



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



### **NOC Committee Members**

Jeffrey Hart – Co-Chair (Delta Air Lines)  
Dianne Miller – Co-Chair, City of Eagan Representative (City of Eagan)  
Ryan Barette – Minnesota Business Aviation Association Representative  
Paul Borgstrom – Chief Pilot Representative (Delta Air Lines)  
Pam Dmytrenko – City of Richfield Representative (City of Richfield)  
Chris Finlayson – At-Large Airport User Representative (Endeavor Air, Inc.)  
Brian Hoffman – At-Large Community Representative (City of St. Louis Park)  
Todd Lawrence – Charter/Scheduled Operator Representative (Sun Country Airlines)  
Patrick Martin – City of Bloomington Representative (Bloomington City Council)  
Jay Miller – City of Mendota Heights Representative (Mendota Heights City Council)  
Angie Moos – Cargo Carrier Representative (United Parcel Service)  
Loren Olson – City of Minneapolis Representative (City of Minneapolis)

### **MEETING AGENDA**

May 15, 2019 at 1:30 PM

**MAC General Office Building, Lindbergh Conference Room  
6040 28<sup>th</sup> 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. 1:30 Review and Approval of January 16, 2019 and March 20, 2019 Meeting Minutes
2. 1:35 Review of Monthly Operations Reports: March and April 2019
3. 1:50 Public Comment Period
4. 2:10 Converging Runway Operation Update
5. 2:40 MSP Airport Long-Term Plan and Stakeholder Engagement
6. 2:50 Runway 17 Departure Operations Report Scope
7. 3:00 macnoise.com Website Redesign
8. 3:10 Spring Listening Session
9. 3:20 Announcements
10. Adjourn

**Public Comment Notice:** A public comment period of no more than 20 minutes will be added to each agenda. Members of the public wishing to address the NOC during this period are allotted 3 minutes to speak. Please complete and submit a speaker card prior to the start of the meeting or have arrangements made with your NOC representative prior to the meeting date.



**MSP NOISE OVERSIGHT COMMITTEE**  
**DRAFT MEETING MINUTES**  
Wednesday, 16<sup>th</sup> of January 2019 at 1:30 PM  
MAC General Office  
Lindbergh Conference Room

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**Call to Order**

A regularly-scheduled meeting of the MSP Noise Oversight Committee, having been duly called, was held Wednesday, 16<sup>th</sup> of January 2019, in the Lindbergh Conference Room at the MAC General Office building. Chair Miller called the meeting to order at 1:30 PM. The following were in attendance:

**Representatives:** D. Miller; J. Hart; R. Barette; G. Goss; B. Hoffman; J. Malin; P. Martin; L. Olson; P. Dmytrenko, J. Miller; A. Moos; C. Finlayson;

**Staff:** D. Nelson; B. Juffer; A. Kolesar; J. Lewis; N. Pesky; D. Anderson; N. Ralston

**Others:** C, Jacobson – City of Mendota Heights; D. Sloan – City of Mendota Heights; M. Brindle – City of Edina; L. Moore – City of Bloomington; B. Hoffman – City of Saint Louis Park; L. Petschel – City of Mendota Heights; J. Gundlach – City of Inver Grove Heights; D. O’Leary – City of Sunfish Lake; A. Nemcek – City of Rosemount; M. Doll – City of Burnsville

**1. Review and Approval of the November 28, 2018 Meeting Minutes**

**Chair Miller, Eagan**, asked for a motion to approve the minutes pending a correction to the attendance list. The motion was moved by **Co-Chair Hart, Delta**, and seconded by **Representative Martin, Bloomington**. It was passed unanimously.

**2. Review of Monthly Operations Reports: November and December, 2018**

**Brad Juffer, Assistant Technical Advisor**, stated there were 31,299 operations in November 2019 and 31,781 operations in December. The 969 flight reduction in November equated to a 3% drop from November 2017; December had a 4% reduction or 1,317 fewer flights than December of 2017.

For the year of 2018, MACNOMS recorded 405,305 operations at MSP; this total is 8,175 fewer operations than 2017. According to FAA OPSNET flight totals, the 2018 final total will be the 2<sup>nd</sup>

lowest total at MSP in the past 25 years. The final amount will be only higher than the 404,000 operations of 2015.

In November, MACNOMS tallied 2,071 operations between 10:30 PM and 6:00 AM at MSP and 2,122 operations during those same hours in December. For these two months, the nighttime total increased by 285 flights or an average of 4.5 flights per night. In all of 2018, 25,477 operations during the MSP nighttime hours; this is 1,236 more than 2017 or 3.25 more per night.

November saw a balanced use of North, South, and Mixed Flow configurations; the flows were split 45/41/7. South Flow configurations were used often in December with splits of 26/48/16. In all of 2018, the use of North Flows decreased by 464 hours or the equivalent of 19.3 days for the year; a 14.5% reduction from 2017. These hours were made up by South Flows, which increased by 425 hours or the equivalent of 17.75 days; a 13.2% increase from 2017. Mixed Flows took most of the leftover with 81 more hours in this configuration in 2018 vs 2017, a 9.5% increase.

RUS Priority 1 runways were used 34.1% of the time in 2018, combined with the 19.6% of use for Priority 2 totaled to 53.7% use for the high priority runways. 30L and 30R saw a reduction of 8,537 arrivals compared to 2017. 30L and 30R handled 13,008 fewer departures in 2018; the decrease of 8,405 operations on 30L was the single biggest change of any runway. Runway 35 had 2,193 fewer arrivals than 2017. Runways 12L and 12R took 6,663 more arrivals than 2017 and 3,618 more departures. Runway 17 had 4,321 more departures in 2018 as both South Flow and Mixed Flow hours increased. Runway 4 handled 1,050 departures in 2018 a 6900% increase. 1,038 of those operations occurred during heavy snow conditions on Jan 22, Apr 13-16, and Dec 1 and 2.

