Metropolitan Airports Commission (MAC)

Minneapolis-St. Paul International Airport (MSP)
Noise Oversight Committee (NOC)
MAC General Office Building
Lindbergh Conference Room
6040 28th Avenue South
Minneapolis, MN 55450

NOC Committee Members
Jeffrey Hart – Co-Chair (Delta Air Lines)
Tom Fitzhenry – Co-Chair (Richfield City Council)
John Bergman, At-large Cities Representative (Apple Valley City Council)
Karen Erazo, Charter/Scheduled Operator Representative (Sun Country Airlines)
Cyndee Fields, City of Eagan Representative (Eagan City Council)
Gordon Goss, Chief Pilot Representative (Delta Air Lines)
Angie Moos, Cargo Carrier Representative (United Parcel Service)
Doug Nelson, Minnesota Business Aviation Association Representative
Jon Olesen, City of Bloomington Representative (Bloomington City Council)
Elizabeth Petschel – City of Mendota Heights Representative (Mendota Heights City Council)
John Quincy, City of Minneapolis Representative (Minneapolis City Council)
Paulajean Vick, At-large Airport User Representative (Delta Global Services)

MEETING AGENDA

20 July 2016
1:30 pm
(Jeffrey Hart, Delta Air Lines, will be the acting Chairperson for the meeting)
***Note: 1:00 – Committee Agenda Review Session**
(NOC members only in the Coleman Conference Room)

1. 1:30 – 1:35 Review and Approval of the May 18, 2016 Meeting Minutes
2. 1:35 – 1:55 Review of Monthly Operations Reports: May and June, 2016
3. 1:55 – 2:10 Guest Speaker: Brian Ryks, MAC Executive Director and CEO
4. 2:10 – 2:20 Review Residential Noise Mitigation Program Implementation Status – Pat Mosites, Project Manager
5. 2:20 – 2:30 Update on Turboprop Departures over Mendota Heights
6. 2:30 – 2:45 NextGen Standard Terminal Arrival Routes (STARs) Amendments Update – Elaine Buckner, FAA Air Traffic Manager
7. 2:45 – 2:50 2016 MAC Noise Communication Enhancement Plan
8. 2:50 Public Comment Period
9. 2:55 Announcements
10. Adjourn

ITEM 1

MSP NOISE OVERSIGHT COMMITTEE
DRAFT MEETING MINUTES
Wednesday, 18th of May 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, 18th of May 2016, in the Lindbergh Conference Room at the MAC General Offices Building. Chair Fitzhenry called the meeting to order at 1:33pm. The following were in attendance:

Representatives: P. Vick; K. Erazo; D. Miller; E. Petschel; T. Fitzhenry; J. Oleson; L. Olson; J. Hart; T. Foster; A. Swenson; J. Klinger; D. Nelson; A. Moos

Staff: D. Nelson; B. Juffer, L. Peilen; C. Leqve; A. Kolesar; G. Warren; N. Ralston

Others: S. Nienhaus – City of Burnsville; C. Carrino-Edina; P. Dmytrenko-City of Richfield; B. Hoffman-City of St. Louis Park; S. Devich-City of Richfield; M. Olson-FAA; N. Lewis-FAA, B. Luna-FAA; G. Hansmann-FAA; K. Till-Crystal; A. Nemcek-City of Rosemount; L. Grotz-Edina; T. Link-City of Inver Grove Heights; M. McNeil-City of Mendota Heights; J. Smith-City of Mendota Heights; M. Park-City of Sunfish Lake; J. Spensley-SMAAC

Chair Fitzhenry, Richfield brought the meeting to order and announced agenda item additions of #7 and #8 as well as the ongoing agenda addition of Announcements. **Co-Chair Hart, Delta** recommended its approval with a second from **Representative Petschal, Mendota Heights**. The motion was passed unanimously.

1. **Review and Approval of the 20 January 2016 and 16 March 2016 Meeting Minutes**
   Chair Fitzhenry, Richfield requested a motion to approve the minutes from January and March NOC meetings, **Co-Chair Hart, Delta** made the motion with a second from **Representative Swenson** and was passed unanimously.

2. **Review of Monthly Operations Reports: March and April 2016**

Brad Juffer, Assistant Technical Advisor reported the number of complaints in March 2016 was 13,196 from 756 locations and 10,040 complaints from 657 locations in April 2016. Complaints in March 2016 were up 32% from 2015 and complaints in April 2016 were up 3.8%. In March 2016 there were 2,819 complaints from one location. Most of the complaints received by the Noise Office were through the website. The March increase in complaints follows a seasonal trend as well as the typical increase in operations. Operations at MSP in March were at 34,966 while the operations

in April 2016 dropped slightly, post-spring break, to 33,293. YTD operations for 2016 currently are 129,876 vs. 128,209 at this time in 2015; this 1.3% drops to a 0.4% increase without the addition of Leap Day this year. **Juffer** delved deeper into exact operations and reported there was a 43/57% split between regional jets and mainline aircraft. In 2015 that ratio was 46/54%

For March and April there were 64,261 operations between 6AM and 10:30PM. During nighttime hours there were 3,998 operations for a resulting rate of 5.86% compared to a 5.64% nighttime rate for the same time period of 2015.

