



MSP NOISE OVERSIGHT COMMITTEE MEETING MINUTES

Wednesday, 21 January 2015, 1:30pm

Richfield Municipal Center – City Council Chambers



Call to Order

A regularly-scheduled meeting of the MSP Noise Oversight Committee, having been duly called, was held Wednesday, 21 January 2015, in the City Council Chambers at the Richfield Municipal Center. Chair Petschel called the meeting to order at 1:31pm. The following were in attendance:

Representatives: K. Erazo, B. Underwood, D. Miller, J. Quincy, E. Petschel, J. Hart, J. Carlson, T. Fitzhenry, J. Oleson, J. Bergman

Staff: J. Lewis, P. Mosites, D. Anderson

Others: C. Costello – City of Richfield; D. Sloan – Mendota Heights Airport Relations Commission; L. Olson – City of Minneapolis; B. Stewart – Edina; M. Doran – Richfield; L. Grotz – Edina; T. Link – City of Inver Grove Heights; K. Hageman – City of St. Paul; D. Lowman – City of Bloomington; B. Shotwell – Richfield; D. Boberg – City of Bloomington; B. Hoffman – City of St. Louis Park; S. Devich – City of Richfield

1. Election

John Nelson, Technical Advisor, announced that, at the Committee's agenda review session held just prior to today's meeting, Ann Swenson, Edina At-large Representative, was elected as the At-large Community Group's alternate representative.

2. Review and Approval of the 19 November 2014 Meeting Minutes

Representative Hart, Delta Air Lines, noted that the last line of item 5 of the 19 November 2014 meeting minutes should read "...the 777 is quieter and does not require the use of Runway 4."

IT WAS MOVED BY REPRESENTATIVE CARLSON AND SECONDED BY REPRESENTATIVE HART TO APPROVE THE MINUTES OF THE 19 NOVEMBER 2014 MEETING, AS CORRECTED.

The motion carried by unanimous vote.

3. Review of Operations Report Summary: November and December 2014

Dana Nelson, Assistant Manager, Noise – Environment & Planning, said there was a 14% increase in the number of complaints filed in November 2014 compared to November 2013, and a 2% decrease in the number of complaints filed in December 2014 compared to December 2013. She said total complaints increased 21% in 2014 compared to 2013. She said the number of complainants decreased slightly in 2014 compared to 2013. She said the communities with the highest number of submitted noise complaints in 2014 were Minneapolis, Edina and Eagan. She said there was a 26% increase in the number of complaints for Minneapolis in 2014, compared to 2013. She said there was a 67% increase in the number of complaints for Edina in 2014, compared to 2013. She said there was a 7% increase in the number of complaints for Eagan in 2014, compared to 2013.

D. Nelson said total aircraft operations decreased 7.4% in November 2014 compared to November 2013 and decreased 4.8% in December 2014 compared to December 2013. She said there were 411,760 total aircraft operations at MSP in 2014, a 4.6% decrease compared to 2013. She noted that 2004 was the year of peak operations at MSP, with a total of 540,727 operations. She noted that total operations in 2014 were about 24% lower than in the peak year of 2004. She noted that the 2007 forecast total operations number was approximately 582,000 and that 2014 was approximately 29% below that number.

D. Nelson said air carrier jet operations in November 2014 decreased 5.5% compared to November 2013, and decreased 3.4% in December 2014 compared to December 2013. She said less than 0% of the air carrier jet fleet composition was Modified Stage 3 aircraft in both November and December 2014, with six B727 operations in December 2014. She said there were 37 total Modified Stage 3 aircraft operations in 2014, compared to 71 in 2013. She said the 2007 forecast total Modified Stage 3 aircraft operations was over 100,000 and that there were approximately 101,000 in the peak year of 2004.

D. Nelson said passenger counts were up 3-7% each month in 2014 compared to 2013.

D. Nelson said nighttime operations (10:30pm – 6:00am) increased 18% in November 2014 compared to November 2013. She said unusual weather circumstances during that time could have contributed to delays across the National Airspace System and at MSP. She said nighttime operations (10:30pm – 6:00am) decreased 2.3% in December 2014 compared to December 2013.

