



**MSP NOISE OVERSIGHT COMMITTEE**  
**FINAL MEETING MINUTES**  
Wednesday, May 17, 2023, at 1:30 PM  
MAC General Offices  
6040 28<sup>th</sup> Avenue South  
Minneapolis, MN 55450



**Call to Order**

A regularly scheduled meeting of the Minneapolis-St. Paul International Airport (MSP) Noise Oversight Committee, (NOC) having been duly called, was held Wednesday, May 17, 2023, at the Metropolitan Airports Commission (MAC), General Offices, Lindbergh conference room, a teleconference option was also provided. **Chair Jacobson** called the meeting to order at 1:30 p.m. The following participated in the meeting:

**Representatives:** S. Alig, M. Brindle, C. Jacobson, N. Jerome, P. Martin D. Lowman, L. Olson, R. Barrette, H. Moody, A. Moos, C. Potter

**Staff:** J. Lewis, K. Martin, D. Nelson, M. Ross, J. Egan, E. Valencia, C. Boyd, B. Ryks, R. Fuhrmann, P. Mosites, N. Ralston, B. Juffer, M. Takamiya

**Others:** D. Scata – FAA, D. Asbell – FAA, S. Doyle – FAA, D. Drozdal – FAA, N. Rao – FAA, D. Langer – FAA, S. Fortier – FAA, W. Eckenrode – FAA, J. Widing, Met Council, N. Benson – JetTip, H. Rand - Inver Grove Heights, D. O’Leary - Sun Fish Lake, G. Fink - Sun Fish Lake, B. Hallbach, K. Gallatin – St. Paul, S. Mlynarek, J. Risser – Edina, J. Kalaidis-Medow, G. Helgeson, R. Palmer, D. Berglund, C. Kyndemal, S. Norling, M. Kerry

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

**Community Representatives:** Alig, Brindle, Jacobson, Jerome, Martin, Olson

**Industry Representatives:** Barrette, Moody, Moos, Potter

**1. Consent**

1.1. Approval of March 15, 2023, Meeting Minutes

There were no questions or revisions to the March 2023 meeting minutes.

1.2. Reports

1.2.1. Monthly Operations Reports: March and April 2023

**Jack Egan, Assistant Technical Advisor**, provided the March and April operations, complaint, and sound monitoring overview. 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>

March	April
<ul style="list-style-type: none"><li>• Total Operations: 27,186</li><li>• Nighttime Operations: 2,000</li><li>• North/South/Mixed: 34/45/13 (%)</li></ul>	<ul style="list-style-type: none"><li>• Total Operations: 25,712</li><li>• Nighttime Operations: 1,824</li><li>• North/South/Mixed: 43/37/12 (%)</li></ul>

- RUS (Priority 1/2/3/4):38/16/0/46 (%)
  - RJ/Narrow/Wide: 69.9/26.5/3.6 (%)
  - Complaints: 7,721
  - Complaint locations: 147
  - Top 10 Households: 66%
  - Hours of events\*: 346
  - Number of events\*: 71,087
  - R17 procedure: 99.4%
  - EMH Corridor procedure: 87.4%
  - Crossing procedure day: 25.4%
  - Crossing procedure night: 36.5%
  - RUS: 54.4%
- RUS (Priority 1/2/3/4):40/15/0/45 (%)
  - RJ/Narrow/Wide: 70/26.2/3.8 (%)
  - Complaints: 10,192
  - Complaint locations: 213
  - Top 10 Households: 64%
  - Hours of events\*: 379
  - Number of events\*: 72,954
  - R17 procedure: 99.2%
  - EMH Corridor procedure: 84.9%
  - Crossing procedure day: 24.2%
  - Crossing procedure night: 21.7%
  - RUS: 54.7%

\* Aircraft sound events above 65dB.

**Mr. Egan** concluded his presentation and offered to stand for questions. Chair Jacobson asked the Committee if they had any questions.

**Committee Member Lowman** inquired as to how multifamily housing complaints were counted.

**Michele Ross, Technical Advisor**, responded that complainants are asked to include their full address including apartment numbers, complaints are counted the same as single family households.

