

# NACOMATIC

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## GENERAL INFORMATION

This Airport/Facility Directory is a Civil Flight Information Publication published and distributed every eight weeks by the FAA, Department of Transportation, National Aeronautical Navigation Services, Silver Spring, Maryland 20910. It is designed for use with Aeronautical Charts covering the conterminous United States, Puerto Rico and the Virgin Islands.

This directory contains all open to the public airports, seaplane bases and heliports, military facilities, and selected private use facilities specifically requested by the Department of Defense (DoD) for which a DoD Instrument Approach Procedure has been published in the U.S. Terminal Procedures Publication. Additionally, this directory contains communications data, navigational facilities and certain special notices and procedures.

Military data contained within this publication is provided by the National Geospatial-Intelligence Agency and is intended to provide reference data for military and/or joint civil/military airports. Not all military data contained in this publication is applicable to civil users.

### CORRECTIONS, COMMENTS, AND/OR PROCUREMENT

**CRITICAL** information such as equipment malfunction, abnormal field conditions, hazards to flight, etc., should be reported as soon as possible to the nearest FAA facility, either in person or by reverse charge telephone call.

**FOR AIRPORT SUPPLEMENT REVISIONS FORM VISIT WEB SITE:** <http://nfdc.faa.gov/portal/airportchanges.do>

FAA, Aeronautical Information Services, ATO-R, Rm. 626  
800 Independence Ave., SW  
Washington, DC 20591  
Telephone 1-866-295-8236  
Fax 202-267-5322  
Email 9-ATOR-HQ-AIS-AIRPORTCHANGES@FAA.GOV

NOTICE: Changes must be received by the Aeronautical Information Services as soon as possible but not later than the "cut-off" dates listed below to assure publication on the desired effective date.

Effective Date	Airport Information	Airspace Information*
	Cut-off date	Cut-off date
8 Apr 10	24 Feb 10	4 Feb 10
3 Jun 10	21 Apr 10	1 Apr 10
29 Jul 10	16 Jun 10	27 May 10
23 Sep 10	11 Aug 10	22 Jul 10
18 Nov 10	6 Oct 10	16 Sep 10
13 Jan 11	1 Dec 10	11 Nov 10

\*Including changes to preferred routes and graphic depictions on charts.

FOR CHARTING ERRORS CONTACT:

FAA, National Aeronautical Navigation Services  
SSMC-4 Sta. #4259  
1305 East West Highway  
Silver Spring, MD 20910-3281  
Telephone 1-800-626-3677  
Email 9-AMC-Aerochart@faa.gov

Frequently asked questions (FAQs) are answered on our website at <http://aeronav.faa.gov>.

See the FAQs prior to contact via toll free number.

FOR PROCUREMENT CONTACT:

FAA, National Aeronautical Navigation Services  
REDIS/Distribution Team  
10201 Good Luck Road  
Glenn Dale, MD 20769-9700  
Online at <http://aeronav.faa.gov>  
Email 9-AMC-Chartsales@faa.gov  
Telephone 1-800-638-8972  
Fax 301-436-6829  
or any authorized chart agent.

**New or Changed Information**—To alert users of new information or changes to information from the previous issue, a vertical line will be portrayed in the outside margin and extending the full length of the new and/or revised data. This will not apply to the front cover or the airport/facility directory listing.

This Airport/Facility Directory comprises part of the following sections of the United States Aeronautical Information Publication (AIP): GEN, ENR and AD.

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## ABBREVIATIONS

The following abbreviations/acronyms are those commonly used within this Directory. Other abbreviations/acronyms may be found in the Legend and are not duplicated below. The abbreviations presented are intended to represent grammatical variations of the basic form. (Example—"req" may mean "request", "requesting", "requested", or "requests").

AAF	Army Air Field	byd	beyond
AB	Airbase	C	Commercial Circuit (Telephone)
abv	above	CGAF	Coast Guard Air Facility
ACC	Air Combat Command; Area Control Center	CGAS	Coast Guard Air Station
acft	aircraft	CIV	Civil
ADCC	Air Defense Control Center	clsd	closed
AER	approach end rwy	comd	command
AFB	Air Force Base	CONUS	Continental United States
AFHP	Air Force Heliport	CSTMS	Customs
afld	airfield	ctc	contact
AFOD	US Army Flight Operations Detachment	ctl	control
AFRC	Armed Forces Reserve Center/Air Force Reserve Command	dalgt	daylight
AFSS	Automated Flight Service Station	Dec	December
AG	Agriculture	DIAP	DoD Instrument Approach Procedure
A-GEAR	Arresting Gear	DoD	Department of Defense
AGL	above ground level	DSN	Defense Switching Network (Telephone)
AHP	Army heliport	dsplcd	displaced
ALS	Approach Light System	durn	duration
alt	altitude	eff	effective
AMC	Air Mobility Command	emerg	emergency
ANGS	Air National Guard Station	EOR	End of Runway
apch	approach	ETA	Estimated Time of Arrival
Apr	April	ETD	Estimated Time of Departure
APU	Auxiliary Power Unit	exc	except
ARB	Air Reserve Base	extd	extend
arpt	airport	FBO	fixed-base operator
ARS	Air Reserve Station	Feb	February
AS	Air Station	fld	field
ASDE-X	Airport Surface Detection Equipment—Model X	FLIP	Flight Information Publication
ASU	Aircraft Starting Unit	fit	flight
ATC	Air Traffic Control	flw	follow
Aug	August	Fri	Friday
AUW	All Up Weight (gross weight)	FSS	Flight Service Station
avbl	available	GA	glide angle
bcn	beacon	GCA	Ground Controlled Approach
blo	below	GS	glide slope
		haz	hazard
		HQ	Headquarters

CONTINUED ON NEXT PAGE

## CONTINUED FROM PRECEDING PAGE

hr	hour	npi	non precision instrument
IAP	Instrument Approach Procedure	NS ABTMT	Noise Abatement
ICAO	International Civil Aviation Organization	NSTD	nonstandard
IFR	Instrument Flight Rules	ntc	notice
ILS	Instrument Landing System	obsn	observation
IM	Inner Marker	Oct	October
IMG	Immigration	OLF	Outlying Field
incr	increase	opr	operate, operator, operational
indef	indefinite	ops	operations
ints	intensity	OTS	out of service
invoF	in the vicinity of	ovrn	overrun
IMC	Instrument Meteorological Conditions	PAEW	personnel and equipment working
Jan	January	pat	pattern
JASU	Jet Aircraft Starting Unit	p-line	power line
JOAP	Joint Oil Analysis Program	PMSV	Pilot-to-Metro Service
JOSAC	Joint Operational Support Airlift Center	POL	Petrol, Oils and Lubricants
JRB	Joint Reserve Base	PPR	prior permission required
Jul	July	PRM	Precision Runway Monitoring
Jun	June	PTD	Pilot to Dispatcher
Kt	Knots	RAMCC	Regional Air Movement Control Center
LAA	Local Airport Advisory	req	request
LAHSO	Land and Hold Short Operations	rgt tfc	right traffic
lbs	pounds	RON	Remain Overnight
ldg	landing	rqr	require
lgtD	lighted	rstd	restricted
lgts	lights	RSRS	reduced same runway separation
LMM	Compass locator at Middle Marker ILS	rwY	runway
LOC	Localizer	Sat	Saturday
LOM	Compass locator at Outer Marker ILS	SELF	Strategic Expeditionary Landing Field
ltd	limited	Sep	September
MACC	Military Area Control Center	SFA	Single Frequency Approach
Mar	March	sfc	surface
MCAF	Marine Corps Air Facility	SFRA	Special Flight Rules Area
MCALF	Marine Corps Auxiliary Landing Field	SOAP	Spectrometric Oil Analysis Program
MCAS	Marine Corps Air Station	SOF	Supervisor of Flying
MCB	Marine Corps Base	SPB	Seaplane Base
med	medium	SR	sunrise
METRO	Pilot-to-Metro voice call	SS	sunset
Mil	military	std	standard
min	minute	Sun	Sunday
MLS	Microwave Landing System	svc	service
MM	Middle Marker of ILS	tfc	traffic
Mon	Monday	thld	threshold
MP	Maintenance Period	Thu	Thursday
MSL	mean sea level	tkf	take-off
MSAW	minimum safe altitude warning	tmpry	temporary
NAAS	Naval Auxiliary Air Station	tran	transient
NADC	Naval Air Development Center	Tue	Tuesday
NADEP	Naval Air Depot	twr	tower
NAEC	Naval Air Engineering Center	twY	taxiway
NAES	Naval Air Engineering Station	UC	Under Construction
NAF	Naval Air Facility	USA	United States Army
NALCO	Naval Air Logistics Control Office	USAF	United States Air Force
NALO	Navy Air Logistics Office	USCG	United States Coast Guard
NALF	Naval Auxiliary Landing Field	USN	United States Navy
NAS	Naval Air Station	V	Defense Switching Network (telephone, formerly AUTOVON)
NAWC	Naval Air Warfare Center	VFR	Visual Flight Rules
NAWS	Naval Air Weapons Station	VIP	Very Important Person
ngt	night	VMC	Visual Meteorological Conditions
NOLF	Naval Outlying Field	Wed	Wednesday
Nov	November	wx	weather

