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THE U.S. AVIATION INDUSTRY AND JOBS: KEEPING AMERICAN MANUFACTURING COMPETITIVE

HEARING

BEFORE THE

SUBCOMMITTEE ON AVIATION OPERATIONS, SAFETY, AND SECURITY

OF THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION
UNITED STATES SENATE

ONE HUNDRED THIRTEENTH CONGRESS

SECOND SESSION

MARCH 13, 2014

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ONE HUNDRED THIRTEENTH CONGRESS

SECOND SESSION

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THE U.S. AVIATION INDUSTRY AND JOBS: KEEPING AMERICAN MANUFACTURING COMPETITIVE

THURSDAY, MARCH 13, 2014

U.S. SENATE,
SUBCOMMITTEE ON AVIATION OPERATIONS, SAFETY, AND SECURITY,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The Subcommittee met, pursuant to notice, at 11:05 a.m. in room SR–253, Russell Senate Office Building, Hon. Maria Cantwell, Chairman of the Subcommittee, presiding.

OPENING STATEMENT OF HON. MARIA CANTWELL, U.S. SENATOR FROM WASHINGTON

Senator CANTWELL. The Senate Commerce Committee, Subcommittee on Aviation will come to order. And I want to thank my colleague, Senator Klobuchar, for being here. I know that Senator Ayotte is finishing up her questioning at an Armed Services Committee meeting at this moment and will be here shortly to give her comments and statement, but since everybody is on a tight timeframe this morning we want to go ahead and get started.

I want to thank our witnesses that are here with us today: Dennis Muilenburg, Vice President and Chief Operating Officer from Boeing Commercial Airplane Company, thank you for being here; the Honorable Marion C. Blakey, President and CEO of Aerospace Industries Association, and obviously we're very familiar with much of your work in the past; Nick Calio, President and Chief Executive Officer of Airlines for America; and Ed Wytkind. Is it Wytkind?

Mr. WYTKIND. Wytkind.

Senator CANTWELL. Wytkind, President of the Transportation Trades Department, the AFL–CIO.

So first, before we turn to the subject of the hearing, I want to offer my condolences to the families and the victims of the Malaysian Flight 370. Our thoughts are with them. I know there are several search parties and investigators working hard to locate the aircraft and find some answers, including the National Transportation Safety Board. And I want to thank them for their efforts and for their dedication. It's a tragic situation and it reminds the aviation community that as we see growth of our systems across the world we must also remain vigilant in regards to safety and operations of our systems, and continue to work every day to prevent such tragedies.

Today, our hearing is entitled, “The U.S. Aviation Industry and Jobs: Keeping American Manufacturing Competitive.” The U.S. aviation sector is vital to our nation’s economy. In 2009 the civil aviation industry supported over 10 million jobs and contributed $1.3 trillion to our total economic activity and accounted for 5.2 percent of the U.S. gross domestic product. Of this total, manufacturing of aircraft and related components provided over a million jobs that produced $185 billion in economic output while U.S. sales of civilian aircraft equipment and parts to foreign entities contributed $75 billion toward our Nation’s trade balance. So aircraft operations directly contribute a lot of money to the U.S. economy.

We’re here today to discuss a critical point in aviation manufacturing, and then aviation in general, and that is that as world demand for airplanes continues to rise, what are the challenges and opportunities. We should note that for the first time in history, a truly global middle-class is emerging. By 2030 it’s projected that that middle-class will double in size from two billion today to five billion. And this will support a strong and steady growth in air service and aircraft. At the same time, while we look at this tremendous opportunity, we know that airlines, and I’m sure we’ll hear from Mr. Calio, must replace old aircraft with new, more fuel-efficient models so that they can combat the rising cost of oil, which accounts for about 30 percent of its cost and the issue of reducing emissions.

As a result, the forecast for new commercial planes over the next 20 years is over 35,000 planes. The market value of these aircraft orders is about $4.8 trillion. This is a huge economic opportunity for America to drive high-wage manufacturing and transportation-related jobs over the next two decades. However, this opportunity is not guaranteed.

While the U.S. has been a global leader in aircraft manufacturing for 100 years, the competition is coming on fiercely. Other nations want to build those 35,000 planes and we can’t rest on our laurels. The majority of demand for new planes will come from abroad. An estimated 80 percent of those new planes will be sold outside of North America and more than one in three planes will go to the rapidly growing Asian market. The European Union continues to make substantial investments in aerospace manufacturing. And new government-backed competitors in China, Brazil, Russia and Canada have emerged as players in the aerospace market over the last few years and they are playing for keeps.

So while we have a tremendous opportunity we also face real challenges in aviation manufacturing. We need to make the right investments to stay competitive on a global stage and financing that innovation is also a challenge. We have to keep moving or we will lose ground.

Today’s hearing is about taking the next steps to ensure that the Nation is ready and poised to capitalize on this opportunity to talk about the job creation activities. There is a demand in the aerospace market for those 35,000 planes and there is a demand for about 200,000 new aviation workers. These are everything from technicians, to engineers, to machinists, to those involved, if you just look at the number of flights that are going to be involved, for pilots, airplane mechanics and repairers. So these are big issues that are going to provide great opportunities for us.

So while the aviation sector supports lots of jobs across our Nation and many states in the United States of America support these jobs, just to name a few: Missouri, 15,000; California, 18,000; obviously, Washington State, we have about 80,000. So these are all areas of our country that depend on the aviation economy and we want to be competitive.

So today we're going to hear and talk about how we educate and train the next generation of aerospace workers. That means making investments in programs like STEM and worker training. So I plan to move forward, working with my colleagues on both sides of the aisle, on new aviation job training and apprentice programs to make sure that we have some of those 200,000 people that we need for the future. And I want to know, with the 777X plane development, the fact that manufacturing is being brought back to the United States from overseas manufacturing, is a very telling opportunity for America as we move forward on advanced materials, like composites, to continue to stay ahead and show that the American workforce delivers the best product.

We also are going to hear about how we need to make sure that there's a level playing field. The Chinese government has committed $30 billion to developing a 737 competitor. The Brazilians have increased their investment in vocational training. We're going to make sure that when it comes to the World Trade Organization that if there are illegal subsidies that those subsidies are stopped.

We're going to hear from Mr. Calio about the competitive nature of what the airlines themselves are facing; about high fuel costs; and challenges as people add to the cost of aviation. The U.S. airline industry needs to have our support in making sure that carriers are on an equal footing in the global marketplace. And so, I look forward to hearing his ideas on how we do that.

We will continue to talk about export investments and about modernization of our air traffic control system, which as many of you here know, is long overdue. These improve safety, expand capacity, lessen congestion, and provide greater efficiencies, and opportunities for airlines to run efficiently.

We've had great success with the Greener Skies program in Seattle which was lowering cost for airlines by reducing noise and carbon dioxide emissions by putting people on a more direct path to landing but we need to make stronger progress implementing NextGen if we want to be a global leader. NextGen is just not critical for the airlines, it's critical for the manufacturers and the sooner the FAA implements the NextGen, the sooner our manufacturers can start exporting the important technologies and creating even more jobs here in the United States.

So, I look forward to hearing from all the witnesses on this and how we maintain our competitiveness in the manufacturing industry. This is an incredible opportunity for us; not every day you can look forward and say there's an opportunity for 200,000 more jobs, but we have to be ready for the competition and put a game plan in place to capture that opportunity.

With that, I'd like to turn to my colleague, Senator Ayotte. Thank you for rushing over from one hearing to this hearing. We very much appreciate you being here and look forward to your opening statement.

STATEMENT OF HON. KELLY AYOTTE, U.S. SENATOR FROM NEW HAMPSHIRE

Senator AYOTTE. Thank you, Madam Chairwoman, and I really appreciate this hearing. It's a very important hearing that we're going to hold today.

And before I begin my remarks, I just want to say that I know that all of our thoughts and prayers are with the families of those who have lost loved ones on the Malaysia Airlines Flight 370, including three Americans who were onboard that flight. I have full confidence that the authorities will conduct a thorough investigation to identify the cause of what happened with that flight and obviously help us prevent similar tragedies from occurring.

Everyone in this room appreciates the value of a healthy and competitive U.S. aviation industry and we all recognize its contribution to America's economy. The industry supports over 10 million American jobs, contributes over $1 trillion to our economy, and accounts for over 5 percent of U.S. gross domestic product. Our focus today is to identify ways to build on these contributions to expand the industry with the goal of making sure that the U.S. aviation industry remains second to none.

For over a decade now, the domestic aviation industry has faced serious challenges. Many of those challenges were due to largely unanticipated events, shocks to our economy, including the September 11 terrorist attacks, the fallout from the financial crisis, and the highly volatile fuel prices. So, so many challenges that the aviation industry has faced.

But some of the barriers to the industry's success can also be attributed to a pattern of poor aviation policy choices. For example, our Nation has an outdated and inefficient air traffic control system, the overhaul of which has been significantly delayed and is more expensive than originally envisioned. So this is something that we absolutely need to work together on, and I look forward to working with the Chairwoman on the NextGen system.

We're also confronted with an aging workforce whose technical skills and expertise are not being adequately replaced. And the industry is further burdened by many onerous taxes and regulatory demands from Washington.

In addition to these obstacles, our domestic aviation industry must also respond to the pressures, often unfair pressures, of an increasingly global marketplace and our ability to compete in that marketplace. These challenges also create an opportunity for the same spirit of innovation that made America a global leader in aviation. Some potential areas include exploring what increased efficiencies may be achieved by engineering smarter aircraft and the possibilities that exist for alternative fuels.

I look forward to hearing from our witnesses today about how Congress and the industry can work together to address these challenges. I look forward to hearing from all of you on how we can help create a better competitive environment for the industry to thrive and grow. And as we begin developing the next FAA Reauthorization Bill, it is critical that members of this committee, and our House counterparts, collaborate with the industry and labor representatives like those on our panel today to understand that we, this is so important to our economy, that we create the very best environment for our aviation industry to continue to thrive and grow and be more competitive than it is now.

Thank you, Madam Chairwoman.

Senator CANTWELL. Thank you.

And now we'll turn to the witnesses. Again, welcome to all of you. Thank you for being here.

And we're going to start with you, Mr. Muilenburg.

STATEMENT OF DENNIS MUILENBURG, VICE CHAIRMAN, PRESIDENT AND CHIEF OPERATING OFFICER, BOEING

Mr. MUILENBURG. Madam Chair and Ranking Member Ayotte, thank you very much for the opportunity to be here today as well as the other members of the Committee. We appreciate the challenges to American competitiveness in the aerospace industry.

My name is Dennis Muilenburg. I am Vice Chairman, President and Chief Operating Officer of the Boeing Company and I'm proud to represent the hard-working employees of Boeing at the hearing here today.

Now before beginning my testimony, I also want to express my condolences on behalf of Boeing to the families and friends of the passengers and the crew on Malaysian Airlines Flight 370. Although we do not yet know the cause of the airplane's disappearance, Boeing is certainly joined with the National Transportation Safety Board. We have a technical advisor and team on the ground. It's a high-priority effort for us and we are committed to doing everything possible to sustain a safe and efficient global transportation system.

Madam Chair, the topic you've chosen for today's hearing is both important and timely. The United States is the world leader in aerospace, but with increasing competition from foreign countries that are investing substantial government funds in their aerospace industries, U.S. preeminence in aerospace is eroding and at risk.

Boeing has a proud history of excellence in aerospace that goes back nearly 100 years. In fact, we'll celebrate our centennial in 2016. During that time, Boeing has used innovation and a highly skilled workforce to create market-leading products. For example, and, Senator, as you just mentioned, we recently launched the 777X; an airplane that will use 12 percent less fuel than its competitor due to the all-new composite wing technology and other innovations that have been built into the airplane.

Our company remains unique in that we assemble, test and deliver all of our highly competitive products right here in the United States. We have approximately 160,000 highly skilled U.S. employees. And last year, we paid $48 billion more—excuse me—$48 billion to more than 15,600 U.S. businesses including 6,800 small and disadvantaged businesses, which collectively support an additional 1.5 million jobs across the country. So the job impact, the employment impact, is very significant. And while 80 percent of the aircraft that we make go to foreign airlines, 80 percent of our supplier spend is right here in the United States. So you see how this globally enables jobs.

Aerospace is one of the few sectors of the American economy with a positive balance of trade in large part because of Boeing Aircraft. For decades, Boeing has been one of the largest U.S. exporters. And over the next 20 years, Senator, as you said, we see a market for more than 35,000 new commercial airplanes valued at $4.8 trillion plus $2.5 trillion of additional commercial aviation services.

This is an opportunity that must be seized because our competition is growing. Our competition with Airbus is especially fierce. And airplane manufacturers in Canada, Brazil, Russia and China are all soon to enter markets currently served by Boeing products. We are working to position ourselves to succeed in this competitive environment. We are focused on productivity and cost reduction while working with our customers to ensure we have the right products.

But government actions and policies affect the competitive landscape as well. So we need your help to ensure that U.S. aerospace industry's proud legacy of leadership continues. One very important policy issue that affects our competitive position is the availability of export credit assistance from the Export-Import Bank. Eximbank, which returns a profit to the U.S. Treasury due to its prudent lending policies, is an important competitive tool for U.S. exporters large and small. Without it, Boeing would be competing on an unlevel playing field to foreign aircraft orders. Boeing also would be at a disadvantage in the intensely competitive market for commercial satellites.

Madam Chairwoman, I know that there are some in Congress who question the need for official export credit, but calls to reduce or eliminate such assistance in the face of international availability amounts to unilateral disarmament. Boeing would feel the impact of such a move immediately and it would be broad, negative economic impacts on our extensive U.S. supply chain. Thousands of direct and indirect U.S. jobs would be lost and nothing would be gained. In fact, U.S. airlines that compete against other airlines on international routes would face that same competition. The only difference would be that foreign airlines would likely be flying more airplanes made in Europe and finance with European export credit assistance. Airbus, it must be noted, has unrestricted access to three European export credit agencies.

Another important issue for us is aircraft certification. The future of American competitiveness in aviation is dependent on a shared commitment by the FAA and industry to adapt to changing safety and certification priorities, domestically and abroad. The committee has been very supportive of these efforts and we thank you for your leadership on Sections 312 and 313 of the FAA Reauthorization bill. That has been very important.

These sections are the cornerstone of the reforms that will be needed to keep the United States at the forefront of innovation. Continued certification streamlining coupled with further use of delegation will provide better safety outcomes, more efficient use of FAA resources, and give industry the tools needed to remain safe and competitive.

There are four additional policy issues which I simply mention here but which I address more fully in my written testimony. And those are, first, enforcement of the WTO ruling against the $18 billion of illegal European government subsidies to Airbus, subsidies that continue unabated.

Second, the growing scarcity of science, technology, engineering, and math talent, and Senator, as you well noted the importance of that talent pipeline.

Third, the decline in Federal R&D spending.

And fourth, the importance, as both of you have mentioned, of NextGen air traffic control and management.

We are proud of the position that Boeing holds in the global economy and what our employees all across the country achieve on behalf of the company and the Nation. And again, I thank the Committee for examining these issues today. And thank you for the opportunity to provide that testimony.

[The prepared statement of Mr. Muilenburg follows:]

PREPARED STATEMENT OF DENNIS MUILENBURG, VICE CHAIRMAN, PRESIDENT, AND CHIEF OPERATING OFFICER, BOEING

Introduction

Madam Chair, Ranking Member Ayotte, and Members of the Committee, thank you for this opportunity to address the challenges to American competitiveness in the aerospace industry. I am Dennis Muilenburg, vice chairman, president and chief operating officer of Boeing.

Before beginning my testimony I want to express my condolences on behalf of Boeing to the families and friends of the passengers and crew of Malaysia Airlines Flight 370. We still do not know the cause of the airplane's disappearance, but Boeing has joined with the National Transportation Safety Board team as a technical advisor and that team is now positioned in the region to offer assistance. We are committed to doing everything possible to sustain a safe and efficient global transportation system.

Madam Chair, the topic you have chosen for today's hearing is both timely and important. United States is the world leader in aerospace, but with increasing competition from foreign countries that are investing substantial government funds into their emerging aerospace industries, the U.S preeminence in aerospace is eroding, and indeed is at risk.

Company Introduction

Boeing has a proud history of excellence in aerospace that goes back nearly 100 years. During that time, Boeing has used technological innovation and a highly skilled workforce to create market-leading products that meet the demands of a diverse and growing global customer base. We evolve constantly to meet our customers' requirements. As an example, a few months ago we launched the 777X with 259 orders and commitments, marking the largest product launch in commercial jetliner history by value. The tremendous market response to the 777X was due to the numerous features that make it 12 percent more fuel efficient than its competitor. They include an all-new composite wing based on the innovative wing developed for the super-efficient 787 Dreamliner, aerodynamic advances such as a hybrid laminar flow control vertical tail and natural laminar flow nacelles, and all-new GE9X engines developed by GE Aviation. The 777X is the latest in a long line of superior Boeing products that provide better value to our customers than those offered by our competitor.

Our Place in the Economy/Suppliers

William Boeing first began making twin-float seaplanes in 1915 from a small red boathouse, and while much has changed since then, our company remains unique in that we assemble, test and deliver all of our highly-competitive products right here in the United States. The final assembly facilities for our commercial products are located in the states of Washington and South Carolina, but we have facilities for engineering and manufacturing major components in multiple states beyond those two—including Oregon, Florida, California, Montana and Utah, where we have a growing presence. Our defense and space -related production primarily is located in the states of California, Missouri, Pennsylvania, Texas, Arizona, Florida and Alabama. Today Boeing has 160,000 employees in the United States, and I'm proud to say that 24,000 of those employees are military veterans. Boeing has been recognized as a top 100 Military Friendly Employer by G.I. Jobs Magazine, and we are very active in numerous national initiatives to help veterans find jobs and obtain the skills that they need to transition into the private sector.

