**SUX ATCT
7110.1H**

SIOUX CITY ATCT
STANDARD OPERATING PROCEDURES

September 10, 2022

VATSIM MINNEAPOLIS ARTCC
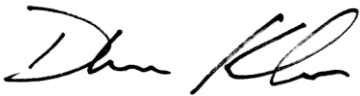
VIRTUAL AIR TRAFFIC SIMULATION NETWORK

Sioux City Air Traffic Control Tower

Standard Operating Procedures (SOP)

7110.1H

FOREWORD

This order prescribes air traffic control procedures and phraseology for use by vZMP controllers providing air traffic control services at SUX ATCT. All operational personnel are required to be familiar with the provisions of this order. Controllers are expected to use their best judgement when encountering situations not specifically covered by this order.

Dhruv Kalra
Air Traffic Manager
Virtual Minneapolis ARTCC

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

This order contains standard operating procedures for maintaining a safe and efficient operation and defines jurisdictional boundaries for each operational position at SUX ATCT.

1-2. DISTRIBUTION

All vZMP controllers.

1-3. CANCELLATION

vZMP ATCSOP Rev. 7, Section 4.9 (Sioux Gateway Airport/Col. Bud Day Field,. Sioux City, IA (KSUX)).

1-4. EFFECTIVE DATE

September 10, 2022

1-5. EXPLANATION OF CHANGES

Initial release.

CHAPTER 2. OPERATIONAL POSITIONS

2-1. SUX ATCT POSITIONS

The following positions are in use at SUX ATCT.

Position Name	Frequency	STARS ID	Callsign
Ground Control/Clearance Delivery	121.900	G	SUX_GND
Local Control	118.700	T	SUX_TWR
ATIS	119.450		KSUX_ATIS
Arrival Radar/Departure Radar	124.600	R	SUX_APP

CHAPTER 3. GROUND CONTROL/CLEARANCE DELIVERY

3-1. JURISDICTIONAL BOUNDARIES AND FREQUENCIES

a. GC is responsible for all movement areas except runways. (Appendix 5)
b. Utilize frequency 121.9.

3-2. GROUND MOVEMENT/COORDINATION

a. Initiate control instructions. Ensure separation and provide air traffic services appropriate to all aircraft operating on the airport taxiways.
b. Scan airport and tower cab environments including known "hot" spots.
c. Coordinate all active runway crossings with LC.
d. Obtain approval from LC prior to authorizing any access to an active runway/safety area not delegated to GC.
e. GC must inform LC when crossings complete and when the runway is no longer needed. LC must acknowledge GC by repeating the information.
f. Back-taxiing should not be used when other taxi routes are available. If used, the aircraft must be put on LC's frequency prior to entering an active runway unless otherwise coordinated.
g. Runway 13/31 and Taxiways Alpha and Golf are heavy reinforced.

3-3. GENERAL RESPONSIBILITIES

a. Provide LC with flight information or flight progress strips for all departures in a timely manner. At a minimum, ACID, RWY and direction of flight must be included.

3-4. CLEARANCES

a. Issue clearances and ensure accuracy of pilot read backs.
b. Issue IFR aircraft an initial altitude of 5000' MSL or lower requested altitude.
c. Practice approaches are normally assigned 3000' MSL.

CHAPTER 4. LOCAL CONTROL

4-1. JURISDICTIONAL BOUNDARIES AND FREQUENCIES

a. LC is responsible for the following air traffic operations:
1) On active runways
2) Within the vertical and horizontal limits of the Delta surface area.
3) Within the active departure corridor to the 10-mile range mark. (Appendices 2 and 3).

b. Utilize frequency 118.7.

4-2. GROUND MOVEMENT/COORDINATION

a. Scan airport and tower cab environments including known "hot" spots.

b. When GC makes a request to cross/operate on or near an active runway, LC shall respond in the following manner:
1. If the request can be authorized, LC must restate the request, including any restrictions.
2. If the request cannot be authorized, state "UNABLE" or "HOLD SHORT".

c. GC must inform LC when crossings complete and when the runway is no longer needed. LC must acknowledge GC by repeating the information.

d. Back-taxiing should not be used when other taxi routes are available. If used, the aircraft must be put on LC's frequency prior to entering an active runway unless otherwise coordinated.

