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**OPERATIONAL IMPLEMENTATION PLAN**

**Final Agreement Between**

**The City of Eden Prairie, Minnesota**

**and**

**The Metropolitan Airports Commission**

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MAC Department of Environment  
Office of Aviation Noise and Satellite Programs

**September 2003**

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## **1. MAC Ordinance 97**

MAC Ordinance No. 97 has been implemented and replaces the previous MAC Ordinance No. 51. The new Ordinance prohibits aircraft maintenance run-ups at Flying Cloud Airport between the hours of 10:00 p.m. and 7:00 a.m. and restricts the use of the airport to only aircraft weighing less than 60,000 pounds certified max gross takeoff weight, dual wheel.

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.

MAC Ordinance No. 97 carries punitive action in the form of a misdemeanor punishable in accordance with Minnesota Statutes, Section 609.03.

## **2. MAC Airport Use and Development Commitments**

The MAC and the City of Eden Prairie also negotiated an agreement that outlines several actions on behalf of MAC that are intended to protect residents around FCM from excessive airport noise impacts associated with the operation and development of FCM. The majority of the requirements outlined in the agreement necessitate implementation actions that are programmatic and operational in nature. This document is intended to outline an overall program/plan that proposes specific actions, in concert, to provide holistic implementation of the agreement elements.

Two elements in the agreement require minimal program development; rather, represent commitments on behalf of the MAC. These commitments include provisions regarding runway infrastructure characteristics and the nature of airport use.

### **2.1 Runway Infrastructure Characteristics**

As part of the agreement with the city of Eden Prairie the MAC will not take action to increase the length of the runways at FCM in excess of the length contemplated in the proposed expansion, unless required by state law, provided that MAC will not initiate, promote, or otherwise support enactment of such law.

In addition, MAC will not take action to increase the runway weight-bearing capacity at the airport, unless required to do so by state law, provided that MAC will not initiate, promote, or otherwise support enactment of such law.

### **2.2 Nature of Airport Use**

The Agreement between the City of Eden Prairie and the MAC places guidelines on the present and future use of the airport relative to the specific nature of operations. These provisions focus on the exclusion of airport air carrier certification and major cargo operations/facilities.

### *2.2.1 Scheduled Air Service Operations*

The operation of major scheduled air carriers requires the airport to comply with Federal Aviation Regulation Part 139. Upon Part 139 certification, an airport is available to major air carriers for operation. As part of the agreement, MAC will not apply for Part 139 certification at FCM. This will ensure that FCM will not be considered to provide facilities for air carrier operations in the future.

### *2.2.2 Major Cargo Operations*

Given the provisions in the agreement regarding airport development and infrastructure the MAC has represented that major cargo operations will not be conducted at FCM.

A major cargo operator/operation is defined as the following:

*“The operation of a business engaged principally in the transportation of cargo, whose operations at FCM would involve the operation of aircraft weighing more than 60,000 pounds and/or whose facilities at the airport would exceed 80,000 square feet in size.”*

## **3. Signed Agreement with Airport Tenants**

The voluntary nature of some of the elements contained in the agreement require due diligence on behalf of the MAC in communicating the provisions of the agreement to airport users and the effective and efficient implementation of the elements on behalf of the operators. The success of such a program is predicated on a commitment on behalf of the airport operators to follow the provision of the agreement.

### **3.1 Letter of Intent**

MAC will develop and distribute a letter of intent to all tenants at the airport including Fixed Based Operators, airport users with based aircraft at FCM and other airport users. A draft version of a letter of intent is provided in **Appendix A**, page A-1. The letter will request a signature by the recipient demonstrating their required adherence to MAC Ordinance 97 and voluntary commitment to adhere to other limits on aircraft operations at FCM. The city of Eden Prairie will be provided copies of all signed letters of agreement, in addition the documentation on any letter of agreement cancellations.

#### *3.1.1 MAC Ordinance 97*

The letter of intent will acknowledge that the users will adhere to Ordinance 97. Specifically, users will not conduct maintenance run-ups at the airport between the hours of 10:00 p.m. and 7:00 a.m., nor operate an aircraft into, or out of, FCM that has a certified max gross takeoff weight of 60,000 pounds or greater, dual wheel.

Page B-1 in **Appendix B** provides a draft aircraft maintenance run-up field rule and an after hour run-up request form.

### *3.1.2 Voluntary Nighttime Operations Restrictions*

The letter of intent will voluntarily commit the users to not operate at the airport between the hours of 10:00 p.m. and 6:00 a.m. In addition, pilots will be granted the opportunity to conduct night flights between 10:00 p.m. and 12:00 a.m. for nighttime flight currency purposes only.

### *3.1.3 Voluntary Stage II Operations Restrictions*

The letter of intent will voluntarily commit the users to not operate Stage II aircraft at FCM. Furthermore, the users will be notified in the letter that if the total number of Stage II aircraft operations at FCM exceeds seventy-five (75) in any rolling twelve-month period, a process to implement a mandatory ban on Stage II aircraft at FCM will be initiated.

### *3.1.4 Departure and Arrival Procedures at the Airport*

The letter of intent will voluntarily commit the users to comply with any established arrival or departure paths or procedures at the airport as outlined in the voluntary FCM Noise Abatement Plan. Specifically, aircraft operating in the pattern will utilize the south parallel runway (Runway 28L/10R) and execute turns to the south of the airport as soon as operationally practical, and/or assigned by the FAA. Turbine aircraft departure operations will utilize the south parallel runway (Runway 28L/10R) and execute turns to the south of the airport as soon as operationally practical, and/or assigned by the FAA. Adherence to the southbound turn procedure applies to all operations when the tower is closed, especially between the hours of 6:00 a.m. and 7:00 a.m. All turbine aircraft shall use the National Business Aviation Association Noise Abatement Procedures when arriving to or departing the airport. Arrival operations on runways equipped with a visual approach 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. In addition, airport users will voluntarily commit to comply with future procedures that may be applied or amended at the discretion of the MAC for the purposes of noise abatement.

### *3.1.5 Due Diligence to Attend Annual Pilot Briefing*

The letter of intent will voluntarily commit the users to attend a MAC sponsored pilot briefing and the annual FCM pilot Controller Forum. A commitment will be made on behalf of MAC to notify the users of such meeting and event times and locations.

## **4. Instruments for Monitoring Compliance**

Successfully managing the implementation of the operational provisions in the agreement requires an ongoing mechanism for assessing and assuring compliance relative to the procedures. To assess procedural compliance MAC will utilize three main sources.

#### **4.1 MAC Employees**

All MAC staff working at FCM will be instructed on the airport/aircraft operations provisions included in the agreement. MAC staff will be provided with a procedure for reporting violations that will include reporting the occurrence to the airport manager, at which time the manager will consult with the manager of Aviation Noise and Satellite Programs to investigate the observation further via the methods outlined in Section 6.2 of this document. Page B-4 of **Appendix B** provides a summary of the violation reporting procedures and violation report form.

#### **4.2 MAC Airport Noise and Operations Monitoring System (ANOMS)**

The MAC owns and operates a computer-based system called the Airport Noise and Operations Monitoring System (ANOMS). In addition to monitoring noise levels around MSP, the system gathers aircraft and flight track data from the radar located on the field at MSP. This includes operations in and out of FCM.

On a weekly basis MAC Aviation Noise and Satellite Programs staff will generate a Stage 2 aircraft report for the preceding week, highlighting aircraft type and the number of Stage 2 operations. Upon completion of the weekly report it will be published as outlined in Section 5.1 of this document. MAC noise staff will maintain a count of the total number of Stage II operations in the preceding rolling twelve months. At the end of each quarter the operations data will be summarized into a quarterly report and published as outlined in Section 5.1 of this document.

#### **4.3 Eden Prairie Residents**

The residents living around the airport provide a good source for the observation of many activities that occur at the airport that may be contrary to the operational procedures established as part of the agreement. Resident comments will be considered as part of the effort to assess compliance at the airport and are further addressed in Section 6 of this document. Residents that wish to express a concern with an operation at the airport should contact the MAC via the Noise Complaint and Information Hotline at 612-726-9411. A special option will be provided on the line for residents living around FCM to leave their comments on an answering machine. MAC Aviation Noise and Satellite Program staff will retrieve the messages and follow-up on the observation made by the resident. The resident will receive a return phone call providing the findings of the MAC staff inquiry and any associated action that has been taken, if action is required per the Agreement.

