

**STATEMENT FOR THE RECORD  
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**SUBMITTED TO THE  
U.S. House of Representatives  
Committee on Transportation and Infrastructure  
Subcommittee on Aviation On**

**Hearing:  
"America Builds: Air Traffic Control System Infrastructure and Staffing"**

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Chairman Graves, Ranking Member Larsen, Chairman Nehls, Ranking Member Cohen and members of the Subcommittee on Aviation, thank you for holding this hearing to focus on the importance of America's air traffic control system infrastructure and staffing.

Before speaking directly to the matters before us in today's hearing, I want to acknowledge the profound loss we all feel in the wake of the tragic accident near Ronald Reagan Washington National Airport (DCA), and the accidents that have followed. As part of the aviation community, NBAA and its members extend our deepest condolences to the families, loved ones and communities of those who have been lost.

On behalf of the National Business Aviation Association's (NBAA's) 11,000-members, we are pleased to provide this statement for the record. NBAA's members rely on business aircraft to meet a significant portion of their transportation needs. The majority of business aircraft are operated by small businesses and are primarily used to provide access to airports supporting communities that aren't served by the commercial airlines. Business aviation is an economic engine for the cities and towns the industry serves and for our members. General aviation supports a total of 1.3 million jobs and nearly \$340 billion in total economic output in the U.S.

The U.S. has the safest, largest, most diverse and most efficient air traffic control system in the world, enabling business aviation to transport persons and cargo, conduct air medical flights for organs and patients, provide natural disaster response and serve many other valuable purposes. The wide-ranging benefits of business aviation in the U.S. are made possible only by our country's air traffic control (ATC) system infrastructure, dedicated controllers and continuous improvement based on data-driven safety initiatives.

NBAA's mission is to foster an environment that allows business aviation to thrive. In order to do so, America's National Airspace System (NAS) must be safe, and also be perceived to be safe. The events of the past month have us looking at those tough questions, including: is air transportation in the U.S. safe today?

These questions are particularly critical in the wake of the January tragedy near DCA and other recent accidents and incidents. First and foremost, it's important that the National Transportation Safety Board (NTSB) and Federal Aviation Administration (FAA) be allowed to complete the investigative process and provide thorough reports, including probable causes and data-driven recommendations. These agencies are the world's finest aviation investigative bodies. Their thorough investigations will provide data that allow policymakers and industry to develop appropriate risk mitigations, but only if we do not rush to judgement on causes or fault of accidents.

The foundation on which the aviation community dramatically improved our safety record over the last three decades is the development and implementation of a "just culture" compliance philosophy, which encourages the reporting of errors, analyzing the collected data and learning from mistakes, without fear of retribution. Just culture empowers the community to identify and address areas of risk before they become incidents or accidents, and when we jump to conclusions before the investigators' report, we erode that foundation.

Together with robust FAA/industry educational outreach and training, just culture compliance has significantly contributed to the reduction in the incident and accident rate, with a scheduled airline fatal accident rate among U.S. air carriers near zero, until last month's tragedy, and a general aviation fatal accident rate of just .762 per 100,000 flight

hours in 2023, down from 1.118 per 100,000 flight hours in 2013. In the first 10 months of 2024, the rate of serious runway incursions fell by 73% compared to the same period in 2023.

We believe that the advancement of air safety depends on further enhancement, not erosion of that just culture. We need to learn from facts rather than speculation. We need to allow the accident and incident investigators the opportunity to complete their critical work. With more and better data, communication, outreach and training, we can move closer to our goal of eliminating incidents and accidents.

To maintain the world's best air traffic control system and remain globally competitive, we know we must focus funding on air traffic infrastructure and modernization, increase air traffic controller workforce hiring and training and commit to continuous improvement of aircraft operations through safety initiatives.

Collaboratively, the industry and federal agencies must build on what we know works, producing better data, broader data sharing and more robust data-driven mitigations.

However, as this past month has demonstrated, we need to do more, and we are committed to using people, processes and technology to further enhance the safety of the NAS.

