

- 1. We've lived in our house since 1970, and when we moved into Edina aviation noise wasn't much of an issue but that has changed substantially in recent years. We are experiencing a greater number of flights, and seemingly more frequently. With the exception of aviation noise, we have a very livable neighborhood and we were counting on it being that way. In essence, we didn't move to the noise, it moved to us.**

Comment noted. Aircraft traffic patterns vary depending on multiple factors, including wind direction and speed, air traffic volume and runway and airfield construction. Aircraft need to land and take-off into the wind. When the wind is from the north or the west, aircraft are typically departing from Minneapolis-St. Paul International Airport (MSP) to the northwest over Minneapolis, Richfield and Edina. Conversely, when the wind is from the south or east, aircraft are typically departing to the southeast and arriving from the northwest over Minneapolis.

Due to these variables, there are occasions when you may experience a greater number of aircraft flights over your home more than other times. For example, in January 2014 there were approximately 5,422 departures within one mile of your home. During January 2015, there were 3,418 (37% fewer than January 2014).

The total number of annual aircraft operations at the airport are down to 1990 levels; however, a particular residence or neighborhood may experience a greater number of flights at times, due to the complexities and variables that determine where the Federal Aviation Administration (FAA) directs aircraft in and out of MSP.

- 2. I'd like you to consider increasing the intervals between arrival and departure operations, the dispersal of aircraft overflights (I understand there is a Runway Use System that may not be fully employed at this time), the use of quieter aircraft, the use of the regional airports in the state and regulating nighttime flights. Hopefully we can have a conversation on these things about how to further them along and work together to make them happen.**

The FAA is solely responsible for the control of aircraft operations inside the U.S. National Airspace System. Air Traffic Control (ATC) considers several factors through each phase of flight to move aircraft safely from one place to another. These factors include safety requirements, capacity needs, efficiency of aircraft movements and specific noise abatement procedures. The FAA follows separation requirements to maintain safe nose-to-tail and wingtip-to-wingtip separation for each aircraft operation. The MAC does not control aircraft operations.

The MAC strives to make improvements, where it can, through collaborative efforts by the Noise Oversight Committee, the FAA, city officials and airlines. Initiatives to reduce noise impact include: use and compliance tracking of noise abatement procedures and operation measures, an extensive home mitigation program, land use planning and management,

designated engine run-up pad, MAC noise program website, FlightTracker, MSP Pilot Guide and the Noise Complaint Hotline.

3. Do we have access to the arrival and departure operations data?

The MAC Noise Program Office provides operational data to the public through our website at www.macnoise.com. Each month we publish a Technical Advisor's Report which shows arrival and departure information beginning on page 4. This includes the number of operations that occurred on each runway during the month for all operations, carrier jet operations, nighttime operations and nighttime carrier jet operations. These reports are available at: <http://www.macnoise.com/tools-reports/monthly-operations-reports>.

Additionally, we provide the public with a way to access information interactively through our website. Runway use, aircraft type and noise information can be obtained through our website for any desired day. This is available at: <http://www.macnoise.com/tools-reports/reports-fly>.

Lastly, our online FlightTracker allows users to investigate and research aircraft operations at all of the MAC-owned airports. With this tool you can view and replay flight activity interactively – with 20 minutes of delay – that took place within 40-nautical miles of MSP. This is available at: <http://www.macnoise.com/tools-reports/flightracker>

Again, thank you for attending the Public Input Meeting. If you have additional questions, please feel free to contact me at 612.725.6330 or visit our website. Comments and questions, with responses, from previous Public Input Meetings can be found at www.macnoise.com/our-neighbors/msp-public-input-meetings.

4. When RNAV flights begin in March, will there be a third arrival track? There have been a lot of new flights over my neighborhood in the last month – one day I counted 54 arrivals in 50 minutes. Will I continue to see that when RNAV is implemented? Most arrivals are a half-block away from my house.

Area Navigation (RNAV) arrival procedures will be implemented at Minneapolis-St. Paul International Airport (MSP) on March 24, 2015. These procedures are overlays of existing arrival procedures. Similar to what occurs today, RNAV arrivals will line-up with the extended runway centerline to the runway on which they are cleared to land. Navigation equipment onboard the aircraft will aid in aligning the aircraft with the runway extended centerline to ensure a safe touchdown on the runway end, particularly in adverse weather or low visibility conditions. There are no anticipated changes in aircraft overflight patterns due to the RNAV arrival procedures.

