KEEPING U.S. AVIATION MANUFACTURING COMPETITIVE

(109–59)

FIELD HEARING

BEFORE THE

SUBCOMMITTEE ON AVIATION

OF THE

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES

ONE HUNDRED NINTH CONGRESS

SECOND SESSION

MARCH 22, 2006 (WITCHITA, KANSAS)

Printed for the use of the Committee on Transportation and Infrastructure

U.S. GOVERNMENT PRINTING OFFICE

28–274 PDF WASHINGTON : 2006

For sale by the Superintendent of Documents, U.S. Government Printing Office
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KEEPING U.S. AVIATION MANUFACTURING COMPETITIVE

Wednesday, March 22, 2006

HOUSE OF REPRESENTATIVES, SUBCOMMITTEE ON AVIATION, COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE, WASHINGTON, D.C.

The subcommittee met, pursuant to call, at 10:00 a.m., at the National Institute for Aviation Research, Wichita State University, 1845 Fairmount, NIAR Room 307-309, Wichita, Kansas, Hon. John L. Mica [chairman of the subcommittee] Presiding.

Mr. MICA. Good morning. I would like to welcome you to the hearing of the House Aviation Subcommittee. This is an appeal hearing of the Committee on Transportation and Infrastructure of the United States Congress, and we are pleased to be here in Wichita, Kansas, and also at Wichita State. It may be one of their first congressional hearings to be held here, so somewhat of a historical occasion, and on a very important topic, and the title of today's hearing is ″Keeping the United States Aviation Manufacturing Competitive.″

I am Congressman John Mica from Florida. I am pleased to chair this subcommittee, and also pleased to have with us today my colleagues on the Transportation and Infrastructure Committee of Congress, and we are fortunate to be in the district of a very good friend, also a committee member, someone who takes American competitiveness very seriously, and also a member of the powerful House of Appropriations Committee, Todd Tiahrt. So thank you for hosting us today.

Then I thought Jerry Moran was right around the corner across the river. Little did I know that Hays, I guess it is, is a 3-hour-plus drive from here. But we are delighted to also be in his State, and not too close, but fairly close to his district, I guess, as far as the crow flies in Kansas.

Jerry Moran, who I think many of you know, is not only on the T&I committee, but very active on the Agriculture Committee and the Veterans Affairs Committee, really a senior of the members that we have.

Then probably one of the most distinguished, at least from an intellectual and science standpoint, also age, Vern Ehlers from Michigan with us. He is, of course, on the T&I Committee, a leader on the Science Committee, and he now—I am privileged to serve with him, and he has taken over as Chair, challenging time for the Congress and the country, of House Administration. So we are delighted to have these distinguished members, and I will yield to them in just a minute.

The order of business and proceeding today is going to be, first, opening statements by members. I will give my opening statement in just a moment. Then we have two—we have assembled two expert panels of witnesses. We will hear from them. And I would also—I will also entertain and pass a motion without—without objection and unanimous consent that the record be left open for a period of 2 weeks.

Now, it is impossible in this proceeding to have everyone participate who is from the aviation community here in Kansas or across the country to testify on this important issue. But we certainly welcome—and any request through the Chair or any of the members of the panel here, submission of additional testimony which will be made part of the official record of our proceedings today. So, without objection, for 2 weeks the record will be open to entertain and include those comments and testimony.

With that, I think what we will do is go ahead, start right off. I have got some comments to open with, and then I will yield to other members.

Again, I want to thank not only Wichita State University, but also the National Institute for Aviation Research for hosting this meeting of the House Aviation Subcommittee. We had a few minutes this morning to also tour some of the facilities and look at some of the programs here at the Institute for Aviation Research—it is very impressive—and I am sure this community, the State, and country can be proud of their work. So we thank you for your efforts and also, again, Wichita State for hosting us today.

This is, in fact, a very important hearing, not only for Congress, but it is also an opportunity for all of us to come together that are interested in keeping the United States aviation manufacturing industry competitive, to come together, discuss some very important issues and how we stay ahead of the curve.

After the difficult period of 2001 and the terrorist attack on our Nation's aviation system, America's aviation sector fortunately today is on the rebound, and sometimes I have some bad news to report, but actually, there is some good news today. In 2005, shipments of large civil aircraft by the U.S. civil aviation industry increased both in number and also in value. Despite a slight increase in commercial jetliner production, 290 aircraft, an increase of just seven from 2004, transport revenues did increase 7 percent to $22 billion. General aviation aircraft shipments—and it was good news for this part of the country—soared with 604 more deliveries to a record $8.5 billion, and civil helicopter sales surged from $515 million to a record $750 million. Taken together, U.S. civil aviation aircraft sales, which also include engines and parts, increased some 20 percent in 2005 to $39 billion. The U.S. aviation industry is forecasting—and that's a very optimistic forecast—but an even stronger year for 2006 with commercial jetliner sales increasing from 290 to somewhere around 400.

Our aviation industry has the highest net trade surplus of all of our manufactured goods and has consistently recorded trade surpluses even as the overall U.S. trade balance and manufactured project has widened. Last year when the United States experienced a record trade deficit, the aviation industry recorded a trading sur-

plus of some $37 billion. U.S. aviation exports sustained over 600,000 high-wage, high-tech jobs in the United States.

Export sales help support not only the airplane manufacturers themselves, but many other companies, including small- and medium-sized enterprises. And we saw many of them as I drove in. You can see an array of medium- and small-sized businesses here in Wichita, Kansas.

To continue growth in the aviation manufacturing sector, our Federal Government must have—must adopt both policies and support programs that allow American aviation industry to compete in an increasingly competitive and expanding global market, and that is going to be part of our discussion today, how we do that. Access to foreign markets is crucial for United States manufacturers of civil aviation and parts of civil aircraft, including engine manufacturers. This is the largest segment of the U.S. aerospace manufacturing industry accounting for about one-third of the total aerospace shipments measured by value. About two-thirds of all the large civil aircraft produced in the United States are shipped to customers.

Now, what I think is very important today, and I look forward to some testimony on some of these issues: tax policy, product certification, competitive trade negotiations and finance opportunities, all that give the United States—that will give the United States' aviation manufacturers a level playing field. And we know that these are some of the most important challenges that we face, at least as our Federal responsibility.

One of the most important responsibilities of—also of this subcommittee, is to maintain fair international marketplace and competition for United States companies and their employees who manufacture aircraft and aviation industry parts. I know the Bush administration and other Members of Congress, from both sides of the aisle, share my views on this issue.

Today I hope to hear from leaders in American aviation, in the very heart of our Nation's aviation manufacturing capital, and I hope to hear from this capital here in the Midwest recommendations that we can take back to America's political capital in Washington and hopefully act upon. So I very much look forward to the proceedings today and hearing from these witnesses and others who will submit commentary and recommendations to the subcommittee. And we look forward to see how we can further expand this very critical sector of our Nation's economy.

With those opening comments, again, I am pleased to be here. Let me—we won't do this necessarily in order of seniority, but I want to yield, first, to the gentlemen who is hosting U.S. today, Mr. Tiahrt. You are recognized.

Mr. TIAHRT. Thank you, Mr. Chairman, and thank you for being here. I can't tell if this thing is on or not. I guess it is. Can you hear me in the back? Okay.

First of all, let me thank you for coming to the air capital of the world. This is a great honor to have the chairman of the Aviation Subcommittee here and members of the Transportation Committee, and the chairman of the Government Reform Committee, Vern Ehlers, also a leading scientist in Congress—the leading scientist in Congress. You know, if you look up at the makeup of the people

who are serving in the United States House of Representatives, I think there are only a couple of them that come from the scientific ranks like Vern Ehlers. So to have him here as part of this hearing process, I think, is invaluable. He brings a lot to the table, a lot of unique perspective.

This is an industry that has a great advantage for the United States economy in that it is a trade plus as far as the surplus is concerned—as was pointed out by the chairman's opening statements, $37 billion net last year. When you look at a $7 trillion trade deficit, we have to have more industries function as the aviation industry does, producing solid products from solid people, and making a big advance in our economy and our trade around the world.

Yet, this is a vulnerable industry. It is vulnerable to outside economic influence like the terrorist attacks we saw on September 11, 2001. Shortly following that, 25,000 aviation workers were laid off. We are very vulnerable to glimpse our economy. We are also vulnerable to tax policy. This industry is vulnerable to tax policy in that if we have positive adjustments in the Tax Code like accelerated depreciation, we can take an industry out of a slump and give it a good start to get back on its feet.

But yet, if we change the dynamics of how people account for costs in the industry, for example, having to account for passengers on a corporate jet, and an inordinate amount of regulation that goes along with that, we can have a devastating effect on sales. So it is vulnerable in that respect.

And in trade policy it is also vulnerable, and I think every time we develop new trade policy and get another trade agreement like we did with DR CAFTA or with NAFTA, we open up markets for the aviation industry. And it gives them an advantage.

If you look at other countries like Brazil that make Embry Air—where Embry Air is located, if they have a trade agreement with a country that America does not have a trade disagreement with, it can make as much as 15 percent difference in the bottom line or on the bid for an aircraft. So it is a huge advantage when we have effective trade policy that we not only get in writing, but also enforce. So I think when we look at our economy, we look specifically at the aircraft industry, we need to take into account the vulnerabilities so that we can have a strong footing to be a big part of our future economy.

One last thing I would like to bring up before we go into our questioning, Mr. Chairman, is that the government regulatory policy can also have a big impact on this industry. We have a representative here from FAA certification, and when that agency is underfunded, it can delay the response time to get new products in the market. When we have an over-regulation burden, perhaps the way we collect revenues for the Federal Government, we can also have a big impact on this fragile—somewhat fragile industry.

So as we move forward to prepare for the next economy, I hope we look not only at the great advantage that we bring through employing people and through providing wonderful products, but we also look at how the Federal Government can be at a disadvantage for this industry that, at times, has been very fragile.

So, once again, thank you for being here. I thank Mr. Moran for being here as well, coming on a long drive this morning, and I am looking forward to the testimony and the questions.

Thank you, Mr. Chairman.

Mr. MICA. Thank you. And again, we appreciate your hospitality.

We are also in the backyard or pretty close to the backyard of the other member from Kansas, who is an outstanding member, and I want to recognize him at this time, Jerry Moran.

Mr. MORAN. Mr. Chairman, thank you very much. Talk about a long distance, it may be 3 hours to my home, but the district is about 10 minutes from here, so we cover a good portion, and we are delighted to have you here—the district surrounds Wichita to the east, north, and the west. So we are delighted to have you here, and Mr. Ehlers here.

Congressman Tiahrt, obviously, these are issues that matter greatly to him and the people of his district, and he is a member of the Transportation Subcommittee of the Appropriations Committee and has been an advocate on aviation issues for as long as I have known Todd; and it is a real honor to be in his district with him. And he and I welcome you and Mr. Ehlers to Wichita.

This subcommittee was in Wichita, at my request, several years ago looking at several issues related to Mid-Continent Airport and airline service, and we are delighted to have you back.

I am delighted to be on the campus of Wichita State University and to see the National Institute of Aviation Research, which we know is world renowned, but delighted also to be here in a week in which Wichita State University is—the Shockers are playing in the Sweet 16. It is an exciting moment not only for this campus, but for all of us in Kansas, and we wish them well.

I have, with your permission, invited businesses in the First Congressional District of Kansas, the one I represent, to join us today, and we will hear how important aviation manufacturing is to small businesses in Hutchinson and Salina as well as Lyons, Kansas, and also would point out the important role that Mr. Schuster's company, Raytheon, plays in Salina, Kansas, a significant employer in my district.

So we look forward to working with you. I look forward to hearing the testimony.

Kansas is clearly the aviation State. There is no State in which these jobs matter more. Forty-five thousand jobs in Kansas are related directly to this industry, a $417 million payroll. So we appreciate your interest in the competitiveness of this industry, and know that it matters greatly to people of our State. We are delighted to welcome you to Kansas and to Wichita.

Thank you, Mr. Chairman.

Mr. MICA. Thank you. And now we will recognize, waiting patiently, the gentleman from Michigan, Mr. Ehlers.

Mr. EHLERS. Thank you, Mr. Chairman. It is a pleasure to be here, and I certainly enjoy Wichita. It was good to come in last night, even though the hotel and people spoke English without an accent. I was born not too far from here, so it is good to encounter Midwestern people again, hard-working and honest as the day is long. They are well concerned about the name of the basketball team. I had to explain to an Easterner this morning that they were

Shockers, not because they played in New York or something like that, but it had something to do with wheat.

At any rate, as I think Todd mentioned, the air capital of the world, and it is certainly better to be in the air capital of the world than the hot air capital of the world in which we spend most of our time. I do love aviation. I always have since I was a child. I love airplanes. I love pilots. I love the whole business, which sometimes complicates my judgment on these issues. But I think it is an essential industry, and the problems, as I see it, of the industry—and I will be very interested in whatever testimony you have to offer because I am sure I don't have as good a picture as you do, but I think competitiveness is a major aspect.

I think Todd mentioned trade agreements. That is a very important part of it. Another very important part I have been working on very hard is improving our educational system, particularly in science education so that we will have an adequate supply of scientists and engineers for the future, because we are certainly not doing a good job of that now.

Money is a problem, money or sufficient funds to run the FAA. They are being slowly starved in the government ranks. The airlines are starving, to a certain extent starving themselves, but they are also a victim of circumstance. And just the general financial problems, particularly in manufacturing as well. It is a tough business out there. And I worry about the future, some aspects of the industry from that standpoint.

Capacity is a huge problem in developing; it is going to be tougher and tougher to find anyplace to build airports, but that is only a small part of it. A major capacity problem, I think, comes from the increase in the number of airplanes in the future, particularly if we get—if all the predictions about air taxis come true. We are going to have capacity problems at airports, but even more importantly, capacity problems in aerospace and in air traffic control, and we have got a lot of work to do there. If we keep on starving the FAA, they are not going to have the money to do the research and develop the kind of air traffic control system we are going to need.

Another issue facing us is fuel cost. That is not going to return—you are not going to get to low-cost fuel again, and the aviation industry is the only industry that does not have an alternative. They have to burn petroleum-based products because that is the only energy source, at this point, that has the energy density you need for air travel, something low weight, but with high energy content. Whereas we can build hybrid cars, none of that is going to work for airplanes.

So we have to—I think it is very important for this Nation to get off the petroleum kick; otherwise, 15 years from now there will—the prices will be so outrageous for petroleum that no one will be able to fly anymore.

And the final problem you have is liability. I was very pleased the first year I got to Congress to participate in changing the liability law regarding aircraft. I fought very hard to get it reduced to 9 years; the most we could do is get it reduced to a few years below what had been proposed. But it is still a major issue and, I think, unreasonable standards largely because the public does not under-

stand aviation, does not understand the aircraft and the huge awards that were given for things, which I thought were clearly pilot error instead of mechanical failure.

We solved part of the problem. At least we have the industry going again. But I still think it is far too long and leaves you in far too much danger. I think we have to address that as well or else develop tort reform which will limit punitive damages, et cetera.

So thank you very much, Mr. Chairman. I appreciate your having the hearing here. I was very pleased to be able to come to the center of certainly small- and mid-sized manufacturing in the country, and I look forward to touring the facility afterwards as well. Thank you.

Mr. MICA. I thank the gentleman from Michigan, and the gentlemen from Kansas for their opening comments, and also for their participation in the hearing today.

And now we will pay our attention to the two panels of witnesses that we have before us. And the first panel consists of Janet Harrah, Director of the Center for Economic Development and Business Research at Wichita State University; Jack Pelton, who is Chairman, President and CEO of Cessna Aircraft; James Schuster, Chairman and CEO of Raytheon Aircraft Company; and Peter Bunce, President and CEO of the General Aviation Manufacturers Association. I would like to welcome our witnesses.

As is customary—well, we are not going to run a clock today, but we ask you to—to summarize your remarks, and if you have any additional testimony, data, information you would like to have made part of today's record and proceeding, request that through the Chair.

TESTIMONY OF JANET HARRAH, DIRECTOR, CENTER FOR ECONOMIC DEVELOPMENT AND BUSINESS RESEARCH, WICHITA STATE UNIVERSITY; JACK J. PELTON, PRESIDENT, CESSNA AIRCRAFT COMPANY; JAMES E. SCHUSTER, CHAIRMAN & CEO, RAYTHEON AIRCRAFT COMPANY; AND PETER J. BUNCE, PRESIDENT & CEO, GENERAL AVIATION MANUFACTURERS ASSOCIATION

Mr. MICA. So, with that, we will turn our attention to our first witness, and I shouldn't welcome you because we are here at your university, but Janet Harrah, Director of Center for Economic Development and Business Research, welcome and you are recognized.

Ms. HARRAH. Mr. Chairman and members of the subcommittee, it is a pleasure to have you here at Wichita State University. I have been asked to talk about the economic importance of aviation manufacturing to the overall U.S. economy.

Is that better?

Mr. MICA. Better.

Ms. HARRAH. Okay.

Aviation manufacturing is a vital sector of the U.S. economy. It consists of companies engaged in the manufacture of aircraft, aircraft parts and engines as well as guided missile and space vehicles. It also includes the overhaul and rebuilding and conversion aircraft.

Aircraft produced in the United States are very diverse, ranging from fixed-wing planes and helicopters to business jets and commercial airliners. The industry has a wide footprint as well. While States such as California, Washington, Texas, Kansas, and Arizona account for the largest number of aerospace jobs, nearly every State has employment in the aviation manufacturing sector.

When you look at the overall competitive environment, it is indeed fierce. A few large companies dominate certain sectors such as the manufacture of engines. For example, together, General Electric and Pratt & Whitney account for about 80 percent of engine revenues. On the other hand, there are a large number of companies producing aircraft parts.

Profitability depends on efficient and timely production. Small companies typically compete by specializing in high-end, low-volume parts or high production of low-priced commodity parts. Large companies having economies of scale in production leverage their volume in negotiating with suppliers and also leverage their leeway pricing to customers. Consequently, revenues per employee are usually higher for large companies compared to smaller companies.

The size of the industry is impressive as well. In 2004 the value added for the industry totaled $95 billion. The value of shipments totaled 165 billion, and the exports for the industry totaled 57 billion or nearly 7 percent of total U.S. exports.

In 2005 more than 606,000 Americans were employed in the aviation manufacturing industry directly. Companies engaged in the manufacture and assembly of complete aircraft accounted for the largest percentage of jobs, followed by primarily engaging in manufacturing search and detection systems. Employment projections indicate that aircraft and aircraft parts manufacturing employment will increase about 8 percent over the next decade, adding more than 36,000 jobs. Total employment for all industries is expected to increase about 15 percent during the same 10-year period.

The drop in air travel and severe financial problems of many U.S. airlines following 9/11 led to drastic reductions in commercial aircraft orders. This, in turn, resulted in significant employment reductions in the manufacturing sector in recent years. However, rising orders are expected over the next decade due to increases in air traffic and the need to replace aging aircraft.

The outlook for the military aircraft and missiles portion of the industry is also better. Concern for the Nation's security has increased the need for military aircraft and military aerospace equipment.

A growing concern for the industry is the rising need to have to hire replacement workers. Many engineers who entered the industry in the 1960s are nearing retirement. The same is true for production workers. For example, at many of our local plants here in Wichita, 50 is a median age of our production workers.

In 2004, the industry employed 45,000 engineers. Training and attracting skilled replacements will be critical to maintaining the industry's worldwide competitiveness in the coming decades.

The aviation manufacturing sector includes many workers, but in a relatively few number of establishments. Nationally there are, on average, about 13 workers per establishment. In the aviation man-

ufacturing sector there are 161 workers per establishment. This reflects a large scale of many of the facilities in the industry.

The industry payroll exceeds $45 million annually. In 2004, the average wage for the industry was $73,000 or 86 percent higher than the overall average of $39,000 for all private sector jobs. These above-average earnings reflect the high skills—high level of skills required by the industry. In 2004, 17 percent of all workers in the aerospace industry were union members or covered by union contracts. This compares with about 14 percent for all workers throughout private industry.

