



## MSP NOISE OVERSIGHT COMMITTEE MEETING MINUTES

Wednesday, July 21, 2021 at 1:30 PM

**\*\*By MS Teams, and Teleconference Only\*\***



### **Call to Order**

A regularly scheduled meeting of the Minneapolis-St. Paul International Airport (MSP) Noise Oversight Committee, (NOC) having been duly called, was held Wednesday, July 21, 2021, by teleconference only. Chair Hart called the meeting to order at 1:30 p.m. The following participated in the teleconference:

**Representatives:** J. Bergman, P. Borgstrom, B. Cloud, T. Cossalter, J. Hart, C. Jacobson, P. Martin, D. Miller, L. Olson, C. Potter

**Staff:** C. Boyd, R. Fuhrmann, P. Hogan, B. Juffer, J. Lewis, D. Nelson, N. Pesky, B. Peters, B. Ryks, M. Ross, M. Takamiya, J. Welbes, L. Werner

**Others:** H. Rand – Inver Grove Heights, B. Hoffman – St. Louis Park, L. Moore – Bloomington, S. Fortier – FAA, K. Mara – FAA, N. Rao – FAA, C. Madden – FAA, and other members of the public

**A quorum** of four Community Representatives, and four Industry Representatives was established by roll call attendance:

**Community Representatives:** J. Bergman, C. Jacobson, P. Martin, D. Miller, L. Olson

**Industry Representatives:** P. Borgstrom, B. Cloud, T. Cossalter, J. Hart, C. Potter

### **1. Consent**

#### **1.1. Introductions**

Members introduced themselves.

#### **1.2. Review and Approval of May 19, 2021 Meeting Minutes**

There were no questions or revisions to the May 19th meeting minutes.

#### **1.3. Reports**

##### **1.3.1. Monthly Operations Reports: May and June 2021**

**Michele Ross, Assistant Technical Advisor to the NOC**, provided May and June 2021 operations updates. (Presentation materials are available on [macnoise.com](http://macnoise.com)):

**MAY**

- Total Operations: 23,953
- Nighttime Operations: 1,042
- North/South/Mixed: 28/59/5 (%)
- RUS (Priority 1/2/3/4): 37/14/0/48 (%)
- RJ/Narrow/Wide: 44.2/52.5/3.3 (%)
- Complaints: 14,202
- Complaint locations: 294
- Top 10 Households: 56%
- Hours of events\*: 318
- Number of events\*: 65,306
- R17 procedure: 99.9%
- EMH Corridor procedure: 90.8 %
- Crossing procedure day: 29.6%
- Crossing procedure night: 52.4%
- RUS: 51.8 %

\* Aircraft sound events above 65dB.

**JUNE**

- Total Operations: 27,002
- Nighttime Operations: 1,478
- North/South/Mixed: 35/43/15 (%)
- RUS (Priority 1/2/3/4): 37/18/1/45 (%)
- RJ/Narrow/Wide: 45.9/51/3.1 (%)
- Complaints: 10,261
- Complaint locations: 291
- Top 10 Households: 49%
- Hours of events\*: 309
- Number of events\*: 66,699
- R17 procedure: 99.0%
- EMH Corridor procedure: 97.0%
- Crossing procedure day: 38.7%
- Crossing procedure night: 45.5%
- RUS: 54.6%

**Co-Chair Miller** requested additional information related to the increase in the use of Runway 17, noting that Runway 17 is being used twice as much as the parallels when the Runway Use System indicates the parallel runways as a first priority. **Miller** noted sweeping turns during nighttime hours and a reduction in the use of the abatement procedures. **Miller** requested quantification of construction impacts to Runway 17 usage and whether runway headings are being used disproportionately, particularly headings 130 and 140. **Ross** will follow up with additional information.

**Member Olson** noted that the Runway Use System prefers the use of Runway 12L and 12R for departures and that Runway 12R seems to be underutilized when Runway 17 is in use. Noted the change for Eagan residents as activity rebounds. Olson requested clarification of the operation to complaint ratio and noted that one complaint for every two operations seems like a high number. **Ross** provided clarification.

### 1.3.2. Status of Aviation Noise, Environment, and Health-Related Research Initiatives

There were no questions related to research initiatives.

**Member Bergman moved**, and **Member Martin seconded** approval of the Consent items listed above. The motion passed on the following roll call vote:

**Ayes:** Ten

Bergman, Borgstrom, Cloud, Cossalter, Jacobson, Martin, Miller, Olson, Potter, Hart

**Nays:** None

**Abstain:** None

## 2. Public Comment Period

There were no questions or comments from the public.

