

O’HARE NOISE COMPATIBILITY COMMISSION

Fly Quiet Committee

September 22, 2020

Zoom Teleconference

Approved Meeting Minutes

The O’Hare Noise Compatibility Commission (ONCC) Fly Quiet Committee met via Zoom teleconferencing on Tuesday, September 22, 2020.

Call to Order

Committee Chair Joe Annunzio called the meeting to order at 9:30 a.m. ONCC staff recorded the meeting minutes.

Committee Members Present

Mr. Joe Annunzio, Fly Quiet Committee Chair, Designee, Village of Niles

Ms. Karyn Robles, Fly Quiet Committee Vice-Chair, Designee, Village of Schaumburg

Mr. Evan Summers, Alternate, Village of Bensenville

Alderman Robert Dunn, Alternate, City of Elmhurst

Mayor Arlene Jezierny, Member, Village of Harwood Heights

Trustee Russell Klug, Alternate, Village of Schiller Park

Mr. Ernie Kosower, Alternate, City of Park Ridge

Mayor Nunzio Pulice, Member, City of Wood Dale

Mr. Dennis Ryan, Designee, Village of River Grove

Alderman Malcolm Chester, Designee, City of Des Plaines

Mr. Peter Bialek, Member, Chicago Ward 39

Invited Guests:

Mr. Dan Dwyer, FAiR

Mr. Ron Seymour, Avion

Cynthia Schultz, JDA

Staff and Consultants:

O’Hare Noise Compatibility Commission Executive Director Jeanette Camacho; Chicago Department of Aviation Staff, Mr. Aaron Frame; Landrum & Brown Consultant, Ryan Anderson; ONCC Consultants Maura El Metennani and Fran Guziel

Approval of Minutes

Mr. Ryan moved, seconded by Mayor Pulice to approve the minutes of the August 20, 2020 Fly Quiet Committee Meeting. Motion carried by a roll call vote.

Interim Fly Quiet Report—Part 1

Mr. Anderson reviewed a prepared summary report of the Interim Fly Quiet program from November 2019 to mid-May 2020. He said there was major work on Runway 4R/22L during the summer months and the IFQ resumed in September beginning with week 30. He said the data from November to

September was similar to Test 3. The report included the summary, background, and highlights of the IFQ for that period. He said intended runways were used 50 percent of the time. On average there were 86 operations per evening on 43 percent of designated runways. A summary of the Fly Quiet Mode showed there were six nights in April and May that used the entire nine-hour period of Fly Quiet. This was due to the impact of COVID-19. On November 6, 2019 there was a major snow event causing IFQ to be in operation for just three hours. The average stop time was later, around 6 a.m. due to COVID. Mr. Anderson pointed out a chart on page 3 that indicated the arrival demand when more than one runway was necessary for operations. The airfield was predominantly in west flow during Interim Fly Quiet Part 1. Configuration O (76%) was the most used configuration, followed by H (34%), and I (24%). As for poor usage of designated runways, this was caused by operational requirements (22%), weather conditions (17%), and aircraft parked in critical areas (5%). Total operations were 16,434 with 10,890 total arrivals and 5,544 total departures. These were predominantly in west flow. 11% of wide body aircraft operations were able to use runways less than 10,000 ft. Page 8 had the summary report: 50% of operations occurring on designated runways, average time in Fly Quiet – 7 hours 16 minutes, average start time 10:44 p.m., average stop time, 6:00 a.m. page 9 features the nightly log that breaks out the start and stop time for each night. The report also showed the weekly wind summaries, runway utilization, airline usage which included United, American, FedEx and UPS. The fleet mix report indicated that the most used aircraft during fly quiet mode were the narrow bodies (50%); with wide body aircraft at 32.5%.

Report Discussion

Alderman Dunn wanted to know about arrivals exceeding departures two to one and asked if that was common.

Mr. Anderson said arrivals always dominate early morning demands. Airlines schedule flights to arrive early to get departures out. The flights are early to connect to long-range destinations.

Mr. Kosower wanted to back up the discussion to 50 percent utilization and wanted to know if that occurred because a pilot would not accept a designated runway.