The economic numbers for the aviation manufacturing industry are impressive. More than 600,000 employees, 45 million in annual payroll, 165 billion in annual shipments and more than 3,700 establishments. However, these direct numbers tell only part of the story. The aviation manufacturing industry is an enormous one that has a cascading effect on other industries in the United States. The industry has a large supplier base. Companies engaged in aviation manufacturing also purchase large volumes of goods and services from a wide variety of other industries. In 2004, the cost of materials for the aviation manufacturing industry totaled $68 billion.

To conclude, the economic activity linked to the aviation manufacturing industry totals $142 billion in annual payroll, and 2.8 million employees in the U.S. as a direct or indirect result of the industry. Thank you.

Mr. MICA. Thank you for your testimony, and we will withhold questions until we have heard from all of the panels.

The next one we will recognize is Jack Pelton, Chairman and President, CEO of Cessna Aircraft. Welcome, and you are recognized.

Mr. PELTON. Thank you. Mr. Chairman and members of the subcommittee, my name is Jack Pelton, and I am Chairman, President, and CEO of Cessna Aircraft Company.

I am proud to say that Cessna is the largest general aviation manufacturer in the entire world. Since our inception in 1927, we have delivered more than 187,000 airplanes to virtually every country in the world. Last year, we delivered more than 1,150 jet and piston airplanes, and this year we expect to significantly improve those numbers.

As you may know, Wichita is the global center of general aviation. But that leadership role is not a divine right. We have worked hard to attain it, and we have had an unwavering support of government, both nationally and locally.

But make no mistake, our role in global aviation in the marketplace is tenuous at best. We are beset from outside of our borders by rivals who have technical skills, industrial capacity, and government support to challenge U.S., and even within our borders by others who wish to take undue advantage of growth of general aviation as a remedy for their own business issues.

Today the financial and competitive advantages of business jet travel are widely accepted by shareholders and CFOs. What was once thought as an extravagant perk is now rightly regarded as a valuable business tool that enhances productivity, competitiveness, and efficiency. The small businessman also relies on general avia-

tion as a resource essential to expansion. In both instances, general aviation is a catalyst that helps strengthen our Nation's competitive position globally.

Cessna is one of the many companies in Wichita dedicated to power flight. With more than 10,000 employees in Wichita and another 2,200 across the U.S., Cessna is the largest of these general aviation companies. But we are part of the community, nonetheless, a community of some 48,000 people.

In terms of spending power, the aerospace industry in Wichita represents a powerful economic engine for this region with more than $2.6 billion in total annual payroll alone. When a standard economic multiplier is multiplied to that number, we find another $2 billion in direct economic benefit to the Wichita area alone. Last year, Cessna accounted for sales of $3.5 billion. In doing so, we spent almost 1.5 billion with our suppliers and our partners.

In addition to over 400 direct and indirect suppliers in Wichita, we also have 900 suppliers in other parts of Kansas, and a total of 4,500 across America. In fact, we had suppliers in each of the 50 States, and this is just Cessna. Our fellow original equipment manufacturers had very similar supply chains.

The state of the industry is very healthy right now. There are more than 320,000 general aviation aircraft worldwide, 218,000 of those here in the U.S. In total, general aviation in America directly contributes more than $41 billion to the economy every year.

General aviation plays an increasingly important role in our Nation's trade balance. Last year, 19 percent of general aviation manufactured planes that were manufactured in the U.S. were exported. In 2005, that number of general aviation airplanes exported from the U.S. rose 67 percent over 2004, while export billings rose 82 percent.

At Cessna, we added about 1,000 employees in 2005, and we expect similar growth in our employment numbers this year. These jobs range from sheet metal mechanics to specialty engineers. This is a growing industry—for now. But we face threats from all directions. From international competitors, the threats are coming from Europe, from Russia, from Brazil, from Asia. We still maintain the advantage, but the gap is closing.

We do not fear competition. Like all Americans, competition drives us to excel.

Cessna, like other American aerospace companies, is focused on transforming our business and how we produce airplanes. We are fully committed to lean manufacturing with programs such as Six Sigma. We are exploiting technologies to form a virtual enterprise with our customers and our suppliers. We are making significant investments in research and development to continue to raise the bar on safety and ensure a full pipeline of new products that our customers tell us they want.

And we are investing in our people and in our communities. Last year, we delivered more than 375,000 hours of training to our employees, and spent 1.5 million in tuition aid to our employees. Cessna, last year, provided more than $2.75 million in charitable contributions.

We are confident that as long as the global playing field remains level, we will maintain our leadership position and continue to im-

prove the quality of life for our employees, their families, our customers, our communities and society.

But while we are doing all we can do to face the external threats, we also face internal threats over which we have little control, threats that will negatively impact our customers and our industries. Regulatory changes that put an undue financial burden on general aviation, inconsistencies in rural interpretations, and illogical regulatory priorities will eventually cripple our industry or torpedo our global leadership position.

A leading concern for us right now is the issue of FAA certification. Bringing new aircraft to the global market is a culmination of years of private investment in research and development, and testing by manufacturers in cooperation with thousands of suppliers. The FAA could delegate much of that work, certification work, to us under the Design Option Authorization program; and that is being advocated by the FAA leadership.

I have included details of the new burdens of FAA certification in my written testimony. This is just one example of the internal regulatory issues we face in general aviation manufacturing. These burdens will severely cripple our industry's ability to bring new products and technologies to the marketplace. The U.S. Government should enable the growth and development of aircraft manufacturing, not inhibit it.

We strongly believe that continued congressional oversight of the general aviation industry is critical to its survival in the ever-changing global environment, and that oversight comes only through direct involvement such as funding, and through hearings as this.

The point is, general aviation is an important contributor to the continued growth of our economy, both as a business tool and as a high-technology industry, an industry where America still leads the world. General aviation is a true national resource.

We must learn from the mistakes of other countries, mistakes made in funding decisions, regulation adoption, air space management, resource allocation, and general accessibility.

It is imperative that Congress takes the necessary steps to ensure that general aviation remains a formidable contributor to our national well-being, that you continue to take a key driver of our Nation's economy and trade balance and continue to provide an important productivity tool for our businesses.

We believe it is in the best interest of our Nation that our Federal Government encourages, not inhibits, general aviation's growth and vitality. It is just good business sense.

Thank you.

Mr. MICA. Thank you for your testimony.

We will now hear from Mr. James Schuster, who is Chairman and CEO of Raytheon Aircraft Company. Welcome and you are recognized.

Mr. SCHUSTER. Thank you, Mr. Chairman and members of the subcommittee. My name is Jim Schuster. I am Chairman and CEO of Raytheon Aircraft Company here in Wichita, Kansas. Raytheon Aircraft Company is a business unit of Raytheon Company, one of the world's largest defense companies that had sales in 2005 of nearly $22 billion and has 80,000 employees world-wide.

On behalf of the 6,500 Kansas-based employees, welcome, again, to the air capital of the world. It is an honor for me to appear before you today.

I am going to use my time today to tell you about our company and to discuss the international market.

Raytheon Aircraft Company designs, develops, manufactures and supports business jets, turboprops and piston-powered aircraft for the world's commercial and military aircraft markets. Last year, Raytheon Aircraft Company had net sales of nearly $3 billion and delivered 416 aircraft.

Headquartered in Wichita, we have a very proud heritage here. Aviation pioneers Walter and Olive Ann Beech founded the company in 1932, and over the years Beechcrafters, as our employees like to be known around the world, have built more than 54,000 aircraft. Some 36,000 are still flying today.

Raytheon Aircraft Company is the third largest employer in the city, and the fifth largest employer in the State of Kansas. While our total annual payroll for Wichita alone is approximately $360 million, our economic impact goes far beyond the city limits or even the State's borders.

We also have company-owned service centers in the U.S., Mexico, and in the United Kingdom. Our total global employee base is just over 8,000.

Raytheon Aircraft Company has over 450 suppliers in the State of Kansas alone, and more than 1,800 across the United States. We spent $1.4 billion with our U.S. suppliers and partners in 2005. We also spent $300 million with 400 international partners and suppliers located in 20 different countries worldwide.

The general aviation industry today is truly international in nature. Not only do our airplanes travel to every corner of the world, our customers are based in virtually every country in the world.

In 2005, the number of general aviation airplanes exported from the U.S. surged about 67 percent over 2004, with 557 aircraft, while export billing rose 82 percent to $2.6 billion. Of the 2,857 general aviation aircraft manufactured in the U.S. in 2005, 19 percent of those aircraft were exported around the world. As the worldwide economy expands and becomes ever more interdependent, it becomes increasingly important for the U.S. Government to support the development of those markets to ensure our Nation's position as a global leader in aviation.

Currently, the FAA, under the leadership of Transportation Secretary Norman Mineta and FAA Administrator Marion Blakey, recognizes this. More time and energy have been spent by our government to foster overseas markets, provide leadership and safety, and promote our industry.

For example, the FAA is adding resources and staff to assist with aviation issues in China and India, two of the largest potential markets for general aviation over the next decade. These efforts will pay large dividends for the entire U.S. aerospace industry, and we are thankful that the U.S. transportation leaders are paying more attention to international markets and related issues.

As other markets develop, it is important to ensure that the FAA and other Federal agencies continue to support aviation expansion into emerging markets. After China we see India and Eastern Eu-

rope as markets with the greatest opportunity to general aviation and aerospace growth.

The aerospace industry works constantly with both Congress and the Executive Branch to ensure foreign markets are open to U.S. products. Working to break down trade barriers is critical to continue the dramatic increase we are seeing in U.S. exports of aerospace products and services.

Congress can help maintain U.S. leadership in aviation by ensuring that the FAA receives the resources it needs to carry out its functions, including the certification of new aviation products.

Jack Pelton has already discussed certification funding this morning, but let me just emphasize how important this is for ensuring continued U.S. global leadership in aviation. Our competitors around the world, particularly in Europe, are working to impose their model of regulation in emerging markets. With the creation of the European Aviation Safety Agency, known as the EASA, the European Union now has a powerful, single, FAA-like institution certifying new aviation products.

Let me be very clear: If the certification of new aviation products becomes onerous or subject to delays in the U.S., Raytheon Aircraft Company and the rest of the U.S. general aviation industry will be severely disadvantaged in the global marketplace. The result will be a loss of our technological leadership, international competitiveness and, ultimately, jobs.

While Raytheon Aircraft Company and our industry are going well today, I must reemphasize that this is an industry vulnerable to subtle changes in laws, regulation, and the economy. We need Congress to continue to carefully consider the issues of FAA funding and resource allocation as well as other regulatory changes. The future of the Raytheon Aircraft Company and the general aviation industry, in many ways, depends on you.

Raytheon Aircraft Company firmly believes there is a solid domestic market for aircraft, but we look to the international market for growth opportunities. I urge Members of Congress to assist in promoting general aviation and assert the continued congressional oversight that is critical to the success of our industry, both domestically and internationally.

Mr. Chairman, I would like to thank you and the subcommittee for taking the time to travel to Wichita today to listen to our comments and concerns about U.S. aviation manufacturing and keeping us competitive. In closing, I would like to extend, on behalf of the entire general aviation industry, our personal appreciation to Congressman Tiahrt for the strong and tireless support he provides to the aviation industry. Thank you.

Mr. MICA. Thank you for your testimony.

And our final witness on this panel is Peter Bunce, who is President and CEO of the General Aviation Manufacturers Association. Welcome, and you are recognized.

Mr. BUNCE. Mr. Chairman and members of the subcommittee, it is very exciting to have you here in Wichita. And just to put it in a little bit of perspective, 80 percent of the world's general aviation aircraft are produced in the United States, and over half of those are produced here in Wichita. So it is truly exciting for you to be here.

GAMA represents 55 of the world's leading aviation manufacturers, and that deals not only with airframe manufacturing of engines, avionics and also those that supply parts for the aviation aircraft.

As you mentioned before, we had a good year last year. Our shipments were up 21 percent, and our billings were up about 27 percent, and we are very optimistic about 2006 and 2007, based on our orders. But as Congressman Tiahrt pointed out, our industry is fragile, and we are concerned about several things.

One of those is that our actual flight hours last year decreased, according to the FAA, by about 2 percent. When you couple that with the fact that over 64 percent of the flight hours that are flown in this country are flown for business purposes, it really emphasizes the fact that business is facilitated by general aviation, and we need not do anything that will impact the ability of folks to be able to use the aircraft for business purposes.

When you look at—is this still working? Test. I will just speak loudly.

Over the last 25 years, we feel very proud that general aviation manufacturers in training within the community has been able to drop the accident rate by 54 percent for general aviation and fatal fatalities by over half. But we all know that any aviation accident is one too many. And so our general aviation manufacturers are committed to be able to get products out to the field that makes supplying easier and makes flying safer; and that is particularly in the realm of giving them systems within the aircraft to tell them where they are, and give them what we call situational awareness to be able to fly safer. That is why it is so imperative that we have the certification services available through the FAA to be able to get that technology into the cockpit quickly.

But coupled very closely with that, as Congressman Ehlers pointed out, is building capacity within the system. And what we are very, very firm on is to be able to have this subcommittee, in particular, be able to keep pushing the FAA and other executive branch agencies to push to give you a coherent modernization plan; and that plan not only needs to contain the types of technologies that the FAA wants to incorporate to build to capacity in the system, but give you a time-phased plan that tells you how much it is going to cost to modernize and what savings are ultimately achieved on the back end.

We are not inventing new technology. The technology is out there primarily produced by military. But we are giving you a plan. Before we go and change mechanisms of how we collect money, it is absolutely imperative to be able to push the ball forward and get to the goal line of building the product capacity in this system.

Now, Mr. Ehlers also touched on that capacity when we talk about the introduction of very light jets. This year, we are going to start the certification for those jets, but there has been a lot of rhetoric out there about how these jets are going to, quote, ″darken the skies with the onslaught of these microjets.″ we want to put this in perspective.

This Nation has put a lot of investment and a lot of taxpayers' dollars, and put concrete out in smaller cities in rural America that are not serviced by airplanes. And we see this new market in the

very light jets, and very quiet jets sometimes—folks are starting to refer to them as ″whisper jets″—to be able to give service to those smaller communities that have runways less than 3,000 feet that can't be serviced by commercial airlines. We see this as not competing for the airspace or the airports where the commercial aircraft have their hub, but by diffusing traffic and providing folks an opportunity to use air transportation for their businesses and actually diffuse that traffic and get them off of, mainly, the highways.

So we are very concerned that a lot of the rhetoric being used about this new generation of aircraft is being used for false purposes and not emphasizing the capability that this will give and the business that it will facilitate for our Nation.

Also, as you touched on, helping us get out of the slump that we were in after 9/11. You did a lot for us with bonus depreciation; however, Federal tax policy can also have a significant unforeseen negative impact. The same legislation that provided GA manufacturers with bonus depreciation also changed the business deductibility of entertainment-related flights.

I want to be very clear. No one in our industry wants—says it is not just to tax fringe benefits, and we are not seeking to repeal this provision. The problem lies not with Congress, but with the IRS interpretation of the methodology and allocation of entertainment use flights. The untold effect of this tax policy is that it is making folks that use business aviation account for seats differently than any other mode of transportation.

When you look at this Nation today, we have 165,000 piston aircraft flying in the system, and over half of the flying time that we fly every year is used for business. It is an onerous system, and not only do you have to count seats, you no longer can take your spouse with you on a business trip because you suffer a significant tax penalty for that. And they are treating general aviation totally differently than we treat, like, a company car. And that type of singling out of aviation for a different type of treatment is already having an effect on folks that are flying aircraft, and will eventually have an effect on sales.

In addition to the tax policy, we also are concerned about some of the export control restrictions that are placed on general aviation. No one wants products that are used in general aviation that migrate into military aircraft to be used by nations or people that can harm us, but it is significant to note that as the military uses more and more commercial off-the-shelf technology, that it is becoming very difficult to differentiate between commercial and military. And as we go—and it is even simple technology; you are talking about rivets, rings, and very basic things like that—we are finding that if it migrates its way into military technology, all of a sudden it makes it very difficult for our aviation manufacturers in the U.S. to export those products. And also it makes those foreign manufacturers of aircraft reluctant to want to use suppliers in the U.S. for that export control. So we hope to be able to work closely with Congress and be able to attack some of those issues with both the State Department and Commerce.

The last issue is tort reform. As you all have noted, it is very important with what you gave us in the General Aviation Recovery Act to be able to help revitalize our industry. But what we are see-

ing are attacks on GARA all the time around the back sides of it. We have a lot of lawyers out there that will go ahead and sue every component manufacturer any time there is an aviation accident, hoping that most of those will settle out of court, and we can consider that a form of extortion out there in all practicality; and any kind of tort reform you can give to this industry in general, tort reform that we can start to be able to get a handle on, that will help suppliers.

The significant effect of that is, we have some of our suppliers that actually are not bringing products to market, such as the flight control systems that give you better fuel efficiency and better immersion controls, just because they worry about the liability that they will have in that arena.

I will submit the rest of my comments for the record. I look forward to your questions.

Mr. MICA. Thank you. We will submit additional statements.

We will turn to questions for our panel, and I have a couple. We will start with Janet Harrah.

You mentioned that the aging—the aging population of the workforce, which was interesting. The President has put forth a proposal to increase emphasis and programs in math and science.

What do you think we should do? Now we have got an average age of 50. That gives us maybe 10 years to sort of get our act together. Is what is being proposed adequate? And what do you see as far as our responsibility at the Federal level in providing the folks to replace this aging workforce?

Ms. HARRAH. Well, from a local and State standpoint, obviously you have to have adequate training, infrastructure to train the number of folks to replace them, whether you are talking about welders and—or you are talking about aerospace engineers.

I think one of the things is that—if you look at the national policy, is the immigration policy. The ability to bring in students—it becomes very difficult for American universities to bring in students from overseas because—as a result of the impact of 9/11, but that is more difficult—

Mr. MICA. That is interesting because people have said, well, we replace those who are aging or we don't have with foreign imports, basically students, but then we are finding now an interesting phenomenon where not as many stay as they go back because they have more opportunities in their own country. So we end up educating them to not compete with us, but to go back into their own respective industries.

Ms. HARRAH. That is always going to occur. That is as true at the international level as it was at the local level. But from the supply side standpoint, more will stay than will leave, and in the short term, we have such a short window of opportunity for some of these companies, we have to start filling them with existing engineers that work overseas now and have the ability to do the program to bring them over here so they can work. We have a limited number of slots of foreign workers to work in this country.

Mr. MICA. But what would attract more students or individuals to math, science, or maybe we don't—maybe we don't need to do that. I mean, do you see anything at the Federal level that we can do in that regard?

Ms. HARRAH. You are asking something that is not in my area of expertise. I am an educator, so —

Mr. MICA. At least you are honest about it. I appreciate it. Let me go to Mr. Pelton.

You talked some about the regulatory process and certification. We have known that we have a backlog and people to provide certification in FAA. We provided some additional dollars, I think, some $4 million. I want to ask a two-part question.

Have you seen any effects from the additional resources we are providing, and is FAA, doing that either having just difficulty finding people to fill those positions?

And two, you mentioned delegation on the certification. Maybe you could elaborate a little bit more on how we can—how Congress can move that forward.

Mr. PELTON. Mr. Chairman, actually, your two questions are linked together.

We went back and testified last year relative to getting appropriations for the FAA's certification branch. We really applauded and appreciated your support of those dollars being allocated. My understanding, to the best of my knowledge, is that the actual money did not go into the certification offices, that, in fact, that money went other places. And so unfortunately, the FAA has not staffed and manned up to the needs of the industry as we see it today.

