



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)
Elizabeth Petschel – Co-Chair (Mendota Heights City Council)
John Bergman At Large Cities Representative (Apple Valley City Council)
John Carlson (United Parcel Service)
Karen Erazo (Sun Country Airlines)
Cyndee Fields (Eagan City Council)
Tom Fitzhenry (Richfield City Council)
Ben McQuillan (MBAA)
John Quincy (Minneapolis City Council)
Bill Underwood (Chief Pilot Delta Air Lines)
Adam Ryan (Delta Global Services)
Vern Wilcox (Bloomington City Council)

MEETING AGENDA

January 15, 2014
1:30 P.M.

(Jeffery Hart, Delta Air Lines, will be the acting Chairperson for the meeting)

***Note:** 1:00 to 1:30 – Committee Agenda Review Session
(NOC members only in the Coleman Conference Room)

1. 1:30 - 1:35 Review and Approval of the November 20, 2013 Meeting Minutes
2. 1:35 - 1:40 Operations Report Summary
3. 1:40 – 2:00 Presentation: 2014 Capital Improvement Program Projects
4. 2:00 - 2:15 Presentation: Air Traffic Control at MSP
5. 2:15 – 2:30 Report: Review Runway 12L Departure Turns before Runway End
6. 2:30 – 2:40 MAC Website Video Library
7. 2:30 – 2:45 Public Comment Period
8. 2:45 Adjourn

**METROPLITAN AIRPORTS COMMISSION
MSP NOISE OVERSIGHT COMMITTEE
DRAFT MEETING MINUTES**

Wednesday, 20 November 2013, 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, 20 November 2013, in the Lindbergh Conference Room at the Metropolitan Airports Commission General Offices. Chair Petschel called the meeting to order at 1:35pm. The following were in attendance:

Representatives: K. Erazo, J. Quincy, D. Miller, B. Underwood, E. Petschel, J. Hart, J. Carlson, T. Fitzhenry, J. Teppen, T. Christiansen, C. Gyskiewicz (phone)

Staff: J. Giesen, P. Mosites, D. Nelson, J. Nelson

Others: M. Johnson – Minneapolis; M. Grimes – City of Golden Valley; Jan Childers – Eagan; Jon Childers – Eagan; D. Boberg – City of Bloomington; P. Mogush – City of Minneapolis; J. Lindahl – City of Rosemount; C. Costello – City of Richfield; J. Miller – City of Mendota Heights; P. Dmytrenko – City of Richfield; B. Hoffman – City of St Louis Park; J. Bennett – City of Edina; M. MacDonald – Sunfish Lake; D. Amundson – MSP FairSkies; R. Owen – Metropolitan Council; L. Grotz - Edina

1. Adoption of the Meeting Agenda

Chair Petschel, Mendota Heights, noted that the presenter for agenda item #3 was not available to present at today's meeting.

IT WAS MOVED BY REPRESENTATIVE FITZHENRY AND SECONDED BY REPRESENTATIVE HART TO REMOVE ITEM #3 FROM TODAY'S MEETING AGENDA TO APPROVE THE AMENDED MEETING AGENDA.

The motion carried by unanimous vote.

2. Review and Approval of the 18 September 2013 Meeting Minutes

IT WAS MOVED BY REPRESENTATIVE HART AND SECONDED BY REPRESENTATIVE FITZHENRY TO APPROVE THE MINUTES OF THE 18 SEPTEMBER 2013 COMMITTEE MEETING.

The motion carried by unanimous vote.

3. Operations Report Summary

Dana Nelson, MAC Environment – Noise Program Office, said noise complaints increased in both September and October 2013 compared to September and October 2012. She said most of the complaints came from residents in the cities of Minneapolis, Edina and Eagan. She said total aircraft operations increased approximately 4% in September 2013 compared to September 2012, and increased 6% in October 2013 compared to October 2012. She said air carrier jet operations increased approximately 3% in September 2013 compared to September 2012, and increased approximately 5% in October 2013 compared to October 2012. She said there were eight hushkit operations in September 2013 and two in October 2013.

D. Nelson said total nighttime operations increased approximately 1.5% in September 2013 compared to September 2012 and increased approximately 4% in October 2013 compared to October 2012.