### **Data-Driven Safety Mitigations**

Business aviation has led the way on aviation safety, including the development of pioneering technologies such as GPS and airborne collision-avoidance systems, as well as in collaboration with the FAA on its Aviation Safety Information Analysis and Sharing (ASIAS) initiative and in the development of the International Standard for Business Aviation Operations, or IS-BAO.

Technology in support of safety is an important element, as important as controller training and ATC infrastructure investments. Business aviation often pioneers technology that drives improvement and safety and has historically been an early adopter of technology. For example, business aviation pioneered and adopted glass cockpit technologies, enhanced vision systems and even the Garmin Autoland system, approved by the FAA in May 2020, which facilitates the autonomous landing of an aircraft without pilot input.

Historically, we have been able to drive down accident rates by ratcheting up collaboration and communication. Data sharing – and leveraging what is known as just culture to ensure frequent reporting – is a crucial part of aviation safety.

In part through data-sharing programs, accident rates are down. Runway incursions are down. Data-sharing initiatives have allowed us to move from accident response to incident interventions. Now we need to build on those programs with more collaboration.

The FAA Compliance Program is an evolution of the just culture concept. It allows stakeholders to self-disclose an error without fear of retribution. The Compliance Program is an open and transparent exchange of information, rather than a focus on enforcement.

The Commercial Aviation Safety Team (CAST), a U.S. aviation safety partnership between regulators, manufacturers, operators, professional unions and more, was founded in 1997. CAST uses safety data to develop risk mitigation. The program began with a goal to reduce

the fixed-wing commercial aviation fatality rate in the U.S. by 80% by 2007. By 2007, CAST reported the fatality rate of commercial air travel in the U.S. was reduced by 83%, exceeding the initial goal. In 2010, CAST developed a new goal: to further reduce commercial air transportation fatalities in the U.S. by 50%.

CAST focuses on Part 121 airlines. The General Aviation Joint Safety Committee (GAJSC) focuses on general aviation, including Part 91 non-commercial operations and Part 135 commercial operations. The GAJSC is similarly data driven. The GAJSC's current goal is to reduce the general aviation fatal accident rate per 100,000 flight hours by 10% over a 10-year period (2019-2028) to no more than 0.90 fatal accidents per 100,000 hours by 2028. Data shows the general aviation accident rate has fallen since the GAJSC's inception.

It's important to note that CAST and GAJSC are not regulatory or policymaking bodies. They are FAA/industry collaborative bodies that implement risk mitigation through consensus-building and industry's voluntary adoption of those mitigations.

Data-sharing initiatives including Aviation Safety Information Analysis and Sharing (ASIAS), Aviation Safety Action Plans (ASAP) and others are the foundation of industry's safety programs. It's important that data is not only shared between aircraft operators and the FAA, but also with aircraft manufacturer organizations, controllers and military operators.

Data-sharing programs are only successful when sole-source reporting is encouraged. Sole-source reporting depends first-person observations and is reliant upon just culture. This requires mutual cooperation and trust in an environment which doesn't seek to place blame following an error, an incident or an accident.

These data-sharing programs give us insight into events before tragedies happen. Our ability to drive down accidents and incidents relies on data collection, data sharing and a culture that encourages education, removed from an enforcement culture. We should expand the safety equation to include all players at the table – airlines, general aviation, military, ATC and other stakeholders – and strengthen these programs to improve our safety record.

Another opportunity to improve safety and efficiency in the national airspace system is through improvements to workforce, facilities and equipment at the FAA.

## **ATC Technology and Workforce Investment**

Recently, NBAA and 33 other stakeholder groups representing airports, pilots, airlines, repair stations, air traffic controllers and others urged Congress to enhance the safety and efficiency of the NAS by funding improvements to air traffic controller hiring and system modernization. The coalition's [letter](#) and [accompanying white paper](#) outline a vision for strengthening workforce and infrastructure.

Specific priorities of NBAA and our member companies include:

1. Robust emergency funding for critical air traffic control technology and infrastructure and controller staffing and training,
2. Realignment and modernization of ATC facilities to improve operational efficiencies, and
3. Exempting the FAA from government shutdowns to ensure a predictable funding stream to ensure continued safety and air traffic control personnel hiring and training.

The data show the necessity for emergency funding for ATC infrastructure and controller hiring and training.

