



## Minneapolis-St. Paul International Airport Noise Oversight Committee (NOC)



### **NOC Committee Members**

Paul Buckley	Scheduled Airline Representative (Delta Air Lines)
Cheryl Jacobson	Community Co-Chair, City of Mendota Heights Representative
Sarah Alig	City of Eagan Representative (City of Eagan)
Grant Fitzer	Minnesota Business Aviation Association Representative
John Bergman	At-Large Community Representative (Apple Valley City Council)
Connor Arnold	At-Large Airport User Representative (Endeavor Air, Inc.)
Chris Swanson	City of Richfield Representative (City of Richfield)
John Klinger	Chief Pilot Representative (Delta Air Lines)
Emily Koski	City of Minneapolis Representative (Minneapolis City Council)
Dwayne Lowman	City of Bloomington Representative (Bloomington City Council)
Angie Moos	Cargo Carrier Representative (United Parcel Service)
Casey Potter	Charter/Scheduled Operator Representative (Sun Country Airlines)

### **MEETING AGENDA**

March 20, 2024 at 1:30 PM

#### **IN-PERSON AND VIRTUAL MEETING FORMATS AVAILABLE**

**MAC General Office Building, Legends Conference Room, 6040 28th Avenue South, Mpls, MN 55450**

**Microsoft Teams Link:** [Click here to join the meeting](#) or **By Phone:** 612-405-6798, ID: 961 415 542#

*Paul Buckley, Delta Air Lines, will be the acting Chairperson for the meeting*

**Note:** 1:00 to 1:30 PM – Committee Agenda Review Session

(NOC members, alternates, and at-large contacts only in the Wold Conference Room)

#### **1. Consent**

1.1. Approval of January 31, 2024 Meeting Minutes

1.2. Reports

1.2.1. Monthly Operations Reports: January and February 2024

#### **2. Public Comment Period**

#### **3. Business**

#### **4. Information**

4.1. 2023 Actual Noise Contour Report and the Consent Decree Noise Mitigation Program Eligibility

4.2. MSP Construction Updates

#### **5. Announcements**

**Adjourn**



**MSP NOISE OVERSIGHT COMMITTEE**  
**DRAFT MEETING MINUTES**  
Wednesday, January 31, 2024, at 1:30 PM  
MAC General Offices  
6040 28<sup>th</sup> Avenue South  
Minneapolis, MN 55450



**Call to Order**

A regularly scheduled meeting of the Minneapolis, Saint Paul International Airport (MSP) Noise Oversight Committee, (NOC) having been duly called, was held Wednesday, January 31, 2024, at the Metropolitan Airports Commission (MAC), General Offices, Legends conference room, a videoconference option was also provided. **Chair Jacobson** called the meeting to order at 1:30 p.m. The following participated in the meeting:

**Representatives:** S. Alig, C. Arnold, J. Bergman, P. Buckley, G. Fitzer, C. Jacobson, R. Jaeger, D. Lowman, L. Olson, C. Potter, C. Swanson

**Staff:** K. Fisher, R. Fuhrmann, E. Johnson, B. Juffer, A. Kes, J. Lea, J. Lewis, K. Martin, D. Nelson, N. Pesky, M. Ross, B. Ryks, M. Schommer, J. Sonju, M. Takamiya, E. Valencia, J. Welbes

**Others:** G. Albjerg – HNTB, A. Aram – Goff Public, D. Benyas, N. Davis – Edina, P. Dugan – Eagan, S. Fortier – FAA, G. Funk – Sunfish Lake, K. Gallatin – St. Paul, J. Hamiel – Mendota Heights, J. Hays, F. Hetman, B. Hoffman – Saint Louis Park, L. Moore - Bloomington, D. O’Leary – Sunfish Lake, N. Rao – FAA, M. Ray - Burnsville, J. Risser – Edina, Y. Xu – HNTB, C. Vassegni, J. Widing – Met Council, and others

A quorum of at least four Community and four Industry Representatives was established.

**Community Representatives:** Alig, Bergman, Jacobson, Lowman, Olson

**Industry Representatives:** Arnold, Buckley, Fitzer, Jaeger, Potter

**1. Consent**

**1.1. Approval of November 15, 2023, and the November 29, 2023, Meeting Minutes**

There were no questions or revisions to the meeting minutes.

**1.2. Reports**

**1.2.1. Monthly Operations Report: November, and December 2023**

**Michele Ross, Technical Advisor**, provided the following November / December operations updates prefacing that each month, the MAC reports information on MSP aircraft operations, aircraft noise complaints, sound levels associated with MSP aircraft operations, and compliance with established noise abatement procedures on its interactive reporting website:

<https://customers.macnoms.com/reports>

November	December
• Total Operations: 26,082	• Total Operations: 26,865
• Nighttime Operations: 1,671	• Nighttime Operations: 1,830
• North/South/Mixed: 35/33/23 (%)	• North/South/Mixed: 30/53/12 (%)
• RUS (Priority 1/2/3/4):38/19/2/41 (%)	• RUS(Priority1/2/3/4): 32/21/0/46(%)
• RJ/Narrow/Wide: 26/71/4 (%)	• RJ/Narrow/Wide: 26/71/34(%)
• Complaints: 7,989	• Complaints: 12,349
• Complaint locations: 173	• Complaint locations: 194
• Top 10 Households: 63%	• Top 10 Households: 72%
• Hours of events*: 355	• Hours of events*: 415
• Number of events*: 69,672	• Number of events*: 81,098
• R17 procedure: 99.1%	• R17 procedure: 99.8%
• EMH Corridor procedure: 97.1%	• EMH Corridor procedure: 93.7%
• Crossing procedure day: 29.1%	• Crossing procedure day: 26.8%
• Crossing procedure night: 48.5%	• Crossing procedure night: 32.8%
• RUS: 57.1%	• RUS: 53.5%

\* Aircraft sound events above 65dB.

**Member Lowman** asked what the drivers were for the 18% increase in noise at sound monitors above 2022 levels.

**Ross** replied that this is still under investigation. There was a ten percent increase in total operations for the time period, and traffic was in South Flow more often in December in 2023 compared to 2022. In addition, a sound monitor located south of Runway 17 was inoperative, so there was not as much available data for that month.

