

STP 7220.3Q

vZMP

09/29/2022



STANDARD OPERATING PROCEDURES

St Paul Air Traffic Control Tower

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. DEFINITIONS..... 4

 1-7. POSITIONS..... 4

 1-8. MULTIPLE RUNWAY CROSSINGS..... 4

 1-9. SPECIAL USE AND PROCEDURES 5

Chapter 2. GROUND CONTROL/CLEARANCE DELIVERY 6

 2-1. POSITION DUTIES AND RESPONSIBILITIES 6

 2-2. CLEARANCE DELIVERY 6

 2-3. AREA OF JURISDICTION..... 6

 2-4. FREQUENCY INFORMATION 7

 2-5. DEPARTURE PROCEDURES 7

 2-6. COORDINATION PROCEDURES..... 7

 2-7. HELICOPTER OPERATIONS 7

 2-8. POTENTIAL PROBLEM AREAS 8

Chapter 3. LOCAL CONTROL 9

 3-1. POSITION DUTIES AND RESPONSIBILITIES 9

 3-2. AREA OF JURISDICTION..... 9

 3-3. FREQUENCY INFORMATION 9

 3-4. ARRIVAL PROCEDURES..... 9

 3-5. DEPARTURE PROCEDURES 9

 3-6. COORDINATION PROCEDURES..... 10

 3-7. HELICOPTER OPERATIONS 10

 3-8. MISSED APPROACH/GO-AROUND OPERATIONS..... 10

 3-9. VISUAL REPORTING POINTS 10

 3-10. SPECIAL FLIGHT HANDLING/PROCEDURES 10

Appendix A GROUND CONTROL/CLEARANCE DELIVERY CHECKLIST 11

Appendix B LOCAL CONTROL CHECKLIST 12

Appendix C MOVEMENT AREAS/NON-MOVEMENT AREAS..... 13

Appendix D RUNWAY LENGTH AND INTERSECTION DEPARTURE LENGTHS 14

Appendix E RUNWAY 13 CLEAR ZONE 15

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 St. Paul Air Traffic Control Tower (STP).

1-2. DISTRIBUTION

All vZMP personnel.

1-3. CANCELLATION

vZMP ATCSOP Rev. 7, Section 1.7 “St. Paul Downtown – Holman Field Airport (KSTP)” dated 20 Oct 2011.

1-4. EFFECTIVE DATE

This order is effective September 29, 2022.

1-5. EXPLANATION OF CHANGES

Initial release.

1-6. DEFINITIONS

Hereafter certain terms in this order shall be defined by abbreviations.

Positions: Local Control shall be defined as “LC”, Ground Control shall be defined as “GC”, Clearance Delivery shall be defined as “CD”.

1-7. POSITIONS.

The following positions are in use at STP ATCT:

<i>Position Name</i>	<i>Frequency</i>	<i>Callsign</i>
Ground Control/Clearance Delivery (GC/CD)	121.675	STP_GND
Local Control (LC)	119.1	STP_TWR
ATIS	118.35	KSTP_ATIS

1-8. MULTIPLE RUNWAY CROSSINGS

In accordance with FAA Order JO 7210.3, St. Paul Air Traffic Control Tower is authorized to provide multiple runway crossings to aircraft as established below.

1. Runway 27 and Runway 31 on Taxiway G.
2. Runway 31 and Runway 32 on Taxiway D.

1-9. SPECIAL USE AND PROCEDURES

1. **West Staging Area** The west staging area is located between taxiways W, L, A, and D. This is normally owned by GC, and used for helicopter operations.
2. **Guard Maltese Cross** The guard cross is a cross painted on taxiway A abeam the guard ramp, and is normally owned by GC. When LC has control of the guard cross, GC must restrict aircraft from taxiing on TWY L and TWY A north of TWY D.

Chapter 2. GROUND CONTROL/CLEARANCE DELIVERY

2-1. POSITION DUTIES AND RESPONSIBILITIES

1. Process and forward flight plan information.
2. Ensure positive control of all traffic on GC designated movement areas.
3. Obtain verbal approval from LC prior to authorizing an aircraft to cross or use any portion of an active runway.
4. Ensure departing aircraft have received current ATIS or wind/altimeter, assigned runway, pertinent NOTAMs and other pertinent STP airport condition information.
5. Issue instructions, clearances, and ensure pilot read back for accuracy.
6. Issue IFR, SVFR, VFR, and VFR-on-Top beacon codes and clearances.
7. Conduct a position relief briefing IAW FAAO 7110.65, FAAO 7210.3, and local orders.

