

**DEPARTMENT OF DEFENSE APPROPRIATIONS  
FOR FISCAL YEAR 2009**

WEDNESDAY, JUNE 4, 2008

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. Daniel K. Inouye (chairman) presiding.

Present: Senators Inouye and Stevens.

**NONDEPARTMENTAL WITNESSES**

**STATEMENT OF SENATOR DANIEL K. INOUE**

Senator INOUE. Believe it or not, 20 years ago I was chairing this subcommittee, handling two witnesses, the Secretary of Defense and the Chairman of the Joint Chiefs. In recent times, we have decided that this subcommittee has to hear from everyone possible. So all the services, nurses, doctors, intelligence, everyone testifies.

Today we have the privilege of listening to citizens, people who handle charitable organizations, men and women who are concerned about certain projects, and we'd like to hear from you. But because time is of the essence, I hope you will work along with us. We have limited presentations to about 3½ minutes, but I can assure you that every document that you submit will be studied and scrutinized. That I promise you, sir.

So with that, may I call upon the first witness, Dr. Prem Paul, the Vice Chancellor for Research and Economic Development, University of Nebraska-Lincoln. Dr. Paul.

**STATEMENT OF PREM PAUL, Ph.D., VICE CHANCELLOR FOR RESEARCH AND ECONOMIC DEVELOPMENT, UNIVERSITY OF NEBRASKA-LINCOLN; CHAIR, EPSCoR-IDEA COALITION**

Dr. PAUL. Mr. Chairman and members of the subcommittee: My name, as you mentioned, is Dr. Prem Paul. I'm the Chair of the EPSCoR-IDEA Coalition. I'm here today on behalf of the Coalition of EPSCoR-IDEA States, a nonprofit organization representing 25 States and 2 territories. The coalition promotes the importance of a strong national science and technology research infrastructure and works to improve the research competitiveness of the States.

EPSCoR ensures enhancing the capabilities of institutions of higher education in our States. It develops, plans, and executes competitive, peer-reviewed research and engineering work that

supports identified mission critical needs of the Department of Defense (DOD), as stated in the Department's broad agency announcements.

Fiscal year 2009 is the most critical year for the EPSCoR program. The administration's fiscal year 2009 budget proposes only \$2.8 million for DEPSCoR and assumes elimination of the program thereafter. Eliminating the program would cripple important basic research efforts at our universities across the Nation and would abandon a program that has worked for nearly 15 years to build a national infrastructure of DOD research.

This subcommittee in fiscal year 2008 responded aggressively to the administration's plan to terminate DEPSCoR with an allocation of nearly \$20 million. The Senate Armed Services Committee responded by requiring a federally funded research and development center, FFRDC, assessment of the program to study the program's success. This assessment will comment in a forward-looking way on how the DEPSCoR program might be enhanced to ensure that it can meet the goal of furthering a national research infrastructure for DOD's basic research. This FFRDC is expected to report to Congress later this year.

In addition, the Department now has the ability to expand the number of eligible States in the DEPSCoR program to roughly 35, but we firmly believe that this would not only dilute the program, but would abandon the original statutory intent to fund only those States that have historically received the least amount of funding.

Our coalition strongly asserts that the administration's plan to terminate the program and to delete the request for \$2.8 million is both shortsighted and risks abandoning competitive, mission-critical research being conducted at our universities. In addition, any administrative changes to the program, including increasing the number of participating States, is premature, given that the current FFRDC assessment will provide important insight into all administrative and budgetary functions of the program.

The coalition respectfully requests that this subcommittee again affirm its support for DEPSCoR by matching its fiscal year 2008 allocation of nearly \$20 million for the program in fiscal year 2009. We also ask that you consider providing report language indicating that this subcommittee opposes any premature administrative changes to the program in light of the FFRDC assessment currently being undertaken.

Mr. Chairman and members of the subcommittee, we appreciate all the support that you have provided in the past. We also appeal to you that every State has important contributions to make to the Nation's competitiveness and every State has scientists and engineers who can contribute significantly to supporting the research needs of the DOD. DEPSCoR ensures that every State does just that.

Thank you very much.

Senator INOUE. I thank you very much, Dr. Paul. [The statement follows:]

PREPARED STATEMENT OF PREM PAUL, PH.D.

Mr. Chairman and members of the subcommittee, my name is Dr. Prem Paul and I am the Vice Chancellor for Research and Economic Development at the University of Nebraska-Lincoln and chair of the EPSCoR/IDeA Coalition (Coalition). I am privi-

leged to be here today on behalf of the Coalition of EPSCoR/IDEA States,<sup>1</sup> a non-profit organization representing 25 States and 2 territories. The Coalition promotes the importance of a strong national science and technology research infrastructure, and works to improve the research competitiveness of States that have historically received the least amount of Federal research funding.

Thank you for the opportunity to testify before your subcommittee regarding the Department of Defense Experimental Program to Stimulate Competitive Research (DEPSCoR), and thank you sincerely to the Members of this Subcommittee for your continued support of DEPSCoR. It is because of your support that DEPSCoR remains a vital program to half the States in the Nation and participating institutions.

The Department of Defense (DOD) EPSCoR program was initially established in Public Law 103-337 with two important policy objectives. First, DEPSCoR ensures a national research and engineering infrastructure by enhancing the capabilities of institutions of higher education in DEPSCoR States. Secondly, DEPSCoR develops, plans and executes competitive, peer-reviewed research, and engineering work that supports identified mission critical research needs of the Department of Defense as stated in the Department's Broad Agency Announcements. Today, EPSCoR States represent 20 percent of the U.S. population, 25 percent of the research and doctoral universities, and 18 percent of the Nation's scientists and engineers.

In Nebraska for example, DEPSCoR has funded research projects such as supporting the Army in studying the molecular response to biowarfare agents that our service members or our civilian population may one day encounter. In fiscal year 2008, DEPSCoR funded research for advancements in anti-jamming capabilities which significantly improves the position, location and timing correction accuracy due to GPS receiver implementation. In another study for the Air Force, a wireless sensor network that can locate, track and identify multiple moving objects was created. This device works both indoors and outdoors where global positioning systems do not function. It allows the military, especially those stationed in Afghanistan and Iraq, to determine the position of friendly assets in difficult environments.

Mr. Chairman and members of this subcommittee, fiscal year 2009 is perhaps the most critical year for the DEPSCoR program since it was initially authorized during the 103d Congress. The administration's fiscal year 2009 budget proposes only \$2.8 million for DEPSCoR in fiscal year 2009 and assumes elimination of the program thereafter. Clearly, eliminating the DEPSCoR program would cripple important basic research efforts at universities across the Nation and would abandon a program that has worked for nearly 15 years to build a national infrastructure of Department of Defense research. Even at the administration's proposed number of \$2.8 million, the program cannot advance its statutory mission of research infrastructure and support of Department of Defense research priorities.

In fiscal year 2008, the administration first announced its plans to terminate DEPSCoR. This subcommittee responded aggressively with a very generous allocation of nearly \$20 million, an amount which returned the program to a level that ensured the program could be effective and could make substantial progress in furthering the statutory intent of the program. Likewise, the Senate Armed Services Committee aggressively responded by requiring a Federally Funded Research and Development Center (FFRDC) assessment of the program to study the program's success, but also to comment in a forward-looking way on how the DEPSCoR program might be enhanced to ensure that it can meet the goal of furthering a national research infrastructure for Department of Defense basic research. This FFRDC is expected to be reported to Congress later this year, and our Coalition has worked diligently to produce data and supporting materials so that this study can serve as a valuable tool for Congress in determining the future of the DEPSCoR program.

Finally, in response to new statutory flexibility for the Department in administering the DEPSCoR program, our Coalition has worked tirelessly with numerous Senators, including members of this subcommittee, to maintain a DEPSCoR program that serves only the historically underfunded States contemplated during the program's creation. The Department now has the ability to expand the number of eligible States in the DEPSCoR program to roughly 35, but we firmly believe that this would not only dilute the program, but it would abandon the original statutory

<sup>1</sup> **Alabama, Alaska, Arkansas, Delaware, Hawaii, Idaho, Kansas, Kentucky, Louisiana, Maine, Mississippi, Montana, Nebraska, Nevada, New Hampshire, New Mexico, North Dakota, Oklahoma, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Vermont, Virgin Islands, West Virginia, and Wyoming.**

States in bold letters are eligible for the DEPSCoR program. All of the States listed above are also eligible for the EPSCoR program.

intent of the program to fund only those States that have historically received the least amount of funding.

In light of these developments, and in light of the FFRDC assessment due later this year, our Coalition strongly asserts that the administration's plan to terminate the program and its meager request of \$2.8 million for fiscal year 2009 is both shortsighted and risks abandoning competitive, mission critical basic research being conducted at universities across the country. Likewise, our Coalition asserts that any administrative changes to the program, including increasing the number of participating States, is premature given that the current FFRDC assessment will provide important insight into all administrative and budgetary functions of the program.

Accordingly, the Coalition respectfully requests that this subcommittee again affirm its support for DEPSCoR by matching its fiscal year 2008 allocation of nearly \$20 million for the program in fiscal year 2009, and consider providing report language indicating that this subcommittee opposes any premature administrative changes to the program in light of the FFRDC assessment currently being undertaken.

Although the program could be significantly enhanced with an even greater allocation than \$20 million, we recognize the tight discretionary budget constraints faced by this subcommittee and we recognize that the FFRDC study will provide an opportunity for a much fuller discussion in the next fiscal year. We, therefore, simply ask that this subcommittee level fund the DEPSCoR program at the fiscal year 2008 level so that we can protect DEPSCoR prior to the issuance of the FFRDC study and so that we can ensure an effective basic research program in fiscal year 2009.

Mr. Chairman and members of this subcommittee, every State has important contributions to make to the Nation's competitiveness and every State has scientists and engineers that can contribute significantly to supporting the research needs of the Department of Defense. DEPSCoR ensures that every State does just that.

Eliminating or significantly underfunding the DEPSCoR program will create a critical research shortfall in participating States that otherwise may not receive an investment of Department of Defense research funding. Now more than ever we must invest in research programs that will support our national security and will improve our readiness and defense capabilities in the future by building a national research infrastructure to support to our long-term research capability requirements. The participating DEPSCoR States continue to do just that, but it will require the continued support of this subcommittee to level fund this program at its current allocation of \$20 million.

Mr. Chairman and members of this subcommittee, on behalf of the Coalition of EPSCoR/IDeA States, I thank you for your time and for the opportunity to testify before the subcommittee on the importance of the DEPSCoR program, and I appreciate your consideration of this request.

Thank you.

Senator INOUE. I'll call upon the Chair of the Extremity War Injuries Project Team, Dr. Andrew N. Pollak.

**STATEMENT OF ANDREW N. POLLAK, M.D., CHAIR, EXTREMITY WAR INJURIES PROJECT TEAM, AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS**

Dr. POLLAK. Good morning, Mr. Chairman. I'm Dr. Andy Pollak. I'm Chief of Orthopaedic Surgery at Shock Trauma at Baltimore. As you mentioned, I chair the Extremity War Injuries Project Team for the American Academy of Orthopaedic Surgeons.

On behalf of military and civilian orthopaedic surgeons and researchers, I take this opportunity to very strongly urge this subcommittee to continue to provide significant resources for peer-reviewed medical research on extremity war injuries. Thank you for providing the DOD with funding for this purpose since fiscal year 2006.

Chairman Inouye, we know of your experience involving extremity trauma during war and appreciate the fact that you have both personal and professional perspectives from which to address this issue. We're very grateful for the dedicated work of Senators Tom

Harkin and Kay Bailey Hutchison, both members of this subcommittee. They worked together in sponsoring a recent "Dear Colleague" letter to you and to Senator Stevens requesting \$50 million for this critical peer-reviewed research program.

Being from Maryland, I'm proud to acknowledge that subcommittee member Senator Barbara Mikulski and Senator Ben Cardin also supported the request, which was signed by 15 Senators in all.

Mr. Chairman, last August I had the privilege of performing surgeries in military facilities at Balad, Iraq, and Landstuhl, Germany, on the invitation of Air Force Surgeon General James Roudebush. I can assure this subcommittee of the outstanding quality of trauma care being delivered by the military health system there.

The problem facing surgeons is the limitation of medical knowledge and techniques in this field. We need your help to advance the state of the art. Over 80 percent of injuries to our service men and women in the global war on terror now involve the extremities, often severely mangled and multiple injuries to the arms and legs.

The peer-reviewed orthopaedic extremity trauma research program was designed to develop targeted medical research. The objective is to help military surgeons to find new limb-sparing techniques, with the goal of avoiding amputations and preserving and restoring the function of injured extremities. The interest and capacity of the U.S. research community is very strong. During the past 2 years, the DOD has been able to fund 26 top research projects. However, another 177 approved highly scored projects have been turned away because of limited funding, a situation that will continue into fiscal year 2009 unless the program receives the significant resources needed to achieve an operating budget of \$50 million.

This desperately needed targeted research will lead to improvements in quality of life for our injured heroes. The funding you provide is being well spent. The new knowledge gained is advancing our ability to better understand and better treat serious extremity injuries. Our message is straightforward: The state of the science must be advanced to provide better treatment options for our wounded service members who suffer extremity trauma. The current peer-reviewed research program has a very large backlog of unfunded top-quality research proposals that must be addressed, and the DOD must be convinced to actively budget for extremity trauma research. But until that occurs, we believe that Congress has an obligation to ensure that DOD receives the necessary resources.

Mr. Chairman, Mr. Vice Chairman, you've recognized the urgent need to finance extremity research over the last 3 years. We are extremely grateful for that support. Based on the level of scientific need and the amount of unfunded research, our goal is to see this DOD program achieve an operating level of \$50 million per year.

Thank you and the entire subcommittee for your vision and leadership in responding to this appeal. We strongly urge your continued support. Thank you.

[The statement follows:]

## PREPARED STATEMENT OF ANDREW N. POLLAK

Chairman Inouye, Vice Chairman Stevens, members of the Senate Defense Appropriations Subcommittee, we thank you for the opportunity to testify today. I am Andrew N. Pollak, M.D., and I speak today on behalf of the American Academy of Orthopaedic Surgeons (AAOS), of which I am an active member, as well as on behalf of military and civilian orthopaedic surgeons involved in extremity trauma research and care.

I am Chair of the Academy's Extremity War Injuries and Disaster Preparedness Project Team, past-chair of its Board of Specialty Societies, and a subspecialist in orthopaedic traumatology. I am Associate Director of Trauma and Head of the Division of Orthopaedic Traumatology at the R. Adams Cowley Shock Trauma Center and the University of Maryland School of Medicine. My division at Shock Trauma is responsible for providing education and training in orthopaedic traumatology to residents from eight separate training programs nationally, including the Bethesda Naval, Walter Reed Army, and Tripler Army orthopaedic residency programs. In addition, Shock Trauma serves as the home for the Air Force Center for the Sustainment of Trauma and Readiness Skills (CSTARS) program. I also serve as a Commissioner on the Maryland Health Care Commission and on the Board of Directors of the Orthopaedic Trauma Association.

Senators, on behalf of all the military and civilian members of the American Academy of Orthopaedic Surgeons, please allow me to take this opportunity today to sincerely thank you both as well as the members of this subcommittee for your vision and leadership in providing funding in fiscal years 2006, 2007, and 2008 for the Army's peer reviewed medical research program on extremity war injuries.

We are very grateful for the dedicated work of Senators Tom Harkin and Kay Bailey Hutchison—both members of this subcommittee—in sponsoring a “Dear Colleague” letter this year supporting a request of \$50 million for this critical peer reviewed research program. I am proud to say subcommittee Member Senator Barbara Mikulski also supported the request which was signed by the following additional Senators, and we are very thankful for their support: Senators Barrasso, Brown, Cardin, Chambliss, Colman, Cornyn, Durbin, Inhofe, Isakson, Kennedy, Sanders, and Stabenow.

Mr. Chairman, we very respectfully commend the committee's work in including additional resources for this important research in the fiscal year 2008 Supplemental Appropriations bill currently under negotiation and we strongly urge your continued support of this program for fiscal year 2009 at an annual operating level of \$50 million. We request that you continue that level of resources until the Department of Defense (DOD) begins to include funding for extremity trauma research in its regular budget request to this committee.

Our message is simple:

- the state-of-the-science must be advanced to provide better treatment options for our wounded service members who suffer extremity trauma;
- the current peer-reviewed research program has a very large backlog of unfunded, top quality research proposals that must be addressed; and
- the Department of Defense must be convinced to actively budget for extremity trauma research, but until that occurs, we believe that the Congress has an obligation to ensure that the necessary resources are appropriated and directed.

As these combined wars enter their sixth year, there continues to be a profound need in the Nation for focused medical research to help military surgeons find new limb-sparing techniques with the goal of avoiding amputations and preserving and restoring the function of injured extremities.

Chairman Inouye, we know of your experience with extremity trauma during war and appreciate the fact that you have both personal and professional perspectives from which to address this issue.

You may remember that last year we were accompanied by CBS News correspondent Kimberly Dozier, who was recovering from severe wounds to her legs and head sustained on the streets of Baghdad while covering American soldiers on patrol with Iraqi security forces on Memorial Day 2006. She had been imbedded with the Army's 4th Infantry Division. The patrol was the victim of a car bombing which critically injured Kimberly and killed her cameraman, soundman, a U.S. Army captain they were following, and his Iraqi translator. I am happy to report that Ms. Dozier is back to work reporting for CBS. In fact, she recently won the prestigious Peabody Journalism Award for her coverage last year of U.S. military women who had lost limbs in the line of duty in Iraq. She is truly one of those rare individuals willing to put herself in harm's way to chronicle the work of our brave American service men and women in Iraq.

Ms. Dozier wrote about her experiences in surviving and recovering from the blast of a 500-pound car bomb remotely detonated on a Baghdad street. In a Washington Post op-ed article Sunday, September 30, 2007, titled "What I Faced After Iraq," she discussed the many medical decisions that have to be made by surgeons in the repair and recovery phases of treating wounded soldiers. She also detailed many important clinical questions that arise where much more medical research is needed. "Like me, future victims of extremity war injuries will desperately need the kind of knowledge that could be gained from adequate research," she concluded.

During the past year there have been many other accounts of the challenges to recovery faced by our wounded warriors with extremity injuries. The powerful HBO documentary by James Gandolfini, "Alive Day Memories: Home From Iraq," was one of those. The film contains interviews with 10 members of the Army and Marines who survived severe injuries. Each has their "Alive Day"—the day they narrowly escaped dying. Many spoke of the types of extremity injuries that have been sustained by our troops in Iraq and Afghanistan.

Military researchers have documented that fact that approximately 82 percent of war injuries suffered fighting the global war on terror involve the extremities—often severe and multiple injuries to the arms and legs.

In fact, House Report 110–279 (July 30, 2007, page 402) accompanying the fiscal year 2008 Defense Appropriations bill states that "Extremity injuries are the number one battlefield injury . . . dynamic research and treatment is necessary to provide service members the greatest ability to recover from injuries sustained on the battlefield."

By funding the Peer Reviewed Orthopaedic Extremity Trauma Research Program operated on behalf of all services by the Army's Medical Research and Materiel Command, your committee is directly advancing the state-of-the-science in this field. Your action will directly result in improved treatments for our wounded warriors now and in future conflicts.

It is important to point out that unique to this conflict is a new type of patient, a warfighter with multiple and severely mangled extremities who is otherwise free of life-threatening injury to the torso because of improvements in protective body armor and the excellent care quickly delivered through the echelon treatment system. Such injuries are rarely, if ever, seen in civilian surgical hospitals, even in Level 1 trauma centers. Current challenges that often compound the battlefield injuries include serious infections due to the nature of the injuries and the environment where they are sustained, and the need for immediate transport for more complex surgery.

The Academy's interest in this effort began in the very early days of Operation Enduring Freedom (OEF) when our deployed military Academy members began to report the great clinical needs that were emerging as they went about their work in surgeries to save injured service men and women. Soon studies on the nature of injuries in Iraq and Afghanistan documented the high proportion of extremity injuries as well as the severity of injuries.

I was fortunate to travel to Landstuhl, Germany, and Iraq last August to initiate the Distinguished Visiting Scholars Program. This program is a joint initiative between the AAOS and the Orthopaedic Trauma Association. The activity allows civilian orthopaedic trauma specialists with demonstrated clinical expertise and national recognition for their teaching abilities to volunteer 2 weeks at a time to be away from their practices performing surgeries at Landstuhl Regional Medical Center. I also had the privilege of performing surgical operations in Balad, Iraq, as part of a request by Air Force Surgeon General James Roudebush to evaluate the trauma care being delivered at the Air Force Theater Hospital and to investigate the feasibility and value of extending the Distinguished Visiting Scholars Program into Iraq and Afghanistan. Based on my experiences in Balad, I can assure this committee of the outstanding quality of trauma care being delivered by the military health system there.

On January 23 and 24 of this year, the third annual Extremity War Injuries Scientific Symposium was held in Washington, DC, sponsored by our Academy, along with the Society of Military Orthopaedic Surgeons and the Orthopaedic Trauma Association. This combined effort of the two associations and the United States military began in 2006 in an initiative to examine the nature of extremity injuries sustained during OEF and Operation Iraqi Freedom (OIF) and to plan for advancing the state-of-the-science and treatment of these injuries. The 2008 meeting was attended by more than 175 military and civilian leaders in extremity medical research and treatment from around the world. We were very fortunate to have had Joint Chiefs Chairman ADM Michael Mullen, Senator Tom Harkin, and Assistant Secretary of Defense for Health Affairs Dr. Ward Casscells each speak to the conference audience about their perspectives on injuries being sustained by our armed forces.

This conference series has produced a widely referenced scientific publication describing the clinical challenges posed by extremity war injuries, and a research agenda to guide the scientific community and the managers of the Peer Reviewed Orthopaedic Extremity Trauma Research Program in planning and executing the program.

ORTHOPAEDIC TRAUMA FROM OPERATION IRAQI FREEDOM AND OPERATION ENDURING FREEDOM

The likelihood of surviving wounds on the battlefield was 69.7 percent in WWII and 76.4 percent in Vietnam. Now, thanks in part to the use of body armor, "up-armored" vehicles, intense training of our combat personnel, and surgical capability within minutes of the battlefield, survivability has increased dramatically to 90.2 percent as of February 2007.

The Armed Forces are attempting to return significantly injured warriors to full function or limit their disabilities to a functional level in the case of the most severe injuries. The ability to provide improved recovery of function moves toward the goal of keeping injured warriors part of the military team. Moreover, when they do leave the Armed Forces, these rehabilitated warriors have a greater chance of finding worthwhile occupations outside of the service to contribute positively to society. The military believes that it has a duty and obligation to provide the highest level of care and rehabilitation to those men and women who have suffered the most while serving the country and our Academy fully supports those efforts.

It probably comes as no surprise that the vast majority of trauma experienced in Iraq and Afghanistan is orthopaedic-related, especially upper and lower extremity and spine. A recent article in the "Journal of Orthopaedic Trauma" reports on wounds sustained in Operation Iraqi Freedom and Operation Enduring Freedom based on data from the Joint Theater Trauma Registry, a database of medical treatment information from theater of combat operations at U.S. Army medical treatment facilities. From October, 2001 through January, 2005, of 1,566 soldiers who were injured by hostile enemy action, 1,281 (82 percent) had extremity injuries, with each soldier sustaining, on average, 2.28 extremity wounds. These estimates do not include non-American and civilians receiving medical care through U.S. military facilities. (Owens, Kragh, Macaitis, Svoboda and Wenke. Characterization of Extremity Wounds in Operation Iraqi Freedom and Operation Enduring Freedom. *J Orthopaedic Trauma*. Vol. 21, No. 4, April 2007. 254-257.)

An earlier article reported on 256 battle casualties treated at the Landstuhl Regional Medical Center in Germany during the first 2 months of OIF, finding 68 percent sustained an extremity injury. The reported mechanism of injury was explosives in 48 percent, gun-shot wounds in 30 percent, and blunt trauma in 21 percent. As the war has moved from an offensive phase to the current counter-insurgency campaign, higher rates of injuries from explosives have been experienced. (Johnson BA, Carmack D, Neary M, et al. Operation Iraqi Freedom: the Landstuhl Regional Medical Center experience. *J Foot Ankle Surg*. 2005; 44:177-183.) According to the JTTR, between 2001 and 2005, explosive mechanisms accounted for 78 percent of the war injuries compared to 18 percent from gun shots.

While medical and technological advancements, as well as the use of fast-moving Forward Surgical Teams, have dramatically decreased the lethality of war wounds, wounded soldiers who may have died in previous conflicts from their injuries are now surviving and have to learn to recover from devastating injuries. While body armor is very effective in protecting a soldier's torso, his or her extremities are particularly vulnerable during attacks.

*Characteristics of Military Orthopaedic Trauma*

At this point we there have been about 36,000 casualties in the global war on terror. As mentioned earlier, the vast majority have injuries to their extremities—often severe and multiple injuries to the arms, legs, head and neck. Most wounds are caused by exploding ordnance—frequently, improvised explosive devices (IEDs), rocket-propelled grenades, as well as high-velocity gunshot wounds. Military surgeons report an average of three wounds per casualty.

According to the "New England Journal of Medicine", blast injuries are producing an unprecedented number of "mangled extremities"—limbs with severe soft-tissue and bone injuries. ("Casualties of War—Military Care for the Wounded from Iraq and Afghanistan," *NEJM*, December 9, 2004). The result of such trauma is open, complex wounds with severe bone fragmentation. Often there is nerve damage, as well as damage to tendons, muscles, vessels, and soft-tissue. In these types of wounds, infection is often a problem. According to the JTTR, 53 percent of the extremity wounds are classified as penetrating soft-tissue wounds, while fractures compose 26 percent of extremity wounds. Other types of extremity wounds com-

posing less than 5 percent each are burns, sprains, nerve damage, abrasions, amputations, contusions, dislocations, and vascular injuries.

The sheer number of extremity injuries represents a staggering health burden. Between January 2003 and February 2007, more than 14,500 U.S. warriors have been wounded severely enough to require evacuation out of theater. In addition, 780 American patients have lost one or more hands or feet (major limb amputation).

#### *Military versus Civilian Orthopaedic Trauma*

While there are similarities between orthopaedic military trauma and the types of orthopaedic trauma seen in civilian settings, there are several major differences that must be noted.

With orthopaedic military trauma, there are up to five echelons of care, unlike in civilian settings when those injured are most likely to receive initial treatment at the highest level center. Instead, wounded warriors get passed from one level of care to the next, with each level of care implementing the most appropriate type of care in order to ensure the best possible outcome. The surgeon in each subsequent level of care must try to recreate what was previously done. In addition, a majority of injured soldiers have to be "medevaced" to receive care and transportation is often delayed due to weather or combat conditions. It has been our experience that over 65-percent of the trauma is urgent and requires immediate attention.

Injuries from IEDs and other explosive ordnance in Iraq and Afghanistan differ markedly from those of gunshot wounds sustained in civilian society. The contamination, infection, and soft-tissue injury caused by exploding ordnance requires more aggressive treatment and new techniques, especially when the individual is in proximity to the blast radius.

Warriors are usually in excellent health prior to injury. However, through the evacuation process they may not be able to eat due to medical considerations resulting in impaired body nitrogen stores and decreased ability to heal wounds and fight infections. This presents many complicating factors when determining the most appropriate care.

The setting in which care is initially provided to wounded soldiers is less than ideal, to say the least, especially in comparison to a sterile hospital setting. The environment, such as that seen in Iraq and Afghanistan, is dusty and hot, leading to concerns about secondary contamination of wounds in the hospital setting. For example, infection from *acinetobacter baumannii*, a ubiquitous organism found in the desert soil of Afghanistan and Iraq, is extremely common. In addition, the surgical environment is under constant threat of attack by insurgents. Imagine teams of medical specialists working in close quarters to save an injured serviceman while mortars or rockets are raining down on the hospital. Finally, the forward-deployed surgical team is faced with limited resources that make providing the highest level of care difficult.

While, as I have stated, there are many unique characteristics of orthopaedic military trauma, there is no doubt that research done on orthopaedic military trauma benefits trauma victims in civilian settings. Many of the great advancements in orthopaedic trauma care have been made during times of war, including principles of debridement of open wounds, utilization of external fixation and use of tourniquets for control of hemorrhage which has been used extensively during the current conflict as well as in civilian care.

#### FUTURE NEEDS OF ORTHOPAEDIC EXTREMITY TRAUMA RESEARCH

As mentioned earlier, an important development in this scientific effort has been the convening of the annual Extremity War Injury Symposia, which began in January of 2006. These widely attended medical conferences in Washington, DC, bring together leading military and civilian clinicians and researchers to focus on the immediate needs of personnel sustaining extremity injuries. Discussions at the conferences has confirmed that there is tremendous interest and much untapped research capacity in the military and civilian research community in the Nation.

These extraordinary scientific meetings were a partnership effort between organized orthopaedic surgery, military surgeons and researchers. They were attended by key military and civilian physicians and researchers committed to the care of extremity injuries. The first conference addressed current challenges in the management of extremity trauma associated with recent combat in Iraq and Afghanistan. The major focus was to identify opportunities to improve care for the sons and daughters of America who have been injured serving our Nation. The second focused on the best way to deliver care within the early echelons of treatment. The third explored the wide spectrum of needs in definitive reconstruction of injuries. Scientific proceedings from the symposia have been published by our Academy and

made available to the military and civilian research community. Each conference has continued to refine the list of prioritized research needs which I will summarize.

#### *Timing of Treatment*

Better data are necessary to establish best practices with regard to timing of debridement, timing of temporary stabilization and timing of definitive stabilization. Development of animal models of early versus late operative treatment of open injuries may be helpful. Prospective clinical comparisons of treatment groups will be helpful in gaining further understanding of the relative role of surgical timing on outcomes.

#### *Techniques of Debridement*

More information is necessary about effective means of demonstrating adequacy of debridement. Current challenges, particularly for surgeons with limited experience in wound debridement, exist in understanding how to establish long-term tissue viability or lack thereof at the time of an index operative debridement. Since patients in military settings are typically transferred away from the care of the surgeon performing the initial debridement prior to delivery of secondary care, opportunities to learn about the efficacy of initial procedures are lost. Development of animal models of blast injury could help establish tissue viability markers. Additional study is necessary to understand ideal frequencies and techniques of debridement.

#### *Transport Issues*

Clinical experience suggests that current air evacuation techniques are associated with development of complications in wound and extremity management although the specific role of individual variables in the genesis of these complications is unclear. Possible contributing factors include altitude, hypothermia, and secondary wound contamination. Clinical and animal models are necessary to help develop an understanding of transport issues.

#### *Coverage Issues*

Controlled studies defining the role of timing of coverage in outcome following high-energy extremity war injuries are lacking. Also necessary is more information about markers and indicators to help assess the readiness of a wound and host for coverage procedures. Additional animal modeling and clinical marker evaluation are necessary to develop understanding in this area.

#### *Antibiotic Treatments*

Emergence of resistant organisms continues to provide challenges in the treatment of infection following high-energy extremity war injuries. Broader prophylaxis likely encourages development of antibiotic resistance. In the context of a dwindling pipeline of new antibiotics, particularly those directed toward gram-negative organisms, development of new technologies to fight infection is necessary. This patient population offers opportunity to assess efficacy of vaccination against common pathogens. Partnerships with infectious disease researchers currently involved in addressing similar questions warrants further development.

#### *Management of Segmental Bone Defects*

A multitude of different techniques for management of segmental bone defects is available. These include bone transport, massive onlay grafting with and without use of recombinant proteins, delayed allograft reconstruction, and acute shortening. While some techniques are more appropriate than others after analysis of other clinical variables, controlled trials comparing efficacy between treatment methods are lacking. Variables that may affect outcome can be grouped according to patient characteristics including co-morbidities, injury characteristics including severity of bony and soft-tissue wounds, and treatment variables including method of internal fixation selected. Evaluation of new technologies for treatment of segmental bone defects should include assessment of efficacy with adequate control for confounding variables and assessment of cost-effectiveness. Partnerships with other military research programs may be particularly effective in improving clinical capabilities in this area.

#### *Development of an Animal Model*

A large animal survival military blast injury model is necessary to serve as a platform for multiple research questions including: VAC v. bead pouch v. dressing changes; wound debridement strategy; effect of topical antibiotics; modulation of inflammatory response; timing of wound closure; and vascular shunt utilization.

*Amputee Issues*

Development and validation of “best practice” guidelines for multidisciplinary care of the amputee is essential. Treatment protocols should be tested clinically. Studies should be designed to allow for differentiation between the impacts of the process versus the device on outcome. Failure mode analysis as a tool to evaluate efficacy of treatment protocols and elucidate shortcomings should be utilized. Clinically, studies should focus on defining requirements for the residual limb length necessary to achieve success without proceeding to higher level amputation. Outcomes based comparisons of amputation techniques for similar injuries and similar levels should be performed. Use of local tissue lengthening and free tissue transfer techniques should be evaluated. In the context of current results and increasing levels of expectation for function following amputation, development of more sensitive and military appropriate outcomes monitors is necessary.

*Heterotopic Ossification*

This condition, known as “H.O.” by the many soldiers who experience it, is abnormal and uncontrolled bone growth that often occurs following severe bone destruction or fracture. Animal models of heterotopic ossification should be utilized to develop early markers for heterotopic ossification that could identify opportunities for prevention. Better information is needed about burden of disease including prevalence following amputation for civilian versus military trauma and frequency with which symptoms develop. Treatment methods such as surgical debridement, while effective, necessarily interrupt rehabilitation. Prevention could expedite recovery and potentially improve outcome.

## THE PEER REVIEWED ORTHOPAEDIC EXTREMITY TRAUMA RESEARCH PROGRAM

Senator Inouye, the AAOS and military and civilian orthopaedic surgeons and researchers are very grateful for your subcommittee’s vision in creating the Peer Reviewed Orthopaedic Extremity Trauma Research Program in the fiscal year 2006 Defense Appropriations bill. This is the first program created in the Department of Defense dedicated exclusively to funding peer-reviewed intramural and extramural extremity trauma research. Having the program administered by the U.S. Army Institute of Surgical Research ensures that the funding closely follows the research priorities established by the Armed Forces. USAISR has extensive experience administering similar grant programs and is the only Department of Defense research laboratory devoted solely to improving combat casualty care. Military orthopaedic surgeons, in addition to personnel at the U.S. Army Medical Research and Materiel Command, Fort Dietrick, have also had significant input into the creation of this program and fully support its goals.

The design of the program fosters collaboration between civilian and military orthopaedic surgeons and researchers and various facilities. Civilian researchers have the expertise and resources to assist their military colleagues with the growing number of patients and musculoskeletal war wound challenges, to build a parallel research program in the military. As can be seen in reviewing the growing numbers of research applications submitted under each RFP, civilian investigators are interested in advancing the research and have responded enthusiastically to engage in these efforts, and this will also provide wide ranging spin-off benefits to civilian trauma patients.

This activity is a targeted, competitively-awarded research program where peer reviewers score proposals on the degree of (1) military relevance, (2) military impact, and (3) scientific merit. Military and civilian orthopaedic surgeons are highly involved in defining the research topics and in evaluating and scoring the proposals. This unique process ensures that projects selected for funding have the highest chance for improving treatment of battlefield injuries.

The program’s first Broad Agency Announcement for grants was released on February 13, 2006, and identified the following basic, transitional, and clinical research funding priorities: improved healing of segmental bone defects; improved healing of massive soft tissue defects; improved wound healing; tissue viability assessment and wound irrigation and debridement technologies; reduction in wound infection; prevention of heterotopic ossification; demographic and injury data on the modern battlefield and the long-term outcomes of casualties (i.e., joint theatre trauma registry); and improved pre-hospital care of orthopaedic injuries.

Almost 100 pre-proposals were received for consideration, with 76 invited to compete with a full proposal. An upper limit of \$500,000 was established for any one grant, to give a reasonable number of grantees an opportunity to participate. Ordinarily grants would be awarded for much higher amounts to support the research required. Larger multi-institutional studies had to limit what they were proposing.

Sixty proposals were evaluated and found meritorious and militarily relevant, however only 14 grants could be funded for their first year of research based on available funding. The amount that would have been needed to fund the remaining 46 grants totals \$44,852,549.

A second call for proposals was issued by the Army on March 29, 2007 based on funding provided in the fiscal year 2007 Appropriations bill. This request for proposals generated 144 “pre proposal” applications. Of those selected to provide full applications, 96 research leaders from around the country had their projects judged by reviewers to be scientifically meritorious, with a total cost of \$125 million ready for award. However, available funding allowed only 12 new grants to be funded.

Significant new funding from the Congress would allow for more robust numbers of grants, a broader scope of work and increased multi-institutional collaboration. Clinical trials and more in-depth tracking of long term outcomes would also be possible—important components in rapidly advancing the state of the science.

#### CONCLUSION

With extremity trauma being the most common form of injury seen in current military conflicts, it is crucial that significant funding be directed specifically to the advancement of research. The AAOS has worked closely with the top military orthopaedic surgeons, at world-class facilities such as the U.S. Army Institute of Surgical Research, Brooke Army Medical Center, Bethesda Naval Hospital, Landstuhl Regional Medical Center, and Walter Reed Army Medical Center to identify the gaps in research and clinical treatment—and the challenges are many.

Extremity trauma research currently being carried out at those and other facilities, and at civilian medical centers, is vital to the health of our soldiers and to the Armed Forces’ objective to return injured soldiers to full function in hopes that they can continue to be contributing soldiers and active members of society.

The 17,000 members of our Academy thank you for sustaining the Peer Reviewed Orthopaedic Extremity Trauma Research Program. While Congress funds an extensive array of medical research through the Department of Defense, with over 80 percent of military trauma being extremity-related, I can assure you that this type of medical research will greatly benefit our men and women serving in the global war on terror and in future conflicts.

Funding is needed to support critical research outlined in the targeted research plan developed through scientific collaboration at the Extremity War Injury Symposia. Research in the management of extremity injuries will lead to quicker recovery times from blast injuries for our wounded warriors, improved function of limbs that are saved, better response rates to infection, and new advances in amputee care in cases where amputation remains the only option.

As I have demonstrated, the interest and capacity of the U.S. research community is very strong. During the past 2 years, the Defense Department has been able to fund 26 top research projects—but another 177 approved, highly scored projects have been turned away because of limited funding. The result: more than \$157 million in urgently needed, high-quality research has gone unfunded and this situation will continue in fiscal year 2009 unless the program receives the significant resources needed to achieve an operating budget of \$50 million.

Mr. Chairman and Mr. Vice Chairman, the American Academy of Orthopaedic Surgeons, as well as the entire orthopaedic trauma community, stands ready to work with this subcommittee to identify and prioritize research opportunities for the advancement in the care of extremity war injuries. Military and civilian orthopaedic surgeons and researchers are committed to pursuing scientific inquiry that will benefit the unfortunately high number of soldiers afflicted with such trauma and return them to the highest level of function possible. This investment to improve treatment for our soldiers will be well spent. It is imperative that the Federal Government—when establishing its defense health research priorities in the future—continues to ensure that research on treating extremity war injuries remains a top priority and that the large backlog of unfunded research is eliminated. We appreciate your consideration of our perspective on this critical issue and urge your continued action on behalf of our Nation’s wounded warriors.

Senator INOUE. I have one question, sir.

Dr. POLLAK. yes, sir.

Senator INOUE. Those veterans who have been residing in tropical areas where it’s hot and muggy have discarded their prosthetic appliances because the old World War II required a stump sock, which gets soaked up with sweat, and this huge monstrosity called

an arm or leg. Can in later life, say 30, 40 years later, decide that times have changed and equipment has changed and that they could fit themselves? Or is there a time limit?

Dr. POLLAK. Well, there's no time limit on changing the type of prosthesis that they're wearing. There have certainly been tremendous advances in prostheses and sockets and the ability to wear sockets comfortably, and much of that work, as you know, has been done at Walter Reed and San Antonio at Brook Army Medical Center and the Center for the Intrepid.

There are opportunities, and the Veterans Administration (VA) needs to work closely with the DOD to share some of the tremendous advances that have been made. I can assure that as a civilian orthopaedic surgeon right now, the quality of prosthesis available for our injured warriors coming out of Walter Reed and Brook is far in excess of anything that we can get access to for civilian patients with amputations. Hopefully, that quality of amputee care can be translated to the VA as well.

Senator INOUE. Thank you very much, sir.

Our next witness is the Director of the University of Dayton Research Institute and Chair of ASME's DOD Task Force, Dr. John Leland. Dr. Leland.

**STATEMENT OF JOHN LELAND, Ph.D., DIRECTOR, UNIVERSITY OF DAYTON RESEARCH INSTITUTE AND CHAIR, DOD TASK FORCE, AMERICAN SOCIETY OF MECHANICAL ENGINEERS**

Dr. LELAND. Good morning, Mr. Chairman, Mr. Vice Chairman. As you noted, I'm Chair of the ASME—

Senator STEVENS. Do you want to pull on your mike so the people in back can hear you, please? Pull the mike toward you and turn it on.

Dr. LELAND. I apologize. As you mentioned, I'm Chair of the American Society of Mechanical Engineers (ASME) DOD Task Force and Director of the University of Dayton Research Institute. I'm pleased to have this opportunity to provide comments to this subcommittee on the fiscal year 2009 DOD budget request.

The ASME is a 127,000 member professional organization focused on technical, educational, and research issues. Since World War II, the United States has led the world in science innovation and technology. However, this lead is quickly eroding. Our Nation's engineers play a critical role in national defense through research discoveries and technology development. Therefore my comments will focus on the DOD science and technology budget.

The administration's fiscal year 2009 request for defense science and technology is \$11.48 billion, which is \$1.2 billion or 9.5 percent less than the fiscal year 2008 appropriated amount. The 2009 request, if implemented, would represent a significantly reduced investment in defense science and technology. We strongly urge this subcommittee to consider additional resources to maintain stable funding of science and technology at a minimum level of \$15.4 billion.

Basic research or 6Y.1 accounts comprise a small percentage of RDT&E funds. The programs that these accounts support are crucial to fundamental scientific advances and maintaining a highly skilled science and technology workforce. The task force recommends that basic research be funded at a minimum level of \$1.7

billion to ensure that these advances and the vitality of our future science and technology workforce are maintained.

With regard to 6.2 applied research I understand full well the importance of these funds for developing our future scientists and engineers. More than 250 students have the opportunity to work on defense research programs each year at the University of Dayton Research Institute. Many more enjoy opportunities through local defense-oriented companies. The proposed 16 percent reduction in 6.2 applied research would stifle a key source of technological and intellectual development as well as stunt the creation and growth of small entrepreneurial companies.

A 7.7 percent reduction in funding has been proposed in 6.3 advanced technology development. Without the system-level demonstrations funded by advanced technology development accounts, companies are reluctant to incorporate new technologies into weapons systems. Advanced technology development accounts also fund research in a range of critical materials technologies, including improved body armor and lightweight vehicle armor to protect troops against improvised explosive devices. Fortunately, Congress has recognized that such cuts are not in the best interest of our troops and has appropriated additional resources in past years.

Investments in science and technology directly affect the future of our national security. We urge this subcommittee to support an appropriation of \$15.4 billion for science and technology programs, or 3 percent of the fiscal year 2009 DOD budget. This request is consistent with recommendations made by the Defense Science Board as well as by senior DOD officials who have voiced support for the future allocation of 3 percent of total obligational authority as a worthy benchmark for science and technology programs.

The ASME appreciates the difficult choices that Congress must make in this challenging budgetary environment, and I thank the committee for its ongoing support of science and technology. Thank you, Mr. Chairman.

[The statement follows:]

#### PREPARED STATEMENT OF JOHN LELAND

##### INTRODUCTION

The ASME Department of Defense (DOD) Task Force of the Committee on Federal Research and Development is pleased to comment on the fiscal year 2009 budget request for the Research, Development, Test and Evaluation (RDT&E) and the Science and Technology (S&T) portion of the DOD budget request.

With 127,000 members, ASME is a worldwide engineering society focused on technical, educational, and research issues. It conducts one of the world's largest technical publishing operations, holds approximately 30 technical conferences and 200 professional development courses each year, and sets many industry and manufacturing standards. This testimony represents the considered judgment of experts from universities, industry, and members from the engineering and scientific community who contribute their time and expertise to evaluate the budget requests and policy initiatives the DOD recommends to Congress.

Our testimony addresses three primary funding areas: Science and Technology (S&T); Engineering (RDT&E); and the University Research Initiative (URI). Our testimony also outlines the consequences of inadequate funding for defense research. These include a degraded competitive position in developing advanced military technology versus potential peer competitors that could harm the United States' global economic and military leadership.

Since World War II, the United States has led the world in science, innovation, and defense technology. However, this lead is quickly eroding and within the next few years may be substantially reduced or may completely disappear in some areas.

A recent study performed by the National Academy of Sciences, entitled "Rising Above the Gathering Storm: Energy and Employing America for a Brighter Economic Future," evaluated the position of the United States in several critical measures of technology, education, innovation, and highly skilled workforce development. While the report indicated that the United States maintains a slight lead in research and discovery, the committee states that it is "deeply concerned that the scientific and technological building blocks critical to our economic leadership are eroding at a time when many other nations are gaining strength." Proper attention should be given to the vital role that DOD S&T programs play in meeting this challenge.

#### DOD REQUEST FOR SCIENCE AND TECHNOLOGY

The fiscal year 2009 budget request for DOD Science and Technology (S&T) is \$11.7 billion, which is \$1.5 billion less than the fiscal year 2008 appropriated amount and represents a 11.7 percent reduction.

The fiscal year 2009 request, if implemented, would represent a significantly reduced investment in DOD S&T. We strongly urge this committee to consider additional resources to maintain stable funding in the S&T portion of the DOD budget. At a minimum, \$15.4 billion for S&T to meet the 3 percent of Total Obligational Authority (TOA) guideline recommended by a National Academies study and set in the 2001 Quadrennial Defense Review and by Congress.

A relatively small fraction of the RDT&E budget is allocated for S&T programs. While the fiscal year 2009 S&T request represents only about 14 percent of the RDT&E total, these accounts support all of the new knowledge creation, invention, and technology developments for the military. Funds for Basic Research (6.1), Applied Research (6.2), and Advanced Technology Development (6.3) in all categories are programmed for significant funding reductions.

Basic Research (6.1) accounts would increase from \$1.6 billion to \$1.7 billion, a 4 percent increase. While basic research accounts comprise only a small percentage over all RDT&E funds, the programs that these accounts support are crucial to fundamental, scientific advances and for maintaining a highly skilled science and engineering workforce.

Basic research accounts are used mostly to support science and engineering research and graduate, technical education at universities in all 50 States. Almost all of the current high-technology weapon systems, from advanced body armor, vehicle protection system, to the global positioning satellite (GPS) system, have their origin in fundamental discoveries generated in these basic research programs. Proper investments in basic research are needed now, so that the fundamental scientific results will be available to create innovative solutions for future defense challenges. In addition, many of the technical leaders in corporations and Government laboratories that are developing current weapon systems, ranging from the F-35 Joint Strike Fighter to the suite of systems employed to counter Improvised Explosive Devices (IED), were educated under basic research programs funded by DOD. Failure to invest sufficient resources in basic, defense-oriented research will reduce innovation and weaken the future scientific and engineering workforce. Several of the proposed reductions to individual S&T program elements are dramatic and could have negative impacts on future military capabilities. The Task Force recommends that Basic Research (6.1) be funded at a minimum level of \$1.7 billion.

Applied Research (6.2) would be reduced from \$5.05 billion to \$4.2 billion, a 16 percent reduction. The programs supported by these accounts apply basic scientific knowledge, often phenomena discovered under the basic research programs, to important defense needs. Applied research programs may involve laboratory proof-of-concept and are generally conducted at universities, Government laboratories, or by small businesses. Many successful demonstrations lead to the creation of small companies. Some devices created in these defense technology programs have dual use, such as GPS, and the commercial market far exceeds the defense market. However, without initial support by Defense Applied Research funds, many of these companies would not exist. Like 6.1 Basic Research, 6.2 Applied Research has also funded the educations of many of our best defense industry engineers. Failure to properly invest in applied research would stifle a key source of technological and intellectual development as well as stunt the creation and growth of small entrepreneurial companies.

Advanced Technology Development (6.3) would experience a 7.6 percent decline, from \$6 billion to \$5.5 billion. These resources support programs where ready technology can be transitioned into weapon systems. Without the real system level demonstrations funded by these accounts, companies are reluctant to incorporate new technologies into weapon systems programs. This line item funds research in a

range of critical materials technologies, including improved body armor to protect troops against IEDs and in developing light weight armor for vehicle protection, such as is needed for the Future Combat System (FCS). With the problems faced in Iraq with IEDs and the need for lighter armor for the FCS it does not seem wise to cut materials research. Fortunately in the past few years the United States Congress has recognized that such cuts are not in the best interest of the country, and has appropriated additional resources to maintain healthy S&T programs in critical technologies.

