

**APPROVED MINUTES OF THE OCTOBER 13, 2016
O'HARE NOISE COMPATIBILITY COMMISSION
TECHNICAL COMMITTEE MEETING**

The O'Hare Noise Compatibility Commission (ONCC) Technical Committee met on Thursday, October 13, 2016 at Mount Prospect Village Hall, 50 S. Emerson, Mount Prospect, IL.

ONCC Technical Committee Chair Catherine Dunlap called the meeting to order at 9:05 a.m. ONCC staff recorded the meeting minutes.

The following committee members were **PRESENT**:

Mr. Evan K. Summers, Designee, Village of Bensenville
Mr. Ron Sak, Member, Chicago, 38th Ward
Mr. Peter Bialek, Member, Chicago, 39th Ward
Committee Chair Catherine Dunlap, Member, Chicago, 41st Ward
Alderman Malcolm Chester, Alternate, Village of Des Plaines
Mr. Tim Millar, Alternate, Village of Palatine
Mr. Dennis Ryan, Designee, Village of River Grove
Mr. Brian Gilligan, Alternate, School District 59

The following committee members were **ABSENT**:

Arlington Heights, Chicago 40th Ward, 45th Ward, Hanover Park, Harwood Heights, Itasca, Mount Prospect, Nilas, Norridge, Rolling Meadows, Schaumburg, and Wood Dale.

The following ONCC and Chicago Department of Aviation (CDA) staff members were present:

Aaron Frame - CDA; Lucia Crespo – ONCC; Jeanette Camacho – ONCC; Jeffrey Jackson – Landrum & Brown; Ryan Anderson – Landrum & Brown; Maura El Metennani – ONCC Consultant.

The following guests were present:

Mary Ann Levar, U.S. Rep. Quigley; Robert Becker, U.S. Rep. Quigley; Ann Limjoco, U.S. Rep. Jan Schakowsky; and Amy Hanson - FAA.

APPROVAL OF MEETING MINUTES – September, 2016

Due to lack of quorum the meeting minutes were not approved.

Long-Term Portable Noise Monitor Report

Mr. Frame reported the Itasca long-term portable noise monitor average for August 2016 measured 63.7 DNL and the value for North Park Village in Chicago measured 59.9 DNL. He noted some of the noise readings were a reflection of less west flow which was why the numbers had gone down slightly in Chicago.

Ms. Dunlap questioned the status of the new permanent noise monitors.

Mr. Frame replied he was in the process of hiring staff, his number one priority.

Mr. Summers asked if there was a timeline for hiring staff.

Mr. Frame replied his goal was this fall.

Presentation: Best Airport Practices

Mr. Frame said one of the 24 noise recommendations made to the commission was to look at Best Practices for noise offices nationwide. He noted Chicago had been very active with the noise program.

Mr. Jackson reported other airports regularly look at Chicago's program site visits and phone conversations. Other airports explain what they are doing and inquire about what Chicago is doing. There have been several studies conducted to compile data.

Mr. Jackson walked the members through a few of the industry's best practices:

- The first one was Airport/Community Relationship which was based on building trust through good two-way communication, public involvement in the decision-making process, consistent transparency and a balanced community education with realistic goals through partnership. He noted over the years there had been more online data available.
- The number one topic of interest from other airports was Community Participation. Most airports' community involvement was nonexistent. Airports that knew about the ONCC asked how Community Participation was developed. Many airports do not have a noise commission but some do have community groups or a round table where airports present pertinent information to the community group. The process with the ONCC was different because CDA brought information to the committee members who then help make recommendations for the noise program, such as:
 1. service-oriented commitment,
 2. develop progressive communication strategies,
 3. establish continuous proactive engagement,
 4. collect citizen feedback,
 5. have quality rather than quantity information,
 6. build lasting relationships and trust, and
 7. manage community expectations through transparency.

Mr. Jackson also reported each department's Distribution of Responsibilities.

- Chicago Department of Aviation (CDA) was runway layout and location of cargo facilities and GRE.
- Federal Aviation Administration (FAA) was runway selection and flight patterns.
- Airlines were responsible for aircraft fleet mix and flight schedule.

Mr. Jackson also presented a chart on Airport Noise Issues and Responsibility Party.

