August 21, 2019

Docket Operations, M-30
U.S. Department of Transportation
1200 New Jersey Avenue SE
Room W12-140, West Building Ground Floor
Washington, DC 20590-00001

Re: Docket No. FAA-2019-0451

Dear Sir or Madam:

The Town of Milton, Massachusetts, through its Select Board, hereby objects to the FAA’s proposed revised regulations for “Special Flight Authorizations for Supersonic Operations,” to be codified as 14 C.F.R. § 91.818.

Supersonic civil flights are prohibited without the FAA’s express authorization. 14 C.F.R. § 91.817. This little-used FAA regulation dating back to 1973 allows the FAA to authorize supersonic flights for the purpose of testing and developing new aircraft. Currently, application requirements are found in Appendix B to 14 C.F.R. Part 91. In its June 28, 2019 notice of proposed rulemaking (the “Notice”), the FAA states that it has received only “a handful of inquiries since 1973” and has granted only three (3) authorizations for supersonic flight testing, two (2) of which related to the testing of an experimental space vehicle attached to an airplane. Notwithstanding this, according to the Notice, the FAA “expects that renewed interest in the development of supersonic aircraft will lead to increased requests to authorize flights in excess of Mach 1.”

As a preliminary matter, we note that, in the four decades since the FAA promulgated 14 C.F.R. § 91.817 and Appendix B, there have been material changes in aviation operations both in the United States and internationally. For example, today there are more airlines than there were
in the 1970s; the fleet mix has changed, with an increase in larger (and louder) jets in operation; and the volume of flights has increased. Perhaps most significantly, in recent years, the FAA has implemented NextGen precision-based navigation, causing a concentration of flight paths at airports around the country. NextGen has produced inequitable, unbearable and dangerous results for some neighborhoods, placing hundreds of loud, low-flying planes a day over the same people, disrupting sleep, creating anxiety, and increasing health risks for people exposed to concentrated airplane noise and pollution.\textsuperscript{1} For years, communities located near airports around the United States have been sounding the alarm about NextGen, raising serious public health concerns and seeking relief from the FAA. Yet the FAA has failed to address the noise and pollution problems wrought by NextGen.\textsuperscript{2} After several years, no solutions to this FAA-created problem have been forthcoming from the FAA.

As leaders of a community with neighborhoods that are already significantly overburdened with overflights to and from Boston’s Logan International Airport, we are very concerned about what the FAA described in the Notice as “renewed industry interest in developing new civil supersonic aircraft.” The Notice makes clear that the FAA’s revisions to Appendix B to Section 91.817 “are intended to support the growth of the civil supersonic industry.” The Notice further states that technological advances as well as renewed industry interest “have prompted the FAA to consider policy and regulatory changes to enable the domestic certification and operation of [supersonic] aircraft.” The Town of Milton strongly objects to the FAA’s supporting or in any way fostering the advent of supersonic flights to, over or from the United States. Unless and until the FAA resolves the very significant NextGen-related airplane noise and pollution concerns that we and so many other communities have raised, the FAA should take no action to further the aviation industry’s apparent recent interest in supersonic air travel. No supersonic testing, let alone supersonic air travel, should be performed until the FAA has fully addressed the problems caused by NextGen.

By the FAA’s own admission, in the four decades since the FAA promulgated its existing regulations on supersonic aircraft, the airline industry has shown little commercial interest in supersonic air travel. Indeed, Concorde, the only supersonic commercial jet ever to be placed in service, ended operations in 2003. The combination of NextGen and supersonic air travel would have a disastrous environmental impact on our town and other communities around the country. Therefore, we believe that, before the FAA takes any action to “support the growth of the civil supersonic industry,” the United States Congress and the United States Environmental Protection Agency (the “EPA”) should weigh in on whether, as a matter of public policy, the encouragement and development of supersonic aircraft is in the Nation’s best interest. We are sending copies of this letter to our Congressional delegation with a request that they consider the wisdom of permitting supersonic aircraft to fly over the United States as well as its regulation by


\textsuperscript{2} In Boston, a study being performed by the Massachusetts Institute of Technology for the FAA and the airport operator is now in its third year. No interim relief has been provided to the affected communities, and none of the first round of recommendations has yet been implemented.
a federal agency that has thus far failed to resolve the serious damage that its NextGen program has caused to communities.

