NOISE ABATEMENT BEST PRACTICES
Crystal Airport (MIC)

INTRODUCTION

These Noise Abatement Best Practices (measures) were developed through a cooperative effort between Crystal Airport (MIC) and community stakeholders in recognition of the need to promote a neighborly environment while continuing to facilitate air transportation services in this region. The goal of this document is to suggest measures that reduce impacts of aircraft activity and noise experienced by people in areas surrounding the airport.

The success of these measures relies on voluntary efforts by aircraft operators to consider and apply these measures as they operate to and from Crystal Airport. None of these measures are intended to conflict with safety considerations or flight operation requirements dictated by federal law.

A Fly Neighborly Guide consolidates the voluntary measures contained in this document for easy reference during flight operations. Refer to the Fly Neighborly Guide in your navigation tool or call 612-726-8100 to request a copy.

1. TAKEOFF AND APPROACH

During takeoff and landing the measures below attempt to reduce the amount of aircraft noise affecting sensitive land uses, such as homes. It is recognized that a wide variety of aircraft use Crystal Airport and each aircraft performs differently. All pilots are encouraged to operate aircraft as quietly as possible with due regard to the performance capabilities of the aircraft being flown, as follows:

A. Runway 14: calm wind runway, use left traffic.

B. Runway 6R and 24R: use right traffic.

C. Runway 6R/24L is turf:
   closed when ATCT is closed, and
   closed during November-April

D. Precision Approach Path Indicator (PAPI) on Runways 14 and 32. Visual Approach Slope Indicator (VASI) on Runways 6L and 24R. Aircraft approaching to land on a runway served by a PAPI or VASI are advised to maintain an altitude at or above the glide slope until a lower altitude is necessary for a safe landing, and in accordance with Federal Aviation Regulations 14 CFR 91.119: Minimum Safe Altitudes.

E. When departing in aircraft equipped with variable pitch propellers reduce engine RPM as soon as practical after takeoff

F. Use guidance published by the FAA, National Business Aircraft Association (NBAA) or Aircraft Owners and Pilots Association (AOPA) when arriving to or departing from the airport.

- FAA Advisory Circular 90-66C Non-Towered Airport Flight Operations: www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.information/documentID/1041885
- FAA Advisory Circular 91-36D - Visual Flight Rules (VFR) Flight Near Noise-Sensitive Areas: www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.information/documentid/23156
- NBAA Noise Abatement Program: https://nbaa.org/aircraft-operations/environmental-sustainability/noise-abatement-program/
- AOPA Noise Awareness Steps: www.aopa.org/-/media/Files/AOPA/Home/Advocacy/AOPANoiseSteps.pdf

G. Turbine-powered aircraft and itinerant aircraft, depart from Runway 14/32 and fly runway heading until attaining an altitude within 300 feet of traffic pattern altitude. Avoid overflight of residential areas and gain as much altitude as practical before overflying residential areas.

2. TRAFFIC PATTERN

The following procedures pertain to aircraft while operating in the traffic pattern:

A. Operate aircraft at the airport traffic pattern altitude as follows, unless a lower altitude is needed while in the process of departing or arriving in accordance with Federal Aviation Regulations 14 CFR 91.119: Minimum Safe Altitudes:

- Turbine-powered aircraft traffic pattern altitude is 1,500 feet AGL[1] (2369 MSL)[2]
- Propellor-driven aircraft traffic pattern altitude is 1,000 feet AGL (1869 MSL)

B. Avoid multiple training events by turbine-powered aircraft in the traffic pattern.

C. Keep traffic pattern legs as short as possible and close to the airport without risking safety to reduce noise and increase efficiency.

D. Use the full length of runway for arrivals and departures:

- Avoid intersection takeoffs, and
- Avoid stop and go operations.

E. Avoid repetitive activity over residences, including flight training activities.

F. When departing the traffic pattern, choose a path that avoids overflying residential areas, if practical.

[1] AGL is above ground level.

[2] MSL is mean sea level.

