



LAX/Community Noise Roundtable

Aviation Noise News Update

July 11, 2018

NASA Technology Cuts Airframe Noise by 70% on Test Aircraft



A series of NASA technologies implemented on a Gulfstream GIII business jet test aircraft has demonstrated airframe (non-engine) noise reductions of over 70% on landing approach

- The NASA technologies focused on landing gear and wing flap designs for the aircraft
- Landing gear design features included porous fairings to allow air to flow into the landing gear structure, as well as design changes to the landing gear wheel wells
- For wing flaps, NASA used an experimental, flexible flap design developed for the Adaptive Compliant Trailing Edge (ACTE) project
- The noise measurement process included flying the aircraft at an altitude of 350 feet above a 185-sensor microphone array at Edwards Air Force Base in California



Photo Credit: NASA / Ken Ulbrich

Maryland Files Two Petitions to Change Flight Paths



On June 26, 2018, the State of Maryland filed a petition in federal court for judicial review of Reagan National Airport (DCA) flight paths, and a separate administrative petition with the FAA over Baltimore/Washington International Airport (BWI) flight paths

- The federal petition was filed in the U.S. Court of Appeals for the District of Columbia Circuit and requests review of a DCA Runway 19 approach path
- The administrative petition filed with the FAA requests a supplemental environmental assessment (EA) and flight path revisions for BWI
- Both petitions were filed by law firm Kaplan Kirsch & Rockwell, which also supported the City of Phoenix in litigation against the FAA over departure flight paths implemented at Phoenix Sky Harbor International Airport (PHX)

NASA to Examine Response to “Quiet” Sonic Booms



In November, 2018, NASA intends to fly a series of F/A-18 Hornet test flights over Galveston, Texas to examine responses to lower-volume sonic booms

- The flights involve a specially-designed flight profile intended to produce loud sonic booms in one geographic area and lower-volume sonic booms in another area
- The flights will focus the loud sonic booms toward the Gulf of Mexico in order to direct the quieter booms toward a group of at least 500 resident volunteers in Galveston
- The residents will be asked whether they heard the booms and what their reactions were
- This research will provide data for NASA’s X-59 low-boom aircraft research program



Photo Credit: NASA / Maria Werries

Rolls-Royce Creates New Business Jet Engine Family



Rolls-Royce is creating a family of jet engines known as Pearl, intended to improve upon existing Rolls-Royce business jet engines

- The family has better environmental performance than the Rolls-Royce BR710 engine that powers the Bombardier Global family of very-long-range business jets
- Noise improvement includes a two-decibel reduction in noise, bringing the Pearl family to 14 effective perceived noise decibels (EPNdB) below the FAA Stage 4 noise standard
- The engine family is expected to enter service on the Bombardier Global 5500 and 6500 business jets in 2019



Graphic Credit: Rolls-Royce

Aviation Groups Oppose Trump ATC Privatization



On June 21, 2018, six aviation associations released a joint statement opposing the Trump Administration's intention to privatize air traffic control (ATC) as a part of its "Delivering Government Solutions in the 21st Century" government reform and reorganization proposal

- The groups include the National Business Aviation Administration (NBAA), the General Aviation Manufacturers Association (GAMA), the Aircraft Owners and Pilots Association (AOPA), Helicopter Association International (HAI), the National Air Transportation Association (NATA), and the Experimental Aircraft Association (EAA)
- The statement points out that ATC privatization proposals have been repeatedly rejected by the U.S. Congress
- The statement also urges the Administration to support a long-term FAA funding bill