D. Nelson noted that, in both September and October 2013, there were some arrival operations on both Runway 17 and Runway 22 due to strong winds.

D. Nelson said there was 99.9% compliance with the Runway 17 Carrier Jet Departure Procedure in September 2013 and 98.4% compliance in October 2013.

D. Nelson said there was 96.2% compliance with the Eagan-Mendota Heights Departure Corridor procedure in September 2013, and 93% compliance in October 2013.

D. Nelson said that, in September 2013, 59% of departure operations used the Crossing-in-the-Corridor Procedure during the nighttime hours of 11:00pm-6:00am, and 50% of departure operations used the procedure during those hours in October 2013. She said that, in September 2013, 28% of departure operations used the Crossing-in-the-Corridor Procedure during the hours of 6:00am-11:00pm, and 25% of departure operations used the procedure during those hours in October 2013.

Representative Miller, Eagan, thanked the FAA for its efforts with regard to utilizing the Crossing-in-the-Corridor Procedure. She noted that Runway 17 was for an average 28% of departure operations over five months, compared to 6% of departure operations on Runway 12R, and was used five times more than Runway 12R in October 2013. She said that Eagan would be requesting that an evaluation of the Runway Use System be part of the Committee's 2014 Work Plan.

4. Fleet Mix Trends at MSP

Dana Nelson, MAC Environment – Noise Program Office, said the Annual Fleet Mix Assessment evaluated all carrier jet operations at MSP from October 2011-September 2013 and grouped aircraft into manufactured Stage 3, regional jet and hushkit. She said there was a 93% decrease in hushkit operations, a 3% increase in manufactured Stage 3 operations and a 4% decrease in regional jet operations. She said that during the 12-month period of October 2012-September 2013, 53% of total operations were in regional jets, compared to 54.3% in the 12-month period of October 2011-September 2012. She said 0.42% of total operations in October 2011-September 2012 were hushkit aircraft and that that decreased to 0.03% in October 2012-October 2013. She said 45% of operations in October 2011-September 2012

were manufactured Stage 3 operations, and that increased to approximately 47% in October 2012-September 2013.

D. Nelson said use of the A330 aircraft, which has a takeoff noise level of 95.6 dB, increased approximately 71% during October 2012-September 2013 compared to October 2011-September 2012, and that there was a corresponding decrease in 747 aircraft, which has a takeoff noise level of 101.6 dB. She said A320 operations went down 13% and that there was a similar increase in 737-700 operations. She said MD80 operations increased approximately 19%, and MD90 operations increased 23%, over the past 12 months. She said the MD90 is significantly quieter than the MD80, with a takeoff noise level of 84.2 dB compared to the MD80's takeoff noise level of 91.5 dB.

D. Nelson said there was a significant decrease in the number of CRJ2 operations and a corresponding increase in CRJ operations. She said the increase in the CRJ numbers is a result of flight tracking software that does not differentiate CRJ operations into sub-categories. She said she believes Delta Air Lines plans to phase out its CRJ-200 aircraft and replace them with Boeing 717s and CRJ-900s.

D. Nelson said there was a 96% decrease in DC9 operations comparing October 2012-September and October 2011-September 2012. She noted that the DC9Q has a takeoff noise level of 91 dB.

D. Nelson said that, since 2011: operations of aircraft with takeoff noise levels greater than 90 dB have decreased 77%; operations of aircraft with takeoff noise levels between 80-90 dB increased 117%; and operations of aircraft with takeoff noise levels less than 80 dB have increased 989%.

Representative Hart, Delta Air Lines, clarified that the Boeing 777 replaces the 747, not the A330. He said the A330 is an upgauge of equipment from the 767 on Delta's Paris service. He said the increase in MD90s is a correlation to the reduction in A320s. **Chair Petschel, Mendota Heights**, asked is there are any 777 operating at MSP. **Hart** said there is one 777 operation per day, a flight to Tokyo. **Petschel** asked if the number of 777 operations would increase. **Hart** said that is market-dependent.