#### A few Notes on MSP Carrier Jet Usage

- The CRJ9 was the top used aircraft type in December. 22 out of the past 24 months, the CRJ2 was the top used aircraft. The CRJ9 was the top aircraft used in December and March 2018.
- The B747-400 had 38 operations in December as UPS increased their December schedule to account for the holiday shipping season.
- The last scheduled MD-80 operation at MSP occurred on 12/18/18. Viewing the airline scheduled data through the end of February 2019, there isn't another MD-80 scheduled to operate at MSP during that time.

The MAC Noise office received 9,508 complaints in November and an additional 9,220 aircraft noise complaints for MSP flights in December. The complaint count in November is 579 more than 2017 while the December number is 2,036 more complaints than 2017. Collectively, that is a 16% increase in complaints received. Complaints were filed from 193 locations in November and 201 locations in December. The November location total is a reduction of 51 locations from 2017 while the December count is 14 higher than 2017.

For 2018, the Noise Office received 139,524 complaints related to aircraft using MSP. The 9,531 complaint reduction equates to a 6% drop from 2017. There were 1,484 locations that filed a complaint in 2018, a location reduction of 137 from the 1,621 locations in 2017.

2018 complaints by city:

- 67,939 complaints were filed by 707 locations within Minneapolis
- 25,277 complaints were filed by 169 locations in Eagan

Compared to 2017, the following cities saw an increase in complaint totals for 2018

- Minneapolis
- Richfield
- Edina
- Sunfish Lake

Compared to 2017, the following cities saw a decrease in complaint totals for 2018:

- Eagan
- Mendota Heights
- Burnsville
- Bloomington
- Inver Grove Heights
- Apple Valley
- St. Louis Park
- St. Paul

Compared to 2017 the following cities saw an increase in complaint locations for 2018:

- Mendota Heights
- Edina
- St. Paul

Compared to 2017, the following cities saw a decrease in complaint locations in 2018:

- Minneapolis
- Inver Grove Heights
- Burnsville
- Bloomington
- Eagan
- Richfield
- St. Louis Park
- Sunfish Lake

Apple Valley had the exact same complaint locations in 2018 as it did in 2017. The Top 10 locations in 2018 filed 71,785 complaints. On average, there are 94 complaints per location. In 2017, the Top 10 locations filed 78,106 complaints. The majority of all locations filed 10 or less complaints for the entire year.

On to sound monitoring, aircraft events occurred for 403 hours in November and 395 hours in December. Overall, this is a 0.7% reduction in the Time Above 65 dBA attributable to aircraft for November and December compared to 2017. The 8,533 events for November and 8,645 events in December is 3,867 more events than the same months in 2017. This is a total increase of 2.5% compared to 2017. When comparing 2018 sound data to 2017, both the Time Above 65 at the sites and the number of events recorded have decreased in 2018.

Regarding noise abatement, R17 procedure was consistent at 99.7% in November and 99.5% in December. There were 39 jets west of the turn-point during those two months. The corridor procedure was used 94.4% of the time in November and 95.2% in December. 289 jets were outside the corridor, 73 on 11/4, and 85 on 12/1, both days were very windy. The use of the crossing procedure, during the day, was 29% in November and 33% in December; use at night was 38% and 47%. In November, the use of 1<sup>st</sup> and 2<sup>nd</sup> priority runways was at 52.3% of the time and was 55.3% of the time in December.

For annual results:

- Runway 17 was used 99.5% of the time in 2018.
- Egan/Mendota Heights was used 94.5% of the time in 2018
- Daytime Crossing-in-the-Corridor stood at 34.5% while night crossing fell to 40.7%
- Use of Priority 1 and 2 runways in 2018 was at 53.7%. This is the highest percent usage in the past 10 years.

### 3. Public Comment Period

**Chair Miller, Eagan**, noted there were not any speaker cards prepared for the meeting and then asked if there was anyone present, wanting to speak. No audience members requested to speak.

### 4. MSP Fleet Mix and Nighttime Operations Report

**Brad Juffer, Assistant Technical Advisor**, expanded on the year end data and reiterated that MACNOMS recorded 405,305 MSP operations in 2018. This total is the 2<sup>nd</sup> lowest total in more than 25 years, but fairly stable when looking at the last 5 years. The proportion of traffic operated by carrier jets has been stable for the past five years. In 2018 carrier jets accounted for 92.5% of all traffic at MSP.

The remainder of the Fleet Mix data will focus only on the carrier jet portion of the operations.

Carrier jets are categorized into three distinct groups:

- Regional jets are short to medium range turbofan powered aircraft and accounted for 40.2% of all carrier jet operations in 2018. While significantly lower than years earlier this decade, 2018 was the first time since 2012 that the trend of regional jet ceding ground to narrowbody jet aircraft has reversed.
- Narrowbody aircraft are larger short to medium range aircraft flown by major airlines. This category accounted for 57% of all carrier jet operations at MSP. Both the total operations and proportion were declines in 2018.
- Wide-body aircraft are medium to long haul aircraft, typically configured with multiple seating rows. In 2018 widebody aircraft flew 2.8% of the carrier jet operations at MSP, a slight increase from 2017.

The regional jet category is very homogenous as the top 5 aircraft types flew all but 258 of the regional jet operations in 2018. Of the listed aircraft. The CRJ2, E170 and E190 operations decreased from 2017 while the CRJ9 and CRJ7 both increased from 2017.

For narrowbody aircraft, the Boeing 737-800 and 737-900 both posted gains in 2018 at MSP. The MD-90, A320 and A319 all saw decreases in 2018. The narrowbody category has many

more aircraft types, the other category includes aircraft types like the B757, B717, 737-700, A321.

The widebody category represents a very small portion of the total carrier jet use. In fact, the total of all widebody aircraft is fewer than 12 individual aircraft types. The use of the DC-10, MD-11 and A330 all decreased in 2018 while the B763, B777 had increases in 2018. The increase in the B763 is the result of Amazon Air operation.

