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FSD ATCT 7110.1L

SIOUX FALLS ATCT

STANDARD OPERATING PROCEDURES

September 10, 2022

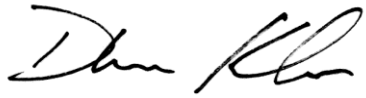
VATSIM MINNEAPOLIS ARTCC

VIRTUAL AIR TRAFFIC SIMULATION NETWORK

FOR SIMULATION USE ONLY

SUBJ: Sioux Falls Air Traffic Control Tower (FSD ATCT) Standard Operating Procedures (SOP)

Foreword. This order prescribes air traffic control procedures and phraseology for use by vZMP controllers providing services at FSD ATCT. Controllers are required to be familiar with the provisions of this order that pertain to their operational responsibilities and to exercise their best judgement if they encounter situations not covered by it.



Dhruv Kalra
Air Traffic Manager
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ORDER RECORD OF CHANGES

Change	Description	Effective Date	Issued By
	Original Publication	10 Sept. 2022	DE

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CHAPTER 1. GENERAL INFORMATION

1-1. PURPOSE OF THIS ORDER.

This order establishes standard operating procedures for vZMP personnel to effectively accomplish positive control while working FSD ATCT airspace. This order is supplemental to vZMP and VATUSA orders and guidelines. Controller personnel are required to be familiar with the provisions of this order, and to exercise their best judgement if they encounter situations not covered by it.

1-2. AUDIENCE.

All vZMP controllers.

1-3. WHAT THIS ORDER CANCELS.

This order cancels vZMP ATCSOP Rev. 7, Section 4.8 (Joe Foss Field Airport. Sioux Falls, SD (KFSD)).

1-4. EFFECTIVE DATE.

This order is effective September 10, 2022.

1-5. CHANGES.

Initial release.

CHAPTER 2. OPERATIONAL POSITIONS

2-1. FSD ATCT POSITIONS.

The following positions are in use at FSD ATCT.

Position Name	*Frequency*	*STARS ID*	*Callsign*
Ground Control	121.900	G	FSD_GND
Local Control	118.300	T	FSD_TWR
ATIS	126.600		KFSD_ATIS
Radar Approach/Departure	125.800	W	FSD_APP

CHAPTER 3. CLEARANCE DELIVERY/GROUND CONTROL

Ground Control/Clearance Delivery are normally combined. GC is responsible for air traffic services as appropriate to all aircraft on designated movement areas, except the active runway(s).

3-1. FREQUENCIES.

a. GC's assigned frequency is 121.9.

3-2. BOUNDARIES.

All aircraft operating on any designated movement area of the airport with the exception of any runway designated as active and in use by Local Control. Control instructions for designated non-movement areas may be issued to provide save and expeditious flow of traffic. Movement and non-movement areas are depicted in Appendix 1.

3-3. CLEARANCE DELIVERY RESPONSIBILITIES.

a. IFR Departures and Local IFR Operations:

1) All IFR departures must be instructed to maintain five thousand, expect (requested altitude) one zero minutes after departure, **or** maintain requested/assigned altitude (if requested/assigned altitude is 5000 feet or less).

2) Flight progress strip must be forwarded to LC prior to aircraft reaching the assigned runway departure point.

b. SVFR Operations:

1) SVFR operations in weather conditions less than basic VFR minima are authorized per FAAO 7110.65 Chapter 7, Section 5.

2) GC must inform LC of any aircraft requesting SVFR clearance.

c. VFR-on-Top:

1) VFR on top operations are authorized per FAAO 7110.65 Chapter 7, Section 3.

2) Flight progress strips must be forwarded to LC prior to aircraft reaching the assigned runway departure point.

d. VFR Departures:

1) Flight progress strips must be forwarded to LC prior to aircraft reaching the assigned runway departure point.

e. Non-Participating Departures:

1) Aircraft departing Sioux Falls airport and not requesting basic radar service do not require a squawk code.

2) Flight progress strips must be forwarded to LC prior to aircraft reaching the assigned runway departure point.

3-4. RUNWAY ASSIGNMENT.

a. All IFR aircraft must be issued the advertised departure runway unless otherwise coordinated with LC.

b. LC must be verbally advised of any VFR aircraft that have been assigned a runway other than the advertised departure runway.

c. LC must be verbally advised of any aircraft that have been assigned or are requesting an intersection departure.

3-5. TAXI INSTRUCTIONS.

Issue taxi/movement instructions to all aircraft under the control of GC in accordance with agency/facility orders and directives.

3-6. RUNWAY COORDINATION PROCEDURES.

a. When Runway 9/27 is in use by LC, GC must coordinate to enter the runway approach area on taxiway A.