2-2. CLEARANCE DELIVERY

1. Issue all IFR departures 3,000 for an initial altitude. Exception: Runway 13/14 IFR departures shall be issued 2,500 for an initial altitude. Assign an initial altitude of 2500 ft. to IFR helicopters initially departing to the south or west of the Runway 13/31 extended centerline. To IFR helicopters initially departing north or east of this centerline, assign an initial altitude of 3000 ft.

Note: Runway 31 is not available for IFR departures.

2. Issue IFR and SVFR clearances according to FAAO 7110.65. SVFRs must be restricted to at or below 2,500.
3. When issuing VFR Bravo airspace instructions, include phraseology that instructs aircraft to remain outside Class B airspace.

Example: "N12345, remain outside the Bravo airspace."

2-3. AREA OF JURISDICTION

1. GC is responsible for all aircraft operations on airport movement area under GC jurisdiction. This area consists of the west staging area, all taxiways except that portion of Taxiway D between Runway 13/31 and Runway 14/32, when both runways are active. GC is responsible for all grass island areas. Grass areas may be delegated to LC for helicopter operations (See Appendix C).
2. Multiple runway crossings are authorized for aircraft only while crossing Runway 27 and Runway 31 on Taxiway G, and Runway 31 and Runway 32 on Taxiway D per waiver to FAAO 7210.3.

2-4. FREQUENCY INFORMATION

Frequency 121.675 is the standard frequency for GC/CD.

2-5. DEPARTURE PROCEDURES

1. All intersection departures shall be verbally coordinated with LC.
2. 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 _____.”

2-6. COORDINATION PROCEDURES

1. Required Coordination with LC

- a. Approval must be granted by LC prior to GC utilizing any area under LC jurisdiction.
- b. To cross or proceed onto active runways, coordinate the operation when the aircraft is reaching the crossing intersection.
- c. Inform LC when a runway operation has been completed.
- d. Inform LC if GC is unable to complete any operation as previously coordinated.
- e. Inform LC when authorizing helicopters to operate in the grass areas near (but not on) active runways.
- f. Intersection Departures: All intersection departures need to be verbally coordinated with LC.

2-7. HELICOPTER OPERATIONS

1. Helicopters use taxiways, runways and grass areas. LC must obtain approval from GC to land any surface other than active runways. Once coordination for landing area is accomplished, LC may taxi arriving helicopters to adjacent parking areas without further coordination. When the operation is complete, LC must coordinate returning the surface to GC. GC must protect the full length of a taxiway for helicopter landing, unless otherwise coordinated. When the Guard Maltese Cross is being used by a helicopter, GC must restrict aircraft and vehicles from using Taxiway L and Taxiway A north of Taxiway D.
2. Helicopters may be taxied to any movement or grass area for departure.
3. When GC taxis a helicopter to a movement area and hands the aircraft off to LC, LC may depart the assigned movement area without any further coordination.
4. All movement areas are authorized for helicopter operations.

2-8. POTENTIAL PROBLEM AREAS

1. **Read Backs:** Many errors occur due to incorrect read backs. Maintain a high level of awareness during all read backs of taxi instructions, clearances, and hold short requirements.
2. **Runway 9/27:** Maintain added awareness to ensure taxiing aircraft hold short of this runway when in use.
3. **Taxiway D:** Ensure pilots holding between Runway 13/31 and Runway 14/32 on Taxiway D observe the correct hold short line.

Chapter 3. LOCAL CONTROL

3-1. POSITION DUTIES AND RESPONSIBILITIES

1. Issue traffic advisories and safety alerts.
2. Initiate control instructions and ensure pilot read back.
3. Issue control instructions to IFR, VFR and SVFR aircraft operating on the active runway(s) and to airborne aircraft within STP Class D surface area.
4. Scan tower cab/airport environment.
5. Receive authorization from GC before using any surface delegated to the position.
6. Obtain IFR releases from M98.
7. Determine active runway(s) in use. Visual approaches may only be advertised when the visibility is at or above 7 miles and the ceiling is at or above 2300 ft. AGL. Advise M98 when visibility or ceiling increase to these minima or greater or decrease to less than these minima.

