

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



NOC Committee Members

Jeff Hart User Co-Chair, Scheduled Airline Representative (Delta Air Lines)

Sarah Alig City of Eagan Representative (City of Eagan)

Ryan Barette Minnesota Business Aviation Association Representative

John Bergman At-Large Community Representative (Apple Valley City Council)

Cameron Haven At-Large Airport User Representative (Endeavor Air, Inc.)

Cheryl Jacobson City of Mendota Heights Representative (City of Mendota Heights)

John Klinger Chief Pilot Representative (Delta Air Lines)

Emily Koski City of Minneapolis Representative (Minneapolis City Council)

Ryan Krzos City of Richfield Representative (Richfield City Council)

Patrick Martin 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

May 18, 2022 at 1:30 PM

MAC General Office Building, Lindbergh Conference Room 6040 28th Avenue South, Minneapolis, MN 55450

Jeff Hart, 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 Coleman Conference Room)

1. Public Presentations

1.1. MAC Chair Rick King – 3rd Amendment Consent Decree

2. Consent

- 2.1. Resolution Honoring Dianne Miller
- 2.2. Approval of January 19, 2022 and March 16, 2022 Meeting Minutes
- 2.3. Reports
 - 2.3.1. Monthly Operations Reports: March and April 2022

3. Public Comment Period

4. Business

4.1. Nomination and Election of Community Co-Chair

5. Information

- 5.1. MSP Air Service Updates
- 5.2. MSP Construction Updates
- 5.3. Review of Spring Listening Session
- 5.4. Meet the Fleet

6. Announcements

Adjourn



MSP NOISE OVERSIGHT COMMITTEE DRAFT MEETING MINUTES

Wednesday, January 19, 2022, 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, November 10, 2021, by teleconference only. Chair Hart called the meeting to order at 1:30 p.m. The following participated in the teleconference:

Representatives: R. Barette, J. Bergman, B. Cloud, C. Jacobson, J. Hart, R. Krzos, P. Martin, D. Miller,

L. Olson, C. Potter

Staff: Y. Bizen, B. Juffer, J. Lewis, K. Martin, M. Ross, C. Boyd, R. Fuhrmann, D.

Nelson, N. Pesky, B. Peters, J. Welbes, P. Hogan

Others: H. Rand – Inver Grove Heights, L. Moore – Bloomington, K. Gallatin – Saint

Paul, G. Davis – Delta, S. Calvert – Delta, J. Ipsen – FAA, D. Langer – FAA, Dominika Drozdal – FAA, J. Ronken – FAA, W. Eckenrode – FAA, R. MacPherson – FAA, N. Rao – FAA, Kristi Regotti – FAA, K. Archer – 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: Bergman, Jacobson, Krzos, Martin, Miller, Olson

Industry Representatives: Barette, Cloud, Hart, Potter

1. Consent

1.1. Approval of November 10, 2021, Meeting Minutes

There were no questions or revisions to the, November 10, 2021, meeting minutes.

1.2. Reports

1.2.1. Monthly Operations Reports: November and December 2021

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

Michele Ross, Assistant Technical Advisor to the NOC, and Assistant Manager for Community Relations for the MAC, provided November and December 2021 operations updates.

NOVEMBER

Total Operations: 25,782

• Nighttime Operations: 1,320

North/South/Mixed: 45/39/9 (%)

• RUS (Priority 1/2/3/4):39/14/0/47 (%)

• RJ/Narrow/Wide: 38.9/58.5/2.5 (%)

Complaints: 9,652

Complaint locations: 187

• Top 10 Households: 56%

• Hours of events*: 373

Number of events*: 72,025

• R17 procedure: 99.3%

• EMH Corridor procedure: 95.7 %

Crossing procedure day: 21.6%

• Crossing procedure night: 39.6%

• RUS: 52.7%

DECEMBER

Total Operations: 25,627

• Nighttime Operations: 1,510

North/South/Mixed: 41/47/5 (%)

• RUS (Priority 1/2/3/4):38/14/0/48 (%)

• RJ/Narrow/Wide: 39.3/57.1/3.6 (%)

• Complaints: 8,700

Complaint locations: 157

Top 10 Households: 65%

Hours of events*: 335

Number of events*: 67,564

R17 procedure: 99.6%

EMH Corridor procedure: 92.8%Crossing procedure day: 25.2%

Crossing procedure night: 40.1%

RUS: 52.3%

Ms. Ross provided operations updates for MSP for the months of November and December.

Chair Hart asked the Committee if they had any questions. Hearing none, Chair Hart asked for a **motion to approve** the consent agenda. **Co-chair Miller** made the motion to approve the consent agenda seconded by **Member Jacobson**. The motion passed on the following roll call vote:

Ayes: Ten - Barette, Bergman, Cloud, Hart, Jacobson, Krzos, Martin, Miller, Potter, Olson

Nays: None Abstain: None

2. Public Comment Period

There were no public comments.

3. Business

There were no business items on the agenda

4. Information:

4.1. VOR Minimum Operational Network

Rebecca MacPherson, FAA Great Lakes Regional Administrator, explained that a Very High Frequency Omni-Directional Range (VOR) is a ground-based electronic system that provides information for high and low altitude routes and airport approaches. VOR is part of a conventional navigation procedure and is used in instrument landings and navigation. VOR has been used by the FAA since the 1950s for all phases of flight.

The purpose of the VOR MON Program is to support the National Airspace System (NAS) transition from VOR-based routes to a more efficient Performance-Based Navigation (PBN) structure, consistent with NextGen goals.

^{*} Aircraft sound events above 65dB.

Within the contiguous United States (CONUS), it enables pilots to:

- Revert from PBN to Conventional/VOR navigation in the event of a Global Positioning System (GPS) outage
- Identify an airport with a VOR MON approach, at a minimum altitude of 5000 feet above ground level (AGL) or higher
- Navigate to an MON airport within 100 nautical miles

FAA will discontinue approximately 30% (306) of VORs by 2030, in accordance with JO 7400.2 and established policies. Standard navigational aid removal procedures and circularization will be completed prior to initiating each VOR discontinuance.

