Equipment Nomenclature	*Requirement*
C–9 Replacement Aircraft (3)	$150
Naval Coastal Warfare	91

Equipment Nomenclature	*Requirement*
F/A–18 Precision Strike Upgrades	92
CESE TOA	25
F–14 Precision Strike Upgrades	34
Miscellaneous Equipment Items	95
P–3 Modifications	116
SH–60B Aircraft (5)	140
E–2 Group II Aircraft (4)	300
ALQ–126B	25
Total Unfunded Requirements	1,068

NAVAL RESERVE OPERATIONS AND MAINTENANCE FUNDING

It is critical that the Operations and Maintenance funding for the Naval Reserve (O&M,NR) provide adequate resources to maintain the readiness of the Naval Reserve and operate its facilities and units in an efficient and safe manner. In the budget, as presented, O&M,NR funds decline from $885.3 million to $834.7 million in fiscal year 1998. Although some of this decline can be accounted for due to the decreased end-strength (which of course we disagree with), it does not adequately explain the lack of support by the Navy for the readiness and operations of the Naval Reserve. We urge you to restore the O&M,NR account to previous levels.

MILITARY CONSTRUCTION FOR THE NAVAL RESERVE

The Navy has been neglecting the operations, repair and maintenance of its Naval Reserve facilities for years. This included a neglect in constructing new facilities for the Naval Reserve to replace aging and grossly inefficient facilities. Through a concerned effort of the Naval Reserve leadership, and with full support of Congressional committees, this situation was gradually reversed, and a plan was conceived and pursued which would correct this unsatisfactory situation. This resulted in an MCNR account of $37.6 million for fiscal year 1997. Unfortunately, with the submission of this budget and a proposed MCNR account of only $13.9 million, the Navy has returned to its position of not supporting, at nearly adequate levels, the facility requirements of the Naval Reserve. The future of these facilities is being mortgaged and will result in rapidly deteriorating infrastructure in the outyears. We urge Congress to return the MCNR account to the $35 to $40 million level for the Naval Reserve.

RESERVE COMPONENT MOBILIZATION INCOME INSURANCE PROGRAM

The Mobilization Income Insurance Program authorized by Congress and implemented by the Department of Defense last year is already severely under funded and unable to provide the income protection which Reservists and Guardsmen have signed up for. Currently, DOD is paying benefits at a rate of four cents on the dollar which we consider to be a complete break in faith with our Reservists of all services. We are at a loss to understand how the Department of Defense, acting under the direction of Congress, could initiate such a program, ask Reservists to support and participate in it, and then apparently manage the program in such a manner that results in such serious under funding. Indeed, we are unable to explain this situation to our members who are not receiving their due payments. DOD has requested supplemental funding of $72 million to get this program through the current fiscal year. The Naval Reserve Association supports the Department's request for these additional funds so that those Reservists and Guardsmen who are eligible for this protection receive what is due them. However, the Association does not support the Department's proposed method to offset this budget increase—taking money from Reserve equipment funds nor does the Association support the Department's plan to terminate this program. DOD needs to redesign the plan so that it meets the needs of Reservists while maintaining fiscal solvency.

PAY AND COMPENSATION

The Naval Reserve Association fully supports the proposed pay increase for all military members as contained in the President's budget. However, we note that the proposed raise merely maintains the existing pay rates at a level which keeps pace with inflation and does nothing to recoup the cumulative loss of buying power suffered by our military members over the years due to historically inadequate pay raises. Of great concern to our members are the reports they see in the press regarding envisioned changes to the way the Consumer Price Index is calculated. The CPI is used as a basis for calculating the amount of Cost of Living Allowance adjustments. Realizing that their military pay has not kept pace with the cost of living

over the years, our members view diminished COLA's in the future as a double burden placed on military retirees. We ask that Congress keep the special circumstance of military retirees in mind when, in the future, it determines COLA adjustments to retired pay.

FEDERAL MILITARY LEAVE POLICY

Contained in the proposed budget is a provision which would change existing policy pertaining to military leave for federal employees. For years, it has been the policy to provide Reservists, who are federal employees, with up to 15 days of military leave annually, with full pay, when they perform their annual training requirements. This leave and pay is in addition to normal annual leave to which federal employees are entitled and the pays and allowances which the individual may earn while performing Reserve duties. This long-standing policy was designed to encourage and support federal employees who were Reservists and Guardsmen. Additionally, the policy sent a strong message to private sector employers and encouraged employers to adopt similar support for their employees. This budget would change that policy to paying federal employees only the difference between their federal salaries and their Reserve compensation for the annual training period. We believe that this change in policy will discourage federal employees from joining the Reserve components and will result in a loss of trained Reservists from the rolls. Additionally, it will encourage private employers to reduce their support for the Guard and Reserve. I urge you not to support the administration's policy change and to restore the $84 million reduction from the Defense budget.

HEALTH CARE BENEFITS

There is growing concern among our members that the health care which has been promised to them during their retirement years will not be there. For decades, military leadership and recruiters promised that one of the benefits of a military retirement was that retirees, and their dependents, would receive free medical care for the rest of their lives. To ensure that this commitment to our retirees is met, the Naval Reserve Association and other members of the National Military/Veterans Alliance support Medicare subvention which would provide greater resources to military treatment facilities and thus allow increased medical service to retirees. Our association also supports either providing the Federal Employees Health Benefit Program option to all military retirees or to restore TRICARE Standard/CHAMPUS to the quality and level of care provided to all other Federal retirees. We ask your support to make this happen.

NAVAL RESERVE'S FUTURE

As I pointed out to you in my recent letter, Mr. Chairman, the Department of the Navy has been discussing courses of action which, if approved by Congress and implemented, would in my opinion, gut and destroy the Naval Reserve as we know it. It would appear to me that these actions are not in response to changing naval requirements nor in lessening of demand by the Commanders-in-Chief for Naval Reserve support but are motivated by the desire to use the Naval Reserve as a "bill payer" for the Navy's share of reduced Defense budgets. Among the solutions being discussed are the elimination of the one remaining Reserve Carrier Air Wing, elimination of all 10 Naval Reserve Force frigates, elimination of seven of eight Reserve Maritime Patrol squadrons, elimination of all helicopter capability within the Naval Reserve and closing or severe downsizing of the bases which support these units. These actions would leave a Naval Reserve with little equipment to train on, become proficient with or to mobilize as a force multiplier in time of need. The Association urges you to question the wisdom of these radical proposals and to continue your support of a strong, well-equipped Naval Reserve.

In closing, Mr. Chairman, we believe, that in this uncertain and dangerous world that we live in, the Naval Reserve provides the affordable leverage required to meet today's and tomorrow's requirements. Within this context, we have asked our Naval Reservists to mobilize for Desert Storm, for Haiti, for Bosnia and to provide increasing daily contributory support around the world. We asked them to do this in face of a 32 percent cut in end-strength, fewer operating funds, and in less than optimal facilities. They have responded in a magnificent fashion and have accepted the drawdown because they believed that there was a plan, a vision and stabilization in the future, They, and we, placed our faith in the integrity of the Department of Defense and the Navy. Now in the space of a few short months, that faith apparently is misplaced. I am sure that you, like we, are at a loss to understand this course reversal by DOD and the Department of the Navy. We believe there is, in fact, no good explanation for the change, except to solve other Navy problems on

the backs of our loyal and dedicated Naval Reservists. Therefore, we appeal to you and ask you to correct this action and restore the levels of funding within the Naval Reserve accounts to the fiscal year 1997 levels. We look forward to working with you and your staffs in solving this most pressing issue.

POINT PAPER

OPERATION AND MAINTENANCE, NAVAL RESERVE (O&M,NR)

Background.—The Defense Budget for fiscal year 1998 as proposed by the President includes a reduction in Operations and Maintenance, Naval Reserve funds of $50.6 million.

Discussion.—O&M,NR funds support the daily operations of the Naval Reserve which includes providing the necessary flight hours for aircraft and steaming days for ships to maintain the readiness of these forces. The fiscal year 1997 budget provided $885.3 million in this account while the proposed fiscal year 1998 Defense budget reduces this funding to $834.7 million. Since the levels of contributory support provided by the Naval Reserve to the active Navy is not diminishing nor are the operational taskings levied on Naval Reserve forces being reduced, the Naval Reserve Association is unable to explain an operational necessity for this $50.6 million cut. The impact of this proposed reduction will be a decline in readiness of Naval Reserve units as well as a weakening of the ability of the Naval Reserve to operate its facilities and units in a safe and efficient manner.

Recommendation.—The Naval Reserve Association urges the House and Senate Appropriations Committees to restore the O&M,NR account to previous levels.

[In millions of dollars]

Category	Fiscal year—		Change
	1997	1998	
Air Operations	513.5	505.8	−7.7
Ship Operations	161.4	140.3	−21.1
Combat Ops/Support	82.2	73.3	−8.9
Weapons Support	6.1	4.1	−2.0
Administration	122.1	111.2	−10.9
Total O&M,NR	885.3	834.7	−50.6

NAVAL RESERVE END-STRENGTH RESERVE PERSONNEL, NAVY (RPN)

Background.—The Defense Budget for fiscal year 1998 as proposed by the President reduces Naval Reserve end-strength from 95,898 in fiscal year 1997 to 94,294 in fiscal year 1998 and 93,582 in fiscal year 1999. There is a commensurate reduction in Reserve Personnel, Navy funds of $29 million in fiscal year 1998.

Discussion.—Over the past two years, the Chief of Naval Reserve, the Chief of Naval Operations, and the Assistant Secretary of Defense (Reserve Affairs) have all testified in the strongest possible terms that an end-strength of 96,000 to 100,000 was required for a viable Naval Reserve. This end-strength range was based on the conclusions of the Congressionally directed Roles and Missions Study for the Naval Reserve which was conducted by OSD. The Navy has apparently abandoned its plan to maintain the size of the Naval Reserve at the 96,000 to 100,000 level. The Naval Reserve Association is at a complete loss to understand what analysis, world situation or daily/crisis requirements have changed so dramatically since the Department of Navy/OSD representatives last testified as to justify this about face in the plan and vision for the Naval Reserve. Clearly, the requirements of the Naval Reserve contributory support are increasing—not decreasing—world-wide. Mobilization requirements remain the same and every field commander is asking for more Reservists, not fewer. It is the Naval Reserve Association's view that these end-strength cuts and the resulting cut in RPN funds have no basis of analysis and in fact are "bill payers" for other Navy programs. If this is the case and it is not corrected, it will make a mockery of the testimony given in the past before Congress.

Recommendation.—The Naval Reserve Association strongly recommends that Congress restore $29 million to the RPN account in fiscal year 1998 and that it restore the end-strength of the Naval Reserve to its previous levels of 96,000 to 100,000.

The Naval Reserve Association further recommends that the end-strength restoral for fiscal year 1998 be implemented as follows:

Medical	+400
Oceanography	+75
Intelligence	+26
Logistics	+400
Submarine	+250
Air	+252
Surface	+76
Expeditionary War	+50
Special Warfare	+75
Total	1,604

NAVAL RESERVE CUTS DISCUSSED

Eliminate 7 of 8 Reserve P–3 squadrons (56 aircraft, 3,387 people, and 7 locations).

Eliminate 10 Reserve FFG–7 class ships (10 ships, 2,436 people, and 4 locations).

Eliminate one remaining Reserve Carrier Air Wing (98 aircraft, 3,508 people, and 7 locations).

Eliminate SH–2G helicopter squadrons (14 aircraft, 676 people, and 2 locations).

RESERVE PATROL (P–3) SQUADRONS

Background.—The Navy Department is discussing various force structure reductions in conjunction with implementation of the Quadrennial Defense Review and Program Review—1999 (PR–99). Among these potential reductions is elimination of seven of eight existing Reserve Patrol (P–3) squadrons.

Discussion.—Over the past 27 years, Reserve Patrol Squadrons have been one of the most successful, and most highly integrated examples of the Total Force within the Navy. They have been a shining example of contributory support to the active Navy throughout their existence. From a posture of four years ago when the Navy had 37 P–3 squadrons (24 Active/13 Reserve) to a level today of 20 squadrons (12 Active/8 Reserve), the Navy is proposing further reductions to a posture of 12 squadrons (11 Active/1 Reserve). Reserve Patrol Squadrons are deployed world-wide in support of real-world operations and are, on a daily basis, contributing to forward presence operations. The existence of these Reserve squadrons and their qualified personnel has reduced the pers tempo and ops tempo of an already overtaxed active component. The Navy is further discussing the formation of three Maritime Augment Units (MAU's) with some of the personnel currently assigned to the Reserve P–3 squadrons. The MAU program has been tried in the past and has just not worked. Furthermore, the elimination of these squadrons based at existing Naval Air Stations, would signal the beginning of elimination of the Naval Air Stations themselves—this would constitute a defacto BRAC decision, without the advice, review, participation or consent of Congress. The elimination of these seven Reserve squadrons would constitute a reduction of 56 P–3 aircraft, 3,387 people based at seven locations. The potential closing of associated Naval Air Stations would significantly add to these totals.

Recommendation.—Since these proposed reductions are not based on any change to operational requirements nor to a decrease in the demand for contributory support by the Fleet commanders-in-chief, they can only be viewed as a "bill payer" so the Navy can meet other funding shortfalls. Therefore, it is recommended that Congressional leaders question the Secretary of the Navy and the Chief of Naval Operations about the need for and prudence of these discussed reductions. Further, it is recommended that these seven squadrons and their personnel be restored to the budget should the Navy Department include such cuts in future budget proposals.

NAVAL RESERVE FORCE FFG–7 CLASS SHIPS

Background.—The Navy Department is discussing the decommissioning of all ten FFG–7 class frigates currently assigned to the Naval Reserve Force.

Discussion.—Naval Reserve Force FFG–7 class ships represent a critical part of the Navy's surface warfare capabilities. They provide forward presence through deployment to Europe, South America and Asia as well as providing counter-drug interdiction in the Caribbean and eastern Pacific. Many of these missions could not be accomplished without the services of these Naval Reserve Force ships. NRF FFG–7's significantly reduce the pers tempo and ops tempo of our hard-pressed ac-

tive duty sailors. This potential reduction of ten NRF ships would involve 2,436 people at four locations.

Recommendation.—Since these proposed reductions are not based on any change to operational requirements nor to a decrease in the demand for contributory support by the Fleet commanders-in-chief, they can only be viewed as a "bill payer" so the Navy can meet other funding shortfalls. Therefore, it is recommended that Congressional leaders question the Secretary of the Navy and the Chief of Naval Operations about the need for and prudence of these discussed reductions. Further, it is recommended that these eleven ships and their personnel be restored to the budget should the Navy Department include such cuts in future budget proposals.

RESERVE CARRIER AIR WING

Background.—The Navy Department is discussing the elimination of the one remaining Reserve Carrier Air Wing (CVWR–20).

Discussion.—This follows the elimination of one-half of the Reserve Carrier Air Wings with the disestablishment two years ago of CVWR–30. CVWR–20 represents the heart and soul of the Naval Reserve aviation arm with a well-seasoned force of significantly trained combat veterans who, have on an average over 3,000 flight hours and 300 carrier landings. They are not only critical to our mobilization and contingency operational plans, but are also critical to achieving the active component mission through adversary services, electronic warfare training, counter-drug operations and a host of other missions that are vital to the training and support of the Navy. VFC–12 and 13 devote 100 percent of their mission to accomplishing adversary training support for the United States Navy, a service unavailable elsewhere. The remaining tactical air squadrons in CVWR–20 routinely provide more than 50 percent of their flight hours in training support of the active Navy. Elimination of CVWR–20 would involve 98 aircraft, 3,387 people and 7 locations.

Recommendation.—Since these proposed reductions are not based on any change to operational requirements nor to a decrease in the demand for contributory support by the Fleet commanders-in-chief, they can only be viewed as a "bill payer" so the Navy can meet other funding shortfalls. Therefore, it is recommended that Congressional leaders question the Secretary of the Navy and the Chief of Naval Operations about the need for and prudence of these discussed reductions. Further, it is recommended that this wing and their personnel be restored to the budget should the Navy Department include such cuts in future budget proposals.

RESERVE HELICOPTER (SH–2G) SQUADRONS

Background.—Discussion of eliminating both SH–2G helicopter squadrons that support the 10 Naval Reserve Force frigates.

Discussion.—The two Naval Reserve HSL squadrons are the only SH–2G capable squadrons in the Navy and are therefore, the only squadrons capable of providing airborne anti-submarine warfare capability to the Naval Reserve Force frigate platforms. The SH–2G aircraft is the only current platform on which Magic Lantern, a system critical to successful mine location and elimination, is installed. This capability must be maintained with the NRF FFG–7 class ships. Elimination of these two squadrons would include loss of 14 aircraft and 676 people at two locations.

Recommendation.—Since these proposed reductions are not based on any change to operational requirements nor to a decrease in the demand for contributory support by the Fleet commanders-in-chief, they can only be viewed as a "bill payer" so the Navy can meet other funding shortfalls. Therefore, it is recommended that Congressional leaders question the Secretary of the Navy and the Chief of Naval Operations about the need for and prudence of these discussed reductions. Further, it is recommended that these seven squadrons and their personnel be restored to the budget should the Navy Department include such cuts in future budget proposals.

RESERVE FLEET LOGISTICS SUPPORT (C–9) WING

Background.—The Navy Department is discussing transfer of the Naval Reserve C–9 aircraft to the U.S. Air Force.

Discussion.—The Fleet Logistics Support Wing provides 100 percent of the Navy's world-wide organic air logistics support. The wing consists of 12 squadrons which operate from CONUS bases as well as overseas at bases in Italy and Japan, providing support to forward deployed Navy forces. A unique and critical capability of these units is the ability to rapidly respond to international missions, often within a few hours of the initial request for services. Without these Navy Unique Fleet Essential Airlift Aircraft, the Navy would be incapable of providing responsive, flexible and rapidly deployable air logistics support required to sustain combat operations at sea and peacetime air logistics support for all Navy commands. Commanders of

both Active and Reserve forces are dependent on the Fleet Logistic Support Wing to meet their world-wide air logistics support flexibly and responsively. Transfer of this capability to the Air Force would result in degraded responsiveness to Navy commanders and would involve 27 aircraft and 1,854 people at 6 CONUS locations.

Recommendation.—Since these proposed reductions are not based on any change to operational requirements nor to a decrease in the demand for contributory support by the Fleet commanders-in-chief, they can only be viewed as a "bill payer" so the Navy can acquire more hardware. Therefore, it is recommended that Congressional leaders question the Secretary of the Navy and the Chief of Naval Operations about the need for and prudence of these discussed reductions. Further, it is recommended that these logistic aircraft and their personnel be retained in the Naval Reserve and restored to the budget should the Navy Department include such cuts in future budget proposals.

Senator STEVENS. Thank you. Give the Admiral our best. Thank you very much.

Captain GODLEY. I certainly will, sir.

Senator STEVENS. Is Dr. Kenneth Quickel here?

[No response.]

Senator STEVENS. Our last witness this morning will be Chief Master Sergeant Mark Olanoff. The balance of the witnesses will be notified when our next hearing will be.

We have just been notified that the conference that we are both part of will resume at 1 o'clock. We cannot reschedule you today. So we will reschedule this for another day and we must do it soon because we are going to start our markup soon.

I apologize for the inconvenience, but we have no control over when the conference is called by the House.

Sir, please proceed.

STATEMENT OF CHIEF MASTER SERGEANT MARK H. OLANOFF, USAF (RETIRED), LEGISLATIVE DIRECTOR, RETIRED ENLISTED ASSOCIATION

Sergeant OLANOFF. Thank you very much, Mr. Chairman. I know that time is running out.

I would like to thank you on behalf of the Retired Enlisted Association to allow us to testify today.

At this time, very briefly, I would like to introduce Command Sergeant Major, retired, Woody Woodward, who is on our board of directors. He is our legislative chairman.

Mr. Chairman, I have done a little research. I know that you and Senator Inouye are veterans of the military and we appreciate your service to your country and also to the veterans at large. But there are two members who are not here who probably heard the same sales pitch that we heard when we first enlisted. Those are a Sergeant Bumpers, who is now a Senator from Arkansas, and Corporal Lautenberg, from New Jersey, who is a U.S. Senator.

If they were here, the question I would ask them is what did they think of this recruiting inducement that was used to recruit us when we first joined the military. I can tell you very briefly that when I enlisted in 1967, no recruiter or any other official of the Government ever told me that there was a Medicare bill passed in 1966 that said that I was not allowed to use CHAMPUS when I become 65.

So I know that you have probably heard this story before about what we call the promise of the health care for our retirees. I am very new to this town, Senator, and just because Government quotes title 10, section 1074, about space availability, our retirees

made their life plans based on the fact that these benefits would be there when they retired. Now that they are over 65, as some of the things I detailed in my statement show, a lot of them did not take Medicare part B because they were advised that it was not needed. Now they don't have Medicare. And we just have a lot of problems right now with the health care for our military retirees.

What the Retired Enlisted Association's plan is for the Congress to correct this situation is we believe that we should have the same health plan that you have. In fact, I would like to read a quick quote from an article that was in People magazine.

Senator STEVENS. That we have?

Sergeant OLANOFF. "As a Federal employee, I have a good health insurance policy. I pay 20 percent copayment. It would be terrible to have this happen to you without any insurance." That Federal employee is the President of the United States, Bill Clinton.

Senator STEVENS. He doesn't get that when he retires, now. He pays the full amount when he retires.

Sergeant OLANOFF. Yes, sir; he pays. And our members are prepared to pay for something that they should have received for free.

So we realize the budget constraints and we know that you cannot sit here today and promise me that I can go back to my membership and say that Senator Stevens is going to propose a bill to give us free health care. We realize that that is not going to be done.

But, sir, what we do believe is that we would like to have the same health care that you have, that your staffers have, and that all other Federal employees have. There are some bills—as I am sure you are aware—that there are some Federal employee health plan bills that are out there. There are some demonstration projects that have been recommended for subvention for DOD and VA, and I am sure you are aware of those things.

PREPARED STATEMENT

So on behalf of our association's president, Dorothy Holmes, who is also a chief master sergeant, retired, we would like to thank you for the time you have provided us today and would like you to consider the Federal employee health plan for military retirees.

[The statement follows:]

PREPARED STATEMENT OF CHIEF MASTER SERGEANT MARK. H. OLANOFF

Mr. Chairman, on behalf of The Retired Enlisted Association's (TREA) National President, Chief Master Sergeant Dorothy Holmes, U.S. Air Force (Ret) and over 95,000 members and auxiliary, we appreciate the opportunity to present testimony to this subcommittee concerning the fiscal year 1998 Defense Appropriations. TREA is a federally chartered organization representing retired, active, guard, reserve and family members who are serving (career military) or have served (and are now retired) in every component of the Armed Forces of the United States: Army; Marine Corps; Navy; Air Force; and Coast Guard.

I am Chief Master Sergeant Mark H. Olanoff, U.S. Air Force (Ret), TREA's Legislative Director.

HEALTH CARE

This is TREA's number one issue. To quote our National Executive Director, Command Sergeant Major, U.S. Army (Ret) John E. Muench, M.S.W., "retiree health care is always competing with bullets and billets." Muench continues "Forced modernization requires a reduction of acquisition and services in order to resource the future. Unfortunately, part of DOD's reduction includes disregarding and disen-

franchising those very warriors who fought and won the cold war and made the future possible. By cutting the support structure you automatically reduce services to active duty as well as retirees." The majority of our members (sixty-one percent) are over the age of 65 and have been disenfranchised from their "earned" military retiree health care benefit.

Many of these retirees were counseled by active duty hospital representatives not to enroll in Medicare Part "B" stating that their care at military health care facilities would continue for the rest of their lives. Today, many years later, we have seen many rounds of Base Realignments and Closures (BRAC), hospital downsizing and future rounds of BRAC recommended by the Defense Quadrennial Review (QDR). Secretary Cohen stated at the QDR hearing concerning the dedication of men and women in uniform—"How does DOD reward that dedication in retirement?" The future of military health care for retirees is bleak. We know you have heard the story about the promised health care benefits for military personnel upon retirement, but I must emphasize this again. For 20 years of active service or at age 60 for reserve or National Guard service, we were promised a range of retirement benefits including health care for us and our families for the rest of our lives. This is and was a very powerful recruiting inducement. Many of our members want to know where the benefits are now?

Further, according to the definition of the VA, all enlisted retirees are considered "indigent veterans". Since no enlisted retiree receives a gross retirement of more than $25,600, we are considered "indigent". However, many of our enlisted retirees have successful second careers, by taking advantage of benefits like the G.I. Bill for college. But many of our retirees did not have all of the retirement options (for example IRA's, 401K's, mutual funds, etc). I want to speak for them right now and provide some solutions. Many of our medicare-eligibles have received letters from hospitals stating that "space-availability" no longer exits. We believe that a small investment for medicare-eligible retirees is necessary to provide health care to those who really need it.

There are two bills currently in the House of Representatives; one for DOD Subvention (H.R. 192) and the other for VA Subvention (H.R. 1362). Both are demonstration projects. These bills would allow medicare-eligibles to use DOD and VA facilities and receive their health care with Medicare reimbursing both DOD and VA. However, there has been some opposition to this concept due to costs. Only in Washington, DC, is there what I call "creative accounting". Both bills authorize reimbursement of 95 percent of what civilian medicare providers would receive. This saves the taxpayers 5 percent, but the Congressional Budget Office (CBO) "scores" these as having a cost. I called CBO's Assistant Director, Budget Analysis Paul N. Van de Water, and asked him how saving 5 percent of Medicare costs doesn't save the taxpayer money. His response was that the VA is not efficient so this will cost money.

Further, there is another bill in the Senate and the House for Federal Health Employee Benefits Program (FEHBP) for medicare-eligible retirees (H.R. 76 and S. 224). TREA supports this as another option to solve the health care situation for military retirees. Our retirees have stated that they will accept paying a premium for the quality health care that was "promised" to be free. This is the same health care system that covers all federal employees including members of Congress and their staffers. Also, military retirees are the only group of federal workers who lose their employer sponsored health care when becoming eligible for Medicare. Why should there be a difference if an employee wears a uniform or a suit? We want equality. And, we are willing to pay for it. We understand that health care is not "free".