3-2. AREA OF JURISDICTION

The STP Class D surface area consists of the airspace within a 4.1 nm radius of STP (except for a cut out for SGS), up to 2500 AGL and below the vertical limits, adjacent to and outside the lateral limits of the MSP Class B airspace.

The LC movement area of jurisdiction consists of the STP Class D surface area, Runways 9/27, 13/31, 14/32, and the portion of Taxiway D between Runway 14/32 and 13/31 when both runways are active. LC may delegate the control of any runway to GC when not in use.

3-3. FREQUENCY INFORMATION

Frequency 119.1 is the standard frequency for the LC position.

3-4. ARRIVAL PROCEDURES

1. Runway 31 and 32 operations: Separate aircraft simultaneously utilizing runways 31 and 32 according to 7110.65 3-9-9 Non intersecting Converging Runway Operations.
2. Advise helicopters utilizing the Guard Maltese Cross of traffic on the field.

3-5. DEPARTURE PROCEDURES

1. IFR releases – LC may clear an IFR aircraft for departure after obtaining a release from the M98 controller. The M98 controller is responsible for assigning a heading to IFR departures with the release.
2. STP has no formal runway use or noise abatement program.
3. Runway lengths and intersection distances are depicted in Appendix D.
4. Runway 31 shall not be used for IFR departures.

3-6. COORDINATION PROCEDURES

1. LC shall coordinate with GC:
 - a. 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. LC shall coordinate with M98:
 - a. IFR aircraft executing an unplanned missed approach.
 - b. Pilot requests, other than those already coordinate with M98.

3-7. HELICOPTER OPERATIONS

1. LC may depart helicopters from assigned movement areas without verbal coordination when GC taxis the helicopter and hands the aircraft off to LC.
2. Advise helicopters of any conflicting traffic on the airfield.
3. If a helicopter requests to land on GC's movement area, LC must coordinate with GC prior to landing. LC shall have the authority to taxi the helicopter into parking adjacent to the surface requested. The area shall be returned to GC when the operation has ended.

3-8. MISSED APPROACH/GO-AROUND OPERATIONS

1. Instruct IFR aircraft executing an unplanned missed approach to fly heading 040 degrees and to maintain 2500 ft. unless an alternate heading is required due to traffic.
2. Advise M98 when an IFR aircraft executes an unplanned missed approach and if a nonstandard heading is required.

3-9. VISUAL REPORTING POINTS

Commonly used checkpoints are:

3M	3.5 E	Hudson	16 E
Shoreview Antennas	7 NW	Stillwater	15 NE
State Capital	2 NW	Lake Elmo (21D)	11 NE
White Bear Lake	11 NNE	South St. Paul	5 SE
State Fair Grounds	6 NW	Pine Bend	12 S

3-10. SPECIAL FLIGHT HANDLING/PROCEDURES

Runway 13 Clear Zone: The Runway 13 clear zone must be clear of aircraft when an aircraft is on approach to Runway 13. See Appendix E.

