Airport Noise Report



A weekly update on litigation, regulations, and technological developments

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Complaints

NEW SERVICE ALLOWS OUTSOURCING OF AIRCRAFT NOISE COMPLAINT MANAGEMENT

PlaneNoise, a new service launched in March, allows airport management and governmental entities to outsource and automate their existing noise complaint management process or to establish an entirely new system to address unresolved or escalating aircraft noise issues.

PlaneNoise may be of interest to large, medium, and small airports that do not have fully integrated airport noise and operations monitoring systems or that only track flights without noise/complaint/flight correlation capabilities. It already has attracted the interest of the Metropolitan Washington Council of Governments and could be of value to governmental entities that want to collect their own aircraft noise complaint data and not rely on that collected by airports.

"As airport operational budgets continue to shrink, facility managers and airport authorities are constantly thinking how to do more with less. One area that is generating significant attention and as a result is requiring more time, money and staff resources is aircraft noise complaint management," said Robert Grotell, the New York-based aviation consultant who developed the new service.

(Continued on p. 62)

SSTs

NASA PLANS PILOT STUDY OF COMMUNITY RESPONSE TO LOW SONIC BOOMS THIS FALL

This fall, the National Aeronautics and Space Administration (NASA) will conduct a pilot study at Edwards Air Force Base in California to determine the response of residents to daily low-level sonic boom exposure.

F-18 aircraft will produce multiple low-level sonic boom events during diving maneuvers. The subjects in the pilot study will be residents accustomed to sonic booms.

The pilot study is the latest project in NASA's long-term research program to develop scientific knowledge to inform a regulatory decision about what level of sonic boom would allow a change in federal regulation 14 CFR 91.817, which currently prohibits civil overland supersonic flight because of the impact of sonic booms.

Supersonic flight is severely restricted in the United States and other countries because sonic booms create shockwaves that are annoying and can damage private property.

The goal of NASA's sonic boom research is to find ways to control the shockwaves and lessen the noise so that supersonic flight can become routine in the fu-

(Continued on p. 63)

In This Issue...

Complaints ... A new service launched this spring allows airport management and governmental entities to outsource and automate the noise complaint management process or to set up an entirely new system to address complaints - p. 61

SSTs ... In the fall, NASA will conduct a pilot test of community response to low-level sonic booms - p. 61

AIP Grants ... Burlington Int'l gets \$3.1 million grant to acquire land ... FAA approves PFC to fund Louisville Int'l sound insulation program - p. 62

RNP ... GE Aviation releases study showing that airlines could save at least \$65.6 million annually while cutting CO2 emissions by implementing RNP flight paths at 46 mid-size airports across the U.S. - p. 63

Conferences ... 11th Annual AAAE Airport Noise Mitigation Symposium will be held Oct. 2-4 in St. Louis - p. 62

May 13, 2011 62

Complaints, from p. 61

"PlaneNoise is an innovative outsourcing solution that reduces the burden on airport management of collecting, analyzing, responding to, and reporting on aircraft noise complaints," he told ANR. "PlaneNoise handles the entire process as an extension of an airport's staff and provides management with a unique, real-time perspective on where aircraft noise complaints are being generated, how often, and by whom."

PlaneNoise is a major upgrade and rebranding of a system that Grotell originally developed in 2007 to collect, analyze, and resolve helicopter noise concerns in and around the New York metropolitan region for the Eastern Region Helicopter Council (ERHC), the leading helicopter trade organization in the Northeast. Grotell serves as a Special Advisor to ERHC on strategic policy, government relations, community affairs, and noise complaint management.

"Elected officials at all levels of government in the New York Metropolitan area, community groups, and residents alike were pointedly asking questions about the many helicopters they were seeing and hearing. PlaneNoise was created to provide needed answers to those stakeholders as well as the local helicopter industry and the Federal Aviation Administration," Grotell told ANR.

"With PlaneNoise data in hand, the local helicopter industry was able to clearly identify noise sensitive areas, define the root causes, and develop and implement voluntary noise abatement procedures in a timely manner. Many stakeholders were proposing solutions before the problems were even identified or quantified," said Grotell, who gained significant constituent service experience as the former head of the New York City Mayor's Office of Transportation and as Deputy Transportation Commissioner during the Giuliani and Bloomberg administrations.

PlaneNoise collects aircraft noise complaints via a toll-free hotline, an online web form and by email. "Using business automation tools, such as voice-to-text transcription and data parsing, all three methods directly feed and populate a secure, online database that in turn generates a 'web-based ticket' for each complaint," Grotell explained. These tickets, he said, automatically drive a series of real-time charts, graphs, and GIS-based maps that can be viewed through an airport customer's dedicated web portal, known as Anytime Analytics.