**1.2.2. Review of Winter Listening Session**

**Michele Ross, Technical Advisor**, shared that on January 24, 2024, at 6:00 P.M., the NOC’s Winter Listening Session was held at the MAC General Offices and via Teams. Attendees included two residents from Mendota Heights, one resident from Edina, and one resident from Eagan. Also in attendance were NOC members Sarah Alig, John Bergman, Kevin Gallatin, and Loren Olson as well as staff from the FAA and the MAC.

Staff provided an overview of complaints received and communications that the Community Relations Office had with residents throughout 2023. After the presentation, staff opened the floor to discussion. Questions arose regarding FAA’s proposed preliminary draft departure procedures as well as ground noise at the airport.

There were no questions or comments.

**Member Olson moved to accept the consent agenda and Member Bergman seconded. The motion carried by unanimous vote.**

**2. Public Comment Period**

**Nora Davis**, of 6921 Southdale Road, Edina, MN., noted that the increase in aircraft noise has become quite evident and she finds the flight tracker application to be helpful with identifying various aircraft types and the directions they are traveling. Ms. Davis also said that community input is important, and she thinks that NOC meetings would be better attended if they were held within communities, rather than at the airport. Ms. Davis cited an example of a Hennepin County meeting that was held at a local library which garnered a lot of community participation. She went on to say that the Teams application isn't as easy as the Zoom application to navigate, which was another reason to hold the meetings within communities to make it easier for residents to participate. Ms. Davis thanked NOC members for their work.

### 3. Business

#### 3.1. Nomination and Election of User Co-Chair

**Michele Ross, Technical Advisor**, provided a brief background about the airport user co-chair position. Jeff Hart, served in the role since 2011 and retired December 2023 after 40 years working for Northwest Airlines and Delta Airlines. The new airport user co-chair will finish out the term running from January 31, 2024, to June 25, 2025.

NOC bylaws specify that airport user representatives are the only members of the NOC that can vote for their user representative co-chair. Each co-chair serves the group they represent. One co-chair represents airport users, the other represents communities. Duties include reviewing agendas, presiding over meetings, calling special meetings, and signing documents as necessary.

#### **Action Requested:**

CONDUCT AIRPORT USER CO-CHAIR NOMINATIONS AND ELECTIONS TO ESTABLISH THE AIRPORT USER CO-CHAIR TO SERVE FROM JANUARY 31, 2024, THROUGH JUNE 25, 2025.

**Member Potter nominated Member Buckley; Member Jaegaer seconded the nomination. There were no other nominations. The election of Member Buckley as User Co-Chair passed via a unanimous voice vote.**

#### 3.2. RNAV Procedure Review Sub-Committee Recommendations

**Michele Ross, Technical Advisor**, stated that the FAA is in the process of upgrading navigational systems used to determine and manage flight procedures at MSP and at airports across the country.

The system currently used at MSP is a ground-based system called a Very High-Frequency Omnidirectional Range (VOR) and the FAA has scheduled to retire this equipment in August 2025. According to the FAA, retiring the VOR, coupled with updates to FAA standards, requires modifying the departure flight procedures at MSP.

The FAA has stated that they will update departure flight procedures at MSP to integrate satellite technology, which includes Area Navigation (RNAV). MSP is one of the last major airports nationwide that does not fully utilize this technology.

The FAA has stated that these updated departure flight procedures will increase safety due to more efficient communications between pilots and air traffic control.

The FAA has stated to the NOC that the FAA's update to departure procedures will consider MSP's existing noise abatement practices and will replicate current departure air traffic to the extent possible, with the goal of dispersing departing airplane traffic above MSP airport's surrounding communities.

The updated departure procedures are scheduled to go into effect August 2025, when the VOR is retired. The MAC is not the decision-making authority on flight procedures. The FAA is fully managing and implementing the update to the departure flight procedures, as the FAA has sole authority over where and how aircraft fly. The MAC is providing input to the FAA on procedure design, including the potential for operational or environmental impacts to surrounding communities.

When the FAA procedure design workgroup met in 2023 to begin to design procedures for MSP, noise considerations were a primary factor. FAA procedure design workgroups include representatives from multiple FAA business units. During the workgroup meetings, there was awareness and acknowledgement across these FAA business units that noise is a concern to communities around MSP and FAA's preliminary draft procedures took that concern into account by incorporating existing departure headings and existing noise abatement practices.

The NOC has received five updates on this project from the FAA since January of 2020. The NOC representatives requested opportunities for learning more about the procedures and any potential changes to the noise environment around MSP. As such, a Sub-Committee of the NOC was established to address this request.

Per Article 9 of the bylaws, the NOC may establish a sub-committee as needed, with a defined task and timeline to complete the task. The task for the RNAV procedure review Sub-Committee includes reviewing the FAA's preliminary proposed RNAV procedures for MSP, reviewing potential changes to the noise environment around MSP as a result of the procedures, and reviewing the communication and community engagement activities related to informing the public regarding the procedures. The Sub-Committee will remain effective until new procedures have been implemented at MSP or until December 31, 2025, whichever is later.

The Sub-Committee is comprised of balanced representation – with equal user and community members. The membership includes three user representatives, including the user Co-Chair, the Chief Pilot member, and the scheduled airline member; and three community representatives, including the Community Co-Chair and members from Mpls and Egan. While the Sub-Committee was comprised of 6 official members, the remaining NOC members were invited to attend the meetings of the Sub-Committee and engage in the dialogue of those meetings.

The MAC advocated for, and the FAA agreed to add, an initial feedback period for the NOC. The FAA has stated they will consider this NOC feedback prior to beginning broader public engagement efforts on the updated procedures. The FAA has scheduled to conduct public engagement workshops in Summer 2024.

The initial feedback period for the NOC is intended to share insight related to aircraft overflights, noise, and meaningful public engagement. The FAA is requiring the NOC to provide initial feedback prior to February 1, 2024.

Ms. Ross acknowledged the work the Sub-Committee and NOC members have undertaken over the past three months in order to meet the deadline. She also acknowledged that this opportunity to review procedures at this early stage in development is not a typical practice of the FAA. The FAA stated that this step in the project has not been conducted at other airports where the FAA has developed and implemented these types of procedural updates.