Mr. Anderson said that there are periods of transitional time early in the evening and early morning when utilizing another runway as expected. Safety inspections are another factor, and there are flights are not able to be accommodated on designated runways for either wind or length issues.

Mr. Kosower said that if the COVID effect was eliminated, it looked like the diagonal runways were only used 36 percent of the time

Mr. Anderson agreed.

Mr. Kosower wanted to know if the diagonal runways were out of the mix how much higher would the numbers be if the diagonals are at 36 percent? What happens to efficiency if the diagonals are not part of the mix.

Mr. Dwyer asked how closely this matched the FAA projections in the re-eval for utilization.

Mr. Anderson said that he can take a look at that at another time.

Ms. Schultz asked what the utilization rate would be if there were two long alternative runways and you could designate one in diagonal weeks. Ms. Schultz said they would be defaulting to a third runway long runway. 36 percent utilization of the diagonals is expected due to the larger aircraft utilizing the loner runways. Utilization would be different if we accounted for the wide body aircraft that will not use the diagonals instead of representing it as a missed efficiency on the program.

Mr. Seymour reminded members that they did discuss this, that with diagonal use that there is a way to increase utilization with outreach to airlines and monitoring of aircraft that are used.

Mr. Anderson said further outreach and implementation of a future program that would keep an eye on utilization and follow up with airlines.

Mr. Summers said other airports' community groups do have a role in policing the airlines.

Mr. Anderson agreed with him and said community groups have oversight over noise abatement guidelines who monitor and reach out to airlines.

Mr. Summers wanted to know if it was the responsibility of the Technical or Fly Quiet committee to initiate that oversight.

Chairman Annunzio suggested that the two committees would work together.

Intersection Departures

The Fly Quiet Committee is in the process to develop and approve alternative configuration and is getting closer to moving toward the goal to submit alternatives to the FAA for environmental review.

Mr. Anderson reviewed the Fly Quiet decision pyramid showing where the committee is according to the process. He said that the committee agreed to pursue the potential inclusion of RNAV procedures in a future alternative, and now needs to approve configurations, departure and arrival runways, departure profiles, rotation schedules, ground movement and stakeholder coordination.

Regarding intersection departures, there is a clear explanation with the FAA feedback that they will need to be used.

Mr. Anderson wanted to provide noise comparisons and have the committee determine whether or not it will be an issue. He used the example of Runway 9C for an intersection departure runway showing the aircraft starting at Taxiway FF. The runway is 11,245 ft. and the ID length is 9,202 ft. The number of

ground movements over nighttime hours is significant, including traffic of aircraft towed to the maintenance hangar. Allowing intersection departures would allow the runways to be used and allow traffic to continue to move without affecting efficiency and safety.

He illustrated with the example of Runway 27C with a length of 11,245 ft. and an ID at Taxiway TT would be 9,962 or 1,283 ft. less. It is the same concept of free flow taxi movement. In the example of Runway 9R, the full length once it is extended will be 11,260 ft. and the ID would be at Taxiway TBD at 9,870 ft. or 1,390 ft. less. Again, this allows for free flow movement on the ground for safety and efficiency. Runway 9C could be used for arrivals allows the aircraft to safely taxi back to the terminal. Finally, Runway 27L would use Taxiway TT for ID at 9,961 ft. a 1,299 ft. difference and aircraft can still get to the terminal core.

Mr. Anderson next addressed noise modeling to demonstrate a comparison of ID to full length runway departures. The purpose was to look at the difference in noise and altitude. The AEDT modeling assumptions included:

- Single departure
- Example aircraft used were a Boeing 737-800, a CRJ200 and a 747-800.
- *Standard Departure Profile:*
 - CRJ 200—Stage length 1 (destination St. Louis)
 - 737-800—Stage length 2 (domestic markets, except west coast)
 - 747-800—Stage length 5 (Alaska, more fuel, cargo)
- OMP full build-out layout
- Full length runway vs. Intersection Departures
- Aircraft flies at heading and procedures
- Ten grid points for every runway

