

- 1. I live south of 494, between Normandale and 169, and it seems like there are days when our area has a tremendous number of flights, but I noticed on the contour maps on your website that there aren't any sound-measuring devices in our area – I'm wondering why that is. Aren't the planes not above the threshold that is set, is it 65 decibels, is that the highest limit? How far west do the Remote Monitoring Towers go?**

The MAC's system of 39 remote monitoring towers (RMT) continuously monitors noise events in communities surrounding MSP. The RMTs monitor noise levels from both aircraft sources and community sources. The analyzer in each RMT records noise events utilizing slow response with A-weighting, as directed by Federal Aviation Regulation (FAR) Part 150. A noise event is detected when the sound pressure level (SPL) reaches 65dBA; then the RMT records the event when the SPL remains at or above 63dBA for at least eight seconds. These recorded events are correlated with flight track data to determine whether the noise source was an aircraft or a community event. The analyzer also provides hourly and daily data. The 8-second threshold detailed above is one criterion applied to all detected noise events as part of the process of determining noise events that were caused by aircraft. Aircraft do not have to fly directly over the RMT to be recorded. Noise is recorded when these criteria are met even when an aircraft is flying several miles away from the RMT.

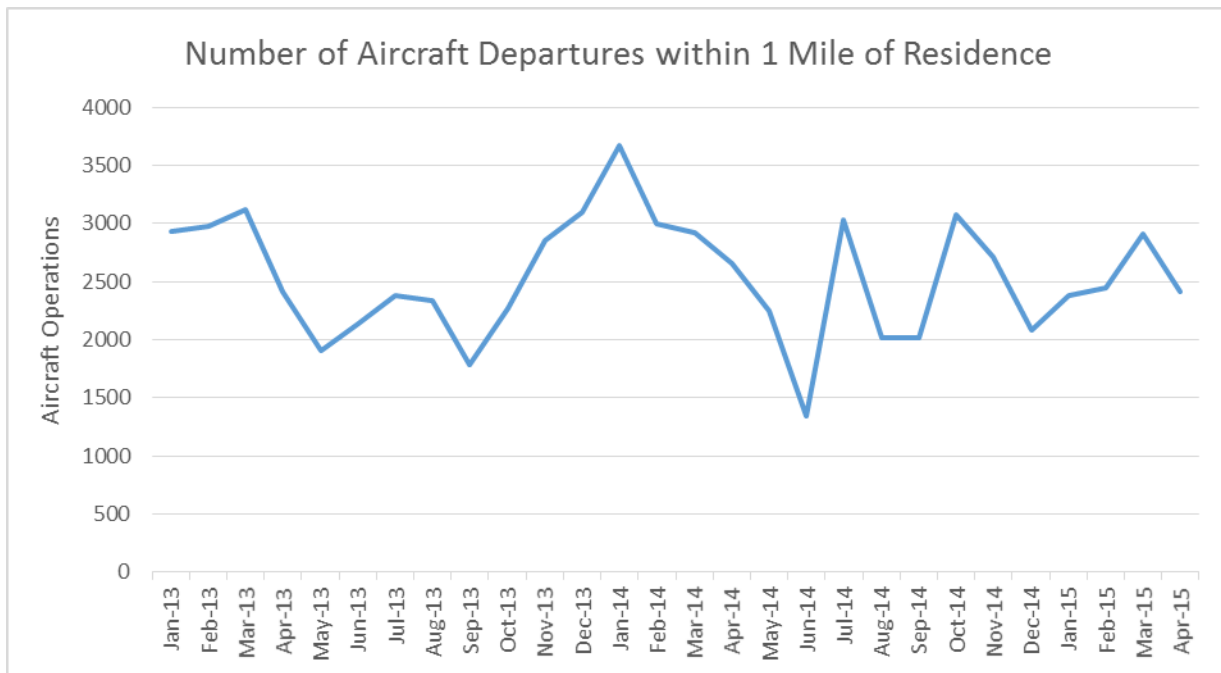
The RMT data collected are not used to develop the aircraft noise contour maps. Rather, these contours are developed using the Integrated Noise Model (INM). Airports are required by the Federal Aviation Administration (FAA) to use INM and a specific noise metric, called Day-Night Average Sound Level (DNL), for quantifying and mitigating aircraft noise. However, the noise data collected at the RMTs are used to help validate some of the data that are used to generate noise contours. The measurements from RMTs are also used in monthly reports that are provided to the public. More information about the RMTs and a map that shows the RMT locations can be found on the MAC Noise Program Office website at [www.macnoise.com/tools-reports/macnoms](http://www.macnoise.com/tools-reports/macnoms). At this time, the MAC is not planning to deploy additional noise monitors.

