



MSP NOISE OVERSIGHT COMMITTEE
DRAFT MEETING MINUTES

Wednesday, 15th of November 2017 at 1:30pm

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, 15th of November 2017, in the Lindbergh Conference Room at the MAC General Office. Chair Miller called the meeting to order at 1:38pm. The following were in attendance:

Representatives: T. Link; L. Moore; G. Goss; J. Hart; D. Miller; P. Dmytrenko; J. Miller;
L. Olson; J. Rokala; A. Moos

Staff: D. Nelson; B. Juffer, C. Leque; A. Kolesar; J. Lewis; P. Hogan; J. Welbes

Others: M. Olson – FAA, Northern Plains District; A. Nemcek – City of Rosemount; L. Grotz – City of Edina; B. Hoffman – City of Saint Louis Park; K. Terrell – MSP FairSkies; D. Sloan – Mendota Heights ARC; C. Carrino – MSP FairSkies; S. Devich – City of Richfield; M. Sands - FAA

Chair Miller, Eagan, introduced and welcomed two new NOC members, James Rokala from Sun Country Airlines and Lynn Moore from the City of Bloomington.

1. Review and Approval of the July 19 and September 20, 2017 Meeting Minutes

Chair Miller, Eagan, requested an approval for the July 19th, 2017 meeting minutes, the motion was moved by **Chair Hart, Delta**, seconded by **Representative Dmytrenko, Richfield**, and passed unanimously. **Chair Miller** requested an approval of the September 20, 2017 minutes, the motion was moved by **Representative Goss, Delta**, seconded by **Representative Dmytrenko** and passed unanimously.

2. Review of Monthly Operations Reports: September and October, 2017

Brad Juffer, Assistant Technical Advisor, started by reporting that there were 33,313 operations in September, a 2.2% drop from 2016, and 35,027 operations in October, a 0.3% increase from 2016.

The noise office recorded 1,551 nighttime operations between 10:30 PM and 6:00 AM in September and 1,807 nighttime operations in October. During the two months, there were 214 fewer operations (6.3% decrease) than the same period in 2016. October represents the 5th

straight month of reductions in nighttime activity compared to 2016 and year to date, nighttime operations are 4% lower than the same time period last year.

Regarding runway use, **Juffer** reported that September's wind conditions were mostly from the south and southeast, as a result, Runway 12L and 12R had 55% of all arrivals. Runway 17 saw 39% of all departures.

In October, there was more balance in the wind directions, however the gusts were stronger. Runway 12L and 12R saw 45% of arrivals, departures on 30L and 30R increased from 38% in September to 48% in October, and use of Runway 17 dropped to 33%. The south winds of September resulted in 53% of all hours spent in a South Flow during that month. Even that high amount of hours was still less than 2016 when CRO and winds had the airport configured in a South Flow 58% of the time. In October the split was 38% North Flow, 42% South Flow, and 10% Mixed Flow.

Juffer then reported a consistent carrier jet fleet mix across September and October, noting the B737-Max made its MSP debut in November as Southwest Airlines began using the aircraft for regularly scheduled service.

Juffer went on to report the aircraft noise complaints. A total of 522 locations logged complaints in September, which fell to 331 in October. There were 15,283 complaints filed in September and 10,844 complaints in October. These totals are over 5,000 more complaints or 25% when compared to last year.

Monthly density graphics were then presented showing the highest density of locations filing noise complaints for September and October. **Juffer** reported that 2.9% of the areas in September included more than 10 locations entering noise complaints, 5.8% had more than 6 locations, 9.6% had more than 4 locations, and the remaining 82% contained less than 3 locations. The total locations were reduced in October and so were the corresponding densities. During October there were no areas that had more than 10 locations entering noise complaints, 4.9% had more than 6 locations, 5.4% had more than 4 locations, and the remaining 90% contained less than 3 locations.

Total complaint density for the two-month period was then presented. **Juffer** reported that there were 238 areas that filed at least 1 complaint. Of those, 5.5% filed more than 5 complaints per day, 17.6% filed more than 1 per day, 31% filed more than 1 complaint per week, with the remaining 46% filing less than 1 complaint per week.

During September and October, **Juffer** reported that the top 10 complaint locations filed 15,512 complaints. This represents nearly 60% of the complaints filed during these months; eight of those 10 locations were also in the top 10 during the previous two months.

