



MSP NOISE OVERSIGHT COMMITTEE DRAFT MEETING MINUTES

Wednesday, 16th of March 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, 16th of March 2016, in the Lindbergh Conference Room at the MAC General Offices Building. Chair Hart called the meeting to order at 1:37pm. The following were in attendance:

Representatives: P. Vick; K. Erazo; D. Miller; E. Petschel; T. Fitzhenry; J. Bergman; J. Oleson; L. Olson; J. Hart

Staff: D. Nelson; B. Juffer, L. Peilen; J. Lewis; C. Leque; A. Kolesar

Others: D. Sloan – City of Mendota Heights ARC; S. Nienhaus – City of Burnsville; A. P – City of Apple Valley; S. Devich – City of Richfield; L. Moore – City of Bloomington; E. Buckner-FAA/ATC; A. Nemcek-City of Rosemount; G. Albjerg-HNTR; L. Grotz-City of Edina; A. Boettcher-City of St Louis Park; A. Swenson-City of Edina; M. Park-City of Sunfish Lake; P. Dmytrenko-City of Richfield; J. Kedrowski-MAC; M. McNeill-City of Mendota Heights; J. Smith-City of Mendota Heights; C. Neal-City of Minneapolis; C. Brownlte-City of Minneapolis

Chair Hart, Delta Airlines commented that the agenda was robust and made a few modifications to the agenda items, adding item number **1a** as well as switching agenda items **4** and **5** as reflected here in the minutes.

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

Because a quorum was not present this item will be addressed at the next meeting on May 18th.

a) Mendota Heights Open House

Co-Chair Petschel, Mendota Heights reported that on March 9th MAC staff, **Elaine Buckner** of the FAA and other FAA staff attended and presented at the Mendota Heights Airport Relation Commission Open House. There was a large residential

turnout. Roughly 99% of the residential attendees went to the meeting to file complaints about the same issue, propeller-driven Bemidji Air Operations that occur between 4am-6:30am. This cargo plane often starts operations as early as 4am. **Co-Chair Petschel** noted that **Dana Nelson, Technical Advisor** and **Elaine Buckner, MSP Air Traffic Manager**, expressed willingness to look into these flight patterns further. To understand when exactly these patterns are occurring, where and with what frequency. **Co-Chair Petschel** then asked that this issue be added to the NOC work plan in order and that the NOC Board work to follow along on the status of this issue. There was not a quorum to move forward but **Hart** explained that they can direct MAC staff on this process. **Co-Chair Petschel** agreed that at this moment they will direct MAC staff and address a formal resolution at a later date when more representatives are in attendance. With no objections **Chair Hart** directed **Nelson** and **Brad Juffer, Assistant Technical Advisor** to move forward as agreed.

2. Nomination and Election of NOC Co-Chair

Chair Hart, Delta Airlines shared with a heavy heart his co-chair of many years, **Co-Chair Petschel** announced her resignation at the last NOC meeting. **Chair Hart** asked if there were nominations for a new co-chair.

Co-Chair Petschel thanked the group and spoke to what a positive experience her time on the NOC has been. **Co-Chair Petschel** nominated **Representative Fitzhenry**. This nomination was seconded by **Representative Oleson** and passed by a unanimous vote by the NOC Community Representatives. **Representative Fitzhenry** accepted the vote and thanked everyone for electing him as the new co-chair.

3. A Resolution Honoring Liz Petschel

Chair Hart, Delta Airlines announced that the MSP airport and the NOC prepared a resolution for retiring **Co-Chair Petschel** and presented a plaque with the resolution. He read from the plaque and stated that the resolution was to honor **Co-Chair Petschel** for her dedication and service to the NOC. He also stated that **Co-Chair Petschel** served on the Mendota Heights Airport Relations Committee. **Chair Hart** thanked **Co-Chair Petschel** for her 19 plus years of dedicated service to the airport noise community and on behalf of the NOC wished her continued success, genuine happiness and good health in the years to come. **Co-Chair Petschel** thanked everyone and commented on her gratitude for guidance received from her mentors and colleagues.