Notably, we have continued to add jobs at Boeing in recent years while other sectors of the U.S. economy have shown little or no employment growth. Both during and in the wake of the recent global recession we hired new talent and critical skills at Boeing—a total of more than 15,000 new, high-paying jobs since 2005. Our hiring has been driven by our record backlog of $441 billion, including a record $374 billion commercial airplane backlog. With more than 5,000 commercial aircraft on order, our commercial backlog is diverse, with customers across the world committing to purchase a full range of Boeing airplanes.

As these numbers suggest, Boeing's impact on the Nation's economy is substantial. Aerospace is one of the few sectors of the American economy where there exists a positive balance of trade—in large part because of Boeing's exports. We are the world's largest aerospace company and a leading U.S. exporter measured by sales. The company's capabilities in aerospace include commercial jetliners, military aircraft, helicopters, electronic and defense systems, satellites, and advanced information and communications systems. And Boeing's exports benefit literally every state in America. Last year, we paid $48 billion to more than 15,600 U.S. businesses, including 6,600 small or disadvantaged businesses, which collectively support an additional 1.5 million jobs across the country. While 80 percent of our commercial airplanes go to airlines outside the United States, 80 percent of our supplier spend is with U.S. companies.

We also have suppliers and partners outside the United States. I mention that because I think it is important that members of the Committee understand the strategy behind our global partnering. It comes down to this. To ensure that we continue to design and build the best commercial airplanes and aerospace systems in the world we must seek out the best technologies, material resources and skills in the world, wherever they reside. In addition, global partnering is critical to Boeing's success in foreign markets where there is an expectation that we invest as well as sell. Some 80 percent of our commercial airplane sales, and nearly 30 percent of our defense and space sales, are outside of the United States, so success overseas is critical to the success of our domestic workforce—and the workforce of our entire U.S. supply chain.

Exports/CMO

Boeing last year delivered more commercial airplanes than any other company in the world. Boeing for years has been one of the largest U.S. exporters, and we see significant opportunity going forward, with a strong and growing market for both our defense and commercial products and services. I will concentrate on the latter since today's hearing is focused on commercial aviation. From 2013 to 2032, we project a demand for $2.5 trillion in aviation services and a $4.8 trillion global market for more than 35,000 new airplanes. Some will replace older, less efficient airplanes, but we expect the total world fleet to double in size over the next 20 years as a result of rising demand for passenger services and a rebound in air freight. The aviation market is broader and deeper than it was in the past, with demand being fueled by growth in China, India and other emerging markets, as well as by rapidly growing low-cost carriers and legacy carriers which want to modernize their fleets. Our biggest challenge is to meet this demand, regain market share from aggressive competition, and have the profitability to invest in future products. For that reason, we are increasing the production rates across our 737 and 787 lines, as well as adding new models with the 787–9 and –10, 737 MAX, and the 777X. In February we began assembling the first 737NG at the new production rate of 42 per month, our highest rate ever, and we have announced that in 2017 we will boost 737 production to 47 airplanes per month. These record high production rates will support tens of thousands of jobs at Boeing, and many more in our extensive U.S. supply chain. Each time a Boeing commercial airplane is exported and lands somewhere in the world, it lands with millions of parts reflecting the workmanship of many of our 15,600 small, medium and large U.S. suppliers.

Foreign Competitive Landscape

The increasing demand for airplanes presents a great opportunity for Boeing and for U.S. commercial aerospace—but it is an opportunity that must be seized. Right now, the international market for airplanes is more competitive than ever, and that competition is only going to become tougher in the decade ahead. Competition with

Airbus, our principal competitor, is particularly fierce, and airplane manufacturers in Canada, Brazil, Russia and China are all, in one way or another, soon to enter markets currently served by Boeing products. We are working tirelessly to position ourselves to succeed in this highly competitive environment, and are taking steps—often challenging and difficult steps—to enable us to win in this rapidly changing marketplace. We are taking cost out of our supply chain, focusing relentlessly on our own productivity, and working with our customers to ensure we have the right product strategy.

We also have negotiated new long-term agreements with the IAM in both Puget Sound and St. Louis that will enable us to be more competitive while still maintaining market-leading pay and benefits for our employees. I cannot stress enough how important these agreements are to our collective future, or how grateful we are that members of the IAM recognize how intensely competitive the global aerospace industry has become. With agreements like these, we can and will move forward with confidence in our future as the world's leading aerospace company.

But public policy and government actions also affect the competitive landscape as we face established and emerging state-supported competitors. In short, we need your help to ensure that the U.S. aerospace industry's proud legacy of leadership continues in the face of these significant, and increasing, global competitive pressures.

WTO Ruling on Subsidies

Airbus has been heavily subsidized by European governments since its inception more than 40 years ago. The subsidies take many forms, but the most egregious is launch aid—the subsidy Airbus receives for new product development. In 2004, the Office of the U.S. Trade Representative (USTR) challenged Europe's subsidies to Airbus with a request to the World Trade Organization for consultations—a step that led two years later to the filing of a formal complaint against the subsidies. A lengthy process ensued, but the bottom line is that in mid-2011 the WTO issued a final ruling stating that European governments had provided illegal subsidies to Airbus totaling $18 billion. It gave European governments six months to comply with its ruling—something that has yet to happen—which is why USTR now is seeking a non-compliance ruling from the WTO. We expect the WTO to make such a ruling in the first half of this year. The U.S. government is moving ever closer to being in a position to pursue sanctions against European exports to the United States if the Airbus-sponsor governments do not remove the harmful effects of their illegal subsidies.

Madam Chairman, this committee and the broader Congress have been very supportive of Boeing and its supplier-partners in this longstanding dispute, which we greatly appreciate. With your continued support we are confident we can end these market-distorting and harmful European practices.

Policy—EX IM

I want to take a moment to discuss another important policy issue that affects our competitive position in the marketplace—the availability of export credit assistance. Today export credit assistance is provided to purchasers of U.S. manufactured products that are exported abroad, at no cost to the American taxpayer. Export credit assistance from the Export Import Bank is an important tool for all U.S. exporters, including aerospace companies like Boeing, to compete against foreign competitors that have access to even larger export credit assistance programs administered by their own governments. Without Ex-Im, Boeing would be unable to compete on a level playing field for non-U.S. aircraft orders—a segment that makes up more than 80 percent of projected demand over the next 20 years. Boeing also would be at a competitive disadvantage in the global and intensely contested market for commercial satellites.

Airbus has unrestricted access from three European export credit agencies. Countries with rapidly growing economies like Brazil and China, which also are investing large amounts of government funds into their emerging aerospace industries, together now provide nearly half of all official export credit in the world today. And with the exception of Brazil, none of the emerging economies is party to international rules and frameworks regarding export credit. Measured as a percent of 2012 GDP, U.S. official export credit ranks below six countries: Korea, India, China, France, Germany and Italy. If the United States were to disarm unilaterally by ceasing or scaling back its official export credit program, it would put U.S. exporters—including Boeing—at even a greater disadvantage in global markets than we find ourselves in today.

Madam Chairman, I know that there are some in this body that question the appropriateness and utility of official export credit, arguing that it creates market distortions. However, our decades of experience selling airplanes does not support that contention. Today, the availability of export credit assistance ensures that Boeing competes and wins on the basis of price and product; it levels the playing field. We can agree to disagree. But calls to reduce or eliminate export credit assistance in the face of international availability amounts to unilateral disarmament. If it is eliminated, or reduced in any significant way, the impacts on Boeing will be felt immediately and there will be a negative impact on the United States and the positive balance of trade payments in the aerospace sector. We know from experience that airlines will flip orders for Boeing airplanes if U.S. export credit halts and European export credit is still available. Thousands of direct and indirect U.S. jobs will be lost and nothing will be gained. U.S. airlines that compete against other international airlines today will face that same competition tomorrow. The only difference will be that their foreign competition will be flying fewer Boeing airplanes and increasing numbers of Airbus aircraft financed with European export credit assistance.

Certification

Another very important issue for us is aircraft certification. The future of American competitiveness in aviation is dependent on a shared commitment by the FAA and industry to adapt to changing safety and certification priorities, domestically and abroad. This Committee has been very supportive of these efforts, and we thank you for your leadership on sections 312 and 313 of the past FAA Reauthorization bill. These sections are the cornerstone of the reforms that will be needed to keep the United States at the forefront of innovation. Continued certification streamlining coupled with further use of delegation will provide better safety outcomes, more efficient use of FAA resources, and give industry the tools needed to remain safe and competitive.

STEM, R&D, and NextGen

There are three other public policy issues I want to mention here briefly. Boeing, like all high-tech U.S. companies, is concerned about the growing scarcity of talent in science, technology, engineering and mathematics—the so-called STEM disciplines—and we have numerous initiatives underway to attract more students to these academic disciplines. We know that many government officials share our concern, and we stand ready to partner with you to address the STEM issue because it is one that will have a significant effect one way or the other on U.S. competitiveness in general.

Declining U.S. spending for research and development is another concern. Companies like Boeing are doing their part to develop new cutting-edge technologies and products. However, long-term research—the kind that advances basic science and may not produce a payback for 20 or more years, is very hard for the private sector to fund and manage. That is why the U.S. government historically has played a central role in long-range research and must continue to do so to keep our Nation competitive and economically strong.

Lastly, I want to reiterate our support for NextGen air-traffic management. It is important to keep this vital aviation infrastructure project adequately funded because the long-term payback will be enormous. NextGen will enable airlines to fly far more efficiently, with real environmental benefits, and in the process will help our overall economy operate more efficiently. NextGen isn't just an airline issue or aerospace issue; it is an issue of national economic development and competitiveness.

Closing

We are proud of the position that Boeing holds in the global economy and what our employees all across the country achieve on behalf of the company. Again, I thank the Committee for examining these issues and allowing me the opportunity to testify today.

Senator CANTWELL. Thank you, Mr. Muilenburg.

Ms. Blakey, thank you very much for being here.

STATEMENT OF HON. MARION C. BLAKEY, PRESIDENT AND CHIEF EXECUTIVE OFFICER, AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA

Ms. BLAKEY. Chairwoman Cantwell, Ranking Member Ayotte and members of the Subcommittee, I certainly join with you in the sympathy that you've expressed and the concern about Flight 370.

And we all hope that this will be speedily resolved. I also appreciate the opportunity to testify and bring AIA's views on competitiveness of the U.S. aviation industry to the fore.

U.S. aircraft manufacturers continue to hold a strong position in the world market due to a dedicated workforce, able executive leadership and, of course, technical excellence. Today, we're proud that commercial aviation manufacturing is the leading contributing factor to U.S. net exports. We had a positive trade balance of $72.1 billion last year. It's a 10 percent gain over 2012. But we have to face at the same time that we may see this erode if the situation is not dealt with on a number of fronts.

These numbers not only reflect air travel's growth in the developing world but also our commitment to invest billions of dollars in cutting-edge research and technology. We've raised jet engine fuel efficiency by 20 percent in the last decade and safety margins, already very impressive, have improved significantly.

Industry forecasts predict rising global demand for large passenger aircraft, general aviation aircraft, and civil helicopters are going up. But, this opportunity for aerospace manufacturers is partly offset by the downturn in U.S. defense investment. With military aircraft, as many of you know, I'm sure, the last hearing discussed this—they're down at this point by 6 percent from last year. The decline of key military aircraft production lines is worrisome from the vantage point, particularly, of the entire aerospace and defense supply chain.

Of course, other nations aren't sitting idly by. Private or government-sponsored manufacturers of Latin America, Russia, China, and elsewhere will increasingly compete, especially in the high growth markets for single-aisle aircraft and regional jets.

I'll now turn to some of those other issues that could negatively impact U.S. civil aviation leadership. While we're pleased that the FAA Modernization and Reform Act pushed the agency to streamline its aircraft certification processes, it's imperative that the FAA follow through. We need these initiatives to expand delegated authorities wherever possible.

We're also concerned that budget austerity will continue to impact the air traffic control modernization. Requested Fiscal Year 2015 NextGen funding is almost $200 million below the President's request of only 2 years ago. It's a steep drop for a critical program. If the FAA is forced to pick winners and losers in their modernization account, new technologies that could really transform aviation may not germinate.

Let's not shut the door on progress, for example, by failing to adequately support the integration of Unmanned Aircraft Systems into the national airspace. The FAA is already falling behind on the proposed rule for small UAS and it's worrisome. We should remember that UAS markets develop not only domestically but internationally. And it's important from a U.S. competitiveness standpoint that our nation continues to be the leader in this emerging aviation field.

Let me now turn to financial policies that are also critical to our industry. We urge favorable consideration of proposals to make permanent the R&D tax credit; an important business investment incentive. At a minimum, legislation is needed to restart the tax credit because it expired on January 1. AIA also strongly supports congressional reauthorization of the Export-Import Bank, as Mr. Muilenburg just discussed. Eximbank plays a vital role in helping America manufacturing companies compete on a level playing field. And in fact, last year, $1.1 billion in profit to the government is very impressive. This is the return that the bank was able to make as well as aiding 3,400 companies, many of them medium and small, in supporting over 200,000 U.S. jobs. We need your support to make sure that there's no gap and certainly no shutdown in the bank's operations.

Finally, for our industry to meet future market demand we'll need to address the aging industry workforce with a major commitment to STEM education and, in fact, customized workforce training programs; that, Madam Chairwoman, I know you've been a strong advocate for.

In conclusion, let me just say we believe that U.S. aviation manufacturers are in a strong competitive position today, but there are risks to our maintaining that position over the next decade. However, with appropriate policies to spur innovation, improve air transportation infrastructure, and replenish the workforce, we can continue to lead aviation progress.

Thank you for inviting us to testify. I look forward to your questions.

[The prepared statement of Ms. Blakey follows:]

PREPARED STATEMENT OF HON. MARION C. BLAKEY, PRESIDENT AND CHIEF EXECUTIVE OFFICER, AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA

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 percent 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 percent since 1960 and by 20 percent 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 percent last year and the forecast for this year is in that range (8.5 percent). Business jet deliveries have also recovered, with shipments up 6.3 percent 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 percent 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 percent 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 percent 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 percent 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.

Senator CANTWELL. Thank you very much for that testimony. I think you hit it right on the head exactly. There is good news but there is a "but" to the question about what we have to do to compete.

So thank you.

Mr. Calio, welcome. Thank you very much for being here.

STATEMENT OF NICHOLAS CALIO, PRESIDENT AND CHIEF EXECUTIVE OFFICER, AIRLINES FOR AMERICA

Mr. CALIO. Thank you, Madam Chairwoman, Senator Ayotte, Senator Klobuchar, Senator Fischer. We appreciate the opportunity to testify here today.

We hope that this will be the first of many hearings that this committee holds and that you will specifically broaden the scope of your inquiry to all sectors and jobs in aviation. You know, we all say that we recognize the unique and vital role that aviation plays in driving the U.S. economy in jobs. It's time that we matched a more practical, focused policy reality to that recognition and that vision. I say that because there have been a bunch of Federal commissions which have talked about that we've talked about this and that committee before the recommendations lay fallow. It's time to move on.

You know, the expansion and transformation of the global aviation sector that currently is underway, that's been referenced, presents both the unique challenge and opportunity for the U.S. aviation industry. It's also a unique challenge and opportunity for this Congress since you and we are all business partners together on a daily basis. The industry is on leashed, or it's constrained, by the policies that you create and the policies that you will oversee.

In a previous appearance before this committee, A4A advocated for the creation of a national airline policy which would give life to that vital and unique role that aviation plays in our economy. Unlike many foreign governments which treat their airlines as strategic assets, the U.S. Government currently encumbers our carriers with tax, regulatory and infrastructure systems that put us at a distinct competitive disadvantage. You, and we, currently have a unique opportunity. While we all, I think, agree that has been shown that Congress doesn't always operate the way we like, it has also been shown, and shown recently, that it can come together on bipartisan legislation on important issues. This committee did it in the 2012 FAA Reauthorization bill; the time to do it and do it better in the next reauthorization bill starts now.

House T&I Chairman, Bill Shuster, and Frank LoBiondo, and their democratic counterparts, Nick Rahall and Rick Larsen, have banded together to already start reaching out to all stakeholders in informal roundtables to gain views on what it would take to provide an FAA Reauthorization bill that is, in their words, transformational. We hope that the Senate will join that effort as A4A has so that we can begin to resolve rather than just talk about what needs to be done to make the U.S. aviation industry the world leader.

Now's the time, we believe, to go big; if we can put it that way. Go big in a way that moves past the Government mindset that harkens back, in too many cases, to a pre-deregulation mindset of the 1970s. The path forward to fundamentally transforming the way Americans travel and ship goods would include, or should include, an examination of air traffic control reform. Reform can provide a broad-based approach to changing governance, financing and delivery of service to travelers and shippers. Putting a new framework in place is what would be a long overdue first step toward creating a system that isn't dependent on an annual funding cycle that furloughs our air traffic controllers and too often delays passengers and the shipment of goods.

This reform can deliver benefits by ensuring that stakeholders are actively engaged in the implementation of NextGen. Airlines have invested billions of dollars in NextGen with very little to show in return to our customers. We can do better and there are models in other controls that show the way. They may or may not work here but the examination is worth it because it would provide a transformation that would get us a lot for—would get us forward a lot faster than we're currently going.

Since 1972 the aviation industry and its customers have seen their tax burden rise thirtyfold. Airlines currently, and their passengers, have 17 individual taxes and fees for which we paid the Federal Government $19 billion last year. Nonetheless, as the budget agreement at the end of 2013 showed, as consideration of the omnibus appropriations bill at the beginning of this year showed, and as the President's budget shows again this year, airlines and their passengers remain the go-to people whenever the Government wants to raise money. ATC reform would have the benefit also of catalyzing making sense out of a patchwork tax structure that's grown hodgepodge over the years and it's a structure that cripples competitiveness and progress.

Similarly, we have a regulatory burden that is outdated. We face a competitive global disadvantage as a result of decades of accumulated regulations that are simply unnecessary. To say that the airline industry is outdated is something of the nature of a bad joke. And, I'm not talking about safety regulations here, safety and security regulations; we're talking about the economic regulations, just to be clear. We need a new regulatory paradigm which forces the application of commonsense to the review of old and to the creation of new regulations.

