Testimony of Ray Conner
FAA Reauthorization Hearing
Transportation and Infrastructure Committee
U.S. House of Representatives
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Chairman Shuster, Ranking Member DeFazio, members of the Committee, thank you for this opportunity to provide Boeing's perspective as you begin the process of developing legislation to reauthorize the Federal Aviation Agency later this year. I am Ray Conner, president and chief executive officer of Boeing Commercial Airplanes.

Mr. Chairman, I will focus my remarks today on the FAA's ongoing effort, with the support of Congress, to modernize and enhance the airplane certification process—and on the importance, both to aviation safety and to American aerospace competitiveness, of that effort continuing. But before I address that important topic, I want to make some general observations about our industry's shared commitment to safety.

Aviation Safety

Any discussion of U.S. aviation regulation should begin with an acknowledgement of an important fact that I expect is well-known to members of this Committee: travel on a large commercial jet is the safest mode of transportation in human history. On average, more than 8 million people board airplanes daily and arrive safely at their destinations. There have been some high-profile air tragedies recently, including the shoot-down of a commercial jet over Ukraine, the mysterious disappearance of a commercial jet over the Indian Ocean, and most recently a crash into the Java Sea. However, since the dawn of the jet age, the industry's safety record has steadily improved. By the most important measure—the occurrence of accidents involving fatalities—flying is several orders of magnitude safer than it was fifty years ago. Today, in the United States, a fatal accident occurs in less than one out of every 45 million flights.

This extraordinary record is a great accomplishment for the aviation industry and its regulators. And we have a shared commitment—one that is deeply embedded in the culture of our Company—to continue to improve. At Boeing, that commitment begins with the design of our airplanes, which feature multiple layers of protection and a redundancy of critical systems; we design our products to ensure that there is no single point of failure that could jeopardize safety. To cite just one example, twin-engine airplanes are designed to land safely using the power of a single engine, should one of the engines fail. We also continuously improve our products based on our customers' operating experience, as well as our own internal research and development projects. As a result of advances in technologies, materials, design techniques, manufacturing processes and other factors, the airplanes we are building today, and are planning to build in the years ahead, will enable our industry to continually improve its already stellar safety record.

The FAA's regulatory system and oversight efforts have, of course, been critical pillars of modern aviation's extraordinary safety record. The FAA certifies all of Boeing's airplane designs, through a robust process demonstrating that each new airplane satisfies the agency's extensive safety requirements. It also certifies all of our production lines, to determine that Boeing has a production system that ensures that each aircraft we build will meet those certification standards. Finally, each airplane that comes off our production lines receives an airworthiness certificate that indicates that it is ready for safe commercial operation.

The FAA's regulatory approach has necessarily adapted and evolved over time in an effort to ensure that its regulatory resources are deployed where they can most effectively contribute to safety in a rapidly growing and technologically complex industry. One of those practices, to which I will return in a moment, is the FAA's use of a carefully overseen and congressionally sanctioned system of delegated authority that allows for the use of industry expertise while simultaneously maintaining regulatory oversight. The FAA's oversight and certification processes—and its ability to adapt and improve those processes as the industry it regulates continues to evolve—have long made the FAA the world leader in global aviation regulation.

The Challenge Ahead

The FAA will need to draw upon this tradition of robust and efficient risk-based oversight in the decades ahead. Air travel continues to substantially outpace global economic growth, and the aviation industry will continue its expansion to meet this demand. Last year Boeing delivered 723 airplanes to customers around the world—an increase in production of 56% in just the last 5 years—and we expect that trend to continue. Our overseas competitors are also ramping up their production rates.

To meet this historic demand, and to keep ahead of the competition in an increasingly intense global competitive environment, Boeing will bring several new products to market in the next few years. They include a new version of the 787 Dreamliner—the 787-10—which we will start delivering to customers in 2018. Also under development for the U.S. Air Force is the KC-46 tanker, which is based on the 767 and is scheduled for first delivery in 2016. New, re-engined versions of the 737—a group of 4 airplanes that we refer to as the 737 MAX family, is right behind the tanker, with first delivery scheduled for 2017. And on the heels of those product introductions will come the 777X – a new version of the 777 that will feature the largest composite wing ever built.

