

July 13, 2020

Docket Operations, M-30
U.S. Department of Transportation
1200 New Jersey Avenue SE, Room W12-140
West Building Ground Floor
Washington, DC 20590-0001

**Re: National Business Aviation Association comments on Noise Certification of
Supersonic Airplanes, Docket: FAA-2020-0316**

The National Business Aviation Association (NBAA) welcomes the opportunity to provide comments to this Federal Aviation Administration (FAA) Notice of Proposed Rulemaking (NPRM) on Noise Certification for Supersonic Airplanes. NBAA represents the interests of over 11,000 members who use aviation to support their business. These members include companies who manufacture, operate, repair and service aircraft. Business aviation is consistently at the forefront of aviation technology in a manner that is both innovative and environmentally responsible. The development of passenger carrying supersonic aircraft and quiet boom technology will be pivotal enhancements to long-range business aircraft travel, reducing travel times and increasing efficiency throughout the industry. NBAA supports this NPRM and appreciates the leadership demonstrated by the FAA in its preparation, which will enable U.S. manufacturers to lead the way in producing the next generation of environmentally responsible supersonic aircraft.

In reviewing this NPRM, NBAA and our members have joined other industry trade organizations to provide industry input and recommendations. NBAA supports comments submitted by the Aerospace Industries Association (AIA), representing collective input from a significant portion of the aerospace industry. We thank AIA for their orchestration. NBAA further offers the comments below for the FAA's consideration in the development of the final rule.

Environmental Responsibility

NBAA supports the development of environmental parameters on supersonic aircraft. Future supersonic aircraft will need to be designed and operated in an environmentally responsible manner. In order to limit noise pollution, it will be important that supersonic speeds over land remain prohibited until advancements limit sonic boom noise to an acceptable level. It will also be essential for manufacturers to utilize and develop technologies that minimize takeoff and landing noise.

Fostering Innovation

NBAA supports the FAA's data-driven approach to setting noise standards specific to particular categories delineated by weight and maximum cruise-speed. This proposed rule strikes a balance between protecting against significant impacts on people and the environment and a regulatory system that supports innovating new technologies that can thrive. NBAA believes this scaled approach is essential to maintain the standard-setting process's integrity and avoid constraining future technologies to current limitations.

Noise Limitations

NBAA supports the FAA's proposal to set individual supersonic limits for Supersonic Level 1 aircraft between current Stage 4 and Stage 5 limits for subsonic aircraft. While accounting for technological feasibility, economic reasonableness, and interdependencies between design parameters, these limits

ensure manufacturers take advantage of all available means to reduce landing and takeoff noise. The proposed noise limits also ensure supersonic aircraft would be no louder than current subsonic aircraft, avoiding significant increases in noise for communities surrounding airports.

NBAA supports the FAA's proposal to permit the use of Variable Noise Reduction Systems (VNRS) to demonstrate compliance with noise certification limits. Just like the development of supersonic aircraft, VNRS is another example of innovative aircraft technology and will benefit both communities surrounding airports and the aviation industry.

Global Harmonization

NBAA supports the development of globally accepted standards. The FAA must develop appropriate noise limits and work to ensure they apply globally. Harmonization between the FAA's final rule and the eventual international standards recognized by the International Civil Aviation Organization (ICAO) will be essential for allowing supersonic aircraft to operate in all potential markets. Given that supersonic travel's time-saving benefits will be most significant over longer journeys, this will ensure businesses are able to maximize the full economic and societal benefits of supersonic aircraft.

Thank you for the opportunity to submit these comments on behalf of NBAA members. Please contact me at 202-361-6435 or sdleon@nbaa.org if NBAA can provide any additional information.

Sincerely,

A handwritten signature in black ink, appearing to read 'Stewart J. D'Leon', written in a cursive style.

Stewart J. D'Leon
Director, Technical Operations
NBAA