Also on fuel, and Madam Chairwoman, you've been a leader in this regard. We need the commitment to continue to develop viable options for alternative fuels. A4A has committed to that; working very closely with the government and with you on that.

In short, the global airline industry of 2014 is very different than that of 1978. Foreign governments recognize that and have adapted accordingly. The U.S. must catch up. We can catch up if we start now to create policies that recognize our failures, build on our successes, and provide a policy vision that matches what airlines and aviations can do for our economy and the growth of jobs.

Thank you very much.

[The prepared statement of Mr. Calio follows:]

PREPARED STATEMENT OF AIRLINES FOR AMERICA®

The U.S. airline industry is a powerful engine to improve the well-being of America and Americans. Yet, Federal Government policies have repeatedly throttled-back our industry. That must change.

The U.S. airline industry has been extraordinarily successful in fulfilling Congress' mandates that safety be maintained as the highest priority and that maximum reliance should be placed on market forces in providing our services. In doing so, our industry has shown remarkable adaptiveness and resilience. We have experienced seismic events—first, deregulation and, more recently, the wrenching aftermath of 9/11—and persevered. Since 2001, U.S. airlines lost over $55 billion. Our perseverance, however, has been rewarded and is paying off for our customers. We've now bounced back from the upheaval that the airline industry experienced in the first decade of this century, albeit with significant levels of debt remaining on our balance sheets.

It is a stunning accomplishment. Because of it, we should be looking at a brighter future, yet it is far from that. We continue to suffer from government policies that exhibit indifference and, often, outright hostility to our industry and, by implication, our employees, customers, the communities that we serve and the aviation manufacturers upon which we rely.

Overview

Commercial air travel remains one of the best bargains in America, especially given its superior speed and price versus other means of travel.

Despite starting 2014 with $71.5 billion in debt, U.S. airlines' modest but encouraging financial progress has allowed them to accelerate investments in employees, products and technology to enhance the customer experience and to cope more effectively with operational impediments, such as extreme weather. In addition to capacity growth, and the continuation of stable employment and rising wages, airlines plan to invest an additional $11 billion—12 billion in 2014. Investments will be made in such areas as new aircraft, spare engines, larger overhead bins, premium seating, airport terminal and lounge improvements, ground equipment, mobile technology, customer kiosks, in-flight entertainment, and Wi-Fi, and baggage handling.

Despite these tangible commitments, non-investment-grade balance sheets continue to burden most airlines. The airline industry remains a low-margin business, significantly lagging (Standard & Poor's) average net profitability (7.9 percent of revenues for airlines versus 10.4 percent of revenues for the S&P 500 in 2013). Moreover, airlines –as ever—remain highly susceptible to volatile jet fuel prices. Jet fuel costs in 2013 exceeded $50 billion for the third straight year.

U.S. airline workers have benefited from improving airline finances, through enhanced job security, higher wages and benefits, and reduction of airline debt. Enhanced employee well-being is one of the most important outcomes of that improvement.

The carriers continue to demonstrate that the flying public, employees, investors and the U.S. economy all are vastly better off with a financially strong U.S. airline industry that can cover its full costs over an entire business cycle and attract investments. It is with such financial health that we will be able to compete effectively on the global stage. In other words, we need sustained, meaningful profitability.

Despite all of the above, the Federal Government does not have a holistic perspective that encourages government policies that enable the airline industry to thrive and thereby contribute as much as it can to the U.S. economy and U.S. employment. That shortcoming needs to be corrected. We are not asking the government to put its thumb on the scale. Instead, we are asking it to remove the yoke of ever-rising taxes and fees, and regulatory programs that neither benefit the consumer nor the airline and thus curb U.S. economic growth.

Basic Considerations

An effective U.S. Government aviation policy should be based on four fundamental considerations.

First, there must be a recognition that the U.S. airline industry is indispensable to our Nation and its economy. What that means, of course, is that the healthier our industry is, the more that we contribute to the prosperity of America.

To place this in some context, the Federal Aviation Administration (FAA) estimated that in 2009 civil aviation supported more than 10 million jobs, contributed $1.3 trillion in total economic activity and accounted for 5.2 percent of total U.S. Gross Domestic Product. Civil aviation in general and the airline industry in particular are thus central to the U.S. economy.

An important element of this economic contribution is international trade and tourism. Air travelers journeying to and from the United States reached a record 185.4 million in 2013. Significantly, non U.S. citizens represented 5.1 percent of year-over-year growth, compared with 3.6 percent growth in U.S. citizen international travel. The Department of Commerce has reported that international visitor spending in the United States totaled $180.7 billion in 2013. U.S. airline receipts totaled $41.2 billion of that sum.

The value of international air cargo transportation is similarly significant. The United States traded a record $940 billion of merchandise by air last year, much of it in high-value items, including $431 billion in exports. The value of a kilogram exported by air was 129 times the value of a kilogram transported by sea.

These examples illustrate the need to scrutinize legislative and regulatory initiatives to assure that they do not wrongly inhibit U.S. airlines' ability to deliver air transportation services efficiently and economically. Taxes and fees, as well as unnecessary regulations, impose a hefty, ongoing drag on airlines and consequently their ability to serve the public.

Second, there is nothing sinful about being profitable. Profitability directly benefits our employees, customers and the businesses from which we buy goods and services. This is the simple reality. Airlines are now in the position to reduce debt, invest in staffing and training, purchase new aircraft and better meet customer demand by offering new and improved products, destinations and seats. As JP Morgan airline equity analyst Jamie Baker recently observed, "With airlines in the U.S. now generating acceptable returns, their ability to reinvest in their product has been greatly enhanced." Most importantly, the recently improved finances have allowed the airlines to sustain more air service than would be possible under unprofitable or less profitable conditions.

Profitably also means more stability and better remuneration for our employees. Over the last three years, employment levels at U.S. passenger airlines have stabilized while wages and benefits have risen substantially. In harsh contrast, the last decade was brutal for airline employment. The number of full-time equivalent employees at U.S. passenger airlines declined from 520,600 in 2000 to 378,066 in 2010, a 27-percent decline. The FTE figure was 380,853 last year. With the recent recovering financial health of the industry, average employee compensation per FTE rose from $85,372 in 2010 to an estimated $93,856. That 10 percent increase is a concrete example of the benefit of profitability.

Third, the marketplace is the best guarantor of consumer welfare. The passenger or shipper will reward or punish the airline based on the price and quality of service it offers. That is how it should be. We're prepared to take our lumps. What we don't want is to have someone who is not in the arena turning the dials and deciding our fate.

Finally, where the Federal Government has the responsibility to provide services related to air transportation, such as customs and air traffic control functions. It must meet the demand for those services and do so efficiently. This means that Customs and Border Protection (CBP) should not be constructing new preclearance facilities overseas. Instead, it should concentrate on assuring improved service at U.S. airports of entry. Congress should also recognize this imperative legislatively. Similarly, the FAA should concentrate on exploiting proven, available technology to improve air traffic procedures so that airlines can leverage the investments they have already made in existing equipment.

The Government's ATM Culture: The Relentless Rise in the Burden of Taxes and Fees

The ever-rising Federal aviation tax burden rose 30 times from 1972 to 2013, hindering the industry's ability to grow and facilitate broader economic growth and job creation, and putting it at a competitive disadvantage vis-à-vis our foreign airline competitors. Unhappily, airlines continue to be regarded as the "go-to guy" for financing the Federal Government.

This was illustrated in December in the congressional budget deal which changed Transportation Security Administration (TSA) security fees from $2.50 per leg of a connecting flight with a $5 per trip cap, to a flat $5.60 each way. This increase will generate an estimated $12.6 billion over the next decade, which the legislation says would be deposited in the general government fund with no incremental benefit to air travelers whatsoever. Thus, passengers were involuntarily and uniquely conscripted into the Federal Government's budget travails.

The Administration's Fiscal Year 2015 budget proposal starkly demonstrates that we remain the "go-to-guy." That dubious distinction would mean an increase in Federal aviation taxes and fees of $4.2 billion annually. Left unsaid in it is the inevitable outcome if the Administration is successful: downward pressure on services and upward pressure on prices. This would not be a winning combination for air travelers and shippers.

More specifically, the FY 2015 budget proposal has four alarming elements.

First, the White House is proposing to increase the TSA aviation security tax from $5.60 per one way trip to $6.00, which would cost airline passengers more than $217 million per year. This comes on the heels, as noted above, of Congress increasing the tax to pay for deficit reduction. Moreover, despite the fact that Congress recently eliminated the TSA's Aviation Security Infrastructure Fee (ASIF), the White House proposes to reinstate ASIF, which would cost the industry $420 million annually.

Second, the budget proposal would create an 18th unique tax on aviation—a mandatory $100 charge for every aircraft departure, costing the U.S. aviation industry another $1 billion annually.

Third, the budget proposal would raise the Passenger Facility Charge (PFC) cap from $4.50 per flight segment to $8, which would cost passengers an additional $2.2 billion annually.

Fourth, the budget proposal would increase the Department of Homeland Security's (DHS) customs fee from $5.50 to $7.50 and immigration fee paid by passengers from $7 to $9, further increasing their overall aviation tax burden by $318 million annually.

The astonishing bottom line is that if the Administration's proposed new, higher taxes and fees were enacted, the tax bite on a typical $300 one-stop domestic roundtrip ticket would increase from $62.98, or 21 percent, to $76.75, or 25.6 percent. That would be a deplorable disregard of the consumer. The Administration's proposal also ignores the fact that air travel is often discretionary; higher costs count when consumers make the decision to fly or stay home, or to ship an item. The elasticity in demand in for air travel has been well documented. In 2012, the U.S. Government Accountability Office (GAO) found that a 1 percent increase in the cost of an airline ticket (including taxes and fees) would result in a 1.12 percent reduction in the quantity of tickets sold. That unmistakably implies that further increases in government-imposed taxes and fees would dampen demand, reduce airline revenue and diminish overall U.S. economic activity.

Congress should recognize the need to leverage commercial aviation—as a key enabler of job growth and U.S. economic activity rather than as a source of U.S. deficit reduction—by rejecting the White House's proposed aviation tax and fee increases.

The International Landscape

The international aviation landscape has been shifting dramatically; indeed, by all appearances, change is accelerating. One fact has been clear for some time: the days of North American and European domination of air transportation are long gone.

Governments in key countries have recognized the increased and critical role global air traffic will play in future economic development. They have created clear, national strategic aviation plans that have served to develop integrated aviation ecosystems that are very effective vehicles for national economic growth.

These aviation "ecosystems" consist of airlines, airports, airport concessions (*e.g.,* duty free shops), ground services, maintenance, aircraft leasing, aircraft financing and aviation policy-maker authorities, that work under the same government umbrella to serve a common government goal and purpose: drive overall economic growth.

Strategic growth is being executed in different ways—organic growth through acquisition of aircraft and the utilization of sixth- and fifth-freedom rights, growth through equity investments in other airlines that open up access to new territories, or growth through industry consolidations backed by the governments.

Global airline traffic activity is shifting south and east in the world, with fast-growing international airlines, such as the Middle East and Chinese carriers emerging as top airlines in terms of revenue and capacity. For example, rapid growth in the last decade has resulted in Middle East carriers' share of all international capacity increasing from 2 percent in 2002 to 11 percent in 2012, equaling U.S. widebody-operator carriers' capacity, which decreased from 14 percent to 11 percent in the same period.

These foreign-flag carriers benefit from smart, forward-looking governmental strategies to stimulate passenger growth by setting low airport fees, low corporate taxes and minimal passenger-related fees and taxes. These decisions generate significant economic benefits to the host countries as traffic increases dramatically. Moreover, some of these carriers have structural business model advantages such as low labor costs (*e.g.,* ~36 percent lower average employee costs) and relaxed labor regulations. These benefits combine to create low-cost and resilient business models.

These dynamics have several noteworthy implications.

First, they highlight how critical government policy is in the development of air transportation in these countries. Whether one agrees with the nature of the governmental involvement, there is a precise focus and abiding discipline exhibited in the execution of the policies.

Second, at the core of the policies is a recognition that a vibrant airline industry inevitably and significantly promotes overall economic development.

Third, the shift to the south and the east will continue unabated. We are not witnessing a temporary phenomenon.

Fourth, given the role of some governments, the U.S. Government must make clear to civil aviation authorities in other countries that a basic tenet of U.S. aviation policy is the maintenance of fair competition.

We are not suggesting that the U.S. Government adopt all of the policies of the governments that oversee rapidly expanding foreign-flag airlines. We, however, firmly believe that the existence of such policies means that the United States must develop a coherent National Airline Policy that enables us to respond with maximum effectiveness to our foreign-flag competitors.

We have demonstrated time and again that we have the wherewithal to compete effectively—domestically and internationally. Customers, airline employees, communities and businesses have been the beneficiaries of that ability. We need government's help, however. Not to tilt the playing field but unshackle us from exorbitant taxes, fees, and regulations that all-to-often are uncalled-for.

Senator CANTWELL. Thank you, Mr. Calio.

And Mr. Wytkind, thank you for being here. We appreciate your testimony.

STATEMENT OF EDWARD WYTKIND, PRESIDENT, TRANSPORTATION TRADES DEPARTMENT, AFL–CIO

Mr. WYTKIND. Thank you very much for having me here, Madam Chair, Ranking Member Ayotte and members of the Subcommittee. I'm pleased to be here on behalf of our 32 transportation unions that are part of the Transportation Trades Department of the AFL–CIO.

This is a very important hearing and it is very timely. We find ourselves at a tipping point in the state of this industry and I'll talk about a couple of key points. First, I also want to associate myself with the comments by others about the Malaysia Airlines situation. The labor movement is deeply concerned and obviously grieves with everyone else for the situation around that flight.

First, trade and other policies as well as the acceleration of globalization often unchecked, threaten the aviation industry and middle-class jobs. That is if our government fails to act with purpose. Second, FAA regulation is not keeping up with the torrid pace of aircraft maintenance outsourcing, which undermines aviation safety and security and denies U.S. airline mechanics the chance to compete on a level playing field. Third, the failure to properly fund the expansion and modernization of our aviation system, meant to ensure adequate resources for the FAA and its employees is threatening the competitiveness, safety and efficiency of this industry.

One very clear example of what we think is liberalization of aviation run amok is the Norwegian Air Shuttle's operating scheme that is currently pending and becoming a very controversial item in this country. Norwegian Air International is the name of the company; NAI.

A few facts: Norwegian Air Shuttle was incorporated in Norway and holds an air operator certificate in that nation. Its so-called new company, NAI, was created to exploit European aviation and labor law, circumvent the U.S.-E.U. Open Skies Agreement, especially its labor article, and gain an unfair advantage over U.S. and European carriers that play by the rules. Norwegian has registered its aircraft in Ireland and attained an Irish air operator certificate but it will not service Ireland. The airline is also contracting, or more accurately renting, its flight crews and they're largely based in Thailand and covered under individual employment contracts under the laws of Singapore. That's right. A Norwegian company created an Irish airline that will not fly in Ireland, will rent Asian flight crews, and will use expanded benefits under the U.S.-European aviation trade accord to compete unfairly with U.S. and European air carriers.

Fortunately, this is not a done deal because the NAI must first secure approval from the U.S. Department of Transportation. The administration must very clearly reject NAI's application and send a clear signal that those seeking to exploit U.S.-European aviation trade relations with a rogue "flag of convenience" operations will not be rewarded with expanded access into the very lucrative U.S. marketplace. We're pleased that yesterday 38 senators sent a letter to Transportation Secretary Foxx that raises many of our concerns. I wanted to thank Madam Chair, Senator Cantwell, for joining that letter, as well as Chairman Rockefeller and Senator Schatz and Blunt for leading the effort.

Another very critical international issue that we face involves TTIP negotiations between the U.S. and the E.U. The history is that aviation has always been left out of broad trade negotiations. There's a very simple reason for it. The strategic importance of the airline industry as expressed by my colleagues here on the panel, cannot be understated. And yet, the E.U. seeks to upend the current policy and include aviation in TTIP negotiations. We think that's a huge mistake. The aim of the European Union is clear; it wants to force unwise and unpopular changes to U.S. policies on foreign ownership and control of change the rules that currently limit point-to-point domestic service to U.S.-controlled carriers. These laws ensure a strong airline industry for Mr. Calio's members, protects against unfair competition and preserve the rights of our members. It would be irresponsible in our judgment to throw air traffic rights into broader free trade talks with the Europeans and then have aviation traded away as part of some broader trade or geopolitical objective.

We've seen decades of unfair trade policy ravage many industries in our country. We're committed to making sure that bad trade policy doesn't ravage U.S. airline employees. Our Government must also ensure the safety and security and oversight of aircraft maintenance performed overseas.

There are 700 facilities that dot the globe now that maintain aircraft that our carriers use. The FAA is now a year late in issuing a rule mandated by the Congress to make sure that those employees in FAA certified facilities around the world are drug tested the same way they are here in the United States. It's not about imposing our will on other countries, it's about imposing a level playing field to make sure that if you're going to fly the seal of the FAA on a facility around the world and say you are approved, that you will comply by the same rules that any facility or air carrier in this country complies by. That rule is overdue and we really need it to be issued.

Last, the U.S. must invest in the FAA's workforce and its aging infrastructure. I join my colleagues here in talking about not only NextGen but the overall modernization of aviation. We still use too much 1950s technology and it puts us at a very competitive disadvantage in the global marketplace. We've already witnessed the impacts of the FAA shutdown and the overall sort of budget impacts in Washington and what that means to the FAA and its programs. You can't run large infrastructure projects and have them go through fits and starts. You can't put them on the shelf and then turn them back on just like that as the government does its sort of fits-and-starts approach to how we fund aviation. And meanwhile, the members I'm honored to represent and the FAA members of the air traffic controllers and PASS, are becoming scapegoats in this battle. And we'd like to see that end with a more dependable, reliable funding stream that deals with the real modernization needs of the system.