A benefit of RNAV arrival procedures is the incorporation of Optimized Profile Descents (OPDs). This refers to how an aircraft descends from altitude to the touchdown point during the landing process. Today, aircraft follow a “stair-step” arrival procedure. The Air Traffic Controllers clear an aircraft to descend to a certain altitude. Once the aircraft reaches the altitude, it must level-

off and wait for clearance to descend further. In order to level-off the pilot needs to add power to maintain airspeed. This stair-step approach increases the amount of fuel an aircraft uses on arrival and also contributes to noise and carbon emissions. OPDs provide a smooth descent approach to the runway touchdown. In ideal conditions, an aircraft can reduce power and fly a constant descent approach down to the runway, reducing fuel burn, noise and carbon emissions.

5. With regard to your online complaint form, which addresses does it recognize and not recognize? It doesn't recognize my address. I've asked this question before but it doesn't change.

There are instructions on our online Aircraft Noise Complaint Form to enter your address using the following format: House number street name, ZIP (such as 6040 28th Avenue, 55450). However, the online complaint form is comprehensive and takes a variety of address formats. For example, your address may be entered as 6401 James Avenue South, 6401 South James Avenue, 6401 S James Ave, 6401 James Ave S, etc. Once you enter an address and click the "Find Address" button the page will refresh and a formatted address will appear. Please check to make sure the address is correct.

6. Is it true that nighttime flights can be operated more quietly but only if the pilot chooses for an operation to be quiet?

The aircraft arrival and departure procedures are the same at night as they are during the day. MSP does not have a curfew to prohibit nighttime operations; however, airlines are requested to refrain from scheduling flights between 10:30 pm and 6:00 am due to the intrusiveness of operations at night. Cargo operations, due to their nature of business, often operate at night.

Noise abatement procedures, such as departing aircraft over the Minnesota River Valley or into the Eagan-Mendota Heights Departure Corridor, help reduce the number of aircraft overflights over noise-sensitive areas when the Air Traffic Control Tower has the ability to use them.

7. I see stats that annual and monthly operations are coming down, and the data that regional jets are quieter, but yet we continue to experience more noise. Is there another way to look at what is going on? Are the regional jets bigger? Are there additional reports we could look at that would help explain?

Each month the Noise Program Office produces a series of reports on the number of noise complaints by city, flights off each runway, noise data and compliance with noise abatement procedures. These reports will help provide more information on the aircraft noise impact in a particular area. They are available at: <http://www.macnoise.com/tools-reports/monthly-operations-reports>.

Additionally, each year we provide an MSP Annual Noise Contour Report that uses the aircraft operations from the previous year to generate a noise contour to assess noise impacts from

PUBLIC INPUT MEETING COMMENTS/RESPONSES
LOCATION: RICHFIELD MUNICIPAL CENTER
27 JANUARY 2015

actual aircraft operations. This information is helpful in assessing where aircraft noise impacts have increased or decreased compared to previous years. These reports are published by March 1 each year and are available at: <http://www.macnoise.com/tools-reports/annual-reports>.

For analysis of particular areas, such as a neighborhood or residence, we suggest using the FlightTracker application available on our website. You can type in a specific address or zoom into an area of interest and pull flight track data from any date and time period back to 2001. Information about a particular operation, such as the aircraft type and altitude, is provided by the FlightTracker.

There has been a trend by the airlines to reduce the use of small 50-seat regional jet aircraft, such as the CRJ-200, and a corresponding increase in the use of narrow-body aircraft, such as the Airbus A319 and A320. The airlines choose the aircraft types that service each airport depending on the needs of the traveling public.

- 8. At a recent NOC meeting, a noise expert said that when you put aircraft over concrete, the noise generated is worse. So that's Hwy 62 and 35 and 494 where a lot of planes currently fly over – it seems to me that could be investigated and have more discussion.**

The type of ground or ground cover tends to impact the propagation of noise. For example, snow cover tends to absorb sound and reflect less sound than a hard surface, such as concrete. Although the airplanes do not follow landmarks on the ground, there are noise abatement procedures that attempt to keep aircraft operations away from residential areas and over compatible land uses such as rivers and industrial and commercial areas. However, the high-density residential use to the north of the airport makes it impossible for aircraft departures to avoid flying over homes. Historically, the Noise Oversight Committee (NOC) has encouraged the fanning of the departures to the north of the airport to distribute the noise impact over a wide area and the Committee has encouraged the FAA to reduce the number of noise-sensitive land use overflights to the north by leveraging major road corridors and interchanges, where possible.

