

Airport Noise Report



A weekly update on litigation, regulations, and technological developments

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Chicago O'Hare Int'l

MAYOR AGREES TO INSTALL EIGHT MORE NOISE MONITORS IN AREAS HIT BY NOISE

Under strong political pressure to take action to address the noise problem caused by a major realignment of runways at Chicago O'Hare International Airport and the opening of a new runway, Chicago Mayor Rahm Emanuel announced July 22 that eight additional permanent noise monitors would be installed in communities newly impacted by aircraft noise.

The Mayor directed the Chicago Department of Aviation (CDA) to work with the O'Hare Noise Compatibility Commission (ONCC) to acquire and install eight additional permanent airport noise monitors in City neighborhoods and suburban communities near O'Hare.

Currently, the airport has 33 permanent noise monitors, only two of which are located in the City of Chicago.

But Emanuel made clear that the O'Hare Modernization Program (OMP) will move forward, saying it was "necessary" and would add 195,000 jobs and contribute \$18 billion to the region's economy.

The mayor did not respond to demands by local politicians and noise-weary
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Noise Monitoring

TRUCKEE-TAHOE SELECTS NEW VNOMS SYSTEM THAT IDENTIFIES GA AIRCRAFT

Truckee-Tahoe is the third airport this year to select the new "VNOMS" noise and operations management system, which allows airports to track and identify general aviation aircraft not identifiable by other NOMS systems.

"After an extensive search and competitive procurement process, we are excited to have chosen Vector Airport Systems as our vendor for the Airports' new NOMS solution," said Hardy Bullock, Director of Aviation and Community Services at Truckee-Tahoe Airport.

He said VNOMS "will allow the airport to eliminate many of the current data silos and replace them with a truly integrated solution. VNOMS will make it easier for our staff to address situations and improve the accuracy of operations reporting, doing so more efficiently and at a lower operating cost than ever before."

Portland (ME) International Jetport and Francis S. Gabreski Airport in Westhampton Beach, NY, also recently acquired the VNOMS system, which is the product of a partnership between two firms based in Herndon, VA:

- Vector Airport Solutions, the leading provider of automated aircraft identification, landing fee billing, and collection services; and

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residents that a new environmental assessment be prepared for the OMP and new public hearings be held on it, that aircraft operations be more evenly spread to all O'Hare runways, and that the airport's nighttime fly quiet program be expanded.

"As the O'Hare Modernization Program moves forward, some of our residents in Chicago and the surrounding communities are affected by changes in flight patterns, and we need to better understand the impact on them," said Mayor Emanuel. "These additional monitors will help us gather and process the data we need to do that."

He charged the CDA to work with the ONCC, Chicago Alderman Michael Zalewski, Chairman of the City Council Committee on Aviation, and Aldermen Mary O'Connor, Pat O'Connor, and Margaret Laurino (who represent city communities newly hit by aircraft noise) to identify new noise monitor locations on existing and future flight paths near O'Hare, and then get those monitors installed as soon as possible.

"These monitors will enable us to ensure that noise levels are within the proper limits to protect our residents," said Alderman Margaret Laurino. "They are another effort by the city to curtail excessive sound disturbances caused by air traffic flight patterns."

Alderman O'Connor said the monitors would provide accurate records of the noise caused by the planes. "It's one step closer to us trying to find a way to improve the quality of life for everyone on the Northwest Side," he said.

The plan for more noise monitors also was applauded by Jac Charlier, one of the leaders of the growing Fair Allocation in Runways Coalition (FAiR), which has been urging the mayor to take action to address the noise impact caused by the runway realignment at O'Hare and opening of a new parallel east-west runway in October 2013.

A demand for more noise monitors is one of the coalition's priorities.

Charlier credited the political pressure generated by the his growing FAiR coalition for the mayor's action.

"We're not stopping," Charlier told the Chicago press. He said FAiR members want to sit down with local and federal aviation officials to discuss a long-term solution to the noise caused by aircraft operations at O'Hare.

Meanwhile, U.S. Rep. Mike Quigley (D-IL) and others are still calling for the Federal Aviation Administration to conduct new public hearings on the impact of O'Hare noise on urban and suburban neighborhoods, asserting that the environmental studies done a decade ago did not make it clear that the new O'Hare runway would send hundreds of flights over homes in northwest Chicago.