Provision of this additional step is a testament to the NOC as trusted stakeholder, with a demonstrated record of providing a balanced forum to address MSP airport noise concerns for over 20 years. Provision of this additional step to collect stakeholder feedback is also a demonstration that the FAA is taking a different approach than in the past.

Because this step is being done ahead of the FAA's broader public engagement and in an early stage in the FAA's procedure design process, the procedures have not been finalized and the FAA has not yet had an opportunity to develop the educational and informational materials that the FAA has provided for broader public engagement efforts at other airports. The FAA has stated the procedures are draft and preliminary and that information materials will be developed following receipt and review of the NOC's feedback and will be shared during broader public engagement in Summer 2024.

Due to this early opportunity for the NOC to provide feedback, the amount of information and materials available were limited. The recommendations put forward are therefore based on the information that was available to the Sub-Committee and the NOC at this time. Working with existing information, the NOC was able to develop thoughtful recommendations.

Given the FAA's timeline of February 1 and the importance of providing timely feedback to the FAA regarding their proposed procedures and their engagement efforts, the Sub-Committee drafted preliminary recommendations for consideration by the NOC in November last year. Those recommendations were unanimously approved by the full NOC on November 29, 2023, and the recommendations were submitted to the FAA on that date.

The Sub-Committee and the NOC have since drafted additional recommendations, that have been included as an addendum to the agenda packet for today's meeting.

Ms. Ross summarized the recommendations that the NOC submitted previously, as well as the response received from the FAA on January 5, 2023.

The recommendations that the NOC submitted on November 29, 2023, included 14 recommendations related to engagement and three recommendations related to FAA's preliminary draft procedures.

In the comments the NOC submitted last year, the NOC emphasized public engagement and identifying additional opportunities for the FAA to engage with the public by seeking community input and not simply informing the public and acknowledging that the MAC and the NOC may not entirely capture the views of the community.

The NOC's recommendations also emphasized increasing transparency and effective communication by requesting the FAA develop a communication approach that considers the communities sensitive to RNAV design based on previous projects.

The NOC requested the FAA communicate project impacts and anticipated changes to noise exposure. The NOC also requested the FAA increase public awareness regarding the project and that the FAA find additional opportunities for the public to participate in the process.

In addition to the 14 recommendations regarding engagement, the NOC's recommendations also identified three opportunities for the FAA to replicate existing flight paths to increase dispersion and prevent concentration of departing aircraft.

The NOC representatives from Saint Louis Park and Minneapolis identified the potential for concentration of departing aircraft from Runways 30L and 30R flying runway headings, noting that the residential areas located below these headings are areas that are also overflown by arriving aircraft to Runways 12L and 12R. This resulted in the Sub-Committee drafting a recommendation for the FAA to evaluate more dispersion for straight-out departures on Runways 30L and 30R.

Additionally, the NOC representatives from Minneapolis, Eagan, and Mendota Heights identified the potential for departing aircraft to fly over areas that currently do not receive these types of overflights. This resulted in two recommendations that requested the FAA turn departures on course similarly to how they depart the airport today.

The Sub-Committee supported the considerations raised by NOC representatives and the NOC held a Special meeting on November 29, 2023, to consider and take action on the recommendations. The NOC as a whole, communities and airport users, fully supported bringing these recommendations forward to the FAA and unanimously approved them at that meeting.

In a letter to the NOC dated January 5, 2024, the FAA shared their FAA's commitment to multi-faceted engagement and a two-way dialogue with the public. The letter also states that the FAA will consider comments received by the public during the public comment period in Summer 2024 and that the FAA will review procedural input for feasibility, safety, and efficiency.

The FAA stated that they will lead the assessment of noise impacts and other environmental factors pursuant to the National Environmental Policy Act and will begin that process later in 2024.

The FAA stated that they will host public workshops live on a virtual platform and record those events to be accessible following the event.

The FAA also stated that the NOC and the MAC will continue to play a vital role with the FAA to develop and discuss next steps.

The FAA's letter also stated a continued commitment to consider the NOC's feedback provided on or before February 1, 2024. The Sub-Committee met again this year to discuss additional recommendations given they had until Feb 1 to submit additional recommendations to the FAA.

The following additional recommendations that have been drafted by the Sub-Committee for NOC's consideration and action today.

The draft recommendations for consideration by the full NOC today include ten recommendations related to engagement and environmental review and nine recommendations related to FAA's preliminary draft procedures.

The draft recommendations continue to emphasize the importance of engaging with the public and providing transparent and effective communication and request that the FAA consider the length of the proposed comment period and the timing of the workshops to allow the greatest opportunity for public engagement. The recommendations also request that the FAA lead the communication and engagement effort and not put city leaders in a position to represent the FAA's project. The recommendations also request that the FAA provide materials for the public as soon as feasible and provide in-person FAA personnel to at least one workshop meeting.

The draft recommendations also request the FAA effectively communicate environmental impacts by providing robust documentation that includes how the level of environmental review was determined as well as the findings of the environmental review conducted for the project.

In addition to the ten recommendations related to engagement and environmental review, the draft recommendations also identified nine opportunities to enhance the use of existing noise abatement practices and to reduce the potential for increased concentration of departing aircraft over neighborhoods.

The NOC representatives from Apple Valley, Burnsville and Eagan identified the potential for increased concentration of departing aircraft flying straight-out on Runway 17, as the residential areas located below these headings are areas that are also overflowed by aircraft arriving to Runway 35. This resulted in a draft recommendation requesting that the FAA not create a concentrated departure path for straight-out departures on Runway 17.

Based on input from the MAC to utilize the existing Eagan-Mendota Heights Corridor, the FAA developed preliminary draft procedures that could result in more concentrated paths for aircraft departing Runways 12L and 12R. The NOC representatives from communities to the south of the airport including Eagan, Mendota Heights, and Sunfish Lake identified the potential for increased concentrations of aircraft outside of the boundary of the Eagan-Mendota Heights Corridor. This resulted in a draft recommendation requesting the FAA design procedures that would provide greater dispersion.