D. Nelson noted 1.2% of nighttime (10:30pm – 6:00am) departures in November 2014 were off of Runway 35 due to very strong north and northeast winds on 10-11 November. She said departures were also occurring off of Runway 4 at that time. **Chair Petschel, Mendota Heights**, noted that December was an unusual month in how MSP was used and asked to have that explained. **D. Nelson** said that, typically, MSP operates more often in a north flow in December with use of Runways 30L and 30R for departures. She said there was a fairly even split in December 2014 between northerly and southerly winds, so Runways 12L and 12R were used for departures in December 2014 more often than usually occurs.

D. Nelson presented information on November and December 2014 nighttime (10:30pm – 6:00am) nighttime scheduled vs actual carrier jet operations. She noted there were no scheduled Modified Stage 3 operations and no actual Modified Stage 3 operations in November

2014. She said a typical reason for the difference in actual and scheduled nighttime operations is delays in the National Airspace System. She noted that cargo carriers do not report their scheduled to the Official Airline Guide, which is the source the MAC uses for scheduled vs actual nighttime operations. She said there were 608 scheduled nighttime (10:30pm – 6:00am) arrivals in December 2014 and 1,177 actual nighttime arrivals. She said there were 140 scheduled nighttime (10:30pm – 6:00am) departures in December 2014 and 269 actual nighttime departures.

D. Nelson said there were 2,573 Runway 17 carrier jet departures, and 99.7% compliance with the Runway 17 Carrier Jet Departure Procedure, in November 2014. She said there were 4,566 Runway 17 carrier jet departures, and 99.7% compliance with the Runway 17 Carrier Jet Departure Procedure, in December 2014.

D. Nelson said 95.6% of carrier jet departures using the Eagan-Mendota Heights Departure Corridor remained in the Corridor in November 2014, and 97.5% remained in the Corridor in December 2014.

D. Nelson said 52% of carrier jet departures used the Crossing-in-the-Corridor Procedure during the nighttime hours of 11:00pm – 6:00am during November 2014, and 50% used it in December 2014. She said 28% of carrier jet departures used the Procedure during the daytime hours of 6:00am – 11:00pm during November 2014, and 32% used it in December 2014.

Representative Miller, Eagan, noted Eagan residents are concerned about nighttime operations turning southwest over Eagan neighborhoods. She noted that the City of Eagan requests the FAA keep aircraft over the industrial area longer before having them make turns, particularly during low-demand periods during nighttime hours.

4. Presentation: Climate and Weather Trends – Michael Griesinger, National Oceanic and Atmospheric Administration, National Weather Service, Chanhassen MN

Michael Griesinger, National Oceanic and Atmospheric Administration, National Weather Service, Chanhassen MN, gave a presentation on weather trends and aviation impacts. Highlights of the presentation include:

- A basic review of the greenhouse effect, in which the sun's energy passes through the atmosphere and heats the ground, the ground heats the air, the air absorbs some of the energy and sends it back to the earth, which warms the earth
- The greenhouse effect is natural and warms the earth by approximately 57°F
- Increasing greenhouse gases increases the power of the greenhouse effect
- Land air temperatures, ocean water temperatures and ocean air temperatures have increased steadily since approximately 1980; sea levels have risen as well; summer arctic ice coverage has decreased steadily since approximately 1980 and dramatically in the past 10 years; tropospheric air temperatures, upper ocean temperatures and atmosphere moisture are increasing; northern hemisphere snow cover and glacial mass are decreasing

