



ITEM 1



**MSP NOISE OVERSIGHT COMMITTEE
MEETING MINUTES**

Wednesday, 21st of September 2016 at 1:30pm

MAC General Offices Building –
Lindbergh Conference Room

Call to Order

A regularly-scheduled meeting of the MSP Noise Oversight Committee, having been duly called, was held Wednesday, 21st of September 2016, in the Lindbergh Conference Room at the MAC General Offices Building. Chair Fitzhenry called the meeting to order at 1:39pm. The following were in attendance:

Representatives: P. Vick; K. Erazo; D. Miller; E. Petschel; J. Oleson; L. Olson; J. Hart; A. Moos; J. Bergman; G. Goss; J. Quincey; D. Lowman; T. Fitzhenry; D. Nelson

Staff: D. Nelson; B. Juffer, L. Peilen; C. Leqve; A. Kolesar; G. Warren; B. Ryks; J. Lewis;

Others: A. Swenson- City of Edina; A. Nemcek-Rosemount; G. Putnam-Mpls; J. Awl-Bloomington; S. Devich-City of Richfield; T. Link-Invergrove Heights; M. McNeill-Mendota Heights; B. Hoffman-St Louis Park; L. Grotz-Edina; R. Owen-Met Council; T. Bathke-Sun Country Airlines; M. Park-Sunfish Lake; K. Goss-Edina; Anette-Apple Valley; S. Nienhaus-Burnsville; S. Murphey-City of Minneapolis; K. Danles- City of Minneapolis;

1. Review and Approval of the 20 July 2016 Meeting Minutes

Chair Fitzhenry, Richfield, requested a motion to approve the minutes from the July NOC meeting, **Representative Bergman, At-Large Representative**, made the motion with a second from **Chair Hart, Delta**, and was passed unanimously.

Fitzhenry proposed the removal of Agenda item #6 due to the extensive agenda. **Representative Petschal, Mendota Heights**, moved to approve the proposal and it was seconded by **Representative Nelson, MBAA**.

2. Review of Monthly Operations Reports: July and August 2016

Brad Juffer, Assistant Technical Advisor reported 10,878 aircraft noise complaints in July – down 6.7% from 2015 and 12,035 aircraft noise complaints for August – down 3.5% from 2015. For July, 639 locations filed a complaint related to MSP, dropping to 595 locations in August. This equates to an average of 17 complaints per location in July increasing to 20 complaints per location in August.

Juffer then reported on the aircraft operations for July and August, which were 37,880 and 37,887, respectively. Those totals were 2.0% and 2.7% higher than the same months of 2015.

Collectively, July and August saw a 41/59% split between regional jets and mainline aircraft. In 2015 the split was 42/58%. A total of 5,606 aircraft operated during MSP nighttime during both months, which was 7.4% of the total operations. Last year for the same time period, 4,156 operated at night which accounted for 5.6% of the total operations. **Juffer** described the factors contributing to the increases at night, including higher than average precipitation, afternoon and evening thunderstorms and computer issues by Delta Air Lines.

Juffer summarized the Runway 17 Departure Analysis, reporting that 99.4% and 99.3% of all jets complied with the Runway 17 Departure procedure in July and August, respectively.

Regarding the Egan-Mendota Heights Corridor Report, 97.0% and 97.6% of all 12L/12R carrier jets remained in the corridor in July and August, respectively. During both months, 1.1% of the departures were north of the corridor and 1.6% south of the corridor. The Crossing-In-The-Corridor procedure was used 39% in July and only 47% in June during the night time hours. During the day time, the percentages dropped to 38% in July and 36% in August.

Juffer went on to report the use of Runway Use System. In July, 54.35% of the operations were on high-priority runways. In August, it was 54.48%. The change in use of high-priority runways is attributable to the use of the Mixed A configuration (arrivals on Runways 30L and 30R with departures off Runway 17 and limited departures off 30L and 30R). Mixed A was used for 86 hours in July and 102 hours in August which is the most of any month in the recent past. Broken down by month, 50.9% of all arrivals used a high priority runway in July. 52.3% during the morning shoulder and 50.4% in the evening shoulder, the nighttime percentage was 56.3%. Comparatively, 57.8% of all departures used a high-priority runway. 54.5% at night, 57.1% in the morning shoulder, 49% in the evening. The evening drops because Mixed A is used far less during this time period than others. For the month of August, 49.4% of arrivals on high priority runways. 44% at night, 53% in morning, 42.8% in the evening. 59.5% of departures in August used high-priority runways. 65% in morning, 57.9% in evening, 65.4% at night.

