

Leading the World in Supersonic Flight Executive Order 14304 and Global Leadership through ICAO



Presented to: ASEB-SSB
By: Don Scata, Deputy Director, FAA Office of Environment & Energy
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**Federal Aviation
Administration**

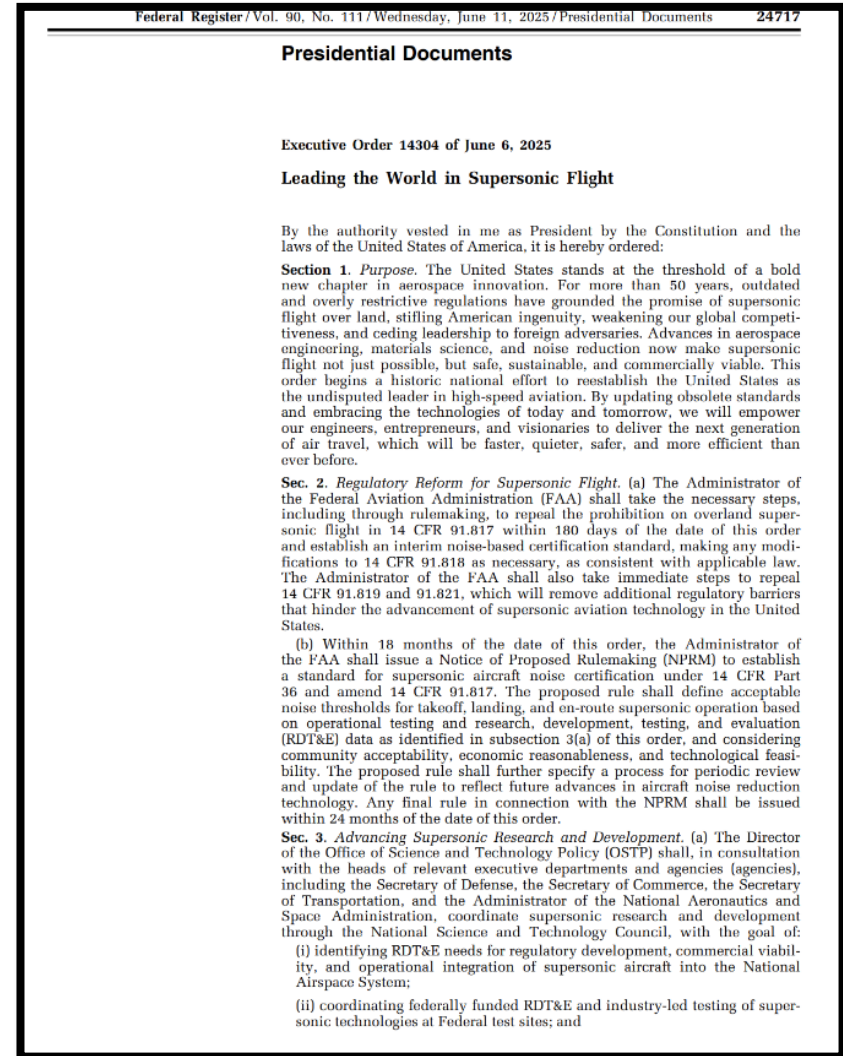
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EO14304 Background

- **In 1973 FAA banned civil supersonic flight**
 - This ban was established “because of inconclusive results of research concerning the effects of sonic boom on the surface environment.”
 - Overland supersonic flights can only be conducted today with a special flight authorization (SFA)
- **Interest in civil supersonic flight has been reignited the last several decades due to technological advancements**
 - Techniques such as Mach cutoff can prevent sonic boom from reaching the surface
 - Considering these advances, a ban on all flight above Mach 1 imprudent and unnecessarily restrictive
- **On June 6, 2025 President Trump Signed EO 14304 Leading the World in Supersonic Flight, the EO:**
 - Directs FAA to repeal the ban on overland supersonic flight and associated regulations, as well as establish an interim noise standard through regulation
 - Directs FAA to establish a landing and takeoff noise standard in part 36 through regulation.
 - A proposed rule is due within 18 months and final rule within 24 months
 - Directs FAA lead in the creation of harmonized standards for supersonic flight at ICAO and with bilateral partners
 - Tasks the White House Office of Science and Technology Policy through the National Science and Technology Council with leading research coordination
- **Congress has already granted the FAA the authority to regulate aircraft noise and sonic boom at the agency’s discretion, so no Congressional action is required**



Repeal of Overland Flight Prohibition (Sec. 2a)

§ 91.817 Civil aircraft sonic boom.