DIRECTORY LEGEND

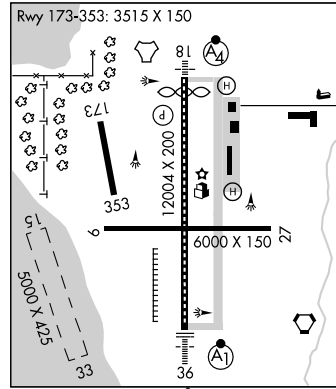
SAMPLE

① CITY NAME  
 ② AIRPORT NAME (ALTERNATE NAME) ③ (LTS) (KLTS) ④ CIV/MIL ⑤ 3 N ⑥ UTC-6(-5DT) ⑦ N34°41.93' W99°20.20' ⑧ JACKSONVILLE  
 200 B S4 FUEL 100 OX 1 TPA-1000(800) AOE Class IV, ARFF Index A NOTAM FILE ORL Not insp. COPTER  
 ⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲ ⑳ ⑳ IAP, DIAP, AD

⑳ RWY 18-36: H12004X200 (ASPH-CONC-GRVD)  
 S-90, D-160, DT-300 PCN 80 R/B/W/T HIRL CL  
 RWY 18: LDIN. MALSF. TDZL. REIL. PAPI(P2R)—GA 3.0° TCH 36'.  
 Thld displcd 300'. Trees. Rgt tfc. 0.3% up.  
 RWY 36: ALSF1. 0.4% down.  
 RWY 09-27: H6000X150 (ASPH) MIRL  
 RWY 173-353: H3515X150 (ASPH-PFC) AUV PCN 59 F/A/W/T  
**LAND AND HOLD SHORT OPERATIONS**  

LANDING	HOLD SHORT	POINT	DIST	AVBL
RWY 18	09-27		6500	
RWY 36	09-27		5400	

**RUNWAY DECLARED DISTANCE INFORMATION**  
 RWY 18: TORA-12004 TODA-12704 ASDA-11704 LDA-11504  
 RWY 36: TORA-12004 TODA-12004 ASDA-12004 LDA-11704  
 ㉑ → **ARRESTING GEAR/SYSTEM**  
 RWY 18 → HOOK E5 (65' OVRN) BAK-14 BAK-12B (1650')  
 BAK-14 BAK-12 (B) (1087') HOOK E5 (74' OVRN) ← RWY 36  
 ㉒ → **MILITARY SERVICE: A-GEAR E-5** connected on dep end, disconnected on  
 apch end. JASU 3(AM32A-60) 2(A/M32A-86)



⑳ FUEL J8(Mil) (NC-100, A) FLUID W SP PRESAIR LOX ← ㉔  
 OIL O-128 TRAN ALERT Avbl 1300-0200Z†, svc limited weekends.  
 ㉕ ㉖  
 ㉗ AIRPORT REMARKS: Special Air Traffic Rules—Part 93, see Regulatory Notices. Attended 1200-0300Z†. Parachute  
 Jumping. Deer invov arpt. Heavy jumbo jet training surface to 9000'. Twy A clsd indef. Flight Notification Service  
 (ADCUS) avbl.  
 ㉘ MILITARY REMARKS: ANG PPR/Official Business Only. Base OPS DSN 638-4390, C503-335-4222. Ctc Base OPS 15  
 minutes prior to ldg and after dep. Limited tran parking.  
 ㉙ WEATHER DATA SOURCES: AWOS-1 120.3 (202) 426-8000, LLWAS.  
 ㉚ COMMUNICATIONS: SFA ATIS 127.25 273.5 (202) 426-8003 UNICOM 122.95 PTD 372.2  
 NAME FSS (ORL) on arpt. 123.65 122.65 122.2  
 NAME RCO 112.2T 112.1R (NAME RADIO)  
 (R) NAME APP/DEP CON 128.35 257.725 (1200-0400Z‡)  
 TOWER 119.65 255.6 (1200-0400Z‡) GND CON 121.7 GCO 135.075 (ORLANDO CLNC) CLNC DEL 125.55  
 NAME COMD POST (GERONIMO) 311.0 321.4 6761 PMSV METRO 239.8 NAME OPS 257.5  
 ㉛ AIRSPACE: CLASS B See VFR Terminal Area Chart.  
 ㉜ RADIO AIDS TO NAVIGATION: NOTAM FILE ORL. VHF/DF ctc FSS.  
 (H) VORTAC 112.2 MCO Chan 59 N28°32.55' W81°20.12' at fld. 1110/8E.  
 (H) TACAN Chan 29 CBU (109.2) N28°32.65' W81°21.12' at fld. 1115/8E.  
 HERNY NDB (LOM) 221 OR N28°37.40' W81°21.05' 177° 5.4 NM to fld.  
 ILS/DME 108.5 I-ORL Chan 22 Rwy 18. Class IIE. LOM HERNY NDB.  
 ASR/PAR (1200-0400Z‡)  
 ㉝ → **COMM/NAV/WEATHER REMARKS:** Emerg frequency 121.5 not avbl at twr.  
 HELIPAD H1: H100X75 (ASPH)  
 HELIPAD H2: H60X60 (ASPH)  
 HELIPORT REMARKS: Helipad H1 lctd on general aviation side and H2 lctd on air carrier side of arpt.  
 187 TPA 1000(813)  
 WATERWAY 15-33: 5000X425 (WATER)  
 SEAPLANE REMARKS: Birds roosting and feeding areas along river banks. Seaplanes operating adjacent to SW side of  
 arpt not visible from twr and are required to ctc twr.

All bearings and radials are magnetic unless otherwise specified.  
 All mileages are nautical unless otherwise noted.  
 All times are Coordinated Universal Time (UTC) except as noted.  
 All elevations are in feet above/below Mean Sea Level (MSL) unless otherwise noted.  
 The horizontal reference datum of this publication is North American Datum of 1983 (NAD83), which for charting purposes  
 is considered equivalent to World Geodetic System 1984 (WGS 84).



10

SKETCH LEGEND

RUNWAYS/LANDING AREAS

- Hard Surfaced . . . . .
- Metal Surface . . . . .
- Sod, Gravel, etc. . . . .
- Light Plane, . . . . .
- Ski Landing Area or Water Under Construction . . . . .
- Closed . . . . .
- Helicopter Landings Area . . . . .
- Displaced Threshold . . . . .
- Taxiway, Apron and Stopways . . . . .

RADIO AIDS TO NAVIGATION

- VORTAC . . . . .
- VOR . . . . .
- VOR/DME . . . . .
- NDB . . . . .
- TACAN . . . . .
- NDB/DME . . . . .

MISCELLANEOUS AERONAUTICAL FEATURES

- Airport Beacon . . . . .
- Wind Cone . . . . .
- Landing Tee . . . . .
- Tetrahedron . . . . .
- Control Tower . . . . .

MISCELLANEOUS BASE AND CULTURAL FEATURES

- Buildings . . . . .
- Power Lines . . . . .
- Fence . . . . .
- Towers . . . . .
- Tanks . . . . .
- Oil Well . . . . .
- Smoke Stack . . . . .
- Obstruction . . . . .
- Controlling Obstruction . . . . .
- Trees . . . . .
- Populated Places . . . . .
- Cuts and Fills . . . . .
- Cliffs and Depressions . . . . .
- Ditch . . . . .
- Hill . . . . .

APPROACH LIGHTING SYSTEMS

A dot "•" portrayed with approach lighting letter identifier indicates sequenced flashing lights (F) installed with the approach lighting system e.g. (A1) Negative symbology, e.g., (A1) (V) indicates Pilot Controlled Lighting (PCL).

- Runway Centerline Lighting . . . . .
- (A) Approach Lighting System ALSF-2 . . . . .
- (A1) Approach Lighting System ALSF-1 . . . . .
- (A2) Short Approach Lighting System SALS/SALSF . . . . .
- (A3) Simplified Short Approach Lighting System (SSALR) with RAIL . . . . .
- (A4) Medium Intensity Approach Lighting System (MALS and MALSF)/(SSALS and SSALF) . . . . .
- (A5) Medium Intensity Approach Lighting System (MALS) and RAIL . . . . .
- (V) Omnidirectional Approach Lighting System (ODALS) . . . . .
- (D) Navy Parallel Row and Cross Bar . . . . .
- (F) Air Force Overrun . . . . .
- (V) Visual Approach Slope Indicator with Standard Threshold Clearance provided
- (V2) Pulsating Visual Approach Slope Indicator (PVASI)
- (V3) Visual Approach Slope Indicator with a threshold crossing height to accommodate long bodied or jumbo aircraft
- (V4) Tri-color Visual Approach Slope Indicator (TRCV)
- (V5) Approach Path Alignment Panel (APAP)
- (P) Precision Approach Path Indicator (PAPI)

## LEGEND

This directory is a listing of data on record with the FAA on all open to the public airports, military facilities and selected private use facilities specifically requested by the Department of Defense (DoD) for which a DoD Instrument Approach Procedure has been published in the U.S. Terminal Procedures Publication. Additionally this listing contains data for associated terminal control facilities, air route traffic control centers, and radio aids to navigation within the conterminous United States, Puerto Rico and the Virgin Islands. Joint civil/military and civil airports are listed alphabetically by state, associated city and airport name and cross-referenced by airport name. Military facilities are listed alphabetically by state and official airport name and cross-referenced by associated city name. Nav aids, flight service stations and remote communication outlets that are associated with an airport, but with a different name, are listed alphabetically under their own name, as well as under the airport with which they are associated.