4-3. GENERAL RESPONSIBILITIES

a. Utilize the TDW and Quick Look the ARDR position.

b. Initiate control instructions and ensure separation.

c. Assume the duties of GCCD when GCCD is not staffed.

4-4. ARRIVALS

a. Sequence pattern traffic with arrivals and departures.

b. Point out LC traffic to RA when needed.

c. Coordinate traffic information with RA.

d. In the event LC retains an IFR go-around, LC shall advise ARDR.

Note – IFR aircraft on a visual approach that execute a go-around, and are retained in the pattern, remain "cleared for visual approach."

4-5 DEPARTURES

a. Assign headings to IFR departures that ensure the aircraft will depart within the confines of the Departure Corridor in use unless other coordination is made with RA.

b. Issue appropriate verbal or non-verbal rolling call to ARDR for all aircraft that will receive radar services.

c. Unless otherwise coordinated, instruct aircraft that execute an unplanned missed approach/go-around to fly runway heading or the heading necessary to establish initial separation within the departure corridor and maintain 3,000 ft.

Note - IFR aircraft on a visual approach or instrument approach that execute a missed approach/go-around continue to receive IFR service until the aircraft lands or cancels IFR. When visual separation, either tower applied or pilot applied, cannot be achieved and sustained, controllers must issue instructions to establish separation.

4-6. SEPARATION

a. Provide initial separation between successive departures, and departures and arrivals, including go-arounds and/or missed approaches.

b. Remain cognizant of the possibility of an unplanned missed approach/go-around when formulating same runway/crossing runway takeoff and landing clearances. Be prepared to issue immediate control instructions to resolve aircraft conflict. Flyovers and encounters with wake turbulence should be avoided.

c. Advise ARDR when an aircraft executes an unplanned missed approach/go-around and/or the aircraft cannot visually proceed/return to the landing runway

d. Resolve all potential conflicts between aircraft within LC area of jurisdiction prior to transferring radio communication.

CHAPTER 5. ARRIVAL RADAR/DEPARTURE RADAR

5-1. JURISDICTIONAL BOUNDARIES AND FREQUENCIES

a. ARDR is responsible for air traffic operations within the airspace depicted in Appendix 1, except the Delta surface area and departure corridor allocated to LC. (Appendices 2 and 3)

b. Utilize frequency 124.6.

5-2. GENERAL RESPONSIBILITIES

a. Make necessary STARS configuration entries

b. Ensure radar handoffs are accomplished.

5-3. ARRIVALS

a. Sequence all IFR and VFR radar arrivals to the airport. If ARDR assigns a downwind pattern entry to a VFR aircraft, LC is responsible for the sequence of that aircraft.

b. Complete arrival data block entries no later than 10 NM from the airport. If closer, verbal coordination is required.

c. Any specific restrictions assigned by ARDR must be coordinated with LC prior to communications transfer

d. ARDR shall transfer aircraft communications to LC between 15 and 5 NM miles from SUX airport, unless otherwise coordinated.

e. Aircraft shall be transferred in the order of approach sequence, unless otherwise coordinated.

5-4. DEPARTURES

a. Ensure STARS automatic acquisition of departure track occurs for aircraft departing satellite airports.

b. ARDR is responsible for issuing departure restrictions to LC for traffic and canceling any restriction when it no longer applies.

5-5. SEPARATION

a. Initiate control instructions and ensure separation.

b. Accept and initiate transfer of control, communications, and flight data of non-radar aircraft.

c. Resolve all potential conflicts between aircraft within radar area of jurisdiction prior to transferring radio communication.

5-6. SATELLITE AIRPORT PROCEDURES

a. VFR aircraft are provided approved separation while conducting practice instrument approaches IAW JO 7110.65. until the aircraft has reached the MAP observed on radar or reported by the pilot. This applies to LRJ, VMR, LCG, MEY, and 0C4.