- O'Hare and almost every airport in the country uses Day-Night Average Sound Level (DNL).
- The FAA and every federal agency approves DNL noise metric and uses it for sound insulation.
- Leq is Equivalent Sound Level and is a logarithmic average for noise. It is shown on the Fly Quiet Report. A 9- hour Leq is done for Fly Quiet from 10 p.m. to 7a.m.
- Maximum Noise Level (Lmax) and Sound Exposure Level (SEL) are the two most common used single events. Both Lmax and Leq are reported on the CDA website.
- Number of Events Above (NA) is counting the number of events over a certain threshold.

- Time Above (TA) is the number of events above instead of counting or showing time.
- Regarding Flight Management Techniques, Optimized Profile Descent (OPD) is different methods of approaching into airspace. Many airports struggle with Preferential Runway Use Program which is used at O'Hare.
- Flight Track Modifications are flying certain procedures off the end of the runway in order to maximize the compatible land use versus incompatible.
- Take Off and Approach Thrust and Flap Management Procedures often come down to the decision of the airline.

Ground Operations Techniques, which are Limit the Use of Reverse on Arrival, is something CDA has encouraged airlines to do. Some airports have tried Restricting Ground Run-Up activity; O'Hare has one of a kind. There are procedures for using run-ups outside of the Ground Run-Up procedure and limiting unnecessary taxiing. Facility Development Actions are runway or taxiway addition or relocation, displaced threshold – landings, relocated runway-end takeoffs, high speed exit taxiways, noise walls and navigational aids. Federal Statutes Governing Aircraft and Airport Noise also are used.

Ms. Dunlap said perhaps there was not enough information on other airports because they don't do as much compared to O'Hare. New York does not have a group of citizens discussing airport noise issues and Los Angeles has a small commission of nine people and has community representation. She requested clarification on the Airport Noise Issues – Responsible Party Chart on Operational Configurations because two were highlighted in yellow and two in green for Community Participation.

Mr. Jackson replied Community Participation was applicable through the Fly Quiet Runway Rotation Test. He also said Operational Configurations were brought to the noise commission to help set standards.

Ms. Dunlap asked if there were other ways in which there was Community Participation.

Mr. Jackson replied yes, public comments were taken for scoping before the EIS was planned and developed.

Alderman Chester said he was interested in the topic of retrofitting aircraft to help mitigate noise. He said he didn't have a good concept on the kind of technologies available and whether they were practical or not. He also said he would like more of a comprehensive look at it.

Mr. Jackson said it could be a topic discussion for a future Technical Committee meeting.

Ms. Dunlap said the committee had been trying to get Boeing to come to a meeting because it had been a while since they addressed ONCC.

Mr. Jackson said for quite some time the concentration had been on the engines. Arrivals had more airframe noise now and the engine was quieter. He added, newly designed aircraft had progressed and could be presented in a meeting.

Ms. Dunlap asked about federal legislation especially regarding new engine standards.

Mr. Jackson replied there were stages 1, through 4 and soon to be 5. CDA would make a presentation to the Technical Committee soon, adding that Stage 5 set the limit for all new aircraft being manufactured today.

Mr. Summers said the new Vortex Generator discussed at the ONCC meeting was effective 15 miles out. Joliet may benefit from it, but Bensenville would probably not.

Ms. Dunlap said perhaps that was true, but noted that at the noise conference she knew it was called a 320 whine because it was talked about and part of a presentation. It was an easier fix for a worldwide problem.

Mr. Frame requested a review of stage standards set by the FAA for noise and how it's not exclusive to the engine.

Mr. Jackson replied there were three different methods for testing an aircraft. The FAA looked at the departures, arrivals and sideline. An aircraft had to be certified by the FAA before going into service.

Mr. Frame clarified those standards were for the entire aircraft and not just the engines. He said manufacturing engineers looked at airframe and engine components along with other different parts. It was not just in terms of aircraft performance and efficiency but also what components of the aircraft may be contributing to the overall noise. Mr. Frame said United's decision to implement the Vortex Generator was based on a fuel port which had nothing to do with the engine.

Mr. Gilligan asked if communities were implementing land-use mitigation and building codes.

Mr. Jackson replied it was not being tracked by the office, but noted it may be something a community was doing.

Mr. Summers asked if there were any airports where the airlines attended noise commission meetings.

Mr. Jackson replied yes, but he did not know the exact ones at the moment.

Mr. Summers asked if the CDA ever took their questions and concerns to the airlines.

Mr. Jackson said yes.

Ms. Dunlap said the ONCC regularly communicates information with the airlines especially about Fly Quiet. She said in Los Angeles the airlines are technically present at meetings but do not participate as much as they would like.

