

Call for Papers

Adaptive Aircraft Surfaces and Structures for Sonic Boom Mitigation

AIAA SciTech 2019

January 7-11

San Diego, CA

Manchester Grand Hyatt

The AIAA Adaptive Structures and Applied Aerodynamics Technical Committees are pleased to solicit papers for presentation in a special joint session on **Adaptive Aircraft Surfaces and Structures for Sonic Boom Mitigation**. There is a nationwide interest in low-boom supersonic aircraft, but it is not clear that required sonic boom signature levels can be met for changing flight and/or atmospheric conditions. This session considers multi-disciplinary efforts to explore the mitigation of sonic boom signatures by means of adapting the local geometric configuration of supersonic aircraft in a distributed manner. Content may contain studies on distributed structural morphing, active materials tuned to achieve such morphing given the specific flight conditions of supersonic platforms, experimental and computational assessments regarding the sensitivity of shock waves and propagated sonic booms to aircraft outer mold line, and the sensing needed to enable real-time aerostructural adaptivity.

Paper Submission Timeline

- Extended abstracts (>1,000 words) are due **June 11, 2018**
 - Select "**Special Sessions**" when submitting to Adaptive Structures
- Author notification of paper acceptance on **August 31, 2018**
- Final manuscripts are due **December 4, 2018**

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