The listing of an open to the public airport in this directory merely indicates the airport operator's willingness to accommodate transient aircraft, and does not represent that the facility conforms with any Federal or local standards, or that it has been approved for use on the part of the general public. Military and private use facilities published in this directory are open to civil pilots only in an emergency or with prior permission. See Special Notice Section, Civil Use of Military Fields.

The information on obstructions is taken from reports submitted to the FAA. Obstruction data has not been verified in all cases. Pilots are cautioned that objects not indicated in this tabulation (or on the airports sketches and/or charts) may exist which can create a hazard to flight operation. Detailed specifics concerning services and facilities tabulated within this directory are contained in the Aeronautical Information Manual, Basic Flight Information and ATC Procedures.

The legend items that follow explain in detail the contents of this Directory and are keyed to the circled numbers on the sample on the preceding pages.

### ① CITY/AIRPORT NAME

Civil and joint civil/military airports and facilities in this directory are listed alphabetically by state and associated city. Where the city name is different from the airport name the city name will appear on the line above the airport name. Airports with the same associated city name will be listed alphabetically by airport name and will be separated by a dashed rule line. A solid rule line will separate all others. FAA approved helipads and seaplane landing areas associated with a land airport will be separated by a dotted line. Military airports are listed alphabetically by state and official airport name.

### ② ALTERNATE NAME

Alternate names, if any, will be shown in parentheses.

### ③ LOCATION IDENTIFIER

The location identifier is a three or four character FAA code followed by a four-character ICAO code assigned to airports. ICAO codes will only be published at joint civil/military, and military facilities. If two different military codes are assigned, both codes will be shown with the primary operating agency's code listed first. These identifiers are used by ATC in lieu of the airport name in flight plans, flight strips and other written records and computer operations. Zeros will appear with a slash to differentiate them from the letter "O".

### ④ OPERATING AGENCY

Airports within this directory are classified into two categories, Military/Federal Government and Civil airports open to the general public, plus selected private use airports. The operating agency is shown for military, private use and joint civil/military airports. The operating agency is shown by an abbreviation as listed below. When an organization is a tenant, the abbreviation is enclosed in parenthesis. No classification indicates the airport is open to the general public with no military tenant.

A	US Army	MC	Marine Corps
AFRC	Air Force Reserve Command	N	Navy
AF	US Air Force	NAF	Naval Air Facility
ANG	Air National Guard	NAS	Naval Air Station
AR	US Army Reserve	NASA	National Air and Space Administration
ARRG	US Army National Guard	P	US Civil Airport Wherein Permit Covers Use by Transient Military Aircraft
CG	US Coast Guard	PVT	Private Use Only (Closed to the Public)
CIV/MIL	Joint Use Civil/Military		
DND	Department of National Defense Canada		

### ⑤ AIRPORT LOCATION

Airport location is expressed as distance and direction from the center of the associated city in nautical miles and cardinal points, e.g., 4 NE.

### ⑥ TIME CONVERSION

Hours of operation of all facilities are expressed in Coordinated Universal Time (UTC) and shown as "Z" time. The directory indicates the number of hours to be subtracted from UTC to obtain local standard time and local daylight saving time UTC-5(-4DT). The symbol ‡ indicates that during periods of Daylight Saving Time effective hours will be one hour earlier than shown. In those areas where daylight saving time is not observed the (-4DT) and ‡ will not be shown. Daylight saving time is in effect from 0200 local time the second Sunday in March to 0200 local time the first Sunday in November. Canada and all U.S. Conterminous States observe daylight saving time except Arizona and Puerto Rico, and the Virgin Islands. If the state observes daylight saving time and the operating times are other than daylight saving times, the operating hours will include the dates, times and no ‡ symbol will be shown, i.e., April 15-Aug 31 0630-1700Z, Sep 1-Apr 14 0600-1700Z.

**7 GEOGRAPHIC POSITION OF AIRPORT—AIRPORT REFERENCE POINT (ARP)**

Positions are shown as hemisphere, degrees, minutes and hundredths of a minute and represent the approximate geometric center of all usable runway surfaces.

**8 CHARTS**

Charts refer to the Sectional Chart and Low and High Altitude Enroute Chart and panel on which the airport or facility is located. Helicopter Chart locations will be indicated as COPTER. IFR Gulf of Mexico West and IFR Gulf of Mexico Central will be depicted as GOMW and GOMC.

**9 INSTRUMENT APPROACH PROCEDURES, AIRPORT DIAGRAMS**

IAP indicates an airport for which a prescribed (Public Use) FAA Instrument Approach Procedure has been published. DIAP indicates an airport for which a prescribed DoD Instrument Approach Procedure has been published in the U.S. Terminal Procedures. See the Special Notice Section of this directory, Civil Use of Military Fields and the Aeronautical Information Manual 5–4–5 Instrument Approach Procedure Charts for additional information. AD indicates an airport for which an airport diagram has been published. Airport diagrams are located in the back of each A/FD volume alphabetically by associated city and airport name.

**10 AIRPORT SKETCH**

The airport sketch, when provided, depicts the airport and related topographical information as seen from the air and should be used in conjunction with the text. It is intended as a guide for pilots in VFR conditions. Symbology that is not self-explanatory will be reflected in the sketch legend. The airport sketch will be oriented with True North at the top. Airport sketches will be added incrementally.

**11 ELEVATION**

The highest point of an airport’s usable runways measured in feet from mean sea level. When elevation is sea level it will be indicated as “00’”. When elevation is below sea level a minus “-” sign will precede the figure.

**12 ROTATING LIGHT BEACON**

B indicates rotating beacon is available. Rotating beacons operate sunset to sunrise unless otherwise indicated in the AIRPORT REMARKS or MILITARY REMARKS segment of the airport entry.

**13 SERVICING—CIVIL**

- |  |  |
|--|--|
| S1: Minor airframe repairs.                      | S5: Major airframe repairs.                      |
| S2: Minor airframe and minor powerplant repairs. | S6: Minor airframe and major powerplant repairs. |
| S3: Major airframe and minor powerplant repairs. | S7: Major powerplant repairs.                    |
| S4: Major airframe and major powerplant repairs. | S8: Minor powerplant repairs.                    |

**14 FUEL**

CODE	FUEL	CODE	FUEL
80	Grade 80 gasoline (Red)	B+	Jet B, Wide-cut, turbine fuel with FS-II*, FP** minus 50° C.
100	Grade 100 gasoline (Green)	J4 (JP4)	(JP-4 military specification) FP** minus 58° C.
100LL	100LL gasoline (low lead) (Blue)	J5 (JP5)	(JP-5 military specification) Kerosene with FS-11, FP** minus 46°C.
115	Grade 115 gasoline (115/145 military specification) (Purple)	J8 (JP8)	(JP-8 military specification) Jet A-1, Kerosene with FS-II*, FP** minus 47°C.
A	Jet A, Kerosene, without FS-II*, FP** minus 40° C.	J8+100	(JP-8 military specification) Jet A-1, Kerosene with FS-II*, FP** minus 47°C, with-fuel additive package that improves thermo stability characteristics of JP-8.
A+	Jet A, Kerosene, with FS-II*, FP** minus 40°C.	J	(Jet Fuel Type Unknown)
A1	Jet A-1, Kerosene, without FS-II*, FP** minus 47°C.	MOGAS	Automobile gasoline which is to be used as aircraft fuel.
A1+	Jet A-1, Kerosene with FS-II*, FP** minus 47° C.		
B	Jet B, Wide-cut, turbine fuel without FS-II*, FP** minus 50° C.		

\*(Fuel System Icing Inhibitor)

\*\* (Freeze Point)

**NOTE:** Certain automobile gasoline may be used in specific aircraft engines if a FAA supplemental type certificate has been obtained. Automobile gasoline, which is to be used in aircraft engines, will be identified as “MOGAS”, however, the grade/type and other octane rating will not be published.

Data shown on fuel availability represents the most recent information the publisher has been able to acquire. Because of a variety of factors, the fuel listed may not always be obtainable by transient civil pilots. Confirmation of availability of fuel should be made directly with fuel suppliers at locations where refueling is planned.

**15 OXYGEN—CIVIL**

- |                    |  |
|--------------------|--|
| OX 1 High Pressure | OX 3 High Pressure—Replacement Bottles |
| OX 2 Low Pressure  | OX 4 Low Pressure—Replacement Bottles  |

**16 TRAFFIC PATTERN ALTITUDE**

Traffic Pattern Altitude (TPA)—The first figure shown is TPA above mean sea level. The second figure in parentheses is TPA above airport elevation. Multiple TPA shall be shown as “TPA—See Remarks” and detailed information shall be shown in the Airport or Military Remarks Section. Traffic pattern data for USAF bases, USN facilities, and U.S. Army airports (including those on which ACC or U.S. Army is a tenant) that deviate from standard pattern altitudes shall be shown in Military Remarks.

**17 AIRPORT OF ENTRY, LANDING RIGHTS, AND CUSTOMS USER FEE AIRPORTS**

U.S. CUSTOMS USER FEE AIRPORT—Private Aircraft operators are frequently required to pay the costs associated with customs processing.

AOE—Airport of Entry. A customs Airport of Entry where permission from U.S. Customs is not required to land. However, at least one hour advance notice of arrival is required.

LRA—Landing Rights Airport. Application for permission to land must be submitted in advance to U.S. Customs. At least one hour advance notice of arrival is required.