2.56 million people flew through MSP in February 2016 and 3.22 million flew through MSP in March 2016. That equates to an average of 93 people per plane in February and 100 per airplane in March. This March number is the highest MSP has seen since at least 2009 and if trends continue in this way they'll rise with the summer travel session in June-August.

Juffer went on to discuss the nighttime operations for March 2016; there were 1,547 scheduled operations with a total of 2,024 actual operations during MSP night time. Most of the flights in the 10:30pm, 11:00pm and 12:00am hours are arrivals. There was one daily departure operation to FLL in the 12:00am hour. In the 3:00am hour there were 9 scheduled arrivals for UPS; in the 4:00am hour there were 38 scheduled arrivals for UPS; in the 5:00am hour there were 65 cargo arrivals, 216 air carrier arrivals and 348 air carrier departures scheduled.

In April the total scheduled and actual nighttime operations dropped from March with 1,255 scheduled and 1,748 actual. All scheduled operations in the 10:30pm and 11:00pm hours were arrivals. Spirit had 12 departures in the 12:00am hour and the rest were arrivals. Southwest had 16 scheduled arrivals during the 1:00am hour. During the 3:00am hour UPS had 9 scheduled arrivals and then 34 scheduled arrivals in the 4:00am hour. During the 5:00am hour there were 41 scheduled air carrier arrivals but due to many Delta flights arriving early there were 159 actual arrivals at that time.

Juffer reported on Noise Abatement Procedures for Runway 17 for February and March. In February 99.8% of all jets complied with Runway 17 Departure Procedures and that number was 99.6% in March. 27 jets or a total of 0.7% of all west bound jets made the west bound turn before reaching the 2.5 turn point.

In the Eagan-Mendota Heights Departure Corridor report, 91.7% and 86.9% of all 12L/12R carrier jets remained in the corridor in March and April. Collectively 1.2% of the deviations were north of the corridor and 9.8% were south of the corridor. The 9.8% south number is a result of seasonal north/northeast/east wind. These winds caused the airport to utilize the 'Straight South Flow' configuration. During this configuration, Runway 17 departures are discontinued otherwise it would result in direct crosswinds or even quartering tailwinds. These departures are then transferred to 12L/12R; the increase in departures and the wind has a negative effect on the crossing-in-the-corridor procedure. Increased aircraft limit the ability of the controllers to utilize the procedure, the winds make it more difficult to choose a ground track that gets the aircraft through the center of the corridor. These factors are what led to the procedure being used 51% during night time hours in March and only 36% in April. Additionally, during the daytime hours this procedure was followed by 28% of flights in March and 29% in April.

Juffer continued on by reporting on the Runway Use System (RUS) numbers. In March the high priority runways were used 51.9% of the time and in April they were used 50.9% of the time. Runway 17 was not used as much as a typical month and therefore the 'Mixed Flow A' configuration, where

aircraft are arriving on Runways 30L and 30R and departing Runways 30L, 30R and 17, was only possible 4.9% of the hours in March and only 3.4% of the hours in April. As a reference, in December 2015 'Mixed Flow A' was used 11.4% of the hours and August 2015 it was used 13.3% of the time. Consequently those are the two highest months for the use of the high-priority runways.

Taking a closer look into the RUS in March, the winds in this month favored south flow configurations more than north flow. In March the north flows were used 43.9% of time while south flows used were used 56.1%. The information presented in the meeting made apparent the impact Converging Runway Operations (CRO) had on the use of Runway 35 which was used 2.7% of the time for arrivals in March. As the FAA implements their procedures for CRO, MAC's Noise Office will be monitoring the runway use. MAC hired HNTB as a consultant to further gather and analyze the data and to adjust the forecast runway use in the Long Term Comprehensive Plan, as warranted.

In March, Runway 17 had the most departures overall however it had the least evening and nighttime hours, those operations shifted to 12R/12L. In April, south flows were used more often than in March, where 64.7% of all arrivals used 12R/12L while 35.3% used the north-bound runways. From April 12-May 2 the airport was in a south flow for 20 out of 21 days. The same runway use trends hold on into April with the south parallel being used more at night and the use of 35 was still somewhat limited. April departures on Runway 17 were slightly lower than in March but that is due to the significant north, northeast and east winds. More of those departures used the parallels as well and followed similar day and night time trends as in March.