3. Guest Speakers: Delta Air Lines and Sun Country Chief Pilots-Aircraft Arrival Gear Extension

Dana Nelson, Technical Advisor introduced the two Chief Pilots, Gordon Goss from Delta and Timothy Bathke from Sun Country. **Goss** started out by describing when pilots lower landing gear and what is required for a stabilized approach and industry standards for approaches. A standard by the International Civil Aviation Organization (ICAO) is that by 1,000 feet from the ground and about 3,000 from the end of the runway, in visible conditions, the landing gear should be down and locked. In order to obtain this stable approach, the pilot typically starts lowering the landing gear between 5-7 miles from the end of the runway. For a low visibility approach, the pilot wants to be stable further out for added safety.

Representative Quincy, Minneapolis, asked if the landing gear typically goes down 3 miles from the end of the runway. **Goss** clarified that 3 miles out is the latest the pilot would have the gear down. The process starts about 6 miles out from the end of the runway. **Quincy** followed by asking how far out the pilots typically are when they're lined up to start the configuration. **Goss** responded that it varies depending on Air Traffic Control (ATC) flow, but generally is at about 6 miles from the end of the runway. Using a PowerPoint presentation, **Goss** further explains the standard approach

profile. **Goss** described scenarios where landing gear is lowered in advance of that 6 mile mark, for example, when there is a slower speed assignment from ATC. **Chair Fitzhenry, Richfield**, asked about the variance in aircraft and if that causes a variance in the 6 mile mark. **Goss** stated that the 6 mile mark for starting the landing gear configuration is average for a normal approach in any aircraft type.

Goss went on to explain that there have not been any changes in the landing gear extension procedures which are the same as they were under Northwest Airlines. There are no ground landmarks to indicate landing gear extension areas for pilots and gear extension rules do not change depending on the runway. **Goss** shared that Delta's Safety Department did landing gear assessments at 12L/12R and they pulled information from January 2015-July 2016 and the data states that with some minor (tenths of a mile) variations month to month, the landing gear extensions for 12L is at about 6.7 miles from the end of the runway and for 12R they average about 7.1 miles from the end of the runway.

Timothy Bathke, Sun Country Airlines, presented Sun Country's Standard Operating Procedures for landing gear extensions and they closely mirror Delta's procedures and are focused on safety. Most of Sun Country's procedures have come to as a result from safety data and FAA directives. For a stabilized approach criteria the pilot is getting the aircraft from a high speed/low drag configuration and into a low speed/high drag configuration. About 3-4 miles out from the end of the runway is when the landing gear needs to be down for Sun Country aircraft. There have not been any major procedural changes to the landing gear configurations in years. Landmarks are not used when deciding when to start dropping the landing gear but **Bathke** noticed that there seem to be some consistencies from ATC requesting a slower speed earlier when aircraft are landing 12L/12R however this appears to be by 1/10 of a mile.

4. Study of Runway 12L and 12R Arrival Operations

Dana Nelson, Technical Advisor, In May 2016 the NOC directed staff to conduct an analysis of the arrival activity on 12L/12R. There has been an increase in arrivals and concerns were raised at the second quarter Public Input Meeting from residents under the arrival paths. MAC staff worked with these residents to define the scope of the study to ensure their concerns were effectively evaluated.

The study used data from 2004, 2013-2016 and specifically was focused on five points:

- volume of aircraft arrival activity
- late night and early morning activity
- arrival altitude trends
- frequency of flights throughout the day
- arrival path changes

The study shows an increase in arrival activity on 12L and 12R from 2013-2015, although arrivals are not as frequent as they were in 2004. Two main factors lead to the increase are more southerly winds and new separation standards for Converging Runway Operations (CRO). There was an increase in late night and early morning (10:30pm-6:00am) activity, overall airport activity has increased and therefore arrivals on 12L/R have increased as well. There are no substantive changes in aircraft altitudes and there were some spatial variations from RNAV arrival procedures. In 2004, 2013, 2014 the predominant configuration was the north flow and in 2015 and moving into 2016, the dominant configuration has been the south flow.

