
Reliever Airports: NOISE ABATEMENT PLAN

Lake Elmo Airport (21D)

INTRODUCTION

The noise abatement plan for Lake Elmo 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 local community, City officials, Federal Aviation Administration representatives, and the Metropolitan Airports Commission. The Plan has proven effective in reducing airport noise in the surrounding communities.

RULE I - NOISE ABATEMENT TAKEOFF AND APPROACH

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 the Lake Elmo Airport.

A. When the winds are calm the preferred runway shall be 32. However, if traffic density or air traffic procedures dictate, Runway 14 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, the following priorities are recommended when selecting a runway:

1. Piston Engine Aircraft or Turbo Prop Aircraft:

Arrivals - 32, 14, 22, 4

Departures - 32, 14, 4, 22

2. Jet Aircraft:

Arrivals/Departures - 32, 14

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. 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 32 or 14 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.

RULE II - 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. The following procedures shall be adhered to while operating in the traffic pattern at the Lake Elmo Airport:

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 for operational safety.

D. Whenever feasible, aircraft remaining in the traffic pattern shall use the runway 32/14.

RULE III - MAINTENANCE RUN-UPS

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 (see map below).

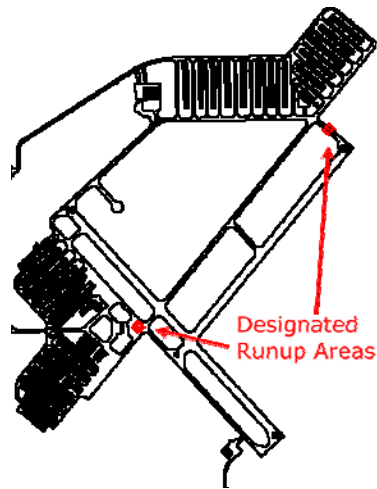
A. Between 1700 local and 2200 all engine tests and maintenance run-ups in excess of 5 minutes shall be conducted in the designated area.

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 should be used.



RULE IV - 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.

RULE V - 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. Intersection takeoffs between the hours of 2200 local and 0700 local are prohibited.

C. Any aircraft not meeting Federal Air Regulation Part 36 is prohibited between the hours of 2200 local and 0700 local.