
Reliever Airports: NOISE ABATEMENT PLAN Flying Cloud Airport (FCM)

INTRODUCTION

The Noise Abatement Plan (FCM Plan) for the Flying Cloud Airport has been prepared in recognition of the need to make the airport and the surrounding community as environmentally compatible as possible. The FCM Plan, as set forth here, is the culmination of a cooperative effort between airport users, airport businesses, the Flying Cloud Airport Advisory Commission, city officials, Federal Aviation Administration representatives, and the Metropolitan Airports Commission.

The recommended procedures contained in the FCM Plan are currently in use at the airport and have proven effective in reducing aircraft noise in the surrounding community. The ideas behind Noise Abatement Procedures (NAP) involve keeping as many operations as possible over less populated areas, promoting FCM quiet hours, and keeping aircraft at the Traffic Pattern Altitude (TPA) of 1,000 feet above ground or higher as much as possible.

The plan does not purport to supersede any Federal Aviation Regulations, especially those regarding safe aircraft operating procedures.

Guidance described in the NAPs are intended to balance safe flight with consideration for people on the ground; these realistic and practical solutions are fair to both aviation and non-aviation interests.

Comprehensive noise control and compatibility planning address elements such as land-use compatibility, airport design, aircraft and airport operational procedures, access restrictions, and noise program management. The FCM Plan is only one part of a comprehensive strategy that focuses on those elements under the control and jurisdiction of the Metropolitan Airports Commission.

***Note:** In December 2002, MAC and the City of Eden Prairie negotiated a “*Final Agreement*” to amend FCM Ordinance No. 51 and to resolve issues related to the proposed development of FCM and to address community concerns related to noise impact. In September 2003, MAC developed an “*Operational Implementation Plan*” that addresses the noise elements and requirements agreed to in the Final Agreement. As such, elements of the Operational Implementation Plan have been incorporated into the FCM Plan and are denoted in this document with an asterisk (*).

***ORDINANCE No. 97**
Effective January 31, 2003 and replaces Ordinance No. 51

MAC Ordinance No. 97 has been implemented and replaces the previous MAC Ordinance No. 51. Ordinance No. 97 prohibits aircraft maintenance run-ups at Flying Cloud Airport between the hours of 2200 and 0700 local time and restricts the use of the airport to only aircraft weighing less than 60,000 pounds certified max gross takeoff weight, dual wheel.

1. Exemptions to the above restrictions do exist in the case of emergency, U.S. Government Aircraft or unscheduled maintenance run-ups that are required to meet a departure time the next morning.
2. MAC Ordinance No. 97 carries punitive action in the form of a misdemeanor punishable in accordance with Minnesota Statutes, Section 609.03.

NAP 1 -- NOISE ABATEMENT TAKEOFF AND APPROACH PROCEDURES

The voluntary measures below are suggested for pilots to consider during the safe operation of their aircraft during takeoff and landing at FCM, including runway selection, takeoff and landing profiles and power settings, and approach or departure paths. It is understood that runway selection is affected by winds, airspace procedures with adjacent air traffic facilities, navigational aids, local tower procedures, aircraft performance and requirements, and traffic density.

- A. When the winds are calm (less than 5 knots) the preferred runway shall be 10R. However, if traffic density or air traffic procedures dictate, Runway 10L may also be used.**
- B. In most circumstances the winds, weather or traffic density will dictate the runway to be used. However in some circumstances there will be an option. To have the least impact on the surrounding community, and to provide for an orderly flow of traffic during non-towered hours, the following priorities are recommended when selecting a runway:**
 1. Piston Engine Aircraft or Turbo Prop Aircraft:
Arrivals - 10R, 10L, 28L, 28R, 36, 18
Departures - 10R, 10L, 28L, 28R, 18, 36
 2. Jet Aircraft:
Arrivals/Departures - 10R, 28L

During tower hours, air traffic control will dictate the active runway.

- C. An airplane approaching to land on a runway served by a visual approach slope indicator or precision approach slope indicator shall maintain an altitude at or above the glide slope until a lower altitude is necessary for a safe landing.**
- D. Unless otherwise instructed by Air Traffic Control all general aviation turbine aircraft shall use National Business Aircraft Association Noise Abatement Procedures when arriving to or departing from the airport.**

- E. Unless otherwise instructed by Air Traffic Control, turbojet aircraft departing on Runways 10R or 28L shall turn to a southerly heading after crossing the departure end of the runway and attaining an altitude of 500 feet above ground level.
- F. During non-tower hours, itinerant traffic will turn to a southerly heading; after crossing the departure end of the runway and attaining an altitude of 500 feet above ground level, and when traffic and other conditions permit.
- *G. Per the Operational Implementation Plan, adherence to the south bound turn procedure applies to all operations when the tower is closed, especially between the hours of 0600 and 0700 local time.