CHAPTER 4. LOCAL CONTROL

Local Control (LC) is responsible for operations conducted on active runways and within Class D airspace. LC must visually scan runways to the maximum extent possible.

4-1. FREQUENCIES.

a. LC's assigned frequency is 118.3.

4-2. VERTICAL AND LATERAL BOUNDARIES.

a. Class D Surface Airspace (5SM [4.4NM] x 3900 feet MSL)

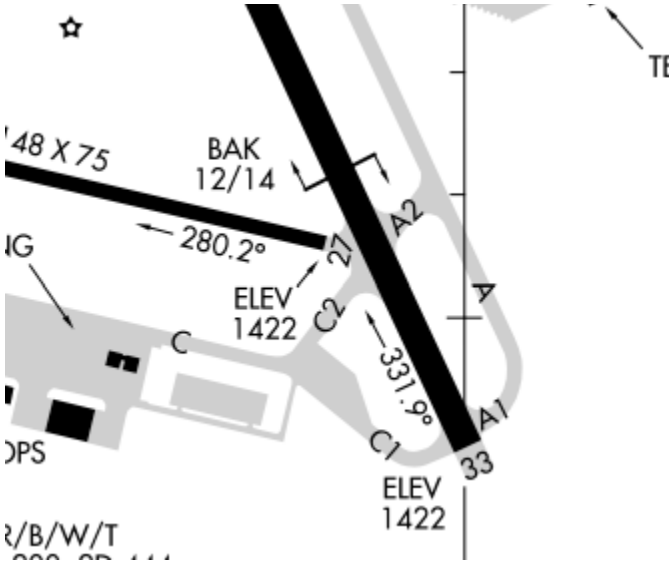
b. All active runways

1) Runway 09/27 is to be handled as an intersecting runway with 03/21 and 15/33.

c. Designated helipads

4-3. DEPARTURE AIRCRAFT.

(Controllers are authorized to issue takeoff clearance for Runway 27 prior to the aircraft crossing Runway 15/33.)



LC must:

a. Verify the accuracy of all flight progress strips. Ensure departure time conforms to release time, if flow programs are in effect. If unable to meet release time, coordinate with TMU for new release.

b. Regardless of runway configuration, LC has automatic releases off the **primary runway** only, with the following delegated headings:

Runway	Headings
15	090-210
33	270-030
3	330-090
21	150-270

Note – *Unless otherwise coordinated, the first runway listed in the ATIS broadcast is considered the primary runway.*

c. An "off runway" departure (departing other than the primary runway) requires release from the radar controller and must be assigned runway heading unless otherwise coordinated.

d. Automatic releases off Runway 9/27 are not authorized except for VFR departures and aircraft remaining in the local traffic pattern. All other arrivals/departures must be verbally coordinated.

e. Provide initial departure separation for all IFR aircraft.

f. Initiate frequency change in accordance with FAAO 7110.65; frequency change must be completed prior to aircraft departing the Class D unless verbally coordinated for conflict resolution.

g. Issue *"Fly runway heading, maintain (assigned altitude)"* to all unplanned missed approach aircraft unless otherwise coordinated.

h. Forward flight progress strip to the Radar Position prior to frequency change.

4-4. ARRIVALS.

Local Control must:

a. Be responsible for separation between IFR aircraft within the Class D airspace which LC has accepted as a handoff, and subsequent departure aircraft.

1) Local Control must verbally coordinate any required restrictions prior to accepting a handoff from approach control.

b. Sequence itinerant aircraft and pattern traffic aircraft as required.

c. Coordinate taxi instructions as needed with GC to ensure landing aircraft can exit clear of the runway.

4-5. SVFR OPERATIONS.

LC must **APREQ with** approach control the direction of flight and any altitude restrictions **prior** to an SVFR departure. LC will inform approach control when SVFR departures are clear of the Class D. LC must APREQ with approach control if local SVFR operations are instructed to remain within the vicinity (3 miles) of the airport.

4-6. RUNWAY COORDINATION PROCEDURES.

a. LC must inform GC when any runway that had been previously released to GC is to be returned to LC for aircraft operations.

b. LC must approve/disapprove coordination initiated by GC to cross an active runway using phraseology IAW FAAO 7110.65 requirements.

CHAPTER 5. RADAR APPROACH/DEPARTURE CONTROL

Radar Approach/Departure Control (R1, R2, R3, and R4) is responsible for the separation, sequencing, and control of arrival/departure/overflight VFR/IFR aircraft within the boundaries of Sioux Falls approach control airspace.

5-1. FREQUENCIES.

a. The radar controller's assigned frequency is 125.8.