And there is a major staffing crisis at the FAA. One third of its workforce, including controllers, inspectors and system specialists are eligible to retire. This is unsustainable and must be addressed because we believe it's going to not only impact operations for the airline industry, but also the safety of the system as you see this brain drain of high-quality people retiring and we're not hiring and replacing them fast enough. It's time for Congress to fully fund the aviation investment needs of the country.

I look forward to working with my colleagues here and many others in trying to get that done. And I believe the issues we've raised in our formal testimony about international trade, about the way we regulate the outsourcing of aircraft maintenance, the way we treat the FAA workforce, and the way that we make sure we build a STEM program in this country that has as many machinists working in America as possible who are members of the IAM at Boeing and many other companies, who can build that workforce up to be the best in the world, as it is today, and compete with the rest of the world as it does today.

Thank you. Appreciate the opportunity.

[The prepared statement of Mr. Wytkind follows:]

PREPARED STATEMENT OF EDWARD WYTKIND, PRESIDENT, TRANSPORTATION TRADES DEPARTMENT, AFL–CIO

Chairwoman Cantwell, Ranking Member Ayotte, and members of the Senate Commerce, Science, and Transportation Committee's Aviation subcommittee, thank you for the opportunity to testify today on the international competitiveness of the U.S. aviation industry.

As the President of the Transportation Trades Department, AFL–CIO (TTD), I am honored to speak on behalf of the employees who operate, maintain, service and build our Nation's aviation system. By way of background, TTD consists of 32 affiliated unions that represent workers in every mode of transportation, private and public sector, including those who work in aviation.[1] Today, America is confronted with enormous challenges as the effects of globalization ripple throughout the aviation sector and its workforce. The policy and trade decisions of our government and the business decisions of our air carriers in the next few years will determine the fate of this vital sector of the U.S. economy.

With trade liberalization policies taking hold around the world, our government—with appropriate congressional oversight—has the responsibility to ensure U.S. airlines can compete on a level playing field worldwide and to protect and expand middle class aviation jobs. Specifically, the Administration and Congress must carefully manage aviation trade relationships to ensure we avoid the land mines and pit falls of unscrupulous liberalization, protect against outsourcing of critical safety and security work, oppose regulatory overreaches by foreign states, and provide stable and robust financing for our aviation infrastructure and FAA workforce.

We are currently faced with a particularly dangerous instance of liberalization run amok that could have far-reaching negative implications for the U.S. aviation industry and its employees. Norwegian Air Shuttle (NAS), which is incorporated in Norway and holds an air operators certificate (AOC) in that country has developed a business model that is designed to exploit European aviation and labor laws and the U.S.-EU Air Transport Agreement (ATA) in order to evade its collective bargaining obligations in Norway and Norway's laws. NAS has created a subsidiary, Norwegian Air International (NAI) which applied for and received an Irish AOC even though it will not serve Ireland. NAI has also registered its 787 aircraft in Ireland and has applied for a foreign air operators certificate with the U.S. Department of Transportation (DOT) as an Irish carrier. Despite being a subsidiary of a Norwegian company and registering as an Irish airline, NAI is using pilots who will be based in Thailand and employed under individual employment contracts that are governed by the laws of Singapore to crew these flights. The pilot crew will not be employed directly by NAI but by a pilot recruitment company that will then contract, or more accurately "rent" them to NAI. A similar arrangement will apply to the flight attendants who will work on the 787s.

The goal here is clear. NAI is using the unique nature of EU aviation laws to effectively shop around for the labor laws and regulations that best suit its bottom line. It's using a "Flag of Convenience" strategy at the expense of high labor standards. NAI is also taking advantage of the liberalized transatlantic aviation market provided by the U.S.-EU ATA, and claiming that this agreement alone provides unlimited access to the U.S. market. NAI has never disputed the assertion by TTD and other U.S. and European labor organizations as well as major air carriers on both sides of the Atlantic that they are simply using this business model to avoid Norwegian labor, tax and other laws. The airline has presented a number of economic reasons for registering in Ireland, but each of these is unsubstantiated and has only been recently presented. Rather than presenting legitimate, fact-based economic benefits, NAI's claims appear to be part of a publicity campaign designed to distract the general public and Federal regulators from their true goal and purpose: to undermine labor standards and secure access to the transatlantic aviation market with bottom of the barrel labor costs.[2]

We raise this not just to complain about a foreign airline operator or to insulate U.S. carriers from legitimate competition. If allowed to proceed, the NAI business model will have an immediate impact on U.S. airlines and their employees. With plans to serve Los Angeles, Oakland, Orlando and other American cities if its application secures DOT approval, NAI would undercut U.S. air carriers and their employees that serve those same markets by as much as 50 percent. If NAI's plan is approved, in the long term this type of "Flag of Convenience" model could become the norm, with more and more airlines seeking to compete by scouring the globe for cheap labor and lax regulations.

Fortunately, negotiators for the EU-U.S. ATA foresaw this type of nefarious business model as a potential problem and included, for the first time ever, a labor article designed to prevent benefits from the ATA from having adverse effects on aviation jobs. This provision, Article 17 *bis* ("Social Dimension"), states that "the opportunities created by the Agreement are not intended to undermine labour standards or the labour-related rights and principles contained in the Parties' respective laws." It further states that "the principles in paragraph 1 shall guide the Parties as they implement the Agreement."

The inclusion of Article 17 *bis* in the ATA represented important progress in our global effort to ensure that market-opening trade initiatives are not used to harm

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[1] A complete list of TTD affiliates is attached.

[2] Attached are joint comments by AFL–CIO president Richard Trumka and TTD president Edward Wytkind, submitted to DOT docket number OST–2013–0204 on December 12, 2014.

good jobs and undermine labor standards, and was praised by both U.S. and European negotiators. The article is also consistent with U.S. law that requires DOT to apply, among other factors, a public interest standard as it considers these aviation policy questions. We believe that NAI's business model is a clear violation of Article 17 *bis* and U.S. public interest standards, and gives DOT ample grounds on which to reject the application. We are also pleased that over a quarter of the U.S. Senate, including many of you here today, joined a letter that was led by Senators Schatz, Blunt and Rockefeller to DOT raising many of these concerns, and urging Secretary Foxx to ensure the NAI application is fully compliant with U.S. law and the U.S.-EU ATA. I want to thank these Senators for their support. Our government must make it clear that NAI's operating scheme runs contrary to the faith and intent of the U.S.-EU ATA and will not be rewarded with expanded access to our lucrative aviation market.

In addition to the NAI dispute, another pending trade issue that is vital to our aviation sector is the U.S.-EU negotiations over a Transatlantic Trade and Investment Partnership, better known as TTIP. These negotiations encompass a wide variety of trade issues, yet despite the historical precedent of excluding air services in these types of broad trade negotiations, the EU is attempting to include aviation liberalization in these talks. We are strongly opposed to this approach, as it is an attempt by the EU to force changes to U.S. rules that limit foreign ownership and control of U.S. airlines and reserve domestic point-to-point service, or cabotage, to U.S.-controlled carriers. Because the EU has failed in its attempts to force unwanted reforms to these U.S. laws, it is attempting to do so in complex TTIP talks with hopes that somehow our aviation interests would be "traded away" for other trade objectives. This strategy must be rejected and we have communicated these views to the Administration and the EU.[3]

The good news is that risking our aviation interests in a broader trade negotiation isn't necessary if the objective is opening aviation markets and expanding trade and jobs. Over 100 trade liberalization pacts, referred to as "Open Skies" agreements already exist between the U.S. and various governments, and new and expanded agreements are on the table. In other words, aviation trade is expanding through existing negotiating frameworks overseen by the subject-matter experts at the Departments of Transportation and State. There is no need for our government to throw aviation into a larger, more complex pot of trade issues.

We know that the expansion of international air transportation opportunities can offer lucrative business opportunities for U.S. airlines and, if done the right way, create good aviation jobs. At the same time, we know that globalization without checks and balances can have devastating effects on entire industries and middle class American jobs.[4] TTD has always rejected efforts that seek aviation liberalization at any cost and without adequate protections for the men and women who work in our aviation industry. Decades of unfair trade policy have ravaged workers in many U.S. industries, and we will not relent in our commitment to ensuring that aviation trade liberalization does not have the same result for U.S. aviation employees.

As noted above, we were pleased to see the inclusion of a labor article in the U.S.-EU ATA as well a process through which the parties can seek to address adverse effects of the agreement on aviation employees. The U.S. also wisely rejected efforts by the EU to force changes to our rules and regulations governing foreign ownership and control of U.S. airlines. It was decided by our government that foreign investment in our airlines was appropriate but not to a degree that ceded actual control to foreign investors.

Foreign ownership and control rules, and prohibitions against foreign carriers engaging in cabotage have ensured a viable U.S. airline industry and have protected U.S. aviation workers against unfair competition, preserved workers' rights and ensured our Nation's status as the world's leader in air transportation. Foreign states have long lobbied to loosen these restrictions in order to gain a foothold in the lucrative U.S. aviation market, the world's largest, and syphon away good middle class jobs. In rejecting these proposals, despite the heavy-handed tactics of the EU, the final U.S.-EU accord proved again that liberalization agreements can be reached that include important protections for a vital U.S. industry and good jobs. With companies such as NAI already seeking to exploit an Open Skies agreement with a clear labor protection article, it would be particularly dangerous to further muddy the regulatory waters by throwing air traffic rights issues into a broad free trade agreement.

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[3] Attached are TTD's comments on the Transatlantic Trade and Investment Partnership, submitted to USTR docket number USTR–2013–07430 on May 10, 2013.T

[4] Bivens, J. (2008, May 6). Trade, Jobs and Wages. *Economic Policy Institute.* Issue Brief #244.

The expanding web of aviation liberalization agreements throughout the world is making the global aviation system increasingly interconnected and integrated. With this comes a host of regulatory issues and concerns that will need to be addressed. One such issue is the impact of aircraft carbon emissions on the environment and global climate change. TTD is committed to working with U.S. carriers and the U.S. Government to seeking a global solution to reducing aviation emissions, but we believe that any solution must be truly global in order to provide meaningful results and ensure competitive balance. Piecemeal unilateral attempts to curb carbon emissions would place an unreasonable financial burden on U.S. carriers and their employees and only further delay the process of reaching an international, consensus-based agreement. This includes the EU's Emissions Trading Scheme (ETS), a plan that if implemented would apply to all flights entering and leaving EU airspace.

I would like to thank Senators Thune and McCaskill for leading the effort last year to pass legislation that allowed the Secretary of Transportation to combat the harmful effects [5] of the EU ETS and ensured that U.S. airlines were not subject to the EU cap-and-trade tax penalties. Because of this legislation and other international pressure, the EU postponed implementation of ETS for a year to give the International Civil Aviation Organization (ICAO) an opportunity to draft a global plan. We were pleased, then, when late last year ICAO's general assembly approved a plan that will provide for the development, over the next three years, of a global framework for addressing aviation's impact on climate change, with the goal of implementing the plan worldwide by 2020. The ICAO action was an important step toward implementing a global solution to this problem, and we look forward to working with ICAO to develop a framework that will substantially reduce global emissions, improve the efficiency and cost-effectiveness of our aviation system, and promote sound environmental stewardship while maintaining competitive balance and fairness in the international aviation marketplace.

We are also pleased that EU officials have tentatively backed off a plan to continue pushing the misguided ETS scheme. In the aftermath of the ICAO general assembly meeting, the European Commission (EC) proposed revising the EU law so that the ETS would cover all flights over EU airspace, including those flown by international carriers. Last week EU officials announced that they would not pursue this course of action, but a final vote is pending in April. We hope that the EU will completely suspend its plans to unilaterally implement its ETS scheme and work with the U.S. and others toward a truly global solution through ICAO.

We also must ensure that the more than 700 foreign-based aircraft repair stations certified by the FAA to work on U.S. aircraft are held to the same safety and security rules that we require for work done in this country. Too often this has not been the case. For example, aircraft mechanics working in the United States either employed at air carriers or at domestic contract repair stations are required to undergo various drug and alcohol screenings to ensure their ability to perform safety-sensitive repairs. Yet employees working at repair stations based overseas are exempt from these tests despite the fact that they work on the same U.S. aircraft and at repair stations certified by the FAA. To address this and other safety loopholes, Senator McCaskill championed a number of reforms to aircraft repair station regulations in the context of the FAA Modernization and Reform Act of 2012. I want to thank and recognize the Senator for her leadership on this issue. Specifically, the final law included a provision (Section 308(d)(2)) directing the FAA, within one year of enactment, to issue a proposed rule requiring all repair station employees responsible for safety-sensitive maintenance on U.S. aircraft to be subject to an alcohol and controlled substance testing program.[6] While we are pleased that Congress moved to address this safety issue, the FAA is now over a year late in fulfilling this mandate and the provision will have no impact until it is formally implemented by the FAA. This delay is unacceptable and particularly grievous since additional time will be needed to implement the final regulations after the proposed rule is finally released.

We are also extremely disappointed in the final security rule on foreign and domestic repair stations issued by the Transportation Security Administration (TSA) in January. When TSA issued an NPRM in 2010, we raised significant concerns that the proposal did not go far enough to address the security questions that have been raised. We agree with TSA's assessment, noted in the agency's NPRM, that as TSA

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[5] Attached is TTD's policy statement "Supporting a Global Solution to Aviation Emissions," which was adopted by the TTD Executive Committee on October 29, 2013.

[6] Separately, Section 308(d)(1) directs the Secretary of Transportation and the Secretary of State to request that member countries of ICAO establish international standards for alcohol and controlled substance testing of persons that perform safety-sensitive maintenance functions on U.S. commercial aircraft.

"tightens security in other areas of aviation, repair stations increasingly may become attractive targets for terrorist organizations attempting to evade aviation security protections currently in place." That is why we were dismayed that the final rule further rolls back the already weak security requirements TSA proposed in 2010, fails to address security loopholes we identified in the proposed rule, and runs counter to the congressional requirement that TSA ensure the security of maintenance work performed at contract repair stations.

The final rule eliminates the proposal that repair stations certified by the FAA that work on U.S. aircraft adopt and implement a security program to help control access to a facility. Instead, limited and weak security measures will apply only to stations that are on or adjacent to an airport. The security challenges raised by the heavy use of contract maintenance are not limited to stations at airports and Congress clearly did not identify this distinction when it mandated security enhancements.

The final rule also did nothing to address concern with adequate background checks of contract station employees. In fact, it went in the opposite direction by only applying these reviews to individuals at a repair station designated as a TSA point of contact and those who have the means to prevent the unauthorized operation of large aircraft.

Finally, TSA does not intend to fully inspect FAA certified repair stations, weakening the agency's ability to ensure their security. This rule also fails to give TSA the clear authority to conduct unannounced inspections of foreign repair stations. While the rule extols the virtues of unannounced inspections at domestic stations, it notes that for foreign stations "it will always coordinate any inspection with the host government prior to starting an inspection." The final rule fails to fulfill the intent of Congress, and we look forward to working with this Committee to improve the safety and security of foreign repair stations.

Beyond TTIP, Open Skies negotiations and ICAO global aviation emission issues, the U.S. Government must embrace policies that promote the competitiveness of U.S. airlines and protect and expand U.S. airline jobs. It also must not advance policies that provide a competitive advantage to foreign airlines, particularly state owned or subsidized airlines. Unfortunately the Department of Homeland Security (DHS) has been doing the latter. Earlier this year DHS opened a Customs and Border Protection (CBP) pre-clearance facility at the Abu Dhabi International Airport in the United Arab Emirates (UAE), despite an outpouring of objections from the U.S. aviation community, including labor, U.S. airlines and airports. CBP pre-clearance facilities are popular with passengers and can help relieve congestion at customs check points in U.S. airports. However, no U.S. carrier currently flies between the U.S. and Abu Dhabi. This facility is staffed by U.S. customs agents at significant cost to the U.S. taxpayer, yet it only benefits Etihad—the state-owned air carrier of the UAE. This is also a significant departure from the prevailing construct of preclearance operations, which is to facilitate U.S. travel and to benefit U.S. travelers. Preclearance should not be a vehicle to put U.S. air carriers and U.S. airline jobs at risk by advantaging a foreign competitor exclusively. And given that Etihad only operates three routes between Abu Dhabi and the U.S., we believe CBP resources and personnel would be better used here at home to relieve overburdened customs lines in U.S. airports. While the Abu Dhabi facility is now up and running, we are concerned that this will lead to other pre-clearance facilities in airports that have a minimal U.S. presence such as Dubai and Doha. We will work closely with Congress in the coming months to ensure that our customs resources are used in a way that help alleviate congestion at our airports while also promoting the competitiveness of U.S. airlines.

In order to remain competitive in the global marketplace and continue in our commitment to serving the flying public, the U.S. must invest in the FAA's workforce and aging infrastructure, stabilize the FAA's operating budget, ensure enhanced oversight of the industry and airspace, and continue modernizing the National Airspace System (NAS) through the Next Generation Air Transportation System (NextGen) initiative. We have all witnessed the impact that government shutdowns have had on these programs and each time this occurs, these initiatives, designed to make air travel safer and more efficient and to expand capacity, are grounded or idled.

The Government shutdown is just the latest disruption for the FAA. Passage of the 2012 FAA Reauthorization Act was delayed over three years with 23 extensions before finally being signed into law. In fact, when an agreement could not be reached on the 21st extension, the FAA was partially shut down for two weeks during the summer of 2011, costing the government nearly $30 million a day. More recently, in April 2013, sequestration forced the FAA to furlough every employee, including air traffic controllers and safety inspectors, and look at closing towers in order to achieve the mandated spending cuts. Sufficient and predictable long-term funding is desperately needed to ensure that our aviation system is as safe and efficient as possible.