## 3. Business

### 3.1. Nomination and Election of Co-Chairs

**Member Martin moved**, and **Member Olson seconded** nomination of Dianne Miller as the Community Co-Chair. The motion passed on the following roll call vote:

**Ayes:** Five

Bergman, Jacobson, Martin, Olson, Miller

**Nays:** None

**Abstain:** None

**Member Borgstrom moved**, and **Member Potter seconded** nomination of Jeff Hart as the User Co-Chair. The motion passed on the following roll call vote:

**Ayes:** Five

Borgstrom, Cossalter, Cloud, Potter, Hart

**Nays:** None

**Abstain:** None

### 3.2. MAC Residential Mitigation Program Update

**Brad Juffer, NOC Technical Advisor**, provided a history and overview of the Amended Consent Decree residential mitigation program.

For 40 years, the Airports Commission has invested resources in sound insulation efforts to reduce the impact of aircraft operations at MSP. The MAC mitigation programs have gone through various phases and taken on different names during those 40 years.

Early mitigation efforts were aimed at providing relief to residential properties in specific noise-impacted areas near MSP. The program first began in 1992. In the early years of the program, neighborhoods most impacted by noise were provided relief first and then began to branch further away from the airport. This original program was conducted from 1992 – 2006 and provided relief for all participating homes within the 1996 65 dB DNL contour. In total 7,800 single family homes, 1,300 multi-family units and 19 schools received products and services from MAC. The school program began in 1981. Additionally, during this phase, the MAC acquired 437 residential properties.

Total investment from 1981 – 2006 for corrective efforts by MAC totaled \$385.6 million dollars. The program during those years was carried out as prescribed by FAA through a Part 150 program. The mitigation efforts were designed to provide relief in the forecasted 65 dB DNL contour area. The program was eligible for FAA grant dollars.

During the Dual-Track planning process of the late 1980's and 1990's, the MAC was directed by the MN State Legislature to study moving MSP versus expanding the airport at its current location. After extensive review, the decision was made by the Legislature to keep MSP where it was and expand the airport. After that in 1998, the MAC authorized an update to the MSP Part 150 Study. A portion of that Part 150 update focused on a potential mitigation program MAC would offer in the 60-64 dB DNL contour area. The FAA does not fund residential mitigation for sensitive land uses in this area, but MAC made a policy decision to provide some level of relief to these homes.

This study was formally submitted to the FAA in October 2000, but withdrawn by MAC after September 11, 2001 before FAA could comment on the study. The disruptive events of 9/11 forced MAC to want to update the forecast activity level and resultant noise exposure maps.

New forecasts were prepared in 2002 with a 5-year forecast generated for MSP. In the new study, the MAC recommended that homes in the 60-64 dB DNL area of the 2007 Forecast Contour would be eligible for central air-conditioning if they did not already have it. The cities near MSP were expecting the MAC to provide a full relief package to all homes in the 2005 60 dB DNL contour and when that expectation was not realized, the Cities of Minneapolis, Eagan, Richfield and the MPHA filed suit against MAC claiming the MAC had violated the Minnesota Environmental Rights Act. Before final judgement was reached on the suit, the parties negotiated a settlement through Consent Decree.

The original Consent Decree was the first of its kind anywhere in the country. The Consent Decree was the first time the MAC began to provide a tiered noise relief strategy based on a homes' forecast noise exposure. This was also the first time that MAC began to provide mitigation to homes exposed to less than 65 dB DNL noise level. This program was also the first instance where MAC used airport generated revenues to fund mitigation activities instead of FAA grants.

As a footnote, the Original Consent Decree program was also the only time that the MAC administered a reimbursement program for homes that fell between the 2005 Forecast developed before 9/11 and the 2007 Forecast developed after 9/11.

The original consent decree program was administered from 2007 – 2014. Total expenditure on that program was \$95.1 million dollars. The MAC provided a full mitigation package to 404 SF homes, provided partial packages to 5,055 single family homes, reimbursed 1,773 homeowners and provided improvements to 1,976 MF units.

The final iteration of MAC's mitigation efforts will bring us to present day. In January 2013, the MAC published the final MSP 2020 Improvements EA/EAW cataloging environmental impacts of MSP terminal and landside developments through 2020. While these improvements were not expected to expand noise exposure, due to the natural growth anticipated at the airport, the public focused on the future of the MAC mitigation program.

In response to these comments, the NOC developed and recommended a new noise mitigation plan that would maintain the tiered approach to mitigation based on noise exposure. The major change to the program that would eventually be implemented in 2013 was to base eligibility on actual noise exposure instead of forecasted noise exposure. This eligibility required a home to be within the actual 60 dB DNL contour level for 3 consecutive years. The amended consent decree program was accepted by the court and approved by the FAA in late 2013.

While this program is set to terminate on December 31, 2024, the program requires that a home achieve its first year of eligibility no later than 2020. In 2020, the contour contracted for the third consecutive year and no homes achieved that first year of eligibility. Consequently, all homes that will be mitigated under the First Amendment to the Consent Decree have already been identified. No more homes will be added to this program.