5-2. VERTICAL AND LATERAL BOUNDARIES.

The radar controller is responsible for the airspace depicted in Appendix 3. This does not include the Class D.

5-3. DEPARTURE/OVERFLIGHT/ARRIVAL AIRCRAFT.

The radar controller must:

a. Ensure that STARS data has auto acquired and that the information displayed is correct prior to issuing a frequency change to the receiving controller. Aircraft types must be displayed in the data block.

b. Ensure required coordination has been completed for IFR departure aircraft, or VFR departure aircraft requesting flight following and, automated or voice handoff completed prior to frequency change to receiving facility.

c. Overflight aircraft that will penetrate the Class D or adjacent airspace must be pointed out prior to entering the airspace to be protected.

d. The radar controller must pointout/handoff any aircraft that will conflict with Local Control's automatic releases.

e. Sequence all arrival aircraft to the advertised runway(s) and resolve and conflicts prior to transferring communications to LC. Communications transfer should normally occur between 7-10 miles from the airport, no later than the aircraft entering the Class D, unless otherwise coordinated. Arrival aircraft to other than the advertised runway(s) must be identified as per Appendix 3.

f. Ensure vertical separation exists between opposite base leg traffic until another form of separation is attained.

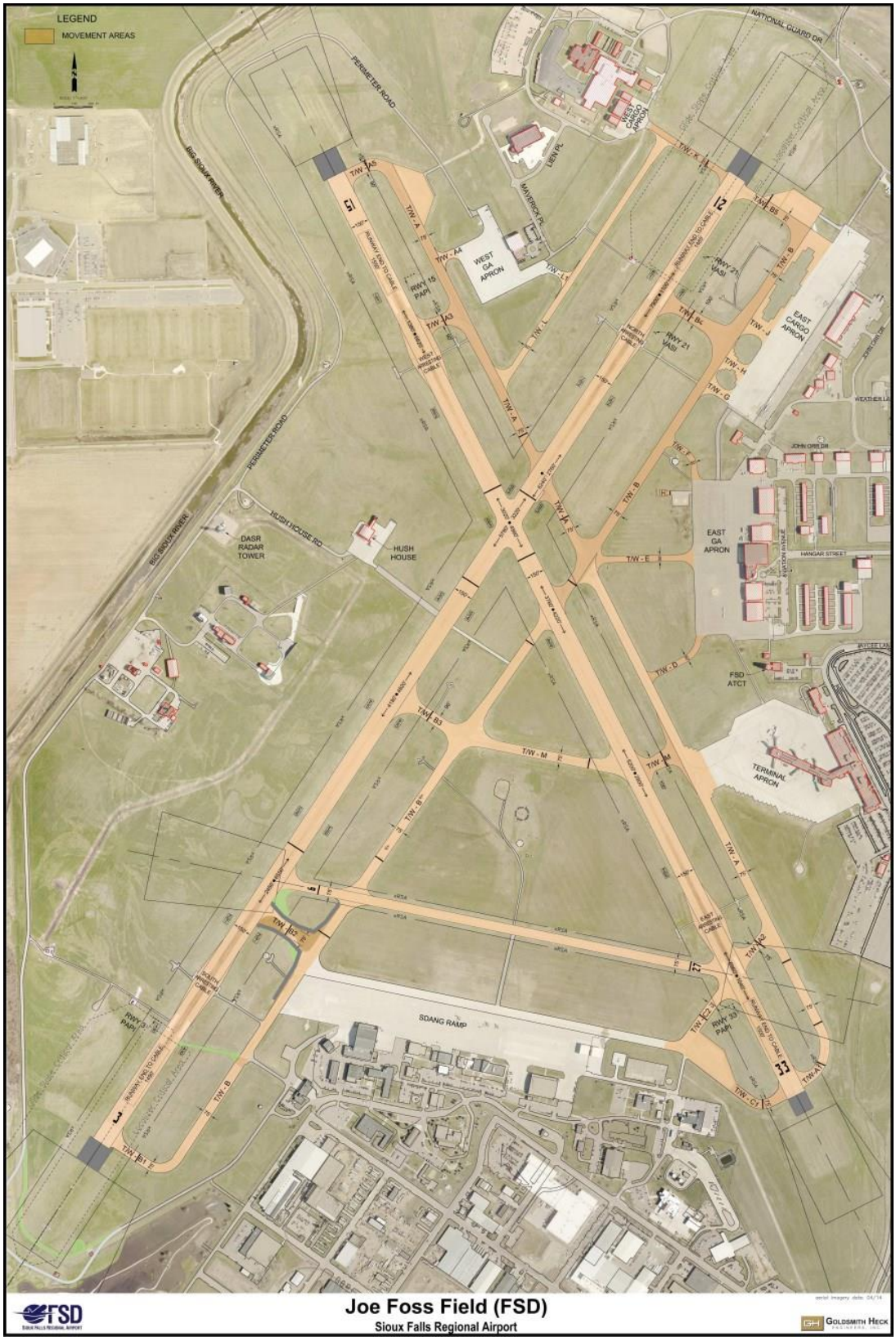
g. Unless otherwise coordinated, Approach Control has control of departing aircraft for turns away from the extended centerline of the designated departure runway.