In 2018, the CRJ2 was one of the quietest aircraft flown at MSP and was the most used aircraft type. The two newest narrowbody models—the A320neo and B737-8 (max) were flown 1,683 times in 2018. Usage of the MD80 dropped by 88%. Use of the DC10 dropped 14%

**Juffer** continued on to share analysis results related to arrival and departure altitudes; the average annual arrival altitudes have a range of less than 50' during the past five years. Specific range details by month are in the report on the MAC Noise Website. While the departure arc is much bigger, it remains five nautical miles from the start of takeoff roll for the primary five runways at MSP. The report also has departure monthly values available. There is a positive relationship between the narrowbody category and regional jet category but that is not the case for widebody aircraft.

Looking at only regional jets and narrowbody aircraft, there has been a drop in average altitude by just over 200 feet from 2014 to 2018 in both categories. The variable that contribute to this are varied, but include temperature, headwind, aircraft weight. The average temp in 2014 was 44.8° which was more than 3° lower than any of the other 4 years. The lower temperature in 2014 certainly aided higher altitudes in that year.

Using scheduled data received from OAG, which includes seat information, the scheduled seats per flight for the past three years at MSP were calculated. With the exception of August 2016 vs August 2017, every month has seen an increase from the previous year for the past 24 months. The result is an incremental increase in seats available for flights at MSP. According to the schedule data, there were 116 sets available on every flight in 2016 increasing to 117 in 2017 and up again to nearly 120 in 2018.

Looking at the actual passenger information reported by the airlines to the MAC, 10 out of 11 months in 2018 posted year over year gains in average passengers per flight; April was the lone outlier. If you roll that into annual averages you get a similar increase in average passengers per flight. In 2016 there were 97 passengers / flight, increasing by half a passenger in 2017 and up to 99.5 through the first 11 months of 2018.

**Representative Olson, Minneapolis**, asked if the increase in passengers is adding enough weight to the airplanes and thus attributable to lower altitudes. **Juffer** responded that he believes it is a variable, specifically in the departure altitude as the arrival altitude is set by glide slope and procedure.

**Juffer** moved on to nighttime operations. MACNOMS recorded 25,477 operations between 10:30 PM and 6:00 AM in 2018. On a daily basis, that is an average of just under 70 night flights per day at MSP. This is a 5% increase from 2017 and a 1.6% increase from 2016.

The south parallel runway 12R/30L continues to handle the majority of nighttime traffic with a total of 61% of operations on that runway at night. The north parallel 12L/30R is next at 30%.

17-35 to the south is next at 7.2%. Runway 4 and 17/35 to the North took the remaining 1.5% as summer closures of the parallels and winter operations increased the use. Runway 22 did not have a single nighttime arrival or departure in 2018.

Delta operated just under 7,000 flights at night in 2018. Due to the size of their operation here, those 7,000 flights were only 4.8% of their schedule. A common anecdote is that cargo flights always happen at night. FedEx and UPS flew 1,710 operations at night in 2018 at MSP. Their individual totals represented only 32% of the UPS schedule and only 24% of the FedEx schedule. Atlas Air is one of the airlines operating aircraft for Amazon. Gulf and Caribbean Cargo is a feeder airline flying a CRJ2 for FedEx. Overall, the 5:00 AM hour posted a reduction from 2018 to the previous average. On the other side, collectively, the 10:30 PM, 11:00 PM, 12:00 AM and 1:00 AM were up by 1,553 operations or 10.6%.

On average there were 49.3 scheduled nighttime operations per day in 2018 vs. 48.7 in 2017. 2018 had increases in the 5:00 AM hour and 10:30 PM hour but decreases in the 11:00 PM and 12:00 AM hours. The 3:00 AM and 4:00 AM hours were within 15 scheduled flights total for the whole year. It's important to note that scheduled time is not actual time. With pushback, deice and taxi there can be significant differences between runway time and gate time. There was more than ½ flight difference in the 1:00 AM hour between 2017 and 2018.

**Co-Chair Hart, Delta**, asked what kind of contribution the added weight from passengers has on the aircraft altitude versus other environmental factors such as temperature and headwinds. **Juffer** responded that the impact is far less than that of the environmental factors. **Representative Olson, Minneapolis**, mentioned that 28% of all nighttime arrivals and 29% of all nighttime departures are over parts of South-West Minneapolis. Considering that those areas are highly populated, there should be routes that are less populated for nighttime routes to utilize. **Juffer** responded that there are limitations to what is possible in regards to runway use. The most heavily used runway for arrivals was 30L, which is over a less populated area and whenever ATC is able, they will use the opposite flow configuration to reduce activity over more densely populated areas. **Dana Nelson, Technical Advisor**, added that with the development of Runway 17, the intention was never to use it as frequently or instead of Runway 12R. **Chair Miller, Eagan**, asked if there could be more balance between the parallel runways. **Juffer** responded that it's a question to bring up with the FAA. **Hart** added that at the last meeting the FAA mentioned favoring 12R due to safety reasons. **Representative Goss, Delta**, mentioned that as a pilot, he'd rather land on 12R because it's longer and the light systems are better. **Nelson** added that during the nighttime hours, aircraft seem to be coming from the West Coast, with that information, ATC is telling them to arrive on the South parallel runway.

## 5. Eagan Mobile Noise Monitoring Study Plan

**Dana Nelson, Technical Advisor**, provided an update on the mobile noise monitoring study for the City of Eagan. The Eagan Airport Relations Committee (ARC) sent the NOC a mobile noise monitoring request and it was approved at the September 2018 NOC meeting. The goals were to determine if gaps in the MSP Remote Monitoring Tower coverage area existed and if two monitors, located next to I-35 E were in an ideal location. There are eight RMTs located in Eagan, and with a map, Nelson showed the group their proximity to one another and in relation to I-35 E. Nelson also compared the number of recorded events to the number of actual aircraft flight tracks that overflew the area. RMT 25 and 37 were the focus of discussion; the purpose is to compare their data to that collected by the mobile noise equipment. The study start date is

projected to be May 1, 2019 and data collection will conclude after two weeks. The data will be presented at the July 9, 2019 Eagan ARC meeting and again at the July 17, 2019 NOC meeting. The list of criteria for the mobile noise monitoring equipment locations lead to choosing two sites, Thomas Lake Park and Mueller Farm Park.