- In general, there are increases in precipitation along with decreases in precipitation days, indicating more potential for flooding and drought
- Climate changes occur because of continental drift, slight changes in the Earth's tilt, slight changes in the Earth's orbit, decadal oscillations, changes in solar output and volcanic eruptions, but most of these occur over the course of tens of thousands to millions of years
- Climate changes occur because of anthropogenic (human-caused) actions, particularly burning fossil fuels, which result in increased greenhouse gases, which increases the strength of the greenhouse effect
- Not all anthropogenic sources result in warming
- The only way to explain recent warming trend is through anthropogenic forcing
- In Minnesota, there was an observed annual warming of 1.3°F from 1895-2010: +1.6°F in spring; +0.8° in summer; +0.5° in fall; +2.2°F in winter
- In Minnesota, there was an observed annual increase of 3.1" in precipitation from 1895-2010: +0.7" in spring; +0.8 in summer; 1.2" in fall; +0.3" in winter
- Global predictions through the mid-21st century are for warmer winters, wetter winters and springs, and drier summers
- In Minnesota, we can expect increased variability in the weather, more extremes; greater temperature variability in winter; wetter but highly variable springs; drier summers with droughts becoming more likely; and milder falls with less snow
- Biggest impact to aviation will be from increases in days with storms, particularly thunderstorms, which affect aircraft routes and increase delays
- There has been an increased tendency for the jet stream to develop blocks, which causes weather patterns to get "stuck" for a prolonged period of time; blocking due to loss of arctic sea ice, which leads to a weaker temperature gradient between the cold poles and warmer mid-latitudes; affects wind patterns and directions

Chair Petschel, Mendota Heights, asked if the increase in severe weather is a reason for the increase in nighttime operations. **Griesinger** said the timing and location of storms around the National Airspace System will have an impact on delays.

Representative Oleson, Bloomington, asked if it's possible to predict whether or not storms will become less predictable in their nature and location. **Griesinger** said modeling has improved and should continue to improve, allowing for storm preparation ahead of time, at least within 48 hours. In terms of a seasonal perspective, he said it will be difficult to predict. **Petschel** asked how volcanic ash impacts immediate weather effects. **Griesinger** said volcanic ash has an impact on the temperature record for at least three years after a major eruption. **Representative Hart, Delta Air Lines**, asked where we're at in the sunspot cycle. **Griesinger** said a maximum cycle completed in 2010, which was the weakest cycle observed. He said sunspot cycles are 10-year cycles, high-to-low, and that by 2020 we'll be in a low section of the cycle. **Hart** asked if that would mean predictably cooler temperatures. **Griesinger** said it would be the opposite.

5. Consent Decree Noise Mitigation Program Update – Patrick Mosites, MAC Airport Development Project Manager

Patrick Mosites, MAC Airport Development, updated the Committee on the Noise Mitigation Program. He reminded Committee members that program was split into different phases that determined the level of mitigation a home would receive. He said over 7,000 homes were affected through the program. He outlined:

- The DNL 63-64 phase called for a 5-decibel modification package; 457 homes in Bloomington, Richfield and Minneapolis were eligible to receive the package, and 404 homes participated; construction began in August 2008 and all construction was completed in December 2009 in compliance with the Consent Decree; average cost for this phase was approximately \$33,410 per home
- The DNL60-62 phase 2a called for installation of central air-conditioning and \$4,832 of mitigation menu items; 2,911 homes in Bloomington, Eagan, Richfield and Minneapolis were eligible, and 1688 homes participated; construction began in February 2009 and was completed in October 2012; mitigation menu items included central air-conditioning, primary doors, primary windows, storm windows, storm doors and insulation
- The DNL 60-62 phase 2b called for \$15,343 of mitigation menu items (if a home already had central air-conditioning or if a homeowner opted for this phase instead of phase 2a); 3,367 homes in Bloomington, Eagan, Richfield and Minneapolis were eligible and 3,367 homes participated; construction was completed in October 2012; mitigation menu items included primary doors, primary windows, storm windows, storm doors and insulation
- The 2005 DNL60 to 2005 DNL 64 phase called for homes to share \$7 million for approved mitigation reimbursements; approximately 2,409 homes were eligible; reimbursements began in March 2010 and were completed in September 2014; at the request of the Commission, a final notice regarding reimbursement was sent to 1,053 homeowners in February 2014; 1,773 homes participated at a total cost of \$5,512,485; average reimbursement claim was \$2,906
- The DNL 60-64 phase called for multi-family units to receive through-the-wall air-conditioning unit covers or through-the-wall air-conditioning units or equivalent; 2,124 units (107 buildings) were eligible in Bloomington, Richfield and Minneapolis; 252 units had a through-the-wall air-conditioning unit or equivalent provided; 1,724 through-the-wall air-conditioning frames and covers were installed; installations began in 2009 and were completed in 2010