The NOC representative from Mendota Heights identified an opportunity to develop additional procedures to enhance the use of the existing Crossing-in-the-Corridor noise abatement practice that directs aircraft over more compatible, commercial, and industrial land uses in the center of the Eagan-Mendota Heights Corridor. This resulted in a draft recommendation requesting the FAA assign a 120-degree heading to additional Runway 12L departure procedures.

The Sub-Committee also heard from NOC representatives from Apple Valley and Burnsville that the MN river provides an opportunity to fly over nonresidential areas, resulting in the Sub-Committee including a recommendation that the FAA keep aircraft over that area as long as possible.

The NOC representative from Minneapolis identified the potential for aircraft flight paths to potentially shift if aircraft stay on runway heading longer than they do today. This resulted in a recommendation to the FAA to evaluate a 500-foot per nautical mile climb gradient to allow aircraft to initiate a turn on course closer to the departure end of the runway.

The NOC representative from Eagan noted the potential concentration of aircraft departing Runway 17 over central Eagan. This resulted in a recommendation to the FAA to design Runway 17 departure



procedures that overfly central Eagan to more closely replicate the way aircraft depart that Runway today.

The NOC representatives from communities to the north and south of the airport including Eagan, Edina, Mendota Heights, Minneapolis, and Sunfish Lake identified the potential for aircraft to concentrate or potentially shift near the first waypoint of preliminary draft departure procedures for Runways 30L, 30R, 12L, and 12R, particularly associated with headings that are frequently utilized on those runways. This resulted in three draft recommendations that request the FAA identify opportunities to spread out tracks, prevent concentration, and replicate aircraft dispersion experienced today. Opportunities may include air traffic controllers directing aircraft on these headings similar to how most departures operate today, shifting the location of the first waypoints, or identifying additional headings.

The Sub-Committee supported the considerations raised by NOC representatives and the NOC as a whole now has the opportunity to act on these recommendations today.

Since the agenda addendum was published, NOC members requested two revisions to the recommendations as shown on this slide. To clarify that there are residential land uses that are located within the Eagan-Mendota Heights Corridor, there is a requested revision to one of the recommendations to better describe the relationship between the corridor and those land uses.

Additionally, a second revision was requested that the language referencing westbound departures was removed as there may be instances when eastbound departures also fly over the river during a Mixed A airport configuration. This revision clarifies that the request is that whenever aircraft are routed over the river, that aircraft stay over the river as long as possible before flying over homes and other noise sensitive areas. It is important to note that in a South Flow configuration when aircraft are departing from Runways 12L, 12R and 17, eastbound departures will not be flying over the river.

If approved today, the additional recommendations will be submitted to the FAA in conjunction with the recommendations submitted on November 29, 2023, which the NOC continues to endorse, and FAA has stated they will review in totality. FAA has stated they will review the NOC's recommendations and incorporate into the procedure design and engagement as feasible. The FAA has also stated that following review of the NOC's recommendations, the assessment of noise and environmental impacts will begin consistent with the National Environmental Policy Act. A broader public engagement is planned for summer 2024 and more information will be available at that time. More information is available at the FAA's project website [www.faa.gov/air-traffic/community-engagement/msp](http://www.faa.gov/air-traffic/community-engagement/msp).

**Action Requested:**

APPROVE THE RNAV PROCEDURE REVIEW SUB-COMMITTEE RECOMMENDATIONS AS AMENDED AND FORWARD TO THE FAA.

**Member Bergman moved and Member Lohmann seconded. The motion carried by unanimous vote**

**Member Olson** thanked everyone for their collaborative work on the comments. She also acknowledged the FAA for their collaboration in providing an early opportunity for public comment. It's not without challenges, because this is preliminary, there have been members of the public that have expressed frustration that they have not seen the procedures yet, which is a legitimate concern.

This shows the challenge of trying to do something in a new way. Overall, despite all of the challenges involved she stated this is definitely a positive step and appreciates the FAA for making this available.

**Member Lowman** thanked **Member Olson** for her comments, and he acknowledged the progressive nature of the work. He went on to mention the importance of having the airport in the Twin Cities metropolitan area, that it is not only a huge economic driver, but also for the ease of transportation. He acknowledged the challenges within the neighborhoods and expressed gratitude for the opportunity to be at the table to have this dialogue. He thanked staff and Sub-Committee members for their hard work.

**Member Swanson** thanked everyone for the collaborative process in working together for the best for all communities. He thanked staff for walking everyone through the highly detailed and technical process and he acknowledged the work of the NOC in helping to create a more collaborative discourse with the FAA.

**Member Risser** mentioned, regarding Ms. Davis's public comment point, that the Team's application can be tricky. She went on to say that she supports her fellow members' statements about how the process is moving along, and she is hopeful that this will be something that the public can engage in and feel good about.

#### 4. Information

##### 4.1. 2023 Fleet Mix and Nighttime Operations Assessment

**Michele Ross, Technical Advisor**, stated that MSP experienced stable growth in total operations from 1990 – 2004 when the airport peaked at more than 540,000 total takeoffs and landings. Airline mergers and economic disruptions in the following years reduced total operations. The airlines began the process of up gauging aircraft, flying more people on fewer flights using bigger aircraft. From 2014 – 2020, the airport had a period of stability in terms of total operations, while more and more passengers continued to use the facility each year. In late March 2020, when the pandemic began to impact the aviation sector, MSP was ahead of 2019 passenger and operations levels, year-to-date. The pandemic caused operations to decline about 40%, to just under 245,000 landings and takeoffs in 2020. The airport has been recovering. The final 2023 MSP operation total is 323,945 operations, which puts the airport at about 80% of 2019 levels and 4% above 2022 levels.

While the number of operations remains below operation levels prior to the pandemic, the dynamically changing fleet has resulted in airlines being able to increase the number of passengers per flight.

There has been an increase in the use of narrowbody aircraft at MSP, which can move approximately 100 more passengers per flight than the smaller regional jet aircraft depending on the specific aircraft type.