The reason I say that the question is also interlinked is that it requires those near-term resources to be able to move industry to a position where delegation can, in fact, occur. I think if you listen to the FAA, they will tell you that you need to migrate from today's processes to a delegation environment which does require oversight of technical experts within the FAA. If there is a shortage today, that is only going to slow down and inhibit the process of moving to the delegation faster.

So it is really complicated in the sense that we do need the FAA to step up and get the staffing that they need today to handle the near-term—near-term demands that industry is placing on them, while they change their business model and their role in the future of being oversight for delegation with industry.

What we would like to see Congress do is to continue to encourage the FAA to move faster in the form of delegation, but also hold them accountable for the moneys that were sent to them to hire the appropriate positions that they need in the certification offices today.

Mr. MICA. Well, these field hearings are nice, but sometimes we should have some positive, concrete results. I am glad that you put those comments on the record, very frankly; and I think one of the things that could be helpful, and I will ask my colleagues to join me, is that as we send Ms. Blakey and Secretary Mineta a letter of our concern about the diversion or lack of use of those funds appropriated by Congress for a specific purpose. And then also encouraging this delegation authority and expediting that to assist the industry.

So maybe I could get—I think I have got three that will join me here. An affirmative nod from Mr. Ehlers, too. So we can do that from this hearing.

Mr. Schuster, you cited one of the concerns we have about the new regulatory regime, at least in the European Union; and I have a quick, two-part question. One, have you seen any of the regulatory shenanigans or maneuvering, or is it too early for that?

And then, two, how do we counter a block like the European Union with the new regulatory regime from proceeding unfairly and using the regulatory process to a competitive disadvantage to the U.S.?

Mr. SCHUSTER. Your two-part question, you answered the first part, I think, correctly; and it is probably a little too early to draw conclusions as to exactly how that is going to work. Speaking from Raytheon Aircraft's perspective, I would say it is too early. My compares here may have a different view.

I think the first part of the answer to the second question is back here on our own soil—and it comes back to the same discussion we just had about the certification process and the FAA funding and so on in making absolutely certain that we don't create a system, a set of processes, here in the United States that are not—that don't facilitate the introduction, development, and launching of new aircraft; and making sure we have a—a system that is at least on par with what European manufacturers are capable of doing.

You couple that with the fact that the industry is going through some pretty profound change with the emergence of companies like Embry Air. The competitive landscape is changing dramatically, and as lower-cost international players come into the game, the Cessnas, the Raytheon Aircrafts, the Gulfstreams, the Pipers and so on in the United States are going to—we are finding ourselves, particularly from a cost perspective, competitively disadvantaged in many situations. And one of the outcomes of that, unfortunately, is that when you have to compete in the international marketplace, in some cases on the basis of cost, or you are competing against a certification processes, I say that works better or faster and there are lower costs, you end up having to move American jobs.

I think one of the realities that we all have to face is that when you put all these factors together, if you slow down the certifications in the United States, if there are barriers put in place at some of the international regions and other regions of the world, cumulatively the effect on this industry is going to be American jobs.

And the real answer, I think, is how we solve that in Europe, but I think it is still in front of us. I don't think we have a solution today. I think that it starts—my focus is right back here on the FAA and making sure we get our planes certified.

Mr. MICA. Thank you.

Mr. Bunce, a final question for you. You talked about export controls and how they do impede—sometimes impede our competitiveness.

How do you set up a regime that will determine, you know, whether dual-use items, what is available on the market because I know that we are put at a disadvantage. I have seen specific instances where we have delay in getting approval where someone else can get another product from another country with basically the same technology, and that sale is gone.

How do you speed up the process? How do you deal with creating a level playing field?

Mr. BUNCE. Well, Mr. Chairman, I think if we take a look at the working groups that exist between Commerce and State, and also within State with the economic side of State, and then the military side of the State Department that actually have to wrestle with this, that is what we are all in, in trying to get people to talk together with industry. And actually at the State Department, the folks that are tasked with being able to go ahead and sort through this whole process are tremendously undermanned to be able to keep up with all the requests that are coming in to them. So they have told us, and we have tried to work very closely with the State Department that they want us to self-identify and self-regulate the items that we have that are both for military and commercial aircraft.

The problem with that is that you lay a lot on the line when you do that. And if there—if there was a more formalized process where we could go in and look at the ITAR restrictions that are out there and be able to go ahead and say, okay, is this really technologically something we don't want to go to people that are unfriendly to us, or is this just basic—just basic, like rivets and rings and the things that I spoke of, that really are something that American manufacturers can make no differently than another foreign manufacturer, but we ought not put U.S. companies at a disadvantage.

So I think it is working an emphasis from the Congress that Commerce and State work with industry to be able to have the mechanisms to be able to classify these products that could help us.

Mr. MICA. Thank you.

Mr. Ehlers.

Mr. EHLERS. Thank you, Mr. Chairman. Most of the questions I had planned on asking you he has already asked, so I will—I appreciate the opportunity to be brief.

Mr. Bunce, on the tax policy issue that you mentioned, I was not aware of that, and I think we should try to address that. It is—as you know, tax issues take a long time to change and resolve. But I wasn't even aware of that, but we can certainly sympathize with that because we face the same problems in Congress, as you know, modern taxation.

And it comes up from an attitude of the public that somehow an airplane is special and a car isn't. So if I have to give a speech out of town and a friend offers to drive me there in a car, that is fine. I don't have to report it. If someone takes me there in an airplane, I have to pay them first-class—equivalent first-class airfare. I have to report it to the Federal Government, not once but twice. We have to get away from the idea in this country that somehow airplanes are to be treated differently.

We have the same thing in accidents. The public accepts with great equanimity 42,000 deaths a year from cars. And you have a crash of an airplane, two people killed, one injured, it is headlines for days.

We somehow have to try to educate the public about that issue, that they should be treated equivalently and considered equiva-

lently. And I would certainly be happy to work on the tax issue with some of my friends on Ways and Means.

The export restrictions are a real bug to me, and again, I don't understand the mentality, but I recall when I first got into office there were export restrictions on encryption products for cybersecurity because the attitude was, we have it in America, we don't want to weaken our stance with our enemies abroad by having them get the same encryption abilities. So there are restrictions in place.

The military persuaded enough Members of Congress, this is important. I fought that. I did not win. I said the other—the rest of the world will develop these encryption standards and manufacture them and sell them, and that is what happened. The Israelis and some other companies did it. We lost a whole industry right there just because of stupid export restriction laws.

And if that affects you, it is going to have the same impact. You are going to lose business abroad because restrictions keep your suppliers from selling abroad.

On tort reform and suppliers, I would be happy to try to do what I can with that, too. That is, as you know, the toughest one to change. But that, again, gets ridiculous and costs you a lot of money, drives your suppliers out of business. It is just no way to run a country, frankly. So I will work on those two.

So no questions. I just wanted to give you some encouragement.

Mr. MICA. Thank you, Mr. Ehlers.

Mr. Moran.

Mr. MORAN. Mr. Chairman, thank you very much. I would point out, Ms. Harrah, that Congress has passed and the President signed a new student grant program for disadvantaged students who are pursuing issues—education in the area of engineering, math, and science.

The Board of Education is now developing the rules and regulations, and I am hopeful that it does create additional opportunity for students who might not otherwise have that opportunity, although I have discovered that it still remains very difficult to get some of our best and brightest interested in math and science. Somehow, perhaps even at younger ages than high school, we have got to raise the awareness, create excitement within that area.

If you have any suggestions, I would be glad to—I have two teenage daughters. I would be glad to have your advice on my personal family as well.

The FAA certification, Mr. Pelton, my question was going to be really to you and to Mr. Schuster and Mr. Bunce as well.

Is there one area of effort, one area of regulatory reform that we ought to be pursuing? And I guess you have answered that question. It really does—it is always difficult for me to address these issues when my constituents complain about bureaucracy. That is an age-old battle that we continue to fight.

But if there are specific examples of where that bureaucracy creates a handicap, a hindrance to economic activity, we are better able to attack them one at a time; and I just would ask, is the priority, the reform that you mentioned, is that where we ought to focus our attention on certification?

Mr. PELTON. I think the concern we have as an industry is that for us to be successful, it is all about time to market. It is being able to get our products to the market when the economy is up, which means you have to have a certification system that is responsive to the speed of the industry. And currently, with the staffing shortfalls and the inability to move as quickly as we would like to delegation, we are being hindered in getting product to market as fast as we would like; and that is showing up today when you make a submittal for a new model certification. You get a letter saying, get in line and we will prioritize based on the resources we have within the FAA.

We have to break that roadblock, and I am convinced that breaking the roadblock is going to be industry and the government collaborating, both on the funding side of it with the government along with the delegation side to industry. It can't be just push it all onto the FAA. We have to take some of that responsibility ourselves.

Mr. MORAN. What is the average length of time, some number that we can compare certification here in the United States versus certification elsewhere in the world? Do those statistics exist?

Mr. PELTON. They don't because it is very confusing as to size, type of certification, and complexity of certification. But I think it is fair to characterize today that if you want to certify anything new, if you are starting a new model, it is going to be delayed in getting into the prioritization system within the FAA, because they just don't have the resources to support all of industry's needs and demands in this robust economy that we have right now.

Mr. SCHUSTER. I will relate a meeting that I was involved in where you have a group of people sitting around a table talking about measuring the rate at which you can invest research and development dollars based on the negating factor of moving projects through the FAA certification process; and we think about the second and third order of effects of reducing research and development in an industry like this.

It goes way beyond—people think about the loss of industrial jobs, factory jobs and so on, but it really does potentially slow the rate at which this industry continues to reinvest. So I have to believe those same meetings are taking place across the industry.

And at the same time we are looking to Congress and to the FAA for solutions to that so we don't find ourselves literally slowing at a rate at which we are investing in an industry that is so important to this country. But those meetings are beginning to take place.

Mr. MORAN. Is the primary reason for the delay related to resources, dollars?

Mr. SCHUSTER. Honestly, Congressman Moran, I think it is all about the money in the end. I really think that is the issue. It is, if the FAA has the financial resources, support that it needs to do what the industry would ask them to do, I think many of these problems go by the wayside.

Mr. MORAN. Thank you very much .

Mr. BUNCE. If I could just add, you all were very kind to get the additional $4 million for us. All we ask is that certification be brought back to 2004 levels. That was in report numbers. Now we

are halfway through this fiscal year, and the problem is that we don't see that is where the money is being spent.

The FAA had a large rescission, and that is where some of those dollars went. It looks like the budget request that the FAA came in with for 2007 will get us back close to the numbers that we asked for. So if they do get their full appropriations this year for the certification branch, we are hopeful that will bring it back. But we are asking the Appropriations Committee to be able to put that mandate for the bodies in a bill in which we can actually say, this is what Congress intended.

Do this. Help industry with that certification.

Mr. MORAN. I will yield to Mr. Ehlers.

Mr. EHLERS. I thank the gentleman for yielding. I wanted to get briefly a comment from Ms. Harrah about the issues you raised.

I have spent over 30 years trying to improve math and science education in this country, K-12, and since I got in the Congress, I have spent 12 years there working on it. It is really a tough issue, but we are losing out to other countries. We have been for a long time. And what makes it so crucial for your industry is not just producing engineers and technicians, but it is producing pilots, and particularly what you might call ″lay pilots,″ people that enjoy flying, want to learn, and they just get intimidated because if they didn't have the right math or science in school, they have to understand vectors and things of this sort, it—they'll throw up their hands and say, well, I will just drive.

I think it is a crucial problem, and I have—as I say, I have worked on it for many years, spoken in a lot of schools, and I found—I am starting to get credibility with the high school students by simply telling them, the courses they choose in high school are very important because if they aren't nerds, they are going to end up working for a nerd. That sort of intimidates them, and so they start looking at nerds more kindly. Then I say, we even have nerds in Congress, which they refuse to believe. I say, I can prove that I am a nerd. Of course, they don't believe that. I say, look, plastic pocket protectors; it is still there.

But we have to change the attitudes of kids at school, and particularly young girls. This is the only major country in the world that somehow has the culture that girls can't do math and science, and I don't know where this comes from. But we should have far more young girls interested in math and science.

Thank you.

Mr. MICA. Okay.

Mr. Tiahrt waiting patiently. Thank you.

Mr. TIAHRT. Thank you, Mr. Chairman. I would like to sort of start this off with a conversation that I had with Mr. Schuster shortly after September 11, 2001, about a wire harness job that ended up going to Mexico, I believe. And I was sitting down with him talking about, you know, the possibilities of outsourcing in Wichita with people that do wire harnesses, and Jim made a comment to me, and I would like to repeat—I am going to paraphrase what he said.

He said, basically, even if the wages were zero, I would have to consider shipping these jobs outside. And it dawned on me then that there were costs beyond the control of the private sector that

impact the decisions on where the jobs are going to be, whether they are in America or overseas. And following that discussion I started looking at costs that the industry faces, and part of it goes back to my years at Boeing where I was a proposal manager, and we had thumbnail guesses—WAGS, what we called them, wild-ass guesses—about prices, and we had a set rate of about $150 an hour for manufacturing. This was over 10 years ago.

But in that wage was only about $17 or $18, and the rest of it was cost beyond just simply wages. And I realized that the problem in America is not wages, it is all these other costs. So I went through and started making a list of them, costs that cannot be controlled by the companies, by the CEOs. It was health care policy, bureaucratic red tape, it is education policy, trade policy, tax policy, energy policy, how we apply our research and development dollars, and lawsuit abuse. And these are all costs that companies confront and pay for, but have no control over.

If you look at the origins of those costs, they came from Congress over the last generation, starting mostly in the 1960s. And I think it is up to this generation of people who are in Congress to eliminate those barriers or certainly reduce them. So as I see some of these barriers come up, I would like to highlight some of them in this—in my questions.

The first one I want to address, and to me it is kind of this—the huge elephant in the room we haven't really talked about much, and that is user fees; and it is a very controversial item because it is, in effect, a cost shift from one segment of the industry to the other. And, you know, when people ask me, who are you for on this certain policy, sometimes I have friends on both sides of the issue, and I say, I am for my friends. But the truth here is that this is a—there are vulnerabilities in this industry that I want to point out.

Historically, user fees have a detrimental effect on the sale of aircraft. And a good example of that is the European Union which has user fees. If you look at general aviation and see the number of aircraft per 100,000 people in the European Union versus in America, a big difference. Part of that is because of user fees. If you try to divide general aviation, normally general aviation is explained as nonmilitary, noncommercial carrier. General aviation, now they are trying to put another segment in here of business jets versus general aviation. I think that is a bad thing to do. But even if you look at general aviation, less single-engine aircraft per 100,000, significantly less in the European Union. Part of that is user fees.

Also, the concept of user fees creates a new bureaucracy within the government. We don't have a bureaucracy to do that now. See, here we are, once again, adding to the cost of American taxpayers in the form of a heavier bureaucracy.

But I think the third thing is that the justification for this, I think, is inaccurate. If you look at the required air traffic control at, for example, DCA, Reagan National Airport, we shut down general aviation following September 11, 2001, and even today it is not back up and running to a large degree. I think it is about 30 flights a day come in. There was no reduction in the cost for air traffic control during that time when there was no GA.

On the flip side, if you look at Nashville and Charlotte, North Carolina, Nashville, Tennessee, where they were getting ready to make those hubs, they ramped up, but the air traffic control never ramped down following when one of those hubs pulled out. So I think the overall basis is not—is not justifiable.

So now I have addressed these issues I wanted to bring up here, Mr. Chairman, and I think it is detrimental to think of user fees.

So going on to my questions very briefly, because I know we are pressed for time, and I have only taken up 5 minutes so far, I want to address trade policy because I think Cessna has had a significant gain in Central America following DR-CAFTA.

Jack, would you just comment on that briefly?

Mr. PELTON. As a result of the trade policy, you are right, Congressman Tiahrt, we have grown significantly in other international deliveries. What is probably the biggest pressing issue that Congress could help on is, if you look at the growing markets that we see, we shifted from what was classically about a 30 percent export in general aviation to an order book this year that was over 40 percent potential export. So the growth in our industry is clearly outside of our own borders, and we have to make sure that our policies continue to support that growth externally.

Some of those policies not only have to deal with export policies, but also get all the way back into regulatory policies and bilateral agreements with other countries. The ITAR control and the export control policies that are necessary to help facilitate that growth outside of our own borders, it is huge. Clearly the legislation that Congress put into place some time ago opened a significant market in South America for us, and we thank you for that and encourage you to continue to look at, as the world continues to flatten, how we can get products into other parts of the world.

Mr. TIAHRT. Thank you, Mr. Pelton.

Mr. Schuster, I would like you to talk a little bit about the biggest barrier that you face now as far as increasing costs and the policies that surround that.

Mr. SCHUSTER. Well, I think you touched on it. The first one that comes to mind is the cost of health care.

If you—if you were to poll the aircraft manufacturers around the country, I think that would show up at the top of every list. In a 3-year period, beginning in 2002, the annual health care costs at Raytheon Aircraft went up $60 million. That is $60 million of additional costs that you have to take out of the business or find in prices or deal with in other ways across the business.

And, you know, I can tell you that across—in boardrooms across the country, this is an issue that we are all facing when it comes to making decisions about where we invest, how we invest. And the comment I made about wire harnesses, literally looking at the zero wage cost when you add the cost for health care and other benefits, especially with an aging workforce where you have increasing pension liabilities and so forth, you have to weigh very carefully where you are going to invest the precious dollars in capital equipment and facilities and so on. And that is—you know, that is an issue that we are all struggling with that you add to the mix.

The fact that—I am being a little repetitive—but the emergence of companies like Embry Air, the cost structure—the manufactur-

ing cost structure that is somewhere south of 50 percent of what we pay in Wichita, Kansas, for the hourly workers and for the engineers, this issue of cost becomes an enormous problem for all of us.

And when I was making notes as we were talking here, when you think about the international emergence of these low-cost manufacturers, a potential slowing of research and development into this industry because we have a certification process that is constrained—and we can argue about why and what the solutions are, but I don't think we would argue it is constrained—the potential repercussions of problems like user fees, and all the friction that we are placing on these markets, you can't point to just one and say, that is going to bring us down. But when you have to live with those things cumulatively every day, and you think about the impact on this industry, together those issues can, in fact, bring general aviation down.

In the light of a strong economy, I think our fears and our concerns tend to maybe get pushed aside a little bit. I think the discussions and the conversations that we all have would be very, very different under different economic circumstances, and those circumstances will arise. They will come to be—one day we will be facing an economy that is not as strong some day through the natural cycles, and we have to get prepared for that day.

Mr. TIAHRT. Ms. Harrah, as an educator, what incentive do you think we could provide to attract young men and women into technical fields like engineering?

Ms. HARRAH. Well, Mr. Ehlers is quite correct. A lot of this, you have to capture them quite young. I think probably grade school and junior high is where you really need to capture their imagination, and science and math is an area that I am interested in, and I want to pursue long term.

But I think certainly at the university level, any kind of Federal scholarship help for those students—similar to what we have if you want to become a doctor; there is money available if you want to go and serve in rural areas. Likewise, if there are critical needs for science and engineering, if you provide some scholarship dollars for students that want to go into those fields and stay in the country and work here, I think that would be very helpful as well.

Mr. TIAHRT. Thank you. Because I think we need to figure out a way to do both, reach them when they are younger and also provide an incentive when they approach their college and undergraduate degrees.

My last question, Mr. Bunce, is it true still—one time it was, I know—that if there is a parts supplier in the European Union that can provide a part for an aircraft that is flying in the European Union and one that can—may have originally been made in America, can you—are we allowed to compete with that parts supplier in the European Union? Or do they have to buy from that European Union parts supplier when there is a need in an aircraft?

Am I clear about my question.

Mr. BUNCE. Sir, I think you are clear about the question, but I am not familiar with what the restrictions are. My colleagues here might be, but —

Mr. TIAHRT. I am sorry.

Mr. SCHUSTER. It is probably military.

Mr. TIAHRT. I am sorry.