Most procedures will be replaced with PBN and GPS navigation. Current departure procedures will be replicated with satellite-based Vector Standard Instrument Departures (SID) vs. ground-based navigation. Noise abatement procedures will be incorporated to the maximum extent possible. Coordination and synchronization will be required between FAA, MSP, and airlines.

Next Steps: Community Engagement

- The MSP VOR will be decommissioned on August 7, 2025.
- Significant efforts will be placed on Community Engagement and Community Involvement throughout the process, in addition to (National Environmental Policy Act) NEPA.
- The Great Lakes Regional Administrator's Office will develop a Community Engagement / Community Involvement Plan.
- The plan and associated timelines will be distributed to the MAC, the NOC and local communities through a variety of means.
- Community Engagement and Community Involvement will take approximately two to three years. Anticipated start will be third to fourth quarter of 2022.
- Identify Collaborative Workgroup and schedule meetings

Next Steps: Procedure Design

- Validate project scope
- IFP design phase
- NEPA
- IFP development
- Flight inspection
- Charting

List of area VORs on the VOR MON schedule include OTG, MKT, DWN, ODI, MSP, ROX, RST, FCM, GPZ.

MacPherson offered to take questions. Chair Hart recognized Member Olson for a question.

Member Olson thanked **Ms. MacPherson** and commented that there is a lot of history with implementation of PBN and concerns around it. The MAC and the NOC are on record in a number of different ways over the years outlining what could help the process be successful.

Olson said that one of the things that the Committee had looked for in the past was to see some examples of where departure procedures have been implemented effectively in a more populated area.

Olson reported that she was happy to hear that the FAA thinks that it's possible to get a condition at the end of the process that is going replicate what is happening more naturally, noise has been dispersed without too many problematic concentrated tracks. Overall, it should be a great process and it could be an example of how to successfully engage the community and implement procedures. Minneapolis is looking forward to ensuring the necessary robust public engagement and hopes it won't be long before proposed tracks are available for review. The public will want some of the data that usually comes with the environmental assessment and the NOC should be prepared to talk to the community about potential noise analysis. **Olson** requested clarification for how the process can be done in a way that is going to work for long-term sustainability of the procedures at the airport and for the community around the airport.

MacPherson thanked **Member Olson** for her comments and said she looks forward to working with the group to make this process as smooth as possible. She went on to say that Minneapolis has a long history of community engagement and the mature relationship that the NOC and the MAC have developed with the surrounding communities will be helpful with early communications regarding expectations.

Chair Hart thanked **Committee Member, Olson** for her question and **Ms. MacPherson** for her response. **Chair Hart** asked if there were any additional questions and noting none moved the agenda on to item 4.2.

4.2. MSP Air Service Updates

Brian Peters, Director Air Service Development for the MAC, provided a high-level overview of where MSP's air service is currently, as well as where it is headed. One of the two graphics he provided outlined the difference between active and suspended routes. The beginning of February 2020 showed 225 active routes with no suspended routes. By late February 2020 Seoul and Tokyo were the first suspended routes which started a rapid downward trend. Early May 2020, there were more routes suspended than were active. It's been a steady climb upward ever since. Active routes peaked in December 2021, with 200 out of 225 operated - generally around the holidays. Active routes dropped a bit in January to 195 and will drop slightly again to about 192 by end of January and will remain around that number range through Spring break and into the early part of Summer. In May, June, July and August, should exceed 200 active routes again, though it is still a little bit dicey; the Omicron variant and pilot shortages are affecting schedules so can probably expect to be in the 215 active route range.

Looking at average daily departures scheduled by month. It is normal to have a little drop from December into January, but at 362 currently will increase slightly in February and then expect to jump to about 410 in March. At that point will only be down about 15% overall compared to prepandemic numbers. Should see a steady increase April through August. Projections are not much beyond that because some airlines have not yet filed their schedules beyond August. The expectation is that MSP will probably be in that 15% to 20%, down range. Overall, for the 2022, forecasting to be at about 80% to possibly 85% of total passengers. MSP was at about 65% of prepandemic levels in 2021, compared to 2019.

Chair Hart went on to introduce **Greg Davis**, Delta General Manager of Future Schedules Networking, Atlanta.

Mr. Davis gave an overview of Delta's operations. Delta expects that by fall average daily departures will most likely be restored in the 85% range of departures. Delta is seeing some softness, currently, based on the Omicron variant and noted that there is still some chance of changes to some market starts as the airline reacts to the ebb and flow of the pandemic.

Highlights in international space would be Heathrow, Haneda, Incheon and our second. Amsterdam coming back this summer. Those are still subject to change based on any travel restrictions related to those countries. There are also questions about whether there is going to be slot relief provided and that is something determined on a country-by-country basis. There is a little more certainty regarding both Domestic and Canadian routes, as there are less restrictions to work around with Domestic markets. Delta has plans for Asheville, Burlington, Buffalo, Charleston, Jacksonville, Myrtle Beach, Providence, Portland, Maine, Savannah domestically as well as Montreal and Vancouver Canada.

Davis provided a chart displaying the newest, quietest aircraft at the top the oldest noisiest aircraft are at the bottom and he outlined that, over time, the progression has gone from a mix of new technology and older technology to now being more weighted towards the newer technology which will continue as we continue to take deliveries of A321s.

The A 321 NEOs first delivery is in February of this year. The NEO is an even quieter aircraft than the A321 CEOs, which Delta currently operates. Several more A220s, both 100s and 300s on the way. As those aircraft are delivered, they will replace some of our older, noisier, airplanes, so the trajectory is positive.

Chair Hart introduced **Casey Potter**, Assistant Chief Pilot, and First Officer for Sun Country Airlines. Mr. Potter also serves as an Industry Representative on the NOC.

