



STATEMENT OF THE

NATIONAL BUSINESS AVIATION ASSOCIATION

ED BOLEN
PRESIDENT AND CEO

BEFORE

THE COMMITTEE ON COMMERCE, SCIENCE & TRANSPORTATION

SUBCOMMITTEE ON AVIATION AND SPACE

UNITED STATES SENATE

REGARDING

**"IMPROVING AIR TRAFFIC CONTROL FOR THE AMERICAN PEOPLE:
EXAMINING THE CURRENT SYSTEM"**

SEPTEMBER 24, 2019

Chairman Cruz, Ranking Member Sinema, and members of the Subcommittee, on behalf of the National Business Aviation Association (NBAA), thank you for holding this hearing on improving air traffic control (ATC) for the American people.

Business aviation and NBAA's more than 11,000 member companies are key stakeholders in our ATC system, and we believe our unique experiences can help inform this hearing. Unlike the big airlines, business aviation serves small towns and rural communities across this country and can reach more than 5,000 public use airports. Fair and equal access to our nation's airspace and airports is fundamental to our success as it allows businesses of all sizes to be productive and competitive in locations that have little or no scheduled airline service.

The United States has the world's largest, safest, most effective and most diverse aviation system, supporting more than 200,000 general aviation aircraft- there is simply no other country that compares. However, to maintain our leadership we must continually improve and enhance the ATC system. This imperative to modernize is why NBAA has taken a leadership role in partnering with the Federal Aviation Administration (FAA) to advance our shared modernization goals. With more than 1.1 million jobs and \$219 billion in annual economic impact tied to general aviation, our industry is committed to growing and moving forward.

The FAA projects that by 2040, air traffic controllers will handle 60.5 million aircraft operations annually, an increase of nearly 16 million operations from what our dedicated controllers handle today. In addition, the commercial unmanned aircraft system (UAS) fleet is projected to grow more than 30-percent over the next five years, and the fleet of non-commercial UAS is anticipated to double in size, to 2.4 million units by 2022. To accommodate this growth, all stakeholders must come together to support full implementation of the Next Generation Air Transportation System (NextGen).

While we have already seen significant successes, with NextGen delivering \$4.7 billion in benefits to the aviation system, we still have more work to do. For example, in the Northeast Corridor, which stretches from Washington, D.C. to Boston, the FAA and industry partners are working on a host of airspace and airport improvements to increase efficiency in some of the most complex and busiest airspace in the world. This work is critical, as FAA found that nearly 50-percent of all aviation delays are attributable to challenges in the Northeast.

Through service on the NextGen Advisory Committee, and a leadership role on the on the Northeast Corridor initiative, NBAA is a recognized leader in partnering with the FAA on modernization. For example, work in the Northeast will focus on increasing arrival capacity at Philadelphia International Airport during times of low visibility, improving the efficiency of departures out of New York City, and other targeted improvements. While the majority of business aviation operations are conducted at reliever airports instead of airline hubs, we are committed to supporting the FAA's mandate of modernizing the entire national airspace system.

To take full advantage of NextGen advancements, aircraft must be properly equipped with the required technology. With the rapidly approaching 2020 deadline for aircraft to be equipped with Automatic Dependent Surveillance-Broadcast (ADS-B) technology, NBAA is committing significant resources to ensure business aviation is prepared. As one of the foundations of NextGen, ADS-B technology provides improved GPS-based aircraft position data to controllers and enhanced situational awareness for pilots.

Through a targeted campaign involving social media, webinars, in-person seminars and news articles, NBAA has communicated to business aviation the critical importance of meeting the ADS-B equipage deadline. Our work has paid off, with nearly 70-percent of turbojet and turboprop business aircraft now ADS-B equipped according to the FAA's Equip 2020 working group, an increase of nearly 15-percent since the beginning of this year. In some cases, due to the age of an aircraft and cost of equipment upgrades, operators may elect to retire the aircraft instead of pursuing ADS-B equipage. However, NBAA is committed to continuing its partnership with the FAA on this critical NextGen initiative.

With the enhanced GPS-based location information and data downlink provided by ADS-B, Congress and industry agree there are privacy considerations that must be addressed. Through technology available today, it is possible for members of the public to track aircraft movements in real time, which poses significant security concerns for aircraft operators. NBAA is partnering with the FAA on a solution that would provide ATC and other government stakeholders all tracking information for an aircraft, while allowing operators the privacy and security of safeguarding their real-time movements from public view. We appreciate the FAA's work on this project and look forward to a solution in the coming months.

In addition to ADS-B, Data Communications or Data Comm is a key NextGen technology that has been rapidly embraced by business aviation. Through Data Comm, controllers can communicate clearances and other flight details to pilots via digital text-based messages. According to FAA data, this technology has saved nearly 25,000 hours of communication time and eliminated more than 15,000 hours of delays. Business aviation is a leader in equipping for and utilizing Data Comm, with ATC towers at key reliever airports including Van Nuys, CA and Teterboro, NJ benefiting from the technology. We look forward to partnering with FAA as Data Comm is implemented at additional facilities and in the enroute environment, which will enhance efficiency and safety.

With business aviation serving more than 5,000 airports, the ability to conduct safe approaches to airports in bad weather provides reliable connectivity to small towns and rural communities. Through Performance Based Navigation (PBN), another key NextGen technology, thousands of general aviation airports now have instrument approaches with lower minimums. Before PBN and advanced GPS technology, the cost to install a new instrument landing system approach, which requires significant equipment on the ground, was out of reach for many airports.