Finally, another bill in the House authorizes the waiver of penalty for not enrolling in Medicare Part "B" for certain military retirees (H.R. 598). We believe that the small investment for DOD and VA Subvention; FEHBP and the waiver of penalties will restore health care benefits for our medicare-eligible retirees and allow the employer (Uncle Sam) to receive some needed creditability when it comes to keeping promises.

Now, for the future solution of health care for new military retirees and their families. We believe that FEHBP (H.R. 1356) will solve the problem for the long-term. In return for legislation mentioned above for the medicare-eligibles, we and many other military associations, pledge to you that we will prepare the future retirees for continued health care after retirement. Just as other civil servants have the option to keep this benefit (and pay the premium), we will prepare the future retirees to pay for this benefit. This provides equality to all federal workers whether military or civilian.

CONCURRENT RECEIPT

Now to the issue of concurrent receipt of military retired pay and VA disability payment. Currently, there is an offset dollar for dollar in VA disability and military retirement. There is a bill in the House and Senate that will correct this inequity (H.R. 65 and S. 657). Many of our retirees are severely disabled and unable to work. Other federal workers do not have such an offset, only the military retiree. The above mentioned bills provide equality to the concurrent receipt issue.

DEPARTMENT OF VETERANS AFFAIRS

We are very concerned about the funding of VA programs, specifically VA Medical Centers. The recently agreed to budget agreement will reduce the VA's funding by $2.2 billion between 1998 and 2002. We realize that there are bills to allow the VA to keep third party receipts (H.R. 1125) and VA Subvention (H.R. 1362), however, these bills are not yet law.

SURVIVOR BENEFITS PLAN (SBP)

Current law requires a survivor's offset at age 62 due to the eligibility of Social Security. We believe this law punishes our retirees. This is not a "free" benefit. Our retirees pay premiums to protect their survivors with 55 percent of their retired pay. Whether a survivor receives Social Security should not be a factor as SBP allows retirees more choices to provide for beneficiaries. Further, this offset does not apply to any other federal workers—again we demand equality.

OTHER "BENEFITS"

During the deliberations of BRAC, the impact of military retirees does not seem to be a very important issue. Further, 37 commissaries are being scheduled to close due to low sales and/or the lack of active duty personnel in those areas. What about the military retiree? Remember, military and retired pay is based on a concept called "Regular Military Compensation" (RMC). Health Care, Exchange and Commissary benefits are included in RMC. When a base or post is closed, the military retiree is not compensated for this loss of RMC. Please remember to think of us when these decisions are made.

RESERVE AND GUARD ISSUES

Many of our members are serving or have served as citizen-soldiers. TREA recommends that members of the guard and reserve be given the same commissary benefit as their active duty and retired counterparts. Again—equality to all, regardless of current status.

Also, another issue of great concern is the Reserve/Guard Mobilization Insurance. Many members are paying the required premium, but are receiving only four percent of their insurance benefit. We believe to attract and maintain a viable reserve component that mobilization insurance is an important ingredient to retain quality citizen-soldiers. TREA recommends that the committee approve the supplemental appropriation to pay current insurance claims.

CONCLUSION

In the past few months I have heard the Government Accounting Office, the Assistant Secretary of Defense for Health Affairs and many other government officials state that Title 10, Section 1074 does not require the employer (U.S. Government) to provide "free" health care for life to military retirees. I would like to know what Lt. Stevens, Lt. (j.g.) Cochran, Lt. Specter, Lt. Inouye, Capt. Hollings, Sgt. Bumpers, Cpl. Lautenberg and Lt. Cmdr. Harkin think about the recruiting inducement of lifetime retirement benefits? Would you work for an employer who makes promises for the future and then does not deliver? Many of our members made their life plans based on the promises made to them at the time of entry into the military. My military career was spent in the military personnel field. As a "personnelist" and supervisor, I explained these retirement benefits to many service members.

We are spending, and plan to spend, billions of dollars on TRICARE, yet DOD states that their responsibility ends with the active duty. We agree with DOD. Let's authorize a demonstration project for FEHBP and allow military retirees the choice of TRICARE or FEHBP. Further, under FEHBP, the retiree could still use DOD or VA facilities; choose civilian HMO's or continue to use CHAMPUS (TRICARE Standard). Also, FEHBP is needed for military retirees who live in remote areas and not located near DOD or VA facilities.

Mr. Chairman, I would like to thank you and the Committee for giving The Retired Enlisted Association the opportunity to present its views and solutions on the important subject of military retirees and their "earned" retirement benefits.

Senator STEVENS. We do want to do something about it. You are the last witness today and we have to leave. But this is the most complex problem we have. If you are a retiree and you are near a hospital where they have surplus services, you will continue to get your promise fulfilled. But if you live in Holikachuk, AK, you are never going to get it filled whether you have FEHB or not.

So the question really is how do we take care of a population that in years gone by retired quite close to military reservations. Today they do not do that. They retire and go off to somewhere where there is no hospital, a military hospital, and they want to have full payment of the services at the local hospital.

We tried that and that has not worked, either, as you heard today. Doctors will not take the CHAMPUS certificate.

So it is getting to be more complex as we close more bases. I think that is one of the reasons that Congress is going to be very slow about closing any more bases.

I hope people keep that in mind. The closing of more bases is going to increase the medical problem, not help it at all. But we will look into it.

You are right. The FEHBP proposal is there. We are trying to cost that out. As a matter of fact, there is a proposal now to include all those people who are not insured under any plan under FEHBP. That will kill it.

So I don't know, really, what the answer is. You don't want to get into a system that is about ready to die. That would just exacerbate the problem of keeping commitments.

Now I do think that we need some really consensus building among the retired population to see what they really want. I don't think there is a common thread here in what we are hearing about what the retired people want in terms of a substitute for access to a military hospital

I appreciate your raising the issue and we will get back to you.

Sergeant OLANOFF. Thank you very much, Mr. Chairman.

Senator STEVENS. Thank you.

We will have to go. Dr. Quickel, you are on our list and we will notify you when the hearing will resume.

Thank you very much.

ADDITIONAL SUBMITTED STATEMENTS

Since conference with the House is meeting at this time any witnesses who are here and cannot testify, your statements will be included in the record.

[The statements follow:]

PREPARED STATEMENT OF GREG MUNDY, M.D., PRESIDENT, AMERICAN SOCIETY FOR BONE AND MINERAL RESEARCH, PROFESSOR OF BONE AND MINERAL METABOLISM, HEALTH SCIENCE CENTER AT SAN ANTONIO, UNIVERSITY OF TEXAS; AND SANDRA C. RAYMOND, EXECUTIVE DIRECTOR, NATIONAL OSTEOPOROSIS FOUNDATION ON BEHALF OF THE NATIONAL COALITION OF OSTEOPOROSIS AND RELATED BONE DISEASES

Mr. Chairman and Members of the Subcommittee, on behalf of the National Coalition for Osteoporosis and Related Bone Diseases, we want to thank you for giving us the opportunity to discuss bone disease research funding in fiscal year 1998. My

name is Sandra Raymond, Executive Director of the National Osteoporosis Foundation (NOF). I am accompanied by Dr. Greg Mundy, President of the American Society for Bone and Mineral Research (ASBMR) and Head of Endocrinology and Metabolism of the University of Texas Health Sciences Center at San Antonio, who will present part of this testimony. We are appearing before your Subcommittee bringing two experiences with the hope of realizing one common goal of improving bone health by reducing the incident of osteoporosis, Paget's disease of bone, Osteogenesis Imperfecta and other bone diseases. Dr. Mundy's perspective is from a scientific and medical angle. My objective is to educate the public about osteoporosis, its prevention, diagnosis and treatment. Together, I believe we make a convincing case for why the continuation of the Department of Defense (DOD) osteoporosis and related bone diseases program is critical to our national security.

First, on behalf of the entire bone community, I want to thank you, Mr. Chairman, Senator Inouye, and your colleagues on the Subcommittee from the bottom of my heart for the $10 million you appropriated for bone research in the fiscal year 1997 DOD budget. It was truly appreciated and I assure you it will be put to good use. This amount builds upon the fiscal year 1995 appropriation of $5 million which has been distributed to five promising grants out of 105 submitted proposals. The $10 million, while it has still not been released by the Office of the Secretary of Defense for Army use, promises to focus on research that will more directly benefit people of military age.

The bone coalition, representing the NOF, ASBMR, the Paget's Foundation and Osteogenesis Imperfecta Foundation, has had a very productive meeting with representatives from the new research unit which will have control of the dollars if and when the money is released. During that meeting, the Army Operational Medicine Research Program, Research Area Directorate III (RAD III) and the bone community realized that we are in full agreement as to the importance of bone research to military readiness with our current troops and future recruits.

The DOD is developing its own focus on bone research with relevance to the military age population. This special focus is welcomed by the bone community as it is not duplicating the important work being funded by the National Institutes of Health. Much of our current knowledge of bone diseases has been derived from studying postmenopausal white women. Our understanding of bone metabolism would be greatly strengthened by this new DOD research emphasis.

The goal of the DOD program is to enhance military readiness by reducing the incidence of fracture, which incur costs and lost time, during physically intensive training. Bone fractures are a major problem for the military population. We need research in determining approaches to making these fractures less common. This is a problem for both sexes, but it is particularly important for women. This is relevant now because first, more women are in the military and second, women have lower bone mass than men which makes them more susceptible to fractures. Research should be directed to finding ways of increasing bone mass above the fracture threshold.

Military training programs require recruits to perform at a much higher physical stress level than is required by civilian life. Some civilians who become soldiers have stress fractures of the lower limbs only when performing their new duties. Those soldiers apparently suffer from "relative osteoporosis" in that their new bones are not strong enough to sustain their new intended use.

Stress fractures are a problem in 10 to 15 percent of women recruits during the 8 weeks of basic training. With the increasing number of women in the military, the bone health of female recruits becomes a concern of growing proportions if they are to serve at maximum capacity and strength. According to the Army, the minimum time away from significant duty for a male or female soldier who develops a stress fracture is 6 to 8 weeks. Full recovery time for those with stress fractures generally takes as long as 12 weeks. Stress fractures are among the most frequent injuries that take men and women in the Army off duty.

The leadership of the Army's osteoporosis and related bone diseases research project is aware that achieving military bone strength takes more than measuring the bone density of potential recruits and screening out the ones with low bone mass. To advance the understanding of overall bone health of military men and women, we must develop the ability to predict susceptibility to stress fractures through studying genetic and environmental influences.

To achieve peak bone mass and retain the inner structural strength that bone provides, bone weakness must be attacked from several fronts. Important research questions must be answered. For example, how do different biomechanical forces such as weight-bearing and muscle development impact bone cells? What is the clinical physiological impact of physical fitness and diet on peak bone mass? To what degree do environmental factors such as smoking, carbonated beverages and alcohol

intake relate to the achievement and retention of peak bone mass? What are the predictors of fracture risk such as genetics, physical characteristics and hormonal factors? What are the best prevention, diagnostic and treatment strategies for the young population.

The military also has an exceptional opportunity to conduct longitudinal studies of bone physiology in young people because it retains individuals from ages 18 through 22. This is an opportunity which should be fully utilized through cooperation between military and civilian scientists. Nonetheless, while the military is primarily focused on this age group, it is also concerned about the health of its military families and retirees who will also benefit from the basic and clinical research performed under the guidance of the DOD.

In conclusion, the military life asks much more of its people in a physical sense than does civilian life and it must, therefore, invest in discovering the means to achieve that top fitness. We urge you to continue your strong support for bone disease research and ask that you provide $20 million in funding for DOD's program in fiscal year 1998.

To paraphrase Franklin Roosevelt and to echo your own words, Mr. Chairman, the total defense which this nation seeks, involves a great deal more than building airplanes, ships, guns and bombs. We cannot be a strong Nation unless we are a healthy nation. And so we must recruit not only men, women, and materials but also knowledge and science in the service of national strength.

Thank you. We will be happy to answer any questions.

PREPARED STATEMENT OF KENNETH E. QUICKEL, JR., M.D., PRESIDENT, JOSLIN DIABETES CENTER, BOSTON, MA; AND STEFAN E. KARAS, M.D., DEPARTMENT CHIEF, DEPARTMENT OF OPHTHALMOLOGY, STRAUB CLINIC AND HOSPITAL, HONOLULU, HI ON BEHALF OF THE JOSLIN DIABETES CENTER

Mr. Chairman and Members of the Subcommittee, we appreciate this opportunity to appear before you to present Joslin Diabetes Center's proposal to improve the access to and quality of health care for Department of Defense personnel and to reduce costs and increase savings in the near term for Department of Defense health care outlays by establishing a new paradigm of health care.

Diabetes among military and civilian Department of Defense personnel and their families mirrors the disease in the total overall population where sixteen million people are diabetic and annual costs associated with diabetes are $138 billion—more than 15 percent of health care costs annually in the United States. In this societal context, the 1998 Department of Defense Health Program covers 6,267,000 people: 188,000 will be diabetics who generate in excess of $2 billion in health care costs annually; nearly an equal number will have diabetes and not know it; nearly 4,000 will die every year from diabetes and its complications; between 330 and 860 will become blind each year; nearly 1,200 will have amputations; and 300 will develop kidney failure.

Though Joslin is the world's largest and most comprehensive independent diabetes research and patient care institution, we would like to put ourselves out of business by finding a cure for diabetes through research, but we are not quite there yet. Joslin would like to share our technology and methods with other institutions and networks in order to limit the effects of diabetes. The personnel structure, telemedicine technology and medical network within the Department of Defense offer a tremendous opportunity for the transfer of Joslin's technology and techniques to demonstrate the following: Early detection of diabetes and those who will develop diabetes; prevention of the onset of diabetes for those prone to diabetes development; and improved care for those who have diabetes.

The real effects of this proposal offer improved quality of life for diabetes patients and significant cost savings for the Department of Defense as soon as the period 2000–2002, the period in which overall government expenditures must be reduced to meet balanced budget objectives.

Joslin proposes to work with Department of Defense officials to develop a pilot program of diabetes detection, prevention and care. The objectives would be to institutionalize advanced techniques to detect diabetes and those most likely to develop diabetes within the Department of Defense civilian and uniformed ranks and their families, and to implement improved prevention and care protocols for diabetes patients employed by Department of Defense.

Early detection, intervention for prevention and improved care techniques can reduce projected health care costs in excess of $400 million throughout the Department of Defense/Veterans Administration population universe by the 2000–2002 period.

Specifically, we propose to institute pilot programs of detection, prevention, and care in two sites (New England and Hawaii) for a two-year demonstration, training and technology transfer exercise of Joslin's expertise utilizing existing Department of Defense telemedicine infrastructure, personnel and employee/patient base. The cost would be $2.5 million annually.

If patients with diabetes have eye examinations annually, current treatments can prevent 98 percent of the blindness of diabetes. Yet today, diabetes and diabetic retinopathy remains the leading cause of blindness in working age Americans. The primary causes for this dilemma are twofold, namely access of patients into mandated standards of care and patient and provider education.

Equally important, the Joslin health care treatment programs can significantly reduce complications of diabetes including cardiovascular disease, kidney disease, and peripheral neuropathy with subsequent significant economic savings.

We have developed the Joslin Vision Network and a Diabetes Eye Health Care Model to address these problems of access and education of diabetic eye disease.

The Joslin Vision Network is a telemedicine based platform that services remote eye examination stations using video imaging technologies that take advantage of low light level sensitive video cameras and industry standard telecommunication protocols. Thus, at a remote site, patients can have their retinal images rapidly and comfortably acquired using the low light level sensitive video technologies, have these images transmitted to a central site where the images and related medical information is stored and reviewed. The review of the images at the central reading center resource produces an assessment of the level of diabetic retinopathy and a recommended treatment plan which can be transmitted back to the patient contact site before the patient has left from their visit. This function is performed using the real time teleconferencing functions of the Joslin Vision Network. Operation of the Joslin Vision Network has been made simple so that retinal images and related medical information can be acquired by ancillary staff without any prior expertise in computers. Minimal training is required for recognizing regions of the retina that will need to be imaged for diagnostic purposes.

The Joslin Vision Network system can affect patient access, compliance, education and motivation using the Department of Defense test bed sites. The objectives are to establish Joslin Vision Network remote imaging stations at these sites and to implement and evaluate services aimed at addressing concerns regarding patient access across geographic and cultural barriers, cost effectiveness of the service, establishing and assessing health professional and patient education programs specifically with respect to behavioral, compliance and motivational issues.

Using the Joslin Vision Network, all Department of Defense civilians and military personnel can be screened for diabetes at the test sites. Diabetes detection will be performed using a methodology that does not involve drawing blood or taking urine samples, which was developed by Joslin and is currently being commercially produced by Spectrx, an Atlanta based medical instrumentation company. The system provides a rapid assessment of diabetes without the need for a blood sample to be obtained and results from initial studies have shown that as a screening device for diabetes this system provides as good or better sensitivity than a fasting plasma glucose measurement.

Diabetes care will be available using the Joslin Vision Network and the Diabetes Outpatient Intensive Treatment program developed at Joslin Diabetes Center. We have had experience at Joslin in applying a new approach toward patients with diabetes. From the beginning, this approach focused on two major areas: improving clinical outcomes and doing so in a practical, resource-efficient manner. Our clinical outcome goals were improved metabolic control (and thus fewer long-term complications) and reduced patient stress from having to take care of their diabetes. The program was focused on individual flexibility and was developed in a way to be more efficient in utilization of both the patient resources and the health care resources. Rather than have the continued intensive involvement of health care providers throughout a patient's lifetime, we put the patient through a short (but intensive) course of training which not only leads to an immediate improvement in their metabolic control, but gives them the foundation to take care of themselves in the future. We are also able to reduce the patient's diabetes-related stress. Training the patients to care for their own diabetes, seeking other input when they need it, is more appealing to the patient, more efficient in use of resources in the long-term, and produces good results.

The Joslin Vision Network provides the technology structure and program for the Joslin Diabetes Eye Health Care Model and the Joslin Diabetes Outpatient Intensive Treatment program so that people with diabetes can closely monitor their disease and appropriately trained medical personnel can provide timely treatment to

better control of glycemia, hypertension and cholesterol to alleviate and eliminate life threatening complications.

The two proposed pilot programs would be expected to demonstrate significantly improved detection, prevention and care techniques for diabetes patients incorporated within the Department of Defense medicare/health arena, resulting in reduced costs, improved patient access and quality of life and increased personnel productivity.

Thank you for this opportunity to appear before you today. We would be pleased to answer any questions you might have.

PREPARED STATEMENT OF EDITH G. SMITH, CITIZEN ADVOCATE FOR DISABLED MILITARY RETIREES

My name is Edith Smith from Springfield, Virginia. I am pleased and honored to present this statement to the Members of the Defense Subcommittee of the Committee on Appropriations, U.S. Senate. I would like to discuss military health care issues affecting disabled and End Stage Renal Disease military retirees and their family members who become eligible for Medicare under age 65. This small group of retired beneficiaries are unjustly cut off from equal eligibility for the Military Health Services System, and cost shifted to the lesser benefits of Medicare, simply because they have been employed and suffer the misfortune of severe disability or End Stage Renal Disease (ESRD.) Because I was not an employed spouse, were I to suffer disability, I would not lose my CHAMPUS benefit to Medicare. This "inequitable" situation is hard for me to understand or accept.

ISSUES OF INEQUITABLE TRICARE/CHAMPUS BENEFIT PROVIDED TO RETIRED "MEDICARE ELIGIBLES" UNDER AGE 65

The Department of Defense requirement to purchase Medicare Part B as a unique condition for disabled or ESRD retired beneficiaries (Medicare-eligibles under 65) to use their earned TRICARE/CHAMPUS health benefit.

No DOD/SSA DATA match—The Defense Eligibility Enrollment Reporting System (DEERS) has failed to implement a system to identify and notify Medicare-eligibles under age 65 of their change in eligibility for CHAMPUS benefits.

"Equitable Relief" waivers for Medicare B penalties requested by DOD.

Waiver of CHAMPUS payments recoupment, Fiscal Year 1996 Defense Auth. Act, Sec. 743. This provision appears to have expired July 1, 1996. DOD has not yet published regulations.

Discriminatory payment of Federal funds through the CHAMPUS program denied to military beneficiaries because they are disabled should be prohibited by Public Law 93–112, Sec. 504, (The Rehabilitation Act of 1973.)

Complex issues of concern to retired Medicare-eligibles under 65 center on an unfair requirement to purchase Medicare B in order to enroll in TRICARE PRIME or to use CHAMPUS as second payer to Medicare benefits.

—Medicare-eligibles under 65 who are family members of Active Duty personnel have a voluntary option to purchase Medicare B. Part B is not required as part of their TRICARE/CHAMPUS eligibility. (Only family members who have worked to qualify for Social Security Disability in their own right suffer a loss of CHAMPUS eligibility. Non-working spouses do not lose CHAMPUS eligibility.)

—Federal Civilian annuitants (any age) who are eligible for Medicare also have the voluntary option to purchase Medicare Part B.

—Retired military beneficiaries who are eligible to enroll in other health insurance (OHI) through employment are not required by Federal law to do so as a "cost saving" action for TRICARE programs.

Further, Congress mandated in Title 18 of "The Social Security Act," Section 1836, that Medicare "Part B" be a voluntary option to all eligible beneficiaries. To deny equal CHAMPUS eligibility to military retirees under age 65 because of disability or ESRD should be considered a discriminatory use of federal funds paid through the CHAMPUS program and thus, prohibited by Public Law 93–112, Section 504, (The Rehabilitation Act of 1973.)

BACKGROUND

I consider myself to be a traditional military wife and I represent no organization. My husband, LtCol. Vincent M. Smith, USMC, Ret., and I became involved in this advocacy work when his CHAMPUS entitlement was terminated in 1989, basically because he became too sick to work. He was determined to be Social Security dis-

abled in February, 1987, when he suffered an unexpected loss of health and work at age 49. Twenty-nine months later, the Department of Defense switched him from CHAMPUS to the lesser benefits of Medicare. He lost 14 years of his earned retired benefit of CHAMPUS. This unjust loss of the earned CHAMPUS benefit has caused us to join others in working to correct this inequity for all military beneficiaries who are at risk of severe disability or kidney disease.

In 1965, Congress established the Medicare Program under Title 18 of the Social Security Act. Medicare is a federal health insurance program administered in 2 parts: Part A and Part B. Part A is financed through taxes paid by workers and their employers (premium free to entitled individuals.) Part B is paid for in part by premiums from persons who voluntarily enroll in the program. Part B is required for participation in Medicare HMO's and for supplemental coverage. Private Sector nor the Federal Government require Part B in lieu of their "employer provided" health benefit.

In 1966, the expressed intent of the Congress was to provide military retirees a premium free CHAMPUS benefit (in lieu of a reduced monthly compensation) equal to the Federal Employees Hi-Option Blue Cross/Blue Shield or other popular fee-for-service FEHBP Plan. Congress provides a Military Medical System that cannot provide a health benefit to all military beneficiaries and therefore is not adequate when compared to the "employer provided" benefit (FEHBP) offered equally to Federal Civilian Annuitants.

In 1972, the Social Security Amendments (42 USC 1395c) expanded Medicare eligibility to entitled disabled CHAMPUS beneficiaries on or after July 1, 1973. There was a dual coverage benefit for these individuals until 1977. The CHAMPUS regulations (DOD 6010.8 dated January 10, 1977) terminated CHAMPUS coverage effective January 1, 1978, for Medicare eligibles under age 65. Fiscal year 1979 testimony presented to the Senate Armed Services Committee by Mr. Vernon McKenzie, ASD(HA) described this change as a cost-saving administration action that did not reduce medical coverage.

In 1980, Public Law 96–513, Sec. 511, an amendment to the "Defense Officer Personnel Management Act" signed on December 12, 1980, mandated a termination of CHAMPUS benefits for Medicare eligibles under age 65.

In 1991, Congress quickly attempted to correct this unjust, and I believe, unintended situation by restoring CHAMPUS as second payer to Medicare. Congressman "Bill" Young, FL, and Senator John McCain, AZ, introduced legislation to restore all health benefits to retired military beneficiaries that they would have had, but lost prematurely because they were disabled.

However, as DOD has implemented CHAMPUS as second payer to Medicare, beneficiaries experienced numerous unanticipated problems. The implementation was "budget driven" rather than using the guidelines for dual coverage benefits already in place for retirees who carry other health insurance.

PROBLEMS WITH THE EXISTING DUAL MEDICARE/CHAMPUS COVERAGE

Medicare Part B requirement for disabled military retirees

Disabled retired military beneficiaries who receive dual coverage under Medicare and CHAMPUS are required to participate in Medicare Part B ($43.80 mo) in order to receive their earned CHAMPUS or TRICARE benefits. Medicare-eligible family members of Active Duty personnel are not required to purchase Medicare Part B as a condition to retain their TRICARE/CHAMPUS eligibility. When the AD member retires, the family member may not now enroll in Part B without severe penalties. At age 65, the Part B "old age" enrollment period begins anew, without penalties during the initial enrollment window. Federal civilian retirees with dual coverage under Medicare and FEHBP have the option to purchase Medicare Part B. If the civilian retiree chooses to participate in Medicare B, the Office of Personnel Management rewards this decision by requiring the FEHBP plans to waive all deductibles and copays. Disabled military retirees must be provided similar considerations by our government.

No DATA match with DEERS/Social Security

Retired beneficiaries cannot be notified by DEERS of the change in their CHAMPUS eligibility and the mandated switch to Medicare Part A until DATA matches are accomplished. Beneficiaries must be held harmless by DOD until an accurate DATA system is in place to identify dual eligible beneficiaries. DOD(HA) has initiated a request to begin this process. End Stage Renal Disease patients cannot be identified by Social Security unless they have voluntarily applied and received Medicare Part A entitlement. ESRD patients do not receive Social Security Disability Income. DOD will have the responsibility to identify ESRD patients

through the TRICARE enrollment—but late identification will result in financial hardship for the uninformed patient who incurs medical bills under the wrong program. A flawed DATA match is not fair to beneficiaries or to the Defense Health Program.

Overseas coverage

Medicare-eligible retirees under 65 who live outside the United States are required to purchase Medicare Part B ($43.80 mo.) in order to use CHAMPUS benefits. To apply this requirement outside CONUS is absurd as Medicare will not make payments on foreign soil. Federal civilian retirees living overseas use their FEHB plan with no Medicare B requirement.