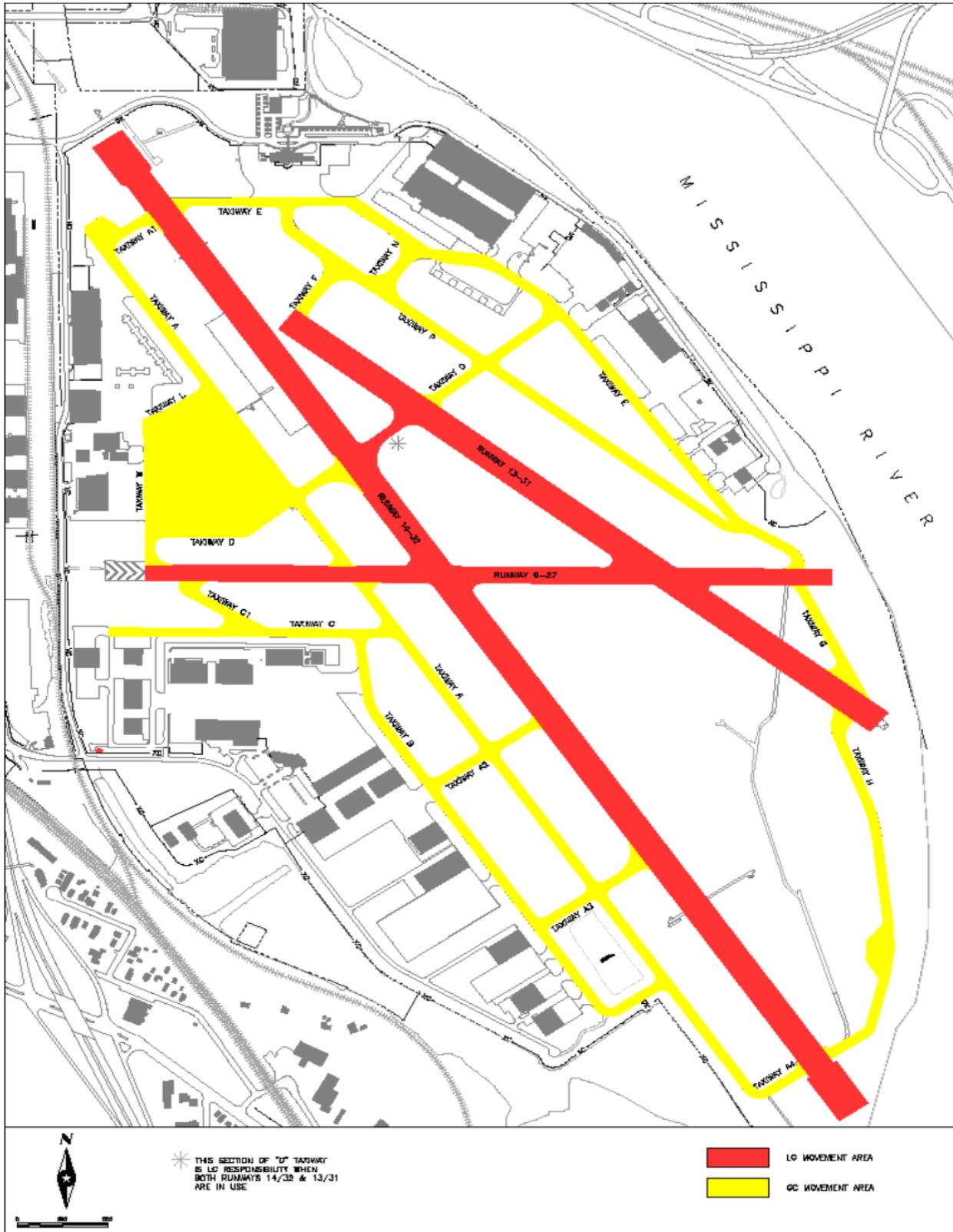
Appendix A GROUND CONTROL/CLEARANCE DELIVERY CHECKLIST

1. Complete Pre-Duty Weather Brief
2. SIA
3. Equipment
4. Airport Conditions/Status
 - a. Closed/Restricted areas
 - b. Braking Action reports
5. Airport activities
6. Weather/Trends
 - a. Present & Forecast conditions
 - b. SIGMETs/PIREPs
 - c. Wind/Altimeter
7. Flow Control/SWAPs/Metering to MSP
8. Special activities/instructions/restrictions
9. ATIS Information and Code
10. Verbally state the status of each runway
 - a. Unavailable
 - b. Closed
 - c. Occupied
11. Pertinent NOTAMs
12. Traffic. INCLUDE:
 - a. Special activity aircraft
 - b. Aircraft standing by for service
 - c. Coordination agreements with other positions
 - d. Special problems, requests, or instructions
13. Two minute monitor by relieved controller