- 2. Your statistics say about 30% of departures go off of Runways 30R and 30L. It seems to me that's a large percentage of flights over my home, so it seems like there should be monitoring in my area. Your departure track maps show heavy traffic over our area. I'm concerned because, if the noise level in my area isn't being monitored and measured, then there's zero chance of it being addressed.**

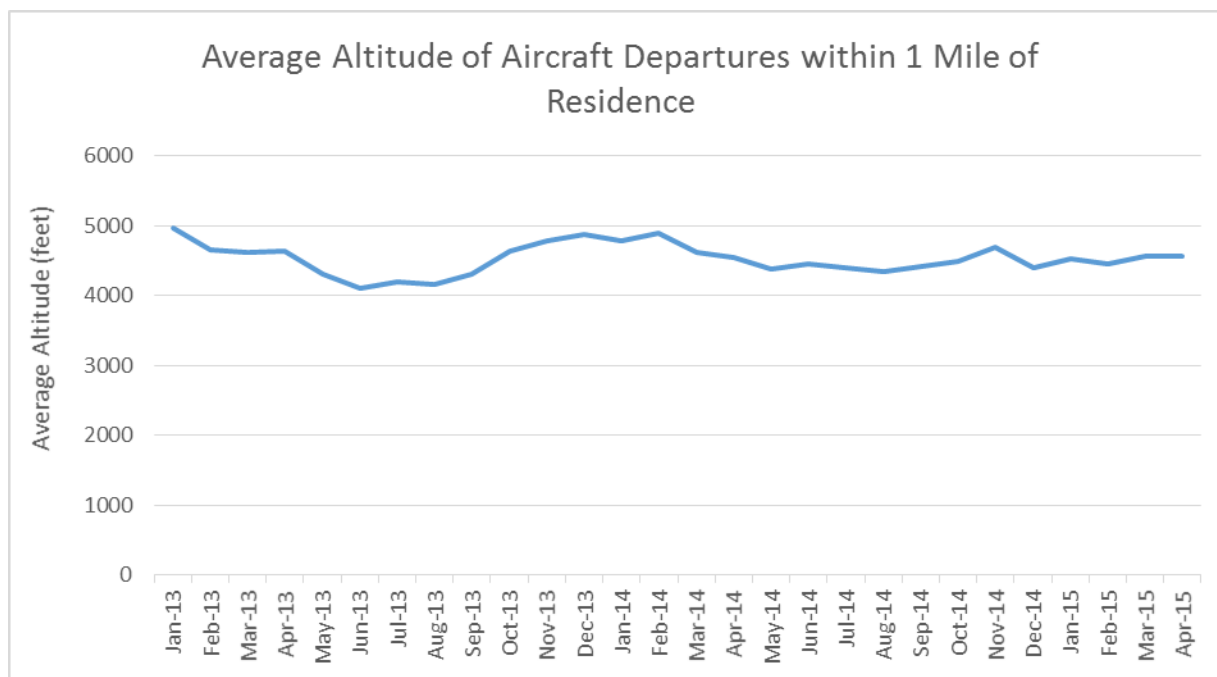
Aircraft departing Minneapolis-St. Paul International Airport (MSP) are under the guidance of the Federal Aviation Administration (FAA) and established aircraft operating procedures. The FAA Air Traffic Control directs all aircraft in flight through the coordinated use of directional headings and navigational equipment. Aircraft taking off from MSP do not fly in reference to landmarks on the ground, rather pilots are given specific procedures to follow, including compass heading, altitude, and speed. The departure procedure, runway, and route assigned to pilots are determined based on the aircraft destination.

After takeoff, aircraft flight paths naturally “fan” over a wide area as a function of safety (i.e., required spacing between aircraft) and as a result of flight factors (e.g., varying aircraft speed, climb performance, winds aloft, destination airport, etc.).

According to our flight tracking system, the departure traffic within a mile of your home has been fairly consistent with previous departure activity. Below is a chart showing monthly Runway 30L and 30R departure flights within a mile of your home since January 2013. The chart shows a peak in January 2014 at 3,676. Since then, the number has fluctuated between 1,340 and 3,075 monthly flights with April 2015 having 2,419 flights.



Additionally, aircraft altitude plays a role in noise impacts on the ground. Using the same departure operations from Runways 30L and 30R in our flight tracking system, average altitudes were analyzed for the January 2013 through April 2015 time period. The chart below shows slight seasonal variations in altitude, however they stay between 4,100 and 5,000 feet over your home. Aircraft performance is slightly degraded during the summertime due to the decreased engine performance in a high-temperature, high-humidity environment. A jet engine performs best in a cold, dry climate, which is why we see higher average altitudes during the winter.



- Aircraft start their turns at Normandale; if they would go further west, like to Eden Prairie Center, before turning they'd be at a higher altitude then, which would mean the operations would be quieter. Most of that area is commercial.**

Comment noted. Aircraft taking off from MSP do not fly in reference to landmarks on the ground, rather pilots are given specific procedures to follow, including compass heading, altitude, and speed. The departure procedure, runway, and route assigned to pilots are determined based on the aircraft destination.

