MSP NOISE OVERSIGHT COMMITTEE
MEETING MINUTES
Wednesday, 28 November, 2018 at 1:30 PM

MAC General Office
Lindbergh Conference Room

Call to Order

A regularly-scheduled meeting of the MSP Noise Oversight Committee, having been duly called, was held Wednesday, 28th November 2018, in the Lindbergh Conference Room at the MAC General Office. Chair Hart called the meeting to order at 6:31 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, C. Jacobson

Staff: D. Nelson; B. Juffer; A. Kolesar; J. Lewis; R. Furman, B. Ryks; N. Pesky

Others: J. Axmacher – City of Eagan; A. Gladhill – City of Eagan; T. Gladhill – City of Eagan; B. Gilbertson – City of Minneapolis; D. Hughes – City of Eagan; D. Dullinger – City of Eagan; S. Henry – City of Eagan; T. Drill – City of Eagan; D. Lager – City of Minneapolis; D. O'Leary – City of Sunfish Lake; L. Moore – City of Bloomington; T. Cossalter – City of Edina; R. Owen – Met Council

1. Review and Approval of the September 19, 2018 Meeting Minutes

Chair Hart, Delta, asked for a motion to approve the minutes. The motion was moved by Representative Martin and seconded by Representative Goss. It was passed unanimously.

2. Review of Monthly Operations Reports: September and October, 2018

Brad Juffer, Assistant Technical Advisor, stated that there were 33,162 operations in September and 34,578 operations in October. The September count is one-half of 1% reduction from 2017 and the October count is 1.24% reduction from 2017. This equates to 600 fewer flights than the same time period of 2017. Year to date operations as of October 31 was 342,225. This is a reduction of nearly 5,900 flights from 2017 or a reduction of 1.7%.

In September, there were 1,781 flights between 10:30 PM and 6:00 AM and an even 1,800 in October. The September figure is an increase of 230 operations (15%) from September 2017 while the October number is a seven flight reduction (.4%) from 2017. Weather was a factor as there were thunderstorms on 9/17, 9/18, 9/20 and roughly only 3 hours of thunderstorm activity in September 2017.

There have been 951 more night flights thus far in 2018 compared to the same time period of 2017. This is a 4.7% increase from 2017 or three additional flights per night.

There were 67,740 operations recorded at MSP in September and October. RUS Priority 1 runways were used 33.5% of the time during the previous 2 months. Combining this number with the 19.4% for Priority 2, and we arrive to the more traditionally reported 52.9% use for high priority runways. A thorough investigation into the RUS percentages and the map does show one other oddity. There were 25 Runway 35 departures and 134 Runway 17 arrivals during the previous two months. This activity, occurring entirely at night, was necessary as both parallel runways had to be closed to facilitate construction activity on and adjacent to Runway 4/22.

A high prevalence of south winds in September aided a month with unbalanced flow configurations. For September the flows were split 21/67/6 between North/South/Mixed. For 15 consecutive days from 9/6 through 9/20 the airport was configured in a South Flow. The flows were more balanced in October with splits of 43/39/10. Of the 104 hours in Mixed Flow during September and October, 98 were Mixed A and 6 were Mixed B.

For the previous two months, the CRJ2 and CRJ9 were the top used aircraft types, followed by the 737-800 and -900 followed by the A320 and A319. These six aircraft types flew 62% of all carrier jet flights in September and October. If you take it two steps further to complete the top 10, you have the B717/MD90 next followed by the CRJ7/E170. These top 10 flew 84% of all carrier jet flights.

For many recent Operations Summary reports, the carrier jet fleet mix has been excluded from the meeting updates. The trends have been continuing slowly and consistently and up until now, bi-monthly updates would be redundant. For carrier jets, narrowbody usage was by far the most common jet type in the early part of this century until 2010 when the regional jet overtook the narrowbodies as propeller driven Northwest Airlink Saabs and Metroliners were replaced with jets. From 2012 through today, that ratio tipped back to narrowbody aircraft. 2018 YTD is the first time since 2012 when the split has leveled off. In 2017, narrowbody aircraft were used 57.3% of the time with RJs filling 40% of the category. Thus far in 2018, narrowbody aircraft flew 57.1% of all carrier jet flight with RJs operating 40.2%.