Representative Miller, Eagan asked a question regarding the days when the wind is so strong and if there is a way to adjust the headings that the aircraft fly off of in order to anticipate the aircraft will float south. **Elaine Buckner, FAA** responded that they do that but sometimes they make better predictions than other times. She also said she took notes during the presentation and plans on bringing them back to her office so they can discuss how to improve those adjustments.

3. Eagan-Mendota Heights Crossing-in-the-Corridor Procedure

Brad Juffer, Assistant Technical Advisor reported that this procedure was studied and implemented in 1995. This procedure attempts to keep departures from 12L/12R in the center of the corridor as much as reasonably possible. To accomplish this, aircraft off Runway 12L are given a heading of 118° while 12R departures are given a 105° heading. Because these tracks would create aircraft convergence, it is limited in the amount of times they can be used. Crossing-in-the-Corridor most often is used when there are non-simultaneous departures from these two runways, when the weather allows, and when both runways are being controlled by one local controller. According to the FAA, there is likely to be one local controller during the nighttime hours of 11pm-6am and from Saturday at 3pm to Sunday at 1pm. Considering all these factors, there are more hours in the day when Crossing-in-the-Corridor can't be used than when it can.

This procedure was studied after implementation in both 1997 and in 1998. The noise office took that analysis period and replicated it, for consistency. The recent analysis found the use of the crossing procedure has increased during the weekend time period with 33.9% of flights performing the procedure compared to 17% in 1998 and 27% in 1999. During the nighttime hours, 50.5% are currently using the procedure as compared to 57.1% in 1999 and 36.1% in 1998.

Juffer outlined two main reasons for these nighttime changes: more frequent 'Opposite Flow' configuration at night (19.1% versus 0.04% during the day). This configuration is preferred because

it fully complies with the RUS, however it reduces the ability to use the Crossing procedure. The second reason is because there are more flights in the 5am hour and during this time the crossing percentage drops to 49.1% and that reduces the overall percentage at night.

Due to separation requirements, an aircraft has to be separated by 15° or 3 miles. When all these aircraft are flying towards the same point, there needs to be a significant time gap in order to ensure a minimum of 3 miles of spacing. During the weekends, flights are more frequent than during the nighttime hours, resulting in lower crossing usage. Moving forward the noise office will continue to analyze and share the percentages as part of the operations report updates at future NOC meetings to track the trends of this procedure.

Representative Petschal, Mendota-Heights observed that the Crossing-in-the-Corridor Procedure is a great tool in terms of noise abatement over Mendota Heights and Eagan. The wind and having a single controller on 12L/R has driven whether a procedure can or cannot be followed and be a successful procedure. The increase in nighttime operations has been a concern for everyone but now the operations in the 5am hour are so frequent that this procedure can't be used and thus impacts the people in the area of the contours and negates the use of this procedure which is a good noise abatement tool.

Juffer responded that the 52.9% is lower than the 5am hour procedure within the analysis period but that they were unable to replicate the same activity from other 5am periods. **Juffer** continued by saying that based on the regular monthly reports that his inclination would be that the increase in night activity is the main factor this procedure not being followed in the 5am hour.

4. Eagan-Mendota Heights Corridor Turboprop Analysis

Brad Juffer, Assistant Technical Advisor reported that due to comments from an open house of the Mendota Heights Airport Relations Committee in March 2016, the NOC directed staff to study early morning turboprop departures from runways 12L/12R. Many things have changed since the beginning years of the Eagan-Mendota Heights corridor in the 1970's and more specifically things have changed within the last 20 years that are contributing to the discussion. Overall operations at MSP are at 20 year lows, less departures are using the parallels after the opening of Runway 17 in 2005 and the use of turboprop and propeller driven aircraft at MSP has dropped considerably. The noise office studied all operations between April 2015 and March 2016 and there were 16,323 turboprop/piston/or unknown operations during the study period. The main operator of turboprops and non-military propeller aircraft falls into the General Aviation category. The next operator, although by a significant margin, is Bemidji Airlines (BMJ). At MSP, BMJ flies freight for the bigger cargo carriers to destinations like Thief River Falls, Bemidji, Grand Rapids, Eveleth, Duluth, Park Rapids, Detroit Lakes, Fergus Falls, Wadena, Brainerd, Alexandria, Willmar, Marshall, Rice Lake, and La Crosse.

During the evaluation period, only 1.8% of turboprop/piston operations happened at night. The majority of the turboprop traffic occurs between 6am-8am and again 7pm-9pm.

Some of these aircraft are directed to exit the corridor early due to airspace capacity constraints. Aircraft need to have a 3 mile separation nose to tail or a 15° heading. Keeping a slow-moving aircraft in the corridor all the way to the eastern border would increase the time the next aircraft had to wait on the ground. A turboprop or piston climbing at 70-100 knots would be very quickly overtaken by a jet traveling in the range of 120-160 knots.