### **5. Operations Monitoring Reporting**

As outlined in Section 4.2, three ANOMS operation reports will be generated for FCM to assess Stage II operations at the airport. These include a weekly and quarterly report that will summarize the Stage 2 aircraft types and the associated number of operations. MAC staff will maintain a count of the total number of Stage II operations occurring during the

preceding rolling twelve-month period. This will include the date and time of any known Stage II operation that takes place at FCM.

The effective and efficient communication of the mentioned reports is as important as their development. As such, MAC Aviation Noise and Satellite Program staff will utilize the following approach to communicate the data to the City of Eden Prairie and its residents.

### **5.1 Weekly and Quarterly Operations Reports on the [www.macnoise.com](http://www.macnoise.com) Website**

The weekly and quarterly reports mentioned previously will be published on the MAC Noise Program Website at [www.macnoise.com](http://www.macnoise.com). An e-mail will be sent after each of the reports is published on the website notifying the designated representative from the City of Eden Prairie that the report is available on the site. The weekly and quarterly report format is provided in **Appendix B**, pages B-7 and B-9.

### **5.2 Develop an Interactive FCM Aircraft Fleet Mix Reporting Application on the [www.macnoise.com](http://www.macnoise.com) website.**

MAC Aviation Noise and Satellite Program staff will develop an interactive Internet reporting application on the MAC Noise Program Website ([www.macnoise.com](http://www.macnoise.com)) that allows users to enter a date/time range and generate a report that provides aircraft names and pictures, a total count of operations and the Stage designation for each of the aircraft in the timeframe specified. A picture of the application is provided in **Appendix B**, pages B-16 and B-17.

### **5.3 FCM Aircraft Operations Replay Mapping Application on the [www.macnoise.com](http://www.macnoise.com) website**

An airspace use replay application is now available on the [www.macnoise.com](http://www.macnoise.com) website. This application allows visitors to the site to replay FCM aircraft operations on a map. A user can enter a timeframe to evaluate and observe the operations on the screen while at the same time gathering information about a specific operation by clicking on the aircraft, as it moves across the screen, providing aircraft type and Stage information. As part of the agreement, this application is now available and will continue to be supported and maintained by MAC Noise Program staff in order to provide this information to interested parties around FCM. A picture of the application is provided in **Appendix B**, pages B-18 and B-19.

### **5.4 Monthly Reporting of a Rolling Year Stage II Operations Summary**

On a monthly basis MAC Aviation Noise and Satellite Program staff will prepare a count of the number of Stage II operations at FCM for the preceding 12 months. The report will include the aircraft types, time of day and date of each of the Stage II operations at the airport. Upon completion, MAC staff will e-mail the report to the City of Eden Prairie's



designated representative. The monthly report format is provided in **Appendix B**, page B-11.

## **6. Complaint Investigation**

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. A complaint form is provided in **Appendix B**, page B-13. The nature of a violation will be determined by evaluating the ANOMS flight data for the time period of interest to verify the claims made by the complainant. If a violation is determined to have occurred, actions outlined in Section 7 of this document will be taken. Copies of complaints received by MAC, and any related responses, will be provided to the designated City of Eden Prairie representative.

### **6.1 Complaints Invoking Investigation**

Any complaint that can be verified with MAC staff on duty at the airport during the timeframe in question, ANOMS operations data or the FAA will be investigated further.

### **6.2 Methods of Investigation**

The MAC's ANOMS, staff and FAA personnel will constitute the primary instruments for follow-up investigation relative to any complaint filed for FCM.

#### *6.2.1 ANOMS*

MAC's ANOMS will be the primary evaluation tool relative to assessing the credible nature of complaints made regarding airport user violations.

#### *6.2.2 MAC Staff and FAA*

If the ANOMS evaluation is inconclusive, MAC and FAA staff on duty at the time the event was reported will be interviewed.

## **7. Violation Actions**

MAC will pursue specific actions when violations are determined to have occurred by a specific operator.

### **7.1 Communication of Specific Violation Information to Violator**

MAC will send a letter to the owner/operator (in cases where contact information is accessible) notifying them that they have operated in a manner inconsistent with the voluntary restraints on nighttime aircraft operations, early morning departures and operations by Stage II aircraft. Furthermore the letter will state that MAC's policy is to voluntarily limit inconsistent operations and request the owner/operator provide a

detailed response describing the reason for the operation in question. In the case of Ordinance 97 violations, MAC will coordinate and cooperate with the City of Eden Prairie in the prosecution of Ordinance violations.

A draft violation letter is included in **Appendix B**, page B-23.

## **7.2 Violation Record Keeping**

MAC's Airport Manager at FCM will keep a record of all violation correspondence and provide copies to the designated City of Eden Prairie representative.

## **7.3 Commencement of Part 161 Study Efforts**

If it is determined in the Rolling Year Stage II Operations Summary that Stage II operations at FCM exceed 75 operations in any rolling 12-month period, a Part 161 study will be pursued (as outlined in the original agreement) to ban Stage II aircraft operations at FCM.

# **8. Residential Noise Testing**

As part of the Agreement, MAC and the City of Eden Prairie will select a representative sample of homes for noise monitoring that are within the Proposed Action 2010 60 dB DNL contour around FCM. The sample homes will come from the list of the homes (by address) to be monitored as provided in the original agreement document. All noise testing, measurement, and result certification will be conducted by a minimum of one representative from the MAC and the City of Eden Prairie.

## **8.1 Purpose of the Testing**

The following test procedure is designed to determine the Noise Level Reduction (NLR) of a residential structure under field conditions. Because of the high degree of variability in dwelling styles and test conditions, the data obtained during these test procedures can be considered accurate, with some degree of variability. This test procedure utilizes a loudspeaker to emit a test signal of pink noise in the outdoor environment. The noise level is then measured both inside and outside the dwelling and the NLR is calculated. The American Society for Testing and Materials (ASTM) E 966-92 Test Method is the basis for the development of this test procedure.

If a home is determined to provide less than a 20 dB exterior to interior noise level reduction, the house will be provided treatment to increase the noise attenuation properties of the home to the 20 dB attenuation level. If noise insulation is required, MAC will consult with the City of Eden Prairie to establish the exact nature of the treatment. MAC shall provide testing and sound insulation for the selected homes regardless of whether funding is provided by the federal government.

Testing and insulation will not be provided to homes that have had building permits issued on or after December 4, 2001.

The monitoring documentation forms are provided in **Appendix B**, page B-25.

## **8.2 Acoustic Definitions**

A-weighted: "A-weighted" means a specific weighting of the sound pressure level for the purpose of determining the human response to sound. The specific weighting characteristics and tolerances are those given in American National Standards Institute S1.4-1983, section 5.1.

Hertz (Hz): Frequency measured in cycles per second.

Decibel: Unit of sound pressure level, abbreviated as dB.

dB(A): "dB(A)" means a unit of sound level expressed in decibels (dB) and A-weighted.

Sound pressure level: "Sound pressure level," in decibels, means 20 times the logarithm to the base 10 of the ratio of the pressure to the reference pressure. The reference pressure shall be 20 micropascals.

Noise Level Reduction (NLR): The difference between the exterior A-weighted noise level as compared to the interior noise level of a structure. The NLR is one value and not expressed in terms of octave bands.

Pink Noise: Noise that has a continuous frequency spectrum and a constant power within a bandwidth proportional to the center frequency of the band.

## **8.3 Testing Equipment**

Noise measuring equipment will include sound level measuring devices, which must meet Type O, or 1 specification under American National Standards Institute S1.4-1983.

A loudspeaker with a directional characteristic, which at 2000 Hz the free-field radiated sound pressure, up to an angle of 45 degrees, shall not be more than 6 dB different from the on-axis sound pressure.

The test signal to be emitted through the loudspeaker should be Pink Noise.

## **8.4 Measurement Methodologies**

Calibration. All sound level measuring devices must, at a minimum, be externally field-calibrated before and after monitoring using a calibration device of known frequency and sound pressure level.

Measurements must be made at least three feet off the ground or surface and away from natural or artificial structures, which would prevent an accurate measurement.

Measurements must be made using the A-weighting and fast response characteristics of the sound measuring device as specified in American National Standards Institute S1.4-1983.

Measurements must not be made in sustained winds or in precipitation that results in a difference of less than ten decibels between the background noise level and the noise source being measured.

Measurements must be made using a microphone that is protected from ambient conditions that would prevent an accurate measurement.

### **8.5 Loudspeaker and Measurement Location**

The exterior sound source shall be located a minimum of 10 meters (33 feet), at a 45 degree angle of incidence, from the façade of the structure.