- (a) No person may operate a civil aircraft in the United States at a true flight Mach number greater than 1 except in compliance with conditions and limitations in an authorization to exceed Mach 1 issued to the operator in accordance with § 91.818.
- (b) In addition, no person may operate a civil aircraft for which the maximum operating limit speed M_{MO} exceeds a Mach number of 1, to or from an airport in the United States, unless—
 - (1) Information available to the flight crew includes flight limitations that ensure that flights entering or leaving the United States will not cause a sonic boom to reach the surface within the United States; and
 - (2) The operator complies with the flight limitations prescribed in paragraph (b)(1) of this section or complies with conditions and limitations in an authorization to exceed Mach 1 issued in accordance with § 91.818.

- **Section 2(a) of the Executive Order directs FAA to repeal the prohibition on overland supersonic flight in 14 CFR 91.817**
 - FAA will establish an interim noise-based certification standard as directed in the EO
 - Take immediate steps to repeal 14 CFR 91.819 and 91.821.
- **Practical Impacts**
 - Repeal of 91.817 and the interim standard paves the way for the establishment of a final noise standard to enable overland supersonic flight
 - FAA does not expect overland civil supersonic flights to begin immediately following this rulemaking, as there are currently no certificated civil aircraft operating that are capable of supersonic flight.



Establishment of a Supersonic Aircraft Noise Certification Standard (Sec. 2b)

- **Criteria for the standard**
 - Address landing and takeoff (LTO), and en-route
 - Based on operational testing and research, development, testing, and evaluation (RDT&E) data
 - Consider community acceptability, economic reasonableness, and technological feasibility (similar to the criteria for all noise certification standards under 49 U.S.C. 44715)
 - Repeal 91.819 and 91.821. These sections would effectively be replaced by the LTO standard
 - Specify a process for periodic review and update of the rule to reflect advances in noise reduction technology
- **Landing and Takeoff (LTO)**
 - ICAO CAEP recommended a draft LTO noise standard and recommended practice (SARP) at their February triennial meeting
 - ICAO SARP is moving through the approval and coordination process
- **Enroute**
 - As part of 2b, we will propose to make the interim standard a final standard.
- **Practical Impacts**
 - Establishment of the LTO Noise standard will enable Type Certification of supersonic aircraft



Advancing Supersonic R&D (Sec. 3)

- **The EO also tasks the Director of the White House Office of Science and Technology Policy (OSTP), in consultation with DOT, NASA, DoD, Commerce and relevant departments and agencies, to coordinate supersonic research and development through the National Science and Technology Council with the goal of:**
 - Identifying research, development, testing, and evaluation (RDT&E) needs for regulatory development, commercial viability, and operational integration of supersonic aircraft into the NAS
 - Coordinating federally funded RDT&E and industry-led testing at federal sties
 - Collecting and sharing the results RDT&E efforts to inform domestic and international regulatory development.
- **OSTP is directed to provide the results of these coordinated efforts to FAA to inform development of future procedures, regulations, and policies**



Promoting International Engagement on Civil Supersonic Flight Regulations (Sec. 4)