NOTE: Advance notice of arrival at both an AOE and LRA airport may be included in the flight plan when filed in Canada or Mexico. Where Flight Notification Service (ADCUS) is available the airport remark will indicate this service. This notice will also be treated as an application for permission to land in the case of an LRA. Although advance notice of arrival may be relayed to Customs through Mexico, Canada, and U.S. Communications facilities by flight plan, the aircraft operator is solely responsible for ensuring that Customs receives the notification. (See Customs, Immigration and Naturalization, Public Health and Agriculture Department requirements in the International Flight Information Manual for further details.)

US Customs Air and Sea Ports, Inspectors and Agents

Northeast Sector (New England and Atlantic States—ME to MD)	407-975-1740
Southeast Sector (Atlantic States—DC, WV, VA to FL)	407-975-1780
Central Sector (Interior of the US, including Gulf states—MS, AL, LA)	407-975-1760
Southwest East Sector (OK and eastern TX)	407-975-1840
Southwest West Sector (Western TX, NM and AZ)	407-975-1820
Pacific Sector (WA, OR, CA, HI and AK)	407-975-1800

**18 CERTIFICATED AIRPORT (14 CFR PART 139)**

Airports serving Department of Transportation certified carriers and certified under 14 CFR part 139 are indicated by the Class and the ARFF Index; e.g. Class I, ARFF Index A, which relates to the availability of crash, fire, rescue equipment. Class I airports can have an ARFF Index A through E, depending on the aircraft length and scheduled departures. Class II, III, and IV will always carry an Index A.

14 CFR PART 139 CERTIFICATED AIRPORTS  
AIRPORT CLASSIFICATIONS

Type of Air Carrier Operation	Class I	Class II	Class III	Class IV
Scheduled Air Carrier Aircraft with 31 or more passenger seats	X			
Unscheduled Air Carrier Aircraft with 31 or more passengers seats	X	X		X
Scheduled Air Carrier Aircraft with 10 to 30 passenger seats	X	X	X	

**14 CFR—PART 139 CERTIFICATED AIRPORTS**

## INDICES AND AIRCRAFT RESCUE AND FIRE FIGHTING EQUIPMENT REQUIREMENTS

Airport Index	Required No. Vehicles	Aircraft Length	Scheduled Departures	Agent + Water for Foam
A	1	<90'	≥ 1	500#DC or HALON 1211 or 450#DC + 100 gal H <sub>2</sub> O
B	1 or 2	≥ 90', <126' ----- ≥ 126', <159'	≥ 5 ----- < 5	Index A + 1500 gal H <sub>2</sub> O
C	2 or 3	≥ 126', <159' ----- ≥ 159', <200'	≥ 5 ----- < 5	Index A + 3000 gal H <sub>2</sub> O
D	3	≥ 159', <200' ----- >200'	< 5	Index A + 4000 gal H <sub>2</sub> O
E	3	≥ 200'	≥ 5	Index A + 6000 gal H <sub>2</sub> O

> Greater Than; < Less Than; ≥ Equal or Greater Than; ≤ Equal or Less Than; H<sub>2</sub>O—Water; DC—Dry Chemical.

NOTE: The listing of ARFF index does not necessarily assure coverage for non-air carrier operations or at other than prescribed times for air carrier. ARFF Index Ltd.—indicates ARFF coverage may or may not be available, for information contact airport manager prior to flight.

**19 NOTAM SERVICE**

All public use landing areas are provided NOTAM "D" (distant dissemination) and NOTAM "L" (local dissemination) service. Airport NOTAM file identifier is shown for individual airports, e.g. "NOTAM FILE IAD". See AIM, Basic Flight Information and

ATC Procedures for detailed description of NOTAM's. Current NOTAMs are available from Flight Service Stations at 1-800-WX-BRIEF. Real time Military NOTAMs are available using the DoD Internet NOTAM Distribution System (DINS) [www.notams.jcs.mil](http://www.notams.jcs.mil).

**20 FAA INSPECTION**

All airports not inspected by FAA will be identified by the note: Not insp. This indicates that the airport information has been provided by the owner or operator of the field.

**21 RUNWAY DATA**

Runway information is shown on two lines. That information common to the entire runway is shown on the first line while information concerning the runway ends is shown on the second or following line. Runway direction, surface, length, width, weight bearing capacity, lighting, and slope, when available are shown for each runway. Multiple runways are shown with the longest runway first. Direction, length, width, and lighting are shown for sea-lanes. The full dimensions of helipads are shown, e.g., 50X150. Runway data that requires clarification will be placed in the remarks section.

**RUNWAY DESIGNATION**

Runways are normally numbered in relation to their magnetic orientation rounded off to the nearest 10 degrees. Parallel runways can be designated L (left)/R (right)/C (center). Runways may be designated as Ultralight or assault strips. Assault strips are shown by magnetic bearing.

**RUNWAY DIMENSIONS**

Runway length and width are shown in feet. Length shown is runway end to end including displaced thresholds, but excluding those areas designed as overruns.

**RUNWAY SURFACE AND LENGTH**

Runway lengths prefixed by the letter "H" indicate that the runways are hard surfaced (concrete, asphalt, or part asphalt-concrete). If the runway length is not prefixed, the surface is sod, clay, etc. The runway surface composition is indicated in parentheses after runway length as follows:

- |                                     |   |                                      |
|-------------------------------------|---|--------------------------------------|
| (AFSC)—Aggregate friction seal coat | (GRVL)—Gravel, or cinders                                 | (PSP)—Pierced steel plank            |
| (ASPH)—Asphalt                      | (MATS)—Pierced steel planking,<br>landing mats, membranes | (RFSC)—Rubberized friction seal coat |
| (CONC)—Concrete                     | (PEM)—Part concrete, part asphalt                         | (TURF)—Turf                          |
| (DIRT)—Dirt                         | (PFC)—Porous friction courses                             | (TRTD)—Treated                       |
| (GRVD)—Grooved                      |   | (WC)—Wire combed                     |

**RUNWAY WEIGHT BEARING CAPACITY**

Runway strength data shown in this publication is derived from available information and is a realistic estimate of capability at an average level of activity. It is not intended as a maximum allowable weight or as an operating limitation. Many airport pavements are capable of supporting limited operations with gross weights in excess of the published figures. Permissible operating weights, insofar as runway strengths are concerned, are a matter of agreement between the owner and user. When desiring to operate into any airport at weights in excess of those published in the publication, users should contact the airport management for permission. Runway strength figures are shown in thousand of pounds, with the last three figures being omitted. Add 000 to figure following S, D, 2S, 2T, AUW, SWL, etc., for gross weight capacity. A blank space following the letter designator is used to indicate the runway can sustain aircraft with this type landing gear, although definite runway weight bearing capacity figures are not available, e.g., S, D. Applicable codes for typical gear configurations with S=Single, D=Dual, T=Triple and Q=Quadruple:

CURRENT	NEW	NEW DESCRIPTION
S	S	Single wheel type landing gear (DC3), (C47), (F15), etc.
D	D	Dual wheel type landing gear (BE1900), (B737), (A319), etc.
T	D	Dual wheel type landing gear (P3, C9).
ST	2S	Two single wheels in tandem type landing gear (C130).
TRT	2T	Two triple wheels in tandem type landing gear (C17), etc.
DT	2D	Two dual wheels in tandem type landing gear (B707), etc.
TT	2D	Two dual wheels in tandem type landing gear (B757, KC135).
SBT	2D/D1	Two dual wheels in tandem/dual wheel body gear type landing gear (KC10).
None	2D/2D1	Two dual wheels in tandem/two dual wheels in tandem body gear type landing gear (A340-600).
DDT	2D/2D2	Two dual wheels in tandem/two dual wheels in double tandem body gear type landing gear (B747, E4).
TTT	3D	Three dual wheels in tandem type landing gear (B777), etc.
TT	D2	Dual wheel gear two struts per side main gear type landing gear (B52).
TDT	C5	Complex dual wheel and quadruple wheel combination landing gear (C5).

AUW—All up weight. Maximum weight bearing capacity for any aircraft irrespective of landing gear configuration.

SWL—Single Wheel Loading. (This includes information submitted in terms of Equivalent Single Wheel Loading (ESWL) and Single Isolated Wheel Loading).

PSI—Pounds per square inch. PSI is the actual figure expressing maximum pounds per square inch runway will support, e.g., (SWL 000/PSI 535).

Omission of weight bearing capacity indicates information unknown.

The ACN/PCN System is the ICAO standard method of reporting pavement strength for pavements with bearing strengths greater than 12,500 pounds. The Pavement Classification Number (PCN) is established by an engineering assessment of the runway. The PCN is for use in conjunction with an Aircraft Classification Number (ACN). Consult the Aircraft Flight Manual, Flight Information Handbook, or other appropriate source for ACN tables or charts. Currently, ACN data may not be available for all aircraft. If an ACN table or chart is available, the ACN can be calculated by taking into account the aircraft weight, the pavement type, and the subgrade category. For runways that have been evaluated under the ACN/PCN system, the PCN will be shown as a five-part code (e.g., PCN 80 R/B/W/T). Details of the coded format are as follows:

- (1) The PCN NUMBER—The reported PCN indicates that an aircraft with an ACN equal or less than the reported PCN can operate on the pavement subject to any limitation on the tire pressure.
- (2) The type of pavement:
  - R — Rigid
  - F — Flexible
- (3) The pavement subgrade category:
  - A — High
  - B — Medium
  - C — Low
  - D — Ultra-low
- (4) The maximum tire pressure authorized for the pavement:
  - W — High, no limit
  - X — Medium, limited to 217 psi
  - Y — Low, limited to 145 psi
  - Z — Very low, limited to 73 psi
- (5) Pavement evaluation method:
  - T — Technical evaluation
  - U — By experience of aircraft using the pavement

NOTE: Prior permission from the airport controlling authority is required when the ACN of the aircraft exceeds the published PCN or aircraft tire pressure exceeds the published limits.

