

FLYING CLOUD ATCT ORDER 7110.1A



STANDARD OPERATING PROCEDURES VIRTUAL MINNEAPOLIS ARTCC VIRTUAL AIR TRAFFIC SIMULATION NETWORK

TABLE OF CONTENTS

CHAPTER 1. GENERAL..... 4

 1-1. PURPOSE..... 4

 1-2. DISTRIBUTION..... 4

 1-3. CANCELLATION..... 4

 1-4. EFFECTIVE DATE 4

 1-5. EXPLANATION OF CHANGES..... 4

 1-6. POSITIONS..... 4

CHAPTER 2. GROUND CONTROL/CLEARANCE DELIVERY 5

 2-1. POSITION DUTIES AND RESPONSIBILITIES 5

 2-2. FREQUENCY INFORMATION 5

 2-3. AREA OF JURISDICTION..... 5

 2-4. CLEARANCES..... 5

 2-5. COORDINATION PROCEDURES..... 5

 2-6. GROUND MOVEMENT PROCEDURES 6

CHAPTER 3. LOCAL CONTROL (NORTH, SOUTH)..... 7

 3-1. POSITION DUTIES AND RESPONSIBILITIES 7

 3-2. FREQUENCY INFORMATION 7

 3-3. AREA OF JURISDICTION..... 7

 3-4. AIRSPACE INFORMATION 7

 3-5. SPLIT LOCALS 8

 3-6. COORDINATION PROCEDURES..... 8

 3-7. TRAFFIC MANAGEMENT..... 9

 3-8. APPROACH IN USE 10

APPENDIX 1. POSITION RELIEF CHECKLIST..... 11

APPENDIX 2. TAXIWAYS, RUNWAYS/LENGTH REMAINING 12

APPENDIX 3. HELICOPTER PRACTICE AREA/HANGAR LANES/PERIMETER ROADS 13

APPENDIX 4. SVFR AREAS OF OPERATION..... 14

APPENDIX 5. MULTIPLE RUNWAY CROSSING AREAS 15

CHAPTER 1. GENERAL

1-1. PURPOSE

This standard operating procedures order contains the body of local knowledge for Flying Cloud (FCM) Air Traffic Control Tower (ATCT). It contains descriptions of local procedures and the area environment. This SOP should be used in conjunction with other vZMP, VATUSA, and VATSIM directives.

1-2. DISTRIBUTION

All vZMP controllers.

1-3. CANCELLATION

vZMP ATCSOP Rev. 7, Section 1.4 “Minneapolis – Flying Cloud Airport (KFCM)” dated 20 Oct 2011.

1-4. EFFECTIVE DATE

This order is effective September 29, 2022.

1-5. EXPLANATION OF CHANGES

Initial release.

1-6. POSITIONS

The following positions are in use at FCM ATCT:

Position Name	Frequency	Callsign
Ground Control/Clearance Delivery (GC/CD)	121.7	FCM_GND
Local Control South (LCS)*	119.15	FCM_S_TWR
Local Control North (LCN)*	125.2	FCM_N_TWR
ATIS	124.9	KFCM_ATIS

NOTE – LCS is the combined Local Control position. When combined, Local may be worked under the callsign FCM_TWR. LC may be used to refer to Local Control in other sections of this order.

CHAPTER 2. GROUND CONTROL/CLEARANCE DELIVERY

2-1. POSITION DUTIES AND RESPONSIBILITIES

- a. Relay IFR clearances.
- b. Ensure separation.
- c. Initiate control instructions.
- d. Scan the airport environment.
- e. Monitor and operate communications equipment.

2-2. FREQUENCY INFORMATION

Frequency 121.7 is assigned to GC/CD.

2-3. AREA OF JURISDICTION

GC is responsible for all aircraft activity on the movement areas of the airport, except for the active runways and taxiways between active runways.