The MAC Noise Office received 18,513 complaints in September and an additional 13,137 aircraft noise complaints for MSP flights in October. The complaint count in September is 3,231 more than 2017 while the October number is 2,293 more complaints than 2017, both of the months happen to be a 21.14% increase. Year to date complaints are down by more than 12,000 from 2017, a 9% reduction.

When complaints go up by more than 5,000, it would be reasonable to expect complaint locations to increase; in the previous 2 months, this was not the case. Complaints were filed from 435 locations in September and 298 locations in October. Both of those totals are reductions from 2017 when the locations were 521 and 331. Because of increased complaints and decreased locations, the average complaints per location of 43 and 44 for September and October were the 2nd and 3rd highest monthly average in the previous four years (March 2018 – 47) while the 1.8 operations per complaint in September was the lowest result on that metric in the previous 4 years.

A look at complaints spatially from September and October:

- 17 locations (7%) of areas of the community filed more than 300 complaints or roughly five day
- On the opposite end, 101 areas or 43% filed less than eight complaints or roughly one per week.

The top 10 locations filed 18,761 complaints in September and October a total encompassing 59% of all complaints. 72% of the complaints from these locations were filed in regard to South/Straight South Flow, 19% were from North/Straight North Flow. 383 locations filed 10 or fewer complaints in September and October.

Regarding sound monitoring, aircraft events occurred for 447 hours in September and 502 hours in October. Overall, this is a .2% reduction in the time above 65 attributable to aircraft for September and October compared to 2017. The 89,809 events for September and 96,020 events in October is 2,474 more events than the same months in 2017. This is a total increase of 1.3% compared to 2017.

For noise abatement, R17 procedure was consistent at 99.5% in September and 99.2% in October. There were 69 jets west of the 2.5 nautical mile turnpoint during those months. The corridor procedure was used 96.2% of the time in September and 95% in October. The use of the crossing procedure was 36% and 32% during the day and 46% and 43% at night. The use of 1st and 2nd priority runways was at 52.1% in September and 53.7% in October.

Representative Olson, Minneapolis, asked if the upgauging trend was stabilizing. **Juffer** responded that the aircraft family use is stabilizing but he would look to seat capacity to accurately respond to aircraft specific inquiry.

Olson asked how Juffer concluded that certain complaints were related to specific flow. **Juffer** responded that the data presented on flow was only in reference to the top 10 complaint locations. In general South Flow tends to generate a larger volume of complaints albeit not always more locations. The top 10 locations are not representative of all complaints, some are related to 12L, others in Eagan are related to 17, and some are related to 35. **Olson** commented that the uptick could be from more continuous days in a certain flow and **Juffer** stated that both North and South Flow have similar complaint locations but, anecdotally, continuous South Flow tends to create a greater volume of complaints.

3. Public Comment Period

Chair Hart, Delta, introduced the new public comment process since the bylaw change at the previous meeting. Each commenter is asked to state their name and address and has three minutes for comment.

Steve Henry
37XX Falcon Way, Eagan, MN

Lived in this home since 1993, prior to 17 opening. The appeal of this location, at the time, was the rare occurrence of aircraft noise and general quiet of the area. R17 opened and there was an increase in aircraft and noise, but not enough to be a bother. Three years ago something changed and the aircraft activity over our house has increased. Planes come over

every 2-3 minutes and is having a negative impact on our quality of life. If the activity was even just once every half-hour it probably wouldn't be a big deal. Looking for help and have worked with City of Eagan and ARC. What changed 3-4 years ago that created the situation and what options are there to deal with it? For 10 years when R17 was open it was ok but the last 3-4 years it's gotten worse. Members of community are talking about moving because this is having an impact on quality of life. What can be done to remediate the situation? Not looking for insulation but for other solutions.