5-7. SCRATCH PAD ENTRIES

a. The use of the SPAD replaces verbal coordination whenever possible (Ex., assigned runway and/or type of approach being made).

b. Each position is responsible for entering the appropriate SPAD entry into the STARS. This does not relieve the controller of using verbal coordination when needed or as directed by this order.

c. The absence of a SPAD entry on an IFR arrival tag indicates the aircraft is making the advertised approach to the primary runway on the ATIS.

d. A "C" between the approach and intentions designators (Ex., ICF, RCM) indicates aircraft is circling to another runway.

e. The following table shows standard local scratch pad data to be entered:

VFR PATTERN ENTRY	
LB	LEFT BASE
LD	LEFT DOWNWIND
RB	RIGHT BASE
RD	RIGHT DOWNWIND
SI	STRAIGHT IN
GENERAL INFO	
ARC	Arc
HLD	Holding
JFA	Just Flying Around
R##	Runway assigned (ex. R35)
S/G	Stop and Go
SVF	Special VFR
T/G	Touch and Go
APPROACH INFO	
GF	RNAV (GPS) Full Stop
GM	RNAV (GPS) Missed Approach
GT	RNAV (GPS) Stay with Tower
IF	ILS Full Stop
IM	ILS Missed Approach
IT	ILS Stay with Tower
LF	LOC Full Stop
TF	TACAN Full Stop
TM	TACAN Missed Approach
TT	TACAN Stay with Tower
VF	VOR Full STOP
VIS	Maintaining Visual Separation
VM	VOR Missed Approach
VT	VOR STAY with Tower

5-8. CLIMB OUT INSTRUCTIONS

a. Unless otherwise coordinated, aircraft executing multiple practice approaches (IFR/VFR) to SUX must be issued the following standard or alternate climb out instructions by ARDR:
    1. For Runways 31 or 35:
        1) Standard - Turn left/fly heading 280, maintain 3000'.
        2) Alternate - Turn right/fly heading 350, maintain 3400'.
    2. For Runways 13 or 17:
        1) Standard - Turn right/fly heading 170, maintain 3000'.
        2) Alternate - Turn left/fly heading 100, maintain 3400'

## CHAPTER 6. PROCEDURES

6-1. TRAFFIC FLOW / DEPARTURE CORRIDORS

a. **NORTH FLOW** describes traffic flow conditions when Runways 31 and/or 35 are designated as active. The NORTH FLOW departure corridor is the area between 280° and 350° bearing relative to the approach end of runway 31 extending outward to the 10 NM range mark and up to 5000' MSL. (Appendix 3)

b. **SOUTH FLOW** describes traffic flow conditions when Runways 13 and/or 17 are designated as active. The SOUTH FLOW departure corridor is the area between 100° and 170° bearing relative to the approach end of runway 13 extending outward to the 10 NM range mark and up to 5000' MSL. (Appendix 3)

Note - *Local Control is responsible for ensuring that assigned headings restrict aircraft to the departure corridor in use. Strong winds may affect the aircraft's track. "Runway heading" for Runway 17/35 is considered inside the departure corridor.*