Juffer reported that during a 12-month period ending March 31, 2016, 2,893 turboprop/piston operations departed Runways 12L or 12R. Of those, 49.6% stayed in the corridor.

Chair Fitzhenry, Richfield asked Juffer if he thought the noise office was receiving more complaints because the turboprop and piston aircraft are slower and thus are over the houses for a longer period of time.

Juffer commented that from a data perspective he could not comment as to why there were more complaints but that these aircraft will be lower and slower, because they are a lower preforming aircraft. **Representative Petschal, Mendota-Heights** added confirmation to that assumption and mentioned that this area is not use to many overflights. When an aircraft is departing from 12L and not flying due south or east they depart and bend back over the city to fly north and west. That equals a substantially higher number of aircraft are flying over than has been seen in the past. That in conjunction with the Bemidji Air phenomenon at 6am is creating new and more concern. **Dana Nelson, Technical Advisor** responded to the comments by saying that the noise office has been working with the FAA and they have agreed to look the assessment and see if there is any room for improvement and the NOC will receive an update at a future meeting. **Petschal** said any feedback will be appreciated but regardless of what can be done, if there are changes in this corridor there will be other areas to the north that will then experience the same issue. Because the airport has been in a continued south flow, this particular area around Mendota Heights has been experiencing the noise at a greater length than average. **Representative Olson, Minneapolis** agreed with **Petschal** regarding this same issue the community has to the north of the airport and then asked for more perspective on the amount of noise associated with this type of aircraft. **Juffer** responded that based on the certificated level of these aircraft, they are in the 70-77 decibel range. **Fitzhenry** asked if Bemidji Air had any long term plans to change their fleet as a solution to the noise issue and **Juffer** responded that he hadn't heard anything regarding that type of change.

5. NextGen Standard Terminal Arrival Routes (STAR) Update

Elaine Buckner, FAA started by saying that the RNAV arrival procedures started about a year ago and last fall the FAA started a review of the procedures. The focus was on the safety and the built in separation, capacity, efficiency as well as the fly-ability of the routes. After that review there were some changes that were identified to be made to smooth out different legs and turning points that were built into the design. The majority of the changes were outside of the Minneapolis Center's airspace. **Buckner** described four changes that were identified within this airspace. Three of the changes take place when aircraft are at and above 8,000 feet. One change takes place at or above 5,000 feet. Using a graphic presented at the meeting, **Buckner** showed examples of how the turns have been smoothed out. These changes will enhance the effectiveness of this part of the procedure and is more aligned with the overall traffic flow. In addition, these enhancements will increase the efficiency of the routes in relation to the rest of the arrival and departing traffic at the airport. **Buckner** said the procedure amendments were submitted for a January 2017 publication and right now it is undergoing a noise screen and the results will be shared at the July NOC meeting.

Representative Swenson, Edina asked for clarification on the percentage of daily flights that will be affected by the procedural changes. **Buckner** responded that she could not exactly answer that with a hard number. **Swenson** followed up by asking how residents living under the procedure will be notified of the changes. **Buckner** responded that notification will depend on a few things, such as how long the noise screen takes. She continued by saying in her area of understanding, changes at the altitude they're referencing don't often generate a huge change in the environmental noise impacts. The exact impacts are being analyzed and the results of that will be shared at the next

NOC meeting. **Swenson** requested that the percentage of daily flights affected by the procedural changes be presented as well. **Chair Fitzhenry, Richfield** asked for clarification on implementation of these new procedures. **Buckner** responded that the publication will come out in January 2017 and if there aren't any modifications to be made, the procedure changes will occur almost immediately after publication. **Fitzhenry** commented that it may be a good idea to notify the neighborhoods that will experience these changes regardless of if they'll hear a difference because they will see a difference in flight tracks. **Representative Petschal, Mendota-Heights** suggested adding to that notification to goal of reduction in fuel usage and thus should include a study on the reduction of emissions as it's a common concern for residents. **Dana Nelson, Technical Advisor** mentioned that the noise office is internally developing a tool to tell how many arrivals are using the Optimized Profile Descent (OPD). The next will be a sit down with local controllers to make sure that knowledge, analysis and expectations are aligned and from there the noise office will reach out to Delta to understand the fuel savings and emission reductions.