Representative Potter spoke about 2022 increases in flight operations over the same months in 2019. For February 2022 there are 39 operations scheduled, which is a 26% increase over 2019. March 2022 shows 42 operations, a 24% increase and April 2022 shows 35 operations which is a 13% increase over the same month in 2019, mostly due to planned growth attributed to the addition of several aircraft in Q4, 2021.

Projections available through April 2022 anticipating two to three flights on an average day for departures out of MSP. 2022 new markets include Spokane Vancouver, Burlington, Vermont, Buffalo, Pittsburgh, Charleston and Jacksonville are additional routes that were flying direct out of MSP for Sun Country.

4.3. 2021 Complaint Data Assessment

Michele Ross, Assistant Technical Advisor to the NOC, provided an overview of the 2021 complaint data assessment. In 2020 there was a 46% decrease in the number of households filing complaints and a 44% decrease in the number of complaints filed compared to 2019. And in 2021 there was a 21% increase in the number of households filing complaints with 996 households filing complaints and a 28% increase in the number of complaints received with 127,578 complaints.

Most of new households filing complaints in 2021 were located in the City of Minneapolis. Of the total households, there were 391 new households that filed complaints last year which is about 40% of all households filing complaints. These households filed 5,124 complaints, which is about 4% of all complaints for the year.

Most cities had an increase in the number of complaints filed in 2021 compared to 2020, with the exception being the city of Minneapolis with 1,329 fewer complaints filed compared to last year. All of the remaining cities had an increase in complaints. Not shown on these slides but available in the report on page 9 is a similar graphic showing the number of households that filed complaints. All cities shown in the presentation slide 34 had an increase in the number of households filing complaints with the exception of Mendota heights that had small Increase.

There were 996 households that filed 127,578 complaints in 2021. 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. The total number of operations for each complaint filed in 2020 was 2.44 and 2021 it was 2.35.

The operations to complaints ratio by hour of the day for 2020 and 2021 are similar except around the hours of 4 am and 5 pm hours when the 2021 ratio is higher than in 2020. In terms of the number of complaints filed, the most are filed in the 8 am hour with other peaks during the day in the 9pm hours.

Complaints can be filed either online or through our complaint hotline. Online, customers select the date, time, airport, and has 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.

Military operations generated the most complaints per operation, with helicopters generating the second highest number of complaints per operation. The CRJ9, CRJ2 and CRJ7 are all quieter aircraft, and the chart illustrates that relative to the number of operations flown using this aircraft the number of complaints received were fewer than other types of aircraft. These aircraft have higher than average operation to complaint ratios – the CRJ9 and the CRJ7 had ratios of 3 operations per complaint and the CRJ2 had a ratio of 4.6 operations per complaint. 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 top 2 flights on the top 10 list were F-16s that were diverted from Duluth due to weather and were unusual aircraft. The 7 Boeing 727-200 aircraft on the list were operated by Kalita which operates as a backup cargo charter for DHL. They operated 81 total flights in 2021.

The largest percentage of complaints were received while MSP operated in south and straight south flow runway configuration. The airport operated in this configuration about 42% of 2021 but 58% of all complaints were received during this configuration.

As expected, when the weather is nice, people are outside or their windows are open, they are more likely to notice aircraft activity and file a complaint when temperatures were between 60 and

80 degrees there were more complaints. Extreme temperatures, when most people are indoors with either heat or air conditioning results in fewer complaints.

Member Olson asked, regarding slide 41, specific incidences of planes that receive a lot of complaints, e.g. DHL cargo, night flights. Is the time of day contributing to complaints. **Ross** replied that she believes time of day is a contributing factor regarding the number of complaints.

Chair Hart noted that DHL uses 727-200s, which used to be a predominant fleet type here in MSP. He went on to say that they generate a lot of noise.

4.4. 2021 Fleet Mix and Nighttime Operations Assessment

Brad Juffer, Technical Advisor to the NOC, provided an overview of the Annual Fleet Mix and Nighttime Operations Assessment for 2021. 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 caused by a housing crisis in the following 5 years reduced those totals. The airlines began the process of upgauging 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 2020 in late March, when the pandemic began to impact the aviation sector, the airport was ahead of 2019 passenger and operations levels. From May of 2020 when the pandemic was at its worst, through the end of 2021, the industry slowly recovered, trying to climb back to 2019 levels. In 2020, total operations were down 40% from the 2019 number. In 2021, when the final number is released by FAA tomorrow, we expect to be very near to 304,000 operations, which would put the airport at 75% of 2019 levels and 24% above 2020.

The emergency stay-at-home orders early in the pandemic did begin to relax in the early summer of 2020. Leisure travelers began to return a little bit in summer and more so in the holiday travel season in 2020. Moreover, airlines began to understand and meet that demand more efficiently in Spring Break timeframe of 2021 as vaccine availability became more widespread and positive rates fell. Airport's passenger flown per flight reached normal levels in Summer 2021. Without having the data available, suspect that early 2022 data may dip, if but temporarily, due to the Omicron variant spread through the country.

In 2021, MSP continued to be dominated by airline carrier jet aircraft operations. 93.5% of all movements at MSP were in this category of aircraft, a return to a normal pre-pandemic level. The remaining categories include 3.5% in a general aviation jet aircraft, 2% in a turboprop aircraft, 1% in a piston driven aircraft.

In 2021, the split between regional jets, narrowbody jets and widebody jets was 44/53/4%. 2021 saw more than normal operations by proportion in regional jets vs narrowbody jets. While not provided in this annual data, airlines continued to schedule more operations in narrowbody jets beginning in late summer and accelerated in the Fall of 2021.