CHAMPUS and Medicare are different federal programs

CHAMPUS operates on a fiscal year basis under criteria and covered services designed for more healthy persons under age 65. CHAMPUS is an employer-provided major medical comprehensive health benefit originally designed to equal the benefits of the Federal Employees Hi-Option Programs and to supplement the direct care system of the military. CHAMPUS was intended to be premium free in lieu of a reduced monthly military paycheck (Army $5,925.85 in 1994) and a $7,500 annual out-of-pocket cap.

Medicare operates on a calendar year basis and was originally designed to serve only the "over 65" population. The Medicare program is funded with contributions from both the employer and the employee. Medicare was intended to assist with medical expenses in old age in combination with employer provided coverage. Medicare does not provide prescription drug coverage or world wide coverage.

CHAMPUS is not a Medicare supplement

The new CHAMPUS "115 percent rule" negates second payer CHAMPUS payment when the Medicare allowed amount is greater than the amount CHAMPUS would have paid, leaving the patient with unexpected out of pocket costs. A true medigap supplemental policy is designed to pay the amount defined as the patient's responsibility. For Medicare covered services where the allowed amounts are sometimes higher than CHAMPUS allowed amounts, CHAMPUS will not pay the patient's deductible or Medicare cost share, leaving the hospital or provider who thought they accepted a patient under Medicare standards suddenly faced with reduced payments that is a disappointment to both the provider and the patient.

Coordination of benefits payment method—Medicare/CHAMPUS

In 1994, Congress specified the traditional "coordination of benefits" payment when CHAMPUS is second payer to Medicare. After Medicare, CHAMPUS would pay remaining out of pocket costs up to the amount they would have paid as primary payer. Has DOD implemented this permanent law for these unique beneficiaries?

Medicare Part A: Accepting assignment

Hospitals who accept federal funding assistance are required to accept Medicare assignment. Hospitals accepting Medicare assignment also are required to accept CHAMPUS assignment. However, there are complex criteria and rules (including the new "115 percent rule") that may prevent CHAMPUS from paying the Medicare Part A deductible of $760.

Medicare Part B: Accepting assignment

Physicians and outpatient providers are not required by law to accept either Medicare or CHAMPUS patients. Even though the physician may be an authorized provider, it is his choice to "accept assignment" on a case by case basis. If the provider accepting Medicare is not also an authorized CHAMPUS provider, then CHAMPUS will not make payments as second payer.

Pre-existing conditions

The active duty member who is medically retired probably will not be enrolled in a CHAMPUS supplement sold by military associations without pre-existing condition exclusions. Federal law requires Medicare supplements to enroll individuals without pre-existing conditions only at age 65 during a 6 month window for the initial Medicare B enrollment period. DOD does not have oversight or control of supplemental insurance sold by Associations to military retirees similar to the government's oversight and coordination of the FEHB plans with Medicare.

Insurance risk pools

Supplemental policies sold by our military associations are community based risk pools by age and state. Premiums for these policies vary greatly with Associations,

often the enlisted groups have the more expensive premiums. Prescription coverage with Medicare supplements is not generally offered because of the high premium costs rated with smaller community based risk pools. Current Senate and House FEHBP Bills include a provision for a separate trial risk pool for retired military beneficiaries which would seem to be an improvement over the restrictive risk pools now available to them.

TRICARE PRIME ENROLLMENT FOR MEDICARE ELIGIBLES UNDER 65

Repeal Medicare Part B requirement

I ask the Committee to please support the removal of the mandated requirement to purchase Medicare Part B as an unnecessary and unfair condition to enroll in TRICARE PRIME for the Medicare-eligible beneficiary.

DOD informational materials on TRICARE PRIME state that Medicare-eligibles may not enroll in PRIME at this time. "Medicare eligibles" unable to enroll are over age 65, Medicare-eligibles under age 65 are eligible for TRICARE PRIME enrollment. TRICARE PRIME charts describing eligibility categories, enrollment fees, and copayments must be required to include unique Medicare-eligible requirements. All beneficiaries are equally deserving of full information about TRICARE to raise awareness about the change in benefit if they were to suffer disability or ESRD. DOD's explanation that the disabled group is too small or the dual coverage too complex to justify space in the marketing materials is not reasonable.

I am told that TRICARE Contractors and MTF Commanders are advised to discourage enrollment of beneficiaries with other health insurance, to include Medicare. However, Medicare differs from other Major Medical policies in that it does not include prescription coverage. Who explains that? How many military medical administrators know that an active duty family Medicare-eligible member is not required to Purchase Part B, the retired beneficiary is required, and the not employed disabled spouse retains full CHAMPUS eligibility? Moreover, are the consequences of not purchasing Medicare B at the first enrollment period fully understood and explained by Health Benefits Advisors or other TRICARE officials?

If the disabled retiree learns of his eligibility for PRIME, he is financially penalized with the requirement to purchase Medicare B ($43.80 mo.) as an added condition to enroll in TRICARE PRIME, then he is assessed the normal enrollment fee ($230 yr.) even though his CHAMPUS is now a second payer, not a normal benefit. Additionally, he may be restricted from freely using all providers in the PRIME network. While TRICARE contractors must "attempt" to sign up providers who accept both CHAMPUS and Medicare, TRICARE PRIME providers are only required to accept CHAMPUS under the PRIME contract.

The disabled military retiree may choose to sign up in the PRIME network to free himself of paperwork that he may not be well enough to accomplish, or to save the 25 percent cost share for CHAMPUS prescription drugs and other preventive programs not offered by standard CHAMPUS. The disabled military beneficiary may desire to join his fellow retirees in the military health program with merely a sense of belonging, remaining in the "military mainstream" with his more healthy retired colleagues, or as a matter of convenience. Whatever his reason, the DOD must not seek to rid their programs of retirees because of age or health status as a way to meet budget targets.

Equitable Relief for Medicare Part B Premium Penalties

Prior to 1996, when a military beneficiary attempted late enrollment in Medicare Part B, DEERS furnished a letter requesting "equitable relief" and explained that DOD had misinformed the retiree about the requirement to enroll in Medicare Part B. (CHAMPUS does not provide each military retiree a CHAMPUS handbook as does Medicare and most other insurance programs.) Base closures caused many retirees who had depended on military medical care to turn to Medicare Part B with late enrollment penalties. The 10 percent per year penalty can result in a high Medicare monthly premium. Early in 1996, a change in DOD policy tightened rules traditionally used for providing "Equitable Relief" letters of request by DEERS to military beneficiaries seeking late enrollment in Medicare Part B. DOD forwarded legislation (fiscal year 1997 and fiscal year 1998 requesting "equitable relief" for "over 65's" in BRAC sites. Why would DOD single out BRAC site beneficiaries—is there a difference in closing a base or closing the Cardiology Dept. of an open hospital for a heart patient? The only criteria for "relief" should be whether DOD had notified a beneficiary by letter of the termination of CHAMPUS and the switch to Medicare. DOD's criteria for requesting "equitable relief" waivers must center on the beneficiaries who were not informed by DEERS letter of their changed CHAMPUS status.

—"Over 65" Medicare-eligibles receive DEERS notification letters shortly before their 65th birthday explaining the termination of their CHAMPUS benefit and how to proceed with the switch to Medicare. However, the changes in health coverage are not described. Federal law prevents the selling of duplicative health coverage to Medicare-eligibles—so why should Medicare eligibles purchase Medicare Part B if they have used the Military Health Services System successfully for many years. This older generation has unwavering faith that they are "grandfathered" in the Military Medical System.

—"Over age 21 and 23" dependent children CHAMPUS beneficiaries receive DEERS letters terminating their CHAMPUS benefit on the occasion of their birthday. "Under 65" Medicare-eligibles do not receive DEERS notification letters as there is no mechanism with Medicare to identify these beneficiaries who are disabled or have kidney disease. Since 1973, DOD has been aware of the need to develop a mechanism to notify Medicare eligibles and has failed to do so. Without "Equitable Relief" recommended by DOD, some beneficiaries are denied access to earned military Medical coverage for as long as a 15 month waiting period for Medicare enrollment in addition to the assessed stiff penalties for late enrollment.

Attempting to correct a 24 years oversight by DOD officials, DOD has written to officials at the Health Care Financing Administration (Jan. 1997) asking for help to solve the problem with "equitable relief" and the required DATA Match. (See Attachment #1) Would the Committee monitor this initiative by Dr. Joseph? The problem may be one of "who's going to pay?" DOD must accept financial responsibility for failure to inform CHAMPUS beneficiaries of changed eligibility.

Federal Employees Health Benefits—A Voluntary Option for Military Beneficiaries

One Senate and 4 house bills have been introduced before the 105th Congress that will allow military beneficiaries the option to participate in the Federal Employees Health Benefits Program (FEHBP). Because Military retirees are the only Federal retirees whose employer provided health coverage ends at age 65, we appreciate these initiatives. This legislation will "honor our commitment" to provide lifetime medical care to those who serve our country through military service. As of now, there are four bills addressing this simple and most reasonable alternative source for a health benefit provided to the military: S. 224 by Senator John Warner, R-VA; H.R. 76 by Congressman James P. Moran, D-VA; H.R. 1356 by Congressman J.C. Watts, R-OK; H.R. 1456 by Congressman "Mac" Thornberry, R-TX; and H.R. 1631 by Congressman John Mica R-FL.

These bills offer various optional participation in the successful FEHB program to military beneficiaries. This legislation eliminates a gap in medical coverage especially for Medicare-eligible military retirees. It does not interfere the TRICARE program, nor does it establish a new, untested insurance program. In my opinion this is the best solution for retirees who are unable to access the free, "Space Available" care in a military facility.

Currently the DOD provides the figure of 230,000 Medicare-eligibles who are able to access "free" medical care in Military treatment facilities at a cost to DOD of more than $1.2 billion. The remaining Medicare population (over 75 percent) receive no employer provided benefit. Using DOD's own figure of $1.2 billion to provide a $1,599.26 government share of an FEHBP premium, about 782,500 Medicare-eligibles could participate in a popular FEHBP insurance program on a shared cost basis. Additional funding to secure an employer provided health benefit for all military beneficiaries is needed for about 400,000 retirees (less those "Medicare-eligibles" that participate in other programs.) Congress mandates over $4 billion annually (1995) for the government contribution to the FEHB program for federal civilian annuitants (see attachment #2.) Has Congress abandoned this same responsibility to provide a medical benefit for military retirees blaming budget constraints?

Some are calling this legislation "FEHBP–65." The use of this acronym could lead to the misperception that "Medicare-eligibles" under 65 are not included in the legislation. An inadvertent exclusion of "Medicare-eligibles" under 65 might occur as this legislation goes forth. When this Committee considers FEHBP legislation, I ask that you protect the inclusion of "Medicare-eligibles" under age 65 for the following reason: CHAMPUS as second payer to Medicare does not provide the dual coverage situation envisioned and intended by Congress in a manner similar to FEHBP "fee for service" plans when they are second payer to Medicare.

Conclusions that support the passage of FEHBP legislation as a voluntary option of retired military "medicare-eligibles" are:

—FEHBP has no pre-existing exclusions.

—FEHBP policies generally contain million dollar lifetime limits. When that limit is reached, the annuitant can switch to another plan and begin again.

CHAMPUS boasts no lifetime dollar limits, however, when the CHAMPUS beneficiary gets too sick to return to an "unprotected" environment, CHAMPUS payments are terminated, usually retroactively.

—FEHBP provides more comprehensive coverage at lower beneficiary costs than the coverage provided by military association supplemental policies.

—Dual Medicare/CHAMPUS beneficiaries need two supplements for adequate protection. One FEHBP Medicare supplemental policy affords better, more seamless coverage, less paperwork, and lower premiums. The opportunity to join a well regulated FEHBP HMO is also available.

—Medicare Part B participation is not a mandated condition for using benefits in the FEHBP plan. It is a voluntary choice by the retiree.

—Federal civilian retirees over age 65 may use their FEHBP health coverage anywhere in the world.

We thank Congressmen Moran, VA; Watts, OK; Thornberry, TX; Mica, FL; and Senator Warner, VA, for introducing legislation to allow military beneficiaries a voluntary alternative for an equal, individual health benefit. This legislation offers the military an equal opportunity for health coverage that is provided to all other Federal employees or retirees. It also "Honors our Commitment" for the promise of lifetime military healthcare. This legislation does not deny military retirees the access to traditional "Space A" care in a military hospital. Please make every effort to pass legislation that will provide an opportunity for equitable, accessible, affordable, and quality health coverage to all military retirees.

MEDICARE SUBVENTION

The Dept. of Defense has consistently testified that Medicare Subvention will provide the solution for the "Medicare-eligible" dilemma. There is a lack of solid information provided to beneficiaries in order for them to have well-informed opinions on this complex health benefit alternative. Congressman have co-sponsored "Subvention" legislation without realizing that they need a military hospital in their district for the legislation to benefit their constituents. Retirees say they desire "Subvention," but do not know if it will be an HMO type plan—or business as usual—billed on a visit by visit basis. Will it provide guaranteed comprehensive care for all who opt to use it? Will it include only the medical services currently provided by the Military facility? Will any disabled retiree be denied enrollment? How does the Department of Defense consider Medicare Subvention the solution to the dilemma for the "over 65's" when 17 states have no military facility, and 9 states have only 1 small medical facility?

Medicare Part B Enrollment and Surcharge Improvements

The President's fiscal year 1998 Budget proposes language which restructures the Medicare enrollment process and the Part B Premium surcharges. The current general enrollment period for Part B and Premium Part A would be replaced with a continuous open enrollment period. Coverage would begin 6 months after enrollment.

The Part B late enrollment surcharge (10 percent per year) is purely punitive—not at all linked to the costs borne by the program due to late enrollment. The President proposes to replace this punitive surcharge with a surcharge based on actuarially determined costs of late enrollment. These proposed improvements would decrease premium costs to military beneficiaries. Additionally, the actuarial table provided would be similar to life insurance premium tables that could be more easily understood by all. An individual could see, at first glance, the financial consequences of late enrollment.

Passage of this legislative proposal would help to ease the complex and misunderstood rules that burden beneficiaries. I urge the Subcommittee to examine these Medicare improvements and to offer support for them.

CONCLUSION

Military retirees were promised lifetime medical care in exchange for reduced compensation and service to their country. They earned it, often at the risk of their lives, and paid for Medicare through payroll deductions. Americans believe that the Uniformed Services provide free, lifetime healthcare. Most members of the Uniformed Services perceive that they are guaranteed lifetime health care for themselves and their family members. In fact, military retirees are the only federal retirees to lose their employer provided health care benefit at age 65. DOD and the military services fund the government contribution for FEHBP for their civilian employees. Disabled military retirees under 65 are not provided a seamless health coverage similar to that provided to under 65 disabled federal civilian retirees.

I ask the Defense Subcommittee to make every effort to be supportive of an equal, accessible, affordable, and quality retired health care benefit not now provided to the military retiree. Begin this effort by repealing the requirement to purchase Medicare Part B because it is an unjust condition to the TRICARE/CHAMPUS benefit earned as a benefit of retirement. Removing this requirement to purchase Part B is consistent with the voluntary options for other health insurance participation provided all other retired Federal beneficiaries, both Military and Civilian.

ATTACHMENT 1

ASSISTANT SECRETARY OF DEFENSE,
DEPARTMENT OF DEFENSE,
Washington, DC, January 15, 1997.

Honorable BRUCE C. VLADECK, Ph.D.,
Administrator, Health Care Financing Administration,
Baltimore, MD.

DEAR DR. VLADECK: I am writing to request your assistance on issues pertaining to CHAMPUS beneficiaries who are entitled to Medicare on the basis of disability.

As you are aware, beginning in 1992 CHAMPUS became second payer for beneficiaries entitled to Medicare on the basis of disability, only if they enroll in Medicare Part B. Unfortunately, the Department of Defense (DOD) has not and does not have the ability to identify this category of beneficiaries in order to notify them of the change in the law. As a result, many CHAMPUS beneficiaries were unaware of the change in the law, continued on CHAMPUS erroneously, and declined Part B, making them ineligible to use CHAMPUS as second payer under the new law. DOD is interested in pursuing equitable relief for those CHAMPUS beneficiaries entitled to Medicare due to disability.

Section 732 of the Fiscal Year 1996 National Defense Authorization Act directs the administering Secretaries to develop a mechanism for notifying beneficiaries of their ineligibility for CHAMPUS when loss of eligibility is due to disability status. It is my understanding that the first step to implement this provision is to initiate a data exchange (on Medicare eligibles due to disability) from HCFA to DOD. Any assistance that you can provide to start the process of the data exchange and execute it in a timely manner would be greatly appreciated.

Further, I would like to initiate a dialogue on developing viable options (agreeable to both Departments) to provide equitable relief for CHAMPUS beneficiaries who are entitled to Medicare on the basis of disability. It would be very beneficial if you could provide a point of contact within HCFA for this proposal of equitable relief for this category of beneficiaries as well as for the data exchange.

I look forward to working together to address this important issue. Please feel free to contact me with any questions or comments.

Sincerely,

STEPHEN C. JOSEPH.
M.D., M.P.H.

ATTACHMENT 2.—PRESIDENT'S BUDGET, FISCAL YEAR 1997

STATUS OF FUNDS

[In millions of dollars]

Identification code 24–9981–0–8–551		1995 actual	1996 est.	1997 est.
	Unexpended balance, start of year:			
0100	Treasury balance	13	17	17
	U.S. Securities:			
0101	Par value	7,573	7,890	7,966
0102	Unrealized discounts	−96	−93	−93
0199	Total balance, start of year	7,490	7,814	7,890
	Cash income during the year:			
	Offsetting collections:			
0280	Contributions from Employing Agencies	4,562	4,338	4,506
0281	Contributions from Postal Service for Active Employees	2,442	2,612	2,725
0282	Contributions from Postal Service for Annuitants	743	602	690
0283	Government Payment for Annuitant Health Benefits	4,018	3,918	4,153

STATUS OF FUNDS—Continued

[In millions of dollars]

Identification code 24–9981–0–8–551		1995 actual	1996 est.	1997 est.
0284	Interest Earned	399	436	405
0285	Contributions from DC Government	85	80	76
0286	Contributions from Active Employees	2,147	2,143	2,233
0287	Contributions from Annuitants	1,814	1,811	1,923
0299	Total cash income	16,210	15,940	16,711
	Cash outgo during year:			
0501	Benefit Payments	−15,714	−15,668	−16,289
0502	Payments to Carriers from OPM Contingency Reserve	−157	−180	−200
0503	Administration	−15	−16	−18
0599	Total cash outgo (−)	−15,886	−15,864	−16,507
	Unexpended balance, end of year:			
0700	Uninvested balance	17	17	17
	U.S. Securities:			
0701	Par value	7,890	7,966	8,170
0702	Unrealized discounts	−93	−93	−93
0799	Total balance, end of year	7,814	7,890	8,094

This display combines the Federal Employees Health Benefits (FEHB) fund and the Retired Employees Health Benefit (REHB) fund.

The FEHB fund provides for the cost of health benefits for: (1) active employees; (2) employees who retired after June 1960, or their survivors; (3) those annuitants transferred from the REHB program as authorized by Public Law 93–246; and (4) the related expenses of the Office of Personnel Management (OPM) in administering the program.

The REHB fund, created by the Retired Employees Health Benefits Act of 1960, provides for: (1) the cost of health benefits for retired employees and survivors who enroll in a Government-sponsored uniform health benefits plan; (2) the contribution to retired employees and survivors who retain or purchase private health insurance; and (3) expenses of OPM in administering the program.

Budget program.—The balance of the EHB fund is available for payments without fiscal year limitation. Numbers of participants at the end of each fiscal year are as follows:

	1995 actual	1996 est.	1997 est.
Active employees	2,282,000	2,254,000	2,225,000
Annuitants	1,771,000	1,794,000	1,815,000
Total	4,053,000	4,048,000	4,040,000

In determining a biweekly subscription rate to cover program costs, one percent is added for administrative expense and three percent is added for a contingency reserve held by OPM for each carrier. OPM is authorized to transfer unused administrative reserve funds to the contingency reserve.

* * * * * * *

Prepared Statement of Col. Charles C. Partridge, U.S. Army (Retired), National Association for Uniformed Services

INTRODUCTION

Mr. Chairman and distinguished members of the Committee, the National Association for Uniformed Services would like to express its appreciation to you for holding these important hearings. The testimony provided here represents the collective views of our members.

The National Association for Uniformed Services represents all ranks, branches and components of uniformed services personnel, their spouses and survivors. Our nationwide nonpartisan association includes all personnel of the active, retired, re-

serve and National Guard, disabled and other veterans of the seven uniformed services: Army, Marines, Navy, Air Force, Coast Guard, Public Health Service, and the National Oceanic and Atmospheric Administration.

Our affiliate, the Society of Military Widows, is an active group of women who were married to uniformed services personnel of all grades and branches and represents a broad spectrum of military society. From our membership of over 160,000 and 300,000 family members and supporters, or almost half a million voters, we are able to draw information from a broad base for our legislative activities.

Surveys of military personnel and their families consistently show that medical care along with adequate pay and inflation protected retired pay and commissaries are the top concerns of the military community. In fact, with base and hospital closures and reductions in medical personnel, the increasing lack of available health care is a major concern to active and retired personnel alike. I will focus on military medical care during this hearing.

BACKGROUND

The promise of lifetime medical care for career service members, their families and survivors is contained in law and tradition that dates back to the 18th century. Later, in 1885 the 48th Congress provided in a War Department Appropriations Bill that, "The Medical Officer of the Army and Contract Surgeon shall, whenever practicable, attend the families of officers and soldiers free of charge."

Prior to the early 1950's, the promise to provide military medical care for retired military personnel was not questioned because throughout their military careers and in retirement, medical care was provided in military medical treatment facilities (MTF's) for personnel who could use those facilities. During the early 1950's and since that time the services, in official documents and literature, used the lifetime promise of free medical care as a recruitment and retention incentive for the large military force required to fight the Cold War.

In 1956 Congress made space available medical care an entitlement for active duty dependents by the enactment of the Dependents' Medical Care Act (Public Law 84–569; June 7, 1956; 70 Stat. 250). The law also specified care for retirees and their dependents at these facilities (without entitlement) on a space available basis.

Also in 1956, Congress concluded that the direct care medical system was inadequate to care for the dependents of active duty personnel and enacted legislation authorizing the Defense Department to contract with private sources to supplement the inadequate in-house care for dependents of active duty members who due to travel distances or other reasons could not use MTF's. This was the forerunner of the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) enacted by Congress to be effective in 1967. With the enactment of CHAMPUS, military retirees, their families and survivors were included.

The CHAMPUS program was designed to provide a quality health care benefit comparable to "Federal Employees Health Benefits Program hi-option Blue Cross/Blue Shield or hi-option Aetna health insurance", (The Military Medical Act, Public Law 89–614).

—CHAMPUS required the Defense Department to pay 80 percent of medical costs for active duty dependents and 75 percent of the cost for retired members under age 65, and their dependents. CHAMPUS beneficiaries were required to pay the remaining balance of the cost of the medical care they received from private sector providers.

—Changes in the CHAMPUS program over the years have been disastrous for beneficiaries. In many areas because of the low allowable payment rates, physicians either will not accept CHAMPUS or consider CHAMPUS beneficiaries as charity patients. This is embarrassing and insulting to our military personnel and their families.

Exhibit A is an extract of some of the promises made in recruiting and retention literature over the years. Despite these promises, the availability of health care continues to be a problem. Deep cuts in both military and civilian medical personnel have left MTF's severely understaffed. Physicians are preparing examining rooms and performing administrative tasks which means they see fewer patients than do private sector physicians who have adequate nursing and administrative help available to them. Meantime, patients not seen in MTF's must be referred to more expensive CHAMPUS or TRICARE contractor care.

Today no single option will solve the problem of providing medical care to DOD's diverse beneficiary population. However, improving access to cost effective, top quality care while meeting wartime training and mobilization requirements can be accomplished at reasonable cost.

CURRENT SITUATION

Over 58 hospitals have been closed as part of the Base Realignment and Closure Commission or other closure actions. Services have been cut back at many of the hospitals remaining open and many of them are being downgraded to clinics. Hundreds of thousands of retirees and military family members who received care in MTF's are now finding no care available. Retirees are being denied prescription drugs by MTF pharmacies in increasing numbers. They are told the prescribed drugs cost too much, or are restricted for issue to active duty or for some reason are no longer available.

The TRICARE Program has been in development or implementation for nearly a decade, yet the TRICARE-Prime program still does not cover many parts of the United States. For example, in California where the military managed care system has been in place the longest—over eight years—there are still areas without TRICARE-Prime networks. This is because DOD is not willing to spend the money necessary to have top quality providers sign up. Therefore, if they cannot or will not establish networks, then an adequate TRICARE Standard/CHAMPUS program should be available. Unfortunately, the CHAMPUS Maximum Allowable Change (CMAC) is so low many physicians will not accept it. Although DOD has asked for and gotten authority to link CHAMPUS rates to Medicare rates, in some areas and for some procedures the rates are lower than Medicare. Linking CHAMPUS rates to Medicare is unsatisfactory in any case. A better solution would be linking them to reasonable and customary charges similar to the Federal Employees Health Benefits Program service charge with provisions for further negotiating. The current system is broken, and must be fixed.

THE SHEEP PEN

One retired Non-Commissioned Officer described the current military medical system as a sheep pen. He said military retirees waiting for care can be compared to sheep in a holding pen. They have three gates to go through for care. A very narrow gate represents decreasing access to MTF's, a slightly larger gate represents TRICARE and the largest gate represents Medicare (See Exhibit B). This describes a system that saves money by restricting or denying access to care.

THE NAUS PLAN

NAUS/SMW fully supports keeping a strong, effective direct care system for the delivery of health care and medical readiness. We also support making full use of the military treatment facilities and TRICARE networks as DOD's primary providers. However, retirees who are not guaranteed access to these primary sources of care should be given the option of participating in the Federal Employees Health Benefits Program (FEHBP). Greater use could also be made of VA health care facilities. (See Exhibit C).

FEHBP AS AN OPTION

NAUS supports offering FEHBP as an option to Medicare eligible military retirees, their families and survivors. Further, TRICARE Standard must be improved for TRICARE eligible beneficiaries to provide a benefit that is at least comparable to that provided to beneficiaries of the Federal Employees Health Benefits Program (FEHBP) as originally intended by Congress. If this is not done then military beneficiaries should be allowed to participate in FEHBP.