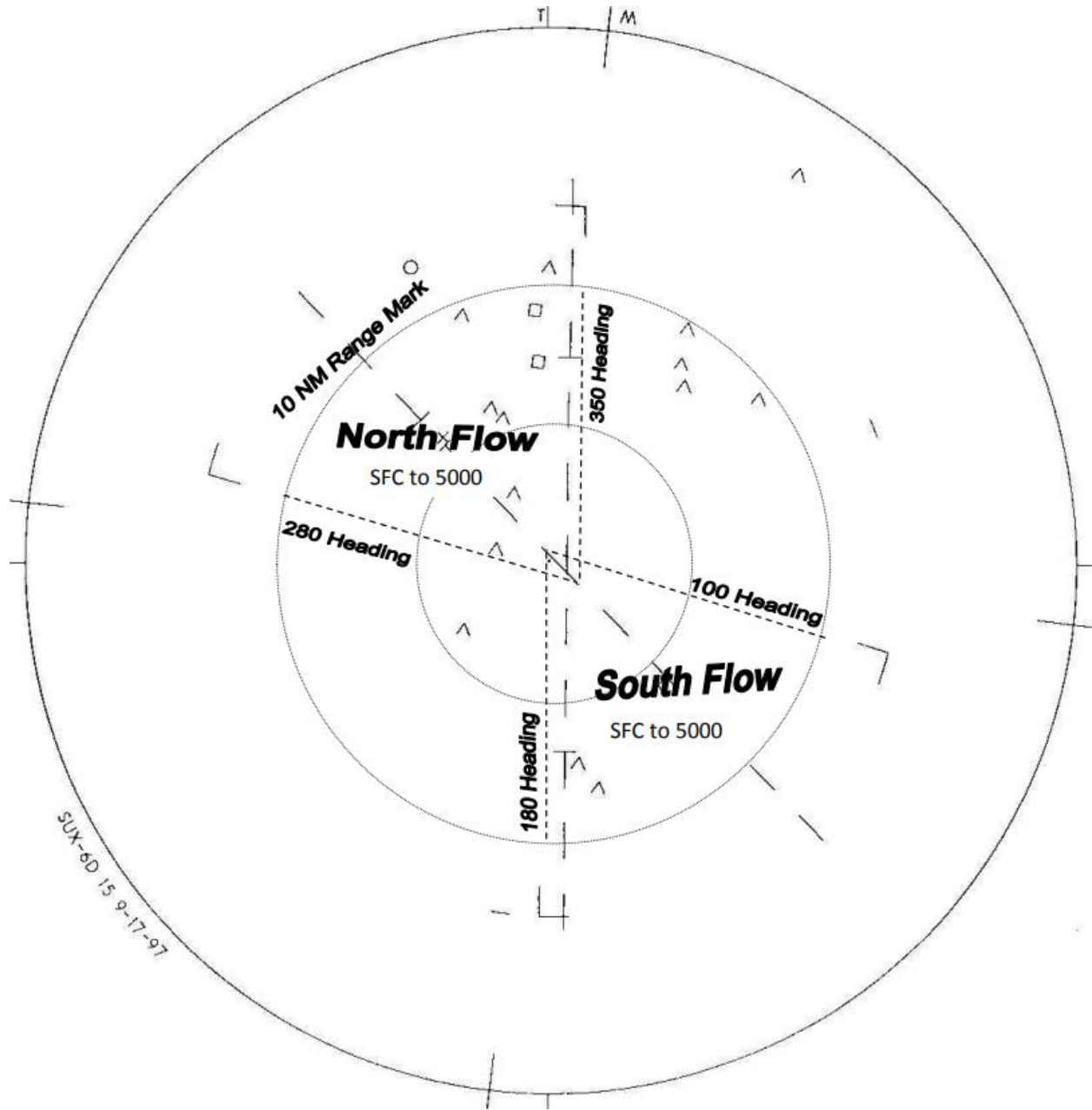## APPENDIX 1 – AIRSPACE DELEGATED TO SUX ATCT