### 1.2.2. Review of Spring Listening Session

The Spring Listening Session review was not presented at this meeting, information regarding the session is included in the meeting packet. **Chair Jacobson** offered to take questions. There were none.

### 1.2.3. MSP Construction Updates

The MSP Construction Updates were not presented at this meeting, the information was included in the meeting packet. **Chair Jacobson** asked the Committee if they had any questions. There were no questions.

**Chair Jacobson** asked for a **motion to approve** the consent agenda. **Member Brindle** made the motion to approve which was seconded by **Member Olson**. The motion passed unanimously.

## 2. Public Comment Period

**Jen Kalaidis-Mesow**, Minneapolis, spoke about how her family has been affected by airport noise, she acknowledged that they live in a vibrant metropolitan area and expects to hear some hustle and bustle, but they have lived in other major cities areas across the U.S. and have not heard anything like this. She wanted to talk about Next Gen, and how that has been affecting our area. She briefly mentioned the superhighways, and the noise decibels and frequency. She said that her home was treated with the MAC updates in 2000, but that was before the new flight paths had been implemented. She said it is extremely difficult to spend any time outdoors, but more than that it is also noticeable indoors. She would like to revisit how homes are mitigated to understand the current reality of what this noise is doing. She would like to talk about expanding flight paths, because currently there is relentless noise pollution in certain areas. She acknowledged that everyone likes to

have a central convenient airport, but the inconveniences need to be shared by a wider public. As mentioned, there were 17,913 noise complaints, while that might have been a decrease in the past 2 months, from 2022, 17,913 complaints are still pretty outrageous. She said that she understands that airports and flying are our way of life, and it's important for our economy but she thinks there needs to be more balance with consideration for public health. She said from conversations with community members, most people think complaints fall on deaf ears. She concluded her remarks and thanked the Committee for listening.

**Steven Mylnarek**, of East Richfield, has lived on Fern Drive for 35 years. He said the last couple of years have been terrible. He spoke about Delta international flights. He said that he did not understand why last week, Friday and Saturday, planes took off from the crosswind runway. He mentioned that when the planes took off to the northeast the turbulence shook his house. He realizes that Delta used the planes Airbus 333 and 339 during Covid for domestic flights and no matter which runway they take off from his house rattles. He said it is worse when they take off from the north/south runway from the north and then they turn east. When the aircraft faces his house, the sound resonates throughout his home. Another concern is the ground noise - he first noticed it a couple of years ago when the Champion hangar was taken over by Sun Country. When the planes are parked on the West side of the airport, he hears the whine and whistle day and night from the jet engines running, as well as the hum from the APUs, and they get the beeping from the backup alarms.

He mentioned that he has a Fitbit he wears to bed, and he thinks that when his sleep score is poor to moderate the timing would most likely match the nighttime takeoffs. Most of his neighbors are new to Richfield and in speaking with them, they agree the noise is bad, but they aren't going to do anything. Common consensus seems to be that nobody is going to do anything about it, so they don't bother to complain.

He mentioned past glycol violations and said it's the same story with noise now. He offered to have someone come over to his house and sit in his backyard and in the house. He said that he filed a complaint last December, when a plane came over his house at 1,500 feet, it took off from the crosswind runway and when it circled around it lit up his backyard and the inside his house. He also filed a complaint with the FAA but never heard back from them.

**Glen Helgenson**, 4321 E Lake Harriet Pkwy said he notices that when its calm (when the wind is 5 mph or less) aircraft have the option of landing on the mixed runway, but it seems like just out of habit they seem to come over his house from the northwest. He went on to say that on Sunday night, Lake Harriet was glass calm and the planes kept coming over from the northwest right over top of his house. From his understanding, when the wind is that calm, aircraft have the option of using the north / south runway so he would really appreciate it if someone could look into this. Also, at night he hears a lot of noise. Last night (May 16) at 12:20am three or four jets came over the house, and he couldn't sleep. He concluded his comments and thanked the Committee for listening.