Each of these new airplanes, when it enters service, will deliver substantial fuel efficiency advantages and other benefits to our airline customers and to the flying public. And these new airplanes, when introduced, will enhance aviation safety, as new, state-of-the-art airplanes replace older airplanes in the worldwide commercial fleet. But each of these airplanes will, of course, need to be certified by the FAA. The large volume of certification work ahead poses a significant challenge for the agency. To meet it, the FAA will need to continue to modernize its certification process to ensure it is making optimal, risk-based decisions about how to use its resources to maximize safety benefit, while simultaneously enabling industry to efficiently bring new, safe and compliant airplanes to the market.

Delegated Authority

As I mentioned, one of the important tools that the FAA has as its disposal is the effective use of delegated authority. I want to take a moment to provide some background on this authority, as there are some misperceptions about it. To begin with, it is not a new practice. It dates back to the late 1920s, and when Congress created the current FAA in 1958, it correctly surmised that if FAA officials were to analyze and review compliance with every single certification requirement, it would require thousands of new engineers and inspectors, additional facilities, and likely hundreds of millions of dollars in new annual funding. Congress back then recognized the fiscal and practical necessity of using private sector expertise to keep pace with the growing aviation industry, and wisely gave the FAA authority to delegate certain certification activities to qualified persons – in effect enabling the agency to leverage its own resources by tapping into the considerable expertise of the private sector.

For reasons of both effectiveness and efficiency, delegated authority has transitioned over time from individual designations to organizational designations. Organizations that demonstrate and maintain strict accountability to certification requirements and processes may receive Organization Designation Authorization, or ODA. As the name implies, ODA status allows an organization to perform certain certification tasks on behalf of the FAA. It is a privilege that is hard to obtain and that carries with it serious legal obligations. Notably, the FAA remains in complete control of the certification process. It retains authority for approval and oversight of all ODA procedures, determines which portions of any given certification project are delegated, and retains ultimate and sole authority to issue airplane type certificates.

ODA holders are governed by stringent FAA requirements that include having an FAA-approved process for selecting and training individuals to perform the delegated tasks. In accordance with FAA procedures, the agency is notified when an individual is selected for ODA membership, and it is given an opportunity to participate in the evaluation of candidates and provide feedback. The FAA also retains the right to direct the removal of an underperforming member.

Boeing received its ODA delegation six years ago, and I can tell you from personal experience that the members of the Boeing ODA are held to a very high standard. They are well qualified, well trained, and take their responsibilities as representatives of the FAA Administrator very seriously. These professionals focus intensely on one goal – to ensure full compliance with all FAA requirements. And they are, by design, and with the full support of the company, protected from any pressures to act in a manner inconsistent with FAA procedures and standards. Through this rigorous and closely overseen ODA system, the FAA has the ability to enhance both the quality and efficacy of its certification process; it can pull expertise from industry into the certification process, and devote its resources more fully to the highest-priority oversight tasks.

Meeting the Challenge

Mr. Chairman, it was gratifying to see Congress recognize the value and importance of ODA and process reforms in its last FAA reauthorization bill. Congress directed in section 312 of that bill that FAA consult with industry to determine methods for enhancing the effective use of delegation and consider process reforms and improvements to the certification process. That process must be robust enough to ensure that new airplanes are safe and compliant, but also efficient enough to ensure that innovation and U.S. competitiveness are not jeopardized. As this Committee knows, Boeing now faces an increasingly fierce competitive landscape against heavily subsidized or state-sponsored aerospace companies overseas. Ensuring continued innovation and competitiveness in the aerospace sector is important not just to the 160,000 employees of the Boeing Company, but to the broader U.S. economy. Boeing supports 1.5 million jobs through its vast U.S. supply chain, and produces America's number one manufactured export. Aerospace, in fact, is one of the few industrial sectors that maintain a positive balance of trade -- $61.2 billion in 2014, according to the Aerospace Industries Association.