The data collected from the mobile noise monitors and the permanent monitors will be assessed. Based on the comparison of aircraft noise levels and community noise levels, it will then be determined if gaps in recording exist. This data will not result in residential sound insulations eligibility, nor will it change the annual noise contours at MSP.

## 6. Evaluate Noise Management Benchmarking Study Findings and Considerations

**Dana Nelson, Technical Advisor**, reviewed the 2018 process of hiring HMMH to conduct a noise management benchmarking study. The consultant identified three categories related to best practices for airport noise offices: Transparency, Responsiveness, and Collaboration. Based on this information and the airports included in the study, HMMH identified the MAC Noise Office as being a forerunner in the industry in all three categories.

There were three considerations HMMH presented to help improve the MAC Noise Office best practices.

- Take noise complaints from non-residential addresses
  - The office made that change and will place the update on the website.
- Live – stream NOC meetings
  - This topic requires a large technology investment to upgrade the conference room and the MAC CIP does not include room upgrades at this time. Other efforts were made to ensure the NOC meeting became more accessible through the reformatted public input process and offering evening meetings.
- Provide real – time alerting to the FAA for established noise abatement procedures to increase compliance and awareness
  - MAC regularly reports compliance with four noise abatement procedures and in December 2017, developed and implemented a dashboard to alert staff and ATC about real time excursions from the voluntary noise abatement procedures.

## 7. 2019 NCAA Final Four Aircraft Activity Update

**Dana Nelson, Technical Advisor**, told the NOC that the NCAA 2019 is being held at USBank Stadium, in Minneapolis, MN. Therefore, an expected increase in aircraft activity will start on Wednesday, April 3<sup>rd</sup> and end the following Tuesday on Tuesday, April 9<sup>th</sup>. MSP anticipates about 100 more private flights and charter flights will bring in an additional 10-15 flights during the event. As with the Super Bowl, low flying helicopters may be seen from the ground and high rise buildings in and around Minneapolis from the end of March to the first week of April.

The MAC expects arrivals will peak in the hours before the Semifinal games on April 6<sup>th</sup> and departures will peak after the National Championship game on the 8<sup>th</sup>; departures will then flow into the 9<sup>th</sup> as well. 40k-50k people are expected to fly out of MSP during the peak



departure day on April 9<sup>th</sup>. The MAC reliever airports are expected to see an increase in activity as well as MSP.

MAC staff created and distributed fact sheets with this information for MSP and the reliever airports regarding the NCAA. **Nelson** shared that they will be posted on the MAC Noise website, available at the Winter Listening Session, and will be distributed at the March NOC meetings.

## 8. Announcements

- **Chair Miller, Eagan**, announced that Representative Goss, Delta, will be resigning from the NOC and expressed appreciation for his partnership and dedication to the group.
- Winter Listening Session, Wednesday, January 23, 2019 @ 7:00 PM, MAC General Offices, Lindbergh Conference Room

## 9. Adjourn

A motion to adjourn was requested by **Chair Miller, Eagan**, moved by **Representative Miller, Mendota Heights**, and seconded by **Representative Moos, UPS**.

The meeting adjourned at 2:37pm.

The next meeting of the NOC is scheduled for **Wednesday, 20 March, 2019 at 1:30 PM**

Respectfully Submitted,

Amie Kolesar, Recording Secretary



**MSP NOISE OVERSIGHT COMMITTEE  
DRAFT MEETING MINUTES**

Wednesday, 20<sup>th</sup> of March 2019 at 1:30 PM

MAC General Office  
Lindbergh Conference Room

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**Call to Order**

A regularly-scheduled meeting of the MSP Noise Oversight Committee, having been duly called, was held Wednesday, 20<sup>th</sup> of March 2019, in the Lindbergh Conference Room at the MAC General Office building. Chair Miller called the meeting to order at 1:30 PM. The following were in attendance:

**Representatives:** D. Miller; R. Barette; G. Goss; B. Hoffman; J. Malin; P. Martin; L. Olson; P. Dmytrenko, J. Miller; C. Koppen; C. Finlayson;

**Staff:** D. Nelson; B. Juffer; A. Kolesar; J. Lewis; N. Pesky; D. Anderson; N. Ralston; B. Ryks;

**Others:** D. Sloan – City of Mendota Heights; L. Grotz – City of Edina; L. Moore – City of Bloomington; L. Petschel – City of Mendota Heights; D. O’Leary – City of Sunfish Lake; A. Nemcek – City of Rosemount; L. Palmisano – City of Minneapolis; M. Doran – City of Richfield

Prior to the agenda, Brian Ryks, MAC Executive Director/CEO, asked to address the Noise Oversight Committee. Ryks stated that one of his priorities has been to enhance stakeholder engagement at the MAC and that has led to restructuring and reorganizing. A new department has been created and noise related items have been adopted in to that department. He announced that Dana Nelson has been selected as the new Director of Stakeholder Engagement. Ryks emphasized the importance and continued effort to partner with the NOC to discuss ways to minimize noise impacts and thanked the members for their involvement and partnership.

**10. Review and Approval of the January 16, 2019 Meeting Minutes**

Minutes were not approved as there was not a quorum.