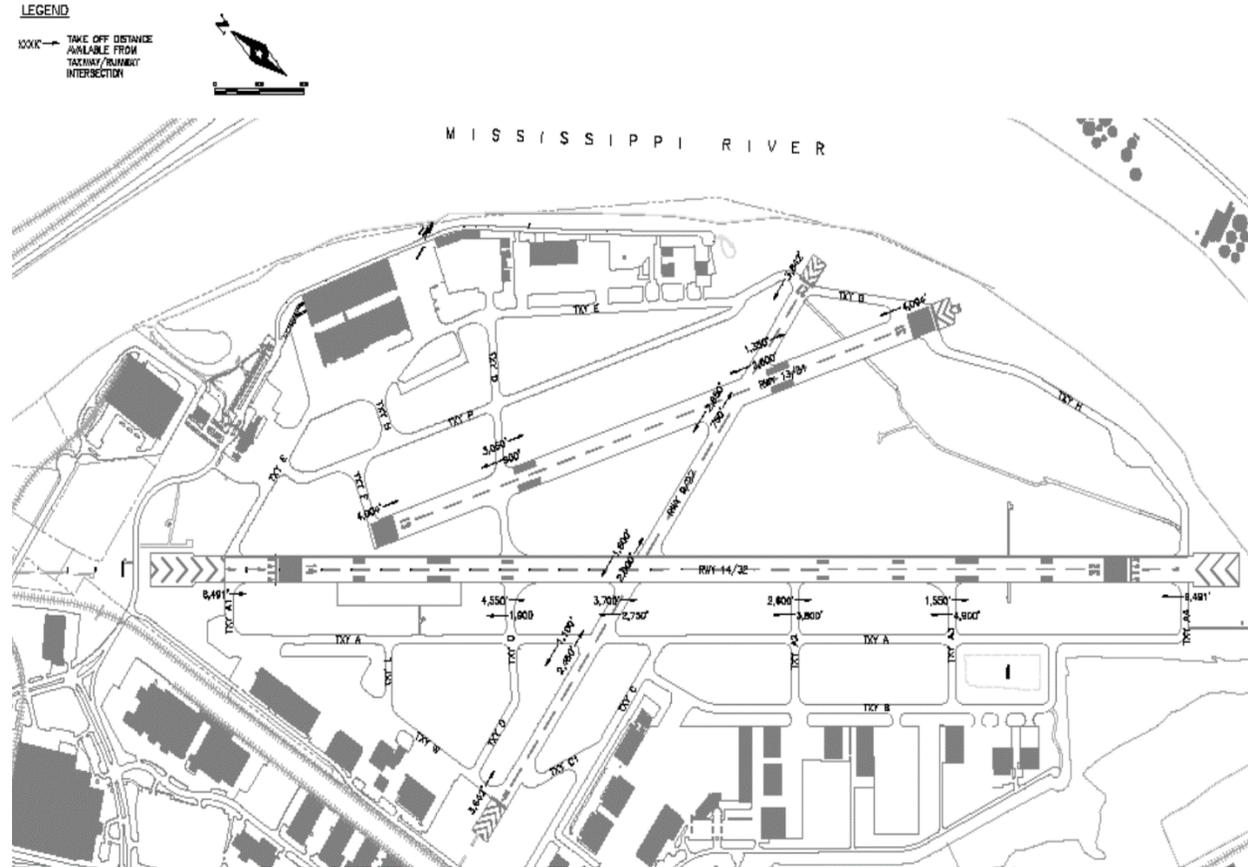
Appendix B LOCAL CONTROL CHECKLIST

1. Complete Pre-Duty Weather Brief
2. SIA
3. Equipment
4. Airport conditions/Status
 - a. Closed/Restricted areas
 - b. Braking Action reports
5. Airport activities
6. Weather/Trends
 - a. Present & Forecast conditions
 - b. SIGMETs/PIREPs
 - c. Wind/Altimeter
7. Flow Control/SWAPS/Metering to MSP
8. Special Activities/Instructions/restrictions
9. ATIS Information and Code
10. Verbally State the Operational status of each runway.
 - a. Unavailable
 - b. Closed
 - c. Occupied
11. Pertinent NOTAMs
12. Traffic, INCLUDE:
 - a. Special Activity Aircraft
 - b. Point Out Aircraft
 - c. Holding Aircraft
 - d. Primary Targets
 - e. Aircraft released but not yet airborne
 - f. Aircraft standing by for service
 - g. Coordination agreements with other positions
 - h. Special problems, requests, or instructions
13. Two minute monitor by relieved controller

Appendix C MOVEMENT AREAS/NON-MOVEMENT AREAS



Appendix D RUNWAY LENGTH AND INTERSECTION DEPARTURE LENGTHS



Appendix E RUNWAY 13 CLEAR ZONE