4. MSP Converging Runway Operations: Elaine Buckner, FAA Air Traffic Manager

Elaine Buckner, MSP Air Traffic Manager, gave an update on the status of the converging runway operation since applying the rule to Runway 30R to the rule. **Buckner** reminded everyone that a converging runway is when runways do not physically intersect but do have flight paths that intersect within one mile of the departure end of a runway. **Buckner** stated in the case of MSP, Runway 35 and 30L as well as Runway 35 and 30R are considered converging runways.

Buckner reports that the potential concern is an arrival on Runway 35 concurrent with a departure off Runway 30L or 30R. If the Runway 35 arrival were to unexpectedly terminate their arrival and they would have to go around, those flight paths could intersect if there was no action taken. New rules for converging runways are based on providing extra safety if there was no action. **Buckner** stated action taken to mitigate that is to alternate departures off 30L or 30R with the arrivals to Runway 35 so there are not simultaneous departures on 30L or 30R with an arrival on 35. On February 29th, 2016 30R was added to this procedure and since that time, based on weather and winds, there have been 2 complete days and a couple partial days when the air traffic was in a north-west configuration. **Buckner** reported the procedures are going well and the arrival rates have been maintained.

Representative Olsen, Minneapolis commented that she recalled **Buckner** saying she didn't expect the arrival rates to be affected by applying the CRO procedures to 30R and she wanted to know if that was still the expectation. **Buckner** responded, yes that continues to be the expectation.

5. Review of Monthly Operations Reports: January and February, 2016

Brad Juffer, Assistant Technical Advisor reported the number of complaints in January 2016 was 5,547 from 295 unique locations and 7,586 complaints in February 2016 from 438 unique locations. Complaints in January 2016 were down 8.4% from 2015 and complaints in February 2016 were up 8.7%, YTD complaints are up 0.8%.

In response to suggestions from Representative Olson and Chair Hart during the January NOC meeting, **Juffer** displayed a chart with the ratios of complaints to household. The chart showed, on average, that the complaints have a higher ratio in the winter than in the summer as the number of complaints from different locations are greater. At this time, the ratios for this time of year are consistent with previous years.

Juffer displayed another chart showing the differences in complaints from 2014 and 2015 in order to illustrate the differences in complaint locations. There shows a trend of a decrease in complaint locations from the SW Minneapolis, Edina, and Eden Prairie areas. Most zip codes saw moderate changes in complaint locations, either an increase of 20 or a decrease of 20 complaint locations.

Juffer reported the operations totals YTD for 2016 are almost exactly the same as 2015. There were 31,597 flights in January 2016 and 30,020 in February 2016. Air carrier jet operations for January and February of 2016 were 29,322 and 27,762. 5.9% of all operations in January were nighttime operations and in February 6% of all operations were nighttime operations. The carrier fleet is made up of 45.7% and 44% regional jets. There were 10 Modified Stage 3 operations in February 2016 and thus the number is not quite 100%. **Juffer** reviewed the MSP passenger data for January 2016, reporting that 1.97 million travelers travelled through the facility, on 15,800 operations. 642,000 regional passengers were on 13,000 regional flights and that is 2.6 million passengers on just over 29,000 flights. The average load was 89.5 people on every aircraft from MSP.

For January's scheduled versus actual data, there were 692 scheduled arrivals and 1,220 actual arrivals during the nighttime hours. There were 110 scheduled versus 188 actual during the hours of 10:30pm-11pm, 362 scheduled versus 428 actual during the 11pm hour, 171 scheduled versus 295 actual flights during the 5am hour. The cargo carriers start their arrivals between 4am-5am and there was one nighttime departure during the 10:30pm block. Overall for departures there were 260 scheduled versus 559 actual. During February, 821 scheduled versus 1,226 actual arrivals during the nighttime hours. 287 scheduled departures versus 488 actual departures in the nighttime hours. The cargo representation is very similar to what it was in January.

