

CRYSTAL ATCT

STANDARD OPERATING PROCEDURES



STANDARD OPERATING PROCEDURES
VIRTUAL MINNEAPOLIS ARTCC
VIRTUAL AIR TRAFFIC SIMULATION NETWORK

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CHAPTER 1. GENERAL

1-1. PURPOSE

This order specifies the required procedures for maintaining a safe and efficient operation and defines the jurisdictional boundaries for each operational position at Crystal Air Traffic Control Tower (MIC).

1-2. DISTRIBUTION

All vZMP personnel.

1-3. CANCELLATION

vZMP ATCTSOP Rev. 7, Section 1.5 “Minneapolis – Crystal Airport (KMIC)” dated 20 Oct. 2011.

1-4. EFFECTIVE DATE

This order is effective September 29, 2022.

1-5. EXPLANATION OF CHANGES

Initial release.

1-6. OPERATIONAL POSITIONS

The following positions are in use at Crystal ATCT:

<i>Position Name</i>	<i>Frequency</i>	<i>Callsign</i>
Ground Control/Clearance Delivery (GC)	121.6	MIC_GND
Local Control (LC)	120.7	MIC_TWR
ATIS	124.475	KMIC_ATIS

1-7. MULTIPLE RUNWAY CROSSINGS

Crystal ATCT is authorized to provide multiple runway crossings as established below and in appendix C.

- a. Runway 6L/24R and Runway 6R/24L at the following intersections:
 1. Taxiways C, D, E, and F
 2. Runway 14/32

CHAPTER 2. GROUND CONTROL/CLEARANCE DELIVERY

2-1. POSITION DUTIES AND RESPONSIBILITIES

- a. Ensure positive control of all traffic on GC designated movement areas.
- b. Obtain verbal approval from LC prior to authorizing an aircraft to cross or use any portion of an active runway.
- c. Verbally inform LC when a previously coordinated operation is complete and clear of the active runway (s).
- d. Ensure all departing aircraft have received current ATIS or wind/altimeter, assigned runway, pertinent NOTAMs and other pertinent MIC airport condition information.
- e. Issue instructions, clearances, and ensure pilot readback for accuracy.
- f. Issue IFR, SVFR, VFR, and VFR-on-top beacon codes and clearances.
- g. Note: Local IFR clearances shall be issued "via radar vectors."
- h. Establish and maintain positive aircraft identity.
- i. Plan and establish taxi traffic flow.
- j. Conduct an appropriate position relief briefing IAW FAAO 7110.65, FAAO 7210.3, and local orders.

2-2. AREA OF JURISDICTION

GC is responsible for all aircraft operations on airport movement areas under GC jurisdiction (See appendix B). CD is the responsibility of GC and is always combined with GC. The helicopter practice area is a movement area under the jurisdiction of GC.

2-3. FREQUENCY INFORMATION

Frequency 121.6 is the standard frequency for GC/CD.

2-4. DEPARTURE PROCEDURES

- a. Issue 3000 ft. MSL initially to all IFR departures. Instruct IFR aircraft to expect filed altitude 10 minutes after departure.
- b. When issuing beacon codes to departing VFR aircraft requesting traffic advisories or Bravo Airspace entry, use the following phraseology:

"Callsign - Remain Outside Of Bravo Airspace Unless Advised To Enter, Departure Frequency _____, Squawk_____."

2-5. COORDINATION PROCEDURES

a. Required coordination with LC

1. Authorization for aircraft movement on an active runway, for purpose other than crossing, shall be provided on the LC frequency. GC shall hold the aircraft short of the active runway and instruct the aircraft to “contact tower”. Inform LC of the aircraft’s intentions.
2. Approval must be granted by LC prior to GC utilizing any area under LC jurisdiction.
 - (a) To cross or proceed onto active runways, coordinate the operation when the aircraft is reaching the crossing intersection.
3. Inform LC when a runway operation has been completed.

Example: “Runway 6L cross complete.”

- (a) Operating on LC jurisdiction: “Clear of runway 14”
 - (b) Runway crossing: “Runway 6L cross complete:
4. Inform LC if GC is unable to complete any operation as previously coordinated.
5. Inform LC when authorizing helicopters to operate in the grass areas near (but not on) active runways.
6. Intersection Departures: All intersection departures need to be verbally coordinated with LC.

