

**STATEMENT OF MS. DORENDA D. BAKER  
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**BEFORE THE UNITED STATES INTERNATIONAL TRADE COMMISSION**

**SEPTEMBER 28, 2011**

**BUSINESS JET AIRCRAFT INDUSTRY: STRUCTURE AND FACTORS  
AFFECTING COMPETITIVENESS**

**Introduction:**

Good morning, my name is Dorenda Baker and I am the Director of the Aircraft Certification Service for the Federal Aviation Administration (FAA).

Thank you for inviting me to speak on the FAA policy and procedures regarding aircraft certification. I will provide a high level overview of the FAA regulatory structure and procedures for aircraft certification, and the domestic and international arrangements which allow us to leverage our resources to meet the changing demands of the industry.

The purpose of the hearing is to examine the structure and competitiveness of the business jet industry, so it is important to understand that the procedures we use to ensure continued operational safety and to certify new products are the same for all aircraft sectors that we oversee.

**FAA Role**

The FAA's mission is to provide the safest most efficient aerospace system in the world. Our role is to promote aviation safety for all of the industry, both domestic and foreign. We issue approvals based on the applicants showing of compliance to safety standards and we take corrective action to address non-compliance or unsafe conditions without discrimination on the basis of nationality.

**Aircraft Certification**

The Aircraft Certification Service is responsible for the issuance of design approvals, production approvals, development and implementation of standards, and continued operational safety of the existing fleet. Every year, the Aircraft Certification Service issues over a thousand design approvals and several hundred airworthiness directives to correct unsafe conditions. In fiscal year 2010, the FAA issued 1185 design approval certificates and just over 400 airworthiness directives.

The Service is comprised of about 1300 employees, including over 700 engineers and 250 inspectors. These specialized engineers and inspectors oversee nearly 3600 individual designees and 130 organizational designees who act as representatives of the FAA.

The process for aircraft certification is multifaceted and highly technical. The FAA issues Type Certificates for aircraft, aircraft engines, and propellers when the applicant demonstrates that its design complies with the applicable regulations. The required standards for a new aircraft are based on a number of factors including, the regulations in effect at the time of application, the size of the aircraft and any unique features.

Once a design is approved and a type certificate is issued, a manufacturer must obtain a production approval in order to produce aircraft for distribution. To receive a production approval, the manufacturer must demonstrate that it has a quality control program that will reliably produce duplicate aircraft that meet the approved type design. After the production approval is issued, our inspectors conduct surveillance audits to assure the integrity of the quality system does not degrade over time.

### **Leveraging Resources**

To address the growth of aircraft design and manufacturing activities worldwide, the FAA has worked to leverage our resources domestically and abroad. To facilitate the export and import of aircraft, parts and services, the FAA utilizes Bilateral Aviation Safety Agreements (or BASAs) developed between the United States and other countries.

Before 1996 bilateral certification arrangements were generally a high-level executive agreement known as a Bilateral Aviation Agreement. The BASA format we use now expands the scope of technical cooperation among aviation authorities to other areas beyond aircraft certification.

BASAs establish a formal acceptance of the competencies of a foreign Civil Aviation Authority in the safety oversight of aircraft and parts. They allow aviation authorities to validate other authorities' Type Certification, which means manufacturers gain certification more efficiently by avoiding costly duplication of effort, and helps pave the way for consistent international regulation. While these agreements facilitate the movement of aircraft and parts across borders, they are primarily aviation safety agreements and *not* trade agreements.

The BASA consists of an Executive Agreement and one or more Implementation Procedures, known as "IPs". The Executive Agreement is negotiated at the State Department level and the IPs are negotiated at the aviation authority level with responsibility for the technical details of that agreement. Separating negotiation of the Executive Agreement and IP simplifies the amendment process, so that technical details can be quickly changed if necessary.

