

[4910-13]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Parts 36 and 91

Civil Supersonic Airplane Noise Type Certification Standards and Operating Rules

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Statement of policy.

SUMMARY: This action updates the Federal Aviation Administration's (FAA) policy on noise limits for future civil supersonic aircraft to reflect current U.S. noise regulations.

This action is intended to provide guidance on noise limits to manufacturers that are considering designs for supersonic aircraft.

FOR FURTHER INFORMATION CONTACT: Ms. Laurette Fisher, Office of Environment and Energy (AEE-100), Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267-3561; facsimile (202) 267-5594; e-mail Laurette.fisher@faa.gov.

Background:

The FAA last issued a noise policy statement for civil supersonic aircraft in 1994 (59 FR 39679, August 4, 1994). At that time, the noise standard in effect for new type certificate applications was Stage 3.

On July 5, 2005, the FAA adopted a new noise standard for subsonic jet airplanes and subsonic transport category large airplanes. That standard,

Stage 4, applies to any person filing an application for a new airplane type design on and after January 1, 2006.

Since March 1973, supersonic flight over land by civil aircraft has been prohibited by regulation in the United States. The Concorde was the only civil supersonic airplane that offered service to the United States, and it is no longer in service.

Interest in supersonic aircraft technology has not disappeared. Current research is dedicated toward reducing the impact of sonic booms before they reach the ground, in an effort to make overland flight acceptable. Recent research has produced promising results for low boom intensity, and has renewed interest in developing supersonic civil aircraft that could be considered environmentally acceptable for supersonic flight over land.

Supersonic aircraft technologists, designers, and prospective manufacturers have approached the FAA and International Civil Aviation Organization (ICAO) for guidance on the feasibility of changing the current operational limitations. The U.S. regulation prohibits civil supersonic aircraft flight over land. Before the FAA can address a change in operational restrictions, it needs thorough research to serve as a basis for any regulatory decisions. Public involvement will be essential in defining an acceptable sonic boom requirement, and public participation would be part of any potential rulemaking process.

While technological advances in supersonic aircraft technology continue, many factors still will need to be addressed. At present, the FAA's guidance for supersonic

aircraft is the same as for subsonic, that the same noise certification limits apply for supersonic aircraft when flown in subsonic flight configurations.

Policy Statement:

The Federal Aviation Administration (FAA) is committed to aviation's long-standing efforts to achieve increasingly effective noise abatement at its source. We anticipate that any future Notice of Proposed Rulemaking issued by the FAA affecting the noise operating rules would propose that any future supersonic airplane produce no greater noise impact on a community than a subsonic airplane. Subsonic noise limits are prescribed in 14 CFR Part 36. The latest noise limit in Part 36 is Stage 4, which applies to the development of future supersonic airplanes operating at subsonic speeds. Noise standards for supersonic operation will be developed as the unique operational flight characteristics of supersonic designs become known and the noise impacts of supersonic flight are shown to be acceptable.

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Carl Burleson
Director of Environment and Energy