CHAPTER 3. LOCAL CONTROL

3-1. POSITION DUTIES AND RESPONSIBILITIES

- a. Issue traffic advisories and safety alerts.
- b. Operations on active runway(s).
- c. Issue landing sequences and clearances.
- d. Issue take-off clearances and control instructions.
- e. Issue control instructions to IFR, VFR, and SVFR aircraft operating on the active runway(s) and to airborne aircraft within MIC Class D surface area.
- f. Coordinate with M98 and GC as required.
- g. Complete position monitoring and relief briefings.
- h. Obtain and comply with releases from M98.

3-2. AREA OF JURISDICTION

LC is responsible for all vehicle and aircraft operations on the active runway(s) and all aircraft in the MIC Class D surface area. The MIC Class D surface area extends to a 3.8 NM radius from the center of the airport, and vertically from the surface up to 2500ft AGL (3369ft MSL).

In areas where MSP Class B airspace is less than 2500ft AGL, MIC Class D airspace terminates at the base of MSP Class B airspace.

Note: North Memorial Hospital operates a helipad located 3.7 NM SSE of MIC airport. The identifier for the helipad is MY77.

3-3. FREQUENCY INFORMATION

LC is assigned frequency 120.7.

3-4. RUNWAY CROSSING(S)

LC is authorized to cross the parallel runway adjacent to the current active runway at any runway or taxiway intersection. No coordination with GC is necessary.

3-5. COORDINATION PROCEDURES

- a. LC shall coordinate with GC:
 1. Use of any inactive runway, movement, or non-movement areas under the GC jurisdiction. GC shall grant approval prior to LC utilizing any area under the GC jurisdiction.
 2. Any operation/situation that may have an effect on GC.

b. LC shall coordinate with M98:

1. IFR aircraft executing an unplanned missed approach. Instruct aircraft executing an unplanned missed approach to fly heading 300° and to maintain 2500 ft. unless otherwise coordinated with M98. Aircraft on visual approaches may be retained in the pattern.
2. IFR releases. Assign all departing IFR aircraft heading 300° unless otherwise instructed by M98.
3. Pilot requests, other than those already coordinated with M98.
4. When IFR aircraft cancel IFR.

3-6. HELICOPTER OPERATIONS

Local Helicopter Operations: On occasion, helicopter pilots will call LC requesting to air taxi, hover, or ground taxi a helicopter on an airport movement or non-movement area not under LC jurisdiction. All of these operations shall first be coordinated with GC: When a helicopter has cleared (gone past) any given point in the route, GC automatically resumes control and responsibility for the previously coordinated areas; no further coordination is necessary.

3-7. VISUAL REPORTING POINTS

Commonly used checkpoints are:

City of Anoka	10N	Golden Valley	7S
Anoka Airport	8NE	Medicine Lake	5 SW
Gopher VOR	5N	Lake Minnetonka	15SSW
Coon Rapids Dam	6NNE	Bass Lake	4W
Shoreview Antennas	10.5E	Rogers	13NW
KSTP Antenna	9ESE	N. Maple Grove Tower	6NW
State Fair Grounds	10SE	Gravel Pits	4.5NW
Downtown Minneapolis	7SE	Osseo	4.5NW
Fish Lake	5.5NW	S. Maple Grove Tower	4W