FAA Presentation: East and West Flow Departures

Ms. Hanson presented a map used for the TAMM experiment and said for the original EIS and reevaluation, the FAA used a program called total airspace in airfield modeler. The FAA worked with air traffic counterparts and the CDA's consultant, Ricondo to perform the

airspace modeling on two situations that were looked at for the interim conditions in the reevaluation.

Ms. Hansen said there were a number of experiments for the two conditions. For example, Experiment 513A, which addressed east flow, had a number of concerns from the 41st Ward, Park Ridge and Des Plaines about Runway R9 departures. She indicated for Runway 9R there were the tracks shown in yellow and were departure fixes. When air traffic developed the airspace routes they looked at the departure capability of the aircraft.

Ms. Hanson addressed the next chart on east flow departure model tracks for the 2015 interim condition. She noted each of the arrows was color coded by the runway. The yellow arrows indicated departure activity to the north and northwest over the 41st Ward, Park Ridge and Des Plaines. Those areas could also have departures from Runway 9R and 10L.

The next chart indicated the assumed overall flight track for O'Hare during the 2015 condition. It depicted departures surrounding the airport. The next chart was a snapshot taken on July 21, 2015 to show flight tracks which had east flow and west flow on the same day. On that day there were a significant amount of Runway 9R departures.

Ms. Dunlap clarified Ms. Hanson's presentation material was over a year old and was public information which was part of the planning and reevaluation. It had not changed and there were no RNAV procedures in place.

Ms. Hanson concurred there were no current RNAV procedures planned for O'Hare.

Ms. Dunlap said perhaps sometime in the future.

Ms. Hanson replied there might be a potential for RNAV but it was not in any of the modeling for any of the conditions from the EIS or the reevaluation. The existing vectoring was being used for the final departure point.

Ms. Dunlap asked what the answer would be for those who claimed departures were banking.

Ms. Hanson replied those departure procedures were developed by the FAA with safety in mind and they looked at the operational characteristics of the fleet when designing those procedures.

Ms. Dunlap said those procedures were designed and anticipated when all of the modeling was put together.

Ms. Hanson replied yes and said when looking at the snapshot of July 21, 2015 those departures were already in place.

Ms. Dunlap said the reason it felt different was because of the new runway on the south airfield. Therefore, there was more east and west flow balance however, not balanced north and south.

Ms. Hanson replied airport operations were based on wind conditions but noted with Runway 10R the airport was able to have the same amount of capacity for east flow versus west flow.

Mr. Millar said the north runway seemed to be used more than the original projections. The projections showed five percent but it was actually closer to 20 percent or more. He wanted to know if this was due to construction or the use of one flow versus the other.

Ms. Hanson asked which runway and which conditions was he comparing it to.

Mr. Millar replied Runway 9L/27R and said the 2015 modeling on the ONCC website showed what percentages the runways were projected to be used to get the model which shows five percent.

Ms. Hanson replied she would get an answer.

Ms. Dunlap asked if he was looking at OMP at Full Build-Out.

Mr. Millar replied no.

Ms. Hanson said it was challenging to compare modeled conditions with current conditions. The FAA does modeling for a 10-year weather average and this year was a little different in terms of strong easterly winds for a significant amount of the summer.

Mr. Jackson asked if the modeling was also looked for the winter time.

Ms. Hanson replied yes.

Mr. Jackson said it was mostly west flow this past winter.

Ms. Hanson replied winter was mostly west flow.

Alderman Chester said his community had Pratt Avenue which was getting to a point where residents could not live in their houses. He asked if FAA looked at land uses from a federal perspective.

Ms. Hanson replied the FAA does look at land use when doing NEPA analysis and noted it was done for the original EIS and reevaluation. She said Des Plaines received one of the FAA's land use grants.

Ms. Dunlap said at the last meeting arrival altitudes were a discussion topic and noted the City was not the altitude police nor was the ONCC. She then asked Ms. Hanson if she had anything to offer on arrival altitudes and how the FAA was alerted to any flights that go low.

Ms. Hanson replied she could refer back to the analysis the CDA did for ONCC regarding the three degrees and said there was an open letter to the FAA from Congressmen Duckworth, Schakowsky and Quigley and would be responding to it. The information she presented was available online and the other TAMM experiments were also posted in

Appendix A of the reevaluation.