As I mentioned earlier—and as Congress wisely recognized—safety and efficiency need not be in tension: since each generation of new airplanes has advanced the safety of commercial jet travel, a robust but efficient certification process will result in new, safe and compliant airplanes entering the market sooner. And a certification process that encourages innovation will result in more efficient development of safety technologies. The challenge facing the FAA—which I believe the FAA is committed to meeting—is to continue to modernize its certification process to address the significant certification burden it confronts in the years immediately ahead. We believe it can do so—in ways that do not compromise, but indeed improve, aviation's extraordinary safety record.

As Congress specifically noted in section 312, enhanced utilization of the available ODA capability that exists throughout our industry should be a cornerstone of this effort. The agency should continue its trend of delegating more routine certification activities--tasks that either do not involve safety-critical items, or that delegated organizations have proven they have the expertise and experience to perform professionally and efficiently. One area where further progress might be made is in the area of software certification where the FAA has recently approved detailed standards, and where hundreds of experts in delegated organizations have been qualified by the FAA to perform approvals.

In this area, and others, the effective use of delegated authority can further enable the FAA to shift its attention and resources from low-risk, low-priority items to higher-level safety opportunities. Such a risk-based, systems-level approach would better enable the FAA to focus on ensuring that an airplane manufacturer like Boeing has the proven systems and technical expertise in engineering, design, test and quality assurance needed to perform day-to-day certification functions. And once that determination is made, the agency then could delegate more of the low-priority tasks, and use its own resources to oversee the delegated organization's work and to focus on the new airplane design issues it considers most critical to safety. Such a system would enhance both aviation safety and U.S. aerospace competitiveness.

Recommendations for Congress

Mr. Chairman, we appreciate this Committee's past work to support the FAA's efforts to modernize and improve its certification processes. We urge the Committee to continue to support these efforts, to help both the FAA, and the American aerospace industry, maintain its world leadership.

The FAA has made progress in this area since the last reauthorization, and I am grateful for the agency's leadership in driving those improvements. As I hope my remarks have illustrated, it is of great importance that more progress be made, given the certification workload the FAA faces in the years immediately ahead. The next reauthorization bill presents an opportunity to consider new proposals that will assist the FAA in modernizing and streamlining the certification process, and in developing and supporting the FAA's workforce.

As I mentioned earlier, the key to unlocking further safety and efficiency benefits is to accelerate the use of ODA, and we would encourage Congress to continue to support the FAA's efforts in this regard. This will enhance the efficiency of the certification process and thus the competitive posture of the U.S. aerospace industry. It will solve pressing resource issues at the FAA, and most importantly it will enable the FAA to spend more of its time and resources pursuing the biggest opportunities for enhancing the safety of new products.

We also suggest that Congress support the FAA's efforts to increase training for its aircraft certification workforce. Specialists at the FAA need the right training to enhance their effectiveness at systems-level oversight. We would like to see Congress work with the FAA to establish a systems engineering discipline at the FAA, to develop the critical skills the agency's workforce needs to support this type of enhanced oversight.

We also would welcome any steps Congress and the FAA could take to encourage increased harmonization of certification standards and the interpretation of these standards with overseas aviation regulators. Doing so would reduce inconsistency and ensure a level regulatory playing field.

In each of these areas, this Committee can help the FAA modernize its oversight structure, and serve both safety and competitiveness in the process.

Close

Mr. Chairman, we appreciate your Committee's support and encouragement of the FAA's efforts to modernize its certification and oversight activities. I look forward to further discussing these efforts with you today, and to working with the Committee and others to advance this important objective in the months to come. With the leadership of Administrator Huerta at the FAA, and the leadership I've seen from both parties and both chambers of Congress, I am confident we will make the adjustments needed to tackle the challenges I've described. We have an opportunity ahead of us to enhance the certification process in ways that will enhance aviation safety, while also enabling U.S. aerospace companies to develop new airplane products on time and at a cost that airlines can afford—thus helping us win in an increasingly fierce competition for global aerospace preeminence.

Thank you for the opportunity to be here today, and I will be glad to answer any questions you may have.

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