**Darcy Berglund**, 54<sup>th</sup> Street and 3<sup>rd</sup> Avenue South, has lived there 10 years. She conceded that neighbors have said "don't move into a house under a flight path and complain about the flight noise" and some people have told me jets are quieter than they used to be, and some say they are louder than they used to be. Ms. Berglund said that she doesn't have MAC windows, or double paned windows. She has been told that 54<sup>th</sup> street was the cutoff for qualifying for MAC windows. She went on to say that she is not asking the Committee to address this right now as she needs to do some research. She mentioned that she lives just south of 54<sup>th</sup> Street and is surprised that planes are directly

over her house, so she is wondering why the area doesn't qualify for MAC mediations. She said that she prefers fresh air, so her windows are open 4 inches at night and she is absolutely stunned by how loud the planes are around 5:30am to 6am in the morning. She is woken up most mornings out of a deep sleep by the noise reverberating through the room. She said that she absolutely loves her house but is afraid she won't be able to stay there many more years because of the ear piercingly loud noise. She concluded her comments and thanked the Committee for listening.

**Joe Widing** introduced himself as the new aviation planner for the Met Council. He mentioned that the Met Council works with MAC Staff pretty extensively on long range plans and he plans to attend future NOC meetings.

**Michelle McGuire**, 47<sup>th</sup> Street and Aldrich Avenue in Minneapolis, attended the meeting via Teams. She mentioned that her house is located in the donut hole between 2 runways, one to the north and one to the south. She said that they quit complaining years ago because nothing was ever done and that no one seemed to pay attention to them because they weren't directly under a runway, but they still have deafening noise. She would like someone to look at this and get back respond.

**Ms. Ross**, asked community members to please make sure to leave their contact information so that her office could get back to them. She mentioned that she and her staff will stay after the meeting to answer any questions.

**Rachel Roach** wrote in to say that South Minneapolis is where she calls home and hopes to raise her family long-term. They are active members of the community, they support local businesses, and aspire to make this city a destination for years to come. However, living directly under a flight path has made envisioning the future here very challenging.

While she does not expect to avoid airplane noise living close to the MSP airport, the constant noise directly overhead and particularly as planes are arriving near Lake Nokomis, has significantly impacted their quality of life (from being unable to spend time outside, to getting fresh air with windows open, to sleep disruption and mental health effects). They are also concerned about what that direct impact will do to their young children's health in the long term.

There is a responsibility to improve these legitimate concerns for the South Minneapolis community. Solutions such as reviewing and distributing flight paths, extra noise mitigation for homes, and limiting late night and early morning flight times should all be strongly considered. She mentioned that her home was fitted with MAC updates over 20 years ago and was told that her home is not eligible for upgrades. In speaking with family and friends who have come to our house, they are shocked at the constant loud noise (many times, every 1-2 minutes on the dot) when flights are landing. At a bare minimum, newer technology and updates are needed in our homes.

They can't imagine living anywhere else. The proximity to bike and walking paths, the creek/chain of lakes, and awesome local restaurants and shops makes this truly the greatest city to be able to call home. However, they simply cannot plan for a life here with the current noise disruptions.

She concluded saying she sincerely appreciates the NOCs consideration of the feedback and proposed solutions and will look forward to future updates.

### 3. Business

There were no business items.

### 4. Information

#### 4.1. FAA Update on Noise Policy Review

**Don Scata, FAA, Noise Division Manager for the Office of Environment and Energy**, provided an update on the FAA Noise Policy Review. Historically noise issues have been largely airport centric around infrequent operations. There were dispersed flight paths, very loud jet aircraft, and noise concerns were raised by communities primarily immediately adjacent to airports. Communities lived experiences included a low cadence of relatively loud aircraft noise events separated by long intervals. Currently, things have changed, it's more of an airspace and overflight noise problem, with more frequent operations, concentrated flight paths, relatively quieter aircraft from in the past, and noise concerns are raised primarily by corridor communities further away from the airport. Community lived experiences are more aligned with a high cadence of daily operations which are quieter than in the past but separated by shorter intervals. Add to this an introduction of new entrants and commercial space operations around the country that also affect how people are being exposed to noise. A Boston Airport example regarding noise complaints under a flight corridor was displayed. He also spoke about the new national curve and the Schultz curve while showing the change in the number of aircraft operations as they get quieter still producing the same level of noise using the Day-Night Average Sound Level (DNL) metric.