Ted Gladhill
11XX Blue Heron Court, Eagan, MN

Anecdotally, the residents in this area are not agreeing with MAC statistics regarding activity over their homes. Why has the airport not returned to pre-CRO? 2014-2015 departures, pre-CRO, showed about 4K departures a month. July 2015, CRO was put in-place and six months after CRO had a 45% increase in departures, on average 5,800-6,100/month. In late 2016 the adjusted CRO procedures occurred and that frequency was ok. Mr. Mara stated in January 2017 that there would be relief, fewer arrivals from R17. That year there was a slight drop with about 5,300 departures/month. In 2018, R17 returns to about 5,790 departures/month. Why has the airport not returned to pre-CRO departure volumes? Was there a change to R17 departure early turn rules to the east? Departure turns have changed, why do aircraft need to turn immediately after the runway? This procedure didn't seem to occur when the runway was originally open. Why is this turn procedure taking place? Was there a mandate for it?

David Hughes
33XX Sibley Memorial Highway, Eagan, MN

Over the last two years, the increase of aircraft noise has had a negative impact on daily living. Met with neighbors, MAC, and City of Eagan. Lived in home since 2009 and in 2016/2017 the noise increased drastically and is nonstop. Feels like property rights and human rights have been violated. No longer have life, liberty, and pursuit of happiness due to a decision thrust on community by the airport. Did staff think about knocking on doors to inform about the runway change? There are a variety of animals on property, it's a safe place for them. There are flocks of geese and migratory birds on property and aircraft shouldn't be moved over property since the number one threat to an airplane are birds.

Co-Chair, Miller, Eagan, mentioned that many of the questions asked during the comment period will be addressed later in the meeting by Sean Fortier, FAA District Manager of Operations for the Minneapolis District. **Hart** followed up that other questions may be sent to the Noise Office through the MACNoise.com website or asked at the next listening session on January 23rd, 2019 at the MAC General Office at 7 PM.

4. Review of the Fall Listening Session

Brad Juffer, Assistant Technical Advisor, stated the Fall Listening Session was held on October 24th, 2018 at the MAC General Office. The meeting was attended by residents from Apple Valley, Mendota Heights, Minneapolis, and Savage. There were representatives from Local FAA Air Traffic Management, MAC staff, NOC Representatives, and a Minneapolis Councilmember. The meeting covered a variety of topics regarding the NOC structure and purpose, the 2018 NOC Work Plan, and the 2019 Draft Work Plan. This meeting had a slightly different format in order to accommodate a larger discussion on the 2019 Draft Work Plan.

5. Summary of Aviation Noise, Environment, and Health-Related Research

Dana Nelson, Technical Advisor, introduced Jennifer Lewis, Noise Program Specialist. **Lewis** started by stating that there is a lot of research being conducted on aircraft noise and how that impacts our environment and our health. Each year a summary is provided to the NOC that updates the committee on items relevant to MSP and surrounding areas. The summary provides information on projects that were completed, active, initiated, or anticipated in 2018 or 2019 by:

- Transportation Research Board (TRB)
- FAA's Centers of Excellence (ASCENT)
- Federal Interagency Committee on Aircraft Noise (FICAN)
- World Health Organization (WHO)

Lewis thanked Representative Olson for feedback from the City of Minneapolis. In 2018 there was conversation about how the NOC can dig deeper into research topics. Looking into 2019, this is a good opportunity to see if there are topics of particular interest to the NOC, and suggested a discussion about them may occur at a future meeting.

Representative Olson, Minneapolis, thanked Lewis for her work and the quick synopsis that allows the committee to keep track of the studies. **Olson** mentioned that she wants to find a way to integrate this information to a meeting, specifically when it relates to the airport and health impacts.

6. Review and Approval of 2019 NOC Work Plan, NOC 2018 Accomplishments, 2019 NOC Meeting Dates

Dana Nelson, Technical Advisor, stated at the September NOC Meeting, the committee reviewed the 2019 NOC Work Plan and the listening session in October acted as a working meeting to gather input from community members. **Nelson** presented the Draft NOC 2019 Work Plan on the power point screen and reviewed each item. The full 2019 NOC Work Plan may be found on the MACNoise.com website:

https://www.macnoise.com/our-neighbors/noc-work-plans-and-accomplishments

2019 will focus on reviewing the residential noise mitigation program; the 2018 actual noise contour and residential noise mitigation program eligibility; updates on CRO, LTCP; noise and health-related research initiatives; improving the user experience with the website and MACNOMS; and continued review of community input from listening sessions. **Co-Chair Miller, Eagan,** mentioned expanding item 2c so it wasn't limited to nighttime usage and could include R17 departure trends and heading usage. **Representative Olson, Minneapolis,** clarified that item 2c includes arrival usage and altitude trends. **Nelson** responded that those items were added to the 2018 NOC Work Plan and will continue for 2019. **Olson** stressed the importance of coming up with creative solutions to nighttime noise and would like to see the NOC and MAC lead the way to manage nighttime noise.