This lack of stable funding has already caused damage, some of which will be difficult if not impossible to reverse. For example, stop-and-start funding means that the FAA can't plan for the future, making long term improvement and modernization projects even more difficult. In addition, restarting modernization projects is very expensive and some projects may need to begin again from square one. The April 2013 furloughs caused delays to modernization projects like En Route Automation Modernization (ERAM) that are costing $6 million per month of delay (currently estimated to be about $42 million).

Due to budget cuts, preventative maintenance has been halted, and engineers and systems specialists must contend with a fix-on-fail policy, meaning they must wait until equipment actually breaks before replacing it. This creates an obvious safety concern and may also result in excessive and avoidable air traffic delays. Sequestration-mandated furloughs in April 2013 caused severe delays: during the week of April 21–27 2013, delays nearly tripled at our Nation's airports, from 5,103 delays to 13,694. These funding cuts are problematic, and will continue until Congress finds a responsible way to end sequestration. Until then, our NAS is in jeopardy of falling behind on efficiency, safety, and capacity.

The FAA also continues to face serious problems regarding staffing, especially considering that one-third of its workforce, including air traffic controllers, aviation safety inspectors and systems specialists, will be eligible to retire starting this year. Furthermore, even if the FAA replaced these retiring workers immediately, the training for employees throughout the agency is extensive and it can take two to five years to fully train new hires. In addition, FAA operations within the current budget environment are presenting major challenges for the FAA workforce and the aviation system, which is resulting in limited funding for travel, challenges performing inspections and other surveillance activity, reduced or delayed maintenance of critical systems and equipment, and difficultly in meeting growing industry demands with its manufacturing and certification process. Without clear funding in place to ensure the current workforce remains on the job and a new generation of employees is in place with access to thorough on-the-job training, there is no way the FAA can guarantee there will be enough aviation safety inspectors, air traffic controllers, systems specialists and other employees in place to secure the safety and efficiency of the system.

The U.S. must also foster programs that will help develop a workforce with the skills and expertise necessary for the manufacture and maintenance of modern, technologically advanced aircraft. U.S. aviation cannot compete globally without maintaining its world leadership in producing the highest quality aircraft. To that end the International Association of Machinists and Aerospace Workers (IAM), a TTD affiliate, has partnered with the Boeing Company to create the Quality Through Training Program. The IAM and Boeing jointly design and administer a host of programs designed to continually upgrade the skills and abilities of the incumbent workforce. These programs comprise career planning, education assistance, and a variety of onsite training programs including apprenticeships.

We also want to refer the Committee to the Modular Manufacturing Development Project, developed by IAM in collaboration with Goodwin College, the Connecticut Center for Advanced Technology (CCAT) and other manufacturing organizations. This project is a shining example of a program designed to increase our manufacturing capabilities to meet the demands of U.S. aviation and around the world. This project has identified gaps in our manufacturing capabilities and brings together industry stakeholders, including labor, to recognize and address the needs of our manufacturing workforce. I commend IAM, led by President R. Thomas Buffenbarger, for its leadership and vision in collaborating on this project, and hope that it will serve as model for workforce development and technological advancement in aviation manufacturing.

The U.S. aviation industry and its workers face significant challenges and opportunities as globalization and liberalization become more prevalent. Already, U.S. aviation crews have seen their jobs threatened by corporate schemes such as alliances between U.S. and foreign air carriers, and the "flag of convenience" scheme being advanced by NAI. Similarly, foreign outsourcing of aircraft maintenance and passenger service functions is sending good U.S. aviation jobs overseas, while our own FAA remains paralyzed by sequestration and budgetary uncertainly. The U.S. aviation system remains the best and safest in the world, however, and through smart government policies and investment that promote U.S. competitiveness, middle class job creation, and technological modernization we can thrive in the international marketplace.

Thank you for the opportunity to testify today, and I look forward to working with the Committee to promote the competitiveness of the U.S. aviation industry and to protect and expand our middle class aviation industry workforce.

ATTACHMENT 1

Transportation Trades Department, AFL–CIO

A bold voice for transportation workers

TTD MEMBER UNIONS

Air Line Pilots Association *(ALPA)*
Amalgamated Transit Union *(ATU)*
American Federation of Government Employees *(AFGE)*
American Federation of State, County and Municipal Employees *(AFSCME)*
American Federation of Teachers *(AFT)*
Association of Flight Attendants—CWA *(AFA–CWA)*
American Train Dispatchers Association *(ATDA)*
Brotherhood of Railroad Signalmen *(BRS)*
Communications Workers of America *(CWA)*
International Association of Fire Fighters *(IAFF)*
International Association of Machinists and Aerospace Workers *(IAM)*
International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers and Helpers *(IBB)*
International Brotherhood of Electrical Workers *(IBEW)*
International Longshoremen's Association *(ILA)*
International Organization of Masters, Mates & Pilots, ILA *(MM&P)*
International Union of Operating Engineers *(IUOE)*
Laborers' International Union of North America *(LIUNA)*
Marine Engineers' Beneficial Association *(MEBA)*
National Air Traffic Controllers Association *(NATCA)*
National Association of Letter Carriers *(NALC)*
National Conference of Firemen and Oilers, SEIU *(NCFO, SEIU)*
National Federation of Public and Private Employees *(NFOPAPE)*
Office and Professional Employees International Union *(OPEIU)*
Professional Aviation Safety Specialists *(PASS)*
Sailors' Union of the Pacific *(SUP)*
Sheet Metal, Air, Rail and Transportation Workers *(SMART)*
SMART—Transportation Division
Transportation Communications Union/IAM *(TCU)*
Transport Workers Union of America *(TWU)*
UNITE HERE!
United Mine Workers of America *(UMWA)*
United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union *(USW)*

These 32 labor organizations are members of and represented by the TTD

ATTACHMENT 2

BEFORE THE

U.S. DEPARTMENT OF TRANSPORTATION

WASHINGTON, DC

Application of	)	
	)	Docket No. OST–2013–0204
NORWEGIAN AIR INTERNATIONAL	)	
LIMITED	)	
	)	
for an exemption under 49 U.S.C. § 40109	)	
and a foreign air carrier permit pursuant to	)	
49 U.S.C. § 41301 (US–EU Open Skies	)	

ANSWER OF THE AMERICAN FEDERATION OF LABOR AND CONGRESS OF INDUSTRIAL ORGANIZATIONS, AND THE TRANSPORTATION TRADES DEPARTMENT, AFL–CIO TO DOT NOTICE OF MOTION

On behalf of the American Federation of Labor and Congress of Industrial Organizations (AFL–CIO), and the Transportation Trades Department, AFL–CIO, we write in response to the written summary of the January 8, 2014 U.S.-EU Joint Committee meeting as it pertained to the current and planned long haul operations of Norwegian Air Shuttle ASA (NAS) and its affiliated companies, Norwegian Long Haul AS (NLH) and Norwegian Air International Limited (NAI).

The AFL–CIO and TTD support the comments filed by the Air Line Pilots Association (ALPA), and we refer you to the analysis and response to each point made by the European delegation detailed in ALPA's filing. As those comments discuss, the DOT Summary states that during a closed-door session of the Joint Committee Meeting, the European delegation gave the Joint Committee what the Summary characterized as "some detailed factual information." We do not believe that this characterization accurately reflects the nature of the information provided by the European delegation, as the information is in most cases not detailed or not factual, or both. Much of the justification being provided for NAS/NLH/NAI business model, including their decision to seek an Air Operators Certificate in Ireland rather than Norway, has only been recently presented. Furthermore, as detailed in the ALPA filing, the economic claims for basing long haul operations out of Ireland seem to be insubstantial. Rather, we believe that these claims are merely part of a publicity campaign designed to distract the general public and Federal regulators from their true goal and purpose: to avoid Norway's labor and other social laws, evade their existing collective bargaining agreements, and to undercut existing U.S. and European airlines and their workers.

Perhaps the most troubling thing about the written summary is what is what the EU delegation did not mention. The EU-U.S. Air Transport Agreement (ATA) includes, for the first time ever, a labor article designed prevent an agreement from having adverse effects on aviation workers. This provision, Article 17 bis ("Social Dimension"), states that "the opportunities created by the Agreement are not intended to undermine labour standards or the labour-related rights and principles contained in the Parties' respective laws." It further states that "the principles in paragraph 1 shall guide the Parties as they implement the Agreement."

The inclusion of Article 17 bis in the ATA represented important progress in our global effort to ensure that market-opening trade initiatives are not used to harm good jobs and undermine labor standards, and was praised by both U.S. and European negotiators. On March 25, 2010 Siim Kallas, the European Commission Vice President Responsible for Transport released a statement proclaiming that "For the first time in aviation history, the agreement includes a dedicated article on the social dimension of EU-U.S. aviation relations. This will not only ensure that the existing legal rights of airline employees are preserved, but that the implementation of the agreement contributes to high labour standards." [1]

[1] European Commission, Office of the Vice President for Transport. Breakthrough in EU-U.S. second-stage Open Skies negotiations: Vice-President Kallas welcomes draft agreement. Retrieved from: *http://europa.eu/rapid/press-release_IP-10-371_en.htm?locale=en*

Despite such a strong statement supporting high labors standards and worker protections, the European delegation appears to be walking away from commitments they agreed to in Article 17 bis. At no point in the written summary of the European delegation's presentation was Article 17 bis mentioned or referenced. Nor does it appear that the European delegation has factored this article into its determination that the U.S. DOT should grant NAI a foreign air carrier permit.

As TTD detailed in its previous filing, NAI's intentions leave little in doubt. Its business model was developed explicitly to evade its collective bargaining obligations in its home country and Norwegian labor laws, and it is doing so using opportunities provided by the ATA. By basing its crews in Thailand and employing them on individual contracts governed by the laws of Singapore, NAI is clearly undermining labor standards on both sides of the Atlantic.

The negotiators of the ATA recognized that the fact that each European signatory to the ATA has its own national labor law might entice airlines to "shop around for a better deal." Article 17 bis was included to precisely to prevent this practice. Yet now, when NAI is attempting to do precisely that, the European delegation appears to be abandoning the principles that guided their negotiations, and walking away from their commitments under the agreement.

Should NAI's business plans be allowed to move forward, we believe that it will set a devastating precedent that will have far reaching implications for the global aviation industry, U.S. and European airlines and airline employees. NAI's application is a critical test case for how the U.S.-EU air services agreement will be implemented, and whether the Article 17 bis labor protections will be enforced as intended.

We believe that the case presented by the European delegation as detailed in the written summary is fundamentally flawed and ignores a crucial article in the ATA. It also ignored many serious questions that TTD and other organizations have posed in regards to the NAI business model. DOT should make clear that it will not ignore the ATA labor article, and seek further information from the European delegation and NAI about how they will address the serious labor concerns that we have presented.

We appreciate your consideration of our views.

RICHARD TRUMKA *President,* AFL–CIO	EDWARD WYTKIND *President,* TTD

ATTACHMENT 3

May 10, 2013

Ms. YVONNE JAMISON,
Office of the United States Trade Representative,
Washington, DC.

RE: REQUEST FOR COMMENTS ON THE TRANSATLANTIC TRADE AND INVESTMENT PARTNERSHIP DOCKET NO. USTR–2013–07430

Dear Ms. Jamison,

The Transportation Trades Department, AFL–CIO (TTD) appreciates the opportunity to submit its views on the proposed Transatlantic Trade and Investment Partnership (TTIP) between the United States and the European Union. TTD has previously submitted comments during the United States European Union High Level Dialogue process, and I gave an oral presentation of TTD's views at the US–EU High Level Regulatory Cooperation Forum on April 11, 2013. TTD's comments today will reflect those previously stated positions.

We understand that the EU has asked that the ownership and control rules that pertain to airlines, the right of the carriers of two sides to operate in each other's domestic markets ("cabotage operations"), and maritime transport services be included as topics in the TTIP negotiations. For the purposes of air transport services, TTD's comments here are limited to whether or not air traffic rights and services directly related to those rights should be included in TTIP. TTD strongly believes that they should not. Likewise, TTD believes that maritime transport services and U.S. maritime laws such as the Jones Act should not be included in these negotiations.

Air transport services have historically been excluded from general trade agreements such as GATS and bilateral and multilateral free trade agreements. Rather, such services have been subject to a separate administrative regime, under which the U.S. has negotiated air service specific agreements with foreign countries. These negotiations have been led by the Department of State and the Department of Transportation, two agencies with dedicated experts on air transport services. This regime has led to the steady and dramatic removal of barriers to trade in the air transport services sector and since 1993 the U.S. has entered into "open skies" agreements with 107 countries agreements that have eliminated virtually all restrictions on the ability of carriers to select routes, to establish frequencies and to set prices.

The U.S. and the EU have recently entered into such an open skies Agreement ("Agreement"). During the comprehensive discussions that resulted in the Agreement, the EU sought the exchange of cabotage rights and the elimination of restrictions on the ownership and control of airlines by the nationals of the parties. In fact, it is fair to say that consideration of altering the ownership and control rules was one of the central topics in the negotiations. Ultimately, the Agreement left in place the restrictions on cabotage. With respect to ownership and control, the Agreement left in place the statutory restrictions but did establish a Joint Committee (consisting of representatives of the two sides) that meets on a regular basis and is tasked, among other things, with considering possible ways of enhancing the access of U.S. and EU airlines to global capital markets.

In TTD's view the existing administrative framework has been successful in opening markets and liberalizing trade in air transport services while at the same time taking into account the legitimate concerns of airline labor. The regime has also created an open market environment that has permitted the airlines of the two sides to receive antitrust immunity for ever-deeper alliance arrangements. Almost all major U.S. and EU passenger airlines are now members of immunized alliances that permit them to operate as virtually single entities in the international markets that are covered by the immunity grants. Additionally, the Agreement contains provisions that recognize the value of "high labour standards" and establishes a mechanism for considering and addressing adverse effects on airline workers that may result.

While restrictions on cabotage and on ownership and control remain, there are good reasons for this. With respect to cabotage, the operation of foreign airlines in U.S. domestic markets would be at odds with a host of U.S. laws, including visa and labor laws. It would also be inconsistent with the treatment of other business sectors. For example, if a foreign automobile company wishes to set up a manufacturing operation in the U.S., that facility and its workforce are subject to U.S. laws and regulations. Granting cabotage rights to EU airlines, however, would allow these airlines to operate in the U.S. domestic market with a workforce that remains technically based in their home country and subject to that country's laws. This would allow the airlines to bypass U.S. laws and displace U.S. aviation employees. Additionally, given that the U.S. represents about half of the world's aviation market, it is unreasonable to argue that opening the U.S. domestic point-to-point market to foreign carriers would represent an even exchange of benefits with our EU trading partners.

The request to eliminate the ownership and control restrictions raises its own set of difficult issues. If an EU airline were able to own a U.S. airline, it would be able to place the air crew of the U.S. carrier in competition with the air crew of the EU airline for the international routes flown by the previously U.S.-owned carriers. If the foreign owner sought to eliminate U.S. jobs and move this work to a foreign crew, it is unlikely that U.S. labor laws would provide an adequate remedy or protection for these workers. This is a very real threat, and the consequences of a similar arrangement are currently being felt by aviation workers in Europe where several airlines have taken advantage of the lack of a comprehensive labor law in the European common aviation area to undermine the ability of European flight crews to bargain over the flying done by their companies. We would be happy to provide specific examples of these actions if you wish to consider the issue in more depth.

Changes to our ownership and control laws would have a negative impact on U.S. aircraft maintenance workers as well. If foreign carriers are allowed to take over U.S. airlines, the practice of outsourcing aircraft maintenance to foreign countries will only accelerate. This is already a major problem that has cost thousands of skilled U.S. jobs and lowered safety standards. And while there is currently a congressionally mandated moratorium on certifying new foreign repair stations, we are still awaiting long overdue security rules governing contract repair stations and drug and alcohol testing at foreign repair stations. Any actions that would further promote the outsourcing of aircraft maintenance work, particularly without adequate rules governing the oversight of these foreign repair stations, should be rejected by this administration. The U.S. Government should be pursuing market-opening aviation trade opportunities that create and sustain U.S. jobs both in the air and on the ground, not those that leave the future of U.S. aviation to foreign carriers (and their respective governments) that may have different economic agendas.

In addition to the problems that relaxing foreign ownership and control rules would cause for our domestic aviation workforce, this proposal would strain our government's ability to mandate and enforce critical security standards. With a foreign interest so integrally involved in controlling the operations of a U.S. air carrier, it would be impossible to assert U.S. security interests. Moreover, the ability of our government to manage the Civil Reserve Air Fleet (CRAF) program, which assures U.S. air carrier capacity for our military's air transport needs during wars and conflicts, would be undermined. Under relaxed foreign ownership and control rules we question how a foreign executive that controls the commercial aspects of a U.S. carrier but does not support our military strategy would be compelled to provide CRAF air transport services during a war or conflict.

Finally, we would note that the Bush Administration in 2005 proposed a rule change to allow foreign entities to exercise actual control over U.S. airlines. This proposal was subject to fierce opposition in Congress and eventually had to be withdrawn by the Administration. It is clear that there remains little support in Congress for changing our current ownership and control standards at the demand of an international trading partner when there is no identifiable benefit to U.S. interests.

The same principles noted above apply to any consideration of U.S. maritime transport laws and policies. The Jones Act has been a successful part of our Nation's national security and economic policy since 1922, and serves a critical economic role for our nation, sustaining over 500,000 good-paying American jobs and generating $100 billion in total annual economic output. This law has ensured that the U.S. continues to have a reliable source of domestically built ships and competent American crews to operate them. Overall, the U.S.-flag maritime industry has played a vital role in supporting our armed forces, our trade objectives, food and other aid to other countries, and our national security. We should be promoting the growth of the U.S. merchant marine, not pursuing changes in our maritime policies through trade negotiations that weaken this vital segment of our transportation system.

Any limitation of the Jones Act would harm American mariners, increase the unemployment rate, accelerate the decline of U.S.-flag operators and seriously damage our economic recovery and national security. This would also permit foreign entities that do not employ U.S. workers and do not pay taxes to our treasury to operate with impunity on our inland waterways and along our coasts. Any efforts to include maritime transport services in these negotiations or to otherwise weaken or infringe upon the Jones Act should be rejected by U.S. negotiators.