In 2021, the most flown aircraft was the CRJ-900 by a significant margin. That aircraft was followed by the CRJ2 and then in a close third was the B738. As a quick plug, go check out the Meet the Fleet series to see more information on 2 of 3 of these aircraft. This order is unchanged from 2020 and also unchanged from 2019. To point out a couple key areas. The Regional Jet other includes a Dornier 328 flown by Denver Air Connection making hops to Thief River Falls. The other category in

the narrowbody category includes limited operations in older model 737s, but also newer 737-Max aircraft that returned to service in 2021. For the widebody aircraft grouping, The Boeing 767s aircraft are flown by multiple cargo carriers and Delta Air Lines. Many of Delta's operations in this aircraft were to domestic airports as opposed to the European destinations popular before 2020. The 747-8 and 747-400 aircraft types flown by UPS doubled in 2021.

The Y-axis on the certificated noise level chart represents the certificated noise level relative to Stage 3 standards. 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 was 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. Those lines are represented on the chart in black.

The lower the solid color goes, the quieter the aircraft will be, relative to its weight and engine configuration. The most used aircraft type last year was the CRJ-900. At last check, there were 46 different configurations of the CRJ-900 certificated by EASA. Just choosing one at random, the aircraft was certificated at 89.1 lateral, 83.6 flyover, 92.4 approach. Add all of those up and you get a 265.1 cumulative output. This aircraft weight limit based on the 2 engine and weight of the aircraft is 281.6. Math tells us then that this aircraft is 16.5 dB below the Stage 3 Limit.

One of the newer aircraft flying at MSP consistently is the Airbus A220-100, represented on the chart as A221. This one is nice, because at the moment, there is only one configuration certificated and reported by EASA. This aircraft is certificated at 88 lateral, 78.8 flyover, and 91.5 approach. The cumulative output on that is 258.3. The Stage 3 limit for this dual engine aircraft based on the weight is 286.3, meaning this aircraft is a full 28 dB below this certificated limit.

In 2021, Delta began flying regular operations using the Airbus A330-900 aircraft. Delta has long been flying the A330-200 and A330-300 but began taking deliveries of the new variant in 2019 and is now using them on flights at MSP. The A330-900 is outfitted with Rolls Royce Trent 7000 engines that have a more efficient and higher bypass ratio than the Pratt 4000s found on the A330-300. The A330-900 has certificated noise levels of 92.4 (lateral), 89.1 (flyover), and 98.4 (approach). The cumulative output is 279.9. The Stage 3 limit for this aircraft weight is 303.8, giving the aircraft a certificated noise level of 23.9 dB below Stage 3 limits.

For arrivals, the altitude measurement point is an imaginary gate at 5 nautical miles from the runway threshold. For departures the measurement point is an arc that is 5 nautical miles from the beginning of the 5 primary runways. All aircraft approaching MSP follow a 3° glideslope into the runway which would mean at 5 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. Prior to the pandemic, you'll note that aircraft perform better in the winter than summer. That trend also exists post-pandemic, but now aircraft weight is an important consideration as well. 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 2021, 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.

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. That level fell with other metrics during the pandemic and returned somewhat in 2021. Last year there were 41 total arrivals or departures on average every day between 10:30 PM and 6:00 AM.

Those 41 average daily nighttime operations are split roughly 70/30 between arrivals and departures. 70% of the arrivals used the south parallel runway 30L or 12R for arrival while 53% of the departures used one of those runway ends.

Delta Air Lines had the highest contribution to the total nighttime traffic at MSP. While they contribute the most, a full 96.4% of their schedule was flown during the daytime hours in 2021. Cargo carriers operate more than passenger airline at night. What is a common misconception is that it isn't the entire schedule and in the case of MSP in 2021, it isn't even the majority of their schedule. UPS flew only 33% of its flights at night and FedEx flew only 20% of its flights at night.

2021 will not meet the average of 2018 -2020 because 2 of those years were not impacted by the pandemic. For 2021, the majority of the night flights happen in the 11:00 PM hour, 10:30 PM half-hour and 5:00 AM hour.

4.5 Website Update

Brad Juffer, Technical Advisor to the NOC, provided a brief introduction to the new Metropolitan Airports Commission website, metroairports.org and provide a few before and after pictures of the project.

This project was done to enhance the user experience. This website is a gateway to the communities we serve so we wanted to build a website that produces meaningful engagement, provides timely and relevant information to users of the site, and does so in an easy and intuitive manner.

The previous metroairports.org website was spread across three separate platforms. The previous metroairports.org site, the MAC Sustainability site, and the macnoise.com site. One of the goals of this project was to align messaging and branding and provide the content to users in one location.

The new and redesigned metroairports.org replaces those individual platforms and combines the information into one experience for our community. The site is meant to be more approachable and community focused view of MAC. The community relations team spends a considerable amount of time building relationships with the NOC and neighbors and stakeholders around all MAC airports. We do that by being approachable and ready to talk about our airports with anyone who is interested. Our goal during this project was to build a site that reflected that.

The new metroairports.org site has a Community Connections section that discusses MAC in the Community. A subsection of that is the Aircraft Noise area of the website. Our macnoise.com presence was a highly curated and mature repository for information related to aircraft noise in this area. The team has spent years delivering that information to proactively answer some of the

questions we often hear from our customers. We had a clear understanding of what our customers used on the old site and how to structure the new page to continue to meet that need. I want to take the time to recognize Jennifer Lewis for building that deep understanding of the needs of our customers and to Michele for working with the project team to deliver that positive experience to our customers. I encourage everyone to browse through the Community Connections site and the broader MetroAirports site after the meeting.

Member Bergman commented that his Member Bios says Member At-Large and suggested that it to note the cities the At-Large represents.

Juffer appreciated the input and remarked he would pass it along.

5. Announcements

Winter Listening Session

Wednesday, January 26, 2022 @ 6:00 pm

Location: Via Teams

March NOC Meeting

Wednesday, March 16, 2022 @ 1:30 pm

Location: Via Teams

6. Adjourn

Chair Hart thanked the members of the Committee, NOC staff and residents in attendance. The meeting was adjourned at 3:01 pm.