Customer service representatives review each ticket, investigate the noise event, and respond to the complainants based on their individual requests. Automated reports typically providing detailed data on complaint volumes, locations, and distinct households are then distributed electronically at any desired frequency. Through Anytime Analytics, airport management also can review individual complaint tickets, follow the dialogue between PlaneNoise customer service and the complainant, and enter their own comments or directions.

In an upcoming version of Anytime Analytics, Grotell ex-

pects to provide airport management with enhanced complaint investigation reports based on flight tracking data.

"Aircraft noise concerns can only be properly addressed and resolved if all the parties are working off the same set of facts. The initial steps in the process are providing complainants with a simple way to communicate with the airport and making sure that they are treated in a respectful, professional and timely manner," said Grotell.

For more information, visit www.planenoise.com or call (631) 938-1116.

Burlington Int'l

AIRPORT GETS \$3.1 MILLION AIP GRANT FOR LAND ACQUISITION

The City of Burlington, VT, received an Airport Improvement Program (AIP) grant of \$3,168,250 to fund acquisition of land within the 65-69 DNL contour of Burlington International Airport, the FAA announced May 11.

Of the 56 AIP grants FAA awarded airports between March 29 and May 6, only one was for a noise mitigation project.

Louisville PFC Approved

In related news, the FAA announced May 10 that it has approved the imposition and use of a \$4.50 Passenger Facility Charge (PFC) at Louisville International Airport for several projects, including a sound insulation program.

The PFC will be imposed from June 1, 2015, to Nov. 1, 2016, for a total estimated revenue of \$2,123,882.

For further information, contact Cynthia Wills in FAA's Memphis Airports District Office; tel: (901) 322-8190.

Conferences

AAAE AIRPORT NOISE MITIGATION SYMPOSIUM SET FOR ST. LOUIS

The 11th Annual American Association of Airport Executives (AAAE) Airport Noise Mitigation Symposium will be held Oct. 2-4 in St. Louis, MO, at The Westin St. Louis.

The ANMS is the only conference in the U.S. that focuses specifically on topics directly related to airport noise mitigation. This year's theme reflects how airport noise personnel, consultants, manufacturers, contractors, and community leaders work together to best plan and implement the various mitigation measures available to airports for reducing their noise impact in the community.

This year's agenda will cover a variety of noise mitigation topics, including land acquisition, sound insulation, and program management.

For registration and agenda information, visit www.noise-mitigation-symposium.com.

May 13, 2011 63

SSTs, from p. 61

ture. New low-boom supersonic aircraft under development that the business jet community is eager to fly produce booms that are much less intrusive than the sharp shocks of decades ago.

Kevin Shepherd, Head of the Structural Acoustics Branch of NASA's Langley Research Center, discussed progress in NASA's sonic boom research program at the Federal Aviation Administration's Aviation Noise Impacts Roadmap Annual Meeting, held in Washington, DC, on April 19-20.

He said that recent progress in NASA's sonic boom program includes:

- Updating the sonic boom propagation code, including the effect of atmospheric turbulence, which allows for improved prediction;
- Structural measurements of sonic boom impact on large buildings;
- Development of a low-frequency structural response model; and
- Completion of a new indoor sonic boom simulation facility.

The sonic boom simulation facility will be used to assess human response to sonic booms experienced indoors and also to investigate response to simulated booms from the new low-boom aircraft designs.

The simulation facility will lead ultimately to the development of a psychoacoustic model of human response to sonic booms indoors, which will complement data from community studies and previous lab studies.

In fiscal years 2013-2015, NASA will validate propagation, structural response, and human response models for single sonic booms.

In fiscal year 2019, when the program ends, NASA will validate its model for community response to low booms.

Helping NASA in studying sonic booms and how to reduce them is Wyle Laboratories, The Pennsylvania State University, Virginia Tech, Purdue University, Fidell Associates, Gulfstream, and JAXA (Japan Aerospace Exploration Agency).

NASA's Dryden Flight Research Center announced in February that it was flight testing two new supersonic shockwave probes to determine their validity as research tools (23 ANR 27).

RNP

GE STUDY FINDS AIRLINES CAN SAVE \$65.6 M. A YEAR WITH RNP

Airlines could save at least \$65.6 million annually while slashing carbon emissions and cutting flight times by implementing new flight paths at 46 U.S. mid-size airports, according to study results released May 10 by GE Aviation.

