

STATEMENT OF  
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BEFORE THE  
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE  
UNITED STATES HOUSE OF REPRESENTATIVES  
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BUILDING A 21<sup>ST</sup> CENTURY INFRASTRUCTURE FOR AMERICA:  
FEDERAL AVIATION ADMINISTRATION AUTHORIZATION

Chairman Shuster, Ranking Member DeFazio, Members of the Committee:

Thank you for inviting me to speak with you today on the future direction of the Federal Aviation Administration (FAA). The upcoming FAA Reauthorization provides an opportunity to build on the FAA's safety record and encourage innovation and creativity. Every day, the dedicated men and women of the FAA safely and efficiently separate and guide thousands of aircraft carrying millions of passengers and tons of cargo to destinations around the country. Despite the FAA's outstanding safety record, the agency is increasingly challenged to address the quickly evolving needs of the nation's airspace users.

Over the years, representatives from the Department of Transportation and the FAA have come before you to discuss new and, all too often, ongoing challenges. As this Committee previously recognized, some of the major ongoing challenges facing the FAA involve being able to respond to the demands of the users of the national airspace, the flexibility to execute its priorities, and funding stability. The FAA has responded to these challenges by prioritizing its work, knowing that safety cannot be compromised. However, the time has come to address these challenges head on. The need for a comprehensive FAA Reauthorization, including a new governance structure for air traffic control operations (ATC) is critical to address these

challenges. The Administration has introduced its principles for crafting legislation to accomplish this reorganization.

These principles include the creation of a private, nonprofit cooperative for air traffic control, leaving the FAA to focus on its oversight and safety duties. Separating the regulated entity from the regulator is hardly a novel concept; that is but one element of the Administration's proposal to transform American's aviation system.

Our skies are becoming increasingly congested; flight delays and time wasted on the tarmac waiting for clearance are the new normal. Some domestic flights between the same two cities today actually take longer than they did decades ago because of congestion and indirect routing. What this means is that we do not have a system that can handle increasing capacity and still maintain safety.

Our air traffic organization must be more nimble. A bulky federal government procurement apparatus does not move fast enough to keep pace with new technologies and new demands. A private non-profit entity with the flexibility and authority to make investment decisions can move much more quickly to replace old equipment and paper flight strips with the latest technology.

A private entity, with an impartial board of directors, is directly responsive to the users of the National Airspace System – delivering the air traffic services that users demand, and charging for the cost of those services. ATC improvements could be made more effectively by an organization supported by its own revenue. Fees charged to users of these services will support the new entity, and any surplus revenue will be reinvested to keep the system current. This is an improvement from the today's mix of aviation taxes that are not tied to the use of air traffic control services.

Today, the FAA must deal with NextGen implementation, the integration of new entrants such as Unmanned Aircraft Systems (UAS), and aviation safety reforms, including aircraft certification and cyber security.

Among other important safeguards, legislation based on the Administration's principles would ensure that the government would work with key stakeholders to achieve a responsible and seamless transition. This transition will be vital to provide operational continuity and protections for existing employees and system users – all without impact to the FAA's safety mission.

While the U.S. remains the gold standard in aviation, the FAA understands that continued innovation and modernization are important to safety and global leadership. Shifting air traffic control out of the government, improving accountability to aviation users and adaptability in its operations are key steps to achieving these goals. While NextGen modernization has been implemented at certain airports and facilities under current constraints, FAA's efforts are often hampered by piecemeal government appropriations and a slow Federal procurement process. A private, nonprofit ATC co-op would be able to leverage private sector financial tools with agility and ingenuity, and accelerate advances in aviation technology. Combined with a steady, predictable revenue stream from user fees and borrowing from capital markets when necessary, the new ATC would be able to make the best modernization investment decisions to keep ATC technology up-to-date and competitive with that of our global peers.

Even under its current constraints, the FAA has been engaged with and responsive to industry. The NextGen Advisory Committee (NAC), comprised of aviation stakeholders, is the most prominent avenue for industry collaboration. It advises the FAA on policy-level issues facing the aviation community in implementing NextGen and plays a critical role in defining

priorities so that the FAA can focus its investments and deliver the NextGen capabilities that matter most to the customers.