MSP NOISE OVERSIGHT COMMITTEE DRAFT MEETING MINUTES

Wednesday, March 16, 2022, 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, March 16, 2022, 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, T. Cossalter, C. Jacobson, J. Hart, R. Krzos, P. Martin, L.

Olson, C. Potter

Staff: B. Juffer, J. Lewis, K. Martin, M. Ross, C. Boyd, J. Welbes, M. Takamiya, B.

Ryks, D. Nelson

Others: H. Rand – Inver Grove Heights, L. Moore – Bloomington, M. Brindle, R.

Peterson, D. Langer – FAA, J. Ronken – FAA, W. Eckenrode - FAA, N. Rao – FAA, S. Fortier – FAA, G. Hines – FAA, Ashleigh Walter, Lori G., Janet

Westenberg, and other members of the public

A quorum requires four community representatives, and four industry representatives to be established by roll call attendance. **A quorum was not established** as there were only three user industry representatives in attendance at the start of the meeting. Member Potter joined the call later in the meeting.

Community Representatives: Bergman, Jacobson, Krzos, Martin, Olson

Industry Representatives: Borgstrom, Cossalter, Hart, Potter

1. Consent

1.1. Due to the absence of a quorum, approval of the January 19, 2022, meeting minutes will be moved to the next NOC meeting, May 18, at 1:30pm.

1.2. Reports

1.2.1. Monthly Operations Reports: January and February 2022

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

Michele Ross, NOC Assistant Technical Advisor, provided January and February 2022 operations updates.

January

Total Operations: 24,260
Nighttime Operations: 1,437
North/South/Mixed: 42/42/9 (%)

February

Total Operations: 22,638
Nighttime Operations: 1,431
North/South/Mixed: 54/28/11 (%)

RUS (Priority 1/2/3/4):38/15/0/47 (%)

RJ/Narrow/Wide: 36/61/3 (%)

• Complaints: 7209

Complaint locations: 137Top 10 Households: 66%

• Hours of events*: 241

• Number of events*: 52,968

• R17 procedure: 99.3%

EMH Corridor procedure: 90.8 %
Crossing procedure day: 25.6%
Crossing procedure night: 45.9%

• RUS: 55.2%

RUS (Priority 1/2/3/4):43/10/0/47 (%)

RJ/Narrow/Wide: 35/62/3 (%)

• Complaints: 7,341

Complaint locations: 130Top 10 Households: 67%Hours of events*: 232

Number of events*: 49,592

• R17 procedure: 99.2%

EMH Corridor procedure: 90.2%
 Crossing procedure day: 25.2%
 Crossing procedure night: 42.5%

• RUS: 71.7%

Chair Hart asked the Committee if they had any questions following the operations updates for MSP for the months of January and February.

2. Public Comment Period

Janet Westenberg, 5893 Portland Avenue offered comments regarding aircraft takeoff noise and asked what the hourly limitations were for nighttime flight operations. She commented that flight noise can be heard from 5:00 AM through midnight and occasionally at 2:00 AM, noting that aircraft fly low and over her house. Some aircraft fly higher for takeoff and others have lower altitude. The higher altitudes have less noise. She recognizes that the flight path can vary. She said she always lodges complaints for noise disruptions after hours. Ms. Westenberg asked if there is a possibility to vary flight paths to provide noise relief. She commented that quieter planes would be a huge plus for the community.

Chair Hart noted that staff would respond to Ms. Westenberg's questions.

3. Business

There were no business items on the agenda

4. Information

4.1. 2021 Annual Noise Contour Report & Noise Mitigation Program Eligibility

Brad Juffer, NOC Technical Advisor, provided an overview of the 2021 Annual Noise Contour and mitigation program eligibility. The amended Consent Decree requires the MAC to produce an annual noise contour analysis report for MSP by March 1 of each year. The 2021 report was developed in partnership with HNTB, using Aviation Environmental Design Tool, AEDT 3D, the newest version of the FAA's noise modeling software. The report was compiled and published on March 1st and is the 15th iteration of the report.

Juffer reviewed the 2021 contour size and compared it to the 2007 Forecast Contour and the 2020 Actual Contour. The 2021 level of operations were 48 percent below what was anticipated in the 2007 forecast. Nighttime aircraft movements were 32 percent below the 2007 forecast. And Stage 3 hushkit operations that were modeled when developing the 2007 forecast are largely gone, dropping from

^{*} Aircraft sound events above 65dB.

275 average per day to 0.5 per day average. The 2021 contour grew from 2020 as a result of the operations recovering slowly from the lows in May of 2020. Total operations were 24 percent greater than 2020. Nighttime operations were 43 percent higher than those in 2020. Total traffic in 2021 was down 25 percent from 2019. All 10 of the runway ends in 2021 had operational values that were between 2019 and 2020.

In the end, the 2021 contour did fall directly between 2019 and 2020. The 2021 65 dB DNL contour came in at 3,350 acres an increase of 35 percent, while the 60 dB DNL contour was 8,500 acres, an increase of 30 percent. As expected, that 8,500 acres falls right between 2019 and 2020 and is in line with where the contour was in 2010 and continues to be well short of what was forecasted as part of the 2005 and 2007 contours.

Juffer covered residential mitigation eligibility and areas where homes had become eligible prior to 2021. The 2021 contour did not, because of size, and could not, because of language in the First Amendment, enter new homes in the First Amendment program. While not yet approved, the 2021 contour also would not have provided any first-year eligibility to homeowners under the 3rd Amendment to the Consent Decree as drafted.

In the City of Minneapolis, some homes received the full 5 dB whole home package, other homes received the partial package less any previous reimbursement, and other the homes received the partial package. In Eagan, a single block with 16 homes were eligible for the partial package less previous reimbursement.