5. Aircraft Density Color Gradients in Technical Advisor's Report

John Nelson, Technical Advisor, said that, in the past, departure and arrival tracks were shown in the Technical Advisor's Report as red and green tracks. He said that, as the number of tracks increased, map features such as city boundaries, water bodies, streets, highways, etc. were lost on the flight track maps, making it difficult for residents to determine, visually, the density of tracks in their areas. **J. Nelson** said that a new color gradient key will be used on the flight track maps in the Technical Advisor's Report. He said the new color gradients don't obscure map features and allows for operational patterns to be more visible. He said the new color gradient will be used in Technical Advisor's Reports going forward. **Representative Quincy, Minneapolis**, asked if anything has changed in terms of airport operations as the new gradient maps seem to depict the use of RNAV tracks. **J. Nelson** said that RNAV has not been implemented, and that the data reported in the flight track maps have not changed, only the way those data are depicted has changed.

6. Review Status of FAA Center for Excellence/PARTNER, TRB and FICAN Initiatives

John Nelson, Technical Advisor, reminded Committee members that staff compiles an annual summary of projects and research being conducted by the FAA Center of Excellence/PARTNER, TRB and FICAN, and that the summary was included in Committee members' meeting packets.

J. Nelson said several projects look at aircrafts' impact on air quality, and others look at aircraft noise mitigation and abatement.

PARTNER research includes:

- Project 3: "Valuation and Trade-offs of Policy Options"
- Project 11: "Health Impacts of Aviation-Related Air Pollutants"
- Project 12: "Emissions Atmospheric Impacts"
- Project 15: "Aircraft Impact on U.S. Local and Regional Air Quality"
- Project 16: "Investigation of Aviation Emissions Air Quality Impacts"
- Project 22: "Objective Measures to Support Airspace Management"
- Project 26: "Sound Transmission Indoors – Integrated Windows"
- Project 35: "Open Rotor Noise Impact on Airport Communities"
- Project 41: "Aircraft Black Carbon Emissions"
- Project 44: "Aviation-Related Noise Effects on the Elderly"
- Project 45: "Aviation System Air Quality Performance Analysis"

With regard to Project 44, **J. Nelson** said a recent publication discussed a study of Medicare patients and found increased cardiovascular ailments. He said 84 airports, including MSP, were part of the study. He said the study findings are preliminary and should not be used for policy decisions at this time, but add to the body of knowledge. He added that the NOC supports such studies.

TRB and ACRP research includes:

- TRB ACRP 02-03: "Aircraft and Airport-Related Hazardous Air Pollutants: Research Needs and Analysis"
- TRB ACRP 02-12: "Environmental Optimization of Aircraft Departures: Fuel Burn, Emissions, and Noise"
- TRB ACRP 02-24: "Guidelines for Airport Sound Insulation Programs"
- TRB ACRP 02-27: "Aircraft Taxi Noise Database for Airport Noise Modeling"
- TRB ACRP 02-31: "Assessment of Sound Insulation Treatments"
- TRB ACRP 02-48 : "Assessing Annoyance of Helicopter Noise compared with Jet Aircraft Noise"
- TRB ACRP 02-51 : "Evaluating Noise Level Reduction Test Methods for Dwellings"
- TRB ACRP 02-52: "Hard and Soft Ground Absorption Methodology"
- TRB ACRP 02-55: "Modeling Noise for Non-standard Aircraft Profiles"
- TRB ACRP 02-57: "Understanding Lead Emissions Reductions at Airports"
- TRB ACRP 03-01: "Fair Disclosure of Airport Impacts in Real Estate Transfers"

7. Review of 22 October 2013 Public Input Meeting

John Nelson, Technical Advisor, noted that the fourth quarter 2013 Public Input Meeting was held on Tuesday, 22 October 2013 at the MAC General Offices Building. He said 54 attendees signed-in at the meeting, and 20 individuals made comments on the record. He said comments focused on:

- RNAV departures to the north and northwest of the airport
- Effects of noise on outdoor recreational uses of nearby lakes and park lands
- Overflight frequency
- Property taxes and airspace use fees
- Noise complaint processing and use by the MAC

J. Nelson noted that written responses have been sent to individuals who commented at the meeting, and that the comments and responses have been posted to www.macnoise.com/our-neighbors/msp-public-input-meetings.

The next quarterly Public Input Meeting is scheduled for 7:00pm on Tuesday, 28 January 2014 and will be held at the MAC General Offices.