Mr. SCHUSTER. It may be just applying to military.

Mr. TIAHRT. It may be just applying to military.

At one time I heard testimony that if you are a supplier of aircraft parts in the European Union, you are isolated from competing with American parts suppliers. They have to take you first.

But I would like to check that out, if—

Mr. BUNCE. We will get back to you, sir, on that.

Mr. TIAHRT. All right. Thank you, Mr. Chairman.

Mr. MICA. Well, thank you, and I want to thank each of our panelists for participating today. We look forward to working with you. I think this hearing is only the beginning of our new effort to—in Congress to make sure we keep U.S. aviation manufacturing competitive. So we will excuse you at this time, and as I said, we are going to keep the record open for a period of 2 weeks.

Let me call the second panel of witnesses. We have five individuals on that panel: Mr. Jeffrey Turner, CEO of Spirit AeroSystems; we have Mr. William Greer, Vice President and General Manager of Airbus North America Engineering; we have Greg Mullins, General Manager of Lyons Manufacturing; we have Kevin Hawley, President of Aerospace Systems and Technologies; and we have Finley Nevin, President of Global Engineering and Technologies, Incorporated.

So we will welcome all of those witnesses. If they would come up and take their respective seats .

I welcome our second panel of witnesses today. Maybe you heard me before. If you have a lengthy statement or additional information you would like to have made part of the record, you can do so through a request of the Chair.

TESTIMONY OF JEFFREY L. TURNER, PRESIDENT AND CEO, SPIRIT AEROSYSTEMS, INC.; WILLIAM W. GREER, VICE PRESIDENT AND GENERAL MANAGER, AIRBUS NORTH AMERICA ENGINEERING, INC.; CRAIG S. MULLINS, GENERAL MANAGER, LYONS MANUFACTURING; AND KEVIN HAWLEY, PRESIDENT, AEROSPACE SYSTEMS AND TECHNOLOGIES, INC.

Mr. MICA. We will go right ahead and, I will first recognize Jeffrey Turner, CEO of Spirit AeroSystems, Inc.

Welcome, sir, and you are recognized today.

Mr. TURNER. Thank you, Mr. Chairman. Mr. Chairman and honorable subcommittee members, I want to thank you for this opportunity to address this important topic of ″Keeping U.S. Aviation Manufacturing Competitive.″ this subject is of supreme interest to my company and to all of our industry.

I am Jeff Turner, the President and CEO of a relatively new company, but one with a deep history of aviation manufacturing. Spirit AeroSystems is the world's largest independent tier-one supplier of aerostructures. Until June of 2005, we were a supplier division of Boeing Company.

With headquarters here in Wichita, Kansas, and operations in Tulsa and McAlester, Oklahoma, we have 10 million square feet of facilities, and about 10,000 employees, about 8,500 of whom are

here in Wichita. We have been engaged in aviation and aerospace manufacturing for over 75 years

Our future is dependent on our ability to remain competitive globally. We strive to become the preferred partner to the aircraft industry supplying top quality fuselage and propulsion structures, wing components, and tooling services to original equipment manufacturers, the OEMs. In addition, we offer spare parts and aftermarket support to airline operators worldwide.

We continue to be the largest supplier to the Boeing commercial product lines, and are actively marketing our skills and capabilities to other aerospace companies throughout the world. Our pending purchase of BAE Systems Aerostructures operations in Scotland and England is a prime opportunity for Spirit to diversify our revenue base, our geographic base, and grow as a world leader in our various capabilities.

I do not believe our position on competitiveness is significantly different from that of other aviation manufacturers. Simply put, we want a level playing field upon which to compete in the global competition. Several factors can help or hinder our participation.

The first is the funding for aviation research such as that here at Wichita State University's National Institute of Aviation Research. NIAR houses an FAA Center of Excellence for Advanced Materials and the NASA National Center for Advanced Materials Performance, and all three have helped us specifically compete with non-U.S. manufacturers.

Second, the need for technical training continues to be essential to securing, sustaining, and retaining the skilled workforce needed to expand our business over the next decades. Projections for our community indicate that five major aviation companies in Wichita may need as many as 4,150 trained workers just this year alone.

Third, attention must be given to developing U.S. engineering talent. Aerospace engineers are the source of future innovation that will provide American aviation manufacturers a competitive edge. Yet the supply is exceeded by the demand. At Spirit AeroSystems we hope to hire about 550 engineers over the next 5 years.

Fourth, capital is needed for product development, new process planning, and new equipment. It is a challenge for Spirit to compete against companies that seem to have an unlimited flow of public assistance to build facilities and fill them with equipment and trained people. This is especially true in developing economies that have targeted the aviation market.

Fifth, health care is the number one rising cost for Spirit and other companies. Health insurance premiums jumped 75 percent—73 percent over the last 5 years. Such escalation continues to be not only a source of competitive disadvantage for U.S. manufacturers in our industry, but also a considerable source of employee/company friction and overall employee concern for the future.

Sixth, and finally, while protecting the national security, we must be able to compete internationally in an open and collaborative way. Appropriate import/export regulation measures are important, but they must be implemented reasonably with full understanding of their cost and their benefits.

In conclusion, thank you again for the opportunity to speak today. This is a critical topic for Spirit AeroSystems. Our customers

and our competitors are global and so must we be. The technology utilized in our products also is global, and our ability to work effectively throughout the world with both customers and partners is essential. To remain competitive, our U.S. industry must be supported with world-class research capability, engineering and technical training, and continuous investment in product, process, and equipment.

Thank you.

Mr. MICA. Thank you.

We will now hear from Mr. William Greer, VP and General Manager of Airbus North America Engineering. Welcome, sir, and you are recognized.

Mr. GREER. Mr. Chairman, thank you for affording me the opportunity to testify this morning, and also thank you for having this hearing in our town. My name is Bill Greer. I am the Vice President and General Manager of Airbus North America Engineering, which includes our facility here in Wichita and a new engineering center in Mobile, Alabama that will open its doors in early 2007.

I have been involved in the industry for a lot of years, more than I would like to say, really. I joined McDonnell Aircraft in 1963 as a junior engineer working on the F4 fighter. Since then I have worked or consulted for a number of companies, including Learjet which first brought me to Wichita in 1972.

If I may, I would like to address three key topics with you today: What I see as the current state of U.S. aerospace, the factors currently driving American innovation, and lastly, what I see as the wisest course for the future. First, the current state of the industry.

Mr. Chairman, I believe the experience Airbus has had in the United States and especially here in Wichita is quite relevant to the subcommittee's efforts to understand how to keep U.S. aerospace strong. I emphasize keep it strong because, in general, the current state of the aerospace manufacturing industry is good. And we at Airbus know this to be the case from firsthand experience.

When Airbus looks for suppliers and business partners, it looks around the globe for the best quality, price, service, ongoing support and more than anywhere else Airbus finds these best suppliers, best supplier companies in the United States.

Last year, Airbus spent $8.5 billion with our suppliers here in the U.S. for parts, components and systems and such items as rivets, wing panels and parts, hydraulic systems, landing gears, evacuation slides and engines, and that is just a short list. This number, $8.5 billion, represents about 46 percent of Airbus's entire procurement budget for aircraft manufacturing. In fact, Mr. Chairman, more of Airbus procurement budget is spent here in the United States than any country in the world, including Europe. And as a result, Airbus has become the number one export customer of the U.S. aerospace industry.

Our contracts with American industry in more than 40 States support 170,000 American jobs - the kind of jobs that are the backbone of the U.S. industry and U.S. economy. But this is only part of the story. That brings me to my second point.

Airbus' partnerships with U.S. companies are also helping to drive innovation in the United States and sustain America's manufacturing competitiveness. I am going to give you one example. At

our wing manufacturing plant in the North Wales town of Broughton, one name is displayed almost as prominently as Airbus, and that name is Electroimpact, a company from the Seattle area whose business originated with Airbus. And developing a wing that could lift the world's largest commercial aircraft, Airbus relied on Electroimpact's innovative engineers to design, perhaps, the most sophisticated tooling equipment the aerospace industry has ever seen. And the American engineers from this small company in Washington State rose to the challenge.

Today, Electroimpact provides virtually all the tooling for the Airbus A380 wing. In addition to making this high-tech equipment here in the United States, Electroimpact employees from the U.S. worked side by side with the Airbus team members in North Wales, and thanks to its partnership with Airbus, Electroimpact is now a world leader in the field of high-tech tooling equipment.

This story is especially relevant to this hearing. It is important to understand that what brought Airbus to Electroimpact was not cheap labor. What brought this company to Airbus was its engineering powers and its manufacturing excellence.

Electroimpact is but one example of how our partnerships with United States industry produce cutting edge aerospace technology and equipment, which is a lifeblood of American competitiveness in this industry. And in my submitted testimony I have got several other examples as well.

In sum, Airbus has gone from merely recognizing the competitiveness of U.S. aerospace technology through our purchases, to now sustaining this competitiveness through our partnerships.

I am going to return to the theme of engineering prowess, Mr. Chairman. It was American know-how, again, that led Airbus to the United States. The Airbus North America Engineering Center was first opened here in Wichita in 2002 to help design the wings of the super-jumbo Airbus A380.

Congressman Tiahrt—you may remember, he participated in our opening ceremonies and may remember that the facility was planned for only about 40 engineers of a certain type—I am delighted to report that things have changed since then. We now employ more than 200 engineers and we are moving to expand that very rapidly from that point, and we are working on all the Airbus products, the large airplanes anyway. We do the A380 passenger, the A380 freighter, and the A340 and the A350.

Now, Airbus Wichita would like to hire more engineers, including recent college graduates, but we are finding that supply is limited. This is a big concern for us, and I know it must be a big concern for the subcommittee as well. Several of the witnesses testifying have mentioned that already.

In particular, the aging of the U.S. engineering community will result in an even more severe shortage of engineers within a decade or so, if the current trend continues. Unfortunately, the up-and-down cycles of our industry have taught young people that careers in aviation are risky. And who is to blame them when they are the very ones who lose their jobs in a down cycle?

By the end of 2007, I will need more than 450 engineers at our Wichita and Mobile, Alabama, facilities. If I can't meet the expected demand with high quality experienced engineering talent

available here in the United States, then I will not be able to continue to grow this company and maintain our competitive advantage in the global market.

Now my third and final point, Mr. Chairman: the best way to secure American aerospace for the future. You see, I believe the key to remaining competitive is innovation, and one of the keys to innovation is to generate a large community of highly motivated engineers and scientists. From my vantage point here in Wichita, one thing is crystal clear. We must make this a national priority.

I do understand that the President and Members of Congress have put forth several initiatives to address this issue, and as an engineer myself, and a manager of many others, I would offer some additional ideas I believe are worth considering.

First as I mentioned, the key to remaining competitive is constant innovation. Once the process or a technology is matured, it will migrate to the lowest cost supplier. Consequently, American aerospace must identify the core competencies and continually upgrade them through the application of advanced technology. This subcommittee can help in that regard by spearheading incentives to continually train and retrain employees to produce complex assemblies through advanced technology.

Second, the base of engineering talent must be increased through programs that encourage middle school and high school students to consider science and engineering as a desirable career choice. In addition, since over half the workforce are women and minorities, and traditionally these groups do not enter the engineering fields, special programs should be put in place to encourage their participation in engineering careers. Dean Toro-Ramos, of Wichita State University, has proposed such a program and one that I fully support.

And lastly, funding for scholarships should be increased to allow any qualified student to have access to a technical education.

This last idea is very important to me. Just before I graduated from high school, the Soviet Union launched the first Sputnik and our leaders responded to this challenge by putting scholarship programs in place to encourage more young people to enter the technical professions. I personally received a full scholarship from the State of Illinois for my engineering education which was based on ACT test results, and I would not have been able to attend university and wouldn't be talking to you today without that program.

So, Mr. Chairman, I must ask that if the driver of competitiveness is innovation, then the key to innovation is competition itself, and in this or any industry, competition drives companies to develop products that are better, faster, stronger or more sophisticated than others. For the U.S. and aerospace industry competition results in greater fuel efficiency, more passenger comfort, increased ability to transport freight longer distances, and higher safety standards. And we have seen all these improvements over the course of years driven on large part by the helpful, beneficial competition between Airbus and Boeing in the marketplace.

Competition-driven innovation led to the original Airbus A300, which drove Boeing to develop the 767. Then Airbus responded with the A330, while Boeing responded in turn with the 777 and now the 787. Now Airbus is creating our A350 as well as the A380

that I mentioned earlier. Competition drives innovation which drives competitiveness. This principle applies not just to the final product that Airbus and Boeing roll off the assembly line, but to nearly every piece of equipment that goes into these aircraft.

This leads me back to where I started: keeping U.S. companies competitive with the rest of the world, and keeping companies such as Airbus and Boeing reliant on American manufacturing, will require America to remain focused on the fundamentals—investment in education, encouragement of innovative technologies, and support for robust competition in a global industry that thrives on innovation. With strong support from you and the members of this committee aerospace will continue to lead. Thank you very much.

Mr. MICA. Thank you for your testimony, Mr. Greer.

We will now hear from Craig Mullins, General Manager of Lyons Manufacturing. Welcome, and you are recognized.

Mr. MULLINS. Thank you, Mr. Chairman. Good morning. I am Craig Mullins, General Manager of Lyons Manufacturing, and it is an honor to be here today to give my testimony on keeping—helping to keep U.S. aviation manufacturing competitive.

Founded in '39, 1939, Lyons Manufacturing is a small company independently owned manufacturing machines—aircraft parts for commercial airplanes. We employ between 30 and 40 people and one—we are one of the larger employers in the small town of Lyons, Kansas.

I have worked at Lyons for more than 16 years and seen many changes take place in the aviation industry. My testimony today will cover some issues I feel hinders small businesses like ours.

The first one, of course, has already been discussed is health care cost. In order to stay competitive with other employers in our area, we offer health care benefits to our employees. Over the years this has become more and more difficult due to the rising cost of offering this type of benefit. In the year 2000, our average annual premium for health care coverage for one individual was almost $5,000. In 2005, that price increased to $11,000 annually. This is 120 percent increase over the 5-year period.

Needless to say, this is an expense that we pass on to our customers in the form of labor costs. Small companies like Lyons cannot continue to pay the increasing cost and stay competitive. Many small companies like ours are starting to drop health care coverage or pass the expense on to the employees. Every year there is a question of whether or not we should continue to offer health care benefits. The problem is I know that health care coverage is an important factor and a necessity to the employees. And I would lose many good people if that benefit would not be offered to them.

The second factor is utilities. As in many manufacturing industries, utility usage is a main cost of producing goods. Over the last 5 years it has become an increase in expense for our company, and I don't see any—anything getting better in the near future. In year 2000, our expenditures for utilities was roughly 56,000. In the year 2005, it was roughly $76,000. This equates to about a 36 percent increase over 5 years.

The third issue is labor. Aero structure suppliers like us are increasingly being forced to assume greater responsibility for supply chain management. If the knowledge and experience we possess

are not adequate to undergo this kind of task, it is easy to fall short of our goals or our professional expectations.

One of the biggest challenges will be in the education and training of our employees. One of the biggest challenges—excuse me. Well-trained, educated people will make better and faster decisions based on unprecedented flow of data, information, and knowledge. Only trained and educated people will be able to separate useful information from useless information. Small towns like Lyons suffer from young adults leaving for college and never returning. Some young adults decide to stay, but never continue their education. Without an educated labor force, we will be left behind or unable to seize new growth opportunities.

When I decided to continue my education at one of the local colleges here in Wichita, I found myself in a classroom of students working in the aviation industry. Practically all my classmates were receiving 100 percent tuition reimbursement from their employers. I remember being angry because my company could not afford to help me, and I had to pay to better my education for the benefit of the company. I am not saying I disagree with these companies providing education for their employees, but it is a problem for small companies to offer the same type of benefit.

I would like to see Federal and State funding become more available for small companies to allow them to educate their employees. This would help us stay competitive in business and attract key employees.

The fourth issue is material pricing and shortages. During the last year and a half, we have seen problems with availability of raw material and substantial price increases. Availability of aluminum and steel has created scheduling problems, production overtime, searching for other material suppliers and missed deliveries. Since we are a small company, we are unable to buy large quantities of raw material for better pricing, so we have seen price gouging due to shortages of this aluminum and steel plating.

These are just a few topics that we are faced with in today's competitive industry. Even though we are a small company, we are one of thousands in this country, and I am sure companies small and large are facing these same issues.

Again, I appreciate this opportunity to testify before this subcommittee.

Mr. MICA. Thank you, Mr. Mullins.

And we will now hear from Kevin Hawley, President of Aerospace Systems & Technologies. Welcome and you are recognized, sir.

Mr. HAWLEY. Chairman Mica and members of the subcommittee, again, my name is Kevin Hawley. I am President of Aerospace Systems & Technologies, Inc., an aviation products company located in Salina, Kansas, 90 miles north of here. I wanted to thank you for this opportunity allowing me to testify and discuss topics, as I see it, for aviation business and maintaining our competitive edge.

Our company is best described as a supplier to the aviation community, both to end users and original equipment manufacturers. We market ice protection systems to the general aviation field, from high performance piston powered aircraft to business jets. Our TKS ice protection system has become the standard for general

aviation aircraft and we are realizing a tremendous growth in our business because of that product.

Our company is a wholly owned subsidiary of CAV Aerospace, Ltd., of the United Kingdom. A majority of the components of the ice protection system are manufactured in the UK; however, a vast majority of the produced product, in terms of ice protection, is sold here in the United States, and our company acts as the focal point for that commerce.

Our office here in Kansas is involved with TKS in four principal areas. First, design and engineering, certification, distribution, sales and marketing, and customer support.

Maintaining business success and competitiveness in the aviation marketplace requires the fulfillment of a number of factors. Our location and infrastructure requirements are met exceedingly well by the Salina Airport Authority and the community of Salina. Most of our personnel needs are likewise met from within the community, both in staff and technical fields. As an example, Kansas State University in Salina has supplied many of our trade and technical personnel in terms of engineers and mechanics and will continue to be a resource for top notch recruits.

There are, however, specific areas of concern relative to the success of our company and our product line. I would like to share those concerns with the committee and examples. There are three: first, certification and regulation, which you have heard much testimony about today; second, again, product liability; and third, recruitment of technical resource.

As you can see, it is obviously a topic of almost everybody that has testified today, and I am just echoing that. I see certification as a potential log jam with future developments of our products. We have a good working relationship with our cognizant FAA representatives and appreciate the efforts they direct to our projects. We see, however, that the workload of the FAA continues to grow while staff size remains dormant or decreases.

The overall effect is not a difficult concept to grasp. Program schedules can become more indeterminate as the FAA struggles to address programs. Program selection becomes more prioritized relative to FAA resources, potentially delaying response to our projects. Certification workload is transferred to companies via delegation increasing the demands on the company's resources from both a personnel and financial standpoint.

I also find that the regulations are becoming more restrictive, but not necessarily to the benefit of the general public. Much, if not all, of the modifications and embellishments of the Federal aviation regulations have been accomplished with safety in mind. Pursuant of regulatory safety is the noblest of goals and an absolute requirement for aviation products, but not at the expense of introduction of safety products to the market.

General aviation continues to evolve as a serious and realistic alternative to commercial airline travel. As they evolve, the aircraft must be equipped to address the many environments and conditions that commercial airline aircraft witness. General aviation is assuming the same responsibility as airlines by delivering occupants or passengers to a specific location at a specific time.

Our ice protection products address one of those needs and rests on the fundamental principle of safety. TKS ice protection allows aircraft to safely exit or transition in flight ice encounters. Our product is born out of safety, yet its availability to the general public is often encumbered with the veil of regulatory safety. Our product is safe, reliable, and proven beyond any reasonable doubt, yet it is becoming more and more difficult and expensive to gain approval of our systems for the market.