#### RUNWAY LIGHTING

Lights are in operation sunset to sunrise. Lighting available by prior arrangement only or operating part of the night and/or pilot controlled lighting with specific operating hours are indicated under airport or military remarks. At USN/USMC facilities lights are available only during airport hours of operation. Since obstructions are usually lighted, obstruction lighting is not included in this code. Unlighted obstructions on or surrounding an airport will be noted in airport or military remarks. Runway lights nonstandard (NSTD) are systems for which the light fixtures are not FAA approved L-800 series: color, intensity, or spacing does not meet FAA standards. Nonstandard runway lights, VASI, or any other system not listed below will be shown in airport remarks or military service. Temporary, emergency or limited runway edge lighting such as flares, smudge pots, lanterns or portable runway lights will also be shown in airport remarks or military service. Types of lighting are shown with the runway or runway end they serve.

NSTD—Light system fails to meet FAA standards.

LIRL—Low Intensity Runway Lights.

MIRL—Medium Intensity Runway Lights.

HIRL—High Intensity Runway Lights.

RAIL—Runway Alignment Indicator Lights.

REIL—Runway End Identifier Lights.

CL—Centerline Lights.

TDZL—Touchdown Zone Lights.

ODALS—Omni Directional Approach Lighting System.

AF OVRN—Air Force Overrun 1000' Standard Approach Lighting System.

LDIN—Lead-In Lighting System.

MALS—Medium Intensity Approach Lighting System.

MALSF—Medium Intensity Approach Lighting System with Sequenced Flashing Lights.

MALSR—Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights.

SALS—Short Approach Lighting System.

SALSF—Short Approach Lighting System with Sequenced Flashing Lights.

SSALS—Simplified Short Approach Lighting System.

SSALF—Simplified Short Approach Lighting System with Sequenced Flashing Lights.

SSALR—Simplified Short Approach Lighting System with Runway Alignment Indicator Lights.

ALSAF—High Intensity Approach Lighting System with Sequenced Flashing Lights.

ALSF1—High Intensity Approach Lighting System with Sequenced Flashing Lights, Category I, Configuration.

ALSF2—High Intensity Approach Lighting System with Sequenced Flashing Lights, Category II, Configuration.

SF—Sequenced Flashing Lights.

OLS—Optical Landing System.

WAVE—OFF.

NOTE: Civil ALSF2 may be operated as SSALR during favorable weather conditions. When runway edge lights are positioned more than 10 feet from the edge of the usable runway surface a remark will be added in the "Remarks" portion of the airport entry. This is applicable to Air Force, Air National Guard and Air Force Reserve Bases, and those joint civil/military airfields on which they are tenants.

VISUAL GLIDESLOPE INDICATORS

APAP—A system of panels, which may or may not be lighted, used for alignment of approach path.			
PNIL	APAP on left side of runway	PNIR	APAP on right side of runway
PAPI—Precision Approach Path Indicator			
P2L	2-identical light units placed on left side of runway	P4L	4-identical light units placed on left side of runway
P2R	2-identical light units placed on right side of runway	P4R	4-identical light units placed on right side of runway
PVASI—Pulsating/steady burning visual approach slope indicator, normally a single light unit projecting two colors.			
PSIL	PVASI on left side of runway	PSIR	PVASI on right side of runway
SAVASI—Simplified Abbreviated Visual Approach Slope Indicator			
S2L	2-box SAVASI on left side of runway	S2R	2-box SAVASI on right side of runway
TRCV—Tri-color visual approach slope indicator, normally a single light unit projecting three colors.			
TRIL	TRCV on left side of runway	TRIR	TRCV on right side of runway
VASI—Visual Approach Slope Indicator			
V2L	2-box VASI on left side of runway	V6L	6-box VASI on left side of runway
V2R	2-box VASI on right side of runway	V6R	6-box VASI on right side of runway
V4L	4-box VASI on left side of runway	V12	12-box VASI on both sides of runway
V4R	4-box VASI on right side of runway	V16	16-box VASI on both sides of runway

NOTE: Approach slope angle and threshold crossing height will be shown when available; i.e., -GA 3.5° TCH 37'.

PILOT CONTROL OF AIRPORT LIGHTING

<u>Key Mike</u>	<u>Function</u>
7 times within 5 seconds	Highest intensity available
5 times within 5 seconds	Medium or lower intensity (Lower REIL or REIL-Off)
3 times within 5 seconds	Lowest intensity available (Lower REIL or REIL-Off)

Available systems will be indicated in the airport or military remarks, e.g., ACTIVATE HIRL Rwy 07–25, MALSR Rwy 07, and VASI Rwy 07—122.8.

Where the airport is not served by an instrument approach procedure and/or has an independent type system of different specification installed by the airport sponsor, descriptions of the type lights, method of control, and operating frequency will be explained in clear text. See AIM, "Basic Flight Information and ATC Procedures," for detailed description of pilot control of airport lighting.

RUNWAY SLOPE

When available, runway slope data will only be provided for those airports with an approved FAA instrument approach procedure. Runway slope will be shown only when it is 0.3 percent or greater. On runways less than 8000 feet, the direction of the slope up will be indicated, e.g., 0.3% up NW. On runways 8000 feet or greater, the slope will be shown (up or down) on the runway end line, e.g., RWY 13: 0.3% up., RWY 21: Pole. Rgt tfc. 0.4% down.

RUNWAY END DATA

Information pertaining to the runway approach end such as approach lights, touchdown zone lights, runway end identification lights, visual glideslope indicators, displaced thresholds, controlling obstruction, and right hand traffic pattern, will be shown on the specific runway end. "Rgt tfc"—Right traffic indicates right turns should be made on landing and takeoff for specified runway end.

LAND AND HOLD SHORT OPERATIONS (LAHSO)

LAHSO is an acronym for "Land and Hold Short Operations." These operations include landing and holding short of an intersection runway, an intersecting taxiway, or other predetermined points on the runway other than a runway or taxiway. Measured distance represents the available landing distance on the landing runway, in feet.

Specific questions regarding these distances should be referred to the air traffic manager of the facility concerned. The Aeronautical Information Manual contains specific details on hold-short operations and markings.

RUNWAY DECLARED DISTANCE INFORMATION

TORA—Take-off Run Available. The length of runway declared available and suitable for the ground run of an aeroplane take-off.

TODA—Take-off Distance Available. The length of the take-off run available plus the length of the clearway, if provided.

ASDA—Accelerate-Stop Distance Available. The length of the take-off run available plus the length of the stopway, if provided.

LDA—Landing Distance Available. The length of runway which is declared available and suitable for the ground run of an aeroplane landing.

**22** ARRESTING GEAR/SYSTEMS

Arresting gear is shown as it is located on the runway. The a-gear distance from the end of the appropriate runway (or into the overrun) is indicated in parentheses. A-Gear which has a bi-direction capability and can be utilized for emergency approach end engagement is indicated by a (B). The direction of engaging device is indicated by an arrow. Up to 15 minutes advance notice may be required for rigging A-Gear for approach and engagement. Airport listing may show availability of other than US Systems. This information is provided for emergency requirements only. Refer to current aircraft operating manuals for specific engagement weight and speed criteria based on aircraft structural restrictions and arresting system limitations.

Following is a list of current systems referenced in this publication identified by both Air Force and Navy terminology:

## BI-DIRECTIONAL CABLE (B)

<u>TYPE</u>	<u>DESCRIPTION</u>
BAK-9	Rotary friction brake.
BAK-12A	Standard BAK-12 with 950 foot run out, 1-inch cable and 40,000 pound weight setting. Rotary friction brake.
BAK-12B	Extended BAK-12 with 1200 foot run, 1¼ inch Cable and 50,000 pounds weight setting. Rotary friction brake.
E28	Rotary Hydraulic (Water Brake).
M21	Rotary Hydraulic (Water Brake) Mobile.

The following device is used in conjunction with some aircraft arresting systems:

BAK-14	A device that raises a hook cable out of a slot in the runway surface and is remotely positioned for engagement by the tower on request. (In addition to personnel reaction time, the system requires up to five seconds to fully raise the cable.)
H	A device that raises a hook cable out of a slot in the runway surface and is remotely positioned for engagement by the tower on request. (In addition to personnel reaction time, the system requires up to one and one-half seconds to fully raise the cable.)

## UNI-DIRECTIONAL CABLE

<u>TYPE</u>	<u>DESCRIPTION</u>
MB60	Textile brake—an emergency one-time use, modular braking system employing the tearing of specially woven textile straps to absorb the kinetic energy.
E5/E5-1/E5-3	Chain Type. At USN/USMC stations E-5 A-GEAR systems are rated, e.g., E-5 RATING-13R-1100 HW (DRY), 31L/R-1200 STD (WET). This rating is a function of the A-GEAR chain weight and length and is used to determine the maximum aircraft engaging speed. A dry rating applies to a stabilized surface (dry or wet) while a wet rating takes into account the amount (if any) of wet overrun that is not capable of withstanding the aircraft weight. These ratings are published under Military Service.