#### DOD REQUEST FOR RDT&E

The administration requested \$80.7 billion for the RDT&E portion of the fiscal year 2009 DOD budget. These resources are used mostly for developing, demonstrating, and testing weapon systems, such as fighter aircraft, satellites, and warships. This amount represents growth from last year's appropriated amount 2.9 percent. Funds for the OT&E function are being reduced by historical standards. The fiscal year 2008 appropriated amount was \$178 million, which is little more than half of the 2005 appropriated amount of \$310 million. The fiscal year 2009 request is \$189 million, but does not reflect the importance of OT&E as mandated by Congress to insure that weapon systems are thoroughly tested so that they are effective and safe for our troops.

#### DOD REQUEST FOR THE URI

The URI supports graduate education in Mathematics, science, and engineering and would see a \$6 million increase from \$300 million to \$307 million in fiscal year 2009, a 2.1 percent increase. Sufficient funding for the URI is critical to educating the next generation of engineers and scientists for the defense industry. A lag in program funds will have a serious long-term negative consequence on our ability to develop a highly skilled scientific and engineering workforce to build weapons systems for years to come. While DOD has enormous current commitments, these pressing needs should not be allowed to squeeze out the small but very important investments required to create the next generation of highly skilled technical workers for the American defense industry.

#### REDUCED S&T FUNDING THREATENS AMERICA'S NATIONAL SECURITY

Science and technology have played a historic role in creating an innovative economy and a highly skilled workforce. Study after study has linked over 50 percent of our economic growth over the past 50 years to technological innovation. The "Gathering Storm" report places a "special emphasis on information sciences and basic research" conducted by the DOD because of large influence on technological innovation and workforce development. The DOD, for example, funds 40 percent of all engineering research performed at our universities. U.S. economic leadership depends on the S&T programs that support the Nation's defense base, promote technological superiority in weapons systems, and educate new generations of scientists and engineers.

Prudent investments also directly affect U.S. national security. There is a general belief among defense strategists that the United States must have the industrial base to develop and produce the military systems required for national defense. Many members of Congress also hold this view. A number of disconcerting trends, such as outsourcing of engineering activities and low participation of U.S. students in science and engineering, threaten to create a critical shortage of native, skilled, scientific, and engineering work force personnel needed to sustain our industrial base. Programs that boost the available number of highly educated workers who reside in the United States are important to stem our growing reliance on foreign nations, including potentially hostile ones, to fill the ranks of our defense industries and to ensure that we continue to produce the innovative, effective defense systems of the future.

#### RECOMMENDATIONS

In conclusion, we thank the committee for its ongoing support of DOD S&T. This Task Force appreciates the difficult choices that Congress must make in this tight budgetary environment. We believe, however, that there are critical shortages in the DOD S&T areas, particularly in those that support basic research and technical education that are critical to U.S. military in the global war on terrorism and defense of our homeland.

The Task Force recommends the following:

- We urge this subcommittee to support a \$300 million increase in basic research accounts for S&T programs. We are encouraged by the movement toward meeting the recommendations in the “Rising Above the Gathering Storm” report that called for a 10 percent increase in defense basic research.
- We also recommend that the committee support the Pentagon’s stated goal of 3 percent of the DOD’s budget be spend for the DOD S&T program 6.1 basic research, 6.2 applied research, and 6.3 advanced technology development.

Senator INOUE. Thank you very much.

Senator Stevens.

Senator STEVENS. Doctor, the Augustine report indicated that, while India was graduating 700,000 engineers and China 400,000, we graduated 70,000. What’s the association doing about trying to increase recruitment into this profession?

Dr. LELAND. Well, besides the things that the association does in terms of raising awareness of engineering, we also support a number of scholarship programs in cooperation with the DOD, for example the SMART program and the NDSEG program and others. But these are small efforts compared to what our country has to do as a whole to pull kids back into science and engineering.

Senator STEVENS. Well, I was astounded to hear last week the number of students that attend 1 year of college and quit. I do think that it’s up to professionals to start going to those schools and trying to interest them in further education and not to quit, because we are really falling behind in terms of the level of sciences, technology people, medical students. We have to turn that around or we’re going to be in real trouble.

Thank you.

Dr. LELAND. Thank you.

Senator INOUE. Thank you very much.

Our next witness is the Co-chairman of the National Military and Veterans Alliance, Captain Marshall Hanson. Captain Hanson.

**STATEMENT OF CAPTAIN MARSHALL HANSON, USNR (RETIRED), CO-CHAIRPERSON, NATIONAL MILITARY AND VETERANS ALLIANCE**

Captain HANSON. Thank you, Mr. Chairman, Senator Stevens. The National Military and Veterans Alliance (NMVA) is again honored to testify. The alliance represents 31 military retiree, veteran, and survivor associations with more than 3.5 million members. The NMVA supports a strong national security. During this global war on terror, recruiting and retention continue to remain paramount.

While the alliance is well aware that the subcommittee faces certain budget constraints, the NMVA continues to urge the President and Congress to increase defense spending to 5 percent of gross domestic product during times of war to cover procurement, prevent unnecessary personnel cuts, and afford needed benefits for serving members and retirees.

Recruiting bonuses and incentives continue to be essential to encourage participation. It is not enough to offer incentives on the initial tour. We have to also encourage our seasoned veterans to stay.

The services face a growing challenge as midgrade officers and enlisted face a tough reenlistment choice after 8 years of service. The Army is already calling upon first lieutenants to fill the jobs that are normally performed by captains and it is finding it a challenge to select enough O-3s for promotion to major.

We thank you for funding end strength increases for the Army and the Marine Corps. This will reduce the PERS-TEMPO, permitting our younger warriors to stay at home longer. But the alliance is concerned with continued cuts in the Air Force and Navy, as manpower is being reduced faster than the planned technology is being procured that would replace airmen and sailors.

It is also important that we have parity in equipment and training for the new operational Guard and Reserve. Cuts in the strength of the Reserve components seem to be counterintuitive to preventing any unforeseen strategic event.

One inequity we ask your assistance on is the Reserve early retirement benefit that was passed last year by the authorizers. This benefit only began on January 28, 2008. During the war it seems unfair that benefits would differ for when service was performed. The reason given for a deferred start was the cost. We ask that your staff work with the alliance's reserve component committee to find funding to correct the eligibility for this benefit to those who have served since September 11, 2001.

It is also crucial that military healthcare be funded. The alliance is concerned that the President's DOD healthcare budget continues to undercut the military beneficiaries' needs. We ask you to continue to fully fund military healthcare in fiscal year 2009.

The NMVA thanks this subcommittee for funding the phased-in survivor benefit plan (SBP) and the dependency and indemnity compensation (DIC) offset last year. But widows of members who are killed in the line of service are continuing to be penalized. Even under the present offset, the vast majority of our enlisted families receive little benefit from this new program because the SBP is almost completely offset by DIC. The NMVA respectfully requests that this subcommittee find excess funding to expand this provision.

As the war continues, our Active and Reserve serving members face challenges. The alliance is confident in your ongoing support and the alliance would like to thank the subcommittee for its ongoing efforts and also for this opportunity to testify.

Thank you very much.

Senator INOUE. Captain, I can assure you that we'll do our absolute best to live up to our promises to our veterans.

Captain HANSON. Thank you, sir.

Senator INOUE. Thank you very much.

[The statement follows:]

PREPARED STATEMENT OF CAPTAIN MARSHALL HANSON

NATIONAL MILITARY AND VETERANS ALLIANCE

The Alliance was founded in 1996 as an umbrella organization to be utilized by the various military and veteran associations as a means to work together towards their common goals. The Alliance member organizations are:

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|--|--|
| American Logistics Association         | Army and Navy Union                    |
| American Military Retirees Association | Catholic War Veterans                  |
| American Military Society              | Gold Star Wives of America, Inc.       |
| American Retirees Association          | Japanese American Veterans Association |
| American World War II Orphans          | Korean War Veterans Foundation         |
| Network                                | Legion of Valor                        |
| AMVETS (American Veterans)             | Military Order of the Purple Heart     |
| Armed Forces Marketing Council         | Military Order of the World Wars       |

|  |                                       |
|--|---------------------------------------|
| Military Order of Foreign Wars         | The Retired Enlisted Association      |
| National Assoc. for Uniformed Services | TREA Senior Citizens League           |
| National Gulf War Resource Center      | Tragedy Assist. Program for Survivors |
| Naval Enlisted Reserve Association     | Uniformed Services Disabled Retirees  |
| Naval Reserve Association              | Veterans of Foreign Wars              |
| Paralyzed Veterans of America          | Vietnam Veterans of America           |
| Reserve Enlisted Association           | Women in Search of Equity             |
| Reserve Officers Association           |                                       |
| Society of Military Widows             |                                       |

These organizations have over three and a half million members who are serving our Nation or who have done so in the past, and their families.

#### INTRODUCTION

Mr. Chairman and distinguished members of the committee, the National Military and Veterans Alliance (NMVA) is very grateful for the invitation to testify before you about our views and suggestions concerning defense funding issues. The overall goal of the National Military and Veterans Alliance is a strong National Defense. In light of this overall objective, we would request that the committee examine the following proposals.

While the NMVA highlights the funding of benefits, we do this because it supports National Defense. A phrase often quoted "The willingness with which our young people are likely to serve in any war, no matter how justified, shall be directly proportional as to how they perceive the Veterans of earlier wars were treated and appreciated by their country," has been frequently attributed to GEN George Washington. Yet today, many of the programs that have been viewed as being veteran or retiree are viable programs for the young serving members of this war. This phrase can now read, "The willingness with which our young people, today, are willing to serve in this war is how they perceive the veterans of this war are being treated."

This has been brought to the forefront by how quickly an issue such as the treatment of wounded warriors suffering from Traumatic Brain Injury or Post Traumatic stress Disorder has been brought to the national attention.

In a long war, recruiting and retention becomes paramount. The National Military and Veterans Alliance, through this testimony, hopes to address funding issues that apply to the veterans of various generations.

#### FUNDING NATIONAL DEFENSE

NMVA is pleased to observe that the Congress continues to discuss how much should be spent on National Defense. The Alliance urges the President and Congress to increase defense spending to 5 percent of Gross Domestic Product during times of war to cover procurement and prevent unnecessary personnel end strength cuts.

#### PAY AND COMPENSATION

Our serving members are patriots willing to accept peril and sacrifice to defend the values of this country. All they ask for is fair recompense for their actions. At a time of war, compensation rarely offsets the risks.

The NMVA requests funding so that the annual enlisted military pay raise exceeds the Employment Cost Index (ECI) by at least half of a percent.

Further, we hope that this committee continues to support targeted pay raises for those mid-grade members who have increased responsibility in relation to the overall service mission. Pay raises need to be sufficient to close the civilian-military pay gap.

NMVA would apply the same allowance standards to both Active and Reserve when it comes to Aviation Career Incentive Pay, Career Enlisted Flyers Incentive Pay, Diving Special Duty Pay, Hazardous Duty Incentive Pay, and other special pays.

The Service chiefs have admitted one of the biggest retention challenges is to recruit and retain medical professionals. NMVA urges the inclusion of bonus/cash payments (Incentive Specialty pay IPS) into the calculations of Retirement Pay for military health care providers. NMVA has received feedback that this would be incentive to many medical professionals to stay in longer.

*G-R Bonuses.*—Guard and Reserve component members may be eligible for one of three bonuses, Prior Enlistment Bonus, Re-enlistment Bonus, and Reserve Affiliation Bonuses for Prior Service Personnel. These bonuses are used to keep men and woman in mission critical military occupational specialties (MOS) that are experi-

encing falling numbers or are difficult to fill. During their testimony before this committee the Reserve Chiefs addressed the positive impact that bonuses have upon retention. This point cannot be understated. The operation tempo, financial stress, and civilian competition for jobs make bonuses a necessary tool for the DOD to fill essential positions. The NMVA supports expanding and funding bonuses to the Federal Reserve Components.

*Reserve/Guard Funding.*—NMVA is concerned about ongoing DOD initiatives to end “two days pay for one days work,” and replace it with a plan to provide one-thirtieth of a month’s pay model, which would include both pay and allowances. Even with allowances, pay would be less than the current system. When concerns were addressed about this proposal, a retention bonus was the suggested solution to keep pay at the current levels. Allowances differ between individuals and can be affected by commute distances and even ZIP codes. Certain allowances that are unlikely to be paid uniformly include geographic differences, housing variables, tuition assistance, travel, and adjustments to compensate for missing health care.

The NMVA strongly recommends that the reserve pay system “two days pay for one days work,” be funded and retained, as is.

#### EDUCATIONAL ISSUES

##### *MGIB–SR Enhancements*

Practically all active duty and Selected Reserve enlisted accessions have a high school diploma or equivalent. A college degree is the basic prerequisite for service as a commissioned officer, and is now expected of most enlisted as they advance beyond E–6.

Officers to promote above O–4 are expected to have a post-graduate degree. The ever-growing complexity of weapons systems and support equipment requires a force with far higher education and aptitude than in previous years.

Both political parties are looking at ways of enhancing the GI bill. There are suggested features in legislation be suggested by both sides. At a minimum, the GI bill needs to be viewed as more than a recruiting and retention incentive. Education is a means to help reintegrate our returning veterans into society. A recent survey by military.com, of returning military veterans, found that 81 percent didn’t feel fully prepared to enter the work force, and 76 percent of these veterans said they were unable translate their military skills into civilian proficiencies.

Transferability of educational benefits to spouses and children are another key aspect that should be included in a G.I. Bill enhancement. In addition, for those with existing degrees and outstanding debts, the G.I. Bill stipend, should be allowed to pay-off outstanding student loans.

No enhancement can be accomplished without funding. This should be viewed as an investment rather than an expense. The original G.I. bill provided years of economic stimulus, returning \$7 for every \$1 invested in veterans.

The National Military and Veterans Alliance asks this subcommittee to support funding for suggested G.I. Bill funding.

The Montgomery G.I. Bill for Selective Reserves (MGIB–SR) will continue to be an important recruiting and retention tool. With massive troop rotations the Reserve forces can expect to have retention shortfalls, unless the Government provides enhances these incentives as well.

The problem with the current MGIB–SR is that the Selected Reserve MGIB has failed to maintain a creditable rate of benefits with those authorized in Title 38, Chapter 30. MGIB–SR has not even been increased by cost-of-living increases since 1985. In that year MGIB rates were established at 47 percent of active duty benefits. The MGIB–SR rate is 28 percent of the Chapter 30 benefits. Overall the allowance has inched up by only 7 percent since its inception, as the cost of education has climbed significantly.

The NMVA requests appropriations funding to raise the MGIB–SR and lock the rate at 50 percent of the active duty benefit. Cost: \$25 million/first year, \$1.4 billion over 10.

#### FORCE POLICY AND STRUCTURE

##### *War Funding*

The Alliance thanks the committee for the war funding amended to the Supplemental Appropriations Act 2008, H.R. 2642. While the debate on Iraqi policy is important, the Alliance would like to stress that resulting legislation should be independent and not included as language in any Defense Appropriation bill. Supporting the troops includes providing funding for their missions.

NMVA supports the actions by this subcommittee to put dollars for the war back into the Emergency Supplemental.

*End Strength*

The NMVA concurs with funding increases in support of the end strength boosts of the Active Duty Component of the Army and Marine Corps that have been recommended by Defense Authorizers. New recruits need to be found and trained now to start the process so that American taxpayer can get a return on this investment. Such growth is not instantaneously productive. Yet, the Alliance is concerned with continued end strength cuts to the other services: the Air Force and the Navy. Trying to pay the bills by premature manpower reductions may have consequences.

*Manning Cut Moratorium*

The NMVA would also like to put a freeze on reductions to the Guard and Reserve manning levels. A moratorium on reductions to End Strength is needed until the impact of an operational reserve structure is understood. Many force planners call for continuation of a strategic reserve as well. NMVA urges this subcommittee to at least fund to last year's levels.

## SURVIVOR BENEFIT PLAN (SBP) AND SURVIVOR IMPROVEMENTS

The Alliance wishes to deeply thank this subcommittee for your funding of improvements in the myriad of survivor programs.

However, there is still an issue remaining to deal with: Providing funds to end the SBP/DIC offset.

SBP/DIC Offset affects several groups. The first is the family of a retired member of the uniformed services. At this time the SBP annuity the servicemember has paid for is offset dollar-for-dollar for the DIC survivor benefits paid through the VA. This puts a disabled retiree in a very unfortunate position. If the servicemember is leaving the service disabled it is only wise to enroll in the Survivor Benefit Plan (perhaps being uninsurable in the private sector). If death is service connected then the survivor loses dollar-for-dollar the compensation received under DIC.

SBP is a purchased annuity, available as an elected earned employee benefit. The program provides a guaranteed income payable to survivors of retired military upon the member's death. Dependency and Indemnity Compensation (DIC) is an indemnity program to compensate a family for the loss of a loved one due to a service-connected death. They are different programs created to fulfill different purposes and needs.

A second group affected by this dollar-for-dollar offset is made up of families whose servicemember died on active duty. Recently, Congress created active duty SBP. These servicemembers never had the chance to pay into the SBP program. But clearly Congress intended to give these families a benefit. With the present offset in place the vast majority of families receive no benefit from this new program, because the vast numbers of our losses are young men or women in the lower paying ranks. SBP is completely offset by DIC payments.

Other affected families are servicemembers who have already served a substantial time in the military. Their surviving spouse is left in a worse financial position than a younger widow. The older widows will normally not be receiving benefits for her children from either Social Security or the VA and will normally have more substantial financial obligations (mortgages, etc). This spouse is very dependent on the SBP and DIC payments and should be able to receive both.

The NMVA respectfully requests this subcommittee fund the SBP/DIC offset.

## CURRENT AND FUTURE ISSUES FACING UNIFORMED SERVICES HEALTH CARE

The National Military and Veterans Alliance must once again thank this committee for the great strides that have been made over the last few years to improve the health care provided to the active duty members, their families, survivors, and Medicare eligible retirees of all the Uniformed Services. The improvements have been historic. TRICARE for Life and the Senior Pharmacy Program have enormously improved the life and health of Medicare Eligible Military Retirees their families and survivors. It has been a very successful few years. Yet there are still many serious problems to be addressed.

*Wounded Warrior programs*

As the committee is aware, Congress has held a number of hearings about the controversy at Walter Reed Army Medical Center. The NMVA will not revisit the specifics. With the Independent Review Group and the Dole/Shalala Commission recommending the closure of Walter Reed, an emphasis needs to be placed on the urgency of upgrades at Bethesda, and the new military treatment hospital at Fort Belvoir. NMVA hopes that this committee will financially support the studies that measure the adequacy of this plan.

The Alliance supports continued funding for the wounded warriors, including monies for research and treatment on Traumatic Brain Injuries (TBI), Post Traumatic Stress Disorder, the blinded, and our amputees. The Nation owes these heroes an everlasting gratitude and recompense that extends beyond their time in the military. These casualties only bring a heightened need for a DOD/VA electronic health record accord to permit a seamless transition from being in the military to being a civilian.

*Full Funding for the Defense Health Program*

The Alliance applauds the subcommittee's role in providing adequate funding for the Defense Health Program (DHP) in the past several budget cycles. As the cost of health care has risen throughout the country, you have provided adequate increases to the DHP to keep pace with these increases.

Full funding for the defense health program is a top priority for the NMVA. With the additional costs that have come with the deployments to Southwest Asia, Afghanistan and Iraq, we must all stay vigilant against future budgetary shortfalls that would damage the quality and availability of health care.

With the authorizers having postponed the Department of Defense's suggested fee increases, the Alliance is concerned that the budget saving have already been adjusted out of the President's proposed budget. NMVA is confident that this subcommittee will continue to fund the DHP so that there will be no budget shortfalls.

The National Military and Veterans Alliance urges the subcommittee to continue to ensure full funding for the Defense Health Program including the full costs of all new programs.

*TRICARE Pharmacy Programs*

NMVA supports the continued expansion of use of the TRICARE Mail Order pharmacy.

To truly motivate beneficiaries to a shift from retail to mail order adjustments need to be made to both generic and brand name drugs co-payments. NMVA recommends that both generic and brand name mail order prescriptions be reduced to zero co-payments to align with military clinics.

Ideally, the NMVA would like to see the reduction in mail order co-payments without an increase in co-payments for Retail Pharmacy.

The National Military and Veterans Alliance urges the subcommittee to adequately fund adjustments to co-payments in support of recommendations from Defense Authorizers.

*TRICARE Standard Improvements*

TRICARE Standard grows in importance with every year that the global war on terrorism continues. A growing population of mobilized and demobilized Reservists depends upon TRICARE Standard. A growing number of younger retirees are more mobile than those of the past, and likely to live outside the TRICARE Prime network.

An ongoing challenge for TRICARE Standard involves creating initiatives to convince health care providers to accept TRICARE Standard patients. Health care providers are dissatisfied with TRICARE reimbursement rates that are tied to Medicare reimbursement levels. The Alliance is pleased by Congress' plan to prevent near-term reductions in Medicare reimbursement rates, which will help the TRICARE Program.

Yet this is not enough. TRICARE Standard is hobbled with a reputation and history of low and slow payments as well as what still seems like complicated procedures and administrative forms that make it harder and harder for beneficiaries to find health care providers that will accept TRICARE. Any improvements in the rates paid for Medicare/TRICARE should be a great help in this area. Additionally, any further steps to simplify the administrative burdens and complications for health care providers for TRICARE beneficiaries hopefully will increase the number of available providers.

The Alliance asks the Defense Subcommittee to include language encouraging continued increases in TRICARE/Medicare reimbursement rates.

*TRICARE Retiree Dental Plan (TRDP)*

The focus of the TRICARE Retiree Dental Plan (TRDP) is to maintain the dental health of Uniformed Services retirees and their family members. Several years ago we saw the need to modify the TRDP legislation to allow the Department of Defense to include some dental procedures that had previously not been covered by the program to achieve equity with the active duty plan.

With ever increasing premium costs, NMVA feels that the Department should assist retirees in maintaining their dental health by providing a Government cost-

share for the retiree dental plan. With many retirees and their families on a fixed income, an effort should be made to help ease the financial burden on this population and promote a seamless transition from the active duty dental plan to the retiree dental plan in cost structure. Additionally, we hope the Congress will enlarge the retiree dental plan to include retired beneficiaries who live overseas.

The NMVA would appreciate this committee's consideration of both proposals.

#### NATIONAL GUARD AND RESERVE HEALTH CARE

##### *Funding Improved TRICARE Reserve Select*

It is being suggested that the TRICARE Reserve Select healthcare plan be changed to allow the majority of Selected Reserve participate at a 28 percent co-payment level with the balance of the premium being paid by the Department of Defense.

NMVA asks the committee to continue to support funding of the TRICARE Reserve Select program.

##### *Mobilized Health Care—Dental Readiness of Reservists*

The number one problem faced by Reservists being recalled has been dental readiness. A model for healthcare would be the TRICARE Dental Program, which offers subsidized dental coverage for Selected Reservists and self-insurance for SELRES families.

In an ideal world this would be universal dental coverage. Reality is that the services are facing challenges. Premium increases to the individual Reservist have caused some junior members to forgo coverage. Dental readiness has dropped. The Military services are trying to determine how best to motivate their Reserve Component members but feel compromised by mandating a premium program if Reservists must pay a portion of it.

Services have been authorized to provide dental treatment as well as examination, but without funding to support this service. By the time many Guard and Reserve are mobilized, their schedule is so short fused that the processing dentists don't have time for extensive repair.

The National Military Veterans Alliance supports funding for utilization of Guard and Reserve Dentists to examine and treat Guardsmen and Reservists who have substandard dental hygiene. The TRICARE Dental Program should be continued, because the Alliance believes it has pulled up overall Dental Readiness.

##### *Demobilized Dental Care*

Under the revised transitional healthcare benefit plan, Guard and Reserve who were ordered to active duty for more than 30 days in support of a contingency and have 180 days of transition health care following their period of active service.

Similar coverage is not provided for dental restoration. Dental hygiene is not a priority on the battlefield, and many Reserve and Guard are being discharged with dental readiness levels much lower than when they were first recalled. At a minimum, DOD must restore the dental state to an acceptable level that would be ready for mobilization, or provide some subsidize for 180 days to permit restoration from a civilian source.

Current policy is a 30-day window with dental care being space available at a priority less than active duty families.

NMVA asks the committee for funding to support a DOD's demobilization dental care program. Additional funds should be appropriated to cover the cost of TRICARE Dental premiums and co-payment for the 6 months following demobilization if DOD is unable to do the restoration.

#### OTHER GUARD AND RESERVE ISSUES

Ensure adequate funding to equip Guard and Reserve at a level that allows them to carry out their mission. Do not turn these crucial assets over to the active duty force. In the same vein we ask that the Congress ensure adequate funding that allows a Guardsman/Reservist to complete 48 drills, and 15 annual training days per member, per year. DOD has been tempted to expend some of these funds on active duty support rather than personnel readiness.

The NMVA strongly recommends that Reserve Program funding remain at sufficient levels to adequately train, equip, and support the robust reserve force that has been so critical and successful during our Nation's recent major conflicts.

While Defense Authorizers provided an early retirement benefit in fiscal year 2008, only those who have served in support of a contingency operation since 28 January 2008 are eligible, nearly 6 years and 4 months after Guard and Reserve members first were mobilized to support the active duty force in this conflict. Over

600,000 Reservists have served during this period and were excluded from eligibility. The explanation given was lack of mandatory funding offset. To exclude a portion of our warriors is akin to offering the original GI Bill to those who served after 1944.

NMVA hopes that this subcommittee can help identify excess funding that would permit an expanded early retirement benefit for those who have served.

#### ARMED FORCES RETIREMENT HOMES

Following Hurricane Katrina, Navy/Marine Corps residents from AFRJ-Gulfport were evacuated from the hurricane-devastated campus and were moved to the AFRH-Washington, DC, campus. Dormitories were reopened that are in need of refurbishing.

NMVA urges this subcommittee to continue funding upgrades at the Washington, DC, facility, and to continue funding to rebuild the Gulfport facility.

#### CONCLUSION

Mr. Chairman and distinguished members of the subcommittee the Alliance again wishes to emphasize that we are grateful for and delighted with the large steps forward that the Congress has affected the last few years. We are aware of the continuing concern all of the subcommittee's members have shown for the health and welfare of our service personnel and their families. Therefore, we hope that this subcommittee can further advance these suggestions in this committee or in other positions that the members hold. We are very grateful for the opportunity to submit these issues of crucial concern to our collective memberships. Thank you.

Senator INOUE. Our next panel is made up of: Lieutenant General McCarthy, Dr. Suchy, Dr. Boehm-Davis, and Ms. Hinestrosa.

Our next witness is the Executive Director of the Reserve Officers Association of the United States, Lieutenant General Dennis M. McCarthy, United States Marine Corps, Retired. General McCarthy.

#### **STATEMENT OF LIEUTENANT GENERAL DENNIS M. McCARTHY, USMC (RETIRED), EXECUTIVE DIRECTOR, RESERVE OFFICERS ASSOCIATION OF THE UNITED STATES**

General McCARTHY. Mr. Chairman, Senator Stevens, members of the subcommittee: thank you for the opportunity to speak once again on the issue of funding for our Nation's Reserve components. As I said many times before, in an all-volunteer era the United States cannot conduct extended military operations without augmenting and reinforcing the Active component. That reinforcement must come from one of two sources, either a draft or a viable and capable National Guard and Reserve.

The 700,000 men and women of our Nation's Reserve components have provided that reinforcing force since 2001. They have literally saved the country from a draft. Every indication I see and hear is that they can and will continue to do so if they're properly trained, equipped, and supported. Congress has made great strides in increasing the funding for these important needs. But realism demands that we recognize that the armed services frequently push their Reserve components to a lower priority at times when funding is tight.

The Reserve Officers Association (ROA)—and I've been authorized to speak on this subject for the Reserve Enlisted Association as well—urges this subcommittee to specifically identify funding for both the National Guard and the Federal Reserve components, ensuring that those funds must be spent to train and equip the Reserve components and to support their families' unique needs.

Both the Congress and the DOD have been given an excellent blueprint for enhancing the Reserve components of the 21st century. The report of the Commission on National Guard and Reserves will guide policymakers and legislators to many of the right answers. I don't personally agree with every word in the document, but ROA believes that it has much value and that you should give each of its 95 recommendations serious consideration.

At the end of the day, I believe the Nation wants an all-volunteer force and that it doesn't want a draft. The only way to achieve both of these objectives is to ensure that the Reserve and the National Guard continue to be filled with the same type of great Americans who serve today. To do that, you must ensure that they are fully trained, properly equipped, and that their families are adequately supported. And you must ensure that your appropriation goes where you intend it to go.

These young men and women, Mr. Chairman, will not come back from combat to sit around empty training centers because there's no equipment for them to train on. They don't come back for a rest, they don't stay in the Reserve components to rest. They come back to continue to train and to prepare for whatever the next mission is. The equipment simply must be present both in the theater, of course, but the equipment must also be present in the training centers, so that when they come back they can retrain, refit, and get ready for whatever else the Nation calls upon them to do.

Mr. Chairman, again I thank you for the opportunity to testify and for the support that you have consistently given to our Reserve components.

[The statement follows:]

PREPARED STATEMENT OF LIEUTENANT GENERAL DENNIS M. MCCARTHY

The Reserve Officers Association of the United States (ROA) is a professional association of commissioned and warrant officers of our Nation's seven uniformed services and their spouses. ROA was founded in 1922 during the drawdown years following the end of World War I. It was formed as a permanent institution dedicated to National Defense, with a goal to teach America about the dangers of unpreparedness. When chartered by Congress in 1950, the act established the objective of ROA to: ". . . support and promote the development and execution of a military policy for the United States that will provide adequate National Security." The mission of ROA is to advocate strong Reserve Components and national security, and to support Reserve officers in their military and civilian lives.

The Association's 65,000 members include Reserve and Guard soldiers, sailors, marines, airmen, and Coast Guardsmen who frequently serve on Active Duty to meet critical needs of the uniformed services and their families. ROA's membership also includes officers from the U.S. Public Health Service and the National Oceanic and Atmospheric Administration who often are first responders during national disasters and help prepare for homeland security. ROA is represented in each State with 55 departments plus departments in Latin America, the District of Columbia, Europe, the Far East, and Puerto Rico. Each department has several chapters throughout the State. ROA has more than 450 chapters worldwide.

ROA is a member of The Military Coalition where it co-chairs the Tax and Social Security Committee. ROA is also a member of the National Military/Veterans Alliance. Overall, ROA works with 75 military, veterans, and family support organizations.

ROA PRIORITIES

The Reserve Officers Association CY 2008 Legislative Priorities are:

- Assure that the Reserve and National Guard continue in a key national defense role, both at home and abroad.
- Reset the whole force to include fully funding equipment and training for the National Guard and Reserves.

- Providing adequate resources and authorities to support the current recruiting and retention requirements of the Reserves and National Guard.
- Support citizen warriors, families, and survivors.

*Issues to help fund, equip, and train*

- Advocate for adequate funding to maintain National Defense during the GWOT.
- Regenerate the Reserve Components (RC) with field compatible equipment.
- Fence RC dollars for appropriated Reserve equipment.
- Fully fund Military Pay Appropriation to guarantee a minimum of 48 drills and 2 weeks training.
- Sustain authorization and appropriation to National Guard and Reserve Equipment Account (NGREA) to permit flexibility for Reserve Chiefs in support of mission and readiness needs.
- Optimize funding for additional training, preparation, and operational support.
- Keep Active and Reserve personnel and Operation and Maintenance funding separate.
- Equip Reserve Component members with equivalent personnel protection as Active Duty.

*Issues to assist recruiting and retention*

- Support incentives for affiliation, re-enlistment, retention, and continuation in the RC.

*Pay and Compensation*

- Provide differential pay for Federal employees.
- Offer Professional pay for RC medical professionals.
- Eliminate the one-thirtieth rule for Aviation Career Incentive Pay, Career Enlisted Flyers Incentive Pay, Diving Special Duty Pay, and Hazardous Duty Incentive Pay.

*Education*

- Introduce an enhanced GI Bill for the 21st century.

*Health Care*

- Provide Medical and Dental Readiness through subsidized preventive health care.
- Extend military coverage for restorative dental care for up to 180 days following deployment.

*Spouse Support*

- Repeal the SBP-Dependency Indemnity Clause (DIC) offset.

NATIONAL GUARD AND RESERVE EQUIPMENT AND PERSONNEL ACCOUNTS

It is important to maintain separate equipment and personnel accounts to allow Reserve Component Chiefs the ability to direct dollars to needs.

*Key Issues facing the Armed Forces concerning equipment.*

- Developing the best equipment for troops fighting the global war on terrorism.
- Procuring new equipment for all U.S. Forces.
- Maintaining or upgrading the equipment already in the inventory.
- Replacing the equipment deployed from the homeland to the war.
- Making sure new and renewed equipment gets into the right hands, including the Reserve Component.

*Reserve Component Equipping Sources*

- Procurement.
- Cascading of equipment from Active Component.
- Cross-leveling.
- Recapitalization and overhaul of legacy (old) equipment.
- Congressional adds.
- National Guard and Reserve Appropriations (NGREA)
- Supplemental appropriation.

CONTINUED RESETTING OF THE FORCE

Resetting or reconstitution of the force is the process to restore people, aircraft and equipment to a high state of readiness following a period of higher-than-normal, or surge, operations.

Some equipment goes through recapitalization: stripping down and rebuilding equipment completely. Recapitalization is one of the fastest ways to get equipment back to units for use, and on some equipment, such as trucks, recapitalization costs

only 75 percent of replacement costs. A second option is to upgrade equipment, such as adding armor. A third option is to simply extend the equipment's service life through a maintenance program.

Operations Iraqi Freedom and Enduring Freedom are consuming the Reserve Component force's equipment. Wear and tear is at a rate many times higher than planned. Battle damage expends additional resources. Many equipment items used in Southwest Asia are not receiving depot-level repair because equipment items are being retained in theater.

In addition to dollars already spent to maintain this well-worn equipment for ongoing operations, the Armed Forces will likely incur large expenditures in the future to repair or replace (reset) a significant amount of equipment when hostilities cease. The services are currently funding their reset programs in large part through the use of supplemental appropriations

#### PERSONNEL TRAINING

When Reserve Component personnel participate in an operation they are focused on the needs of the particular mission, which may not include everything required to maintain qualification status in their military occupation specialty (MOS, AFSC, NEC).

- There are many different aspects of training that are affected.
  - Skills that must be refreshed for specialty.
  - Training needed for upgrade but delayed by mission.
  - Ancillary training missed.
  - Professional military education needed to stay competitive.
  - Professional continuing education requirements for single-managed career fields and other certified or licensed specialties required annually.
  - Graduate education in business related areas to address force transformation and induce officer retention.
- Loss, training a replacement: There are particular challenges that occur to the force when a loss occurs during a mobilization or operation and depending on the specialty this can be a particularly critical requirement that must be met.
  - Recruiting may require particular attention to enticing certain specialties or skills to fill critical billets.
  - Minimum levels of training (84 days basic, plus specialty training).
  - Retraining may be required due to force leveling as emphasis is shifted within the service to meet emerging requirements.

#### END STRENGTH

The ROA would like to put a freeze on reductions to the Guard and Reserve manning levels. ROA urges this subcommittee to fund to at least last year's levels.

- Army National Guard of the United States, 352,600.
- Army Reserve, 206,000.
- Navy Reserve, 67,800.
- Marine Corps Reserve, 39,600.
- Air National Guard of the United States, 106,700.
- Air Force Reserve, 67,500.
- Coast Guard Reserve, 10,000

In a time of war and the highest OPTEMPO in recent history, it is wrong to make cuts to the end strength of the Reserve Components. We need to pause to permit force planning and strategy to catch-up with budget reductions.

#### READINESS

Readiness is a product of many factors, including the quality of officers and enlisted, full staffing, extensive training and exercises, well-maintained weapons and authorized equipment, efficient procedures, and the capacity to operate at a fast tempo. The pace of wartime operations has a major impact on service members.

The Defense Department does not attempt to keep all active units at the C-1 level. The risk is without resetting the force returning Active and Reserve units will be C-4 or lower because of missing equipment, and without authorized equipment their training levels will deteriorate.

#### NONFUNDED ARMY RESERVE COMPONENT EQUIPMENT

The Army National Guard and Army Reserve have made significant contributions to ongoing military operations, but equipment shortages and personnel challenges have increased and, if left unattended, may hamper the reserves' preparedness for future overseas and domestic missions.

To provide deployable units, the Army National Guard and the Army Reserve have transferred large quantities of personnel and equipment to deploying units, an approach that has resulted in growing shortages in nondeployed units. Also, reserve units have left quantities of equipment overseas and DOD has not yet developed plans to replace it.

*Army Reserve Unfunded Requirements*

Approximately 4 percent of USAR's equipment has been left in theater, representing one-third of USAR Heavy Equipment Transporters, 25 percent of USAR medium non-tactical tractors, and 15 percent of USAR HMMWVs.

Currently, Army Reserve units average a 68 percent of required equipment on hand. To meet pre-mobilization training objectives, the Army Reserve was forced to expend limited resources to move 6,700 training items from units to training locations in fiscal year 2007, with the expectation to ship another 7,000 pieces of equipment to pre-mobilizations training sites in fiscal year 2008.

To address all Army Reserve shortfalls, \$6.8 billion is needed in NGREA and other accounts for USAR designated equipment.

*Army Reserve Modernization Vehicle Requirements—\$1.75 billion*

Light-medium trucks (LMTV) 2.5 Ton Truck; Medium Tactical Vehicle (MTV) 5.0 Ton Truck; Truck Cargo PLS 10x10 M1075; PLS Trailer; High Mobility Multi-Purpose Wheeled Vehicle (HMMWV); High Mobility Multi-Purpose Wheeled Vehicle, up-armored; and Truck Tractors Line Haul (M915A3).

*Recruiting Bonuses—\$321 million*

These bonuses are critical to exceed an end strength of 205,000 soldiers. For 205,000 mission ready soldiers, additional soldiers are needed to be in the training conduit. To fully fund just the Army Recruiter Assistance Program (ARAP) \$28.5 million is needed.

*Professional Military Education—\$195 million*

To support higher occupational skill qualification rates.

*Special Pre-mobilization training days—\$162 million*

In order to integrate into a fully integrated operational force, \$80 million for additional training days are needed for 20,000 soldiers, and another \$82 million to re-source up to 17 days of pre-mobilization training.

*Army Reserve Force Structure rebalancing—\$66 million*

Increased training events and equipment to replace less-equipment intensive units.

*Construction and modernization of Army Reserve Centers—\$281.7 million*

To build five Army Reserve centers and modernize other Reserve Centers.

*Reduction in Facility Maintenance backlog—\$256 million*

*Army National Guard Top Ten Equipment Requirements*

Priority 1 equipment requirements by the Army National Guard totals \$2 billion.

*Joint Forces HQ Command and Control—\$168.4 million*

Man-portable Communications Support Kits; Joint Incident Site Communications and Interim Satcom Incident Site. (JISC & ISISCS); Wideband Imagery Satellite Terminals; Army Battle Command Systems; Warfighters Information Network Tactical Systems.

*Civil Support Teams (Force Protection)—\$88 million*

NBC Reconnaissance Vehicle; Portable Chemical Decontamination System; Portable Riot Control Dispenser.

*Maintenance—\$48.5 million*

Electrical and Electronic Properties Measuring and Testing instruments.

*Aviation—\$100.5 million*

UH-60A to UH-60L Upgrade Kits; LUH-72A S&S Mission Equipment Package.

*Engineers—\$129.2 million*

Horizontal Construction/Heavy Equipment; Route and Area Clearance Equipment.

*Medical—\$8.75 million*

Expeditionary Medical Vehicles.

*Communication—\$145.3 million*

PHOENIX Satellite Upgrade; Radios.

*Transportation—\$1.15 million*

FMTV/LMTV Cargo Trucks; HMMWV; HTV 8x8 Heavy Trucks; Tactical Trailers.

*Security—\$68.2 million*

Night Vision Goggles; Illuminator, Infrared AN/PEC-15; Commander Vehicle CVICV.

*Logistics Equipment—\$93.77 million*

In-transit Asset Visibility System; Field Feeding Systems; Generator Sets; Tactical Water and Water Purification Systems.

#### AIR FORCE RESERVE COMPONENT EQUIPMENT PRIORITIES

ROA continues to support military aircraft Multi-Year Procurement (MYP) for more C-17s and more C-130Js for USAF.

#### *Air Force Reserve Unfunded Requirements*

The Air Force Reserve (AFR) mission is to be an integrated member of the Total Air Force to support mission requirements of the joint warfighter. To achieve interoperability in the future, the Air Force Reserve top ten priorities for "Other Equipment" are:

*C-40 D multi-role Airlift(3).*—To replace C-9 C's.

*Aircraft Infra-Red Counter Measures (6).*—Installs LAIRCM Group A and B kits on (6) C-130 H2's and procures all associated spares and support equipment.

*Airlift Defensive Systems (16).*—Install ADS systems onto (16) AFRC C-5As at Lackland Air Force Base against IR missile threats.

*ARC-210 Radio (61).*—Procure AN/ARC-210 Group A and B multi-band, jam resistant beyond line of sight radios for (61) AFRC C/HC-130 aircraft to replace VHF radio.

*Infrared Missile Warning System (27).*—Modify (27) A-10s with MWS; integrates missile warning into the ALQ-213 Counter Measures Set; allows faster, automatic responses.

*APN-241 Radar (17).*—Modify (17) remaining C-130H2 AC, includes group A, B, installs, spares, support equipment, and sustainment through the FYDP.

*Infra-Red Counter Measures (42).*—Procure and install (42) LAIRCM lite systems on AFRC C-5s. Protects high value national assets against advanced IR missile threats.

*Missile Warning System (MWS).*—Upgrade/replacement—Improve and integrate the existing Electronic Attack (EA) for A-10 and F-16 and Electronic Protection (EP) for A-10, F-16, and HC-130.

*SAFIRE Lookout Troop Window and Seat Modifications. (61).*—A larger window in the C-130 paratroop doors will increase the field of view for the scanner. A collocated seat will help keep the scanner alert as crucial scanning duties are performed.

*C-5 Structural Repair.*—Stress corrosion cracking of C-5A Aft Crown Skins and Contour Box Beam Fittings requires fleet-wide replacement to avoid grounding and restriction of outsize cargo-capable to sustain strategic mobility assets.

#### *Air National Guard Top Ten Equipment Requirements*

Priority 1 equipment requirements by the Air National Guard total \$500 million.

*Joint Forces HQ Command and Control—\$27 million*

Cell Restoral; ANG Readiness center Crisis Action Team; Joint Incident Site Communications and Interim Satcom Incident Site. (JISC & ISISCS).

*Medical—\$33.9 million*

Expeditionary Medical System (EMEDS); Tamiflu.

*Communication—\$72.3 million*

Wireless Internet; 11xCell Phone Restoral; 11x JISC and ISISCS.

*Logistics Equipment—\$15.7 million*

Combat Readiness Training Center; HLS/HLD Mission Essential; Single Pallet Expeditionary Field (SPEK) Kitchen Phase IV; Disaster Response Bed down Kits.

*Transportation—\$52.1 million*

P-19, P-22, P-23 Firefighting Vehicles; Refueling Vehicles.

*Engineers—\$31.2 million*

Construction/Heavy Equipment—Loaders, Graders, Evacuators, Mixers, Backhoes; Explosive Ordnance Disposal (EOD) IED Equipment.

*Civil Support Teams (Force Protection)—\$21.4 million*

PJ/STs Medical Treatment Equipment; Hazardous Material Equipment; Fire Fighter Self Contained Breathing Apparatus; CBRNE Incident Response Equipment; Personnel Protective Equipment for First Responders to WMD.

*Maintenance—\$13.4 million*

Standard Asset Tracking System.

*Security—\$74.5 million*

Security Forces Body Armor (vests, helmets); Night Vision Goggles; Mobility Bag Upgrades; Weapons Upgrades (stocks, racks, rifles, storage cases).

*Aviation—\$158.5 million*

HH-60 Avionic Upgrades, Para-rescue Specialist upgrades, Special Tactics Survivability Upgrades and Modernization Suite; C-21 A Avionics upgrades; HC-130 Data Link; HC/MC-120 LAARS V-12; C-130 CDU, NVIS, radar, propulsion upgrades; RC-26 Avionics, BLOS, CNS/ATM upgrades.

## NAVY RESERVE UNFUNDED PRIORITIES

Active Reserve Integration (ARI) aligns Active and Reserve Component units to achieve unity of command. Navy Reservists are fully integrated into their AC supported commands. Little distinction is drawn between AC and RC equipment, but unique missions remain.

*C-40 A Combo cargo/passenger Airlift (4)—\$330 million*

The Navy requires a Navy Unique Fleet Essential Airlift Replacement Aircraft. This aircraft was designated as the C-40A to replace the aging C-9 fleet. The C-40A is able to carry 121 passengers or 40,000 pounds of cargo, compared with 90 passengers or 30,000 pounds for the C-9. In addition, the maximum range for the Clipper is approximately 1,500 miles more than the C-9.

*C-130J Aircraft (5)—\$320 million*

These Aircraft are needed to fill the shortfall in Navy Unique Fleet Essential Airlift (NUFEA). C-130 J's are flown by Navy Reserve crews for intra-theater support as tactical transport aircraft.

*P-3 Maritime Patrol Aircraft Fixes—\$312 million*

Due to the grounding of 39 airframes in December 2007, there is a shortage of maritime patrol and reconnaissance aircraft, which are flown in associate Active and Reserve crews. P-3 wing crack kits are still needed for fiscal year 2009.

*New Accession Training Bonuses—\$17 million*

This is the Navy Reserve's only non-prior service accession program. The request funds \$10 million for bonuses, and \$7 million to meet increase Reserve Component recruiting.

*DDG-1000 Training Facility, Norfolk—\$5 million*

A training facility is needed for both Active and Reserve augmentees to the fleet to prepare sailors for the next generation of destroyer.

## MARINE CORPS RESERVE UNFUNDED PRIORITIES

The Marine Corps Reserve faces two primary equipping challenges, supporting and sustaining its forward deployed forces in the Long War while simultaneous re-setting and modernizing the Force to prepare for future challenges. Only by equally equipping and maintaining both the Active and Reserve forces will an integrated Total Force be seamless.

*Training Allowance (T/A) Shortfalls—\$187.7 million*

Shortfalls consist of over 300 items needed for individual combat clothing and equipment, including protective vests, poncho, liner, gloves, cold weather clothing, environmental test sets, tool kits, tents, camouflage netting, communications systems, engineering equipment, combat and logistics vehicles and weapon systems.

*Brite Star FLIR (6)—\$7.2 million*

A cost-effective military qualified third-generation multi-sensor system that provides TV surveillance, a laser designator, and a laser range finder. These are needed to upgrade Reserve aircraft to match active duty configuration.

*Virtual Combat Convoy Trainer (1)—\$2.75 million*

A mobile self-contained convoy trainer simulates the space and physical constraints of the HMMWV. It incorporates small arms and crew-served weapons response training, mission rehearsal and coordination with other units. Can train up to 10 marines at a time and can be relocated for convoy training at various Reserve Training Centers.

*Deployable Virtual Training Environment—DVTE (12)—\$444,000*

Simulation technologies that will help prepare Reserve Marines for combat. It is made up of two components: the Combined Arms Network (CAN) and the Infantry Tool Kit (ITK), which contain several tactical simulations. Of 184 sites, there are 12 technological suites remaining to be purchased.

*Tactical Remote Sensor System—TRSS (3)—\$7.98 million*

This is a suite of sensors used by the Ground Sensors Platoons of the Intelligence Battalions to accomplish their mission to detect enemy movement on avenues of approach.

*MCB Twenty Nine Palms, Vehicle Maintenance Facility—\$10.9 million*

Addition to Marine Corp Reserve Training Center for vehicle storage and maintenance.

Ground equipment mission readiness rates for non-deployed Marine Forces Reserve Units average 88 percent based on Training Allowance. Reduced readiness results from shortages in home station Training Allowance. There is approximately a 10 percent readiness shortfall across the Force for most equipment.

## NATIONAL GUARD AND RESERVE EQUIPMENT APPROPRIATION

Prior to 1997, the National Guard and Reserve Equipment Appropriation was a critical resource to ensure adequate funding for new equipment for the Reserve Components. The much-needed items not funded by the respective service budget were frequently purchased through this appropriation. In some cases it was used to bring unit equipment readiness to a needed state for mobilization.

With the war, the Reserve and Guard are faced with mounting challenges on how to replace worn out equipment, equipment lost due to combat operations, legacy equipment that is becoming irrelevant or obsolete, and in general replacing that which is gone or aging through normal wear and tear. Funding levels, rising costs, lack of replacement parts for older equipment, etc. has made it difficult for the Reserve Components to maintain their aging equipment, not to mention modernizing and recapitalizing to support a viable legacy force. The Reserve Components would benefit greatly from a National Military Resource Strategy that includes a National Guard and Reserve Equipment Appropriation.

## ROA LAW CENTER

It was suggested that ROA could incorporate some Federal military offices, such as recruiting offices, into the newly remodeled ROA Minuteman Memorial building. ROA would be willing to work with this committee on any suggestion.