Presently, DOD does not officially endorse giving military retirees the FEHBP option stating it may cost more, weaken readiness or siphon off funds from other programs already underfunded.

However, Congress appropriates some $4 billion annually for FEHBP for Federal civilian retirees including DOD civilian personnel while DOD is closing military hospitals and disengaging its military retirees from health care to save money.

Military retirees deserve to have a health care program at least comparable to that of the President, the Congress and every current and retired Federal civilian employee. CHAMPUS/TRICARE-Standard has been destroyed by DOD and Congress by severe funding cuts and administrative restrictions; DOD/Congress must restore CHAMPUS/TRICARE-Standard to its original high quality status. If these improvements are not made, FEHBP will be required as an option for younger TRICARE eligible retirees and their families. The government now funds FEHBP for its DOD civilian employees and retirees. Shouldn't the government also provide a guaranteed benefit for the nation's retired warriors—the men and women who put their lives on the line to defend this nation?

Concerned members of Congress have introduced legislation to provide FEHBP to military beneficiaries:

Bill	Sponsor	Description
H.R. 1356	Rep. J.C. Watts	Restores CHAMPUS/TRICARE Standard to original standards intended by Congress; allows Medicare eligibles option to enroll in FEHBP; under 65 would have FEHBP option if restored benefit not available.
H.R. 1456	Rep. Thornberry	Provides TRICARE-Prime for Medicare eligible retirees w/Medicare reimbursements to DOD; allows them to participate in FEHBP; waives Part B penalties; requires benefits under TRICARE Standard to be comparable to highest level FEHBP plan or opens FEHBP as an option to military retirees, survivors, and family members.
H.R. 1631	Rep. Mica	FEHBP, as an option, is open to active duty families, military retirees, family members and survivors; coverage/costs same as Federal civil service. Cost controlled by limiting elections—100,000 first year; 200,000 second year; 400,000 third year.
H.R. 76	Rep. Moran	Provides FEBHP, as an option, to Medicare eligible retirees.
S. 224	Senator Warner	Companion bill to H.R. 76.

Medicare Reimbursement (Subvention)

NAUS supports Representative J.C. Watt's H.R. 1357 and Joel Hefley's bill, H.R. 192 which would set up Medicare subvention demonstration projects at up to five sites and Joel Hefley's H.R. 414 would fully implement Medicare subvention. We also support Representative Mac Thornberry's bill H.R. 1456 which includes Medicare subvention. We understand that Senator Phil Gramm plans to introduce subvention reimbursement legislation in the Senate soon. We would like to see full Medicare reimbursement legislation passed promptly. If that cannot be done we would support a demonstration project. However, the longer we delay full implementation the greater the injustice to military retirees.

Some features which we recommend be incorporated into all Medicare subvention include:

—A fee-for-service option. The current demonstration would limit participation to those who are willing to give up their Medicare benefit except as part of the DOD TRICARE Prime program. We believe those who do not want to enroll in TRICARE-Prime should be allowed to use military treatment facilities on a space available basis and the MTF should be allowed to bill Medicare for treatment at a DOD/HCFA negotiated rate.

—Waive TRICARE-Prime enrollment fee for Medicare eligibles. Currently, Medicare HMO's require no enrollment fee for beneficiaries. We believe "fee stacking" by requiring participation in Part B Medicare and payment of TRICARE enrollment fees will place the TRICARE-Prime out of reach for some beneficiaries. A couple would pay $1,164 for Medicare Part B plus $460 for the enrollment fee for a total of $1,624 per year. This would be before co-payments and other fees required under the TRICARE program.

—Solve Medicare Part B premium problems. Waive Medicare Part B penalties for Medicare eligibles who do not have Medicare Part B, but would like to enroll in Part B and participate in a Medicare subvention program.

—Ensure that Medicare eligible beneficiary enrollees are given the same priority care that other enrollees receive.

—Include authority for all uniformed services Medicare eligibles to participate, not just those of the Armed Services.

—Provide clear guidance and safeguards to make participation by Medicare eligibles completely voluntary. Some retirees are in satisfactory health care programs and would object to any provision that would require participation in a Medicare subvention program.

SENIORS HEALTH CARE PROGRAM

NAUS applauds DOD's efforts to provide a pharmacy benefit for Medicare eligibles. However, we oppose the elimination of the current pharmacy program to fund it. The high enrollment fees, deductibles and lack of provisions for name brand

drugs while eliminating the current program would make it unacceptable to most retirees.

However, we could support a properly funded pharmacy benefit that would give beneficiaries the choice of participating in a guaranteed mail service program with a prescription cost structure similar to TRICARE-Prime. To be acceptable, a large formulary would be required. Further, the provisions of brand name drugs at a modest mark-up over the base cost would also be needed. We would consider a well designed pharmacy benefit for Medicare eligibles an excellent step toward eliminating the age discrimination in the DOD health program; however, we would not consider that to be an adequate answer to the need for the FEHBP option for retirees which has a prescription drug benefit part of the plan.

RETIREE DENTAL PLAN

NAUS strongly supports development of a retiree dental plan. Cost will be a major factor in its success among retirees. A long lock-in period to keep rates down in conjunction with stable rates would be acceptable to retirees. A proposal that encourages competition to provide the best service at reasonable costs is desirable.

UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES

The Alliance thanks this Committee for its strong support for providing funds for the continued operation of the Uniformed Services University of the Health Sciences. Study after study has shown that when all factors are considered USUHS is more cost-effective than the U.S. Health Profession Scholarship Program. We urge you to continue your support for this school. We also urge all members of Congress with responsibility for the health and safety of our servicemen and women to visit this fine institution and see first hand the critical role it plays in military medicine and in providing top quality training to uniformed medical personnel.

FUNDING

Last year the Defense Health Program was under funded by the Administration by about $500 million. The Defense Authorization and Appropriations Committees restored the funds. Again this year the DHP is under funded. Therefore, Mr. Chairman, we again ask that you and the members of this panel provide necessary funds for fiscal 1998. We are also concerned that there are insufficient funds allocated for fiscal 1999 and beyond. According to a GAO report (GAO/NSIAD 97–83BR Defense Health Program) provided to the Chairman and Ranking Minority Member of the Subcommittee on National Security, House Committee on Appropriations, DOD's health care budget assumptions under fund the Defense Health Program from $3.2 to $8.4 billion through the year 2003.

Further, we ask that the Defense Department be directed to present this committee with a plan to provide health care accessible to all 8.5 million beneficiaries and to provide a specific date when the plan will be in place. We believe the plan should include FEHBP.

Finally, NAUS thanks this committee for its support of Medicare reimbursement, for holding this hearing and its interest and concern for our service members, their families and survivors.

EXHIBIT A.—MILITARY MEDICAL CARE PROMISES

Army Recruiting Brochure, "Superb Health Care. Health care is provided to you and your family members while you are in the Army, and for the rest of your life if you serve a minimum of 20 years of active Federal service to earn your retirement." [RPI 909, November 1991 U.S.G.P.O. 1992 643–711]

Life in the Marine Corps, p. 36. "Benefits * * * should you decide to make a career of the Corps, the benefits don't stop when you retire. In addition to medical and commissary privileges, you'll receive excellent retired pay * * *."

Guide for Educators and Advisors of Student Marines, p. 35. "Retired Marines are generally eligible to receive any type of health and dental care at those facilities provided for active duty personnel."

Navy Guide for Retired Personnel and Their Families, p. 51. "Covered under the Uniformed Services Health Benefits Program (USHBP) are retired members, dependents of retired members and survivors of deceased active duty or retired members. This care is available anywhere in the world either in a uniformed services medical facility (meaning Army, Navy, Air Force and certain Public Health Service facilities) and under the part of the USHBP called CHAMPUS." [NAVPERS 15891D November 1974]

The Bluejackets Manual, p. 257. "What Navy Retirement means to you—pay. Continued medical care for you and your dependents in government facilities." [1969]

Air Force Preretirement Counseling Guide, Chapter 5 Medical Care 5–2f.. "One very important point, you never lose your eligibility for treatment in military hospitals and clinics." [1 April 1986]

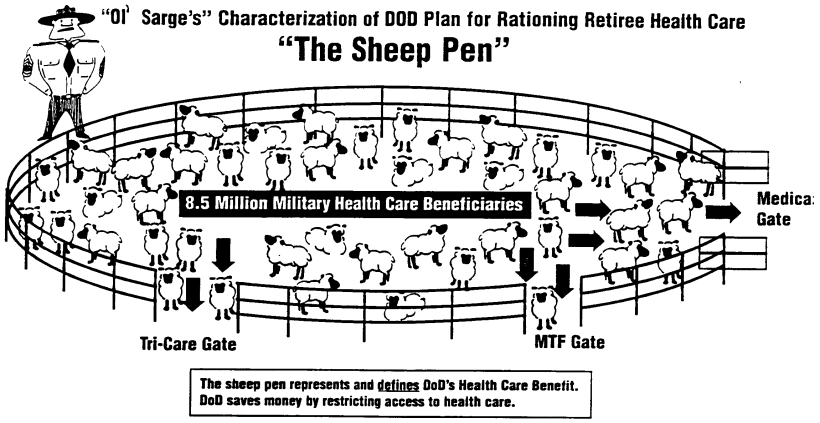
Air Force Guide for Retired Personnel, Chapter 1. "Treatment authorized. Eligible retired members will be furnished required medical and dental care." [1 April 1962]

United States Coast Guard Career Information Guide, USGPO. "Retirement * * * You continue to receive free medical and dental treatment for yourself plus medical care for dependents." [1991]

U.S. Coast Guard Pamphlet Be Part of the Action, "Reap the Rewards * * * You can earn retirement benefits—like retirement income * * * Plus medical, dental care * * *." [1993]

Hearings on CHAMPUS and Military Health Care, HASC No. 93–70, 93rd Congress "* * * the government has a clear moral obligation to provide medical care to retired personnel and their dependents * * * this Committee has found numerous examples of recruitment and retention literature which pledged * * * medical care for the man and his family following retirement." [Oct-Nov 1974]

EXHIBIT B



Many retired NCO's ("ol' sarges") have characterized DOD's current military health services system (MHSS) as a "Sheep Pen" with military retirees being kept in a holding pen waiting for rationed care.

Under this concept, there are 3 gates out of the pen but only 2 lead to DOD sponsored health care:

MTF Gate—is designed to restrict access to care: Space A Only; Hospital Closures; Specialty Program Cuts; Reduced Hospital Pharmacies; Doctor, Nurse and Support Personnel Cuts; and Hospitals "Cherry Pick" the Medical Cases for "Practice" [Graduate Medical Education (GME) Program].

TRICARE Gate—is designed to restrict access to care TRICARE Prime: Inadequate Prime Networks; Low Physician Payments; High Point-of-Service Costs; High Cost of Contract Administration; and Over 65 Medicare Eligibles Not Allowed to Participate.

TRICARE Standard (CHAMPUS): Restrictive Non-Availability Statement Requirements; No Care for Medicare Eligibles; and Considered Charity by Many Physicians.

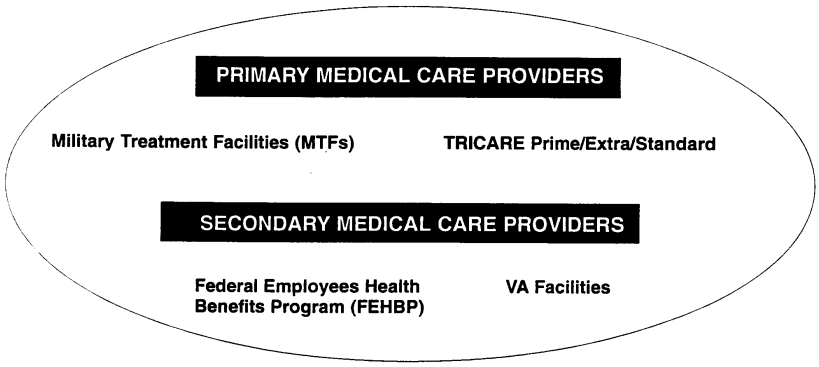
Medicare Gate—Where DOD herds the sickest and oldest sheep. Saves DOD Money; Allows DOD to renege on its lifetime medical care promise; No Prescription Drug Coverage (Must attempt to get needed prescription drugs from MTF which has cut some expensive drugs to save money.); 26 states have no major military treatment facility (MTF); 58 hospitals have been closed; 17 are to be considered for downsizing to clinics; Even when DOD's TRICARE program is fully implemented in the 21st century, only 50 to 60 percent of the 8.5 million beneficiaries will be cared for (what about the other 40 percent?); And, Medicare reimbursement (subvention)

will care for only about one-third of the Medicare eligible beneficiaries who live near MTF's.

Keeping the beneficiaries in the "sheep pen" holds costs down. Shouldn't DOD's old warriors have a health care plan at least comparable with that of DOD's civilian staff?

EXHIBIT C.—NAUS HEALTH CARE PLAN TO SERVE ALL MILITARY BENEFICIARIES

NAUS proposes a plan that would allow DOD to provide health care to all 8.5 million beneficiaries without keeping military beneficiaries in a "sheep pen" with rationed care.



This plan would provide promised DoD health care to all 8.5 million beneficiaries.

Primary Medical Care Providers:

Military Treatment Facilities (MTF's).—Care would continue to be provided on a space available basis to all eligible military beneficiaries. Medicare reimbursement would be provided for care of Medicare eligibles. FEHBP would reimburse MTF's for beneficiaries who elect the FEHBP option. These steps support the Graduate Medical Education (GME) program.

TRICARE Prime/Extra/Standard.—NAUS supports TRICARE with improvements. Medicare eligibles would be eligible to participate. Medicare reimbursement would be provided for care of Medicare eligibles.

Secondary Medical Care Providers:

Federal Employees Health Benefits Program (FEHBP) Option.—FEHBP would be offered as an option for all retired military beneficiaries who cannot be guaranteed care within MTF's and TRICARE networks and are willing to pay premiums and/or co-payments. FEHBP option could still be used in MTF's on space available basis with full reimbursement to MTF's. Under age 65 retirees would be offered FEHBP or a high quality restored CHAMPUS/TRICARE Standard option.

VA Facilities.—Agreements would allow all military beneficiaries near Veterans Administration (VA) hospitals to use them and be reimbursed by Medicare, TRICARE/CHAMPUS and other third party payers, including FEHBP.

All 8.5 million military beneficiaries would be provided promised, guaranteed, accessible, quality health care by DOD through these four alternatives while providing MTF's with the necessary number and variety of patients needed for training for battlefield casualty and other medical readiness training. Additional cost should not be great because it will be offset by restricting individuals to one primary or secondary medical care provider. Cost should not be a primary factor since Congress appropriates $4 billion annually for FEHBP for Federal civilian retirees (including DOD civilian retirees). Military retirees—our nation's warriors—should be afforded comparable health care. Congress should appropriate sufficient funding to accomplish this.

PREPARED STATEMENT OF THE NATIONAL ASSOCIATION OF ENERGY SERVICE COMPANIES

The National Association of Energy Service Companies (NAESCO) appreciates the opportunity to submit the following written testimony in support of the Department of Defense (DOD) fiscal year 1998 budget request for energy efficiency contracting and other energy efficiency project support services.

NAESCO is a trade association of energy service companies (ESCO's) and their trade allies, including utility and manufacturing companies. NAESCO's current membership of over 100 organizations includes firms involved in the design, manufacture, financing and installation of energy efficiency equipment and services in the private and public sectors, including Federal buildings.

The thousands of energy efficiency retrofits installed by NAESCO member companies to date enable energy consumers to save an average of 25 percent of their previous building energy costs. NAESCO's energy service company (ESCO) members offer capital constrained customers the opportunity to upgrade their facilities without any up-front capital expenditures. In addition, ESCO's assume the performance and technical risk so that repayment for project costs comes only from measured and verified energy savings generated by a successful, ongoing project.

DEPARTMENT OF DEFENSE INITIATIVES IN SUPPORT OF FEDERAL BUDGET SAVINGS THROUGH ENERGY SAVINGS PERFORMANCE CONTRACTING

The DOD has an excellent history of reliance on the private sector to provide energy efficiency services, including Energy Savings Performance Contracts (ESPC's), on behalf of DOD facilities. In recent years, the DOD appears to have increased its use of ESPC's, a trend that NAESCO strongly endorses, since the award of an ESPC requires a competitive procurement, which helps to ensure the selection of the highest quality and most cost effective services. Attached to this testimony as Exhibit A are case studies of two such contracts, one at Fort Polk (LA) and the other at Hill Air Force Base (UT). Both projects illustrate the magnitude of energy and dollar savings achievable.

Solicitations for Energy Efficiency Services

While NAESCO is extremely supportive of the DOD's commitment to the use of ESPC's to reduce energy costs and generate dollar savings, NAESCO nonetheless would like to express strong reservations concerning the Department of the Army's recent decision to issue a 46 state solicitation for energy efficiency services. NAESCO strongly encourages Congress to advise Federal agencies to continue their past practice of holding Request For Qualification (RFQ) competitions on a region-by-region basis. It has been suggested by some that a single "national" RFQ would be simpler to manage, both for procurement personnel and for bidding ESCO's. However, solicitations on the magnitude of the Army's 46 state RFQ are far ahead, in terms of size, of the development of the procurement infrastructure for evaluating proposals and awarding and negotiating contracts. "Mega solicitations" such as this are likely to create contracting delays rather than facilitate the contracting process as projects are lined up in the pipeline without sufficient contracting staff in place to negotiate and finalize contracts.

By continuing the practice of holding regional competitions, Federal agencies also enable smaller Energy Service Companies, that are active on a regional basis, to remain in the competition for Federal facilities' projects. One of the dangers of such a large competition is that only the largest companies may be able to meet the qualifications requirements of such competitions. Thus, the smaller companies, who may be able to offer excellent and competitive energy efficiency services, but who are not backed by a national support system, would be excluded from the competition. A result such as this would represent a disservice to those companies as well as to the DOD facilities covered by the RFQ, since those facilities would not receive the benefit of the broadest possible competition among energy services providers.

Centralized Contracting Initiatives

The DOD also has taken the initiative, ahead of other Federal agencies, in developing centralized contracting offices, in particular at the Huntsville Army Base and at Tyndall Air Force Base. NAESCO supports this move since it offers the potential to decrease the administrative costs of implementing Energy Savings Performance Contracts (ESPC's) by creating centers of procurement and contract management expertise. Therefore, NAESCO fully supports specific line item ("fenced" funding) for energy conservation necessary to support this infrastructure. Without such fenced funding, the monies generally allocated to operations and maintenance simply go to other mission-related functions.

However, NAESCO would like to suggest that some flexibility in the organizational structure be encouraged. In the experience of our member companies, each project site identified for an energy efficiency retrofit tends to have unique characteristics. The level of knowledge, understanding and skills related to energy efficient equipment, the potential for energy and cost savings, and the facility upgrades available through energy efficiency retrofits varies widely among facility managers and contracting officers. Also, there is a broad range of capability in terms of the contracting tools available for procuring these services. At some project sites, facility engineers, contracting officers and legal counsel may be poorly equipped to oversee, procure and develop these highly cost effective projects. In cases like this, the centralized offices can offer invaluable support services to help make energy efficiency projects possible.

At other sites, however, facility staff and their on-base support personnel may be the most qualified to bring such a project together. In cases such as this, mandatory exclusive use of centralized office personnel has the potential actually to increase the cost of these projects through the duplication of efforts and the inefficient use of personnel time.

We strongly encourage the DOD and Appropriators to ensure that the centralization of support services for energy savings contracts creates more efficient and expeditious contracting procedures in all cases, by the provision of site-appropriate support.

ALL QUALIFIED ENERGY SERVICE PROVIDERS SHOULD BE GIVEN EQUAL ACCESS TO THE FEDERAL MARKET

Federal agencies have adopted the view that sole-source contracting with existing regulated utility companies is a preferred method of obtaining energy efficiency services, when compared with the competitive procurement of Energy Savings Performance Contracts (ESPC's). This reliance on the use of utility sole-source contracts violates Federal requirements for full and open competition. Utility power services historically have been procured on a sole-source basis due to the traditional compact with the utility franchise. The national trend toward both wholesale and retail competition in the utility industry weakens this traditional unilateral relationship and there are questions about whether such a sole-source relationship is appropriate or beneficial in a changing marketplace. In addition, it has never been clear that the statutory authority for this sole-source power supply extended to the provision of energy efficiency services. The policy that DOD and other agencies have adopted, absent public review or comment, is that federal facilities may contract directly with utilities for energy efficiency services, but that all other providers must engage in a competitive procurement process.

The use of non-competitive procurement practices in energy efficiency contracting denies the Federal government and U.S. taxpayers the benefits of competition in the market for energy efficiency services. Furthermore, it is not supported by any rational justification. Therefore, NAESCO strongly encourages the DOD and Federal Appropriators to prescribe the use of competitive procedures for all providers when DOD is engaged in the procurement of energy efficiency services.

THROUGH THE COMPETITIVE PROCUREMENT OF ENERGY EFFICIENCY SERVICES, THE FEDERAL GOVERNMENT CAN REDUCE THE ENERGY COSTS BORNE BY AMERICAN TAXPAYERS

Within the United States' economy, residential and commercial buildings, including those dedicated to the Federal sector, consume one-third of all primary energy and 65 percent of all the electricity we produce. By investing in energy efficiency, we can capture more than 25 percent of this energy for use elsewhere within our economy. If the same amount of capacity for energy production were to be provided from the construction of new electric power plants, it would require eighty 1,000 megawatt plants with their attendant environmental impacts and siting concerns.

A 1994 macroeconomic study demonstrates that by meeting a 2010 energy use reduction target of 30 percent, the U.S. will reduce annual electricity generation by 27 percent and decrease the need for the construction of new generating facilities by over 50 percent. U.S. electricity customers will enjoy an 18 percent overall reduction in their electricity bill (a savings of $50 billion), while electric sector emissions of carbon dioxide and oxides of nitrogen will be reduced by 33 percent and 12 percent, respectively. These lower costs for energy, available through private energy efficiency investments, will enable U.S. consumers to increase their annual consumption of non-electricity goods and service by $45 billion. ("DSM and the Broader Economy," Edward Moscovitch, The Electricity Journal, May 1994.)

In the Federal sector, cost savings through energy efficiency investments enable agencies to pursue their missions while reducing budget outlays through reductions in infrastructure costs. However, the full benefits of energy efficiency investments will not be realized by the Federal Government or by the taxpayers if Federal agencies continue to pursue non-competitive practices in acquiring these services.

CONCLUSION

The competitive procurement of privately funded energy efficiency investments in Federal facilities offers a win-win budget initiative for the Congress and the U.S. taxpayer. These initiatives will increase energy productivity by reducing the energy consumption and therefore the dollar cost of operating and maintaining Federal facilities.

NAESCO supports the DOD's centralization of support services for energy savings contracting to the extent that it can be implemented in a way that creates more efficient and expeditious contracting procedures in all cases, by the provision of site-appropriate levels of support.

NAESCO strongly encourages the DOD and the Congress to continue to support a Federal-private sector initiative for reducing energy costs in Federal facilities. We further encourage the Congress and Federal agencies to provide U.S. taxpayers the maximum budget savings and other benefits available through these investments by employing competitive procedures for their procurement.

PREPARED STATEMENT OF CYRUS M. JOLLIVETTE, VICE PRESIDENT FOR GOVERNMENTAL RELATIONS, UNIVERSITY OF MIAMI

Mr. Chairman and Members of the Subcommittee: I appreciate the opportunity to present testimony on behalf of the University of Miami. The University has long enjoyed your thoughtful support, and my colleagues in Florida are deeply appreciative of your leadership, and the Subcommittee's confidence. At no time in the past have you and your colleagues on the Committee on Appropriations faced more difficult constraints. Yet, I am certain that you will continue to make the difficult choices with the best interests of the nation guiding your decisions. My colleagues and I hope that you will find it possible to fund the important initiatives detailed below in the fiscal year 1998 appropriations cycle.

The University is seeking your support for several initiatives within your purview: (1) an International Center for Health Research; (2) a Children's Research Center; (3) a South Florida Ocean Measurements Laboratory; (4) an oceanographic research vessel for the Southeastern Consortium for Ocean Research (SECOR); and (5) the Ocean Surface Current Radar (OSCR).

The University of Miami International Center for Health Research

The University of Miami's International Center for Health Research is dedicated to improving controls on the emergence and migration of infectious diseases. The incidence of emerging and re-emerging infectious diseases has dramatically increased within the past two decades. The United States is vulnerable to these emerging and re-emerging diseases as evidenced by the advent of the HIV virus, and resurgence of tuberculosis, particularly in densely populated areas, and among ethnic minorities. Other infectious diseases have emerged, including malaria, dengue, and cholera. Introduction of these diseases into the United States is enhanced by increased air travel and migration among the countries of the Western Hemisphere, particularly from Latin America and the Caribbean.

Controlling disease outbreaks in other countries is important not only for humanitarian reasons, but also to prevent these diseases from entering the United States, where they could endanger our national health and security. Three International Centers are needed to improve collaboration between scientists from the U.S., Latin America and Caribbean countries. The Centers' mission will be to investigate and develop innovative strategies to determine etiology, the spread, and the unique interactions between nutritional status and susceptibility, as well as disease progression and disease control for HIV, TB, and other infectious diseases. These Centers need to be located in the gateways to the Americas and the Caribbean, which have established collaborative relationships with the Latin American and Caribbean countries, and are susceptible to high numbers of visitors, as well as legal and illegal immigrants. The resulting infrastructure and knowledge will enhance effective hemispheric disease control. Direct and indirect funding of $750,000 per year for five years per Center will be awarded.

The Batchelor Children's Research Center

The Batchelor Children's Research Center is the research and diagnostic institute of the Department of Pediatrics at the University of Miami School of Medicine, which is one of the larger academic pediatric departments in the country, with an impressive teaching/educational program, extensive clinical care activities and major research efforts. When the University of Miami School of Medicine was formed, the Department of Pediatrics had little research, and was not assigned significant research space. Today, the Department has over 125 full-time salaried faculty, and a total faculty and staff of over 700. In recent years, the research effort of the Department of Pediatrics has grown phenomenally, and now receives more external grant and contract funding than any other Department within the University. This success has resulted in a serious shortage of quality space, and an even more serious problem in the organization of the space available, which is scattered in small units throughout the medical campus.