Average passengers per flight last year exceeded or were very close to the same months in 2022. These levels have come a long way since the low of 14 average passengers per flight in April 2020

In 2023, MSP continued to be dominated by airline carrier jet aircraft operations. 93% of all movements at MSP were in this category of aircraft. The remaining categories include about 4% in a general aviation jet aircraft, about 2% in a turboprop aircraft and about 1% in a piston driven aircraft.

Of that carrier jet group, they are further categorized into three groups of aircraft based on general size. In 2023, the split between regional jets, narrowbody jets and widebody jets was 26/70/4%. 2023 saw an increase in the number of narrowbody jet operations compared to 2022.

In 2023, the most flown aircraft was the Boeing 737-800. That aircraft was followed by the Embraer E170 regional jet aircraft, followed by the Boeing 737-900 and the Airbus 321.

The B737, E170, and B739 were used for 15.4, 11.8 and 11.5% of all carrier jet operations respectively. The FAA and ICAO have set the maximum noise level an aircraft can produce as measured at 3 specific points along the track of a flight—lateral, flyover (takeoff), approach. For Stage 3 standards, the aircraft is given a maximum noise level at each of these points subject to the number of engines on the airplane and the maximum takeoff weight. Because of the engine and weight component, the maximum noise level is different for every aircraft on this chart.

When Stage 4 and Stage 5 regulations were codified, they were implemented relative to Stage 3. An aircraft certificated between 2006 and 2017 were required to have 3 noise measurements that were cumulatively 10 dB below the Stage 3 limit. Aircraft certificated after 2017 must have the 3 measurements points be 17 dB below Stage 3.

All aircraft approaching MSP follow a 3° glideslope into the runway which would mean at five NM, the aircraft should be at 1,592 feet above the ground.

In general, the departure altitude of aircraft is impacted by aircraft weight and weather conditions—primarily temperature and wind. In April and May 2020, there were less than 50 passengers on each airplane on average. The lack of weight allowed aircraft to climb faster, and altitudes peaked. In 2023, while total operations have not returned, the average passenger per aircraft has generally returned to pre-pandemic levels and now average departure altitudes are also in the range of average altitudes prior to 2020.

The amount of aircraft activity happening at night at MSP increased last year. Note that operations during the federal definition of night, 10:00 PM and 7:00 AM; as well as activity during the MSP nighttime (10:30 PM – 6:00 AM), was fairly stable from 2016 – 2019. Last year there were 62 total arrivals or departures on average every day between 10:30 PM and 6:00 AM, which is up about 13% from the previous year.

The 62 average daily nighttime operations are split roughly 68/32 between arrivals and departures. 72% of the arrivals used the south parallel runway 30L or 12R for arrival while 60% of the departures used one of those runway ends.

In 2023, similar to past years, Delta Air Lines had the highest contribution to the total nighttime traffic at MSP. While they contribute the most, 94% of their schedule was flown during the daytime hours in 2023. As for cargo carriers – nighttime isn't the majority of their schedule. UPS flew 33% of its flights at night and FedEx flew 25% of its flights at night.

The majority of the night flights in 2023 happen in the 11:00 PM hour, 10:30 PM half-hour and 5:00 AM hour.

**Member Lowman** asked, regarding the 2023 MSP carrier jet usage with cumulative certificated noise levels slide, that there have been changes in fleet mix over the past few years and it would

be helpful to see charts from, for example, five years ago, to see the difference in noise impacts. He acknowledged that there is no easy way to measure the change between the years and fleet mix, so his remark is more of a comment.

**Member Lowman** also asked, regarding nighttime operations, about a letter the NOC had sent to airlines in the past asking them to mitigate and decrease nighttime operations. He wondered what the impact was from that letter and if it may make sense to send another to see if we can effectuate change? He acknowledged that every airport is different but wondered how MSP compared to others regarding nighttime operations. He would like to know if staff could put together information for the public about the work and investments that have been done by the NOC, the airlines, and communities in order to mitigate nighttime noise and make it a (better) place to live around this economic driver (MSP).

**Chair Jacobson** asked Ms. Ross if she could follow up on any results produced by the letter that Member Lowman mentioned.

**Ms. Ross** affirmed that she would follow up with the letter and report back to the committee. She also mentioned that she would follow up on Member Lowman's scope request as well.

**Member Bergman** addressed Member Lowman's comments regarding looking at data from five years ago, saying that in order to have real numbers, we have to take the Covid time period out of the data. We need to look at the time prior to, or post Covid for comparisons.

Regarding nighttime flying it depends on what the general public wants to do and even which side of the country you are coming from. The general public in the long run benefits from what is going on here, and we want to make sure that what we do isn't detrimental to the airline industry.

**Member Olson** regarding the runway use at night chart; according to the data, the south parallel runway gets used for 31% of all nighttime departures and 33% of all nighttime arrival traffic uses 30L, which is a big burden when it is considered to be the worst option in terms of noise abatement. This has been brought up at other times; how can we take better advantage of industrial or commercial areas so as not to overburden this densely populated area?

**Ms. Ross** appreciated Member Olson's comment and went on to say that there will be a construction update in either March or May. The north parallel runway will be closed for construction for long periods this coming summer, so unfortunately the impact will continue to grow for that runway, but it is a consideration that will continue to be monitored and looked at for opportunities.

#### **4.2. 2023 Complaint Data Assessment**

**Michele Ross, Technical Advisor**, stated that in 2022 there was a 12% decrease in the number of households filing complaints and a 19% decrease in the number of complaints filed compared to 2021. And in 2023 there was a 14% increase in the number of households filing complaints with 997 households filing complaints and a 11% increase in the number of complaints received with 117,924 complaints.

Most new households filing complaints in 2023 were located in the City of Minneapolis. Of the total households, there were 394 new households that filed complaints last year which is about 40% of all households filing complaints. These households filed 10,497 complaints, which is about 10% of all complaints filed for the year.

The top 10 households that filed complaints in 2023 filed 62,985 or 53% of complaints filed for the year; 90% of complaints were filed by fewer than 10% of the households that filed complaints.