Juffer reviewed the following noise abatement procedures for MSP: Runway 17 Departure Procedure, Eagan-Mendota Heights Departure Corridor Procedure and the Runway Use System (RUS). In January 99.9% of all operations complied with the Runway 17 Departure Procedures and February 99.5% of all operations complied with the Runway 17 Departure Procedure. In January there was a 97.9% compliance rate for the Eagan-Mendota Heights Departure Corridor Procedure and in February there was a 93.9% compliance rate for the Eagan-Mendota Heights Departure Corridor Procedure. The Crossing-in-the-Corridor procedure had 221 jets in the corridor at night utilizing this procedure in January and February which resulted in 35% and 55% crossing compliance. During the day the percentages were 34% and 29%. In regards to the RUS, MSP had 51.8% of flights in January and 52.4% in February use the high priority runways. Mixed A usage which sees arrivals on the 30s, departures on 17 and 30sin January was only used 4.2% of the time. In February that number increased 7.2% which results in more efficient use of the high priority runways. In January 46.4% of all departures used high priority runways while arrival use was in the low 20% range. In February departures on the south bound runways were only 38% but arrivals on the north bound runways were at 66.5%

Representative Olson thanked **Juffer** for the complaint map and commented on the flight patterns over Minneapolis not being a surprise. **Representative Olson** continued to comment on the nighttime operations and the high percentage of departures on 30L. The people living under the flight pattern of arrivals on 30L have that noise then in addition are subjected to the 30L departure noise. She would like to see more balance because this area of airspace is used frequently.

Representative Olson then asked for clarity on nighttime operation expectation. **Juffer** responded that month to date numbers are much more aligned with patterns of the same time in March 2015 than the January and February 2016 numbers. **Representative Olson** commented that it seems the number of nighttime operations continue to grow over time. **Juffer** responded that when looking at trends year after year there is a growing trend but as of March 2016 the numbers are more similar to the number of flights in 2015 whereas the January and February numbers of 2016 are much higher than those of the same months in 2015. **Co-Chair Petschel** commented on days with specific weather phenomenon that increased the nighttime flight patterns. Then went on to question if we went back to look at January and February and could attribute the increase in nighttime flights to weather.

Representative Oleson commented on the maps showing community noise complaints in addition to the maps showing flight pattern data and went on to ask how a trend analysis over time is done. Being unclear if there was a policy for that analysis **Representative Oleson** commented that it might be a good idea to start doing a trend analysis of that data over time. **Chair Hart** commented that it would be up to him and Co-Chair Tom Fitzhenry to figure out the best way to represent that data. **Co-Chair Petschel** commented that she too would be interested finding a way to represent the data in a way that can follow yearly trends.

6. MSP Draft 2035 Long-Term Comprehensive Plan (LTCP) Publication Update

Dana Nelson, Technical Advisor, commented that in late August the FAA began implementing the converging runway operations and procedures for 30L and 35. On February 29th, 2016 the FAA began the same procedures for 30R and 35. This implementation impacts the LTCP schedule. MSP is allowing a five to six month evaluation period from the FAA to implement procedures on 30R. When that is complete the noise office will collect that data and work with consultants to look at how those changes may affect the forecast runway use for the 2035 noise contours used in the LTCP. If changes need to be applied to the runway use, then the noise office will revise and re-run the forecast noise contours. There is a possibility the FAA's evaluation time will be shorter than the six months but that depends on weather and other use circumstances. If that timeline is condensed the noise office will present the information to the NOC.

7. 2015 MSP Annual Noise Contour Analysis

Dana Nelson, Technical Advisor, reported on the Annual Contour Analysis which was published on February 29, 2016. This is the first year that homes reached the 3 consecutive year eligibility requirement for the residential noise mitigation program under the First Amendment of the Consent Decree. The MAC Noise Office worked with HNTB to compile the noise contour inputs and run the contours. All homes that fall under the third year eligibility are in the city of Minneapolis. There are 483 single family homes met the first year of eligibility, 285 single-family homes met the second year and 137 single family homes and 88 multi-family units that met the third year of eligibility. The homes that met all three years are eligible for mitigation in 2017.