The loudspeaker should produce an A-weighted decibel level, in the interior of the structure, of 10 dBA above the ambient interior noise level.

To measure the exterior sound pressure level near the structure an average of five or more measurements at random distances from the structure, at random distances across the structure, and at varying heights across the structure will be taken to meet the requirements of ASTM Designation E 966-92, 12.3. The random distances should be in the range of more than 1.2 meters (4 feet) and less than 2.5 meters (8 feet) from the structure. The random positions and random heights should be within the left, right, upper, and lower limits of the test structure.

To measure the interior sound pressure level, a minimum number of three microphone positions are required. No microphone shall be closer than 1 meter (39 inches) to the inside surface of the exterior wall or to any other boundary or extended surface. The minimum separation of microphone positions should be one-half wavelength or 1 meter (39 inches), whichever is less. Alternatively a single moving microphone may be used that moves continuously along a traverse or circular path while satisfying the above conditions.

### **8.6 Data Documentation**

A summary sheet for all sound level measurements shall be completed and signed by the person making the measurements. At a minimum, the summary sheet shall include:

- A. Date;
- B. Time;
- C. Location;
- D. Noise source;

- E. Wind speed and direction;
- F. Temperature;
- G. Make, model, and serial number of measuring equipment;
- H. Field calibration results;
- I. Monitored levels; and
- J. Site sketch indicating noise source location, measurement location, directions, distances, and obstructions.

### **8.7 Calculation of a Home's Noise Level Reduction**

The NLR of the structure is calculated by subtracting the interior sound pressure level from the exterior sound pressure level.

## **9. Outreach and Education Program**

As mentioned previously in this document, one of the fundamental elements contributing to the success of voluntary noise abatement programs is the action on behalf of airport users to implement the procedure in the operation of their aircraft. As such, outreach and education of the airport user community is critical.

MAC will also make presentations to the Eden Prairie City Council, as requested, concerning implementation and enforcement of the FCM operational provisions. MAC will also facilitate the City of Eden Prairie's access to the airport by accompanying city officials onto airport property to visit facilities to which MAC has access.

### **9.1 Annual Pilot Briefings by MAC Noise Program Staff**

MAC Aviation Noise and Satellite Program staff will hold an annual pilot briefing on two separate dates throughout the year. The briefing will provide a comprehensive review of noise issues around FCM and an in-depth review of the operational procedures included in the voluntary program established by the agreement between the MAC and the City of Eden Prairie. Additionally, an annual award will be presented at the briefing to an airport user who has demonstrated a high level of compliance with the voluntary measures and thus contributed to the ongoing success of the program. Exemplary compliance will be determined base on the minimal number of violations and documented programs/efforts on behalf of an airport operator to ensure compliance in their day-to-day operation of aircraft. A copy of the slideshow is provided in **Appendix B**, page B-28.

### **9.2 FCM Pilot Airport Noise Issue/Operation Information Page on the Internet at [www.macnoise.com](http://www.macnoise.com)**

MAC Aviation Noise and Satellite Program staff will develop and maintain comprehensive web pages on the [www.macnoise.com](http://www.macnoise.com) website devoted to pilot information regarding operating in and out of FCM in a manner consistent with the provisions contained in the MAC and City of Eden Prairie agreement. Pictures of the web pages are provided in **Appendix B**, pages B-20, B-21 and B-22.

### **9.3 Notification in Aviation Publications**

MAC will publish and maintain information regarding all operational elements of the agreement in the following publications: Airport Facility Directory, Department of Defense Flight Information Manual, Jeppesen Information Manual and relevant MAC publications (i.e. FCM brochure, airport operations manual, Noise Program Website FCM pilot page, etc.). The information provided will include the MAC Noise Program website address where the FCM Pilot Information web page will be accessible.

# **APPENDIX A**

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## **LETTER OF INTENT**

---

[DATE]

[Contact Person]  
[Title]  
[Company Name]  
[Address]

Dear [Contact Person]:

The Metropolitan Airports Commission (“MAC”) is pleased to submit this Letter of Intent regarding the Airport User’s commitment to the provisions outlined herein.

The parties to this Letter of Intent are undersigned as listed below: Airport Users and the MAC. MAC is the operator of Flying Cloud Airport (“FCM”) and administers noise abatement policies, programs and procedures at FCM. Airport Users include but are not limited to all airport tenants, Fixed Based Operators, airport users with based aircraft at FCM and other transient aircraft operations.

This Letter of Intent is intended to execute the Implementation Plan set forth by the MAC to comply with the provisions of Article 3 of the Final Agreement Concerning Flying Cloud Airport and MAC Ordinance No. 97 (“Final Agreement”).

Signature by the recipient commits the Airport User to voluntarily adhere to the following limits on aircraft operations at FCM and to actively participate in implementing and monitoring compliance as contained in Article 3 of the Final Agreement. (The provisions of Ordinance 97 are mandatory and apply to any aircraft operator flying at FCM, regardless of whether or not the operator has signed this letter of agreement. Ordinance 97 violators will be prosecuted.):

## 1.0 MAC ORDINANCE 97

Airport Users are obligated to adhere to the provisions of Ordinance 97. Specifically, Airport Users are prohibited from:

- 1.1 Conducting maintenance run-ups at FCM between the hours of 10:00 p.m. and 7:00 a.m.
- 1.2 Operating an aircraft into, or out of, FCM that has a certified max gross takeoff weight of 60,000 pounds or greater, dual wheel.

Ordinance 97 contains the following exception:

The terms of this Ordinance shall not apply in the case of an emergency and shall not apply to aircraft owned and operated by the U.S. Government. The prohibition [on maintenance run-ups] does not apply to unscheduled maintenance run-ups performed between 10:00 p.m. and 7:00 a.m. where strict compliance with the prohibition would not allow sufficient time to permit the aircraft to depart on schedule the following morning. **Any aircraft owner or operator claiming to qualify for an exception, excluding the owner or operator of a U.S. Government aircraft, must notify the Commission within 24 hours by submitting the form designated by the Commission’s Director of Reliever Airports or the Director’s designated representative for this purpose.** A copy of this form is attached to this letter as Exhibit 1.

## 2.0 VOLUNTARY NIGHTTIME OPERATIONS RESTRICTIONS

Airport Users will voluntarily limit aircraft takeoff or landing operations at the airport between the hours of 10:00 p.m. and 6:00 a.m. This voluntary commitment does not apply to operations conducted



between 10:00 p.m. and 12:00 a.m. for the purposes of nighttime flight currency training requirements prescribed in 14 C.F.R. Part 91.

### **3.0 VOLUNTARY STAGE II OPERATIONS RESTRICTIONS**

Airport User voluntarily commits not to operate Stage II aircraft at FCM unless it cancels this Letter of Intent. Airport User understands that in the event that the number of Stage II aircraft departures at FCM exceeds seventy-five (75) in any rolling twelve-month period, MAC will initiate the necessary procedures to implement a mandatory ban on Stage II aircraft.

### **4.0 DEPARTURE AND ARRIVAL PROCEDURES AT FCM**

Airport User voluntarily commits to comply with the established noise abatement provisions outlined in the FCM Noise Abatement Plan. Specifically, aircraft operating in the pattern will utilize the south parallel runway (Runway 28L/10R) and execute turns to the south of the airport as soon as operationally practical, and/or assigned by the FAA. Turbine aircraft departure operations will utilize the south parallel runway (Runway 28L/10R) and execute turns to the south of the airport as soon as operationally practical, and/or assigned by the FAA. Adherence to this southbound turn procedure applies to all operations when the tower is closed, especially between the hours of 6:00 a.m. and 7:00 a.m. All turbine aircraft shall use the National Business Aviation Association Noise Abatement Procedures when arriving to or departing the airport. Arrival operations on runways equipped with a visual approach 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. In addition, Airport User voluntarily commits to comply with future procedures that may be applied or amended at the discretion of the MAC for the purposes of noise abatement.

### **5.0 DUE DILIGENCE TO ATTEND ANNUAL PILOT BRIEFING**

Airport User voluntarily commits to use due diligence to attend an annual MAC sponsored pilot briefing and the annual FCM pilot Controller Forum. MAC will use due diligence to ensure proper Airport User notification of such event times and locations.

### **6.0 CANCELLATION**

Either party may cancel this Letter of Intent on 30 days advance written notice.

Except with respect to the references to Ordinance 97, this Letter of Intent is not intended to create a legally binding commitment.