Staff also considered how each program has been referenced. Knowing that it is important to have clarity and simplicity when talking to homeowners, the Contour Report was updated this year to reflect new titles to align our vocabulary and bring congruence across the organization. This is especially true because eligibility does not carry over from one program to another. So, the programs will no longer include reference to Consent Decree and instead will use new titles that reference program years. As of January 2022 the investment into all of the different programs is over \$511 million dollars.

- Full Report: https://metroairports.org/MSP 2021 Noise Contour
- Address Eligibility List (2017-2021): https://metroairports.org/do-i-qualify
- Mitigation Map: https://customers.macnoms.com/mitigation/

4.2. Update on MSP Long Term Plan & Associated Stakeholder Engagement

Dana Nelson, Director, Stakeholder Engagement provided an overview of the MSP Long Term Planning process. The MSP Long Term Plan process began in 2019 with an inventory of MSP as well as Aviation Forecasts which were completed prior to the COVID pause. Aviation forecasts were updated with actual 2020 numbers and a post-pandemic recovery period. Consultants have been reengaged for remaining tasks. The LTP process should be completed and submitted for the MAC Council process review by the end of 2022.

Planning areas include the following:

- Baseline of existing facilities inventory and document existing facilities and aviation activities to establish baseline conditions.
- Forecasts forecast MSP aviation activity levels (passengers, cargo, and aircraft operations) for the milestone years between 2020 and 2040.

- Facility Requirements Gap Analysis determine any facility deficiency gaps between the baseline condition and desired future conditions based on forecasted activity levels.
- Development Concepts develop and evaluate alternative means to remedy facility deficiencies identified through the process.
- Proposed development determine a proposed development program, funding plan, and implementation strategy to present to the community and the MAC board.
- Environmental considerations prepare an overview of factors that should be considered when determining the appropriate level of environmental review needed to implement the plan.

Nelson went over the activities completed to date, the COVID pause and the reinitiation of the activity forecast. There were five public engagements around this planning though one event (April 2020) was canceled due to the pandemic. There have been four stakeholder advisory panel meetings to date with two more scheduled.

Stakeholder Engagement Program is a high engagement approach utilizing the following:

- Stakeholder Advisory Panel several NOC members serve on this panel.
- Project Milestone Events
- Project Website https://mspairport.com/long-term-plan
- Project E-Newsletters
- Updates at the NOC an MAC's PD&E Committee
- Additional Public Presentations are available upon request

MSP Long Term Plan Virtual Engagement will be a series of short pre-recorded, high level, video presentations posted on the project website. This will allow the audience, members of the public, scheduling flexibility where they can watch the videos at their convenience. We are trying to draw a consistent line from our 2019 Experience MSP (MOA), using the same wordmark and color scheme.

Video topics include:

- 1. Introduction and Welcome | MAC
- 2. MSP Airport Long-Term Plan Update | MAC
- 3. Existing Conditions Landside | Kimley Horn
- 4. Airfield Capacity Study | HNTB
- 5. Updated Activity Forecasts | Ricondo

This work will culminate in a live, Teams, virtual public meeting with the opportunity to talk about the video content, and LTP. Subject matter experts will be available to answer questions.

Experience MSP Promotion will use a variety of channels to direct people to the project website to watch the videos and encourage viewers to submit questions in advance of the public meeting.

- Post cards sent to residential addresses around MSP
- Electronic newsletters (MAC, MSP, LTP)
- Local community channels (Ms. Nelson will reach out to NOC Community Members to share
 an electronic flyer to see which distribution channels would be beneficial for the community.
 Also reaching out to local community centers and libraries to inform the public about access
 to the videos and virtual meeting.
- Share with stakeholder advisory panel

- Project website
- Metroairport.org event
- Print ads
- Social media

A virtual Public Meeting will be held on April 12, 4:30pm – 6:00pm with an open house format. There is not a prepared presentation as this information will be covered by the video series. Presenters and MAC engagement staff will be present to answer questions. Participation guidelines will be similar to our NOC meetings, and we ask that questions are submitted in advance and via the chat meeting function.

Chair Hart asked about how to find the meeting details? **Nelson** said that she will extend an invitation to NOC members and all electronic newsletters will have a link to the meeting and other pertinent information.

4.3. Review of Winter Listening Session

Michele Ross, Assistant Technical Advisor to the NOC, provided an overview of the MSP Winter Listening Session, held on January 26, 2022. The event was included on the metroairports.org website and a news article and email was distributed. NOC community representatives were encouraged to share the event with their communities.

The event was attended by one resident from Minneapolis, one resident from Saint Paul and one professor of aviation from Trinidad. Also in attendance were Sean Fortier, Josh Ronken, Kurt Mara, and Dominika Drozdal with the FAA, NOC representatives Jeff Hart, Emily Koski (and staff Melissa Hill), Loren Olsen, John Bergmann, John Klinger, Kevin Gallatin, and Ryan Krzos, MAC Commissioner Yodit Bizen, and five MAC staff.

In addition to promoting the event to encourage participation, the content of the MAC presentation was assessed and updated to provide information not previously presented at a NOC meeting. The staff presentation included an overview of some of the community questions and concerns that MAC received in 2021 by general topic areas as well as a review of emails received by the NOC.

Post presentation discussion topics included:

- Mitigation information about a previously mitigated home.
- Mitigation program and airport operation information.
- Ground noise disturbance in Saint Paul.

5. Announcements

Spring Listening Session

Wednesday, April 27, 2022 @ 6:00 pm

May NOC Meeting

Wednesday, May 18, 2022 @ 1:30 pm

6. Adjourn

Chair Hart thanked the members of the Committee, NOC staff and residents in attendance. The meeting was adjourned at 2:19pm

ITEM 2.1

TO: MSP Noise Oversight Committee (NOC)

FROM: Brad Juffer, Manager, Community Relations

SUBJECT: RESOLUTION HONORING DIANNE MILLER

DATE: May 4, 2022

In recognition of Dianne Miller's many years of service to the Minneapolis-St. Paul International Airport (MSP) noise community and in consideration of the City of Eagan announcement that she has been named the City of Eagan City Administrator, MAC staff has drafted the attached resolution for consideration by the MSP Noise Oversight Committee.