Neighborhood Environmental Survey (NES) results support an observed increase in annoyance from aircraft noise which is substantial for the population living in the vicinity of airports and is generally consistent across various levels of exposure. The Schultz curve shows a level of more than 10% at 65DNL, people highly annoyed while the national curve shows that more than 60% of people are highly annoyed at the same level of exposure.

The federal Register Notice for the NES received more than 4000 comments. The majority of the comments were received largely from the East and West Coasts. As a part of the analysis of comments, each was tagged according to the themes noted. A comment could have multiple tags depending on the different concerns raised. When looking at the distribution of sub-topics for additional research the highest number of tags suggested that the FAA should take what was learned from the NES and begin considering updates to its noise policy which is what is occurring now.

The next highest number of tags suggested that additional metrics should be used, notably Number Above (NA) which counts the number of aviation noise events over a certain location at a decibel level to better reflect noise impacts on communities. In addition other highly tagged suggestions were to consider using metrics in addition to DNL and also consider changing the noise thresholds. All of the suggestions are under consideration as a part of the noise policy review.

Other frequent tags were developing a timely roadmap for changing noise regulations and use the NES as a new basis for decision making on community impacts.

In late 2021, the FAA initiated a review of the noise policy as part of an ongoing commitment to address aircraft noise. This effort will build on work to advance the scientific understanding

of noise impacts as well as the development of analytical tools and technologies. It will consider new evidence from the agency's noise research program, including from the NES, and the distribution of environmental risks, tradeoffs, or externalities across communities. The goals are to identify and implement well-reasoned, scientifically grounded noise policy updates that incorporate FAA's updated understanding of aviation noise and human response and the development of analytical tools and technologies to better manage and reduce the environmental impacts of aviation, and to conduct an inclusive, transparent, and participatory process that prioritizes input from substantially affected stakeholders, including local communities.

The scope of the noise policy review is focused on the foundational elements of FAA's noise policy including metrics. The FAA is taking a hard look at DNL, and considering other metrics (e.g., NA), and how they are calculated. Noise thresholds are also being reviewed considering NES findings and other research, investigating lowering DNL 65 dBA, the definition of the level of significant noise exposure for actions subject to environmental review requirements and modifying the definitions of the levels of noise exposure that are deemed to be "normally compatible" with airport operations, as set forth in Table 1 of Appendix A to Part 150. New metrics would consider whether it is appropriate to establish a noise threshold and its potential value.

The [Federal Register Notice](#) was published May 1, 2023, which starts a 90-day comment period ending July 31, 2023. It includes a background on the FAA Noise Policy and a request for comments which includes 11 questions. There is a link to a companion framing paper and a link to submit comments to [Docket FAA-2023-0855](#) at [regulations.gov](#).

The [Framing Paper](#) is entitled "The Foundational Elements of the Federal Aviation Administration Civil Aviation Noise Policy: The Noise Measurement System, its Component Noise Metrics, and Noise Thresholds". It is intended to be read in parallel with the FRN and provides additional context and discussion around the 11 questions included in the FRN. Its aim is to provide context for the review and help stakeholders better understand the questions included in the FRN.

The question of should the FAA transition away from a noise policy with a single metric comprising the system in favor of an expanded system of metrics. An expanded system of metrics may consider vehicle types, e.g., helicopter, aircraft, rocket, the analysis purpose, such as environmental review, land use planning or eligibility requirements, or the type of analysis like airfield changes, airspace changes, or new entrants.