Nelson presented the 2018 NOC Accomplishment list with 23 items and thanked the NOC Bylaw Review Subcommittee for helping to break down barriers and increase citizen involvement. The 2018 NOC Accomplishment List may be found on the MAC Noise website: https://www.macnoise.com/our-neighbors/noc-work-plans-and-accomplishments.

Item #11 is the MSP Noise Management Benchmarking Study which was born from a request made by MSP FairSkies. This then lead to a robust discussion on goals and further opportunities for the NOC to identify. The study was multi-faceted and a big component was to ensure it was performed by an independent third party.

Nelson presented the suggested 2019 NOC Meeting dates:

- January 16
- March 20
- May 15
- July 17
- September 18
- November 20

Representative Martin, Bloomington, asked if the November Meeting will be in the evening again for 2019. **Nelson** responded that the NOC Committee can decide on that, it was chosen as the evening meeting for 2018 so the public could come to discuss the 2019 NOC Work Plan. **Nelson** requested for action to approve and recommend to the MAC Planning, Development and Environment Committee the final 2019 NOC Work Plan and approve the list of 2018 NOC accomplishments and 2019 meeting dates.

A motion was brought and unanimously approved by the committee.

7. Guest Speaker: MSP Converging Runway Operations (CRO) Update

Sean Fortier, FAA District Manager of Operations for the Minneapolis District stated that the FAA is working to bring traffic into and out of MSP safely and efficiently, but within the constraints of the current airport configuration. All airports with converging runways have constraints and they're all unique to that airport and its configuration. The FAA is working to determine a final, long-term strategy for mitigating Converging Runway Operations (CRO), as it exists within the current footprint at MSP. Once a long term strategy has been determined, the FAA will determine the appropriate level of environmental review regarding CRO mitigation in accordance with the requirements of the National Environmental Policy Act, and FAA Order 1050.1F, Environmental Impacts: Policies and Procedures. This was specifically requested through a NOC Resolution and backed by the MAC, the FAA responded in December 2016. The FAA continues to stand by that commitment once they reach that final strategy. The FAA continues to explore additional mitigation strategies to determine options that ensure the highest degree of safety while minimizing efficiency constraints and environmental impacts.
Over the past two years, several FAA workgroups have met to refine procedures and operational configurations to determine what options will best meet required safety goals while also minimizing efficiency constraints and environmental impacts. The FAA continues to review existing procedures.

As previously reported, the FAA has made substantial progress in designing and employing technological tools within its system to regain some capacity loss. The latest procedural test, announced by Kurt Mara at the July NOC meeting, comprises of a workgroup of Minneapolis Tower (MSP), Minneapolis Terminal Radar Control (M98 TRACON), and Minneapolis Air Route Traffic Control Center (ZMP ARTCC) personnel. The goals of this FAA workgroup are to outline standardized processes and procedures, with repeatable and clear expectations for the agreed upon capacity triggers that necessitate the use of the RWY 30/35 configuration. Additional research is also being conducted with FAA Technical Operations and The MITRE Corporation to develop Virtual Runway Intercept Point (VRIP) technology as an additional safety mitigation for CRO. Updates have been continuously provided to MAC representatives, the FAA will continue its engagement with the MAC and NOC to provide updates as they become available.

This workgroup should be developing recommendations soon and those will be passed on to the representative sponsors and that will lead to a long term strategy. The exact timeline for this is still unknown but process and progress updates will be provided.

Representative, Olson, Minneapolis, taking steps forward with the Long Term Comprehensive Plan (LTCP) and doing so with the understanding that we're getting close to a Runway Use Pattern (RUS) that we will see in the future. **Fortier** responded that it is premature to say there wouldn't be any changes and it would be irresponsible, prior to a long term strategy, to say something like that. The data provided and shared, thus far, does indicate stabilization on those rates.