The Reserve Officers Association's recommendation would be to develop a Servicemembers Law Center, advising Active and Reserve servicemembers who have been subject to legal problems that occur during deployment.

A legal center would help encourage new members to join the Active, Guard, and Reserve components by providing a non-affiliation service to educate prior service about USERRA and Servicemember Civil Relief Act (SCRA) protections, and other legal issues. It would help retention as a member of the staff could work with Active and Reserve Component members to counsel those who are preparing to deploy, deployed or recently deployed members facing legal problems.

The Legal Center could advise, refer by providing names of attorneys who work related legal issues and amicus curiae briefs, encourage law firms to represent servicemembers, and educate and training lawyers, especially active and reserve judge advocates on servicemember protection cases. The center could also be a resource to Congress.

ROA would set-aside office spaces. ROA's Defense Education Fund would hire an initial staff of one lawyer, and one administrative law clerk to man the Servicemembers Law Center to counsel individuals and their legal representatives.

Anticipated startup cost, first year: \$750,000

#### CIOR/CIOMR FUNDING REQUEST

The Interallied Confederation of Reserve Officers (CIOR) was founded in 1948, and its affiliate organization, The Interallied Confederation of Medical Reserve Officers (CIOMR) was founded in 1947. The organization is a nonpolitical, independent confederation of national reserve associations of the signatory countries of the North Atlantic Treaty (NATO). Presently there are 16 member nation delegations representing over 800,000 reserve officers.

CIOR supports four programs to improve professional development and international understanding.

*Military Competition.*—The CIOR Military Competition is a strenuous 3-day contest on warfighting skills among Reserve Officers teams from member countries. These contests emphasize combined and joint military actions relevant to the multinational aspects of current and future Alliance operations.

*Language Academy.*—The two official languages of NATO are English and French. As a non-Government body, operating on a limited budget, it is not in a position to afford the expense of providing simultaneous translation services. The Academy offers intensive courses in English and French at proficiency levels 1, 2, and 3 as specified by NATO Military Agency for Standardization. The Language Academy affords national junior officer members the opportunity to become fluent in English as a second language.

*Partnership for Peace (PfP).*—Established by CIOR Executive Committee in 1994 with the focus of assisting NATO PfP nations with the development of reserve officer and enlisted organizations according to democratic principles. CIOR's PfP Committee, fully supports the development of civil-military relationships and respect for democratic ideals within PfP nations. CIOR PfP Committee also assists in the invitation process to participating countries in the Military Competition.

*Young Reserve Officers Workshop.*—The workshops are arranged annually by the NATO International Staff (IS). Selected issues are assigned to joint seminars through the CIOR Defense and Security Issues (SECDEF) Commission. Junior grade officers work in a joint seminar environment to analyze Reserve concerns relevant to NATO.

Dues do not cover the workshops and individual countries help fund the events. The Department of the Army as Executive Agent hasn't been funding these programs.

#### CONCLUSION

DOD is in the middle of executing a war and operations in Iraq are directly associated with this effort. The impact of the war is affecting the very nature of the Guard and Reserve, not just the execution of Roles and Missions. Without adequate funding, the Guard and Reserve may be viewed as a source to provide funds to the Active Component. It makes sense to fully fund the most cost efficient components of the Total Force, its Reserve Components.

At a time of war, we are expending the smallest percentage of GDP in history on National Defense. Funding now reflects close to 4 percent of GDP including supplemental dollars. ROA has a resolution urging that defense spending should be 5 percent to cover both the war and homeland security. While these are big dollars, the President and Congress must understand that this type of investment is what it will take to equip, train, and maintain an all-volunteer force for adequate National Security.

The Reserve Officers Association, again, would like to thank the sub-committee for the opportunity to present our testimony. We are looking forward to working with you, and supporting your efforts in any way that we can.

Senator INOUE. I thank you very much, General. How would you assess the morale of those men and women who have served abroad in Afghanistan and Iraq, members of the National Guard?

General MCCARTHY. Obviously, Mr. Chairman, I have less personal contact than I once did, so I get a lot of secondhand reports. But my sense is that it remains very, very good, and the fact that the services continue to make their recruiting goals and that they continue to retain high quality people I think is the very best indication.

But I'm concerned when I hear about units that come back and don't have the equipment and the things that they need. I think that's a morale destroyer and something that we need to be very watchful of.

Senator INOUE. I thank you very much, sir.

Our next witness is the Chairman of the Council on Government Affairs of the American Dental Association, Dr. Keith Suchy.

**STATEMENT OF KEITH W. SUCHY, D.D.S., CHAIRMAN, COUNCIL ON GOVERNMENT AFFAIRS, AMERICAN DENTAL ASSOCIATION**

Dr. SUCHY. Good morning, Mr. Chairman and Senator Stevens. My name is Dr. Keith Suchy as you stated, Mr. Chairman. I'm Chairman of the Council on Government Affairs for the American Dental Association (ADA). The ADA represents over 155,000 dentists, including almost 3,000 dentists in military service. We thank you this morning for the opportunity to testify regarding military dental research programs. It's a very small but valuable program that certainly needs the subcommittee's support to continue its work.

When we last testified in 2004 before this subcommittee, the goal of military dental research was simply to keep our deployed forces healthy. While oral health is still one of our priorities, the wars in Afghanistan and Iraq have dramatically changed our dental research agenda. It's been estimated that more than 40 percent of the injuries in these conflicts are to the head and face, and to date over 1,600 young men and women have been treated at Walter Reed and Bethesda alone for such injuries.

These wounds present a unique challenge to the dental researchers and to the dentists who are treating these patients. The importance of restoring facial features cannot be overstated. They really affect the person's ability to communicate and embody one's sense of self, and the loss of facial features brings with it very adverse psychological effects. Re-entering the workforce back home, for example, is all but impossible.

Restoring the facial tissue and structure is complicated and currently the maxillofacial prosthetic materials we use are not adequately mimicking natural tissues. Naval dentists at Great Lakes are working to develop better materials already to replace facial skin, ears, and noses, and the dentists at Walter Reed and Bethesda Medical Centers are currently fashioning skulls and facial bones using synthetic polymers and titanium mesh screens.

In addition, our naval dental researchers are working to establish a program where we would take predeployment 3D CT scans of every warfighter. This certainly would allow a template for the dentists that make cranial and facial structures and allow them to work from these CTs to get more exact replacements for the wounded. If this method proves successful, it has implications for military and non-military patients who have lost similar structures through cancers and traumas.

Preventing burns and injuries to the face and head has been a top priority of our Army dental researchers for many years, and as a result of previous congressional funding the Army has developed a lightweight face shield to reduce, if not prevent, such injuries. A final prototype is nearing completion and we look forward to the

field trials with it. We've included a picture of this shield in our submitted testimony, and we've also detailed several more research projects in our written statement along with specific funding requests.

Mr. Chairman, all of our requests have direct implications to combat medicine. All of them are targeted to improve the oral health of the deployed personnel, and they can really lead to enormous cost savings in the field.

In 2007, this program was funded for \$4 million and the current funding is at only \$1.2 million, a loss of 70 percent of our resources. This current funding level is woefully inadequate and we are therefore requesting \$6 million in the subcommittee's bill to restore and expedite this research. This small amount I understand brings with it the risk of being overlooked, but it translates into an immense difference for the wounded who can once again look into the mirror and see a familiar face.

Thank you, Mr. Chairman. This concludes my testimony and I certainly look forward to any questions.

Senator INOUE. Thank you very much, doctor. I can understand what you're trying to tell us.

Dr. SUCHY. Thank you, sir.

Senator INOUE. There's too many of them.

[The statement follows:]

PREPARED STATEMENT OF KEITH SUCHY, D.D.S.

Good morning, Mr. Chairman and members of the subcommittee. I am Dr. Keith Suchy, Chairman of the Council on Government Affairs of the American Dental Association (ADA), which represents over 155,000 dentists including almost 3,000 dentists in the military services. Thank you for the opportunity to testify to discuss appropriations for military dental research.

This is a small but very valuable program that needs the committee's support to continue its work.

Military dental research is not a new program. The Army began formal dental research with the establishment of the Army Dental School in 1922, which was a precursor to the establishment of the U.S. Army Institute of Dental Research in 1962.

The Navy Dental Research Facility at Great Lakes was established in 1947, which subsequently became the Naval Dental Research Institute in 1967 (now known as the Naval Institute for Dental and Biomedical Research). In 1997, both activities were co-located at Great Lakes as a result of the Base Realignment and Closure activities of 1991. These research programs share common Federal funding and a common goal to reduce the incidence and impact of dental diseases and maxillofacial injury on deployed troops. This is unique research that is not duplicated by the National Institutes of Health or in the civilian community.

In 2004, when we last testified before this committee, the goal of military dental research was to keep deployed troops orally healthy. While that is still a priority, the war in Afghanistan and Iraq has dramatically changed the research agenda.

It has been estimated that more than 40 percent of the injuries in this war are to the head and face. With over 90 percent of wounded warriors surviving their injuries, these wounds present a unique challenge to dental researchers and prosthodontists and oral surgeons who treat the patients.

Treatment for head and facial wounds, often resulting in traumatic brain injury, is usually a long process that requires significant care. The initial length of time from injury to restoration is between 5-6 months, and includes placement in ICU. A long-term stay at Walter Reed or Bethesda Naval hospital is often necessary to treat wound infections. Once the infection has cleared patients are sent to a rehabilitation facility, then back to the hospital for the implant, followed by 2 or more years of outpatient therapy for everything from motor to sensory to speech skills.

Preventing and treating these injuries, by investing in military dental research could result in significant cost savings to the military.

If you speak with the dentist at Walter Reed in charge of fashioning cranial and facial structures and ask what does he need most, he will tell you protective head

gear to prevent such injuries, better restorative materials, and better tissue retention materials. These are areas that dental researchers at Great Lakes are researching.

The importance of restoring facial appearance cannot be understated. Facial features affect a person's ability to communicate and embody one's sense of self. Loss of a face or facial features also brings with it psychological effects. Imagine how hard it is to be accepted for employment if you were missing a nose, jaw, ear, or smooth facial skin. These are the challenges that confront the patients and the dentists who strive to return our wounded troops to society.

We have included in our testimony, pictures of such wounds so you can see to what extent it is necessary to restore bone structure to the head and around the eyes, nose, mouth and jaw, and the challenges facial skin grafts create. They are hard to look at and because of that, they have not been chronicled in the news like other injuries.

Restoring facial tissue and structure is complicated and unique. The maxillofacial prosthetic materials currently available for head and neck prosthetic reconstruction do not adequately mimic natural tissues. The silicone materials being used today for head/neck and maxillofacial prosthetic reconstruction for ears, noses and facial tissue provide limited restoration of function. These materials have limited durability and are esthetically poor. In addition, the colorants added to make the prosthetic materials appear life-like are very unstable. Ultimately, these artificially reconstructed features do not look natural and have to be replaced.

Currently, dentists at Walter Reed and Bethesda Medical Centers are fashioning bony structures with synthetic polymer materials and titanium mesh screens. Using a CT scan of the wounded patient's head, they fabricate mirror images of the undamaged bone to fashion the replacements. While this process has worked well, it can be improved significantly.

One goal of Navy dental researchers is to establish a technique for dentists at military treatment centers to recreate as close as possible the original craniofacial shapes and contours using synthetic materials. Toward this aim, the use of 3-D imaging to aid in the complex treatment planning and surgical reconstruction of traumatic craniofacial injuries is being investigated. By taking a pre-deployment 3-D CT scan of every war fighter, dentists who fabricate cranial implants and facial structures can work from them to make more exact replacements. They would not have to rely on creating mirror images of head and facial structures which might not be exact and therefore would require multiple surgeries to correct. If this method proves successful, it can also be used for military and non-military patients who have lost extensive amounts of head and neck structures as a result of facial or oral cancer surgery.

Dental researchers also hope to develop a means of releasing antibiotics from the surface of craniofacial implants to prevent infections. Current infection rate is between 10-12 percent. The Navy is using nanotechnology to infuse antibiotics in nanoparticles applied to the implants that maxillofacial prosthodontists and oral surgeons are placing. By using antibiotics that will be released over time they hope to prevent long term or recurring infections.

Before this war, cranial and facial replacements of this magnitude for such destructive wounds were rare. Now, over 1,600 young men and women have been treated at Walter Reed and Bethesda alone. No one knows how well the polymers and titanium will hold up, whether they will lead to further infections or deteriorate over time.

Equally important to naval military dentists at Great Lakes is the development of improved head and neck prosthetic materials specifically for a young adult population (ages 18-40). Soft tissue facial features like ears and noses present unique challenges in restoring function and appearance, as well as, improving the systems for attachment of the prostheses.

The facial features must be fabricated from artificial materials that match a patient's skin. Current materials being used for the replacement of facial features are modeled after middle-aged and older skin. The objectives of the research being done by the Navy are to characterize selected properties of human skin (i.e., color, translucency, elasticity, etc.) of patients in the age group 18-40 years and to compare those properties to those of existing prosthetic materials. The ultimate goal is the development of durable maxillofacial prosthetic materials that more closely mimic the skin of younger adults. Navy researchers will also determine the small color and textural differences between maxillofacial reconstruction materials which would be detectable by human observers.

Preventing injuries and burns to the face and head have been a top priority of Army dental researchers for many years. As a result of congressional funding, the Army has developed a lightweight face-shield to reduce if not prevent such injuries.

It is also designed to prevent burns. Prototypes were developed and evaluated in spring 2007. The two submissions were rated second and third out of seven items evaluated. A final prototype is nearing completion and we look forward to field trials, the next research step. We have included in our testimony a picture of one of these shields.

As we stated at the beginning of our testimony, research being done by Navy and Army dentists at Great Lakes is focusing on war-related injuries. However, they have not stopped projects that focus on keeping deployed troops orally healthy. Deployed troops can be evacuated from a war zone for injuries as well as oral disease.

A new study published in "Military Medicine" this month reports that from 2003–2004, oral-facial injuries accounted for 327 evacuations from Iraq and 47 from Afghanistan. Of those, 158 (42 percent) were due to disease, 136 (36 percent) were due to battle injuries; mostly facial fractures and 80 (21 percent) were due to non-battle injuries (such as motor vehicle accidents, sports injuries, etc.)

One reason for evacuations due to disease is plaque-related conditions, including trench mouth, which can account for as much as 75 percent of the daily dental sick call rate in deployed troops. Even soldiers who ship out in good oral health can become vulnerable to these severe gum diseases if stationed in combat areas where access to oral hygiene is difficult. An easy and cost effective way to address these conditions is the development of an anti-plaque chewing gum, which could be included in every meals ready-to-eat or mess kit. The Army has successfully developed such a product. It is a novel antimicrobial peptide (KSL-W) that will be incorporated into chewing gum to control plaque growth and reduce dental emergencies due to plaque.

When untreated dental plaque leads to oral infections and abscesses, affected troops must be evacuated for treatment which can be costly and dangerous. Procedure demands that convoys be no less than four vehicles, exposing many to attack. The anti-plaque chewing gum is a simple and inexpensive solution. It is a direct result of previous congressional funding.

Dehydration continues to be a significant problem, not only for soldiers in Iraq and Afghanistan, but with basic trainees as well. Extreme dehydration can come on rapidly and result in altered behavior, such as severe anxiety, confusion, faintness or lightheadedness, inability to stand or walk, rapid breathing, weak, rapid pulse and loss of consciousness. If field commanders could detect oncoming dehydration it would reduce the number of troops affected and improve missions.

There is currently no non-invasive method to determine a soldier's hydration status in order to prevent heat injuries. Army dental researchers at Great Lakes are developing a miniature intraoral sensor to monitor hydration rates that could be bonded to a soldier's tooth. Health care personnel at a remote site could monitor the sensor and alert the deployed forces to administer fluids before the situation becomes critical.

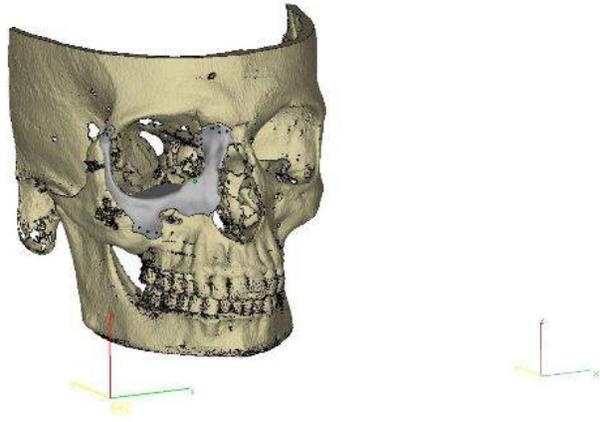
Since we last testified before the committee in 2004, naval researchers have licensed and are transitioning to commercial partners for final development rapid point-of-care tests for the detection of military relevant diseases. This includes devices use properties in saliva to: (1) monitor the immune response in recipients of the U.S.-licensed anthrax vaccine; (2) diagnose tuberculosis; and (3) monitor cortisol levels. Congressional funding was key in developing this diagnostic device which has great implications for homeland security needs.

These are just a few of the dental research projects being conducted at the Great Lakes facility. All have a direct relationship to combat medicine, are targeted to improve the oral health of deployed personnel and can lead to enormous cost savings for forces in the field. Furthermore, while the Army and the Navy do not duplicate the research done by the National Institute of Dental and Craniofacial Research, many of their findings will have implications within the civilian community or other Federal agencies.

In 2007, the military dental research program at Great Lakes was funded at \$4 million. Current funding for the program is \$1.2 million. The ADA believes that if the funding continues to stay at this level or be decreased further, it will significantly retard highly needed treatments for our wounded.

Therefore, the Association strongly recommends that the committee include in its fiscal year 2009 bill funding for military dental research at \$6 million to restore and expedite this research for the deployed forces.

The ADA thanks the committee for allowing us to present these issues related to the dental and oral health of our great American service men and women.









Senator INOUE. Now may I call upon Dr. Deborah Boehm-Davis, Chair of the Department of Psychology, George Mason University. Doctor.

**STATEMENT OF DEBORAH BOEHM-DAVIS, Ph.D., CHAIR, DEPARTMENT OF PSYCHOLOGY, GEORGE MASON UNIVERSITY, ON BEHALF OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION**

Dr. BOEHM-DAVIS. Good morning, Mr. Chairman, Senator Stevens. I'm submitting testimony on behalf of the American Psychological Association, or APA, a scientific and professional association of more than 148,000 psychologists and affiliates.

Senator STEVENS. Pull the mike back, please, toward you. Thank you.

Dr. BOEHM-DAVIS. For decades, clinical and research psychologists have brought their unique and critical expertise to meeting the needs of our military and its personnel, playing a vital role within the Department of Defense.

I am a human factors psychologist. The goal of psychology, as I'm sure you know, is to understand and predict human behavior. Human factors psychologists take that knowledge and embed it in systems to enhance safety and productivity. Over my career, I've

worked in two application areas—human-computer interaction and transportation—specifically focusing on aviation and highway safety. For the past several years I've had the privilege of serving on the Air Force Scientific Advisory Board.

This morning I focus on APA's request that Congress reverse administration cuts to the overall DOD science and technology (S&T) budget and maintain support for important behavioral sciences research on counterterrorism and counterintelligence operations within DOD. Specifically, APA urges the subcommittee to provide a minimum of \$13.2 billion for Defense S&T in fiscal year 2009.

Although the President's budget allows for an increase in DOD basic research, it does not provide for bringing this basic research into applications for military use. To do so, we must strengthen the 6.2 and 6.3 research programs, which face substantial cuts in the administration's proposed budget. This would be in line with the 2008 report from the National Academies on human behavior in military contexts, which calls for enhanced research in six areas of behavioral research that traditionally have been supported by the military research laboratories: the Army Research Institute, the Office of Naval Research, and the Air Force Research Laboratory.

These labs need increased basic and applied research funding in fiscal year 2009 to expand their reach even further into effectively mapping the human terrain.

Finally, APA also is concerned with the potential loss of invaluable human-centered research programs within DOD's counterintelligence field activity (CIFA), due to a current reorganization of their structure and personnel strength. APA urges the subcommittee to provide ongoing funding in fiscal year 2009 for CIFA's behavioral research programs on cybersecurity, insider threat, and other counterterrorism and counterintelligence operational challenges as they merge into other defense agencies, the most likely being the Defense Intelligence Agency.

As a member of an Air Force study team examining cybersecurity, I heard concrete data that confirmed what I knew as a human factors psychologist and as a behavioral scientist: the greatest threat to cybersecurity is people. It is critical to understand human behavior and to be able to design systems that can counter these threats.

Thank you and, on behalf of APA, I urge the subcommittee to support the men and women on the front lines by reversing another round of dramatic, detrimental cuts to the overall Defense S&T account and the human-oriented research projects within the military labs and CIFA. Thank you.

[The statement follows:]

PREPARED STATEMENT OF DR. DEBORAH BOEHM-DAVIS

The American Psychological Association (APA) is a scientific and professional organization of more than 148,000 psychologists and affiliates.

For decades, psychologists have played vital roles within the Department of Defense (DOD), as providers of clinical services to military personnel and their families, and as scientific researchers investigating mission-targeted issues ranging from airplane cockpit design to human intelligence-gathering. More than ever before, psychologists today bring unique and critical expertise to meeting the needs of our military and its personnel. APA's testimony will focus on reversing administration cuts to the overall DOD Science and Technology (S&T) budget and maintaining support for important behavioral sciences research within DOD.

## DOD RESEARCH

“People are the heart of all military efforts. People operate the available weaponry and technology, and they constitute a complex military system composed of teams and groups at multiple levels. Scientific research on human behavior is crucial to the military because it provides knowledge about how people work together and use weapons and technology to extend and amplify their forces.”—“Human Behavior in Military Contexts” Report of the National Research Council, 2008

Just as a large number of psychologists provide high-quality clinical services to our military service members stateside and abroad, psychological scientists within DOD conduct cutting-edge, mission-specific research critical to national defense.

In terms of the overall DOD S&T budget, the President’s request for fiscal year 2009 included a renewed commitment to supporting basic, 6.1 level research. However, the administration also included deep cuts in the applied and advanced technology (6.2 and 6.3) programs within the DOD S&T account. Funding for overall S&T would fall again in fiscal year 2009 to \$11.7 billion, a significant decrease from the estimated fiscal year 2008 level of \$13.2 billion.

The President’s budget request for basic and applied research at DOD in fiscal year 2009 is \$11.7 billion, a decrease of \$1.5 billion from the enacted fiscal year 2008 level. APA urges the subcommittee to reverse this cut to the critical defense science program by providing a total of \$13.2 billion for DOD S&T in fiscal year 2009. The increase in DOD basic research support is laudable, but the ability to bring this basic research into applications for military use relies on maintaining and strengthening the 6.2 and 6.3 research programs at the same time.

## BEHAVIORAL RESEARCH WITHIN THE MILITARY SERVICE LABS AND DOD

Within DOD, the majority of behavioral, cognitive, and social science is funded through the Army Research Institute (ARI) and Army Research Laboratory (ARL); the Office of Naval Research; and the Air Force Research Laboratory (AFRL), with additional, smaller human systems research programs funded through the Office of the Secretary of Defense, the Defense Advanced Research Projects Agency (DARPA), and DOD’s Counterintelligence Field Activity (CIFA).

The military service laboratories provide a stable, mission-oriented focus for science, conducting and sponsoring basic (6.1), applied/exploratory development (6.2), and advanced development (6.3) research. These three levels of research are roughly parallel to the military’s need to win a current war (through products in advanced development) while concurrently preparing for the next war (with technology “in the works”) and the war after next (by taking advantage of ideas emerging from basic research). All of the services fund human-related research in the broad categories of personnel, training and leader development; warfighter protection, sustainment and physical performance; and system interfaces and cognitive processing.

*New National Academies Report Calls for Doubling Behavioral Research*

The new National Academies report on Human Behavior in Military Contexts (2008) recommends doubling the current budgets for basic and applied behavioral and social science research “across the U.S. military research agencies.” It specifically calls for enhanced research in six areas: intercultural competence; teams in complex environments; technology-based training; nonverbal behavior; emotion; and behavioral neurophysiology.

Behavioral and social science research programs eliminated from the mission labs due to cuts or flat funding are extremely unlikely to be picked up by industry, which focuses on short-term, profit-driven product development. Once the expertise is gone, there is absolutely no way to “catch up” when defense mission needs for critical human-oriented research develop. As DOD noted in its own Report to the Senate Appropriations Committee:

“Military knowledge needs are not sufficiently like the needs of the private sector that retooling behavioral, cognitive and social science research carried out for other purposes can be expected to substitute for service-supported research, development, testing, and evaluation . . . our choice, therefore, is between paying for it ourselves and not having it.”

*Defense Science Board Calls for Priority Research in Social and Behavioral Sciences: Mapping the Human Terrain*

This emphasis on the importance of social and behavioral research within DOD is echoed by the Defense Science Board (DSB), an independent group of scientists and defense industry leaders whose charge is to advise the Secretary of Defense and

the Chairman of the Joint Chiefs of Staff on “scientific, technical, manufacturing, acquisition process, and other matters of special interest to the Department of Defense.”

In its 2007 report on 21st Century Strategic Technology Vectors, the DSB identified a set of four operational capabilities and the “enabling technologies” needed to accomplish major future military missions (analogous to winning the Cold War in previous decades). In identifying these capabilities, DSB specifically noted that “the report defined technology broadly, to include tools enabled by the social sciences as well as the physical and life sciences.” Of the four priority capabilities and corresponding areas of research identified by the DSB for priority funding from DOD, the first was defined as “mapping the human terrain.”

#### MAINTAINING BEHAVIORAL RESEARCH DURING CIFA REORGANIZATION

In addition to strengthening the DOD S&T account, and behavioral research within the military labs in particular, APA also is concerned with the potential loss of invaluable human-centered research programs within DOD’s CIFA due to a current reorganization of CIFA’s structure and personnel strength. Within CIFA, psychologists lead intramural and extramural research programs on counterintelligence issues ranging from models of “insider threat” to cybersecurity and detection of deception. These psychologists also consult with the three military services to translate findings from behavioral research directly into enhanced counterintelligence operations on the ground.

APA urges the subcommittee to provide ongoing funding in fiscal year 2009 for counterintelligence behavioral science research programs in light of their direct support for military intelligence operations.

#### SUMMARY

On behalf of APA, I would like to express my appreciation for this opportunity to present testimony before the subcommittee. Clearly, psychological scientists address a broad range of important issues and problems vital to our national security, with expertise in modeling behavior of individuals and groups, understanding and optimizing cognitive functioning, perceptual awareness, complex decision-making, stress resilience, recruitment and retention, and human-systems interactions. We urge you to support the men and women on the front lines by reversing another round of cuts to the overall defense S&T account and the human-oriented research projects within the military laboratories and CIFA.

As our Nation rises to meet the challenges of current engagements in Iraq and Afghanistan as well as other asymmetric threats and increased demand for homeland defense and infrastructure protection, enhanced battlespace awareness and warfighter protection are absolutely critical. Our ability to both foresee and immediately adapt to changing security environments will only become more vital over the next several decades. Accordingly, DOD must support basic S&T research on both the near-term readiness and modernization needs of the department and on the long-term future needs of the warfighter.

Below is suggested appropriations report language for fiscal year 2009 which would encourage the DOD to fully fund its behavioral research programs within the military laboratories and protect counterintelligence research.

#### DEPARTMENT OF DEFENSE

##### *Research, development, test, and evaluation*

*Behavioral Research in the Military Service Laboratories.*—The Committee notes the increased demands on our military personnel, including high operational tempo, leadership and training challenges, new and ever-changing stresses on decision-making and cognitive readiness, and complex human-technology interactions. To help address these issues vital to our national security, the Committee has provided increased funding to reverse cuts to applied psychological research through the military research laboratories: the Air Force Office of Scientific Research and AFRL; the ARI and ARL; and the Office of Naval Research.

*Human-centered Counterintelligence Research.*—The Committee urges the DOD to continue supporting human-centered research, formerly coordinated through CIFA, as its behavioral science programs are reorganized within other defense intelligence entities.

Senator INOUE. Dr. Davis, thank you.  
Senator Stevens.

Senator STEVENS. Last week, doctor, Dr. Peake, Secretary of Veterans Affairs, was in Alaska and we had some discussions concerning the use of telemedicine and extending it into the psychological and psychiatric side of medicine. Have you done any work in that?

Dr. BOEHM-DAVIS. No, sir, I have not personally. I do know that the Army Research Lab in Aberdeen has done work on telepresence. I was on a review panel that looked at that work some years ago.

Senator STEVENS. Think of the cost of transporting people in my State hundreds of miles to come into a veterans clinic or a hospital. That would be very cost effective if it could be developed. I would encourage your association to go into that. These veterans that come from small villages or from rural America, to travel long distances and then stand in line doesn't make much sense.

If we can use telepsychiatry, telepsychology, I think it would improve the system vastly and really be, as I said, cost effective.

Dr. BOEHM-DAVIS. Thank you.

Senator STEVENS. Thank you.

Senator INOUE. I've been urging my colleagues to look into the problems that you describe very carefully because oftentimes they compare World War II with the present war, and statistically the differences are of an historic nature. For example, in my regiment 96 percent of the men were single, 4 percent were married. Today it's just the opposite. It's about 65, 70 percent are married and the rest are unmarried.

Second, the last phone call you made was when you left home and then the next phone call was maybe 2 years later or 3 years later. Today they pick up the cell phone and call up Iraq every day or carry on conversations on the e-mail, and every so often little junior gets on the line and says: "Daddy, come home."

I would think it has an impact upon one's mind. Are these things being considered?

Dr. BOEHM-DAVIS. Those issues are personnel issues and I believe that the agencies are looking at those. It's a little bit to the side of the work that I personally do, but I can look into that and get back to you with more information.

Senator INOUE. Thank you very much.

Dr. BOEHM-DAVIS. Thank you.

Senator INOUE. Now we have the Executive Vice President of the National Breast Cancer Coalition, Ms. Carolina Hinestrosa.

**STATEMENT OF CAROLINA HINESTROSA, EXECUTIVE VICE PRESIDENT, NATIONAL BREAST CANCER COALITION**

Ms. HINESTROSA. Thank you, Chairman Inouye and Senator Stevens, for the opportunity to talk to you about a program that has made a significant difference in the lives of women and their families.

I'm Carolina Hinestrosa, now a three-time breast cancer survivor. I testify today on behalf of the more than 3 million women living with breast cancer. There is no question that most of the progress in the fight against this disease has been made possible by the Appropriation Committee's investment in breast cancer research through the Department of Defense peer-reviewed breast

cancer research program. This program has launched new models of biomedical research that have benefited academia, other funding agencies, and both public and private institutions, and, most importantly, women. It has changed for the better the way research is performed and has been replicated by programs focused on other diseases, by other countries, and by the States.

To make sure this unprecedented progress moves forward, we ask that you support a separate \$150 million appropriation for fiscal year 2009. In order to continue the success of the program, you must ensure that it maintains its integrity and separate identity in addition to the requested level of funding. This is important not just for breast cancer, but for all biomedical research that has benefited from this incredible Government program.

The hallmark of the Department of Defense peer-reviewed breast cancer research program is funding for innovative scientific ventures that represent an attempted avenue of investigation or novel applications of existing technologies. Many of the grant mechanisms developed by this program have later been adopted by the National Institutes of Health (NIH) and by other prestigious research programs, more recently the Howard Hughes Institute. This program has also funded unprecedented multi-disciplinary, multi-institution collaborations.

One example of the promising outcomes of research funded by the program was the development of the first monoclonal antibody targeted therapy, an unprecedented approach that prolongs the lives of women with a particularly aggressive type of breast cancer.

The DOD breast cancer research program is extremely efficient and accountable. Over 90 percent of funds allocated to date have gone directly to research. The program is also transparent, as one of the first to report its results regularly back to the public at a meeting called Era of Hope. The next Era of Hope is June 25 through June 28 this year in Baltimore, and we urge you and encourage you to participate.

The program is unique because it includes consumers as voting members of both the scientific peer review panels and the programmatic review panels, and consumers work alongside leaders in the scientific community in setting the vision for the program.

The competitive peer review process in which research proposals are reviewed first for scientific quality and then for programmatic relevance was developed by the Institute of Medicine (IOM). It has been reviewed favorably by the IOM on two separate occasions, in 1997 and 2004.

Chairman Inouye and Ranking Member Stevens, we have appreciated your personal support of this program in the past. I am hopeful that you and your subcommittee will continue that determination and leadership.

Thank you again for the opportunity to testify today and for giving hope to the 3 million women in the United States living with breast cancer and their daughters at risk.

Senator INOUE. I thank you very much.

Ladies and gentlemen, in case you've forgotten, the author of the breast cancer research funding is the man sitting to my left, Senator Stevens. For that move he was highly criticized, not only by the Department of Defense, but by the medical profession, because

the question was what does Defense know anything about breast cancer? After all, there are just a few women in the Defense Department.

But he persisted and we've got some cures, I think. You can thank Senator Stevens.

Ms. HINESTROSA. Thank you very much.

Senator INOUE. Now we'll have—give him a hand.

[The statement follows:]

PREPARED STATEMENT OF FRAN VISCO, J.D., PRESIDENT, NATIONAL BREAST CANCER COALITION

Thank you, Mr. Chairman and members of the Appropriations Subcommittee on Defense, for the opportunity to testify today about a Program that has made a significant difference in the lives of women and their families. I am Fran Visco, a 20-year breast cancer survivor, a wife and mother, a lawyer, and president of the National Breast Cancer Coalition (NBCC or Coalition). I come before you representing the hundreds of member organizations and thousands of individual members of the Coalition. NBCC is a grassroots organization dedicated to ending breast cancer through action and advocacy. The Coalition's main goals are to increase Federal funding for breast cancer research and collaborate with the scientific community to implement new models of research; improve access to high quality health care and breast cancer clinical trials for all women; and expand the influence of breast cancer advocates wherever breast cancer decisions are made.

You and your committee have shown great determination and leadership in funding the Department of Defense (DOD) peer-reviewed Breast Cancer Research Program (BCRP or Program) at a level that has brought us closer to eradicating this disease. Chairman Inouye and Ranking Member Stevens, we appreciate your longstanding personal support for this Program. I am hopeful that you and your committee will continue that determination and leadership.

I know you recognize the importance of this Program to women and their families across the country, to the scientific and health care communities and to the DOD. Much of the progress in the fight against breast cancer has been made possible by the Appropriations Committee's investment in breast cancer research through the DOD BCRP. This Program has launched new models of biomedical research that have benefited other agencies and both public and private institutions. It has changed for the better the way research is performed and has been replicated by programs focused on other diseases, by other countries and States. To support this unprecedented progress moving forward, we ask that you support a separate \$150 million appropriation for fiscal year 2009. In order to continue the success of the Program, you must ensure that it maintain its integrity and separate identity, in addition to the requested level of funding. This is important not just for breast cancer, but for all biomedical research that has benefited from this incredible Government Program. In addition, as Institute of Medicine (IOM) reports concluded in 1997 and 2004, there continues to be excellent science that would go unfunded without this Program. It is only through a separate appropriation that this Program is able to continue to focus on breast cancer yet impact all other research. The separate appropriation of \$150 million will ensure that this Program can rapidly respond to changes and new discoveries in the field and fill the gaps in traditional funding mechanisms.

Since its inception, this Program has matured into a broad-reaching influential voice forging new and innovative directions for breast cancer research and science. Despite the enormous successes and advancements in breast cancer research made through funding from the DOD BCRP, we still do not know what causes breast cancer, how to prevent it, or how to cure it. It is critical that innovative research through this unique Program continues so that we can move forward toward eradicating this disease.

OVERVIEW OF THE DOD BREAST CANCER RESEARCH PROGRAM

The DOD peer-reviewed BCRP has established itself as a model medical research program, respected throughout the cancer and broader medical community for its innovative, transparent, and accountable approach. The pioneering research performed through the Program has the potential to benefit not just breast cancer, but all cancers, as well as other diseases. Biomedical research is being transformed by the DOD BCRP's success.

This Program is both innovative and incredibly streamlined. It continues to be overseen by an integration panel including distinguished scientists and advocates, as recommended by the IOM. Because there is little bureaucracy, the Program is able to respond quickly to what is currently happening in the research community. Because of its specific focus on breast cancer, it is able to rapidly support innovative proposals that reflect the most recent discoveries in the field. It is responsive, not just to the scientific community, but also to the public. The flexibility of the Program has allowed the Army to administer it with unparalleled efficiency and effectiveness.

An integral part of this Program has been the inclusion of consumer advocates at every level. Breast cancer is not just a problem of scientists; it is a problem of people. Advocates bring a necessary perspective to the table, ensuring that the science funded by this Program is not only meritorious, but it is also meaningful and will make a difference in people's lives. The consumer advocates bring accountability and transparency to the process. Many of the scientists who have participated in the Program have said that working with the advocates has changed the way they approach research. Let me quote Dr. Michael Diefenbach of Mount Sinai School of Medicine:

"I have served as a reviewer for the Department of Defense's Breast and Prostate Cancer Review programs and I am a member of the behavioral study section for the National Cancer Institute . . . I find survivors or advocate reviewers as they are sometimes called bring a sense of realism to the review process that is very important to the selection and ultimately funding process of important research . . . Both sides bring important aspects to the review process and the selected projects are ultimately those that can fulfill scientific rigor and translatability from the research arena to clinical practice. I urge that future review panels include advocate reviewers in the review process."

Since 1992, over 585 breast cancer survivors have served on the BCRP peer review panels. As a result of this inclusion of consumers, the Program has created an unprecedented working relationship between the public, scientists, and the military, and ultimately has led to new avenues of research in breast cancer. The vital role of the advocates in the success of the BCRP has led to consumer inclusion in other biomedical research programs at DOD. This Program now serves as an international model.

It is important to note that the integration panel that designs this Program has a strategic plan for how best to spend the funds appropriated. This plan is based on the state of the science—both what scientists know now and the gaps in our knowledge—as well as the needs of the public. While this plan is mission driven, and helps ensure that the science keeps that mission—eradicating breast cancer—in mind, it does not restrict scientific freedom, creativity or innovation. The integration panel carefully allocates these resources, but it does not predetermine the specific research areas to be addressed.

#### UNIQUE FUNDING OPPORTUNITIES

The DOD BCRP research portfolio includes many different types of projects, including support for innovative ideas, networks to facilitate clinical trials, and training of breast cancer researchers.

Developments in the past few years have begun to offer breast cancer researchers fascinating insights into the biology of breast cancer and 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. Concept Awards support funding even earlier in the process of discovery. These grants have been instrumental in the development of promising breast cancer research by allowing scientists to explore beyond the realm of traditional research and unleash incredible new ideas. IDEA and Concept grants are uniquely designed to dramatically advance our knowledge in areas that offer the greatest potential. IDEA and Concept grants are precisely the type of grants that rarely receive funding through more traditional programs such as the National Institutes of Health and private research programs. They therefore complement, and do not duplicate, other Federal funding programs. This is true of other DOD award mechanisms also.

Innovator awards invest in world renowned, outstanding individuals rather than projects, by providing funding and freedom to pursue highly creative, potentially groundbreaking research that could ultimately accelerate the eradication of breast cancer. The Era of Hope Scholar Award supports the formation of the next genera-

tion of leaders in breast cancer research, by identifying the best and brightest scientists early in their careers and giving them the necessary resources to pursue a highly innovative vision of ending breast cancer.

These are just a few examples of innovative funding opportunities at the DOD BCRP that are filling gaps in breast cancer research. Scientists have lauded the Program and the importance of these award mechanisms. In 2005, Zelton Dave Sharp wrote about the importance of the Concept award mechanism:

“Our Concept grant has enabled us to obtain necessary data to recently apply for a larger grant to support this project. We could have never gotten to this stage without the Concept award. Our eventual goal is to use the technology we are developing to identify new compounds that will be effective in preventing and/or treating breast cancer . . . Equally important, however, the DOD BCRP does an outstanding job of supporting graduate student trainees in breast cancer research, through training grants and pre-doctoral fellowships . . . The young people supported by these awards are the lifeblood of science, and since they are starting their training on projects relevant to breast cancer, there is a high probability they will devote their entire careers to finding a cure. These young scientists are by far the most important “products” that the DOD BCRP produces.”

Zelton Dave Sharp,  
Associate Professor, Interim Director/Chairman,  
Institute of Biotechnology/Dept. Molecular Medicine,  
University of Texas Health Science Center (August 2005)

The DOD BCRP also focuses on moving research from the bench to the bedside. DOD BCRP awards are designed to fill niches that are not addressed by other federal agencies. The BCRP considers translational research to be the application of well-founded laboratory or other pre-clinical insight into a clinical trial. To enhance this critical area of research, several research opportunities have been offered. Clinical Translational Research Awards have been awarded for investigator-initiated projects that involve a clinical trial within the lifetime of the award. The BCRP has expanded its emphasis on translational research by also offering five different types of awards that support work at the critical juncture between laboratory research and bedside applications.

The Centers of Excellence award mechanism brings together the world’s most highly qualified individuals and institutions to address a major overarching question in breast cancer research that could make a significant contribution towards the eradication of breast cancer. Many of these centers are working on questions that will translate into direct clinical applications. These centers include the expertise of basic, epidemiology and clinical researchers, as well as consumer advocates.

Dr. John Niederhuber, now the Director of the National Cancer Institute, said the following about the Program when he was Director of the University of Wisconsin Comprehensive Cancer Center in April, 1999:

“Research projects at our institution funded by the Department of Defense are searching for new knowledge in many different fields including: identification of risk factors, investigating new therapies and their mechanism of action, developing new imaging techniques and the development of new models to study [breast cancer] . . . Continued availability of this money is critical for continued progress in the nation’s battle against this deadly disease.”

Scientists and consumers agree that it is vital that these grants continue to support breast cancer research. To sustain the Program’s momentum, \$150 million for peer-reviewed research is needed in fiscal year 2009.

#### SCIENTIFIC ACHIEVEMENTS

One of the most promising outcomes of research funded by the DOD BCRP was the development of the first monoclonal antibody targeted therapy that prolongs the lives of women with a particularly aggressive type of advanced breast cancer. This drug could not have been developed without first researching and understanding the gene known as HER-2/neu, which is involved in the progression of some breast cancers. Researchers found that over-expression of HER-2/neu in breast cancer cells results in very aggressive biologic behavior. The same researchers demonstrated that an antibody directed against HER-2/neu could slow the growth of the cancer cells that over-expressed the gene. This research, which led to the development of the targeted therapy, was made possible in part by a DOD BCRP-funded infrastructure grant. Other researchers funded by the DOD BCRP are identifying similar kinds of genes that are involved in the initiation and progression of cancer.

Another example of innovation in the Program is in the area of imaging. One DOD BCRP awardee developed a new use for medical hyperspectral imaging (MHSI) technology. This work demonstrated the usefulness of MHSI as a rapid, noninvasive, and cost-effective evaluation of normal and tumor tissue during a real-time operating procedure. Application of MHSI to surgical procedures has the potential to significantly reduce local recurrence of breast tumors and may facilitate early determination of tumor malignancy.

Studies funded by the DOD BCRP are examining the role of estrogen and estrogen signaling in breast cancer. For example, one study examined the effects of the two main pathways that produce estrogen. Estrogen is often processed by one of two pathways; one yields biologically active substances while the other does not. It has been suggested that women who process estrogen via the biologically active pathway may be at higher risk of developing breast cancer. This research will yield insights into the effects of estrogen processing on breast cancer risk in women with and without family histories of breast cancer.

Another example of success from the Program is a study of sentinel lymph nodes (SLNs). This study confirmed that SLNs are indicators of metastatic progression of disease. The resulting knowledge from this study and others has led to a new standard of care for lymph node biopsies. If the first lymph node is negative for cancer cells, then it is unnecessary to remove all the lymph nodes. This helps prevent lymphedema which can be painful and have lasting complications.

#### FEDERAL MONEY WELL SPENT

The DOD BCRP is as efficient as it is innovative. In fact, 90 percent of funds go directly to research grants. The flexibility of the Program allows the Army to administer it in such a way as to maximize its limited resources. The Program is able to quickly respond to current scientific advances and fulfills an important niche by focusing on research that is traditionally under-funded. This was confirmed and reiterated in two separate IOM reports released in 1997 and 2004. The areas of focus of the DOD BCRP span a broad spectrum and include basic, clinical, behavioral, environmental sciences, and alternative therapy studies, to name a few. The BCRP benefits women and their families by maximizing resources and filling in the gaps in breast cancer research.

The Program is responsive to the scientific community and to the public. This is evidenced by the inclusion of consumer advocates at both the peer and programmatic review levels. The consumer perspective helps the scientists understand how the research will affect the community and allows for funding decisions based on the concerns and needs of patients and the medical community.

The outcomes of the BCRP-funded research can be gauged, in part, by the number of publications, abstracts/presentations, and patents/licensures reported by awardees. To date, there have been more than 11,700 publications in scientific journals, more than 12,000 abstracts and nearly 550 patents/licensure applications. The American public can truly be proud of its investment in the DOD BCRP. Scientific achievements that are the direct result of the DOD BCRP grants are undoubtedly moving us closer to eradicating breast cancer.

#### INDEPENDENT ASSESSMENTS OF PROGRAM SUCCESS

The success of the DOD peer-reviewed BCRP has been illustrated by several unique assessments of the Program. The IOM, which originally recommended the structure for the Program, independently re-examined the Program in a report published in 1997. They published another report on the Program in 2004. Their findings overwhelmingly encouraged the continuation of the Program and offered guidance for program implementation improvements.

The 1997 IOM review of the DOD peer-reviewed BCRP commended the Program, stating, "the Program fills a unique niche among public and private funding sources for cancer research. It is not duplicative of other programs and is a promising vehicle for forging new ideas and scientific breakthroughs in the Nation's fight against breast cancer." The 2004 report spoke to the importance of the program and the need for its continuation.

#### TRANSPARENT AND ACCOUNTABLE TO THE PUBLIC

The DOD peer-reviewed Breast Cancer Research Program not only provides a funding mechanism for high-risk, high-return research, but also reports the results of this research to the American people every 2 to 3 years at a public meeting called the Era of Hope. The 1997 meeting was the first time a federally-funded program reported back to the public in detail not only on the funds used, but also on the research undertaken, the knowledge gained from that research and future directions

to be pursued. The fifth Era of Hope meeting will be held in Baltimore, Maryland, June 25–28, 2008.

The DOD peer-reviewed Breast Cancer Research Program has attracted scientists across a broad spectrum of disciplines, launched new mechanisms for research and facilitated new thinking in breast cancer research and research in general. A report on all research that has been funded through the DOD BCRP is available to the public. Individuals can go to the DOD website and look at the abstracts for each proposal at <http://cdmrp.army.mil/bcrp/>.

COMMITMENT OF THE NATIONAL BREAST CANCER COALITION

The NBCC is strongly committed to the DOD BCRP in every aspect, as we truly believe it is one of our best chances for finding cures for and ways to prevent breast cancer. 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 research to forge ahead. From 1992, with the launch of our “300 Million More Campaign” that formed the basis of this Program, until now, NBCC advocates have appreciated your support.

Over the years, our members have shown their continuing support for this Program through petition campaigns, collecting more than 2.6 million signatures, and through their advocacy on an almost daily basis around the country asking for support of the DOD BCRP.

There are 3 million women living with breast cancer in this country today. This year, more than 40,000 will die of the disease and more than 240,000 will be diagnosed. We still do not know how to prevent breast cancer, how to diagnose it truly early or how to cure it. It is an incredibly complex disease. We simply cannot afford to walk away from this program.

This April many of the women and family members who support this program came to NBCC’s Annual Advocacy Training Conference here in Washington, DC. More than 600 breast cancer activists from across the country, representing groups in their communities and speaking on behalf of tens of thousands of others, were here as part of our efforts to end breast cancer. The overwhelming interest in and dedication to eradicating this disease continues to be evident as people not only are signing petitions, but are willing to come to Washington, DC, from across the country to tell their members of Congress about the vital importance of continuing the DOD BCRP.

Since the very beginning of this Program in 1992, Congress has stood with us in support of this important investment in the fight against breast cancer. In the years since, Chairman Inouye and Ranking Member Stevens, you and this entire committee have been leaders in the effort to continue this innovative investment in breast cancer research.

NBCC asks you, the Defense Appropriations Subcommittee, to recognize the importance of what has been initiated by the Appropriations Committee. You have set in motion an innovative and highly efficient approach to fighting the breast cancer epidemic. We ask you now to continue your leadership and fund the Program at \$150 million and maintain its integrity. This is research that will help us win this very real and devastating war against a cruel enemy.

Thank you again for the opportunity to submit testimony and for giving hope to all women and their families, and especially to the 3 million women in the United States living with breast cancer.

Senator INOUE. Now may I call on the next panel, made up of Dr. Levine, Mr. Carlebach, Mr. Davis, and Mr. Rick Jones.

Our next witness is the past President of the American Society of Tropical Medicine and Hygiene, American Society of Tropical Medicine and Hygiene, Dr. Myron M. Levine.