8. Review and Approval of 2014 NOC Work Plan, NOC 2013 Accomplishments and 2014 NOC Meeting Dates and Topics

John Nelson, Technical Advisor, noted that a draft of the 2014 Work Plan was discussed at the Committee's September 2013 meeting. He noted that Item 2a of the draft plan was amended to include "to be completed by an independent consultant". He said HNTB will be that consultant. He said Item 2g was amended to include "national", and Item 2k was amended to include "will include participation of NOC City representatives in the measurement and analysis process". He noted that a new item, Item 4 – Guest Speakers, was added to the plan at the request of the Committee co-chairs. He said that a schedule of speakers and topics was included in Committee members' meeting packets.

J. Nelson reviewed the Committee's accomplishments for 2013:

- Reviewed and supported the First Amendment to the Consent Decree extending noise mitigation eligibility
- Reviewed the status of the 2007 64 to 60 DNL noise mitigation program implementation, which is in its final phase
- Completed a Nighttime Operations Assessment finding that the nighttime use of hushkitted aircraft is minimal
- Completed two Runway 30R/30L Departure studies examining flight patterns, altitude, density and direction
- Completed the Annual Runway Use Analysis and Fleet Mix Reports
- Added improved flight density cartography to monthly Technical Advisor's Report
- Amended By-Laws to add the City of Edina as an At-Large Member

Representative Miller, Eagan, noted that an evaluation of the Runway Use System at MSP was slated for July 2014 and she asked if that could be moved to January or March 2014. **J. Nelson** proposed moving the MACNOMS validation study from May to July, and moving the RUS evaluation to May. **Miller** said that would be acceptable. She asked if J. Nelson were to know in advance that the FAA would not be ready to present an update on RNAV at the January 2014 meeting, if the RUS evaluation could be moved to January. **J. Nelson** said he would look at that.

Chair Petschel, Mendota Heights, noted that the 2014 Work Plan was created with input from Committee members.

IT WAS MOVED BY REPRESENTATIVE FITZHENRY AND SECONDED BY REPRESENTATIVE MILLER TO RECOMMEND APPROVAL OF THE FINAL 2014 NOC WORK PLAN, AS AMENDED, TO THE MAC PLANNING, DEVELOPMENT AND ENVIRONMENT COMMITTEE, AND TO APPROVE THE 2014 MSP NOC MEETING SCHEDULE AND TOPICS, AMENDED TO MOVE EVALUATION OF RUNWAY USE SYSTEM USAGE AT MSP AND RELATED VARIABLES TO THE 21 MAY 2014 MEETING AND TO MOVE MACNOMS VALIDATION STUDY TO THE 16 JULY 2014 MEETING.

The motion carried by unanimous vote.

J. Nelson noted that the Committee co-chairs will present the 2014 Work Plan to the MAC Planning, Development and Environment Committee meeting on Monday, 4 December 2013.

9. Public Comment Period

There were no public comments.

The next meeting of the NOC is scheduled for Wednesday, 15 January 2014.

The meeting adjourned at 2:40pm.

Respectfully Submitted,
Christene Sirois Kron, Recording Secretary

MEMORANDUM

TO: MSP Noise Oversight Committee (NOC)
FROM: John Nelson, Manager – Noise, Environment and Planning
SUBJECT: **CONTENT OF OPERATIONS REPORT SUMMARY**
DATE: December 3, 2013

Each month of the year the Metropolitan Airports Commission (MAC) produces a Technical Advisor's Report for the Noise Oversight Committee (NOC). This report provides maps, tables, and charts that examine runway use, departures and arrivals, and noise levels associated with aircraft operations at Minneapolis-St. Paul International Airport (MSP).

The detailed content of a typical Monthly Technical Advisor's Report is provided below:

- 1) Complaint Data
 - a) Number of Complaints
 - i) Type (noise, engine run-up, low altitude, etc.), time of day/night, and complaint city of origin listing.
 - b) Noise Complaint Map
 - i) Showing location and number of complaints.
- 2) Runway Use
 - a) FAA Available Time for Runway Usage
 - i) Showing the airport layout and hours per month (all hours and nighttime hours) that each runway end met FAA Aviation Performance Metrics.
 - b) MSP All Operations Runway Usage
 - i) Showing the airport layout and the percentage of monthly flights for each runway.
 - c) MSP Carrier Jet Operations Runway Usage
 - i) Showing the airport layout and percentage of monthly flights by the air carriers.
 - d) MSP Carrier Jet Fleet Composition
 - i) Table showing type of aircraft, number of monthly operations at MSP, percentage of operations for each aircraft type and FAR Part 36 Take-Off Noise Levels.
- 3) Nighttime Runway Use (10:30 p.m. to 6:00 a.m.)
 - a) MSP All Operations Nighttime Runway Usage
 - i) Showing the airport layout and the percentage of use of each runway at night.
 - b) MSP Carrier Jet Operations Nighttime Runway Usage
 - i) Showing the airport layout and percentage of nighttime flights by the air carriers.
 - c) MSP Scheduled Nighttime Operators
 - i) Tables and a chart showing the names of the air carriers, number of operations per carrier and time of night of flights, including the schedule of nighttime jet operations.
 - d) MSP Top 15 Nighttime Operators by Type and Stage Mix
 - i) Tables and a chart the aircraft type (A320, MD 90, etc.), stage mix (Stage 3, hush-kitted, etc.), and type of aircraft used by the air carriers by time of night.

4) Airport Noise and Operations Monitoring System

a) Flight Tracks

i) A series of maps showing the weekly tracks of arrivals and departures for each runway.

b) MSP ANOMS Remote Monitoring Tower Site Locations Map

i) A map showing the locations of each of the 39 Remote Monitoring Towers (RMT).

c) Time Above dB Threshold for MSP Arrival/Departure-Related Noise Events

Tables showing the address location of each RMT and the amount of time for the month that each RMT recorded jet aircraft noise arrivals and departures events ≥ 65 dB, ≥ 80 dB, ≥ 90 dB and ≥ 100 dB.

d) MSP Arrival/Departure-Related Noise Events

i) Tables showing the count of jet aircraft arrival and departure events ≥ 65 dB, ≥ 80 dB, ≥ 90 dB and ≥ 100 dB.

e) MSP Top Ten Aircraft Noise Events per RMT

i) Tables showing the flight number, aircraft type, runway and L_{MAX} (dB).

f) Analysis of Daily and Monthly Aircraft Noise Events DNL

At the January 15, 2014 NOC meeting, MAC staff will provide an update on the Technical Advisors for November 2013 and December 2013.

MEMORANDUM

TO: MSP Noise Oversight Committee (NOC)
FROM: John Nelson, Manager – Noise, Environment and Planning
SUBJECT: **2014 CAPITAL IMPROVEMENT PROJECTS**
DATE: December 10, 2013

At the September 18, 2013 meeting of the Noise Oversight Committee (NOC), members requested that the staff of the Metropolitan Airports Commission coordinate a presentation of the 2014 Capital Improvement Program (CIP) to assist in the planning and preparation of the 2014 NOC Work Plan, as needed.

The MAC prepares CIP documents each year for projects at Minneapolis-St. Paul International Airport (MSP) and the reliever airports. These documents include lists of projects, requested and forecasted budgets for each itemized project, maps of project locations and descriptive narrative for each itemized project. For MSP, the projects are listed for Terminals 1 and 2 under broad headings such as Safety and Security, Facility Rehabilitation, Passenger Amenities, Field and Runway and so forth.

Final review and approval of the CIP is an annual function of the MAC Full Commission and usually occurs at the regular Commission meeting held in December. Subsequent changes or amendments to the CIP within a given year also require Commission approval. The CIP itself is “firm” for the coming year, in this case 2014. For the year 2014, following Commission approval, the MAC can proceed with final construction plan and specifications, additional scope, and cost analysis necessary to prepare a project for a public bidding process. When the project is bid, MAC staff returns the project to the Commission for the consideration of the recommended bid award and execution of the construction contract. Once the CIP has been approved, MAC staff can begin more detailed scope and cost analysis for projects scheduled in 2015 and preliminary scope and cost analysis for projects scheduled in 2016. Further, projects are scheduled in the CIP for 2017-2020 for planning and coordination purposes.