2-4. CLEARANCES

- a. Instruct departing IFR aircraft to maintain 3000 ft., expect filed altitude 10 minutes after departure. **Exception:** Assign Runway 10L/R IFR departure 2500 ft initially.
- b. Clear SVFR aircraft to conduct operations at or below 2500 ft. MSL. SVFR operations in the area east of the MSP Class B 8.5-NM boundary shall be at or below 2000 ft. MSL (See appendix 4).

2-5. COORDINATION PROCEDURES

- a. With LC
 1. **General Crossings.** Request crossings in a timely manner.
 - (a) Be aware of LC's traffic to the maximum extent possible. If feasible reference LC's traffic for efficiency.
 - (b) Specify the intersection of crossing.
 - (c) If multiple crossings request the runway or make separate requests.
 - (d) Advise LC when crossings are complete.
 2. **Taxiway Alpha.** Due to the close proximity of taxiway alpha to runway 10L/28R (only 30 feet between runway hold short lines and taxiway edge, larger aircraft cannot clear runway without encroaching on taxiway alpha) GC shall ensure that aircraft taxiing on taxiway alpha give way to aircraft exiting the runway. GC must be aware of LC's traffic to the maximum extent possible in an effort to better plan ground operations.

3. **Aircraft Larger than 50ft. and Jets.** Generally these aircraft will require the longer runway. When the parallel runways are active aircraft over 50 feet in length and all jet aircraft cannot hold between the parallel runways without encroaching on runway safety areas. GC shall coordinate as appropriate.
 - (a) When Runway 28L and Runway 28R are active: Aircraft parked on the north side of the airport and requesting to depart runway 28L should:
 - (1) Be held short of runway 28R at taxiway C.
 - (2) It may be advantageous to cross both parallel runways at any intersection and approach runway 28L from taxiway B.
 - (b) When Runway 10L and Runway 10R are active, it may be advantageous to cross runway 10L from other than taxiway G to avoid traffic congestion.
4. **Intersection departures.** Coordinate intersection departures with LC.
5. **Other than active runway operations.** LC may request a runway or taxiway for a single aircraft operation. In this case, once the operation is observed, the runway reverts back to GC without verbal coordination.

PHRASEOLOGY:

LC: "REQUEST (runway # or taxiway) FOR ONE (departure or arrival)".

GC: "(runway # or taxiway) IS YOURS FOR ONE (departure or arrival), (state restrictions if necessary)".

***NOTE:** You MUST OBSERVE the operation before utilizing the runway. If operation is not observed, you shall coordinate for the return or use of the taxiway or runway.

6. **When utilizing Split Locals.** GC shall be aware of the direction of flight of aircraft and taxi to the appropriate runway i.e. northbound aircraft to the north parallel runway, southbound aircraft to the south parallel runway.
 - (a) Aircraft over 50 feet in length and all jet aircraft shall be handled as in section 3 of this chapter and shall be assigned the LC frequency for the runway it will departure. Non-jet aircraft and those able to hold between the parallel runways should be crossed by GC.
 - (b) Aircraft holding short of a parallel runway, departing the other parallel runway, should be issued the appropriate LC frequency for the runway of departure.
 - (c) Aircraft departing Runway 18 will be assigned LCS frequency.
 - (d) Aircraft departing Runway 36 will be assigned LCN frequency.

2-6. GROUND MOVEMENT PROCEDURES

- a. **Multiple Runway Crossings.** Flying Cloud Tower is authorized to provide multiple runway crossings at the following locations: Taxiways C, D, E, F, and G (See appendix 5).

CHAPTER 3. LOCAL CONTROL (NORTH, SOUTH)

3-1. POSITION DUTIES AND RESPONSIBILITIES

- a. Scan the airport and its environment for anomalies which may affect operations.

3-2. FREQUENCY INFORMATION

Frequencies 119.15 and 125.2 are assigned to LC. 119.15 is the primary frequency when LC is combined. During periods when dual local control positions are operated. 119.15 will be designated as LCS and 125.2 will be designated as LCN.