The NAC previously identified the development of Data Communications (Data Comm) as a priority. Voice communications can be time consuming and labor intensive. For example, when planes are awaiting takeoff, controllers must use a two-way radio to issue new routes to pilots to help them avoid bad weather. This process can take 30 minutes or more, depending on how many aircraft are in line for departure. It also introduces the potential for miscommunication known as “readback/hearback” error. Data Comm dramatically reduces communications time, which results in faster taxi outs and reduced delays. Data Comm also enhances safety by virtually eliminating the chance of the flight crew misunderstanding the message from air traffic control. Data Comm is now operational at 56 air traffic control towers nationwide and is installed on over 3,800 aircraft operating in the nation’s airspace. However, expanded Data Comm services at all FAA en route air traffic control centers will not begin until 2019. While Data Comm delivered capabilities to air traffic control towers ahead of schedule and on budget, deployment to en route centers could happen faster with a non-governmental entity. Government is simply not the most effective generator for change, particularly involving technology.

#### *New Entrants*

The Department of Transportation and the FAA are uniquely positioned, but not adequately equipped, to assimilate the exciting new technologies that are revolutionizing our transportation infrastructure, such as unmanned aircraft systems (UAS)—more commonly referred to as drones. Drones are the new frontier of aviation and the Administration is committed to making America the world leader in UAS technologies and applications. It is a

priority of this Administration to fully and expeditiously integrate drones into the NAS so that they may operate harmoniously, side-by-side with manned aircraft. Safely integrating new entrants, such as drones, into the NAS will require a flexible governance framework that can adapt to new capabilities, technologies and users and effectively coordinate with all stakeholders. The Administration recently sent draft legislation on Unmanned Aircraft Systems (UAS) to the Congressional Armed Services Committees for inclusion in the fiscal year 2018 National Defense Authorization Act. This legislation is an important step in unlocking the promise of a new era in aviation and industry development. Under current law, the government is unable to fully evaluate or utilize essential detection, tracking, and mitigation technologies to counter rapidly advancing safety and security risks that may be posed by errant or hostile UAS operations. The Administration's proposed legislation provides a tailored grant of authority within a framework that provides effective oversight and protects privacy, civil liberties, and airspace safety. I ask for the committee's support for this important piece of legislation as DOT and interagency partners work with Congress to its hopeful enactment into law this year.

Drones present unique security challenges. As Congress recognized in the FAA Extension, Safety and Security Act of 2016 (FAA Extension) these challenges require a whole-of-government response. The FAA is working with several departments and agencies—including the Department of Justice, Department of Homeland Security, Department of Defense, and others—to identify and evaluate technologies that detect, and track unmanned aircraft movement through the NAS, and mitigate threats posed by UAS in a safe manner.

As directed in Section 2206 of the 2016 FAA Extension, the FAA has established a pilot program and is working with interagency partners to evaluate some of these technologies, which have been tested in airport environments at New York's JFK Airport, Atlantic City International

Airport, and Denver International Airport. The FAA recently completed another test session at the Dallas-Fort Worth Airport. Additionally, the FAA is working with interagency partners to develop policies and procedures for restricting UAS operations over fixed site facilities, as directed by Section 2209 of the 2016 FAA Extension.

Moving forward, the FAA intends to build on the progress that it has made. One example of an initiative currently underway is the FAA's development of an automated process for drone operators to notify ATC of flights within five miles of an airport or to get authorization to fly in certain classes of airspace. Developed in partnership with industry, this initiative, known as the Low Altitude Authorization and Notification Capability (LAANC), will provide operators with a streamlined solution to enable notification and authorization, with the goal of near real-time processing of airspace notifications and automatic approval of routine requests. Once fully operational, LAANC will be the first step toward implementing UAS traffic management (UTM), as directed by the 2016 FAA Extension.

The FAA continues to involve all stakeholders in framing challenges, prioritizing activities, and developing consensus solutions. Last summer, the FAA formed the Drone Advisory Committee (DAC). Its members include representatives from industry, government, labor, and academia. The DAC will allow the FAA to look at drone use from every angle, while considering the different viewpoints and needs of the diverse UAS community. Currently, the DAC is assisting the FAA in three key areas: identifying the roles and responsibilities of drone operators, manufacturers, and government officials concerning drone use in populated areas, determining what the highest-priority drone operations are and how the FAA can enable access to the airspace needed to conduct these operations, and how to fund the full complement of services required to safely integrate drones into the NAS in the long-term.