Olson asked to clarify that FAA currently uses the arrival and departure window off the end of each runway. Then asked if the FAA adds the VRIP bases that on knowing what time the plane will be in a certain location. **Fortier** responded that the VRIP projects a time based implementation utilizing a ground base radar to project where a possible loss of separation or conflict may occur. That is in development and will provide another layer of safety mitigation for that runway configuration. Some residents that spoke, noted differences in 2015, 2016, and 2017. When the runway window was implemented for CRO in 2015, it was only on runway 30L and then in January 2016 it was expanded to 30L and 30R. These are the main tools being implemented now, the work group is working on establishing standardized procedures for the use of equipment and process.

Chair Hart, Delta, added in the recent year or so, we've seen stabilized runway use patterns and will the task force radically change that? **Fortier** responded that it would be irresponsible to state, at this time, if there would be a substantial or any change. Once the recommendations come in, the work group will move forward, and the FAA will keep the MAC and the NOC fully informed of those recommendations.

Co-Chair Miller, Eagan, referred back to the environmental review process mentioned in Fortier's presentation and asked what that looks like. **Fortier** responded that he doesn't have that information now but the work group will and once he has it, he will report back. **Nelson** interjected that MAC staff will be involved and part of the NOC resolution was to have the FAA report back on the environmental review. **Miller** asked Fortier to speak to R17 use and the change from the forecast of use when the runway was initially approved. **Fortier** responded that as a baseline, winds dictate the runway configuration. During periods of calm winds, ATC has the option to select alternative runway configurations. The second factor in determining runway use is the demand on the airport. This doesn't mean annual airport demand, this means the 15 minute demand periods that identify a low, medium, or high period of demand. Total annual operations may have decreased but the impact periods of high demand still exist. When demand is at a moderate or greater level, the runway configuration that is most aligned with the wind that allows the greatest capacity shall be selected. **Miller** asked if the impact periods have increased enough to justify increased departures of R17. **Fortier** responded when looking at runway use due to CRO mitigation procedures, there's a loss of capacity utilizing those arrival departure windows. When choosing a runway with the most capacity will lead to R17 being chosen, prior to CRO, that configuration may have been R30/35 configuration. That explains the change in use on all three runways but most significantly on R35 and R17. **Miller** stated that RUS calls for 12L/R to be used as first priority for departures but R17 continues to be used more than both R12, combined. What's driving that change,

year after year? **Fortier** responded year over year the FAA predicted R17 would have more use than 12L/R, the initial study indicated that. The reason is because R17 is a departure only runway and there's no competition with arrival traffic. Any time an aircraft has less than 6k feet between an arrival and a departure those safety considerations are taken in to account. 6k fee is the closest any two aircraft can be in flight. If you have arrivals and departures on a runway, you need to maintain that space but if you only have departures on a runway, you can depart without arrivals competing for airspace. **Miller** stated there has an increase in planes turning quickly and asked if this was related to CRO and if there is an opportunity to move planes straight south. **Fortier** responded that when aircraft depart MSP on R17, they are destined for a city pair like Atlanta, Vegas, or Phoenix. These city pairs and associated headings are the same as before CRO, while number of flights may have increased, headings have stayed the same. Delta has a hub in Atlanta now and that may be impactful. **Miller** asked if there was a correlation between CRO and changes in headings. **Fortier** responded that there may be an increase in flight frequency but he's not sure if the heading distributions are impacting as well. **Nelson** added that the data regarding R17 shows that runway use is up and they are CRO driven and wind driven. Warmer weather is adding to this because when the airport is in a Mixed Flow, R17 departures are held to either a straight out heading or a west heading. That's where the majority of the increase is because first priority is the Eagan/Mendota Heights Corridor and second is the River Valley.

Representative Goss, Delta, added that it would be worthwhile for NOC Members and staff to spend time in ATC during a CRO operation. Doing so may offer extra insight and perspective on the process and ATC staff can explain how it's working. **Fortier** responded that his team absolutely welcomes that opportunity.

Olson asked if changes in fleet could be resulting in variation in altitude and headings. **Fortier** responded that fleet may not change the impact exactly but maybe it changes the altitude given the weight of the aircraft. The heading is provided to achieve a certain track over the ground and the tracks resemble those from 2005.