3-3. AREA OF JURISDICTION

LC is responsible for all airborne aircraft in the FCM Delta surface area and all activity on designated active runway(s), and taxiways between active runway(s).

3-4. AIRSPACE INFORMATION

- a. **Calm Wind Runway.** Determining factors during periods of calm wind should be:
1. Weather.
 2. Use of runway 28L & 28R for easier taxi purposes (crossing fewer runways)
 3. The direction of the sun.
- b. **Bravo Airspace.** The local controller is required to be familiar with and to pass information to a pilot who may be violating the MSP Bravo airspace without a clearance. Advise the pilot of the situation and suggest a course of action to prevent a Bravo incursion.
- c. **Aircraft Departing from Non-Movement Areas.** Coordination only needs to be made with GC if his/her traffic may be affected.
- d. **Other landing areas in Delta Airspace.** Occasional floatplane operations are conducted at Lake Riley and at Bryant Lake. Pilots are required to establish radio contact with the tower to advise of their intentions. Neither lake is an official seaplane base. No clearance or separation is necessary, however, traffic advisories and other pertinent information is exchanged (e.g. FCM winds and altimeter).
- e. **Visual Reporting Points.** Commonly used checkpoints are portrayed on the local airport chart. Knowledge of the following checkpoints is necessary to maintain an efficient flow of traffic in the local area. * Indicates VFR Checkpoint

Chaska	Chanhassen	Eden Prairie Center	Excelsior
Hazeltine (Stubr)	Hopkins	Lake Minnetonka	Lake Minnewashta
Lake Riley	Lake Victoria	Lake Waconia*	Mound
Prior Lake*	Radisson South	Savage	Shakopee*
Spring Lake	Staring Lake	Wayzata*	

3-5. SPLIT LOCALS

The local control position has the capability of being split into two separate operating positions when the traffic volume is heavy enough and the parallel runways are in use.

- a. **Local Control North (LCN).** LCN operates on frequency 125.2. LCN is responsible for the portion of the Flying Cloud Delta Surface Area that lies north of an east-west line running halfway between runway 10R/28L and runway 10L/28R. All inbound traffic north of the line shall be instructed to contact LCN. This will include departing traffic on runway 36.
- b. **Local Control South (LCS).** LCS operates on frequency 119.15. LCS is responsible for the portion of the Flying Cloud Delta Surface Area that lies south of an east-west line running halfway between runway 10R/28L and runway 10L/28R. All inbound traffic south of the line shall be instructed to contact LCS. This will include departing traffic on runway 18.
- c. **Position Location and Runway Assignment:**
 1. Runway 10L and Runway 10R
 - 1) LCN assigned runway 10L, LCS assigned runway 10R.
 2. Runway 28L and Runway 28R
 - 1) LCN assigned runway 28R, LCS assigned runway 28L.
 3. Runway 18/36
 - 1) Landing runway 18 or departing runway 36 assigned to LCN.
 - 2) Landing runway 36 or departing runway 18 assigned to LCS.

3-6. COORDINATION PROCEDURES

- a. **GC.** Coordinate as needed and as included in Section 2-5.
- b. **M98.**
 1. Request IFR releases from M98. M98 will assign departure headings.
 - a) Standard departure headings for all runways except Runway 10 are 180°, 230°, and 300° with an initial departure altitude of 3,000 ft.
 - b) Runway 10 standard departure headings are 230° and 300° with an initial departure altitude of 2,500 ft. Runway 10 departures shall be issued right turns unless verbally coordinated.
 - c) LC may clear IFR arrival aircraft to sidestep to land either parallel runway without coordination when the parallel runways are active.
 2. Instruct any IFR aircraft executing an unplanned missed approach to turn left or right, as appropriate, to heading 230° and maintain 2500 ft. unless otherwise instructed by M98.