Recognizing the need, Miami has embarked on the construction of one of the major children's research facilities in the nation. Initiated with a ten million dollar gift from Mr. George Batchelor and the Batchelor Foundation, and quickly augmented with a five million dollar grant from the Harcourt M. & Virginia Sylvester Foundation, the project was well on its way. The University has employed an architectural firm to design a state of the art research building to house all basic and clinical research of the Department of Pediatrics. Additional funding commitments have come from the Florida Cystic Fibrosis, Inc. in the amount of one million dollars, and a gift of two million dollars from an anonymous supporter for pediatric AIDS research. The goals and mission of the facility are for the benefit of the children of Florida, the United States, and beyond, to create a children's clinical and basic research center of unmatched excellence, to facilitate consolidated, coordinated, interdisciplinary research efforts in pediatrics, and to study, treat and ultimately cure childhood diseases.

In the critical arena of marine and atmospheric research in which the Department of Defense has long played a leading role, we would like to submit testimony on the following initiatives: the South Florida Ocean Measurements Laboratory and South Florida Test Facility, the Southeast Consortium for Oceanographic Research and Oceanographic Research Vessel, and finally, the Ocean Surface Current Radar Technology Demonstration.

The South Florida Ocean Measurements Laboratory

The South Florida Ocean Measurements Laboratory is a partnership currently being defined between Florida Atlantic University (FAU), the South Florida Test Facility (SFTF), and the University of Miami for the purpose of developing a unique Ocean Measurements Laboratory. This laboratory would expedite ocean research and testing by direct access to the sea with high speed fiber optic cables that are connected to the Port Everglades facility operated by the SFTF and the new FAU facility in Dania, Florida. The partnership would afford FAU, SFTF, and UM equal input in proposals for infrastructure on a State and Federal level, and on the working level, individual investigators from each organization would compete within the peer review process for specific research projects. Natural spheres of interest amongst participants are: FAU has programs in autonomous underwater vehicles and the applications of high frequency underwater acoustics to problems in sub-bottom profiling, underwater communication and mine warfare; SFTF is involved with the at-sea tests and trials of U.S. Navy ships, submarines, sonars, and other systems; and UM has nearly a 40 year history of research in the Florida Straits on low frequency long-range acoustic propagation in shallow water, bioacoustics, and the development of underwater signal processing methods. UM can successfully contribute to the design of the general purpose instrumentation suite for defining the oceanic and atmospheric environments at the FAU and SFTF sites.

The Southeast Consortium for Oceanographic Research (SECOR)

The Southeast Consortium for Oceanographic Research (SECOR) is a partnership of three universities: the University of Miami, Texas A&M University, and the University of Texas. Additionally, the NOAA Atlantic Oceanographic Meteorological Laboratory has joined SECOR as an associate member. The three universities seek funding for and propose to operate a new regionally-based fisheries-oceanography ship in cooperation with the National Marine Fisheries Service of NOAA. Research trends in the past five years, as well as national needs, make the Gulf Coast and Caribbean an area of great opportunity and international coordination. Such a vessel could fill the need for sub-intermediate class ship, capable of working on fishery-oceanographic projects on the continental shelf, as well as conducting NMFS fishery stock assessment surveys. SECOR has already implemented joint operations. The

combined strengths of the universities and NOAA laboratories can create an efficient use of existing facilities and can lead to enhanced regional multidisciplinary research programs. SECOR anticipates that there would be scientific and cost-saving benefits in coordinating the operation of a regionally-based ship.

The Ocean Surface Current Radar Technology Demonstration

The Ocean Surface Current Radar system is a shore-based, dual-frequency Doppler radar which transmits short pulses of electromagnetic radiation in the radio frequency band. The signal is scattered back from the moving ocean surface and received by a linear phased-array antenna system erected along the shore. The radar measures the Doppler shift of resonant surface waves by the underlying flow. This measuring principle is identical to that used by police to clock speeding cars. The result is a map of surface vector currents over a large domain at high spatial and temporal resolution. With increasing interests in the coastal ocean there is also a requirement to acquire high-quality surface current data for long-term monitoring of the surface circulation to study their effect on a broad spectrum of societal and environmental issues, such as coastal pollution, oil spills, beach erosion, and sediment transport. A wide variety of management decisions would be enhanced with the "real-time" knowledge of the circulation patterns in a body of water.

The Ocean Surface Current Radar system operated by the University of Miami has been rigorously tested and used in numerous application over the past several years, such as experiments to study the transport of reef fish larvae, the detection of eddies and fronts, the evolution of fresh water plumes in the coastal ocean and validation of airborne and satellite-based remote sensors. Recently, we have expanded the measurement capability of OSCR to extract sea state information on the height of ocean waves. Other studies are also underway to specify the wind speed and direction from the OSCR measurements.

Once again, we appreciate the opportunity to submit testimony on these vitally important projects to the Subcommittee, and respectfully request your support of these initiatives.

PREPARED STATEMENT OF DR. RAYMOND E. BYE, JR., ASSOCIATE VICE PRESIDENT FOR RESEARCH, FLORIDA STATE UNIVERSITY

Mr. Chairman, thank you and the Members of the Subcommittee for this opportunity to present testimony. I would like to take a moment to acquaint you with Florida State University. Located in the state capitol of Tallahassee, we have been a university since 1950; prior to that, we had a long and proud history as a seminary, a college, and a women's college. While widely-known for our athletics teams, we have a rapidly-emerging reputation as one of the Nation's top public universities. Having been designated as a Carnegie Research I University several years ago, Florida State University currently exceeds $100 million per year in research expenditures. With no agricultural nor medical school, few institutions can boast of that kind of success. We are strong in both the sciences and the arts. We have high quality students; we rank in the top 25 among U.S. colleges and universities in attracting National Merit Scholars. Our scientists and engineers do excellent research, and they work closely with industry to commercialize those results. Florida State ranks seventh this year among all U.S. universities in royalties collected from its patents and licenses. In short, Florida State University is an exciting and rapidly-changing institution.

Mr. Chairman, let me describe two projects that we are pursuing this year. The first is a continuation of a successful collaboration between the Learning Systems Institute at Florida State University and the Institute for Machine and Human Cognition (IMHC) at the University of West Florida, assisting the Chief of Naval Education and Training (CNET) with critical technology and training related issues.

During the current fiscal year, CNET has asked for assistance in assessing the effectiveness and efficiency of the Navy's Leadership Continuum training program. Early in fiscal year 1994, CNET approved the development of this program to provide uniformed Navy personnel—both enlisted and non-commissioned officers—with a systematic program of leadership education and training. The program consists of eight courses, four for enlisted men and four for officers, that form the cornerstone of the program. These courses are taken at different times during each individuals military career. These courses are now in place and over 50,000 personnel will attend one of these courses each year.

CNET has asked the Learning Systems Institute (LSI) at Florida State University to assist in the development of a system to assess the effectiveness of the entire

Leadership Continuum. Part of the work will be the identification of organizational performance-related data that can be linked to specific program training objectives.

Working with CNET professionals, LSI will identify what data are required for leadership continuum evaluation and continuous improvement, identify data collection schedules, obtain and reduce the data, identify evaluation and continuous improvement criteria, identify possible data collection instruments and vehicles, assist CNET staff in design and development of the instruments and vehicles, support the implementation of the instruments and vehicles, assist in data analysis and interpretation, and make recommendations for continuation and revision to the program and leadership continuum.

Simultaneously, CNET has also asked for assistance in the development of specific Internet tools for supporting training worldwide. Initial work in this area is being done this fiscal year by the Institute for Machine and Human Cognition at the University of West Florida. This initial work will expand in subsequent years and FSU will collaborate with UWF in the further development of appropriate Performance Support Systems for the Navy that will involve the use of World Wide Web and other Internet technologies. This will result in the development of electronic tools that use elements of artificial intelligence and distance learning technologies to provide needed information and training at the moment and place of greatest need, which will simultaneously improve job performance while reducing training time and costs.

The experience and skills of the Learning Systems Institute at Florida State University, specifically the Office of Interactive Distance Learning, and the Institute for Human and Machine Cognition at the University of West Florida, are complimentary and synergistic. It is a powerful partnership that brings some of the best expertise available in the world to bear on critical education and training issues. This will be increasingly important in the world of the future when technology will be moving at an even faster pace.

Continuation funding is being sought at the $2 million level for fiscal year 1998 through the Department of Defense.

Our second project is a cooperative effort between the Florida State University (FSU), the joint FAMU-FSU College of Engineering (CoE), the National High Magnetic Field Laboratory (NHMFL), and the private sector. This project will establish a multidisciplinary center for simulation-based design, research, and testing, focused on multimodal advanced transportation systems. The proposed center combines the unique resources and expertise of a national Carnegie Foundation Class One graduate research institution, a supercomputing center, and the state and federal departments of transportation and the DOD. This center has as a long-term goal the advancement of transportation technology through the development of integrated design systems based on computational modeling which include the disciplines of fluid dynamics, materials and structures, manufacturing processes, and virtual reality performance simulation supported by a comprehensive program of materials development and critical component testing.

The Center for Advanced Transportation Simulation and Design will bring together several existing programs at FSU and FAMU to address advanced transportation needs critical to the State of Florida Department of Transportation (FDOT) and the United States Department of Transportation (DOT) and Department of Defense (DOD). Such a goal further demands the development of tools in the areas of decision support systems, optimization, and high-performance computing. The Center will focus on simulated design, manufacturing and performance evaluation, and will include an integrated program of high performance materials development, economic feasibility, and component testing. The expected exponential growth in computer power and memory permits one to envisage such a design environment where multi-objective, multi-criteria optimization processes manage the interaction among the design and manufacturing disciplines to arrive at a design configuration that represents the best compromise between the often conflicting design and performance requirements. High level system simulation, coupled with selective component and materials testing, offers unparalleled opportunity to evaluate the performance and development risks associated with novel systems before committing to the expense of full scale system deployment.

The Center will focus on several emerging transportation technologies including high speed rail, high speed ocean transport, and non-fuel burning individualized surface transport. The common underlining thrust within these areas is to address innovative new approaches to the utilization of electromagnetics leading to cost effective alternatives to existing technologies. The program will address both short-term and long-term goals through the development of massively paralleled codes. The program also will provide more detailed and realistic simulations of system performance and optimization with sensitivity to manufacturing and cost issues. The

simulated design and performance evaluation will be paralleled by experimental programs directed at critical component prototype development and testing and materials development needs as identified by optimization modeling. The program will build on the world-class facilities and human resources developed at the NHMFL, the FSU Supercomputer Computational Research Institute (SCRI), the FAMU-FSU CoE, and FSU, in general, coupled with strong partnerships with the private sector.

The FDOT has funded a private-public partnership to develop high speed rail linking the Miami, Orlando and Tampa metropolitan areas. It has invested in a magnetic levitation demonstration project that provides alternatives for high speed inter-modal transport thought to be critical to the future of Florida and the United States. The NHMFL has been charged by the National Science Foundation to advance magnet and magnet materials technology in support of United States' competitiveness. In response to this charge, the NHMFL has developed extensive partnerships with the private sector to advance a variety of magnet-related technologies including a partnership that supports maglev development, demonstration, and implementation.

The NHMFL also has been approached to help develop the next generation of high speed ferry and ship transport with targets for ships with large freight capacity traveling at 60+ mph. There are also efforts within the DOD, in particular, the Navy, to pursue similar high speed options to existing technologies. A critical component to the development of high speed water transport is the redesign of the ship hull and power system to provide greater flexibility in weight distribution, while simultaneously reducing overall weight. Both the Navy and private sector are looking at the complete electrification of ship drive systems as the only option that will meet the needs of this new technology. The NHMFL has a joint project with Westinghouse and the Navy to conduct prototype testing of compact superconducting magnetic energy storage devices, a critical component of a buffered electrical drive system for the new generation of ship transports.

There are also significant opportunities to re-examine compact motor designs with a focus on weight, power, and efficiency issues. These designs incorporate new high energy density permanent magnet materials and high strength, high conducting composites that are ripe for further advancements. Paralleling these interests, there are clear opportunities in the future for incorporating the recently discovered high temperature superconductors in even higher power density motors, generators, and transmissions subsystems. The Navy has some emerging programs to address these opportunities.

The above technologies have a common underpinning in the development of innovative approaches to electromagnetic propulsion systems. They also share some similar design concerns, for example, hydrodynamic response at high speeds and shape-optimization to address this, and weight-to-performance limitations requiring materials development and testing.

Finally, the development of any simulated design program to address transportation needs should include a computer-aided performance program to evaluate safety, environmental, and sociological factors. A very successful program exists at the FAMU-FSU CoE and will be expanded to address the broader scope of this program.

The Center, by focusing on simulated design manufacturing, and performance evaluation supported by materials development and component testing, will provide systems that can be readily applied to a wide variety of transportation problems, both civilian and military. It offers excellent opportunities for military and civilian joint development activities that can result in major advances in surface transportation technology for both applications.

The CATSD will be developed through a new state-federal-private sector partnership and will be modeled after the very successful state-federal partnership that led to the establishment of the NHMFL. Center activities will be supported from a combination of state, federal, and private sector support and will be managed by an External Advisory Board that includes members from the private sector, national laboratories, FDOT, and DOT, who were selected in consultation with the FDOT and DOT.

Funding for the Center for Advanced Transportation Simulation and Design is being sought at the $3 million level.

Mr. Chairman, these activities discussed will make important contributions to solving some key problems and concerns we face today. Your support would be appreciated, and, again, thank you for an opportunity to present these views for your consideration.

PREPARED STATEMENT OF MICHAEL P. KENNY, EXECUTIVE OFFICER, CALIFORNIA AIR RESOURCES BOARD; ROBERT J. CABRAL, SUPERVISOR, SAN JOAQUIN COUNTY, CHAIRMAN OF THE BOARD, SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT; MANUEL CUNHA, JR., PRESIDENT, NISEI FARMERS LEAGUE; LES CLARK, VICE PRESIDENT, INDEPENDENT OIL PRODUCERS' ASSOCIATION; AND CATHERINE H. REHEIS, MANAGING COORDINATOR, WESTERN STATES PETROLEUM ASSOCIATION ON BEHALF OF THE CALIFORNIA INDUSTRY AND GOVERNMENT COALITION ON PM–10/PM–2.5

Mr. Chairman and Members of the Subcommittee: On behalf of the California Industry and Government Coalition on PM–10/PM–2.5, we are pleased to submit this statement for the record in support of our fiscal year 1998 funding request of $750,000 for the California Regional PM–10/PM 2.5 Air Quality Study.

The San Joaquin Valley of California and surrounding regions exceed both state and federal clean air standards for small particulate matter, designated PM–10/PM–2.5. The 1990 Federal Clean Air Act Amendments require these areas to attain federal PM–10/PM–2.5 standards by December 31, 2001, and the proposed PM–2.5 by mid 2003. Attainment of these standards requires effective and equitable distribution of pollution controls that cannot be determined without a major study of this issue.

According to EPA and the California Air Resources Board, existing research data show that air quality caused by the PM–10/PM–2.5 problem has the potential to threaten the health of more than 3 million people living in the region, reduce visibility, and impact negatively on the quality of life. Unless the causes, effects and problems associated with PM–10/PM–2.5 are better addressed and understood, many industries will suffer due to production and transportation problems, diminishing natural resources, and increasing costs of fighting a problem that begs for a soundly researched solution.

PM–10/PM–2.5 problems stem from a variety of industry and other sources, and they are a significant problem in the areas that are characteristic of much of California. Typical PM–10/PM–2.5 sources are dust stirred up by vehicles on unpaved roads, and dirt loosened and carried by wind during cultivation of agricultural land. Soil erosion through wind and other agents also leads to aggravation of PM–10/PM–2.5 air pollution problems. Chemical transformation of gaseous precursors are also a significant contributor to PM–2.5, as combustion sources.

Several aspects of the research are important to the U.S. Department of Defense:

—DOD has a number of facilities within the affected region, such as Edwards Air Force Base and China Lake. Degradation of air quality and visibility could impact their operations.

—Poor air quality also degrades the health and quality of life of personnel stationed at Valley bases.

—Operations at DOD facilities in the Valley produce emissions which contribute to the Valley's air quality problem.

—Transport out of the Valley may impact operations in the R–2508 airspace in the Mojave Desert. Visibility reduction in particular could interfere with the ability to conduct sensitive optical tracking operations at DOD desert test ranges.

In summary, the Department of Defense is a double stakeholder with respect to the PM–10/PM–2.5 issue and this important study. DOD activities not only contribute to the problem, they also are negatively affected by it.

The importance of this study on PM–10/PM–2.5 is underscored by the need for more information on how the Federal Clean Air Act Amendments standards can be met effectively by the business community, as well as by agencies of federal, state and local government whose activities contribute to the problem, and who are subject to the requirements of Title V of the Clean Air Act. There is a void in our current understanding of the amount and impact each source of PM–10/PM–2.5 actually contributes to the overall problem. Without a better understanding and more information—which this study would provide—industry and government will be unable to develop an effective attainment plain and control measures.

Numerous industries, in concert with the State of California and local government entities, are attempting to do our part, and we come to the appropriations process to request assistance in obtaining a fair federal share of financial support for this important research effort. In 1990, our Coalition joined forces to undertake a study essential to the development of an effective attainment plan and effective control measures for the San Joaquin Valley of California. This unique cooperative partnership involving federal, state and local government, as well as private industry, has raised more than $14 million to date to fund research and planning for a comprehensive PM–10/PM–2.5 air quality study. Our cooperative effort on this issue

continues, and it is our hope that private industry, federal, state and local governments will be able to raise an additional $13 million over the next three years to fund this important study.

To date, this study project has benefited from federal funding provided through USDA's, DOD's, and EPA's budgets. In fiscal year 1995, $130,000 was appropriated for PM–10/PM–2.5. For fiscal year 1996, a total of $250,000 was appropriated through Department of Defense. For fiscal year 1997, a total of $750,000 was appropriated.

The following is a list of PM–10/PM–2.5 research projects which are in progress:

Planning.—Development of protocols for emissions, field monitoring, data analysis and modeling.

Technical support studies.—Suitability of data base; 1995 Integrated monitoring Study; micrometeorological parameters; fog formation/dissipation; ammonia from soils.

Modeling.—Demonstration of modeling system for application in SIP's.

Data analysis.—Analysis of existing data to aid project planning.

Demonstration studies.—Almond, fig, walnut, cotton, harvesting; unpaved agricultural roads; unpaved public roads; unpaved shoulders of paved roads; dairies, feedlots, poultry, dry cereal grain.

For fiscal year 1998, our Coalition is seeking $750,000 in federal funding through the U.S. Department of Defense to support continuation of this vital study in California. We respectfully request that the Appropriations Subcommittee on Defense provide this additional amount in the DOD appropriation for fiscal year 1998, and that report language be included directing the full amount for California.

The California Regional PM–10/PM–2.5 Air Quality Study will not only provide this vital information for a region identified as having particularly acute PM–10/PM–2.5 problems, it will also serve as a model for other regions of the country that are experiencing similar problems. The results of this study will provide improved methods and tools for air quality monitoring, emission estimations, and effective control strategies nationwide.

The Coalition appreciates the Subcommittee's consideration of this request for a fiscal year 1998 appropriation of $750,000 for DOD to support the California Regional PM–10/PM–2.5 Air Quality Study.

PREPARED STATEMENT OF DR. E. JOSEPH SAVOIE, COMMISSIONER OF HIGHER EDUCATION, STATE OF LOUISIANA

Mr. Chairman and members of the Subcommittee, I thank you for the opportunity to submit this testimony regarding the Department of Defense Experimental Program to Stimulate Competitive Research (DEPSCoR). This program is vitally important to our nation, to science and technology, to our national security, and to the state of Louisiana.

BACKGROUND

If our country is to maintain its position of world leadership in research and development, it is important that all areas of the country, rather than just a few states, be allowed to develop their research capability. Congress began EPSCoR as a program in the National Science Foundation due to concern that there were many missed opportunities in federally sponsored research resulting from the uneven geographic distribution of research funds. Due to the success of the NSF program, Congress created EPSCoR and EPSCoR-like programs in six additional federal agencies, including DOD.

EPSCoR and EPSCoR-like programs help researchers and institutions in participating states[1] improve the quality of their research so they can compete for non-EPSCoR research funds. The federal-wide EPSCoR effort funds only merit-based, peer reviewed programs that work to enhance the competitiveness of research institutions and increase the probability of long-term growth of competitive funding.

Of a federal R&D budget exceeding $12 billion per year, only $83 million is directed to strengthening R&D through the seven federal agency EPSCoR programs to the 18 EPSCoR states and Puerto Rico. While the EPSCoR states still lag significantly behind in the distribution of R&D funds, EPSCoR is fulfilling its mission by improving the quality of research in participating states.

---

[1] States that have typically participated in the DEPSCoR program include Alabama, Arkansas, Idaho, Kansas, Kentucky, Louisiana, Maine, Mississippi, Montana, Nebraska, Nevada, North Dakota, Oklahoma, South Carolina, South Dakota, Vermont, West Virginia, Wyoming, and the Commonwealth of Puerto Rico.

EPSCoR is necessary because our country's R&D funds have typically been concentrated in a small number of institutions and states. As our nation moves toward a science and technology policy aimed at global economic competitiveness, it is imperative that all regions of the country have a strong S&T base. Students across the country need access to high-quality education and research opportunities.

EPSCoR relies heavily on state involvement and participation, including non-federal matching funds. Due to the federal/state partnership upon which EPSCoR relies, EPSCoR is often considered a model program, and is a wise use of taxpayer funds during these difficult fiscal times.

DEPARTMENT OF DEFENSE EPSCOR

DEPSCoR contributes to the states' goals of developing and enhancing their research capabilities, while simultaneously supporting DOD's research goals. DOD awards DEPSCoR grants based on recommendations from the EPSCoR state committees and DOD's own evaluation and ranking. For the fiscal year 1997 competition, DOD will only fund proposals submitted through the EPSCoR State Committees.

DEPSCoR also builds research competitiveness by fostering collaborations and developing human resources. Research proposals are only funded if they provide DOD with research in areas important to national defense.

DOD has announced that the fiscal year 1997 DEPSCoR competition will be administered through the Army Research Office (ARO), Ballistic Missile Defense Organization (BMDO), Office of Naval Research (ONR), and Air Force Office of Scientific Research (AFOSR). DOD plans to award approximately $16 million of fiscal year 1997 appropriations and, if a sufficient number of meritorious proposals are received, DOD plans to award fiscal year 1998 funds subject to the availability of fiscal year 1998 appropriations.

DEPSCoR was authorized by Section 257 of Public Law 103–337 (as amended), which states that DEPSCoR's objectives are to: (1) enhance the capabilities of institutions of higher education in eligible states to develop, plan, and execute science and engineering research that is competitive under the peer-review systems used for awarding Federal research assistance; and (2) increase the probability of long-term growth in the competitively awarded financial assistance that universities in eligible states receive from the Federal Government for science and engineering research.

DEPSCOR IN LOUISIANA

Louisiana is the nation's largest EPSCoR State. We are rich in resource-consuming industries, and poor in non-resource-based businesses. The R&D laboratories of its major chemical industries are located outside its borders, nor does it have a national laboratory upon which to build an R&D/S&T infrastructure. Although Louisiana has a large pool of higher education science and engineering personnel, it is a consumer—not an effective producer—of such talent. Through EPSCoR, we are working to turn that around.

In 1985 the Louisiana Board of Regents, with the support of the National Science Foundation's EPSCoR program, established a statewide initiative to address barriers faced by scientists and engineers competing for federal research funding. This initiative is called the Louisiana Stimulus for Excellence in Education and Research. The LaSER Committee serves as Louisiana's EPSCoR committee and has been the focus of our efforts to enhance scientific and engineering research competitiveness and human resources development. Our priority fields of research are in biology, chemistry, chemical engineering, computer sciences, and environmental sciences.

The Defense EPSCoR program is one of several strong activities of the Louisiana LaSER Committee. The diverse concentration of defense-applicable research in the sixteen Louisiana DEPSCoR funded proposals broadens scientific expertise in such areas as chronic stress, high temperature structural applications, computer simulation and noise control.

CONCLUSION

Congress has funded DEPSCoR at approximately $20 million per year since fiscal year 1995. This year, for the first time, DEPSCoR was included in the budget request at the level of $10 million. While that is an important step, more funds are needed in order for the DEPSCoR states to participate fully in this important R&D program, and to provide DOD with the high-quality, mission-related research it needs. As a result, the Coalition of EPSCoR states urges the Subcommittee to fund DEPSCoR at the level of $25 million.

I appreciate the opportunity to submit this testimony, and I thank the Subcommittee for considering carefully this request.

PREPARED STATEMENT OF SERGEANT MAJOR MICHAEL F. OUELLETTE, USA (RET.), DIRECTOR OF LEGISLATIVE AFFAIRS, NON COMMISSIONED OFFICERS ASSOCIATION OF THE UNITED STATES OF AMERICA

Mr. Chairman, the Non Commissioned Officers Association of the USA (NCOA) appreciates the opportunity to present testimony to this subcommittee concerning fiscal year 1998 Defense Appropriations. NCOA's comments will express the views and concerns of it's noncommissioned and petty officer membership and those of the Apprentice Division (E–1 to E–3) concerning a wide range of compensation, personnel, medical care and quality-of-life issues considered to be of significant importance. Hopefully, the recommendations from the enlisted viewpoint will be of value and assistance to the members of this subcommittee during its deliberations.

NCOA is a federally-chartered organization representing 160,000 active-duty, guard and reserve, military retirees, veterans and family members of noncommissioned and petty officers serving in every component of the Armed Forces of the United States; Army, Marine Corps, Navy, Air Force and Coast Guard.

This testimony has been endorsed by the National Military and Veterans Alliance (NMVA). The Alliance is comprised of nationally prominent military and veterans organizations who collectively represent over 3 million members of the seven uniformed services—officer, enlisted, active-duty, National Guard and Reserve, retired and veterans plus their families and survivors. The Alliance organizations endorsing this testimony are: American Military Retirees Association; American Retirees Association; Air Force Sergeants Association; Korean War Veterans Association, Military Order of the Purple Heart; National Association for the Uniformed Services; Naval Enlisted Reserve Association; Naval Reserve Association; and the Veterans of Foreign Wars.