In addition to the foregoing general objection to the FAA's pursuit of supersonic air operations at this time, we offer the following comments on the specific text of the proposed revised regulation. The FAA proposes, in part, to move application criteria from Appendix B to 14 C.F.R. § 91.817 to a newly created Section § 91.818. While we do not object to a mere reorganization of existing application requirements, we do object to certain revisions to, and the substance of, portions of the proposed regulation. Additionally, in response to the FAA's request for comments on removing or retaining Section 91.818(b), we urge the FAA to remove such provision.

1. **Time of Day**

   Proposed Section 91.818(a)(5) would require an applicant to include "the time of day the flights would be conducted." Section 91.818(a)(5) would make clear that "[p]roposed night operations may require further justification for their necessity." The increased noise from supersonic flights would be unduly burdensome during daytime hours, and even worse at night when people are trying to sleep. Under no circumstances should nighttime testing of supersonic aircraft be permitted. Communities that are already adversely affected by NextGen cannot and should not be subjected to the noise of supersonic jets, either during daytime or nighttime hours.

2. **Additional Reason for Authorization**

   Currently, the FAA may authorize supersonic flights for only four (4) reasons: to show compliance with airworthiness requirements; to determine the sonic boom characteristics of an aircraft; to establish a means of reducing or eliminating the effects of sonic boom; and to demonstrate the conditions and limitations under which a supersonic flight will not cause a measurable sonic boom to reach the ground. To this list, the FAA proposes to add, through Section 91.918(a)(8)(v), a fifth reason: to measure the noise characteristics of an aircraft to either demonstrate compliance with noise requirements or determine limits for operation. The Notice describes this new reason for authorization as "forward-looking" because it may help establish noise limits for supersonic air travel, which do not currently exist. As stated above, unless and until the FAA adequately responds to and resolves the significant harm it has already imposed on communities as a result of its NextGen implementation, we object to any action that may add to the noise and pollution burden imposed upon people on the ground.

3. **"Overocean" Testing**

   Section 91.818(a)(9) would require an applicant to show "why its intended operation cannot be safely or properly accomplished over the ocean at a distance ensuring that no sonic boom overpressure reaches any land surface in the United States." While the revised language is clearer and better than the existing text, we believe that the FAA must go further than requiring an applicant to justify its request for testing supersonic jet capability over land. Instead, the FAA should mandate that future supersonic testing be conducted over the ocean (in such a manner that no sonic boom overpressure reaches land) successfully before any testing over land is authorized.
4. Duration of Authorizations

Section 91.818(e)(1) would authorize the Administrator to determine the length of time that is necessary for supersonic flights to be flown in a test area, presumably on a case-by-case basis. The Notice states that Appendix B does not currently specify a maximum time period for testing supersonic flights. We believe that a bright line test must be provided in the regulation. A maximum allowable testing duration, which may be shortened but not lengthened by the Administrator, must be stated. We further believe that the FAA should seek the input of the EPA in determining the maximum allowable testing duration.

We agree with the FAA that an applicant should submit separate applications for testing supersonic flights for different phases of a project. However, we believe that the FAA must do more than “encourage” such separate applications; the regulation should be revised to mandate separate applications for distinct phases of a project.

5. Test Areas

The Notice provides that:

“[t]o support the current development efforts of the industry, the FAA seeks to provide supersonic flight test applicants with the broadest opportunity to request an appropriate flight test area, consistent with applicable regulations. Whether an applicant chooses to request an area already used for non-civil supersonic flights or an area in another location would be up to the applicant. The ability to request a flight test area appropriate for an applicant’s needs would allow the applicant to control the costs and benefits of various options, and to develop its business plan accordingly. The requirement to submit the environmental impact information remains, which allows the FAA to determine the acceptability of the location and the effect on the environment of the proposed flights as well as its duty to determine the level of review required under NEPA.”

