

## Civil Supersonic Aircraft Noise Panel Discussion

**Date & Time:** July 14, 2011 from 1:00 p.m. to 3:00 p.m.\*

**Location:** DOT Headquarters building, 1200 New Jersey Ave., SE, Washington, DC 20590  
held in Oklahoma A-C Conference Room

**Registration:** **Meeting registration is requested by July 11 and late walk-ins are welcome;** there is no registration fee. All participants are requested to register at the following Web site:  
<https://spreadsheets.google.com/spreadsheet/viewform?formkey=dEFEdIRnYzBiaHZtTUozTHVtbkF4d0E6MQ>

The Federal Aviation Administration (FAA) is conducting its fourth public meeting on civil supersonic aircraft research. The public meeting will include presentations on current research programs and a question and answer session for attendees. The purpose of the meeting is to raise public awareness of the continuing technological advancements in supersonic aircraft technology aimed at reducing the intensity of sonic boom and for the FAA, the National Aeronautics and Space Administration (NASA), and industry to get feedback from interested persons.

### SOUND SIMULATOR DEMONSTRATION - OPEN ALL DAY TO PUBLIC:

Highlighting the effort to raise awareness, Gulfstream has supported the FAA's public meetings by making its Supersonic Acoustic Signature Simulator II (SASSII) available for attendees to visit. The SASSII is a mobile audio booth designed and equipped to demonstrate the "Gulfstream Whisper", the aerospace company's latest effort to provide a solution to the traditional sonic boom.

A supersonic aircraft such as the Concorde in cruise produces a traditional jagged "N-wave" sonic boom pressure wave, resulting in a loud, jarring double boom on the ground as it passes by. Gulfstream's patented spike for controlling and reducing sonic boom transforms the traditional N-wave sonic boom into a smooth and more rounded pressure wave shaped roughly like a sine wave or a sideways "S". This change in the wave shape results in a softer sound that is quieter than the Concord sonic boom by a factor of 10,000. Gulfstream developed the mobile SASSII so others could experience this dramatic sound difference. The simulator enables visitors to sense for themselves the dramatic difference in sound, reverberation, and intensity. Using a sophisticated, computer-based audio system, the acoustic engineer sends the audio feed into a sound booth where visitors can compare various sound signatures.





Conceptual designs for Quiet Small Supersonic Transport (QSST) aircraft