Some cities had a decrease in the number of complaints filed in 2023 compared to 2022, (St. Paul, Edina, Bloomington, Apple Valley, Mendota Heights, Sunfish Lake and Inver Grove Heights) while other cities had an increase in the number of complaints filed including Minneapolis with 2,374 more complaints, SLP with 3,668 more, Richfield with 8,838 more, Burnsville with 4,669 more, and Eagan with 3,223 more complaints filed last year compared to 2022. There was also an increase in the number of households that filed complaints in those cities as well as the cities of Bloomington and Mendota Heights.

While a few cities had a decrease in the number of households that filed in 2023 compared to 2022, (St. Paul, Edina, and Inver Grove Heights) other cities had an increase in the number of households that filed including Minneapolis with 15 more households, Saint Louis Park with 16 more, Richfield with 5 more, Bloomington with 9 more, Burnsville with 19 more, Apple Valley with 10 more, Eagan with 18 more and Mendota Heights with 2 more households that filed last year compared to 2022.

While there is a visible concentration of complaints around the airport this map shows that proximity to the airport is not necessarily the primary factor contributing to the number of complaints submitted. Everyone's experience of aircraft noise and activity varies and how someone experiences noise can vary greatly from person to person.

The total number of operations for each complaint filed in 2022 was 3.0 and 2023 it was 2.7.

For most hours during the day other than the noon hour, the 2023 ratio is lower than the 2022 ratio – meaning that in 2023 there were complaints filed per operations than in 2022. In terms of the number of complaints filed, most are filed in the 7 am hour with other peaks during the day in the 8, 9, and 10pm hours.

As for complaints filed by complaint reason, complaints can be filed either online or through our complaint hotline. Online, customers select the date, time, airport, and have the option of choosing one or all of the nine complaint descriptors provided (describe/name each one). When filing a complaint, one must select at least one of these nine reasons for the complaint.

Carrier jet aircraft operations generated the most complaints per number of operations with helicopters generating the second highest number of complaints per operation.

In general, smaller, regional aircraft had higher than average ratios, so more operations with fewer complaints, narrowbody aircraft are typically at or just below the annual average and large, widebody aircraft were below average, with fewer operations generation more complaints.

The largest % of complaints were received while MSP operated in South and Straight South Flow airport configuration; the airport operated in this configuration about 44% of the time in 2023 but 53% of all complaints were received during this configuration.

**Member Olson** asked if there was an investigation into the couple of months that had an increase in complaints and if there was a correlation to what flow the airport was in leading into early Spring.

**Ms. Ross** remarked that the increase in complaints occurred around the end of last year beginning this year and it's not unusual to see seasonal changes in the number of complaints received. In this case, the airport had a pretty busy year end, and the number of operations was increasing. The 4.84 operation to complaint ratio was anomalous in that for almost every five operations that flew there was one complaint, so in this case there were fewer complaints during that time period. Fewer complaints are typically received in winter months as people are inside most of the time due to the cold weather.

#### **4.3. Meet the Fleet, Good Year Blimp**

**Michele Ross, Technical Advisor**, stated that this [video](#) is part of the series that provides a behind the scenes look at aviation at the MAC system of airports. The Goodyear Blimp aircraft last visited the Anoka County Blaine Airport in 2022.

### **5. Announcements**

#### **March NOC Meeting**

Wednesday, March 20, 2024 @ 1:30 pm

Location: MAC General Offices, Legends conference room + Teams

#### **NOC Spring Listening Session**

Wednesday, April 24, 2024 @ 6:00 pm

Location: MAC General Offices + Teams

[Listening Session website](#)

### **6. Adjourn**

**Chair Jacobson** thanked the members of the Committee, NOC staff, and residents in attendance. The meeting was adjourned at 3:09pm

# MEMORANDUM

ITEM 1.2.1

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**TO:** MSP Noise Oversight Committee (NOC)

**FROM:** Carey Metcalfe, Assistant Manager, Community Relations

**SUBJECT:** **REVIEW OF MSP MONTHLY OPERATIONS REPORTS: JANUARY AND FEBRUARY 2024**

**DATE:** March 6, 2024

Each month, the MAC reports information on MSP aircraft operations, aircraft noise complaints, sound levels associated with MSP aircraft operations, and compliance with established noise abatement procedures on its interactive reporting website:

<https://customers.macnoms.com/reports>.

At the March NOC meeting, MAC staff will provide a summary of this information for January and February 2024. To view these summary reports prior to the meeting, visit the "Archive" section at the link above.

# MEMORANDUM

ITEM 3

**TO:** MSP Noise Oversight Committee (NOC)

**FROM:** Michele Ross, Manager, Community Relations

**SUBJECT:** PUBLIC COMMENT PERIOD

**DATE:** March 6, 2024

Members of the public are welcome to listen to the NOC meeting. During the meeting, a public comment period of no more than 20 minutes is included on the agenda. Individuals who wish to speak during the public comment period may do so by following the directions of the chairperson.

Below are some rules of decorum for speaking at NOC meetings.

- Each speaker will have one opportunity to speak and is allotted three (3) minutes. The public comment period is limited to 20 minutes.
- The chairperson will open the public comment period by asking for participants who wish to speak to indicate their desire following the direction of the chairperson. Comments can be made in-person or virtually for those participating using Microsoft Teams.
- Commenters shall address their comments to the NOC and not to the audience.
- Use of profanity, personal attacks, or threats of violence will not be tolerated.
- Interruptions from the audience, such as speaking out of turn, shouting, and other disruptive behavior are not permitted.
- If special assistance is needed to make a public comment, please contact the NOC Secretary at least two days prior to the meeting by sending an email to: [nocsecretary@mspmac.org](mailto:nocsecretary@mspmac.org).



# MEMORANDUM

ITEM 4.1

**TO:** MSP Noise Oversight Committee (NOC)

**FROM:** Michele Ross, Manager, Community Relations

**SUBJECT:** **2023 ANNUAL NOISE CONTOUR REPORT AND THE CONSENT DECREE NOISE MITIGATION PROGRAM ELIGIBILITY**

**DATE:** March 6, 2024

In October 2007, the Metropolitan Airports Commission (MAC) and the cities of Minneapolis, Richfield and Eagan, received judicial approval of a Consent Decree that provided settlement of the noise mitigation lawsuits filed in 2005. Pursuant to the Consent Decree, the MAC is required, by March 1st of each calendar year, to prepare an Annual Noise Contour Report that reflects an assessment of actual noise generated by aircraft operations at Minneapolis-St. Paul International Airport (MSP).