Through April 2021, 905 homes in Minneapolis have been completed. Additional homes are in construction both in Minneapolis and Eagan. Homes having achieved eligibility can participate through 2024. Because it is not complete, the number of homes completed, and expenses will continue through 2024 as well. Through April, the MAC has invested nearly \$510 million dollars on noise relief in neighborhoods and communities near MSP.

MAC staff has had internal conversations about the sunset of the program. At the conclusion of those conversations, MAC staff believe the proper course of action would be to continue the current program beyond 2024. The current program is the most expansive mitigation program in the country and represents the most direct form of tangible relief to neighbors most affected by aircraft noise from MSP traffic.

Staff believes the best vehicle to offer this relief would be in the form of another amended Consent Decree. An amendment would allow the clarity provided by a legal framework to continue. Parties to the Consent Decree have shown willingness in the past to work together to amend the program. More importantly, the Court and the FAA have approved amendments in the past that have allowed the program to continue. In both the original Consent Decree and subsequent amendments, approval by FAA was a requirement and was also a challenging burden to overcome. Given their past approval, staff is optimistic that an amendment that does not significantly alter the program and would simply extend the sunset date, would be approved by FAA.

The NOC will be asked to take the action that is laid out in the meeting's memo. That action would then be forwarded on to the MAC PD&E Committee and full MAC Board in August. Assuming their approval, the Board will direct staff to begin negotiations with the parties on a 3rd amendment. After that negotiation period, the parties will need to individually approve an amendment through City Council or MAC Board action. A proposed amendment would be submitted to the Court and FAA for their approval. While not a requirement, the staff desire would be to complete an amendment by the end of the year.

City of Richfield members was not able to attend the meeting. As a party to the Consent Decree, Richfield asked that a comment letter be read on their behalf.

“The City of Richfield would like to enter into the record its strong support for the continuation of the Metropolitan Airport Commission’s Noise Mitigation Program in a manner that is consistent with the current provisions of the Consent Decree.

As a party to the original Consent Decree and its successive amendments, the City has appreciated and valued the efforts of all the parties to create and implement a program that provides critical noise relief to residents surrounding MSP. The success of the current program and the uncertainty of the future noise environment around MSP, reinforces that residential noise mitigation remains a priority and an important component of the sound mitigation efforts at MSP.

With the support of the Noise Oversight Committee, Richfield city officials and staff look forward to engaging with all parties to the Consent Decree to ensure the continuity of a noise mitigation program well into the future.”

**Chair Hart** thanked Juffer for his report, then asked the Committee if they had any questions.

**Member Olson** noted that this would initiate the conversations to continue the Consent Decree and noted that the motion had more specificity than expected at this stage in the process. Although it is expected that the program may continue as it stands, there has not been an engagement of relevant city staff and therefore can only commit today to initiate the process and not the elements of the program.

**Chair Hart** requested clarification regarding who are the parties of the Consent Decree. **Juffer** clarified that the parties to the Consent Decree are the MAC, the cities of Minneapolis, Richfield, Eagan and the Minneapolis Public Housing Authority.

**Co-Chair Miller** thanked the MAC for initiating the conversation and requested that program details be removed from the action at this time and just that the NOC recommends the process continue forward.

**Juffer** clarified that the action was worded as provided to replicate and be consistent with past Consent Decree actions. Additionally, the FAA would need to approve any amendment and it was a significant hurdle for the FAA to allow for the MAC to use airport revenue for the program. MAC staff felt that consistency with the existing program has the best chance of achieving continued FAA approval.

**Member Olson** noted support for Co-Chair Miller’s change to the motion and would like to move forward in good faith to move quickly and maintain the program into the future.

**Requested Action:** The NOC supports continuation of the Noise Mitigation Program, in a manner consistent with the provisions of the Consent Decree. Further, the NOC requests that MAC staff explore continuation of the program with the parties of the Consent Decree for future consideration by the Commission, court and FAA.

There was a motion by **Co-Chair Miller**, with a second by **Member Olsen**. The motion passed on the following roll call vote:

**Ayes:** Ten

Bergman, Borgstrom, Cloud, Cossalter, Jacobson, Martin, Miller, Olson, Potter, Hart

**Nays:** None

**Abstain:** None

#### 4. Information

##### 4.1. Minnetonka Mobile Sound Study Report

**Brad Juffer, NOC Technical Advisor**, provided an overview of the Minnetonka Mobile Sound Study. In 2019, the City of Minnetonka formally requested a Mobile Sound Monitoring Study by completing the noise monitoring request form. The form and letter were sent to then at-large NOC representative Mary Brindle. Representative Brindle worked with MAC staff to evaluate the request and in November of 2019, the NOC added the study to the 2020 NOC Work Plan. Due to significant reductions in air traffic in 2020, MAC staff consulted with the City of Minnetonka staff and with NOC approval, the study was deferred to 2021. At the end of May, MAC staff completed the field data collection and compiled the report for the NOC consideration.