While there has not been a large variation in altitudes, the noise office wanted to study the impact of aircraft size on aircraft altitudes. The results showed minimal variation in altitude no matter the size of the aircraft. Furthermore, comparing altitudes across the two runways did not show differences, although Runway 12R typically sees larger aircraft.

In 2015 typical south flow days show 58.7 operations during the peak hour of 5pm-6pm. In 2014 the peak hour was 6pm-7pm and the number of operations during that time was 54.5 average arrivals. Since aircraft need to depart and arrive into the wind, the team looked at the wind conditions during the study period. 2014-2015 saw an increase in winds favoring south flow. When winds were calm, light, or there was a crosswind, the dominant configuration was a north flow in 2013/2014. In 2015-2016 the predominant configuration during these same wind patterns changed to south flow.

A comparison was done to evaluate the spatial differences in arrival density before and after RNAV implementation. A sample day was used from June, during a week day with no adverse weather conditions and there was a south flow all day. Comparisons show the final approach paths have not moved, the downward legs are shifted outward from the airport and the spread of aircraft turning onto the final approach has shifted slightly towards the airport. The residents expressing concerns about these flights at the Public Input Meeting received this report as well as more detailed reports specific to their addresses.

5. Update on the Impacts of Converging Runway Operations (CRO)

Dana Nelson, Technical Advisor, reminded the Committee that at the July NOC meeting, some community representatives expressed concerns about changing runway use and flight track use resulting from CRO. MAC staff coordinated meetings with the NOC community representatives and FAA for further discussion. **Representative Miller, Egan**, introduced Resolution #02-2016 to recommend to the MAC Commission to support and communicate the NOC's request that the FAA conduct an environmental review to assess the impacts of both noise and airport capacity impacts today and into the future resulting from CRO. The resolution specifically requests an evaluation of runway use comparisons, a 20-year forecast runway use, DNL noise contours, an examination on airport capacity impacts, and a plan as to how the information will be presented to the NOC.

Representative Petschal, Mendota Heights moved to pass Resolution #02-2016 and was seconded by **Representative Miller, Egan**. It passed by a unanimous vote.

Elaine Buckner, Air Traffic Tower Manager, provided a presentation on CRO and their efforts for a long-term solution.

A non-intersecting converging operation is when the flight path of two aircraft intersect but the runway itself does not. During CRO, if an aircraft arriving on 35 is directed into a go around it could be too close to another aircraft that is departing from Runways 30L or 30R. When runways 17 and 35 were opened, Minneapolis ATC developed procedures to address the safety concerns during this operation. In 2013 the National Transportation Safety Board (NTSB) made a recommendation, nationwide, stemming from a 2011-2013 analysis of go around procedures. Based on this recommendation, the FAA determined that additional separation requirements were necessary at airports with this configuration across the country. As a result, MSP was required to modify their safety mitigations, which began with a phase-in approach in 2014. One step was to reduce the number of go arounds on runway 35 through many layers of mitigation. In 2014 safety risk management panel came out to assess and review the safety mitigation standards in place

at MSP and the panel approved the safety measures that were in place. In mid-2015 the FAA conducted another review and determined that the level of mitigation was no longer sufficient to meet the new safety standards and that new measures needed to be put in place for Runway 35 arrivals and Runway 30L departures. Arrivals to Runway 35 were temporarily suspended during August 2015. In September 2015, Runway 35 arrivals resumed with the use of an Arrival Departure Window (ADW). An ADW is a tool used to comply with the new CRO rules and effectively alternates arrivals on Runway 35 with departures on Runways 30L. In February 2016, it was determined that the convergent point on 35 and 30R also needed to comply with the new CRO rules. FAA Minneapolis ATC was required to utilize a second ADW which resulted in different tactics in taxiing, arriving and departing aircraft in a north flow configuration.