Noise contours use the federally prescribed Day-Night Average Sound Level (DNL) metric, which represents the total accumulation of all sound energy (in decibels or dB) averaged uniformly over a 24-hour period. A 10-decibel penalty is added to each flight occurring between 10:00 PM and 7:00 AM.

### Consent Decree Background

The 2007 Consent Decree was first amended in 2013 in response to concerns expressed by the NOC over the MSP 2020 Improvements Environmental Assessment/Environmental Assessment Worksheet. This amendment created the 2017-2024 Noise Mitigation Program (2017-2024 Program), which established mitigation eligibility based on annual assessments of actual MSP aircraft activity rather than projections. To be eligible for noise mitigation, a home would need to be located for three consecutive years in a higher aircraft noise mitigation area when compared to the home's status under the terms of the 2007 Consent Decree. The first of the three years must occur by 2020. Under the 2017-2024 Program, a Full 5-decibel Reduction Package was offered to single-family homes meeting these criteria inside the 63 dB DNL noise contour while the Partial Noise Reduction Package was offered to single-family homes in the 60-62 dB DNL noise contours. A uniform Multi-Family Noise Reduction Package was offered to multi-family units within the 60 dB DNL noise contour. Homes were offered mitigation in the year following their eligibility determination. The 2013 Annual Noise Contour Report marked the first year in determining eligibility for this mitigation program.

A second amendment was made to the 2007 Consent Decree in 2017. This amendment allowed for the use of the Aviation Environmental Design Tool (AEDT) to develop the actual noise contours each year, beginning with the 2016 Actual Contour. In 2015, AEDT replaced the Integrated Noise Model (INM) as the federally approved computer model for determining and analyzing noise exposure and land use compatibility issues around airports in the United States. The second amendment also provided clarity on the Opt-Out Eligibility criteria of the 2017-2024 Program. Specifically, single-family homes that previously opted out of the Partial Noise Reduction Package may participate in the Full 5-decibel Reduction Package, provided the home meets the eligibility requirements.

In 2022, a third amendment was made to the 2007 Consent Decree that established the 2025-2032 Noise Mitigation Program (2025-2032 Program). This program will provide eligibility criteria and aircraft noise relief packages consistent with the 2017-2024 Program through 2032.

### MSP 2023 Contours

The number of aircraft operations (takeoffs and landings) is a prominent factor in noise contour calculation. There was an increase in aircraft noise exposure from flight activity at MSP in 2023 compared to 2022 as MSP made progress to continue its recovery from the ongoing impacts of the COVID-19 pandemic which resulted in the largest sustained reduction in air travel demand in aviation history beginning in 2020. In 2023, MSP supported 323,945 aircraft operations versus 310,235 in 2022. This compares to the pre-pandemic operational level of 406,073 in 2019.

The current program requires the use of the 2007 Forecast Contour as a baseline to measure potential areas of growth, consistent with previous programs. Therefore, this report compares the 2023 Actual Contour with the 2007 Forecast Contour.

Because the total number of operations at MSP in 2023 (323,945) was fewer than the number forecasted in 2007 (582,366), the 2023 60 dB DNL Actual Contour is approximately 33 percent smaller than the 2007 Forecast Contour, and the 2023 65 dB DNL Actual Contour is approximately 44 percent smaller than the 2007 Forecast Contour. The contraction of the contours from the 2007 Forecast to the 2023 Actual Contour is driven by the reduction in aircraft operations due to airlines operating larger aircraft and by the advancements in noise reduction technology on modern aircraft. There were 708 fewer average operations per day in 2023 compared to what was forecasted in 2007.

### 2017-2024 Mitigation Program Status

In 2017, the MAC began mitigating homes meeting the eligibility requirements of the 2017-2024 Program. The program included 138 single-family homes and 88 multi-family units as part of the 2017 program, 283 single-family homes in the 2018 program, 429 single-family homes in the 2019 program, 243 single-family homes in the 2020 program, and 16 single-family homes in the 2021 program. As of January 2024, \$33,028,926 has been spent on mitigating homes pursuant to the 2017-2024 Program.

2020 was the final year that homes could become eligible under the terms of the 2017-2024 Program. The MAC will provide mitigation to eligible homes until the end of 2024. Eligible homes that have not yet participated in the 2017-2024 Program have been notified in writing and will continue to be notified that their deadline to participate is at the end of 2024.

### 2025-2032 Program Eligibility

There are 342 single- and 539 multi-family homes that achieved the first year of eligibility as a result of the 2023 Actual Contour as outlined by the terms of the 2025-2032 Program. Of those homes, 245 single- and 539 multi-family homes are located outside of previously mitigated areas. The remaining 97 single-family homes were previously mitigated under the Partial Noise Reduction Package and have moved into the 63 DNL contour. If these homes remain in a higher noise impact area compared to previous programs for three consecutive years, they will become eligible to receive mitigation in the 2025-2032 Program.

Figures 1 and 2 illustrate the 2023 Actual Contour and mitigation program eligibility.