NAP 2 -- TRAFFIC PATTERN PROCEDURES

During safe operation of aircraft within the FCM traffic pattern, pilots are asked to consider the following procedures:

- A. Keep the traffic pattern close to the airport and maintain flying altitude at the TPA of 1,000 feet agl. This TPA is consistent with recommended airport operating procedures and minimum safe altitudes as established in Part 91 of the Federal Air Regulations.
- B. Multiple training events by jet aircraft in the traffic pattern are prohibited.
- C. Extended legs in the traffic pattern are not permitted unless required by Air Traffic Control or for operational safety.
- *D. Per the Operational Implementation Plan, aircraft will utilize the south parallel runway (Runway 28L/10R) as the preferred runway and execute turns to the south of the airport as soon as operationally practical, and/or assigned by the FAA.



NAP 3 -- MAINTENANCE RUN-UPS

Three locations on the airport are designated for engine tests and maintenance run-ups. These locations are selected to minimize the amount of noise projected toward adjacent residential areas. When run-ups are being conducted, please select from the available locations and position aircraft as such to direct noise towards the airfield as much as possible.

- A. **Between 1700 local and 2200 all engine tests and maintenance run-ups in excess of 5 minutes shall be conducted in the designated area.**
- B. **Aircraft will be parked on a heading of 360 to 030 degrees whenever practical.**
- C. **Run-up Areas**
 - 1. When the active runways are 28L, 28R, 10L, or 10R, the intersection of Runway 18/36 and Taxiway Delta-2 or Echo-2 will be used.
 - 2. When the active runway is 18/36, the approach end of Runway 28R at Taxiway Charlie or the approach end of Runway 10L will be used.



- *D. **Per Ordinance No. 97 and except in the circumstances outlined in the previous section, engine tests and maintenance run-ups are prohibited between 2200 local time and 0700 local time.**

NAP 4 -- HELICOPTER TRAINING

The unique design characteristics and capabilities of helicopters allow and sometimes require operations to and from movement areas not designated for fixed wing aircraft. Helicopter operators generally avoid the flow of fixed-wing aircraft. The following procedures shall apply to helicopter training:

- A. All helicopter training shall be conducted within the helicopter traffic pattern area as depicted in the Letter of Agreement between the Metropolitan Airports Commission and the Federal Aviation Administration. Please view the most recent HLOA published on the MAC Noise Program Office website: www.macnoise.com/pilots/flying-cloud-airport-fcm-pilots.**
- B. Multiple helicopter approaches to a hard surface shall be restricted to the approach end of Runway 36 or Runway 28L. (Runway 28L should be used when runway 18/36 is in use; Runway 36 should be used when the parallel runways are active.)**
- C. Helicopter training in the traffic pattern area is prohibited from 2200 local time to 0800 local time.**
- D. Air Traffic Control shall determine traffic pattern procedures for training helicopters, keeping in mind the noise sensitive areas surrounding the airport.**

NAP 5 -- NIGHTTIME RESTRICTIONS

The period of 2200 hours to 0700 hours is when most people are resting and are most sensitive to noise intrusions. To help mitigate the effect of airport operations on the surrounding community, the following nighttime restrictions are in effect.

- *A. Per the Operational Implementation Plan, MAC has implemented a voluntary restriction on operations during the quiet hours, 2200 to 0700 local time.**
 - 1. Operations during the quiet hours are acceptable if they are conducted for the purposes of meeting nighttime flight currency requirements, pre-approved by the airport manager, or is a medical or public safety emergency.
- B. No training may be conducted in the traffic pattern between the hours of 2400 local and 0700 local.**
- C. Intersection takeoffs at the airport are discouraged at all times. There may be no intersection takeoffs between the hours of 2200 local and 0700 local.**
- D. Any aircraft not meeting Federal Air Regulation Part 36 is prohibited between the hours of 2200 local and 0700 local.**

NOISE COMPLAINT PROCEDURES

The Metropolitan Airports Commission documents complaints about aircraft operations associated with any of its seven airports. The phone number is (612) 726-9411 and is available 24 hours per day; MAC staff are available to discuss aircraft activity during normal business hours.

*Per the Operational Implementation Plan, complaints received from Eden Prairie residents, airport users, Fixed Base Operators or any other source will be evaluated/investigated to determine whether a violation or failure to comply with a voluntary measure has occurred.

MAC staff sends written notification to the owner/operator of an aircraft noise complaint (in cases where contact information is accessible) and when they have operated in a manner inconsistent with the voluntary restraints on nighttime or early morning aircraft operations. Additionally, the letter will share information about the MAC's policy to promote the FCM Plan and limit operations inconsistent with the FCM Plan. The owner/operator of the aircraft will be asked to provide a detailed response describing the reason for the operation in question. In the case of Ordinance No. 97 violations, MAC will coordinate and cooperate with the City of Eden Prairie in the prosecution of Ordinance violations.