Mosites noted that, according to an amendment to the Consent Decree, eligibility of single-family and multi-family homes to receive mitigation under the First Amendment Program will be based on actual noise contours developed for the preceding calendar year, beginning March 2014.

Mosites said he receives calls from home owners seeking information on the products that were installed as part of the mitigation program, as well as their warranties. He noted some calls are from new homeowners seeking information on whether or not their home received mitigation.

6. Structural Disturbance Complaint Trends

John Nelson, Technical Advisor, said that residents using the MAC Noise Program Office's online noise complaint form can select any of the following complaint types: early/late (operation); excessive noise; frequency; ground; helicopter; low; run-up; structural disturbance; other. He said that complainants may select more than one type of complaint and that complainants sometimes select all of the types at one time when making a complaint. He said the most common complaints are for excessive noise, frequency of overflight and low altitude.

J. Nelson said there has been an increase in structural disturbance complaints, and that investigation into the trend shows this is largely the result of two complainants' entries. He said the complainants have filed thousands of complaints. He said the complainants' locations are in Edina and Mendota Heights. He noted that structural disturbance complaints increased significantly after discussions were held on the implementation of RNAV at MSP.

J. Nelson noted that, in construction terms, structural disturbance would involve movement in a load-bearing surface such as the foundation of a home, exterior walls and load-bearing walls, beams and/or columns of a home. He said this is not necessarily the case in the structural disturbance complaints received by the MAC, which often cite windows and/or pictures or other objects rattling. He noted that structural disturbance complaints tend to increase during summer months.

Representative Quincy, Minneapolis, noted that MAC staff provided information on structural disturbance complaints to the City of Minneapolis. He noted that that information did not include the two complainants J. Nelson mentioned, but that it still showed a trend of increasing structural disturbance trends in 2014. He asked if the 2014 trend might correlate to complaints about low altitude operations. **J. Nelson** said he does not have an answer to that question today, but that staff have been discussing ways to fine-tune complaint data analysis, and will be forming a task force to look into doing so. **Chair Petschel, Mendota Heights**, reminded Committee members that complaint analysis is on the group's 2015 Work Plan. **Representative Bergman, At-large Representative**, asked what year "structural disturbance" was added as a complaint option. **J. Nelson** said he is not certain but that it appears in the monthly Technical Advisor's Reports going back to 2010,

7. History and Origin of NOC: Review of the 2002 Blue Ribbon Panel Recommendations

John Nelson, Technical Advisor, noted that the MAC's Executive Director convened a blue ribbon panel in 2002 to develop a new framework for an aircraft noise advisory committee. He said the cities of Minneapolis, Eagan and Mendota Heights had representatives on the panel, as did Northwest Airlines, the Minnesota Business Aviation Association and United Parcel Service. He said the panel proposed community and airport user concerns be considered and that information be communicated via the MAC Noise Office, the MAC Aviation Noise and

Satellite Program website, the *MSP Noise News* newsletter, the MAC noise complaint and information hotline, governmental body official policy development processes, MAC public hearings, MAC informational meetings, NOC members, the MAC Planning and Environment Committee and MAC board meetings.

J. Nelson noted the panel's report proposed the NOC provide a balanced forum for discussing and evaluating noise impacts around MSP by: identifying, studying and analyzing airport noise issues; providing policy recommendations or options regarding airport noise issues to the MAC PDE Committee and to the MAC board; monitoring compliance with established noise policy at MSP; and ensuring the collection of information and dissemination to the public.