Figure 1: 2023 Contours and Mitigation Program Eligibility

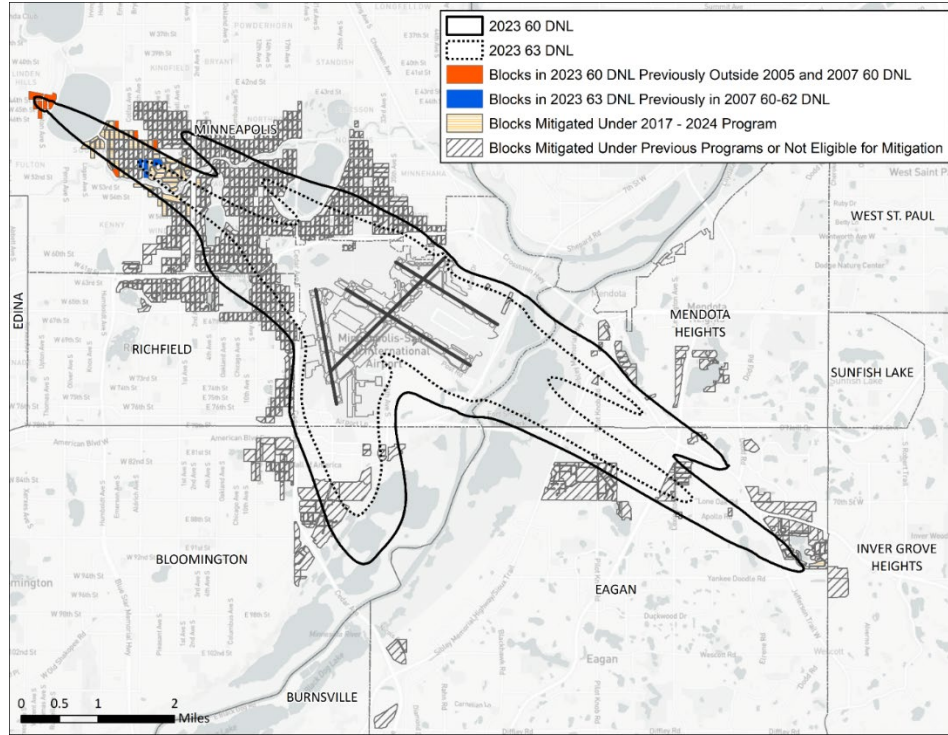
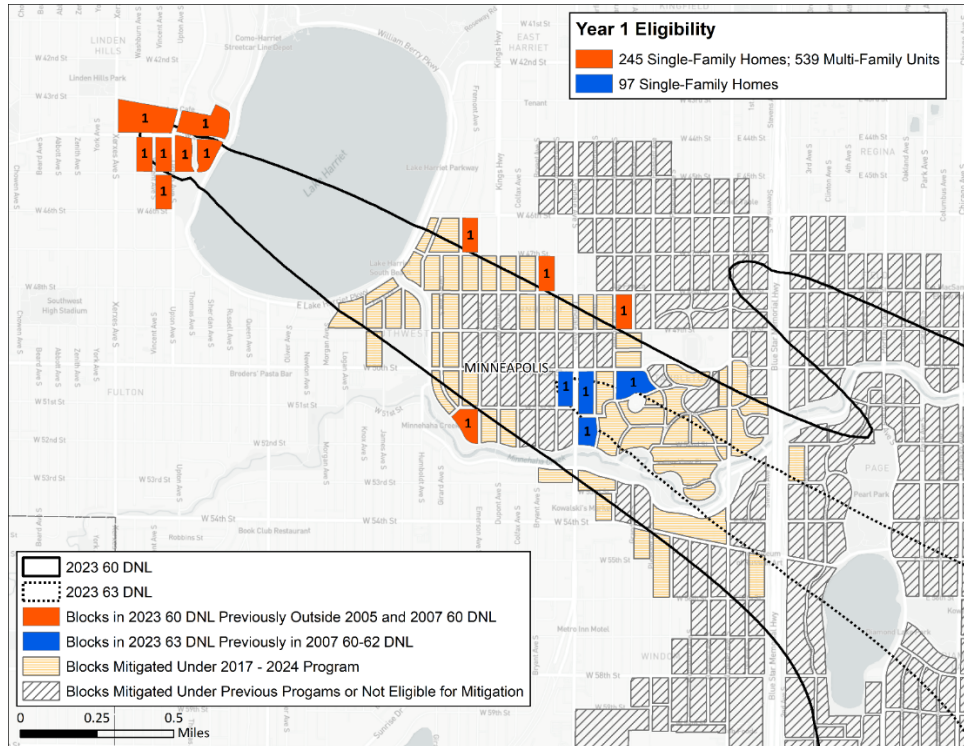


Figure 2: 2023 MSP Noise Contours with Mitigation Program Eligibility – Minneapolis



# MEMORANDUM

**TO:** MSP Noise Oversight Committee (NOC)

**FROM:** Michele Ross, Manager, Community Relations

**SUBJECT:** **MSP CONSTRUCTION UPDATES**

**DATE:** March 6, 2024

The MSP airfield has over 7 miles of runway and 25 miles of taxiways. Maintaining and updating the MSP airfield so that airfield infrastructure (i.e., runways, taxiways, aircraft parking surfaces, etc.) are safe for aircraft take offs and landings is an ongoing process throughout the year and requires coordination of regularly scheduled construction and maintenance tasks that involve pavement, painting, electrical work, signage, navigational aids, and area protection barriers.

Construction and maintenance projects on the airfield at MSP may impact typical runway use. Airfield construction and maintenance may require closing one or more runways at MSP temporarily, even when the activity is not occurring on the runway, to ensure the safety of construction crews and aircraft. Additionally, construction activities can impact how the Federal Aviation Administration (FAA) assigns aircraft to open runways.

Over the next two years, runway and taxiway closures at MSP are planned to complete needed pavement reconstruction and runway safety area grading. This work is necessary to ensure critical airport infrastructure maintains the highest level of safety for handling aircraft operations and conforms to Federal Aviation Administration (FAA) specifications.

Reconstruction work on runways and taxiways will include removing and excavating pavement, followed by laying new granular material, crushed aggregate base, concrete pavement, and bituminous shoulders. The final step in reconstruction will be painting with new pavement markings and installing lights. This work will also include grading around the runways, in an area called the runway safety area. Runway safety areas must be maintained so they are clear of debris, drained and graded and able to support aircraft, snow removal equipment and aircraft rescue and firefighting operations.

This summer, Runways 12L-30R and 4-22 will be closed from June 3, 2024, through September 21, 2024.

While these runways are closed, airport runway operations will be temporarily adjusted to accommodate air traffic. Flights that would normally use these runways must be assigned to alternative runways. People residing in areas around MSP may notice unusual sounds, lights, or aircraft activity while construction and maintenance activities are occurring.

At the March meeting, Pat Mosites, Airport Development Project Manager, will provide the NOC with an update on the construction project and Sean Fortier, FAA Minneapolis District Traffic Management Officer, will provide an update on anticipated runway use during construction.