At Phoenix Deer Valley, which is one of the busiest airports in the world for training new pilots, the FAA has created two new instrument approach procedures using PBN. Pilots can now fly safer approaches to the primary runway at Deer Valley thanks to NextGen. In Texas, nearly 170 new approach procedures have been created at airports that never had the benefit of a costly instrument landing system. By utilizing GPS avionics in the aircraft and detailed performance specifications, general aviation airports are now safer and more accessible during inclement weather.

Through its Metroplex program, the FAA is also using PBN and other technologies to make aircraft operations more efficient and sustainable in areas with multiple airports and complex traffic flows. The FAA and industry partners have worked in eleven Metroplex locations, including the Washington, D.C. area, Charlotte, Las Vegas and Southern and Northern California. With changes to traffic flows, flight paths can shift, meaning that communities not accustomed to aircraft operations might observe a change. NBAA has actively partnered with the FAA in community meetings to better explain how business aviation operates and the safety and efficiency gains that come from analyzing our most complex airspace. For example, in Las Vegas, NBAA participated in meetings to help the local community

and elected officials better understand operations at Henderson Executive, McCarran International and North Las Vegas which are key airports in the Metroplex effort. We believe that bringing communities into the process as early as possible is a win-win, with benefits for all stakeholders.

Collaboration between users of the ATC system, including business aviation, and the FAA occurs on a continuous basis and makes our airspace more efficient. To better utilize airport and airspace capacity, while increasing efficiency, NASA is partnering with the FAA to leverage existing technologies and provide for improved collaboration between aircraft operators and ATC.

For example, through the Airspace Technology Demonstration 2 (ATD-2) effort, departures at busy airports are being managed more strategically to maximize capacity. For business aviation, a mobile application is being developed as part of ATD-2 that will allow operators to communicate when they are ready to taxi and receive more precise departure time information from ATC. This type of mobile technology will allow for improved sequencing of departures into the airspace - reducing delays, saving fuel and increasing efficiency.

In addition to making the airspace more efficient, NextGen provides measurable benefits to the environment. Through reducing flight times, aircraft operators are expected to save 2.8 billion gallons of fuel by 2030. With precise GPS-based standard instrument arrivals and departures, millions of gallons of fuel are saved annually by aircraft flying more direct routes and approaches to airports. Through NBAA's support of NextGen, and our efforts to increase the uptake of sustainable alternative fuels, we are committed to reducing aviation's environmental impact.

To achieve the challenging goals established for NextGen, while meeting the needs of our growing aviation system, support from Congress is critically important. That is why NBAA worked hard to advocate for passage of the FAA Reauthorization Act of 2018 that provides the agency with additional tools to modernize, and the needed resources to operate the world's largest, safest, most efficient and most diverse aviation system. We applaud your leadership in securing passage of the bill which provides a five-year authorization and certainty for the FAA.

The FAA Reauthorization debate also identified challenges the agency faces during modernization efforts and implemented targeted solutions. For example, through detailed reporting and enhanced oversight, the bill provides Congress with improved cost benefit data on modernization programs and the status of key milestones and deliverables. Annual reports are also required to document a positive return on investment for each NextGen program. We look forward to working with the FAA and Congress to provide stakeholder input on these important oversight requirements.

Another challenge that has impacted modernization efforts is the negative effect of government shutdowns. With many NextGen programs stretching out over years, a government shutdown can halt progress and introduce months of delays. That is why NBAA worked directly with appropriators in Congress to secure more flexible multi-year funding authority for the FAA operations account which has proven to be very helpful.

Through our support of the Aviation Funding Stability Act of 2019, we are also committed to maintaining financial stability for the FAA by allowing use of funds from the Airport and Airway Trust Fund (AATF) during lapses in government funding. Although taxes continued to be paid into the AATF throughout the most recent shutdown, the FAA was prohibited from using any funds to continue operations or pay the

agency's dedicated employees during that time. Passage of this bill would provide the agency additional flexibility to use trust fund revenues for continued operations during government shutdowns or other funding lapses.

To continue moving forward with new investments, proper funding for the FAA is critical, and as you are aware, most FAA programs are funded by the AATF, established in 1970. The fund is supported by taxes and fees, including a per gallon tax on jet fuel and gasoline used by general aviation operators, and a 7.5-percent tax on amounts paid for airline tickets and charter flights. According to the Joint Committee on Taxation, total AATF revenue in fiscal year 2017 was \$14.6 billion. The CBO projects that fund revenues will exceed outlays for the 2019-2029 budget window, and cash balances are also expected to grow to nearly \$60 billion.

In addition to providing a growing and reliable revenue stream, the trust fund taxes are simple to administer and collect. Both the fuel tax, and the percentage tax on airline tickets and charter flights, do not require the government to issue invoices or institute complex recordkeeping systems that a per-flight user fee would require. However, over the years, there have been various proposals to eliminate the 7.5-percent tax in favor of a per-flight user fee, which would require significant costs to collect. In our opinion, maintaining the AATF and associated taxes is the best approach to funding our future aviation infrastructure and modernization needs.

The leadership displayed by Congress in passing a long-term FAA reauthorization bill provided certainty and the needed investments for the aviation industry to be successful. While progress on ATC modernization has been impressive, there is more work to be done to accommodate expected growth and new entrants. NBAA has always been steadfast in our support and advancement of modernization programs that allow equal and fair access to airports and airspace for all aviation stakeholders. This hearing provides an important opportunity to review our progress while looking towards the future - we thank you for including NBAA in the discussion and we look forward to continuing our partnership.