TTD looks forward to working with the U.S. Government as it considers how to proceed with respect to the proposed TTIP. Thank you for your consideration of our views.

Sincerely,

EDWARD WYTKIND,
President.

cc: Susan Kurland, Assistant Secretary for Aviation and International Affairs, DOT
Paul Gretch, Director, Office of International Aviation, DOT
Kris Urs, Deputy Assistant Secretary for Transportation Affairs, DOS

ATTACHMENT 4

SUPPORTING A GLOBAL SOLUTION TO AVIATION EMISSIONS

Earlier this month the International Civil Aviation Organization's (ICAO) general assembly approved a plan that will provide for the development, over the next three years, of a global framework for addressing aviation's impact on climate change, with the goal of implementing the plan worldwide by 2020. TTD applauds the adoption of this plan, and looks forward to working with ICAO to develop a framework that will substantially reduce global emissions, improve the efficiency and cost-effectiveness of our aviation system, and promote sound environmental stewardship while maintaining competitive balance and fairness in the international aviation marketplace.

The U.S. aviation system plays a critical role in our national economy. It employs millions of workers both directly and indirectly, generates nearly $900 billion in economic activity annually, and is responsible for nine percent of our GDP. The aviation industry also faces significant financial head winds as profit margins remain thin and job losses continue at some carriers. Rising fuel costs have contributed greatly to these hardships. Despite technology driven reductions in jet engine fuel consumption and airline fuel conservation practices, jet fuel expenses have become the airlines' largest operating cost. As a result, U.S. airlines have acted proactively to both decrease their environmental footprint and combat volatile fuel expenses. The industry has improved fuel efficiency and lowered emissions, including a 1.5 percent annual average fuel-efficiency gain through 2020, carbon-neutral growth from 2020, and a 50 percent net reduction in emissions by 2050. The U.S. was also actively engaged in negotiating the ICAO global emissions plan.

The ICAO agreement comes on the heels of a contentious period revolving around aviation emissions. In November of last year President Obama signed legislation that allowed the Secretary of Transportation to combat the harmful effects of the European Union's Emissions Trading Scheme (EU ETS) and ensured that U.S. airlines are not subject to the EU cap-and-trade tax penalties. TTD endorsed this legislation, the purpose of which was not to turn a blind eye to the effects of aviation emissions on global climate change, but to reaffirm our commitment to finding a global solution to reducing aviation emissions through ICAO.

The U.S. and EU share the common goal of reducing carbon emissions in the aviation industry. However, while the U.S. was committed to working through the ICAO process, the EU moved forward by unilaterally subjecting all international flights arriving and departing from the EU to emissions standards mandated by the EU ETS. This would have placed an unreasonable financial burden on U.S. carriers and their employees, and would have only further delayed the process of reaching an international, consensus-based agreement. Fortunately, in the face of deep criticism from the international community including the legislation signed by President Obama, the EU delayed implementation of the EU ETS for one year to allow the ICAO process to deliver a global plan.

A global solution is not only the most effective way to reduce aviation emissions in the environment that we all share, but also the most economically sound solution. Rather than a patchwork system of environmental standards set by various governments, a global system will address this problem without putting U.S. carriers and their workers at a competitive disadvantage. The emission payments under the EU ETS, for instance, were expected to cost the U.S. aviation industry over $3 billion dollars in the next several years—a prohibitive expense that could have cost thousands of jobs.

Despite the international commitment to creating a global framework for reducing carbon emissions, EU officials have unfortunately expressed disappointment with the ICAO agreement and are pushing to implement the misguided ETS scheme regardless. In the aftermath of the ICAO general assembly meeting, the European Commission (EC) proposed revising the EU law so that the ETS would cover all flights over EU airspace, including those flown by international carriers. While we continue to support the responsible reduction of carbon emissions, the latest EU proposal only complicates the goal of reducing emissions on a truly global scale.

TTD and its affiliated unions oppose the heavy handed, unilateral approach being taken by the EU and believe that these actions only harm the international community's ability to find a meaningful and permanent solution. We remain committed to working with U.S. carriers, the U.S. Government, and ICAO to build an international framework for combating global carbon emissions in the aviation system, but will oppose unilateral action by other governments that undermine U.S. airlines and their workers.

Policy Statement No. F13–05 Adopted October 29, 2013

Senator CANTWELL. Thank you, Mr. Wytkind.

And again, thank you to all the witnesses for your testimony. It was very thorough and brought up a lot of issues and hopefully my colleagues and I will have ample time to ask you some questions.

And I want to start with you, Mr. Muilenburg, about the 35,000 planes that are this market opportunity for us. Seventy percent of that market, or 24,000 of that demand is going to be single-aisle planes which is kind of evenly divided right now between Boeing and Airbus. There are new entrants into the market like China and Brazil who are making serious investment. So what is it we need to do to stay competitive in the U.S. in manufacturing of the single-aisle planes?

Mr. MUILENBURG. Senator, you bring up a very good point. And your statistics, they are very accurate. The majority of those 35,000 planes are in the single-aisle marketplace. Boeing, today, we have our 737 family of aircraft that compete in that market space against our principle competitor, Airbus. That is our most competitive market space.

A couple of things I think are important to enable U.S. industry and the rest of the infrastructure as we look forward. One is continuing to invest in innovation. As you know, we are currently investing in the 737 MAX, the next version of the 737, to make the airplane 14 percent more efficient than it already is today as we work in this competitive marketplace. But continuing to invest in aerospace R&D in the country to enable that innovation, I think, is very important.

We know, also, that many of the airlines that are buying these single-aisle airplanes are leveraging government investment in Europe. We continue to be concerned about the illegal subsidies that we see in Europe that Airbus is taking advantage of. We think the WTO compliance panel, that's currently evaluating the compliance of Airbus to the previous WTO rulings that were made, it's important that that's brought to conclusion so that we can operate on a level playing field.

EX-Im Bank reauthorization, as we talked about, is another important financing element here that will enable us to take advantage of that marketplace. As we said, 80 percent of those airplanes will likely be sold outside of the United States while 80 percent of the jobs will be in the United States. So it's in our best interest to help airlines finance and take those airplanes.

And then last, I think, is workforce training. As you said, if we look at the demographics for our workforce across Boeing and much of the aerospace industry, about 50 percent of our top engineers and mechanics will be eligible to retire over the next, roughly, 5 years. If you look at the STEM pipeline in this country, just to give you an example, we have about four million children entering kindergarten this year. At current rates, that will produce about 60 to 70,000 engineers at the end of college. That's not even enough to satisfy the aerospace industry, let alone all sectors that need engineers.

So investing in the future pipeline training across engineers, mechanics, all of those high-skilled areas, an important investment to the future, as well.

Senator CANTWELL. Thank you.

And I have some follow-up for that but I also want to ask a question because I think, you know, many of us have mentioned this, Malaysian Flight 370 and the fact that the flight is missing and everybody is very anxious and concerned, including the family members who are living through this, but it seems to me that certain things shouldn't be missing. And that is information and data about what is the accuracy of either in-flight information or—I wanted to ask Mr. Calio about this issue of Interpol. I found it surprising, maybe many Americans did, that U.S. carriers or flights in and out of the U.S. basically had background checks and yet some of these other foreign destinations don't.

Ms. Blakey, I don't know if you know about these in-flight monitoring systems but these are, the 777, are one of the most technologically sophisticated flying machines out there. And I think people are anxious to know, is there data collected on these planes that's a normal part of engine maintenance and what is that information and how can it be made available to people?

Ms. BLAKEY. Well, to speak to the last point because I'm sure that there are lots of expertise up here at the table, I certainly can't comment on the specifics of the Rolls-Royce engines that were on that flight. But it is true that airplanes, new airplanes, are flying computers and they do have tremendous amounts of data that is very helpful in maintaining the extraordinary safety record that we have because they do monitor in-flight, for example, the health and our activity of engines. That is something that newer engines will do. They do it periodically during the flight.

If there are anomalies that begin to appear in terms of the data, then that monitoring becomes more intense and transmission to the ground is available, again, depending on the model. And then finally when they land, of course, you can download all of that so that from a maintenance standpoint, as well as from the standpoint of transit issues, we've got a tremendous amount of information available. So that certainly is a part of the picture in all of this.

Senator CANTWELL. So that communication is continuing during flight?

Ms. BLAKEY. It depends, again, on the model, the engine itself, but it is sporadic, usually, with a healthy engine; it is not continuous.

I would turn to Muilenburg, he also knows this.

Mr. MUILENBURG. That's an accurate description of the overall systems. So we can't yet comment on the details of that specific flight but the technology is sophisticated and available. Our in-flight monitoring systems are often used to enhance the safety and maintenance of the airplanes. So we have a team on the ground in Malaysia working with the safety board and we're providing technical assistance. So we will stay very closely engaged in that process.

Senator CANTWELL. And my time is up on this round. But, Mr. Calio, how do U.S. carriers look at this Interpol issue in the sense that they're providing the safety and security for systems flying in and out of the United States? Our U.S. carriers are doing in partnership with our government that work but Americans are now finding out that if they're on these other flights they're not basically going through the same Interpol system?

Mr. CALIO. Madam Chairwoman, I worry a little bit about commenting about anything right now because we don't really know. And I'm not intimately familiar with the Malaysian security but we do have agreements with many other countries and we work with our partners in flight on the security matters. Security is not something we normally compete on. You know, we've got the best system in the world we think. So we're going to have to wait to see what the facts say about the Interpol report.

Senator CANTWELL. OK.

Well, I think Americans want to understand, as we have implemented——

Mr. CALIO. Sure.

Senator CANTWELL.—security regimes, what's happening to these systems around the globe? So, thank you.

Senator Ayotte.

Senator AYOTTE. Thank you, Madam Chairwoman.

Let me just follow up on what the Chair just raised. I think the issue is, at least the public reports have been that essentially Interpol has this data base but it's not being checked. And we may be checking it for, obviously, our carriers, but these other carriers are not checking whether it's, for example, a stolen passport issue or an invalid passport issue of some form.

And so, I think this issue is incredibly important and all of you have tremendous technical background and expertise in this area. While this is ongoing, I hope that we can have follow up on this, Madam Chair, to get your advice and thoughts as the facts come forward as to what happens so that we can obviously take a look at this issue from a perspective of the safety of American passengers. And I appreciate that.

And I think the other issue is you were talking about, Mr. Muilenburg, that Boeing has people on the ground in Malaysia. I really appreciate that. I know my people have raised with me, is this issue of the so called "black box." And usually, that type of data survives and is designed, as I understand it, to survive not only water type situations but other weather conditions.

Can you give us a sense, to the extent you can, of how that system works? And I understand that the facts are still being gathered here but I think that's one of the things that's an outstanding question in people's minds.

Mr. MUILENBURG. Yes.

I can give you some of the basics of how that system is designed. It's certainly intended to be very robust and to survive any kind of physical encounter in the airplane. It's highly integrated. It records the overall flight path of the airplane, details of how the airplane is performing, pilot inputs. So it's a very thorough monitoring system. It is designed to survive any kind of impact that might occur. It is designed to survive any kind of electrical interference, as well. So it's a very robust system, one that we typically rely on for post-incident reviews. And I think it has contributed significantly to the safety and overall improvements of the aviation system over time. And we'll continue to stay very engaged in this particular incident as we would any time we see something that might raise concerns about the aviation system.

Senator AYOTTE. Absolutely; we appreciate it.

I want to get to the issue, obviously, of how do we create a better competitive environment for the aviation industry and with all of the importance in it and the good news in terms of the exports.

But, I wanted to ask you, Mr. Calio, about—you talked about looking at ATC reform on the tax structure. Can you give us a sense what, as we look in terms of your average airline's ticket, what is actually currently part of it in terms of taxes?

And also, when you talk about this type of reform, I guess, Mr. Muilenburg, so all of you, what do you think we should do there as we look at if we go big on a reauthorization to help you be more competitive?

Mr. CALIO. Thank you.

A couple of points. The most shocking fact in the world to most normal people is when you tell them that if they bought a $300 roundtrip ticket, $61 of that is currently Federal taxes and fees. That will rise come July as a result of the budget agreement where, in 2013 when the TSA Security fee was raised by $3.10, absolutely none of which is going to security.

So one of the things that has to happen is more transparency in taxes and fees and, going forward, we'd like to see those taxes and fees reduced. You know, for the most part the taxes and fees are collected to fund the system, but it's a not very well thought out way to fund the system and a critical portion of that goes to fund ATC operations. If you were able to reform, make more efficient ATC operations which would have multiple benefits down the line, and the air traffic controllers agree with us on this, you could look at a new way to fund the system that made a lot more sense than this accumulation of taxes and fees that's built up over the last 20 to 30 years.

Senator AYOTTE. And I wanted to follow up, Mr. Wytkind, I think there's a number, if we get a second round, of additional questions, on the issue that you talked about with regards to this Norwegian issue.

Mr. WYTKIND. Yes.

Senator AYOTTE. And could you help me understand, is there a precedent for this within DOT to deny this type of application? And also, what do you see the implications if it's not denied? And, if it is denied, do you think that there'll be any kind of retribution on the European's part?

Mr. WYTKIND. Well, let's sort of look back for a minute. Thank you for that question, by the way. The issue is very important.

So this is an unprecedented moment. We just had a new U.S.-E.U. Open Skies Agreement negotiated and finalized in 2010—and it did liberalize and open new markets—that we supported. It also had embedded in it a labor article that made it very clear that both sides of the Atlantic embrace high labor standards and that nothing in this agreement shall be used by any carrier to lower labor standards. And so, this NAI, this Norwegian operation, we think violates the agreement. It also violates our own public interest laws in the United States. And so, it is a bit of an unprecedented case because they are using a U.S.-E.U. agreement to form a new airline in Ireland that doesn't fly in Ireland and that employs people in Thailand who are under Singapore labor laws.

So the precedent question is one where the DOT has denied applications by many carriers over the history. But, this is a very clear-cut slam-dunk case in front of DOT, as far as we're concerned. If our government is going to embrace a labor article that is enforceable and then you have the first case come before you that says we want to fly in the United States, we want to compete with U.S. and European air carriers on a very unleveled playing field, we want to use the benefits of the U.S.-E.U. Agreement to do so, but we don't want to play by the same rules as our competitors, we think the government needs to say no to this application. And so, the implication is, however, that we're going to be sending the signal if we approve this that it's OK to use "flag of convenience" operations that scour the globe for the cheapest labor costs under so-called liberalized trade agreements that are designed to create opportunities for U.S. aviation and for European aviation. So I think it's a clear-cut case, but obviously it's in the hands of DOT regulators and we believe, you know, they're moving a little closer toward a decision.

Senator AYOTTE. Thank you.

Mr. WYTKIND. Thank you.

Senator CANTWELL. Senator Klobuchar.

STATEMENT OF HON. AMY KLOBUCHAR, U.S. SENATOR FROM MINNESOTA

Senator KLOBUCHAR. Thank you very much, Chairman Cantwell. Thank you to all our witnesses.

Minnesota is the home of the twelfth largest airfield, the Minneapolis St. Paul Airport. We're also the home of Cirrus, one of our Nation's major manufacturers of small jets and we're the home of Charles Lindberg. So, there you go.

And I wanted to focus today on two issues really. The first is Small Airplane Revitalization Act; something that I led with Senator Murkowski, and we passed and signed into law. It doesn't happen a lot around here right now. And then, also, the export issue with growing markets in Asia and Latin America demanding more aircraft. And I did want to say, Mr. Wytkind, I'm on the letter with, I think there are 38 Senators——

Mr. WYTKIND. There are, thank you.

Senator KLOBUCHAR.—bipartisan Senator on that issue that you just discussed and share your concerns. So thank you for that.

With eight aviation-related manufacturing, engineering and assembly facilities in my state, I'm interested in how aviation companies are able to get FAA approval for commercial use of their innovative products. The Small Airplane Revitalization Act that I introduced and I mentioned earlier, address a certification process for smaller airplanes, Part 23 category, given the FAA dates certain to streamline the process.

I guess I go to you, Ms. Blakey. What more can we do to modernize and improve the certification process for other forms of aircraft such as larger cargo or passenger planes, as well as new aerospace innovation?

Ms. BLAKEY. Well, I think this committee, that Act, have been appropriately focused on asking the FAA to streamline their operations and, in fact, move much more quickly, employing the expertise that is available, for example, under an ODA, an organizational designation authority. We feel that they have done a good job in pulling together through several aviation rulemaking committees with industry; working out processes that can really speed things up.

The problem is they haven't implemented them. And I think that is where we really do need the ongoing scrutiny and attention from the Congress, because FAA does not have the resources to continue to operate the way they have in the past on certification nor is it appropriate from either a technological standpoint where expertise is, these days, very diffuse. We need to capitalize on the best possible ways and that often means working in coordination but not trying to provide all of that within the FAA's own structure. And that's what streamlining and ODA is all about.

Senator KLOBUCHAR. OK.

I assume you agree, Mr. Muilenburg?

Mr. MUILENBURG. I agree fully with all of Marion's comments. And I also would offer that the progress the Committee has already made here on Sections 312 and 313 of the FAA reauthorization bill, big enablers here, down that path. We do think certification reform, streamlining the system, as Marion has described, is very important to the future. It's an important enabler and I appreciate the progress already made.

Senator KLOBUCHAR. Another issue with the exports; I just know from our own company employing thousands of people in Duluth, Minnesota, that—where it's really warm right now. Well, it's warming up. I'll put it that way. The issue is that we're seeing this growing export market. And, first of all, Mr. Muilenburg, does Boeing have a sense of what the demand is for cargo planes over the next decade? Is it expected to increase at the same rate as the demand for passenger aircraft when you look at exports?

Mr. MUILENBURG. It is.

And, just to give you an overall sense of it, as we said, about 35,000 large aircraft, both single-aisle and dual-aisle large aircraft class, over the next 20 years.