COMMITTEE ACTION REQUESTED

ADOPT RESOLUTION #01-2022 HONORING DIANNE MILLER FOR HER DEDICATED SERVICE TO THE MINNEAPOLIS-ST. PAUL INTERNATIONAL AIRPORT NOISE COMMUNITY.



MINNEAPOLIS-ST. PAUL INTERNATIONAL AIRPORT (MSP)

NOISE OVERSIGHT COMMITTEE (NOC)

RESOLUTION #01-2022

A RESOLUTION HONORING DIANNE MILLER FOR HER DEDICATED SERVICE TO THE MINNEAPOLIS-ST. PAUL INTERNATIONAL AIRPORT NOISE COMMUNITY

- WHEREAS, the MSP Noise Oversight Committee is the primary advisory body to the Metropolitan Airports Commission (MAC) on topics related to aircraft noise at MSP; and
- WHEREAS, Dianne Miller has served on the Noise Oversight Committee, representing the City of Eagan since the NOC's origin in 2002, and leading the NOC as Community Co-Chair since 2017; and
- WHEREAS, Dianne has served her community for over 20 years as City of Eagan Assistant City Administrator and now as City Administrator; and
- WHEREAS, Dianne has been the Eagan staff support to the Eagan Airport Relations Advisory Commission, promoting change to procedures at MSP that benefitted her community while not impacting other neighbors; and
- WHEREAS, Dianne has represented the citizens of Eagan and the MSP airport noise community with equity and dedication; and
- WHEREAS, Dianne has cultivated a productive relationship with airport staff and has earned the respect and admiration of fellow NOC members and the Metropolitan Airports Commission for her expertise, leadership, and capacity for balanced advocacy.

NOW THEREFORE BE IT RESOLVED, that we, the members of the Noise Oversight Committee of the Minneapolis-St. Paul International Airport, do hereby extend to Dianne Miller our sincere gratitude for her dedicated service to the airport noise community and wish her success and happiness in her new role.

Adopted by the Noise Oversight Committee of the Minneapolis-St. Paul International Airport this 18th day of May, 2022.

ITEM 2.3.1

TO: MSP Noise Oversight Committee (NOC)

FROM: Michele Ross, Assistant Manager, Community Relations

SUBJECT: REVIEW OF MSP MONTHLY OPERATIONS REPORTS: MARCH AND APRIL

2022

DATE: May 4, 2022

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 May NOC meeting, MAC staff will provide a summary of this information for March and April 2022. To view these summary reports prior to the meeting, visit the "Archive" section at the link above.

ITEM 3

TO: MSP Noise Oversight Committee (NOC)

FROM: Brad Juffer, Manager, Community Relations

SUBJECT: PUBLIC COMMENT PERIOD

DATE: May 4, 2022

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. When called upon to speak by the chairperson, speak clearly into the microphone and state your name and address. If you are affiliated with any organization, please state your affiliation.
- 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.

ITEM 4.1

TO: MSP Noise Oversight Committee (NOC)

FROM: Brad Juffer, Manager, Community Relations

SUBJECT: NOMINATION AND ELECTION OF COMMUNITY CO-CHAIR

DATE: May 4, 2022

Dianne Miller was elected Community Co-Chair on July 21, 2021. In her new role as City of Eagan City Administrator, she will no longer be serving on the Noise Oversight Committee as the representative for Eagan and therefore no longer serving as Co-Chair. As such, a new Community Co-Chair is needed.

The process for the selection of Co-Chairs is found in the NOC Bylaws in Article V, given below:

"The airport user and community segments of the Committee shall each select a Co-Chairperson who will serve at the pleasure of the appointing group. Each Co-Chairperson will serve for a two-(2) year term or until his/her representation on the Committee terminates, or until replaced by the appointing group, whichever occurs first.

The powers and duties of the Co-Chairpersons are as follows:

- 1. To review agendas.
- 2. To preside over meetings the presiding Chairperson will alternate every other meeting.
- 3. By the mutual consent of the Co-Chairpersons, special meetings may be called, or upon request of a majority of the Committee, four (4) users and four (4) community representatives.
- 4. To sign as Co-Chairpersons of this Committee, all instruments in writing that may require such signature, unless the membership shall otherwise direct, and to perform such other duties and tasks as these Bylaws or as the membership shall from time to time prescribe.
- 5. Each segment of the Committee, by a majority vote, shall elect their respective Co-Chairperson."

At the May NOC meeting a nomination process and vote will be conducted for community selection of their NOC Co-Chair.

COMMITTEE ACTION REQUESTED

CONDUCT COMMUNITY CO-CHAIR NOMINATIONS AND ELECTIONS TO ESTABLISH THE COMMUNITY CO-CHAIR TO SERVE FROM MAY 18, 2022 THROUGH JUNE 25, 2023.

ITEM 5.1

TO: MSP Noise Oversight Committee (NOC)

FROM: Brad Juffer, Manager, Community Relations

SUBJECT: MSP AIR SERVICE UPDATES

DATE: May 4, 2022

The COVID-19 pandemic continues to impact flight activity at MSP. Passenger levels and associated aircraft takeoffs and landings have been depressed below normal levels since late March 2020. This reduced level of activity changed the experience for many residents living near MSP for most of 2020 and 2021. It is expected that passenger levels and aircraft operations will not fully return to pre-pandemic levels for many years.

To keep NOC members updated and prepared with information about upcoming air service to address community concerns that may arise, the NOC has invited Brian Peters, MAC Director of Air Service Development to provide an update about future airline schedules and communicate how those schedules will impact airport operations.