Sincerely,

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METROPOLITAN AIRPORTS COMMISSION

Accepted this \_\_\_\_ day of \_\_\_\_\_, [2003]

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[FCM User's Name]  
[Address]  
[FCM Lease Number (if applicable)]

METROPOLITAN AIRPORTS COMMISSION  
FLYING CLOUD AIRPORT  
EDEN PRAIRIE, MN

AFTER-HOURS RUN-UP REPORTING FORM

Please fax this form to 763-537-8623

Date:

Aircraft Number:

Aircraft Type:

Organization Name:

Run-up Start Time:

Run-up End Time:

Reporting Employee:

Reason for after Hour Run-Up:

**Notice:** Maintenance run-ups at FCM between the hours of 10:00 p.m. and 7:00 a.m. CST. are prohibited by MAC Ordinance 97. The prohibition [on maintenance run-ups] does not apply to unscheduled maintenance run-ups performed between 10:00 p.m. and 7:00 a.m. where strict compliance with the prohibition would not allow sufficient time to permit the aircraft to depart on schedule the following morning. Any aircraft owner or operator claiming to qualify for an exception, excluding the owner or operator of a U.S. Government aircraft, must notify the Commission within 24 hours by submitting the form designated by the Commission's Director of Reliever Airports or the Director's designated representative for this purpose. In this case, maintenance run-ups during the quiet hours must be pre-approved by the Airport Manager. The Airport Manager can be reached via pager at 612-650-9893. If the Airport Manager cannot be reached within 30 minutes of the request, this facsimile form shall be sent to the Airport Manager's office at (763) 537-8623.

**APPENDIX B**

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**SPECIFIC PROGRAM ELEMENTS**

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Maintenance Run-Up Field Rule  
&  
After Hour Run-Up Request Form

FLYING CLOUD AIRPORT

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Metropolitan Airports Commission  
Aviation Noise & Satellite Programs

METROPOLITAN AIRPORTS COMMISSION

**FLYING CLOUD AIRPORT  
EDEN PRAIRIE, MN**

OFFICE OF THE DIRECTOR OF RELIEVER AIRPORTS

February 28, 2003

NOTICE TO: FLYING CLOUD AIRPORT USERS

FROM: GARY SCHMIDT, DIRECTOR OF RELIEVER AIRPORTS

SUBJECT: **FIELD RULE – AIRCRAFT MAINTENANCE RUN-UP PROCEDURES**

The Metropolitan Airports Commission in consideration of aircraft maintenance requirements and the desire to reduce aircraft noise has revised its run-up procedures FIELD RULE.

The following new rules for aircraft engine maintenance run-ups are effective this date, February 28, 2003 and supersede all previous Field Rules regarding this issue.

1. Documentation of all maintenance run-ups must be maintained by the organization responsible for the operation and such information will be made available to the Metropolitan Airports Commission immediately upon request with the following information:
  - Date
  - Type of aircraft and tail number
  - Organization name
  - Start time – End Time
  - Reason for run-up
2. The approved aircraft run-up hours will be from 7:00 a.m. – 10:00 p.m. CST. Except for the provision in paragraph #5, maintenance run-ups will not be authorized during quiet hours, 10:00 p.m. – 7:00 a.m. CST.
3. Radio contact with air traffic ground control (121.7) is required for approval of movement to/from a designated run-up area during tower hours. Aircraft shall monitor the air traffic ground control frequency at all times during the run-up.
4. In consideration of the noise impact on our airport neighbors, maintenance run-ups are restricted to the following locations, as specified below. These locations are selected to minimize the amount of noise projected towards adjacent residential areas.
  - When the active Runways are 28L, 28R 10L or 10R, the intersection of Runway 18/36 and Taxiway Delta 2 or Echo 2.
  - When the active Runway is 18/36, the approach end of Runway 28R and Taxiway Alpha 2.
  - Aircraft will be parked on a heading of 360 to 30 degrees whenever practical.
5. Absolutely no non-emergency maintenance run-ups will be authorized between the hours of 10:00 p.m. and 7:00 a.m. CST. In the case of an emergency, maintenance run-ups during these quiet hours must be pre-approved by the Airport Manager. The Airport Manager can be reached via pager at 612-650-9893. If the Airport Manager cannot be reached within 30 minutes of the request, a facsimile shall be sent to the Airport Manager's office at (763) 537-8623 with the following information:
  - Type of aircraft and tail number
  - Organization name
  - Start time – End Time
  - Reason for after hour run-up
  - Name of supervisor or manager making request

This FIELD RULE contains provisions for effective aircraft maintenance run-ups by minimizing the noise impacts to surrounding residential neighborhoods and maintaining airport safety. It is essential each commercial operator emphasize to their aircraft maintenance employees the need to comply with the engine run-up FIELD RULE.

---

Gary Schmidt, MAC Director of Reliever Airports

METROPOLITAN AIRPORTS COMMISSION  
FLYING CLOUD AIRPORT  
EDEN PRAIRIE, MN

AFTER-HOURS RUN-UP REPORTING FORM

Please fax this form to 763-537-8623

Date:

Aircraft Number:

Aircraft Type:

Organization Name:

Run-up Start Time:

Run-up End Time:

Reporting Employee:

Reason for after Hour Run-Up:

**Notice:** Maintenance run-ups at FCM between the hours of 10:00 p.m. and 7:00 a.m. CST. are prohibited by MAC Ordinance 97. The prohibition [on maintenance run-ups] does not apply to unscheduled maintenance run-ups performed between 10:00 p.m. and 7:00 a.m. where strict compliance with the prohibition would not allow sufficient time to permit the aircraft to depart on schedule the following morning. Any aircraft owner or operator claiming to qualify for an exception, excluding the owner or operator of a U.S. Government aircraft, must notify the Commission within 24 hours by submitting the form designated by the Commission's Director of Reliever Airports or the Director's designated representative for this purpose. In this case, maintenance run-ups during the quiet hours must be pre-approved by the Airport Manager. The Airport Manager can be reached via pager at 612-650-9893. If the Airport Manager cannot be reached within 30 minutes of the request, this facsimile form shall be sent to the Airport Manager's office at (763) 537-8623.

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Violation Reporting Procedures  
&  
Violation Report Form

FLYING CLOUD AIRPORT

---

Metropolitan Airports Commission  
Aviation Noise & Satellite Programs

**METROPOLITAN AIRPORTS COMMISSION  
FLYING CLOUD AIRPORT  
EDEN PRAIRIE, MN  
VIOLATION REPORTING PROCEDURES**

**Background**

**MAC Ordinance No. 97**

MAC Ordinance No. 97 has been implemented and replaces the previous MAC Ordinance No. 51. The new Ordinance prohibits aircraft maintenance run-ups at Flying Cloud Airport between the hours of 10:00 p.m. and 7:00 a.m. and restricts the use of the airport to only aircraft weighing less than 60,000 pounds certified max gross takeoff weight, dual wheel. In addition to MAC Ordinance No. 97, MAC and the city of Eden Prairie negotiated an agreement to be implemented with the new Ordinance. The agreement outlines several actions on behalf of MAC that are intended to protect residents around FCM from excessive airport noise impacts.

**Voluntary Nighttime Operations Restrictions**

Users voluntarily commit to not operate at the airport between the hours of 10:00 p.m. and 6:00 a.m. Pilots are granted the opportunity to conduct night flights between 10:00 p.m. and 12:00 a.m. for nighttime flight currency purposes only.

**Voluntary Stage II Aircraft Operations Restrictions**

Users voluntarily commit to not operate Stage II aircraft at FCM. Furthermore, if the total number of Stage II aircraft operations exceeds seventy-five (75) in any rolling twelve-month period, a process to implement a mandatory ban on Stage II aircraft at FCM will be initiated.

**Departure and Arrival Procedures at the Airport**

Users voluntarily commit to comply with any established arrival or departure paths or procedure at the airport. Specifically, during the hours of 6:00 a.m. and 7:00 a.m., departure operations should occur on the south parallel runway with departure turns south over the river valley.

**Violations Reporting Procedure**

All MAC staff working at FCM and employees or personnel working at or on the premises of FCM shall report any suspected violations of MAC Ordinance No. 97, or any violations of the voluntary operational restrictions, to the FCM Airport Manager. The FCM Airport Manager can be reached at:

Metropolitan Airports Commission  
Joseph Harris, Airport Manager  
6040 28<sup>th</sup> Avenues South  
Minneapolis, MN 55450

E-mail: [jharris@mspmac.org](mailto:jharris@mspmac.org)  
Phone: (763) 537-2058  
Pager: (612) 650-9893  
Fax: (763) 537-8623

All personnel reporting a violation are asked to provide as much information as possible including date of violation, time of violation, a detailed description of the violation, aircraft type/number if known and any other relevant information that will assist in the subsequent investigation.