Noise Model Chart for Runway 9R

CRJ-200—Full Length (4,019 altitude) Intersection Departure (3,912 altitude) 107-ft. difference
737-800—Full length (4,259 altitude) Intersection Departure (4,067 altitude) 192-ft. difference
747-800—Full length runway (2,478 altitude) Intersection Departure (2,396 altitude) 82-ft. difference

Noise Model Chart for Runway 27L

CRJ200—Full Length (4,004 altitude) Intersection Departure (3,904 altitude) 100-ft. difference
737-800—Full length (4,238 altitude) Intersection Departure (4,057 altitude) 181-ft. difference
747-800—Full length runway (2,461 altitude) Intersection Departure (2,383 altitude) 78-ft. difference

Noise Comparison LMAX at five miles for Runway 9R

CRJ200—Full Length (65.50dB) Intersection Departure (65.89 dB) 0.39dB .48dB higher
737-800—Full length (70.94 dB) Intersection Departure (71.41 dB) .47 dB .50dB higher
747-800—Full length runway (79.36 dB) Intersection Departure (79.77 dB) .41dB .49dB higher

Noise Comparison LMAX at five miles for Runway 27L

CRJ200—Full Length (65.55dB) Intersection Departure (65.91dB) .36dB .45dB higher

737-800—Full length (71dB) Intersection Departure (71.44dB) .44dB .47dB higher

747-800—Full length runway (79.44dB) Intersection Departure (79.84dB) .40db .47dB higher

A 25 degree turn on Runway 9R at Intersection Departure would be 50 percent dB louder.

Mr. Anderson reminded the members that a lesson learned from Noise 101 that the smallest detection change by the human ear is plus one 1dB and plus1-3 dB is noticeable. It is hard to notice a noise difference.

Discussion

Trustee Klug asked what dB comparison is over Schiller Park for full length versus intersection departures five miles.

Mr. Anderson said that he would get that answer for Trustee Klug. He said it would be louder because Schiller Park is closer to the airport. The same significant difference we can get Schiller Park those numbers. He expressed concern about how much it would increase closer to the airport.

Mr. Anderson said it would be about the same increase. He would provide the increase amount at the grid point at the one mile.

Mr. Summers clarified that you cannot get decibel numbers by adding the two together and dividing the sum.

Mr. Anderson said it was done with a logarithmic average.

Mr. Kosower asked what is the potential that the north runway will be designated a long runway and how do you utilize them with intersecting runways.

Mr. Anderson said the use of the north airway will require use of intersection departures. There are times throughout the overnight hours when the full runway will be able to be used.

Mr. Dwyer raised a question on altitude and noise and added there is an x component when one person lives under a departure runway. How much of a difference does that flight make as it relates to runway headings? If the aircraft starts 2,000 ft. further down the runway and initiates its the turn, it takes on a different geometry. He asked how can the committee quantify how different it would be?

Mr. Anderson explained that the turn begins at the runway threshold so there would not be a difference.

Mr. Dwyer asked is the turn initiate over the airfield with full length.

Mr. Frame said it depends on aircraft size and weight. The model does not account for a difference in turn – the model assumes that if the aircraft turns it would be at the threshold.

Mr. Seymour said if the Intersection Departure is in effect and an aircraft needed the full length, air traffic would grant the request. The intersection departures would be more heavily used at the beginning or end, in the middle full length would likely be able to be used.

Mr. Anderson said yes, full-length departures are preferred when operationally feasible. The criteria mention this. Air traffic would be able to use intersection departures for safety and efficiency, at those times when it is not needed, full length departures can be used.