Juffer then reported data from the 39 RMT locations. During September, there were 444 hours of aircraft events above 65 decibels and 506 hours in October. The 444 hours is the lowest recorded since February of this year. There were 87,883 aircraft noise events above 65 decibels recorded in September and 95,472 in October. **Juffer** noted that October had more total aircraft

operations that lead to the increase in aircraft noise events. Both time above and event totals for September and October dropped from 2016.

Juffer reported the noise abatement procedure compliance, noting the Runway 17 Departure Procedure continued to see high usage at 99.8% in September and 99.9% in October. Only 17 jets during those months were west of the 2.5 mile turn point.

The Eagan/Mendota Heights Departure Corridor compliance rate was 97.6% in September and 97.1% in October. The Crossing-in-the-Corridor procedure was used 30.7% and 32.5% of the time during the day in the previous 2 months. At night, 46% of the operations in September crossed in the corridor and 44.3% in October.

The Runway Use System report shows that the overall use of the high priority runways were very similar to one another at 53.7% in September and 53.5% in October. Due to the increased south winds and south flow in September, the departure usage on Runways 12L, 12R and 17 increased in September. In October the airport configuration was more balanced with 55% of arrivals on Runways 30L, 30R and 35 and 52% of departures on 12L, 12R and 17.

Representative Olson, Minneapolis, asked for clarification on the time above data. **Juffer** responded that the time above data was 9% lower than the information provided for the same time period in 2016. This is a result of numerous variables such as the airport flow, the times the aircraft operated, as well as surrounding community noise sources.

Representative Dmytrenko, Richfield, asked how the MAC Noise Office staff responds to noise complaints when there is a clear increase in complaints. **Juffer** responded that the office responds in a number of ways, when filing a complaint via the website, there is a specific spot that asks the resident if they would like a staff response to their question. If they do, then staff responds to the individual resident. If they do not wish for a response, the complaint is archived and retained for reporting purposes. Residents who call to file a complaint on the hotline and request a return phone call will receive a phone call from staff. Sometimes staff meets with individual residents. For example, recently MAC staff met with Representative Tom Link, Inver Grove Heights, and two residents from his community to have a face to face conversation regarding their aircraft noise concerns.

3. Response to MSP FairSkies Requests

Chad Leque, MAC Director of Environment, reminded the NOC of the previous MSP FairSkies requests, noting that on March 7th, 2017 Dana Nelson, NOC Technical Advisor, received a letter from MSP FairSkies requesting publication of a 55 dB DNL annual noise contour. On March 15th, 2017, the NOC discussed the request and did not move forward with the publication of the 55 dB DNL contour. On August 9th, 2017, MAC staff members met with MSP FairSkies representatives to discuss a FairSkies forum that was held on June 8th, 2017, in Saint Louis Park. It was at that meeting that the FairSkies representatives clarified that the goal for their contour request was to advance a more stringent federal noise metric/threshold prior to the FAA returning to MSP to consider the implementation of Area Navigation departure procedures.

Leqve paused to revisit the NOC's mission of providing a balanced forum for the discussion and evaluation of noise impacts around MSP through: identifying, studying, and analyzing airport noise issues and solutions; providing policy recommendations or options to the MAC Planning, Development, and Environment Committee and Full Commission regarding airport noise issues; monitoring compliance with established noise policy at MSP; and ensuring the collection of information and dissemination to the public. **Leqve** then listed a number of NOC accomplishments that demonstrate the NOCs execution of its mission.

Leqve then revisited the September 20th, 2017 NOC meeting, when representatives from MSP FairSkies addressed the Committee and requested that the NOC and MAC produce a 55 dB Noise Exposure Map/Contour, produce an N65 Noise Exposure Map/Contour, establish a goal to reduce noise, and enhance the NOC with greater stakeholder (citizen) representation. After introducing each request, **Leqve** then went into greater detail on each item and the associated considerations for the NOC.

Regarding the request to publish the 55 dB DNL noise contour, **Leqve** reminded the Committee that the residential sound insulation program and Annual Noise Contour Report are prescribed by the noise litigation Consent Decree with specific requirements for the MAC to follow. **Leqve** also expressed the potential confusion that another noise contour may create with regard to noise mitigation eligibility and the existing partnership that currently exists with the FAA to allow residential sound insulation beyond the federally-established threshold. **Leqve** then mentioned the current effort by the FAA to evaluate the appropriateness of the noise metric (DNL) and threshold (65 dB DNL) and that this effort will include an opportunity for the public to participate in the process. Lastly, regarding the MSP FairSkies purpose to advance a more stringent noise standard before FAA returns to MSP to implement RNAV departure procedures, **Leqve** reminded the Committee about the NOC's RNAV Resolution from 2014, which provides a preemptive and unanimous position on a stakeholder engagement strategy at MSP.