6. Review of April 27, 2016 Public Input Meeting

Brad Juffer, Assistant Technical Advisor reported that the 2nd Quarter Public Input Meeting (PIM) was held at St. Louis Park on April 27, 2016. There were 37 residents in attendance, 13 made public comments, asked questions and relayed concerns about noise. There were a few major themes from the residents: increased arrivals over the northwest area of Minneapolis and suburbs, increased nighttime flights, low aircraft altitudes, how CRO and RNAV have changed flight activity, and what has the PIM process done to benefit the residents. **Dana Nelson, Technical Advisor** addressed the committee members and restated the resident's inquiry of the actual impact of quarterly PIM and mentioned an ongoing NOC work plan item to review input received from quarterly PIMs as possible agenda items. To that end, staff suggested adding two items to the NOC 2016 work plan specifically related to the use of the airport during south flow configurations: an analysis of MSP Runway 12L and 12R arrival activity over cities to the northwest of the airport; and an evaluation of landing gear extension for arrivals on Runways 12L and 12R. **Chair Fitzhenry** requested a motion to add these items to the work plan; **Representative Miller** made the motion, it was seconded by **Representative Petschal** and was passed unanimously. These items are planned for the September NOC meeting.

7. MAC Noise Program Community Engagement Enhancements

Dana Nelson, Technical Advisor presented the noise program's collaboration with the MAC Public Affairs and Marketing team in order to understand how the noise program office can enhance community engagement. This process will analyze how meetings are held, how the noise office communicates and leverages communication technologies. Through this process two consulting firms will assist in the analysis as well as reaching out to community members and stakeholders for input. There are four tactics being used to enhance communication: communication through video on the website and possibly at meetings with accompanied fact sheets, continuous collaboration with the MAC Public Affairs and Marketing to ensure timeliness and clarity, sending out informational brochures to people who file noise complaints for the first time, and finally to launch a Community Engagement Enhancement Program. Within this program, consultants will conduct a series of stakeholder interviews and a community survey. **Nelson** ensured that the NOC can expect regular updates on this project. **Representative Swenson, Edina** asked Dana what the expected timeline was and **Nelson** responded that mid-June would be when this project would start to take shape.

8. Public Comment Period

A community member, Connie Carrino, sponsored by **Representative Swenson, Edina** stood up to speak and referenced the NOC meeting minutes from January and March 2016 and specifically conversations that were had regarding the Vortex Generator. Related to that, Delta recently announced that it will be moving in some Airbus aircraft to replace the older MD88. Her question was if the Airbus are already retrofitted with vortex generators or if that will be a new cost Delta will incur. She then requested that the NOC write a letter to Delta to request that the new Airbus coming in be fitted with the vortex generator prior to operation. Carrino continued on by stating she was a member of MSP FairSkies and inquired about their proposal of the Steeper Glide Slopes and asked if the NOC would look into it and add it to a work plan. In addition, Amsterdam has done some innovative landscaping to reduce noise and MSP FairSkies thinks that could be beneficial around Lake Nokomis. Finally, on behalf of MSP FairSkies, Carrino thanked the MAC and the NOC for providing noise contour data information to the 55 DNL dB. Based on that information it appears that St. Louis Park has experienced more than a 100% increase in residents that are impacted by this noise. Based on that info, Carrino said she hopes this data will be included in future analysis of the DNL. **Co-Chair Hart, Delta** stated that Delta just started to take delivery on new Airbus A321 and they are all coming with vortex generators. In regards to retrofitting current 320s and 319s there isn't any firm guidance on that but all future 321's will have the vortex generator on it. **Dana Nelson, Technical Advisor** added that once the aircraft using vortex generators are regularly using the MSP airport, the noise office can collect noise data. That can be compared to the noise data of aircraft that are not equipped with the vortex generator and those findings can be provided to Delta.

9. Announcements

Representative Swenson, Edina announced that the city of Edina is holding its third informational meeting on airport noise on Monday, May 23rd at 7pm at the Edina City Hall.

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

The meeting adjourned at 2:46 p.m.

The next meeting of the NOC is scheduled for Wednesday, 20 July 2016.

Respectfully Submitted,
Amie Kolesar, Recording Secretary

ITEM 2

MEMORANDUM

TO: MSP Noise Oversight Committee (NOC)

FROM: Bradley Juffer, Assistant Manager—Noise, Environment & Planning

SUBJECT: **REVIEW OF MONTHLY OPERATIONS REPORTS**

DATE: July 6, 2016

Each month the Metropolitan Airports Commission (MAC) produces a Technical Advisor's Report for the Noise Oversight Committee (NOC). This report provides information on the Minneapolis-St. Paul International Airport (MSP), such as aircraft noise complaints, aircraft operations and noise levels associated with MSP aircraft operations.

Additionally, the MAC produces four monthly reports assessing the compliance with established noise abatement procedures: the Runway 17 Departure Analysis Report, the Eagan-Mendota Heights Corridor Report, the Crossing-in-the-Corridor Analysis and the MSP Runway Use System (RUS) Report.