My next area of concern is a topic likely shared and as testified to today with all aviation businesses: Product liability. When queried about potential lawsuits, the reply is nearly unanimous. It is not a question of ever being sued; it is a question of when. It is a dark cloud that shades all of aviation businesses and threatens competitiveness by additional financial burden.

Like most businesses, our company stands by its product and assumes responsibility for that product. Our responsibility quickly becomes warped and often exaggerated when litigation occurs. From my perspective, a majority of the burden is moved to the defendants with little responsibility placed on the plaintiffs. A company can be sued by anybody and those people allowed to fish for any evidence without overwhelmingly compelling evidence to support their position.

My experience also indicates that the aviation industry is often treated unfairly by the litigation world. The concept of trial by peers is virtually non-existent because the court cases are often very technical when aircraft are involved.

I do not advocate absolution of our responsibilities to the public and to our customers. I do, however, ask for a reasonable chance, within the legal system, to have a fair trial on unbiased terms. As an example, pre-trial arbitration may be one form of relief that could potentially weigh the true merit of a case. Likewise, the allowance of countersuit for damages may be another means of deterring frivolous lawsuits.

General aviation has found relief with aged fleet of aircraft, but growth of new aircraft, new products and new innovation could be severely restricted by product liability.

My final area of concern is, again, a common theme here today, and that centers around the most fundamental resource of any company: Its employees. Specifically, the recruitment of new employees. Earlier in my testimony I indicated that our location in Salina affords us a good source of local people for labor, both trade and technical. Our difficulty arises when we must recruit people from disciplines not available to us through the local educational resources.

Our basic problem arises with recruitment of engineers. It is common knowledge and you have heard many times today that engineers are a shrinking commodity. We suffer from that every day. Aerospace/aviation business is good. As a matter of fact, it is great. But fewer and fewer kids are pursuing technical degrees within the United States. The end result is one that all the companies will suffer from, but particularly the small companies. A shortage of engineers will inflate the wage basis making it extremely difficult for small companies like ours to compete with large companies for a limited labor pool. Though it is contrary to the desire of most

Americans, it is not difficult to understand why companies are outsourcing technical work. It is difficult to find the engineers to do the work.

The concept, though, can be reversed for the benefit of companies, but roadblocks still exist. Thousands of foreign students come to the United States to obtain higher education. Many of those students would like to remain in the U.S. after earning their degrees, but are hampered by immigration policy. It will be extremely beneficial to all technical companies if immigration quotas were expanded for foreigners with technical degrees, particularly around the month of May. As an example, our company could recruit new foreign aerospace or aeronautical engineers from our own Regents' schools such as Wichita State and the University of Kansas.

The answers to recruitment issues are not easy. As I indicated, modification of immigration policy would certainly help in the short term. For a long term solution, it is my hope that more young people can be encouraged to enter technical fields and pursue a technical career, and many examples of motivational techniques have been offered today. It is paramount that our technology base survives and assures our competitiveness in all fields.

I thank you for having me here for the day. I will be happy to answer any questions when the time comes.

Mr. MICA. Thank you.

And we will first hear from our last witness waiting patiently, Mr. Finley Nevin, who is President of Global Engineering and Technology.

Welcome, sir, and you are recognized.

Mr. NEVIN. Thank you, Mr. Chairman and I thank all the members of the subcommittee, especially Congressman Moran, for inviting me to be here today. I apologize for not having an outline or anything. I didn't do too well at that.

My wife and I founded Global Engineering in 1991, to supply interior components, mainly cabinetry items to the local aircraft industry. We are now the—kind of the trickle-down effect of the—how the industry does here locally. If the local industries here do well, we do well. If they falter, we falter.

We suffer many of the same pains that everybody else at the table has discussed so far: rising insurance costs that you have to debate whether to pass on to the employees or to keep offering it in order to be competitive, and draw the employment that we need to sustain growth.

Many of the things that we have talked about here, the problems and issues that I have seen in my 30 years of being—35 years of being in aircraft, center around a vast variety of things. One thing that is near and dear to my heart is the issue brought up earlier about the FAA. We participate in a STC program that we started almost 2 years ago for one of the local companies to get an STC for the aircraft. Through the problems with the manning of the local FAA, because of the short help, this project took entirely too long, slowed delivery and therefore affected jobs and everybody else.

Insurance is an issue, as we heard, that everybody shares, and we are concerned with that. I am glad to be a part of this industry and watch the growth of it and see where we go. I don't have much

to add past that. You have heard everything that I was going to talk about—thought about earlier, but I do appreciate being here.

If I can answer any questions or anything, with what we do, I will be glad to do that.

Mr. MICA. Thank you, Mr. Nevin. You are the only one that did it right. You summarized, and they all read their statements. So even though we tried to ignore you with no name plate, and took your working life away from you, you succeeded. Thank you.

We will go into questions now and I am going to yield in reverse order to Mr. Tiahrt first.

Mr. TIAHRT. Thank you, Mr. Chairman. I am noticing a common theme. It was in the first panel as well as this one. Health care costs are driving a lot of the burden that is on manufacturers, and it is something you really can't control, other than, Mr. Nevin, you called it insurance and I assume you meant health care insurance.

Mr. NEVIN. Health care. Workmen's comp, that is also increasing.

Mr. TIAHRT. Which I put in a different category. We need to do lawsuit reform to keep your liability insurance costs down as well as health care reform to keep your health insurance costs down. So I think that common theme is important for us to make a mental note of because it is a huge problem. It is 15 percent of our economy today.

Health care is 15 percent of the economy. It is the fastest growing segment of our economy. That is good in the job perspective; it is bad from the cost perspective. It is one of the things that makes us less competitive.

You mentioned, Mr. Nevin, as well as Mr. Hawley, and I think almost everybody, the FAA problems as far as getting—being undermanned. Could you tell me how you—Mr. Hawley, let me start with you.

Could you tell me how you interface with the FAA and what their funding shortfall—how those problems have affected you day-to-day.

Mr. HAWLEY. It is very similar to what you heard earlier, except us being a small company, and I am an engineer by training and I still do a fair amount of engineering work. That is the benefit of a small company, wearing many, many different hats.

I would say the biggest downfall is just the time factor. I mean, quite frankly, like I said, we have a great relationship with our local aircraft certification office. Nowadays you come in the door with a program, and in the old days pretty quickly, you know, you would get a reply letter with what the project number is.

Nowadays standard order of operation is they give you a letter that tells you within 30 days, they'll tell you if they can do the project or not. Now, imagine trying to plan any kind of business operation around that to start with, an additional product, so it is—

Mr. TIAHRT. Are you saying that it is feasible that you could come up with an innovative product, but because of their lack of funding, which is not—they are good, quality people. It is not anybody here's responsibility. They just can't get to it. You had a new product that could not make it to market because they couldn't certify it.

Mr. HAWLEY. Absolutely. I think about it often, what life would be like now if I was starting over what we did 20 years ago, and

I don't think we could pull it off because quite frankly, like all small companies, we were pretty ignorant on the subject and knew what we were doing, but in those days, you know, the FAA helped us along, guided us in the right direction, and now we have evolved over 20 years.

If somebody is trying to come into the market now with an innovative product, you know, they better have a big wad of cash in their pocket to go hire the help because they won't be able to do it on their own like we did then. So it is quite feasible that people and even existing companies can run into a substantial roadblock and not get their product out there. Just—a lot of it just depends on what the visibility of your company is, what the visibility of the product is, and what the visibility of the issue is. So that is the distinct problem we have.

Now, there is also—there was a lot of talk, particularly from Cessna, on delegation. Delegation is good and it is bad also. It is tough for small companies—there are lots of companies that have brought products to market and certified them that didn't have the technical basis and the FAA actually fulfilled that role.

Early on we were that way. Now, we have delegations in our company and will continue to go that route, but it is kind of a two—a double-edged sword, depending on the size of the company and what you are trying to do. It does help us out on a day-to-day basis. We can get a lot of things done. But still, even in a delegation process, you never quite know if the oversight is going to come in and put the hammer down on you or not. Will they accept what you—what you said was good and certifiable or will they throw it back at you?

So it is—I don't know. I don't know quite what the answer is, other than the fact that they do need more manpower. Our local ACO staff virtually dropped, I would say, 50 percent in size from the last few years by staffing in another office, but yet nobody was brought in to fill those gaps. So it is just a timing thing, and it directly applies in the different projects in streaming them out .

Thank you, Mr. Chairman. I know I have some other questions, but in deference to time, I know that Mr. Moran has to get on, so I am going to stop.

Mr. MICA. I would yield now to Mr. Moran.

Mr. MORAN. Thank you.

Mr. Chairman, Mr. Ehlers and Mr. Tiahrt would know this, but Mr. Hawley and Mr. Nevin come from my urban areas of my district, populations of between 40- and 50,000 in their communities. Mr. Mullins would come from a more typical-sized community, the First District of Kansas, 2,500 to 3,000 people.

And I guess one of the things that I would—I think what I have heard today, and especially from you, Mr. Hawley, what you just said in response to Mr. Tiahrt is that small business has an even more extraordinary hurdle with certification, with regulatory issues because of the inability to have the expertise, the personnel, the ongoing relationship, I suppose, with the FAA. And in the process, as a result of that, I assume that that means it is less likely. You say about—let me finish that sentence. It is less likely to have entry into aviation manufacturing that we will not see as we saw here historically in Kansas, especially here in Wichita, the start-up

of aviation companies because of the impediments, the hurtles. And we all can complain about how business keeps getting larger and larger, and yet I assume that that regulatory burden is one of the factors that makes that occur.

Is that an accurate assessment?

Mr. HAWLEY. Yes, it is.

It is—I testified to that earlier. It is becoming more and more difficult because the regulations themselves continue to evolve. There is more burden from that, plus from our perspective as a small company, again, it is the delegation, like you said, pushing more and more of this requirement into our company; and we aren't a huge company by any means.

We are capable of dealing with parts that I, myself—I am the resident designated engineering representative, and I can handle certain disciplines of it, but there are other disciplines that aren't elements within our programs that we can't possibly afford to have a full-time person, and we have to contract that out. And that kind of—that kind of almost demanded outsourcing becomes more and more expensive for us all the time. And I just have a difficult time imagining, you know, new companies coming into it.

Quite frankly, every aviation company in Kansas, in one fashion or another, was a mom-and-pop operation somewhere along the line, and it is just not possible to do that.

Mr. MORAN. Mr. Mullins, the employment history at Lyons Manufacturing, is it up and down? Are you historically good or high or low levels, and what percentage of your employment is related to aviation manufacturing?

Mr. MULLINS. Of course, we are 100 percent aviation manufacturing. Definitely after 9/11 we sustained a 30 percent drop in our employment level. So the 40 range is more of a general area that we employ during peak times. Of course, during aviation—I mean, we are all prone to the history of the ups and downs, just like anybody else is, so—

Mr. MORAN. Let me ask a broader question. What concerns me—maybe this is Mr. Greer or Mr. Turner, but any of you, we all know what happened to the aviation industry post 9/11, and testimony today has been that the aviation industry is in good shape. Things are much improved than they were during that period of time. But what concerns me is that I don't think we made any changes in our policies. That we have not made any structural changes in the industry. It is just that the general economy improved and therefore, the testimony that you all provide today is extremely different than it would have been three years ago, but yet I don't know that we learned anything from 9/11.

And my question is, are there things beyond what has already been said that we should learn today, and action that we should take so that when the difficult times return, the aviation industry is better capable of weathering the storm?

Mr. TURNER. I would like to—first of all, Congressman, I think that is a very perceptive point, and we have talked about several things that drive our costs which are not sensitive to the cycle, like health care, but I do believe we have all talked about—Janet Harrah talked about the fact that we have an aging workforce. We talked about technical training. We talked about—we talked about

engineering, education, and now you brought up this point about the cycle. I think the fact is that we exist in an industry that is cyclical. We exist in an economy that is cyclical, and the longer term view is extremely important, I believe. The south central Kansas area is working very hard collaboratively, State, local, the industry, to create a technical training, a center of technical training excellence, which I think is essential for economic development. I believe economic development is driven by the technical training and education systems.

I think there is a policy opportunity here because our industry will cycle again, and when it cycles again, we will have two choices. One is to operate like we always have, which is businesses layoff people or scale back. Government scrambles for what they should do with the down-turned economy, and we all come up with good ideas that are implemented about the time that the industry comes back and the cycle begins to rebound, and we no longer need it. So I think there is a policy opportunity here to get ahead of the cycle. We will have another down-turn. We don't know when it is. We have the opportunity if we will—if we will create a world-class technical training capability here in south-central Kansas for our cluster. When the downturn comes, we have the opportunity to switch policy and work together, government and industry, to retrain our people during the down-turn and have them available on the up-turn again.

So that is not something that I—that I have heard proposed or heard talked about, but I think it is an opportunity to use, both public and private resources and a long-term view to be prepared for both the downside and the upside.

Mr. GREER. I will add a couple points to that. I agree with everything he said, but the thrust of the matter is just that the up cycle always returns, and the best time to prepare for that is during the down cycle, and the things that Mr. Turner mentioned are good.

Also, perhaps, making it a little easier for our customers to purchase capital equipment through tax policy would encourage at least a flow of product during those down-times. That might be a good idea.

Mr. MORAN. I thank you all for your testimony, and I thank the Chairman and Mr. Ehlers for coming to join Mr. Tiahrt and me in Kansas, and I thank Mr. Hawley and Mr. Mullins and Mr. Nevin for coming to Wichita today and presenting your testimony.

I have a funeral to attend today, and I am going to depart, but I will make certain that I know what further questions and answers there were. Again, this is such an important issue to us, and I appreciate the testimony that I have heard today.

Mr. MICA. Thank you, again, Mr. Moran, and thank you for your hospitality.

We will now recognize Mr. Ehlers.

Mr. EHLERS. Thank you, Mr. Chairman.

And, Mr. Moran, before you leave, I just want you to know, I grew up—spent the first 14 years in a town of 800, then moved to a town of 250 for my high school years. I have a great appreciation for your district. I find some of the most innovative people in America living in these small communities because they have to make

do. And you pointed out, as an engineer you had to do everything. A lot of people have to do that. It is a real strength for our country.

Mr. MORAN. I appreciate, Mr. Ehlers, you have that respect. I was also going to suggest particularly to Mr. Greer and Mr. Turner, they might network with Mr. Hawley and Mr. Nevin about potential contracts. We would love to see that business.

Mr. EHLERS. All right. Thank you.

On the regulatory delay issue, I have sort of a rule of thumb, if you have to wait for something you are probably dealing with the government and—because in the private sector—I have actually switched banks because I had to wait too long in line at the bank. I switched to another bank that kept the line shorter. The same thing at supermarkets.

I have always valued time. I hate to stand in line. If I have to wait in line at the supermarket, I start going to another one. We don't have that choice with the government.

Now, we have dealt with that in an unusual way with passports because some people wanted to travel and they applied for the passport too late to wait two months for a passport. We charge an extra fee so you can get expedited service. And in a day or two you can get a passport, if you pay the extra fee.

I hesitate to recommend that we start that with the FAA because I am afraid the fee would get higher and higher, but frankly, given the situation as it is, it would be economically better for you to pay a fee and get it in a month rather than not pay a fee and have to wait 2 years. It is a problem we have to address, and I certainly don't want to take that route, but it is ridiculous that you have to wait on the government and lose money because we are not appropriating enough money for the FAA to do what they are supposed to do, and I will certainly be happy to join with any interested Congresspersons in trying to change that.

Mr. Turner and Mr. Greer and, in fact, most of you talked about either need for more engineers or need for better education. I have devoted my life to that. It is extremely frustrating. I wish all of my colleagues in the Congress could have heard your testimony because most just don't realize the need. They hear about it, but they don't feel it the way you do. And so I urge you to, through your national associations, really impress the need to Congress.

I have mentioned getting bills passed of doing much of what you want, but when it comes to the appropriations, the appropriators don't put the money into the programs, and we just have to hear more from you in Congress so that we do that.

The other thing, Mr. Hawley, I was interested in your comments about is the lack of engineers. Believe it or not, we have a surplus of engineers in some areas that are not working, and maybe one of the quickest ways to meet your needs is through a retraining program.

And I am fascinated with Mr. Turner's suggestion of during a recession, take advantage of that time to train engineers, perhaps even to switch them from civil engineering to mechanical engineering or in some way meet the needs of the market better. It is crazy to have a shortage of engineering and have unemployed engineers at the same time. So you have given me a lot of things to think about and I really appreciate the testimony.

I really don't have any questions because your testimony is crystal clear and the message was the same from all of you, and I appreciate you coming here to say it. Thank you.

With that, I will yield back.

Mr. MICA. I thank you, Mr. Ehlers.

Also, again, I want to express my appreciation to Mr. Tiahrt for hosting us here at the university, and I want to thank each of the witnesses on this panel and our previous panel for their testimony and participation, especially our small business participants. When you are the chief cook and bottle washer, taking time off to be with us is difficult, but it is especially important that we take the issue of competitiveness out here to the heart of aviation manufacturing and hear from you.

The good news is, some of what we heard was positive as to where we are now. The challenge we face, of course, is keeping ahead of the curve, and then addressing all the issues that were raised here, health care, insurance, liability, certification, competing as the world grows flatter, as one of the witnesses testified.

So we welcome your participation today, and Congress is involved in an ongoing process of changing the laws and our policies and programs hopefully to assist you so we can be successful together. So there being—as I mentioned, too, we couldn't have everybody testify in Wichita. We have dozens, hundreds of companies as we have heard and learned. We do welcome additional testimony from anybody who would like to submit it to the members here or to me as Chair. It will be made part of the official record, and we will include that in today's testimony. So the record will be open for a period of 2 weeks.

There being no other business to come before the House Aviation Subcommittee, I declare this hearing adjourned. Thank you.

[Whereupon, at 12:30 p.m., the subcommittee was adjourned.]

Statement of Peter J. Bunce
President & CEO
General Aviation Manufacturers Association

Before the Subcommittee on Aviation
House Transportation and Infrastructure Committee
U.S. House of Representatives

Keeping U.S. Aviation Manufacturing Competitive
March 22, 2006

Mr. Chairman and members of the Subcommittee, my name is Peter J. Bunce and I am President and CEO of the General Aviation Manufacturers Association (GAMA). GAMA is an international trade association headquartered in Washington, DC representing over 55 of the world's leading manufacturers of general aviation aircraft, engines, avionics and related equipment. GAMA's members also operate fleets of aircraft, fixed based operations, and pilot training and maintenance training facilities.

I believe my colleagues here at the table will agree that you have picked the right place for an examination of the state of U.S. aviation manufacturing. Fifty-five percent of all general aviation airplanes made in the United States are produced here in Wichita. The economy of this city, its surrounding communities, and this state, is directly tied to the magnitude of aerospace manufacturing that takes place here.

The impact of what you are seeing here in Wichita has national and worldwide implications. Aviation manufacturers are producing safe and reliable transportation that companies employ worldwide as business tools. With 80 percent of the world's aircraft being made in the United States, this translates into a healthy and positive balance of trade for our Nation and its economy.

In concert with the other witnesses here today before the Subcommittee, I want to briefly discuss the current status of general aviation manufacturing in this country and touch on some issues of importance to our industry.

General Aviation Overview

In 2005, United States general aviation (GA) manufacturers shipped 2,857 new airplanes at $8.67 billion in billings. When comparing 2005 numbers to 2004, total shipments of GA aircraft increased by 21 percent while billings increased by 27 percent. These outstanding figures demonstrate that GA is one of the brightest and most promising sectors of American manufacturing.

In this decade, we have seen the industry peak in 2000, followed by a post 9-11 decline in 2002-2003, while 2004 and 2005 were years of recovery. The industry is optimistic about 2006 and 2007 based on current orders for GA aircraft.

Although the shipment and billings numbers for 2005 are positive, the GA industry is still in a recovery. This is illustrated by the fact that GA flight activity actually decreased by two percent last year from 2004.

