



Making some noise

Chicago O'Hare's relationship with its neighbouring communities has been enhanced by the formation of the O'Hare Noise Compatibility Commission, writes Arlene Mulder.

When Jim and Mary Anne Fiasche purchased a six-room raised ranch in a rural, quiet suburb of Chicago 45 years ago, it was surrounded by farms and forest preserves and aircraft noise simply wasn't an issue.

"Sure, we lived next to O'Hare and planes flew over our house, but flights were infrequent and jumbo jets nonexistent," recalls Jim Fiasche.

However, over time, jetliners replaced turboprops and O'Hare grew into a primary aviation crossroads for most air travel, meaning that by the 1980s the Fiasches and their three children had to stop their conversations every few minutes as jets flew overhead.

Urban sprawl and aircraft noise from one of the world's busiest airports overtook the couple's rural retreat.

While thrilled with O'Hare's successful expansion that generated high employment and economic prosperity, Chicago's Mayor Richard M Daley recognised the airport's effects on nearby residents – specifically, aircraft noise.

So much so in fact that in 1982 he introduced sound insulation in Chicago area schools. In 1995, he directed the Chicago Department of Aviation (CDA) to sound insulate 10 homes as a demonstration project. A year later, he invited suburban mayors, Chicago neighbourhood leaders and school district superintendents

near O'Hare to use their consensus-building skills to address aircraft noise issues.

The group promptly formed the O'Hare Noise Compatibility Commission (ONCC), a policy-making, inter-governmental agency dedicated to reducing aircraft noise. Its three standing committees address residential and school sound insulation and technology.

And today the ONCC's 45-member communities and school districts actively work with the CDA and the FAA to oversee the nation's leading residential sound insulation programme. Thus far, more than 6,950 homes have been sound insulated at a cost close to \$180 million – including new attic insulation, windows, exterior and storm doors for the Fiasches.

The FAA authorised another \$247 million in 2009 to complete sound insulation for the remaining 5,000 homes identified in the \$6 billion O'Hare Modernization Program's 2014 Build Out noise contour.

ONCC also oversees the largest school sound insulation program in the world and has spent close to \$282 million to sound insulate 116 elementary, middle and high schools.

Originally funded by the city of Chicago, today's sound insulation programmes are financed by Passenger Facility Charges (PFCs) approved by the FAA and reimbursed by FAA grants.





It pursues new technology to help mitigate aircraft noise throughout the broad O'Hare landscape. For example, ONCC was involved in the world's first ground run-up enclosure constructed at O'Hare. Last year ONCC sponsored its first-ever technology symposium where aviation experts discussed design of quieter engines and other measures to preserve the human and natural environment.

A highly sophisticated Airport Noise Management System, introduced when ONCC was formed, provides monthly data reports that ONCC and the CDA use to develop and manage specific abatement noise programmes. Data comes from several sources including 33 noise monitors, FAA radar data and noise complaints.

Brendan McLaughlin, ONCC executive director, attributes the organisation's co-operative spirit and collaboration with the FAA, CDA, airlines and their pilots as key to ONCC's success in noise reduction.

Currently, ONCC is working with aviation partners to refine a voluntary night time Fly Quiet programme by identifying the handful of errant overnight departures. ONCC encouraged the CDA to integrate preferred departure flight paths into the FAA's aeronautical plates included in flight manuals for improved pilot adherence and less noise over homes.

When a new O'Hare runway was commissioned in 2008, aircraft noise shifted dramatically in some communities. ONCC collaborated with Congressional, school and community leaders, to urge the FAA to re-consider its current 65 DNL standard (day/night level of averaging noise metric).

In response, the FAA initiated a five-year Noise Research Roadmap project in 2009 to evaluate the validity of the 65 DNL and to investigate frequency of

flights affecting quality of life for residents living near airports. ONCC serves as an advisory member.

ONCC has also collaborated with municipalities to acquire nearly \$2.3 million in FAA funds to develop compatible land use plans in four O'Hare communities. Comprehensive plans address ground transportation networks, redevelopment opportunities and infrastructure needs.

In terms of community relations, ONCC initiates dialogue about aircraft noise issues through community outreach appearances, education programmes and information channels such as its website and brochures.

The city of Chicago's Community Outreach Vehicle offers residents an opportunity to talk one-on-one with O'Hare aviation experts, see simulated flight paths over the gateway via flat screens and pick up more information about the O'Hare Modernization Program.

ONCC's website (oharenoise.org) hosts news about ongoing sound insulation projects, monthly noise monitor reports, an annual report and newsletters, ONCC general and committee public meeting schedules and other aviation related information.

Regarding environmental aviation technology, ONCC actively participates on the advisory board for PARTNER, a leading aviation co-operative research organisation sponsored by the FAA, NASA and Transport Canada. As always, members tenaciously continue their pursuit of quieter skies.

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About the author

Arlene Mulder is Mayor of Arlington Heights and has served as chair of the O'Hare Noise Compatibility Commission since its inception in 1996.