ITEM 5.2

TO: MSP Noise Oversight Committee (NOC)

FROM: Brad Juffer, Manager, Community Relations

SUBJECT: MSP CONSTRUCTION UPDATES

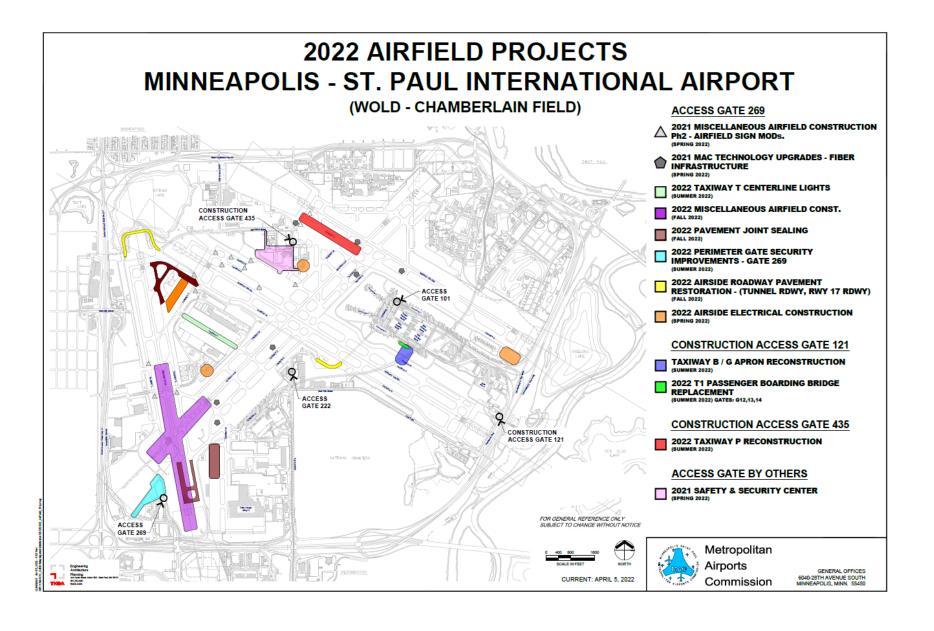
DATE: May 4, 2022

The MAC has begun construction projects on the airfield at MSP that could impact typical runway use.

One project provides for reconstruction of some airfield taxiways. The project area includes Taxiway A between Taxiway A3 and Taxiway A4 and Taxiway B between gates G12 and G15. The project will require closures of some G Concourse Gates and some aircraft limitations at other G Concourse Gates. Work will include removals, excavation, granular material, crushed aggregate base, concrete pavement, bituminous shoulders, pavement marking and taxiway centerline and edge lights. Unlike 2021, this project is not expected to impact runway use.

Additionally, work will continue on the runway safety area near Runway 17-35. A runway safety area is the area adjacent to a runway that is prepared and suitable for reducing the risk of damage to airplanes in the event of an aircraft excursion from the runway. The safety area must be maintained so that it is clear of debris, drained and graded and able to support aircraft, snow removal equipment and aircraft rescue and firefighting operations. The specifications for a runway safety area exist to ensure proper drainage and prevent ponding water adjacent to the runway. The work for this project is intended to restore runway safety area slopes to FAA specifications. This work is expected to be completed in one six-week period. To ensure the safety of the construction crews and aircraft, Runway 17-35 will be closed during the project. This project is expected to begin the day after Labor Day.

At the May NOC meeting, Pat Mosites, Airport Development Project Manager, will provide the Committee an update on this item.



ITEM 5.3

TO: MSP Noise Oversight Committee (NOC)

FROM: Michele Ross, Assistant Manager, Community Relations

SUBJECT: SPRING 2022 LISTENING SESSION

DATE: May 4, 2022

The primary goal of Listening Session meetings is to ensure residents' concerns are heard and considered as part of the ongoing effort by the MAC and the NOC to address noise and other topics around MSP.

To encourage participation in the Listening Session, the event was co-hosted by the City of Edina and held within the City. The event was included on the metroairports.org website and a news article and email was distributed. NOC At-Large community representatives were encouraged to share the event with their communities.

On April 27, 2022 at 6:00 P.M., MAC Community Relations staff conducted a Listening Session at the South Metro Public Safety Training Facility. One resident from Edina, one resident from Bloomington and one resident from Burnsville participated in the meeting. Also in attendance were Sean Fortier and Eric Lorbach with the FAA, NOC representatives John Bergmann and Mary Brindle, Edina City Manager Scott Neal, and four MAC staff.

In addition to promoting the event to encourage participation, the content of the MAC presentation was assessed and updated to provide information not previously presented at a NOC meeting. The staff presentation included an overview of March 2022 aircraft activity that overflew the City of Edina. The presentation slides are available on the Listening Session page on the MAC website at: https://metroairports.org/msp-quarterly-listening-sessions.

After the presentation, staff opened the floor to discussion. The topics discussed during the conversation included:

- The potential changes to aircraft fleet mix operating at MSP in the near future.
- Summer 2022 construction updates.
- Aircraft and community sound event information.
- Noise monitoring site locations.
- Aircraft viewing area amenities.

The next Listening Session will be held on July 27, 2022. Further details will be made available on the https://metroairports.org/community-connection/aircraft-noise website.

ITEM 5.4

TO: MSP Noise Oversight Committee (NOC)

FROM: Brad Juffer, Manager, Community Relations

SUBJECT: MEET THE FLEET

DATE: May 4, 2022

In 2021, MAC staff launched an exciting video series to bring our airports to our neighbors. In partnership with our talented NOC pilots, Meet the Fleet will give viewers a behind-the-scenes view of different aircraft types that frequently use MSP. The videos feature commentary from pilots sharing interesting facts about specific aircraft, identifying characteristics, common routes flown and up-close footage of the fleet.

At the May NOC meeting, staff will share the fourth <u>Meet the Fleet</u> video. This iteration of the series highlights the Airbus A350.

MAC staff would like to personally thank Delta Airlines Pilot, Martha Whiteaker for participating in this video and lending their equipment and expertise to this effort.