At the July 20, 2016 NOC meeting, MAC staff will provide a summary on these five monthly operations reports for the months of May and June, 2016.

ITEM 3

MEMORANDUM

TO: MSP Noise Oversight Committee (NOC)

FROM: Dana Nelson, Manager—Noise, Environment & Planning

SUBJECT: **GUEST SPEAKER: BRIAN RYKS, MAC EXECUTIVE DIRECTOR AND CEO**

DATE: July 6, 2016

The Metropolitan Airports Commission (MAC) began operating under new leadership at the top level on May 23, 2016 when Brian Ryks started his new position as the Executive Director/CEO.

A native of Lakeville, Minnesota, and graduate of St. Cloud State University, Ryks began his career in 1986 as a noise and operations technician at the MAC. He left the MAC in 1990 to become noise abatement manager at Stapleton and Denver International airports in Colorado. After that, he served as airport manager at Aberdeen Regional Airport in South Dakota from 1995 to 1997 and at St. Cloud Regional Airport from 1997 to 2002. He was executive director of the Duluth Airport Authority from 2002 to 2012, then became the executive director and chief executive officer at Gerald R. Ford International Airport in Grand Rapids, Mich.

Under Ryks' leadership, Gerald. R. Ford International Airport has won numerous international awards, including the top airport in North America in its size category for service quality and awards for environmental mitigation and community outreach and education from Airports Council International-North America.

In addition, Ryks was named 2015 Newsmaker of the Year in Economic Development by the Grand Rapids Business Journal. The Minnesota Council of Airports awarded Ryks the 2012 Distinguished Service Award and the 2009 Award of Excellence for the Outstanding Promotion of Aviation in the State of Minnesota. He is also a recipient of the 2008 Patriot Award for employee support of the National Guard and Reserve.

He has been elected by industry peers to serve in leadership capacities in state, regional, national and international organizations including the Minnesota Council of Airports, Airports Council International-North America (ACI-NA) Board of Directors and the American Association of Airport Executives.

The NOC will be introduced to Brian Ryks at the July 20, 2016 NOC meeting.

ITEM 4

MEMORANDUM

TO: MSP Noise Oversight Committee (NOC)

FROM: Dana Nelson, Manager—Noise, Environment & Planning

SUBJECT: **REVIEW RESIDENTIAL NOISE MITIGATION PROGRAM IMPLEMENTATION STATUS**

DATE: July 6, 2016

The NOC 2016 Work Plan includes the Review of Residential Noise Mitigation Program Status and Implementation.

The Metropolitan Airports Commission (MAC) has long administered one of the most aggressive noise mitigation programs in the world at Minneapolis-St. Paul International Airport (MSP). In total, MAC has spent close to $500 million since 1992 on noise mitigation programs at MSP. This includes insulating over 15,000 single-family homes, 3,200 multi-family units, 18 schools and acquiring 437 residential properties.

First Amendment Noise Mitigation Program Background

The Cities of Minneapolis, Richfield and Eagan, and the Minneapolis Public Housing Authority and the MAC jointly filed the First Amendment to the Consent Decree ("Amendment") to Hennepin County Court. On September 25, 2013, Hennepin County Court Judge Ivy Bernardson approved the Amendment, which binds the MAC to provide noise mitigation services until the year 2023.

Under the provisions of the Amendment, properties must meet certain criteria to be considered eligible for participation in the MAC noise mitigation program.

First, as stated in the Amendment:

> *"The community in which the home is located has adopted local land use controls and building performance standards applicable to the home for which mitigation is sought that prohibit new residential construction, unless the construction materials and practices are consistent with the local land use controls and heightened building performance standards for homes within the 60 DNL Contour within the community in which the home is located."*

Second, as stated in the Amendment:

> *"The home is located, for a period of three consecutive years, with the first of the three years beginning no later than calendar year 2020 (i) in the actual 60-64 DNL noise contour prepared by the MAC under Section 8.l(d) of this Consent Decree and (ii) within a higher*

noise impact mitigation area when compared to the Single-Family home's status under the noise mitigation programs for Single-Family homes provided in Sections 5.1 through 5.3 of this Consent Decree or when compared to the Multi- Family home's status under the noise mitigation programs for Multi-Family homes provided in Section 5.4 of this Consent Decree. The noise contour boundary will be based on the block intersect methodology. The MAC will offer noise mitigation under Section IX of this Consent Decree to owners of eligible Single-Family homes and Multi-Family homes in the year following the MAC's determination that a Single-Family or Multi-Family home is eligible for noise mitigation under this Section."

In cases where homes have received previous reimbursements or mitigation from the MAC, those improvements will be deducted from the efforts required to increase the homes' mitigation relative to the actual noise level, per the amended Consent Decree.