## FOREIGN CABLE

<u>TYPE</u>	<u>DESCRIPTION</u>	<u>US EQUIVALENT</u>
44B-3H	Rotary Hydraulic (Water Brake)	
CHAG	Chain	E-5

## UNI-DIRECTIONAL BARRIER

<u>TYPE</u>	<u>DESCRIPTION</u>
MA-1A	Web barrier between stanchions attached to a chain energy absorber.
BAK-15	Web barrier between stanchions attached to an energy absorber (water squeezer, rotary friction, chain). Designed for wing engagement.

NOTE: Landing short of the runway threshold on a runway with a BAK-15 in the underrun is a significant hazard. The barrier in the down position still protrudes several inches above the underrun. Aircraft contact with the barrier short of the runway threshold can cause damage to the barrier and substantial damage to the aircraft.

## OTHER

<u>TYPE</u>	<u>DESCRIPTION</u>
EMAS	Engineered Material Arresting System, located beyond the departure end of the runway, consisting of high energy absorbing materials which will crush under the weight of an aircraft.

**23** MILITARY SERVICE

Specific military services available at the airport are listed under this general heading. Remarks applicable to any military service are shown in the individual service listing.

**24** JET AIRCRAFT STARTING UNITS (JASU)

The numeral preceding the type of unit indicates the number of units available. The absence of the numeral indicates ten or more units available. If the number of units is unknown, the number one will be shown. Absence of JASU designation indicates non-availability.

The following is a list of current JASU systems referenced in this publication:

USAF JASU (For variations in technical data, refer to T.O. 35-1-7.)

## ELECTRICAL STARTING UNITS:

A/M32A-86	AC: 115/200v, 3 phase, 90 kva, 0.8 pf, 4 wire DC: 28v, 1500 amp, 72 kw (with TR pack)
MC-1A	AC: 115/208v, 400 cycle, 3 phase, 37.5 kva, 0.8 pf, 108 amp, 4 wire DC: 28v, 500 amp, 14 kw
MD-3	AC: 115/208v, 400 cycle, 3 phase, 60 kva, 0.75 pf, 4 wire DC: 28v, 1500 amp, 45 kw, split bus
MD-3A	AC: 115/208v, 400 cycle, 3 phase, 60 kva, 0.75 pf, 4 wire DC: 28v, 1500 amp, 45 kw, split bus
MD-3M	AC: 115/208v, 400 cycle, 3 phase, 60 kva, 0.75 pf, 4 wire DC: 28v, 500 amp, 15 kw



MD-4 AC: 120/208v, 400 cycle, 3 phase, 62.5 kva, 0.8 pf, 175 amp, "WYE" neutral ground, 4 wire, 120v, 400 cycle, 3 phase, 62.5 kva, 0.8 pf, 303 amp, "DELTA" 3 wire, 120v, 400 cycle, 1 phase, 62.5 kva, 0.8 pf, 520 amp, 2 wire

AIR STARTING UNITS

AM32-95 150 +/- 5 lb/min (2055 +/- 68 cfm) at 51 +/- 2 psia  
 AM32A-95 150 +/- 5 lb/min @ 49 +/- 2 psia (35 +/- 2 psig)  
 LASS 150 +/- 5 lb/min @ 49 +/- 2 psia  
 MA-1A 82 lb/min (1123 cfm) at 130° air inlet temp, 45 psia (min) air outlet press  
 MC-1 15 cfm, 3500 psia  
 MC-1A 15 cfm, 3500 psia  
 MC-2A 15 cfm, 200 psia  
 MC-11 8,000 cu in cap, 4000 psig, 15 cfm

COMBINED AIR AND ELECTRICAL STARTING UNITS:

AGPU AC: 115/200v, 400 cycle, 3 phase, 30 kw gen  
 DC: 28v, 700 amp  
 AIR: 60 lb/min @ 40 psig @ sea level  
 AM32A-60\* AIR: 120 +/- 4 lb/min (1644 +/- 55 cfm) at 49 +/- 2 psia  
 AC: 120/208v, 400 cycle, 3 phase, 75 kva, 0.75 pf, 4 wire, 120v, 1 phase, 25 kva  
 DC: 28v, 500 amp, 15 kw  
 AM32A-60A AIR: 150 +/- 5 lb/min (2055 +/- 68 cfm) at 51 +/- 2 psia  
 AC: 120/208v, 400 cycle, 3 phase, 75 kva, 0.75 pf, 4 wire  
 DC: 28v, 200 amp, 5.6 kw  
 AM32A-60B\* AIR: 130 lb/min, 50 psia  
 AC: 120/208v, 400 cycle, 3 phase, 75 kva, 0.75 pf, 4 wire  
 DC: 28v, 200 amp, 5.6 kw

\*NOTE: During combined air and electrical loads, the pneumatic circuitry takes preference and will limit the amount of electrical power available.

USN JASU

ELECTRICAL STARTING UNITS:

NC-8A/A1 DC: 500 amp constant, 750 amp intermittent, 28v;  
 AC: 60 kva @ .8 pf, 115/200v, 3 phase, 400 Hz.  
 NC-10A/A1/B/C DC: 750 amp constant, 1000 amp intermittent, 28v;  
 AC: 90 kva, 115/200v, 3 phase, 400 Hz.

AIR STARTING UNITS:

GTC-85/GTE-85 120 lbs/min @ 45 psi.  
 MSU-200NAV/A/U47A-5 204 lbs/min @ 56 psia.  
 WELLS AIR START SYSTEM 180 lbs/min @ 75 psi or 120 lbs/min @ 45 psi. Simultaneous multiple start capability.

COMBINED AIR AND ELECTRICAL STARTING UNITS:

NCP-105/RCPT 180 lbs/min @ 75 psi or 120 lbs/min @ 45 psi. 700 amp, 28v DC. 120/208v, 400 Hz AC, 30 kva.

JASU (ARMY)

59B2-1B 28v, 7.5 kw, 280 amp.

OTHER JASU

ELECTRICAL STARTING UNITS (DND):

CE12 AC 115/200v, 140 kva, 400 Hz, 3 phase  
 CE13 AC 115/200v, 60 kva, 400 Hz, 3 phase  
 CE14 AC/DC 115/200v, 140 kva, 400 Hz, 3 phase, 28vDC, 1500 amp  
 CE15 DC 22-35v, 500 amp continuous 1100 amp intermittent  
 CE16 DC 22-35v, 500 amp continuous 1100 amp intermittent soft start

AIR STARTING UNITS (DND):

CA2 ASA 45.5 psig, 116.4 lb/min

COMBINED AIR AND ELECTRICAL STARTING UNITS (DND)

CEA1 AC 120/208v, 60 kva, 400 Hz, 3 phase DC 28v, 75 amp  
 AIR 112.5 lb/min, 47 psig

ELECTRICAL STARTING UNITS (OTHER)

C-26 28v 45kw 115-200v 15kw 380-800 Hz 1 phase 2 wire  
 C-26-B, C-26-C 28v 45kw: Split Bus: 115-200v 15kw 380-800 Hz 1 phase 2 wire  
 E3 DC 28v/10kw

AIR STARTING UNITS (OTHER):

A4 40 psi/2 lb/sec (LPAS Mk12, Mk12L, Mk12A, Mk1, Mk2B)  
 MA-1 150 Air HP, 115 lb/min 50 psia  
 MA-2 250 Air HP, 150 lb/min 75 psia

CARTRIDGE:

MXU-4A USAF

**(25) FUEL—MILITARY**

Fuel available through US Military Base supply, DESC Into-Plane Contracts and/or reciprocal agreement is listed first and is followed by (Mil). At commercial airports where Into-Plane contracts are in place, the name of the refueling agent is shown. Military fuel should be used first if it is available. When military fuel cannot be obtained but Into-Plane contract fuel is available, Government aircraft must refuel with the contract fuel and applicable refueling agent to avoid any breach in contract terms and conditions. Fuel not available through the above is shown preceded by NC (no contract). When fuel is obtained from NC sources, local purchase procedures must be followed. The US Military Aircraft Identaplates DD Form 1896 (Jet Fuel), DD Form 1897 (Avgas) and AF Form 1245 (Avgas) are used at military installations only. The US Government Aviation Into-Plane Reimbursement (AIR) Card (currently issued by AVCARD) is the instrument to be used to obtain fuel under a DESC Into-Plane Contract and for NC purchases if the refueling agent at the commercial airport accepts the AVCARD. A current list of contract fuel locations is available online at [www.desc.dla.mil/Static/ProductsAndServices.asp](http://www.desc.dla.mil/Static/ProductsAndServices.asp); click on the Commercial Airports button.

See legend item 14 for fuel code and description.