ACTIVE FORCE MONEY MATTERS

NCOA wishes to extend its appreciation to the members of the subcommittee for they're past efforts on behalf of enlisted men and women of the armed forces to improve their financial well being. The ability to recruit and retain quality-enlisted people is paramount to maintaining an effective military force. At the very top of enlisted members' list of priorities is the ability to meet the responsibility of financially supporting either themselves and/or their families. Understanding the difficult deficit reduction climate in which the Congress must operate, NCOA believes the efforts of this subcommittee to improve the financial capabilities of the enlisted force and reduce out-of-pocket expenses will be key to the military services' ability to retain quality noncommissioned and petty officers. The major point the Association wishes to make to members of this subcommittee is that any decision to maintain a credible military force automatically mandates a responsibility to take care of the men and women who comprise that force regardless of its size. Therefore, NCOA will offer a number of pay and compensation recommendations for the consideration of this subcommittee, which are viewed as being extremely important by enlisted members and their families:

Military Pay Raise.—Enlisted people are very aware that their military pay raises have been capped below private sector pay growth as measured by the Employment Cost Index (ECI) in 11 of the last 15 years. They are also aware that military pay raises have lagged a cumulative 12.9 percent behind those enjoyed by the average American. With the knowledge of these facts and after sustaining months of family separation and the hardship of deployment and working increasingly longer workdays because of force reductions and operations tempo, enlisted men and women feel they are being "short-changed" by those in charge of their destinies. Consequently, NCOA recommends this subcommittee fund a full ECI military pay raise of 3.3 percent and put military members on equal financial ground with the average American in future years by linking military pay to actual ECI growth. NCOA would further support an annual higher than ECI pay raise in order to reduce the current 12.9 percent pay gap.

Housing Allowances (BAQ and VHA).—Although enlisted members were encouraged by the efforts of Congress over the past two years to provide separate Basic Allowance for Quarters (BAQ) increases above the annual military pay raise, there remained dissatisfaction with the yearly individual member survey method of determining the Variable Housing Allowance (VHA). NCOA believes the current Defense Department's "cost-neutral" proposed legislation to combine BAQ and VHA into a single housing allowance which would vary by location within the United States would have significant merit in the minds of enlisted people. The associated proposal of linking annual adjustments of this new allowance to actual housing cost growth rather than the current ECI basic pay increase would be welcomed by enlisted people. Still NCOA remains concerned that even these proposals will fall short

of meeting the original intent of the allowances to cover 85 percent of median housing expenses associated with grade and location. NCOA strongly supports DOD's efforts to combine BAQ and VHA into a single variable housing allowance and encourages this subcommittee to ensure that the end result will provide enlisted people with sufficient money to meet at least 85 percent of civilian housing costs.

Basic Allowance for Subsistence (BAS) Reform.—NCOA has been a long-time supporter of extending BAS to all single enlisted members who currently receive rations-in-kind except for those in the early training stages of their military service. Additionally, NCOA has no problem with the Defense Department's proposed legislation that would establish the U.S. Department of Agriculture's (USDA) "moderate food plan cost" as the standard for determining future BAS annual increases. However, NCOA points out to the members of this subcommittee that enlisted members, currently receiving monthly BAS money which increases in the amount of annual pay raises, will perceive this action as an offset to their annual pay raise. NCOA considers this proposal to be one that "robs Peter to pay Paul." Since BAS is money paid for a specific purpose but is viewed by enlisted members as a family budget item, the Association believes that although BAS should be paid to single military members as an option, it should not be made available at the expense of those currently receiving the allowance. NCOA cares less as to what standard is ultimately used to determine BAS amounts, but recommends as part of this plan that BAS recipients be protected from loss of annual pay raises normally received.

Removal of Exchange Merchandise Restrictions.—NCOA is quick to point-out to the members of this subcommittee that information received from Association members and obtained by NCOA representatives during on-site visits to military bases and installations, enlisted people indicate they no longer can afford to shop in the exchange for many items. In fact, many enlisted members have referred to the K-Marts, WalMarts and Target stores in the local communities as "enlisted exchanges." Although the exchange systems report a shopper savings of approximately 30 to 40 percent on name brand items, enlisted people simply cannot afford to purchase many exchange products at the overall reduced price level. To support this statement, a copy of a recent exchange advertisement has been attached to this statement as Enclosure 1. Notice the overall cost of this woman's name brand ensemble is $364. The weekly earnings of a Sergeant (E–5) including BAQ and BAS are approximately $524. Consequently, this Sergeant would have to spend roughly 70 percent of his weekly pay to purchase the advertised products. In this regard, NCOA believes the reports of enlisted members to be of significant value to the members of this subcommittee when the Defense Department's request to remove the restrictions placed on the types of merchandise sold in military exchanges. It only makes sense that Congress should do everything in its power to promote opportunities to increase Morale, Welfare and Recreation (MWR) funding by "leveling the playing field" so that military exchanges may compete for the enlisted members' dollar by promoting the availability of affordable merchandise and not necessarily the "high-dollar items." NCOA supports the lifting of current restrictions on the sale of exchange merchandise as being in the best interest of potential enlisted shoppers and the MWR Program.

Commissaries.—NCOA constantly receives inquiries from enlisted people, both active-duty and retired, concerning the continued availability of these very important non-pay benefits. Of course, the loss of this benefit would impact significantly on all eligible patrons; however, the impact would be the greatest on enlisted patrons simply because of their reduced pay levels. NCOA has supported initiatives to improve the management of the commissary system and would support the privatization of commissaries as long as the value of the benefit is not eroded and services are not reduced. NCOA, however, is not confident that a decision to privatize this benefit would not result in a reduction in the value of the benefit. Therefore, NCOA urges the members of this subcommittee to maintain required appropriated fund levels to protect the non-pay benefit in the best interests of the enlisted communities in mind.

HEALTH CARE

Mr. Chairman, surveys of military personnel and their families consistently show that medical care along with adequate pay and inflation protected retired pay and commissaries are the top concerns of the military community. In fact, with base and hospital closures and reductions in medical personnel, the increasing lack of available health care is a major concern to active and retired personnel alike. However, the loss or reduction of the medical care benefit has the greatest impact on the active-duty and retired enlisted members who are always on the lower end of the pay scales and consequently place a greater value on the benefit.

Currently over 58 hospitals have been closed as part of the Base Realignment and Closure Commission or other closure actions. Services have been cut back at many or the hospital remaining open and many of them are being downgraded to clinics. Hundreds of thousands of retirees and military family members who received care in MTF's are now finding no care available. Retirees are being denied prescription drugs by MTF pharmacies in increasing numbers. They are told the prescribed drugs cost too much, or are restricted for issue to active duty or for some reason it is no longer being stocked.

The TRICARE Program has been in development or implementation for nearly a decade, yet the TRICARE-Prime program still does not cover many parts of the United States. For example, in California where the military managed care system has been in place the longest—over eight years—there are still areas without TRICARE-Prime networks. However, despite the lack of established networks, the TRICARE-Standard/CHAMPUS program should be available. Unfortunately, the CHAMPUS Maximum Allowable Charge (CMAC) is so low many physicians will not accept it. The current system is broken, and must be fixed.

NCOA fully supports keeping a strong, effective direct care system for the delivery of health care and medical readiness. The Association also supports making full use of the military treatment facilities and TRICARE networks as DOD's primary providers. However, retirees who are either "locked-out" of TRICARE Prime or not guaranteed access to these primary sources of care should be offered a number of alternatives or options. In this regard, NCOA supports:

—*No-Cost Health Care for Active-Duty Families Assigned to Isolated Areas*.—Since many military personnel and their families are assigned to isolated areas without the support of a Military Treatment Facility (MTF) or a TRICARE Prime Program, NCOA urges this subcommittee to appropriate necessary funds to permit full payment of all health care costs (deductibles and cost-shares) incurred by the families of military members forced to use TRICARE Standard/CHAMPUS as their only option.

—*Medicare Subvention*.—Representative Joel Hefley's bill H.R. 192 would set up a three year Medicare subvention demonstration project at up to five sites and H.R. 414 would fully implement Medicare subvention. Senator Phil Gramm plans to introduce subvention reimbursement legislation in the Senate. NCOA believes Medicare subvention legislation must be passed immediately since demonstration of the concept will only prolong the need for immediate relief in order to minimize a greater injustice being done to military retirees.

—*FEHBP as an Option*.—NCOA supports offering the Federal Employees Health Benefits Program (FEHBP) as an option to Medicare eligible military retirees, their families and survivors. Furthermore, the Association also supports offering FEHBP as an option to TRICARE-Standard eligible beneficiaries located outside of TRICARE-Prime catchment areas. Representative Jim Moran and Senator John Warner have introduced H.R. 76 and S. 224 respectively to provide the FEHBP option for Medicare eligible beneficiaries. NCOA urges this subcommittee to support the funding of these bills and to direct DOD restores CHAMPUS/TRICARE-Standard as originally intended by Congress or authorize funding for FEHBP as an option for all retirees and their families.

—*Medicare Part B Enrollment Penalty Waiver*.—NCOA urges the enactment of legislation to waiver the Part B Medicare late enrollment penalty for uniformed service members whose access to the military health care system has been curtailed because of base closures or implementation of TRICARE-Prime.

—*Expand Mail-Order Pharmacy Program*.—NCOA urges this subcommittee to fund any legislation intended to expand the DOD mail-order pharmacy program to include all uniformed services beneficiaries, regardless of age, status or location.

—*Retiree Dental Plan*.—NCOA urges this subcommittee to push for timely implementation of the Retiree Dental Plan as the eligible population is badly in need or protection such a plan would offer and further urges this subcommittee to support a legislative change to current law to permit the enrollment of the survivors of military retirees in any plan offered.

RETIRED FORCE ISSUES

Retired Pay Cost-of-Living Adjustment (COLA) Threats.—NCOA appreciates the efforts of this subcommittee to provide equity in the payment of COLA's to military retirees and Federal civilian retirees and to restore payment of annual COLA's to January 1. Nonetheless, NCOA remains extremely concerned with the recent indication that some suggesting that the current standard for determining inflation levels, the Consumer Price Index (CPI), overrates inflation by as much as 1.1 percent. Such

a change or reduction in COLA levels even if applied to all 57 million COLA recipients in the United States, would be particularly devastating to military retirees because of their younger retirement ages and enlisted retirees, in general, because of their lower retirement pay levels. Additionally, enlisted members who entered military service after August 1, 1986, are working under a retirement system which already reduces COLA by 1 percent from the date of retirement until age 62. At that point there is a one-time catch-up in lost COLA percentages, however, from that point until death annual COLA's will be COLA minus 1 percent. NCOA believes at this point any change or variation from the current CPI standard would break faith with those who are currently serving under an already reduced retirement system and constitute yet another "broken promise" to those who are serving. NCOA urges this subcommittee to continue to resist retirement or COLA proposals that would reduce the value or purchasing power of military retired pay. In the end, enlisted retirees would be hit the hardest because, once again, they are on the low end of the pay scale.

Concurrent Receipt.—Despite the fact that cost is a major factor in changing the current offset between VA disability compensation and military retired pay, NCOA remains committed to correcting this inequity. Retired pay and VA disability compensation are made available to two distinctively different reasons. Yet, if a military retiree is adjudicated to a disability by the VA, there continues to be a dollar for dollar offset in the payment of the benefits. NCOA urges this subcommittee to work toward providing funds to reduce or eliminate the current VA disability offset to military retired pay at least for the 100 percent or most severely disabled.

SURVIVOR ISSUES

NCOA fully supports and recommends legislative changes to the Survivor Benefit Plan (SBP) which would permit 30-year paid-up SBP coverage, award of the minimum SBP annuity to forgotten widows, full SBP coverage for all active-duty deaths, and a limited one-year exit option.

GUARD AND RESERVE ISSUES

NCOA is committed to supporting legislation intended to improve the lives of members of the National Guard and Reserve and their families. In doing so, NCOA supports and urges this subcommittee to fund legislation which would:

—Authorize unlimited commissary access for Guard and Reserve members.
—Make the Reserve Component Transition Assistance Program (RCTAP) disability retirement provision a permanent part of law.
—Authorize an annual review of Reserve members' elections for Mobilization Insurance (Income) Protection and allow for changes to reflect changes in income levels.
—Provide long-term, low-interest loans to self-employed Reservists who suffered significant financial penalties as a result of their participation in Operation Desert Storm.
—Reject any effort to eliminate the Military Leave Program for Federal civilian employees participating in the Reserves.

CONCLUSION

Mr. Chairman, perhaps the single most valuable effort this subcommittee could make to the well-being of the military enlisted communities and the armed forces in general is to send a signal that Congress will provide some stability in pay and benefits. Every year Congress and the Administration churn military personnel programs looking for nickels in savings and producing dollars in damage to recruiting, retention and morale.

The insecurity caused by this constant churning of benefits creates an environment of stress that takes a real toll on national security. Look back thirty years. More volunteers than conscripts served in Vietnam. They accepted the hazards of the duty as being part of the job, but, they also served with the knowledge that they and their families had assured medical care, access to commissaries, reasonable income, good retirement and survivor programs and great post-service support. Now, flash forward to Bosnia. Personnel serving there may have taken a pay cut for the privilege because their hazard pay is less than the subsistence allowance they forfeit. Reservists serving there are receiving four cents on the dollar under a badly bungled income replacement program while bureaucrats and politicians argue over who is responsible.

NCOA urges this subcommittee to provide stability and predictability to military personnel. Authorize pay increases at the ECI level for five years, or even two consecutive years. Authorize commissary funding for three years. Fund the deficit in

the Reserve Income Protection Program. Establish a legislative review cycle that staggers program reviews over successive years thus hazarding only one or two benefits at a time. Give the military member an opportunity to respect and participate in change instead of living in constant dread and fear of loss.

NCOA appreciates the opportunity to submit a number of enlisted views to this subcommittee. The Association looks forward to addressing further details regarding the issues discussed and any other issues with you and the subcommittee staff.

Thank You.

PREPARED STATEMENT OF JOE L. MAUDERLY, SENIOR SCIENTIST AND DIRECTOR OF EXTERNAL AFFAIRS, LOVELACE RESPIRATORY RESEARCH INSTITUTE

It is proposed that the Department of Defense take advantage of the unique capabilities offered by the Lovelace Respiratory Research Institute to meet its research needs in the areas of: (1) health risks from exposure to airborne toxic agents; (2) health risks from combined exposures to multiple toxic agents; and (3) provision of vaccines against strategic biological agents.

THE LOVELACE RESPIRATORY RESEARCH INSTITUTE

The Lovelace Respiratory Research Institute (LRRI) is a private research institute in Albuquerque, New Mexico dedicated to the mitigation and cure of respiratory disease through research aimed at understanding causes and biological mechanisms, detecting and eliminating exposures to causal agents, and developing improved prevention and treatment strategies. With its diverse research capabilities, its close working relationships with universities, federal laboratories, and industry, LRRI is among the nation's largest independent, non-profit biomedical research organizations, and the nation's only such organization wholly dedicated to research on respiratory health problems.

LRRI is an international center of excellence for research on the biology of respiratory disease, inhalation toxicology and health risks associated with airborne agents, preclinical development of therapeutic agents, and clinical trials of new drugs and medical devices. Its staff work in 350,000 square feet of laboratory and clinical facilities with many unique features. Among its facilities is the Inhalation Toxicology Laboratory, a recently privatized former DOE laboratory LRRI has managed since its creation, and a unique national center for animal, cellular, and genetic research on inhalation hazards. This facility is remotely located on Kirtland AFB near Albuquerque, and provides an isolated environment for working with hazardous agents.

LRRI's 50 scientists and 250 technicians and support staff conduct multidisciplinary, basic and applied, independent and collaborative research funded by grants, contracts, and philanthropy at approximately $23 million annually. Research at LRRI is supported approximately 60 percent by federal agencies, 30 percent by industry and private sponsorship, and 10 percent from endowments. LRRI has extensive experience managing large, integrated, short- and long-term research projects for federal agencies. LRRI has conducted research for the Department of Defense (DOD), taking advantage of its unique capabilities to address important health risk issues of concern to the Department. With the now greater availability of its recently privatized Inhalation Toxicology Laboratory, LRRI looks forward to an expanded role in meeting DOD research needs.

HEALTH RISKS FROM EXPOSURE TO AIRBORNE TOXIC AGENTS

It is proposed that the Department of Defense participate in an interagency effort to establish and maintain a National Environmental Respiratory Center (NERC) for the purpose of coordinating research and information transfer concerning health risks from airborne contaminants.

The Problem

DOD faces numerous health protection challenges related to airborne agents inhaled by its personnel during military actions, training, and routine operations. DOD also faces environmental health challenges related to agents suspended in air at its installations. DOD shares with other agencies concerns for contaminants inhaled in the workplace and environment. Air contaminants in these environments and in the home are known to contribute to respiratory illness, but their health risks and the extent of their role in causing respiratory disease are often not clear. There is no national center for coordination of research and information in this field.

DOD is repeatedly faced with estimating the health effects of air contaminants in the presence of large uncertainty. It is difficult to associate health effects with

specific contaminant exposures. Most environmental air contaminants have multiple sources. Most contaminant exposures occur as mixtures, but we have little scientific or regulatory ability to deal with pollutant mixtures. It is often difficult to determine the range of human susceptibility to inhaled toxicants. There are often uncertainties regarding the relevance of laboratory results to human health risks, which is especially important when our only information is derived from studies of animals. There is presently too little emphasis on ensuring that responses observed in the laboratory are similar to those that occur in humans. There is presently no central, integrated source of information on these issues.

DOD shares the above problems, but has neither the mandate nor the resources to resolve these issues alone. Current efforts are funded by DOD, numerous other agencies, industry, labor, health advocacy groups, and private foundations. The lack of coordination among these efforts prevents integration and synergism among the programs. Resolving these issues requires the interactive efforts of several scientific disciplines, health professionals, and policy makers. There is no national center coordination of this interagency and interdisciplinary effort. There is no national center for collecting and disseminating information on the health impacts of airborne contaminants. There is also no interagency user facility with the specialized facilities, equipment, core support, and professional collaboration required for many types of investigations to study the complex airborne materials and health responses of concern.

The Proposed National Environmental Respiratory Center (NERC)

LRRI proposes to establish a national center to meet the above needs. The NERC will be located at LRRI's Inhalation Toxicology Laboratory on Kirtland AFB in Albuquerque, NM. This facility and its capabilities were developed at taxpayer expense and is now leased by LRRI. This 270,000 square foot, world-class facility contains $50 million in government-owned equipment, and has unmatched potential as the proposed Center. The facility is well-equipped and staffed for intramural and collaborative research on all types of airborne materials by reproducing pollutant atmospheres, conducting inhalation exposures of animals, determining the dosimetry of inhaled materials, evaluating health effects ranging from subtle genetic and biochemical changes to clinical expression of disease, and coordinating access to information. This facility has conducted research for DOD, and has served as a training site for DOD nuclear safety training courses held at Kirtland AFB.

The interests and expertise of LRRI are well-matched to the proposed activities of the Center. LRRI has contributed heavily to the present understanding of the respiratory health impacts of airborne pollutants. LRRI has contributed heavily to the research cited as scientific basis for worker protection standards and air quality regulations. The group is well-known for its efforts to understand airborne materials, link basic cellular and tissue responses to the development of disease, validate the human relevance of laboratory findings, and coordinate complex interdisciplinary studies. The "virtual" center LRRI envisions will also encompass nearby institutions and an expanding group of collaborating investigators nationwide. Academic affiliation with the University of New Mexico, primarily through its Health Sciences Center will extend research and training capabilities. Other local technological and collaborative resources include Sandia and Los Alamos National Laboratories, and DOD research and training facilities on Kirtland AFB.

Proposed DOD Participation in the Center

LRRI seeks authorization and subsequent appropriations through EPA as the lead agency for funding the Center, with complementary interagency sponsorship through grants and contracts from DOD and other agencies targeting research meeting individual agency mandates and strategic goals.

An initial appropriation of $2 million per year for 5 years, beginning in fiscal year 1998, will establish the Center and its core information, educational, and administrative functions. This amount will provide for critical computing and communication infrastructure, and limited facility renovations and equipment acquisitions. Support for intramural and extramural research is sought from the lead agency (EPA), DOD, and other agencies. The goal is to develop research support principally through sponsored programs, and to use the core Center support principally to provide coordinating and information services and sponsor limited collaborative research.

Support is sought from DOD through funding of related, independent research programs having special relevance to the Department's mission, and through such participatory support of the Center's core functions as established on an interagency basis. The Department's participation in interagency planning, research coordination, and information transfer activities of the Center is also sought.

HEALTH RISKS FROM COMBINED EXPOSURES TO MULTIPLE AGENTS

It is proposed that the Department of Defense participate in an interagency program of research on health risks from combined inhalation exposures to multiple toxic agents.

The Combined Exposures Problem

The Department is faced with understanding and mitigating health risks to its personnel and the public from DOD operations. The DOD workplace involves inhalation exposures to aircraft and other engine emissions, solvents and other chemicals, smoke and obscurants, machining, polishing, and stripping aerosols, and other gases, vapors, dusts, and fibers. Traditional toxicology and risk assessment deal with single agents.

Most exposures occur as combined exposures to multiple agents, rather than to single hazardous species. Individuals receive exposures to multiple hazardous agents at different times. Many individuals have lifestyle risk factors for disease, such as tobacco and alcohol use. There is also concern for public inhalation exposures to hazardous agents as a result of DOD activities. It may be presumed that to the extent that such exposures have occurred, they have also occurred as exposures to mixtures, exposures in sequence with contact with other hazardous agents, and exposures of individual with other risk factors.

Researchers, regulators, industry, and health professionals are aware of the importance of combined exposures, but have limited ability to address them. We know that multiple agents can cause common effects, such as inflammation, asthma attacks, or cancer. Lacking other information, it is assumed that the effects of multiple agents are additive, but we know that this is often not true. We know that some agents amplify the effects of others, but have little ability to predict the magnitude of amplification or to understand the amplification processes. We can presume that exposure to a mixture of hazardous agents, each within its acceptable limit, can present an unacceptable aggregate health risk, but do not know how to predict or control the aggregate risk. We continually face the possibility that an agent encountered in combination with others might be wrongly assigned sole responsibility for an adverse health effect that, in fact, resulted from a mixture or an unrecognized copollutant or cofactor that varied in concert with the accused agent.

There has been very little research or standard-setting based on the influence of combinations of exposures on health risks. The design, conduct, and interpretation of studies of the health outcomes of combined exposures are potentially as complex as the possible range of combinations of agents and individuals. Most research involves stretching investigative technologies to their limit of interpretation for even single agents; thus, there are few attempts to extend efforts to mixed exposures. As a result, we have poor ability to assess risk, set limits, or assign causality in the face of combined exposures. This creates two key problems: (1) protective standards may not be adequate in the face of combined exposures; and (2) agencies, the courts, and the public have little ability to apportion causality among exposures occurring within and outside of the workplace, from different sources, or including exposures of personal choice.

LRRI Combined Exposures Program

Since 1986, LRRI has conducted a combined exposures program for the Department of Energy (DOE) to resolve health risk issues of importance to that agency. This program has been funded at approximately $2 million/year, which has provided for the conduct of selected animal studies comparing the long-term health risks, primarily cancer, of exposure to two agents to the additive risks of exposure to each agent alone. This is the only program in the world addressing health risks from multiple inhalation exposures.

The program has focused largely on cancer, and has conducted carcinogenicity studies of rodents exposed together or in sequence to two agents. The principal product has been knowledge of the influence of the combination on long-term risk. Ancillary studies have been conducted as needed to gain knowledge or develop techniques necessary to conduct or interpret the core cancer studies. Because the research is complex and requires considerable time and funding, only a few carefully selected combinations of exposures have been evaluated. The program also fosters the development of cellular and molecular investigative tools which may eventually replace long-term rodent studies.

Five core studies are complete or are near completion. These five studies have produced a number of key findings with implications for worker and public protection: (1) cigarette smoking markedly increases the lung cancer risk from inhaled radionuclides; (2) external irradiation does not increase the lung cancer risk from inhaled radionuclides; (3) a common class of chemical carcinogen (nitrosamine)

taken up by a non-inhalation route does not increase the lung cancer risk from inhaled radionuclides; (4) inhaled beryllium metal particles are highly carcinogenic in the rat, and increase the lung cancer risk from inhaled radionuclides; and (5) inhaling the common solvent, carbon tetrachloride, causes liver damage which alters the radiation dose to liver and bone from translocation of inhaled radioactive particles, and thus liver and bone cancer risk, but does not affect the radiation dose to lung or kidney.

This program has produced several other scientific and technical advancements, such as the establishment, for the first time, of a rodent model of cigarette smoking which clearly demonstrates a dose-related increase in lung cancer. This advancement provides a new research tool for understanding the many interactions thought to occur between smoking and health effects of other agents of importance to DOD.

Proposed DOD Participation in LRRI Combined Exposures Program

LRRI proposes that DOD participate in an interagency research program which would expand to include DOD combined exposure health risk issues. The DOE-funded program has addressed exposures which overlap to an extent with DOD issues; however, without participation by DOD, the program will not target DOD needs. The $2 million/year DOE funding is projected to decrease, and joint funding from DOD would ensure that: (1) this unique program will continue; and (2) DOD-specific exposure issues will be addressed. Interagency support is also sought from several other agencies with concerns for combined exposures.

VACCINES AGAINST STRATEGIC BIOLOGICAL AGENTS

It is proposed that the Department of Defense take advantage of the capabilities of the Lovelace Respiratory Research Institute for preclinical studies leading to FDA approval of vaccines against biological agents of strategic concern.

DOD is now developing a program for approval of vaccines to avoid repeating its recent Gulf War experience of facing deployment of vaccines that were not approved by the FDA. Through its Inhalation Toxicology Laboratory in the newly privatized, federally-owned facility on Kirtland AFB, LRRI has excellent capabilities for conducting animal studies of the safety and efficacy of vaccines developed for protecting DOD personnel, and potentially the public, from biological agents of strategic concern.