Senator KLOBUCHAR. And that's a lot, you know, a lot of international demand?

Mr. MUILENBURG. A lot of international demand. About 80 percent of those aircraft will be sold outside of the United States.

Senator KLOBUCHAR. Right. And that's what I see with our small jets. Different——

Mr. MUILENBURG. Yes.

Senator KLOBUCHAR.—obviously, different product.

Mr. MUILENBURG. Very similar.

Senator KLOBUCHAR. It's over 50 percent of their market and it's what they really built to get through the turn because of that.

Mr. MUILENBURG. Very similar dynamic and it's shared across passenger traffic and cargo traffic; as you're well pointing out.

Senator KLOBUCHAR. OK.

The export control list, on October 28 of last year, the first export control reform list rules took effect. These rules include the revisions Category 8 regulations for aircraft and transition less sensitive items in this category from the State Department's jurisdiction to the Commerce Department, been a long-time advocate as we look at not just airline manufacturing but also defense manufacturing as a whole. We're seeing decreased spending. We'll want to keep these jobs and we've got to reform this export control list while still maintaining safety for the public.

Mr. Muilenburg, do you feel that these efforts will help companies increase exports and if there are more you feel needs to be done—I actually raised this on the Export Council, the President's Export Council with your CEO and raised this issue recently in quite some detail about what I thought needed to be done.

Mr. MUILENBURG. Yes.

Senator KLOBUCHAR. But do you want to comment on that?

Mr. MUILENBURG. Yes.

As you noted, Jim McNerney, our Chairman and CEO, is part of the Export Reform Council. We think the actions on export reform that have already been taken are very important and we appreciate the progress that has been made. Much more still to do; we believe. So we'd like to continue on that urgent path. This is an enabler for both commercial aircraft and for defense products and also for commercial satellites.

So the recent actions to move satellites to the Commerce List, largely, has been a real enabler for the commercial satellite business in the U.S. So those are all important features for us. We would urge continued aggressive action there. And, in many cases, our broad supply chain is enabled by export reform because much of their work supports both commercial aircraft and defense aircraft.

Senator KLOBUCHAR. Thank you.

I have a question on Export-Import Bank but I'll put that on the record.

Thank you, all of you.

Senator CANTWELL. Thank you.

Senator Fischer.

STATEMENT OF HON. DEB FISCHER, U.S. SENATOR FROM NEBRASKA

Senator FISCHER. Thank you, Madam Chair, and Ranking Member Ayotte and thank you to our panelists for being here today.

Mr. Calio, it's my understanding that in January of 2012 we saw a new rule come out from the DOT with regard to the full fare advertising. I also understand the House has now introduced legislation that's going to reverse that rule and allow airlines to, again, separate the fees and taxes from what the airline ticket truly costs. As a consumer, I think that's really important. And I know all of my colleagues agree that transparency is always good. Our constituents like that; we like that.

Can you tell me your feelings on that?

Mr. CALIO. Thank you for the question.

Our feelings are very strong. We thought that the rule was wrong-headed. It's an example of the type of economic regulation that predates deregulation. It's also one that makes no sense and, as is the case, and often the airline industry is held to a different standard. There's no other product or service you can name, I don't think, that requires you to take the taxes and publish them as part of the price. If you buy an automobile, you get a base price and then you add things on and the taxes are separate. If you buy a hotel room, the same thing happens. You have a base price. Taxes are listed separately. I could go on but you get the point.

So with us being required to advertise a ticket at costing $300, consumers naturally think that the airlines are taking $300 out of that, not $239. When ticket prices go up because of the new TSA security fee July 1, if that rule stays in effect, the new price will be published and it will look like we just raised our fare $3.10. So we believe that repeal should happen. We hope that the Senate will join in that because it will provide greater transparency to consumers. That rule has allowed the government to effectively hide the ball on tax increases.

Senator FISCHER. Thank you. I agree with that.

Senator Ayotte had talked about the taxes and fees with you and you brought up the example of the $300 ticket, which is fascinating to me, that we aren't able to see what the true costs are on that. You also briefly mentioned in passing the President's new budget proposal. It's coming up for Fiscal Year 2015. Can you tell me how that is now going to impact the ticket price? That's that $3.00 that we're going to see in addition, another addition?

Mr. CALIO. Yes.

If the President's budget were fully implemented, airlines and their passengers would end up taking that $61 up to $76.

Senator FISCHER. OK, thank you.

Mr. CALIO. And that dampens demand which is considerable. You know, there's very little price elasticity in any airline price which is why sometimes when we raise prices to cover the cost of fuel or other expenses you'll see those were increases rejected because consumers won't buy into it.

Senator FISCHER. Exactly, thank you.

Ms. Blakey, on your testimony you discuss the ways that American companies are at a disadvantage in the global market. And you talked about the increase in taxes and regulations, as well as some export controls that are there. Where do you see the trends moving in terms of our competitiveness on a global scale? And what can we do? What can Congress do to address that competitive issue that is so very important to this industry as well as others?

Ms. BLAKEY. Well I think there's no doubt about the fact that we are seeing competitors move up behind us. You can hear the feet. You can feel the hot breaths. So we should recognize that. Now I have tremendous confidence in American innovation and technology. And I do believe that we can continue to lead the world in terms of our aviation industry. You only have to look at the most recent products that are out there; 787 is a great example. And you see that we are doing well, but we need to be very careful about both government policies and our workforce.

On government policies we've got to extend that R&D tax credit. Other countries throughout the world are providing very significant monies to their industries in terms of supporting research and innovation. We're not the first; we're not even the sixth. We're way back there. And so we basically must complete that.

We also have to reauthorize the Export-Import Bank. This is a debate we shouldn't be having. A Federal agency that is supporting American jobs and American industry in a way that 60 other nations do, many of them outdistancing us, this really is not a debate and we need to accomplish it.

And, turning to the broader issue of workforce, STEM education is something that the Federal Government, state and local, all of us need to move together to emphasize the importance of science, technology, engineering and math. And I do mean in terms of both vocational training as well as the kind of efforts that, for example, we're making with state universities and others to net up their engineering departments' offerings with the actual jobs that we have in our industry so that there really are the opportunities and smooth transference into the workforce.

Those are several things I'd mention.

Senator FISCHER. Thank you.

My time is up but, for the record, I would like to ask all of you, how we can improve the cost and the access for my constituents in Nebraska when it comes to these issues?

Thank you.

Senator CANTWELL. Thank you.

Senator Scott.

STATEMENT OF HON. TIM SCOTT, U.S. SENATOR FROM SOUTH CAROLINA

Senator SCOTT. Thank you, Madam Chairwoman.

I did listen to Amy asking her question about streamlining. Really, it was one of the questions I had. So I was appreciative of her asking that question.

To the panel, I spend a lot of my time working on finding a way to look at all the duplicative job training programs that we have, more than 30, and have the overhead collapse down in the "Skills Act" that passed the House that I've introduced in the Senate. So to focus my attention like a laser on the needs of our future workforce, we have certainly had a lot of economic development announcements in South Carolina. We have, hopefully, some good news coming in the upstate with automotive expansions, as you all are aware of the wonderful opportunities we now have in Charleston because of Boeing; 5,000 employees growing to, hopefully, a couple thousand more. And then, I assume over the next several years, you guys will just move the whole shop to South Carolina. But that's just my personal perspective. You don't need to answer to that comment.

But there are four million jobs available today in America that go unfilled because the skills necessary to fill those jobs are very hard to find in the workforce. According to, I think, it's the National Association of Manufacturers, there are over 500,000 jobs that could be filled in their industries that can't be filled because of skills. I'd love to hear your perspective on ways that you would like us to focus to improve the skill set and the workforce and, perhaps specifically, in the workforce development space where we use technical schools. I think that should be a major part of the opportunities moving forward, as well as other vocational training schools because some of the jobs that we're looking for aren't necessarily the STEM areas, they are simply the ability to have the skill set, from welding and other areas, that are impacting the transportation sector significantly.

So I'd love to hear some of your responses.

Mr. MUILENBURG. Senator, perhaps I could take a cut at that.

I certainly share your high interest here and appreciate your focus on workforce development. And as mentioned, STEM skills are very important to us, but machinists' skills, the skill to build airplanes is also a skill where we see a shortage going forward. And we think the investment talent needs to be both broader and deeper, needs to start earlier. And this is getting children interested in aerospace-related career fields early on. Things like the FIRST Robotics program, I think, are wonderful examples. They're jointly working together with colleges and universities, intern programs, vocational schools; very important to bring those machinists' skills in early so that as they enter the workforce they can quickly ramp up as we try to produce airplanes.

So I think there are opportunities for government and industry to partner together each step of that career progression to fill the size of the pipeline and also to build the depth of that pipeline early on, in particular, in some of those high-end skills, both STEM and machinists-related.

Senator SCOTT. I have it noted that Boeing, specifically in Charleston, has a program for high school students at a couple of high schools to try to help overcome that chasm in the workforce, that seems to be certainly a very strong tool. I read a study; I think it was recently. It may have been a comment by Dr. Thomas Sowell that suggests that it is sixth or seventh grade, not high school, sixth or seventh grade is when we start seeing the bifurcation of education as it relates to STEM and the machinists or the blue collar workers that we know we're going to need in the future.

Is there any approach that you've seen that's been effective around the country and perhaps getting in the pipeline those students between the first and sixth grades?

Mr. MUILENBURG. Yes.

Well, we have, and as you rightly mention, those early decisions are happening. And, I would offer that in many cases aerospace machinists' skills——

Senator SCOTT. Yes.

Mr. MUILENBURG.—although sometimes labeled as blue collar skills, those are technically very sophisticated to build airplanes with aerospace qualities. So those are high-end high paying jobs in the end. We see the opportunity to take that vocational training earlier.

So as you've mentioned the high school examples in Charleston, in fact, we're doing it in many sites around the country including in the State of Washington, participating with high schools now for early vocational training and even looking earlier in the pipeline with programs like FIRST Robotics as I mentioned, which trains some machinists' skills.

Senator SCOTT. Thank you very much.

Senator CANTWELL. Senator Thune.

STATEMENT OF HON. JOHN THUNE, U.S. SENATOR FROM SOUTH DAKOTA

Senator THUNE. Thank you, Madam Chair, and Senator Ayotte for having this hearing. I want to thank our panelists for being here. And I have a statement I'd like to have included in the record.

Senator CANTWELL. Without objection.

[The prepared statement of Senator Thune follows:]

PREPARED STATEMENT OF HON. JOHN THUNE, U.S. SENATOR FROM SOUTH DAKOTA

I would like to thank Chairwoman Cantwell and Ranking Member Ayotte for holding this hearing today, and thanks to the witnesses for testifying.

The United States is a leader in aerospace design and manufacturing. The sector is a source of thousands of high-quality jobs for businesses large *and small.*

While it is good news that many segments of the aviation industry appear to be rebounding from the recession, the industry continues to face a number of challenges. Fuel prices remain volatile, pressures from our international competitors are growing, and tax and regulatory burdens are drags on our global competitiveness.

I am keeping a close eye on developments regarding the European Union Emissions Trading Scheme (EU ETS). This is an issue Senator McCaskill and I, along with Senator Ayotte and others, have been confronting head on for quite some time. The EU ETS is little more than a unilateral tax-grab that would hurt American operators and the traveling public when flying into and out of Europe.

In 2012, we led an effort to protect U.S. interests from this controversial tax, culminating in the EU Emissions Trading Scheme Prohibition Act, which was signed into law in November 2012. That law required the Secretary of Transportation to hold U.S. operators of civil aircraft harmless from the EU ETS, and directed the Secretary to conduct negotiations at the International Civil Aviation Organization (ICAO) charting a path for a global, consensus-based approach to aviation emissions.

I am pleased with the positive outcome on the global aviation emissions agreement at ICAO's 38th General Assembly, which rejected unilateral approaches. At the end of last year, the EU had announced proposed changes to the EU ETS that appeared inconsistent with the ICAO agreement. However, recent press reports indicate the EU may extend the moratorium through 2016. This would be a positive development, and I look forward to hearing from the witnesses on this issue, including how the absence of a continued moratorium could affect aviation competitiveness, U.S. consumers, and trade relations with the EU.

During his confirmation process, Secretary Foxx was clear that the Department of Transportation would enforce the provisions of the EU ETS Prohibition Act. I look forward to continuing to work with my colleagues and the Department to confront this challenge.

Another issue on the international front that I look forward to hearing about today is the impact of state sponsorship of foreign air carriers on the competitive landscape of international markets.

While the Middle Eastern carriers have been important customers of our aviation *manufacturing* sector, we should be careful to consider the impacts state sponsorship may have on U.S. air carriers' ability to compete in international markets, as well as the potential consequences of Open-Skies agreements and what that could potentially mean for domestic service that exists today—including service to small and rural communities.

Today, I hope to hear our witnesses' views on what U.S. Government policies help or hurt our carriers' competitiveness in this regard. Thank you, Chairwoman Cantwell.

Senator THUNE. Thank you.

I'd like to direct this question—I guess it has to do with the E.U.-ETS issue. And I'm kind of opening this up, I suppose, to whoever wants to answer it but I think presents a real challenge to U.S. operators and that's why Congress gave the DOT the authority to protect our air carriers and the traveling public from what is unilateral taxation, in effect. And I'm encouraged to hear that E.U. negotiators are considering extending the current "stop the clock," at least to 2016. And I guess my question has to do with, while we hope for an extension that continues that existing moratorium, how would the expiration of this stop the clock affect aviation competitiveness, U.S. consumers and U.S.-E.U. trade relations?

Mr. Calio, perhaps, take that.

Mr. CALIO. First of all, Senator Thune, thank you very much for all your support and leadership on the issue and the leadership of this committee. Frankly, if Congress had not done what it had done last year, the E.U. never would have backed off and never would have put the "stop the clock" in place.

That "stop the clock" in their statement was based on progress at ICAO in September and October of this year. We believe considerable progress was made. But, I guess I would say to you that—that Congress is going to have to remain vigilant on this issue. Experience with the E.C. and the E.U. suggests that there will be constant reconsideration of this even if that vote is positive in the next few weeks. If they move the clock ahead or if they put the stop the clock to 2016, all positive, but I would bet there would be another effort to roll it back at times. And it does put us at a disadvantage and it's just wrong. There's nothing about the tax that goes toward the aviation or making aviation any better. It's extra territorial, as you all know, and it's something that should have been done in the first place.

So again, thank you very much, all of you, for your help on that issue. Without your help and what DOT did on the administration last year, that would be in place right now.

Senator THUNE. And, just as a follow up, compared to the past, how engaged would you say that U.S. stakeholders and foreign bodies are when it comes to utilizing ICAO to find a comprehensive solution to the issue of aviation emissions?

Mr. CALIO. From our perspective, from the airline's perspective, we are very engaged. I say that, you know, if I were to be glib about it and say you've never seen so many e-mails and meetings in your entire life on any issue. But it's all positive. People are working very diligently. It's to our great benefit to come up with solutions because it means less fuel burn, better customer service, less noise, everything along the way. There's a real vested interest here as well as a common good.

Mr. WYTKIND. Senator, may I add——

Senator THUNE. Yes.

Mr. WYTKIND. I really want to, first, on behalf of our 32 unions, to really thank you for your leadership on this issue. As you know, our unions all completely came on board in support of your effort and the effort of the airlines to stop what we thought was a very heavy-handed tactic. And, unfortunately for us in the labor movement, the European Union's heavy-handed tactics on these kinds of issues have become the norm. That's the same strategy they're deploying in trying to force changes to our foreign ownership of control roles; it's the same strategy they're using to try to allow their carriers to serve domestic markets in the United States point to point.

And so, we're completely on board. We're very engaged at ICAO. We've embraced an ICAO solution, a global solution, not one that's unilaterally imposed by the Europeans. So we're completely with you and all your colleagues and members of this committee. We think it's the right approach and your leadership in 2013 brought us to the point we are today.

But I'm with Nick, Mr. Calio. I think this "stop the clock" strategy, while it's better than the alternative which is trying to force it on us, that issue is coming back and we're going to have to be very, very aggressive.

Thank you.

Senator THUNE. I'm sure Nick is going to want to use that "I'm with Nick" statement over and over again.

[Laughter.]

Ms. BLAKEY. Let me also add from the manufacturers' standpoint, that at ICAO, working jointly, the manufacturers, and particularly the engine manufacturers, have done what is very difficult to do and that is come up with a carbon standard. You know, you have to measure this. There has to be science behind it——

Senator THUNE. Right.

Ms. BLAKEY.—at the end of the day. And we're making real technical progress through this international effort. So we're right at the forefront.

Senator THUNE. Good.

And I want to come back to something that you just stated and that has to deal with the issue of foreign ownership.

Mr. WYTKIND. Yes.

Senator THUNE. And, you know, increasingly we're seeing competition from aircraft that are, you know, aircraft manufacturing from countries like Brazil and China. And I think it was mentioned in testimony earlier that U.S. aviation companies are competing against foreign governments, not just foreign companies.

So I guess the question is how does that state sponsorship in other countries impact U.S. air carriers' ability to compete in international markets? And I should say as a follow up to that question, what risk does expanded direct foreign ownership and competition mean in the long-term for domestic service here in the United States? Will we always have more, or fewer, carriers and flight options domestically for the traveling public, say, 10 to 15 years down the road?

Mr. WYTKIND. Well, I might say, look, the vision of those that are proposing to dramatically reform our foreign ownership rules, is to turn the U.S. essentially into a feeder country. Even though we're the world's largest aviation industry market, they want to turn us into a feeder.

And so, there have been many attempts led mostly by the Europeans to try and change our rules and here's how it would work. You would make our employees have to work for foreign companies that come and decide who flies the planes; who maintains the planes; who services the planes; where they fly; where they don't fly; are they going to become ticket sellers where all they want to do is feed the foreign carriers' market opportunities abroad; and at the end of the day we think the strategic significance of aviation and its connection to national security cannot be ignored in this debate.