Quigley said he would continue to push to extend the hours of O'Hare's "fly quiet" program and to allow more homes to qualify for subsidized soundproofing.

"While I'm glad the city is taking this important step, there's plenty more that can be done," Quigley said in a blog post.

But some suburban officials did not see the benefit of adding more noise monitors around O'Hare.

"Adding monitors, which provide information used to make funding decisions about soundproofing, doesn't do enough for hard-hit neighborhoods where noise is 'unbearable'," Bensenville Village President Frank Soto told the *Chicago Daily Herald*.

"There is not a level of soundproofing that can compensate these people," said. "This problem is not going away."

NextGen**TECH TRANSFER ALLOWS ATC TO MAXIMIZE BENEFITS OF PBN**

NextGen software technology that will allow air traffic controllers to maximize the benefits of Performance Based Navigation (PBN) procedures on the approach to the runway was transferred to the Federal Aviation Administration (FAA) from the National Aeronautics and Space Administration (NASA) on July 14 in an official ceremony at FAA headquarters.

Coupled with the precision of PBN, the technology – called Terminal Sequence and Spacing – provides predictability, allowing controllers to safely reduce excess spacing between approaching aircraft, saving time and fuel while reducing emissions.

The technology uses time-based metering to improve the safety and efficiency of Area Navigation (RNAV) and Required Navigation Performance (RNP) approach procedures in terminal airspace.

The airport-centric Terminal Sequence and Spacing technology dovetails with an existing traffic metering tool – called Time-Based Flow Management – that delivers efficiencies in the airspace beyond the airport," FAA explained.

While Time-Based Flow Management "improves the flow of traffic through high altitude en route airspace down to the four corner posts navigational fixes in the sky approximately 40 miles from an airport," FAA said that Terminal Sequence and Spacing "helps controllers manage aircraft from the four corner posts down to the runway."

"With the new technology, controllers see circles – called slot markers – on their display screens that indicate where an aircraft should be in order to fly a RNAV or RNP route through the forecasted wind field, meet all speed and altitude restrictions and land on time. This software enables the use of PBN procedures to become more routine, requiring less vectoring, fewer level-offs of aircraft and less communication between controllers and pilots," FAA explained.

The FAA, which received an initial technology transfer of Terminal Sequence and Spacing from NASA last September, is expected to make a full investment decision by the end of the year through its Joint Resources Council, a team of top agency executives that reviews major acquisitions and approves funding.

*Heathrow***INDUSTRY INITIATIVE TO STUDY NOISE REDUCTION PROCEDURES**

Airbus, British Airways (BA), Heathrow Airport and the UK's air navigation services provider NATS launched a unique partnership on July 16 to study and develop operational procedures to reduce the number of people affected by noise around London's Heathrow Airport.

The announcement comes as Heathrow vies with Gatwick Airport to be selected as the site of a new runway to increase airport capacity in the London area. The commission established by the UK Government to decide where to add the runway is concerned about noise impact.

The new Heathrow project utilizes the capabilities of the A380, the quietest aircraft of its size, and will look at how the aircraft manufacturer, airline, airport and air navigation services provider can further reduce the noise impact of flight operations for local communities.

Airbus ProSky – the Air Traffic Management subsidiary of Airbus – is in charge of designing the departure and arrival procedures based on NATS, Heathrow, and BA recommendations.

The four cross-industry partners announced a three-stage 'Quieter Flight' project.

The first stage identifies the operational improvements that are possible. These include for departures, for example, reducing thrust and optimizing the height at which the aircraft is flown. Changes to these departure procedures have the potential to significantly reduce noise levels.

The second stage will see the testing and training of procedures in a British Airways flight simulator.

Once all the project stages are complete, the partners expect to bring all the operational improvements together into a series of demonstration flights with the A380, starting from early next year. These procedures will then be made available to other operators and airports around the world.

Airbus' executive Vice President, Customer affairs, Christopher Buckley said: "The A380 is the ideal aircraft to conduct the "Quieter flights" because it has the latest state of the art technologies that allow optimized paths to be flown very precisely. The A380 is able to further reduce the noise of what is already the quietest aircraft of its type. Together with Airbus ProSky, we are honored to be a key player in this unique industry project that addresses a real issue worldwide."

Heathrow's Sustainability Director Matt Gorman added, "We are really pleased to be working closely with industry partners on this project. Heathrow is at the forefront of international efforts to tackle aircraft noise and collaborations such as this form part of our long term commitment to do this whilst also safeguarding the connectivity and growth that Heathrow provides."