- c. **Split Locals.** LCN and LCS shall verbally coordinate prior to any aircraft entering the other LC's area of jurisdiction. This includes, but is not limited to:
1. Aircraft using Runway 18/36
 2. Aircraft on missed approach.
 3. Overflights
 4. Aircraft larger than 50 ft. or jet aircraft holding short of the other LC's runway that may be assigned your frequency by GC. As described in Section 2-5.
 5. If GC did not, it may be advantageous to transfer departing aircraft across your assigned runway to the other LC's runway for management of flow for direction of flight.
 6. Holding aircraft larger than 50ft. or jet aircraft between the parallels. It would be advantageous to keep the other LC apprised of landing aircraft over 50ft. that will be intending to cross their runway to access parking.
 7. Departures taking off that will enter the area of responsibility of the other Local Control should be coordinated prior to take off roll or as soon as possible when airborne.
PHRASEOLOGY: "REQUEST (left or right) TURN (direction or heading) FOR (acid) (give location)".
 8. Aircraft that call you in the other LC's jurisdiction should be given a frequency change and if able, advise the other LC.
 9. Advise when pertinent intersections are blocked.

3-7. TRAFFIC MANAGEMENT

- a. **Holding Aircraft between Runway 10R/28L and Runway 10L/28R.** If aircraft larger than 50 feet or jet aircraft are held between the Parallel Runways, only the runway these aircraft are holding short of may be utilized. The exited runway may not be used for arrivals or departures until that aircraft has moved forward to clear the runway safety area. Propeller driven aircraft smaller than 50 feet may be held between the parallel runways with both still in use.
- b. **Arrival Procedures.**
1. Assign a landing runway and traffic pattern (if other than standard left turns).
 2. Keep aircraft on your frequency when they are between the parallel runways and are unable to cross the runway due to traffic.
PHRASEOLOGY: "(acid), HOLD SHORT OF RUNWAY (#) (reason), REMAIN THIS FREQUENCY!"
- c. **Departure Procedures**
1. **Line Up And Wait (LUAW).** This procedure shall be exercised with discretion. Whenever an aircraft is issued a LUAW instruction, all procedures and phraseologies in FAAO 7110.65 and FAAO 7210.3 shall apply.

- d. **Helicopter Procedures.** There are no helicopter pads at FCM however, there are designated practice areas. Refer to Appendix 3 for map.
- e. **Overflights and Transitions**
1. Approve to the maximum extent possible all overflights and transitions through the FCM Delta airspace.
 2. Issue current altimeter setting.
 3. When unable to authorize transitions because altitude requested would allow the aircraft to enter the MSP Bravo airspace, state:

PHRASEOLOGY: "THE BASE OF THE MSP BRAVO AIRSPACE OVER FCM AIRPORT IS 3000 FEET MSL. SUGGEST YOU DESCEND BELOW 3000 OR CONTACT MSP APPROACH ON FREQUENCY (FREQUENCY). ADVISE."