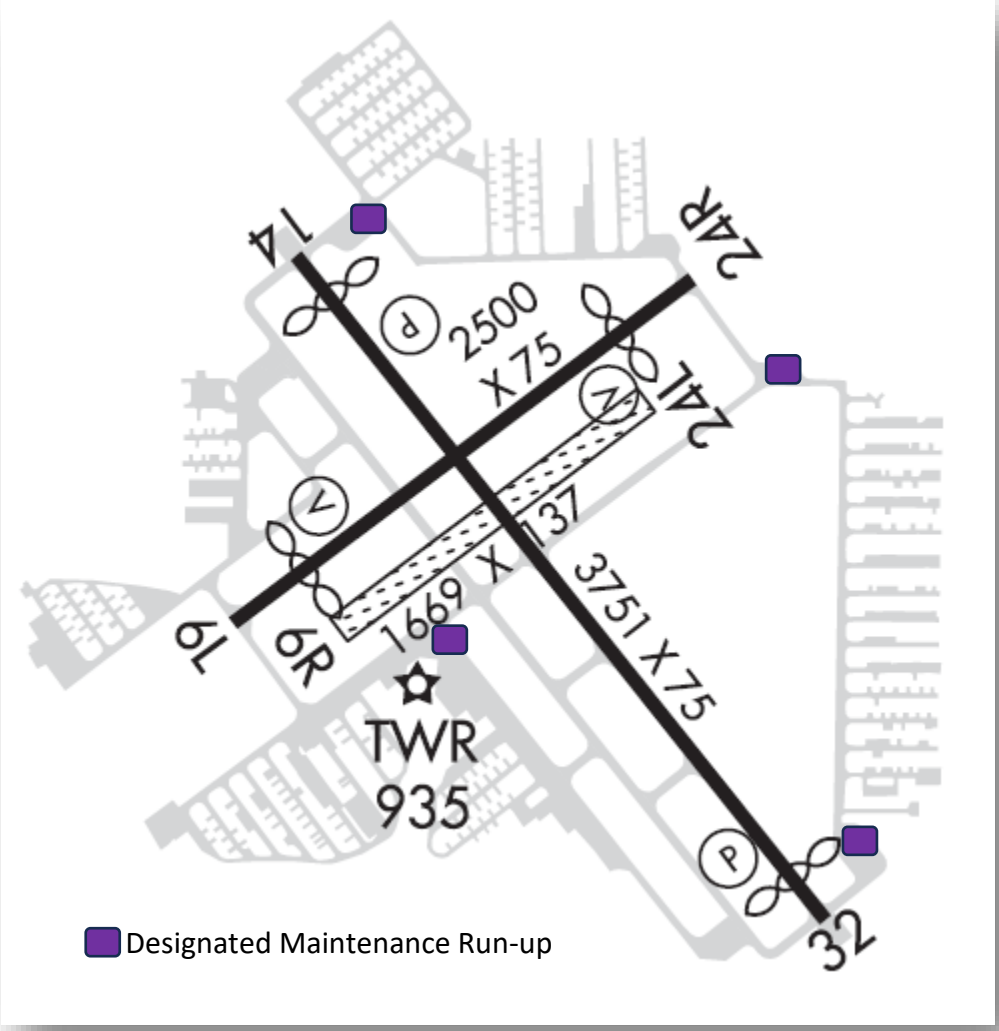
3. MAINTENANCE RUN-UPS

Specific locations on the airfield are designated for engine tests and maintenance run-ups. These locations are selected to minimize the amount of noise projected toward adjacent residential areas (see map below):

A. When practical, conduct extended engine tests and maintenance run-ups in excess of 5-minutes in the designated area (see map).

B. Avoid engine tests and maintenance run-ups during nighttime hours.

NOTE: A pre-departure run-up, or run-ups of less than 5-minute duration may be conducted at other areas on the airfield, as needed.



4. HELICOPTER TRAINING

The unique design and operational characteristics of helicopter operations do not require use of a runway surface; however, helicopter operators must avoid conflicting with the flow of fixed wing aircraft. The following measures apply to helicopter training:

A. Avoid helicopter training in the traffic pattern during nighttime hours.

B. Avoid hovering for extended durations in the vicinity of residential areas.

C. Avoid repetitive activity over residential areas.

5. NIGHTTIME OPERATIONS (2200-0700)

Nighttime hours (2200 to 0700 local time) are noise sensitive because people are resting, and noise intrusions are more noticeable. When nighttime flight activity is needed, please limit noise and operate with consideration for neighbors by following these measures:

A. Avoid nighttime currency operations and flight training in the traffic pattern after 2400 local time.

B. Avoid unnecessary low-level flyovers at the airport.

6. FLY NEIGHBORLY GUIDE

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