- What is the goal of the NOC? Is it to have a certain reduction in noise, like 10 decibels or 20 decibels? I feel like we can kind of get off track of what the real objective is, or what it should be. Is the Noise Committee just a buffer?**

The Metropolitan Airports Commission (MAC) established the MSP Noise Oversight Committee (NOC) in August 2002 as an advisory board to bring industry and community representatives together to address aircraft noise issues at MSP and to bring policy recommendations to the Metropolitan Airports Commission.

The NOC Mission, taken from the committee bylaws, is provided below for reference:

Provide a balanced forum for the discussion and evaluation of noise impacts around Minneapolis-St. Paul International Airport through the following functions:

- Identify, study and analyze airport noise issues and solutions

- Provide policy recommendations or options to the MAC Planning, Development and Environment Committee and full Commission regarding airport noise issues
- Monitor compliance with established noise policy at MSP
- Ensure the collection of information and dissemination to the public

The above functions will be conducted in a manner that considers public and airport user concerns, taking into consideration public input/information from the following channels of communication:

- MAC Noise Program Office
- MAC Noise Program Office Website
- MSP Noise News newsletter
- MAC noise complaint and information hotline
- Governmental body official policy development processes
- MAC public hearings
- MAC informational meetings
- Individual NOC members
- MAC Planning, Development and Environment Committee
- Metropolitan Airports Commission meetings.

In accordance with its mission, the NOC establishes a work plan each year. The work plan and accomplishments are published on the MAC Noise Program Office website: [www.macnoise.com/our-neighbors/msp-noise-oversight-committee-noc](http://www.macnoise.com/our-neighbors/msp-noise-oversight-committee-noc).

- 5. I think simple goals are better, like a noise reduction of 10 decibels. When Delta merged with Northwest Airlines, the aircraft were retrofitted with wings that bent up on the ends. If we think outside of the box, what could we accomplish?**

Comment noted.

- 6. What is the noise reduction goal for the Noise Committee for the coming months, years?**

Please see response to question 1 above. The NOC 2015 Work Plan is available on the MAC Noise Program Office website: [www.macnoise.com/pdf/noc\\_work\\_plan\\_2015.pdf](http://www.macnoise.com/pdf/noc_work_plan_2015.pdf).

- 7. What is best practice globally in airport noise control?**

The NOC mission and work plan include a comprehensive evaluation of the aircraft noise issues associated with MSP. To that end, each year the NOC work plan includes an overview of related work conducted by the FAA Center of Excellence Partnership for Air Transportation Noise and Emissions Reduction (PARTNER), Transportation Research Board (TRB), and the Federal Interagency Committee on Noise (FICAN). Initiatives by these groups involve experts in aircraft noise academia and science. This topic of discussion will be included on the NOC meeting

agenda in November 2015. To understand the global best practices, please visit each of the associated websites as follows:

PARTNER: <http://partner.mit.edu/projects>  
 TRB: <http://www.trb.org/Projects/Projects2.aspx>  
 FICAN: [http://www.fican.org/pages/noise\\_issues.html](http://www.fican.org/pages/noise_issues.html)

**8. If noise is federally regulated, has the Noise Committee lobbied senate, congress, FAA and EPA to make improvements?**

The MSP NOC is active in its review of aircraft noise regulations. An example of the NOC's engagement is provided in the following news article published on the MAC Noise Program Office website: [www.macnoise.com/news/clarity-needed-legislative-intent-catex2-categorical-exclusion](http://www.macnoise.com/news/clarity-needed-legislative-intent-catex2-categorical-exclusion). For more information about the NOC's interest and involvement with these types of efforts, please review the NOC Accomplishments published on the following webpage: [www.macnoise.com/our-neighbors/msp-noise-oversight-committee-noc](http://www.macnoise.com/our-neighbors/msp-noise-oversight-committee-noc).

**9. Why are planes noisier over Apple Valley – that is quite far away from the airport – as compared to other areas much closer to the airport?**

The MAC Noise Program Office website reports measured noise data for RMT 36, which is the RMT located in Apple Valley, in the monthly Technical Advisor's Report. The table below compares measured data for April 2015 at RMT 36 (Apple Valley) with data recorded at RMT 30, which is located closer to MSP; both of these RMT measure arrivals and departures on Runway 17-35:

RMT ID	City	April 2015 Count of Aircraft Events Equal to or Greater than:			
		65 decibels	80 decibels	90 decibels	100 decibels
<b>RMT 30</b> Aircraft Departure Events	Bloomington	2,561	333	2	0
<b>RMT 36</b> Aircraft Departure Events	Apple Valley	66	2	0	0
<b>RMT 30</b> Aircraft Arrival Events	Bloomington	512	5	0	0
<b>RMT 36</b> Aircraft Arrival Events	Apple Valley	1,780	4	0	0