The findings of the study, Highways in the Sky, come at a

critical time in the debate on the future of our aging national air traffic control infrastructure, where additional investment is increasingly measured against proven benefits to the economy, environment, and the everyday traveler, according to GE Aviation, which is one of only two companies to be designated by the Federal Aviation Administration as third parties to develop the advanced navigation procedures required for NextGen.

Release of the GE study may have been timed to influence a House/Senate conference committee haggling over funding levels for the FAA and implementation of the satellite-based NextGen system, through which advanced navigation procedures, such as Required Navigation Performance (RNP) procedures, are deployed.

The House passed a four-year, \$59.7 billion FAA Reauthorization bill that rolls back FAA funding to 2008 levels. The Senate FAA Reauthorization bill is a two-year, \$35 billion measure that increases funding for FAA and accelerates the transition to NextGen.

An amendment to the Senate FAA Reauthorization bill – strongly sought by GE Aviation – would require the FAA administrator to issue a Categorical Exclusion from environmental review for RNP and other performance-based navigation procedures "that will measurably reduce aircraft emissions and result in an absolute reduction or no net increase in noise levels."

No definition of the new term "net increase in noise levels" has been provided yet (23 ANR 37). FAA's environmental order does not include the term nor is it a concept recognized in the National Environmental Policy Act.

House Transportation Committee Chairman John Mica (R-FL) said May 12 that Congress may have to pass another short-term extension of the current FAA funding law to allow House and Senate negotiators additional time to resolve their remaining differences over provisions in the FAA reauthorization bills.

46 Airports Included in GE Study

Steve Fulton, technical fellow with GE Aviation, high-lighted the results of the GE study on May 10 at the NextGen Ahead Air Transportation Modernization conference held in Washington, DC.

GE's *Highways in the Sky* study illustrates the potential for significant economic and environmental benefit of near-term deployment of RNP landing approaches, he said.

Although the study focused on 46 mid-sized U.S. airports, Fulton said the data and analysis support accelerated deployment of RNP at any airport. GE's study of the 46 airports concludes that deployment of RNP instrument arrivals would annually save:

- 12.9 million gallons of jet fuel, or 527 round-trip flights from New York to Los Angeles;
- \$65.6 million, a savings equivalent to the full-time salary of 1,573 middle-class jobs;
- 274.6 million pounds of C02, equal to the carbon absorbed every year by 1,384,095 trees; and

May 13, 2011 64

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• 747 days of flight time, or roughly two years and seventeen days in the sky.

"We are facing a serious global challenge as air traffic increases and our skies become more and more congested," said Lorraine Bolsinger, President and CEO of GE Aviation Systems. "This is an opportunity to provide tangible benefits to every stakeholder; responsible growth of an essential industry, better asset utilization, lower fuel burn and cost for airlines, greater throughput for airports and air navigation service providers (ANSPs), fewer delays for passengers, lower emissions and noise for communities and reduced dependence on foreign oil."

RNP technology allows aircraft to fly precisely-defined trajectories without relying on outdated, ground-based radio-navigation signals, GE explained. Independence from a fixed, ground based infrastructure, linked with the inherent precision of satellite navigation and advanced computer technology aboard the aircraft allow the creation of shorter, more consistent and more efficient flight paths. The consistency and efficiency of the new flight paths can reduce flight delays helping to alleviate costly air traffic congestion.

ICAO, the International Civil Aviation Organization, has predicted that efficiencies made possible by RNP alone can cut global CO2 emissions by 13 million metric tons per year, GE said.

"Win-Win Scenario'

"There is no reason the U.S. aviation industry should be tied to a ground-based beacon system that was developed in the 1940s," said Captain Brian Will, Director - Airspace Modernization and Advanced Technologies for American Airlines.

"GE Aviation's *Highways in the Sky* study clearly demonstrates the tremendous benefits realized through satellite-based navigation. RNAV and RNP provide benefits to all airspace users. For controllers and pilots, we have safety benefits from reduced radio transmissions and reduced controller workload and increased pilot situational awareness. For the airport communities, RNAV and RNP can reduce both noise and emissions – this is a win-win-win scenario, everyone benefits."

In many locations around the world, RNP is already demonstrating significant benefits, GE said. In Brisbane, Australia, government sponsored trials demonstrated that RNP instrument approach procedures saved aircraft operators 882,000 pounds of jet fuel a year, even though only 18 percent of the aircraft were capable of flying the procedures. Based on those results, Airservices Australia is implementing RNP at 28 airports nationwide which it expects will save operators nearly 86 million pounds of jet fuel each year.

GE's *Highways in the Sky* report is available at http://www.geaviation.com/aboutgeae/presscenter/pdf/GE study.pdf.

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