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"The U.S. Aviation Industry And Jobs: Keeping American Manufacturing Competitive"

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INTRODUCTION

The Aerospace Industries Association (AIA) appreciates the opportunity to present our views on the competitiveness of the U.S. aviation industry. Today, there is no sector of our economy that contributes more to U.S. net exports than commercial aviation manufacturing. This situation could change in the future if we are not careful.

I am Marion Blakey, President and Chief Executive Officer of AIA, the nation's largest trade association representing aerospace and defense manufacturers. Our 380 members represent an industry directly employing one million workers, and supporting another 2.5 million jobs either indirectly or as suppliers. First, let me discuss the state of commercial aircraft manufacturing today.

U. S. COMPETITIVENESS IN AIRCRAFT MANUFACTURING

U. S. aircraft manufacturers continue to hold strong positions in the world market due to the dedication and hard work of American workers, the wisdom of executives leading those companies, and the pursuit of technological advances that drive world markets. In fact, the aerospace industry continues to be the United States' leading exporter of manufactured goods. By value, our industry exported $72.1 billion more than we imported last year. This figure was up 10% over the previous year, even as the overall U. S. economy improved in fits and starts.

Without a doubt, the success in net exports is related to our dominance in commercial aircraft manufacturing. U. S. exports of civil aircraft, engines, avionics, and related components represent 88 percent of all aerospace exports and almost all of the increase we experienced last year. This is a sign of growth in the developing world. But it is also a testament to an industry which has invested billions of dollars in research and development to remain competitive through the use of increasingly sophisticated technologies. We have raised the fuel efficiency of jet engines by 125% since 1960 and by 20% in the past ten years. And while increasing efficiency, our manufacturers have also increased safety. In fact, aircraft safety margins have doubled since 1990. Because of these advancements, the competitiveness of our industry remains strong.

Several of AIA's member companies analyze global market trends, and they reach similar conclusions. Aircraft manufacturing will continue to experience growth that outpaces the growth in global GDP. About 60 percent of these new aircraft will be needed to accommodate global market growth. However, the high price of aviation fuel has been accelerating the replacement of older aircraft with more modern, fuel-efficient aircraft.

A disproportionate share of this growth involves smaller, single-aisle aircraft in emerging markets led by the Asia-Pacific region and China in particular.

We are pleased that the business aviation and rotorcraft sectors are poised to recover from the economic downturn that began a few years ago. General aviation aircraft shipments were up about 6% last year and the forecast for this year is in that range (8.5%). Business jet deliveries have also recovered, with shipments up 6.3% last year. For the next five years at least, the majority of orders are expected to come from North America, and therefore will be largely dependent on the state of the U. S. economy. However, over the long term, our success in the business aviation market will become increasingly dependent on our market share in the developing world, particularly Asia and Latin America. Likewise, sales of civil helicopters are increasing, and we expect this trend will continue over the next few years with modest growth. These markets include oil and gas exploration and production, public safety, and emergency medical services.

I should add that the downturn in U. S. military investment puts a drag on this positive message from our commercial industry. The U. S. military aircraft sector continues to shrink, falling 6.3 percent last year and almost 10 percent over the past three years. Many do not realize that several of our key military aircraft production lines are sustained today largely by exports. This situation contributes to a declining supplier base that can affect the commercial sector in its overall competitiveness.

Of course, other nations are not sitting idly by; they are trying to cut into our edge. The growth in emerging markets is naturally stimulating other nations to improve or establish their own aircraft manufacturing capabilities. Two years ago, Russia joined the International Coordinating Council of Aerospace Industries Associations (ICCAIA), and China is expressing interest. Manufacturers in Latin America, Russia, China, and elsewhere will increasingly compete with U. S. industry, particularly in the high-growth markets for single-aisle aircraft and regional jets. And it is important for us to realize that, in many cases, U. S. companies are competing against foreign governments, not just foreign companies.

AIA also believes the global liberalization of aviation treaties -- in "open skies" agreements and multilateral trade agreements -- should continue to be supported by governments around the world. Initiatives such as these that increase the flow of goods, services and passengers provide economic growth for countries worldwide and benefit all of us.

Considering this situation, it is also imperative that we address long-term risks or barriers to our global competitiveness. Let me highlight a few of those issues.