**11. Review of Monthly Operations Reports: January and February, 2019**

**Brad Juffer, Assistant Technical Advisor**, stated there were 30,743 operations in January and 27,944 operations in February. The 40 flight increase in January combined with the 2,056 flight reduction in February equates to a reduction of just over 2,000 flights from the first 2 months of 2018. Super Bowl traffic in 2018 and a record 39 inches of snow in February 2019, were two of the contributing factors to a 3.3% decline of operations.

MACNOMS tallied 2,126 operations between 10:30 PM and 6:00 AM at MSP in January and 2,276 operations during those times in February. For these two months, the nighttime total increased from 2018 by 465 flights or an average of nearly eight flights per night.

**Juffer** moved on to runway flow and the January splits for North, South, and Mixed flows were 44%, 32%, and 18%, respectively. A total of 126 hours were spent in a mixed flows (either Mixed A – arrivals and departures on Runways 30L and 30R and departures on Runway 17) or Mixed B – arrivals and departures on Runways 12L and 12R and arrivals on Runway 35). These 126 hours represent the 3<sup>rd</sup> highest monthly total since Runway 17/35 opened. The North, South, and Mixed flows split in February was 41%, 45%, and 8%, respectively. Overall for the combined months of January and February of 2019, the split was 43/38/13 percent, respectively. These numbers are similar to the same two months of 2018, however, **Juffer** explained subtle details are often important.

During 2018, South Flow occurred for 21.1% of the hours in January and February, almost identical to the 21.9% in 2019. **Juffer** pointed out the difference was the use of Straight South Flow (arrivals and departures only on 12L and 12R), which was only 8.8% in 2018 and increased to 16% in 2019. Winds and snow removal activities led to less available time for Runway 17 in 2019. The use of North Flow in January and February was 43% in 2019 compared to 42% in 2018. Looking at 2019, this was 39.5% in Straight North Flow (arrivals and departures on Runways 30L and 30R) compared to only 3% of the full North Flow (arrivals and departures on Runways 30L and 30R with arrivals on Runway 35). Snow removal and runway availability again contribute to the change in this case. Additionally, the FAA considers upcoming arrival demand in 15 minute segments when determining the need to use Runway 35.

**Juffer** reported a total of 58,687 operations were recorded in the MAC's Noise and Operations Monitoring System in January and February. The Runway Use System's first priority runways were used 40.1% of the time, combined with 14.8% for second priority equates to 54.9% use for high priority runways.

In 2019, Straight South Flow was used often compared to previous years. In February only 3,330 departures used Runway 17, which was the lowest monthly total in four years. Many of those departures ended up on Runway 12R. Additionally, while North Flow was used for 43% of the hours in the first 2 months of 2019, there were only 447 arrivals on Runway 35 or 1.5%.

**Juffer** moved on to MSP Carrier Jet Usage; the CRJ9 was the most used carrier jet aircraft type so far in 2019 followed by the B738 and the CRJ2. This is a change from last year when the CRJ2 was the most used aircraft type. The split of Regional Jet, Narrow Body and Wide Body use for the first two months of the year was 39%, 58%, and 3%, respectively. This is consistent with the same time last year.

Next **Juffer** reported the aircraft noise complaints received by the MAC. A total of 12,307 complaints were logged for MSP in January and 6,972 in February. The complaint count in January is more than double the complaints received in January. The February count was 954 more than last year. Complaints were filed from 234 locations in January and 132 locations in February. The January location total is an increase of 48 locations from 2018 while the February count is 44 lower than 2018.

The Top 10 locations in January and February filed 13,379 complaints accounting for 69% of all complaints received. The majority of all locations (67%) of customers filed 10 or less complaints for the previous 2 years.

Regarding sound monitoring, aircraft events over 65 decibels (dB) occurred for 373 hours in January and 257 hours in February. Overall, this is a 14.1% increase in the Time Above 65 dB for January and February compared to 2018. The Number of Events Above 65 dB was 75,314 in January and 57,926 in February. This is a total increase of 12.1% compared to 2018.

**Juffer** reported the compliance with noise abatement procedures, beginning with the Runway 17 Departure Procedure, which was used 99.4% in January 2019 and 99.5% in February. The Eagan-Mendota Heights Departure Procedure was used 95.9% in January and 93.0% in February. The daytime use of the Crossing-in-the-Corridor Procedure was 30.7% and 27.0% in January and February, respectively, The Crossing use at night was 41.4% in January and 40.0% in February.

**Representative Dmytrenko, Richfield**, mentioned the increase of complaints without the locations increasing and asked if there was a point when the MAC would step in and reach out to communities differently. **Juffer** responded that there is not a certain threshold to trigger outreach, but rather complaint trends and locations are evaluated comprehensively. Often residents will reach out to the MAC via the website or with a phone call and receive extra information regarding their concerns. However, the MAC does record when residents create an account and when complaints are submitted so mining that data and setting specific thresholds for additional outreach is possible.

**Representative Martin, Bloomington**, asked for clarification on the complaint data for January of 2018 versus 2019 and if it's fair to assume the airport was in South Flow twice as much in 2019 than 2018 or is it just that complaints increase this much when the airport is just in a South Flow. **Juffer** responded that he does not think the increase in South Flow was that drastic, rather the factors that tend to drive increased complaints in that flow may have played into the complaint increase. For example, the day of week, time of day, temperature contribute to fluctuations in complaints. **Juffer** noted that in the last few months, South Flow has contributed to more complaints than in previous months.

**Representative Olson, Minneapolis**, asked if increased Straight South and Straight North flows is a developing trend. **Juffer** responded that wind and snow removal activity does not always allow the use of Runway 17/35. The other variable in North Flow is the Converging Runway Operations (CRO), at times not necessitating the use of Runway 35 based on demand. **Dana Nelson, Technical Advisor**, added that Runway 35 requires different weather minimums. Additionally, FAA went through a working group to develop and implement with standard protocol to determine when they will go into and come out of CRO based on demand. The FAA has indicated that they have not experienced the level of demand within 15-minute blocks that would require as much use of Runway 35. **Olson** asked that the NOC be provided with more information on this topic. **Nelson** responded that she has a request to FAA to provide an update at the May NOC meeting.