MAC staff relied on previous experience conducting sound studies and also consulted with City of Minnetonka staff to setup the Study Scope, including purpose and expectations. The purpose of the study was to collect aircraft sound measurements specifically targeting the northeast portion of the city. The study was meant to provide information about MSP sound levels in this area of Minnetonka, analyze aircraft and community sound levels and compare both field monitored, and computer modeled data. As always, mobile studies in no way provide annualized data nor do studies change residential mitigation eligibility.

MAC staff identified a handful of potential locations to site the equipment. After consult with City staff, the Minnetonka Fire Station #2 was chosen as the best site available given existing criteria. The equipment was placed on May 21 and picked up on June 1. This provided full days' worth of data from May 22, 2021 through May 31, 2021. The equipment was sited to be near arrival paths to MSP in and the data was ultimately matched with only MSP traffic. The site was almost directly under the final approach course for Runway 12R. Due to potential conflict with road traffic on Highway 169, this was nearly as close to the airport whilst still being in the City of Minnetonka.

To eliminate ambient noise, the same parameters as for the permanent sites were used by requiring sound levels to be at or above 65 dB for a minimum of 8 seconds to be considered an event. When an event has been recorded, the MACNOMS system then searches for an MSP flight track that falls within specific time and space requirements.

The amount of traffic near the temporary site and the number of events recorded were highest on May 27, followed then by May 30. On May 27, there were 414 arrivals within 1 mile of the site and 57 events recorded. On May 30 there were 316 arrivals within 1 mile of the site and 20 events recorded. There are two variables that exist on those days and in parts of other days that contribute to this result. First and most importantly, the airport was configured in a south flow for the majority of both of those days. When aircraft are arriving from the north to land on Runways 12L and 12R, there are more aircraft that overfly this area. If aircraft are departing to the north, the dispersal of traffic and the destinations of most of the traffic would direct them away from this area. The 2nd variable that contributes to the increase in events on these days is the amount of time spent in IMC vs VMC flight conditions. IMC or Instrument meteorological Conditions require that air traffic controllers direct pilots to utilize instrument arrival procedures and separate aircraft differently. VMC or visual meteorological conditions allow pilots to fly with visual cues outside of the cockpit. The difference in where aircraft fly when IMC or VMC conditions exist manifest itself in this area of the community. On May 27, there were 17 hours spent in IMC conditions while all 24 hours of May 29 were VMC. Very few of the arrivals to Runway 12R fly through central Minnetonka on or south of the monitoring site on May 27. The majority of the aircraft are aligned with the runway northwest of this area. On May 29, may more arrivals fly a visual approach and join the final approach to the southeast of this location, more over St. Louis Park. Due to the altitude of aircraft and lower probability of causing an event to begin with, much fewer events are recorded.

MAC staff listened to every event recorded and found the loudest events were all caused by community sources. Beyond those events, the majority of events from a community or aircraft source are interspersed between 75 and 85 dB SEL. The loudest aircraft events recorded during the 10 day study period was a charter 737-400, which is an older aircraft that is not flown for scheduled service at MSP. The Top 10 Aircraft events all had Lmax levels below 80 dB.

MAC staff used actual flight track data from the same dates as the study period and modeled aircraft events using the FAA approved noise modeling software, AEDT. While monitoring and modeling produce the same metric results, each method had pros and cons. Modeling allows for data to be available beyond the single site where equipment was deployed. Modeling does not need to consider or filter ambient noise. Modeling, however, cannot replicate exactly the operational characteristics of aircraft in flight or environmental variables. While weather and terrain inputs are considered in the model, weather is input as an average of the study period and terrain does not necessarily consider foliage, ground reflection or sound shielding from buildings.

There were no questions related to the report.

#### **4.2. Meet the Fleet**

**Brad Juffer, NOC Technical Advisor**, thanked Endeavor Air and past NOC member Chris Finlayson for agreeing to this concept. The focus was to give customers an inside view of the airport and also to help demystify that airplane that they may see when out for a walk or enjoying a BBQ on their patio. The first iteration features the Canadair Regional Jet 900 aircraft. This is currently the most flown aircraft at MSP, which made it an easy choice to lead off the series.

<https://macnoise.com/meet-fleet>

The Airbus A220 is the next aircraft on schedule in the series.

## 5. Announcements

### Summer Listening Session

Wednesday, July 28, 2021 @ 6pm

Virtual via Teams

### September NOC Meeting

Wednesday, September 15, 2021 @ 1:30pm

## 6. Adjourn

**Chair Hart** thanked the members of the Committee, NOC staff and residents in attendance. The meeting was adjourned at 2:24 pm.