2017 Noise Mitigation

The 2015 Annual Noise Contour Report marked the third year of actual noise contour mapping as established by the terms of the Amendment, therefore qualifying homes to become eligible according to the criteria above. All residential properties that meet the mitigation eligibility criteria are located within the City of Minneapolis.

In total there are 138 single-family and 88 multi-family units that are eligible to receive mitigation in 2017. They are all located within the 60-62 DNL noise contour and therefore eligible for the "Partial Noise Reduction Package", which is the installation of central air conditioning plus up to $5,245* of noise mitigation products and services or up to $18,359* of noise mitigation products and services where air conditioning already exists, or when the homeowner chooses not to receive a new air conditioner.

The MAC has reserved $3.2 million to execute the 2017 Noise Mitigation Program.

Through coordination and consultation with the City of Minneapolis, the MAC sent the initial communication – which included a letter and questionnaire – to all eligible single-family residences on June 24, 2016. In the letter, the homeowner is notified that the home is eligible to participate in the Residential Noise Mitigation Program, which is anticipated to begin in the spring of 2017. The homeowner will receive an invitation to a Homeowner Orientation Meeting by January 15, 2017. Currently, two sessions are planned to take place around mid-February 2017. If homeowners are not able to attend either meeting, they are able to make other arrangements with MAC staff to ensure they receive the information. The purpose of the questionnaire sent on June 24 was to acquire more information about the homes and personal preferences of the homeowners. The MAC requested the questionnaire be completed and returned to MAC's consultant, the Center for Energy and Environment, by July 15, 2016. The initial letter and questionnaire have been posted on the macnoise.com website under "Do I Qualify for Home Noise Mitigation?"

*Dollar allocations will be adjusted consistent with changes in the Consumer Price Index.

There are two multi-family complexes included in the 2017 Noise Mitigation Program – one 82-unit apartment building and one 6-unit building. Letters will be sent out to the owners of these structures in July 2016 notifying them of their eligibility to participate in the Multi-Family Noise Mitigation Program. This program consists of either the installation of a single acoustical covering for each air conditioner or the installation of a through-the-wall air conditioning unit, plus acoustical cover for each dwelling that does not have a functional and adequate air conditioning unit.

At the July 20, 2016 NOC meeting, Mr. Pat Mosites, MAC Airport Development Project Manager, will provide an update on the progress of the implementation of the MSP Residential Noise Mitigation Program as required per the provisions of the First Amendment to the Consent Decree.

ITEM 5

MEMORANDUM

TO: MSP Noise Oversight Committee (NOC)

FROM: Dana Nelson, Manager—Noise, Environment & Planning

SUBJECT: **UPDATE ON TURBOPROP DEPARTURES OVER MENDOTA HEIGHTS**

DATE: July 6, 2016

In response to concerns expressed from citizens of Mendota Heights through their Airport Relations Commission, MAC staff presented the Eagan-Mendota Heights Departure Corridor ("Corridor") Turboprop Analysis at the May 18, 2016 NOC meeting.

The analysis found that for 12 months ending March 31, 2106, MSP recorded 2,893 turboprop or piston-driven aircraft departures off Runways 12L or 12R over the cities of Eagan and Mendota Heights.

Of the 2,893 departures from Runways 12L or 12R, it was found that 1,460 of these operations crossed either the northern or southern boundary of the Corridor. Some of these aircraft were pushed out of the corridor by winds, which is more of a factor for these smaller, lighter aircraft types. In other cases, the Air Traffic Control instructed the pilot to turn outside the corridor to maintain adequate separation for subsequent operations departing behind the turboprop, which is allowed per current Corridor procedures.

The Federal Aviation Administration (FAA) Air Traffic Management evaluated the analysis provided by MAC staff to assess if any improvements can be made to reduce the number of turboprop and propeller-driven departures flying north of the Corridor over residential areas of Mendota Heights.

An update of the FAA's evaluation into reducing these noise impacts will be provided at the July 20, 2016 NOC meeting.

ITEM 6

MEMORANDUM

TO: MSP Noise Oversight Committee (NOC)

FROM: Dana Nelson, Manager—Noise, Environment & Planning

SUBJECT: **NEXTGEN STANDARD TERMINAL ARRIVAL ROUTES (STARS) AMENDMENTS UPDATE**

DATE: July 6, 2016

At the May 18, 2016 NOC meeting, the Federal Aviation Administration (FAA) Air Traffic Manager, Elaine Buckner, provided an update on the NextGen Standard Terminal Arrival Routes (STARs) which were implemented in March 2015.

Buckner advised the Committee that beginning last fall, the FAA started to review the STARs, focusing on the safety and the built-in separation, capacity, efficiency as well as the fly-ability of the routes. The review identified four procedure modifications within the airspace of the Minneapolis-St. Paul International Airport. One of the changes takes place at or above 5,000 feet at a distant location southeast of MSP, while the other three take place at or above 8,000 feet. The amended procedures are scheduled to be published and implemented in January 2017.

