“Civil Supersonic Aircraft Advance Noise Research”

Lourdes Maurice
Washington D.C. Public Session
July 14, 2011
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)