

**STATEMENT FOR THE RECORD
Ed Bolen, President & CEO
National Business Aviation Association**

**SUBMITTED TO THE
House Committee on Small Business
Subcommittee on Innovation, Entrepreneurship, and Workforce Development**

**Hearing:
“Moving Upwards and Onwards: The Workforce and Innovation Needs of the Aviation and
Aerospace Industry”**

May 12, 2022

Chairman Crow, Ranking Member Kim, and members of the Subcommittee on Innovation, Entrepreneurship and Workforce Development, thank you for holding this hearing to address the Workforce and Innovation Needs of the Aviation and Aerospace Industry. On behalf of the National Business Aviation Association's (NBAA's) 11,000-member companies, we are pleased to provide this statement for the record.

NBAA's members, many of which are small businesses, rely on business aircraft to meet some portion of their transportation challenges. Business aircraft provide connectivity to communities in nearly every Congressional district, many of which are not served by commercial airlines. While the airlines serve only around 500 airports, business aviation can reach 5,000.

Business aviation is part of the general aviation industry, which includes all operations and manufacturing other than those supporting scheduled commercial air service or the military. Our industry supports nearly 1.2 million jobs and more than \$240 billion in economic output. Further, the U.S. civil aviation industry is a vital part of international trade, providing a \$75 billion favorable balance of trade in 2018 and was essential in vaccine and medical supply delivery during the COVID-19 pandemic.

However, for general aviation to continue growing and supporting communities, we must address the significant workforce challenges, including the growing shortage of pilots and technicians. According to pre-pandemic forecasts from the Boeing company outlook, 645,000 new commercial pilots and nearly 100,000 new business aircraft pilots will be needed worldwide between 2019 and 2038. There is a projected worldwide demand for almost 770,000 new technicians in the maintenance sector over the next 20 years.

Although the pandemic has provided a momentary reprieve from the transportation workforce shortage, the demand for qualified workers is returning and the workforce shortage will again destabilize transportation operations. The aviation industry will have a global demand for at least 34,000 pilots by 2025, with women making up only 5% of pilots and other underrepresented groups making up less than 10% of men and women.

As recovery and the worldwide demand for air travel continues to increase, we must come together and take bold actions that will enable the U.S. to maintain its role as the world leader in aviation. To help support those efforts, NBAA has taken the lead on several fronts to address workforce shortages, including working with Chairman Larsen, the late Congressman Don Young, Congresswoman Angie Craig, Senator Gary Peters, Senator Dan Sullivan, and Senator Catherine Cortez Masto on the introduction of H.R. 3310 and S. 1681, the Promoting Service in Transportation Act, which was included in The Infrastructure Investment and Jobs Act. This legislation authorizes the Department of Transportation to develop a series of broadcast, digital and print public service announcements to promote career opportunities and improve diversity in the transportation workforce.

Through these public service announcements, we will raise awareness of careers across all modes of transportation, including aviation. There will also be synergies with the President's efforts to grow the STEM workforce and related educational opportunities. While momentum around the future STEM workforce is strong, students often do not consider aircraft pilot and aviation technician careers. That is why the full funding of this program through this year's appropriations process is critical. It will help address these challenges by building linkages between STEM programs and the significant career opportunities for pilots and technicians.

We also supported the efforts of Congress to address aviation workforce issues in the FAA Reauthorization Act of 2018, which included numerous workforce development initiatives. Specifically, the bill established grant programs to support the education of future aircraft pilots and the recruitment of much-needed aviation maintenance technicians. Both programs received the full \$5 million in funding through the appropriations process. The bill also enacted two aviation workforce programs, the Youth Access to American Jobs in Aviation Task Force and the Women in Aviation Advisory Board, to develop and recommend initiatives to encourage youth and women to pursue careers in aviation.

NBAA has representation on the FAA/DOT's Women in Aviation Advisory Board and the Youth Access to American Jobs in Aviation Task Force. These boards are closely aligned in its missions to attract, retain and develop aviation professionals, especially those from underrepresented communities. The Women in Aviation Advisory Board recently reported¹ its findings at its March 2022 public meeting, identifying 55 recommendations focused on culture, recruitment, retention, advancement, and data critical to ensuring the aviation industry's safety, sustainability, profitability, and ability to innovate.