Finally, Mr. Jackson presented two charts showing both arrivals and departures. Each chart represented a recent day that was mostly west flow and the other mostly east flow. The red indicated arrivals and green was departures. The darker green and red was 2,000 feet or less mean sea level (MSL), the medium red and green was 2,000 to 4,000 feet MSL and the lighter red and green were 4,000 to 6,000 MSL.

For the east flow chart on September 20, Runway 10L departures went south over Schiller Park, Norridge or Franklin Park at 2,000 feet MSL and Runway 9R departures went north. Runway 9R departures can depart to the south and some Runway 10L departures can depart to the north. The chart indicated where the departures go over and at what mean sea level.

Mr. Frame referred to the chart Ms. Hanson presented on Airspace Routes and noted the yellow tracks from Runway 9R departures going to the east. He said her chart on Airspace Routes had rings showing increments of five miles which go to 40 miles from the center of the airfield. He said Runway 9R departures on the east flow chart had a cluster of green tracks going over Edison Park, Niles, Skokie and Evanston which align with the EBAKE and DUFFE track shown on the Airspace Routes chart. The tracks on the east flow chart could be applied to other exhibits in order to be better understood.

Mr. Jackson reported the west flow chart from September 27 showing departures off of Runway 28R and 22L. He said both were primary departure runways and 28R was the most used departure runway. For west flow he said arrivals were landing to the north on Runway 27R, 27L and 28C. He noted there were some aircraft landing on Runway 28R at night and arrivals landing on Runway 32L in the evening. He said the chart was done because Alderman Arena wanted to get a better idea of it and decided to do both arrivals and departures.

Mr. Frame said Alderman Woods also wanted a further examination of east flow.

Ms. Dunlap recommended consulting Web Track on a regular basis and comparing it to see where the aircraft was at in other points.

Mr. Frame said Web Track showed entire aircraft in motion one by one. Therefore, the east and west flow charts presented by Mr. Jackson were those tracks from Web Track showing what was happening for the day and being able to see the entire airspace.

Ms. Dunlap encouraged the members and citizens to go on Web Track.

Mr. Millar asked if the east and west flow chart could be done for nighttime rotation on Fly Quiet.

Mr. Frame replied it was a good suggestion and would pass it on to Mr. Annunzio and to discuss in further detail at the Fly Quiet Committee.

Draft 2017 ONCC Technical Committee Meeting Work Plan

Ms. Dunlap reported she was working on a 2017 draft work plan and noted it would look

similar to what was presented last year. She said she would take input from members and acknowledged more work had to be done on the complaint system and communicating with airlines.

Next ONCC Technical Committee Meeting

Committee Chair Dunlap announced the next ONCC Technical Committee meeting would be held on Tuesday, November 15, 2016 at the Mount Prospect Village Hall.

Comments from Members

None

Audience Comments

Mr. Rapp, a Park Ridge resident, asked if he could assume the ONCC was the Community Group.

Ms. Dunlap replied absolutely. She started as a resident in the audience from 2007 to 2011 and then was appointed to the committee.

Mr. Rapp asked if Ms. Dunlap acknowledged there were other community groups.

Ms. Dunlap replied there are many community groups across the Chicago area.

Mr. Rapp said he learned a lot and recommended the information shared would also be presented at the general ONCC meeting because it was important for residents to understand. He said he would not question the integrity of what was being presented but said a year ago it wasn't like this and it did change. He said the whole idea of heading changes and banking was not there because it was more east flow.

Mr. Rapp said there should be a discussion about heading changes in departures banking and the attitude in which aircraft do that. He also said the east and west flow chart did not follow the original noise profile. East flow versus west flow balance was good for some but noted the communities on the corner were greatly impacted. He referred to the primary arrival runway on west flow which was 27R/9L and said when on east flow and there was a flight path heading change over 41st Ward and Park Ridge there was no relief. He noted Park Ridge also requested the same chart at the last meeting.

Ms. Dunlap said the information presented was not new.

Mr. Gagliardi, a resident of Chicago, said he made some comments at the October general meeting regarding the Fly Quiet Rotation. He then handed a copy of an illustration to Ms. Dunlap and Mr. Frame of an alternative suggestion to report Fly Quiet I,II and III to cover the entire period from 10p.m. to 7a.m. as opposed to the rotation period. Mr. Gagliardi said he was concerned with the expansion of the shoulder hours leading to the total Fly Quiet period and suggested it needed to be managed. He also said there were some airports where you could look at Web Track where there was access to noise monitor data and noted O'Hare was not one of them.

The meeting ended at 10:23 a.m.