
Reliever Airports: NOISE ABATEMENT PLAN

Crystal Airport (MIC)

INTRODUCTION

The noise abatement plan for Crystal Airport has been prepared in recognition of the need to make the airport and the surrounding community as environmentally compatible as possible. The plan, as set forth here, is the culmination of a cooperative effort between airport users, airport businesses, the Crystal Airport Advisory Commission, City officials, Federal Aviation Administration representatives and the Metropolitan Airports Commission (MAC).

Many of the recommended procedures contained in the plan are currently in use at the airport and have proven effective in reducing airport related noise in the surrounding community. The thrust of the noise abatement plan is to direct the bulk of traffic over sparsely populated areas so as to reduce noise levels over the nearby residential areas. The additional step of raising the traffic pattern altitude to 1,000 feet should also help to reduce noise levels over sensitive areas. The plan does not purport to supersede any Federal Aviation Regulations, especially those regarding safe aircraft operating procedures. Certain flight conditions and aircraft operational limitations may make it unsafe to fly all or any part of these procedures.

No two airport situations are alike, and each requires a unique combination of procedures to achieve an acceptable solution to the noise problem. The best path to follow is to take a balanced approach which produces realistic and practical solutions fair to both aviation and non-aviation interests. In this regard, a full range of possible solutions has been explored and the best composition of solutions has been chosen and carefully weighed before settling on the final plan.

Comprehensive noise control and compatibility planning addresses a number of elements such as: land use compatibility, airport design, aircraft and airport operational procedures, access restrictions and noise program management. The noise abatement plan for this airport is only one part of what would be a comprehensive strategy and focuses on those elements under the control and jurisdiction of the MAC.

NOISE ABATEMENT TAKEOFF AND APPROACH PROCEDURES

A basic noise mitigation strategy is the use of noise abatement takeoff and landing procedures. There are a number of alternatives within this strategy including runway selection, takeoff and landing profiles and power settings, and approach or departure paths. Runway selection is affected by winds, airspace procedures with adjacent air traffic facilities, navigational aids, aircraft performance and requirements, and traffic density. When linked with appropriate landing and takeoff profiles and approach/departure paths, runway selection should provide relief when compared to an unconstrained airport environment. The following takeoff and approach procedures shall apply to MIC.

- A. When the winds are calm (less than 5 knots) the preferred runway shall be 14L. However, if traffic density or weather dictates, Runway 14R 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 - 14L, 14R, 32R, 32L, 24R, 24L, 6L, 6R
Departures - 14L, 14R, 32R, 32L, 6L, 6R, 24R, 24L**
 - 2. Jet Aircraft:
Arrivals/Departures - 32R, 14L**
- 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. Turbojet aircraft departing on Runways 14L or 32R shall turn to a northerly heading after crossing the departure end of the runway and attaining an altitude of 500 feet above ground level.**
- F. Itinerant traffic will turn to a northerly 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.**

TRAFFIC PATTERN PROCEDURES

The traffic pattern is the specified path to be flown by aircraft operating in the vicinity of an airport. The components of a typical traffic pattern are: upwind leg, crosswind leg, downwind leg, base leg, and final approach (see attachment). The following procedures shall be adhered to while operating in the traffic pattern at MIC:

- A. Consistent with recommended airport operating procedures and minimum safe altitudes as established in Part 91 of the Federal Air Regulations, the traffic pattern altitude shall be 1,000 feet above ground level.**
- 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 for operational safety.**

- D. Whenever feasible, aircraft remaining in the traffic pattern shall use the north parallel runway.**

MAINTENANCE RUNUPS

Two locations on the airport are designated for engine tests and maintenance run-ups, as specified below. These locations are selected to minimize the amount of noise projected toward adjacent residential areas.

- 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 180 to 200 degrees whenever practical.**
- C. Except in emergencies, engine tests and maintenance run-ups are prohibited between 2200 local time and 0800 local time.**
- D. Run-up Areas:**
 - 1. The run-up pad adjacent to the threshold of the active runway should be used.**

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. In general, helicopter operators are instructed to avoid the flow of fixed wing aircraft. The following procedures shall apply to helicopter training.

- A. Helicopter training in the traffic pattern area is prohibited from 2200 local time to 0800 local time.**

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. No training may be conducted in the traffic pattern between the hours of 2400 local and 0700 local.**
- B. 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.**
- C. Any aircraft not meeting Federal Air Regulation Part 36 is prohibited between the hours of 2200 local and 0700 local.**