The FAA is currently evaluating the civil aviation authorities in China and Japan to assess their competency in certification of transport airplanes. Until the bilateral agreements we currently have in place include the recognition of the civil aviation authority's competency in certification of transport aircraft, we can not accept an application from manufacturers of transport aircraft in either of those countries.

We recently signed an Executive Agreement with India and plan to sign Implementation Procedures in November. This agreement will recognize the approval of select aerospace components for export into the United States.

The scope of the agreements we have with Canada and Europe, already cover all aircraft, engines and propellers, while the agreements with Brazil and Russia are more limited.

The European BASA went into effect May 1<sup>st</sup> of this year and marks a significant achievement in cooperation and collaboration for aviation safety. The agreement recognizes the European Aviation Safety Agency as the technical agent for all 27 EU

states and streamlines certification activities for U.S. manufacturers as they will work with the FAA and one single authority in Europe.

On the domestic front, one way the FAA also leverages resources, is the use of delegation. In the Federal Aviation Act of 1958, Congress granted the FAA authority to delegate certain responsibilities to approved private individuals and organizations. These “designees” act as representatives of the FAA in examining aircraft designs, production, quality, and airworthiness. Delegating qualified designees to carry out specific certification activities allows the FAA to focus its limited resources on safety-critical areas.

Delegation to an organization, rather than an individual, takes advantage of the experience and knowledge inherent in a manufacturer's organization. Because the aviation industry needs continue to expand at a rate exceeding that of FAA resources, effective delegation to an organization is essential.

The FAA recently converted three different organizational delegation programs, developed over many years, to the Organization Designation Authorization or ODA program. The ODA program is a substantial improvement in efficiency and effectiveness but it is still in its infancy. We are working with industry groups such as the Aerospace Industries Association and the General Aviation Manufacturer’s Association to help industry realize the gains it expects from its investment in the program.

The FAA is also planning for a further evolution of the Organization Designation Authorization system to a Certified Design and Production Organization or CDPO. If authorized by Congress, the CDPO will form the basis for formal FAA recognition of a design organization’s capabilities within the Code of Federal Regulations. Under the CDPO, a certified organization could be authorized to certify compliance with the FAA requirements and standards prescribed for the type certification of aircraft, aircraft engines, propellers, or parts.

## **Prioritization of Work**

While bilateral agreements and delegation leverages our resources, they are not a panacea. Each entails an obligation to assure those acting on our behalf understand our regulations, receive training, and have proper oversight. This requires significant FAA involvement so we need to be vigilant in our allocation of resources.

As existing operational fleets expand and industry's certification needs grow, the FAA faces the critical challenge of prioritizing our resources to fulfill our safety mission and to meet the certification needs of our applicants.

In 2005, to ensure that resources were not drawn away from our safety mission to keep pace with the industry demand, the FAA implemented a certification project sequencing process to align our resources with our priorities. The objective is to ensure sufficient resources are dedicated to continued operational safety before they are allocated to certification activities.

Prior to using the sequencing process, the FAA accepted an unlimited amount of certification work on a first come first served basis. When there were schedule conflicts, the projects were, in effect, sequenced at the local level by individual engineers and supervisors, managing resource commitments for both certification and safety.

Today all applications for new certification and validation projects requiring more than 40 hours of FAA work effort are sequenced. Projects are sequenced at a national level to provide fair and equitable treatment of our applicants based on the designs impact on safety and how much the applicant is delegated to assist in the certification process. The standard operating procedure for sequencing was published in the Federal Register earlier this month to provide transparency to industry on how the process works.

## **Summary**

The FAA is keenly aware of the needs of the global industry and strives to continuously improve our certification processes and programs to streamline the way we do business to meet those demands; however continued operational safety is our first priority.

In closing, I would like to reiterate that the FAA mission is to provide the safest most efficient aerospace system in the world. Issuance of FAA approvals and action to correct unsafe conditions is conducted without discrimination on the basis of nationality

Thank you again for the opportunity to present this information today, I will answer any questions you may have.