Roughly 90% of FAA's budget for Facilities and Equipment (F&E) goes to sustainment, while true NAS systems improvements remain minimal. The FAA has approximately \$5.2 billion in sustainment backlog for facilities and systems that directly support national airspace operations.

Meanwhile, in June 2023, a Department of Transportation Inspector General's investigation found that the "FAA continues to face staffing challenges and lacks a plan to address them, which in turn poses a risk to the continuity of air traffic operations." At the end of Fiscal Year 2024 (FY24), there were 1,020 fewer Certified Professional Controllers (CPCs) than there were at the end of FY12, a 9% decrease. At the end of FY24, FAA netted only 34 CPCs.

Emergency funding to bolster ATC infrastructure and increase the controller workforce is important, but it is also crucial for Congress to ensure a continuous, predictable source of funding for the FAA as a whole. The FAA is mainly funded through the Airport and Airway Trust Fund (AATF), with a small general fund contribution. The funds are subject to annual Congressional appropriations and federal budget discretionary spending limits. Allowing the FAA to utilize the existing funds in the AATF to meet current obligations under the recently passed FAA reauthorization law and execute long-term focused investment would help modernize the national airspace. Developing a predictable source of funding via a multi-year account is necessary to begin recapitalizing major infrastructure assets and ensure the continued safety and efficiency of US airspace. Congress must also exempt the FAA from government shutdowns.

NBAA believes technology and workforce funding are only two legs of the safety stool. Industry and the FAA must work collaboratively to expand existing, proven safety initiatives.

## **Privatization**

Continued investment in our ATC infrastructure and career controllers in its existing public structure is critical to the ongoing safety of our skies. In the same letter to Congress, advocating for critical investment in air traffic technology, facilities and workforce, the broad coalition of 34 aviation stakeholders also urged Congress not to pursue privatization, as it would distract from the necessary and immediate investments and reforms.

In fact, globally, we see privatized national airspace systems are not a panacea, and have the same or additional safety, workforce and technology challenges in systems that are a fraction as broad and diverse as the U.S. NAS.

Canada privatized its NAS in 1996. Nav Canada's management of Canada's airspace has resulted in delays, a system which prioritizes commercial airlines and big cities to the detriment of more rural areas and smaller operators and increased fees. Nav Canada receives only a grade "C" from the International Civil Aviation Organization (ICAO), ranking far below its peers, with an audit score of 65.1%, a significant decline from the previous audit in 2005. Nav Canada's revenue growth in recent year-end financials report an increase of just 1%, while operating expenses increased 10% and free cash flow decreased 54%.

The United Kingdom also faces challenges after privatizing its airspace to UK-NATS. Staffing shortages and management problems have led to operational inefficiencies, flight disruptions and concerns about leadership accountability. Despite the operational deficiencies, fees have increased 26% between 2023 and 2027.

Meanwhile in Australia and New Zealand, severe staffing shortages at Airservices Australia and Airways New Zealand have led to empty control towers and have forced pilots into "self-separation" scenarios. Some airports have no weekend ATC services and a toxic workplace culture led to contentious labor union negotiations. Technology challenges plague the systems, as described in a 2023 Transport Accident Investigation Commission (TAIC) report. The TAIC reviewed a disconcerting 2019 radar surveillance outage in New Zealand, which disrupted services in Christchurch and Auckland while 41 domestic flights were airborne. TAIC concluded proper maintenance checks, as per Airways New Zealand's procedures, would likely have prevented the outage.

Privatization is not a panacea. Congress must focus on funding modernization of our existing ATC infrastructure, not distract from the work of safe and efficient air transportation by discussing or pursuing privatization.

## **Conclusion**

The U.S. ATC system is one of the safest and most robust in the world, but the events of the past few months show we need to be better. The data show accident rates are low and headed lower, but the reality is we need to do more and we need to do better, from ATC infrastructure and controller workforce funding to industry safety initiatives.

We commend the Subcommittee for recognizing the importance of funding ATC infrastructure and the controller workforce. We look forward to collaboratively working to address ATC safety and efficiency to ensure the U.S. National Airspace System remains the preeminent aviation system in the world.

Thank you again for holding this important hearing.