Nelson reported there were 404,374 total operations in 2016, which represents a 30.6% reduction from the 2007 forecast; compared to 2014, total operations were down 1.8%. The average daily number of Modified Stage 3 operations was down over 99.9% from the 2007 forecast. The total night time operations was down 16.6 average daily operations from the 2007 forecast. Overall there was a decrease of 37.8% in the 60 DNL contour, and 46.3% in the 65 DNL contour. The reduction is largely due to the decrease in operations and fleet mix changes. **Nelson** reported there was one small area in which the 2015 actual extended beyond the 2007 forecast noise contours and this was driven by night time operations and specifically due to arrivals on 12R during nighttime hours. The areas affected by the nighttime arrivals to Runway 12 are the areas of focus for the residential noise mitigation program. **Nelson** went on to explain a graphic visually representing the areas that had been

previously mitigated as well as the areas that have achieved one, two and three years of eligibility.

Nelson reviewed the 2014 actual contour to the 2015 actual contour. There was some growth in the size of the 2015 contour, largely driven by the night time operations. All homes that met the first year of eligibility in 2014 have achieved the second year of eligibility per the 2015 actual contour. All homes that met the second year of eligibility in 2014 have achieved the third year of eligibility per the 2015 actual contour. Comparatively, there was an 11.6% growth in both the 60 DNL and 65 DNL contours from 2014 to 2015; 106.7 average daily nighttime operations in 2015 compared to the 95.3 daily nighttime operations in 2014. Specifically examining Runway 12R arrivals in 2015, there was a daily average of 123.6 daytime arrivals and 16.9 at night whereas in 2014 there were 99.2 daytime arrivals at 14.5 at night.

Nelson reported on the timeline notifications for the residential noise mitigation program per the First Amendment to the Consent Decree. The initial contact for homes eligible for mitigation will be before July 2016. At the May NOC Meeting, Pat Mosites, the project manager, will stand before the committee to give a briefing on the timeline and the communications plan for moving forward.

Representative Olson thanked MAC for how they are carrying out the program and their clear communication. She commented that as a community they would prefer to not have further mitigations because they would ultimately prefer the noise not increase. **Representative Olson** went on to state that as a committee she would like to continue work on reducing night time operations.

8. FAA Reauthorization Bill Update

Chad Leque, Environment Department Director, reported an update on the FAA Reauthorization Bill. Congressional leaders proposed a reauthorization and one topic within this reauthorization relates to the privatization of Air Traffic Control (ATC) services. This would move the service from the government into a not for profit corporation. This issue has started a lot of conversation and has thus caused the temporary shelving of the initial reauthorization language. Since then, the focus is now on a short-term extension to continue the operation by the FAA as the current authorization will expire at the end of March 2016. Simultaneously the US Senate's Commerce, Science and Transportation committee took up language to move forward a piece of the re-authorization. **Leque** commented on conversations held at a national level focusing on aircraft noise and RNAV procedures and implementation. Related to MSP and the NOC it has been noted that they have been working on this process at a local level starting in 2007. Provisions that are in the draft authorization use language that MSP NOC has come up with to address issues that are now being addressed at a national level. **Co-Chair Fitzhenry** commented that there is concern about the privatization of the ATC and the user fees associated with that. How does this affect back-funding and who the FAA answers to? Without these fees there is concern about MAC funding options. **Leque** commented that there isn't a clear line on where or how that funding will change and how that will affect MAC. There are still use fees that need to be charged in order for space to be used but beyond that there isn't clarity.

Airline opinions vary on support for the ATC privatization. **Representative Olson** stated that members of the NOC know that The City of Minneapolis has taken a formal position opposing the privatization of ATC. **Representative Olson** went on to state that they support NextGen technology and think its implementation will be very efficient. The concern with privatization is that the FAA and ATC engagement with the public will decrease. **Chair Petschel** commented that there is tremendous agreement with Minneapolis' formal position on the ATC privatization. The NextGen technology could be really beneficial but that its benefits depend on implementation. The things this technology can accomplish for air navigation and noise abatement are a lot of the things MSP has already addressed and completed.