While discussing mitigation considerations related to the request by FairSkies, **Representative Olson, Minneapolis**, asked for clarification regarding a MSP 60 dB DNL Contour Acreage chart that was presented to show the 2005 and 2007 forecast as compared to the actual. **Leqve** reiterated that it was a chart based on the 60 dB DNL as agreed on by the stakeholders and the associated mitigation program. **Olson** then asked if the 55 dB DNL would mirror the 60 dB DNL trend line and **Leqve** replied that it would, although the contour would be larger.

Leqve continued by presenting considerations for the request to establish a goal to reduce noise. He explained the goals iterated in the MAC Purpose, the strict regulatory environment for U.S. airports, NOC's long list of achievements in the midst of a mature noise program and a heavily regulated environment, as well as the current focus on providing mitigation to all homes impacted at the actual 60 DNL noise level.

Lastly, **Leqve** presented considerations related to the request to enhance the NOC with greater stakeholder (citizen) representation. **Leqve** discussed the MASAC group that was present prior to the NOC, the importance of having a balanced forum to discuss aircraft noise issues, the existence of quarterly listening sessions to engage with citizens, the MAC Noise Program's communication enhancements and a list of NOC recent activities that that stemmed from resident/citizen input.

Representative Link, Inver Grove Heights, mentioned the FAA's policy on the 55 dB DNL contour and he asked what the status of that was. **Leqve** responded that the FAA is not

specifically evaluating the 55 dB DNL contour, but reviewing their current policy as it relates to the 65 dB DNL contour. The last report from the FAA was to have results from the airport surveys released by the end of 2017 and when that's complete, the Agency will conduct three policy studies related to its noise metric and threshold based on the survey results.

Representative Dmytrenko, Richfield, thanked Leqve for the background information on the NOC and MASAC and thanked MSP FairSkies as an organization and their input. **Representative Olson, Minneapolis**, stated that Minneapolis supports the production of a 55 dB DNL contour map so they can be part of the national conversation and then asked if the group could continue the conversation as it relates to the noise reduction goals. She also stated that the group is succeeding by a lot of metrics and that the contour is actually shrinking except for the areas that are really still impacted by noise during the nighttime hours. **Olson** also stated that if residents feel like they don't have adequate representation, that the issue needs to be addressed and is glad to have more time to have the board discuss these concerns.

The Committee unanimously agreed that in order to adequately consider the information presented at the meeting and to allow time for at-large representatives to communicate with their respective at-large groups, it would be appropriate to continue the discussion and respond to the MSP FairSkies requests at its January 2018 meeting.

4. Annual MSP Fleet Mix and Nighttime Operations Report

Dana Nelson, Technical Advisor, introduced the annual report that reviews fleet mix trends and trends in nighttime operations at MSP. A complete report was provided to the Committee in their meeting packet and **Nelson** reviewed some highlighted information. Widebody jets have maintained a consistent 2% total over the years in the operations at MSP. **Nelson** showed the group a chart with the percentages of wide body types over the years, the three jets with the highest numbers are the Airbus 330, Boeing 763, and the MD11.

Narrowbody jets were the second largest group of operations but in mid-2014 the airlines started to up-gauge their aircraft and the narrowbody aircraft surpassed regional jets. Across the board, airlines have made an effort to operate fewer operations but with more passenger seating. The top four narrowbody jets over the years are the Airbus 319, Airbus 320, Boeing 738, and the MD90. It should also be noted that the Boeing 717 saw growth in 2016 to 2017, this is a quiet and efficient aircraft. The Boeing 739 has seen an increase in use as well. Last, the MD80 has had a decrease in operations over the years, these are one of the noisiest aircraft to operate at MSP.

Representative Hart, Delta, asked **Nelson** if there was a way to add a noise footprint for each aircraft so there could be a visual comparison of the noise impact difference. **Nelson** responded that she pulled the FAA certification information for a few aircraft types, these list the aircraft's takeoff noise level and the perceived noise level. The B738 has an effective perceived noise level (EPNL) of 88.6 dB, earlier variances of this aircraft were around the low 90s. The A319/320 are at about an 87.4-87.8 EPNLdB, the MD90 is at an 84.2 EPNLdB and the MD80 is at 91.5 EPNLdB. The last thing to note is that the DC9 was once a very popular aircraft and had registered the primary noise events, the number of DC9 operations has been dropping. From January-September of 2017, there have been a total of six DC9 aircraft operations and those have been non-scheduled and charter operations.