We run a very robust aircraft program which gives our military the auxiliary support it needs from our airline industry to be able to use its aircraft during times of military and international emergencies. And, for us to just turn the keys over to foreign interests that want to take over our airlines, we think it would be one of the great strategic blunders that this country has made; especially given the fact that we've already seen bad decisions ravage all sorts of U.S. industries that are now completely overseas and we've lost them here. And so, I think we have to act with great caution. That's why we're strongly against their agenda.

Mr. CALIO. Senator, if I could address that as well.

People are surprised to allow it, the "I'm with Nick" and "I'm with Ed," but we are together on a lot of things and we're together on foreign direct ownership. It's a very divisive issue on the past. We believe it's almost a sidelight issue. What we, and our partners in labor, have done is try to partner up on issues that matter most to the industry because we both agree. You need the U.S. Airline industry to be sustainably profitable to have good jobs, better jobs, better product, buy more product. And we're working toward that end.

In terms of state owned enterprises, we are facing very stiff competition from a lot of state-owned enterprises. We have information. We'd be happy to share the—brilliant, actually, the way they've created it. If we could start from scratch it would be much easier, but they've created these aviation ecosystems where, for instance, in the case of one airline, one country, there's one person at the top of the entire chain; runs the airport, the duty free, the operations, the maintenance, the airline itself. And they are taking product away. And what that means in terms of the small and medium sized communities that you ask about is significant because U.S. airlines use the profit from international routes which are their most lucrative parts of their business to subsidize most of the domestic flying. It's a little known fact that for years we've been flying people from point A to point B in the United States at a loss. And it's the international profits that subsidize the loss on those. And to the degree that you see a diminution of services down the line, and in many cases currently, it's because those routes simply become unsubsidizable.

Senator CANTWELL. Well, I want to thank our witnesses. We're out of time because we had a 15-minute roll call vote start about 10 minutes ago. So we're going to have to adjourn the hearing. But I do want, to Mr. Muilenburg and Ms. Blakey, to follow up on your FAA certification process.

We are going to have more hearings about this. I would like to, obviously, got to work with our Senator Ayotte on this, but to focus on what other additional FAA certification process focus this committee can give to helping us expedite that process. And to your point, Mr. Calio, would love to hear more feedback from you on what you want to see in the FAA reauthorization bill that you would think will also help us in this process of competitiveness.

Mr. CALIO. Thank you.

Senator CANTWELL. Senator Ayotte.

Senator AYOTTE. First of all, I absolutely agree with the Chair to have more hearing follow-up on the certification process. And I do want to hear from all of you what the priorities should be on the authorization and two other issues we talked about.

Mr. Calio, the issue of the fees that are on the airline bills and, obviously, openness of those fees and how people know. But also, I'd like to get your thoughts on the overall tax code and what you think needs to be done to ensure that we're more competitive as these discussions about tax reform keep bubbling up.

And finally, on the STEM education piece. Obviously, we've had a great discussion about it today and how we can improve the pipeline, which I think we're all committed to, but also what role you believe that raising the H–1B visa caps in the interim until we have that pipeline.

Thank you.

Senator CANTWELL. Well, I, again, want to thank all the witnesses and all the members. I think we can see from today's attendance that aviation is a very important issue all across the America. I think you have laid out an agenda that the opportunities are great but so are the risks. So we want to be a partner in helping to minimize those. And so, we'll look forward to having more discussions and more hearings on this subject.

We're adjourned.

[Whereupon, at 12:27 p.m., the hearing was adjourned.]

A P P E N D I X

AERONAUTICAL REPAIR STATION ASSOCIATION
Alexandria, VA, March 13, 2014

Hon. JOHN D. ROCKEFELLER IV,
Chairman,
Commerce, Science, and Transportation Committee,
Washington, DC.

Hon. MARIA CANTWELL,
Chairman,
Aviation Operations, Safety, and Security Subcommittee,
Washington, DC.

Hon. JOHN THUNE,
Ranking Member,
Commerce, Science, and Transportation Committee,
Washington, DC.

Hon. KELLY AYOTTE,
Ranking Member,
Aviation Operations, Safety, and Security Subcommittee,
Washington, DC.

NEW DATA HIGHLIGHTS ECONOMIC STRENGTH OF AVIATION MAINTENANCE INDUSTRY

Chairmen Rockefeller and Cantwell and Ranking Members Thune and Ayotte:

I am writing to provide a new report from the Aeronautical Repair Station Association (ARSA) quantifying the aviation maintenance industry's economic and employment footprint nationally, and in your respective states (see attached state-by-state chart). Please visit *http://bit.ly/1i83gCb* to view the full study.

The study makes clear that, although maintenance may be the least visible segment of the aviation industry, in addition to helping U.S. airlines become safer and more competitive, repair stations are significant economic contributors throughout the country. The study found that the U.S. civil aviation maintenance industry employs 311,614 people and generates $44.4B in economic activity. Additionally, 84 percent of maintenance, repair, and overhaul (MRO) companies in the United States are small-medium sized entities.

The report also details the broader aviation sector's significant growth overseas. To ensure the U.S. aviation maintenance industry remains internationally relevant, repair stations must be able to compete globally. Congress and the administration should encourage the negotiation of more bilateral aviation safety agreements (BASAs), respect our current international aviation accords, and refrain from micromanaging the aviation maintenance sector through unnecessary mandates that offer no flight safety benefit.

Additionally, indiscriminate cuts to FAA funding further threaten the viability of the industry. Congress requires that the agency provide strict oversight of the industry. However, when lawmakers don't give FAA the resources to retain adequate certification and inspection personnel to carry out congressional mandates, the aviation maintenance industry's ability to efficiently service customers is at risk.

When considering legislative proposals, ARSA asks Congress to keep our industry's contributions and safety record in mind. Thank you for your consideration and please contact me if you have questions.

Sincerely,

DANIEL B. FISHER,
Vice President of Legislative Affairs.

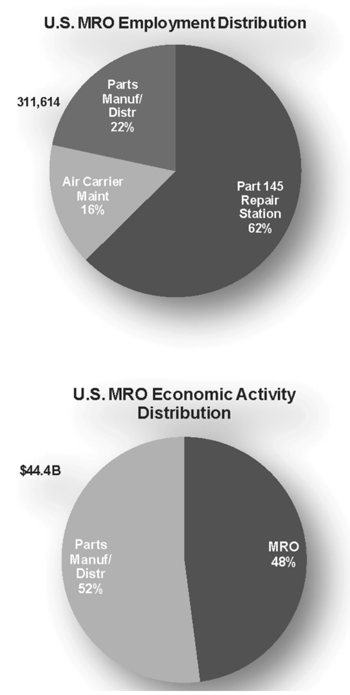
cc: Members of the U.S. House
Members of the U.S. Senate

U.S. Employment & Economic Impact by State

Overview

The U.S. civil aviation maintenance industry employs 311,614 people and generates $44.4B in economic activity. (Figure 1.) MRO accounts for 78 percent of the total employment in the U.S. with 244,144 employees. Within the MRO industry, companies that are certificated by the FAA under part 145 are the largest employers with some 195,114 employees. The remaining 49,030 are employed by other companies involved in civil aviation. Parts manufacturing and distribution accounts for the remaining 22 percent of employment with 67,470 employees. MRO generates 48 percent of the economic activity or $21.3B. With 22 percent of the total employment, parts manufacturing and distribution, accounts for 52 percent of the total economic activity or $23.1B.

Figure 1. 2014 U.S. CIVIL MRO EMPLOYMENT & ECONOMIC ACTIVITY

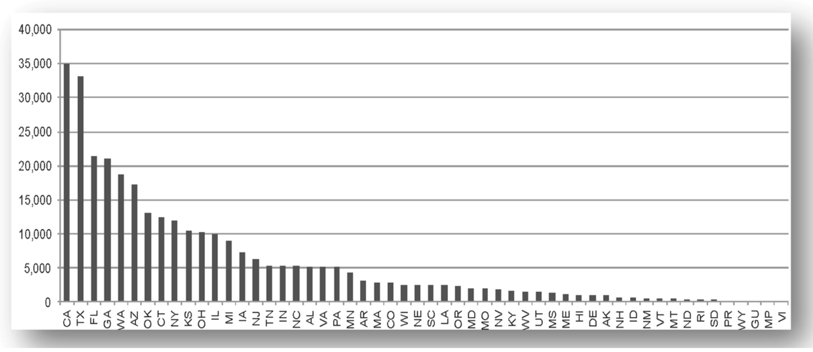


Source: FAA/BLS/RITA/TeamSAI Consulting Services analysis

Analyzing the MRO industry at the state level, TeamSAI estimates that California, Florida, Georgia, and Texas combined represent 35 percent of the total U.S. civil aviation maintenance employment with an estimated 110,330 employees. The top ten states represent 62 percent of the total employment in the U.S. (Figure 2.)

Figure 2. 2014 U.S. EMPLOYMENT RANKING BY STATE (# EMPLOYEES)

EMPLOYEES



Source: FAA/BLS/RITA/TeamSAI Consulting Services analysis

California and Texas also generate the most economic activity followed by Arizona, Connecticut, Georgia, and Washington. Together, these six states generate 49 percent of the total economic activity. (Figure 3.)

Figure 3. 2014 U.S. ECONOMIC ACTIVITY RANKING BY STATE ($USM)

ECONOMIC ACTIVITY

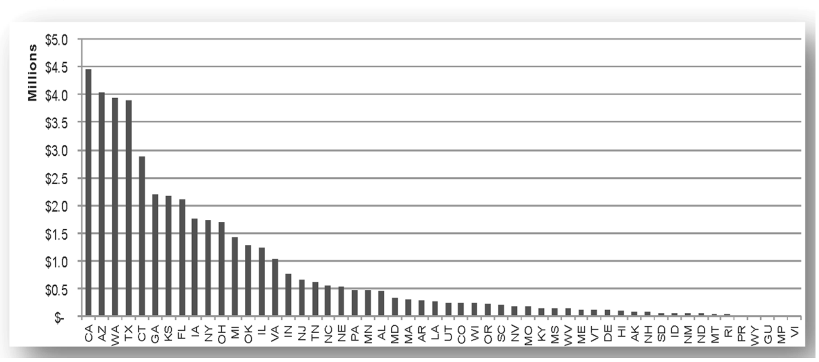


Figure 4 presents the detailed employment and economic impact at the state level.

Figure 4. 2014 U.S. Aviation Maintenance Industry Employment And Economic Impact

	Aviation Maintenance Industry Employment				Aviation Maintenance Industry Economic Activity		
	Maintenance, Repair and Overhaul (MRO)						
State	FAA Repair Station	Air Carrier	Parts Manufacturing /Distribution	Total Employment	Maintenance, Repair and Overhaul (MRO)	Parts Manufacturing /Distribution	Total Economic Activity
AK	490	417	9	916	$65,833	$3,084	$68,917
AL	5,065	—	28	5,093	$367,634	$9,595	$377,229
AR	2,927	79	61	3,067	$218,185	$20,903	$239,088
AZ	6,306	978	9,907	17,191	$528,697	$3,394,869	$3,923,566
CA	26,296	3,170	5,493	34,959	$2,138,739	$1,882,307	$4,021,046
CO	1,211	1,535	15	2,761	$199,314	$5,140	$204,454
CT	5,042	240	7,067	12,349	$383,385	$2,421,676	$2,805,061
DE	893	25	83	1,001	$66,631	$28,442	$95,073
FL	16,536	3,780	976	21,292	$1,474,602	$334,450	$1,809,052
GA	16,225	3,338	1,435	20,998	$1,419,947	$491,737	$1,911,684
GU	21	54	—	75	$5,444	$0	$5,444
HI	158	863	8	1,029	$74,108	$2,741	$76,849
IA	2,738	—	4,443	7,181	$198,733	$1,522,500	$1,721,233
ID	501	95	33	629	$43,260	$11,308	$54,568
IL	4,010	4,501	1,441	9,952	$617,756	$493,793	$1,111,549
IN	3,450	618	1,164	5,232	$295,269	$398,872	$694,141
KS	5,479	53	4,932	10,464	$401,531	$1,690,067	$2,091,598
KY	538	965	44	1,547	$109,093	$15,078	$124,170
LA	2,040	135	187	2,362	$157,869	$64,080	$221,949
MA	2,060	486	268	2,814	$184,797	$91,837	$276,634
MD	1,102	246	593	1,941	$97,842	$203,206	$301,048
ME	923	—	129	1,052	$66,994	$44,205	$111,199
MI	4,377	1,946	2,531	8,854	$458,944	$867,307	$1,326,251
MN	2,367	1,557	360	4,284	$284,817	$123,363	$408,179
MO	1,630	276	23	1,929	$138,344	$7,881	$146,225
MP	6	—	—	6	$435	$0	$435
MS	1,076	23	140	1,239	$79,769	$47,974	$127,743
MT	367	—	18	385	$26,638	$6,168	$32,806
NC	3,788	1,031	384	5,203	$349,779	$131,587	$481,366
ND	233	—	99	332	$16,912	$33,925	$50,837
NE	1,079	—	1,297	2,376	$78,317	$444,448	$522,765
NH	661	—	33	694	$47,978	$11,308	$59,286
NJ	4,060	1,735	449	6,244	$420,620	$153,861	$574,481
NM	462	—	47	509	$33,533	$16,106	$49,639
NV	545	1,175	116	1,836	$124,843	$39,750	$164,593
NY	5,761	3,438	2,743	11,942	$667,694	$939,954	$1,607,648
OH	6,052	937	3,174	10,163	$507,285	$1,087,647	$1,594,931
OK	12,188	335	523	13,046	$908,961	$179,218	$1,088,179
OR	1,645	552	116	2,313	$159,465	$39,750	$199,216
PA	3,411	1,536	114	5,061	$359,070	$39,065	$398,134
PR	116	55	—	171	$12,412	$0	$12,412
RI	251	—	44	295	$18,218	$15,078	$33,296
SC	2,197	164	10	2,371	$171,369	$3,427	$174,796
SD	83	—	170	253	$6,024	$58,255	$64,279
TN	2,633	2,055	601	5,289	$340,270	$205,947	$546,217
TX	21,871	7,300	3,910	33,081	$2,117,327	$1,339,854	$3,457,182
UT	342	697	458	1,497	$75,414	$156,945	$232,359
VA	1,179	1,557	2,336	5,072	$198,588	$800,486	$999,074
VI	2	—	—	2	$145	$0	$145
VT	171	—	297	468	$12,412	$101,774	$114,186
WA	8,838	888	9,012	18,738	$705,945	$3,088,176	$3,794,121
WI	2,155	195	94	2,444	$170,571	$32,211	$202,782
WV	1,483	—	38	1,521	$107,641	$13,022	$120,663
WY	74	—	17	91	$5,371	$5,825	$11,197
Total	*195,114*	*49,030*	*67,470*	*311,614*	*$17,720,775*	*$23,120,200*	*$40,840,975*

Source: FAA/BLS/RITA/TeamSAI Consulting Services analysis

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. AMY KLOBUCHAR TO HON. MARION C. BLAKEY

Question. In September, the authorization of the Export-Import Bank will expire. There is no doubt that many U.S. businesses benefit from Ex-Im Bank financing, but there have also been concerns raised during past reauthorizations. Why is it important that the U.S. provide these financial guarantees? Please comment on the controversy of wide-body aircraft financing to countries that subsidize their airlines.

Answer. The reauthorization of the Export-Import Bank of the United States (Ex-Im) is a high priority for the Aerospace Industries Association. With 95 percent of the world's consumers living outside the United States, and with GDP rising at faster rates in many of those countries, it is imperative for policy makers to support the export of U.S. manufactured products. The Ex-Im plays a vital role in helping American aerospace companies compete on a level playing field in the global marketplace. Ex-Im is crucial to supporting U.S. jobs, generating export revenue, maintaining a robust network of aerospace suppliers, and facilitating a strong U.S. presence in the global market. The backbone of the aerospace industry is supported by more than 30,000 small and medium-sized suppliers—all who benefit when our products are exported. The benefits don't stop there. The Ex-Im Bank is a self-sustaining entity, actually returning more than $1 billion to the Treasury Department last year.

Our foreign competitors have their own export credit agencies that provide financial support to their domestic manufacturers. Without Ex-Im, U.S. aerospace companies would be unable to compete on a level playing field for overseas orders. It will undermine our global competitiveness, in a field where we lead the world today.

We believe that without the support of the Ex-Im Bank, foreign airline carriers will decide to purchase non-U.S. manufactured aircraft financed by foreign export credit agencies.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. AMY KLOBUCHAR TO NICHOLAS CALIO

Question. In September, the authorization of the Export-Import (Ex-Im) Bank will expire. There is no doubt that many U.S. businesses benefit from Ex-Im Bank financing, but there have also been concerns raised during past reauthorizations. Why is it important that the U.S. provide these financial guarantees? Please comment on the controversy of wide-body aircraft financing to countries that subsidize their airlines.

Answer.The financing of large, wide-body aircraft is not an Ex-Im Bank problem—it is an export credit structural problem. Today our foreign airline competitors can save millions of dollars on financing costs because export credit assistance from the Ex-Im Bank or a European export credit agency allows them to finance aircraft at below market rates. U.S. airlines, however, are blocked from export credit. Both sides—the U.S. and Europe—support their aircraft manufacturers and neither can disengage unilaterally. We understand that. But the cost is U.S. airline jobs and U.S. airline global competitiveness. U.S. airlines, their employees and, ultimately, consumers, pay the price of this market distortion.

The solution, which Congress identified in the 2012 Ex-Im Bank reauthorization bill, is for the U.S to reach agreement with Europe to eliminate export credit for wide-body aircraft. That way nobody is harmed—the manufacturers and the airlines are free to compete on a level playing field. It is critical to the global competitiveness of our industry that export credit does not place U.S. airlines at a competitive disadvantage, particularly as to state-owned and state-supported airlines and those with strong credit ratings who can access the credit and capital markets to finance their aircraft purchases.

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