The FAA has ambitious plans for UAS integration. Contrary to other countries who merely wish to segregate UAS operations, the FAA's long-term plan is to fully integrate UAS into the NAS. This endeavor will be a complex process requiring creative new pilot projects, the use of new technology to identify users, the development of a guidance framework aimed at supporting technological advancement, and the involvement of multiple partners nationwide. While the FAA has made great strides to integrate UAS into the NAS, full integration would substantially benefit from comprehensive FAA Reauthorization, including a stable, efficient, and flexible air traffic control corporation.

#### *Risk-Based Decision Making*

The aviation industry is undergoing a transformation, with hundreds of thousands of new entrants, and cutting-edge advancements in technology. Comprehensive FAA Reauthorization, including a new, private ATC entity, is critical to support the FAA in its efforts to continue to set global standards in areas such as aircraft certification transformation, and emerging cyber security threats.

Government must be a catalyst for innovation, not an impediment. To that end, the FAA's safety organization has capitalized on its current flexibilities to implement a risk-based decision making approach that will enable it to keep pace with industry while continuing to increase the level of safety. In the area of aircraft certification, the FAA is moving beyond the reforms that Congress directed in the FAA Modernization and Reform Act of 2012 to transform its Aircraft Certification Service (AIR) to meet the demands of today's dynamic aviation environment. Refreshing the certification strategy means FAA will take a systems approach, relying on industry's processes and competencies based on risk management. This minimizes our involvement along the certification path to those areas of higher risk.

To support this shift to a risk-based management model, the FAA is making investments in information technology that will allow it to adjust its level of involvement and assign its resources accordingly. Perhaps most importantly, the FAA is investing in its people. By moving away from an organizational structure based on geographic locations to an organization built around the functions AIR performs, AIR will better match industry's demands and global needs. Emphasis will be placed on up front planning on new technologies with industry, development of reusable compliance techniques adaptable to industry, and a shared risk-based oversight program with industry.

We know industry wants to maximize the Organizational Delegation Authorization, or ODA—and the FAA is doing just that. For example, AIR recently created a new Organizational Performance Division that will oversee its roadmap to transformation, tracking outcomes expected by both the FAA and industry. The new division will establish agreed upon metrics and effectiveness measures for both the FAA and industry. In this new organizational framework, the FAA and industry will hold each other accountable to meeting these metrics. With the support of Congress, the FAA has also completed the first major revision of its aircraft certification regulations. In December of last year, the FAA issued new performance-based rules for small aircraft certification in 14 CFR part 23. Instead of prescribing certain technologies and designs, the new rules define performance objectives and give industry the flexibility to determine the best and safest way to meet them. A major endeavor in conjunction with this revision is streamlining the cost and timelines associated with acquiring and installing safety enhancing equipment in the general aviation cockpit. We want to “right size” the level of rigor applied in certifying this new technology based on the overall risk it presents, balanced by the



potential safety enhancement it introduces. The FAA has also streamlined the process of installing other non-required safety enhancing equipment in the general aviation cockpit.

#### *Other Priorities*

The FAA recognizes that cyber security is one of our greatest challenges, because threats change continuously. We know that the agency must be vigilant, particularly as new technologies and procedures are added into the NAS. In 2015, the FAA tasked its Aviation Rulemaking Advisory Committee (ARAC), comprised of industry stakeholders, to form a working group to provide recommendations on cyber security aimed at the full spectrum of civil aviation products—from transport aircraft to general aviation aircraft to engines. The FAA intends to use these recommendations to promote the establishment of an international standard to protect civil aircraft from cyber vulnerabilities.

#### *Conclusion*

To accommodate growing air traffic and address the quickly evolving needs of the Nation's airspace users, Congress should be ambitious and embrace a bold, comprehensive vision for FAA Reauthorization. To maintain its status as the global leader in aviation, the Administration's proposal to separate ATC into a non-profit entity, with the ability to charge for air traffic services and governed by an impartial Board of Directors representing the broad stakeholders that use the national airspace, will accomplish this. The critical aviation safety activities such as the certification of manufactures and pilots, safety oversight of aviation operators and the air traffic control private entity, and the regulation of new entrants such as UAS, would be maintained in the FAA. The Administration is committed to working with Congress to foster American innovation in aviation and solidify America's role as the global leader in aviation.

This concludes my statement. I look forward to working with you and the members of the Committee as we move forward on FAA Reauthorization.