BARRIERS AND RISKS TO MAINTAINING U. S. COMPETITIVENESS

While the U. S. is in a stable position today, there are risks and barriers that will undercut our position over the next few years if not addressed. These include FAA budget concerns, the inability to maintain a properly skilled workforce, appropriate financial support, and tax incentives for the development of new technologies. Let me address each of these in turn.

FAA Funding and Future Sequestration

The Federal Aviation Administration (FAA) provides critical services that directly affect the competitiveness of U. S. aviation manufacturers. Our industry has a wide range of aerospace products that are poised to enter the global marketplace. As a regulated industry, bringing these new products to the market requires FAA review, approval, and certification. However, in this fast-moving environment, we often find that FAA's certification process moves too slowly.

We were pleased that Congress recognized this issue in section 312 of the FAA Modernization and Reform Act of 2012 (Public Law 112-95). This section, commonly referred to as "certification streamlining", requires the FAA to examine the certification and approval process and provide recommendations for streamlining. The FAA commissioned an Aviation Rulemaking Committee and developed an implementation plan for those recommendations. We urge the agency to follow through on this plan as soon as possible. Given the current budget constraints facing the FAA, making this process more efficient will help ensure the industry does not have even longer wait times. The FAA needs to make maximum use of existing delegation systems and leverage best practices in their certification processes.

AIA does not believe FAA can maintain today's level of service and invest adequately for the future if the agency is faced with additional Budget Control Act sequesters. We appreciate the near-term relief for fiscal years 2014 and 2015 that was provided in the Bipartisan Budget Act last December. However, sequestration returns with a vengeance in fiscal year 2016.

If fiscal year 2013 is any guide, when additional sequesters go into effect the investment accounts will bear a heavier share of the reductions. In 2013, the agency lost $637 million from a sequester that occurred in the middle of the year. To avoid employee furloughs, Congress authorized a one-time transfer of airport grant funds to the operating account. However, even with this flexibility, the agency had to reduce NextGen programs by almost $140 million, taking this initiative back to its fiscal year 2011 funding level and disrupting

dozens of programs. The FAA's NextGen budget request for fiscal year 2015 does not recover from these reductions. In fact, that request is almost $200 million below the President's request of only two years ago. That is a steep funding drop for a critical program.

In addition, if the agency is forced to take a "today first" attitude, new technologies that could transform aviation may end up on the cutting room floor. Foremost among these is the budding market for unmanned aircraft systems (UAS). We think it was wise and important that Congress promoted the integration of UAS into our national airspace by the year 2015. The application of UAS for public safety missions and a variety of commercial uses is enormous, and other nations are just as interested. Our manufacturers lead the world in these technologies, and if we make sure the Congressionally-mandated integration stays on course, we will see markets open up for our technologies, not only here in the United States, but around the world. We hope you will support funding for UAS integration activities, including the standards development efforts and the research and development programs that are needed for successful and safe NAS integration. And while we understand the desire to address privacy, we believe it can be adequately protected. We urge you to oppose any such legislation that would cripple or unduly restrict the growth of this important industry before it is given a chance to develop.

If the FAA is constantly distracted by continuing resolutions and budget cuts, long-term investments will suffer the most. I understand the need to keep today's air traffic system running safely and smoothly. But to remain competitive over the next decade, our manufacturers also need continued investment in a twenty-first century infrastructure, including high technology and transformational systems like UAS.

Our failure to make these investments, just as we are hitting our stride, would embolden our overseas competitors. It would send the wrong message to the developing world – a message that the U. S. may not be able to meet their needs in the future. Equally important, it would break the faith with a manufacturing industry that is investing billions to advance in growing worldwide markets. We are investing in new supply chains, new plants and equipment, and new jobs employing skilled workers all around the country. We need the government to do its part -- to review and approve those products efficiently, support new markets, and expand our national aviation infrastructure.

Continuing to Improve Environmental Stewardship and Energy Efficiency

Because aviation is fundamentally global, it is critical that the U. S. maintain its leadership role in the international bodies that set standards and harmonize technical specifications for aviation technologies – an issue with rising importance as market dynamics shift to developing nations.

There is no better example than the critical technologies underpinning aircraft fuel efficiency and low emissions. The high cost of jet fuel on the global market has made engine fuel efficiency a major driver of aircraft purchase decisions. The FAA's commitment to the Continuous Low Emissions, Environment and Noise (CLEEN) program is important to our industry. This program is cost-shared with manufacturers on a dollar-for-dollar basis and is showing real results in the development of new engine technologies that dramatically reduce aviation noise, emissions and fuel burn. In addition, maintaining momentum in the multi-agency alternative fuels development program is an important initiative for the aviation industry as we work to reduce our dependence on petroleum-based energy sources.

