

MSP 2023 Spring Listening Session



April 26, 2023

Agenda

- 6:00 – Welcome
- 6:05 – Introductions
- 6:15 – MAC Presentation
 - What is the NOC?
 - Spring Weather Impacts to Operations & Noise
- 6:25 – Open Conversation
- 6:55 – Closing Feedback





MSP Noise Oversight Committee (NOC)



Roles and Responsibilities



U.S. Congress

- Passes laws that govern aviation in the U.S.



Federal Aviation Administration

- Regulates airports
- Regulates airlines
- Operates Air Traffic Control (ATC) facilities



Airlines

- Transport people and products domestically and internationally
- Determine number of flights, aircraft types and flight times based on market demands



Metropolitan Airports Commission

- Owns and operates MSP and six reliever airports
- Provides a facility for airlines to conduct air commerce activities
- Does not determine where aircraft fly, runway use, or flight procedures

MSP NOC

- ✈ Established in 2002
- ✈ 6 Community Representatives
- ✈ 6 Airline Industry Representatives
- ✈ Balanced forum and advisory committee to the MAC Board



MSP NOC

✈️ Mission

- Identify, study, and analyze airport noise issues and solutions
- Provide policy recommendations or options to the MAC PD&E Committee and full Commission
- Monitor compliance with established noise policy at MSP
- Ensure the collection of information and dissemination to the public

✈️ Meetings

- Bimonthly
- Next: May 17, 2023, 1:30pm



Minnesota Spring Weather

Impacts to Operations & Noise



Minnesota Spring Weather Impacts to Operations

- Spring is **windiest** season of the year.
- Windiest months: #1 April, #2 March
- Windiest day: March 23 (11.2mph)