**STATEMENT OF MYRON M. LEVINE, M.D., D.P.P.H., PAST PRESIDENT,  
ON BEHALF OF THE AMERICAN SOCIETY OF TROPICAL MEDICINE AND HYGIENE**

Dr. LEVINE. Thank you, Mr. Chairman, Ranking Member Stevens, and members of the subcommittee. I welcome the opportunity to testify before you on behalf of the American Society of Tropical Medicine and Hygiene, or ASTMH. I commend the subcommittee for its attention to the vital issue of research on infectious diseases

of military importance and the role of that research in protecting our troops deployed abroad.

I'm a physician, an infectious disease consultant and epidemiologist, and, as you mentioned, have served in the past as president of our society, the world's largest professional membership organization dedicated to the prevention and control of tropical diseases.

On behalf of our membership, I'd like to make a plea for assuring adequate funding for the DOD's infectious disease research programs, in particular malaria research. Because the U.S. military operates in so many tropical and developing regions of the globe, preventing or being able to promptly diagnose and treat tropical diseases is often critical to mission success. For this reason, and based on the lessons learned from decades of deployments and military operations in tropical regions, the U.S. military has historically played a pivotal role in the development of anti-malarial drugs and research on malaria vaccines. Several widely used anti-malarial drugs were originally developed by U.S. military researchers.

Similarly, for three decades the U.S. Army and Navy research teams have been at the forefront of malaria vaccine research. The new drugs to treat and vaccines to prevent malaria that are derived from the research and development efforts of U.S. military investigators will also be available to protect U.S. civilian travelers to developing areas, and in some instances they may be useful for preventing malaria in indigenous populations, particularly young children in endemic areas.

The consequence that inadequate prevention of malaria can have on a U.S. military deployment was highlighted a few years ago during a small peacekeeping operation in Liberia in 2003. Of 157 marines who spent one or more nights ashore during this operation, nearly one-half contracted malaria, and nearly one-half of those had to be emergency air-evacuated to Germany, where many ended up in intensive care units.

We need to assure that malaria vaccines will complete their development and become licensed as soon as possible, and that new drugs will come into the armamentarium to treat malaria caused by parasites that are resistant to currently available drugs.

Malaria vaccine research in 2006, the last year for which we have data, was approximately \$27.8 million. We're concerned that this funding level is not commensurate with the health threat that this disease poses to military operations. Therefore, we respectfully request that the subcommittee increase funding for malaria vaccine and new drug research to a minimum level of \$30 million for fiscal year 2009. We also request that subsequent annual increases be planned so that by fiscal year 2015 funding will reach at least \$76.6 million.

These increases will support programs that will help ensure that our troops are protected from malaria when they serve our Nation overseas.

Mr. Chairman, Ranking Member Stevens, subcommittee members, I thank you for the opportunity to speak today on behalf of the ASTMH.

[The statement follows:]

## PREPARED STATEMENT OF MYRON M. LEVIN

*Overview.*—The American Society of Tropical Medicine and Hygiene (ASTMH or Society) appreciates the opportunity to submit written testimony to the Senate Defense Appropriations subcommittee. With nearly 3,500 members, ASTMH is the world's largest professional membership organization dedicated to the prevention and control of tropical diseases. We represent, educate, and support tropical medicine scientists, physicians, clinicians, researchers, epidemiologists, and other health professionals in this field.

As part of our efforts, we advocate implementation and funding of Federal programs that address the prevention and control of infectious diseases that are leading causes of death and disability in the developing world, and which pose threat to U.S. citizens. Priority diseases include malaria, Dengue fever, Ebola, cholera, and tuberculosis. Because the military operates in and deploys to so many tropical regions, reducing the risk that tropical diseases present to service men and women is often critical to mission success.

For this reason, we respectfully request that the subcommittee expand funding for military malaria research and control initiatives, providing the following allocations in the fiscal year 2009 defense appropriations bill to support the military's readiness for tropical disease threats.

—\$30 million to support efforts to develop a vaccine against malaria and to develop new anti-malaria drugs to replace older drugs that are losing their effectiveness as a result of parasite resistance.

ASTMH also requests that there are consistent increases in the overall funding level for Department of Defense (DOD) malaria research programs that, along with subsequent annual increases, results in \$76.6 million in funding by fiscal year 2015.

We very much appreciate the subcommittee's consideration of our views, and we stand ready to work with subcommittee members and staff on these and other important tropical disease matters.

*ASTMH.*—ASTMH plays an integral and unique role in the advancement of the field of tropical medicine. Its mission is to promote global health by preventing and controlling tropical diseases through research and education. As such, the Society is the principal membership organization representing, educating, and supporting tropical medicine scientists, physicians, researchers, and other health professionals dedicated to the prevention and control of tropical diseases. Our members reside in 46 States and the District of Columbia and work in a myriad of public, private, and non-profit environments, including academia, the U.S. military, public institutions, Federal agencies, private practice, and industry.

The Society's long and distinguished history goes back to the early 20th century. The current organization was formed in 1951 with the amalgamation of the National Malaria Society and the American Society of Tropical Medicine. Over the years, the Society has counted many distinguished scientists among its members, including Nobel laureates. ASTMH and its members continue to have a major impact on the tropical diseases and parasitology research carried out around the world.

*Tropical Medicine and Tropical Diseases.*—The term "tropical medicine" refers to the wide-ranging clinical work, research, and educational efforts of clinicians, scientists, and public health officials with a focus on the diagnosis, mitigation, prevention, and treatment of diseases prevalent in the areas of the world with a tropical climate. Most tropical diseases are located in either sub-Saharan Africa, parts of Asia (including the Indian subcontinent), or Central and South America. Many of the world's developing nations are located in these areas; thus tropical medicine tends to focus on diseases that impact the world's most impoverished individuals.

The field of tropical medicine encompasses clinical work treating tropical diseases, work in public health and public policy to prevent and control tropical diseases, basic and applied research related to tropical diseases, and education of health professionals and the public regarding tropical diseases.

Tropical diseases are illnesses that are caused by pathogens that are prevalent in areas of the world with a tropical climate. These diseases are caused by viruses, bacteria, and parasites which are spread through various mechanisms, including airborne routes, sexual contact, contaminated water and food, or an intermediary or "vector"—frequently an insect (e.g., a mosquito)—that transmits a disease between humans in the process of feeding.

*Malaria.*—Malaria is highly treatable and preventable. The tragedy is that despite this, malaria is one of the leading causes of death and disease worldwide. According to the CDC, as many as 2.7 million individuals die from malaria each year, with 75 percent of those deaths occurring in African children. In 2002, malaria was the fourth leading cause of death in children in developing countries, causing 10.7 percent of all such deaths. Malaria-related illness and mortality extract a significant

human toll as well as cost Africa's economy \$12 billion per year perpetuating a cycle of poverty and illness. Nearly 40 percent of the world's population lives in an area that is at high risk for the transmission of malaria.

TROPICAL DISEASE CONTROL AND PREVENTION: A KEY COMPONENT OF MILITARY  
PREPAREDNESS

Service men and women constitute a significant proportion of the healthy adults traveling each year to malarial regions on behalf of the U.S. Government. For this reason, the U.S. military has long taken a primary role in the development of anti-malarial drugs, and many of the most effective and widely used anti-malarials were developed by U.S. military researchers. Drugs that have saved countless lives throughout the world were originally developed by the U.S. military to protect troops serving in tropical regions during World War II, the Vietnam War, and the Korean War.

Fortunately, in recent years the broader international community has stepped up its efforts to reduce the impact of malaria in the developing world, particularly by reducing childhood malaria mortality, and the U.S. military is playing an important role in this broad partnership. The U.S. military also makes significant contributions to the global effort to develop a malaria vaccine. But military malaria researchers are working practically alone in the area most directly related to U.S. national security: drugs designed to protect or treat healthy adults who travel to regions endemic to malaria. These drugs benefit everyone living or traveling in the tropics but are particularly essential to the United States for the protection of forces from disease during deployments.

Unfortunately, the prophylaxis and treatments currently given to U.S. service men and women are losing their effectiveness, and increased Federal support is required to develop their replacements. Drugs such as Chloroquine-Primaquine and Mefloquine that are used to prevent or treat malaria in healthy adults are declining in efficacy. The reasons vary, but the result is the same: the U.S. Government is increasingly unable to send personnel to regions endemic to malaria without a significant risk that many of them will become seriously ill. Similarly, the residents of regions endemic to malaria are finding that existing drugs are no longer as effective at preventing or treating malaria.

"Malaria has affected almost all military deployments since the American Civil War and remains a severe and ongoing threat."—From "Battling Malaria: Strengthening the U.S. Military Malaria Vaccine Program", Institute of Medicine (IOM) Report, 2006

As the IOM notes in the 2006 report quoted above, current malaria prevention strategies are inadequate. The most recent and dramatic example of this as it relates to military readiness was in 2003 when a small U.S. peacekeeping force was deployed to Liberia. Of the 157 marines who spent at least one night ashore during this operation, 69 developed malaria, despite being supplied with anti-malarials. Half of the infected Marines had to be evacuated by air to Germany. The 1993 operation "Restore Hope" in Somalia was also impacted by high malaria incidence among U.S. troops. If new drugs are not developed soon, U.S. operations in sub-Saharan Africa and some parts of Southeast Asia will increasingly be at-risk for significant disease casualties.

To ensure that as many American soldiers as possible are protected from tropical and other diseases, Congress provides funding each year to support DOD programs focused on the development of vaccines and drugs for priority infectious disease. To that end, the Walter Reed Army Institute of Research and Naval Medical Research Center—which are co-located in the Inouye Building in Silver Spring, Maryland—coordinates one of the world's premier tropical disease research programs. These entities contributed to the development of the gold standard for experimental malaria immunization of humans, and the most advanced and successful vaccine and drugs current being deployed around the world.

The need to develop new and improved malaria prophylaxis and treatment for U.S. service members is not yet a crisis, but it would quickly become one if the United States were to become involved in a large deployment to a country or region where malaria is endemic, especially sub-Saharan Africa. Fortunately, a relatively tiny amount of increased support for this program would restore the levels of research and development investment required to produce the drugs that will safeguard U.S. troops from malaria. In terms of the overall DOD budget, that malaria research program's funding is small—approximately \$27.8 million in fiscal year 2006—but very important. Cutting funding for this program would deal a major blow to the military's work to reduce the impact of malaria on soldiers and civilians

alike, thereby undercutting both the safety of troops deployed to tropical climates, and the health of civilians in those regions.

REQUESTED MALARIA-RELATED ACTIVITIES AND FUNDING LEVELS

ASTMH maintains that the battle against malaria requires funding for a comprehensive approach to disease control including public health infrastructure improvements, mosquito abatement initiatives, and increased availability of existing anti-malarial drugs. In addition, research must continue to develop new anti-malarial drugs and better diagnostics, and to identify an effective malaria vaccine. Much of this important research currently is underway at the DOD. Additional funds and a greater commitment from the Federal Government are necessary to make progress in malaria prevention, treatment, and control.

In fiscal year 2006, the DOD spent only \$27.8 million annually for malaria vaccine research, this despite the fact that malaria historically has been a leading cause of troop impairment and continues to be a leading cause of death worldwide. A more substantial investment will help to protect American soldiers and potentially save the lives of millions of individuals around the world. As noted previously, we respectfully request that the subcommittee support the following funding levels:

—\$30 million to support efforts to develop a vaccine against malaria and to develop new anti-malaria drugs to replace older drugs that are losing their effectiveness as a result of parasite resistance.

ASTMH also requests that there are consistent increases in overall funding level for Department of Defense malaria research programs that, along with subsequent annual increases, results in \$76.6 million in funding by fiscal year 2015.

*Conclusion.*—Thank you for your attention to these important but often overlooked military readiness matters. We know that you face many challenges in choosing funding priorities and we hope that you will provide the requested fiscal year 2009 resources to those programs identified above. ASTMH appreciates the opportunity to share its views, and we thank you for your consideration of our requests.

Senator INOUE. Thank you very much, Dr. Levine.

Senator Stevens and I come from the old generation where we were prescribed atabrine. I believe that was the medicine they called it. Atabrine?

Dr. LEVINE. Yes.

Senator INOUE. How does it compare to the vaccine that you speak of?

Dr. LEVINE. Well, when we have the vaccine that fills the criteria for protection of troops, for the ideal vaccine there will not be need for chemoprophylaxis. The problem with chemoprophylaxis is the need for the line officers to make sure that the drug, no matter how good it is, is taken on the appropriate schedule, and also there are supply issues. With the vaccine, this is something that would be done predeployment and protection would come from the immunization.

Senator INOUE. When will it be available under your scheme?

Dr. LEVINE. Very good question. A first generation of vaccines, in great part based on research carried out at Walter Reed and at the Naval Medical Research Center, is expected to be licensed about 2013 or 2014. That'll be a first generation.

There is also the beginning of another vaccine, again coming out of research with a military history, and that would probably be later, perhaps 2017 or so.

Senator STEVENS. When will that be—how long will it be effective?

Dr. LEVINE. The first generation vaccines may have a high level efficacy of only about 6 months. But the improved ultimate vaccine would have efficacy that would go more than 1 year, perhaps 2 years.

Senator STEVENS. Well, I took atabrine for at least 18 months and turned a little bit yellow, but it worked. What about, didn't the marines have atabrine?

Dr. LEVINE. There was medication available, but there was not good compliance with taking of the anti-malarials.

Senator STEVENS. So half of them got sick with malaria in that short a period?

Dr. LEVINE. Yes. In West Africa malaria is highly, highly seasonal.

Senator STEVENS. Someone should have been courtmartialed.

Thank you very much.

Senator INOUE. Well, our next witness is the Ovarian Cancer National Alliance representative, Mr. Mark Carlebach.

**STATEMENT OF MARK CARLEBACH ON BEHALF OF THE OVARIAN  
CANCER NATIONAL ALLIANCE**

Mr. CARLEBACH. Mr. Chairman and Senator Stevens: Thank you for the opportunity to testify before you today about the ovarian cancer research program at the DOD. My name is Mark Carlebach and my wife Lacey Gallagher was diagnosed with ovarian cancer on February 5, 2005. Lacey was one of the small percent of women diagnosed early with stage 1-C ovarian cancer. Unfortunately, her ovarian cancer was of a particularly aggressive and chemo-resistant type known as clear cell ovarian cancer. Lacey was in remission for almost 2 years after her original diagnosis, but it recurred in July 2007 with metastases to her lungs.

Lacey was the most determined and courageous person I've ever known. Nonetheless, despite her incredible efforts, that involved diet, supplements, many investigational approaches that she pursued, in addition to two surgeries, radiation, and several chemotherapy protocols, Lacey died of ovarian cancer on February 27, 2008, less than 37 months after her original early diagnosis. She was 45.

Lacey felt strongly that awareness and support for curing ovarian cancer should reflect ovarian cancer's mortality rate and not merely its incidence rate. While ovarian cancer might not be as common as other forms of cancer, its mortality rate is particularly high and requires more funding as a result.

Through Lacey's efforts with the Ovarian Cancer National Alliance (OCNA), Lacey had hoped to make this argument herself, but never recovered sufficiently to be as active an ovarian cancer cure advocate as she had hoped. I am honored to be here today to speak as a representative for my most amazing wife, Lacey, who cannot be here herself.

As much as anything, Lacey saw herself as an analyst. Before she died, Lacey suggested that the OCNA prepare the following statistics to support her thesis that spending for ovarian cancer is disproportionately low if you use its mortality rate rather than its incidence rate as a basis for funding decisions. Here is what the OCNA came up with.

First, last year the congressionally directed medical research programs funded \$138 million for breast cancer research, \$80 million for prostate cancer research, and \$10 million for ovarian cancer research. All of these diseases are terrible and it's hard to say that

any deserves less funding. Still, if you look at these numbers as a dollar of investment for each cancer death, you would see that this funding represents \$3,000 for each cancer—for each breast cancer or prostate cancer death, but only \$650 for each ovarian cancer death.

In other words, the congressionally directed medical program, research programs, spent four and one-half times the amount per death for breast and prostate cancer than it did on ovarian cancer.

In other Federal programs we see similar statistics. The overall amount spent on breast cancer is more than \$18,000, on prostate cancer is more than \$14,000, and on cervical cancer is more than \$26,000. The amount of money spent on ovarian cancer, in contrast, was less than \$7,500.

When Lacey was first diagnosed, I tried to comfort her with assurances that researchers were working on treatments and a cure. With just a little time and luck, I hoped Lacey would benefit from these efforts. She was an optimistic person by nature, but challenged me with the sobering fact that ovarian cancer is relatively rare, with less research and fewer cures on the horizon as a result.

One way to compensate for this is to at least consider the number of deaths from a particular disease as a basis for normalizing your funding decisions. We therefore—I'm joining with the ovarian cancer community in respectfully requesting that Congress provide \$25 million for the ovarian cancer research program, OCRP, in fiscal year 2009 as part of the Federal Government's investment in the DOD congressionally directed medical research programs.

Thank you for your support in the past and in this effort in the future.

[The statement follows:]

#### PREPARED STATEMENT OF MARK CARLEBACH

I thank the subcommittee for this opportunity to submit comments for the record regarding the Ovarian Cancer National Alliance (Alliance) fiscal year 2009 funding recommendations. We believe these recommendations are critical to ensure that advances can be made to help reduce and prevent suffering from ovarian cancer.

I am here through the Alliance, which advocates for continued Federal investment in the Department of Defense Congressionally Directed Medical Research Programs (CDMRP). The Alliance respectfully requests that Congress provide \$25 million for the Ovarian Cancer Research Program (OCRP) in fiscal year 2009.

#### OVARIAN CANCER'S DEADLY STATISTICS

According to the American Cancer Society, in 2008, more than 21,000 American women will be diagnosed with ovarian cancer, and more than 15,000 will lose their lives to this terrible disease. Ovarian cancer is the fifth leading cause of cancer death in women. Currently, more than half of the women diagnosed with ovarian cancer will die within 5 years. When detected early, the 5-year survival rate increases to more than 90 percent, but when detected in the late stages, the 5-year survival rate drops to less than 29 percent.

In the more than 30 years since the war on cancer was declared, ovarian cancer mortality rates have not significantly improved. A valid and reliable screening test—a critical tool for improving early diagnosis and survival rates—still does not exist for ovarian cancer. Behind the sobering statistics are the lost lives of our loved ones, colleagues and community members. While we have been waiting for the development of an effective early detection test, thousands of our mothers, daughters, sisters, and friends—including one-third of our founding board members have lost their battle with ovarian cancer.

Last year a number of prominent cancer organizations released a consensus statement about ovarian cancer identifying the early warning symptoms of ovarian cancer. Without a reliable diagnostic test, we can rely only on this set of vague symp-

toms of a deadly disease, and trust that both women and the medical community will identify these symptoms and act promptly and quickly. Unfortunately, we know that this does not always happen. Too many women are diagnosed late due to the lack of a test; too many women and their families endure life-threatening and debilitating treatments to kill cancer; too many women are lost to this horrible disease.

#### THE OVARIAN CANCER RESEARCH PROGRAM

The aim of the OCRP is to conquer ovarian cancer by promoting innovative multidisciplinary research efforts on understanding, detecting, preventing, diagnosing, and controlling ovarian cancer. In support of this, the OCRP has distributed \$111.7 million from 1997 to 2007 for research on topics ranging from diagnosis to treatment to quality of life.

Since 1997, research conducted through the OCRP has been published and presented widely, helping bolster and expand the limited body of scientific knowledge of ovarian cancer. Further, the program attracts and retains investigators to the field of ovarian cancer research. The OCRP has ample use for increased funds; in fiscal year 2005, the program funded less than 15 percent of the successful research proposals due to insufficient funds. Only with increased funding can the OCRP grow and continue to contribute to the fight against ovarian cancer.

Today, ovarian cancer researchers are still struggling to develop the first ovarian cancer screening test. With traditional research models largely unsuccessful, the innovative grants awarded by the OCRP are integral in moving the field of research forward. The OCRP has been responsible for the only two working animal models of ovarian cancer—models that will help unlock keys to diagnosing and treating ovarian cancer. In 2007, researchers announced the discovery of a potential biomarker that may be used on ovarian cancer screening. Only with sufficient funding will the realization of a desperately-needed screening test be possible.

The OCRP has received a \$10 million appropriation for the past 6 years. The OCRP is a modest program compared to the other cancer programs in the CDMRP, and has made vast strides in fighting ovarian cancer with relatively few resources. With more resources, the program can support more research into screening, early diagnosis and treatment of ovarian cancer. In light of this, we request that Congress appropriate \$25 million for fiscal year 2009 to the OCRP.

#### SCIENTIFIC ACHIEVEMENTS

Since its inception, the OCRP has developed a multidisciplinary research portfolio that encompasses etiology, prevention, early detection/diagnosis, preclinical therapeutics, quality-of-life, and behavioral research projects. The OCRP strengthens the Federal Government's commitment to ovarian cancer research and supports innovative and novel projects that propose new ways of examining prevention, early detection and treatment. The program also attracts new investigators into ovarian cancer research, and encourages proposals that address the needs of minority, elderly, low-income, rural, and other under-represented populations.

The program's achievements have been documented in numerous ways, including 371 publications, 431 abstracts/presentations and, 15 patents applied for/obtained. The program also has introduced and supported 25 new investigators in the field of ovarian cancer research, 18 of whom are still active in ovarian cancer research. Investigators funded through the OCRP have produced several crucial breakthroughs in the study of prevention and detection, including: recent research has focused on immunotherapy, ovarian cancer stem cells, and the microtumor environment.

#### SUMMARY

On behalf of the entire ovarian cancer community—patients, family members, clinicians, and researchers—I thank you for your leadership and support of Federal programs that seek to reduce and prevent suffering from ovarian cancer. Thank you in advance for your support of \$25 million in fiscal year 2009 funding for the Ovarian Cancer Research Program.

Senator INOUE. This is a personal matter, but my wife of 57 years was infected or afflicted with ovarian cancer and she passed away 27 months ago.

Mr. CARLEBACH. Sorry to hear that.

Senator INOUE. I know what you're going through.

Mr. CARLEBACH. Thank you.

Senator STEVENS. May I? The incidence of ovarian cancer, I know it's a terrible thing, but have you got any figures on the incidence of those people that are in the military? We really are dealing with treatment of military people in this bill. We also handle the NIH bill and I think that's where this emphasis should be for ovarian cancer.

Mr. CARLEBACH. I don't know the answer to your statistic, but I'll work with OCNA and get back to you on that.

Senator STEVENS. Thank you.

Senator INOUE. Our next witness is the Director of the Legislative Programs of the Fleet Reserve Association, Mr. John R. Davis. Mr. Davis.

**STATEMENT OF JOHN R. DAVIS, DIRECTOR OF LEGISLATIVE PROGRAMS, THE FLEET RESERVE ASSOCIATION**

Mr. DAVIS. Mr. Chairman, Ranking Member Stevens: Thank you. The Fleet Reserve Association (FRA) wants to thank you and the entire subcommittee for your work to improve military pay, increase base allowance for housing, improve healthcare, and enhance other personal, retirement, and survivor programs.

This year, even with the \$100 billion in supplemental appropriations, the United States will spend only 4 percent of its GDP on defense, as compared to 9 percent annually in the 1960s. We strongly support funding of anticipated increased end strengths in fiscal year 2009 to meet the demands of fighting the war on terror and sustaining other operational commitments.

The association is especially grateful for the inclusion of the wounded warrior assistance provisions as part of the fiscal year 2008 National Defense Authorization Act (NDAA).

Authorization is one thing; adequate funding is another, and FRA supports funding to effectively implement these badly needed reforms, adequate funding to provide for the people, training, and oversight mechanisms needed to restore confidence in the quality of care and service received by our wounded warriors and their families.

FRA also strongly supports adequate funding for the defense health program in order to meet readiness needs, fully fund TRICARE, and improve access for all beneficiaries. FRA strongly urges the subcommittee to restore the funding in lieu of the proposed TRICARE fee increases. FRA believes funding healthcare benefits for all beneficiaries is part of the cost of defending our Nation.

The association believes that the DOD must investigate and implement other options to make TRICARE more cost efficient as an alternative to shifting costs to retiree beneficiaries under age 65. That is why FRA supports the authorization of pilot programs for preventative healthcare for TRICARE beneficiaries under age 65 that are provided for in both the House and Senate versions of the NDAA. The association would welcome this subcommittee providing adequate funding to ensure success of this effort if it is authorized.

FRA supports annual active duty pay increases that are at least one-half a percent above the employment cost index and supports the 3.9 percent increase recommended in both the House and Sen-

ate versions of the defense authorization bills. Adequate pay contributes to improved morale, readiness, and retention. The value of adequate pay cannot be overstated. Better pay will reduce family stress, especially for junior enlisted, and reduce the need for military personnel to use short-term payday loans for those people who are unaware of the ruinous long-term impact of excessive interest rates.

Military pay and benefits must reflect the fact that military service is very different from work in the private sector. Also, reforming and updating the Montgomery GI bill for the reservists is an important issue to take into account on funding.

Again, thank you, Mr. Chairman and Ranking Member Stevens, for the opportunity to present the association's recommendations, and I stand ready to answer any questions you may have.

[The statement follows:]

PREPARED STATEMENT OF JOHN R. DAVIS

THE FRA

The Fleet Reserve Association (FRA) is the oldest and largest enlisted organization serving active duty, Reserves, retired, and veterans of the Navy, Marine Corps, and Coast Guard. It is congressionally chartered, recognized by the Department of Veterans Affairs (VA) as an accrediting Veteran Service Organization (VSO) for claim representation and entrusted to serve all veterans who seek its help.

FRA was established in 1924 and its name is derived from the Navy's program for personnel transferring to the Fleet Reserve or Fleet Marine Corps Reserve after 20 or more years of active duty, but less than 30 years for retirement purposes. During the required period of service in the Fleet Reserve, assigned personnel earn retainer pay and are subject to recall by the Secretary of the Navy.

FRA's mission is to act as the premier "watch dog" organization in maintaining and improving the quality of life for Sea Service personnel and their families. FRA is a leading advocate on Capitol Hill for enlisted active duty, Reserve, retired, and veterans of the Sea Services.

FRA is the co-chair of The Military Coalition (TMC) a 35-member consortium of military and veterans organizations. FRA hosts most TMC meetings and members of its staff serve in a number of TMC leadership roles, including co-chairing several committees.

FRA celebrated 83 years of service in November 2007. For over eight decades, dedication to its members has resulted in legislation enhancing quality of life programs for Sea Services personnel and other members of the Uniformed Services while protecting their rights and privileges. CHAMPUS, now TRICARE, was an initiative of FRA, as was the Uniformed Services Survivor Benefit Plan (USSBP). More recently, FRA led the way in reforming the REDUX Retirement Plan, obtaining targeted pay increases for mid-level enlisted personnel, and sea pay for junior enlisted sailors. FRA also played a leading role in obtaining predatory lending protections for servicemembers and their dependents in the fiscal year 2007 National Defense Authorization Act.

FRA's motto is: "Loyalty, Protection, and Service."

OVERVIEW

Mr. Chairman, ensuring that wounded troops, their families, and the survivors of those killed in action are cared for by a grateful Nation remains an overriding priority for the Fleet Reserve Association (FRA). The Association thanks you and the entire subcommittee for your strong and unwavering support of funding the Department of Defense (DOD) portion of the Wounded Warrior Assistance provisions in the fiscal year 2008 National Defense Authorization Act (NDAA). Another top FRA priority is full funding of the Defense Health Program (DHP) to ensure quality care for active duty, retirees, Reservists, and their families.

"The Administration's fiscal year 2009 budget would provide \$541.1 billion in budget authority for national security which is 3.6 percent of Gross Domestic Product (GDP) not including war supplemental funding. Although the budget increases \$10 billion a year through fiscal year 2013, it would actually decline in terms of

GDP to 3.2 percent in fiscal year 2013.”<sup>1</sup> The defense budget is not only shrinking in terms of GDP but is also shrinking in comparison with domestic mandatory spending programs.

FRA believes this budget is woefully inadequate to fight a truly Global War on Terrorism (GWOT) and maintain other ongoing defense commitments. Even with supplemental war funding, the fiscal year 2009 Defense budget would total just over 4 percent of GDP. The Association supports a more robust financial commitment to the national defense and that is why FRA is supporting Senate Joint Resolution 26, sponsored by Senator Elizabeth Dole, which supports a base defense budget that at the very minimum totals 4 percent of GDP. This base line seems reasonable when compared to other time periods. From 1961–1963, the military consumed 9.1 percent of GDP annually. In 1986, the military consumed 6 percent of GDP and in 1991 (gulf war), the military consumed 4.6 percent of GDP. According to many experts, the active duty military has been stretched to the limit since 9/11/01.

Over the past several years, the Pentagon has been constrained in its budget, even as it has been confronted with rising personnel costs, aging weapon systems, worn out equipment, and dilapidated facilities.

This statement lists the concerns of our members, keeping in mind that the Association’s primary goal is to endorse any positive safety programs, rewards, and quality of life improvements that support members of the Uniform Services, particularly those serving in hostile areas, and their families, and survivors.

#### WOUNDED WARRIORS

The good news is that over 90 percent of those wounded in combat in Iraq or Afghanistan survive and return home for treatment, as compared to 70 percent during the Vietnam conflict. The bad news is that they are overwhelming the medical system and uncovered flaws in a lethargic and overly bureaucratic system. A two-front war, a lengthy occupation and repeated deployments for many servicemembers has put a strain on the DOD/VA medical system that treats our wounded warriors. The system is being strained not only by volume but by the complexity of injuries and the military has shown that it is woefully inadequate in recognizing and treating cases of Traumatic Brain Injury (TBI) and Post Traumatic Stress Disorder (PTSD).

FRA is especially grateful for the inclusion of the Wounded Warrior Assistance provisions as part of the fiscal year 2008 National Defense Authorization Act. Key elements of the House and Senate-passed versions of the act, plus elements of the Dole-Shalala Commission recommendations establish new requirements to provide the people, training, and oversight mechanisms needed to restore confidence in the quality of care and service received by our wounded warriors and their families. Maintaining an effective delivery system between DOD and VA to ensure seamless transition and quality services for wounded personnel, particularly those suffering from PTSD and TBI.

Authorization is one thing—adequate funding is another and FRA supports:

- Adequate funding to allow DOD to improve care, management, and transition of seriously ill or injured warriors, including inpatients as well as out patients.
- Adequate funding to let DOD, in conjunction with VA, continue to work for improved care for PTSD and TBI.
- Adequate funding to require DOD, in conjunction with VA, to continue operations of the Senior Oversight Committee to oversee implementation of Wounded Warrior initiatives.
- Adequate funding to enable the joint DOD VA inter-agency create an effective and usable electronic health record.
- Adequate funding to provide a sufficient number of Wounded Warrior Recovery Coordinators, if authorized.

Many of these initiatives approach the jurisdictional boundaries of this distinguished subcommittee and some may even go beyond. These challenges not with standing, adequate funding is essential to helping our wounded warriors recover from their injuries in service to our Nation. The Association urges this subcommittee to work with other appropriations subcommittees to ensure sufficient funding for authorized programs that bridge jurisdictions to help our wounded warriors.

<sup>1</sup>*Backgrounder, The Fiscal Year 2009 Defense Budget Request: The Growing Gap in Defense Spending*, Heritage Foundation No. 2110, February 25, 2008.

## HEALTH CARE

FRA strongly supports adequate funding for the Defense Health Program in order to meet readiness needs, fully fund TRICARE, and improve access for all beneficiaries regardless of age, status or location.

FRA supports adding \$1.2 billion in funding to cover the cost of the drastic TRICARE fee increases proposed in the DOD fiscal year 2009 budget that have been rejected by both authorizing committees. The Association supports full funding for the Defense Health Program and believes that the Defense Department must investigate and implement other cost-savings options to make TRICARE more cost-efficient as alternatives to shifting costs for TRICARE Standard and other health care benefits to retiree beneficiaries.

Higher health care fees for retirees will significantly erode the value of retired pay, particularly for enlisted retirees who retired prior to larger and targeted recent pay adjustments enacted to close the pay gap. Military service is very different from work in the corporate world and requires service in often life-threatening duty assignments and the associated benefits offered in return must be commensurate with these realities.

The Association welcomes the Senate Armed Services Committee authorizing demonstration and pilot projects that will provide incentives for TRICARE beneficiaries' health promotions and urges this subcommittee to adequately fund these projects that have proven to save money over the long term.

FRA also supports the funding of other programs important to active duty, Reserve Component, and retired members of the Uniformed Services, their families, and survivors. The subcommittee's work has greatly improved military pay, eliminated out-of-pocket housing expenses, and enhanced other personnel, retirement, and survivor programs. This support is critical to maintaining readiness and is invaluable to our servicemembers and their families serving throughout the world fighting the global war on terror, sustaining other operational commitments and to fulfilling commitments to those who've served in the past.

## PROTECT PERSONNEL PROGRAMS

*Active Duty Pay.*—FRA supports annual active duty pay increases that are at least 0.5 percent above the Employment Cost Index (ECI) along with targeted increases for mid-career and senior enlisted personnel to help close the remaining 3.4 percent pay gap between active duty and private sector pay.

FRA strongly supports the authorization and funding of a 3.9 percent fiscal year 2009 pay increase included in the Senate Armed Services Committee markup for the fiscal year 2009 Defense Authorization (S. 2787).

Adequate and targeted pay increases authorized in recent years, particularly for middle grade and senior petty and noncommissioned officers, have contributed to improved morale, readiness, and retention. Better pay reduces family stress, especially for junior enlisted and may reduce the need for military personnel use of short-term pay day loans unaware of the ruinous long-term impact of excessive interest rates.

Military pay and benefits must reflect the fact that military service is very different from work in the private sector.

*BRAC and Rebasing.*—Adequate resources are required to fund essential quality of life programs and services at bases impacted by the Base Realignment and Closure (BRAC) and rebasing initiatives. The House Armed Services Committee Readiness Subcommittee, during its mark up of the fiscal year 2009 Defense Authorization bill, noted that base-closing costs have increased by almost 50 percent and that expected savings have declined. FRA is also concerned about sustaining commissary access, MWR programs and other support for servicemembers and their families particularly at installations most impacted by these actions. These include Guam, where a significant number of marines and their families are being relocated from Okinawa. The shortage of funds is curtailing or closing some of the activities while the costs of participating in others have recently increased. Regarding Navy fitness centers, the biggest challenge is updating older fitness structures and providing the right equipment, and ensuring availability of trained staff.

*Family Readiness and Support.*—FRA supports funding for a family readiness and a robust support structure to enhance family cohesion and improve retention and recruitment. DOD and the services must provide information and education programs for families of our servicemembers. Spousal and family programs are being fine tuned and are successfully contributing to the well-being of this community. The Navy's Fleet and Family Centers and the Marines' Marine Corps Community Services (MCCS) and the family services programs are providing comprehensive, 24/7 information and referral services to the servicemember and family through its One

Source links. One Source is also particularly beneficial to mobilized Reservists and families who are unfamiliar with benefits and services available to them.

*Child and Youth Programs.*—MCPON Joe Campa testified before the House Appropriations Subcommittee on Military Construction and Veterans Affairs on February 7, 2008, that there is a need for more childcare facilities with more than 8,000 children on annual waiting lists. The average waiting time for access is 6 months and up to 12 months in fleet concentration areas. “Parents are waiting too long for services and missing days from work due to lack of available childcare.” Access to child care is important and FRA urges Congress to authorize adequate funding for this important program.

Other top Navy requirements are the need for more homeport/ashore barracks, and improved health care access via more providers in certain fleet concentration areas.

As an integral support system for mission readiness and deployments, it is imperative these programs be adequately funded and improved and expanded to address the needs of both married and single parents.

*Spousal Employment.*—The Association welcomes President Bush’s State-of-the-Union speech recommending hiring preference for military spouses and urges Congress to continue its support of the military’s effort to affect a viable spousal employment program and to authorize sufficient funds to assure the program’s success. Today’s all-volunteer environment requires the services to consider the whole family. FRA also supports provisions in the Senate Armed Services Committee Defense Authorization markup addressing spousal employment, which is important and can be a stepping-stone to retention of the servicemember—a key participant in the defense of this Nation.

*Active Duty and Reserve Component Personnel End Strengths.*—FRA strongly supports adequate end strengths to win the war on terror and to sustain other military commitments around the world. Inadequate end strengths increase stress on the military personnel and their families and contribute to greater reliance on the Reserve Component. FRA welcomes the administration’s increase of 5,000 marines (from 189,000 to 194,000) and urges appropriations to cover the associated short- and long-term costs.

*Education Funding.*—FRA strongly supports funding for supplemental Impact Aid for 1,400 highly impacted school districts with military children. It is important to ensure our servicemembers, many serving in harm’s way, have less concern about their children’s education and more focus with the job at hand. Funding for Impact Aid has been flat for several years now. That is why the Association welcomes the additional \$30 million of Impact Aid included in the Senate Defense Authorization bill, the \$10 million in special assistance to local education agencies, and \$5 million for children with severe disabilities.

*Reform of PCS Process.*—FRA appreciates that the long-delayed implementation of the Families First program which provides full replacement value reimbursements for damaged household goods moved during servicemembers’ PCS relocations. This program and other authorized PCS reform initiatives must be adequately funded to ensure full implementation and the continuation of this program.

*Family Housing.*—The Association welcomes the \$337 million increase for family housing from fiscal year 2008 to fiscal year 2009. It should be noted, however, that the fiscal year 2007 appropriation for family housing was more \$800 million than the proposed fiscal year 2009 budget. Adequate military housing that’s well maintained is critical to retention and morale.

#### RESERVE ISSUES

FRA stands foursquare in support of the Nation’s Reservists. Due to the demands of the War on Terror, Reserve units are now increasingly being mobilized to augment active duty components. As a result of these operational demands, Reserve component is no longer a strategic Reserve but is now an operational Reserve that is an integral part of the total force. And because of these increasing demands on Reservists to perform multiple missions abroad over longer periods of time, it’s essential to improve compensation and benefits to retain currently serving personnel and attract quality recruits.

*MGIB.*—FRA supports both “The Enhancement of Recruitment, Retention, and Readjustment Through Education Act” (S. 2938), and “The Post 9/11 Veterans Educational Assistance Act” (S.22). Both bills make substantial improvements to the Reserve MGIB program, and the Association urges the subcommittee to fully fund these increased Reserve benefits that may be authorized by the United States Senate. The increasing number and duration of deployments to fight the war on terror and sustain other operational commitments has put a strain on families and careers

of Reservists and more than justifies improved MGIB benefits that would provide needed recognition of this fact and enhance retention and recruitment.

*Retirement.*—If authorized, FRA supports funding retroactive eligibility for the early retirement benefit to include Reservists who have supported contingency operations since September 11, 2001. The fiscal year 2008 Defense Authorization Act (H.R. 4986) reduces the Reserve retirement age (age 60) by 3 months for each cumulative 90-days ordered to active duty. The provision, however, only applies to service after the effective date of the legislation, and leaves out more than 600,000 Reservists mobilized since 9/11 for Afghanistan and Iraq and to respond to natural disasters like Hurricane Katrina. About 142,000 of them have been deployed multiple times in the past 6 years.

*Family Readiness.*—FRA supports resources to allow increased outreach to connect Reserve families with support programs. This includes increased funding for family readiness, especially for those geographically dispersed, not readily accessible to military installations, and inexperienced with the military. Unlike active duty families who often live near military facilities and support services, most Reserve families live in civilian communities where information and support is not readily available. Congressional hearing witnesses have indicated that many of the half million mobilized Guard and Reserve personnel have not received transition assistance services they and their families need to make a successful transition back to civilian life.

#### CONCLUSION

FRA is grateful for the opportunity to present the organization's views to this distinguished subcommittee. The Association reiterates its profound gratitude for the extraordinary progress this subcommittee, with outstanding staff support, has made in advancing a wide range of enhanced benefits and quality-of-life programs for all uniformed services personnel, retirees, their families, and survivors.

Thank you.

Senator INOUE. I thank you very much, sir. We do have a problem. Our latest numbers tell us that we're spending a little over \$126,000 per person in the military per year, and the total cost for pay, benefits, and health for active duty personnel, \$180 billion per year. So we're trying our best to do what we can to add to that, but, as you know, it's not that easy.

Yes, sir?

Mr. DAVIS. I just would like to respond. We fully understand that the cost of healthcare is going up in the military. It is also going up everywhere else. It's not just a military problem. We do support other measures, as I mentioned in the testimony and also more extensively in my written testimony. Other efforts we think should be made first to try and make the healthcare system more cost effective before shifting the cost to the retirees.

Thanks.

Senator INOUE. Our next witness is the Legislative Director of the National Association of Uniformed Services, Mr. Rick Jones. Mr. Jones.

#### STATEMENT OF RICK JONES, LEGISLATIVE DIRECTOR, NATIONAL ASSOCIATION FOR UNIFORMED SERVICES

Mr. JONES. Thank you, Mr. Chairman. With the longest day, D-Day, June 6, 1944, just around the corner, it's an honor to testify before you two most distinguished World War II veterans. As proud as we are of the World War II generation, we are just as proud, perhaps as proud as any person could be, as any association could be, in what is going on today with the generation serving us overseas and around the globe and throughout America. What they do is vital to our security and the debt we owe them is enormous.

Mr. Chairman, quality healthcare is a very strong incentive for a military career. At a time when we are relying on our armed

forces, the DOD's recommendations to reduce military healthcare spending by \$1.2 billion raises very serious questions and concerns. As you know, the DOD plans would double and even triple annual fees for retirees, and our association asks you to ensure full funding is provided to maintain the value of the healthcare benefit. What we ask is what is best for our service men and women, who have given a career in the armed services.

Mr. Chairman, the long war fought by an overstretched force gives us also a warning about force readiness. There are simply too many missions, too few troops. To sustain the service, we must recognize that an increase in troop strength is needed and it must be resourced.

We also ask that you give priority to funding operations and maintenance accounts to reset and recapitalize and renew the force.

Another matter of great interest to our members is the plan to realign and consolidate military health facilities in the National Capital Region, specifically Walter Reed Army Medical Center in Washington, DC. To maintain Walter Reed's base operations support and medical services and to ensure that they provide uninterrupted care to catastrophically wounded soldiers and marines, we request that funds be in place to ensure that Walter Reed remains open, fully operational, fully functional until the planned facilities at Bethesda and Fort Belvoir are in place and ready to give appropriate care. Our wounded warriors deserve the care that we provide and we hope that it can be resourced.

In a seamless transition, we ask that you maintain an oversight view on the DOD-VA electronic healthcare records and related coordination to ensure there is a bidirectional interoperable system, so that no one falls through the cracks. That shouldn't occur.

It is said of traumatic brain injury that it is a signature injury of the war, and indeed it is. There's a full spectrum of care available. We ask you to recognize that care and fully fund it.

We also encourage the subcommittee to ensure that funding for defense programs prosthetic research is adequate to support the full range of programs needed to meet the current healthcare challenges that our wounded warriors face.

The Uniformed Services Health University. We ask you to recognize that as the Nation's Federal school of medicine and graduate school of nursing. The care that comes out of that can help our military provide the doctors that are needed. We also ask you to ensure that the Armed Forces Retirement Home is funded.

We appreciate the opportunity you've given us to testify and thank you very much for your service and for your work here in the United States Senate. We deeply appreciate it.

[The statement follows:]

#### PREPARED STATEMENT OF RICK JONES

Chairman Inouye, Ranking Member Stevens, and members of the subcommittee, good morning. It is a pleasure to appear before you today to present the views of The National Association for Uniformed Services on the 2009 Defense appropriations bill.

My name is Richard "Rick" Jones, Legislative Director of the National Association for Uniformed Services (NAUS). And for the record, NAUS has not received any Federal grant or contract during the current fiscal year or during the previous 2 years in relation to any of the subjects discussed today.

As you know, Mr. Chairman, the National Association for Uniformed Services, founded in 1968, represents all ranks, branches, and components of uniformed services personnel, their spouses, and survivors. The Association includes all personnel of the active, retired, Reserve and National Guard, disabled veterans, veterans community, and their families. We love our country, believe in a strong national defense, support our troops, and honor their service.

Mr. Chairman, the first and most important responsibility of our Government is the protection of our citizens. As we all know, we are at war. That is why the Defense Appropriations bill is so very important. It is critical that we provide the resources to those who fight for our protection and our way of life. We need to give our courageous men and women everything they need to prevail. And we must recognize as well that we must provide priority funding to keep the promises made to the generations of warriors whose sacrifice has paid for today's freedom.

At the start, I want to express a NAUS concern about the amount of our investment in our national defense. At the height of the war on terror, our current defense budget represents only a little more than 4 percent of the gross national product, as opposed to the average of 5.7 percent of GNP in the peacetime years between 1940 and 2000.

We cannot look the other way in a time when we face such serious threats. Resources are required to ensure our military is fully staffed, trained, and equipped to achieve victory against our enemies. Leaders in Congress and the administration need to balance our priorities and ensure our defense in a dangerous world.

Here, I would like to make special mention of the leadership and contribution this panel has made in providing the resources and support our forces need to complete their mission. Defending the United States homeland and the cause of freedom means that the dangers we face must be confronted. And it means that the brave men and women who put on the uniform must have the very best training, best weapons, best care, and wherewithal we can give them.

Mr. Chairman, you and those on this important panel have taken every step to give our fighting men and women the funds they need, despite allocations we view as insufficient for our total defense needs. You have made difficult priority decisions that have helped defend America and taken special care of one of our greatest assets, namely our men and women in uniform.

And NAUS is very proud of the job this generation of Americans is doing to defend America. Every day they risk their lives, half a world away from loved ones. Their daily sacrifice is done in today's voluntary force. What they do is vital to our security. And the debt we owe them is enormous.

The members of NAUS applaud Congress for the actions you have taken over the last several years to close the pay gap, provide bonuses for specialized skill sets, and improve the overall quality of life for our troops and the means necessary for their support.

Our Association does, however, have some concerns about a number of matters. Among the major issues that we will address today is the provision of a proper health care for the military community and recognition of the funding requirements for TRICARE for retired military. Also, we will ask for adequate funding to improve the pay for members of our armed forces and to address a number of other challenges including TRICARE Reserve Select and the Survivor Benefit Plan.

We also have a number of related priority concerns such as the diagnosis and care of troops returning with Post Traumatic Stress Disorder (PTSD) and Traumatic Brain Injury (TBI), the need for enhanced priority in the area of prosthetics research, and providing improved seamless transition for returning troops between the Department of Defense (DOD) and the Department of Veterans Affairs (VA). In addition, we would like to ensure that adequate funds are provided to defeat injuries from the enemy's use of Improvised Explosive Devices (IEDs).

#### MILITARY QUALITY OF LIFE: HEALTH CARE

Quality health care is a strong incentive to make military service a career. The Defense blueprint for military healthcare raises serious concern. DOD recommends saving \$1.2 billion through sharp increases in TRICARE fees and higher copays for pharmaceuticals for 3.1 million retirees under age 65 and their families.

To achieve these savings, Defense officials would institute the plan proposed last year. That plan triples annual enrollment fees for TRICARE Prime next October for officers, to \$875 from \$230 a year for individuals and to \$1,750 from \$460 per year for families. For retired E-6 and below, the fee would jump nearly 50 percent, to \$450/\$900 from \$230/\$460. And for E-7 and above, the jump would more than double to \$595/\$1,190 from \$230/\$460.

Defense officials also suggest the establishment of a TRICARE Standard enrollment fee and an increase in the annual amount of deductible charges paid by retirees using Standard coverage. The standard beneficiary already pays a 25 percent cost share (and an added 15 percent for non-participating providers). Should Congress approve the DOD request to increase deductibles and initiate an annual fee, the value of the benefit earned by military retirees using Standard would be greatly diminished.

In addition, DOD suggests the establishment of an enrollment fee for retirees age 65 and over and their families for participation in TRICARE for Life.

DOD officials also recommend changes in TRICARE retail pharmacy copayments. Their ideas call for increasing copays for retail generic drugs to \$15 from \$3; for increasing copays for retail brand drugs to \$25 from \$9; and for increasing copays for non-formulary prescriptions to \$45 from \$22. By the way, these would also affect retirees age 65 and over who use TRICARE for Life.

The assertion behind the proposals is to have working-age retirees and family members pay a larger share of TRICARE costs or use civilian health plans offered by employers. Frankly, we are deeply troubled that DOD would aim to discourage retirees from using their earned benefits with the military medical system.

The National Association for Uniformed Services is certainly not comfortable with DOD estimates that by 2011, if the changes were made, 144,000 retirees currently enrolled in the TRICARE programs would bail out and go to a State or private plan and an estimated 350,000 people who earned the benefit would never come into it.

According to DOD, the Pentagon plan would drive half a million military retirees to make a choice that they might otherwise not want to make in order to reduce DOD costs this year by \$1.2 billion. It is not only an extremely poor way to treat military families in times of peace or war; it is unfair, unbalanced, and would push 500,000 retirees out of TRICARE, the benefit they earned through a military career.

Mr. Chairman, the National Association for Uniformed Services asks you to ensure full funding is provided to maintain the value of the healthcare benefit provided those men and women willing to undergo the hardships of a military career.

The provision of quality, timely care is considered one of the most important benefits afforded the career military. What Congress has done reflects the commitment of a Nation, and it deserves your wholehearted support.