An expanded system of metrics may include accounting for cumulative, operational, single-events, and low-frequency metrics for use alone, in combination, or in lieu of another metric. FAA could review the following metrics that may comprise the system, such as cumulative: DNL, Community Noise Equivalent Level (CNEL), School/Work Hour Equivalent Sound Level (Leq), also a cumulative single event such as NA and Time Above (TA).

The policy review will look at elements of DNL by unpacking the way it is calculated and evaluating alternatives – for example looking at peak of operational months and perhaps seasonal variation e.g., resort areas that could have increased operations seasonally. It will also examine existing noise thresholds and consider whether to retain the current thresholds, with

no change; set noise thresholds for any, some, or all the noise metrics in the system, change the metric and level used to define the threshold of significant and reportable impacts, revise the metric and level used to define compatible land use and noise sensitive uses. The FAA is also considering reviewing the noise policy at least once every 3-5 years to determine whether updates or revisions are necessary to respond to new information.

Key takeaways regarding the FAA policymaking could result in possible updates to regulations, orders, and guidance. It could change the level of review needed for given action, and it could improve the FAA's communication about noise impacts to the public. The policy changes will not affect current / existing aviation noise exposure or where or when aircraft currently fly as well as completed or ongoing environmental reviews.

The FAA has published a landing page at [www.faa.gov/noisepolicyreview](http://www.faa.gov/noisepolicyreview). The page will be revised as the noise policy review progresses. The landing page will include Noise Policy Review information and status, framing paper, resources, links to join virtual webinars and a link to subscribe to FAA project updates.

Webpage: [www.faa.gov/noisepolicyreview](http://www.faa.gov/noisepolicyreview)

Email: [NoisePolicyReview@faa.gov](mailto:NoisePolicyReview@faa.gov)

Phone: 202-269-6999

**Mr. Scata** concluded his presentation and offered to stand for questions.

**Chair Jacobson** mentioned that Committee Members received information previous to this presentation, but she thought the presentation was very helpful. She asked if any Committee Members had any questions.

**Member Olson** thanked Mr. Scata for attending the UC Davis Conference and also for spending a lot of time talking with people about noise concerns. She thanked Mr. Scata and his team for making sure this conversation stays active and moves forward to examine the issues and she thinks Mr. Scata already recognizes some of the key issues where there is potentially a gap in terms of TA or NA and looks forward to figuring out the best way to incorporate data and also to make sure that as PBN is implemented that it is being recognized how can have a different impact on the ground and to make sure the metrics affect some of the things that come along with it. **Olson** thanked Mr. Scata for coming and said his leadership is appreciated.

**Member Lowman** expressed his gratitude for the presentation, he mentioned that the first couple of slides demonstrate what the community is experiencing from a noise perspective, and understanding the different policy implications with the changes and the measures and trying to balance between the economic development of the airport and also mitigation for folks that live around the airport. He referred to a slide which talked about "here is where these measures could happen and here is where the measures won't happen". **Lowman** asked if there is a concrete example of how that would impact the policy implications?

**Mr. Scata** said that, for example, if the decision-making metric is changed from DNL to include NA, when the environmental review is done, NA would be part of the decision on whether there was a significant impact based on the proposed actions under consideration. Whether a threshold is created for that metric or not is something that is up for discussion and certainly

no decisions have been made on any of this. There are practical implications of having to base a decision on potentially another metric or if FAA changed the threshold from 65 to 60 that could result in different levels of environmental review based on the specific action that is being proposed. Those are things that could change future things but would not change what is in place today or upon immediate implementation. FAA does not have control over where aircraft fly and which aircraft is used by the operators. Really close into the airport there are procedures the aircraft are flying. If they are being moved in the future after a policy has changed the environmental review associated with those changes would consider the future policy and could result in maybe a different outcome of what would have occurred before the policy had changed.

**Chair Jacobson** asked if there were any other questions. Hearing none, she went on to say that the NOC has an opportunity to provide a letter and comment through the Federal Register Notice. In order to consider the draft letter, there will be a special NOC meeting held on June 20, to review a comment letter to the Federal Register Notice.