According to the Federal Aviation Administration (FAA), sixty-four percent of all GA flight hours are for business operations such as corporate flying, flight instruction, aerial observations, air-medical, and on-demand charter flights.

There are about 609,000 active pilots in the United States including Air Transport Pilots (commercial), private pilots, and students flying 218,000 GA aircraft. Currently there are over 18,000 landing facilities accessible to GA in the United States and its territories while only about 500 are accessible to commercial airlines.

No discussion about GA can be complete without recognizing our tremendous progress on safety. Over the past 25 years we have seen the number of accidents decline by 54 percent, while fatalities are down by half. However, any aviation fatality is one too many. Consequently, our industry continues to work closely with the FAA, the National Transportation Safety Board (NTSB), and other government agencies to ensure that this encouraging trend continues through improvements in pilot education and introduction of safety equipment into airplanes such as "all-glass" cockpits, synthetic vision, and situational awareness. This is why FAA certification services are so important to our industry. The faster we can get new technology into the cockpit the safer the aircraft become.

Despite the positive figures that I have just outlined, there are a number of issues before our industry that have a direct impact on the future growth and vitality of our industry. My colleagues have discussed some of them and I wish to address some additional concerns for your consideration. The Subcommittee's assistance and leadership on these issues is greatly appreciated by our industry.

Modernization of Our Nation's Air Traffic Control System

GA is an active partner with the FAA in development of the Next Generation Air Transportation System (NGATS), working to ensure modernization plans reflect the many advances in GA capabilities and technologies, including new aircraft, engine, and avionics designs. GA manufacturers are at the forefront of bringing new technology and designs to the aerospace industry.

The fundamental tenent of modernization is the use of new technologies for air navigation, communication and surveillance in order to enhance safety, capacity and efficiency of our air transportation system. Modernization that ensures access to airports and airspace will incorporate more use of digital communication and satellite based navigation, making the aircraft less reliant on ground-based systems.

We thank Congress for mandating that the executive branch agencies work with industry to facilitate the design of a modernized air transportation system. Your continued support for, and oversight of, the Joint Planning and Development Office (JPDO) will be the driving force that requires presentation to the Congress of a coherent time phased modernization roadmap that fully delineates costs and projected savings from this investment.

The Introduction of Very Light Jets (VLJs)

General aviation manufacturers are pioneering the development of a new class of very light jets. These airplanes are set to emerge into the market this year and we are excited about this innovation that will create new opportunities for people to incorporate general aviation into their business and personal lives.

This new class of aircraft will provide a new avenue for people to move about the country. They will circumvent the large hubs used by the airlines, while providing ways for people to travel from point-to-point, especially to and from smaller communities with limited or no commercial air service.

No organization is more committed to the safe and methodical introduction of this new class of airplanes than the manufacturers themselves and they are working closely with the FAA to develop approved training programs that capitalize on technology designed to minimize pilot workload.

In representing over 55 of the world's leading general aviation manufacturers, we get the most realistic and up to date portrait of how this exciting new sector of aviation is developing, so please let me inject a dose of reality into the recent outrageous projections made by some about VLJs.

These aircraft are not going to "darken the skies" as some have suggested. GA manufacturers have listened with amazement as some in the industry and the administration use the phrase "onslaught of microjets", citing wild claims about how these aircraft will clog up the airways, particularly in the "air taxi" business. These claims simply do not acknowledge the realities that if the air taxi concept proves successful, service will be diffused from the airline hubs and airports where congestion is the greatest and utilize the shorter runways that communities across this nation have invested their tax dollars to construct.

GAMA pledges to work with the Subcommittee to ensure that future discussions on the numbers, use, and potential of VLJ's are done based on facts and sound reasoning.

Federal Tax Policy Directly Impacts GA Activity and Aircraft Sales

As with any manufacturing industry, federal tax policy has a direct impact on sales and activity. There is no better example of this than bonus depreciation.

The American Jobs Creation Act of 2004 ("JOBS Act") provided bonus depreciation for taxpayers who purchased aircraft and had them placed in service by December 31, 2005. This short-term stimulus helped GA manufacturing recover following the dramatic downturn after 9-11. I want to thank this Subcommittee for its support of bonus depreciation and the direct impact it had on GA manufacturing jobs right here in Wichita and around our nation.

Bonus depreciation highlights the positive economic impacts that can occur from federal tax policy. However, federal tax policy can also have a significant unforeseen negative impact.

The same legislation that provided GA manufacturers with bonus depreciation also changed the business deductibility of entertainment-related flights.

At this point let me be absolutely clear. No one opposes taxation of fringe benefits and we are not seeking to repeal this provision. The problem lies not with Congress but with the IRS interpretation of the methodology and allocation of entertainment use flights.

We strongly believe that the current IRS guidance on how to comply with this law goes well beyond what Congress intended in the JOBS Act, is a bureaucratic nightmare to comply with, and will result in reduced flight hours and lost sales of new aircraft. At a time when this industry and its sales are nearly recovered to pre 9/11 levels, the industry is deeply concerned that this erroneous interpretation of the law could severely impact our industry.

The IRS interpreted guidance of a seat allocation method requires operators to maintain and file an onerous amount of paperwork. This methodology is so burdensome companies are reducing their flying and in turn, reducing the benefits derived by owning and operating a company airplane.

For example, there are over 165,000 piston aircraft in the U.S. today. Over 53 percent of the flight time these planes fly is for business purposes Under the IRS interpretation, these owner-operators of aircraft can no longer have their spouse accompany them on business trips without incurring a significant tax penalty.

Even more alarming to manufacturers, the IRS guidance actually would make it more advantageous to own an aircraft that is fully depreciated and provide a disincentive to purchase a new aircraft. This clearly was not the intent of Congress in 2004 when it passed this legislation.

We in industry are working with Congress to clarify their intent to the IRS on this issue. It is unfair to single out general aviation and treat those who use aviation for business differently from those using other forms of transportation such as a company car. We are working to have this issue resolved as quickly as possible and appreciate any support the Subcommittee can provide on this important issue.

Export Control Issues

In addition to opening new markets for U.S. products, industry is working with the State Department to ensure that their products do not run afoul of the Arms Export Control Act (AECA) and the International Traffic in Arms Regulations (ITAR).

With military components increasingly being sourced from the civilian sector, the lack of clarity and transparency in the application of export control regulations threatens to harm U.S. manufacturers and potentially divert business to foreign suppliers who can offer "ITAR-free" components for export.

As this issue develops, we plan to continue to brief the Subcommittee on issues that arise regarding export controls. We will need your continued assistance to work with the Administration to balance the need to support continued growth of U.S. exports of aerospace products and services, while at the same time, prevent technology from falling into the wrong hands overseas.

Tort Reform

The current good health of the U.S. GA industry is a direct result of the General Aviation Revitalization Act (GARA) signed into law in 1994. GARA introduced a statute of repose of 18 years on general aviation airplanes.

Since GARA, U.S. GA piston engine manufacturing has increased production by 290 percent, producing over 2,465 airplanes in 2005. Several companies, including Cessna and Piper, returned to the industry. In the first five years following GARA, the industry added over 25,000 jobs in the United States.

In many ways, GARA saved the general aviation industry and our manufacturers. We ask Congress to protect GARA from any attempts to alter and erode its protections, as well as continue efforts to limit frivolous lawsuits filed against manufacturers and prevent misuse of our judicial system.

Conclusion

I would like to commend this Subcommittee once again for taking a personal interest in the health and vitality of aviation manufacturing, and for holding this hearing in the very heart of this industry. I appreciate the opportunity to testify today and would be happy to answer any questions you or the Subcommittee members have.

Testimony of Mr. Bill Greer
Vice President – General Manager
Airbus North America Engineering, Inc.
Wichita, Kansas
Before
The Subcommittee on Aviation
U.S. House of Representatives
March 22, 2006

Mr. Chairman, thank you for affording me the opportunity to testify this morning. And, thank you all for holding this important hearing in our town. My name is Bill Greer. I am Vice President and General Manager of Airbus North America Engineering, which includes our facility here in Wichita, and a new engineering center in Mobile, Alabama, that will open its doors in early 2007.

I have been involved in the industry for more years than I'd like to say. Perhaps you can do the math silently in your heads, but I joined McDonnell Aircraft, in 1963, as a junior engineer working on the F4 fighter. Since then, I have worked or consulted for a number of aerospace companies, including Learjet/Bombardier, which first brought me to Wichita.

If I may, I would like to address three key topics with you today: what I see as the current state of U.S. aerospace; the factors currently driving American innovation; and, lastly, what I see as the wisest course for the future.

First, the current state of the industry: Mr. Chairman, I believe the experience Airbus has had in the United States – and especially here in Wichita – is quite relevant to the Subcommittee's efforts to understand how to keep U.S. aerospace strong. I emphasize keep it strong because, in general, the current state of the aerospace manufacturing industry is good. We at Airbus know this to be the case from firsthand experience.

As you have already heard today, the aerospace industry is truly global. Neither we nor our competitors can be successful by relying only on the resources of our home markets. When Airbus looks for suppliers and business partners, it looks around the globe for the best – the best quality,

price, service, and ongoing support. More often than anywhere else, Airbus finds these "best supplier" companies in the United States.

Last year, Airbus spent $8.5 billion with our suppliers here in the U.S., for parts, components and systems and such items as rivets, wing panels and parts, hydraulic systems, landing gear, evacuation slides and engines, among many other items. This number - $8.5 billion - represents about 46 percent of Airbus's entire procurement budget for aircraft manufacturing. In fact, Mr. Chairman, more of Airbus' procurement budget is spent here in the U.S. than in any country in the world – even in Europe. As a result, Airbus has become the number one export customer of the U.S. aerospace industry.

While last year was a record year for Airbus' procurement in the United States, it was by no means unique. The partnership between Airbus and U.S. manufacturing began more 30 years ago with the manufacture of the company's first airplane – the A300. Since then, the amount of U.S. content on Airbus aircraft has steadily increased.

Today, the Airbus network of American suppliers includes some of the most respected names in U.S. aerospace, including Alcoa, B/E Aerospace, Eaton, Goodrich, GE, United Technologies, Honeywell, Northrop Grumman, Rockwell Collins and Vought Airplane Company. In addition, Airbus has partnerships with hundreds of medium and small U.S. companies, such as Hamilton Sundstrand in Illinois; Electroimpact in Washington; Faber in California; and GKN in Alabama – just to name a very few.

Our contracts with American industry in more than 40 states support 170,000 American jobs –the kind of jobs that are the backbone of U.S. industry and the U.S. economy.

Mr. Chairman, this is only part of the story – and that brings me to my second point. Airbus' partnerships with U.S. companies are also helping to drive innovation in the United States and sustain America's manufacturing competitiveness. Let me give you a few examples of what I mean.

The wings for all our planes are assembled in the United Kingdom – in a very impressive facility in the North Wales town of Broughton. For our latest

aircraft, the A380, we built a special plant to handle such large components.

At that plant in Broughton, one name is displayed almost as prominently as Airbus. That name is Electroimpact – a company from the Seattle area whose business originated with Airbus. In developing a wing that could lift the world's largest passenger aircraft, Airbus relied upon Electroimpact's innovative engineers to design perhaps the most sophisticated tooling equipment the aerospace industry has ever seen. And the American engineers from this small company in Washington state rose to the challenge.

Today, Electroimpact provides virtually all the tooling for the A380 wings. In addition to making this high-tech equipment here in the U.S., Electroimpact employees from the U.S. work side-by-side with Airbus team members in North Wales. Thanks to its partnership with Airbus, Electroimpact is now a world leader in the field of high-tech tooling equipment.

This story is especially relevant to this hearing. It is important to understand that what brought Airbus to Electroimpact was not cheap labor. Mr. Chairman, what brought this company to Airbus was its engineering prowess and manufacturing excellence.

Mr. Chairman, Electroimpact is but one example of how our partnerships with U.S. industry produce cutting edge aerospace technology and equipment – the lifeblood of continued American competitiveness in this industry. Other examples include our partnerships with:

- Goodrich, which in Ohio is building the most advanced hydraulic landing gear that has ever touched down on a runway;
- Marotta Controls, which in New Jersey is making a device that will improve aircraft maneuverability on runways;
- Hamilton Sundstrand, which in California is designing, manufacturing and supporting auxiliary power units for several Airbus models;
- Rockwell Collins, which in Iowa is designing radio and navigation systems, control panels and Traffic Alert and Collision Avoidance systems for many Airbus aircraft;

- Alcoa, which in Iowa is building the wing plates and fuselage skin for the A380; a new aluminum/lithium alloy was developed in the process.

I could go on, Mr. Chairman, but I think you understand my point. In sum, Airbus has gone from merely recognizing the competitiveness of U.S. aerospace technology through our purchases, to now sustaining this competitiveness through our partnerships.

If I could return to the theme of engineering prowess, Mr. Chairman, it was American know-how that again led Airbus to the United States. The Airbus North America Engineering Center first opened here in Wichita in 2002, to help design the wings of the super-jumbo Airbus A380. It was the first Airbus manufacturing-related engineering facility located outside of Europe.

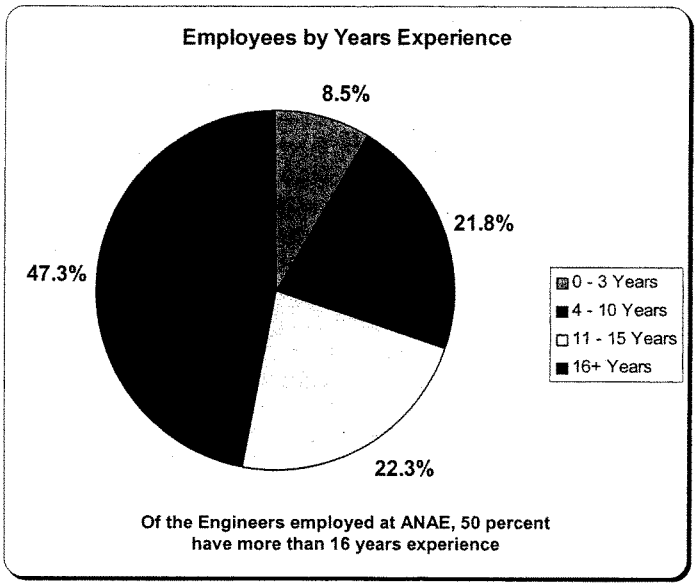
Congressman Tiahrt, who participated in our opening ceremonies, will remember that the facility was planned for only about 40 engineers. I am delighted to report that things have changed since then. We now employ more than 200 engineers, who are working on wing designs for the A380 passenger aircraft, the A380 freighter, the A340 and the A350.

When we opened the facility here, many observers asked the same question: "Why did Airbus come to Wichita?"

The answer is found in the brain trust here. According to our local Chamber of Commerce, as a percentage of the population, more people work in aerospace and aviation in Wichita than in any other city in the country – even Seattle.

We found great engineers here. At a high-tech operators conference held in Phoenix recently, a design contest was held among 72 entrants from aerospace companies throughout the industry. Airbus Wichita had two entrants in the challenge, and they finished in first and second place.

Airbus Wichita would like to hire more young engineers like our two award winners, including recent college graduates. But we are finding that the supply is limited. This is a big concern for us, and I know it must be a big concern for this subcommittee as well.



I say this because nationwide, the aging of the U.S. engineering community will result in a severe shortage of engineers within a decade or so if the current trend continues. Unfortunately, the up-and-down cycles of our industry have taught young people that a career in aviation is risky. And who's to blame them, when the ones who lose jobs in a down cycle are generally those with the least experience?

My projections tell me that by the end of 2007, I will need more than 450 engineers at our Wichita and Mobile, Alabama, facilities. If I can't meet the expected demand with high quality, experienced engineering talent available here in the U.S., I don't know how we'll be able to maintain our competitive advantage in this global market.

And this brings me to my third and final point, Mr. Chairman: the best way to secure American aerospace for the future. You see, as any economist will tell you, the key to remaining competitive is innovation. And one of the keys to innovation is to generate a large community of highly motivated

engineers and scientists. From my vantage point here in Wichita, one thing is crystal clear: we must make this a national priority.

I understand that the President and Members of Congress have put forward several initiatives to address this issue. As an engineer myself and a manager of many others, I would offer some additional ideas I believe are worth considering:

- First, the key to remaining competitive is constant innovation. Once a process or technology is mature, it will migrate to the lowest cost supplier. Consequently, American aerospace must identify the core competencies and continually upgrade them through the application of advanced technology. This subcommittee can help in that regard by spearheading incentives to continually train and retrain employees to produce complex assemblies through the use of advanced technology.
- Second, the base of engineering talent must be increased through programs that encourage middle and high school students to consider science and engineering a desirable career choice. In addition, since over half of the workforce are women and minorities (and traditionally these groups do not enter the engineering fields), special programs should be put in place to encourage their participation in engineering careers.
- Lastly, funding for scholarships should be increased to allow any qualified student to have access to a technical education.

This last idea is very important to me. Just before I graduated from high school, the Soviet Union launched the first Sputnik. Our leaders responded to this challenge by putting scholarship programs in place to encourage more young people to enter the technical professions. I received a full scholarship from the State of Illinois for my engineering education based on my ACT test results. I would not have been able to attend University – and certainly wouldn't be sitting here with you – without this program.

Mr. Chairman, I must stress that if the driver of competitiveness is innovation then the key to innovation is competition itself. In this or any industry, competition drives companies to develop products that are better, faster, stronger or more sophisticated than others. And, for the U.S. aerospace industry, competition results in greater fuel efficiency, more passenger comfort, increased ability to transport freight longer distances,

and higher safety standards. We've seen all of these improvements over the course of the years, driven in large part by the healthy, beneficial competition between Airbus and Boeing in the marketplace.

Competition-driven innovation led to the original Airbus A300, which drove Boeing to develop the 767. Then Airbus responded with the A330, while Boeing responded in turn with the 777 and 787. Now Airbus is creating our A350 – as well as the A380 that I mentioned earlier. Competition drives innovation, which in turn drives competitiveness. This principal applies not just to the final product that Airbus and Boeing roll off the assembly line, but to nearly every piece of equipment that goes into these aircraft.

This leads me back to where I started: keeping U.S. companies competitive with the rest of the world – and keeping companies such as Airbus and Boeing reliant on American manufacturing – will require America to remain focused on the fundamentals: investment in education, encouragement of innovative technologies, and support for robust competition in an industry that thrives on innovation. With strong support from you and the members of this Committee, American aerospace will continue to lead.

Mr. Chairman, thank you again for this opportunity. I would be happy to answer any questions.

Statement of Janet Harrah
Director, Center for Economic Development and Business Research,
W. Frank Barton School of Business, Wichita State University

Before the Subcommittee on Aviation
House Transportation and Infrastructure Committee
U.S. House of Representatives

Keeping U.S. Aviation Manufacturing Competitive

March 22, 2006

Mr. Chairman and members of the Subcommittee, my name is Janet Harrah. I am director of the Center for Economic Development and Business Research housed in the W. Frank Barton School of Business at Wichita State University.

INDUSTRY DEFINITION

Aviation manufacturing is a vital sector of the U.S. economy. It consists of companies engaged in the manufacture of aircraft; aircraft parts and engines; auxiliary equipment; guided missiles; space vehicles; propulsion units and parts; and aircraft overhaul, rebuilding and conversion.[1] Aircraft produced in the United States is very diverse ranging from fixed wing planes and helicopters to dirigibles and hang gliders to business jets and commercial airliners.

Data in this statement do not include aerospace R&D-related workers who work in separate establishments. Under the North American Industry Classification System, workers in research and development establishments that are not part of a manufacturing facility are included in a separate industry—research and development in the physical, engineering, and life sciences.

