

Duluth International Airport Part 150 Study

DRAFT MINUTES OF THE MEETING

MEETING: Public Advisory Committee (PAC) Meeting #2

DATE: March 5, 2020

TIME: 1:00 pm – 3:00 pm

PLACE: Amatuzio Conference Room
Duluth International Airport, Duluth, MN

ATTENDEES: Mark Papko, Duluth Airport Authority
Natalie Peterson, Duluth Airport Authority
Jana Kayser, Duluth Airport Authority
David Ross, Duluth Area Chamber
Hannah Alstead, U.S. Senator Tina Smith
Ken Stromquist, Citizen
Ryan Blazevic, 148th Fighter Wing
Rob Troy, 148th Fighter Wing
Scott Rautio, FAA Air Traffic Control Tower
Josh Fitzpatrick, FAA ADO
Lindsay Butler, FAA ADO
Jayme Heim, City of Rice Lake
John Warner, City of Rice Lake
Kevin L. Cornick, Canosia Township
Ken Butler, Citizen
John Mulder, City of Hermantown
John Eloranta, Congressman Pete Stauber
Anna Tanski, Visit Duluth
Kevin Carlson, MNDOT (by phone)
Tom Kleven, MNDOT (by phone)
Gina Mitchell, FAA ADO (by phone)
Jake Martin, FAA ADO (by phone)
Scott Sannes, SEH
Shawn McMahan, SEH
Kaci Nowicki, SEH
Jesse Baker, L&B

NOTE: Meeting presentation and all meeting materials are posted on the project website:
<https://duluthairport.com/noise-study/>

MINUTES:

Jesse Baker from Landrum & Brown discussed the meeting's agenda starting with the results from the short-term noise monitoring. Noise monitoring was performed at 14 of 16 sites during a one (1) week period. The monitoring sites were selected by the public during a previous Open

House meeting. Noise monitoring was completed at each requested site.

Noise was measured by using the Lmax noise metric, which is the peak level of a noise event. The noise monitoring focused on capturing F-16 aircraft operations. Generally, F-16 departures were performed in multiple aircraft formation and arrivals performed by single aircraft. Mr. Baker advised not to confuse Lmax, which is a single event metric, with the Day-Night Level (DNL) metric, which is a 24-hour cumulative average level of noise exposure.

The Lmax noise measurements are not used to build the noise model or noise contours, but are used to verify the model. The measurement results concluded that aircraft noise levels were within reasonable tolerance of model noise levels. Therefore, it was determined that the noise model predicted aircraft noise accurately.

Mr. Fitzpatrick asked how site 14 was selected. Mr. Baker indicated that the site was requested by a land owner. Additionally, noise monitors were deployed to the properties/residences of all citizens who requested it. Mr. Baker provided high level noise monitoring results. A noise monitoring report containing more detailed information was distributed to attendees.

Mr. Baker described the noise modeling methodology. The noise model is the Federal Aviation Administration (FAA) approved Aviation Environmental Design Tool (AEDT) version 3b. Two of the modeling inputs were flight tracks and runway use. The modeled flight tracks were based on actual radar flight tracks. He also used the FAA's National Offload Program (NOP) data. Mr. Baker coordinated with the Minnesota Air National Guard (MNANG) 148th fighter wing to develop the modeling flight tracks for their aircraft. The MNANG approved the flight tracks.

Mr. Baker continued to explain the modeling input parameters such as the aircraft fleet mix, annual operations (takeoffs and landings), stage length, and time of day. He explained that he gathered the number of operations from September 2018 to August 2019 from the FAA's Air Traffic Activity System (ATADS). Specific information about the F-16 sorties and aircraft-specific information was provided by the MNANG.

Relative to flight track use allocation, Mr. Baker explained that flight track use depended on flight destination, origin, and flight procedures used. The military flight tracks were less dispersed than the civil aircraft flight tracks. The Military also has low approach flight tracks, which occur at the end for an arrival when returning to DLH.

Relative to hours of aircraft operations, Mr. Baker clarified that nighttime, for the purposes of Part 150, is defined as the time period between 10:01pm to 6:59am. Ms. Butler from the FAA added that this is an FAA definition, not something DLH developed.

Mr. Baker explained that out of the total Military operations, 97% were F-16 aircraft and the remaining 3% were C-130 aircraft. Also, Runway Use was not the same at night and day. The actual runway utilization breakdown was developed with radar data. Mr. Baker also reviewed run up data.