## 12. Public Comment Period

No public comments

### 13. 2018 Annual Noise Contour Report and Mitigation Eligibility

**Brad Juffer, Assistant Technical Advisor**, reminded the group that as dictated by the Consent Decree, the MAC is required to prepare an annual noise contour report by March 1<sup>st</sup> that examines the airport operations at MSP for the previous year. The 2018 annual contour was developed by HNTB Corporation using the Aviation Environmental Design Tool version 2D. That contour was the basis for the 12th Annual Noise Contour Report which was published and sent to the parties of the Consent Decree on February 28<sup>th</sup>, 2019.

Address lists and the interactive mitigation map were also updated to reflect the new contour. The publishing was accompanied by a website article that was distributed to those subscribed to receive our noise news articles. .

**Juffer** reported that the 2018 contours were developed using the FAA reported operational level of 406,913 operations. This is a reduction of 30.1% from the 582,366 operations included in the forecast 2007 contour. The 2007 forecast contour included 274.9 average daily Hushkit operations. During 2018, there was less than one average daily operation in a Hushkit (0.8 average operations per day). On average, there were three fewer nighttime operations in the 2018 contour compared to the 2007 contour. These three factors result in a contour that is 28% smaller in the 60 dB DNL and 39% smaller in the 65 dB DNL.

While the total contour is significantly smaller than the forecast 2007 contour, there are two areas where the 2018 60 dB DNL contour extends beyond the 2007 forecast contour, those areas are the focus for our mitigation program.

The contour contracted in areas along Runways 30L and 30R arrival lobes in Eagan and Inver Grove Heights. The contour also shrunk in Richfield and Minneapolis along Runways 30L and 30R departure lobes. This is the result of variations in runway use between 2017 and 2018 and a decrease in North Flow operations in 2018. Less North Flow gave way to more South Flow operations in 2018. The result is growth in the contour on the Runway 12L and 12R arrival lobes in Minneapolis. Additional growth is visible in the area of Runway 17 departures over the Minnesota River and a minor increase on the Runway 12L departure path. There is also a small growth on the Runway 4 arrival due to the snow storms of 2018.

The actual 2018 60 dB DNL contour encompasses 137 fewer acres of land than the 2017 contour (a 1.2% reduction). The 63 dB DNL contour is 25 acres smaller than 2017 (a 0.6% reduction). The primary driver of the smaller contour was a reduction of 8,790 total operations from 2017.

**Juffer** reported on mitigation eligibility, which he explained is strictly defined in the Consent Decree. The language stipulates that the home must meet the following criteria to be eligible for mitigation.

1. The home has to be located in a community with local land use controls and building performance standards to ensure the practices are consistent with the noise mitigation provided by the MAC.
2. The home has to be in the actual 60 dB DNL noise contour for three consecutive years and within a higher mitigation area than the original program.

The Amended Consent Decree program is ongoing now and will be active through 2024. The program provides residential sound insulation materials to homes out to the 60 dB DNL threshold. This program is the most advanced noise mitigation program in the country as the federal standard stops at 65 dB DNL.

The Consent Decree also defines the level of mitigation eligibility.

- Eligible homes in the 63-64 dB DNL will receive a Full 5 dB Reduction Package. The package was creatively named to indicate that the goal of the package is to reduce interior noise levels by an average of 5 dB
- Eligible homes in the 60-62 dB DNL will receive a partial noise reduction package. Homes in this area have 2 options. The homeowners can choose to receive air conditioning and \$4,000 of additional products and services or no air conditioning and \$14,000 of products and services.
- It is important to note that the mitigation is provided in the year after eligibility has been determined. For example, homes that were identified in the 2018 Annual Contour Report released in February 2019 will receive their upgrades in 2020.

**Juffer** reported historic residential mitigation has occurred in two programs, the first from 1992-2006 and again from 2007-2013.

Mitigation during the MSP Residential Noise Mitigation Program from 1992 –2006 included:

- 7,800 single family homes
- 1,327 multi-family units
- 19 schools

Mitigation during the original Consent Decree from 2007-2013 included:

- 404 single family homes received full mitigation package
- 5,055 single family homes received partial mitigation package
- 1,773 single family homes participated in reimbursement program
- 1,976 multi-family units

During the Amended Consent Decree as a result of the 2013 – 2017 actual noise contours, 230 homes became eligible for the Partial Noise Reduction Package in 2017 – 2019. These homes were previously in areas that were included in the Homeowner Reimbursement program. Any package received was reduced by the amount received in the reimbursement phase.

In 2017 – 2019, 322 homes were eligible for the Partial Noise Reduction Package without any deduction. Also on these blocks were 88 multi-family units. The multi-family program offers pull-through air conditioning units or acoustical air conditioning covers if the building is already equipped.

Finally, 298 homes became eligible for the Full 5 dB Reduction Package as a result of being in the 63 dB DNL for three consecutive years. These homes were previously eligible for the

Partial Noise Reduction Package. Any new improvements received in 2017 – 2019 will consider previous work completed.

Cost of the program to date is: \$7.5m with the majority of 2019 costs yet to be included.

As a result of the 2018 Annual Contour Report, 243 additional homes became eligible for mitigation; all 243 homes are located in the City of Minneapolis.

- 24 homes are located on a block that was previously eligible for the Homeowner Reimbursement Program are now eligible for the Partial Noise Reduction Package. The values of any previous reimbursements will be deducted from the improvements made in 2020.
- 140 homes on 6 blocks that were outside any previous program are eligible for the Partial Noise Reduction Package in 2020.
- 79 homes on 4 blocks that were previously eligible for the Partial Noise Reduction Package are now eligible for the Full 5 dB Reduction Package.