The primary aircraft in the regional jet category are the CRJ2, CRJ9, and E170. This category has had an overall decrease in operation numbers. The CRJ2 was around 20% of the fleet

for 2012 and in 2017 that number dropped to about 16%. However the CRJ9 was hovering around 7% in 2012 and in 2017 rose to over 11%. The E170 follows the same trend as the CRJ2 and went from being over 15% of the fleet mix in 2012 to just over 7% in 2017.

Nelson introduced three new aircraft: the A320 NEO which Spirit and Frontier have operating at MSP and American has 100 on order; the B737 Max, which Southwest has in operation at MSP with additional orders by American and United; and the CS-100 which Delta has on order and aircraft deliveries are scheduled to begin in 2018.

Nelson moved on to the nighttime operations report. When comparing 2015 to 2016, there were close to 10 flights per day increase during the nighttime period; however, in 2017 that number decreased by about four operations per night. During the nighttime hours, runway use percentages were compared between 2016 and 2017. The RUS is in place to direct aircraft over less densely populated areas as much as possible, the Eagan/Mendota Heights area and over the river, so arrivals are directed to Runways 30L and 30R and departures are directed to 12L and 12R. The percentages on those runways, equal over 50% of the nighttime operations, the main increase is on 30L nighttime arrivals. The other runways show a consistent percentage with the two year average. To delve deeper, **Nelson** then listed the top 15 airlines with the highest number of nighttime operations and what percentage of their total operations are at night. While Delta, Sun Country, American, and Southwest had the highest count, the percent of nighttime operations from their total operational level is quite low.

Representative Olson, Minneapolis, asked for clarification on the list of operations by airline and said she would like to see what percentage of nighttime flights belong to which airline. **Chair Miller, Eagan**, asked **Nelson** if those numbers were already available in the monthly operations reports. **Nelson** responded that they were and in the interactive reports under the operations tab. **Representative Hart, Delta**, inquired about scheduled versus unscheduled nighttime operations as well as 10pm-1am flights compared to early morning flights. **Nelson** responded that the information for those details is also in the interactive reports and can be broken down in that detail. **Miller** brought up an inquiry from the Eagan Airports Relations Committee, about Runway 30L having most of the nighttime arrivals and asked for strategies to balance the operations more. **Nelson** responded that at this point her office does not have a recommended strategy but inquiries have been sent to FAA. She continued that she suspects it's related to the geographical location and time difference of flights that come in to MSP at night, mainly from the west coast. **Representative Goss, Delta**, commented that from a pilot's perspective Runways 30L and 12R are more desirable, because of the added length, especially for nighttime arrivals/departures. **Nelson** ended by saying that her team can revise the report according to this feedback and present this annual report again in January 2018 with full 2017 data so that can be accurately compared to the historical data. **Miller** agreed that would be helpful.

5. Vortex Generator Noise Monitoring Study

Chair Miller, Eagan, suggested that this item be postponed to January 2018 meeting due to time restrictions and move on to the 2018 work plan. **Dana Nelson, Technical Advisor**, agreed since the 2018 work plan requires an approval action from the committee.

6. Approval of 2018 NOC Work Plan, Meeting Dates, and 2017 Accomplishments

Dana Nelson, Technical Advisor, introduced the draft 2018 NOC Work Plan. The last listening session was akin to a work session with residents to come up with suggestions on what they would like to see the NOC consider in its 2018 Work Plan. The list was shared with the NOC

