



SSTs Could Fly Again as Congress Targets Supersonic Ban

Elvina Nawaguna

September 12, 2018

The U.S. has banned domestic commercial supersonic aviation for four decades, but lawmakers could upend those restrictions in the coming weeks even as environmentalists and public health advocates warn that doing so could elevate pollution and climate damage from high speed aircraft.

Congress faces a Sept. 30 deadline to reauthorize the Federal Aviation Administration. A provision in the House-passed FAA reauthorization bill directs the agency to create federal and international “policies, regulations, and standards relating to the certification and safe and efficient operation of civil supersonic aircraft.”

The Senate bill that was advanced by the Commerce, Science and Transportation Committee last year and now awaits floor consideration would direct the Transportation secretary to promulgate rules to permit “the development, testing, manufacturing, and operation of civil supersonic aircraft in the United States” and to set a noise standard for sonic boom that is “economically reasonable and technologically” practical.

The prospect of opening up the U.S. to supersonic flights has provoked reminders and warnings about the fate of the Concorde, which was retired in 2003 because of, according to the FAA, high costs associated with meeting the environmental restrictions on sonic booms, inefficient fuel consumption and other factors.

In an Aug. 27 letter, a group of environmental and public health organizations warned that the provision in the FAA bill would allow future supersonic aircraft to simply ignore the landing and takeoff noise standards for new subsonic jets.

“We oppose this provision because supersonic aircraft, once again under development, threaten Americans with lasting damages from extreme climate, noise and air pollution effects,” the groups — including the Center for Biological Diversity, the Natural Resources Defense Council and Earthjustice — said in their letter. “If passed, the Supersonic Provision would pave the way for a revival of old, dirty technology that failed spectacularly the first time it was introduced.”

Those pushing to lift the ban argue that the restrictions put in place in the 1970s hindered research and development of supersonic passenger jets and low-noise aircraft designs. New technological advancements, they say, can mitigate the energy and environment concerns associated with that kind of aviation.

“Fortunately, R&D has continued despite the ban, and recent technological breakthroughs in manufacturing and computer design have enabled several American companies to make

significant progress towards the goal of introducing affordable supersonic passenger flights,” a group of fellows at the right-leaning Competitive Enterprise Institute wrote in a letter urging Congress to keep the supersonic aviation provisions in the final reauthorization. “Doing so would provide the investment certainty American entrepreneurs need to unleash a renaissance in commercial aviation innovation, create thousands of American manufacturing jobs, and strengthen the United States’ position as a global technological leader.”

Softer booms

Supporters of the provisions also counter fears of the potential effects of the sonic boom by saying that those new technologies are capable of reducing the noise.

“My inclination is that lifting the ban on supersonic commercial transport is a good thing, as the speed of commercial air travel hasn’t really improved in several decades,” said Randal O’Toole, a senior fellow focusing on urban growth and transportation issues at the Cato Institute. “Also, I understand new technologies can get around the noise problem.”

The Aerospace Industries Association formed a working group to push for more support for supersonic aviation, and a number of startups, such as Spike Aerospace Inc. and Boom Supersonic, are exploring the technology.

Colorado-based Boom, a startup that aims to build the “world’s fastest and most affordable supersonic airliner” has backed that section of the legislation, saying it would put the U.S. at the forefront of developing a new aerospace market that will dominate 21st-century aviation.

“It shows that the United States is not only willing but poised to lead the nascent civil supersonics industry, which will create tens of thousands of high-paying jobs,” Boom said in a news release last year. “By taking decisive action, the United States can spur the world to global adoption of this exciting technology that will generate enormous benefits to workers, businesses, and consumers.”

With the deadline looming, it is not clear whether a full reauthorization will be completed on time or whether lawmakers will write another extension as they have done in recent years. Senate Commerce, Science and Transportation Committee Chairman John Thune and ranking member Bill Nelson did not immediately respond to requests for comment on the prospects of the bill.

The Senate bill includes an amendment by Republican Sens. Mike Lee of Utah and Cory Gardner of Colorado that would require the FAA to write a rule on the testing and operation of supersonic aircraft.

“Next-generation supersonic technology being developed in Colorado could fundamentally change the way we travel through the air by reducing travel times significantly,” Gardner said of his amendment in June last year. “Companies pursuing supersonic technology need long-term regulatory certainty from the FAA that will allow their designs to move forward so long as they are safe and meet existing standards for noise.”

Even as the reauthorization legislation remains pending in Congress, the FAA is already moving to propose regulations that would pave the way for overland supersonic flights.

The agency says it has started two rulemakings targeting supersonic aircraft noise; one proposes a rule for noise certification of supersonic aircraft, and the second is a proposed rule to “streamline and clarify the procedures to obtain special flight authorization” for conducting supersonic flight testing.

“The current rulemaking activity related to noise certification of supersonic aircraft will determine the technological and economic basis that supports noise level requirements that are appropriate for supersonic aircraft,” the agency says in a factsheet.

Current boom rules prohibit civil aircraft from operating faster than Mach 1, a speed equivalent to the speed of sound, over land and wherever a boom could reach U.S. shores, according to the FAA.