Long Runways

The Committee posed the question and it was presented to the FAA, what long runways can be considered long runways during Fly Quiet Mode? He said once the OMP is complete, there will be four runways over the length of 10,000 feet. On the north airfield there are two runways over the length of 11,000 feet. Most airports in the world don't even have 1 runway at 11,000 feet. Both north runways can accommodate arrivals and departures. For south airfield configurations for both east and west flow, Runway 10L/28R is the designated long runway. During the north airfield configurations, Runway 9R/27L at 11,260 feet is designated as the long runway. When in full airfield configurations are in use, Runways 9R/27L and 10L/28R can both be used as the long runway and Runway 28C. During the crosswind configurations the FAA preferred long runway in west flow will be Runway 10L/28R and in east flow the preferred long runway will be 9R/27L. Today, in IFQ, the preferred long runway is 10L/28R. In Fly Quiet²¹ there are potentially two long runways, 9R/27L and 10L/28R. Each could be paired with a configuration to build predictability into the plan. In the north airfield, the designated runway will be 9R/27L and on the south airfield it will be 10L/28R. On the full airfield, either runway could be used depending on the configuration; the long runways to be used during crosswind configurations could be used as identified by the FAA.

Mr. Summers said he was glad to see there was a second, long runway named, but it does not end a pilot request.

Mr. Anderson said that is right, the FAA would accommodate a pilot's request.

Mr. Summers asked if the CDA had made any progress reaching out to the FAA.

Mr. Anderson said that they are not talking about specific requests. CDA is discussing with the airlines and they have not heard about any decisions yet.

Mr. Summers wanted to know if it was possible to close the south airfield not knowing this variable.

Mr. Anderson said the CDA is committed to exploring that question and he hopes to have commitments by the next meeting. The CDA supports closing either north or south airfield as part of the future Fly Quiet program.

Mr. Dwyer wanted to know for the 4/22 runways headings if the alternates were just for departures or both arrivals and departures. For the 4R arrivals departing 4L, the FAA said both 9C and 9R are acceptable for departures. 9R, 9C, 10L and 10C would require extra spacing for arrivals. 9R would be preferred for both departures and arrivals. For 22R arrivals, 22L departures, 28C is the preferred long runway for arrivals and departures.

Mr. Seymour stated that from a land use standpoint, departures on 28R are more preferable than 28C – he asked if there were any discussions with the FAA to switch from 28R to 28C? He acknowledged that a CRO would be needed but that wasn't a deal breaker.

Mr. Anderson said they would have to get clarification from the FAA.

Chairman Annunzio asked if there was any idea of when the committee would get some of these answers from the FAA.

Mr. Anderson said they are engaged in steady discussions, but he did not have a definite timeline.

Next Steps

Mr. Anderson said that for the October meeting there would be a robust discussion on alternatives presented by the CDA and alternatives submitted by members. It is time to review and revise and the intention is that would be the only agenda item for the meetings moving forward until the committee is comfortable with the revised alternatives to submit to the full commission. The October meeting will be a thorough meeting on alternatives.

The next Fly Quiet Committee meeting will be held on October 27, 2020 at 9:30 a.m. via Zoom teleconferencing.

Audience Comments

Mr. Icuss said there are three metrics when discussing sound – it hasn't been decided which is more important - clarified sound loudness and acoustic pressure. He noted that the 747 is 15 decibels louder than smaller aircraft. Is it possible to limit the 747s that are taking off and banking? What is disturbing is the pressure that one feels. He also wanted to know if the altitudes presented in the report were at sea level.

Mr. Anderson said O'Hare is relatively flat and the measurements were taken at ground level. Mr. Icuss thought that 2,478 ft. at five miles is not that high, the 747s are taking forever to get off the ground. He thought that 747 operations should be limited.

Mr. Grabowski wanted to let the committee know that Elmhurst would submit their alternative configurations on formal letterhead.

Mr. Summers wanted to know when the configurations would be off the table, when the committee would start voting on alternatives.

Mr. Anderson said that the committee would continue to discuss all alternatives until they get to a preferred alternative to present to the full commission.

Chairman Annunzio said he is hoping to have this finished by December.

Mr. Summers replied that he is waiting for the FAA and CDA to let the commission know what will be permitted before a decision can be reached.

Chairman Annunzio concurred.

Mr. Summers stated the committee's decision must be based on fact and not assumptions on what the FAA will allow.

Ms. Ryan moved, and Ms. Robles seconded the motion to adjourn the meeting. The motion carried with a roll call vote. The meeting adjourned at 10:51 a.m.