Miller thanked Fortier, Kurt Mara, and the ATC team for their communication with the MAC and NOC, especially through the CRO process. **Fortier** responded that his team enjoys the opportunity to answer questions and help the community understand the constraints of the system and make sure residents understand the FAA is not motivated to impact them in an adverse way. The goal is to ensure safe, orderly, and efficient process while understanding the environmental impacts that do occur.

8. Stakeholder Engagement Plan for MSP 2040 Long Term Comprehensive Plan (LTCP)

Dana Nelson, Technical Advisor, reminded the committee that the MAC's effort towards the LTCP update began in 2015 with airport planner, Neil Ralston, presenting before the NOC. The plan was delayed due to CRO and the city of Minneapolis requested that everyone enter the LTCP with CRO at the front. There were changes in efficiency and capacity at the airport. Prior to CRO there were about 90 arrivals per hour during a north flow was reduced to 64 arrivals per hour during R35 suspension in July 2015. In August 2015, FAA started using the arrival departure window, this regained some capacity loss that MSP saw. It also increased arrivals on 35. Over the years, the noise office staff paid close attention to CRO safety regulations and from 2016-2018 provided the NOC with updates on that information. With

support from Met Council, it was agreed that the LTCP would be a 20 year forecast, 2020-2040. The noise team has been looking at capacity in a NW flow, runway use patterns, and looking at trends that can be used to forecast out 20 more years. The team worked hard to make sure they had the best information available regarding CRO, fleet use, and schedules. This new LTCP includes a Stakeholder Engagement Plan and that includes a legislative mandate for the MAC as well as a widened scope for the engagement. There will be an airport community panel that will be both an advisory role and a carrier of the message to their constituents and return with feedback. There are four project milestones created to ensure the LTCP process is transparent and allows for consistent public involvement. Communication for the Stakeholder Engagement Plan will be through a project website, monthly e-news updates, and project newsletters. Public meetings events, updates at the NOC and PD&E meetings, and additional public presentations as requested will continue.

Representative Olson, Minneapolis, asked where the capacity analysis fits in to the project milestones. **Nelson** responded that there isn't a timeline for each milestone yet, the first two take the longest and that will include the aviation activity forecast and the capacity study. **Olson** asked where the runway use projection and noise contour maps fit in. **Nelson** responded that it would fit in the third milestone that includes environmental land use planning.

Representative Martin, Bloomington, mentioned that one of the stakeholder groups MAC is going to engage are travelers, what is the process for actually obtaining the traveling public's information. **Nelson** responded that the office uses a travelers assistance group and they would provide that data and input.

9. Noise Abatement Dashboard Update

Brad Juffer, Assistant Technical Advisor, stated that one of the NOC functions is to monitor compliance with established noise policy at MSP and MAC staff provides data online daily, through published reports monthly, and at NOC meetings bi-monthly. The new dashboard is to provide more timely compliance information to air traffic control and MAC staff.

Juffer displayed the new dashboard on a screen at the meeting and provided a demo for the committee. During the presentation **Juffer** pointed out the graph displaying the current information and historical information for the corridors and compliance. Each abatement procedure is voluntary so the term "violation" on the graph is not a documentable violation but rather neglecting to participate in a voluntary abatement procedure. **Representative Goss, Delta,** suggested finding a synonym for violation as that word denotes shattering transgression and this is more akin to drifting out of the corridor bounds, often due to wind. **Juffer** said he'll take the suggestion back and potentially use deviation or non-compliant as both of those words will be just as effective.

10. Announcements

- Winter Listening Session, Wednesday, January 23, 2019 @ 7:00 PM, MAC General Offices, Lindbergh Conference Room

11. Adjourn

A motion to adjourn was requested by **Chair Hart, Delta,** moved by **Co-Chair Miller, Eagan,** and seconded by **Representative Olson, Minneapolis.**

The meeting adjourned at 3:31 p.m.

The next meeting of the NOC is scheduled for **Wednesday, 16 January, 2019 at 1:30 PM**

Respectfully Submitted,

Amie Kolesar, Recording Secretary