**Juffer** also reported that the 2018 actual noise contour provided one year of eligibility for 313 single family homes and 525 multi-family units, all in Minneapolis. If these homes stay in the same contour area in the 2019 and 2020 Annual Contour Reports, they will be eligible for mitigation in 2021 and construction activities will commence in 2022.

There is currently one block in Eagan with 16 homes with two years of eligibility that were previously eligible for the Homeowner Reimbursement Program. If this block stays in the 60 dB DNL contour in the 2019 Annual Contour Report released in 2020, the homes will receive mitigation in 2021. The value of their packages will be reduced by the value paid out during the reimbursement phase.

**Representative Olson, Minneapolis**, stated that MSP's mitigation program is not only a good program but helps to show goodwill to being a good neighbor. It helps improve people's daily lives and **Olson** acknowledged that this has been a good partnership. **Olson** also said that they are constantly making effort to reduce noise levels and this program doesn't negate those efforts. This group needs to be more creative in ways to reduce nighttime operations.

**Representative Martin, Bloomington**, asked why the 2007 forecast was so accurate with nighttime operations and so off in the daytime operation projection. **Juffer** responded that the total forecasted operations showed robust growth based on expected passenger levels and was not able to account for the 2008 economic crash, consolidations, nor was it able to gauge the aircraft model change. Nighttime operations is forecasted as a percentage of total operations. Therefore, they tend to be more accurate.

#### 14. MSP Airport Long-Term Plan and Stakeholder Engagement Update

**Dana Nelson, Technical Advisor**, stated that the MSP Long-Term Plan is a forward-looking planning tool that studies facility and infrastructure needs based on projected 20-year passenger demand and aircraft operations. It will focus on evaluating when facility improvements are needed to accommodate projected demand in a manner that is safe, efficient, orderly and cost-effective and that maintains and enhances customer service. It does not, however, authorize construction or improvements to facilities, nor does it serve as a basis

for determining eligibility for noise mitigation programs. The Plan helps the MAC better understand and plan for future facility needs.

The Long-Term Plan goals are:

- Plan for future facilities that will meet projected passenger activity levels in a manner that maintains and enhances customer service, while facilitating a seamless experience.
- Produce a development plan that positions the MAC to meet future demand levels, enhance financial strength, leverage environmental stewardship, and infuse sustainable thinking.
- Conduct the planning process in a manner that includes meaningful stakeholder engagement processes.

The planning process has its own steps and processes:

1. Baseline Existing Facilities
  - a. Inventory and document existing facilities and aviation activity levels to establish baseline conditions
2. Forecasts
  - a. Forecast MSP aviation activity levels (passengers, cargo, and aircraft operations) for the milestone years between 2020 and 2040
3. Gap Analysis
  - a. Determine any facility deficiency gaps between the baseline condition and desired future conditions based on forecasted activity levels
4. Development Concepts
  - a. Develop and evaluate alternative means to remedy facility deficiencies identified through the process
5. Proposed Development
  - a. Determine a proposed development program, funding plan, and implementation strategy to present to the community and the MAC board
6. Environmental Considerations
  - a. Prepare an overview of environmental factors that should be taken into consideration when implementing the plan

In conjunction with the MSP Long-Term Plan is the Stakeholder Engagement Program. There are a number of components to this program and process and it will start with a Stakeholder Advisory Panel. This program will have milestone updates, a website, a newsletter, public events, updates to NOC and PD&E Committee, and there will be an option for additional public presentations.

The stakeholder advisory panel is made of 27 individuals and includes:

- Airport Tenants
- Federal Partners
- Local Communities
- Passenger Groups
- Regional Businesses
- Tourism Associations



**Nelson** presented a timeline schedule to the group with a projected quarterly timeline, review dates, events, and comment periods. This project is scheduled to close in the fourth quarter of 2020.

**Representative Olson, Minneapolis**, said that Councilmember Linnea Palmisano was present at the meeting and will be representing the City of Minneapolis through this process.

#### 15. NCAA Final Four Aircraft Activity Update

**Brad Juffer, Assistant Technical Advisor**, said the MAC expects peak arrivals on April 6<sup>th</sup> and peak departures on April 8<sup>th</sup> and into the morning of April 9<sup>th</sup>. MAC provided fact sheets for the local communities in Minneapolis and those around the reliever airports. This information is on the website and provided at this meeting. Cities can link this information to their local informational sites as well.

#### 16. Winter Listening Session Update

**Brad Juffer, Assistant Technical Advisor**, informed the group that the Winter Listening Session was in late January and was attended by four residents from Eagan, MAC staff, and NOC members. The conversation focused primarily on Runway 17 and involved discussing wind direction, nighttime operations, Area Navigation (RNAV), Converging Runway Operations (CRO), Noise Mitigation Eligibility, and future NOC work plan items.

#### 17. Announcements

- The spring Listening Session will be Wednesday, April 24, 2019 at 7:00 PM at the Mendota Heights City Hall.
- NOC Member terms expire in June 2019. Member appointment requests will be mailed to the city and carrier partners.

#### 18. Adjourn

A motion to adjourn was requested by **Chair Miller, Eagan**, moved by **Representative Dmytrenko, Richfield**, and seconded by **Representative Olson, Minneapolis**.

The meeting adjourned at 2:40 pm.

The next meeting of the NOC is scheduled for **Wednesday, 15 May, 2019 at 1:30 PM**

Respectfully Submitted,

Amie Kolesar, Recording Secretary

# MEMORANDUM

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

**FROM:** Brad Juffer, Assistant Manager – Noise, Environment & Planning

**SUBJECT:** **REVIEW OF MSP MONTHLY OPERATIONS REPORTS: MARCH AND APRIL 2019**

**DATE:** May 1, 2019

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://www.macenvironment.org/reports/>.

At the March 20, 2019 NOC meeting, MAC staff will provide a summary of this information for March and April 2019. To view these summary reports prior to the meeting, visit the “Archive” section at the link above.