We urge the subcommittee to take the actions necessary for honoring our obligation to those men and women who have worn the Nation's military uniform. Confirm America's solemn, moral obligation to support our troops, our military retirees, and their families. They have kept their promise to our Nation, now it's time for us to keep our promise to them.

#### MILITARY QUALITY OF LIFE: PAY

For fiscal year 2009, the administration recommends a 3.5 percent across-the-board pay increase for members of the Armed Forces. The proposal is designed, according to the Pentagon, to keep military pay in line with civilian wage growth.

The National Association for Uniformed Services calls on you to put our troops and their families first. Our forces are stretched thin, at war, yet getting the job done. We ask you to express the Nation's gratitude for their critical service, increase basic pay and drill pay one-half percent above the administration's request to 3.9 percent.

Congress and the administration have done a good job over the recent past to narrow the gap between civilian-sector and military pay. The differential, which was as great as 14 percent in the late 1990s, has been reduced to just under 4 percent with the January 2008 pay increase.

However, we can do better than simply maintaining a rough measure of comparability with the civilian wage scale. To help retention of experience and entice recruitment, the pay differential is important. We have made significant strides. But we are still below the private sector.

In addition, we urge the appropriations panel to never lose sight of the fact that our DOD manpower policy needs a compensation package that is reasonable and competitive. Bonuses have a role in this area. Bonuses for instance can pull people into special jobs that help supply our manpower for critical assets, and they can also entice "old hands" to come back into the game with their skills.

The National Association for Uniformed Services asks you to do all you can to fully compensate these brave men and women for being in harm's way, we should clearly recognize the risks they face and make every effort to appropriately compensate them for the job they do.

## MILITARY QUALITY OF LIFE: BASIC ALLOWANCE FOR HOUSING

The National Association for Uniformed Services strongly supports revised housing standards within the Basic Allowance for Housing (BAH). We are most grateful for the congressional actions reducing out-of-pocket housing expenses for servicemembers over the last several years. Despite the many advances made, many enlisted personnel continue to face steep challenge in providing themselves and their families with affordable off-base housing and utility expenses. BAH provisions must ensure that rates keep pace with housing costs in communities where military members serve and reside. Efforts to better align actual housing rates can reduce unnecessary stress and help those who serve better focus on the job at hand, rather than the struggle with meeting housing costs for their families.

## MILITARY QUALITY OF LIFE: FAMILY HOUSING ACCOUNTS

The National Association for Uniformed Services urges the subcommittee to provide adequate funding for military construction and family housing accounts used by DOD to provide our servicemembers and their families quality housing. The funds for base allowance and housing should ensure that those serving our country are able to afford to live in quality housing whether on or off the base. The current program to upgrade military housing by privatizing Defense housing stock is working well. We encourage continued oversight in this area to ensure joint military-developer activity continues to improve housing options. Clearly, we need to be particularly alert to this challenge as we implement BRAC and related rebasing changes.

The National Association for Uniformed Services also asks special provision be granted the National Guard and Reserve for planning and design in the upgrade of facilities. Since the terrorist attacks of September 11, 2001, our Guardsmen and reservists have witnessed an upward spiral in the rate of deployment and mobilization. The mission has clearly changed, and we must recognize they account for an increasing role in our national defense and homeland security responsibilities. The challenge to help them keep pace is an obligation we owe for their vital service.

## INCREASE FORCE READINESS FUNDS

The readiness of our forces is declining. The long war fought by an overstretched force tells us one thing: there are simply too many missions and too few troops. Extended and repeated deployments are taking a human toll. Back-to-back deployments means, in practical terms, that our troops face unrealistic demands. To sustain the service we must recognize that an increase in troop strength is needed and it must be resourced.

In addition, we ask you to give priority to funding for the operations and maintenance accounts where money is secured to reset, recapitalize and renew the force. The National Guard, for example, has virtually depleted its equipment inventory, causing rising concern about its capacity to respond to disasters at home or to train for its missions abroad.

The deficiencies in the equipment available for the National Guard to respond to such disasters include sufficient levels of trucks, tractors, communication, and miscellaneous equipment. If we have another overwhelming storm, hurricane or, God forbid, a large-scale terrorist attack, our National Guard is not going to have the basic level of resources to do the job right.

## WALTER REED ARMY MEDICAL CENTER

Another matter of great interest to our members is the plan to realign and consolidate military health facilities in the National Capital Region. The proposed plan includes the realignment of all highly specialized and sophisticated medical services currently located at Walter Reed Army Medical Center in Washington, DC, to the National Naval Medical Center in Bethesda, Maryland, and the closing of the existing Walter Reed by 2011.

While we herald the renewed review of the adequacy of our hospital facilities and the care and treatment of our wounded warriors that result from last year's news reports of deteriorating conditions at Walter Reed Army Medical Center, the National Association for Uniformed Services believes that Congress must continue to provide adequate resources for WRAMC to maintain its base operations' support and medical services that are required for uninterrupted care of our catastrophically wounded soldiers and marines as they move through this premier medical center.

We request that funds be in place to ensure that Walter Reed remains open, fully operational and fully functional, until the planned facilities at Bethesda or Fort

Belvoir are in place and ready to give appropriate care and treatment to the men and women wounded in armed service.

Our wounded warriors deserve our Nation's best, most compassionate healthcare and quality treatment system. They earned it the hard way. And with application of the proper resources, we know the Nation will continue to hold the well being of soldiers and their families as our number one priority.

#### DEPARTMENT OF DEFENSE, SEAMLESS TRANSITION BETWEEN THE DOD AND VA

The development of electronic medical records remains a major goal. It is our view that providing a seamless transition for recently discharged military is especially important for servicemembers leaving the military for medical reasons related to combat, particularly for the most severely injured patients.

The National Association for Uniformed Services calls on the appropriations committee to push DOD and VA to follow through on establishing a bi-directional, interoperable electronic medical record. Since 1982, these two departments have been working on sharing critical medical records, yet to date neither has effectively come together in coordination with the other.

The time for foot dragging is over. Taking care of soldiers, sailors, airmen, and marines is a national obligation, and doing it right sends a strong signal to those currently in military service as well as to those thinking about joining the military.

DOD must be directed to adopt electronic architecture including software, data standards and data repositories that are compatible with the system used at the Department of Veterans Affairs. It makes absolute sense and it would lower costs for both organizations.

If our seriously wounded troops are to receive the care they deserve, the departments must do what is necessary to establish a system that allows seamless transition of medical records. It is essential if our Nation is to ensure that all troops receive timely, quality health care and other benefits earned in military service.

To improve the DOD/VA exchange, the hand-off should include a detailed history of care provided and an assessment of what each patient may require in the future, including mental health services. No veteran leaving military service should fall through the bureaucratic cracks.

#### DEFENSE DEPARTMENT FORCE PROTECTION

The National Association for Uniformed Services urges the subcommittee to provide adequate funding to rapidly deploy and acquire the full range of force protection capabilities for deployed forces. This would include resources for up-armored high mobility multipurpose wheeled vehicles and add-on ballistic protection to provide force protection for soldiers in Iraq and Afghanistan, ensure increased activity for joint research and treatment effort to treat combat blast injuries resulting from improvised explosive devices (IEDs), rocket propelled grenades, and other attacks; and facilitate the early deployment of new technology, equipment, and tactics to counter the threat of IEDs.

We ask special consideration be given to counter IEDs, defined as makeshift or "homemade" bombs, often used by enemy forces to destroy military convoys and currently the leading cause of casualties to troops deployed in Iraq. These devices are the weapon of choice and, unfortunately, a very efficient weapon used by our enemy. The Joint Improvised Explosive Device Defeat Organization (JIEDDO) is established to coordinate efforts that would help eliminate the threat posed by these IEDs. We urge efforts to advance investment in technology to counteract radio-controlled devices used to detonate these killers. Maintaining support is required to stay ahead of our enemy and to decrease casualties caused by IEDs.

#### DEFENSE HEALTH PROGRAM—TRICARE RESERVE SELECT

Mr. Chairman, another area that requires attention is reservist participation in TRICARE. As we are all aware, National Guard and Reserve personnel have seen an upward spiral of mobilization and deployment since the terrorist attacks of September 11, 2001. The mission has changed and with it our reliance on these forces has risen. Congress has recognized these changes and begun to update and upgrade protections and benefits for those called away from family, home and employment to active duty. We urge your commitment to these troops to ensure that the long overdue changes made in the provision of their health care and related benefits is adequately resourced. We are one force, all bearing a critical share of the load.

## DEPARTMENT OF DEFENSE, PROSTHETIC RESEARCH

Clearly, care for our troops with limb loss is a matter of national concern. The global war on terrorism in Iraq and Afghanistan has produced wounded soldiers with multiple amputations and limb loss who in previous conflicts would have died from their injuries. Improved body armor and better advances in battlefield medicine reduce the number of fatalities, however injured soldiers are coming back oftentimes with severe, devastating physical losses.

In order to help meet the challenge, Defense Department research must be adequately funded to continue its critical focus on treatment of troops surviving this war with grievous injuries. The research program also requires funding for continued development of advanced prosthesis that will focus on the use of prosthetics with microprocessors that will perform more like the natural limb.

The National Association for Uniformed Services encourages the subcommittee to ensure that funding for Defense Department's prosthetic research is adequate to support the full range of programs needed to meet current and future health challenges facing wounded veterans. To meet the situation, the subcommittee needs to focus a substantial, dedicated funding stream on Defense Department research to address the care needs of a growing number of casualties who require specialized treatment and rehabilitation that result from their armed service.

We would also like to see better coordination between the Department of Defense Advanced Research Projects Agency and the Department of Veterans Affairs in the development of prosthetics that are readily adaptable to aid amputees.

## POST TRAUMATIC STRESS DISORDER (PTSD) AND TRAUMATIC BRAIN INJURY (TBI)

The National Association for Uniformed Services supports a higher priority on Defense Department care of troops demonstrating symptoms of mental health disorders and traumatic brain injury.

It is said that Traumatic Brain Injury (TBI) is the signature injury of the Iraq war. Blast injuries often cause permanent damage to brain tissue. Veterans with severe TBI will require extensive rehabilitation and medical and clinical support, including neurological and psychiatric services with physical and psycho-social therapies.

We call on the subcommittee to fund a full spectrum of TBI care and to recognize that care is also needed for patients suffering from mild to moderate brain injuries, as well. The approach to this problem requires resources for hiring caseworkers, doctors, nurses, clinicians, and general caregivers if we are to meet the needs of these men and women and their families.

The mental condition known as Post Traumatic Stress Disorder (PTSD) has been well known for more than 100 years under an assortment of different names. For example more than 60 years ago, Army psychiatrists reported, "That each moment of combat imposes a strain so great that . . . psychiatric casualties are as inevitable as gunshot and shrapnel wounds in warfare."

PTSD is a serious psychiatric disorder. While the Government has demonstrated over the past several years a higher level of attention to those military personnel who exhibit PTSD symptoms, more should be done to assist servicemembers found to be at risk.

Pre-deployment and post-deployment medicine is very important. Our legacy of the gulf war demonstrates the concept that we need to understand the health of our servicemembers as a continuum, from pre- to post-deployment.

The National Association for Uniformed Services applauds the extent of help provided by the Defense Department, however we encourage that more resources be made available to assist. Early recognition of the symptoms and proactive programs are essential to help many of those who must deal with the debilitating effects of mental injuries, as inevitable in combat as gunshot and shrapnel wounds.

We encourage the members of the subcommittee to provide for these funds and to closely monitor their expenditure and to see they are not redirected to other areas of defense spending.

## ARMED FORCES RETIREMENT HOME

The National Association for Uniformed Services encourages the subcommittee's continued interest in providing funds for the Armed Forces Retirement Home (AFRH).

We urge the subcommittee to continue its help in providing adequate funding to alleviate the strains on the Washington home. Also, we remain concerned about the future of the Gulfport home, so we urge your continued close oversight on its reconstruction. And we thank the subcommittee for the provision of \$240 million last

year to build a new Armed Forces Retirement Home at its present location of the tower, which began this past March.

The National Association for Uniformed Services also asks the subcommittee to closely review administration plans to sell great portions of the Washington AFRH to developers. The AFRH is a historic national treasure, and we thank Congress for its oversight of this gentle program and its work to provide for a world-class quality-of-life support system for these deserving veterans.

#### IMPROVED MEDICINE WITH LESS COST AT MILITARY TREATMENT FACILITIES

The National Association for Uniformed Services is also seriously concerned over the consistent push to have Military Health System beneficiaries age of 65 and over moved into the civilian sector from military care. That is a very serious problem for the Graduate Medical Education (GME) programs in the MHS; the patients over 65 are required for sound GME programs, which, in turn, ensure that the military can retain the appropriate number of physicians who are board certified in their specialties.

TRICARE/HA policies are pushing out those patients not on active duty into the private sector where the cost per patient is at least twice as expensive as that provided within Military Treatment Facilities (MTFs). We understand that there are many retirees and their families who must use the private sector due to the distance from the closest MTF; however, where possible, it is best for the patients themselves, GME, medical readiness, and the minimizing the cost of TRICARE premiums if as many non-active duty beneficiaries are taken care of within the MTFs. As more and more MHS beneficiaries are pushed into the private sector, the cost of the MHS rises. The MHS can provide better medicine, more appreciated service and do it at improved medical readiness and less cost to the taxpayers.

#### UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES

As you know, the Uniformed Services University of the Health Sciences (USUHS) is the Nation's Federal school of medicine and graduate school of nursing. The medical students are all active-duty uniformed officers in the Army, Navy, Air Force, and U.S. Public Health Service who are being educated to deal with wartime casualties, national disasters, emerging diseases, and other public health emergencies.

The National Association for Uniformed Services supports the USUHS and requests adequate funding be provided to ensure continued accredited training, especially in the area of chemical, biological, radiological, and nuclear response. In this regard, it is our understanding that USUHS requires funding for training and educational focus on biological threats and incidents for military, civilian, uniformed first responders, and healthcare providers across the Nation.

#### JOINT POW/MIA ACCOUNTING COMMAND (JPAC)

We also want the fullest accounting of our missing service men and ask for your support in DOD dedicated efforts to find and identify remains. It is a duty we owe to the families of those still missing as well as to those who served or who currently serve. And as President Bush said, "It is a signal that those who wear our country's military uniform will never be abandoned."

In recent years, funding for the Joint POW/MIA Accounting Command (JPAC) has fallen short, forcing the agency to scale back and even cancel many of its investigative and recovery operations. NAUS supports the fullest possible accounting of our missing service men. It is a duty we owe the families, to ensure that those who wear our country's uniform are never abandoned. We request that appropriate funds be provided to support the JPAC mission for fiscal year 2009.

#### APPRECIATION FOR THE OPPORTUNITY TO TESTIFY

As a staunch advocate for our uniformed service men and women, The National Association for Uniformed Services recognizes that these brave men and women did not fail us in their service to country, and we, in turn, must not fail them in providing the benefits and services they earned through honorable military service.

Mr. Chairman, The National Association for Uniformed Services appreciates the subcommittee's hard work. We ask that you continue to work in good faith to put the dollars where they are most needed: in strengthening our national defense, ensuring troop protection, compensating those who serve, providing for DOD medical services including TRICARE, and building adequate housing for military troops and their families, and in the related defense matters discussed today. These are some of our Nation's highest priority needs and we ask that they be given the level of attention they deserve.

The National Association for Uniformed Services is confident you will take special care of our Nation's greatest assets: the men and women who serve and have served in uniform. We are proud of the service they give to America every day. They are vital to our defense and national security. The price we pay as a Nation for their earned benefits is a continuing cost of war, and it will never cost more nor equal the value of their service.

We thank you for your efforts, your hard work. And we look forward to working with you to ensure we continue to provide sufficient resources to protect the earned benefits for those giving military service to America every day.

Again, the National Association for Uniformed Services deeply appreciates the opportunity to present the Association's views on the issues before the Defense Appropriations Subcommittee.

Senator INOUE. Thank you very much, sir.

Senator STEVENS.

Senator STEVENS. Mr. Jones, I'm just back from a prolonged trip to Alaska and I found that, while doctors in Alaska are seeing TRICARE patients and veterans patients, they are not seeing Medicare patients. We have about 10 times as many of the military and veterans as we do the seniors because they're leaving the State.

I sense in your testimony that you think that TRICARE is too low. Is that right?

Mr. JONES. The testimony here is the total funding that the Pentagon has suggested—that individuals who have earned the healthcare benefit and were promised that are being asked to shift, to pay out of their own pockets for their own benefit. We're asking you to fill that gap, rejecting the—

Senator STEVENS. That's a family benefit, isn't it? The individual is receiving the care, but it's the family benefits that's creating the—

Mr. JONES. Well, there's TRICARE Standard, TRICARE Prime. These are the benefits that do provide for families and for retirees. As you know, individuals from the military can retire after 20 years, oftentimes at an early age. He's eligible for those retirement programs.

Senator STEVENS. I'm not opposed to increasing the TRICARE. I just wonder about a system that really is paying the Medicare patients, physicians who see Medicare patients, so low that they won't see them. In our State right now, the medical profession won't see senior citizens on Medicare, but they do see TRICARE.

Mr. JONES. That's interesting, because we're concerned with the TRICARE reimbursement package that's being discussed now in the Senate, and we've recognized that if reductions do go in place that our medical care benefit may become hollow. Individuals looking for medical procedures may not be able to access doctors who deliver those procedures.

Senator STEVENS. I don't think there should be a difference.

Mr. JONES. It's interesting that Alaska—

Senator STEVENS. There should not be a difference between the amount we pay to a doctor to see a senior citizen, and the patient costs ought to be the same. Today it's not. We'll chat about that later, but I do think there ought to be a single payment schedule for physicians to see those eligible for support from the Federal system for Medicare.

Mr. JONES. Couldn't agree more with you, sir. The hope is that that threshold level is adequate enough to maintain an adequate number of doctors who are willing to see those patients.

Senator INOUE. I thank you very much, sir.

Now we'll have a new panel: Dr. George—Mr. George Dahlman, Mr. Martin Foil, Captain Walt Steiner, and Ms. Mary Hesdorffer.

Our first witness of this panel is the Senior Vice President for Public Policy, The Leukemia and Lymphoma Society, Mr. George Dahlman.

**STATEMENT OF GEORGE DAHLMAN, SENIOR VICE PRESIDENT FOR PUBLIC POLICY, THE LEUKEMIA AND LYMPHOMA SOCIETY**

Mr. DAHLMAN. Thank you, Mr. Chairman and Senator Stevens. As mentioned, I'm George Dahlman, Senior Vice President for The Leukemia and Lymphoma Society. I'm also the father of a leukemia survivor. Since 1949, the society has been dedicated to finding a cure for the blood cancers, and to that end in 2008 we'll provide approximately \$70 million of our own money raised privately in research grants.

A number of our grant recipients receive additional funds from the NIH, private foundations, and the DOD through the congressionally directed medical research program.

For fiscal 2009, The Leukemia and Lymphoma Society, along with other blood cancer groups—the American Society of Hematology, the Aplastic Anemia and MDS International Foundation, the International Myeloma Foundation, Lymphoma Research Foundation, and the Multiple Myeloma Research Foundation—all support a \$10 million dedicated stand-alone research program for blood cancers in the congressionally directed medical research program within DOD.

The reasons for having a blood cancer research program at DOD are the benefit such program would have for the warfighter and the fact that blood cancer research has led to breakthroughs in the treatment of other cancers. Several agencies in the Federal Government have recognized the importance of blood cancers to those that serve in our military. For example, the VA has determined that service members who have been exposed to ionizing radiation and contract multiple myeloma, non-Hodgkin's lymphoma, or leukemias other than chronic lymphocytic leukemia are presumed to have contracted those diseases as a result of their military service.

Second, in-country Vietnam veterans who contract Hodgkin's disease, chronic lymphocytic leukemia, multiple myeloma, or non-Hodgkin's lymphoma are presumed to have contracted those diseases as a result of their military service.

Because these diseases are presumed to have been service connected in certain instances, VA benefits are available to affected veterans.

Furthermore, the IOM has found that gulf war veterans are at risk for contracting a number of blood cancers due to exposure to benzene, solvents, and insecticides. One example is that the IOM has found sufficient evidence of a causal relationship between exposure to benzene and acute leukemias.

In addition, the C.W. Bill Young Department of Defense Marrow Donor Program works to develop and apply bone marrow trans-

plants to military casualties with marrow damage resulting from radiation or exposure to chemical warfare agents containing mustard. Bone marrow transplants are also a commonly used second line therapy for blood cancers, more so than other cancers.

Finally, research into blood cancers has produced results that can help patients with other cancers as well. The idea of combination chemotherapy was first developed to treat blood cancers in children, but is now common among cancer treatments. Bone marrow transplants were first used as curative treatments for blood cancer patients, but these successes led the way to stem cell transplants and related immune cell therapies for patients with other diseases.

In general, blood cancer cells are easier to access than cells from solid tumors, making it easier to study cancer-related molecules in blood cancers and to measure the effects of new therapies that target these molecules that are frequently also found in other cancers.

Several targeted agents designed to kill other cancer cells and leave healthy cells undamaged were first developed in blood cancer patients and are already helping or being developed to help other cancer patients as well.

So in conclusion, because blood cancer research is relevant to our Nation's military and because blood cancer research often leads to treatments in other cancers, we collectively would urge the subcommittee to include \$10 million for a dedicated stand-alone blood cancer research program at the congressionally directed medical research program at DOD.

Thank you very much.

[The statement follows:]

#### PREPARED STATEMENT OF GEORGE DAHLMAN

##### INTRODUCTION

Mr. Chairman and members of the committee, my name is George Dahlman, Senior Vice President, Public Policy for The Leukemia and Lymphoma Society (Society). I am pleased to appear today and testify on behalf the Society and the almost 800,000 Americans currently living with blood cancers and the 130,000 who will be diagnosed with one this year—recently some of whom have been right here in the Senate. Furthermore, every 10 minutes, someone dies from one of these cancers—leukemia, lymphoma, Hodgkin's disease, and myeloma.

During its 59-year history, the Society has been dedicated to finding a cure for the blood cancers, and improving the quality of life of patients and their families. The Society has the distinction of being both the Nation's second largest private cancer organization and the largest private organization dedicated to biomedical research, education, patient services, and advocacy as they pertain to blood-related cancers.

Our central contribution to the search for cures for the blood cancers is providing a significant amount of the funding for basic, translational, and clinical research. In 2008, we will provide approximately \$70 million in research grants. In addition to our research funding role, we help educate health care and school professionals as needed and provide a wide range of services to individuals with a blood cancer, their caregivers, families, and friends through our 64 chapters across the country. Finally, we advocate responsible public policies that will advance our mission of finding cures for the blood cancers and improving the quality of life of patients and their families.

We are pleased to report that impressive progress is being made in the effective treatment of many blood cancers, with 5-year survival rates doubling and even tripling over the last two decades. More than 90 percent of children with Hodgkin's disease now survive, and survival for children with acute lymphocytic leukemia and non-Hodgkin's lymphoma (NHL) has risen as high as 86 percent.

Just 7 years ago, in fact, a new therapy was approved for chronic myelogenous leukemia (CML), a form of leukemia for which there were previously limited treatment options, all with serious side effects—5-year survival rates were just over 50 percent. Let me say that more clearly, if 8 years ago your doctor told you that you had CML, you would have been informed that there were limited treatment options and that you should get your affairs in order. Today, those same patients have access to this new therapy, called Gleevec, which is a so-called targeted therapy that corrects the molecular defect that causes the disease, and does so with few side effects. Now, 5-year survival rates are as high as 96 percent for patients newly diagnosed with chronic phase CML.

The Society funded the early research that led to Gleevec approval, as it has contributed to research on a number of new therapies. We are pleased that we played a role in the development of this life-saving therapy, but we realize that our mission is far from realized. Many forms of leukemia, lymphoma, and myeloma still present daunting treatment challenges. There is much work still to be done, and we believe that the research partnership between the public and private sectors—as represented in the Department of Defense's (DOD) Congressionally Directed Medical Research Program—(CDMRP) is an integral part of that important effort and should be further strengthened.

#### THE GRANT PROGRAMS OF THE LEUKEMIA AND LYMPHOMA SOCIETY

The grant programs of the Society have traditionally been in three broad categories: Career Development Program grants, Translational Research Program grants, and Specialized Centers of Research Program grants. In our Career Development Program, we fund Scholars, Special Fellows, and Fellows who are pursuing careers in basic or clinical research. In our Translational Research Program, we focus on supporting investigators whose objective is to translate basic research discoveries into new therapies.

The work of Dr. Brian Druker, an oncologist at Oregon Health Sciences University and the chief investigator responsible for Gleevec's development, was supported by a Translational Research Program grant from the Society.

Our Specialized Centers of Research grant program is intended to bring investigators together to form new research teams focused on the discovery of innovative approaches to treating and/or preventing leukemia, lymphoma, and myeloma. The awards go to those groups that can demonstrate that their close interaction will create research synergy and accelerate our search for new and better treatments.

Dr. Druker is certainly a star among those supported by the Society, but our support in the biomedical field is broad and deep. Through the Society's research grant programs, we are currently supporting more than 380 investigators at 134 institutions in 34 States and 12 other countries.

Not content with these extensive efforts, the Society has launched a new Therapy Acceleration Program intended to proactively invest in promising blood cancer therapies that are in early stages of development by industry, but which may not have sufficient financial support or market potential to justify private sector investment. In addition, the Society will use this program to further facilitate the advancement of therapies in development by academic researchers who may not have the spectrum of resources or expertise to fulfill the potential of their discoveries. Directed early phase clinical trial support in this funding program will further advance new and better treatments for blood cancer treatments.

#### IMPACT OF HEMATOLOGICAL CANCERS

Despite enhancements in treating blood cancers, there are still significant research challenges and opportunities. Hematological, or blood-related, cancers pose a serious health risk to all Americans. These cancers are actually a large number of diseases of varied causes and molecular make-up, and with different treatments, that strike men and women of all ages. In 2008, more than 130,000 Americans will be diagnosed with a form of blood-related cancer and almost 65,000 will die from these cancers. For some, treatment may lead to long-term remission and cure; for others these are chronic diseases that will require treatments across a lifetime; and for others treatment options are still extremely limited. For many, recurring disease will be a continual threat to a productive and secure life.

A few focused points to put this in perspective:

—Taken together, the hematological cancers are fifth among cancers in incidence and fourth in mortality.

—Almost 800,000 Americans are living with a hematological malignancy in 2008.

- Almost 65,000 people will die from hematological cancers in 2008, compared to 160,000 from lung cancer, 41,000 from breast cancer, 27,000 from prostate cancer, and 52,000 from colorectal cancer.
- Blood-related cancers still represent serious treatment challenges. The improved survival for those diagnosed with all types of hematological cancers has been uneven. The 5-year survival rates are:
  - Hodgkin's disease—87 percent;
  - NHL—64 percent;
  - Leukemias (total)—50 percent;
  - Multiple Myeloma—33 percent; and
  - Acute Myelogenous Leukemia—21 percent.
- Individuals who have been treated for leukemia, lymphoma, and myeloma may suffer serious adverse consequences of treatment, including second malignancies, organ dysfunction (cardiac, pulmonary, and endocrine), neuropsychological and psychosocial aspects, and poor quality of life.
- For the period from 1975 to 2003, the incidence rate for NHL increased by 76 percent.
- NHL and multiple myeloma rank second and fifth, respectively, in terms of increased cancer mortality since 1973.
- Lymphoma is the third most common childhood cancer and the fifth most common cancer among Hispanics of all races. Recent statistics indicate both increasing incidence and earlier age of onset for multiple myeloma.
- Multiple myeloma is one of the top ten leading causes of cancer death among African Americans.
- Hispanic children of all races under the age of 20 have the highest rates of childhood leukemias.
- Despite the significant decline in the leukemia and lymphoma death rates for children in the United States, leukemia is still the leading cause of death in the United States among children less than 20 years of age, in females between the ages of 20 and 39 and males between the ages of 60–79.
- Lymphoma is the fourth leading cause of death among males between the ages of 20 and 39 and the fifth leading cause of death for females older than 80. Overall, cancer is now the leading cause of death for U.S. citizens younger than 85 years of age, overtaking heart disease as the primary killer.

#### POSSIBLE ENVIRONMENTAL CAUSES OF HEMATOLOGICAL CANCERS

The causes of hematological cancers are varied, and our understanding of the etiology of leukemia, lymphoma, and myeloma is limited. Extreme radiation exposures are clearly associated with an increased incidence of leukemias. Benzene exposures are associated with increased incidence of a particular form of leukemia. Chemicals in pesticides and herbicides, as well as viruses such as HIV and EBV, apparently play a role in some hematological cancers, but for most cases, no environmental cause is identified. Researchers have recently published a study reporting that the viral footprint for simian virus 40 was found in the tumors of 43 percent of NHL patients. These research findings may open avenues for investigation of the detection, prevention, and treatment of NHL. There is a pressing need for more investigation of the role of infectious agents or environmental toxins in the initiation or progression of these diseases.

#### IMPORTANCE TO THE DEPARTMENT OF DEFENSE

The Leukemia and Lymphoma Society, along with its partners in the American Society of Hematology, Aplastic Anemia and MDS International Foundation, International Myeloma Foundation, Lymphoma Research Foundation, and Multiple Myeloma Research Foundation, believe biomedical research focused on the hematological cancers is particularly important to the DOD for a number of reasons.

Research on blood-related cancers has significant relevance to the armed forces, as the incidence of these cancers is substantially higher among individuals with chemical and nuclear exposure. Firstly, blood cancers are linked to members of the military who were exposed to ionizing radiation, such as those who occupied Japan after World War II and those who participated in atmospheric nuclear tests between 1945–1962. Service members who contract multiple myeloma, NHL, and leukemias other than chronic lymphocytic leukemia are presumed to have contracted these diseases as a result of their military service; hence, they are eligible to receive benefits from the Department of Veterans Affairs (VA).

Secondly, in-country Vietnam veterans who contract Hodgkin's disease, chronic lymphocytic leukemia, multiple myeloma, or NHL are presumed to have contracted

these diseases as a result of their military service and the veterans are eligible to receive benefits from the VA.

Thirdly, the Institute of Medicine (IOM) has found that Gulf War veterans are at risk for contracting a number of blood cancers. For instance, the IOM has found sufficient evidence of a causal relationship between exposure to benzene and acute leukemias. Additionally, the IOM has found there is sufficient evidence of an association between benzene and adult leukemias, and solvents and acute leukemias. Finally, the IOM has also found there is also limited or suggestive evidence of an association between exposure to organophosphorous insecticides to NHL and adult leukemias; carbamates and Benzene to NHL; and solvents to multiple myeloma, adult leukemias, and myelodysplastic syndromes—a precursor to leukemia.

In addition, research in the blood cancers has traditionally pioneered treatments in other malignancies. Cancer treatments that have been developed to treat a blood-related cancer are now used or being tested as treatments for other forms of cancer. Combination chemotherapy and bone marrow transplants are two striking examples of treatments first developed for treating blood cancer patients. More recently, specific targeted therapies have proven useful for treating patients with solid tumors as well as blood-related cancers.

From a medical research perspective, it is a particularly promising time to build a DOD research effort focused on blood-related cancers. That relevance and opportunity were recognized for a 6-year period when Congress appropriated \$4.5 million annually—for a total of \$28 million—to begin initial research into chronic myelogenous leukemia (CML) through the CDMRP. As members of the Subcommittee know, a noteworthy and admirable distinction of the CDMRP is its cooperative and collaborative process that incorporates the experience and expertise of a broad range of patients, researchers and physicians in the field. Since the Chronic Myelogenous Leukemia Research Program (CMLRP) was announced, members of the Society, individual patient advocates and leading researchers have enthusiastically welcomed the opportunity to become a part of this program and contribute to the promise of a successful, collaborative quest for a cure.

Many extremely productive grants have been funded through this program. For example, from fiscal year 2002-fiscal year 2006 the CMLRP-funded research with accomplishments that fall into three rather broad areas.

#### *Basic science*

A better understanding of disease processes will facilitate the development of the next generation of therapeutic agents. The CMLRP has funded basic science research that has increased our knowledge of the patho-biology of CML, the molecular and cellular processes involved in the initiation of CML and the progression of disease. This may be exemplified by the work of Dr. Danilo Perrotti of The Ohio State University. Dr. Perrotti described the loss of activity of a protein phosphatase 2A (PP2A), a tumor suppressor, in CML cells. His research then determined that activity of the protein BCR/ABL, expressed in most CML cells and associated with disease development, inhibits PP2A activity which would allow CML cells to continue to proliferate. Dr. Perrotti took this basic understanding of this aspect of CML cell biology and took it one step further. He showed that treating cells with a compound that increases the activity level of PP2A in cells decreased tumor growth by virtually overpowering the negative effects of BCR/ABL, indicating that this compound has potential to be developed as a new CML treatment option.

#### *Therapeutic development*

Genetic mutations that confer resistance to currently available CML treatment agents demonstrates the need for the development of new therapeutics that may be used in conjunction with these agents or as second line defense options when resistance develops. CMLRP-funded scientists have discovered and developed potential new therapeutic agents that may be used to combat or halt disease progression. For example, after screening a chemical library of small molecules, Dr. Joel Gottesfeld of The Scripps Research Institute identified a set of molecules that inhibits proliferation of CML cells in a BCR/ABL-independent manner. Secondly, Dr. Craig Jordan of the University of Rochester used an antiproliferative compound, which specifically inhibits a molecule involved in the transcription of many genes, to inhibit the proliferation of CML cells while not affecting normal cells. Thirdly, Dr. E. Premkumar Reddy of Temple University is developing an agent that will target CML cells that are Gleevec resistant. Finally, Dr. Kapil Bhalla of Medical College of Georgia Cancer Center has discovered a new agent that inhibits that activity of BCR/ABL.

*Model organism development*

Many model organisms are utilized by the scientific community for studying genetics, molecular mechanisms, cellular functions, or therapeutic efficacy including, but not limited to worms, flies, zebrafish, chickens, and mice. The model organism of choice may be dependent on a number of variables such as research strategy and feasibility, experimental design, statistical needs for data interpretation, and budget. In addition, using a variety of model organisms to study a disease may be advantageous.

Many CMLRP-funded researchers have been involved in developing and validating new mouse and zebrafish models of CML for understanding genetic, molecular and cellular changes that accompany the development and progression of CML; and for pre-clinical testing of potential new therapeutic agents. Mice are mammals, a potential advantage for relating research results to human disease. In addition, a large proportion of human genes have a mouse counterpart. However, zebrafish also share extensive genetic similarity with humans and have been shown to share many features of the innate immune system with those of humans. Also, zebrafish have a short generation interval (e.g., lifespan) making them very amenable to and useful for genetic analysis.

In spite of the utility and application to individuals who serve in the military, the CML program was not included in January's 2007 Continuing Resolution funding other fiscal year 2007 CDMRP programs. This omission, and the program's continued absence seriously jeopardizes established and promising research projects that have clear and compelling application to our armed forces as well as pioneering research for all cancers.

With all due respect to our colleagues fighting a broad range of malignancies that are represented in this program—and certainly not to diminish their significance—a cancer research program designed for application to military and national security needs would invariably include a strong blood cancer research foundation. DOD research on blood cancers addresses the importance of preparing for civilian and military exposure to the weapons being developed by several hostile nations and to aid in the march to more effective treatment for all who suffer from these diseases. This request clearly has merit for inclusion in the fiscal year 2009 legislation.

Recognizing that fact and the opportunity this research represents, a bipartisan group of 45 Members of Congress have requested that the program be reconstituted at a \$10 million level and be expanded to include all the blood cancers—the leukemias, lymphomas, and myeloma. This would provide the research community with the flexibility to build on the pioneering tradition that has characterized this field.

The Society strongly endorses and enthusiastically supports this effort and respectfully urges the committee to include this funding in the fiscal year 2009 Defense Appropriations bill.

We believe that building on the foundation Congress initiated over 6-year period should not be abandoned and would both significantly strengthen the CDMRP and accelerate the development of all cancer treatments. As history has demonstrated, expanding its focus into areas that demonstrate great promise; namely the blood-related cancers of leukemia, lymphoma, and myeloma, would substantially aid the overall cancer research effort and yield great dividends.

Senator STEVENS. You know, we have a large sum that covers a whole series of research efforts.

Mr. DAHLMAN. Correct.

Senator STEVENS. Have you spoken to them, DOD, about the emphasis on blood research? I agree with you. I really think that this and the others ought to have more intensive application of this money. But we already have about \$50 million in that pot.

Mr. DAHLMAN. Right.

Senator STEVENS. What do you get out of it now?

Mr. DAHLMAN. Senator Stevens, it was sporadically included in the peer reviewed program, which is about \$50 million, and blood cancers was reinstated this last time, and we are working with the Army right now to see if there is any grant availability for blood cancers.

Senator STEVENS. Well, I would urge it in the context, but I don't know whether we can raise that money. But you're right, that research ought to be increased.

Mr. DAHLMAN. Thank you.

Senator INOUE. You just heard the man. We'll increase it.

Mr. DAHLMAN. Thanks.

Senator INOUE. Now our next witness is the Director of the National Brain Injury Research, Treatment and Training Foundation, Mr. Martin Foil.

**STATEMENT OF MARTIN B. FOIL, JR., CHAIRMAN, BOARD OF DIRECTORS, NATIONAL BRAIN INJURY RESEARCH, TREATMENT AND TRAINING FOUNDATION**

Mr. FOIL. Good morning, Mr. Chairman, Senator Stevens. It's an honor and a pleasure to be here. I've been here for over 10 years.

Senator STEVENS. Would you turn on your mike?

Mr. FOIL. I'll turn it on, thank you. Is that better? Okay.

As you know, I'm the father of a young man with a severe brain injury, and I serve as the Chairman of the National Brain Injury Research, Treatment and Training Foundation (NBIRTT). So in behalf of NBIRTT, I respectfully request your support for the full funding of the Defense Veterans Brain Injury Center (DVBIC) as part of the new Department of Defense Center of Excellence in Psychological Health and Traumatic Brain Injury. We want to see DVBIC continue to be a key program at that center of excellence and to be funded at \$28 million in 2009.

In addition, we would like to see \$3.75 million go toward a pilot project for those suffering from severe traumatic brain injury (TBI). For many years, I have come before you and requested funding for TBI, but this year's different. You have appropriated literally hundreds of millions of dollars in the past year for the DOD and the VA to screen, evaluate, provide care, rehabilitation, education, and research for our wounded warriors with TBI. I commend you and your subcommittee for your leadership as it was desperately needed.

As you know, TBI is the signature injury of the war on terror and the impact that TBI continues to have on our troops is very enormous. We must be sure to address the needs of all our injured troops along the entire spectrum. There are those who are walking wounded, don't know that they have this problem, only to find trouble after they go home. On the other end, there are those folks who are so terribly injured that standard modern medicine has little to offer them and they are sent to live out their lives in nursing homes.

We must be sure to address the needs of all TBIs, to provide the best our Nation has to offer. For those with mild TBI who go undiagnosed, we urge the DOD through the DVBIC to coordinate with State agencies and TBI programs which have already begun to reach out to veterans groups to provide a safety net for our troops who are returning who are undiagnosed or underdiagnosed.

Particularly because returning National Guard and Reserves go back to their civilian doctors, we need to educate the civilian population on the less visible signs of TBI and help injured troops navigate available resources.

On the other end of the spectrum—those are the wounded warriors with severe TBI, who require a longer time to recover, who need long-term rehabilitation. If these severely injured warriors are sent to nursing homes, they'll never recover because neither the VA

nor the community nursing homes have the expertise or the technology needed.

We support a pilot program for severe TBI which would work through DVBIC at a facility in Johnstown, Pennsylvania. It's standing, it's ready to provide for 25 severely injured wounded warriors as well as respite care for their families. There are 187 wounded warriors already awaiting placement into a program similar to this.

We also hope you will urge the DOD to keep the TBI registry with the DVBIC instead of moving it over to healthcare.

We know that your subcommittee is committed to providing the resources that the DOD needs to care for our warriors. We hope you will be sure to provide the \$3.75 million for those severely wounded who need to go to a place like Johnstown.

Thank you.

Senator INOUE. I thank you very much.

[The statement follows:]

PREPARED STATEMENT OF MARTIN B. FOIL, JR.

Dear Chairman Inouye, Ranking Member Stevens and members of the Senate Appropriations Subcommittee on Defense: Thank you for this opportunity to submit testimony in support of funding the Defense and Veterans Brain Injury Center (DVBIC), The National Brain Injury Research, Treatment, and Training Foundation (NBIRTTF) urges your support for \$28 million for the DVBIC in the fiscal year 2009 Defense Appropriations bill which would include \$3,750,000 for the pilot project on the minimally conscious.

As you well know, my name is Martin Foil and I am the father of Philip Foil, a young man with a severe brain injury. I serve as Chairman of the Board of Directors of NBIRTTF.<sup>1</sup> Professionally, I am the Chief Executive Officer and Chairman of Tuscarora Yarns in Mt. Pleasant, North Carolina.<sup>2</sup>

My testimony concerns the two extreme ends of the spectrum of traumatic brain injury (TBI) in the military—from those who go undiagnosed and return to the community and are only later found to have brain injuries after experiencing problems, and those who are the most severely injured and are left to live out their lives in minimally conscious or vegetative states in nursing homes without rigorous efforts to help them regain consciousness.

THE NATIONAL RESPONSE TO TBI IN THE MILITARY AND VETERAN POPULATIONS

For 16 years, since the DVBIC was created in 1992, my colleagues in the brain injury community and I have requested Congressional support to sustain its research, treatment, and training initiatives. What started as a small research program, the DVBIC has grown to a nine-site network<sup>3</sup> of state-of-the-art care in collaboration between the Department of Defense (DOD) and the Veterans Administration (VA) and is now a key component of the Department of Defense Center of Excellence in Psychological Health and Traumatic Brain Injury (DCoE).

We are extremely pleased that over the past year, Congress has appropriated hundreds of millions of dollars for screening, evaluation, treatment, and support for troops sustaining TBI. We applaud your leadership in assuring funding for TBI. Similarly, we were encouraged to see that the DVBIC was included in the new TBI initiatives of the fiscal year 2008 National Defense Authorization Act (NDAA).

We remain concerned, however, that the DOD may not fully implement all of the initiatives of the NDAA, or may delay their development. It is reports like that by

<sup>1</sup>NBIRTTF is a non-profit national foundation dedicated to the support of clinical research, treatment, and training.

<sup>2</sup>I receive no compensation from this program; rather, I have raised and contributed millions of dollars to support brain injury research, treatment, training, and services.

<sup>3</sup>Walter Reed Army Medical Center, Washington, DC; James A. Haley Veterans Hospital, Tampa, Florida; Naval Medical Center San Diego, San Diego, California; Minneapolis Veterans Affairs Medical Center, Minneapolis, Minnesota; Veterans Affairs Palo Alto Health Care System, Palo Alto, California; Virginia Neurocare, Inc., Charlottesville, Virginia; Hunter McGuire Veterans Affairs Medical Center, Richmond, Virginia; Wilford Hall Medical Center, Lackland Air Force Base, Texas; Laurel Highlands Neuro-Rehabilitation Center, Johnstown, Pennsylvania.

USA Today on March 18, 2008,<sup>4</sup> uncovering policies of the DOD to delay screening of troops in fear that the issue of TBI may become another “Gulf War Syndrome” that makes us ask for your support in overseeing DOD. The recent news report that a VA doctor suggested that diagnosis of Post Traumatic Stress Disorder (PTSD) be redesignated as “an adjustment disorder” as well as the “New England Journal of Medicine” article published in January, by Colonel Hoge who argues that TBI is really just PTSD, are also alarming.

The Rand Corporation issued a study in April,<sup>5</sup> which found that about 19 percent of troops report having a possible TBI. 1.64 million troops have served since October 2001, so that means there’s a possibility of over 300,000 TBIs. Similarly, almost 20 percent of returning service personnel have symptoms of PTSD or major depression. Unfortunately, only half have sought treatment and they experienced delays and shortfalls in getting care.

There are disturbing reports about the 1,000 suicides per month among veterans of the conflicts in Iraq and Afghanistan, and the connection with PTSD and TBI cannot be overlooked. A May 11, 2008, New York Times editorial about the VA’s downplaying of a suicide epidemic, argued that the solutions are clear: more funding for mental health services, more aggressive suicide prevention efforts and more efficiency at managing veterans’ treatment and more help for their families. However, we know well that none of this is simple and funding and program proposals are only the beginning and need to be carefully monitored. Congressional leadership has been stellar, legislation now enacted, but once the DOD and VA have the resources and directives, Congressional oversight is still needed.

The issues of PTSD and TBI in the military are enormous and affect both the military and civilian health care systems. If only half of troops with symptoms of PTSD and TBI are seeking treatment, it is clear that injured service personnel will fall through the cracks and not get the neuro-rehabilitation or services they and their families need.

#### THE NEED FOR COORDINATION WITH STATE AGENCIES AND COMMUNITY SERVICES

On May 13, 2008, LTG Clyde Vaughn, Director of the Army National Guard testified before your committee that there needs to be a safety net for troops returning who have unidentified PTSD and/or TBI and urged a coordination, between the military, veterans agencies and State agencies. As to screening, Lieutenant General Vaughn acknowledged that the Army National Guard could at one time follow its troops, but now as regiments are divided, such an effort would require that all branches of the armed services participate.

The NDAA provided a directive for the military to collaborate with civilian entities to ensure community services are available. NBIRTT supports the proposal by the National Association of State Head Injury Administrators (NASHIA) submitted to the DCoE to collaborate with State agencies to provide a continuum of information and resources for those troops that we know will fall through the cracks.

As service personnel return home from Iraq and Afghanistan, an increasing number of them and their family members are contacting State governmental programs for assistance that states usually provide to the civilian population. While many who are seriously injured will be treated by military treatment facilities, others with mild or undiagnosed TBI—especially the National Guard and Reserves—will return to their homes, families, and communities after tour of duty. They will often seek medical care from civilian health care professionals who may not be aware of the person’s exposure to blasts.

It is often the resulting actions or behaviors and poor judgment of these individuals that result in domestic violence, inappropriate public outbursts and encounters with law enforcement or unemployment. It is under these circumstances that many with TBI are “discovered” by State and local agencies. These agencies or professionals often do not know to ask the question as to whether the person served in Iraq or Afghanistan and was exposed to blasts, such as those from roadside bombs. It is key for proper assessment and diagnosis that these professionals learn the cause or reason for such behaviors or other cognitive issues.

Funding is needed to enlighten the civilian community about TBI and related disorders associated with blast injuries incurred in Iraq and Afghanistan. National Guardsmen and women and Reservists may exit their tour citing no medical difficulties. It is only after a period of time that these individuals may find it difficult to

<sup>4</sup>Col.:DOD *Delayed Brain Injury Scans*, by Gregg Zoroya, USA Today, March 18, 2008.

<sup>5</sup>*Invisible Wounds of War: Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery* (Tanielian and Jaycox [Eds.], Santa Monica, Calif.: RAND Corporation, MG-720-CCF, 2008).

manage their jobs, interact with their family members or co-workers, manage their emotions or engage in activities once considered routine. These individuals are at risk of being misdiagnosed and treated inappropriately by medical and healthcare professionals.

The NDAA authorized funding to improve the continuum of care from acute, post-acute, rehabilitation, transition, follow-up, community, and long-term care and case management/service coordination to coordinate resources and benefits for injured troops.

In general, States have extensive experience in helping civilians access services across private (e.g., insurance, workers comp), local (e.g., public education, county health and social service agencies), State (TBI, mental health and disability programs) and Federal (e.g., Medicaid, public assistance, substance abuse, and vocational rehabilitation) systems. Now, States need support in collaborating with DOD/VA in order to assist those returning servicemembers with “mild” or undiagnosed TBI to get the services and supports they need, whether these services are provided through the VA or through State public programs or by civilian healthcare providers. At the same time, States can provide information to DOD/VA on community resources for those severely or moderately injured service members who are returning to their communities and may need life-long care and family supports. This requires States and DOD/VA to have knowledge on how to navigate each of these complex systems, as well as to have formal relationships for transitioning returning service members with TBI and related conditions to their home and community and conducting outreach to identify those with mild or undiagnosed TBI.

The Centers for Disease Control and Prevention (CDC), in recognition that many civilians who sustain a mild TBI are not hospitalized or receive no medical care at all, has updated and revised the “Heads Up: Brain Injury in Your Practice” tool kit for physicians. This toolkit also directs physicians to note potential blast related TBIs. This toolkit has also been distributed to State agencies hoping that they will educate their medical communities regarding this emerging issue.

If it is true, as was mentioned earlier, the DOD and VA do not fully screen and correctly diagnose service personnel with TBIs, it is inevitable that troops will return home injured only to fend for themselves. We urge your support for a collaborative agreement between the DVBIC and DCoE and NASHIA to provide a safety net for troops returning home.