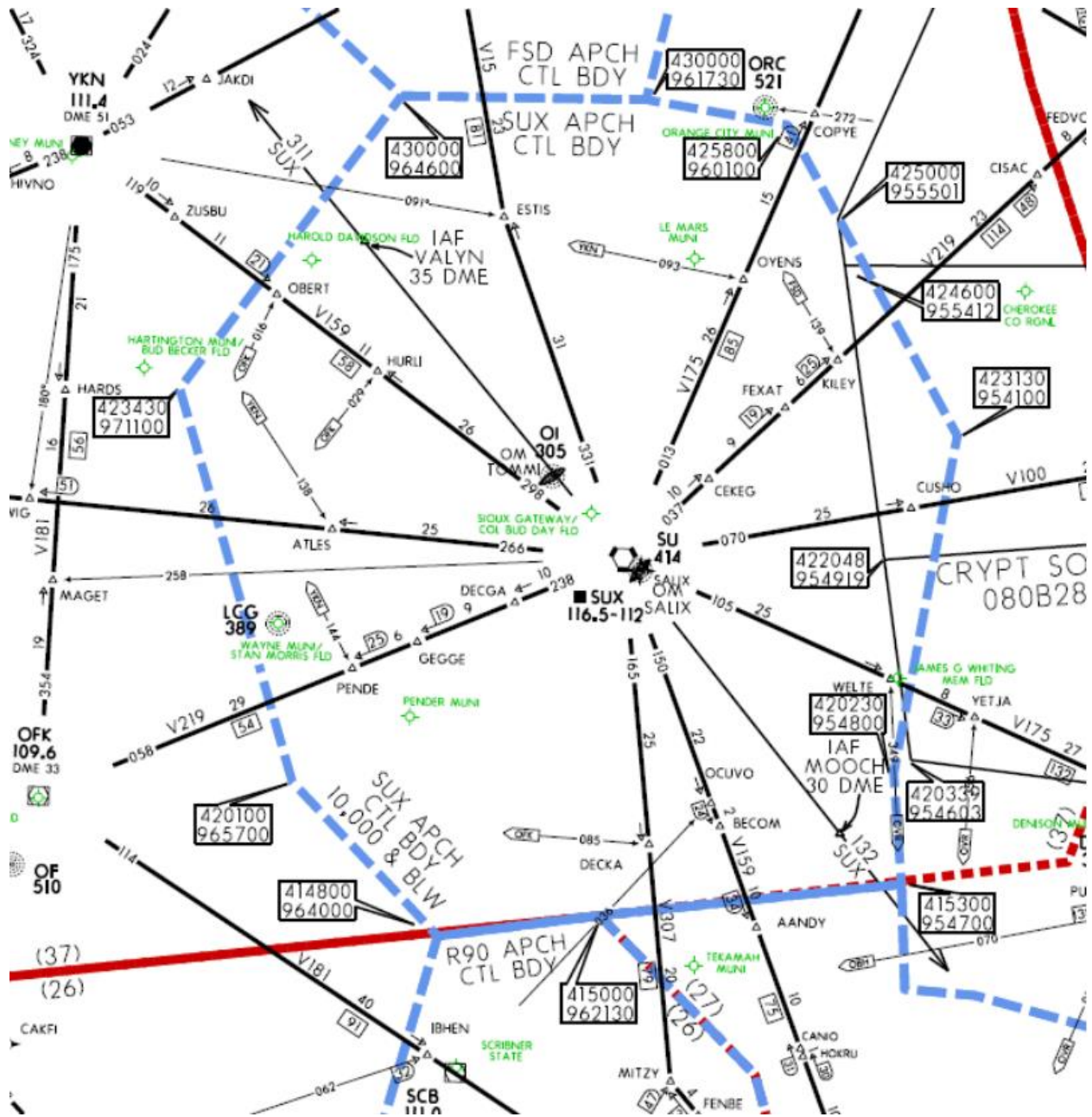
APPENDIX 2 – SURFACE AREA
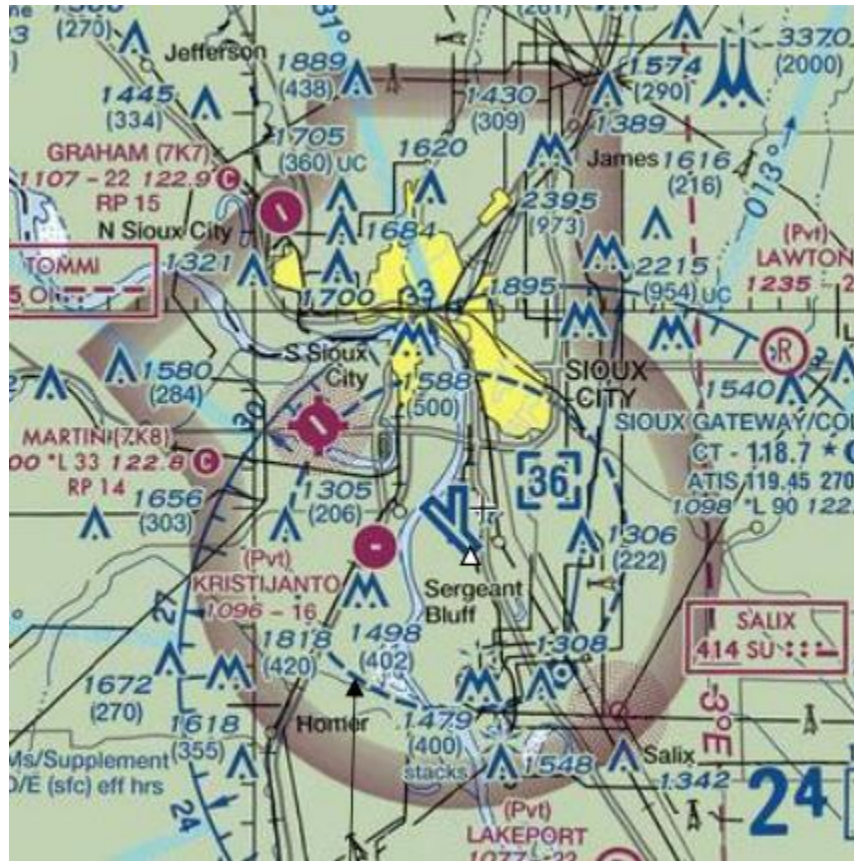
Class D