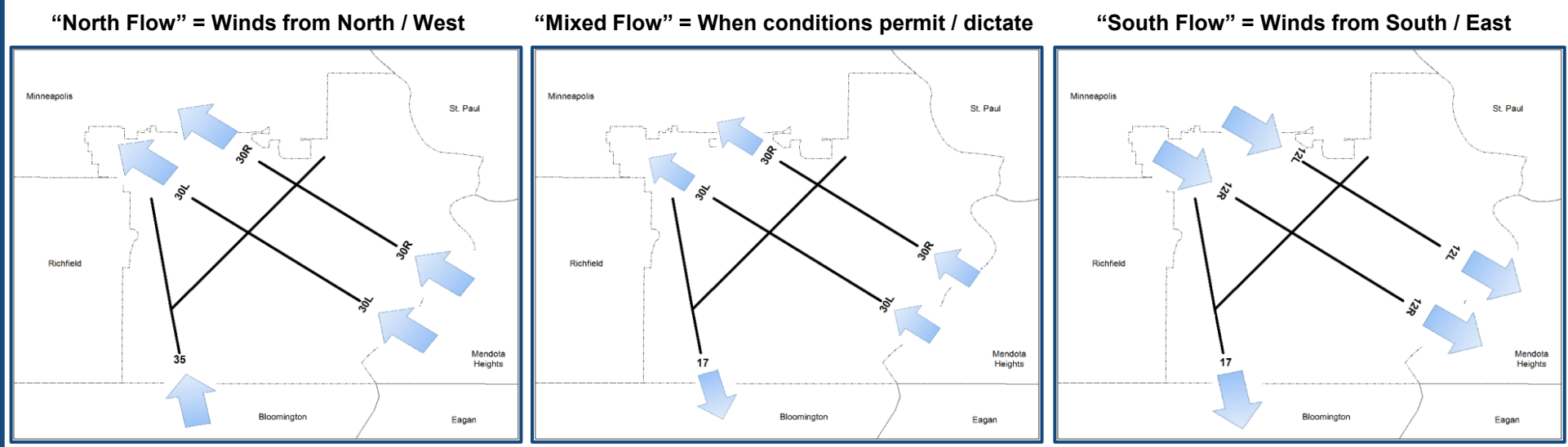
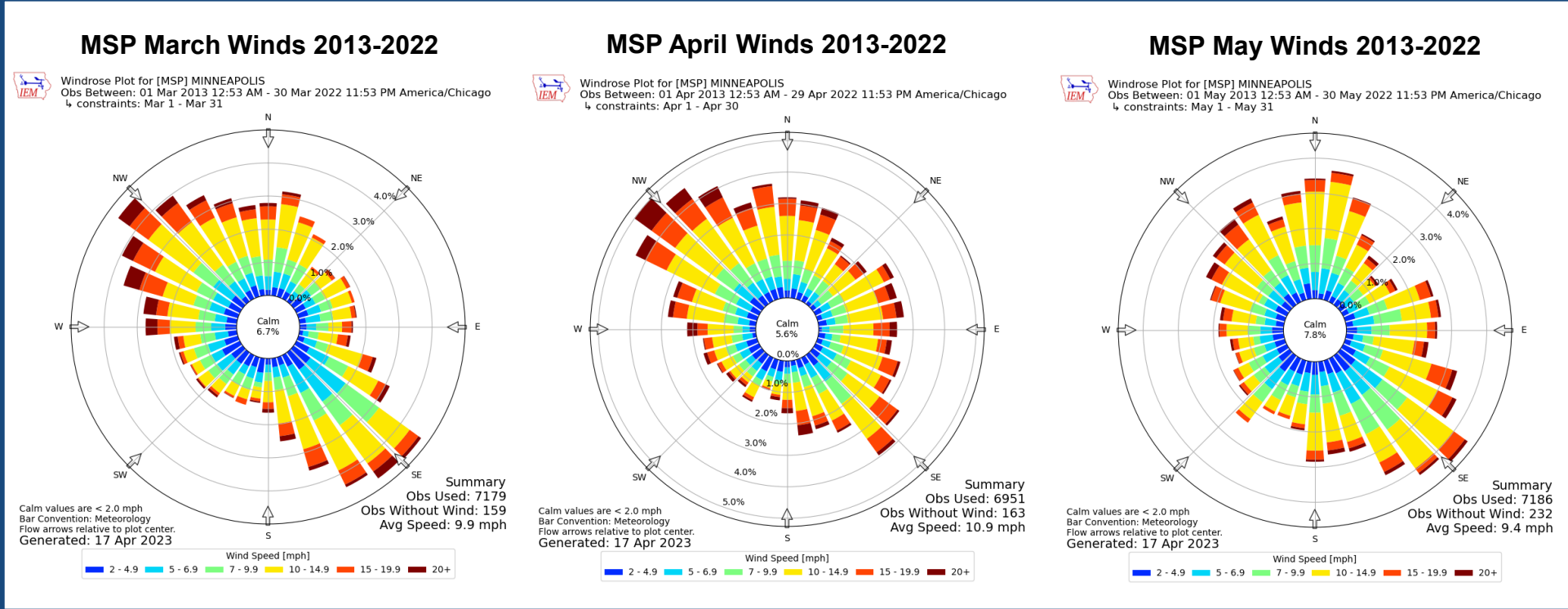
- Wind shifts at MSP during spring:
 - Predominantly out of the **north** March 1 – May 6.
 - Predominant out of the **south** May 6 – May 31.

- Ground winds generally dictate runway assignments (>5 mph). Aircraft takeoff and land into the wind for safety.

- Air Traffic Control prioritize runways when conditions permit.