J. Nelson said the panel recommended there be 12 members on the NOC, with six representatives from the airport users and six representatives from the community. He said the panel recommended that community representation be defined as those communities within or touched by the most-recently developed and submitted Part 150 65 DNL contour, and one at-large representative to represent the cities of St. Paul, Burnsville, Inver Grove Heights, Sunfish Lake and St. Louis Park. **J. Nelson** noted that the City of Edina was added to the at-large community group in 2013.

J. Nelson said the panel recommended that five of the six airport user representatives, including one at-large representative, be determined by the MSP Airport Airline Affairs Committee and the sixth airport user representative be appointed by the Minnesota Business Aviation Association.

J. Nelson said that, with regard to administrative matters, the panel recommended Robert's Rules of Order be utilized by the NOC, that the NOC meet bi-monthly and that NOC members meet for agenda review pre-meetings before each Committee meeting. The panel also outlined the roles the MAC board and staff should play, the reporting relationships and responsibilities and the NOC's bylaws.

J. Nelson noted that the NOC met for the first time on 26 June 2003.

Chair Petschel, Mendota Heights, observed that the framework developed by the Blue Ribbon Panel was developed to avoid the pitfalls that made the Metropolitan Airport Sound Abatement Council ineffective. **Petschel** noted that she and Representative Hart presented the NOC's 2014 accomplishments and its 2015 Work Plan to the MAC Planning, Development and Environment Committee. She said she asked the PDE Committee members if the NOC appeared to be functioning and accomplishing as the MAC had envisioned. She said the Committee said yes.

Representative Hart, Delta Air Lines, noted that the NOC uses and analyzes more data which has been helpful in explaining aircraft noise issues. He thanked Nelson for staff's efforts in those areas.

8. FAA Categorical Exclusion Declaration (CATEX) Environmental Review for MSP STARs

John Nelson, Technical Advisor, informed Committee members that the FAA issued a Categorical Exclusion Declaration for the environment review of the MSP Standard Terminal

Approach Routes (STARs). He said this means the FAA can proceed with additional STARs implementation steps, which include quality assurance checks, flight inspections, automation updates, charting, air traffic control training, publication and post-implementation review. He clarified that STARs are for arrival operations and not for departure operations. He said the FAA plans to publish and implement the STARs procedures, which include Optimized Profile Descents, in March and April 2015. He noted that MSP Air Traffic Control may begin using STARs one runway at a time at MSP, and not on all runways at once.

Chair Petschel, Mendota Heights, asked if the FAA could update the Committee on how the STARs implementation is proceeding, after it begins. **J. Nelson** said he would coordinate an update with MSP Air Traffic Control. **Representative Quincy, Minneapolis**, asked if aircraft must have specific equipment on board in order to utilize and implement the STARs. **Representative Underwood, Delta Air Lines**, said all of Delta's fleet types will be able to use the procedures and that he believes all Delta Connection partners will be able to as well. **J. Nelson** said that all of the aircraft serving MSP, with the exception of turboprop aircraft, can fly the OPD. **Quincy** asked if there will be an evaluation of the STARs procedures, in terms of noise impacts, after implementation. **J. Nelson** said it is staff's intent to examine which data and measures could be used to determine whether or not they are having an impact. He noted that it would be more difficult to make that determination for areas lying outside the range of the RMTs. **Quincy** said he is not expecting Minneapolis to experience any changes. He asked if the airlines will be able to determine if there are any environmental impacts from the procedures. **Chad Leque, MAC Director of Environment**, said that the use of OPDs has the potential to reduce of greenhouse gas emissions from arriving aircraft and that MAC staff was discussing the possibility of OPD tracking with the FAA and Delta Air Lines.

9. Public Comment Period

There were no public comments.

The next meeting of the NOC is scheduled for Wednesday, 18 March 2015.

The meeting adjourned at 3:03pm.

Respectfully Submitted,
Christene Sirois Kron, Recording Secretary