When describing the Existing Conditions 2020 Noise Exposure Map, Mr. Baker discussed how the run up activities influenced the noise contour. The 1997 NEM had 19,000 military operations, and in 2020 baseline conditions, there were approximately 5,000 military operations. Given that the F-16s provided a great contribution to noise exposure, the 2020 noise contours were smaller than the 1997 noise contours.

The NEM contour maps showed that homes were located within the 65 and 70 DNL contours on the west, north and south side the airport, as well as three (3) barrack buildings within the prison. The Duluth Airport Authority (DAA) would work with FAA to determine how to quantify and evaluate prison population. There was one (1) home north of runway that was within the 70 DNL. Mr. Baker described how the U.S. Census data was used to estimate and determine impacted population level.

Mr. Baker then discussed the assumptions used in modeling the future noise contours, which included the use of forecasts. This Part 150 study used the DLH Master Plan aviation forecasts. Additionally, the increased arm/de-arm activity matches the increased operations, and there were no changes to runway utilization, tracks, stage lengths, or time of day assumptions. Change in commercial service did not have a significant impact on the noise contours since the contour size are really driven by the F-16s. The forecasts did include some change in commercial aircraft fleet, some will drop out some will come in.

Ms. Butler stated that airline service is dynamic. But also when airline operations change, it is typically during the day. Nighttime airline operations are really where the airport might see a difference with them. For example, a new cargo operator during the night may sway it. Fleet changes during the day are not much a factor noise-wise.

The F-35 aircraft was not included in the forecast so it was not modeled in the Part 150 study or used in the Master Plan forecast. It is not currently planned to be deployed at DLH. If the F-35 is deployed to DLH in the future, the MNANG would need to conduct environmental analysis. The ANG has performed F-35 environmental analysis in Madison, WI and Burlington, VT. The ANG did an Environmental Impact Statement (EIS) with a detailed analysis on how the F-35 would impact the community. A National Environmental Policy Act (NEPA) document would be needed prior to any F-35 deployment to DLH.

Mr. Baker then explained future aircraft operational levels. The future noise contours will increase in size by a small amount and include a couple more mobile homes in a mobile home park, and a slightly larger area over the prison. The noise impacts to the north will remain the same relative to the number of homes. Mr. Baker restated that the existing and future noise contours were very similar, with the future contours showing a very slight growth in contour area.

Mr. Baker continued his presentation by discussing the next steps of the Part 150 process. He described the noise abatement alternatives that can be explored which could include flight track and runway use modifications, flight management of preferred tracks, ground activity restrictions, and facility modification which would include changes in airfield infrastructure.

Land Use Management Alternatives that can be considered include the prevention of the introduction of new incompatible land uses within the 65 DNL contour. This could be done through zoning. For example, in areas with no residential use in the 65DNL, zoning could ensure no future residential use. Additionally, corrective actions can be done to incompatible land use with easements, acquisition, and sound insulation. Mr. Baker concluded his presentation by stating that the next meeting will take place in two to three months.

Then, Mr. Baker requested suggestions from attendees on noise abatement alternatives:

Mr. Fitzpatrick asked if the F-16s were driving the contours and complaints, and if DAA was fielding them.

Mr. Baker stated that he did get complaint data from the 148th that the study has documented. Many were from complainants near the Military Operating Areas. Mr. Fitzpatrick added that in future homes in 65DNL, funding for any improvements would come from FAA.

Ms. Nowicki stated that Faye Topliff, a PAC member who was unable to attend, wanted it to be shared that she felt a noise complaint line would add value.

Ms. Butler clarified that if a measure does not have a net benefit on 65DNL, the FAA disapproves it for the purposes of Part 150. It just means it doesn't have a benefit, even though it may still benefit the community in another way.

Mr. Baker added that even though FAA only looks at 65 DNL, the Part 150 Study will still look at the 60DNL as well. You may have an impact of only 1 home in the 65 DNL, but 25 homes in the 60DNL with a specific strategy, for example.

Ms. Butler continued that 65 DNL is the federally established standard. There have been many years of discussion at congressional level that the 65 DNL is the federal level. Some airports have adopted lower local standards, which is their choice. Airports can do that. Airports with sensitive populations in 60-65 for specific land uses (schools for example) have done this. For example, O'Hare and Midway airports, decided they would use 60 DNL for schools. The jurisdictions for land use have to come together and agree. It's generally a pretty high bar to get to. The 65 DNL is just the federal line in the sand. Minneapolis-St. Paul Airport (MSP) sound insulates some areas to the 60DNL, they (the Metropolitan Airports Commission) fund it on their own. Using 60 DNL is not unheard of, it's just rare.