**ORDINANCE NO. 97 AND OPERATIONS RESTRICTIONS  
VIOLATION REPORTING FORM**

**Please fax this form to 763-537-8623**

**Date:**

**Aircraft Number:**

**Aircraft Type:**

**Organization Name:**

**Time of Violation:**

**Reporting Employee:**

**Detailed Description of Violation:**

**Notice:** Please include all relevant information that will assist in the follow-up investigation.

January 1-7, 200x

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## Weekly Stage 2 Aircraft Operations Report

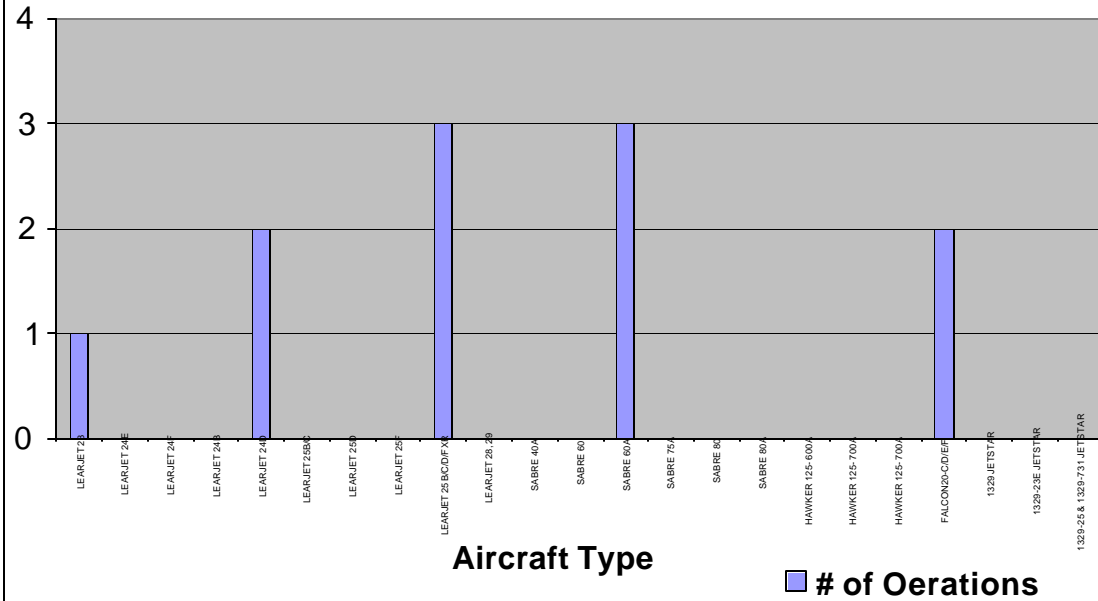
FLYING CLOUD AIRPORT

---

Metropolitan Airports Commission  
Aviation Noise & Satellite Programs

# DRAFT Example

## FCM Stage 2 Operations January 1-7, 200x



Aircraft Type	# of Operations	Date of Operation	Time of Operation
LEARJET 23	1	1/1/200x	3:30 pm
LEARJET 24E	0	1/1/200x	3:30 pm
LEARJET 24F	0	1/1/200x	3:30 pm
LEARJET 24B	0	1/1/200x	3:30 pm
LEARJET 24D	2	1/1/200x	3:30 pm
LEARJET 25B/C	0	1/1/200x	3:30 pm
LEARJET 25D	0	1/1/200x	3:30 pm
LEARJET 25F	0	1/1/200x	3:30 pm
LEARJET 25 B/C/D/F XR	3	1/1/200x	3:30 pm
LEARJET 28, 29	0	1/1/200x	3:30 pm
SABRE 40A	0	1/1/200x	3:30 pm
SABRE 60	0	1/1/200x	3:30 pm
SABRE 60A	3	1/1/200x	3:30 pm
SABRE 75A	0	1/1/200x	3:30 pm
SABRE 80	0	1/1/200x	3:30 pm
SABRE 80A	0	1/1/200x	3:30 pm
HAWKER 125- 600A	0	1/1/200x	3:30 pm
HAWKER 125- 700A	0	1/1/200x	3:30 pm
HAWKER 125- 700A	0	1/1/200x	3:30 pm
FALCON20-C/D/E/F	2	1/1/200x	3:30 pm
1329 JETSTAR	0	1/1/200x	3:30 pm
1329-23E JETSTAR	0	1/1/200x	3:30 pm

1<sup>st</sup> Quarter 200x

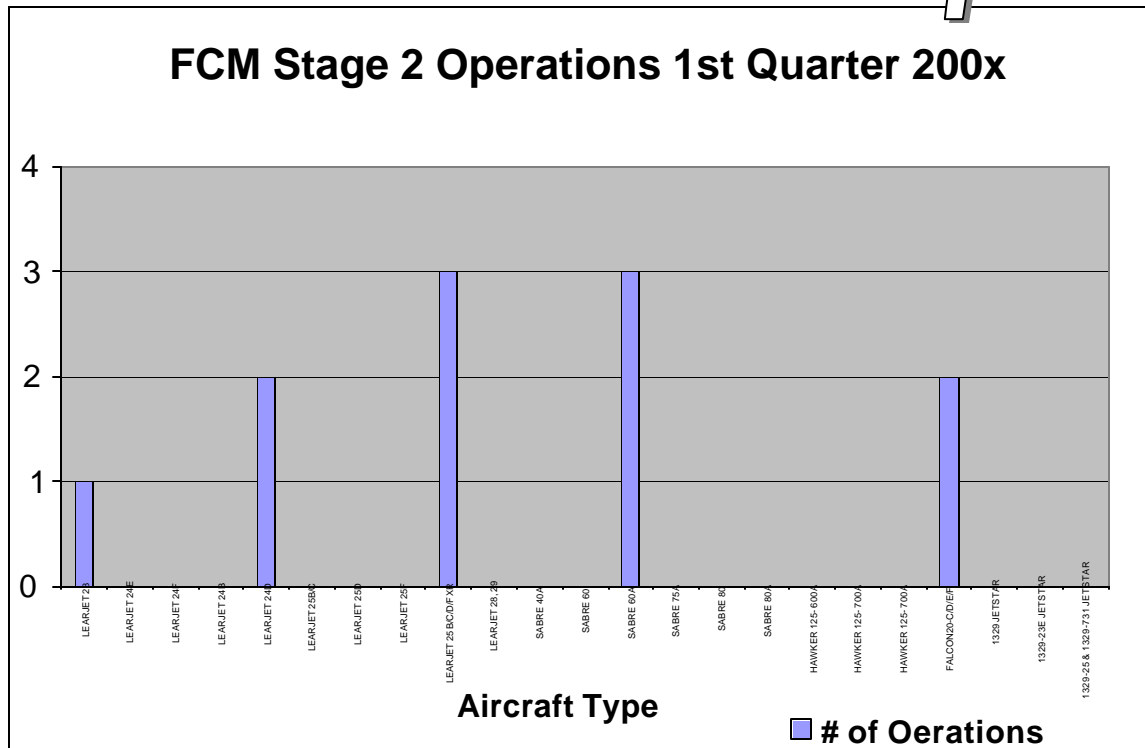
---

## Quarterly Stage 2 Aircraft Operations Report

FLYING CLOUD AIRPORT

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# DRAFT Example



Aircraft Type	# of Operations	Date of Operation	Time of Operation
LEARJET 23	1	1/1/200x	3:30 pm
LEARJET 24E	0	1/1/200x	3:30 pm
LEARJET 24F	0	1/1/200x	3:30 pm
LEARJET 24B	0	1/1/200x	3:30 pm
LEARJET 24D	2	1/1/200x	3:30 pm
LEARJET 25B/C	0	1/1/200x	3:30 pm
LEARJET 25D	0	1/1/200x	3:30 pm
LEARJET 25F	0	1/1/200x	3:30 pm
LEARJET 25 B/C/D/F XR	3	1/1/200x	3:30 pm
LEARJET 28, 29	0	1/1/200x	3:30 pm
SABRE 40A	0	1/1/200x	3:30 pm
SABRE 60	0	1/1/200x	3:30 pm
SABRE 60A	3	1/1/200x	3:30 pm
SABRE 75A	0	1/1/200x	3:30 pm
SABRE 80	0	1/1/200x	3:30 pm
SABRE 80A	0	1/1/200x	3:30 pm
HAWKER 125- 600A	0	1/1/200x	3:30 pm
HAWKER 125- 700A	0	1/1/200x	3:30 pm
HAWKER 125- 700A	0	1/1/200x	3:30 pm
FALCON20-C/D/E/F	2	1/1/200x	3:30 pm
1329 JETSTAR	0	1/1/200x	3:30 pm
1329-23E JETSTAR	0	1/1/200x	3:30 pm