The Youth Task Force will make its formal recommendations in September 2022 but is keenly focused on the value of creating a "one-stop shop" website on aviation career support for students, counselors, teachers, parents and others, as well as other initiatives to help high school students be successful in achieving aviation career goals.

NBAA is leading several significant initiatives to attract the next generation of pilots and technicians to the general aviation industry. At our largest event, NBAA-BACE, which attracts nearly 26,000 attendees, we host a "Careers in Business Aviation Day" that draws hundreds of students and provides three days of workforce development programming as part of the association's "Collegiate Connect" initiative. During our most recent event, students heard from Members of Congress on the importance and vastness of an aviation career.

Each year, we continue these efforts at NBAA's regional events and targeted educational programs by offering student-focused programming to educate young people about the many career opportunities in business aviation. Utilizing our events to introduce students to business aviation allows us to build networking opportunities and expand a dedicated mentoring program, creating valuable connections between students and industry professionals.

Some of the most qualified potential business aviation employees are our dedicated military professionals transitioning to civilian careers. These individuals often have advanced technical training and can successfully move into rewarding general aviation careers. We are currently working with Hiring Our Heroes and the U.S. Air Force to increase awareness of business aviation career opportunities among members of the military.

We are also partnering with the Red Tail Flight Academy (RFA) to address the need to build a bridge for the industry to recruit and retain from underrepresented communities. As RFA develops a diverse talent pool with cross-functional skill sets, NBAA provides opportunities for that talent to access the industry through our events, scholarships, and educational opportunities. This initiative will help to ensure that the industry remains competitive and reflects a more diverse workforce.

¹ Women In Aviation Advisory Board, Recommendations Report "Breaking Barriers for Women In Aviation: Flight Plan for the Future"
https://www.faa.gov/regulations_policies/rulemaking/committees/documents/media/WIAAB_Recommendations_Report_March_2022.pdf

NBAA standing committees and work groups are also focused on attracting, retaining, and developing aviation professionals through in-person and online education, sharing scholarship opportunities, mentor networks, and regionally-focused engagement with students of all ages. This includes highlighting DE&I best practices and using NBAA media channels to promote the “see it, be it” for students exposed to aviation careers.

Finally, through NBAA’s Young Professionals in Business Aviation (YoPro) group, we are using social media to highlight the positive personal and societal impact of a career in aviation. These efforts are paying off with thousands of young people following and engaging with our YoPro Instagram and Facebook groups. We plan to leverage these social media opportunities with focused content for students in *Business Aviation Insider*, NBAA’s print publication for the community.

As technological advances continue to impact the aviation industry, NBAA recognizes the need for representation among the emerging technologies communities to ensure safe and secure integration into the National Airspace Systems (NAS); as well as the recruitment and development of a workforce with diverse skill sets to service these new technologies. One way we are addressing this is through the creation of the Emerging Technology Committee and Advanced Air Mobility (AAM) Roundtable. Through meetings with this industry, NBAA identified workforce challenges facing this sector and is actively engaging Congress and government agencies to address these concerns. Our input was included in the recently released GAO Study,² *Stakeholders Identified Issues to Address for ‘Advanced Air Mobility’*.

Through the Infrastructure Investment and Jobs Act (IIJA), Congress has already shown strong leadership in addressing aviation workforce challenges. With rapidly advancing technology, including electric aircraft, advanced air mobility, and unmanned systems, our industry is ready to grow; however, to be successful, we must all work to attract the next generation of employees. As the Subcommittee continues to bring stakeholders together in developing solutions to workforce challenges, NBAA looks forward to being part of the process and highlighting the importance of general aviation to the nation.

² United States Government Accountability Office (GAO), Report to Congressional Committees: Transforming Aviation: Stakeholders Identified Issues to Address for ‘Advanced Air Mobility’, accessed May 2022, <https://www.gao.gov/assets/gao-22-105020.pdf>