

“Civil Supersonic Aircraft Advance Noise Research”

Lourdes Maurice
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**Federal Aviation
Administration**



Regulatory Background

- Regulation (14 CFR §91.817):
 - Since March 1973, supersonic flight over land by civil aircraft has been prohibited in the United States.
- Supersonic Noise Policy - (8/94, revised 10/08):
 - States 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.



Why Now

- **Current research has demonstrated enough progress on reducing impact of sonic booms before they reach the ground for us to re-visit this issue.**
- **FAA is gathering information from NASA, Partnership for AiR Transportation Noise and Emissions (PARTNER) Center of Excellence, U.S. Industry and ICAO.**
- **Public involvement will be essential in defining an acceptable sonic boom requirement.**



Context

- ICAO Supersonic Task Group:
 - Monitors & coordinates several different concurrent efforts on advanced technologies for supersonic aircraft and provide guidance for specific research and questions that need to be addressed.
- Supersonic Roadmap:
 - NASA in cooperation w/ FAA and ICAO Task Group has initiated the development of a roadmap for research into the community response to sonic booms. Roadmap defines key research that should be accomplished in order to provide a firm technical basis to inform future noise-based standards for sonic boom acceptability.



Goal

To raise public awareness on advancements in supersonic technology, and for FAA, NASA, and industry to get feedback from interested persons.

Speakers:

- Peter Coen (NASA Fundamental Aeronautics)
- Vic Sparrow (Professor of Acoustics at Penn State University)
- Robbie Cowart (Director, Supersonic Technology Development at Gulfstream)
- Richard Tracy (Director, Chief Operating Officer at Aerion Corporation)