That airspace extending upward from the surface to and including 3,600 feet MSL within a 4.3-mile radius of Sioux Gateway Airport, excluding that airspace within a 1-mile radius of the South Sioux City Martin Field (7K8). (Dotted line inside of shaded line)

APPENDIX 3 – DEPARTURE CORRIDORS

APPENDIX 4 – POSITION RELIEF CHECKLISTS

1. **LOCAL CONTROL (LC)**	2. **GROUND CONTROL/CLEARANCE DELIVERY (GC/CD)**
a. Status Information Area/ATIS	a. Status Information Area/ATIS
b. Airport Conditions/Status	b. Airport Conditions/Status
1) Type of Approach in use	1) Type of approach in use
2) Verbally state status of each Runway (primary, secondary, available, closed, occupied)	2) Verbally state status of each Runway (primary, secondary, available, closed, occupied)
3) Taxiway Closures	3) Taxiway closures
c. Equipment	4) Runway condition codes/braking action
1) STARS	c. Equipment
2) Other	d. Airport Activities
d. Airport Activities	e. Flow Control
e. Weather/Trends	1) Programs
1) Current/Forecast	2) Delays (EDCTs, etc)
2) PIREPs, SIGMETs, CWAs, AIRMETs	3) FRCs and preferred routing
3) Altimeter/Trends	f. Weather/Trends
f. Special Activities	1) Current/forecast
g. Special Instructions/Restrictions	2) PIREPs, SIGMETs, CWAs, AIRMETs
1) Positions Combined	3) Altimeter/Trends
2) Arrival/Departure Restrictions	g. Special activities
h. Traffic	h. Special instructions/Restrictions
1) Current Traffic (Arrivals, Departures, Satellite Aircraft)	1) Crossings (current and pending)
2) Pointout Aircraft	i. Traffic
3) Special Activity Aircraft	1) Current Traffic (Arrivals, Departures)
4) Aircraft released but not yet airborne	2) Aircraft holding short of Runways
5) Aircraft standing by for service	3) Aircraft standing by for service
6) Coordination agreements (ODO, APREQs)	4) Aircraft release coordination pending
7) Special problems, requests, or instructions	5) Special problems, requests, or instructions

3. **RADAR (ARDR)**
   a. Status Information Area/ATIS
   b. Airport Conditions/Status
      1) Type of Approach in use
      2) Verbally state status of each
         Runway (primary, secondary,
         available, closed, occupied)
   c. Equipment
      1) Radar/STARS
      2) Other
   d. Weather/Trends
      1) Current/forecast
      2) PIREPs, SIGMETs, CWAs,
         AIRMETs,
      3) Altimeter/Trends
      4) Icing, Turbulence, Visiblity
   e. Flow Control
      1) Programs
      2) Delays (EDCTs, ESP)
      3) FRCs and Preferred Routing
   f. Special Activities
      1) MOAs
      2) Other unusual operations
   g. Special Instructions/Restrictions
      1) Departure/Arrival restrictions
      2) Center Restrictions
   h. Traffic
      1) Current Traffic (Arrivals,
         Departures, Satellite, Overflight
         Aircraft, headings, altitudes, speed
         restrictions)
      2) Point out aircraft
      3) Special activity aircraft (non-radar,
         holding, primary target, practice
         area, etc)
      4) Aircraft handed off but still in
         airspace
      5) Aircraft released but not yet
         airborne
      6) Aircraft standing by for service
      7) Coordination agreements (ODO,
         APREQs)
      8) Special Problems, requests,
         instructions
	Intentionally left blank.

APPENDIX 5 – AIRPORT DIAGRAM