#### DCOE OFFICIALS SHOULD DETERMINE THE COURSE OF TBI INITIATIVES

Last year we testified that “the DVBIC is an important tool to assure a continuum of care, but it requires an increased level of POM funding and a solid commitment by the DOD to assist in improving the military and VA health care systems.” Now that adequate funding is in place, we need to assure that Congressional mandated programs are actually implemented. We are pleased that DCoE is headed by BG Loree Sutton along with a cadre of professionals and experts in TBI. We hope that the DOD will defer to their expertise in deciding the best means to develop a true Center of Excellence for TBI.

DCoE staff recently submitted the proposed budget for fiscal year 2010, up the chain of command, but bureaucrats within the DOD have not supported such programs as the pilot project for the minimally conscious. The minimally conscious program was in the NDAA and endorsed by experts in TBI treatment and research, as well by officials at DCoE. All facets are ready to go and the program in its entirety could be stood up by this fall. The pilot project is a unique attempt to provide our most injured wounded warriors with cutting edge care to help them regain consciousness. There is no other effort like it being done by the VA or DOD. Severely injured wounded warriors deserve the most cutting edge treatment for a chance to return to their lives. They do not deserve misdiagnosis or a decree of futility, only to be sent to nursing homes.

#### *The Minimally Conscious Program: Improving Outcomes for Wounded Warriors with Disorders of Consciousness*

Disorders of consciousness (DOC) include coma, the vegetative state (VS) and the minimally conscious state (MCS). These disorders are among the most misunderstood conditions in medicine and are an important challenge for scientific inquiry. Published estimates of diagnostic error among patients with disorders of consciousness range from 15–43 percent. The highly publicized case of Terri Schiavo revealed the depth of confusion, misinformation, and unfounded speculation concerning these disorders that exists among the public, the media, Government officials, and healthcare professionals. To some extent, these problems should have been avoidable, because well-accepted definitions, diagnostic criteria, and prognostic parameters concerning coma, VS, and MCS are available in the scientific literature. Al-

though all of these disorders involve severe alteration of awareness of self and environment, there is clear and growing evidence that subtle but important clinical differences exist between these states of altered consciousness that impact access to treatment, management decisions, outcomes, family adjustment, and cost of care. Failure to recognize these differences may result in misdiagnosis, inaccurate prognosis, inappropriate treatment recommendations and improper management of fiscal and human resources.

*Incidence and prevalence of VS and MCS in the U.S.*

Accurate estimates of the incidence and prevalence of disorders of consciousness are challenging to obtain for several reasons. First, it is difficult to find persons with these disorders across the many different locations where they receive care, and to follow them over time to see if they improve. In addition, the lack of International Classification of Disease diagnostic codes for MCS makes it difficult to track the number of cases using currently available data. Finally, the prevalence of both the VS and MCS is influenced by survival, which is dependent upon access to care, quality of care and decisions to withdraw care.

As a result of these challenges, knowledge of the epidemiology of DOC is extremely limited. It is estimated that at least 4,200 new individuals with the VS are diagnosed each year in the United States. The incidence of new cases of MCS, including the number of persons who transition from VS to MCS, has not been determined. Regarding the prevalence, published estimates suggest that approximately 315,000 Americans are living with a disorder of consciousness, including 35,000 in VS and 280,000 in MCS. An estimated 40 percent of persons with DOC are children. These figures most likely under represent the frequency of occurrence of VS and MCS because of the lack of surveillance in subacute settings in which most of these individuals reside. Detailed information about persons with VS and MCS by age, sex, and cause of the disorder has not been reported.

*Incidence and prevalence of VS and MCS among wounded warriors*

The exact number of wounded warriors from Operation Iraqi Freedom and Operation Enduring Freedom in the vegetative and minimally conscious state is unknown. DVBIC reports that 4 percent, or approximately 223 individuals with severe TBI have been seen and or treated by the DVBIC. This is an underestimation because it does not include those seen or treated at other military hospitals and programs.

The DVBIC/DCoE program could be stood up by this fall if located at the Hiram G. Andrews Center in Johnstown, Pennsylvania. The program plans to fully assess and research patient conditions and responses, wean patients from ventilators, provide complete medical care, get patients to the point where they can communicate, involve family and consultants via teleconferencing and telerehabilitation, and develop assistive devices for the patients to improve quality of life and reduce the need for skilled nursing facilities which will decrease the burden to both the family and society.

The DVBIC/DCoE pilot project will utilize the latest technology and scientific evidence to treat wounded warriors with TBI. Nothing being done by the VA or the DOD comes close to the goals for this pilot project. There are numerous stories of young men and women who were considered hopeless, only to fully recover conscious and functioning. No one better deserves the most cutting edge research and care than our wounded warriors. The VA Polytrauma Centers provide excellent state-of-the-art care for a handful of severely injured. Our troops deserve a step above, and all severely injured should be given the opportunity to hope for recovery.

We urge your support for \$3,750,000 in the DOD Appropriations bill for fiscal year 2009 for the pilot program for the minimally conscious.

In summary, we request a total of \$28 million for the DVBIC, understanding that is only a component of the DCoE, we want to be sure that the same level of funding for TBI is given next year as was given this year.

As the DOD implements the initiatives of the NDAA and directives from appropriations, it cannot lose sight of those wounded warriors who may be forgotten because they are at the extremes of the spectrum of TBI. Many of the walking wounded do not even know they have TBI. Others are so severely injured they are misdiagnosed as hopeless. The DCoE can address both of these issues through collaborative efforts with communities and developing treatments to provide hope for the most injured.

As we have seen in years past, it is your leadership that has assured the care of troops with TBI. If we could rely on the layers of bureaucracy to take responsibility for identifying and treating troops with TBI, then we wouldn't have had to come before your committee for some 15 years asking for plus ups of \$5, \$10, or

\$12 million to supplement a \$7 million base budget. Now that the core commitment by the DOD is there, we cannot lose the opportunity to assure that funds are directed properly, efficiently and effectively. Time is, and has always been, of the essence when it comes to TBI.

Thank you for your wisdom, support, and leadership in providing critical resources to our troops.

Senator INOUE. Now may I call upon Captain Walt Steiner, President of the Naval Reserve Association.

**STATEMENT OF CAPTAIN WALT STEINER, UNITED STATES NAVY (RETIRED), PRESIDENT, NAVAL RESERVE ASSOCIATION**

Captain STEINER. Chairman Inouye and Ranking Member Stevens: The Naval Reserve Association (NRA) is very grateful to have the opportunity to testify today. We want to thank this subcommittee for the ongoing stewardship on the important issues of national defense and especially the reconstitution and transformation of the Navy. Your unwavering support for our deployed marines and service members and sailors in Iraq and Afghanistan and for the worldwide fight against terrorism is of crucial importance and warriors a top priority.

In keeping with that priority, we urge this subcommittee to immediately appropriate 2008 supplemental funds to continue to support the ongoing war against terrorism.

NRA would like to highlight some other areas of concern. We support the utilization of Navy reservists in operational reserve support roles, but we also believe that Chairman Mullen's October 2007 call for a strategic reserve should be heeded by the Navy. We interpret "strategic reserve" to mean capability-based commissioned Reserve units with assigned missions and roles and organic equipment, which should be maintained in order to ensure that the United States is prepared to surge for military operations against near competitor states or other threats at any point in the near future, or in the future.

The NRA believes that the administration and Congress must make it a high priority to maintain the end strengths of already overworked military forces. This includes the Navy Reserve. At a minimum, the Navy Reserve should be stabilized at 68,000 members.

We continue to have concerns with how the Reserve components are being utilized by the Pentagon. Our Navy reservists are pleased to be making a significant contribution to the Nation's defense as operational Reserve forces. However, the reality of it all is that the added stress on the Reserve could pose long-term consequences for our country in recruiting, retention, family, and employer support. This issue deserves your attention.

Our Navy reservists are fighting the wars in Iraq and Afghanistan on the ground, in the air, and on the sea, and at sea. Many if not most of these excellent reservists are the product of the Naval Reserve that predated Operation Iraqi Freedom. As such, the more senior officers and enlisted were developed in organized, commissioned and organically equipped units where their leadership skills and operational experience were tested and hardened by the rigors of unit command and responsibility. That tremendous reservoir of operational capability must be maintained.

There is a risk that they will not be able to do so under a projection of the present model of utilization, and current Active-Reserve integration plans do not call for leadership roles for midgrade enlisted or officers.

Regarding equipment, the NRA does support the Chief of Naval Operations' unfunded programs list. We do not agree with the Pentagon's position recommending the repeal of separate budget requests for procuring reserve equipment and ask this subcommittee to continue to provide separate appropriations against unfunded NGRE requirements in the NGRE appropriation.

The Naval Reserve Association strongly believes that dedicated Naval Reserve units with their own equipment are a major factor in recruiting, retaining, and training the qualified personnel in the Navy Reserve. The Reserve should not be viewed solely as a labor pool to fill a gap in existing active duty manning.

Specific equipment and funding needs at the Navy Reserve that we support include:

Funding the C-40A aircraft to replace dangerously aged C-9s. Two aircraft are currently in the 2009 supplemental and four in the 2009 annual funding;

Replace the C-20;

Fund six C-130Js for the Naval Reserve;

Increase funding for the Naval Reserve equipment for the naval coast warfare mission; and

Establish a floor of 68,000 for Navy Reserve end strength.

We thank this subcommittee for consideration of these tools to assist the Guard and Reserve in an age of increased sacrifice and utilization of these forces. Additionally, we can never forget the families and employers of these unselfish volunteers who serve our country in uniform.

Thank you.

Senator INOUE. Thank you very much, Captain Steiner.

[The statement follows:]

PREPARED STATEMENT OF CAPTAIN WALTER K. STEINER

The Naval Reserve Association traces its roots back to 1919, and is devoted solely to service to the Nation, Navy, the Navy Reserve, and Navy Reserve officers and enlisted. It is the premier national education and professional organization for Navy Reserve personnel, and the Association Voice of the Navy Reserve .

Full membership is offered to all members of the services and NRA members come from all ranks and components.

The Association has just under 23,000 members from all 50 States. Forty-five percent of the Association membership is drilling and active reservists and the remaining 55 percent are made up of reserve retirees, veterans, and involved civilians. The national headquarters is located at 1619 King Street, Alexandria, VA.

Mr. Chairman and distinguished members of the committee, the Association is very grateful to have the opportunity to testify today.

Our Association looks at equipment, force structure, and policy issues that are not normally addressed by the Office of Secretary of the Navy.

We would like to thank this committee for the on-going stewardship on the important issues of national defense and, especially, the reconstitution and transformation of the Navy. At a time of war, its pro-defense and non-partisan leadership sets the example.

Your unwavering support for our deployed service members in Iraq and Afghanistan and for the world-wide fight against terrorism is of crucial importance and warrants a top priority. NRA would like to highlight some areas of emphasis.

As a Nation, we need to supply our service members with the critical equipment and support needed for individual training, unit training, and combat. Additionally, we can never forget the families and employers of these unselfish volunteers.

## NGREA EQUIPMENT

In recent years, the Pentagon has recommended the repeal of separate budget requests for procuring Reserve equipment. A combined equipment appropriation for each service does not guarantee needed equipment for the National Guard and Reserve Components. For the Navy Reserve, this is especially true. We do not agree with the Pentagon's position on this issue and ask this committee to continue to provide separate appropriations against unfunded NG and RE requirements.

People join the Reserve Components to serve their country and operate equipment. Recruiting and retention issues have moved to center stage for all services and their reserve components. In all likelihood, the Navy will not meet its target for new Navy Reservists and the Navy Reserve could be challenged to appreciably slow the departure of experienced personnel this fiscal year. We've heard that Reserve chiefs are in agreement, expressing concern that senior personnel could leave when equipment is not available for training.

Besides re-enlistment bonuses which are needed, the NRA strongly believes that dedicated Navy Reserve equipment and Navy Reserve units are a major factor in recruiting, retaining and training qualified personnel in the Navy Reserve.

## END-STRENGTH

In addition to equipment to accomplish assigned missions, the NRA believes that the administration and Congress must make it a high priority to maintain, if not increase, the end strengths of already overworked and perhaps even overstretched, military forces. This includes the Navy Reserve. The Navy Reserve has always proven to be a highly cost-effective and superbly capable operational and surge force in times of both peace and war. At a minimum, the Navy Reserve should be stabilized at 68,000 personnel.

## OPERATIONAL NAVY RESERVE FORCE

We continue to have concerns on how the Guard and Reserve are being utilized by the Pentagon, currently mobilizing over 615,000 Guard and Reserve. The move away from the traditional mission of the Guard and Reserves to an operational part-time fighting force is the only way our country could fulfill our immediate defense requirements after 9/11. However, for the foreseeable future, we must be realistic about what the unintended consequences are from this very high rate of usage. History shows that a Reserve force is needed for any country to adequately meet its defense requirements, and to enable success in offensive operations, when needed. Our current Guard and Reserve members are pleased to be making a significant contribution to the Nation's defense as operational reserve forces; however, the reality of it all is that the added stress on the Guard and Reserve could pose long term consequences for our country in recruiting, retention, family and employer support. This issue deserves your attention in a continuum of benefits that includes pay, compensation, retirement issues, Family Support Programs, Transition Assistance Programs and for the Employer Support for the Guard and Reserve programs.

The Navy Reserve has decreased from 86,000 to 66,000 in just 5 years. At the same time, the Navy Reserve continues to mobilize over 4,500 sailors in support for the on-going global war on terror. Your Navy Reserve personnel are fighting the wars in Iraq and Afghanistan. It should be noted that many, if not most, of these excellent Reservists are the product of the Naval Reserve policies and force structure that pre-date 9/11. As such, and in particular, the more senior officers and enlisted were developed in organized, commissioned and organically equipped units where their leadership skills and operational experience were tested and hardened by the rigors of unit command and responsibility. Care must be taken that tremendous reservoir of operational capability be maintained and not capriciously dissipated. Officers, Chief Petty Officers, and Petty Officers need to exercise leadership and professional competence to maintain their capabilities. There is a risk that they will not be able to do so in the present model of utilization, and current integration does not call for leadership roles of mid-grade enlisted or officers.

That said, we recognize there are many issues that need to be addressed by this committee and this Congress. The NRA supports the Navy Unfunded Programs list provided by the Chief of Naval Operations.

*Specific equipment and funding needs of the Navy Reserve include:*

C-40 funding to replace dangerously aged C-9s. These are war fighting logistic weapons systems. Two aircraft are currently programmed for fiscal year 2009 supplemental. We have to replace aging C-9s to maintain Navy and Marine Corps engagement in the global war on terrorism. Our country needs these warfighting systems because;

## First:

- It is the entire Navy's only world-wide intra-theater organic airlift, operated by the U.S. Navy, and meet critical fleet needs on a daily basis around the clock.
- Navy currently operates nine C-40As, in three locations: Fort Worth, Jacksonville, and San Diego.
- A pending CNA study—substantiates the requirements for 31–35 C-40As to replace aging C-9s.

## Second:

- CNO, SECNAV, and Department of Defense (DOD) support the requirement for C-40A's.
- Commander, Naval Air Force 2007 Top Priority List stated the requirement for at least 32 aircraft.

## Third:

- Current average age of remaining C-9s that the C-40 replaces is 37 years!
- There will be no commercial operation of the C-9s or derivatives by 2011.
- C-9s cannot meet the GWOT requirement, due to MC rates, and availability of only 171 days in 2006.
- Modifications required to make C-9s compliant with stage III Noise compliance, and worldwide Communications/Navigation/Surveillance/Air Traffic Management compliance—are cost prohibitive.
- There are growing indications that the availability and Mission Capability rates of the C-20Gs.

## Fourth:

- 737 commercial availability is slipping away, if we do not act now; loss of production line positions in fiscal year 2008–09—due to commercial demand would slip to 2013, increase in DOD, service unit costs, and endanger fleet readiness and current operations.

C-130J procurement funding for six C-130s for the Navy Reserve.

New Accession Training Bonus is for the Navy Reserve force non-prior service accession program. This program will pay to meet increased Reserve Component recruiting mission. This supports the global war on terrorism through accessing Reserve members into: Seabees, Master-at-Arms, Intelligence Specialists, and Hospital Corpsmen rates.

A full range of Navy Expeditionary Command equipment for Navy Reserve units.

Overwhelmingly, we have heard Reserve Chiefs and Senior Enlisted Advisors discuss the need and requirement for more and better equipment for Reserve Component training. The Navy Reserve is in dire need of equipment to keep personnel in the Navy Reserve and to keep them trained. Approximately 4,500 Navy Reserve personnel are on recall each and every month since 9/11. We must have equipment and unit cohesion to keep personnel trained. This means—Navy Reserve equipment and Navy Reserve specific units with equipment.

*Additional issues**The Reserve Component as a worker pool*

*Issue.*—The view of the Reserve Component that has been suggested within the Pentagon is to consider the Reserve as of a labor pool, where Reservists could be brought onto Active Duty at the needs of a service and returned, when the requirement is no longer needed. It has also been suggested that an Active Duty member should be able to rotate off active duty for a period, spending that tenure as a Reservist, returning to active duty when family, or education matters are corrected.

*Position.*—The Guard and Reserve should not be viewed as a temporary-hiring agency. Too often the Active Component views the recall of a Reservist as a means to fill a gap in existing active duty manning. If the active Navy is undermanned for its assigned global mission, it is the responsibility of the Pentagon and the Congress to address those shortfalls in end-strength. If the Navy wishes to have a surge capability in strategic reserve, then it needs to allocate those missions to the Navy Reserve, and increase the end-strength of the Navy Reserve to support those capabilities.

## EQUIPMENT OWNERSHIP

*Issue.*—An internal study by the Navy has suggested that Naval Reserve equipment should be transferred to the Navy. At first glance, the recommendation of transferring Reserve Component hardware back to the Active component appears not to be a personnel issue. However, nothing could be more of a personnel readiness issue and is ill advised. Besides being attempted several times before, this issue needs to be addressed if the current National Security Strategy is to succeed.

*Position.*—The overwhelming majority of Reserve and Guard members join the RC to have hands-on experience on equipment. The training and personnel readiness of Guard and Reserve members depends on constant hands-on equipment exposure. History shows, this can only be accomplished through Reserve and Guard equipment, since the training cycles of Active Components are rarely if ever—synchronized with the training or exercise times of Guard and Reserve units. Additionally, historical records show that Guard and Reserve units with hardware maintain equipment at or higher than average material and often better training readiness. Current and future war fighting requirements will need these highly qualified units when the Combatant Commanders require fully ready units.

Reserve and Guard units have proven their readiness. The personnel readiness, retention, and training of Reserve and Guard members will depend on them having Reserve equipment that they can utilize, maintain, train on, and deploy with when called upon. Depending on hardware from the Active Component, has never been successful for many functional reasons. The NRA recommends the committee strengthen the Reserve and Guard equipment appropriation in order to maintain optimally qualified and trained Reserve and Guard personnel.

The Four “P’s” can identify the issues that are important to Reservists: Pay, Promotion, Points, and Pride.

—Pay and compensation needs to be competitive. As Reservists have dual careers, they have had other sources of income. But, this is changing with continuous recalls, which they are glad to do. If pay and compensation are out of sync, or expenses too high, a Reservist knows that time may be better invested elsewhere.

—Promotions need to be fairly regular, and attainable. Promotions have to be accomplished through an established system and be cyclically predictable. We are learning that leadership roles are as important as ever, and that leaders take a long time to develop and if those leadership skills are not constantly exercised, they will atrophy.

—Points reflect a Reservist’s ambitions to earn retirement. The recently passed reserve retirement benefit is a number one priority. Retirement points and the reserve retirement provision are as creditable a reinforcement as pay. Guard and Reserve members are serving their second and third times in OIF/OEF; this is an important issue to them and their families.

—Pride is a combination of professionalism, parity and awards: doing the job well with requisite equipment, and being recognized for one’s efforts. While people may not remember exactly what you did, or what you said, they will always remember how you made them feel.

In summary, we believe the committee needs to address the following issues for Navy Reservists in the best interest of our national security:

—Fund C-40A for the Navy Reserve, per the fiscal year 2009 Supplemental; we must replace the C-9s and replace the C-20Gs in Hawaii and Maryland.

—Fund six C-130Js for the Navy Reserve, per the CNO unfunded list.

—Increase funding for Naval Reserve equipment in NGREA Naval Coastal Warfare Equipment

—Establish an End-strength cap of 68,000 as a floor for end strength to Navy Reserve manpower—providing for surge-ability and operational force.

We thank the committee for consideration of these tools to assist the Guard and Reserve in an age of increased sacrifice and utilization of these forces.

Thank you for your ongoing support of the Nation, the Armed Services, the United States Navy, the United States Navy Reserve, and the fine men and women who volunteer to defend our country.

Senator INOUE. Now our next witness is the Medical Liaison, Mesothelioma Applied Research Foundation, Ms. Mary Hesdorffer.

**STATEMENT OF MARY HESDORFFER, MEDICAL LIAISON, MESOTHELIOMA APPLIED RESEARCH FOUNDATION**

Ms. HESDORFFER. Chairman Inouye, Ranking Member Stevens, and the distinguished members of the Defense Appropriations subcommittee: Thank you for allowing me to testify in front of you. I’m a nurse practitioner and I work as the Medical Liaison for the Mesothelioma Applied Research Foundation. We’re dedicated to advancing medical research to improve treatments for mesothelioma.

Mesothelioma, as you may know, is one of the rarest and most aggressive cancers facing people today. It attacks the linings of the

lung, the pericardium, and the abdomen. It's caused by direct exposure to asbestos. Before we knew the properties of asbestos, it was used widely because it had wonderful properties. It was used in engines, nuclear reactors, decking materials, pipe coverings, hull insulation, pumps, gaskets, boilers, distillers, evaporators, rope packing, and brakes and clutches on winches. It was used all over the Navy ships, even in living spaces, where pipes overhead were lined with asbestos. It was used on planes, on military vehicles, insulating materials in quonset huts.

As a result, millions of defense people have been exposed to asbestos. In one study in Groton, Connecticut, 100,000 people who worked there in the Navy shipyard were exposed to asbestos.

I have specialized in treating this disease. There is only one approved regimen to treat the disease and the life expectancy with that regimen is only 14 months.

I want to just speak to you a little bit about some of the military people who have been exposed and what's happened to them. Chief Naval Officer Admiral Elmo Zumwalt, who led the Navy during Vietnam, was diagnosed with mesothelioma and died within 3 months.

Another fellow, Lewis Deets, at the age of 18 volunteered to serve in Vietnam. He was not drafted; he volunteered. He was serving on the U.S.S. *Kitty Hawk*. A fire broke out in the engine room. The engine was covered with asbestos because that's how we insulated the boilers. That happened in 1965. He developed the disease, he was dead within 4 months.

Bob Tregget is now alive. He's 57 years old. He served on a nuclear submarine. He developed mesothelioma. He's undergone surgery where they removed his lung, the lining of his lung, the lining of his heart, part of his diaphragm in an effort to save his life. The tumor has now since recurred on his other lung.

In addition to these heroes exposed 10 to 50 years ago, because we have a very long latency period with this disease, at 9/11 we had tons of asbestos that was exposed, that was released into the air. My son Alex Plitsas, who is currently serving now in Sadr City, was a volunteer fireman at the time and was exposed to asbestos during 9/11. So this is very dear to my heart, in addition to the known asbestos exposure in Iraq today.

I want to thank the subcommittee because this year in 2008 you appropriated money and you allowed us to be part of your reviewed medical research program. We're urging you again to include us in the year 2009. I need to provide hope to my patients that I'm in daily contact with, and right now it's so difficult to give them hope with a disease that has no cure and has only one approved treatment. We desperately need your research dollars for all the vets and for all the people who have served their country so valiantly in the past and in the future.

Thank you.

Senator INOUE. I thank you very much, Ms. Hesdorffer. We'll do what we can.

Ms. HESDORFFER. Thank you.

[The statement follows:]

## PREPARED STATEMENT OF MARY HESODORFFER

Chairman Inouye, Ranking Member Stevens, and the distinguished members of the U.S. Senate Defense Appropriations subcommittee: Thank you for this opportunity, a week after Memorial Day, to address a tragic disease that disproportionately kills our veterans and heroes. My name is Mary Hesdorffer. I am a nurse practitioner and the Medical Liaison for the Mesothelioma Applied Research Foundation, the national nonprofit collaboration of researchers, physicians, advocates, patients, and families dedicated to advancing medical research to improve treatments for mesothelioma.

## MALIGNANT MESOTHELIOMA

Mesothelioma or meso is an aggressive cancer of the lining of the lungs, abdomen or heart, caused by asbestos exposure. The tumor is among the most painful and fatal of cancers, as it invades the chest wall, destroys vital organs, and crushes the lungs.

## THE "MAGIC MINERAL"—EXPOSURES WERE WIDESPREAD

As you may know, until its fatal toxicity became fully recognized, asbestos was regarded as the magic mineral. It has excellent fireproofing, insulating, filling, and bonding properties. By the late 1930's and through at least the late 70's the Navy was using it extensively. It was used in engines, nuclear reactors, decking materials, pipe covering, hull insulation, valves, pumps, gaskets, boilers, distillers, evaporators, soot blowers, air conditioners, rope packing, and brakes and clutches on winches. In fact it was used all over Navy ships, even in living spaces where pipes were overhead and in kitchens where asbestos was used in ovens and in the wiring of appliances. Aside from Navy ships, asbestos was also used on military planes extensively, on military vehicles, and as insulating material on quonset huts and living quarters.

As a result, millions of military defense personnel, servicemen, and shipyard workers, were heavily exposed. A study at the Groton, Connecticut, shipyard found that over 100,000 workers had been exposed to asbestos over the years at just this one shipyard. The disease takes 10 to 50 years to develop, so many of these heroes who served our country are just now becoming sick.

## MESOTHELIOMA TAKES OUR HEROES

For the past 12 years I have specialized in meso, working with researchers, caring for patients, developing clinical trials to attempt to treat them, and working to manage their pain. I know who they are and what they suffer. These are the people who served our country's defense and built its fleet. They are heroes like former Chief Naval Officer Admiral Elmo Zumwalt, Jr., who led the Navy during Vietnam and was renowned for his concern for enlisted men. Despite his rank, prestige, power, and leadership in protecting the health of Navy service men and veterans, Admiral Zumwalt died at Duke University in 2000, just 3 months after being diagnosed with mesothelioma.

Lewis Deets was another of these heroes. Four days after turning the legal age of 18, Lewis joined the Navy. He was not drafted. He volunteered, willingly putting his life on the line to serve his country in Vietnam. He served in the war for more than 4 years, from 1962 to 1967, as a ship boilerman. For his valiance in combat operations against the guerilla forces in Vietnam he received a Letter of Commendation and The Navy Unit Commendation Ribbon for Exceptional Service. In December 1965, while Lewis was serving aboard the U.S.S. *Kitty Hawk* in the Gulf of Tonkin, a fierce fire broke out. The boilers, filled with asbestos, were burning. Two sailors were killed and 29 were injured. Lewis was one of the 29 injured; he suffered smoke inhalation while fighting the fire. After the fire, he helped rebuild the boilers, replacing the burned asbestos blocks. In 1999, he developed mesothelioma and died 4 months later at age 55.

Bob Tregget is a 57-year-old retired sailor who was diagnosed with mesothelioma a few years ago. Bob was exposed to asbestos as a sailor in the U.S. Navy from 1965 to 1972, proud to serve his country aboard a nuclear submarine whose mission was to deter a nuclear attack upon the United States. To treat his disease, Bob had what today is the state-of-the-art for mesothelioma treatment. He had 3 months of systemic chemotherapy with a new, and quite toxic, drug combination. Then he had a grueling surgery, to open up his chest, remove his sixth rib, amputate his right lung, remove the diaphragm and parts of the linings around his lungs and his heart. After 2 weeks of postoperative hospitalization to recover and still with substantial postoperative pain, he had radiation, which left him with second degree burns on

his back, in his mouth, and in his airways. Recently, the tumor returned on his left side, but Bob is hanging on.

Admiral Zumwalt's, Boilerman Deets', and sailor Tregget's stories are not atypical. I have treated many more meso patients who were exposed in the Navy, or working in a shipyard. Almost 3,000 Americans die each year of meso, and one study found that one-third of patients were exposed on U.S. Navy ships or shipyards. That's 1,000 U.S. veterans and shipyard workers per year, lost through service to country, just as if they had been on a battlefield.

In addition to these heroes, exposed 10 to 50 years ago and developing the disease today, many more are being exposed now and will develop the disease in the next 10 to 50 years. There is grave concern now for the heroic first responders from 9/11. My son, Alex Plitsas, who is currently serving in Iraq, was one of those responders so this is very close to my heart. The EPA now acknowledges that hundreds of tons of asbestos were released into the atmosphere, and that firefighters, police officers, paramedics, construction workers, and volunteers who worked in the rubble at Ground Zero are at greatest risk. Residents in close proximity to the WTC towers and those who attended schools nearby are also at risk.

Asbestos exposures have been reported among the troops now in Iraq. The destruction wrought by Katrina has potentially exposed countless more. Asbestos is virtually omni-present in all the buildings constructed before the late 1970s. The utility tunnels in this very building have dangerous levels. While active asbestos usage is not as heavy today as in the past, even low-dose, incidental exposures can cause meso. Congressman Bruce Vento, the distinguished member from Minnesota, happened to work near an asbestos-insulated boiler in a brewery in Minneapolis for two summers while putting himself through college. As a result, he died of meso in 2000. His wife Sue Vento now champions efforts to raise awareness about this deadly disease and the need for a Federal investment in research toward a cure, and testified before you last year. For those who could develop mesothelioma as a result of all these current exposures, the only hope is effective treatment.

#### MESOTHELIOMA FUNDING HAS NOT KEPT PACE

Despite this deadly toll on our heroes and patriots, meso has been an orphan disease.

With the huge Federal investment in cancer research through the National Cancer Institute (NCI), and billions spent in biomedical research through the Department of Defense (DOD) Congressionally Directed Research Program, we are winning the war on cancer and many other diseases. But for meso, the NCI has provided virtually no funding, in the range of only \$1.7 million to \$4 million annually over the course of the last 5 years, and from 1992 until last year, the DOD did not invest in any meso research, despite the military-service connection. As a result, advancements in the treatment of mesothelioma have lagged far behind other cancers. With current treatment options, including aggressive surgical procedures, meso patients have an average survival of only 4–14 months, ranking it as one of the most aggressive, and deadly cancers that our veterans and others face today.

#### NEW OPPORTUNITIES

But there is good news. A small but passionate community of physicians and researchers is committed to finding a cure. The decades-long hopelessness that treatment was futile is no longer true. The FDA has now approved one drug shown to be effective against the tumor. Median survival on this drug averages 12.2 months. This is just the beginning as having one drug to treat this aggressive and fatal cancer is not enough. Most cancers have over a dozen drugs approved for treatment yet meso only has one! Biomarkers for meso are being identified and one of them received FDA approval just last year. Two of the most exciting areas in cancer research generally—gene therapy and anti-angiogenesis—look particularly promising in meso.

With its seed-money grant funding, the Foundation is supporting research in these and other areas. To date we have funded over \$5 million to investigators working on novel, promising research projects. Researchers are learning which genes and proteins can give a signature for the disease, and which of these also control the pathways that will turn a normal cell into a mesothelioma. Now we need the Federal Government to partner with us in order to make sure that promising findings receive the funding necessary to be fully developed into effective treatments for patients. The scientific community believes that we can continue to advance the treatment of this disease and increase its survivability if the Federal Government makes a concerted investment.

Last year, there was another very hopeful step. At the direction of your committee, the DOD last year—for the first time ever—included meso as an area of emphasis in the DOD's Peer Reviewed Medical Research Program. In fiscal year 2008, this will enable mesothelioma researchers to compete for Federal funds based on the scientific merit of their work, and provide urgently needed resources to explore new treatments and build a better understanding this disease. The DOD just released its Program Announcement and the Foundation has heard from dozens of meso researchers who are interested in applying.

To keep the momentum of research interest going, for fiscal year 2009 we ask you to again include meso in the list of congressionally identified priority research areas. This will not expand the Federal budget. But it will crucially enable mesothelioma researchers to compete for existing Federal funds based on the scientific merit of their work. This will translate directly to saving lives and reducing suffering of patients and families battling meso. We look to the Senate Defense Appropriations subcommittee to continue to provide leadership and hope to the service men and women and veterans who develop this cancer after serving our Nation. Thank you for the opportunity to provide testimony before the subcommittee and we hope that we can work together to develop life-saving treatments for mesothelioma.

Senator INOUE. Our next panel—

Senator STEVENS. Can I just ask one question?

Senator INOUE. Please do.

Senator STEVENS. Mr. Foil, I'm very interested in your testimony because there's an increasing number of young people that are involved in automobile accidents that come out with brain injuries. You have this Defense and Veterans Brain Injury Center. Is that online? Can parents of children who've been injured in automobile accidents go online and get some idea what kind of treatment's available through your center?

Mr. FOIL. Yes, they can. We field calls like that all the time, Senator. That's the way my child was hurt. So I'll probably get several hundred calls each year about this, saying, where can we go, what can we do? But yes. And there are a number of agencies around the country who can do that for children. But it depends on the severity of the injury where they should go. There are lots of good level one trauma centers in the country today, but once you get out of that it's who knows.

Senator STEVENS. Well, we're seeing more and more brain injuries in young people in single car accidents where, you know, we have ice and what-not, they go off the road. But even worse in terms of when you hit—

Mr. FOIL. Are you talking about in Alaska, Senator?

Senator STEVENS. Yes.

Mr. FOIL. It's the number one cause of brain injury among young people in this country, car accidents. No question.

Senator STEVENS. I want to make sure that—I'm willing to help you, but I want to make sure that the information that's there is available to non-veterans as well as the veterans. I know you can't treat them, but at least some knowledge.

Mr. FOIL. There is information available. They can go to a number of web sites. But the Defense and Veterans Brain Injury Center really doesn't do that. But at NBIRTT we try and do what we can. We are small. We don't even have an office and we all do our stuff volunteer.

Senator STEVENS. Okay.

Mr. FOIL. By the way, Senator Inouye, congratulations on your new marriage, and much happiness.

Senator STEVENS. Well, I would hope there would be someplace that people could go for that, because, as you say, your son was involved—

Mr. FOIL. Yes.

Senator STEVENS. But I think these people, particularly in rural areas, have to know what to do.

Mr. FOIL. It's a serious problem, particularly when you are in rural areas, because those first few hours, that means everything.

Senator STEVENS. That's right.

Mr. FOIL. So thank you for your comments.

Senator STEVENS. Thank you very much.

Thank you, Senator.

Senator INOUE. Thank you.

Our last panel: Mr. Ronald Whitten, Mr. Richard Dean, Commander John Class, Dr. Wanda Wilson, and Mr. Bob Wolz.

Our next witness is Mr. Ronald Whitten of the Lymphoma Research Foundation.

**STATEMENT OF RONALD B. WHITTEN, BOARD MEMBER, GEORGIA CHAPTER, LYMPHOMA RESEARCH FOUNDATION**

Mr. WHITTEN. Chairman Inouye, Ranking Member Stevens: Thank you for the opportunity to speak before you today regarding blood cancer research. My name is Ronald Whitten. I am a member of the Georgia chapter of the Lymphoma Research Foundation. I am also a lymphoma survivor. I was diagnosed in late 1997 with stage four non-Hodgkin's lymphoma, occurring above and below my diaphragm with bone marrow involvement. An aggressive course of treatment led to my complete clinical remission in August 1998.

The good news is that many of us with less aggressive or indolent forms of lymphoma are living longer. This would not be possible without the research being conducted by scientists within the cancer research community.

The disconcerting news is that there is no known cure for these and many other types of lymphoma. I consider myself very fortunate to have been blessed with continued years of marriage, family, and the special joy of grandparenting. But when I reflect on my survivorship, I am left with mixed feelings, knowing that so many people have lost their lives to this disease.

I am saddened by our failure to have done more to find a cure. Yet I remain optimistic that some day we will win this long war on cancer.

We'd like to express our appreciation to Congress and to this subcommittee specifically for its contributions to the battle against cancer. Today we are requesting that the subcommittee supplement existing cancer research efforts at the Department of Defense by establishing a \$10 million dedicated stand-alone blood cancer research program. We're asking that the new research program encompass all forms of blood cancer, including lymphoma.

We are confident that a research program focused on the blood cancers will yield tremendous benefits for the approximately 150,000 Americans who will be diagnosed with blood cancer this year and the hundreds of thousands who are currently living with this disease.

Perhaps most importantly, the blood cancers are a compelling target for DOD investment because of the association between military service and the development of certain blood cancers. Military personnel may face a significant hazard from certain environmental exposures and therefore be at heightened risk for a blood cancer diagnosis. The linkage between exposure to one particular herbicide, Agent Orange, and blood cancer has been established by a special committee of the IOM. As a veteran of the Vietnam era and a health professional for more than 40 years, I have known and observed far too many veterans suffering from a range of psychological disorders and physiological diseases, including cancer.

For many years, we were left with speculation, not science. Now we have clear recognition of the increased risk which some of our veterans are facing for blood and other cancer forms. The progress made by existing research efforts is generating optimism that some day a cure will be found, but adequate investment must be made to reach our goal. That is why we urge the subcommittee to expand the existing cancer research programs at the DOD to include this crucial blood cancer research component. Such a commitment would be complementary to the ongoing efforts by the NIH and private groups like the Lymphoma Research Foundation.

Mr. Chairman, I thank you again for the opportunity to testify. Senator INOUE. Thank you very much, Mr. Whitten.  
[The statement follows:]

PREPARED STATEMENT OF RONALD B. WHITTEN

Chairman Inouye, Ranking Member Stevens, and members of the subcommittee, thank you for the opportunity to speak before you today regarding research on lymphoma and other blood-related cancers. My name is Ronald Whitten. I am a board member of the Georgia Chapter of the Lymphoma Research Foundation (Foundation) and a member of the national organization's Public Policy Committee. The Lymphoma Research Foundation is the Nation's largest voluntary health organization devoted exclusively to funding lymphoma research and providing patients and healthcare professionals with critical information on the disease. The Foundation's mission is to eradicate lymphoma and serve those touched by this disease. To date, the Foundation has funded over \$35 million in lymphoma research, ranging from basic laboratory science to translational research.

I am a lymphoma survivor; I was diagnosed in late 1997 with Stage IV non-Hodgkin lymphoma occurring above and below my diaphragm, with bone marrow involvement.

A course of aggressive chemotherapy was followed by the administration of a biological agent, leading to a complete clinical remission in August of 1998. The good news is that many of us with less aggressive, or indolent, forms of lymphoma are living longer. This would not be possible without the research being conducted by scientists and physicians within the cancer research community. The disconcerting news is that there is no known cure for these and many other types of lymphoma.

Lymphoma is a disease notorious for recurrence. Patients often repeat a cycle of remission, relapse, and re-treatment. The 5-year survival rate for non-Hodgkin lymphoma is 63 percent and the 10-year survival rate is only 51 percent. The incidence rate for the disease continues to grow. I consider myself very fortunate to have been blessed with continued years of marriage, family and the special joy of grand parenting. Likewise, to have been able to continue my life's work as a university professor, licensed clinical social worker and healthcare professional has been immensely rewarding.

When I reflect on my survivorship, I am left with mixed feelings, knowing that so many children and young men and women have lost their lives to this disease. I am saddened by our failure to have done more to find a cure. Yet I remain optimistic that someday, we will win this long war on cancer.

Today, we would like to express our appreciation to Congress and to this subcommittee specifically, for its contribution to the battle against cancer and leadership in supporting cancer research. The Department of Defense (DOD) has a distin-

guished history of conducting cutting edge research. Specifically, the Congressionally Directed Medical Research Program (CDMRP) has supported significant advancements in the study of several chronic diseases including breast, prostate, and ovarian cancers.

We believe that a similarly focused research effort could lead to new approaches in the study and treatment of lymphoma. That is why we are requesting that the subcommittee supplement existing research efforts at the DOD by establishing a \$10 million dedicated, stand-alone blood cancer research program. While my personal experience and the mission of the Lymphoma Research Foundation extends only to lymphoma, we are asking that the new research program encompass all forms of blood cancer, including leukemia, non-Hodgkin lymphoma, Hodgkin lymphoma, multiple myeloma, and myelodysplastic syndromes. There are benefits to a cross-cutting research effort that includes all of these diseases, not the least of which is maximizing Federal research dollars in the face of diminishing resources.

It is important to note that many treatments initially developed for the blood cancers routinely lend themselves to the treatment of other types of cancer. Lymphoma is often called the “Rosetta Stone” of cancer research because it has helped unlock the mysteries of several other types of cancer. For example, a number of chemotherapy agents that are now used in the treatment of a wide range of solid tumors were originally used in the treatment of blood cancer. Therefore, an investment in blood cancer research will often contribute to the study and development of treatments for many other forms of cancer.

Blood cancer research has been funded in the past through the Peer Reviewed Medical Research Program, an omnibus research initiative within the CDMRP. Although quality research has been supported in this manner, the ad hoc funding system has been insufficient to support a dynamic blood cancer research program. A stable and consistent source of funding is critical if we are to encourage researchers and institutions to pursue projects that will identify the origins of these diseases and develop treatments for the hundreds of thousands of Americans currently suffering from blood cancer.

#### THE BURDEN OF BLOOD CANCER

Blood cancers are the fourth most commonly-diagnosed cancer in the United States; as many as 150,000 new cases of blood cancer and myelodysplastic syndrome will be diagnosed this year alone. Of these cases, over 74,000 will result in a lymphoma diagnosis.

Lymphoma is the most common blood cancer and the third most common cancer of childhood. In this decade, we have witnessed an over 19 percent increase in new lymphoma cases, at a pace greater than the number of new cancer diagnoses overall.

Taken together, the hematological or blood-related cancers rank second in cancer mortality. More than 53,000 Americans will die from a blood cancer in 2008, while 41,000 will die from breast cancer, 29,000 from prostate cancer and 16,000 from ovarian cancer. Survivors of blood cancer also bear a significant burden. Individuals who have been treated for a blood cancer may suffer a variety of adverse effects as a result of their treatment, including second malignancies, organ dysfunction, psycho-social disorders like depression, and other health-related problems.

#### BLOOD CANCER AND THE MILITARY

While we do not know the cause of most blood cancers, there is increasing information to suggest a link between some environmental carcinogens, pesticides, herbicides and bacteria, and the risk of developing blood cancer. Military personnel may face a significant hazard from such environmental exposures and therefore may be at heightened risk for a blood cancer diagnosis. The linkage between exposure to one particular herbicide—Agent Orange—and blood cancer has been established by the Committee to Review the Health Effects in Vietnam Veterans of Exposure to Herbicides, a special committee of the Institute of Medicine.

As a veteran of the Vietnam era and a healthcare professional of more than 40 years, I have known and observed far too many veterans suffering from a range of social and psychological disorders and physiological diseases, including cancer. For many years we were left with speculation, not science. Now we have clear recognition of the increased risk which some of our veterans are facing for blood and other cancer forms. We must do more to better serve this population and one important way to do this is to expand efforts to identify improved treatments through research.

## THE PROMISE OF BLOOD CANCER RESEARCH

This is a particularly critical time to discuss investment in research: in the past decade, scientists have made significant breakthroughs, bringing blood cancer research fully into the translational era. Recent advances in the study of lymphoma have provided new insight into the etiology and treatment of the disease.

One such development has occurred in the study of mantle cell lymphoma, an aggressive and rare form of the disease that less than 15 years ago wasn't even recognized as a separate kind of lymphoma. As a result, survival with conventional treatment was so low that patients could only expect to live for 3 years. Fortunately, advances in research funded by the Foundation have provided a better understanding of this disease: since its inception in 2005, the Foundation's Mantle Cell Consortium has created a broad program including the work of nearly 100 researchers that focuses entirely on this single type of blood cancer. As a direct result of this targeted research, patient treatment response rates are improving and while we are still years away from discussing a cure, mantle cell patients are living longer and fuller lives.

Similarly, advances are being made in the study and treatment of follicular lymphoma, the second most common form of non-Hodgkin lymphoma. Standard care for follicular lymphoma has often included a "wait and watch" approach, in part because the treatments available to patients have numerous negative side effects. As a result, years of uncertainty for patients and their families can follow a diagnosis. But with the advent of new therapies like Rituxan, the drug that helped to bring me into remission, patients now have more options, and most importantly, they have more time. More time with their families, more time to fulfill promising careers, more time to live out their dreams.

As we consider the possibilities that new treatment options bring, we cannot overlook that for many patients, managing their disease is a full-time job. The chronic nature of blood cancer requires diligent monitoring accompanied by difficult and often painful treatment. And unfortunately, even after remission is achieved, patients and survivors are often left dealing with a host of side effects in addition to the fear of relapse or a secondary malignancy. A concerted effort to study new blood cancer treatments could result in fewer disease complications, improve the quality of life of blood cancer patients and assist them as they contend with the long-lasting symptoms of their disease.

Research has enabled great strides in the study and treatment of blood cancer, yet tens of thousands of patients are still left with limited options upon diagnosis. And despite the consistent progress being made, these diseases remain incurable. A strong, ongoing investment in basic and clinical research is vital if we are to work toward identifying more effective treatments and eventually a cure for every form of blood cancer.

## CONCLUSION

Our Nation faces many challenges, but we believe that a compelling case can be made for increasing Federal investment in blood cancer research. Learning more about the basic biology of blood cancer will show us how to identify disease processes and intervene at the earliest possible stages, limiting suffering and the possibility of death.

The progress made by existing research efforts is generating optimism that someday, a cure will be found. But adequate investment must be made to reach our goal. That is why we urge the subcommittee to expand the existing cancer research programs at the DOD to include this crucial blood cancer research component. Such an effort would be complimentary to the ongoing efforts by the National Institutes of Health and private organizations like the Lymphoma Research Foundation. We believe that the results of such an initiative could yield substantial benefit not only for members of the military and for our Nation's veterans, but for every American facing a blood cancer diagnosis.

As a lymphoma survivor and a volunteer in these endeavors to find a cure for lymphoma, I thank you again for the opportunity to testify. I am ready to answer your questions about lymphoma, and the Foundation stands ready to provide additional information on existing lymphoma research and promising avenues for collaboration on lymphoma and other blood cancer-specific research initiatives.

Senator INOUE. Now may I call upon the Chief Executive Officer, Air Force Sergeants Association, Mr. Richard Dean.

**STATEMENT OF CMSGT JONATHAN E. HAKE, USAF (RETIRED), DIRECTOR OF MILITARY AND GOVERNMENT RELATIONS, AIR FORCE SERGEANTS ASSOCIATION**

Mr. HAKE. Good morning, Chairman Inouye. Mr. Dean is at Hanscomb Air Force Base today. I'm John Hake, the Director of Military and Government Relations with the Air Force Sergeants Association (AFSA). Ranking Member Stevens, on behalf of the 125,000 members of the AFSA, I thank you for your continued support of airmen and their families.

The AFSA is deeply concerned about drawing down end strength to fund Air Force weapons systems and modernization. The most valuable weapon that America has in its arsenal is the men and women that serve. We believe that a course correction is needed to avert long-term consequences that have already begun to adversely affect morale, retention, and combat readiness, and we strongly support increasing and fully funding Air Force end strength by 14,000.

The AFSA is also particularly pleased by the tremendous strides that are made to implement and fund the wounded warrior programs that were spoken of earlier. Currently 15 percent of active duty and 25 percent of the Reserve forces are women. Many are serving or have served in Iraq and Afghanistan. We support increasing the VA budget to address the unique needs of these veterans now and into the future.

We are deeply concerned about the pending Medicare reimbursement rate cuts. When these go into effect there will be a profound adverse impact on those that depend on TRICARE. During recent field visits our members shared stories about how the anticipated cuts were already causing providers, even in military-friendly communities like San Antonio and Colorado Springs, from accepting TRICARE patients. We strongly urge you to provide the necessary funding to avert these projected rate cuts for the military members and for the Medicare beneficiaries.

In the area of veterans education benefits, the AFSA is extremely pleased so many in Congress are interested in reforming veterans education. We know this will have an associated cost and respectfully offer the return on investment is not just good for the military member and their family, it's good for America.

There are many proposals worthy of consideration and we believe two key elements should be included. First, make it transferable. Today's all-volunteer force shares the same profound love of country and patriotism as previous generations. Where they differ is in their education. In many cases these men and women have some college credit before volunteering and they earn more as they serve. We believe they should have the flexibility to use their earned benefit however best fits their situation.

We commend the Senate for making a technical adjustment addressing transferability in a recent supplemental bill. However, we believe if you truly want to see transferability implemented it must be fully funded and not left to the service's discretion.

AFSA understands that a line must be drawn to determine eligibility for the revised benefit, which brings me to my second point—vesting. We believe those with 36 months time-in-service on September 12, 2001, should be immediately eligible for the entire ben-

efit, and phased in for others as time and service requirements are met. This Nation's experienced troops, officers and enlisted alike, rapidly responded on 9/11, leading, training, and inspiring those that followed and joined after the attack. AFSA urges true bipartisan cooperation and collaboration in creating an updated education benefit reflecting the sacrifices of today's all-volunteer force.

Again, thank you, Mr. Chairman, for this opportunity to share our perspective.