3-8. APPROACH IN USE

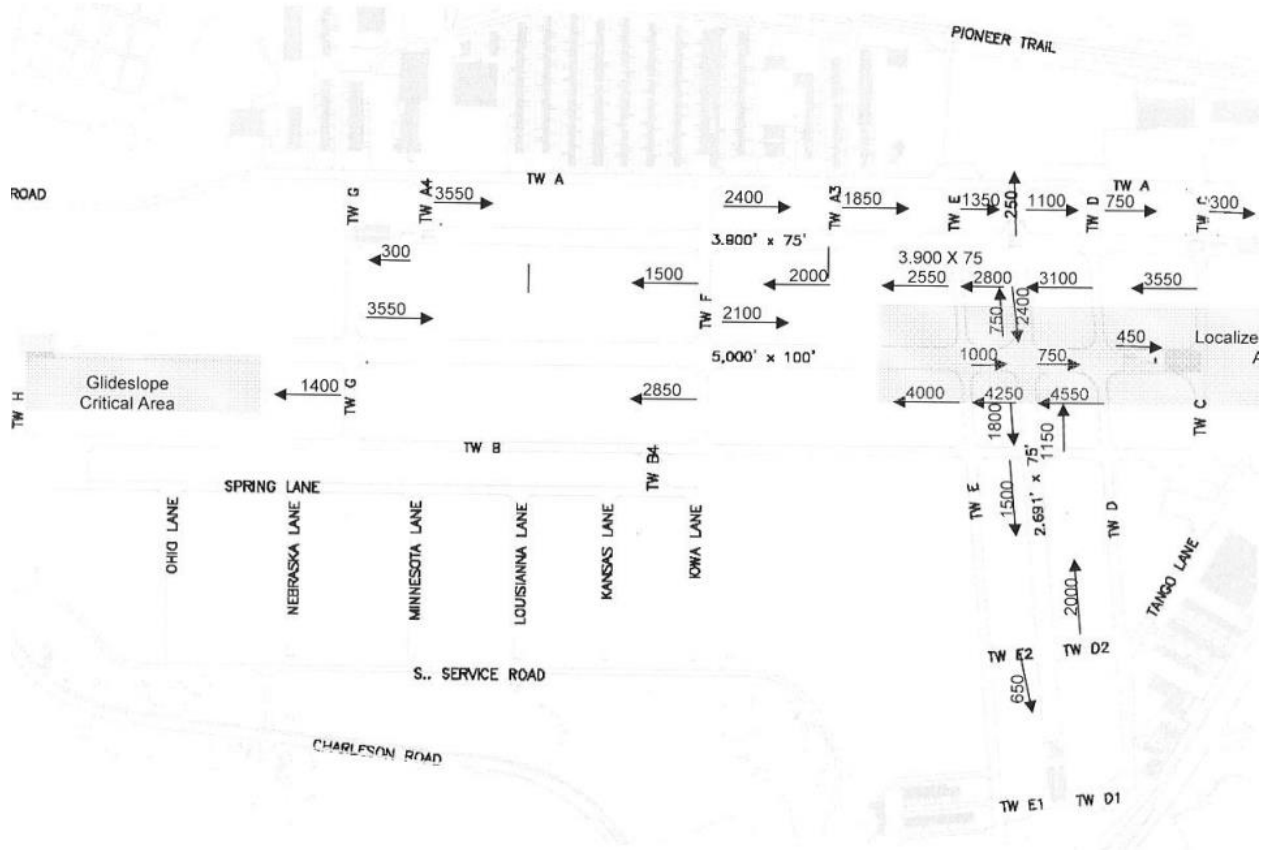
Advertise visual approaches only when the visibility is at or above 7 miles and the ceiling is at or above 2100 ft. AGL. When instrument approaches are in use, advertise the following instrument approaches on the FCM ATIS:

- a. When Runways 10L/R or 36 are in use, advertise a straight-in approach procedure for the active runway(s).
- b. When Runway 28 is active, advertise the RNAV (GPS) Runway 28L and 28R Approaches and/or the VOR Runway 36 Approach circle to Runway 28L.
- c. When Runway 18 is active, advertise an instrument approach procedure for Runway 10R circle to Runway 18.