- Priority for Runway Use:
 - Departures: 12L/R, 17, 4-22, 30L/R
 - Arrivals: 30L/R, 35, 4-22, 12L/R

- Avg. Runway Use (Spring 2018-2022):
 - 30L/R: 48.4%
 - 12L/R: 37.1%
 - 17: 12.8%
 - 35: 1.3%
 - 4-22: 0.4%



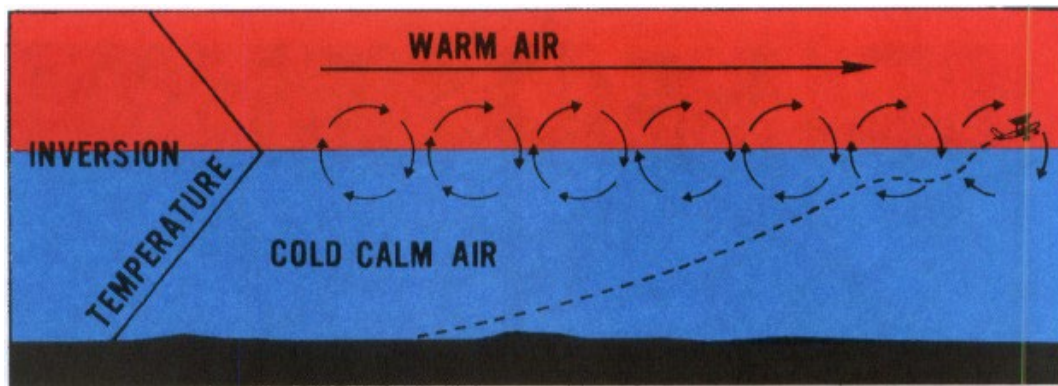
Minnesota Spring Weather Impacts to Noise



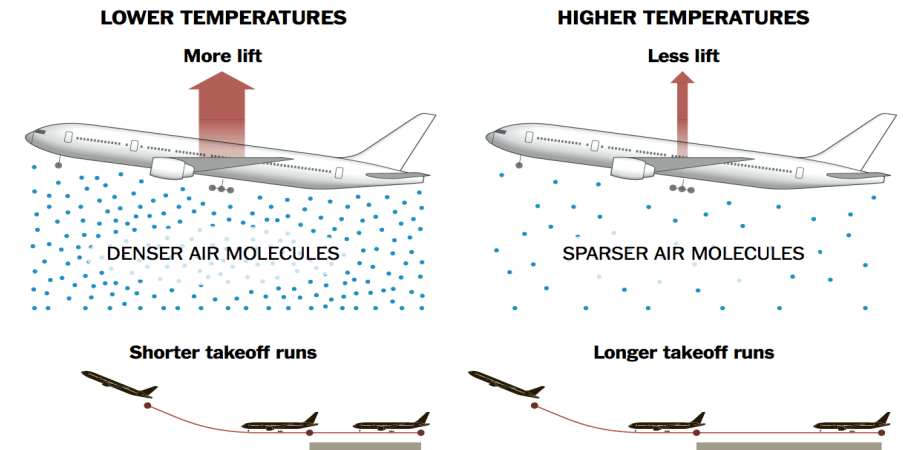
Wind generally causes sound waves to bend and move in the direction it flows. This may disperse aircraft noise over a wider area, carry sound further, or cause fluctuations in decibel levels



Cloud Coverage, depending on thickness, can deflect or rebound aircraft noise back towards the ground. Minnesota cloud coverage typically decreases during spring into summertime.



Temperature Inversion, where air near the ground is cooler than air at altitude, usually occurs overnight due to soil heat absorption, cooling lake effects and upper jet streams. This causes wind shear and a difference in air density, usually a few hundred feet above ground, and deflects noise back toward the ground like clouds do.



Warmer Temperature means less efficient aircraft performance, which leads to longer takeoff runs, slower climb rates, and higher engine power levels. Although noise travels further in cold air, ground noise near aircraft may increase.

Open Conversation



Announcements

- Next NOC Meeting
 - May 17
 - 1:30 pm

More information at metroairports.org/events



Please let us know how we are doing

- Please take our survey:
- What did you enjoy about this meeting?
- What suggestions do you have to improve?