LRRI's Inhalation Toxicology Laboratory is uniquely positioned to help meet DOD needs. It has extensive animal management facilities meeting the requirements of vaccine and drug approval studies. LRRI has quality assurance capabilities meeting FDA requirements and has experience with preclinical studies leading to FDA approval. LRRI has exceptional capabilities for challenging animals by inhalation to hazardous agents. Importantly, the facility is located on DOD property within a DOD security area, is situated remotely from populations in dwellings or commercial properties, and contains laboratories for working with hazardous agents. LRRI has managed the facility during its 30 years of research with highly hazardous materials, and has never had a significant environmental release or worker exposure. Finally, under LRRI management, this laboratory has already been the site of training exercises in preparation for meeting the requirements of international inspection treaties targeting potential chemical and biological warfare activities.

LRRI offers its capabilities to meet DOD strategic vaccine development and approval needs, and looks forward to making important contributions to the national defense in this way.

PREPARED STATEMENT OF LYNNE P. BROWN, ASSOCIATE VICE PRESIDENT FOR GOVERNMENT AND COMMUNITY RELATIONS ON BEHALF OF NEW YORK UNIVERSITY CENTER FOR COGNITION, LEARNING, EMOTION AND MEMORY

Research into cognition, learning, emotion, and memory can help educators, physicians, and other health care givers, policymakers, and the general public by enhancing our understanding of normal brain development as well as the many disabilities, disorders, and diseases that erode our ability to learn and think, to remember, and to emote appropriately.

New York University is seeking $10.5 million over five years to establish at its Washington Square campus a Center for Cognition, Learning, Emotion and Memory. The program will draw on existing research strengths in the fields of neural science, biology and chemistry, psychology, computer science, and linguistics to push the frontiers of our understanding of how the brain functions, and how we learn.

Such exploration into the fundamental neurobiological mechanisms of the nervous system has broad implications for human behavior and decision making as well as

direct applicability to early childhood development, language acquisition, teaching methods, computer science and technology development for education, the diagnosis and treatment of mental and memory disorders, and specialized training for stressful occupation.

Cognition, Learning, Emotion and Memory Studies at NYU (CLEM)

New York University is poised to become a premier center for biological studies of the acquisition, storage, processing and retrieval of information in the nervous system.

To be housed at NYU's Washington Square Campus within the Center for Neural Science, the new Center will capitalize on the university's expertise in a wide range of related fields that encompass our computer scientists who use MRI imaging for research into normal and pathological mental processes in humans, our vision scientists who are exploring the input of vision to learning and memory, our physical scientists producing magnetic measurements of brain function with a focus on the decay of memories, our linguists studying the relation of language and the mind, and our psychiatrists conducting clinical studies of patients with nervous system disorders.

The New York University Program in Cognition, Learning, Emotion and Memory (CLEM) focuses on research and training in the fundamental neurobiological mechanisms that underlie learning and memory—the acquisition and storage of information in the nervous system. Current studies by the faculty at NYU are determining why fear can facilitate memory; how memory can be enhanced; what conditions facilitate long-term and short-term memory; and where in the brain all these memories and processed and stored. The research capacity of this Center capitalizes on our expertise in physiology, neuroanatomy, and behavioral studies, and builds on active studies that range from the mental coding and representation of memory to the molecular foundations of the neural processes underlying emotional memories. Our faculty uses electrophysiological and neuroanatomical techniques to study the organization of memory in the medial temporal lobe. Together these researchers bring substantial strength in psychological testing, computational sophistication, advanced tissues staining and electrical probes, and humane animal conditioning. These core faculty are well recognized by their peers and have a solid track record of sustained research funding from federal agencies and private foundations: total costs awarded and committed for their research for full project periods from all sources presently total $7 million. Additional faculty are being recruited in areas of specialization that include: the cellular and molecular mechanisms operative in neural systems that make emotional memory possible, neurophysiological studies of memory in nonhuman primates, computational modeling of memory, and neuropsychological and imaging research on normal and pathological human memory.

Colleagues in the Biology Department are doing related work in the molecular basis of development and learning. Given the important input of vision to learning and memory, the Center has strong links with the many vision scientists based in the Psychology Department who work on directly related topics that include form, color, and depth perception, memory and psycholinguistics. Colleagues in behavioral science study learning and motivation, memory and aging. Physical scientists explore the magnetic measurement of brain function, with a focus on the decay of memories. CLEM also shares research interests with colleagues in the Linguistics Department, who study the relation of language and the mind.

Research linkages extend to computational vision studies, now centered in NYU's Sloan Program in Theoretical Neurobiology. The Sloan Program works closely with computer scientists at our Courant Institute on Mathematical Science, with colleagues at the Medical Center in Psychiatry, who use MRI imaging for research into normal and pathological mental processes in humans, and in Neurobiology, who are conducting clinical studies of patients with nervous disorders, especially memory disorders.

What is unique and exciting about the establishment of such a comprehensive center at NYU is the opportunity to tap into and coordinate this rich multidisciplinary array of talent to conduct pioneering research into how the brain works. In this, the "Decade of the Brain," NYU is strategically positioned to be a leader.

Early Childhood and Education

Research into the learning process as it relates to attention and retention clearly holds important implications for early childhood development. Although most of a person's brain development is completed by birth, the first few years of life are critically important in spurring intellectual development. For example, research has already shown that in their early years, children need human stimulation, such as playing and talking, to develop the ability to learn.

The scientific findings on brain development generated by researchers at NYU point clearly to windows of learning opportunity—that open and close—with important implications for when children best learn and when they best learn what. Understanding how and when and under what conditions learning proceeds can lead to practical applications for parents, care givers and educators.

With more immigrant children in schools, language development is another crucial area of study. If a child's brain were more receptive to acquiring sounds during the first few months of life, and language in the first few years of life, then students may learn a second language more quickly if taught in the lower grades instead of waiting for high school.

In the midst of a national debate on education reform, thousands of education innovations are being considered without the advantage of a fundamental understanding of the learning process. CLEM researchers, coupled with educational psychologists, can contribute to a better understanding of how parents can stimulate their children's cognitive growth, how children learn at different stages and use different styles, how educators can accommodate those styles, and how educational technology can be harnessed to increase retention and memory.

At NYU, these efforts will be enhanced by our scholars and research conducted in our School of Education and our New York State-supported Center for Advanced Technology.

The research being conducted at NYU into underlying neurobiological mechanisms of learning and emotion can lead to advances in a range of areas including: visual development and how motor behavior is connected to vision; diagnosis and treatment of emotional and memory disorders; strategies for dealing with cognitive impairment.

Computer Science and Technology Development

As we refine our knowledge of how the brain acquires, processes, retains and retrieves information and images, we will also be able to improve the design, development and utilization of computer science and technology. As we reach a better understanding of how children learn, we can more effectively harness computer technology in the service of education, including the development of simulated learning models.

At NYU, this effort is enhanced by the presence of our New York State-supported Center for Digital Multimedia, Publishing and Education, which brings together educators, laboratory scientists and software designers who explore how interactive multimedia technologies enhance learning and develop prototype teaching models.

Specialized Training

Research into how cognition and emotion interact can have applicability to other diverse areas of interest including retraining of adult workers, job performance and specialized training for high risk or stressful jobs such as military service and emergency rescue work.

Accordingly, we believe that the work of this Center is an appropriate focus for the Department of Defense. The relevance of this research of the Department of Defense includes the following:

—Understanding how the brain functions and how we learn is crucial to educating and training a diverse range of individuals for a diverse range of skills—one of the primary tasks of the Armed Services. The more we know about how people acquire and process information—the better training programs can be designed and targeted for specific groups of trainees and for specific skills.

—The research being conducted at NYU also holds promise for advancement in simulated training and other technically-driven training methods.

—A major component of the work being done at New York University is through a Vision Research Center, where researchers are exploring how the brain proceeds and how motor behavior is connected to visual perception. This is an area of great relevance in the training of troops and other Department of Defense personnel to operate highly sophisticated equipment, machinery and weapons.

—The work at NYU with its emphasis on emotional memory can also be applied to developing proper training for stressful situations or for high risk assignments.

—Finally, there is a therapeutic dimension to this research. In understanding maladaptive responses, and emotional disorders, researchers are better able to understand and treat phobias, panic attacks, and post-traumatic stress disorders.

PREPARED STATEMENT OF JUDITH GUSTINIS, DIRECTOR, ROCHESTER INSTITUTE OF TECHNOLOGY CENTER FOR INTEGRATED MANUFACTURING STUDIES

Thank you, Mr. Chairman, for allowing the Rochester Institute of Technology (RIT), Rochester, New York, to testify today regarding the Defense Subcommittee's consideration of the fiscal year 1998 Department of Defense (DOD) budget.

A National Center for Remanufacturing

Mr. Chairman, my name is Judith Gustinis, Director of the Rochester Institute of Technology's newly created Center for Integrated Manufacturing Studies or CIMS. I would like to bring to the attention of the Subcommittee a proposal to establish within CIMS a national center for excellence in an emerging and important area of manufacturing research—remanufacturing. We strongly believe that the establishment of a National Center for Remanufacturing at RIT will address many problems facing the U.S. manufacturing sector today and tomorrow and, at the same time address several important research missions of the Department of Defense ManTech Program. For these reasons we submit that this initiative should be supported with funding in the fiscal year 1998 DOD ManTech budget.

Mr. Chairman, RIT's designation as a national center for excellence in remanufacturing research will enable the institution to use its already considerable manufacturing research resources and capabilities to make much needed strides in Remanufacturing. This will greatly benefit U.S. manufacturers—many of which are DOD suppliers—by making them more competitive and efficient by training industry engineers to design products in a fashion that dramatically reduces raw material costs, energy consumption, overall unit costs and the amount of industrial and end product waste. It will also directly benefit the Department of Defense which, itself is the world's leading remanufacturer of military equipment and component systems.

The Process of Remanufacturing

The process of Remanufacturing takes our Nation's current product and material recycling efforts a giant step further. Currently, our Nation is taking great pains to recycle materials that many products are made of. This is, of course, a very important exercise in resource conservation. However, the original cost of engineering and manufacturing embedded in a product is lost when a product is melted down or otherwise recycled and its materials recovered. The concept of Remanufacturing needs to be introduced to design and manufacturing engineers. They need to know how to design products so that they can be recovered at the end of their useful life, disassembled, and their durable component parts cleaned, reworked, inspected and reassembled with some new parts to make a Remanufactured Product which meets the exact specifications of a totally new product. The Remanufactured Product is restored to "like new" conditions, thereby saving considerable costs in materials, energy, labor and engineering. Likewise, tons of waste material that would otherwise be sent into the waste stream will be used productively again in a Remanufactured Product.

Remanufacturing Success Story—Kodak's Single Use Camera

Mr. Chairman, one of the most successful examples of Remanufacturing is the Kodak "Single Use" camera. Kodak has developed a system whereby the single use camera is designed not to be discarded after use by the consumer. The camera is returned to a neighborhood photofinisher who takes the film out of the camera and develops it. The photofinisher then ships the camera body back to Kodak which puts it through the Remanufacturing process.

Under this process, the cameras are disassembled and separated into parts which can be reused, parts which can be Remanufactured, and parts which can only be recycled for the materials in them. Virtually all parts of each camera returned to Kodak is recycled or reused in a Remanufactured camera. In fact, each new Single Use camera made by Kodak contains recycled material and Remanufactured parts.

Last year, over 63 percent of Kodak's Single Use cameras in the U.S. were returned to the manufacturer. More than 14 million pounds of waste was diverted from landfills which equals more than 100 million Fun Saver Cameras recycled. This illustration is an example of the tremendous economic potential of remanufacturing. If we assist other manufacturers to integrate Remanufacturing processes into their design there will be a significant savings in energy, materials, labor and other costs including environmental liabilities. For example, on average a Remanufactured product consumes one-sixth of the energy that is required to manufacture a new product.

Department of Defense and Remanufacturing

Mr. Chairman, in light of steadily declining defense budgets, your Committee, the Congress and the Department of Defense have struggled mightily to maintain force readiness and a robust military system R&D and acquisition program—both of which are critical to our national security. There is no question that a central part of this effort has been to ensure the "affordability" of new weapons systems. Affordability needs span all military system development, production and sustainment functions, including the support of aging weapons systems.

A key element of the Department's effort to ensure affordability has been the dramatically increased use of "remanufacturing" of military systems at the end of their useful life or when new technology needs to be inserted. The cost-savings associated with remanufacturing of old systems compared to acquisition of new systems are enormous.

The Department of Defense and the private sector defense industry may indeed be the largest group of remanufacturers in the world. In order to maintain force readiness, the military services are constantly rebuilding and overhauling systems, parts, assemblies and subassemblies. These activities include the remanufacture of various systems which have reached the end of their useful life, need new technology insertion or are not planned to be replaced through procurement of new systems.

Significant examples of DOD remanufacturing efforts are as follows, divided by service:

Army—Bradley fighting vehicle.—Approximately 1,602 existing Bradley A–2's will be remanufactured into A–3's.

Army—medium tactical vehicle.—This 5-ton truck will reach the end of its service life in fiscal year 1999. The Army will remanufacture 8,080 of these vehicles through fiscal year 2004.

Marine Corps—AV–8B aircraft.—76 AV–8B's will reach the end of their service lives. All 76 will be remanufactured beginning in fiscal year 1999.

Navy—HH–60H and SH–60CV helicopters.—Remanufacture of these helicopters is ongoing.

Air Force—B–52 bomber.—This 1950's vintage aircraft has been remanufactured several times to extend its life cycle.

Another example of DOD remanufacturing efforts involves the Detroit Diesel Corporation which recently won an award from the U.S. Army Tank Automotive and Armaments Command for the remanufacture of 463 engines for the Marine Corps fleet of Light Armored Vehicles. As part of the remanufacturing process, Detroit Diesel will replace older technology parts with a package of components which will extend the life of the engine and reduce life cycle costs. The engines will be completely refurbished using new and refurbished parts and will carry a warranty equivalent to a new engine.

The nature of military procurement, the high cost of military equipment, and the problems associated with maintaining an inventory of unique spare parts, have made remanufacturing an attractive and important part of the DOD's effort to preserve the technical superiority of the military services. As a result of its stake in both manufacturing and remanufacturing, the Army has entered into a cooperative research and development agreement with the big three automobile manufacturers to create the National Automotive Center as the U.S. Tank and Automotive Command. The Army is also currently in discussions with NASA, and its three university centers of excellence for rotorcraft technology and the rotorcraft industry to establish a similar center for rotorcraft technology. RIT's National Center for Remanufacturing will fill a vacuum in DOD's remanufacturing and applied technology program.

Remanufacturing is also important in DOD's environmental strategy which focuses on cleanup, compliance, conservation, pollution prevention and technology. Of these objectives, DOD considers pollution prevention to be "perhaps the most important pillar in its environmental program." DOD believes it needs to consider environmental costs and benefits as early in the design process as possible, including reexamining assumptions about the life-cycle of parts, products and raw materials. This action can be taken at the remanufacturing stage of many military systems.

DOD's commitment to and dependence upon remanufacturing has created an internal need for engineers trained in the science of remanufacturing. The need to identify and or recruit military engineers trained in remanufacturing is no longer the only education and training challenge the Department faces. Changes in Federal acquisition policy now require that at least 40 percent of the military remanufacturing effort be shifted from in-house personnel to outside vendors. Air Force personnel have expressed private and public concern that they have been unable to identify outside vendors with the experience in remanufacturing needed to ensure the con-

tinued reliability of their equipment. The National Center for Remanufacturing at RIT will collaborate with the Department of Defense to develop new technologies and processes, train and qualify vendors and develop effective solutions to these problems.

The DOD's extremely successful ManTech program was created to help the military services and the U.S. manufacturing sector improve its manufacturing capabilities and the affordability and life-cycle sustainability of military systems. This program is a collaborative effort among the Department and the various services, private sector defense manufacturers and academia. As you well know, ManTech's research programs focus on (1) Manufacturing and Engineering Systems; (2) Processing and Fabrication; and (3) Advanced Industrial Practices. Under Manufacturing and Engineering Systems, ManTech research focuses on developing techniques to model and improve manufacturing enterprises. Under Advanced Industrial Practices, ManTech research focuses on the implementation of world-class best practices to create major improvements in cost, cycle time and quality in manufacturing. Under Processing and Fabrication, ManTech research involves improvements to manufacturing processes on the shop floor with an emphasis on process maturation in the areas of composites, electronics, and metals.

Mr. Chairman, these are significant manufacturing research programs, but they currently do not now have a significant focus on the theory and process of remanufacturing. In light of the substantial amount of remanufacturing now being carried out by DOD and defense contractors with much more expected in the future, we believe that it is in the strong interest of DOD to create a new ManTech Center of Excellence in remanufacturing. Because remanufacturing also cuts across all three major thrusts of ManTech's programs, the Center for Excellence in Remanufacturing would be in a position to provide support to all ManTech programs.

RIT's proposal to establish a center for excellence in remanufacturing at our Center for Integrated Manufacturing Studies would be an important addition to the ManTech program. The National Center for Remanufacturing would be a partnership among RIT's Center for Integrated Manufacturing Studies, DOD, private sector manufacturers and the Remanufacturing Industries Council, a national association of remanufacturing companies.

We are proposing a 5-year plan of collaborative research with DOD and industry with the goal of modernizing and developing the remanufacturing capabilities of the DOD and the U.S. manufacturing base in order to meet the military system acquisition needs of the military services and sustain defense systems throughout their life-cycles.

National Center for Remanufacturing Funding Request for Fiscal Year 1998

The Rochester Institute of Technology is requesting DOD ManTech support of $4,000,000 in fiscal year 1998 for start up activities for the National Center for Remanufacturing. These funds would be used in the manner described in Attachment A. $1,978,909 would be used for one-time costs to purchase major equipment items for the National Center for Remanufacturing. It is anticipated that the ongoing program costs of the Center will be approximately $2,800,000 per year. RIT, through income derived from the conduct of projects for industry, New York State, and other funding sources will provide $800,000 to $900,000 of support annually for the National Center. RIT will seek $2,000,000 per year for 4 additional years for program costs from the federal government.

National Center for Remanufacturing Research Plan

RIT is proposing a 5-year plan for the National Center for Remanufacturing which will focus on the following six goals:

—The National Center for Remanufacturing will become after 5 years a self-sustaining national resource for applied research which will provide technical solutions to real-life problems for manufacturers and remanufacturers, with a particular focus on manufacturing companies which are defense industry suppliers.

—The National Center will continually enhance the body of knowledge and research in remanufacturing processes and develop advanced technology transfer techniques for and with industry, the DOD and relevant federal government agencies. The result in 5 years will be improved design and manufacturing processes and the development of curriculum to educate engineers and manufacturers regarding the utilization of technology in remanufacturing products and processes. In short, the National Center will strive to train engineers to design and manufacture products that can be remanufactured to save energy costs and reduce waste to protect the environment.

—The National Center, along with RIT's multidisciplinary Center for Integrated Manufacturing Studies, will sponsor high quality technical projects to solve the

real time industry needs while expanding opportunities for professional development. Areas which may be pursued by the National Center are: demanufacturing practices; development of test methodologies to determine usable life; design for the environment for both product and package; signature analysis; life cycle costing; failure mode analysis; and, cleaning technologies.

—The National Center will over 5 years develop advanced uses of the CIMS test bays to allow industry, faculty and students to develop skills in all areas related to environmentally conscious design, design for reuse and Remanufacturing.

—The National Center will integrate RIT's cooperative educational program—one of the leading co-op programs in the country—with Remanufacturing, enabling students to immediately assist companies to incorporate design for reuse and remanufacturing practices and technologies into their manufacturing processes.

—The National Center will over 5 years concentrate on meeting the manufacturing technology research mission of the Department of Defense ManTech program.

Attachment B is a fully detailed prospectus on the National Center which is attached for the information of the Subcommittee.

RIT is the Right Choice for a Remanufacturing Initiative

Mr. Chairman, we at RIT believe the answer is to create a national center for excellence in remanufacturing at RIT's Center for Integrated Manufacturing Studies and support this center with Department of Defense funding. Such a national center is needed to raise the visibility of this emerging area of manufacturing and to provide a place for industry, academia and government agencies such as DOD to come together to research and apply current and new Remanufacturing processes to real manufacturing situations. RIT's just completed 157,000 square foot manufacturing laboratory—the Center for Integrated Manufacturing Studies—is the logical home for a national Remanufacturing effort. This facility, which is one-of-a-kind in the Nation, has five large flexible research bays, expressly designed to have the capability to provide industry an academic researchers with the ability to conduct full-scale testing of Remanufacturing processes using state-of-the-art equipment.

RIT is also the appropriate place to locate a national center for excellence in Remanufacturing because of the University's long and distinguished history of service to large, medium and small manufacturers through applied manufacturing research. In addition to these strong capabilities in Industrial Manufacturing and Mechanical Engineering, Packaging Science, Economics and Business, RIT has, in recent years, brought to bear on manufacturing problems pragmatic solutions to meeting the technological and work force needs in industries related to microelectronics engineering, imaging technologies and software engineering. RIT's Center for Integrated Manufacturing Studies also brings to the National Center for Remanufacturing support labs in: simulation; packaging; printing; reverse engineering; design for manufacturing and assembly; computer aided design and manufacturing; and, ergonomics. CIMS also has state-of-the-art capabilities in technology transfer and distance learning.

Through projects and case studies, the remanufacturing team has proven its ability to deliver concrete solutions for the remanufacturing industry. The group has conducted research in areas of life-cycle analysis, automotive remanufacture, disassembly, design for remanufacturing and other design considerations since 1991. Past and present projects include case hardness depth determination of CV joints and the feasibility and economics of remanufacturing anti-lock braking systems sponsored by the Automotive Parts Rebuilders Association; an assessment of remanufacturing technology and comparative energy analysis contrasting remanufacturing and new build operations sponsored by the Department of Energy; and also cleaning process evaluation, design for remanufacturing, and ergonomic evaluation of a remanufacturing process sponsored by Eastman Kodak. The three-fold purpose of the remanufacturing team is to provide practical solutions for problems concerning the remanufacturability of products, aid OEM's in design of redesign of products for remanufacture and recycle, and prepared small and medium-size businesses to more efficiently remanufacture and recycle products.

RIT has already established a remanufacturing database system for the Nation. The database compiles articles, books, technology updates and case studies in remanufacturing and associated fields. It will serve as a base for sharing findings with industry nationally and assisting individual companies in keeping abreast of advances in Remanufacturing, government programs and regulations. RIT has also set up an Internet site for Remanufacturing research.

Support for Creation of a National Center

There is widespread support for the creation of the National Center for Remanufacturing at RIT among large, medium and small manufacturing companies. Moreover, RIT's Remanufacturing program is affiliated with the Automotive Parts Rebuilders Association (APRA), the Remanufacturing Industries Council International (RICI) and other industry organizations.

Conclusion

In conclusion, Mr. Chairman, we hope that the Congress will look favorably upon our request to help fund the establishment of a center for excellence in remanufacturing as a modest investment in a research area which will yield virtually immediate results for the private sector and the Department of Defense.

It should be noted that although concepts for reuse of products and Remanufacturing are relatively new, the practice of Remanufacturing has existed in the U.S. for many years. Current data indicates that there are 75,000 manufacturing firms currently using some form of Remanufacturing with $53 billion in revenue.

A National Center for Remanufacturing focused on expanding the knowledge base on Remanufacturing will help current remanufacturers and many more manufacturing companies increase their competitive posture, manufacture higher quality goods, use less energy and natural resources, generate less waste to harm the environment and save and, perhaps, create jobs in what has been a declining U.S. industry sector. It will also help ensure that the Department of Defense meets its system acquisition affordability and life cycle sustainability goals.

Thank you for this opportunity, Mr. Chairman, for RIT to make its case for Department of Defense funding support.

ATTACHMENT A.—*National Center for Remanufacturing, Rochester Institute of Technology Fiscal Year 1998 Budget*

[Breakdown of use of funds]

Total start-up/program operating costs:	
Staff	$1,198,000
Benefits	311,480
Project Travel	90,000
Project Materials and Supplies	95,263
Facility Operations	73,386
Equipment Installations (one time costs)	31,081
Equipment (one-time costs)	2,048,229
Equipment Maintenance	217,719
Indirect Costs	798,704
Total	4,863,862
Federal funding request:	
Staff	1,048,610
Benefits	272,639
Project Travel	25,000
Project Material and Supplies	20,000
Equipment Installations	31,081
Equipment	1,978,969
Equipment Maintenance	50,400
Indirect Costs	573,301
Total	4,000,000
RIT/other funding sources:	
Staff	149,390
Benefits	38,841
Project Travel	65,000
Project Materials and Supplies	75,263
Facility Operations	73,386
Equipment	69,260
Equipment Maintenance	167,319
Indirect Costs	225,403
Total	863,862

CONCLUSION OF HEARINGS

Senator STEVENS. If there is nothing further, the subcommittee will stand in recess.

[Whereupon, at 10:18 a.m., Wednesday, June 4, the hearings were concluded, and the subcommittee was recessed, to reconvene subject to the call of the Chair.]

