Dennis Muilenburg Competitiveness Hearing Committee on Commerce, Science and Transportation U.S. Senate March 13, 2014

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 marketleading 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 marketdistorting 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.