**(26) SUPPORTING FLUIDS AND SYSTEMS—MILITARY****CODE**

ADI	Anti-Detonation Injection Fluid—Reciprocating Engine Aircraft.
W	Water Thrust Augmentation—Jet Aircraft.
WAI	Water-Alcohol Injection Type, Thrust Augmentation—Jet Aircraft.
SP	Single Point Refueling.
PRESAIR	Air Compressors rated 3,000 PSI or more.
De-Ice	Anti-icing/De-icing/Defrosting Fluid (MIL-A-8243).
<b>OXYGEN:</b>	
LPOX	Low pressure oxygen servicing.
HPOX	High pressure oxygen servicing.
LHOX	Low and high pressure oxygen servicing.
LOX	Liquid oxygen servicing.
OXRB	Oxygen replacement bottles. (Maintained primarily at Naval stations for use in acft where oxygen can be replenished only by replacement of cylinders.)
OX	Indicates oxygen servicing when type of servicing is unknown.
NOTE: Combinations of above items is used to indicate complete oxygen servicing available;	
LHOXRB	Low and high pressure oxygen servicing and replacement bottles;
LPOXRB	Low pressure oxygen replacement bottles only, etc.

NOTE: Aircraft will be serviced with oxygen procured under military specifications only. Aircraft will not be serviced with medical oxygen.

**NITROGEN:**

LPNIT	Low pressure nitrogen servicing.
HPNIT	High pressure nitrogen servicing.
LHNIT	Low and high pressure nitrogen servicing.

**(27) OIL—MILITARY**

US AVIATION OILS (MIL SPECS):

CODE	GRADE, TYPE
0-113	1065, Reciprocating Engine Oil (MIL-L-6082)
0-117	1100, Reciprocating Engine Oil (MIL-L-6082)
0-117+	1100, 0-117 plus cyclohexanone (MIL-L-6082)
0-123	1065, (Dispersant), Reciprocating Engine Oil (MIL-L-22851 Type III)
0-128	1100, (Dispersant), Reciprocating Engine Oil (MIL-L-22851 Type II)
0-132	1005, Jet Engine Oil (MIL-L-6081)
0-133	1010, Jet Engine Oil (MIL-L-6081)
0-147	None, MIL-L-6085A Lubricating Oil, Instrument, Synthetic
0-148	None, MIL-L-7808 (Synthetic Base) Turbine Engine Oil
0-149	None, Aircraft Turbine Engine Synthetic, 7.5c St
0-155	None, MIL-L-6086C, Aircraft, Medium Grade
0-156	None, MIL-L-23699 (Synthetic Base), Turbo Prop and Turbo shaft Engines
JOAP/SOAP	Joint Oil Analysis Program. JOAP support is furnished during normal duty hours, other times on request. (JOAP and SOAP programs provide essentially the same service, JOAP is now the standard joint service supported program.)

**(28) TRANSIENT ALERT (TRAN ALERT)—MILITARY**

Tran Alert service is considered to include all services required for normal aircraft turn-around, e.g., servicing (fuel, oil, oxygen, etc.), debriefing to determine requirements for maintenance, minor maintenance, inspection and parking assistance of transient aircraft. Drag chute repack, specialized maintenance, or extensive repairs will be provided within the capabilities and priorities of the base. Delays can be anticipated after normal duty hours/holidays/weekends regardless of the hours of transient maintenance operation. Pilots should not expect aircraft to be serviced for TURN-AROUNDS during time periods when servicing or maintenance manpower is not available. In the case of airports not operated exclusively by US military, the servicing indicated by the remarks will not always be available for US military

aircraft. When transient alert services are not shown, facilities are unknown. NO PRIORITY BASIS—means that transient alert services will be provided only after all the requirements for mission/tactical assigned aircraft have been accomplished.

**29 AIRPORT REMARKS**

The Attendance Schedule is the months, days and hours the airport is actually attended. Airport attendance does not mean watchman duties or telephone accessibility, but rather an attendant or operator on duty to provide at least minimum services (e.g., repairs, fuel, transportation).

Airport Remarks have been grouped in order of applicability. Airport remarks are limited to those items of information that are determined essential for operational use, i.e., conditions of a permanent or indefinite nature and conditions that will remain in effect for more than 30 days concerning aeronautical facilities, services, maintenance available, procedures or hazards, knowledge of which is essential for safe and efficient operation of aircraft. Information concerning permanent closing of a runway or taxiway will not be shown. A note "See Special Notices" shall be applied within this remarks section when a special notice applicable to the entry is contained in the Special Notices section of this publication.

Parachute Jumping indicates parachute jumping areas associated with the airport. See Parachute Jumping Area section of this publication for additional information.

Landing Fee indicates landing charges for private or non-revenue producing aircraft. In addition, fees may be charged for planes that remain over a couple of hours and buy no services, or at major airline terminals for all aircraft.

Note: Unless otherwise stated, remarks including runway ends refer to the runway's approach end.

**30 MILITARY REMARKS**

Military Remarks published at a joint Civil/Military facility are remarks that are applicable to the Military. At Military Facilities all remarks will be published under the heading Military Remarks. Remarks contained in this section may not be applicable to civil users. The first group of remarks is applicable to the primary operator of the airport. Remarks applicable to a tenant on the airport are shown preceded by the tenant organization, i.e., (A) (AF) (N) (ANG), etc. Military airports operate 24 hours unless otherwise specified. Airport operating hours are listed first (airport operating hours will only be listed if they are different than the airport attended hours or if the attended hours are unavailable) followed by pertinent remarks in order of applicability. Remarks will include information on restrictions, hazards, traffic pattern, noise abatement, customs/agriculture/immigration, and miscellaneous information applicable to the Military.

Type of restrictions:

CLOSED: When designated closed, the airport is restricted from use by all aircraft unless stated otherwise. Any closure applying to specific type of aircraft or operation will be so stated. USN/USMC/USAF airports are considered closed during non-operating hours. Closed airports may be utilized during an emergency provided there is a safe landing area.

OFFICIAL BUSINESS ONLY: The airfield is closed to all transient military aircraft for obtaining routine services such as fueling, passenger drop off or pickup, practice approaches, parking, etc. The airfield may be used by aircrews and aircraft if official government business (including civilian) must be conducted on or near the airfield and prior permission is received from the airfield manager.

AF OFFICIAL BUSINESS ONLY OR NAVY OFFICIAL BUSINESS ONLY: Indicates that the restriction applies only to service indicated.

PRIOR PERMISSION REQUIRED (PPR): Airport is closed to transient aircraft unless approval for operation is obtained from the appropriate commander through Chief, Airfield Management or Airfield Operations Officer. Official Business or PPR does not preclude the use of US Military airports as an alternate for IFR flights. If a non-US military airport is used as a weather alternate and requires a PPR, the PPR must be requested and confirmed before the flight departs. The purpose of PPR is to control volume and flow of traffic rather than to prohibit it. Prior permission is required for all aircraft requiring transient alert service outside the published transient alert duty hours. All aircraft carrying hazardous materials must obtain prior permission as outlined in AFJI 11-204, AR 95-27, OPNAVINST 3710.7.

Note: OFFICIAL BUSINESS ONLY AND PPR restrictions are not applicable to Special Air Mission (SAM) or Special Air Resource (SPAR) aircraft providing person or persons on board are designated Code 6 or higher as explained in AFJMAN 11-213, AR 95-11, OPNAVINST 3722-8J. Official Business Only or PPR do not preclude the use of the airport as an alternate for IFR flights.

**31 WEATHER DATA SOURCES**

Weather data sources will be listed alphabetically followed by their assigned frequencies and/or telephone number and hours of operation.

ASOS—Automated Surface Observing System. Reports the same as an AWOS-3 plus precipitation identification and intensity, and freezing rain occurrence (future enhancement).

AWOS—Automated Weather Observing System

AWOS-A—reports altimeter setting (all other information is advisory only).

AWOS-1—reports altimeter setting, wind data and usually temperature, dewpoint and density altitude.

AWOS-2—reports the same as AWOS-1 plus visibility.

AWOS-3—reports the same as AWOS-1 plus visibility and cloud/ceiling data.

See AIM, Basic Flight Information and ATC Procedures for detailed description of AWOS.

HIWAS—See RADIO AIDS TO NAVIGATION

LAWRS—Limited Aviation Weather Reporting Station where observers report cloud height, weather, obstructions to vision, temperature and dewpoint (in most cases), surface wind, altimeter and pertinent remarks.

LLWAS—indicates a Low Level Wind Shear Alert System consisting of a center field and several field perimeter anemometers. SAWRS—identifies airports that have a Supplemental Aviation Weather Reporting Station available to pilots for current weather information.

SWSL—Supplemental Weather Service Location providing current local weather information via radio and telephone.

TDWR—indicates airports that have Terminal Doppler Weather Radar.

WSP—indicates airports that have Weather System Processor.

When the automated weather source is broadcast over an associated airport NAVAID frequency (see NAVAID line), it shall be indicated by a bold ASOS, AWOS, or HIWAS followed by the frequency, identifier and phone number, if available.

## **32 COMMUNICATIONS**

Airport terminal control facilities and radio communications associated with the airport shall be shown. When the call sign is not the same as the airport name the call sign will be shown. Frequencies shall normally be shown in descending order with the primary frequency listed first. Frequencies will be listed, together with sectorization indicated by outbound radials, and hours of operation. Communications will be listed in sequence as follows:

Single Frequency Approach (SFA), Common Traffic Advisory Frequency (CTAF), Automatic Terminal Information Service (ATIS) and Aeronautical Advisory Stations (UNICOM) or (AUNICOM) along with their frequency is shown, where available, on the line following the heading "COMMUNICATIONS." When the CTAF and UNICOM frequencies are the same, the frequency will be shown as CTAF/UNICOM 122.8.