Mr. Fitzpatrick asked if there were any homes from the 1997 NEM that were sound insulated. Mr. Baker answered that he did not believe so and that there were no acquisition for the purposes of noise. Both were alternatives in the 1997 Noise Compatibility Plan (NCP).

Mr. Stromquist asked whether the objective is to mitigate for the people in the 65-70DNL. Mr. Baker responded yes, within the 65-70 band is where the Part 150 looks as a noise impact areas. Ms. Butler stated that yes, the focus is on the 33 housing units that DLH has in that area. This did not, however, include the prison. We generally look at housing units. The NEM identifies potentially incompatible land uses. The program identifies what we are going to do about it. That is what Mr. Baker is asking suggestions for. We would look to the airport to say how they are going to address the identified incompatible land uses.

Mr. Stromquist asked whether there is a penalty if we do nothing. Ms. Butler responded that there is no penalty. But, now we have identified a problem. What you do is not for the FAA to answer. Mr. Fitzpatrick added that something to keep in mind, say we insulate homes. It's a 1 time deal. Mr. Baker added that if an owner declines insulation, they can't come back later and get it. A land owner has to take it when it is offered.

Ms. Kayser asked what if the property owner said no to insulation, then sells and then has a new owner. Ms. Butler replied that it's something the airport has to decide. Also, our guidance generally says homes built after 1998 are not eligible for noise insulation if the airport had an active noise contour at that time. The airport had one in 1997, it was drastically different. We would use the date we sign this one as the line in the sand. If someone builds after that date, they can't be insulated since the map was publicly available. Mr. Baker added that preventative measures can also be building practices, or number of units per building. Ms. Butler stressed

that these 33 housing units are not automatically eligible or sound insulation. We would test the units to see what sound reduction level we could achieve. It has to reach a certain number. The house has to be up to code, we don't bring them up to code.

Mr. Papko asked for a description of an aviation easement. Mr. Baker responded that it would be going to a land owner and buying an easement. You give money for an easement for overflight rights. It's a monetary trade off. Or, you can go to a full acquisition with relocation benefits. There are many ways you can go about the property acquisition process, fee, easement, etc.

Mr. Werner added that the airport has acquired some properties over time. It has assumed that in preparation of the runway extension there would be no homes in the south side of Martin Rd. It's in Zone A which prohibits structures. Some of the land use on the maps may be incorrect. Mr. Baker added that if there are some discrepancies he can adjust them as needed.

Group asked if any land owners in the 65-70 DNL have been notified. Mr. Baker responded that they were notified via mailer, door hangar for the Part 150 Open House. And there was other public notification. The airport could elect to do more direct solicitation for involvement at any time in the process. There will also be additional Open Houses.

Ms. Butler added that in this Part 150, the action would be to agree to do sound insulation, in general. It would not be negotiations with individual land owners to agree to do it or not on a specific property or not. There is a public hearing as part of the Part 150 process as well, which could be a good time that the airport could consider direct invitations to land owners.

Mr. Baker continued that the next meeting will be to review solutions and alternatives. We will both consume your ideas and bounce ideas off of you. We have two (2) more Open Houses (public workshops) in the process where we will get the same feedback from the public. The last one would also include the public hearing.

Mr. Mulder asked if dealing with commercial structures is included in this process. Mr. Baker replied that there are different noise levels that are compatible with each land use, including types of commercial structures. Ms. Butler added that manufacturing is considered compatible up to 85 DNL. Table 1 in Part 150 Appendix A lists all the land uses and their compatible noise levels. It came out of legislation in the 1970s. It is still considered the best we have. There is not, however, one for prisons. We are struggling with that a bit.

Mr. Werner added that there are some pending developments as well in Rice Lake. The properties may become available.

Ms. Butler stated that if any measure is discussed, we still have the legal right and authority to do an environmental study on a proposed measure. If a runway extension to Runway 3/21 is a measure, when and if we go through and carry it forward, the approval will say "Approved for purposes **if** it has a benefit and **if** approved with NEPA review".

Landrum & Brown believes that this document accurately reflects the business transacted during the meeting. If any attendee believes that there are any inconsistencies, omissions or errors in the minutes, they should notify the writer at once. Unless objections are raised within seven (7) days, we will consider this account accurate and acceptable to all.



If there are errors contained in this document, or if relevant information has been omitted, please contact Jesse Baker at jbaker@landrum-brown.com