January 200x – December 200x

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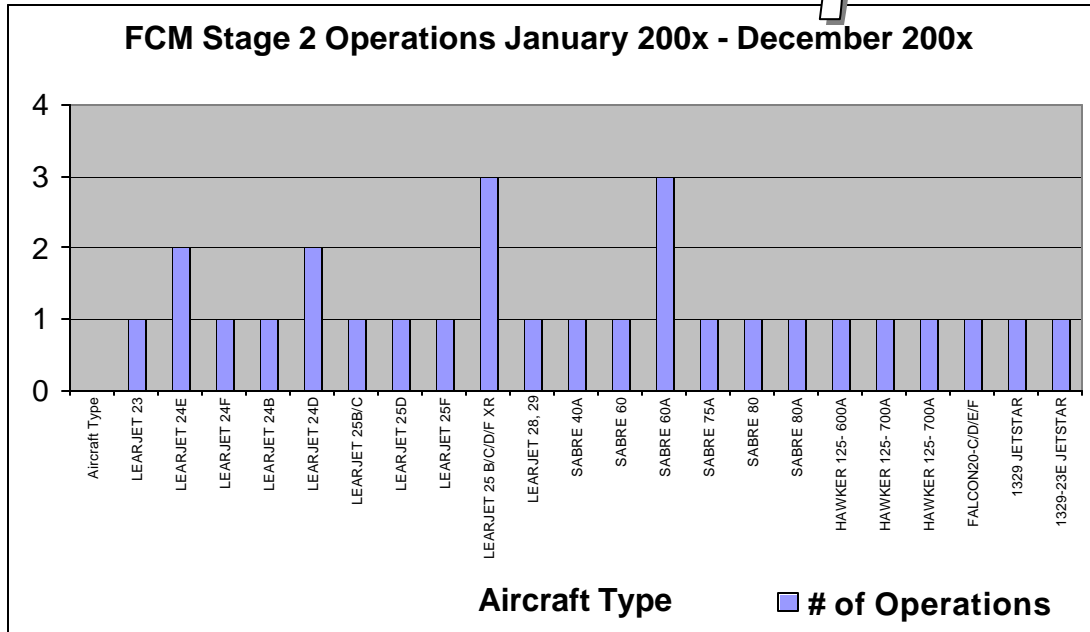
Stage 2 Aircraft Operations Report for  
Preceding Twelve Months

FLYING CLOUD AIRPORT

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Metropolitan Airports Commission  
Aviation Noise & Satellite Programs

# DRAFT Example



<b>Aircraft Type</b>	<b># of Operations</b>	<b>Date of Operation</b>	<b>Time of Operation</b>
LEARJET 23	1	1/1/200x	3:30 pm
LEARJET 24E	2	1/1/200x	3:30 pm
LEARJET 24F	1	1/1/200x	3:30 pm
LEARJET 24B	1	1/1/200x	3:30 pm
LEARJET 24D	2	1/1/200x	3:30 pm
LEARJET 25B/C	1	1/1/200x	3:30 pm
LEARJET 25D	1	1/1/200x	3:30 pm
LEARJET 25F	1	1/1/200x	3:30 pm
LEARJET 25 B/C/D/F XR	3	1/1/200x	3:30 pm
LEARJET 28, 29	1	1/1/200x	3:30 pm
SABRE 40A	1	1/1/200x	3:30 pm
SABRE 60	1	1/1/200x	3:30 pm
SABRE 60A	3	1/1/200x	3:30 pm
SABRE 75A	1	1/1/200x	3:30 pm
SABRE 80	1	1/1/200x	3:30 pm
SABRE 80A	1	1/1/200x	3:30 pm
HAWKER 125- 600A	1	1/1/200x	3:30 pm
HAWKER 125- 700A	1	1/1/200x	3:30 pm
HAWKER 125- 700A	1	1/1/200x	3:30 pm
FALCON20-C/D/E/F	1	1/1/200x	3:30 pm
1329 JETSTAR	1	1/1/200x	3:30 pm
1329-23E JETSTAR	1	1/1/200x	3:30 pm
<b>Total</b>	<b>28</b>		

---

# FCM Complaint Form

## FLYING CLOUD AIRPORT

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Metropolitan Airports Commission  
Aviation Noise & Satellite Programs



## FCM NOISE/OPERATIONS COMPLAINT FORM

**DATE:** \_\_\_\_\_

**TIME:** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_

**CITY:** \_\_\_\_\_

**ZIP CODE:** \_\_\_\_\_

**AIRPORT:** \_\_\_\_\_

**COMPLAINT:** \_\_\_\_\_

**RUNWAY:** \_\_\_\_\_

**OPERATION:** \_\_\_\_\_

**NAME:** \_\_\_\_\_

**COMMENTS:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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Internet Resources on [www.macnoise.com](http://www.macnoise.com)

## FLYING CLOUD AIRPORT

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# Internet FCM Aircraft Type Query Form

FCM Aircraft Operations Report - Microsoft Internet Explorer

Address: http://192.9.209.2/relevers/fcm/interactive\_reports/stage-bwo\_count\_test.cfm

macnoise.com

MPLS-ST PAUL INTERNATIONAL AIRPORT

RELIEVER AIRPORTS

Search/browse  Go

### FCM Aircraft Operations Report

**Available Data**

Data Begin Date	Data End Date
APR 10, 2002	MAR 01, 2003

Enter Start Date:

End Date:

Mode of Operation:

[Back to Interactive Reports Home](#)

[Noise Programs Home](#)

- Technologies
- MSP Part 150 Update
- Runway 17/35

Menu ready for use

Internet

# Internet FCM Aircraft Type Report



Interactive Report - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites Media Print

Address http://192.9.209.2/technologies/anoms/interactive\_reports/type\_count.cfm?RequestTimeout=500

Links Customize Links Free Hotmail Windows Media Windows

  [MPLS-ST PAUL INTERNATIONAL AIRPORT](#)  
[RELIEVER AIRPORTS](#)

MAC Aviation Noise & Satellite Programs

MAC Home

Noise Programs Home

Quick Links

Technologies

MSP Part 150 Update

New Runway 17/35

Community Involvement

Noise Program Information

Noise Abatement at the Reliever Airports

Resources



Contact Us

Noise Site Map

Search/Browse  [Go](#)

### FCM Aircraft Operations Report

Start Day: JANUARY 01, 2003  
End Day: JANUARY 03, 2003  
Mode of Operation: A

Picture	Type	Stage	Count
	Lear31	3	4
	C172	N/A	142

Menu ready for use Internet

# Internet FCM Aircraft Operation Replay Query Form

MSP Flight Replay System - Microsoft Internet Explorer


File Edit View Favorites Tools Help

Address <http://www.msnnoise.com/msp/selectdate.jsp>


Links Customize Links Free Hotmail Windows Media Windows

## MAC - Aviation Noise and Satellite Programs

Minneapolis/St. Paul International Airport



### Flight Track Power Replay



#### Choose a Time Period

*Please choose a time period (including start date on the adjacent calendar).*

Start Year: 2003

Start Month: March

Start Time: 09 : 00

Duration: 30 minutes

[Click here for the available dates](#)

#### Choose a Date

March 2003

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Next Step Cancel

Revision: 1.0 | Date: 2001/08/02 10:41:43  
© 2001 Discovereast, Inc. All Rights Reserved.