#### **4.2. FAA Update on MSP VOR-MON and Procedure Development**

**Nitin Rao, FAA Community Engagement Officer for the Regional Administrator**, spoke about the Very High-Frequency Omni-Directional Range Minimum Operational Network, (VOR-MON) project design and upcoming community engagement.

VOR technology goes back to the 1950s. New area navigation vector (RNAV) departure procedures are under development which will replace conventional procedures. The RNAV goal is to replicate, to the extent possible, current departures procedures through the use of satellite technology. There have been a couple of working group meetings to date. FAA safety and efficiency standards must be maintained as well as other criteria such as FAA orders and operational and airworthiness guidelines. Noise is an important consideration, and it is something that is discussed at every meeting.

Regarding the MSP VOR-MON discontinuance status update, there is a second round of design meetings this week. The kickoff meeting was in January and there might be another later this summer. These core work group meetings are between the FAA, MAC, and Industry. Procedure development and design are discussed as well as any impacts they may have. In all these discussions, potential noise impacts and whether we are following the desired noise abatement procedures. The MAC is there to lend their perspective on that throughout the process. The goal is to have the preliminary design completed by August; it is about 90% complete.

The FAA community engagement policy has evolved over the years. The FAA used to follow the National Environmental Policy Act (NEPA) requirements. The FAA has since realized more can and should be done to educate the community and explain why the decommissioning of the VOR at MSP and also to seek community input on the designs. Look to see if there are things that can be improved, while still maintaining the safety and efficiency perspective as well.

In an effort to improve community engagement the [FAA Minneapolis community webpage](#) was updated. This is where citizens can go for the latest information. The webpage features the current project and explains why it is necessary. It also provides information about past projects that have occurred in the area as well. In addition, status updates are being continually provided to the MAC, the NOC, and congressional staff as requested. We are aware of the March letter



sent from the NOC to congressional staff and have followed up on that as well. The MAC and the NOC have been invaluable resources and the FAA looks forward to continuing to work together to enhance the community engagement process.

Regarding upcoming community engagement activities, the FAA will brief the MAC and the NOC upon preliminary design completion, hopefully early to mid-August. The agenda will include current and proposed design tracks using mapping software. Feedback from the NOC and the MAC will be analyzed in order to potentially see if the designs can be improved. Time will be built into the schedule to review and evaluate proposed suggestions.

The FAA will develop a video of the designed procedure changes which will include a model of aircraft dispersion, hopefully by Spring of 2024. Public workshops are being planned for Spring or early Summer of 2024 to gather public feedback. An email has been provided for public comments and an online workshop as well. Public comments will be evaluated for design feasibility.

In addition, the FAA will conduct a NEPA. There will be an opportunity for community comments through the NEPA process as well. Review completion is expected for the Fall of 2024 and the publishing of these procedures is anticipated for the Fall of 2025.

Contact information:

Nitin Rao, FAA Community Engagement Officer for the Regional Administrator

(P) 847-294-7375

(E) Nitin.Rao@faa.gov

**Member Olson** thanked Mr. Rao and mentioned that she is encouraged by a lot of what she is hearing and a lot of the things that are planned for engagement like the video showing what is changing from current procedures is good. **Olson** commented that in general she thought that developing the engagement plan would be a collaborative effort and she hopes that it still can be. She would like everyone to work together to find ways to get everyone the information they need and look at whether there is a need to supplement planned activities.

**Olson** went on to say that she has heard encouraging things about what the procedures can potentially do. She said she would like everyone to work together to figure out how to present the information to the public in an easily digestible format so that folks can feel confident in the process and procedures. She mentioned that good communication can help mitigate unnecessary drama and that it is really important to get it right the first time because it is really difficult, if not impossible, to adjust procedures later.

Olson said that at some point, she would like access to detailed plans like a Jeppesen plate chart with detailed altitudes, SIDS etc. and a couple of months' time to review it, and possibly get third party advice. **Olson** said she is really encouraged by what has been done so far but would like to do her own due diligence and she asked when the information could be available.