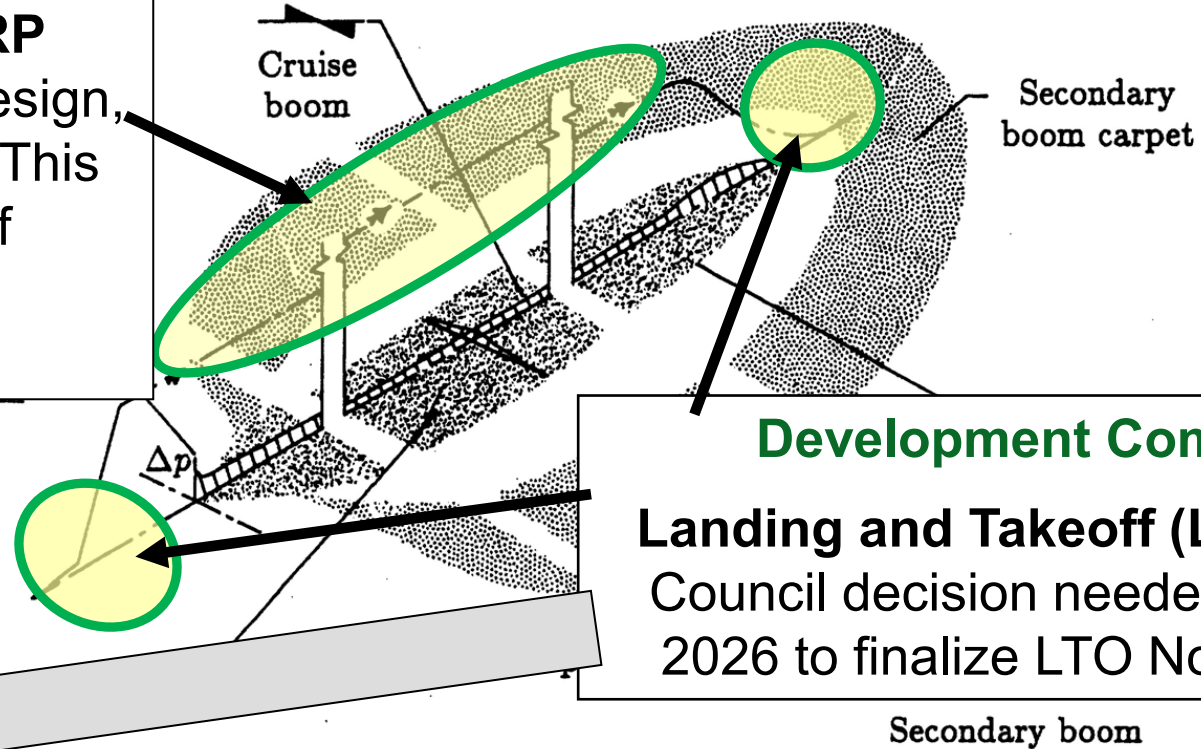
- The EO tasks FAA, in consultation with OSTP and the heads of other appropriate agencies as determined by OSTP, to engage ICAO and key foreign partners to seek global alignment regarding supersonic regulatory approaches
- The EO also tasks FAA, under supervision of OST and in coordination with State, to seek to secure bilateral aviation safety agreements (BASA) with foreign authorities as necessary for the safe international operation of supersonic aircraft
- FAA has a record of successful engagement with ICAO on civil supersonic flight and intends to build on this record through fulfilling the EO requirements



Supersonic SARP developments

IN-PROGRESS (est. 2031)

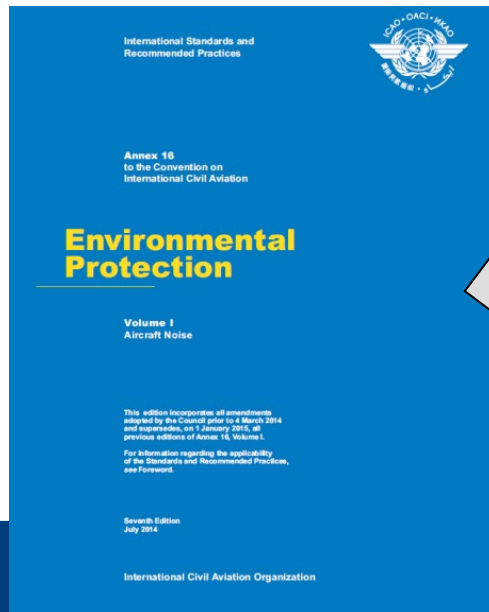
En route, Low Boom SARP
for compliance of cruise, off-design,
and focus boom climb noise. This
activity under N.05 task of
Supersonic Task Group



Development Complete

Landing and Takeoff (LTO) SARP
Council decision needed in Spring
2026 to finalize LTO Noise SARP

Secondary boom



Questions?