Buckner described two opportunities that are currently being evaluated to develop a long-term solution to CRO. ATC's main goal is to be compliant with the FAA's safety orders in insuring the highest order of safety while minimizing the impacts to capacity and the environmental impacts. First, the ATC team is studying the use of ADW's on two runways at the same time, which is currently not approved. During high arrival demand periods, departures are only happening on one runway at a time, Runway 30R, in a north flow configuration. This creates a lot of ground complexities. **Buckner** stated a safety review panel was currently being conducted to review and mitigate the risks associated with using two ADW's at the same time; results take about 6 weeks and to train and operationalize will take approximately 6 months. Second, there is a request to FAA headquarters for a review of aircraft departing and turning north of runway centerline off Runway 30R to be independent of the ADW because they avoid the conflict area. **Buckner** offered briefings or outreach sessions to neighboring communities, in conjunction with the MAC, to go into greater detail and discuss specific community concerns. **Miller** asked for clarification on the timeline of the environmental and capacity review. **Buckner** responded that the procedures need to be in place, which is estimated that to take one year, before an environmental evaluation can occur.

6. ~~Update on Turboprop Departures over Mendota Heights~~

Approved to move to November's NOC Meeting.

7. NextGen Standard Terminal Arrival Routes (STARs) Amendments Update

Dana Nelson, Technical Advisor introduced **Kristi Regotti, FAA Environmental Specialist**, to discuss the National Environmental Policy Act (NEPA) process that was followed to conduct an environmental screen on adjustments being made to some arrival routes. NEPA is a broad national policy to protect and enhance the quality of the environment. For the FAA Environmental Policy, the guiding orders are the 1050.1F policies and Air Traffic has taken a step further and provided more environmental guidance for airspace matters. During the typical process, the proposed action is reviewed in comparison with existing conditions. If the action does not qualify for a categorical exclusion (CatEx), then it moves on to an environmental assessment. If there is a CatEx, then they look to see if there are any extraordinary circumstances involved or if any thresholds of significance are surpassed. If none of those apply then they move ahead with a CatEx documentation process. For the MSP arrival procedure amendments, the proposed changes were reviewed against the existing procedures. The environmental review process started with Air Traffic Initial Environmental Review (AIER) which considers extraordinary circumstances and insures the FAA is compliant with NEPA. There was also a noise screen to assess possible changes with the proposed amendments. The screen included 28 days of flight data during times without major construction or weather events. Findings from the noise screen and the IER resulted in no extraordinary circumstances and there was no significant noise

increase reported or identified. The threshold of significance as defined through the NEPA process is a 1.5 decibel increase inside 65 DNL. Therefore the determination was made that this qualifies for a CatEx under the 5-6.5i which allows for air traffic control procedures conducted at or above 3,000 feet when there are no extraordinary circumstances identified or significant noise level increases. The CatEx package including the CatEx declarations, noise screen, and IER are then sent to the director requesting a signature. Once signed it then becomes a public document and will be available on the FAA website. **Representative Bergman, Apple Valley**, requested a projected timeline for the signature. **Regotti** responded that the process has recently changed but that a signature should be on the document in no more than 30 days.

8. ~~Runway Use System (RUS) Evaluation~~

Approved to move to November's NOC Meeting.

9. ~~Consent Decree Amendment Update~~

Approved to move to November's NOC Meeting.

10. Draft 2017 NOC Work Plan

Approved to email work plan suggestions to **Dana Nelson, Technical Advisor** who will compile the final 2017 NOC Work Plan and request approval at the November NOC meeting.

11. Review of July 27, 2016 Public Input Meeting

Dana Nelson, Technical Advisor, reviewed the Public Input Meeting in July. One resident attended, who relayed concerns regarding FAA decision making process as well as consideration for community impact. There was interest raised at the meeting regarding the difference of community impact from MSP versus other airports. FAA and Airline representation was there and provided a dialogue specific to the resident's questions and concerns.

12. Public Comment Period

None

13. Announcements

None

14. Adjourn

Co-Chair Fitzhenry made a motion to adjourn the meeting and it was seconded by **Representative Petschal, Mendota Heights** and passed unanimously.

The meeting adjourned at 4:02 p.m.

The next meeting of the NOC is scheduled for Wednesday, 16 November 2016.

Respectfully Submitted,
Amie Kolesar, Recording Secretary