# MEMORANDUM

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

**FROM:** Brad Juffer, Assistant Manager – Noise, Environment & Planning

**SUBJECT:** **PUBLIC COMMENT PERIOD**

**DATE:** May 1, 2019

Members of the public are welcome to attend NOC meetings. During each meeting, a public comment period of no more than 20 minutes is added to each agenda. Individuals choosing to speak during the public comment period may do so by submitting a speaker card prior to the meeting start time or by contacting their NOC representative prior to the meeting date. Speaker cards will be made available at the sign-in table before each meeting. Submit completed speaker cards to the NOC Secretary or to any NOC member before the meeting begins.

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.
- When called upon to speak, speak clearly into the microphone, 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.

# MEMORANDUM

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

**FROM:** Brad Juffer, Assistant Manager – Noise, Environment & Planning

**SUBJECT:** **CONVERGING RUNWAY OPERATION UPDATE**

**DATE:** May 1, 2019

At the May 15, 2019 NOC Meeting, FAA Regional Administrator, Rebecca MacPherson will provide an update on the agency's recent activities regards Converging Runway Operations (CRO) at MSP.

# MEMORANDUM

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

**FROM:** Brad Juffer, Assistant Manager – Noise, Environment & Planning

**SUBJECT:** **MSP AIRPORT LONG-TERM PLAN AND STAKEHOLDER ENGAGEMENT**

**DATE:** May 1, 2019

The MAC is responsible for long-term planning for each of its airports. The MSP Airport Long-Term Plan (“the Plan”) is a forward-looking planning tool that studies facility and infrastructure needs based on projected 20-year passenger demand and aircraft operations.

A robust community and stakeholder engagement program – including creation of a Stakeholder Advisory Panel – will accompany various phases of the planning process, providing ample opportunities for public information, input and discussion.

An overview of engagement program updates and upcoming Stakeholder Advisory Panel activities will be shared at the May 15, 2019 NOC meeting.

# MEMORANDUM

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

**FROM:** Brad Juffer, Assistant Manager – Noise, Environment & Planning

**SUBJECT:** **RUNWAY 17 DEPARTURE OPERATIONS REPORT SCOPE**

**DATE:** May 1, 2019

The 2019 MSP Noise Oversight Committee’s Work Plan includes the following item: Conduct an Evaluation of Runway 17 Departure Operations and Heading Usage Trends.

This item was added to the NOC Work Plan as a result of resident and community input at a Listening Session in October 2018. It was further discussed at the Listening Session in January 2019. Because this study was added to the work plan at the request of airport neighbors, the MAC sought input from interested residents about the contents of the study.

An overview of the engagement and the resulting study scope will be shared at the May 15, 2019 NOC meeting.

# MEMORANDUM

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

**FROM:** Brad Juffer, Assistant Manager – Noise, Environment & Planning

**SUBJECT:** **MACNOISE.COM WEBSITE REDESIGN**

**DATE:** May 1, 2019

In 2019, the MAC will initiate a project to redesign the company website, metroairports.org. As a part of that project, macnoise.com will be redesigned to fit within the MAC website. To ensure that the redesigned sites meet the needs of our users, MAC staff would like to solicit feedback from the NOC about how these websites are used. Specifically, we would like to hear your responses to the following questions:

- How do you use the current sites?
- What do you appreciate about the current sites?
- What changes to the sites would help provide better service?
- Are there certain functions we could add that our users would appreciate having?
- Do you have any favorite websites that provide information or functionality you would like to see on the MAC site?

Input on the redesigned website will be collected during the May 15, 2019 NOC meeting. Additionally, input can be sent directly to Dana Nelson at [dana.nelson@mspmact.org](mailto:dana.nelson@mspmact.org) or calling at 612-725-6330. Please provide your input by May 31, 2019.

# MEMORANDUM

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

**FROM:** Brad Juffer, Assistant Manager – Noise, Environment & Planning

**SUBJECT:** **SPRING LISTENING SESSION**

**DATE:** May 1, 2019

On April 24, 2019 at 7:00 P.M., the Spring Listening Session was held at the Mendota Heights City Hall. Seven residents attended the meeting from Mendota Heights, Sunfish Lake, Eagan, Richfield and St. Paul. Also in attendance were MAC Staff, FAA Staff, Mendota Heights mayor Neil Garlock, Sunfish Lake mayor and NOC member Dan O’Leary, Mendota Heights Councilmember Liz Petschel, members of the Mendota Heights Airport Relations Commission and NOC Member and Delta Chief Pilot Paul Borgstrom.

Mayor Garlock and Mayor O’Leary opened the meeting and described how the meeting came to be in Mendota Heights. Staff then provided a presentation that covered Noise Abatement Procedures, MSP Turboprop activity and the MAC’s Noise Abatement Dashboard. The presentation slides are available on the Listening Session page on our website:

<http://www.macnoise.com/our-neighbors/msp-quarterly-listening-sessions>

The City of Mendota Heights also streamed the meeting live and made it available on their website at:

[http://townsquaretv.granicus.com/MediaPlayer.php?view\\_id=9&clip\\_id=12496](http://townsquaretv.granicus.com/MediaPlayer.php?view_id=9&clip_id=12496)

After the presentation, staff opened the meeting to discussion. Because the meeting was held in Mendota Heights, the open floor discussion was focused primarily on departure operations from Runway 12L and 12R. The topics raised during the conversation included:

- The MAC Noise Abatement Dashboard
- Departure paths from Runways 12L and 12R
- History of the Eagan-Mendota Heights Corridor Procedure
- Crossing-in-the-Corridor Procedure
- Turboprop departures over Mendota Heights

The next Listening Session will be on July 24, 2019 at 7:00 P.M. This Listening Session is being hosted by the city of Edina at South Metro Public Safety Training Facility, located at 7525 Braemar Blvd, Edina, MN 55439. Further details are available on the [www.macnoise.com](http://www.macnoise.com) website.