This paragraph makes clear that the FAA prioritizes the airline industry’s business purposes and costs, not the need to protect either the health of people on the ground who would be affected by supersonic test flights or the environment. Section 91.818(a)(6) should not leave it up to aviation industry applicants to designate a test area to be overflown. If overland flights are to be considered, the regulation must designate as a test area either an area that is unpopulated or, at worst, one of the military test ranges (the locations of which are not disclosed in the Notice) that the FAA approved for three (3) previous applicants. According to the Notice, environmental impact statements have already been approved for such military test ranges. The Notice also points out that using these military sites will be “more efficient and less costly” than establishing a new test area. Therefore, these sites, not residential areas, should be the approved test areas. Specifically, we object to any testing of supersonic aircraft at or near Boston’s Logan International Airport.
6. Supersonic Operations Outside Test Area

The Notice invited public comment on whether the FAA should maintain or remove a provision (Appendix B, section 2(b)) of the existing regulation that allows an applicant to request supersonic non-test flights outside of a test area. For the reasons stated in the Notice, we strongly urge the FAA to remove Section 91.818(b) from the proposed regulation. According to the Notice, the “prerequisites for this supersonic operation are considerable” and would be “difficult” to satisfy, and “the FAA knows of no aircraft that can meet the ‘no overpressure’ provision.” Forty-five years after the existing regulation was promulgated, “no operator has applied for an authorization to demonstrate a supersonic flight capable of producing no measurable sonic boom overpressure such as to qualify for this operating allowance.” Lastly, the Notice points out that “speeds slightly above Mach 1 are often the least fuel-efficient and may have the most negative effects on an aircraft.”

We submit that removal of Section 91.818(b) from the proposed regulation will have no measurable consequence upon any aircraft that may be under development. Testing is a necessary prerequisite to commercial flight operations and would continue to be governed by the re-codified regulation. If at some point in time, the aviation industry is able to successfully test a supersonic flight first over the ocean and then over an appropriate overland test area, the FAA will have adequate time to write a new and suitable regulation to govern flights outside of a test area. Such a regulation would be informed by current aviation practice and conditions, not aviation practice and conditions that existed in the 1970s.\(^3\) We believe that the FAA must seek current guidance from the EPA and the United States Congress on the critical issue of whether supersonic air travel is in the Nation’s best interest and, if so, under what conditions and limitations it should be authorized. Removing Section 91.818(b) and crafting an appropriate new regulation only after successful testing is demonstrated and Congressional, EPA and other governmental and public input is obtained, is in the best interests of the people we represent and, in our opinion, the entire Nation.

\(^3\) We submit that the Notice itself provides the obvious answer to the question of whether Section 91.818(b) should be included in the final regulation. The Notice states that “[t]he records of the adoption of this provision in 1973 contain no discussion of how these flights would be included in the overall operation of the national airspace system (NAS). The sheer volume of increased activity in the NAS since 1973 would demand a more comprehensive consideration of the impact of supersonic flights. Moreover, in the event that some level of supersonic boom or other noise generated by supersonic flight is determined to be consistent with the FAA’s statutory authority to protect the public health and welfare, the FAA would consider all available regulatory tools . . . to allow such flights, rather than rely on a 45-year-old standard that was included in a regulation designed primarily to approve test flights (emphasis added).”
Lastly, as noted above, our position is that unless and until the FAA adequately resolves the significant noise and pollution burden it has imposed on our town and other communities through its implementation of NextGen’s precision-based navigation, the FAA should pursue no new technology or measures that would add to that burden.

Thank you for your consideration of our comments.

Sincerely,

MILTON SELECT BOARD

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