COMPETITIVE LANDSCAPE

Overall the industry is highly competitive. Certain sectors such as the manufacture of engines are dominated by a few large companies. General Electric and Pratt & Whitney, a unit of United Technologies, together account for about 80 percent of engine revenue.[2] Profitability depends on efficient and timely production. Small companies compete by specializing in high-end, low-volume or hard-to-find parts, or in high production of low-price commodity parts. Large companies having economies of scale in production leverage their volume in negotiating with suppliers and leverage their leeway in pricing to customers, since larger companies can often afford to lower margin to get the deal. Consequently, revenues per employee are usually higher for large companies compared to smaller companies.

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[1] The NAICS codes used to capture the main aerospace and aviation industry manufacturing sectors are 336411, 3364112, 336413, 336114, 3364115, 3364119 and 334511.
[2] http://www.firstresearch.com

INDUSTRY OUTPUT AND TRADE

In 2004 value added for the industry totaled $94.8 billion. The value of shipments totaled $165.1 billion.[3] In 2004, exports for the industry totaled $56.8 billion or 6.9 percent of total U.S. exports.[4]

EMPLOYMENT NUMBERS

In 2005, 606,433 Americans were employed in the aviation manufacturing industry. Companies engaged in the manufacture and assembly of complete aircraft account for the largest portion of industry jobs. In second quarter 2005 these companies had more than 209,000 employees or 35 percent of the industry's employment base. Firms primarily engaged in manufacturing search, detection, navigation, guidance, aeronautical, and nautical systems and instruments have more than 155,000 jobs accounting for 26 percent of industry employment.

Table 1: Aviation Manufacturing Employment by Sector, 2nd Qtr 2005

	Number of Employees	Percent of Total
AVIATION MFG INDUSTRY	606,433	100%
334511 Search, detection, and navigation instruments	155,387	26%
336411 Aircraft (manufacture & assembly complete)	209,856	35%
336412 Aircraft engine and engine parts mfg.	81,031	13%
336413 Other aircraft parts and equipment	86,232	14%
336414 Guided missile and space vehicle mfg.	53,359	9%
336415 Space vehicle propulsion units and parts mfg.	13,092	2%
336419 Other guided missile and space vehicle parts	7,477	1%
Data source: U.S. Department of Labor, Bureau of Labor Statistics		

EMPLOYMENT OUTLOOK

Employment projections indicate that aircraft and aircraft parts manufacturing employment will increase 8.2 percent over the 2004-2014 period adding 36,400 jobs. Total employment for all industry sectors is projected to increase 14.8 percent.

The reduction in air travel and severe financial problems of many U.S. airlines following the terrorist attacks of 9/11 led to drastic reductions in commercial transport aircraft orders. This in turn resulted in significant employment reductions in recent years. However, increases in orders are expected over the next decade due to increases in air traffic and the need to replace aging aircraft.

The outlook for the military aircraft and missiles portion of the industry is better. Concern for the Nation's security has increased the need for military aircraft and military aerospace equipment.

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[3] U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau, *Annual Survey of Manufacturers, Statistics for Industry Groups and Industries: 2004*, issued December 2005.

[4] *Statistical Abstract of the United States 125th Edition*, Table 1295. United States Total and Aerospace Foreign Trade: 1980 to 2004, U.S. Census Bureau.

A growing concern for the industry is the rising need to hire replacement workers. Many engineers who entered the industry in the 1960s are nearing retirement. The same is true for production workers. In many of our local plants 50 is the median age for production workers. Training and attracting a skilled workforce will be a critical to maintaining the industry's worldwide competitiveness in the coming decade.

OCCUPATIONS

The design and manufacture of technologically sophisticated aircraft requires the input and skills of a variety of workers. Skilled production workers and engineers account for the bulk of employment. The aerospace industry has a larger proportion of workers with education beyond high school than the average for all industries. In 2004 the industry employed 45,000 engineers and 23,000 drafter and mapping technicians.

Table 2: Employment of Wage & Salary Workers in Aviation Manufacturing by Occupation, 2004 *

	Number of Employees	Percent of Total
Total, all occupations	444,000	100
Aerospace engineers	45,000	10.2
Drafters, engineering, and mapping technicians	23,000	5.3
Aircraft structure, surfaces, rigging, and systems assemblers	16,000	3.6
Machinists	16,000	3.6
Aircraft mechanics and service technicians	15,000	3.5
Material recording, scheduling, dispatching, and distributing	14,000	3.1
Inspectors, testers, sorters, samplers, and weighers	14,000	3.1
Mechanical engineers	13,000	3
Computer software engineers	13,000	2.9
Industrial engineers	12,000	2.7

*Does not include employment for NAICS 334511 "Search, detection & navigation instruments."
Data source: Bureau of Labor Statistics, U.S. Department of Labor, *Career Guide to Industries, 2006-07 Edition*, Aerospace Product and Parts Manufacturing, on the Internet at **http://www.bls.gov/oco/cg/cgs006.htm** (visited *March 17, 2006*).

GEOGRAPHIC DISTRIBUTION

While states such as California, Washington, Texas, Kansas, and Arizona account for the largest numbers of aerospace jobs, nearly every state has employment in the aviation manufacturing sector.

Table 3: Aviation Manufacturing Employment by State 2004

	Employment	Percent of Total	Cumulative Percent
UNITED STATES	606,433	NA	NA
California	120,254	19.8%	20%
Washington	63,257	10.4%	30%
Texas	51,667	8.5%	39%
Kansas	35,189	5.8%	45%
Arizona	35,130	5.8%	50%
Connecticut	31,004	5.1%	55%
Florida	26,591	4.4%	60%
Georgia	17,761	2.9%	63%
New York	16,897	2.8%	66%
Massachusetts	16,227	2.7%	68%
All Others	192,456	31.7%	100%

Source: U.S. Department of Commerce, Bureau of Labor Statistics, Quarterly Census of Employment and Wages

PAYROLL/AVERAGE WAGE NUMBERS

The industry's payroll exceeds $45 billion annually. The average industry wage in 2004 was $72,829 annually or 86 percent higher than the average wage of $39,134 for all private-industry jobs. Above average earnings reflect the high levels of skill required by the industry.

Table 4: Aviation Manufacturing Payroll, 2nd Qtr 2005

	2nd Qtr 2005 Payroll	Percent of Total
AVIATION MFG INDUSTRY	$11,274,534	100%
334511 Search, detection, and navigation instruments	$3,128,535	28%
336411 Aircraft (manufacture & assembly complete)	$4,105,262	36%
336412 Aircraft engine and engine parts mfg.	$1,298,999	12%
336413 Other aircraft parts and equipment	$1,191,545	11%
336414 Guided missile and space vehicle mfg.	$1,191,630	11%
336415 Space vehicle propulsion units and parts mfg.	$229,688	2%
336419 Other guided missile and space vehicle parts	$128,876	1%

Data source: U.S. Department of Labor, Bureau of Labor Statistics

ESTABLISHMENTS NUMBER AND SIZE

Counts from the Bureau of Labor Statistics' Quarterly Census of Employment and Wages program show that the aviation manufacturing sector employs many workers, but in a relatively small number of establishments. Nationally, there are 13.4 workers per establishment. In the aviation manufacturing sector there are 161.5 workers per establishment. This reflects the large scale of many of the facilities in the industry.

Table 5: Aviation Manufacturing Establishments, 2nd Qtr 2005

	Number of Establishments	Workers per Establishment
AVIATION MFG INDUSTRY	3,754	161.5
334511 Search, detection, and navigation instruments	871	178.4
336411 Aircraft (manufacture & assembly complete)	626	335.2
336412 Aircraft engine and engine parts mfg.	598	135.5
336413 Other aircraft parts and equipment	1,393	61.9
336414 Guided missile and space vehicle mfg.	139	383.9
336415 Space vehicle propulsion units and parts mfg.	59	221.9
336419 Other guided missile and space vehicle parts	68	110.0
Data source: U.S. Department of Labor, Bureau of Labor Statistics		

UNIONIZATION

In 2004, 17 percent of all workers in the aerospace industry were union members or covered by union contracts, compared with about 14 percent of all workers throughout private industry. Some of the major aerospace unions include the International Association of Machinists and Aerospace Workers; the United Automobile, Aerospace, and Agricultural Implement Workers of America; the Society of Professional Engineering Employees in Aerospace (SPEEA); and the International Union of Allied Industrial Workers of America.[5]

IMPACT ON SUPPLIER BASE

The economic numbers for the aviation manufacturing industry are impressive: more than 600,000 employees, $45 billion in annual payroll, $165 billion in annual shipments and more than 3,700 establishments. However, these direct numbers tell only part of the story. The aviation manufacturing industry is an enormous one that has a cascading effect on other industries in the United States. The industry has a large supplier base. Companies engaged in aviation manufacturing purchase large volumes of goods and services from a wide variety of other industries. In 2004 the cost of materials for the aviation manufacturing industry totaled $68.2 billion.[6] The economic activity linked to the aviation manufacturing industry totals more than $141.8 billion in payroll and 2.8 million employees in the U.S. as a direct or indirect result of the industry.[7]

[5] Bureau of Labor Statistics, U.S. Department of Labor, *Career Guide to Industries, 2006-07 Edition*, Aerospace Product and Parts Manufacturing, on the Internet at http://www.bls.gov/oco/cg/cgs006.htm (visited *March 17, 2006*).

[6] U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau, *Annual Survey of Manufacturers, Statistics for Industry Groups and Industries: 2004*, issued December 2005.

[7] Based on total multipliers for output, earnings, and employment by detailed industry United States, RIMS II Multipliers, U.S. Department of Commerce, Economic and Statistics Administration, Bureau of Economic Analysis.

Testimony Before the
Committee on Transportation and Infrastructure
Aviation Subcommittee
U.S. House of Representatives

Wednesday, March 22, 2006

10:00 A.M. - National Institute for Aviation Research
Wichita State University
Wichita, Kansas

by

Kevin E. Hawley, BSAE, ME, DER
President
Aerospace Systems & Technologies Inc.

Chairman Mica and members of the Subcommittee on Aviation, my name is Kevin Hawley. I am President of Aerospace Systems & Technologies Inc., an aviation products company located in Salina, Kansas. I want to thank the committee for this opportunity to testify and discuss the topic of aviation business and maintaining our competitive edge.

Our company is best described as a supplier to the aviation community, both to end users and original equipment manufacturers. We market ice protection systems to the general aviation field, from high performance piston-powered aircraft to business jets. Our TKS ice protection system has become the standard for general aviation aircraft, and we are realizing a tremendous growth in our business because of the TKS product.

Our company is a wholly-owned subsidiary of CAV Aerospace Ltd. of the United Kingdom. A majority of the components of the ice protection system are manufactured in the UK. A vast majority of the produced product is sold in the U.S., and our company acts as the focal point for that commerce.

Our office is involved with TKS systems in four principle areas: Design and Engineering, Certification, Distribution, Sales and Marketing, and Customer Support.

Maintaining business success and competitiveness in the aviation marketplace requires the fulfillment of a number of factors. Our location and infrastructure requirements are met exceedingly well by the Salina Airport Authority and the community of Salina. Most of our personnel needs are likewise met from the community, both in staff and technical fields. As an example, Kansas State University in Salina has supplied many of our trade and technical personnel and will continue to be a resource for top notch recruits.

There are, however, specific areas of concern relative to the success of our company and our product line. I would like to share these concerns to the committee as examples of the difficulties small aviation businesses face these days. My primary areas of concern are:

1) Certification and Regulation
2) Product Liability
3) Recruitment of Technical Resource.

I see certification as a potential log jam with future developments of out products. We have a good working relationship with our cognizant FAA representatives and appreciate the efforts directed toward our programs. We see, however, that the work load of the FAA continues to grow while staff size remains dormant or decreases. The overall effect is not a difficult concept to grasp. Program schedules can become more indeterminate as the FAA struggles to address programs. Program selection becomes more prioritized relative to FAA resources, potentially delaying response to our projects. Certification workload is transferred to companies via delegation, increasing the demands on the company's resources both from a personnel and a financial standpoint.

I also find that the regulations are becoming more restrictive, but not necessarily to the benefit of the general public. Much, if not all of the modifications and embellishments of the Federal Aviation Regulations have been accomplished with safety in mind. Pursuit of regulatory safety is the noblest of goals and an absolute requirement for aviation products, but not at the expense of introduction of safety products to the market.

General aviation continues to evolve as a serious and realistic alternative to commercial airline travel. As they evolve, the aircraft must be equipped to address many of the environments and

conditions that commercial airline aircraft witness. General aviation is assuming the same responsibility as the airlines by delivering occupants or passengers to a specific location at a specific time.

Our ice protection products address one of those needs and rests on the fundamental principle of safety. TKS ice protection allows aircraft to safely exit or transition in-flight ice encounters. Our product is born out of safety, yet its availability to the general public is often encumbered with the veil of regulatory safety. Our product is safe, reliable, and proven beyond any reasonable doubt, yet it is becoming more and more difficult and expensive to gain approval of our systems for the market.

My next area of concern is a topic likely shared with all aviation businesses: Product liability. When queried about potential lawsuits, the reply is nearly unanimous. It is not a question of ever being sued, but a question of when. It is a dark cloud that shades all aviation businesses and threatens competitiveness by additional financial burden.

Like most businesses, our company stands by its product and assumes responsibility for that product. Our responsibility quickly becomes warped and often exaggerated when litigation occurs. From my perspective, a majority of the burden is moved to the defendants with little responsibility placed on the plaintiffs. A company can be sued by anybody, and allowed to "fish" for any evidence without overwhelmingly compelling evidence to support their position.

My experience indicates that the aviation industry is often treated unfairly in the litigation world. The concept of trial by peers is virtually nonexistent, because the court cases are often very technical when aircraft are involved.

I do not advocate absolution of our responsibilities to the public and to our customers. I do, however, ask for a reasonable chance within the legal system to have a fair trial on unbiased terms. Pre-trial arbitration may be one form of relief, a system that could potentially weigh the true merit of a case. The allowance of countersuit for damage may be another means of support, deterring frivolous law suits.

General Aviation has found relief with its aged fleet of aircraft, but growth of new aircraft, new products, and new innovation could be severely restricted by product liability.

My final area of concern centers around the most fundamental resource of any company: its employees. Specifically, the recruitment of new employees. Earlier in my testimony I indicated that our location in Salina affords us a good source of local people for labor, both trade and technical. Our difficulty arises when we must recruit people from disciplines not available through our local educational resources, or personnel with an experience base.

Our problem arises with recruitment of engineers. It is common knowledge that engineers are becoming a shrinking commodity. We suffer from that concept every day. Aviation/Aerospace business is good. Fewer and fewer kids are pursuing technical degrees within the United States. The end result is one that all companies will suffer from, particularly the smaller companies. A shortage of engineers will inflate the wage basis, making it extremely difficult for small companies to compete with large companies for a limited labor pool. Though it is contrary to the desire of most Americans, it is not difficult for me to understand the rationale of outsourcing technical work to overseas corporations. It is difficult to find engineers.

This concept can also work in reverse to the benefit of companies, but roadblocks still exist. Thousands of foreign students come to the United States to obtain higher education. Many of those students would like remain in the U.S. after earning their degrees, but many are hampered by immigration policy. It would be beneficial to all technical companies if immigration quotas were expanded for foreigners with technical degrees. As an example, our company could recruit new foreign aerospace or aeronautical engineers from our own regents schools such as Wichita State or the University if Kansas as needed.

Answers to recruitment issues are not easy. As I indicated, modification of immigration policy would certainly help in the short term. For a long term solution, it is my hope that more young people can be encouraged to enter technical fields and pursue a technical career. It is paramount that our technology base survives, and assures our competitiveness in all fields.

Thank you for your time and attention on these matters, and than you for the opportunity to present my views. I would be pleased to answer any questions you may have.

Introduction

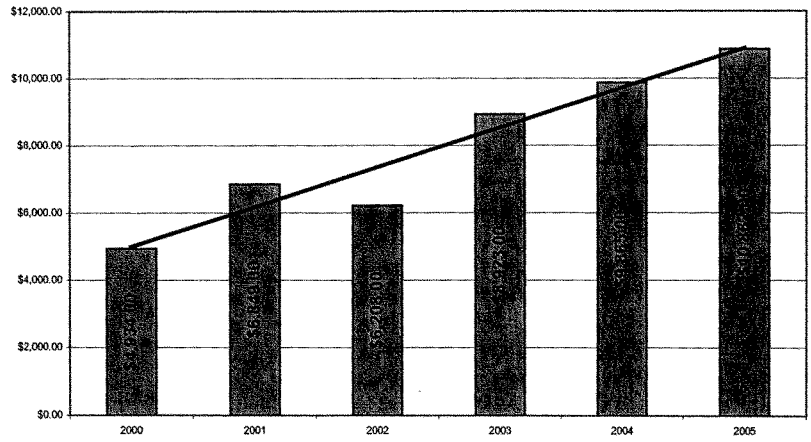
Good morning. I am Craig Mullins, General Manager of Lyons Manufacturing Co. It is an honor to be here today to give my testimony on "Keeping U.S. Aviation Manufacturing Competitive".

Founded in 1939, Lyons Manufacturing Co. is a small independent company that manufactures machined aircraft parts for commercial airplanes. Employing between 30 and 40 people we are one of the larger employers in the small town Lyons Kansas.

I have worked at Lyons Manufacturing Co. for more than 16 years and have seen many changes take place in the aviation industry. My testimony will cover some issues that I feel hinders small businesses like ours.

Health Care Cost

In order to stay competitive with other employers in our area we offer health care benefits to our employees. Over the years this has become more and more difficult due to the rising cost of offering this type of benefit. In 2000 our average annual premium for health care benefits was almost $5,000.00. In 2005 our average annual premium for health care benefits was almost $11,000.00. This equates to a 120% increase over a five-year period and a 24% increase per year.



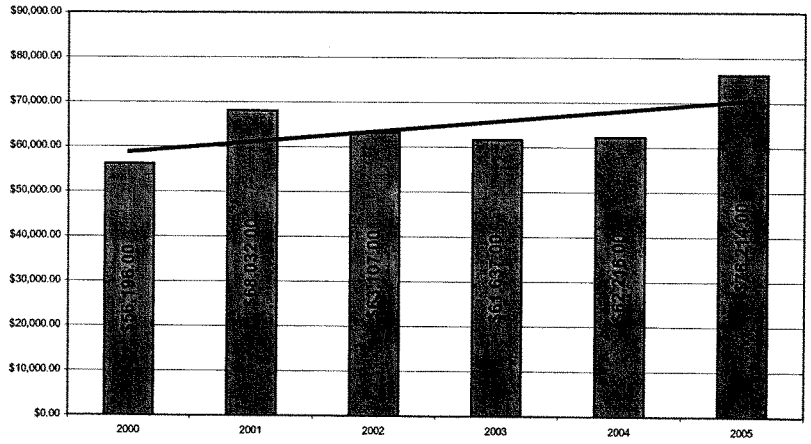
Annual Health Care Cost

Needless to say this is an expense that we pass on to our customers in the form of labor cost. Small companies like Lyons Manufacturing Co. cannot continue to pay for this increase and stay competitive. Many small companies like ours are

starting to drop health care coverage as a benefit or they are pushing the increased cost onto their employees. Every year I question whether or not we should continue to offer health care benefits. The problem is I know that health care coverage is very important and a necessity to many of our employees and I would lose good people if this benefit were not offered to them.

Utilities

As in many manufacturing industries, utility usage is a major cost to produce goods. Over the last five years it has become an increasing expense for our company and I don't foresee it getting any better in the near future. In 2000 our utility cost were a little more than $56,000.00 and in 2005 our utility cost increased to just over $76,000.00. This is a 36% increase over a five-year period, which is a little over 7% per year.



Annual Utility Cost

Labor

Aero structure suppliers are increasingly being forced to assume greater responsibility for supply chain management. If the knowledge and experience we possess are not adequate to undergo this kind of task, it is easy to fall short of our goals and professional expectations. One of the biggest challenges will be in the education and training of our employees. Well-trained, educated people will make better and faster decisions based on an unprecedented flow of data, information, and knowledge. Only trained and educated people will be able to separate useful information from useless information.