In a companion action done in parallel with the preparation of the seven-year CIP, all of the MAC CIP projects are reviewed for environmental impacts in accordance with the requirements of Minnesota Statutes 1986, Chapter 473.614, as amended in 1988 and 1998. Under this Minnesota law, the MAC is required to “examine the cumulative environmental effects at each airport of the projects at that airport (in the seven-year CIP), considered collectively.” Many of the projects in the CIP entail repair or rehabilitation of existing facilities. Such work will not affect use of the facilities and as such will not add to, or subtract from, cumulative environmental effects.

The amended 1986 law also requires the preparation of an Environmental Assessment Worksheet under the Minnesota Environmental Policy Act (MEPA) for projects that meet all of the following conditions:

1. The project is scheduled in the CIP for the succeeding calendar year (2014 in this CIP);
2. The project is scheduled to cost \$5 million or more at Minneapolis-St. Paul International Airport (MSP) or \$2 million or more at any other MAC airport; and

3. The project involves the construction of: (i) a new or expanded structure for handling passengers, cargo, vehicles or aircraft; or (ii) a new runway or taxiway or the extension of an existing runway or taxiway.

An Assessment of Environmental Effects (AOEE) for the “Seven Year Capital Improvement Program 2014-2020” has been prepared and distributed by the MAC for comment in October 2013.

Both the Commission review and approval process of the CIP and the AOEE process ensure that projects that might effect changes in aircraft noise levels are thoroughly examined via an Environmental Assessment and/or an Environmental Assessment Worksheet. In relation to the 2014 CIP projects, the MAC prepared the “2020 Improvements Final Environmental Assessment/Environmental Assessment Worksheet” in January 2013, which received a “Finding of No Significant Impact” from the Federal Aviation Administration in March of 2013.

The presentation of the 2014 CIP to the NOC membership will be done by Gary Warren P.E., MAC Vice President of Planning, Development, and Environment. This is an information item, no NOC action is requested.

MEMORANDUM

TO: MSP Noise Oversight Committee (NOC)
FROM: John Nelson, Manager – Noise, Environment and Planning
SUBJECT: AIR TRAFFIC CONTROL at MSP
DATE: November 6, 2013

The Federal Aviation Administration's (FAA) mission is to provide an air traffic control system that is safe and efficient and supports Homeland Security within the United States (US). Air traffic control is a vital component of achieving this mission because during periods of typical air traffic, there can be over 7,000 individual aircraft flying within the US National Airspace System (NAS).

Making sure that these aircraft move and operate safely within the NAS is the job of FAA air traffic controllers. As is well understood, the job of an air traffic controller requires an attention to detail, accuracy, and precision that is extremely demanding and has no margin for the slightest error. Such skill levels are attained only after completing rigorous training. Air traffic controllers assigned to busy hub airports such as MSP have years of experience in their positions.

The day-to-day tasks of air traffic controllers are described by the FAA in an article titled "Today's Air Traffic Control"

They (air traffic controllers) monitor radar screens to track aircraft. As aircraft fly over radar sites, the data from those radars is communicated digitally via telecommunications lines to controllers hundreds or even thousands of miles away.

Controllers in en route facilities guide airplanes flying at high altitudes through large sections of airspace. As aircraft fly across the country, pilots talk to controllers in successive en route centers. There are 21 en route centers that control aircraft flying through the NAS.

At approach control facilities, controllers guide aircraft as they approach, or leave, airspace surrounding airports to about 40 miles away.

The public is most familiar with air traffic control towers at airports. Controllers in these facilities guide aircraft as they take off or land and taxi from or to the gate. Their primary function is to separate aircraft on the airport surface."

During the discussion of the NOC 2014 Work Plan led by NOC Co-chairs Petschel and Hart at the MAC Planning, Development and Environment Committee on December 2, 2013, the MAC Commissioners emphasized the importance of NOC providing the public with educational noise/airport/aviation related information on a broad scale using available technology.

In keeping with the interest expressed by the Commissioners, representatives from the FAA Air Traffic Control Tower (ATCT) will provide the NOC an overview of air traffic control methods and practices at MSP.