**Mr. Rao** replied that the information will be available at a community engagement post design showcase this Fall.

**Member Olson** asked if Mr. Rao had a sample of the report he could share now?

**Mr. Rao** said that shouldn't be a problem.

**Member Brindle** mentioned that when a city has a major document like a comprehensive plan there is a prescribed period of time for public review. She agreed with Member Olson's request for a sixty-day public review period in order to plan the public review with the communities. **Brindle** said that the NOC is the panel that connects directly with the public and that is the reason the Committee exists, so she would like to make sure the opportunity is not missed. This is something the Committee has been talking about since prior to Covid and now that the plan is taking shape it is important that everyone is at the table.

**Mr. Rao** said he understood.

**Member Jacobson** asked if there were any other comments from Committee Members; hearing none, she thanked Mr. Rao and mentioned that the Committee looks forward to continued engagement on this topic.

#### **4.3. FAA Update on Converging Runway Operations**

**Sean Fortier, FAA Traffic Management Officer, Minneapolis District**, spoke about Converging Runway Operation (CRO). He provided a brief history of MSP CRO mitigations and also spoke about the present MSP CRO test procedures. CRO exists when runways do not cross, however the extended centerlines intersect within one mile of departure end. CRO exists at least thirteen airports across the national airspace system. Airport diagrams for MSP, MIA, and LAS airports were shown to the Committee.

When converging operations exist, there is a procedural requirement to mitigate the possible safety risks for this type of runway configuration. The runways can be treated as though they cross or what is typically safer and more efficient is to utilize tools and aids, e.g., Arrival and Departure Window (ADW), a virtual runway intersection point or a converging runway display aid.

ADW is a depiction on the Air Traffic Control (ATC) display that is used to prevent possible conflicts between arrivals to and departures from one or more of the runways at MSP. There are parallel runways which both depart and cross with a possible missed landing to Runway 35, so there are two ADWs at MSP, one for each parallel runway. These identify the points on the final approach course by which a departing aircraft must have begun their takeoff. If there is an aircraft on Runway 35 that is between those points, that is regarded as the no-departure zone. Aircraft can depart prior to the arrival of an aircraft reaching that first point on the ADW or they can depart after the aircraft arriving on Runway 35 exits that no-departure zone.

Virtual Runway Intersection Zone (VRIP) is a depiction on the ATC display which identifies the point at which the extended centerlines of two runways cross. It is used as a reference for when the departing aircraft can safely be turned.

Converging Runway Display Aid (CRDA) is another depiction on the ATC display. It mirrors the track of an aircraft on final for Runway 30L to display a "ghost target" on final for Runway 35. It provides guidance to the controller in order to ensure appropriate spacing is achieved. A few examples of these tools were shown to the Committee.

In 2015 there was a determination, based on safety concerns, and NTSB recommendations throughout the National Airspace System, that new procedures and mitigations were needed to ensure safe operations. A series of test procedures occurred over the next three years to develop the procedures needed to run CRO in a safe environment using the dual ADWs, the converging runway display aid and the additional layered procedural mitigations.

A steady state was reached in 2019 and long-term environmental review for the operation was beginning exploration. However, during that time period there were some additional safety concerns raised by a whistle blower and subsequently additional investigations were done at MSP to ensure the safest operations possible. The allegations raised were not substantiated although a review of the ADW and a more comprehensive look at the aircraft that were involved in the examination and development of the criteria was conducted using an updated fleet mix which included every aircraft type at MSP. The result of the review was a change to the ADW size.

Due to the pandemic's effect on air traffic, in 2020, the new procedures were unable to be implemented. Since traffic levels have rebounded somewhat since then, coupled with construction that will reduce capacity at MSP, a three-month CRO test procedure will be conducted in early June. The criteria requirements for the test encompass weather conditions, cross winds, tail winds, wind shear limits, ceilings, and visibility. The correct personnel and equipment requirements must be in place and the demand must exceed a two-runway capacity.