9. Update on the FAA Stage 5 Noise Certification

Brad Juffer, Assistant Technical Advisor, reported that the FAA issued a Notice of Proposed Rulemaking (NPRM) for Stage 5 noise certification in January 2016 and the comment period associated with that is open until April. The NPRM is seeking to revise the regulation that deals with aircraft noise. The use standards would apply to aircraft over 55,000kg seeking certification after December 31, 2017 and smaller aircraft under 55,000kg seeking certification after December 31, 2020. The industry is moving in the correct direction but the ICAO driven regulations are written to avoid moving backwards and not written for technology. The FAA anticipates by the time this proposal becomes effective existing noise reduction technologies will allow the airplanes to comply with the regulation. In the NRPM the FAA specifically comments that this regulation does not seek to phase out stage three or stage four aircraft. There are no operational restrictions nor production cutoffs on the use of stage three or stage four aircraft. The ICAO Committee for Aviation Environmental Protection started studying this regulation in 2010. They studied reductions to stage four between 3,5,7,9 and 11 EPNdB reductions, ultimately choosing a 7 dB reduction from stage four for the Chapter 14 regulation. There have been a series of cost benefit analysis done which studied the environmental impacts including what the quantifiable physical and monetary effects of noise, fuel burn and emissions. The ICAO standard was issued in 2014 and was published and on the record by January 1, 2015.

Juffer reported that the evolution of Part 36 in the United States started in 1969. It was amended in 1976 which required operators to bring their fleet to a stage two or stage three regulation. In 1977 it was modified so stage three was the maximum level. The Airport Noise Capacity Act of 1990 phased out large stage two aircraft after 2000. Stage four was introduced in 2005 for any certified aircraft after 2006; stage four is 10dB below stage three. Now stage five is being introduced which is 17DB below stage three.

Stage three is defined by Part 36 as being measured in three different locations; fly over location at 6.5 km from the break release point at takeoff, sideline reference at 450 meters from the side of the runway, approach point is 2 km from the runway threshold under the approach path. Stage three specifies a maximum level based on max takeoff weight and number of engines at each specific point. Stage four and stage five sum all those points up and assume that the stage four aircraft is cumulatively 10dB below stage three and that stage five is 17dB below. It also stipulates that you can't be higher than any of those categories but it focuses on the cumulative output of the aircraft. The FAA is analyzing

approach and departure noise categories and those numbers show the noise levels in departures are decreasing faster than in the approach categories. Juffer went on to explain the changes in engine design and how over the years the designs have reduced the noise emitted. Moving forward another design with high bypass ratios will be on new aircraft that will reduce the noise impact even more. The higher the air bypass ratio, the more fuel efficient the engine is and the quieter the engine is. **Juffer** went on to describe a few aircraft that are in the process of having these changes implemented as well as aircraft that could qualify for the stage five changes.

Representative Loren Olson asked for clarification on stage five being 17dB below which stage. **Juffer** responded that stage five is 17dB below stage three.

Representative Miller inquired if there was a better way to describe or compare the dB drop to a layperson. **Juffer** responded that it would be challenging as the regulation numbers are very specific to the metrics in place to make sure a proper test is undertaken.

Co-Chair Fitzhenry asked if there was a consensus on what constitutes the perception of sound. **Juffer** responded that the noise perception in this case is determined by the metrics of Effective Perceived Noise Level (EPNL) and the associated measurable dB to certify what level an aircraft is. EPNL is the sound equivalent level as modified by tone correction and duration. In short the measurement isn't done by straight decibels but by a calculated metric.

10. Review of January 27, 2016 Public Input Meeting

Dana Nelson, Technical Advisor, reported that on January 27th MAC held its first quarter Public Input Meeting, eight people were in attendance and two people made comments. Responses were provided to the comments and are also available on the MAC website. The comments focused on tips to insulate a home against airplane noise, this information is also already available on the website. The other comment was related to how MSP noise relates to other airports within in the United States. The next meeting is April 27th, it will be at the Saint Louis Park City Hall at 7pm.

11. Public Comment Period

There were no public comments.

The next meeting of the NOC is scheduled for Wednesday, 18 May 2016.

Co-Chair Fitzhenry made a motion to adjourn the meeting and it was seconded by **Co-Chair Petschel**.

The meeting adjourned at 2:54 p.m.

Respectfully Submitted,
Amie Kolesar, Recording Secretary