Internet


# Internet FCM Aircraft Operation Replay Output

MSP Flight Replay System - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address: http://www.msnnoise.com/msp/MSPSubletJoerateMEPSession


Links: Customize Links Free Hotmail Windows Media Windows



## Flight Track Power Replay

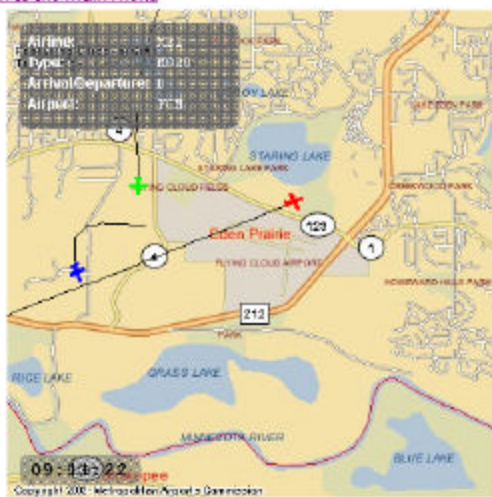
2003-03-01 09:00:00.0 -- TO -- 2003-03-01 09:30:00.0

The below numeric values represent the noise event level in decibels - A-weighted. The circles around the RMTs are representative of the noise level variation and are not representative of the geographic noise propagation.



[Return to the main menu](#) [Help](#)

Aircraft:	522
Type:	8020
Arrival/Departure:	0
Altitude:	705



09:14:22

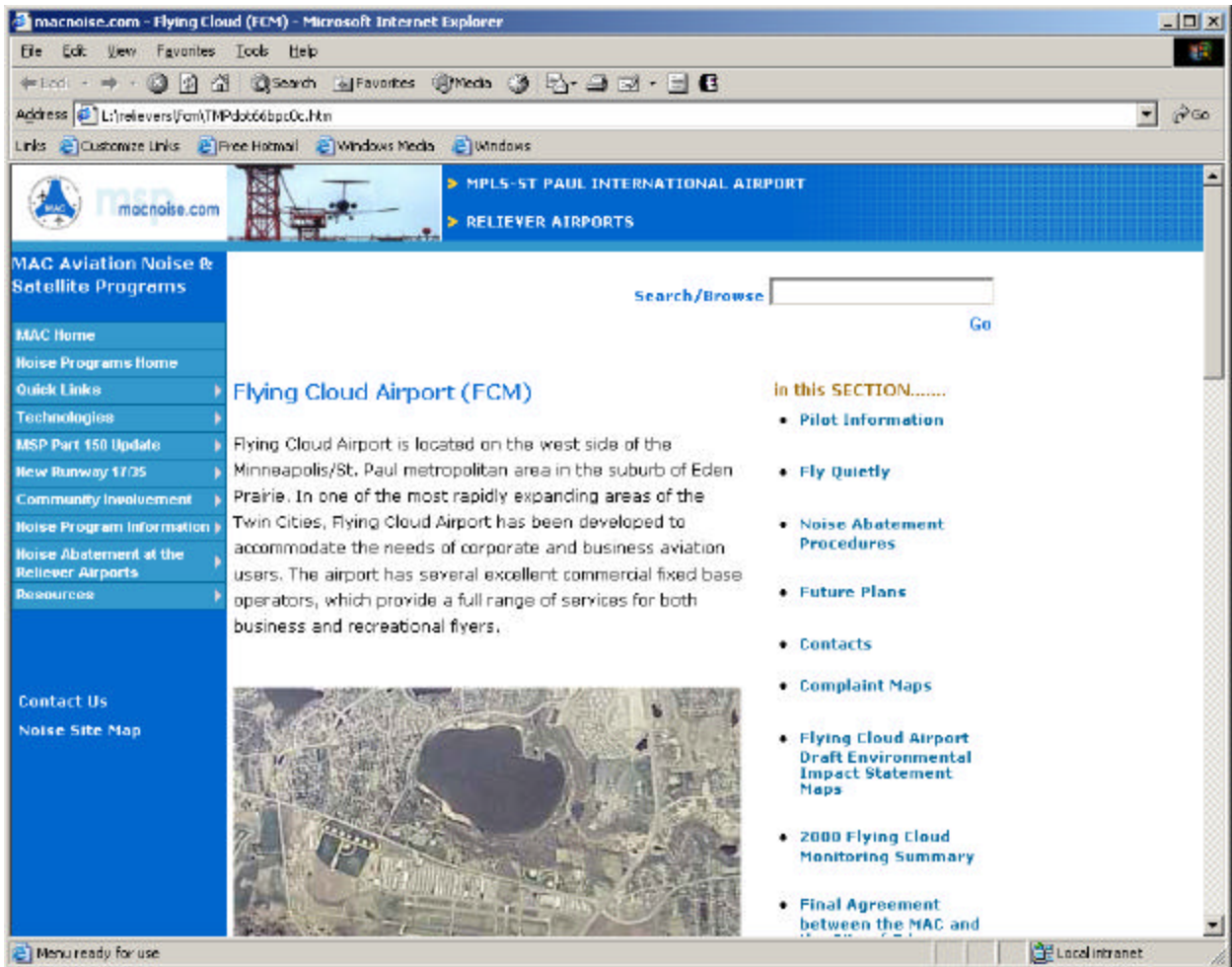
Copyright © Microsoft/Aviation Dynamics

Navigation: << < > >>

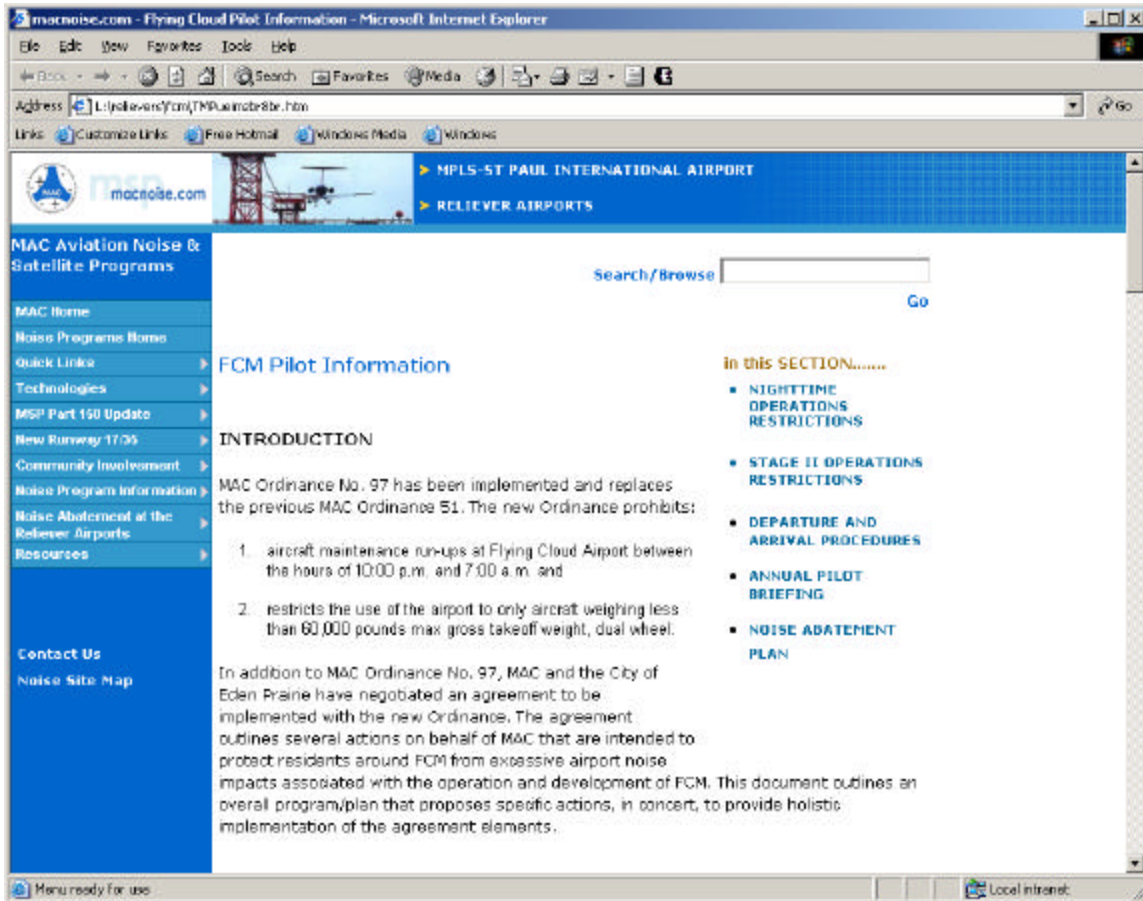
\$Revision: 1.10 \$ \$Date: 2003/03/09 09:24:44 \$  
© 2001 Dicosnoise, Inc. All Rights Reserved.