Providing Globally Competitive Tax Policies

The Research and Experimentation Tax Credit (commonly called "R&D Tax Credit") is an important incentive for national business investment in R&D. This is important for many sectors of our economy, but it is especially important for high-tech companies in the aerospace sector. Once again, the credit was allowed to expire at the end of last year, a political football caught up in the broader discussion of comprehensive tax reform.

U. S. commercial aerospace manufacturers are at a substantial disadvantage vis-à-vis foreign competitors whose home countries almost universally have more favorable and more predictable R&D tax credits. A permanent R&D credit has been proposed as part of the administration's corporate tax reform package, and was included in Chairman Camp's bill released earlier this month. We urge the Senate to act favorably on these proposals either separately or as part of comprehensive tax reform legislation. At a minimum, legislation is urgently needed to restart the R&D tax credit and apply its provisions retroactively to the beginning of calendar year 2014.

Providing a Skilled Aerospace Workforce

American aerospace workers are among the most highly productive and skilled workers in the world. With a global market that is growing rapidly, we must maintain an adequate supply of workers with degrees in science, technology, engineering and math (STEM) disciplines and specific manufacturing skills for U. S. industry to continue to dominate and benefit from the aerospace export market. And for aviation markets to meet the forecasted demand, we will need to recruit and train hundreds of thousands of new pilots and maintenance technicians, as a recent Boeing study has verified. We want to sell those aircraft, train those pilots, and hire those mechanics.

Unfortunately, today America is simply not producing enough workers with the right technical skills. The U. S. graduates around 300,000 students a year with bachelors or

associate degrees in STEM fields. The February 2012 report of the President's Council of Advisors on Science and Technology (PCAST) recommended that this be raised by one-third to meet our economic needs. One startling fact is that less than 40% of students who start college intending to earn a STEM degree actually complete the degree requirements. We need to turn that around, and AIA and our member companies are working to do just that. We are collaborating with other stakeholders to increase retention rates in engineering programs by putting in place policies and practices, such as internships and mentoring, which encourage and support the success of qualified students.

And this is not just about four year degrees. Community colleges and career technical education play an equally important role in meeting our workforce needs. In fact, today one third of our current STEM employees begin their education in community colleges. For years, aerospace companies have experienced challenges in filling certain manufacturing and other technical positions. Customized credentialing programs that prepare students with the specifically required skills are playing an important role in addressing the existing STEM skills gap and constitute another key element of our industry's workforce efforts.

Our STEM workforce challenge is exacerbated by the fact that the aerospace industry is graying. In 2007, we found that almost 60 percent of the U.S. aerospace workforce was age 45 or older. Today, 9.6 percent of our industry is eligible to retire, and projections are that by 2017 -- just three years from now -- 18.5% of the entire industry will be eligible to retire. At our largest corporations (those employing 100,000 or more), the percentage retirement eligible is already 18.6 percent. We are experiencing a shortage of STEM workers today, but the problem will be even greater when the bow wave of actual retirement hits us in the next couple of years.

It was ten years ago that the Commission on the Future of the U.S. Aerospace Industry recommended "the nation immediately reverse the decline in and promote the growth of a scientifically and technologically trained U.S. aerospace workforce". Our industry paid attention, and AIA has been driving progress on STEM education and workforce issues for a number of years. We facilitate collaboration among our member companies and with other stakeholders – business groups, government, academia and the philanthropic community – at the national, state and local levels. We seek systemic change that will produce a prepared and competitive twenty-first century workforce. AIA further raised the profile and rigor of its engagement in 2013 with the formation of a new, high-level Workforce Policy Council, and we remain committed to meeting this challenge.

Implementing Improved Export Policies

AIA strongly supports the goal of the National Export Initiative to double U. S. exports by the year 2014 and rationalize our outdated system of export controls. Export control reform is crucial to the success of the aerospace and defense industrial base to increase exports, and enhance interoperability with our allies and trading partners, while ensuring that advanced technologies are protected in the most appropriate manner. AIA appreciates the substantial achievements in satellite export reform enacted by Congress in 2012, and we are committed to working with the administration and Congress to see these reforms continue in other areas.