Senator INOUE. Thank you very much, sir.

[The statement follows:]

#### PREPARED STATEMENT OF JONATHAN E. HAKE

Mr. Chairman and distinguished committee members, on behalf of the 125,000 members of the Air Force Sergeants Association (AFSA), I thank you for your continued support of airmen and their families. I appreciate the opportunity to present our perspective on priorities for the fiscal year 2009 defense appropriations.

The AFSA represents Air Force Active Duty, Air National Guard, Air Force Reserve Command, including active, retired, and veteran enlisted airmen and their families. We are grateful for this subcommittee's efforts, and I can't overstate the importance your work is to those serving this Nation.

You have a daunting task before you and shoulder tremendous responsibility as you wisely appropriate limited resources based on many factors. The degree of difficulty deciding what can, and what cannot, be addressed isn't lost on us. It is significant.

#### AIR FORCE MANPOWER

The AFSA strongly believes the aging fleet of legacy Air Force systems needs to be modernized. However, we also know the truly most valuable weapon America has in its arsenal are those serving this great Nation, especially the men and women wearing chevrons of the enlisted grades.

We are deeply concerned about the approach taken to drawdown Air Force manpower to fund system modernization and recapitalization. Although well-intended, it does not appear to have yielded the results envisioned. Some efficiency was gained as airmen exercised innovation and continuous process improvement to accomplish missions, reflecting a remarkable "can-do" spirit.

Greater operational demands have expanded over this same time—fielding increased intelligence, reconnaissance, and surveillance (ISR) resources, supporting the newest combatant command in Africa, growing capabilities to ward off threats from the cyber domain and accomplishing the expanding workload associated with more inspections and maintenance to keep aging airframes ready. All this, and more, is being done with fewer people—it is straining the force and their families.

The AFSA believes a course correction is needed to avert severe adverse, long-term consequences that has already begun to effect morale, retention, and combat readiness. We strongly support increasing and fully funding Air Force end strength by 14,000.

#### QUALITY OF LIFE

If we expect to retain this precious resource we must provide them, and their families, with facilities that reflect their level of commitment and sacrifice. This impacts their desire to continue serving through multiple deployments and extended separations.

This Nation devotes significant resources training and equipping America's sons and daughters—a long-term investment—and that same level of commitment should be reflected in the facilities where they live, work, and play.

We caution deferring these costs, especially at installations impacted by base realignment and closure decisions and mission-related shifts.

We applaud congressional support for military housing privatization initiatives. This has provided housing at a much faster pace than would have been possible through military construction alone.

The AFSA urges Congress to fully fund appropriate accounts to ensure all remaining installations eliminate substandard housing as quickly as possible. Those devoted to serving this country deserve nothing less.

Tremendous strides have been made to improve access to quality child care and fitness centers on military installations, and we are grateful to the Department of

Defense and Congress for these collective efforts. There is still more work to be done. The demand for child care continues to grow as a larger percentage of military members have young children and a fit force is absolutely essential to enduring the rigors of service.

#### VETERANS AFFAIRS HEALTHCARE FUNDING

We believe the healthcare portion of Veterans Affairs (VA) funding should be moved to mandatory annual spending. One of this Nation's highest obligations is the willingness to fully fund VA health care, facilities, and other programs for those who have served in the past, are serving today and will serve in the future.

There are many challenges facing veterans and we are encouraged by the initiatives centered on improving access, continuity of care and addressing the scars of war, some obvious and others not so, such as traumatic brain injuries and post traumatic stress disorders. We are particularly pleased by the tremendous strides made to implement and fund Wounded Warrior programs.

#### WOMEN VETERANS HEALTHCARE ISSUES

We applaud the actions of various committees and subcommittees to directly address the issue of the unique health challenges faced by women veterans. Between 1990 and 2000, the women veteran population increased by 33.3 percent from 1.2 million to 1.6 million, and women now represent approximately 7 percent of the total veteran population. By the year 2010, the VA estimates women veterans will comprise well over 10 percent of the veteran population. Currently women make up more than 15 percent of the active duty force and approximately 25 percent of the reserve force with thousands serving, or having already returned from serving, in Iraq and Afghanistan. The AFSA urges an increase to the VA budget so they can appropriately care for these veterans now and in the future.

#### IMPACT AID

Military leaders often use the phrase, "we recruit the member, but we retain the family" when talking about quality of life and retention. Impact Aid is a program at the very core of this premise, because it directly affects the quality of educational programs provided to the children of military service members.

These children lead unique lives, fraught with challenges associated with frequent changes in schools, repeatedly being uprooted and having to readjust to new communities and friends. Worrying about what resources might or might not be available to school administrators should not be yet another concern heaped upon them and their parents.

The Impact Aid program provides Federal funding to public school districts with significant enrollment of students with a parent who is a member of the Armed Forces, living on and/or assigned to a military installation (federally owned land).

The budget proposed by the administration calls for a freeze in funding for this important program. We find this to be very disappointing. The implicit statement in this action is military children are a lower priority than others in our Nation. We ask this committee to take the steps necessary to show our military men and women that the education of their children is as important as the next child.

The AFSA is grateful Congress increased Impact Aid funding by \$100 million in fiscal year 2008 and urge similar action in fiscal year 2009.

#### BASIC MILITARY PAY

Tremendous progress has been made over the last 15+ years to close the gap between civilian sector and military compensation. The AFSA appreciates these steady efforts and encourage further steps. We believe linking pay raises to the employment cost index (ECI) is essential to recruiting and retaining the best and brightest volunteers. AFSA urges support for efforts to adjust the annual pay raise formula to ECI+0.5 percent until the gap is completely eliminated. America's sons and daughters understand monetary compensation is important, but not the only factor that drives them to serve.

#### TRANSITION ASSISTANCE PROGRAMS

The all-volunteer military force repeatedly answers this Nation's call to duty and at the end of their tours of duty, whether a few years or after decades of service, all transition to civilian life.

Section 502 of the National Defense Authorization Act of Fiscal Year 1991, Public Law 101-510, codified in sections 1141-1143 and 1144-1150 of title 10, United

States Code, authorized comprehensive transition assistance benefits and services for separating service members and their spouses.

From that legislation grew a valuable partnership between the Department of Labor and the Departments of Defense, Veterans Affairs, and Homeland Security to provide Transition Assistance Program employment workshops, VA Benefits Briefings and the Disabled Transition Assistance Program. These programs and briefings provide service members valuable job placement assistance, training opportunities, and education on veteran benefits so they make informed choices about post-service opportunities.

We urge this committee to continue fully funding transition assistance programs.

In addition, we ask you to support the administration's initiative to pass legislation and fund a program that would create hiring preferences across Federal Government for military spouses. Under current law, veterans of America's Armed Forces are entitled to preferences over others in competitive hiring positions in the Federal Government. We believe the sacrifice of family members warrant this consideration as well.

#### VETERANS EDUCATION BENEFITS—MONTGOMERY G.I. BILL REFORM

The AFSA is extremely pleased by the interest by so many in Congress to reform Montgomery G.I. bill (MGIB) educational benefits for those that have stepped up to defend America's interests at home and abroad.

No doubt, making the MGIB a more viable benefit will have an associated cost and we unequivocally and respectfully offer the return on investment is not just good for the military member and his family, it is good for America.

We would like to see the MGIB transformed into something like the post-WW II G.I. bill. This would go a long way toward recruiting this Nation's best and brightest to serve.

There are many proposals worthy of consideration and there are at least six key elements we believe essential to the final product.

First, we ask this committee to fund a program that pays for all books, tuition, and fees, indexed annually to reflect the actual cost of education.

Second, eliminate the \$1,200 user fee for the MGIB. Military members earn this benefit by virtue of their service.

Third, make the the MGIB transferable to immediate family members. Today's all-volunteer force shares the same profound love of country and patriotism as previous generations. Where they differ is their education—in many cases these men and women have some college credit before volunteering to serve and often earn more credits during accession and technical training, setting them on a course of education and training that continues throughout their term of service. We believe they should have the flexibility to use their earned benefit however best fits their situation including transferring it to their immediate family—they sacrifice much and endure hardship too.

Fourth, provide enlisted members who declined enrollment in the Veterans Educational Assistance Program (VEAP) during the late 70s and early 80s the opportunity to enroll in the new program. There is currently about 10,050 airmen remaining on active duty today in this situation. About 5,600 are enlisted members.

They passed on the VEAP program because of bad advice, lack of foresight or with the hope of a better program to come later during their careers. Whatever the case, wouldn't it be a travesty to leave those who have devoted so many years of their lives to service be left without an educational benefit? Time is running out to make this right.

Fifth, implement a Total Force MGIB. Members of the Guard and Reserve contribute to missions in Afghanistan, Iraq, and here at home—more than 500,000 of these brave men and women have been called up since September 11, 2001, and more than 70,000 have pulled two or more tours of duty and yet they are denied educational benefits commensurate with their service.

This would rely on two broad concepts—first, consolidate active duty and reserve MGIB programs under title 38 and second, restructure the MGIB benefit levels according to the level of military service performed.

Sixth, we understand a line must be drawn to determine eligibility and a timeline established to earn 100 percent of the revised benefit. We simply offer those with 36 months or more time in service on September 12, 2001 should be immediately eligible for the entire benefit and phased in for others as time in service requirements are met. Our Nation's experienced troops—enlisted and officer alike—rapidly responded on 9/11 leading, training, and inspiring those that joined post attack.

Again, Mr. Chairman, we appreciate your efforts and thank you for this opportunity to share our perspective. We realize the many difficult decisions this com-

mittee must make and hope the information we presented proves helpful. As always, we remain ready to support you in matters of mutual concern.

Senator INOUE. Our next witness is Commander John Class, Military Officers Association of America. Commander Class.

**STATEMENT OF COMMANDER JOHN S. CLASS, USN (RETIRED), DEPUTY DIRECTOR, GOVERNMENT RELATIONS FOR HEALTH AFFAIRS, MILITARY OFFICERS ASSOCIATION OF AMERICA**

Commander CLASS. Good morning, Mr. Chairman, Ranking Member Stevens. The Military Officers Association of America (MOAA) thanks you for the opportunity to appear before you today. MOAA is grateful for your past support in providing funds to offset DOD's planned TRICARE fee increases and ensuring pay raises that continue to bring military pay closer to that of their private sector counterparts.

For the third year in a row, DOD has reduced the defense health program, assuming Congress would approve the proposed TRICARE fee hikes. Once again, Congress has rejected these proposals. MOAA urges the subcommittee to restore the \$1.2 billion shortfall that this has created and fully fund the defense health program.

Every year since 1999, Congress has narrowed the gap between military and private sector pay. However, a 3.4 percent gap still exists. MOAA urges the subcommittee to fully fund a 3.9 percent pay raise and avoid making the services absorb the extra 0.5 percent above what was requested in the President's budget.

Over the past few years Congress, DOD, and the VA have made great strides with regard to care of our wounded warriors and their families. MOAA hopes the subcommittee will ensure full funding of joint DOD-VA initiatives, to include a top-down planning and execution of all seamless transition functions.

Congress has recently moved to include legislation for a new GI bill. MOAA believes that a new GI bill will enhance the service's ability to recruit and retain quality service members. MOAA strongly recommends the subcommittee provide the necessary funding for the GI bill changes.

Robust family support programs continue to be crucial to overall military readiness, especially with the demands of frequent and extended deployments. MOAA urges the subcommittee to support an increase in family support funding to meet the growing needs associate with the increased OPTEMPO.

MOAA is also greatly concerned about the level of support services and quality of life programs for members and their families in areas affected by BRAC and global repositioning initiatives. MOAA urges the subcommittee to ensure sustainment of these programs at closing installations until all families have left and institution of these programs at gaining installations as servicemembers and their families arrive.

A recent Government Accountability Office (GAO) report confirmed that DOD has overcharged those Guard and Reserve members who purchased TRICARE Reserve Select healthcare coverage. Both Armed Services Committees have included language that would require DOD to set future premiums based on cost. MOAA realizes that this will cause a budget shortfall and hopes that the

subcommittee will fully fund the TRS program under the new premium schedule.

Once again, I thank you for this opportunity to represent MOAA before the subcommittee and would be happy to answer any of your questions.

Senator INOUE. Commander Class, I thank you very much for your participation and contribution.

[The statement follows:]

PREPARED STATEMENT OF COMMANDER JOHN S. CLASS

Mr. Chairman and distinguished members of the subcommittee. On behalf of the Military Officers Association of America (MOAA) we are grateful to the committee for this opportunity to express our views concerning issues affecting the uniformed services community. This statement provides the views of MOAA which represents approximately 370,000 current and former officers of the seven uniformed services, plus their survivors.

MOAA does not receive any grants or contracts from the Federal Government.

Mr. Chairman MOAA thanks you and the entire subcommittee for your continued, unwavering support of our active duty, Guard, Reserve, retired members, and veterans of the uniformed services, to include their families and survivors.

OVERVIEW

Over the past several years, the Pentagon has repeatedly sought to curb spending on military personnel and facilities to fund operational requirements. In the process, the Defense Department has imposed dramatic force reductions in the Air Force and the Navy, tried to deter military retirees from using their earned health coverage by proposing large TRICARE fee increases, and cut back on installation quality of life programs.

MOAA believes these efforts to rob personnel to fund operations will only make the uniformed services more vulnerable to future readiness problems. We agree with the Chairman of the Joint Chiefs of Staff, who has stated that 4 percent of GDP should be the "absolute floor" for the overall military budget. If we want a strong national defense, we have to pay for a strong military force as well as replace and upgrade aging, war-worn weapons and equipment.

In testimony today MOAA offers its recommendations on what needs to be done to address these important issues and sustain long-term personnel readiness.

WOUNDED WARRIOR ISSUES

*Caregiver Initiatives.*—Several wounded warrior provisions in the recently enacted NDAA provide additional support for the caregiver of the wounded warrior, typically a family member. However, we believe more needs to be done to strengthen support for families, to include the authorization of compensation for family member caregivers of severely injured who must leave their employment to care for the service member.

*Joint Research.*—Combined Research Initiatives would further enhance the partnership between VA and DOD. Since many of the concerns and issues of care are shared, joint collaboration of effort in the area of research should enable dollars to go much further and provide a more standardized system of health care in the military and veteran communities. Furthermore, research must also be performed jointly and across all Military Departments and with other practicing healthcare agencies to ensure timely integration of these findings in the diagnosis and treatment of wounded and disabled patients.

MOAA urges the subcommittee to ensure full funding of joint DOD–VA initiatives to include top-down planning and execution of all "seamless transition" functions, including the joint electronic health record; joint DOD/VA physical; implementation of best practices for TBI, PTSD, and special needs care; care access/coordination issues; and joint research.

ACTIVE FORCE ISSUES

The subcommittee's key challenges will be to fend off those who wish to cut needed personnel and quality of life programs while working with DOD and the administration to reduce the stress on the force and their families already subjected to repeated, long-term deployments. Rising day-to-day workloads for non-deployed members and repeated extensions of combat tours creates a breeding ground for reten-

tion problems. Meeting these challenges will require a commitment of personnel and resources on several fronts.

*End Strength and Associated Funding.*—MOAA was encouraged when the subcommittee ensured that the Army and Marine Corps authorized end strengths continued to grow in fiscal year 2008, and we are further encouraged that the DOD has asked for additional manpower increases for the Army and Marine Corps over the next 4 years.

Congress must ensure these increases are sufficient to ease force rotation burdens and the services are fully funded in order to achieve the new end strength. Increasing end strength is not a quick fix that will ease the stressors on currently serving service members and their families.

Some already speculate that the planned increases may not be needed if we can reduce the number of troops deployed to Iraq. MOAA believes strongly that the increases are essential to future readiness, regardless of force levels in Iraq. We know we didn't have enough troops to fight the current war without imposing terrible penalties on military members and families, and we must build our force management plans to avoid having to do so when the Nation is faced with another major unexpected contingency requirement.

For too long, we have planned only for the best-case scenario, which ignores our responsibility to the Nation to be prepared for unexpected and less-favorable scenarios, which could well arise anywhere around the globe, including the Far East.

A full range of funding is required to support this necessary end strength, including housing, health care, family programs, and child care. Having the services absorb these costs out of pocket is self-defeating.

MOAA strongly urges the subcommittee to sustain projected increases in ground forces and provide additional recruiting, retention, and support resources as necessary to attain/sustain them.

*Compensation and Special Incentive Pays.*—MOAA is committed to ensuring that pay and allowance programs are equitably applied to the seven uniformed services. In that regard, MOAA urges the subcommittee to be mindful that personnel and compensation program adjustments for Department of Defense forces should also apply to uniformed members of the Coast Guard, NOAA Corps, and Public Health Service.

Since the turn of the century, Congress and DOD have made significant progress to improve the lives of men and women in uniform and their families. Since 1999, when military pay raises had lagged a cumulative 13.5 percent behind the private sector pay comparability standard, Congress has narrowed that gap to 3.4 percent. Each year during that span, Congress has ensured at least some progress in shrinking that disparity further. MOAA is grateful for that progress, and believes strongly that it should continue until full pay comparability is restored.

MOAA urges the subcommittee to fully fund the 3.9 percent pay raise included in the Defense Authorization Bill, and to avoid making the services absorb the extra 0.5 percent above what was requested in the President's Budget.

*GI Bill.*—The Senate and House have voted favorably to include legislation for a New GI Bill in the pending Emergency Spending Supplemental on the Iraq and Afghanistan Conflicts. However, it will be necessary to resolve differences in funding the measure. The Senate bill does not fund the New GI Bill, whereas the House proposes to raise taxes on high income individuals to support the bill.

MOAA has been a forceful leader for creating a GI Bill for today's warriors and future veterans. Less than 1 percent of the population is defending the other 99 percent of the Nation in the war on terror, yet our service women and men do not receive educational benefits commensurate with their enormous sacrifices. A New GI Bill will support quality recruitment, retention and readjustment outcomes and has broad bi-partisan support in both chambers.

MOAA strongly recommends that the committee approve necessary funding for a New GI Bill as a priority this year.

*Family Readiness and Support.*—A fully funded, robust family readiness program continues to be crucial to overall readiness of our military, especially with the demands of frequent and extended deployments.

Resource issues continue to plague basic installation support programs. At a time when families are dealing with increased deployments, they are being asked to do without. Often family centers are not staffed for outreach. Library and sports facilities hours are being abbreviated or cut altogether. Manpower for installation security is being reduced. These are additional sacrifices that we are imposing on our families left behind while their service members are deployed.

In a similar vein, MOAA believes additional authority and funding is needed to offer respite and extended child care for military families. These initiatives should be accompanied by a more aggressive outreach and education effort to improve

members' and families' financial literacy. We should ensure members are aware of and encouraged to use child care, mental health support, spousal employment, and other quality-of-life programs that have seen recent growth. However, this education effort should also include expanded financial education initiatives to inform and counsel members and families on life insurance options, Thrift Savings Plan, IRAs, flexible spending accounts, savings options for children's education, and other quality of life needs.

In particular service members must be educated on the long-term financial consequences of electing to accept the much lower-value \$30,000 REDUX retention bonus after 15 years of service vice sustaining their full High-3 retirement benefit.

MOAA urges the subcommittee to support increased family support funding and expanded education and other programs to meet growing needs associated with increased ops tempo, extended deployments and the more complex insurance, retirement, and savings choices faced by over-extended military families.

*Permanent Change of Station (PCS) Allowances.*—PCS allowances have continually failed to keep pace with the significant out-of-pocket expenses service members and their families incur in complying with Government-directed moves.

One way to improve allowances is to recognize that military spouses increasingly have their own professional careers that suffer disruption when the service member is relocated. The Armed Services Committee has recommended a 500-pound additional weight allowance to assist military spouses in moving their professional books and equipment.

MOAA urges the subcommittee to fully fund the 500-pound professional goods weight allowance for military spouses.

*BRAC/Rebasing/Military Construction/Commissaries.*—MOAA remains concerned about inadequacy of service implementation plans for DOD transformation, global repositioning, Army modularity, and BRAC initiatives. Given the current wartime fiscal environment, MOAA is greatly worried about sustaining support services and quality of life programs for members and families. These programs are clearly at risk—not a week goes by that MOAA doesn't hear reports of cutbacks in base operation accounts and base services because of funding shortfalls.

Feedback from the installation level is that local military and community officials often are not brought "into the loop" or provided sufficient details on changing program timetables to plan, seek, and fund support programs (housing, schools, child care, roads, and other infrastructure) for the numbers of personnel and families expected to relocate to the installation area by a specific date.

MOAA urges the subcommittee to ensure sustainment of adequate family support/quality of life programs at closing and gaining installations—to include housing, education, child care, exchanges and commissaries, health care, family centers, unit family readiness, and other support services.

*Morale, Welfare, and Recreation Programs.*—The availability of appropriated funds to support MWR activities is an area of continuing concern. MOAA strongly opposes any DOD initiative that withholds or reduces MWR-appropriated support for Category A and Category B programs or that reduces the MWR dividend derived from military base exchange programs.

Service members and their families are reaching the breaking point as a result of the war and the constant changes going on in the force. It is unacceptable to have troops and families continue to take on more responsibilities and sacrifices and not give them the support and resources to do the job and to take care of the needs of their families.

MOAA urges the subcommittee to ensure that DOD funds MWR programs at least to the 85 percent level for Category A programs and 65 percent for Category B requirements.

#### NATIONAL GUARD AND RESERVE FORCE ISSUES

Every day somewhere in the world, our National Guard and Reserves are answering the call to service. Although there is no end in sight to their participation in homeland security, overseas deployment and future contingency operations, Guard and Reserve members have volunteered for these duties and accept them as a way of life in the 21st century.

All Guard and Reserve components are facing increasing challenges involving major equipment shortages, end-strength requirements, wounded-warrior health care, assistance and counseling for Guard and Reserve members for pre-deployment and post-deployment contingency operations.

Congress and the Department of Defense must provide adequate benefits and personnel policy changes to support our troops who go in harm's way.

*Family Support Programs and Benefits.*—MOAA supports providing adequate funding for a core set of family support programs and benefits that meet the unique needs of Guard and Reserve families with uniform access for all service members and families. These programs would promote better communication with service members, specialized support for geographically separated Guard and Reserve families and training and back up for family readiness volunteers. This access would include:

- Web-based programs and employee assistance programs such as Military One Source and GuardFamily.org.
- Enforcement of command responsibility for ensuring that programs are in place to meet the special needs of families of individual augmentees or the geographically dispersed.
- Expanded programs between military and community religious leaders to support service members and families during all phases of deployments.
- Availability of robust preventive counseling services for service members and families and training so they know when to seek professional help related to their circumstances.
- Enhanced education for Guard and Reserve family members about their rights and benefits.
- Innovative and effective ways to meet the Guard and Reserve community's needs for occasional child care, particularly for preventive respite care, volunteering, and family readiness group meetings and drill time.
- A joint family readiness program to facilitate understanding and sharing of information between all family members, no matter what the service.

MOAA urges Congress to continue and expand its emphasis on providing consistent funding and increased outreach to connect Guard and Reserve families with relevant support programs.

*Tangible Support for Employers.*—Employers of Guard and Reserve service members shoulder an extra burden in support of the national defense. The new “Operational Reserve” policy places even greater strain on employers. For their sacrifice, they get plaques to hang on the wall.

For Guard and Reserve members, employer “pushback” is listed as one of the top reasons for Reservists to discontinue Guard and Reserve service. If we are to sustain a viable Guard and Reserve force for the long term, the Nation must do more to tangibly support employers of the Guard and Reserve and address their substantive concerns, including initiatives such as:

- Tax credits for employers who make up any pay differential for activated employees.
- Tax credits to help small business owners hire temporary workers to fill in for activated employees.
- Tax credits for small manufacturers to hire temporary workers.

MOAA urges the subcommittee to work with the Finance Committee to support needed tax relief for employers of Selected Reserve personnel and reinforce the Employer Support for Guard and Reserve Program.

*Seamless Transition for Guard and Reserve Members.*—Over 615,000 members of the Guard and Reserve have been activated since 9/11. Congressional hearings and media reports have documented the fact that at separation, many of these service members do not receive the transition services they and their families need to make a successful readjustment to civilian status.

MOAA urges the subcommittee to continue and expand its efforts to ensure Guard and Reserve members and their families receive funded transition services to make a successful readjustment to civilian status.

#### HEALTH CARE ISSUES

MOAA very much appreciates the subcommittee's strong and continuing interest in keeping health care commitments to military beneficiaries.

The unique package of military retirement benefits—of which a key component is a top-of-the-line health benefit—is the primary offset afforded uniformed service members for enduring a career of unique and extraordinary sacrifices that few Americans are willing to accept for 1 year, let alone 20 or 30. It is an unusual—and essential—compensation package that a grateful Nation provides for the relatively few who agree to subordinate their personal and family lives to protecting our national interests for so many years.

*Full Funding for the Defense Health Program.*—MOAA very much appreciates the subcommittee's support for maintaining—and expanding where needed—the healthcare benefit for all military beneficiaries, consistent with the demands imposed upon them.

The Defense Department, Congress, and MOAA all have reason to be concerned about the rising cost of military health care. But it is important to recognize that the bulk of the problem is a national one, not a military-specific one. To a large extent, military health cost growth is a direct reflection of health care trends in the private sector.

It is true that many private sector employers are choosing to shift an ever-greater share of health costs to their employees and retirees. In the bottom-line-oriented corporate world, many firms see their employees as another form of capital, from which maximum utility is to be extracted at minimum cost, and those who quit are replaceable by similarly experienced new hires. But that can't be the culture in the military's closed personnel, all-volunteer model, whose long-term effectiveness is utterly dependent on establishing a sense of mutual, long-term commitment between the service member and his/her country.

Some assert active duty personnel costs have increased 60 percent since 2001, of which a significant element is for compensation and health costs. But much of that cost increase is due to conscious decisions by Congress to correct previous shortfalls—including easing the double-digit military “pay gap” of that era and correcting the unconscionable situation before 2001 when military beneficiaries were summarily dropped from TRICARE coverage at age 65. Additionally, much of the increase is due to the cost of war and increased optempo.

Meanwhile, the cost of basic equipment soldiers carry into battle (helmets, rifles, body armor) has increased 257 percent (more than tripled) from \$7,000 to \$25,000 since 1999. The cost of a Humvee has increased seven-fold (600 percent) since 2001 (from \$32,000 to \$225,000).

While we have an obligation to do our best to intelligently allocate these funds, the bottom line is that maintaining the most powerful military force in the world is expensive—and doubly so in wartime.

MOAA objects strongly to the administration's arbitrary reduction of the TRICARE budget submission. DOD has typically overestimated its healthcare costs as evidenced by a recent GAO report on the TRICARE Reserve Select premiums. MOAA deplors this inappropriate budget “brinkmanship”, which risks leaving TRICARE significantly underfunded, especially in view of statements made for the last 2 years by leaders of both Armed Services Committees that the Department's proposed fee increases were excessive.

MOAA understands only too well the very significant challenge such a large and arbitrary budget reduction would pose for this subcommittee if allowed to stand. If the reduction is not made up, the Department almost certainly will experience a substantial budget shortfall before the end of the year. This would then generate supplemental funding needs, further program cutbacks, and likely efforts to shift even more costs to beneficiaries in future years—all to the detriment of retention and readiness.

MOAA strongly urges the subcommittee to take all possible steps to restore the reduction in TRICARE-related budget authority and ensure continued full funding for Defense Health Program needs.

*Alternative Options to Make TRICARE More Cost-Efficient.*—MOAA continues to believe strongly that the Defense Department has not sufficiently investigated other options to make TRICARE more cost-efficient without shifting costs to beneficiaries. MOAA has offered a long list of alternative cost-saving possibilities, including:

- Promote retaining other health insurance by making TRICARE a true second-payer to other insurance (far cheaper to pay another insurance's copay than have the beneficiary migrate to TRICARE).
- Reduce or eliminate all mail-order co-payments to boost use of this lowest-cost venue.
- Change electronic claim system to kick back errors in real time to help providers submit “clean” claims, reduce delays/multiple submissions.
- Size and staff military treatment facilities (least costly care option) in order to reduce reliance on non-MTF civilian providers.
- Promote programs to offer special care management services and zero copays or deductibles to incentivize beneficiaries to take medications and seek preventive care for chronic or unusually expensive conditions.
- Promote improved health by offering preventive and immunization services (e.g., shingles vaccine, flu shots) with no copay or deductible.
- Authorize TRICARE coverage for smoking cessation products and services (it is the height of irony that TRICARE currently doesn't cover these programs that have been long and widely acknowledged as highly effective in reducing long-term health costs).

- Reduce long-term TRICARE Reserve Select costs by allowing members the option of a Government subsidy (at a cost capped below TRS cost) of civilian employer premiums during periods of mobilization.
- Promote use of mail-order pharmacy system via mailings to users of maintenance medications, highlighting the convenience and individual expected cost savings
- Encourage retirees to use lowest-cost-venue military pharmacies at no charge, rather than discouraging such use by limiting formularies, curtailing courier initiatives, etc.

MOAA is pleased that the Defense Department has begun to implement at least some of our past suggestions, and stands ready to partner with DOD to investigate and jointly pursue these or other options that offer potential for reducing costs.

MOAA urges Congress to allocate funds enabling DOD to pursue greater efforts to improve TRICARE and find more effective and appropriate ways to make TRICARE more cost-efficient without seeking to “tax” beneficiaries and make unrealistic budget assumptions.

*TRICARE Reimbursement Rates.*—Physicians consistently report that TRICARE is virtually the lowest-paying insurance plan in America. Other national plans typically pay providers 25–33 percent more. In some cases the difference is even higher.

While TRICARE rates are tied to Medicare rates, TRICARE Managed Care Support Contractors make concerted efforts to persuade providers to participate in TRICARE Prime networks at a further discounted rate. Since this is the only information providers receive about TRICARE, they see TRICARE as even lower-paying than Medicare.

This is exacerbated by annual threats of further reductions in TRICARE rates due to the statutory Medicare rate-setting formula. Doctors are unhappy enough about reductions in Medicare rates, and many already are reducing the number of Medicare patients they see.

But the problem is even more severe with TRICARE, because TRICARE patients typically comprise a small minority of their beneficiary caseload. Physicians may not be able to afford turning away large numbers of Medicare patients, but they’re more than willing to turn away a small number of patients who have low-paying, high-administrative-hassle TRICARE coverage.

Congress has acted to avoid Medicare physician reimbursement cuts for the last 4 years, but the failure to provide a payment increase for 2006 and 2007 was another step in the wrong direction, according to physicians. Further, Congress still has a long way to go in order to fix the underlying reimbursement determination formula.

Correcting the statutory formula for Medicare and TRICARE physician payments to more closely link adjustments to changes in actual practice costs and resist payment reductions is a primary and essential step. We fully understand that is not within the purview of this subcommittee, but we urge your assistance in pressing the Finance Committee for action.

In the meantime, the rate freeze for 2006 and 2007 along with a small increase for the first part of 2008 makes it even more urgent to consider some locality-based relief in TRICARE payment rates, given that doctors see TRICARE as even less attractive than Medicare. Additionally, the Medicare pay package that was enacted in Public Law 109–432 included a provision for doctors to receive a 1.5 percent bonus next year if they report a basic set of quality-of-care measures. The TRICARE for Life beneficiaries should not be affected as their claims are submitted directly to Medicare and should be included in the physicians’ quality data. But there’s been no indication that TRICARE will implement the extra increases for treating beneficiaries under 65, and this could present a major problem. If no such bonus payment is made for TRICARE Standard patients, then TRICARE will definitely be the lowest payer in the country and access could be severely decreased.

The TRICARE Management Activity has the authority to increase the reimbursement rates when there is a provider shortage or extremely low reimbursement rate for a specialty in a certain area and providers are not willing to accept the low rates. In some cases a state Medicaid reimbursement for a similar service is higher than that of TRICARE. As mentioned previously, the Department has been reluctant to establish a standard for adequacy of participation and should use survey data to apply adjustments nationally.

MOAA urges the subcommittee to exert what influence it can to persuade the Finance Committee to reform Medicare/TRICARE statutory payment formula. To the extent the Medicare rate freeze continues, we urge the subcommittee to encourage the Defense Department to use its reimbursement rate adjustment authority as needed to sustain provider acceptance.

*National Guard and Reserve Healthcare*

MOAA is grateful to the subcommittee for its leadership in extending lower-cost TRICARE eligibility to all drilling National Guard and Reserve members. This was a major step in acknowledging that the vastly increased demands being placed on Selected Reserve members and families needs to be addressed with adjustments to their military compensation package.

While the subcommittee has worked hard to address the primary health care hurdle, there are still some areas that warrant attention.

*TRICARE Reserve Select (TRS) Premium.*—MOAA believes the premium-setting process for this important benefit needs to be improved and was incorrectly based upon the basic Blue Cross Blue Shield option of the FEHBP. This adjustment mechanism has no relationship either to the Department's military health care costs or to increases in eligible members' compensation.

When the program was first implemented, MOAA urged DOD to base premiums (which were meant to cover 28 percent of program costs) on past TRICARE Standard claims data to more accurately reflect costs. Now a GAO study has confirmed that DOD's use of Blue Cross Blue Shield data and erroneous projections of participation resulted in substantially overcharging beneficiaries.

GAO found that DOD projected costs of \$70 million for fiscal year 2005 and \$442 million for fiscal year 2006, whereas actual costs proved to be \$5 million in fiscal year 2005 and about \$40 million in fiscal year 2006. GAO found that DOD estimates were 72 percent higher than the average single member cost and 45 percent higher than average family cost. If DOD were to have used actual fiscal year 2006 costs, the annual individual premium would have been \$48/month instead of \$81/month. The corresponding family premium would have been \$175/month instead of \$253/month.

GAO recommended that DOD stop basing TRS premiums on Blue Cross Blue Shield adjustments and use the actual costs of providing the benefit. DOD concurred with the recommendations and says, "it remains committed to improving the accuracy of TRS premium projections." However, GAO observed that DOD has made no commitment to any timetable for change.

Both Armed Services Committees have included language in the fiscal year 2009 Defense Authorization Act that would require the Defense Department to base TRS premiums on actual program costs—which is expected to reduce premiums to the cost-share relationship originally envisioned by Congress.

This means that, since service members will no longer be overcharged, the Defense Department will have to start funding its proper share of the TRS program.

MOAA urges the subcommittee to fully fund the TRS program under the new premium schedule.

*Reserve Dental Coverage.*—MOAA remains concerned about the dental readiness of the Reserve forces. Once these members leave active duty, the challenge increases substantially, so MOAA believes the services should at least facilitate correction of dental readiness issues identified while on active duty. DOD should be fiscally responsible for dental care to Reservists to ensure service members meet dental readiness standards when DOD facilities are not available within a 50-mile radius of the members' home for at least 90 days prior and 180 days post mobilization.

MOAA supports funding dental coverage for Reservists for 90 days pre- and 180 days post-mobilization (during TAMP), unless the individual's dental readiness is restored to T-2 condition before demobilization.

*Health-Related Tax Law Changes*

MOAA understands fully that tax law changes are not within the subcommittee's jurisdiction. However, there are numerous military-specific tax-related problems that are unlikely to be addressed without the subcommittee's active advocacy and intervention with members and leaders of the Finance Committee.

*Deductibility of Health and Dental Premiums.*—Many uniformed services beneficiaries pay annual enrollment fees for TRICARE Prime, TRICARE Reserve Select, and premiums for supplemental health insurance, such as a TRICARE supplement, the TRICARE Dental and Retiree Dental Plans, or for long-term care insurance. For most military beneficiaries, these premiums are not tax-deductible because their annual out-of-pocket costs for healthcare expenses do not exceed 7.5 percent of their adjusted gross taxable income.

In 2000, a Presidential directive allowed Federal employees who participate in FEHBP to have premiums for that program deducted from their pay on a pre-tax basis. A 2007 court case extended similar pre-tax premium payment eligibility to certain retired public safety officers. Similar legislation for all active, reserve, and retired military and Federal civilian beneficiaries would restore equity with private sector employees and retired public safety officers.

MOAA urges all committee members to seek the support of the Finance Committee to approve legislation to allow all military beneficiaries to pay TRICARE-related insurance premiums in pre-tax dollars, to include TRICARE dental premiums, TRICARE Reserve Select premiums, TRICARE Prime enrollment fees, premiums for TRICARE Standard supplements, and long-term care insurance premiums.

CONCLUSION

MOAA reiterates its profound gratitude for the extraordinary progress this subcommittee has made in advancing a wide range of personnel and health care initiatives for all uniformed services personnel and their families and survivors. MOAA is eager to work with the subcommittee in pursuit of the goals outlined in our testimony. Thank you very much for the opportunity to present MOAA's views on these critically important topics.

Senator INOUE. May I now call upon the President of the American Association of Nurse Anesthetists, Dr. Wanda Wilson.

**STATEMENT OF WANDA WILSON, Ph.D., PRESIDENT, AMERICAN ASSOCIATION OF NURSE ANESTHETISTS**

Dr. WILSON. Chairman Inouye, Ranking Member Stevens, and members of the subcommittee: Good morning. My name is Wanda Wilson and I serve as president of 37,000 members of the American Association of Nurse Anesthetists.

The quality of healthcare America provides our service men and women and their dependents has long been this subcommittee's high priority. Today I report to you the contributions that certified registered nurse anesthetists, or CRNAs, make toward our services' mission. I will also provide you our recommendations to further improve military healthcare for these challenging times. I also ask unanimous consent that my written statement be entered into the record.

Senator INOUE. Without objection.

Dr. WILSON. Thank you.

America's CRNAs provide some 30 million anesthetics annually, in every healthcare setting requiring anesthesia care, and we provide that care safely. The IOM reported in 2000 that anesthesia is 50 times safer than it was in the early 1980s.

For the U.S. armed forces, CRNAs are particularly critical. In 2005, 493 active duty and 790 reservist CRNAs provided anesthesia care indispensable to our armed forces' current mission. One CRNA, Major General Gale Pollock, served as Acting Surgeon General of the Army for a time last year. Today CRNAs serve in major military hospitals and educational institutions, aboard ships, in isolated bases abroad and at home, and as members of forward surgical teams as close to the tip of the spear as can be. In most of these environments, CRNAs provide anesthesia services alone, without anesthesiologists, enabling surgeons and other clinicians to safely deliver life-saving care.

But in recent years the number of CRNAs in the armed forces has fallen below the number needed. The private market for CRNA services is very strong and the military has struggled to compete. The services, this subcommittee and the authorizing committees have responded with increased benefits to CRNAs, incentive special pay, ISP, and the health professionals loan repayment program, focusing on incentives for multi-year agreements.

The profession of nurse anesthesia has likewise responded. In 2007, accredited nurse anesthesia educational programs produced

over 2,000 graduates, an 88 percent increase in just 5 years, to meet the growing demand.

These combined actions have helped strengthen the services' readiness and the quality of healthcare available to our service men and women. So our first recommendation to you is to extend and strengthen this successful ISP program for CRNAs. The authorizing committee has extended the ISP program. We encourage this subcommittee to continue funding ISP levels sufficient for the services to recruit and retain the CRNAs needed for the mission.

The second is to support the Troops-to-Nurse Teachers, or TNT initiative. Today a pilot program sponsored by the Army Surgeon General's Office has placed uniformed military nurses as instructors in a civilian school of nursing. Under this project nurses in the service advance their teaching and mentoring skills and the nursing students in an expanded program witness military service in the best possible light. In addition to our support of the military's highly regarded CRNA educational program at Fort Sam Houston, the Uniformed Services University, and at Bethesda, we join the chairman of this subcommittee to support the TNT program.

Our third and final recommendation is for the subcommittee to encourage all services to adopt the joint scope of practice. Standard practice across all services enhances patient safety and the quality of healthcare for our service men and women. The Navy in particular has made a great deal of progress toward adopting the joint scope for independent practitioners. We encourage you to adopt this in all services.

Thank you very much.

Senator INOUE. I thank you very much, Dr. Wilson.

[The statement follows:]

#### PREPARED STATEMENT OF WANDA WILSON

Chairman Inouye, Ranking Member Stevens, and members of the subcommittee: The American Association of Nurse Anesthetists (AANA) is the professional association that represents more than 37,000 Certified Registered Nurse Anesthetists (CRNAs) across the United States, including 483 active duty and 790 reservists in the military reported in May 2005. The AANA appreciates the opportunity to provide testimony regarding CRNAs in the military. We would also like to thank this committee for the help it has given us in assisting the Department of Defense (DOD) and each of the services to recruit and retain CRNAs.

#### CRNAS AND THE ARMED FORCES: A TRADITION OF SERVICE

Let us begin by describing the profession of nurse anesthesia, and its history and role with the Armed Forces of the United States.

In the administration of anesthesia, CRNAs perform the same functions as anesthesiologists and work in every setting in which anesthesia is delivered including hospital surgical suites and obstetrical delivery rooms, ambulatory surgical centers, health maintenance organizations, and the offices of dentists, podiatrists, ophthalmologists, and plastic surgeons. Today, CRNAs administer some 30 million anesthetics given to patients each year in the United States. Nurse anesthetists are also the sole anesthesia providers in the vast majority of rural hospitals, assuring access to surgical, obstetrical, and other healthcare services for millions of rural Americans.

Our tradition of service to the military and our veterans is buttressed by our personal, professional commitment to patient safety, made evident through research into our practice. In our professional association, we state emphatically "our members' only business is patient safety." Safety is assured through education, high standards of professional practice, and commitment to continuing education. Having first practiced as registered nurses, CRNAs are educated to the master's degree level, and some to the doctoral level, and meet the most stringent continuing edu-

cation and recertification standards in the field. Thanks to this tradition of advanced education and clinical practice excellence, we are humbled and honored to note that anesthesia is 50 times safer now than in the early 1980s (National Academy of Sciences, 2000). Research further demonstrates that the care delivered by CRNAs, physician anesthesiologists, or by both working together yields similar patient safety outcomes. In addition to studies performed by the National Academy of Sciences in 1977, Forrest in 1980, Bechtoldt in 1981, the Minnesota Department of Health in 1994, and others. Dr. Michael Pine, MD, MBA, recently concluded once again that among CRNAs and physician anesthesiologists, "the type of anesthesia provider does not affect inpatient surgical mortality" (Pine, 2003). Thus, the practice of anesthesia is a recognized specialty in nursing and medicine. Most recently, a study published in "Nursing Research" confirmed obstetrical anesthesia services are extremely safe, and that there is no difference in safety between hospitals that use only CRNAs compared with those that use only anesthesiologists (Simonson et al., 2007). Both CRNAs and anesthesiologists administer anesthesia for all types of surgical procedures from the simplest to the most complex, either as single providers or together.

#### NURSE ANESTHETISTS IN THE MILITARY

Since the mid-19th century, our profession of nurse anesthesia has been proud and honored to provide anesthesia care for our past and present military personnel and their families. From the Civil War to the present day, nurse anesthetists have been the principal anesthesia providers in combat areas of every war in which the United States has been engaged.

Military nurse anesthetists have been honored and decorated by the United States and foreign governments for outstanding achievements, resulting from their dedication and commitment to duty and competence in managing seriously wounded casualties. In World War II, there were 17 nurse anesthetists to every 1 anesthesiologist. In Vietnam, the ratio of CRNAs to physician anesthetists was approximately 3:1. Two nurse anesthetists were killed in Vietnam and their names have been engraved on the Vietnam Memorial Wall. During the Panama strike, only CRNAs were sent with the fighting forces. Nurse anesthetists served with honor during Desert Shield and Desert Storm.

Military CRNAs also provide critical anesthesia support to humanitarian missions around the globe in such places as Bosnia and Somalia. In May 2003, approximately 364 nurse anesthetists had been deployed to the Middle East for the military mission for Operation Iraqi Freedom and Operation Enduring Freedom. When President George W. Bush initiated Operation Enduring Freedom, CRNAs were immediately deployed. With the new special operations environment new training was needed to prepare our CRNAs to ensure military medical mobilization and readiness. BG Barbara C. Brannon, Assistant Surgeon General, Air Force Nursing Services, testified before this Senate Committee on May 8, 2002, to provide an account of CRNAs on the job overseas. She stated, "Lt. Col Beisser, a certified registered nurse anesthetist leading a Mobile Forward Surgical Team, recently commended the seamless interoperability he witnessed during treatment of trauma victims in Special Forces mass casualty incident."

Data gathered from the U.S. Armed Forces anesthesia communities reveal that CRNAs have often been the sole anesthesia providers at certain facilities, both at home and while forward deployed. For decades CRNAs have staffed ships, isolated U.S. bases, and forward surgical teams without physician anesthesia support. The U.S. Army Joint Special Operations Command Medical Team and all Army Forward Surgical Teams are staffed solely by CRNAs. Military CRNAs have a long, proud history of providing independent support and quality anesthesia care to military men and women, their families and to people from many nations who have found themselves in harms way.

In the current mission, CRNAs are deployed all over the world, on land and at sea. This committee must ensure that we retain and recruit CRNAs for now and in the future to serve in these military deployments overseas. This committee must ensure that we retain and recruit CRNAs now and in the future to serve in these military overseas deployments and humanitarian efforts, and to ensure the maximum readiness of America's armed services.

#### NURSE ANESTHESIA PROVIDER SUPPLY AND DEMAND: SOLUTIONS FOR RECRUITMENT AND RETENTION

In all of the services, maintaining adequate numbers of active duty CRNAs is of utmost concern. For several years, the number of CRNAs serving in active duty fell

short of the number authorized by the DOD. This is further complicated by strong demand for CRNAs in both the public and private sectors.

It is essential to understand that while there is strong demand for CRNA services in the public and private healthcare sectors, the profession of nurse anesthesia is working effectively to meet this workforce challenge. The AANA anticipates growing demand for CRNAs. Our evidence suggests that while vacancies exist, the demand for anesthesia professionals can be met if appropriate actions are taken. As of January 2008, there are 108 accredited CRNA schools to support the profession of nurse anesthesia. The number of qualified registered nurses applying to CRNA schools continues to climb. The growth in the number of schools, the number of applicants, and in production capacity, has yielded significant growth in the number of nurse anesthetists graduating and being certified into the profession, while absolutely maintaining and strengthening the quality and competence of these clinicians. The Council on Certification of Nurse Anesthetists reports that in 2007, our schools produced 2,021 graduates, an 88 percent increase since 2002, and 1,869 nurse anesthetists were certified. The growth is expected to continue. The Council on Accreditation of Nurse Anesthesia Educational Programs projects the 108 CRNA schools to produce over 2,310 graduates in 2008.

This committee can greatly assist in the effort to attract and maintain essential numbers of nurse anesthetists in the military by their support to increase special pays.

#### INCENTIVE SPECIAL PAY FOR NURSES

According to a March 1994 study requested by the Health Policy Directorate of Health Affairs and conducted by DOD, a large pay gap existed between annual civilian and military pay in 1992. This study concluded, "this earnings gap is a major reason why the military has difficulty retaining CRNAs." In order to address this pay gap, in the fiscal year 1995 Defense Authorization bill Congress authorized the implementation of an increase in the annual Incentive Special Pay (ISP) for nurse anesthetists from \$6,000 to \$15,000 for those CRNAs no longer under service obligation to pay back their anesthesia education. Those CRNAs who remained obligated receive the \$6,000 ISP.

Both the House and Senate passed the fiscal year 2003 Defense Authorization Act Conference report, H. Rept. 107-772, which included an ISP increase to \$50,000. The report included an increase in ISP for nurse anesthetists from \$15,000 to \$50,000. The AANA is requesting that this committee fund the ISP at \$50,000 for all the branches of the armed services to retain and recruit CRNAs now and into the future. Per the testimony provided in 2006 from the three services' Nurse Corps leaders, the AANA is aware that there is an active effort with the Surgeons General to closely evaluate and adjust ISP rates and policies needed to support the recruitment and retention of CRNAs. In 2006, MG Gale Pollock, MBA, MHA, MS, CRNA, FACHE, Deputy Surgeon General, Army Nurse Corps of the U.S. Army stated in testimony before this subcommittee, "I am particularly concerned about the retention of our certified registered nurse anesthetists. Our inventory of CRNAs is currently at 73 percent. The restructuring of the incentive special pay program for CRNAs last year, as well as the 180 (day)-deployment rotation policy were good first steps in stemming the loss of these highly trained providers. We are working closely with the Surgeon General's staff to closely evaluate and adjust rates and policies where needed."

There have been positive results from the Nurse Corps and Surgeons General initiatives to increase incentive special pays for CRNAs. In testimony before the House Armed Services Committee in 2007, Major General Pollock stated, "We have . . . increased the Incentive Special Pay Certified Registered Nurse Anesthetist, and expanded use of the Health Professions Loan Repayment Program (HPLRP). The . . . Nurse Anesthetist bonuses have been very successful in retaining these providers who are critically important to our mission on the battlefield." She also stated in that same statement, "In 2004, we increased the multi-year bonuses we offer to Certified Registered Nurse Anesthetists with emphasis on incentives for multi-year agreements. A year's worth of experience indicates that this increased bonus, 180-day deployments, and a revamped Professional Filler system to improve deployment equity is helping to retain CRNAs."