Done Internet

FCM Pilot Airport Noise/Operation Information on  
www.macnoise.com



# FCM Pilot Information on www.macnoise.com





# FCM Noise Abatement Plan on [www.macnoise.com](http://www.macnoise.com)



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# Violation Letter

## FLYING CLOUD AIRPORT

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Metropolitan Airports Commission  
Aviation Noise & Satellite Programs

[Date]

[Contact Person]  
[Address]

Dear [Contact Person]:

According to our records, tail number [N12345] [departed/arrived/conducted a unauthorized run-up] at the Flying Cloud Airport (FCM) on [February 28, 2003] at [1:00 a.m.] This operation was conducted in a manner inconsistent with voluntary restraints on [nighttime operations, early morning operations, established run-up procedures, Stage II operations]. In the case of aircraft operations at FCM in excess of 60,000 pounds certified maximum gross takeoff weight and nighttime maintenance run-ups, the provisions in Ordinance 97 are governing. Noncompliance with these provisions constitutes a breach of Ordinance 97.

It is the intent of the Metropolitan Airports Commission to reduce unnecessary airport activity during quiet hours, 10:00 p.m. – 7:00 a.m. CST. However, 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.

It is required that a detailed written description describing your aircraft [operation/run-up] be submitted to my office for further review. I can be reached at the following address:

Metropolitan Airports Commission  
Joseph Harris, Airport Manager  
6040 28<sup>th</sup> Avenue South, Minneapolis, MN 55450.  
Facsimile: 763-537-8623  
E-Mail: [jharris@mspmac.org](mailto:jharris@mspmac.org)

If you need further clarification or additional information regarding this matter, please do not hesitate to contact me at 763-537-2058. I also urge you to visit the MAC web site at [www.macnoise.com](http://www.macnoise.com) to learn more about Flying Cloud's noise abatement procedures.

Sincerely,

Joseph Harris  
Reliever Airports  
Metropolitan Airports Commission

---

# Noise Monitoring Forms

## FLYING CLOUD AIRPORT

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Metropolitan Airports Commission  
Aviation Noise & Satellite Programs

# Metropolitan Airports Commission Noise

Location \_\_\_\_\_

Date \_\_\_\_\_

Technician \_\_\_\_\_

Time \_\_\_\_\_

**Instrumentation**-SLM1-LD824 s/n\_\_\_\_\_ SLM2-LD824 s/n\_\_\_\_\_ SLM3-LD824 s/n\_\_\_\_\_ SLM4-LD824 s/n\_\_\_\_\_ Calibrator LDCA250 s/n \_\_\_\_\_

## Meteorological Conditions

Wind Speed / Direction \_\_\_\_\_ Temperature \_\_\_\_\_ Humidity \_\_\_\_\_

## Site

(Indicate sound source location, microphone location, reflecting objects, and distances.)

		Sample 1	Sample 2	Sample 3	Average	NLR
Room 1	Meter 1					
	Meter 2					
	Meter 3					
	Average					
	Meter 4					
Room 2	Meter 1					
	Meter 2					
	Meter 3					
	Average					
	Meter 4					
Room 3	Meter 1					
	Meter 2					
	Meter 3					
	Average					
	Meter 4					

## Calibration Information

SLM 1 Initial \_\_\_\_\_

Final \_\_\_\_\_

SLM 2 Initial \_\_\_\_\_

Final \_\_\_\_\_

SLM 3 Initial \_\_\_\_\_

Final \_\_\_\_\_

SLM 4 Initial \_\_\_\_\_

Final \_\_\_\_\_

## Background Noise Level

Exterior \_\_\_\_\_ (dBA)

Interior \_\_\_\_\_ (dBA)

## Residential Noise Test Data

Performed by the Metropolitan Airports Commission (MAC) and Minnesota Pollution Control Agency (MPCA) for Flying Cloud Airport, Eden Prairie, Minnesota.

The following data represents the Noise Level Reduction (NLR) of the structure identified below, based on test procedures of the American Society for Testing and Materials E 966-92 Test Methods.

Address: _____, <u>Eden Prairie, Minnesota</u>	
Date: _____	Time: _____
Technician: Jason Giesen, MAC, Signed _____	
Technician: City of Eden Prairie Representative, Signed _____	

## Test Equipment Used

Sound Level Meter (1)	Larson Davis Labs	Model - 824	S/N 1234	Cal Due 3/22/04
Microphone (1)	Larson Davis Labs	Model - 2541	S/N 1235	Cal Due 3/22/05
Sound Level Meter (2)	Larson Davis Labs	Model - 824	S/N 1236	Cal Due 3/22/06
Microphone (2)	Larson Davis Labs	Model - 2541	S/N 1237	Cal Due 3/22/07
Sound Level Meter (3)	Larson Davis Labs	Model - 824	S/N 1238	Cal Due 3/22/08
Microphone (3)	Larson Davis Labs	Model - 2541	S/N 1239	Cal Due 3/22/09
Sound Level Meter (4)	Larson Davis Labs	Model - 824	S/N 1240	Cal Due 3/22/10
Microphone (4)	Larson Davis Labs	Model - 2541	S/N 1241	Cal Due 3/22/11
Calibrator	Larson Davis Labs	Model - CA250	S/N 1242	Cal Due 3/22/12
Frequency Generator	Larson Davis Labs	Model - FG938	S/N 1243	Cal Due 3/22/13
Loudspeaker	JBL	Model 460	S/N 1244	

Meteorological Conditions:	
Wind Speed: _____	Wind Direction: _____ Temperature: _____ degrees Fahrenheit

Calibration Information:			
SLM (1) Initial _____	Final _____	SLM (2) Initial _____	Final _____
SLM (3) Initial _____	Final _____	SLM (4) Initial _____	Final _____

Exterior Sound Level in (dBA)	Average Interior Sound Level in (dBA)	NLR of Structure in (dBA)
90	57	<b>33</b>
90	56	<b>34</b>
90	57	<b>33</b>

---

# Pilot Briefing Slideshow

## FLYING CLOUD AIRPORT

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Metropolitan Airports Commission  
Aviation Noise & Satellite Programs

# **Flying Neighborly: Operational Efforts to Reduce Noise Impacts on Residents Around FCM**

**Annual FCM Pilot Briefing**



## Letter of Intent

- Letter of Intent represents airport users' commitment to the development of FCM in reducing impacts on the surrounding community
- Specifically operators commit to:
  - MAC Ordinance #97
  - Voluntary Nighttime Restrictions
  - Voluntary Stage II Restrictions
  - Departure and Arrival Procedures
  - Attendance at an Annual Pilot Briefing
- Pilot compliance with the listed items is critical to the successful development and operation of FCM.





## MAC Ordinance #97

- Supports extension of Runway 27L/9R to 5,000 feet.
- Run-ups at the airport are prohibited between the hours of 10:00 p.m. and 7:00 a.m.
- Aircraft weighing greater than 60,000 pounds max gross takeoff weight, dual wheel, are prohibited from operating at FCM.
- Exemptions to the above restrictions do exist in the case of emergency, U.S. Government Aircraft or unscheduled run-ups that are required to meet a departure time the next morning.
- No scheduled Part 139 air service and or major cargo operations at FCM.



## Voluntary Nighttime Operations Restriction

- **Operators voluntarily commit not to operate at the airport between the hours of 10:00 p.m. and 6:00 a.m.**
- **Pilots may conduct night flights between 10:00 p.m. and 12:00 a.m. for nighttime flight currency purposes only.”**



## Voluntary Stage II Operations Restriction

- ➔ **Operators voluntarily commit not to operate Stage II aircraft at FCM.**
- ➔ **If the total number of Stage II aircraft operations exceeds seventy-five (75) in any rolling twelve-month period, a process to implement a mandatory ban on Stage II aircraft at FCM will be initiated.**



## Departure and Arrival Procedures at the Airport

- ➔ **Operators voluntarily commit to compliance with any established arrival or departure paths or procedures at the airport as outlined by MAC. Specific emphasis will be given to procedures to be used during the hours of 6:00 a.m. and 7:00 a.m.**
  - ➔ **Early morning operations (6:00 a.m. to 7:00 a.m.) should utilize Runway 27L/9R with a southbound turn as soon as safety permits upon departure.**



## MAC Investigation & Notification Process

- Weekly, Monthly and Quarterly Reporting
- Complaint Investigation
  - Residents, Airport Tenants, MAC Employees
  - Airport Manager will follow-up at the Airport
  - ANOMS
- When a violation is discovered a letter will be sent to the operator



## F C M OPERATOR OF THE YEAR AWARD