5-4. SECONDARY AIRPORT OPERATIONS.

a. Terminate radar service prior to frequency change for aircraft landing or conducting approaches at a secondary airport.

b. Instruct the pilot to report cancelling IFR with Sioux Falls approach.

APPDENDIX 1. MOVEMENT AREAS



APPENDIX 2. POSITION RELIEF BRIEFING

1. This appendix prescribes the method and step-by-step process for conducting a position relief briefing and transferring position responsibility from one controller to another.

Ground Control (GC) – Relief Briefing Checklist

1. **Pre-Brief Checklist Items** (completed by relieving controller):

   a. Review SIAs.

   b. Airport Conditions/Status.

   c. Airport Activities

   d. Altimeter/Weather Trends

   e. Special Activities

   f. Pertinent NOTAMs.

2. Briefing Checklist:

   a. Verbally state current ATIS and runway status.

   b. Coordination agreements with other positions.

   c. Brief communication status of all known aircraft.

   d. AIRMETs, SIGMETs, CWAs, PIREPs, special activity aircraft, situations, etc.

   e. All other traffic.

Local Control (LC) – Relief Briefing Checklist

1. **Pre-Brief Checklist items** (completed by relieving controller):
    a. SIAs.
    b. Airport Conditions/Status
    c. Airport activities
    d. Altimeter/Weather Trends
    e. Special Activities
    f. Pertinent NOTAMs
2. **Briefing Checklist:**
    a. Verbally state ATIS and runway status.
    b. Coordination agreements with other positions.
    c. Brief communication status of all known aircraft.
    d. AIRMETs, SIGMETs, CWAs, PIREPs, Special activity aircraft, situations, etc.
    e. All other traffic.

Radar Arrival/Departure – Relief Briefing Checklist

1. **Pre-Brief Checklist items** (completed by relieving controller):
    a. SIAs.
    b. Airport Conditions/Status.
    c. Airport Activities.
    d. Altimeter/Weather Trends.
    e. Special Activities.
    f. Pertinent NOTAMs.
2. **Briefing Checklist:**
    a. Verbally state current ATIS and runway status.
    b. Coordination agreements with other positions.
    c. Brief communication status of all known aircraft.
    d. AIRMETs, SIGMETs, CWAs, PIREPs, Special activity aircraft, situations, etc.
    e. All other traffic.

APPENDIX 3. MANDATORY LOCAL DESIGNATORS

1. The following scratch pad entries must be used as appropriate within FSD Airspace.

a. **(R)** ILS runway 3.

b. **(J)** ILS runway 21.

c. **(V)** VOR or TACAN runway 15.

d. **(D)** VOR/DME or TACAN runway 33.

e. **(G0)** RNAV (GPS) runway 3.

f. **(G9)** RNAV (GPS) runway 9.

g. **(G1)** RNAV (GPS) runway 15.

h. **(G2)** RNAV (GPS) runway 21.

i. **(G7)** RNAV (GPS) runway 27.

j. **(G3)** RNAV (GPS) runway 33.

k. **(V##)** On visual approach when advertising approaches. (Ex: V21 = visual rwy 21).

l. **(F)** Aircraft on a visual approach following another aircraft on approach.

m. **(C)** Pilot will circle to another runway. Without coordination, if the 2 runways are advertised on the ATIS, the circle will be to the other runway. Radar will verbally coordinate all other circles. (Runway designation following the **C** will be the same as for the **GPS approaches**).

n. **(O)** Pilot has requested the option on the approach.

o. **(M)** Pilot will execute a missed approach back to radar. Radar must advise LC if other than runway heading has been issued.

p. **(H)** Pilot will enter holding. (Example: HR = hold @ ROKKY, etc)

When two approaches are advertised an entry will be made in the scratch pad to indicate which approach the a/c is on. Data blocks must display the appropriate scratch pad approach entry for pilots executing multiple approaches.

Radar must verbally inform LC of pilots executing either an High ILS to runway 3 or 21, or the High TACAN to runway 15 as the published missed approach procedures are different for the high altitude approaches.

APPENDIX 4. APPROACH AIRSPACE MAP