members and included every verbal and written comment from the meeting. **Nelson** then asked the committee if they would like to see any other items added. **Chair Miller, Eagan**, requested that in addition to the RUS review, that there be a dialogue with the FAA on runway use calling out priorities. **Representative Hart, Delta**, agreed that he would like to see that as well. There was no opposition and the topic was added to the Work Plan. **Representative Olson, Minneapolis**, asked if altitude information related to arrivals and departures is included. **Nelson** responded that in the past there hasn't been a regular report with that specific information and the scope would have to be more specifically defined when looking at the altitudes in specific geographic areas. However altitude trends based on geographical grids as well as by using the noise monitors is available in the interactive reports. **Olson** responded that the public continues to be interested in arrival altitude information and especially with the fleet changing and how that alters altitude. **Representative Goss, Delta**, responded that arrival altitudes have not changed, nor will they, significantly since the 3 degree slope procedures were put in place; significantly being defined as a few hundred feet. As the fleet changes and as the weather and aircraft loads change, there may be altitude changes in departures. **Representative Dmytrenko, Richfield**, added that she would like to focus on outcomes and that maybe there are opportunities to invite experts to address the Committee on topics related to aircraft fleet, manufacturing technologies, and the future of aviation. The topic was added to the Work Plan. **Nelson** mentioned that discussing and responding to the MSP FairSkies requests should be added to the 2018 Work Plan as well and under that address many items that were also requested by members at the listening session, as they overlap. **Chair Miller, Eagan**, requested a motion to approve the amended 2018 NOC Work Plan, it was moved by **Representative Hart, Delta**, seconded by **Representative Moos, UPS**, and was passed unanimously.

Nelson added that the meeting dates for 2018 are listed and needs committee approval for the meeting dates. **Chair Miller, Eagan**, requested a motion, it was moved by **Representative Dmytrenko, Richfield**, seconded by **Representative Moore, Bloomington**, and passed unanimously. **Chair Miller, Eagan**, requested a motion to approve and send the 2017 NOC accomplishments to PD&E in December. The motion was moved by **Representative Dmytrenko, Richfield**, seconded by **Representative Goss, Delta**, and passed unanimously.

7. Review of October 25, 2017 Listening Session

Dana Nelson, Technical Director, stated that 26 people attended the fall listening session and majority of the residents were from Minneapolis and Edina. MAC staff, FAA staff, NOC representatives, City of Minneapolis staff, and Delta staff were also in attendance.

8. Public Comment Period – **Representative Olson, Minneapolis**, made a motion to allow a Minneapolis resident address the Committee. The motion was seconded by **Representative Link**.

Kevin Terrell, MSP FairSkies Coalition, commented that he was glad to hear the committee discuss a focus on outcomes because that requires one to have good key performance indicators (KPI). That aside, **Terrell** said that the KPI's before the committee were not an accurate reflection of citizen expectations. If one is going to use KPI's, one needs to collect and use relevant, accurate, and valid data. **Terrell** stated that the problem with N65 data is that the remote monitoring towers are not evenly distributed, this means that when flow changes, the numbers change and there isn't a valid measurement. One action item listed for 2018 is to improve the monitoring system and **Terrell** suggested that the committee look at the proposal in the legislature that MSP FairSkies put forth. The proposal is around creating matrix of 200

noise and air quality monitors across the Twin Cities, evenly distributed, and run by one of the universities in the area. **Terrell** added that about half of a million dollars could get that project up and running and would provide a consistent look at noise and air quality across the entire Twin Cities.

Terrell then directly addressed the request that MSP FairSkies put forth and said historically a 55 dB DNL contour has been built when the annual noise contour report is produced. He then referred to the current Lake Elmo Long Term Comprehensive Plan and stated there is an associated 55 dB DNL noise contour in that document for that airport. **Terrell** added that the 55 dB DNL is published in Part 150 documents in New York City airports, which showed a doubling in impacted acreage with this contour. **Terrell** stated that staff can create a noise exposure map using this contour and thusly discover the number of people affected by noise; this is the KPI. Regarding the N65 contour, **Terrell** said there were some questions as to which metrics can be used and which metrics the FAA says can be used. **Terrell** stated that N65 is an allowable supplemental metric, it is written in the FAA's guidance; it can be used, it's allowed, and it's been built into the model used to create the noise contour. Related to that, the noise exposure map can be done based on the N65 contour data.

In conclusion, **Terrell** suggested that the committee await the FAA's decision at the end of 2017 and wait for them to come forward with a useful solution. If that doesn't happen, he suggested that the committee take a close look at the request made by MSP FairSkies as their request was made based on facts, within the confines of the system, and based on what else is being done in other parts of the country. **Terrell** said that if the committee decides to not do anything that MSP FairSkies requested, including going backwards on producing a 55 dB DNL noise contour, that FairSkies as well as members of legislature will view that action very dimly.

9. Announcements - None

10. Adjourn

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

The meeting adjourned at 3:25 p.m.

The next meeting of the NOC is scheduled for Wednesday, 24th of January, 2018.

Respectfully Submitted,
Amie Kolesar, Recording Secretary