Small towns like Lyons suffer from young adults leaving for college and never returning. Some young adults decide to stay but never continue their education. Without an educated labor force we will be left behind or unable to seize new growth opportunities.

When I decided to continue my education at one the local colleges here in Wichita, I found myself in a classroom of students working in the aviation industry. Practically all of my classmates were receiving 100% tuition re-imbursement from their employers. I remember being angry because my company could not afford to help me and I had to pay to better my education for the benefit of the company. I am not saying I disagree with these companies providing education for their employees but it is a problem for small companies to offer the same benefit. I would like to see Federal or State funding become available for small companies to allow them to educate their employees. This would help us stay competitive in business and attract or keep employees.

Material Pricing and Shortages

During the last year and a half we have seen problems with availability of raw material and substantial price increases. Availability of aluminum and steel has created scheduling problems, production overtime, searching for other material suppliers, and missed deliveries. Since we are a small company, we are unable to buy large quantities of raw material for better pricing, so we have seen price gouging due to the shortages of aluminum plate.

With a predicted consumption growth of roughly 3.5% over the next 10 years for aluminum, I worry about availability of raw aluminum to manufacture parts. I keep asking myself; will the shortages and increased pricing be a continuing problem for us.

Conclusion

These topics are just a few issues that we are faced with in today's competitive industry. Even though we are a small company we are one of thousands in this country and I am sure companies small and large are facing these same issues.

Again, I appreciate this opportunity to testify before this subcommittee.

Statement

of

Jack Pelton
Chairman, President & CEO
Cessna Aircraft Company

Before the Subcommittee on Aviation

House Transportation and Infrastructure Committee

U.S. House of Representatives

Keeping U.S. Aviation Manufacturing Competitive

March 22, 2006

Mr. Chairman and members of the Subcommittee, my name is Jack Pelton. I am Chairman, President and CEO of Cessna Aircraft Company of Wichita, Kansas. Cessna is a unit of Textron, which also owns Bell Helicopters and Lycoming Engines. I am also Chairman of the General Aviation Manufacturers Association (GAMA).

I'm proud to say that Cessna is the largest general aviation manufacturer in the world. Since our inception in 1927, we have delivered more than 187,000 airplanes to virtually every country in the world. Last year, we delivered 822 single engine piston aircraft, 86 turboprops and 249 business jets, and this year we expect to significantly improve on those numbers.

As you may know, Wichita is the global center of general aviation. Since the beginning of powered flight, the people of Wichita have probably contributed more to the advancement of general aviation than anywhere else. We are intensely proud of our heritage, intensely proud of the products we develop and build here in Wichita, and intensely proud of the leadership role we in America have achieved in the global aerospace market.

But that leadership role is not a divine right. We have worked hard to attain it – and we have had the unwavering support of governments, both local and national. But make no mistake – our role in the global aviation marketplace is tenuous at best. We are beset from outside our borders by rivals who have the technical skills, industrial capacity, and government support to challenge us – and even from within our borders by others who wish to take undue advantage of the growth of general aviation as a remedy for their own business crises.

This, as I am sure you know, will be a topic of great interest in the months ahead. Today, I would rather talk about what is so dear to Kansas and to her citizens, and to so many business people around the country – general aviation.

Right now, the general aviation industry is doing very well. That's a major turnaround from just a few years ago. Much of the recent success in the industry is a result of the outstanding support that Congress has provided with the enactment of the General Aviation Revitalization Act in 1994 and the bonus depreciation in 2003-2004. Without these initiatives, it is very unlikely that we would have a healthy general aviation industry today, and for that we are very appreciative.

Today, the financial and competitive advantages of business jet travel are widely accepted by shareholders and CFOs. What was once thought of as an extravagant perk is now rightly regarded as a valuable business tool that enhances productivity, competitiveness and efficiency. The small businessman also relies on GA as a resource essential to expansion. In both instances, general aviation is a catalyst that helps strengthen our nation's competitive position globally.

I think it is important to focus here for just a moment. Business travel should not be regarded only as the use of business jets by large corporations. When I talk about general aviation, I mean everything from the multinational conglomerate flying an airline-size business jet to the small business owner in western Kansas who owns a couple of hardware stores and uses his single-engine four-seater to manage his business.

In fact, about two-thirds of all hours flown by GA aircraft are for business – that's about 15 million flight-hours every year. It is easy, then, to see that regulatory changes that impact the effectiveness of this segment of the industry will have immense consequences on American business.

I also want to give you a look at the current state of our industry – the business of developing, building, selling and supporting general aviation aircraft. After all, that is Wichita's strength.

Cessna is one of many companies in Wichita dedicated to powered flight. With more than 10,000 employees in Wichita and another 2,200 across the U.S., Cessna is the largest of these companies, but part of a community nonetheless – a community of some 48,000 people. The others – some of whom you will hear from today – include Raytheon, Spirit, Boeing, and Bombardier. This number also includes almost 400 direct and indirect subcontractors and suppliers in the Wichita area.

In terms of spending power, the aerospace industry in Wichita represents a powerful economic engine for this region, with more than $2.6 billion in total annual payroll alone. When a standard economic multiplier is applied to that number, we find another $2 billion in indirect economic benefit to the Wichita area.

Last year, Cessna accounted for sales of $3.5 billion. In doing so, we spent almost $1.5 billion with our suppliers and partners.

In addition to our 400 direct and indirect suppliers in Wichita, we also have about 900 suppliers in other parts of Kansas, and a total of 4,500 across America. In fact, we have suppliers in each of the 50 states. And this is just Cessna. Our fellow original equipment manufacturers (OEMs) have similar supply chains.

The state of the industry is very healthy right now. We are looking at an increase in our sales forecast this year over last, and 2007 is expected to be even better. I think you will find similar optimism from my colleagues at the other OEMs here in Wichita and across the country. There are more than 320,000 general aviation aircraft worldwide, 218,000 of those in the U.S. In total, general aviation in America directly contributes more than $41 billion to the economy every year.

General aviation plays an increasingly important role in our nation's trade balance. Last year, 19% of the GA airplanes manufactured in the U.S. were exported. In 2005, the number of GA airplanes exported from the U.S. rose 67% over 2004, while export billings rose by 82%.

At Cessna, we added about 1,000 employees in 2005 and we expect similar growth in our employment this year. These jobs range from sheet metal assemblers to specialty engineers. This is a growing industry – for now.

But we face threats from all directions.

From international competitors, the threats are coming from Europe, from Russia, from Brazil, from Asia. We still maintain the advantage, but the gap is closing.

We do not fear competition. Like all Americans, competition drives us to excel.

Cessna, like other American aerospace companies, is focused on transforming how we do business – how we produce airplanes. We are fully committed to lean manufacturing with programs such as Six Sigma; we are exploiting technologies to form a virtual enterprise with our customers and suppliers; we are making significant investments in R&D to continue to raise the bar on safety, and to ensure a full pipeline of new products our customers tell us they want; and we are investing in our people and our communities. Last year, we delivered more than 375,000 hours of training to our employees, and spent $1.5 million in tuition aid to our employees. Also last year, Cessna provided more than $2.75 million in charitable contributions.

We are confident that, as long as the global playing field remains level, we will maintain our leadership position and continue to improve the quality of life for our employees and their families, our customers, our communities and our society.

But while we are doing all we can to face external threats, we also face internal threats over which we have little control – threats that will negatively impact our customers, and our industry.

Regulatory changes that put an undue financial burden on general aviation, inconsistencies in rule interpretations, and illogical regulatory priorities will eventually cripple our industry – and torpedo our global leadership position.

A leading concern for us right now is the issue of FAA certification – bringing new aircraft to the global market is the culmination of years of private investment in research, development, and testing by a manufacturer in cooperation with thousands of suppliers. We consider ourselves experts in this field and we plan our sales and deliveries according to long range schedules. But certification has now become a risk and threatens our business plan.

In the past two weeks, we have just been told by the FAA that they will not begin work on certification of our new XL block point change – which is an upgrade to our current XL business jet -- for at least 90 days, and will continue to be further delayed every 90 days until they have resources available. This follows a similar action with our Encore block point change that suffered two delays under the FAA's new 40-HOUR RULE.

Under this rule, any certification project that requires more than 40 hours time on the part of the FAA is put into a general certification sequencing hold where it will sit and await its turn until FAA staffing will be made available. Whether the project calls for the certification of a new coffee maker or a new jet, it all falls into the same queue.

So no matter what new models we develop – no matter what efficiencies we adopt for manufacturing – no matter what safety enhancing technologies we produce, no matter what our customers expect in terms of availability of new business aircraft tools – we can do nothing until the FAA tells us they are ready to staff our certification project. If this continues, it will severely cripple our industry's ability to bring new products and technologies into the marketplace. In order to remain competitive in the world market, the federal government needs to maintain its level of services and support to the U.S. aerospace industry.

FAA could delegate much of the certification work to us under the Design Option Authorization program – as is being advocated by FAA leadership. Cessna, after all, has certified 26 airplanes in the past 10 years, more than any other company in the world. We really do know what we're doing.

Instead, more and more work is being required under ever-changing rule interpretations, which takes more and more man-hours to process. This is a moving target when the regulations do not change, but the FAA tries to force the airplane design to change. This occurs while critical certification projects that fuel GA expansion languish for lack of staff. Most importantly, there are technologies and new products ready to be certified that will make flying safer. We need to make sure that the certification process does not prevent or delay implementation.

This is just one example of the internal regulatory issues we face in general aviation manufacturing. The U.S. government should enable the growth and development of aircraft manufacturing, not inhibit it. On a similar front, this does not consider the additional issues we face in dealing with international regulatory agencies.

We believe that continued Congressional oversight of the general aviation industry is critical to its survival in the ever-changing global environment, and that oversight only comes through direct involvement such as through funding – and through hearings such as this.

The point is -- general aviation is an important contributor in the continued growth of our economy – both as a business tool and as a high technology industry – an industry where America still leads the world. General aviation is a true national resource.

We must learn from the mistakes of other countries – mistakes made in funding decisions, regulation adoption, airspace management, resource allocation, and general accessibility.

It is imperative that Congress takes the necessary steps to ensure that general aviation remains a formidable contributor to our national well-being, continues to be a key driver of our nation's economy and trade balance, and continues to provide an important productivity tool for our businesses.

We believe that it is in the best interests of our nation that our federal government encourages -- not inhibits -- general aviation's growth and vitality.

It's just good business sense.

Thank you.

Statement

of

Jim Schuster

Chairman and CEO

Raytheon Aircraft Company

Before the Subcommittee on Aviation

House Transportation and Infrastructure Committee

U.S. House of Representatives

Keeping U.S. Aviation Manufacturing Competitive

March 22, 2006

Mr. Chairman and members of the Subcommittee, my name is Jim Schuster. I am Chairman and CEO of Raytheon Aircraft Company of Wichita, Kansas. Raytheon Aircraft Company is a business unit of Raytheon Company, one of the world's largest defense companies with 2005 sales of $21.9 billion and 80,000 employees worldwide.

On behalf of the 6,000 Wichita-based employees: welcome to the Air Capital of the World – home of Beechcraft and Hawker, two of the best known and admired brands in general aviation. It is an honor for me to appear before you today.

I'm going to use my time today to tell you about our company and discuss the international market.

Raytheon Aircraft Company designs, develops, manufactures and supports business jets, turboprops and piston-powered aircraft for the world's commercial, fractional ownership, and military aircraft markets. Last year, Raytheon Aircraft Company had net sales of nearly $3 billion and delivered 416 aircraft.

Headquartered in Wichita, we have a proud heritage here. Aviation pioneers Walter and Olive Ann Beech founded the company in 1932, and over the years Beechcrafters – as our employees are known around the world – have built more than 54,000 aircraft. Some 36,000 are flying today.

Raytheon Aircraft Company is the third largest employer in the city and the fifth largest in the State of Kansas. While our total annual payroll for Wichita alone is approximately $360 million, our economic impact goes beyond the city limits or even the state's borders.

We produce wings for our Beechcraft aircraft and Hawker 400XP light jet in Salina, Kansas, where we employ 340 people. We have a major completion and service center for our Hawker business jets in Little Rock, Arkansas, with 650 employees.

We also have company-owned service centers in the U.S., Mexico and the United Kingdom. Raytheon Aircraft Company leads the industry with more than 100 authorized services centers and more than 1,000 trained A&P field service representatives worldwide. Our total global employee base is just over 8,000.

Additionally, Raytheon Aircraft Company has more than 300 direct and indirect suppliers locally, with an additional 150 in Kansas and a total of 1,800 across the United States. We spent $1.4 billion with our U.S. suppliers and partners in 2005. We also spent $300 million with our 400 international partners and suppliers located in 20 different countries worldwide.

The general aviation industry today is truly international in nature. Not only do our airplanes travel to every corner of the world, but our customers are based in virtually every country in the world.

In addition to our commercial business, we also produce and support special missionized versions of many of our commercial aircraft for military and governments worldwide.

I am proud to tell you that Raytheon Aircraft Company produces and supports the T-6A primary trainer for the U.S. Air Force and U.S. Navy's Joint Primary Aircraft Training Systems program – more commonly known as JPATS. We were awarded the contract in 1996, which calls for nearly 800 primary trainers through the year 2017 and support through 2050. We also exported the T-6 internationally with 26 aircraft delivered to Canada for the NATO Flying Training in Canada program and 46 to the Hellenic Air Force of Greece.

In 2005, the number of general aviation airplanes exported from the U.S. surged by 67 percent over 2004 to 557 aircraft, while export billings rose 82 percent to $2.6 billion. Of the 2,857 general aviation airplanes manufactured in the U.S. in 2005, 19 percent were exported around the world. At Raytheon Aircraft Company, our international deliveries nearly doubled between 2004 and 2005; with nearly 29% of the aircraft we manufactured being exported to customers around the world last year.

As the worldwide economy expands and becomes ever more interdependent, it becomes increasingly important for the U.S. Government to support the development of those markets to assure our nation's position as a global leader in aviation.

Currently, the FAA under the leadership of Transportation Secretary Norman Mineta and FAA Administrator Marion Blakey recognizes this. More time and energy is being spent by our government overseas to foster new markets, provide leadership in safety and promote our industry.

For example, the FAA is adding resources and staff to assist with aviation issues in China and India, two of the largest potential new markets for general aviation over the next decade. These efforts will pay large dividends for the entire U.S. aerospace industry, and we are thankful that U.S. transportation leaders are paying more attention to international markets and issues.

As other markets develop, it is important to ensure that the FAA and other federal agencies continue to support aviation expansion into emerging markets. After China, we see India and Eastern Europe as markets with the greatest opportunity for general aviation and aerospace growth.

The aerospace industry works constantly with both Congress and the Executive Branch to ensure foreign markets are open to U.S. products. Working to break down trade barriers is critical to continue the dramatic increase we are seeing in U.S. exports of aerospace products and services.

Congress can help maintain U.S. leadership in aviation by ensuring that the FAA receives the resources it needs to carry out its functions, including the certification of new aviation products.

Jack Pelton has also discussed certification funding this morning, but let me just emphasize how important this is to assuring continued U.S. global leadership in aviation. Our competitors around the world, particularly in Europe, are working to impose their model of regulation in emerging markets. With the creation of the European Aviation Safety Agency, EASA, the European Union (EU) now has a powerful single FAA-like institution to certify new aviation products. Let me be very clear: if the certification of new aviation products becomes onerous or subject to delays in the U.S., Raytheon Aircraft Company and the rest of the U.S. general aviation industry will be severely disadvantaged in the global marketplace. The result will be a loss of our technological leadership, international competitiveness and, ultimately, jobs.

While Raytheon Aircraft Company and our industry is doing well today, I must re-emphasize that this is an industry vulnerable to subtle changes in laws, regulations and the economy.

We need Congress to continue to carefully consider the issues of the FAA funding and resource allocation, as well as other regulatory changes. The future of Raytheon Aircraft Company and the general aviation industry depends on you.

Raytheon Aircraft Company firmly believes there is a solid and continuing domestic market for our aircraft and we look to the international market for growth opportunities. I urge members of Congress to assist in promoting general aviation and assert that continued Congressional oversight is critical to the success of our industry, both domestically and internationally.

Mr. Chairman, I would like to thank the Subcommittee for taking the time to travel to Wichita today to listen to our comments and concerns about keeping U.S. aviation manufacturing competitive. In closing, I would like to extend my personal thanks to Congressman Tiahrt for his strong and tireless support of the aviation industry.

Statement by Jeffrey L. Turner
President and Chief Executive Officer
Spirit AeroSystems, Inc.
before the House Subcommittee on Aviation
on "Keeping U.S. Aviation Manufacturing Competitive"
March 22, 2006

Chairman Mica and Honorable Subcommittee Members:

Thank you for this opportunity to address the important topic of "Keeping U.S. Aviation Manufacturing Competitive." This subject is of supreme interest to my company and all of our industry.

I am Jeff Turner, President and CEO of a relatively new company but one with a deep history of aviation manufacturing. Spirit AeroSystems is the world's largest independent tier-one supplier of aerostructures. Until June of 2005, we were a supplier division in Boeing Commercial Airplanes.

With headquarters here in Wichita, Kan., and operations in Tulsa and McAlester, Okla., we have 10 million square feet of facilities and 9,750 employees (8,500 in Wichita). We have been engaged in aerospace manufacturing for over 75 years.

Our future is dependent on our ability to be competitive. We strive to become the preferred partner to the aircraft industry, supplying top-quality fuselage and propulsion structures, wing components, and tooling services to original equipment manufacturers (OEMs). In addition, we offer spare parts and aftermarket support to airline operators worldwide.

We continue to be the largest supplier to the Boeing commercial product lines and are actively marketing our skills and capabilities to other aerospace companies. Our pending purchase of BAe Systems Aerostructures operations in Scotland and England is a prime opportunity for Spirit to diversify our revenue base and grow as a world leader in our various capabilities.

I do not believe our position on competitiveness is different from that of other aviation manufacturers. Simply put, we want a level playing field upon which to compete in the global competition. Several factors can help or hinder our participation.

The first is the funding of aviation research such as that here at the Wichita State University National Institute for Aviation Research. NIAR houses an FAA Center of Excellence for Advanced Materials and the NASA National Center for Advanced Materials Performance, and all three have helped us compete against non-U.S. manufacturers.

Second, the need for technical training continues to be essential to securing, sustaining, and retaining the skilled workforce needed to expand our business over the next decade. Projections for our community indicate that the five major aviation companies in Wichita may need as many as 4,150 trained workers this year alone.

Third, attention must be given to developing U.S. engineering talent. Aerospace engineers are the source of future innovation that will provide American aviation manufacturers a competitive edge. Yet the supply is exceeded by the demand. At Spirit AeroSystems we hope to hire about 550 engineers over the next five years.

Fourth, capital is needed for product development, new process planning, and new equipment. It is a challenge for Spirit to compete against companies that seem to have an unlimited flow of public assistance to build facilities and fill them with equipment and trained people. This is especially true in developing economies that have targeted the aviation market.

Fifth, health care is the number one rising cost for Spirit and other companies. Health insurance premiums jumped 73 percent over the past five years. Such escalation continues to be not only a source of competitive disadvantage for U.S. manufacturers in our industry, but also a considerable source of employee-company friction and overall employee concern for the future.

Sixth, and finally, while protecting national security, we must be able to compete internationally in an open and collaborative way. Appropriate import/export regulatory measures are important but they must be implemented reasonably with full understanding of their cost and benefits.

In conclusion, thank you again for the opportunity to speak today. This is a critical topic for Spirit AeroSystems. Our customers and our competition are global and so must we be. The technology utilized in our products also is global and our ability to work effectively throughout the world with both customers and partners is essential. To remain competitive, our U.S. industry must be supported with world-class research capability, engineering and technical training, and continuous investment in product, process, and equipment.

Thank you.

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