Controllers will direct aircraft departing Runway 30L to fly runway heading until passing the Runway 30L/35 VRIP. Controllers will then issue headings for divergence as they do today. MSP will remain in a 30L/R and 35 configuration when conditions allow. Test procedures will be continuously evaluated and may be terminated, extended, or made permanent. Updates will be provided to the MAC and the NOC during future meetings and the appropriate level of environmental review and FAA community engagement will be determined based on the outcome of this test.

**Member Olson** remarked that it will be interesting to see how it goes as wind typically comes from the south more often during the test time period. The Runway Use System (RUS) that we have in place here at MSP would favor departures to the south, departing to the North via the 30s is the worst option under the RUS because aircraft depart over a heavily populated area. She asked if there would potentially be more departures to the North during the summer when the planes depart at lower altitudes (due to warmer weather). As the North flow becomes a good option for capacity etc., **Olson** requested that ATC figure out how to balance and still utilize a mixed flow and south flow. She mentioned that some of the complaints brought forward today are by people that are affected by arrivals. She went on to say that if noise can be reduced over the most populated areas, which is a little complicated at night, that might ease the burden of favoring a North Flow. **Olson** observed that it will take extra effort to balance the runways. When airport used to favor North Flow, the number of complaints tended to be higher from the community.

**Mr. Fortier** acknowledged the concerns and said that every effort would be made to comply with the RUS when possible. As noted with weather limitations, there will still be opportunities when the weather conditions may not allow for CRO, yet the winds may be conducive to a Mixed Flow A in which case it would still be expected to see use of that configuration, certainly during the nighttime period. ATC will look for the absolute best configuration from an RUS standpoint, understanding the sensitivities for the community at that time. As the summer months approach, one consideration is

that thunderstorm activity can push planes later into the night although past midnight will be the noise friendly configurations.

**Member Olson** mentioned, as a follow up, that the arrivals are the quieter operations at nighttime, and it used to be about 75% of nighttime operations were arrivals, which helped to spread out the nighttime arrivals.

**Mr. Fortier** said he understood.

**Member Brindle** asked, from a community engagement perspective, since the testing could change the expected arrival and departure of a flight, is there a way to notify the public of irregular operations?

**Ms. Ross** said that an in-depth summary of this meeting will be on the website and will also go out to the 8000+ constituent email list in order to inform the public. There will be an article outlining the test period and runway use along with other information. There will be a listening session in July.

**Member Lowman** mentioned that the mix of the fleet triggered a change in the size of the window. Thinking about the continued decrease in regional aircraft, what would trigger another change from a safety perspective?

**Mr. Fortier** replied that the trigger for the previous concern was the omission, in the previous design, of propeller driven aircraft. Since then, those aircraft have been taken into consideration. It is a very comprehensive design which includes aircraft of all speeds.

**Member Alig** asked a question about when CRO can be expected.

**Mr. Fortier** replied that the time periods where arrival demand exceeds capacity would be those time periods where can expect to see aircraft landing on Runway 35. A north configuration would likely be in place already with landing and departing on the 30s and at that point arrivals would be added to Runway 35.

**Member Alig** asked if it possible to predict the length of the windows and how many flights would be involved.

**Mr. Fortier** responded that it's difficult to say, this is one of the reasons to run the tests in order to evaluate capacity and impacts. **Mr. Fortier** estimated one-hour within the timeframes. He mentioned that the later time period in the day shows a very large spike in traffic, followed by another small bump into the next hour which might last an hour and a half, other periods might be an hour or less.

## 5. Announcements

### **June Special NOC Meeting**

Tuesday, June 20, 2023 @ 10:30am

Location: MAC General Offices + Teams

### **July NOC Meeting**

Wednesday, July 19, 2023 @ 1:30 pm

Location: MAC General Offices + Teams

**NOC Summer Listening Session**

Wednesday, July 26, 2023 @ 6:00 pm

Location: Eagan City Hall + Teams

**7. Adjourn**

Chair Jacobson thanked the members of the Committee, NOC staff, and residents in attendance. The meeting was adjourned at 3:07pm.