

SANTA CLARA/SANTA CRUZ COUNTIES AIRPORT/COMMUNITY ROUNDTABLE PO Box 3144 Los Altos, CA 94024

November 11, 2019

Ms. Raquel Girvin Regional Administrator, AWP-1 FAA Western-Pacific Region 777 S. Aviation Blvd., Suite 150 El Segundo, CA 90245

Subject: Recommendations Regarding the Development and Promulgation of New Supersonic Business and Commercial Aircraft Noise Regulations

Dear Regional Administrator Girvin:

At its October 23, 2019 regular meeting, the Santa Clara/Santa Cruz Airport/Community Roundtable authorized me to send you this letter regarding the Roundtable's input into the FAA's process of developing and promulgating new aircraft noise regulations for the next generation of business and commercial supersonic aircraft. As the Roundtable's conduit into the FAA, I would appreciate you forwarding this letter to the appropriate leadership/departments within the FAA for their review/action/response.

The SCSC Roundtable understands that at the direction of Congress, the FAA will be developing new aircraft noise regulations for business and commercial supersonic aircraft.¹ The SCSC Roundtable requests that as a part of this process, the FAA consider the following recommendations:

• The certified aircraft noise levels of newly manufactured business and commercial supersonic aircraft must be less than the current Stage 5 and ICAO Chapter 14 noise standards as measured at the 14 CFR Part 36 takeoff, sideline, and approach noise measurement locations. Similarly, the air pollutant emissions must be less than current air pollution standards for similar sized aircraft.

As evidenced by the existence and need for the SCSC Roundtable and many other aircraft noise roundtables throughout the country, the significant number of aircraft noise complaints lodged about aircraft noise throughout Santa Clara and Santa Cruz Counties, and the national ground swell regarding aircraft noise, the current Stage 5/Chapter 14 noise standards do not adequately protect the public health and welfare or provide for a viable national aviation transportation system. Development of the current Stage 5/Chapter 14 noise standards began several years ago and their adoption was a result of compromise with the aircraft engine and airframe manufacturers. Utilizing the Stage 5/Chapter 14 noise standards to certify new business and commercial supersonic aircraft

¹ Federal Aviation Administration Reauthorization Act of 2018, Section 181, FAA Leadership on Civil Supersonic Aircraft.

will lock the communities into the current aircraft noise exposure for decades. FAA must adopt lower noise and air pollutant emissions standards for the new business and commercial supersonic aircraft to ensure that noise levels are reduced with this new generation of aircraft, which has been FAA's approach for several decades.

• During supersonic flight over land, there must be no audible sound as heard by people outdoors on the ground. Current research suggests that sonic booms may be reduced to sonic "thumps," which would expose entirely new groups of people to a new and unfamiliar source of aircraft noise; a proven recipe for disaster.

FAA's implementation of the Metroplex Process and other satellite-based navigation systems has exposed millions of people to new "less than significant" aircraft noise levels resulting in widespread public outcry, ongoing lawsuits, and formation of new airport/community roundtables in areas that had previously not experienced widespread noise concerns. The SCSC Roundtable urges the FAA not to make the same mistake again when implementing new noise regulations for business and commercial supersonic aircraft.

• Develop a new aircraft noise metric and threshold of significance to replace the antiquated and ineffective Day-Night Average Sound Level (DNL) and DNL 65 threshold that FAA has used for decades to assess land use compatibility with aircraft noise exposure that can be applied to both subsonic and supersonic aircraft operations over the United States.

Although the DNL metric and DNL 65 land use compatibility guideline may have been appropriate when Stage 2 aircraft such as the 727-200, 737-200, and DC-9 that dominated airline fleets and aircraft noise exposure at our nation's busiest airports, those aircraft have been gone from the commercial fleet for nearly 20 years. Today, instead of requiring just a few Stage 2 aircraft operations to generate a DNL 65 noise exposure, it may be achieved (or not) by hundreds of aircraft operations. DNL masks the obvious problem, a lack of respite from aircraft noise without exceeding FAA's own significance threshold. Using DNL to evaluate, under the National Environmental Policy Act, the introduction of supersonic aircraft into the business and commercial aircraft fleet will only exacerbate the existing aircraft noise problem that FAA is struggling to deal with today. Therefore, prior to the operation of civil supersonic aircraft, the SCSC Roundtable urges the FAA to adopt a new noise metric and a new significance threshold that more accurately reflects human annoyance and is more responsive to the introduction of new aircraft noise over new people, so that past mistakes are not repeated.

On behalf of the SCSC Roundtable, thank you for considering these recommendations. We look forward to receiving FAA's response and sharing it with the Roundtable members and public.

Sincerely,

marylynne Bernald

Mary-Lynne Bernald Chairperson, SCSC Roundtable