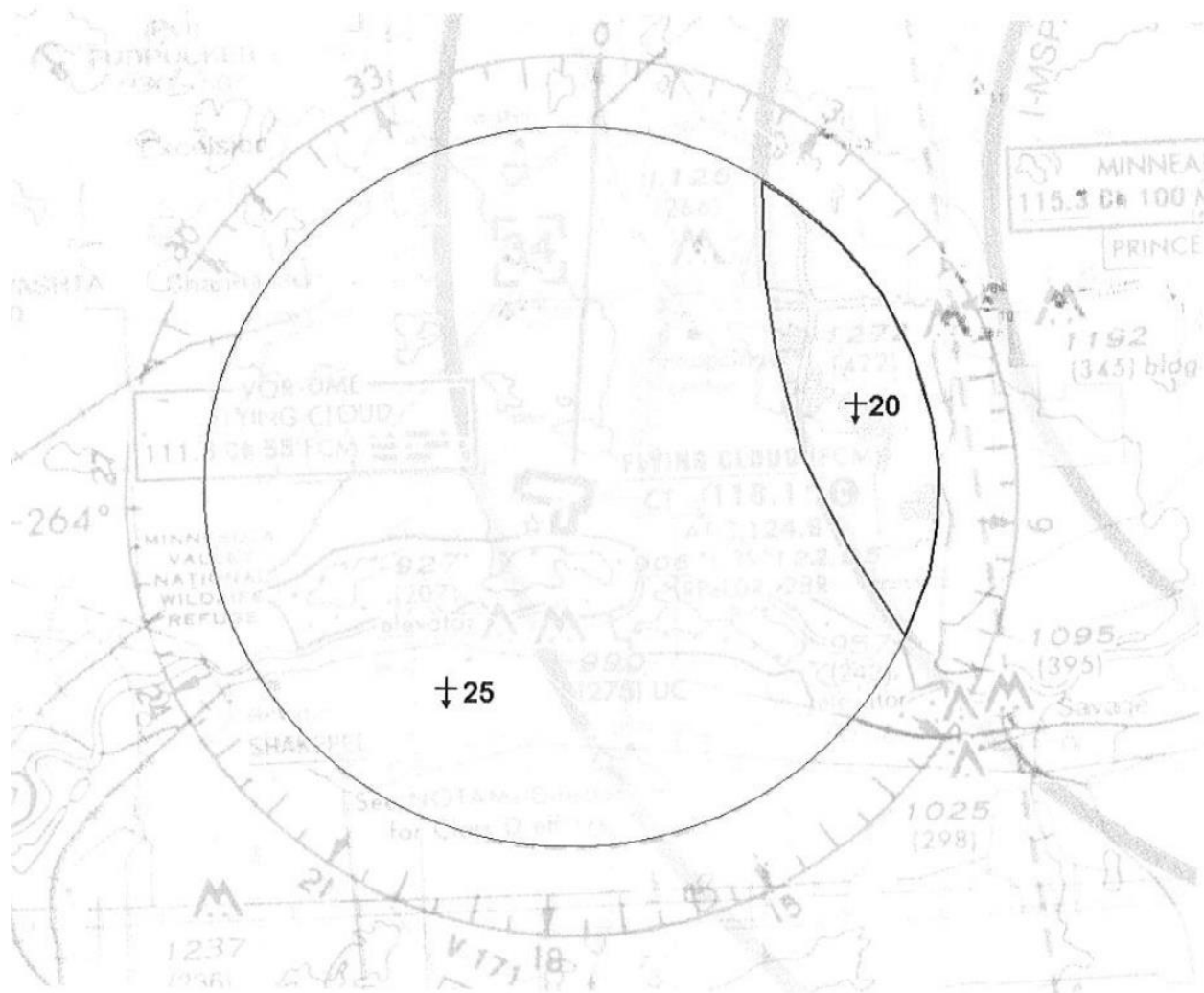
APPENDIX 1. POSITION RELIEF CHECKLIST

1. SIA
2. Weather Information
 - a. Current weather
 - b. ATIS
 - c. SIGMETs
 - d. AIRMETs
 - e. PIREPs
 - f. ILS CRITICAL
 - g. NOTAMs
3. Field Condition Report
 - a. Braking action
 - b. Airport activities
4. Weather and Altimeter Trends
5. Verbally State Runway Use Status
 - a. Local Control Owned
 - b. Ground Control Owned
 - c. Unavailable, Closed, Occupied
6. Coordination Agreements
 - a. With other positions
 - b. With other facilities
7. Traffic
 - a. Aircraft standing by for service
 - b. Special activity
 - c. Point out A/C
 - d. Inbound A/C
 - e. Outbound A/C

APPENDIX 2. TAXIWAYS, RUNWAYS/LENGTH REMAINING



APPENDIX 4. SVFR AREAS OF OPERATION



APPENDIX 5. MULTIPLE RUNWAY CROSSING AREAS