Ian Jopson, NATS Head of Environmental and Community Affairs, commented: "Air traffic management has a vital

role to play in tackling the impact of aircraft noise and NATS has an excellent track record of working with the rest of the industry and community groups on this important issue. The Quieter Flight partnership, brings together the expertise of the whole industry, and when combined with the wide range of other initiatives we are working on, will help make a difference to those people living under the flightpath."

VNOMS, from p. 90

- INDMEX Aviation, an engineering and software development firm established by air traffic surveillance, information technology, and engineering experts.

The firms said their strategic partnership allowed them to leverage their respective subject matter expertise in the NOMS market and launch their VNOMS web-based NOMS application.

VNOMS, they explained, "is based on the complete operations data set that results from the fusion of flight track data with data from Vector's Automated Aircraft Identification system.

"Unlike other products in the market that rely solely on flight track data, Vector has spent years researching and developing technologies that independently detect aircraft operations, capture the aircraft's registration number, and automatically fuse this data to the flight track and Vector's own operator database, giving the VNOMS user the complete data needed to respond to complaints, interact with pilots, and produce comprehensive reports.

"This is especially critical at airports with significant general aviation traffic - where typically up to 60 percent of the tracked aircraft are not identifiable by the industry's other existing NOMS products," the firms said.

Added Pete Coleton, president of Vector, "As the leading supplier of aircraft identification and landing fee management systems, we saw the NOMS market as a logical extension of our existing product line – one that was being underserved by the offerings from other vendors. Our new VNOMS system, developed in cooperation with INDMEX, allows us to offer the industry the first fully-integrated common operational NOMS application with greater aircraft identification capabilities at a price point significantly lower than existing offerings."

Filling a Niche in the NOMS Market

Tom Breen, Vector's vice president for Sales and Product Strategy, told ANR that VNOMS is not trying to compete with Exelis or B&K in the NOMS market.

Rather, VNOMS is trying to fill a niche in the market for general aviation and smaller airports "that are not interested in all the bells and whistles of larger, more expensive NOMS systems or can't keep up with the increasing cost of a larger NOMS system but need to identify GA aircraft to bill them, send them letters regarding noise violations, monitor compliance with voluntary noise restrictions, or otherwise identify them," he said.

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Vector has more than 30,000 unique GA registration numbers and operators in its growing data base, Breen said, and for half of those operators it also has verified e-mails and telephone numbers in addition to their street addresses.

Breen said that other GA airports are considering VNOMS because it can identify aircraft not conforming to training flight patterns, bill operators for exceeding specified noise levels, and identify aircraft exceeding voluntary curfews or doing touch-and-go operations. The VNOMS camera-based aircraft identification system operates on solar power and can capture aircraft identification numbers day and night.

Can Be Added to Larger NOMS Systems

The VNOMS software can be used alone or added to a larger, existing NOMS system. In that regard, it could be of interest to noise offices at larger airports by allowing them to identify GA aircraft that use the FAA's Blocked Aircraft Registration (BARR) Program to block their flight tracks from public-access flight tracking displays.

In 2012, the general aviation community rallied enough support on Capitol Hill to force the FAA to rescind a policy that made it much more difficult for GA operators to block their flight tracks (24 ANR 5).

FAA's policy rescission disappointed several airport noise officers, including Dan Frazee, who at the time was director of Airport Noise Mitigation at San Diego International Airport but is now retired.

ANR asked Frazee whether he thought VNOMS could be of use to larger airport noise offices.

He responded, "From the information you provided, I think this product would benefit airports operating without a 'conventional' NOMS. Practically speaking, though, from a large airport perspective, such as SAN, whose general aviation traffic is about 3% of volume, this camera-based aircraft identification system would be an expensive add-on with limited payback."

Larger airports with a greater percentage of GA aircraft, however, may be interested in VNOMS.

In Brief...

The Airport Cooperative Research Program (ACRP) is seeking potential legal research topics for the Fiscal Year 2015 ACRP Legal Research Program and the FY 2015 Synthesis Program.

The closing date for submitting legal research topics is Sept. 5, The closing date for submitting Synthesis Program topics is Sept. 12.

For further information and submission forms, look under "Announcements" at <http://www.trb.org/ACRP/ACRP.aspx>.

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Anne H. Kohut, Publisher

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