There still continues to be high demand for CRNAs in the healthcare community leading to higher incomes widening the gap in pay for CRNAs in the civilian sector compared to the military. However, the ISP and other incentives the services are providing CRNAs has helped close that gap the past 2 years, according to the most recent AANA membership survey data. In civilian practice, all additional skills, experience, duties and responsibilities, and hours of work are compensated for mone-

tarily. Additionally, training (tuition and continuing education), healthcare, retirement, recruitment and retention bonuses, and other benefits often equal or exceed those offered in the military. Therefore, it is vitally important that the ISP be supported to ensure retention of CRNAs in the military.

AANA thanks this committee for its support of the annual ISP for nurse anesthetists. AANA strongly recommends the continuation in the annual funding for ISP at \$50,000 or more for fiscal year 2009, which recognizes the special skills and advanced education that CRNAs bring to the DOD healthcare system, and supports the mission of our U.S. Armed Forces.

#### BOARD CERTIFICATION PAY FOR NURSES

Included in the fiscal year 1996 Defense Authorization bill was language authorizing the implementation of a board certification pay for certain clinicians who are not physicians, including advanced practice nurses. AANA is highly supportive of board certification pay for all advanced practice nurses. The establishment of this type of pay for nurses recognizes that there are levels of excellence in the profession of nursing that should be recognized, just as in the medical profession. In addition, this pay may assist in closing the earnings gap, which may help with retention of CRNAs.

While many CRNAs have received board certification pay, some remain ineligible. Since certification to practice as a CRNA does not require a specific master's degree, many nurse anesthetists have chosen to diversify their education by pursuing an advanced degree in other related fields. But CRNAs with master's degrees in education, administration, or management are not eligible for board certification pay since their graduate degree is not in a clinical specialty. Many CRNAs who have non-clinical master's degrees either chose or were guided by their respective services to pursue a degree other than in a clinical specialty. The AANA encourages DOD and the respective services to re-examine the issue of restricting board certification pay only to CRNAs who have specific clinical master's degrees.

#### DOD/VA RESOURCE SHARING: U.S. ARMY-VA JOINT PROGRAM IN NURSE ANESTHESIA— FORT SAM HOUSTON, SAN ANTONIO, TX.

The establishment of the joint U.S. Army-VA program in nurse anesthesia education at the U.S. Army Graduate Program in Anesthesia Nursing, Fort Sam Houston, in San Antonio, Texas holds the promise of making significant improvements in the VA CRNA workforce, as well as improving retention of DOD registered nurses in a cost effective manner. The current program utilizes existing resources from both the Department of Veterans Affairs (VA) Employee Incentive Scholarship Program (EISP) and VA hospitals to fund tuition, books, and salary reimbursement for student registered nurse anesthetists (SRNAs). This joint program also serves the interests of the Army.

This VA nurse anesthesia program started in June 2004 with three openings for VA registered nurses to apply to and earn a Master of Science in Nursing (MSN) in anesthesia granted through the University of Texas Houston Health Science Center. In the future, the program is granting degrees through the Northeastern University Bouve College of Health Sciences nurse anesthesia educational program in Boston, Massachusetts. At a time of increased deployments in medical military personnel, this type of VA-DOD partnership is a cost-effective model to fill these gaps in the military healthcare system. At Fort Sam Houston, the VA faculty director has covered her Army colleagues' didactic classes when they are deployed at a moments notice. This benefits both the VA and the DOD to ensure the nurse anesthesia students are trained and certified in a timely manner to meet their workforce obligation to the Federal Government as anesthesia providers. We are pleased to note that the VA Acting Deputy Under Secretary for Health and the U.S. Army Surgeon General approved funding to start this VA nurse anesthesia school in 2004. In addition, the VA director has been pleased to work under the direction of the Army program director LTC Thomas Ceremuga, Ph.D., CRNA, to further the continued success of this U.S. Army-VA partnership. With modest levels of additional funding in the VA EISP, this joint U.S. Army-VA nurse anesthesia education initiative can grow and thrive, and serve as a model for meeting other VA workforce needs, particularly in nursing.

#### TROOPS-TO-NURSE TEACHERS (TNT) INITIATIVE

I also want to express to the subcommittee our profession's support for the Troops-to-Nurse Teachers (TNT) initiative. Modeled after the successful DOD program established in 1994 to encourage retiring military personnel to teach in high-need areas and to teach high-need subjects such as math and science, the TNT pro-

gram as expressed in legislation pending in the Senate (S. 2705, Durbin (D-IL) and several cosponsors) would help alleviate the nursing shortage by increasing faculty in schools of nursing, thereby allowing schools to expand their applicant pools.

One aspect of the TNT initiative would provide opportunities for Nurse Corps Officers in the Armed Forces the ability to transition to faculty positions at accredited nursing schools after retirement. The bill offers a number of incentives. It provides career placement assistance, transitional stipends, and educational assistance if needed to those who have served a minimum of 20 years in the Armed Forces and who are qualified to teach. It creates an educational scholarship program to give financial assistance to those members of the Armed Forces who have served at least 20 years on active duty are eligible to retire and who want to become nurse faculty. And it gives nurse officers in the Armed Forces who have a graduate degree in nursing the opportunity to serve a 2-year tour of duty as an educator. The school of nursing where the faculty teaches then commits to provide scholarships to those students who sign-on to become a nurse officer in the military after graduation.

The TNT initiative is also a pilot project now under way within the Army Nurse Corps, which has six Army nurses in camouflage uniforms serving as faculty to the school of nursing at the University of Maryland. The military gets strong, positive visibility in a highly regarded educational program, showing nursing students directly what kind of future that service in the Army Nurse Corps can provide them. According to the chief of the Army Nurse Corps, the University of Maryland was able to admit another 151 students to its nursing program, helping to meet the tremendous community and national need for registered nurses. Last, Army nurse teachers have additional, valuable opportunities to develop and strengthen their skills in teaching, to help continue improving the quality of healthcare education available within the U.S. Army.

The TNT initiative holds great promise to support both national healthcare needs and the mission of the U.S. Armed Forces, and we encourage the subcommittee to support it. Current cosponsors of S. 2705 include Senators Bayh (D-IN), Biden (D-DE), Brown (D-OH), Clinton (D-NY), Collins (R-ME), Dole (R-NC), Inhofe (R-OK), Inouye (D-HI), Lieberman (I-CT), Menendez (D-NJ), Mikulski (D-MD), Obama (D-IL), and Reed (D-RI).

#### CONCLUSION

In conclusion, the AANA believes that the recruitment and retention of CRNAs in the armed services is of critical concern. By Congress supporting these efforts to recruit and retain CRNAs, the military is able to meet the mission to provide benefit care and deployment care—a mission that is unique to the military. The AANA would also like to thank the Surgeons General and Nurse Corp leadership for their support in meeting the needs of the profession within the military workforce. Last, we commend and thank this committee for their continued support for CRNAs in the military.

Thank you. If you have further questions, please contact the AANA Federal Government Affairs Office.

Senator INOUE. Our next witness represents the National Multiple Sclerosis Society, Mr. Bob Wolz.

#### **STATEMENT OF BOB WOLZ, ON BEHALF OF THE NATIONAL MULTIPLE SCLEROSIS SOCIETY**

Mr. WOLZ. Thank you, Chairman Inouye, Ranking Member Stevens, and members of the subcommittee, for allowing me to provide testimony at this hearing today. My name is Bob Wolz and I'm a veteran living with relapsing remitted multiple sclerosis, or MS. I'm here today on behalf of the estimated 400,000 Americans and more than 28,000 veterans who live with MS. Together we ask you to help advance MS research by providing funding under the congressionally directed medical research programs.

MS is a chronic, unpredictable, often disabling, disease of the central nervous system and there is no cure. Every hour someone is newly diagnosed with MS. It is the most common neurological disease leading to disability in young adults.

I'm a retired sergeant first class from the United States Army. I served more than 20 proud years as a chemical, biological, radio-

logical, and nuclear specialist, with two tours in Korea, two tours in Germany, Desert Shield/Desert Storm, and Operation Iraq Freedom, and various stateside units. I believe my MS is a lingering wound from my tour of duty in the gulf war. My resulting disease and disabilities have been deemed service connected by the VA.

I first served with the First Armored Division during Operation Desert Shield/Desert Storm. In March 1991, we were in Kuwait living and working within the dark clouds of the burning Kuwaiti oil wells. Additionally, I was located within the downwind hazard plume from the Khamisiyah Pit demolition that contained sarin and cyclosarin.

My symptoms started between 1995 and 1996. The first signs were muscle weakness on my left side, problems with bowel movements, and unusual fatigue. These symptoms continued to worsen and more developed. I started walking with a limp and noticed muscle atrophy on my left side. These symptoms continued even into my deployment to Operation Iraq Freedom with the Fourth Infantry Division in 2003, the division that caught Saddam.

One day after a mission, I showered and attempted to trim my fingernails, a simple task. I was a soldier, but my left hand could not squeeze the clippers to accomplish such a simple thing. I left Iraq and returned to Fort Hood, Texas. There I had several tests run by an Army neurologist, who said I had a reaction to anti-malaria pills. I retired in March 2004.

Thousands of veterans could share similar stories. Recent studies confirm that combat veterans have an increased risk of developing MS. Dr. Match Wallin, a neurologist with the VA MS Center of Excellence in Baltimore and a professor at Georgetown University, treats warfighters like me who live with MS. Dr. Wallin has published a professional hypothesis explaining that deployed gulf war veterans are at an increased risk of developing MS because of their exposure to neurotoxins such as sarin gas and burning oil fields.

A recent study found a twofold increase in MS among Kuwaiti residents who lived in the gulf area before, during, and after the first gulf conflict. The rapid increase suggests an environmental trigger for MS.

Finally, the congressionally mandated Research Advisory Committee on Gulf War Veterans Illnesses found evidence of probable links between exposures to neurotoxins and the development of neurological disorders.

I believe that the DOD has a responsibility to identify and research all diseases that could be related to military service, including MS. Recently Senator Brown and Senator Bunning from my home State sent the subcommittee a bipartisan letter with the signatures of 27 of your colleagues who support a \$15 million appropriation for MS research under the CDMRP. This effort is also supported by the Paralyzed Veterans of America, American Academy of Neurology, the United Spinal Association, and the Vietnam Veterans of America.

We appreciate your consideration. With your commitment to more research, we can move closer to a world free of MS. Thank you.

Senator INOUE. I thank you very much, Mr. Wolz.

[The statement follows:]

## PREPARED STATEMENT OF BOB WOLZ

## INTRODUCTION

Thank you Chairman Inouye, Ranking Member Stevens and distinguished members of the committee, for allowing me to provide testimony at this hearing.

My name is Bob Wolz, and I am a veteran living with multiple sclerosis (MS). I am here today on behalf of the estimated 400,000 Americans and more than 28,000 veterans who live with MS. Together, we ask you to help us advance MS research by providing funding under the Congressionally Directed Medical Research Programs (CDMRP).

## NO CURE FOR MULTIPLE SCLEROSIS

Multiple sclerosis is a chronic, unpredictable, often-disabling disease of the central nervous system. It interrupts the flow of information from the brain to the body and stops people from moving. Every hour someone is newly diagnosed. MS is the most common neurological disease leading to disability in young adults. But despite several decades of research, the cause remains unclear, and there is no cure. The research must continue.

The symptoms of MS range from numbness and tingling to blindness and paralysis. MS causes loss of coordination and memory, extreme fatigue, emotional changes, and other physical symptoms. The progress, severity, and specific symptoms of MS in any one person cannot yet be predicted. These problems can be permanent, or they can come and go.

The National Multiple Sclerosis Society recommends treatment with one of the FDA-approved "disease-modifying" drugs to lessen the frequency and severity of attacks, and to help slow the progression of disability. But unfortunately, the cost is often financially devastating. The FDA approved drugs for MS range from \$16,500 to more than \$30,000 a year, and treatments continue over a lifetime.

## MS AND VETERANS

Testimony from individual veterans like me, along with evidence from recent studies, suggests that combat veterans have an increased risk of developing multiple sclerosis.

Dr. Mitch Wallin, a neurologist with the Department of Veterans' (VA) Affairs MS Center of Excellence in Baltimore and a professor at Georgetown University, currently treats warfighters with MS. Dr. Wallin recently published a formal professional hypothesis explaining that deployed gulf war veterans are at an increased risk for developing MS because of their exposure to neurotoxins while in the gulf war theater. These neurotoxins include sarin gas, burning oil fields, and more. Some of which were purposely used on our soldiers and others a by-product of the theatre of war. These same obstacles could be found in our most recent conflicts in the Middle East.

Dr. Wallin hopes to explore this hypothesis through research at the VA. He previously authored a letter to the Chairman and Ranking Member of this subcommittee urging them to support funding for MS research in the CDMRP. In addition to Dr. Wallin's professional hypothesis, I offer the following supporting rationale:

- A recent epidemiological study found an unexpected, two-fold increase in MS among Kuwaiti residents between 1993–2000. This study focused on individuals who lived in the gulf area before, during and after the first gulf conflict. The rapid increase in MS is startling and suggests an environmental trigger for MS. Possible triggers include exposure to air particulates from oil well fires, sarin or infectious agents. By exploring this finding we could learn more about how MS is triggered, how the disease manifests and how to better fight it.
- More than 28,000 veterans with the diagnosis of MS are receiving care through the VA. However, the VA only treats about one-third of the country's veteran population. Therefore, the number of U.S. veteran's with MS could be three times higher. The "Annals of Neurology" recently identified 5,345 of these cases to be deemed "service-connected" by the VA. That is a very important statistic because I can tell you that running the gauntlet to be deemed service connected is not an easy exercise. and finally,
- The Congressionally-mandated Research Advisory Committee on Gulf War Veterans' Illnesses (RAC) found evidence that supports a probable link between exposures to neurotoxins and the development of neurological disorders. Furthermore, RAC recommended more Federal funding to study the negative effect of neurotoxins on the immune system.

As news and preliminary evidence circulates of a potential link between MS and military service, more and more veterans are coming forward with their stories and symptoms. Their stories illustrate a unique health concern among our veterans and tell us that there is a strong possibility that an environmental trigger could contribute to the causes and development of this disease. Learning more about this could unlock the mystery of MS.

#### BOB WOLZ'S STORY

I am a retired Sergeant First Class in the U.S. Army. I served more than 20 years as a chemical, biological, radiological, and nuclear specialist. I served two tours in Korea and Germany, the gulf war, Operation Iraqi Freedom, and various stateside units. I was diagnosed with relapsing-remitting multiple sclerosis in the spring of 2006. The MS is a lingering wound from my tour of duty in the gulf war, and my resulting disease and disabilities have been deemed service connected by the VA.

I served with the First Armored Division, 69th Chemical Company during Operation Desert Shield and Operation Desert Storm. There, like all veterans. I was given many inoculations, pills, and utilized a number of insect repellents. In March of 1991, we were in Kuwait living and working within the dark clouds of the burning Kuwaiti oil wells. Additionally, I was located within the downwind hazard plume from the Khamisiyah Pit demolition that contained sarin and cyclosarin. I believe my symptoms started between 1995 and 1996.

The first signs were muscle weakness on my left side, problems with bowel movements (constant diarrhea), and unusual fatigue. To account for the weakness, Army doctors felt that I was not doing enough physical training and told me to work out more. My diet was allegedly the culprit to my problems with bowel movements and it was adjusted accordingly. The unusual fatigue was chalked up to insufficient physical training and lack of sleep.

These symptoms continued to worsen and more developed. I started walking with a limp and noticed muscle atrophy on my left side. On a subsequent visit to the doctor, I was told I probably had a small stroke. Blood tests and an EEG were done and everything was reported to be normal. The symptoms continued even into my deployment to Operation Iraqi Freedom with the 4th Infantry Division in 2003. (This is the division that caught Saddam).

I started experiencing strange blackout conditions. I could hear people but their voices were muffled. Constant diarrhea added to my fatigue. I consumed a lot of Imodium in an effort to curb the diarrhea, so that I could do my job. A couple visits to sick call provided me with Cipro and an order to drink more water. One day after getting back from a mission, I showered and attempted to trim my fingernails. My left hand could not squeeze the clippers to accomplish this simple task. I left Iraq and returned to Fort Hood, Texas. Upon my return, I had several tests run by a Army neurologist. His diagnosis was that I had a reaction to the anti-malaria pills I was taking while deployed. I completed my retirement physical for the Army and the VA without anything significant being noted except IBS, bad knees, and a bum ankle. I retired in March of 2004.

In 2006, my symptoms continued to worsen and my family doctor ran more tests and an ultra sound for a stroke. She was also concerned with the size difference in the muscles on my left side as opposed to my right. Upon a clean bill of health, I signed up for the VA gulf war registry. My appointments started with a visit to the physical therapist who told me that I did not have a stroke and there was something else going on. After numerous other tests, my MRI revealed a 19 millimeter lesion on my C4 vertebrae; 1 millimeter on my C1 vertebrae; and numerous lesions scattered on both sides of my brain. I received my diagnosis and started treatment with self-injections three times a week in the spring of 2006.

My current symptoms include partial paralysis on my entire left side of my body; muscle weakness on my left side; muscle spasticity, stiffness, tremors, and atrophy; foot drop; IBS; ED; MS fatigue; intolerance to heat; and cognitive changes that include verbal fluency, memory, attention and concentration. Tripping and falling are a usual occurrence that has become part of my life.

The disease has also taken a toll on my family physically and mentally. They worry more, watch me at times like a baby, and are afraid to let me be alone.

I have all the reasons in the world to be depressed and invite people to swim with me in my pool of pity. I chose not to do that. My battle with MS does not compare to the pain I experienced in burying my little brother, SGT James Wolz (age 27) in 2000, and my son Jason (age 20) in 2002. I have the will and ability to fight, not only for myself but also for those out there with MS who cannot move, for those that will not or cannot speak, and for those who are completely devastated by this disease. I walk for them, I speak for them, and I fight for them.

## THE NEED FOR MORE MS RESEARCH

My story is just one of many. Given this and all the evidence, we strongly believe that the DOD has a responsibility to identify and research all diseases that could be related to military service, including MS.

Last year Public Law 110-116 made MS eligible for research funding under the Peer Reviewed Medical Research Program. This was an important step, and we thank you for the opportunity to compete for this funding. But given the rationale, the needs of people living with MS—a specific program for MS research should be designated under the CDMRP.

On April 11, Senators Brown and Bunning sent the subcommittee a strong bi-partisan letter with 27 of your colleague's signatures urging you to support a \$15 million appropriation for MS research under the CDMRP. This effort is also supported by the Paralyzed Veterans of America, the American Academy of Neurology, the United Spinal Association and the Vietnam Veterans of America.

The cause, progress, or severity of symptoms in any one person living with MS cannot yet be predicted or cured. But advances in research and treatments can help. We appreciate your consideration of this request. With your commitment to more research, we can move closer to a world free of MS. Thank you.

Senator INOUE. Now may I recognize the vice chairman.

Senator STEVENS. Thank you very much. I enjoyed the hearing very much, Mr. Chairman. I appreciate the witnesses. It was a good hearing. Thank you.

## ADDITIONAL SUBMITTED STATEMENTS

Senator INOUE. We have received testimony from Dr. Raymond Bye, Jr., Director of Federal Relations, Florida State University; Ms. Kathleen Yosko, Chairman of the Board of ARA Research Institute. These statements will be made part of the record along with any additional statements that the subcommittee receives.

[The statements follow:]

## PREPARED STATEMENT OF FLORIDA STATE UNIVERSITY

Mr. Chairman, I would like to thank you and the members of the subcommittee for this opportunity to present testimony before this Committee. I would like to take a moment to briefly acquaint you with Florida State University.

Located in Tallahassee, Florida's capital, FSU is a comprehensive Research I university with a rapidly growing research base. The University serves as a center for advanced graduate and professional studies, exemplary research, and top-quality undergraduate programs. Faculty members at FSU maintain a strong commitment to quality in teaching, to performance of research and creative activities, and have a strong commitment to public service. Among the current or former faculty are numerous recipients of national and international honors including Nobel laureates, Pulitzer Prize winners, and several members of the National Academy of Sciences. Our scientists and engineers do excellent research, have strong interdisciplinary interests, and often work closely with industrial partners in the commercialization of the results of their research. FSU had over \$190 million this past year in research awards.

The University attracts students from every State in the Nation and more than 100 foreign countries. The University is committed to high admission standards that ensure quality in its student body, which currently includes National Merit and National Achievement Scholars, as well as students with superior creative talent. Since 2005, FSU students have won more than 30 nationally competitive scholarships and fellowships including 2 Rhodes Scholarships, 2 Truman Scholarships, 1 Goldwater, 1 Jack Kent Cooke, and 18 Fulbright Fellowships.

At FSU, we are proud of our successes as well as our emerging reputation as one of the Nation's top public research universities.

Mr. Chairman, let me summarize three projects of great interest. The first project involves improving our Nation's fighting capabilities and is called the "Nanotubes Optimized for Lightweight Exceptional Strength (NOLES)/Composite Materials" Project.

The U.S. Army's objective of developing effective personnel protection and a lighter, stronger fleet of fighting vehicles may be achieved through the diminutive nanotubes that (1) are the strongest fiber known, (2) have a thermal conductivity

two times higher than pure diamond, and (3) have unique electrical conductivity properties and an ultra-high current carrying capacity [1996 Nobel Laureate Richard Smalley]. For producing lightweight multifunctional composites, resins impregnated with nanotubes hold the promise of creating structures, which, pound for pound, will be the strongest ever known, and hence offer maximum personnel and vehicle protection. Benefits are apparent not only to defense, but also throughout the commercial world.

Partnered with the Army Research Laboratory and the top five U.S. defense companies—Boeing, General Dynamics, Lockheed Martin, Northrop Grumman, and Raytheon—as well as Armor Holdings, one of the Nation’s largest armor manufacturers, FSU’s team of multi-disciplinary faculty and students has developed unique design, characterization and rapid prototyping capabilities in the field of nano-composite research, leading to vital defense applications. For instance, in a partnership with Lockheed Martin Missiles and Fire Control—Orlando, FSU researchers delivered more than 150 square feet of nanotube/polycarbonate composites for armor evaluation. The NOLES research team is working with the technical staff of General Dynamics in developing high performance thermal management materials utilizing nanotubes. The NOLES team is collaborating with Boeing and Northrop Grumman to use nanotube composites for shielding against electromagnetic interference (EMI). In addition, FSU’s nanotube composites are being tested for missile wings, UAVs and missile guidance systems by several defense contractors.

Two core programs are envisioned for fiscal year 2009: (1) developing nanotubes as a material platform for a new generation of devices, structures and systems, giving special attention to the design and demonstration for defense applications; and (2) utilizing nanotube buckypapers and vertically grown nanotube arrays initially for liquid crystal display backlighting and eventually for flexible displays. We are requesting \$4,000,000 for this important program.

Our second project is also important to our Nation’s defense and involves our capabilities at sea and is called the “Integration of Electro-kinetic Weapons into the Next Generation Navy Ships” program.

The U.S. Navy is developing the next-generation integrated power system (NGIPS) for the future war ships that will have an all-electric platform of propulsion and weapon loads and an electric power systems with rapid reconfigurable distribution systems for integrated fight-through power.

On-demand delivery of the large amounts of energy needed to operate these types of weapons raises challenging technical issues that must be addressed before implementing a combat ready system. These include the appropriate topology for the ship electric distribution system for rapid reconfiguration to battle readiness and the energy supply technology for the weapon systems.

The goal of this initiative is to investigate the energy delivery technologies for electro-kinetic weapons systems and investigate the integration and interface issues of these weapons as loads on the ship NGIPS through system simulations and prototype tests. The results will provide the Navy’s ship-builders with vital information to design and de-risk deployable ship NGIPS and weapon power supplies.

With significant support from the Office of Naval Research, FSU has established the Center for Advanced Power Systems (CAPS). CAPS has integrated a real time digital power system simulation and modeling capability and hardware test-bed, capable of testing IPS power system components at ratings up to 5MW, offering unique hardware-in-the-loop simulation capabilities unavailable anywhere in the world. To support this initiative, FSU will partner with the University of Texas—Austin and General Atomics. This team combines the best talents for modeling and simulation of ship power systems, hardware-in-the-loop testing, power supplies for present and future electro-kinetic systems, and interfacing the weapon to a power system. University of Texas—Austin will work with FSU to provide validated models of system performance and in subscale testing to provide more complete model validation where needed. General Atomics will provide the power requirements on each side of the weapons interface to the shipboard power distribution system to better define the interface effort.

The National High Magnetic Field Laboratory (NHMFL) will utilize its research expertise and infrastructure for the proposed development. FSU’s partnership with University of Florida and Los Alamos National Laboratory is a key part of the NHMFL.

General Atomics is currently involved in the design and development of the pulse forming network for the Electromagnetic Rail Gun program for the U.S. Navy and the design and development of power distribution architectures (i.e., NGIPS and IFTP) for future U.S. Navy all-electric combatants. We are seeking \$4,500,000 for this important work.

Finally, the objective of our final project, “Integrated Cryo-Cooled High Power Density Systems”, is to approach the goal of achieving cryo-cooled high power densities through systems integration, management of heat generation, and removal in the electrical system. The systems approach begins with identifying type of power system and the enabling technologies needed and then pursuing research programs to advance the enabling technologies.

The research activities will be directed in several areas:

- Systems Analysis*.—Extensive system modeling and simulation of the integrated electrical and thermal systems to understand dynamic performance under normal and adverse conditions is necessary to achieve a useful system. Develop prototypes of key technologies and test in hardware-in-the-loop simulations at levels of several megawatts (MW) to demonstrate the technologies.
- Materials: Conductors, Semi-conductors and Insulation*.—Characterization of conductor materials (both normal and superconducting), semi-conductors (for use in power electronic components) and insulating materials (both thermal and electrical) at cryogenic temperatures to obtain the data needed to predict system performance and design components. Full understanding of the materials and their characteristics is important.
- Cryo-thermal Systems*.—Optimize thermal system options such as conductive heat transfer systems, fluid heat transfer systems, insulation, packaging and cooling equipment for performance, reliability, and failure modes. Because heat leaks from the ambient to the low temperature environment are critical to successful performance and quite sensitive to quality of construction, the issue of constructability at reasonable cost is a major issue for investigation.
- System Components*.—Consider new concepts for design of system components and interfaces to achieve optimum system integration, such as conductors, motors, transformers, actuators, fault current limiters, and power electronics operating at cryogenic temperatures. High power density cryo-cooled systems require the use of new families of materials.

The NHMFL will be involved in the proposed development. Also FSU and the University of Central Florida will provide research on integration, efficiency, and capability of pulse tube cryo-coolers. We are seeking \$4,000,000 for this project.

Mr. Chairman, we believe this research is vitally important to our country and would appreciate your support.

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PREPARED STATEMENT OF THE ARA RESEARCH INSTITUTE

Chairman Inouye, Ranking Member Stevens, and other distinguished members of the committee, on behalf of the ARA Research Institute I thank you for this opportunity to comment on actions this committee can take to address the needs of soldiers who are gravely injured during their service. Mr. Chairman, you have been a leader in ensuring that the brave men and women of our military have the resources and care they need to effectively protect our country. The ARA Research Institute applauds your efforts.

ARA Research Institute, a 501(c)(3) organization based in Springfield, Illinois, was founded in 1986 to carry on fundamental scientific research and education relating to furnishing, administering, and financing medical rehabilitation and physical therapy services, and to publish and distribute the findings to the Government and the public. Since 2006, the ARA Research Institute has funded numerous research projects addressing significant medical rehabilitation policy and practice issues. The work of the Institute has received strong support by the hospital medical rehabilitation field—at a February 2007 “State of the Science” symposium, ARA and other national organizations brought together the best minds in the Nation to review the Institute’s research findings from the initial projects funded and chart a course defining future projects.

Policymakers at all levels, and in all political parties, have recognized the importance of providing quality medical and rehabilitative care to our wounded troops. President Bush’s proposed fiscal year 2009 budget supports the Veterans Administration (VA) in implementing the recommendations of the President’s Commission on Care for America’s Returning Wounded Warriors. Specifically, the President’s Budget devotes \$252 million to research projects focused on veterans returning from Iraq and Afghanistan. Indeed, the need is great—the injuries sustained in these conflicts are severe and pervasive.

America now faces a national opportunity to give back to the members of the Armed Forces who are selflessly serving our country, sometimes at great physical and lifetime peril. In addition to efforts by the Government, the plight of returning service men and women facing enormous physical and mental disabilities demands

a national private sector response. Recent media attention has focused national public awareness on the catastrophic injuries many of these individuals face and certain inadequacies in the current Veterans' health system. We are all painfully aware of the large number of veterans who return with wounds of massive proportion, as well as potentially undiagnosed traumatic brain injuries, many of which are causing both the VA and private providers of rehabilitation care challenges heretofore never encountered at this magnitude.

We applaud the VA's leadership on behalf of our Nation's heroes who have returned with life-shattering injuries. Unfortunately, public providers are not always able to adequately deal with patients with missing limbs or multiple serious disabling conditions in geographic areas preferable to patients and families. Cases have been brought to our attention where injuries presented overwhelming challenges to veterans, their families, and their VA providers. In some instances, private inpatient medical rehabilitation hospitals and units perhaps present the best opportunity of reintegrating persons with such injuries into their own communities and our society, yet private inpatient rehabilitation hospitals are limited in their ability to serve combat veterans returning from the current war. Our country has some of the highest quality inpatient medical rehabilitation hospitals in the world, and these private sector resources should be equally accessible to our returning veterans. It makes no sense to spend taxpayer dollars to duplicate capacity and expertise already available in the private sector, when the fundamental issue is accessibility.

Another important component of caring for our wounded soldiers is funding research to determine the most appropriate and most effective ways to care for them, research to capture best practices, and clinical research to improve the care and outcomes of medical rehabilitation. To ensure an optimal Federal research investment, private sector inpatient rehabilitation hospital research should be funded along with any public sector research funding. The ARA Research Institute is a non-profit organization dedicated to stimulating research in the medical rehabilitation field. The Institute is calling for a Federal-private sector partnership to forge an exciting and critically necessary research demonstration project designed to provide alternative inpatient medical rehabilitation services to returning war veterans.

The Veteran Rehabilitation Research and Demonstration Project will build a bridge between public and private sector resources that can be dedicated to bringing these soldiers back to their full human potential. Specifically, if Federal funding is made available and with additional private sector contributions, the Institute will issue a competitive RFP and distribute a number of demonstration grants to rehabilitation hospitals and units in various areas of the country to provide medical rehabilitation services to injured veterans. These hospitals will be required to collaborate with VA resources and their peer group of participating hospitals to identify the best practices and delineate the most effective ways to treat the needs of these soldiers. The Institute has submitted appropriations requests to help build this project, and respectfully asks that the committee direct funding of this project.

The national conscience demands that all potential medical resources, including research funding, be available to bring our soldiers back to their full human potential. We ask the committee to include full funding this year for the Veteran Rehabilitation Research and Demonstration Project, to ensure private sector participation in ensuring that our wounded warriors receive the highest quality of care they need and deserve.

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PREPARED STATEMENT OF THE U.S. NAVAL SEA CADET CORPS

REQUEST

It is respectfully requested that \$300,000 be appropriated for the Naval Sea Cadet Corps (NSCC) in fiscal year 2009, so that when added to the Navy budgeted \$1,700,000 will restore full funding at the \$2,000,000 requirement level. Further, in order to ensure future funding at the full \$2,000,000 requirement, consideration of including the following conference language is requested:

"Congress is pleased to learn that Navy has funded the U.S. Naval Sea Cadet Corps in the fiscal year 2009 budget as urged by the Senate and House in the 2008 Defense Budget Conference Report. Conferees include an additional \$300,000 for the U.S. Naval Sea Cadet Corps, that when added to the \$1,700,000 in the fiscal year 2009 budget request will fund the program at the full \$2,000,000 requested. Conferees urge the Navy to continue to fund this program and increase the POM level to \$2,000,000 for the U.S. Naval Sea Cadet Corps."

### *Background*

At the request of the Department of the Navy, the Navy League of the United States established the NSCC in 1958 to “create a favorable image of the Navy on the part of American youth.” On September 10, 1962, the U.S. Congress federally chartered the NSCC under Public Law 87–655 as a non-profit civilian youth training organization for young people, ages 13–17. A National Board of Directors, whose Chairman serves as the National Vice President of the Navy League for Youth Programs, establishes NSCC policy and management guidance for operation and administration. A full-time Executive Director and small staff in Arlington, Virginia, administer NSCC’s day-to-day operations. These professionals work with volunteer regional directors, unit commanding officers, and local sponsors. They also collaborate with Navy League councils and other civic, or patriotic organizations, and with local school systems.

In close cooperation with, and the support of the U.S. Navy and U.S. Coast Guard, the Sea Cadet Corps allows youth to sample military life without obligation to join the Armed Forces. Cadets and adult leaders are authorized to wear the Navy uniform, appropriately modified with a distinctive Sea Cadet insignia.

There are currently more than 362 Sea Cadet units in all 50 States, Puerto Rico, and Guam. Registered enrollment is 9,064.

### *NSCC objectives*

- Develop an interest and skill in seamanship and seagoing subjects.
- Develop an appreciation for our Navy’s history, customs, traditions, and its significant role in national defense.
- Develop positive qualities of patriotism, courage, self-reliance, confidence, pride in our Nation, and other attributes, which contribute to development of strong moral character, good citizenship traits, and a drug-free, gang-free lifestyle.
- Present the advantages and prestige of a military career.

Under the Cadet Corps’ umbrella is the Navy League Cadet Corps (NLCC), a youth program for children ages 11–13. While it is not part of the Federal charter provided by Congress, the Navy League of the United States sponsors NLCC. NLCC was established “. . . to give young people mental, moral, and physical training through the medium of naval and other instruction, with the objective of developing principles of patriotism and good citizenship, instilling in them a sense of duty, discipline, self-respect, self-confidence, and a respect for others.”

### *Benefits*

Naval Sea Cadets experience a unique opportunity for personal growth, development of self-esteem, and self-confidence. Their participation in a variety of activities within a safe, alcohol-free, drug-free, and gang-free environment provides a positive alternative to other less favorable temptations. The Cadet Corps introduces young people to nautical skills, to maritime services and to a military life style. The program provides the young Cadet the opportunity to experience self-reliance early on, while introducing this Cadet to military life without any obligation to join a branch of the armed forces. The young Cadet realizes the commitment required and routinely excels within the Navy and Coast Guard environments.

Naval Sea Cadets receive first-hand knowledge of what life in the Navy or Coast Guard is like. This realization ensures the likelihood of success should they opt for a career in military service. For example, limited travel abroad and in Canada may be available, as well as the opportunity to train onboard Navy and Coast Guard ships, craft and aircraft. These young people may also participate in shore activities ranging from training as a student at a Navy hospital to learning the fundamentals of aviation maintenance at a Naval Air Station.

The opportunity to compete for college scholarships is particularly significant. Since 1975, 197 Cadets have received financial assistance in continuing their education in a chosen career field at college.

### *Activities*

Naval Sea Cadets pursue a variety of activities including classroom, practical, and hands-on training as well as field trips, orientation visits to military installations, and cruises on Navy and Coast Guard ships and small craft. They also participate in a variety of community and civic events.

The majority of Sea Cadet training and activities occurs year round at a local training or “drill” site. Often, this may be a military installation or base, a reserve center, a local school, civic hall, or sponsor-provided building. During the summer, activities move from the local training site and involve recruit training (boot camp), “advanced” training of choice, and a variety of other training opportunities (depending on the Cadet’s previous experience and desires).

### *Senior leadership*

Volunteer NSCC officers and instructors furnish senior leadership for the program. They willingly contribute their time and effort to serve America's youth. The Cadet Corps programs succeed because of their dedicated, active participation and commitment to the principles upon which the Corps was founded. Cadet Corps officers are appointed from the civilian sector or from active, reserve, or retired military status. All are required to take orientation, intermediate, and advanced Officer Professional Development courses to increase their management and youth leadership skills. Appointment as an officer in the Sea Cadet Corps does not, in itself, confer any official military rank. However, a Navy-style uniform, bearing an NSCC insignia, is authorized and worn. Cadet Corps officers receive no pay or allowances. Yet, they do derive some benefits, such as limited use of military facilities and space-available air travel in conjunction with carrying out training duty orders.

### *Drug-free and gang-free environment*

One of the most important benefits of the Sea Cadet program is that it provides participating youth a peer structure and environment that places maximum emphasis on a drug- and gang-free environment. Supporting this effort is a close liaison with the U.S. Department of Justice Drug Enforcement Administration (DEA). The DEA offers the services of all DEA Demand Reduction Coordinators to provide individual unit training, as well as their being an integral part of our boot camp training program.

Among a variety of awards and ribbons that Cadets can work toward is the Drug Reduction Service Ribbon, awarded to those who display outstanding skills in the areas of leadership, perseverance and courage. Requirements include intensive anti-drug program training and giving anti-drug presentations to interested community groups.

### *Training*

#### *Local training*

Local training, held at the unit's drill site, includes a variety of activities supervised by qualified Sea Cadet Corps officers and instructors, as well as Navy and Coast Guard instructors.

Cadets receive classroom and hands-on practical instruction in basic military requirements, military drill, water and small boat safety, core personal values, social amenities, drug/alcohol abuse, cultural relations, Navy history, naval customs and traditions, and other nautical skills. Training may be held aboard ships, small boats or aircraft, depending upon platform availability. In their training Cadets also learn about and are exposed to a wide variety of civilian and military career opportunities through field trips and educational tours.

Special presentations by military and civilian officials augment the local training, as does attendance at special briefings and events throughout the local area. Cadets are also encouraged and scheduled to participate in civic activities and events to include parades, social work and community projects, all part of the "whole person" training concept.

For all Naval Sea Cadets the training during the first several months is at their local training site and focuses on general orientation to and familiarization with the entire program. It also prepares them for their first major away from home training event, the 2 weeks recruit training which all Sea Cadets must successfully complete.

The Navy League Cadet Corps training program teaches younger Cadets the virtues of personal neatness, loyalty, obedience, courtesy, dependability, and a sense of responsibility for shipmates. In accordance with a Navy-oriented syllabus, this education prepares them for the higher level of training they will receive as Naval Sea Cadets.

#### *Summer training*

After enrolling, all Sea Cadets must first attend a 2-week recruit training taught at the Navy's Recruit Training Command, at other Naval Bases or stations, and at regional recruit training sites using other military host resources. Instructed by Navy or NSCC Recruit Division Commanders, Cadets train to a condensed version of the basic training that Navy enlistees receive. The curriculum is provided by the Navy and taught at all training sites. In 2007, there were 23 recruit training classes at 21 locations, including 2 classes conducted over the winter holiday break and another held over spring break. About 18 nationwide to 22 regional sites are required to accommodate the steady demand for quotas and also to keep cadet and adult travel costs to a minimum. Just over 2,000 cadets attended recruit training in 2007 supported by 350 adult volunteers.

A Cadet who successfully completes recruit training is eligible for advanced training in various fields of choice. Cadets can experience the excitement of “hands-on” practical training aboard Navy and Coast Guard vessels, ranging from tugboats and cutters to the largest nuclear-powered aircraft carriers. Female Cadets may also train aboard any ship that has females assigned as part of the ship’s company. Qualified Cadets choose from such Sea Cadet advanced training as basic/advanced airman, ceremonial guard, seamanship, sailing, SEAL training, amphibious operations, leadership, firefighting and emergency services, Homeland security, mine warfare operations, Navy diving submarine orientation and training in occupational specialties, including health care, legal, music, master-at-arms, and police science and construction.

The Cadet Corp programs excel in quality and diversity of training offered, with more than 7,000 training orders carried out for the 2007 summer training program. Cadets faced a myriad of challenging training opportunities designed to instill leadership and develop self-reliance, enabling them to become familiar with the full spectrum of Navy and Coast Guard career fields.

This steady and continuing participation once again reflects the popularity of the NSCC and the positive results of Federal funding for 2001 through 2007. The NSCC still continues to experience an average increased recruit and advanced training attendance of well over 2000 cadets per year over those years in which Federal funding was not available.

While recruit training acquaints cadets with Navy life and Navy style discipline, advanced training focuses on military and general career fields and opportunities, and also affords the cadets many entertaining, drug free, disciplined yet fun activities over the summer. The popularity of the training continues to grow not with just overall numbers but also as evidenced with numerous cadets performing multiple 2-week training sessions during the summer of 2007.

*Training Highlights for 2007.*—The 2007 training focus was once again on providing every cadet the opportunity to perform either recruit or advanced training during the year. To that end emphasis was placed on maintaining all traditional and new training opportunities developed since Federal funding was approved for the NSCC. These include more classes in sailing and legal (JAG) training, expanded SEAL training opportunity, more SCUBA and diving training classes, more seamanship training onboard the NSCC training vessels on the Great Lakes, more aviation-related training, and additional honor guard training opportunities. Other highlights included:

- Maintained national recruit training opportunity for every cadet wanting to participate with 23 recruit training evolutions in 2007.
- Maintained cadet training opportunities beyond the traditional summer evolutions to include advanced and recruit training classes over the Thanksgiving high school recess, the Christmas recess and the spring recess. During 2007, 13 additional classes over these school breaks were conducted with 566 cadets participating. They were supported by another 89 adult volunteers.
- Continued NSCC’s aggressive NSCC Officer Professional Development Program, with three different weekend courses tailored to improving volunteer knowledge and leadership skills. More than 500 volunteers attended 2007 training at 37 different training evolutions.
- Continued placing cadets onboard USCG *Barque Eagle* for a summer underway orientation training cruise.
- Expanded seamanship training on the Great Lakes with four underway cruises onboard two NSCC YP’s and the NSCC torpedo retriever “Grayfox”.
- Continued NSCC cadet opportunity for advanced training in the medical field through the expanded medical “first responder” training at Naval Hospital Great Lakes, Illinois, and continuing the very advanced, unique “surgical tech” training at the Naval Medical Center in San Diego, California.
- Continued NSCC’s maritime focus through its expanded sail training with basic, intermediate, and advanced sailing classes offered in San Diego, California, and two additional classes on board “tall ships” in Newport, Rhode Island.
- Continued to place cadets aboard USCG stations, cutters, and tenders for what proves to be among the best of the individual training opportunities offered in the NSCC.
- Placed cadets onboard USN ships under local orders as operating schedules and opportunity permitted.
- Promoted cadets’ orientation of the U.S. Naval Academy and the U.S. Coast Guard Academy by offering tuition offsets to cadets accepted into either academies summer orientation program for high school juniors (NASS or AIM). Twenty-three cadets participated in 2007.

—Again, as in prior years, enjoyed particularly outstanding support from members of the United States Naval Reserve, the Army, and National Guard, whose help and leadership remains essential for summer training.

*International Exchange Program (IEP)*

For 2007, the NSCC again continued its' highly competitive, merit based, and very low cost to the cadet, IEP. Cadets were placed in Australia, United Kingdom, Sweden, Netherlands, Hong Kong, Scotland, Russia, and Bermuda to train with fellow cadets in these host nations. The NSCC and Canada maintained their traditional exchanges in Nova Scotia and British Columbia, and the NSCC hosted visiting international cadets in Newport, Rhode Island, and at ANG Fort Lewis in Washington State for 2 weeks of NSCC-sponsored training.

*Navy League Cadet training*

In 2007, approximately 950 Navy League cadets and escorts attended Navy League Orientation and Advanced Training nationwide. Participation in 2007 showed an increase over 2006, surmised to be attributable to training opportunities. Approximately 244 Navy League cadets and their escorts attended advanced Navy League training where cadets learn about small boats and small boat safety using the U.S. Coast Guard's safe boating curriculum. Other advanced Navy League training sites emphasize leadership training. Both serve the program well in preparing League cadets for further training in the NSCC, and particularly for their first recruit training.

*Scholarships*

The NSCC scholarship program was established to provide financial assistance to deserving Cadets who wished to further their education at the college level. Established in 1975, the scholarship program consists of a family of funds: the NSCC Scholarship Fund; the Navy League Stockholm Scholarship; and the NSCC "named scholarship" program, designed to recognize an individual, corporation, organization, or foundation since the inception of the scholarship program, 223 scholarships have been awarded to 209 Cadets (includes some renewals) totaling over \$291,500.

*Service accessions*

The NSCC was formed at the request of the Department of the Navy as a means to "enhance the Navy image in the minds of American youth." To accomplish this, ongoing presentations illustrate to Naval Sea Cadets the advantages and benefits of careers in the armed services, and in particular, the sea services.

While there is no service obligation associated with the NSCC program, many Sea Cadets choose to enlist or enroll in officer training programs in all the services.

The NSCC was formed at the request of the Department of the Navy as a means to "enhance the Navy image in the minds of American youth." To accomplish this, ongoing training illustrates to Naval Sea Cadets the advantages and benefits of careers in the armed services, and in particular, the sea services.

Annually, the NSCC conducts a survey to determine the approximate number of Cadets making this career decision. This survey is conducted during the annual inspections of the units which occurs during the period January through March. The reported accessions to the services are only those known to the unit. There are many accessions that go unreported, that occur 2–5 years after Cadets leave their units. With about 78 percent of the units reporting, the survey indicates that 519 known Cadets entered the Armed Forces during the reporting year ending December 31, 2005. This is an increase over the previous years' accessions. Each Cadet entering the Armed Forces is a disciplined, well-trained individual and progresses much better than those with no experience. Attrition of former cadets prior to their completion of obligated service is very low compared to other entrees.

| Unit                               | Cadets |
|------------------------------------|--------|
| U.S. Naval Academy (2006) .....    | 159    |
| U.S. Military Academy .....        | 7      |
| U.S. Coast Guard Academy .....     | 7      |
| U.S. Air Force Academy .....       | 5      |
| U.S. Merchant Marine Academy ..... | 12     |
| NROTC .....                        | 32     |
| OCS Navy .....                     | 4      |
| OCS Army .....                     | 9      |
| OCS Air Force .....                | .....  |
| OCS Marine Corps .....             | 1      |
| USNA Prep School .....             | 5      |

| Unit                            | Cadets |
|---------------------------------|--------|
| Navy—Enlisted .....             | 138    |
| U.S. Coast Guard—Enlisted ..... | 12     |
| Marine Corps—Enlisted .....     | 67     |
| Army—Enlisted .....             | 41     |
| Air Force—Enlisted .....        | 9      |
| National Guard—Enlisted .....   | 11     |
| Total .....                     | 519    |

<sup>1</sup>The U.S. Navy Recruiting Command has advised that out of 20,000 ex-Naval Sea Cadets eligible each year, approximately 2,000 join the services (Eligible numbers are all ex-Naval Sea Cadets within the recruiting eligible age range).

#### *Program finances*

Sea Cadets pay for all expenses, including travel to/from training, uniforms, insurance, and training costs. Out-of-pocket costs can reach \$500 each year—not including the costs for summer training. Assistance is made available so that no young person is denied access to the program, regardless of social or economic background.

Federally funded at the \$1,000,000 level in fiscal years 2001, 2002, and 2003, and at \$1,500,000 in fiscal year 2004 and \$1,700,000 in 2005 (of the \$2,000,000 requested), and \$2,000,000 in fiscal year 2006 and fiscal year 2007 all of these funds were used to offset individual Cadet's individual costs for summer training, conduct of background checks for adult volunteers and for reducing future enrollment costs for Cadets. In addition to the Federal fund received, NSCC receives under \$700,000 per year from other sources, which includes around \$226,000 in enrollment fees from Cadets and adult volunteers. For a variety of reasons, at a minimum, this current level of funding is necessary to sustain this program and the full \$2,000,000 would allow for program expansion:

- All time high in number of enrolled Sea Cadets.
- General inflation of all costs.
- Some bases denying planned access to Sea Cadets for training due to increased terrorism threat level alerts and the associated tightening of security measures—requiring Cadets to utilize alternative, and often more costly training alternatives.
- Reduced availability of afloat training opportunities due to the Navy's high level of operations related to the Iraq war.
- Reduced training site opportunities due to base closures.
- Non-availability of open bay berthing opportunities for Cadets due to their elimination as a result of enlisted habitability upgrades to individual/double berthing spaces.
- Lack of available "Space Available" transportation for group movements.
- Lack of on-base transportation, as the navy no longer "owns" buses now controlled by the GSA.
- Navy outsourcing of messing facilities to civilian contractors increases the individual Cadet's meal costs.

Because of these factors, Cadet out-of-pocket costs have skyrocketed to the point where the requested \$2,000,000 alone would be barely sufficient to handle cost increases.

It is therefore considered a matter of urgency that the full amount of the requested \$2,000,000 be authorized and appropriated for fiscal year 2009.

#### CONCLUSION OF HEARINGS

Senator INOUE. I would like to thank all the witnesses who have testified this morning and participated and contributed much. We will take all your issues and your suggestions very seriously. As I said in the opening, believe it or not, we read them.

This will conclude our scheduled hearings for this fiscal year and we will begin working on it. We hope to come out before the others do. So with that, I thank you and the subcommittee stands in recess subject to the call of the Chair.

[Whereupon, at 11:51 a.m., Wednesday, June 4, the hearings were concluded, and the subcommittee was recessed, to reconvene subject to the call of the Chair.]