- 9. At one point planes were flying west over 62 and they would head south before they hit Xerxes and I would like more information about why they aren't doing that as much as they used to.**

Airplanes do not follow landmarks on the ground, such as roadways. Upon departure, the FAA Air Traffic Control (ATC) gives the pilot a heading to fly. The point at which the turn is initiated will vary for each aircraft operation, based on aircraft performance, piloting and weather conditions. This provides a "fanning" or dispersion of aircraft departures off each runway. This results in some aircraft departures turning southbound earlier than others. There have been no changes in departure procedures by the FAA at MSP; however, in the past five years there has been a shift in fleet mix trends, specifically a reduction of Saab 340 (SF34) turboprop aircraft.

Turboprop aircraft are slower than carrier jets and ATC often has to direct turboprops to make a turn so they stay out of the path of carrier jet departures following behind.

With the reduction of turboprop aircraft at MSP, the fleet mix is more uniform. Today, aircraft departures travel around the same speeds, so ATC does not need to turn aircraft out earlier to maintain nose-to-tail separation.

10. With the Long-term Comp Plan, is that developed in conjunction with the Met Council? Do you include resident input on the development of that plan?

The MAC is in the early stages of updating the MSP Long Term Comprehensive Plan (LTCP). The 20-year planning document will be updated this year in accordance with the Metropolitan Council. The 2015 LTCP report will address planning and facility development needs at MSP for the next 20 years, out to the year 2035.

The MSP LTCP is focused on developing facilities to accommodate forecast growth in a safe and efficient manner with a high level of customer service. Proposed improvements are phased to reflect the gradual growth of demand at MSP and to reflect lead time required for detailed planning, environmental analysis, design, and implementation. The LTCP will be updated every five years, consistent with Metropolitan Council guidelines, to ensure planning activities address changes in the aviation industry, demand, and local and national economic conditions.

Among the various actions necessary for the completion of the MSP 2035 LTCP are the following:

- An inventory of existing baseline conditions and infrastructure.
- A projected forecast of annual passenger counts and annual aircraft operation counts.
- Anticipated landside and airside facility requirements to meet forecast needs.
- Preparation of development alternatives.
- Recommendation of a preferred development program.
- A review of environmental considerations.

The current schedule for the preparation of the MSP LTCP includes presentations to the Noise Oversight Committee by Neil Ralston, MAC Airport Planner on March 18, 2015 and May 20, 2015. The final draft of the MSP LTCP is expected to be released for public review in June/July 2015. There will be a public information process as part of the 2015 MSP LTCP. Specific dates and times will be shared with the NOC as they are scheduled.

11. Has there ever been consideration for a curfew for arrivals and departures for MSP? Has that ever been discussed? Is it practical? Are there any airports of comparable size that do have curfews?

PUBLIC INPUT MEETING COMMENTS/RESPONSES
LOCATION: RICHFIELD MUNICIPAL CENTER
27 JANUARY 2015

According to the Airport Noise and Capacity Act (ANCA) of 1990, no airport may impose any access restriction, such as a mandatory curfew, that unduly burdens interstate commerce. All seven MAC-owned airports are public-use facilities available 24 hours per day. Because all seven MAC-owned airports are public-use facilities that use federal aviation dollars for improvements and development, federal policy supersedes local authority with respect to access and use of the airports. A curfew would create a burden on interstate commerce which is illegal by FAA regulations. Since ANCA was implemented, the federal government has not granted approval to any airport to implement an access restriction. Airports that had access restrictions, such as a nighttime curfew, prior to the 1990 ANCA were grandfathered in. An example of this is San Diego International Airport.

The MAC has, however, implemented voluntary restrictions at MSP and its six reliever airports with recommended procedures for operations that occur during the nighttime hours (10:30 pm to 6:00 am). Letters were sent to all air carrier operators at MSP requesting that they avoid scheduling operations between the nighttime hours of 10:30 p.m. and 6:00 a.m.