Missile Technology Control Regime and UAS Exports

One example of a current barrier to U. S. competitiveness involves the application of the Missile Technology Control Regime (MTCR) to the export of unmanned aircraft systems (UAS). We believe the MTCR's "presumption of denial" for UAS exports capable of greater than a 300 KM range and a 500 KG payload must be balanced for risk management purposes on a consistent and clear basis. Other criteria to consider in overcoming the "presumption of denial" include the system's additional capabilities (or lack thereof) and the specific allies and partners with whom we are considering sharing this technology to protect and promote our common security interests. Absent such considerations, we run the risk of the same loss of market share and damage to the industrial base that occurred in the commercial satellite sector under similar one-size-fits-all export controls, and may also stifle the move to commercial use of such systems. We continue to work with the administration to develop a new way forward to control UAS systems for export appropriately in a way that benefits U. S. industry and jobs while protecting our valid national security interests.

FAA Authority to "Promote" Civil Aeronautics

In the 1996 FAA Reauthorization Act (Public Law 104-264), Congress deleted FAA's authority to "promote" new aviation technology. The agency is still allowed to "encourage" these developments, but not to "promote" them. We acknowledge the intent of Congress to have the agency focus solely on aviation safety. However, we believe FAA is interpreting this in an overly restrictive manner that affects the ability of U. S. manufacturers to sell our superior products overseas. One recent example is the agency's refusal to endorse basic information about air traffic control equipment currently in use by the agency out of concern that this could be construed as "promotion". We believe a clarification of Congressional intent or some modest exception authority would be helpful.

Export-Import Bank of the United States

The Export-Import Bank of the United States also plays a vital role in helping American companies compete on a level playing field in the global marketplace. Last year, the bank aided 3,400 companies – large, medium and small – in supporting over 205,000 U.S. jobs, maintaining a robust network of aerospace suppliers, and facilitating a stronger U.S. presence in the global market. Significantly, nearly 88% of these jobs were at small businesses around the country. Many people do not realize that the bank is self-sustaining, and operates at no cost to U.S. taxpayers. In fact, through its fees and charges, the bank brought in more than $1 billion to the U.S. treasury in fiscal years 2012 and 2013. Simply put, the federal deficit will go up if the Export-Import Bank is shut down.

At a time when defense cuts are causing smaller suppliers to shrink their operations, Ex-Im financing maintains the financial health of a large number of aerospace industry suppliers, providing assistance to 30,000 of them. Many of these suppliers have looked to other aerospace sectors to compensate for lost revenue from the defense downturn. Furthermore, Ex-Im financing is a critical tool to the aerospace exporter in both general aviation and space services. From May 2012 to February 2014, Ex-Im financed over $1 billion in business jet exports, supporting over 5,000 jobs. Satellites and space launch services have become Ex-Im's fastest growing sector. Prior to 2010, Ex-Im financed roughly $50 million annually in space services. That number has risen to over $1 billion in each of the last two years. In fact, over 60% of U. S.-built commercial satellite exports today are supported through Ex-Im financing.

Equally important, the bank allows U.S. exporters to effectively compete with foreign firms that have their own government-assisted financing. Our Export-Import Bank is one of 59 export credit agencies around the world. Each of them supports the export of manufactured goods in a highly competitive global marketplace. And many of these governments extend more credit, at more favorable rates, than the United States. In fact, as a percentage of GDP, U.S. export credit in 2012 ranked below six other countries. Germany and France extended nearly two and a half times as much export financing; China and India almost three times; and Korea ten times as much. The Export-Import Bank does not cost American taxpayers a dime. It helps our manufacturers compete and sell their products around the world. And since aircraft manufacturing is one of our nation’s biggest exports, it is not surprising that U. S. jobs depend on our government helping to maintain a level playing field. The bank's authority is set to expire on September 30, 2014, and we need your support to ensure there is no gap or shutdown in this important program's operations.

CONCLUSION

In conclusion, we believe that U. S. aviation manufacturers are in a strong competitive position today, but there are risks to our maintaining this position over the next decade. As a nation, we need to ensure that our tax policies and financial support provide incentives to maintain jobs here in the United States and are competitive with the policies of other nations. We need to provide improved infrastructure in air traffic control technology, not only for our own economic health but for its export potential. And we need to ensure that our aerospace workforce is prepared to handle the challenges and changes coming to the global marketplace over the next decade or two. Thank you for the opportunity to submit testimony on this important subject.