At the July 20 NOC meeting, the FAA will update the Committee on the results of the Agency's noise screen for the procedure amendments and respond to questions that were asked at the May NOC meeting.

ITEM 7

MEMORANDUM

TO: MSP Noise Oversight Committee (NOC)

FROM: Dana Nelson, Manager—Noise, Environment & Planning

SUBJECT: **2016 MAC NOISE COMMUNICATION ENHANCEMENT PLAN**

DATE: July 6, 2016

Our ability to facilitate solutions and effectively communicate with stakeholders is central to developing and maintaining positive relationships, especially with aircraft noise given the effects it can have on daily life in an impacted community. Realizing this, the MAC Environment Department has teamed up with MAC Public Affairs and Marketing (PAM) to create and implement a Noise Communication Enhancement Plan.

The Communication Enhancement Plan strives for an effective dialogue that enhances community stakeholders' understanding of the complexities associated with aircraft operations and what is being done to reduce associated noise impacts. As part of this initiative, we will evaluate our current noise program engagement and communication techniques and develop a plan for enhancement driven by stakeholder input and external consultation.

The Plan details the following four tactics:

Tactic 1 - Noise Videos and Fact Sheets

Noise 101-styled videos and fact sheets will be designed to help interested community stakeholders learn basic facts about commercial flight, air traffic control, what airports can and cannot do to address noise concerns, what has and is being done at MSP, and how residents can get more involved. The materials will be shared through macnoise.com and through other distribution channels in consultation with PAM and the NOC. The videos will also be shown at future Public Input Meetings.

Tactic 2 – Ongoing Coordination and Teaming

We will enhance internal coordination and teaming between the MAC's Environment and PAM departments to identify developing trends in noise concerns and address them with timely, effective, easy-to-understand informational pieces. A variety of media tools will be used, including Web articles and email bulletins explaining changes that have occurred or debunking misinformation regarding causes of changes in noise patterns. The MAC will work with PAM and members of the NOC to further disseminate the information.

Tactic 3 – Informational Brochures

We will develop two informational brochures intended for new customers who file complaints through the noise complaint line and/or customers who create an account online to submit their noise complaints. Content of each of these brochures will provide an abbreviated explanation of the information provided in the noise office video series, and readers will be guided on how to obtain more detailed information if desired. One brochure will focus on information specific to MSP while the second brochure will provide generalized information about aircraft noise concerns applicable to any MAC airport.

Tactic 4 – Community Engagement Enhancement Program

We will launch a Community Engagement Enhancement Program in consultation with external convening and communication experts to enhance community engagement on noise related topics and ultimately strengthen relationships between the MAC and its airport neighbors. Using stakeholder feedback, we will facilitate dialogue that builds a shared understanding of the circumstances and is committed to creative collaboration and effective communication.

As part of Tactic 4, we are in the process of kicking off an assessment of the Noise Program's community engagement activities. This effort will include conducting a baseline assessment of current program components and related effectiveness providing a plan for enhancement. Focus will be placed on MAC's convening activities, specifically noise-related meetings, and MAC's communication techniques with communities about noise and related strategies, messaging, media, etc. Both processes will include input from key stakeholders by conducting a community survey and a series of stakeholder interviews.

Community Survey

An external consultant will commission a phone survey of households in all NOC communities. The consultant recommends a sample size of 800 respondents, with the intent to get an even split between cell and landline phone responses. The survey is expected to begin in early July with final data collection complete by the end of July. The survey will focus on the effectiveness of the current communication tactics by the MAC Noise Program Office and how residents in noise-affected areas prefer to get aircraft noise-related information from the MAC.

The survey will split respondents into Tier 1 (NOC Communities) and Tier 2 (NOC At-Large Communities). The survey sample will be proportionate to the size of the tiers, i.e. Tier 1 Communities contain 58 present of the households and Tier 2 Communities contain 42 percent. Tier 1 Communities will be surveyed relative to the population size of the city in which they live. Tier 2 Communities will likely be broken into two groups to ensure we get a representative sample of people who interact with the MAC and experience aircraft noise.

Stakeholder Interviews

A second external consulting team will conduct stakeholder interviews with individuals identified by MAC staff, including elected officials, city staff, NOC Community representatives, MAC Commissioners and MSP Fairskies. The interviews will be centered on the effectiveness of current airport noise meetings and identify recommendations for improving these meetings. On

July 25 invitations to participate in the interview will be emailed to individuals. The completion date of the interviews is mid-August.

The results from the community surveys and stakeholder interviews will go in to a recommended enhancement plan for the MAC Noise Program Office to initiate in 2017.