Topics covered in the MSP ATCT overview will include:

1. MSP Airspace Layout – Explanation of Minneapolis Center, Terminal Radar Control (TRACON), and Local Control.
2. MSP Runway Layout
 - a. Typical Runway Use and Operational Flow – Arrivals and Departures
 - i. North flow
 - ii. South flow
 - iii. Mixed flow
 - iv. Typical conditions for each of these operational flows
 - b. Considerations for Runway Use and Configuration:
 - i. Air traffic safety
 - ii. Weather conditions
 - iii. Airport arrival and departure demand
 - iv. Operational capacity
 - v. Surface winds
 - vi. Winds aloft
 - vii. Noise impacts (Runway Use System (RUS), distant Noise Abatement Departure Profile (NADP). and related procedures)

This is an information item, no NOC action is requested.

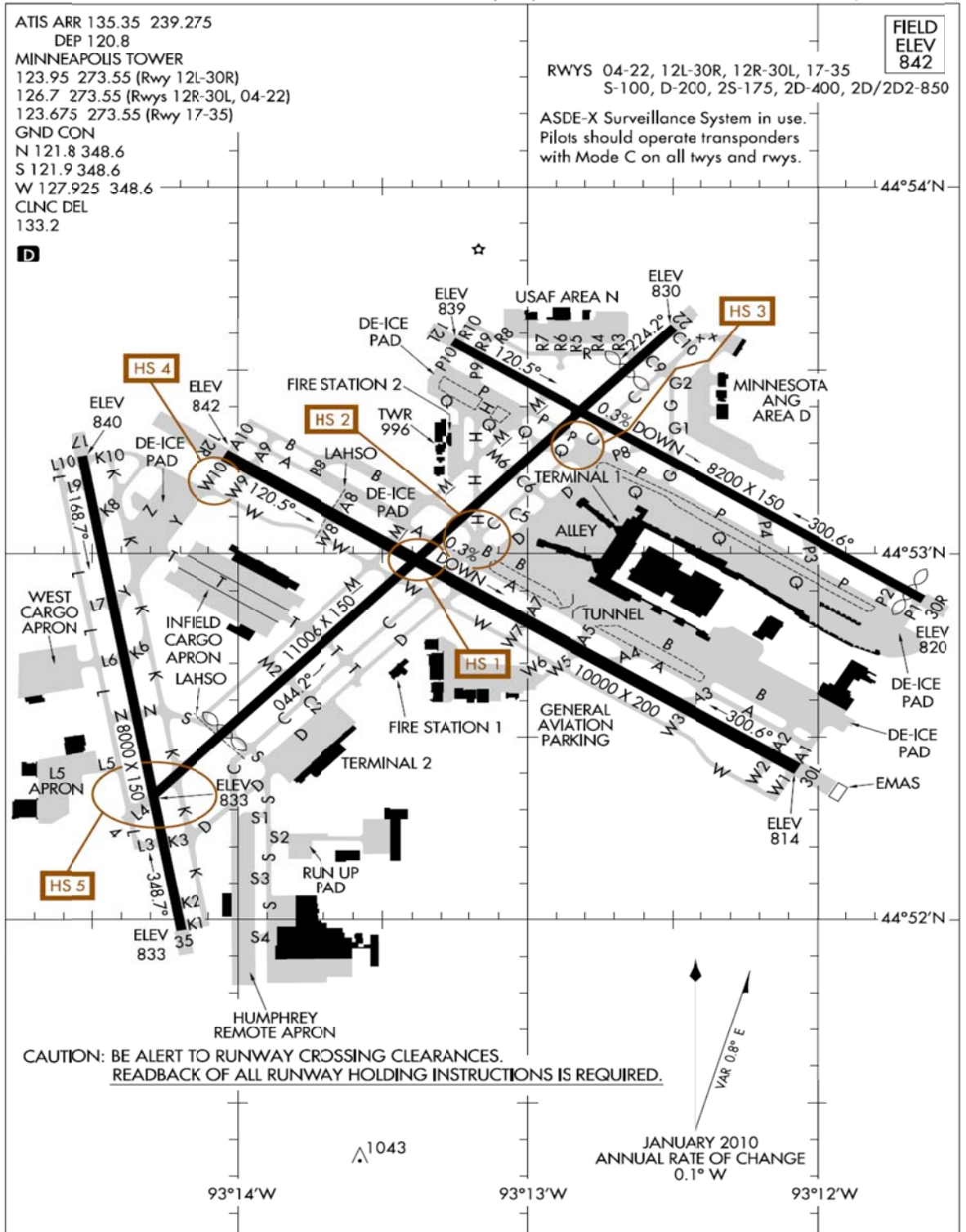
Attachments:

AIRNAV.com MSP Airport Diagram
2010 Aerial Photograph of MSP

13290

AIRPORT DIAGRAM

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)
AL-264 (FAA) MINNEAPOLIS, MINNESOTA



AIRPORT DIAGRAM

13290

MINNEAPOLIS, MINNESOTA
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)



MEMORANDUM

TO: MSP Noise Oversight Committee (NOC)
FROM: John Nelson, Manager – Noise, Environment and Planning
SUBJECT: **REVIEW RUNWAY 12L DEPARTURE TURNS BEFORE RUNWAY END**
DATE: December 21, 2013

MAC staff will provide a presentation of the Runway 12L Departure Turns Before Runway Report.

The Executive Summary of the Report states:

The report presents an analysis based, in part, on new NextGen data that provides the Metropolitan Airports Commission (MAC) the capability to carefully examine flight tracks beginning on the runway surfaces and near the runway ends at the Minneapolis-St. Paul International Airport (MSP). The historical information presented provides the context, intent, previous MAC/Noise Oversight Committee/Federal Aviation Administration (FAA)/User actions, and related background information that serves as a baseline for on-going review of the “Minneapolis - St. Paul International Airport Runway 12L Departure Turn before Runway End” into the future¹.

Using the FAA’s Airport Surface Detection Equipment Model X (ASDE-X) flight track data made available to the MAC in November 2013, a penetration gate analysis was completed at the end of Runway 12L to detect early turns of aircraft before the flight track reached the end of the runway. This report found that a small number of air carrier departures, primarily regional jets, crossed the north edge of Runway 12L, while in flight, prior to reaching the end of the runway. The exact cause for a low number of specific flights crossed the edge of Runway 12L in November 2013 is unknown. However, it is highly probable that wind, weather, FAA instructions and pilot actions were contributing factors to varying degrees of influence.

The implementation of the turn procedure after reaching the end of Runway 12L in 2005 was, and is, designed to reduce the number of flights crossing the northern boundary of the Eagan – Mendota Heights Corridor. The procedure has served that purpose well, based on relevant data provided in the *Supplement Analysis* of this report, which shows that a very small percentage of Runway 12L departures have flight tracks north of the northern boundary of the Corridor.

Monthly average Day-Night (DNL) aircraft noise levels, as measured by equipment that monitors flight operations on Runway 12L, have declined steadily in recent years.

¹ Additional technical data and discussion are included in the *Supplemental Analysis* of the report.

MEMORANDUM

TO: MSP Noise Oversight Committee (NOC)
FROM: John Nelson, Manager – Noise, Environment and Planning
SUBJECT: **MAC NOISE WEBSITE VIDEO LIBRARY**
DATE: December 21, 2013

A new video feature has been added to the Metropolitan Airports Commission's (MAC) Noise Program Website (<http://www.macnoise.com/our-neighbors/videos>). This development is part of an ongoing effort to provide effective educational resources to the public.

The videos on the Noise Program Website will communicate current and helpful information to the public on topics ranging from the use of existing website resources, to current airport noise-related issues and concerns. This new resource will also be leveraged to provide increased access to NOC activities with an initial focus on publishing videos of presentations to the NOC by subject matter experts in 2014. For example, in January 2014 Federal Aviation Administration (FAA) Air Traffic Control (ATC) representatives will provide a briefing on ATC operations at MSP and Gary Warren, MAC Vice President of Planning, Development and Environment, will give a 2014 Capital Improvement Program (CIP) overview to the NOC. Future highlighted speakers will include Jeff Hamiel, MAC Executive Director/Chief Executive Officer, and airline representatives with expertise in fleet planning and scheduling. Videos of these presentations will be published on the Noise Program Website.

Additional videos are in the planning phase and will cover topics such as: airport noise 101; MACNOMS functionality; tutorials on the use of various interactive applications on the website; and specifics on other monthly and annual noise and operation reports prepared by the MAC Noise Program Office. The video library will give the MAC another education tool to augment the comprehensive scope of existing program elements.

The new video tutorial showing the public how to use some of the most popular noise website features will be presented at the January 15, 2014 NOC Meeting.