3-8. APPROACHES

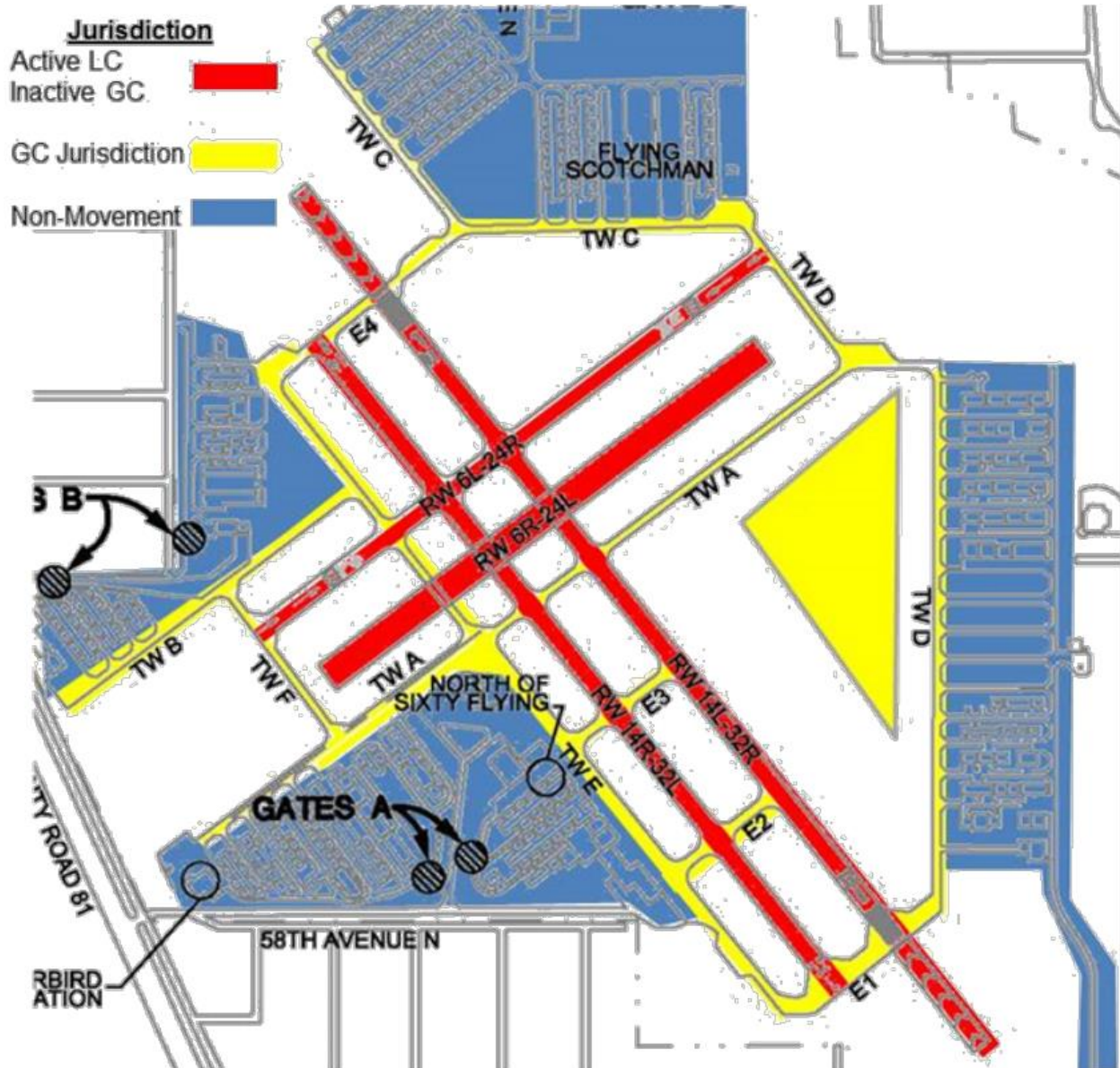
Advertise visual approaches only when the visibility is at or above 7 miles and the ceiling is at or above 2200 ft. Otherwise, advertise the RNAV (GPS) approach to the runway(s) in use.

APPENDIX A. POSITION RELIEF BRIEFING CHECKLIST

1. SIA
 - a. Verbally state runway status
 - b. ATIS code and information
 - c. Equipment
 - d. Airport conditions/status
 - e. Weather conditions
 - f. Flow Control
 - g. NOTAMs
 - h. TFRs
2. SIA items not displayed or unknown to the relieving controller
3. Airport/Special activities
 - a. Coordination/restrictions
 - b. New procedures/other activities
 - c. Solicit PIREP's
4. Traffic:
 - a. Communication status of each aircraft
 - b. Special activity aircraft
 - c. Coordination with other positions
 - d. IFR/VFR/SVFR and inbound/outbound proposals
 - e. Clearances/codes issued
 - f. M98 coordination
 - g. Aircraft standing by for service
 - h. Problems/requests/instructions

APPENDIX B. MOVEMENT/NON-MOVEMENT AREAS

NOTE: Runway 14R/32L has been closed and is now Taxiway G. Taxiway G is delegated to GC.



APPENDIX C. MULTIPLE RUNWAY CROSSINGS

Crystal ATCT is authorized to provide multiple runway crossings as follows:

- a. Runway 6L/24R and 6R/24L at the following intersections
 1. Taxiways C, D, E, F, and G.
 2. Runway 14/32

NOTE – Runway 14R/32L is still depicted in the following graphic. Runway 14R/32L has been permanently closed and is now Taxiway G.