LIST OF WITNESSES, COMMUNICATIONS, AND PREPARED STATEMENTS

Page

Alexander, Maj. Gen. Richard C., Adjutant General, State of Ohio, Ohio National Guard, Department of Defense 441
Prepared statement 444

Baca, Lt. Gen. Edward D., U.S. Army, Chief, National Guard Bureau, Department of Defense 389, 392
Prepared statement 394
Question submitted to 435
Bennett, Hon. Robert F., U.S. Senator from Utah:
Prepared statement 468
Questions submitted by 505, 528
Bond, Hon. Christopher S., U.S. Senator from Missouri:
Prepared statements 216, 326
Questions submitted by 64, 372, 382
Brock, Jack L., Jr., Director, Defense Information Management Systems, National Security and International Affairs Division, General Accounting Office 467, 490
Brown, Lynne P., associate vice president for Government and community relations on behalf of New York University Center for Cognition, Learning, Emotion and Memory, prepared statement 849
Bumpers, Hon. Dale, U.S. Senator from Arkansas, questions submitted by 689, 702
Bye, Dr. Raymond E., Jr., associate vice president for research, Florida State University, prepared statement 836

Cabral, Robert J., supervisor, San Joaquin County, chairman of the board, San Joaquin Valley Unified Air Pollution Control District on behalf of the California Industry and Government Coalition on PM–10/PM–2.5, prepared statement 839
Calkins, Charles L., national executive secretary, Fleet Reserve Association ... 742
Prepared statement 743
Carey, Rear Adm. James J., U.S. Naval Reserve (retired), national president, Naval Reserve Association, prepared statement 804
Clark, Les, vice president, Independent Oil Producers' Association on behalf of the California Industry and Government Coalition on PM–10/PM–2.5, prepared statement 839
Cline, Master Sergeant Michael P., (retired), executive director, Enlisted Association of the National Guard 795
Prepared statement 796
Cochran, Hon. Thad, U.S. Senator from Mississippi, questions submitted by 58, 465
Cohen, Bill, Secretary of Defense, Department of Defense, letter from 299
Coleman, Hon. Rodney A., Assistant Secretary of the Air Force (Manpower, Reserve Affairs, Installations, and Environment), Environmental Program, Department of Defense 574
Prepared statement 576
Questions submitted to 604
Cunha, Manuel, Jr., president, NISEI Farmers League on behalf of the California Industry and Government Coalition on PM–10/PM–2.5, prepared statement 839

Page

Dalton, Hon. John H., Secretary of the Navy, Office of the Secretary, Department of the Navy, Department of Defense 215
Prepared statement 221
Questions submitted to 301
Denman, Julia, Assistant Director, Defense Management Issues, National Security and International Affairs Division, General Accounting Office 467, 492
Domenici, Hon. Pete V., U.S. Senator from New Mexico, questions submitted by 60, 176, 306, 318, 371, 379, 436, 439, 686, 699
Dorgan, Hon. Byron, U.S. Senator from North Dakota:
Prepared statements 1, 160
Questions submitted by 69, 183, 313
Duggan, Dennis M., assistant director, National Security-Foreign Relations Division, the American Legion 735
Prepared statement 736

Fogleman, Ronald R., Chief of Staff, Department of the Air Force, Department of Defense 607
Prepared statement 614
Questions submitted to 696
Foil, Martin B., Jr., chairman of the board, Brain Injury Association, Inc 728
Prepared statement 729

Godley, Capt. John, legislative director, Naval Reserve Association 802
Gregg, Hon. Judd, U.S. Senator from New Hampshire, question submitted by 439
Guckenheimer, John, Ph.D., professor of mathematics and mechanics at Cornell University and president of the Society for Industrial and Applied Mathematics, Joint Policy Board for Mathematics 756
Prepared statement 757
Gustinis, Judith, director, Rochester Institute of Technology Center for Integrated Manufacturing Studies, prepared statement 852

Hait, Dr. William, director of Cancer Institute of New Jersey, University of Medicine and Dentistry of New Jersey 780
Hamre, John J., Ph.D., Under Secretary of Defense, Comptroller, Department of Defense 1
Letter from 52
Harkin, Hon. Tom, U.S. Senator from Iowa, questions submitted by 374, 384, 596, 602, 605, 690, 702
Harnage, Bobby, national secretary-treasurer, American Federation of Government Employees, AFL–CIO 759
Prepared statement 761
Hickey, Sydney T., associate director, Government relations, the National Military Family Association 710
Prepared statement 712
Hinton, Henry L., Jr., Assistant Comptroller General, National Security and International Affairs Division, General Accounting Office 467
Prepared statement 470
Hollings, Hon. Ernest F., U.S. Senator from South Carolina, questions submitted by 372, 383
Howell, William C., Ph.D., American Psychological Association 705
Prepared statement 707

Inouye, Hon. Daniel K., U.S. Senator from Hawaii, questions submitted by 64, 304, 310, 321, 594, 599, 604

James, Brig. Gen. Daniel C., III, Adjutant General, State of Texas, Texas National Guard, Department of Defense 454
Biographical sketch 459
Prepared statement 456
Johnson, Adm. Jay L., USN, Chief of Naval Operations, Office of the Secretary, Department of the Navy, Department of Defense 215
Questions submitted to 305
Johnson, David, Ph.D., executive director, Federation of Behavioral, Psychological and Cognitive Sciences 749
Prepared statement 750

Page

Jollivette, Cyrus M., vice president for governmental relations, University of Miami, prepared statement 834

Karas, Stefan E., M.D., department chief, Department of Ophthalmology, Straub Clinic and Hospital, Honolulu, HI, on behalf of the Joslin Diabetes Center, prepared statement 816
Kenny, Michael P., executive officer, California Air Resources Board on behalf of the California Industry and Government Coalition on PM–10/PM–2.5, prepared statement 839
Krulak, Gen. C.C., USMC, Commandant of the Marine Corps, Office of the Secretary, Department of the Navy, Department of Defense 215
Questions submitted to 317

Leahy, Hon. Patrick J., U.S. Senator from Vermont, questions submitted by..... 322, 373, 435, 438, 602, 605
Lestenkof, Maj. Gen. Jake, Adjutant General, State of Alaska, Alaska National Guard, Department of Defense 451
Prepared statement 452
Lokovic, James E., chief master sergeant, USAF (retired), Air Force Sergeants Association 764
Prepared statement 765
Lord, Comdr. Mike, USN (retired), Commissioned Officers Association of the U.S. Public Health Service, Inc., co-chair, Health Care Committee, the Military Coalition 786
Prepared statement 787
Lyles, Lt. Gen. Lester L., USAF, Director, Ballistic Missile Defense Organization, Department of Defense 137
Biographical sketch 156
Prepared statement 143

Mauderly, Joe L., senior scientist and director of external affairs, Lovelace Respiratory Research Institute, prepared statement 846
Maves, Michael D., M.D., MBA, executive vice president, American Academy of Otolaryngology—Head and Neck Surgery 725
Prepared statement 726
McConnell, Hon. Mitch, U.S. Senator from Kentucky, questions submitted by..... 303, 382, 599
Molloy, Russ, Esq., director of Government relations, University of Medicine and Dentistry of New Jersey 780
Prepared statement 781
Mundy, Greg, M.D., president, American Society for Bone and Mineral Research, professor of bone and mineral metabolism, Health Science Center at San Antonio, University of Texas, prepared statement 814

National Association of Energy Service Companies, prepared statement 832
Navas, Maj. Gen. William, Jr., Director, Army National Guard, National Guard Bureau, Department of Defense 389, 402
Prepared statement 402
Questions submitted to 436

Olanoff, Chief Master Sergeant Mark H., USAF (retired), legislative director, Retired Enlisted Association 810
Prepared statement 811
Ouellette, Sergeant Major Michael F., USA (ret.), director of legislative affairs, Non Commissioned Officers Association of the United States of America, prepared statement 842

Partridge, Col. Charles C., U.S. Army (retired), National Association for Uniformed Services, prepared statement 825
Pilling, Vice Adm. Donald L., Deputy Chief of Naval Operations, U.S. Navy, depot operations, Department of Defense 509
Prepared statement 513
Questions submitted to 533
Pirie, Hon. Robert B., Jr., Assistant Secretary of the Navy (Installations and Environment), Environmental Program, Department of Defense 556
Prepared statement 557
Questions submitted to 599

Page

Prueher, Adm. Joseph W., U.S. Navy, Commander in Chief, U.S. Pacific Command, Department of Defense 187
Prepared statement 190

Quickel, Kenneth E., Jr., M.D., president, Joslin Diabetes Center, Boston, MA, on behalf of the Joslin Diabetes Center, prepared statement 816

Raymond, Sandra C., executive director, National Osteoporosis Foundation on behalf of the National Coalition of Osteoporosis and Related Bone Diseases, prepared statement 814
Rees, Maj. Gen. Raymond F., Adjutant General, State of Oregon, Oregon National Guard, Department of Defense 447
Prepared statement 449
Question submitted to 465
Reese-Coulbourne, Jane, executive vice president, National Breast Cancer Coalition, for Frances M. Visco, Esq., president 753
Reheis, Catherine H., managing coordinator, Western States Petroleum Association on behalf of the California Industry and Government Coalition on PM–10/PM–2.5, prepared statement 839
Reimer, Dennis J., General, Chief of Staff of the Army, Department of the Army, Department of Defense 325
Prepared statement 337
Questions submitted to 374

Sandler, Maj. Gen. Roger W., AUS (retired), Reserve Officers Association of the United States 769
Prepared statement 771
Savoie, Dr. E. Joseph, commissioner of higher education, State of Louisiana, prepared statement 840
Shalikashvili, Gen. John M., Chairman, Joint Chiefs of Staff, Department of Defense 73
Prepared statement 98
Shelby, Hon. Richard C., U.S. Senator from Alabama:
Prepared statements 160, 432
Questions submitted by 179, 505, 527, 532, 533
Shepperd, Maj. Gen. Donald W., Director, Air National Guard, National Guard Bureau, Department of Defense 389, 410
Prepared statement 410
Questions submitted to 439
Smith, Edith G., citizen advocate for disabled military retirees, prepared statement 818
Specter, Hon. Arlen, U.S. Senator from Pennsylvania, questions submitted by 317, 685
Stevens, Hon. Ted, U.S. Senator from Alaska, questions submitted by 53, 301, 305, 317, 371, 374, 685, 696

Torsch, Comdr. Virginia, MSC, USNR, the Retired Officers Association, co-chair, Health Care Committee, the Military Coalition 786

Van Alstyne, John, General, U.S. Army, Comptroller, Department of Defense 1
Viccellio, Gen. Henry, Jr., Commander, U.S. Air Force Materiel Command, depot operations, Department of Defense 509
Prepared statement 510
Questions submitted to 527
Visco, Frances M., Esq., president, National Breast Cancer Coalition, prepared statement 754

Walker, Hon. Robert M., Assistant Secretary of the Army (Installations, Logistics, and Environment), Environmental Program, Department of Defense 535
Prepared statement 539
Questions submitted to 594
West, Togo D., Jr., Secretary of the Army, Department of the Army, Department of Defense 325
Prepared statement 329
Questions submitted to 371

Page

Widnall, Sheila E., Ph.D., Secretary of the Air Force, Department of the Air Force, Department of Defense 607
Prepared statement 614
Questions submitted to 685
Wiener, Jerry M., M.D., past president of the American Psychiatric Association and American Academy of Child and Adolescent Psychiatry and chairman of the Department of Psychiatry and Behavioral Science at George Washington University 720
Prepared statement 721
Wilson, Gen. Johnnie E., Commanding General, U.S. Army Materiel Command, depot operations, Department of Defense 509
Prepared statement 511
Questions submitted to 532

SUBJECT INDEX

DEPARTMENT OF DEFENSE

Adjutant Generals

Page

Additional committee question 465
Deployed units, high retention in 459
Equal readiness standards 455
National Guard:
  Economic benefits of the 444
  Modernization 463
  Today and in the future 441
Operational areas funding 451
OPTEMPO funding 448
Partnership program 462
Readiness funding 442
Real property and logistical support 464
Reductions, ability to manage 461
Simulators, innovative uses of 462

Ballistic Missile Defense Organization

ABM Treaty provisions 163
Additional committee questions 176
Arrow program 164
  Capabilities 166
  Intercept 157
Ballistic missile defense 176, 179, 183
Countermeasures 171
Cruise missile threat 167
Israeli boost-phase intercept system 174
Minuteman booster 170
National missile defense 140
  Acquisition strategy 161
  Lead system integrator 171
  Program risk 163
Pacific Missile Range facility 165
Patriot 166
Procurement funding 173
Risk reduction 169
Simulation program 167
Support technology 141
System testing 158
Systems, use of other 170
Test determinations 173
Test program 168
Test range availability 174
THAAD:
  Procurement 159
  Test investigation 142
Theater missile defense 138
Three plus three test costs 175

Comptroller

Additional committee questions 53

Page

Appropriated funds, release of 39
Army National Guard O&M/MilPers accounts 64
B–52:
  Funding, fiscal year 1998 69
  Re-engining study 70
Ballistic Missile Defense Program 18, 60
  Procurement funds 55
BMDO technology budget 43
Bosnia:
  Civil works in 33
  Costs 32
    Lessons learned 20
  Possible future supplementals for 42
Budget:
  Comparisons 6
  Resolution, comparison to 8
Budgeting for major regional conflicts 26
Cost estimates, accuracy of 24
Cost of maintaining older systems 31
Countries, cooperation of 29
Current defense strategy and force structure 35
Defense appropriations, congressional control over 33
Defense budget:
  Overview of 2
  Topline 69
Defense efforts, international comparability of 31
Defense spending:
  In context 49
  Trends 66
Depot maintenance, greater privatization of 41
DOD:
  Budget, highlights of fiscal year 1998 9
  Infrastructure, excess 36
  Weapons, average ages of 16
F–22:
  Affording the 47
  Cost estimates and justification 45
  Sales abroad and other sources of savings 47
Family housing 62
Force structure 64
  And personnel 10
Health care:
  Costs 65
    Budget amendment for 51
  Economizing 65
Host nation support 27
Infrastructure:
  Costs 68
  Savings 68
Logistics Civilian Augmentation Program [LOGCAP] 57
Military medical care 42
Modernization:
  Funding 14
  Program, highlights of 17
National Guard and Reserve O&M/procurement funding 58
National missile defense 54
Operational expenditures, controlling 24
Operations costs, fiscal year 1997 20
Operations, tempo of 23
Peacekeeping, funding for 22
Procurement 58
"Quadrennial Defense Review" 19, 65
  Funding projections and the 44
  Guidance, following 45
Quality of life 13
R&D expenditures 29
Readiness 12
Rescission and supplemental, fiscal year 1997 4

Page
Rescissions 59
Proposed 35
Saudi Arabia:
Personnel levels 37
United States costs and troops for 37
Shipbuilding 59
Submarine programs 67
Supplemental appropriations, timely passage of 22
Supplemental contingency costs 66
Tactical aircraft 54
TRICARE 62
Unit rotation 58
University research 37

DEPARTMENT OF THE AIR FORCE

Additional committee questions 685
Adultery:
Air Force investigations of 690
Charges 672
Rank of personnel 672
Air and space superiority 612
Air Force:
And Joint Vision 2010 620
Pay and benefits 688
People 613, 629
Personnel, quality of life for 695
Research Laboratory/impact to Phillips Lab 686
Air National F–15 force upgrade 657
Air traffic controller training 682
Airborne laser [ABL] 700
Aircraft manufacture 683
B–2:
Bomber program 694
Cost per flying hour 689
Deployment requirement 689
Maintenance 702
B–52 reengining proposal 665
Base closure 666
BRAC, future 681
Business practices, revolution in 613, 627, 633
C–17 basing 647
Capability shaping 668
Civil Air Patrol 695
Columbus Air Force Base pilot training facilities 680
Deployments, stress for 701
EF–111 701
Replacement with the EA–6B 700
F–22:
Air Force publications 694
Construction 683
Cost estimates 662
First flight and development status 685, 696
Justifications for aircraft 702
Performance 685, 696
Production costs 645
Decreases 664
Program 644
Costs 694
Restructuring 690
Publications 661, 679
Radar cross section 689, 702
Tier 1 and 2 initiatives 689
Food stamps 688
Force conversion 646
Force protection 632
Gerald Champion Memorial Hospital [GCMH] 699
German Air Force, USAF training for the 687

Page

Global engagement 631
"Global Engagement" brochure 678
Inventory management 703
Investigation report evaluation 655
Joint air-to-surface standoff missile:
    Requirements 658, 697
    SLAM-ER 697
Khobar Towers 654
Kirtland AFB, importance of 687
Manpower reductions 700
McClellan/Tobyhanna, status of MOA 685
Midrange cruise missile programs 658
Missile defense plan 665
NMD Minuteman option 698, 699
    Flight tests 699
Public/private competition 670
Quality forces 632
Recruiting update 648
Reengining cost versus capability 698
Restructuring and downsizing 643
Retention 649
Shared hospital facilities 660
Tobyhanna, transfer of funds to 686
Uniform Code of Military Justice:
    Enforcement 677
    Violations 675
Worldwide operations 611, 615

DEPARTMENT OF THE ARMY

Additional committee questions 371
Advanced warfighting experiment 367
Aircraft fleet upgrade 386
    Administrative 386
Allowances, insufficient 355
Antisatellite weapons 374
Army:
    A full spectrum force for today and tomorrow 341
    Changing 329
    Generals, increase in the number of 385
    Globally engaged and cost effective 339
    Inventory practices of the 378
    Missions: Engaged worldwide 330
    Priorities—readiness, modernization, and quality of life 330
    War fighting experiment 380
    Western Regional Civilian Personnel Center 371
    World's best 345
Base realignment and closures 333
Bosnia 360
    Contingency costs 371, 387
    Supplemental 345
Brigade alignment 348
Budget issues 378
Changing to meet the challenges of the future 340
Comanche 369
    Helicopter 379
    Program 379, 380
Deployment tempo 370
Drawdown update 339
Efficiencies 334
Family violence 375
Food stamps 377
Force:
    Mobility 350
    Size 351
    Structure reduction 369
    XXI Brigade at NTC 383
Fort Chafee, training at 363

Page
General officers, number of 356
Guaranteed active duty commissioning 372
Headquarters reductions 383
High energy laser system test facility 374
Housing, inadequate 384
Huey Helicopter Reengining Program 380
Hunter Unmanned Aerial Vehicle Program 381
Inventories, excess 357
Inventory management 358
Landmines 360
Logistical equipment 382
M–1 upgrades 362
    Cost effectiveness of 362
Medium extended air defense system 368
Military construction 333
Missile defense, funding for 359
Modernization 332
    Priorities 352
    The key to our future success 342
Multiple launch rocket system 365
National Guard and Reserve 333
National missile defense 371
    Issue 381
Objective crew served weapon 373
Pay:
    Inadequate 384
    Increase 354
Priorities and challenges 337
Quality of life 332, 351, 353
Readiness 330
Recruiting 347
Reengineering efforts 344
Reserve component:
    Funding 361
    Resourcing 366
Reserve mobilization income insurance 383
Rock Island Arsenal 386
Sexual harassment, policy on 349
Strategic imbalance—requirements and resources 344
Stress from deployments 375
Supplemental funding 373, 382
Theater high altitude area defense 364
Theater missile defense issues 387
Troop morale 372
Underfunding and the quadrennial defense review 378
Urban warfare doctrine and training, status of 382

Department of the Navy

Office of the Secretary

Acquisition 317
Additional committee questions 301
Advanced amphibious assault vehicle 219
Aerial refueling 314
Aircraft:
    Building 296
    Replacement 292
Antiterrorism activity 273
Army tactical missile system [ATACM] 295
AV–8B Harriers 277
Aviation 323
Avionics, room for growth 316
Bosnia operations 318, 319
Budget issues 306, 318
Carrier:
    Basing 311
    Recovery period 315

Page
CH–53E 284
CH–60 286
Combat performance 314
Commandant's warfighting laboratory 323
Department of the Navy 1997 posture statement 221
Depot maintenance funds 274
EA–6B Prowler replacement to EF–111 310
EF–111 versus EA–6B Prowler 293
Efficiency 245
Equipment, initial issue 322
F/A–18E/F 275, 281
Family of medium tactical vehicles [FMTV] 283
Fuel tanks, use of 480-gallon external 313
Health care 271
Hunter/Jaeger aviation 309, 320
Industrial base 272
Joint Strike fighter 281
KC–130 aircraft 290
Landing gear upgrades 316
Mobile offshore base [MOB] 286
Modernization demands 304, 321
Naval expeditionary forces 223
Navy-Marine Corps team 222
Operational primacy 227
Pacific Missile Range facility [PMRF]:
    Navy missile defense testing at the 304, 311, 313
People 220
Procurement authority, multiyear 267
Programs 249
Quadrennial defense review 217, 318
Quality of life 290
    Issues 307, 318, 319
Readiness 239
Recruiting:
    And retention 310, 321
    Goals 269
Sexual harassment 270
Ship depot maintenance 305, 311
Shipbuilding 287
SLAM-ER Program 278
Smart ship systems 284
Staffing 278
Super Hornet Strike fighter 219
T–45 289
Technology 242
TRICARE 283
Trident retrofitting 295
Upper tier program 289
V–22 ..... 268, 279, 317
    Osprey 304, 322

DEPOT OPERATIONS

A–76 competitions 527, 532, 533
Additional committee questions 526
Background—BRAC decisions 511
Capacity:
    Current excess 529
    Excess 528
Competition:
    Savings 531
    Structure, current 531

Page

Core:
- Maintenance 532
- Weapons platforms 527, 533
- Workload 530, 532

Depots:
- Consolidation of 521
- Efficiencies and initiatives 514
- Impact of decreased force structure on 514
- Maintenance command structure 527, 532, 533
- Maintenance system inefficiencies 529
- Partnering 516
- Workload consolidation 528

Excess capacity 515
GAO findings 524
Infrastructure reduction 528
Job projection 529
Logistics, lean 518
Louisville privatization 523
Nuclear shipyard capacity 519
Ordnance centers 518
Partnering 523
Private companies, co-location of 530
Private/public competition 530
Privatization 520
- Cost/negative sides of 529

Production breaks 524
Public/private competition 530
Readiness issue 526
60/40 rule 525
Source selection 522
Strategy 512
Teaming requirements/opportunities 531
Workers, age of 528, 533, 534
Working capital fund issues 515
Workload and performance, current 514
Workloads, moving 530

ENVIRONMENTAL PROGRAM

Additional committee questions 594
Air emission credits 600, 604

Air Force:
- Award-winning program 592
- Cooperation with regulators 586
- ESOH 576
- Partnership programs 575
- Prevention programs 589
- Program saved money 591
- Risk assessment 588
- Work with the regulators 585

Ammunition plants 597, 603, 606

Army:
- Budget request, fiscal year 1998 540
- Environmental commitment 539
- Environmental program, overview of the 543

Base closure cleanup costs 575
Base realignment and closure 579
BRAC Environmental Program 572
Challenge, meeting the 577
Cleanup 560, 578
Compliance 546, 563, 580, 584
Conservation 548, 570, 578
DERA budget 597, 603, 605
Environment 578

Environmental:
- Budget overview, fiscal year 1998/99 558
- Cleanup 537
- Management Committee 589

Page

Environmental—Continued
Program in support of military readiness 557
Restoration accounts 585
Kaho'olawe cleanup 601
Legacy funding 596, 601, 604
Legislative proposal, fiscal year 1998 574
Military munitions rule/range rule 595, 600
Mission essential support 539
Occupational safety and health 581
Partnering 538, 561, 595
Agreements/contracts 601, 604
Pollution prevention 544, 567, 581, 588, 598, 603, 606
New technologies 594, 599
Program management and organizations 541
Restoration (cleanup) 551
Restoration advisory boards 596, 602, 605
Superfund sites 605
Technology 571
Unexploded ordnance 596, 602, 605

JOINT CHIEFS OF STAFF

ABM talks 126
Additional committee questions 133
Atlantic Command 93
Ballistic missile defense 122
Ballistic missile threat 120
Bosnia 78, 111
Budgeting control 113
Central Command 86
Chemical, biological, nuclear threat 118
Counterterrorism 96
European Command 75
F–22 expense 123
Global overview 74
Humanitarian/peacekeeping missions 131
Korean reunification 115
Member requirements, new 134
Missile defenses 130
Modernization—equipping the force for the 21st century 106
Naval procurement 124
Northeast Asia 114
Nuclear weapons testing 128
Nunn-Lugar 120
Operations 98
Overseas deployments 110
Pacific Command 90
"Quadrennial Defense Review" 109, 125
Quality people—the key to success 102
Readiness 104
Russia 77
Russian:
Military 111
Naval forces 123
Southern Command 95
Southwest Asia operations 134
Terrorism 116
U.S. direct enlargement costs 134

NATIONAL GUARD BUREAU

Additional committee questions 435
Air Force tiered readiness 422
Air National Guard:
Cost of units 419
Integration 424
America:
Adding value to 393

Page

America—Continued
A militia-based nation ... 394, 417
Antiterrorism training ... 428
Army equipment from Europe, repair of ... 428
Army National Guard resources ... 422
Base support program ... 430
Biloxi/Gulfport airport ... 424
Budget ... 403
Issues ... 436
Camp Shelby, training at ... 425
Community activities ... 414
Counterdrug operations and programs ... 398
Distance learning:
Initiatives ... 419
Sharing the technology of ... 426
Diversity program ... 415
Dual-role force ... 393
With three mission areas ... 396
Enhanced brigades ... 422
Equipment improvements ... 411
Flight simulators, alternatives to ... 420
Force structure ... 403
Fort Chaffee, AR ... 429
Fort State ... 408
Full-time support ... 418
Future:
Poised to dominate the ... 400
Preparing for the ... 415
Guard/Reserve missions ... 437, 439
Improving today ... 410
Infrastructure and facilities, leveraging ... 408
Logistics and maintenance ... 409
Missions, new ... 410
National Guard:
People and values ... 396
Vision ... 394
Force of the future ... 395
New Mexico issues ... 438, 439
Organizational improvements ... 413
Posturing for tomorrow—A force in transition ... 399
"Quadrennial Defense Review" ... 430
Quality force ... 415
Radar warning receivers ... 439
Readiness ... 406
Real world contingencies (OPTEMPO) ... 413
Recruiting ... 405
Reserve component automation system ... 426
Restructure/modernization ... 404
Safety ... 406
Space ... 415
State partnership program ... 431
Technology ... 415
Telecommunications link to rural America ... 425
Tiered resourcing ... 420, 433
Total force ... 416
UH–60 Blackhawk helicopters ... 434

U.S. Pacific Command

Alaska and exercises Northern Edge ... 210
Asia-Pacific environment ... 191
Balancing resources for our strategy: Programs and initiatives ... 196
Burdensharing ... 212
China ... 205
CODEL visit to Northeast Asia ... 213
Executive summary ... 191
Forward presence and regional stability ... 202
How cooperative engagement is working: An assessment ... 194

Page

Korean Peninsula 204
Missile defense 211
North Korea 206, 208
Pacific Command strategy 189
Peace, crisis, and war, cooperative engagement in 192
Quality of life 207
Russia, engagement with 201
Strategy, resources to support the 190
United States carrier homeporting in Japan 211
United States interests in the Pacific 210

GENERAL ACCOUNTING OFFICE

National Security and International Affairs Division

Additional committee questions 505
Depots:
  Inefficiencies 496
  Maintenance operations, challenges facing DOD in improving the cost-effectiveness of 471
  Potential impact on readiness from closing 497
Military costs and readiness, issues regarding 501
60/40 workload mix 499
Support structure to sustain conflict, viability of 495
Working capital fund:
  Cash management 473
    And operations issues 470
  Operations 476

○