The FSS telephone nationwide is toll free 1-800-WX-BRIEF (1-800-992-7433). When the FSS is located on the field it will be indicated as "on arpt". Frequencies available at the FSS will follow in descending order. Remote Communications Outlet (RCO) providing service to the airport followed by the frequency and FSS RADIO name will be shown when available.

FSS's provide information on airport conditions, radio aids and other facilities, and process flight plans. Airport Advisory Service (AAS) is provided on the CTAF by FSS's for select non-tower airports or airports where the tower is not in operation. (See AIM, Para 4-1-9 Traffic Advisory Practices at Airports Without Operating Control Towers or AC 90-42C.)

Aviation weather briefing service is provided by FSS specialists. Flight and weather briefing services are also available by calling the telephone numbers listed.

Remote Communications Outlet (RCO)—An unmanned air/ground communications facility that is remotely controlled and provides UHF or VHF communications capability to extend the service range of an FSS.

Civil Communications Frequencies—Civil communications frequencies used in the FSS air/ground system are operated on 122.0, 122.2, 123.6; emergency 121.5; plus receive-only on 122.1.

- a. 122.0 is assigned as the Enroute Flight Advisory Service frequency at selected FSS RADIO outlets.
- b. 122.2 is assigned as a common enroute frequency.
- c. 123.6 is assigned as the airport advisory frequency at select non-tower locations. At airports with a tower, FSS may provide airport advisories on the tower frequency when tower is closed.
- d. 122.1 is the primary receive-only frequency at VOR's.
- e. Some FSS's are assigned 50 kHz frequencies in the 122-126 MHz band (eg. 122.45). Pilots using the FSS A/G system should refer to this directory or appropriate charts to determine frequencies available at the FSS or remote facility through which they wish to communicate.

Emergency frequency 121.5 and 243.0 are available at all Flight Service Stations, most Towers, Approach Control and RADAR facilities.

Frequencies published followed by the letter "T" or "R", indicate that the facility will only transmit or receive respectively on that frequency. All radio aids to navigation (NAVAID) frequencies are transmit only.

### **TERMINAL SERVICES**

SFA—Single Frequency Approach.

CTAF—A program designed to get all vehicles and aircraft at airports without an operating control tower on a common frequency.

ATIS—A continuous broadcast of recorded non-control information in selected terminal areas.

D-ATIS—Digital ATIS provides ATIS information in text form outside the standard reception range of conventional ATIS via landline & data link communications and voice message within range of existing transmitters.

AUNICOM—Automated UNICOM is a computerized, command response system that provides automated weather, radio check capability and airport advisory information selected from an automated menu by microphone clicks.

UNICOM—A non-government air/ground radio communications facility which may provide airport information.

PTD—Pilot to Dispatcher.

APP CON—Approach Control. The symbol **Ⓡ** indicates radar approach control.

TOWER—Control tower.

GCA—Ground Control Approach System.

GND CON—Ground Control.

GCO—Ground Communication Outlet—An unstaffed, remotely controlled, ground/ground communications facility. Pilots at uncontrolled airports may contact ATC and FSS via VHF to a telephone connection to obtain an instrument clearance or close a VFR or IFR flight plan. They may also get an updated weather briefing prior to takeoff. Pilots will use four "key clicks" on the

VHF radio to contact the appropriate ATC facility or six "key clicks" to contact the FSS. The GCO system is intended to be used only on the ground.

DEP CON—Departure Control. The symbol **(R)** indicates radar departure control.

CLNC DEL—Clearance Delivery.

PRE TAXI CLNC—Pre taxi clearance.

VFR ADVSY SVC—VFR Advisory Service. Service provided by Non-Radar Approach Control.

Advisory Service for VFR aircraft (upon a workload basis) ctc APP CON.

COMD POST—Command Post followed by the operator call sign in parenthesis.

PMSV—Pilot-to-Metro Service call sign, frequency and hours of operation, when full service is other than continuous.

PMSV installations at which weather observation service is available shall be indicated, following the frequency and/or hours of operation as "Wx obsn svc 1900-0000Z+" or "other times" may be used when no specific time is given. PMSV facilities manned by forecasters are considered "Full Service". PMSV facilities manned by weather observers are listed as "Limited Service".

OPS—Operations followed by the operator call sign in parenthesis.

CON

RANGE

FLT FLW—Flight Following

MEDIVAC

NOTE: Communication frequencies followed by the letter "X" indicate frequency available on request.

### **(33) AIRSPACE**

Information concerning Class B, C, and part-time D and E surface area airspace shall be published with effective times.

Class D and E surface area airspace that is continuous as established by Rulemaking Docket will not be shown.

CLASS B—Radar Sequencing and Separation Service for all aircraft in CLASS B airspace.

CLASS C—Separation between IFR and VFR aircraft and sequencing of VFR arrivals to the primary airport.

TRSA—Radar Sequencing and Separation Service for participating VFR Aircraft within a Terminal Radar Service Area.

Class C, D, and E airspace described in this publication is that airspace usually consisting of a 5 NM radius core surface area that begins at the surface and extends upward to an altitude above the airport elevation (charted in MSL for Class C and Class D). Class E surface airspace normally extends from the surface up to but not including the overlying controlled airspace.

When part-time Class C or Class D airspace defaults to Class E, the core surface area becomes Class E. This will be formatted as:

**AIRSPACE: CLASS C** svc "times" ctc **APP CON** other times CLASS E:

or

**AIRSPACE: CLASS D** svc "times" other times CLASS E.

When a part-time Class C, Class D or Class E surface area defaults to Class G, the core surface area becomes Class G up to, but not including, the overlying controlled airspace. Normally, the overlying controlled airspace is Class E airspace beginning at either 700' or 1200' AGL. This will be formatted as:

**AIRSPACE: CLASS C** svc "times" ctc **APP CON** other times CLASS G, with CLASS E 700' (or 1200') AGL & abv:

or

**AIRSPACE: CLASS D** svc "times" other times CLASS G with CLASS E 700' (or 1200') AGL & abv:

or

**AIRSPACE: CLASS E** svc "times" other times CLASS G with CLASS E 700' (or 1200') AGL & abv.

**NOTE: AIRSPACE SVC "TIMES" INCLUDE ALL ASSOCIATED ARRIVAL EXTENSIONS.** Surface area arrival extensions for instrument approach procedures become part of the primary core surface area. These extensions may be either Class D or Class E airspace and are effective concurrent with the times of the primary core surface area. For example, when a part-time Class C, Class D or Class E surface area defaults to Class G, the associated arrival extensions will default to Class G at the same time. When a part-time Class C or Class D surface area defaults to Class E, the arrival extensions will remain in effect as Class E airspace.

**NOTE: CLASS E AIRSPACE EXTENDING UPWARD FROM 700 FEET OR MORE ABOVE THE SURFACE, DESIGNATED IN CONJUNCTION WITH AN AIRPORT WITH AN APPROVED INSTRUMENT PROCEDURE.**

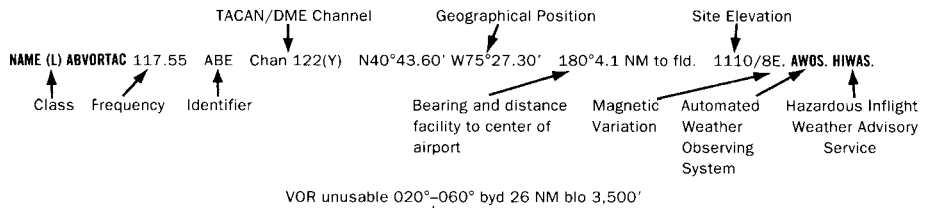
Class E 700' AGL (shown as magenta vignette on sectional charts) and 1200' AGL (blue vignette) areas are designated when necessary to provide controlled airspace for transitioning to/from the terminal and enroute environments. Unless otherwise specified, these 700'/1200' AGL Class E airspace areas remain in effect continuously, regardless of airport operating hours or surface area status. These transition areas should not be confused with surface areas or arrival extensions.

(See Chapter 3, AIRSPACE, in the Aeronautical Information Manual for further details)

**34 RADIO AIDS TO NAVIGATION**

The Airport/Facility Directory lists, by facility name, all Radio Aids to Navigation that appear on National Aeronautical Navigation Services Visual or IFR Aeronautical Charts and those upon which the FAA has approved an Instrument Approach Procedure, with exception of selected TACANs. Military TACAN information will be published for Military facilities contained in this publication. All VOR, VORTAC, TACAN, ILS and MLS equipment in the National Airspace System has an automatic monitoring and shutdown feature in the event of malfunction. Unmonitored, as used in this publication, for any navigational aid, means that monitoring personnel cannot observe the malfunction or shutdown signal. The NAVAID NOTAM file identifier will be shown as "NOTAM FILE IAD" and will be listed on the Radio Aids to Navigation line. When two or more NAVAIDS are listed and the NOTAM file identifier is different from that shown on the Radio Aids to Navigation line, it will be shown with the NAVAID listing. NOTAM file identifiers for ILSs and its components (e.g., NDB (LOM) are the same as the associated airports and are not repeated. Automated Surface Observing System (ASOS), Automated Weather Observing System (AWOS), and Hazardous Inflight Weather Advisory Service (HIWAS) will be shown when this service is broadcast over selected NAVAIDS.

NAVAID information is tabulated as indicated in the following sample:



Restriction within the normal altitude/range of the navigational aid (See primary alphabetical listing for restrictions on VORTAC and VOR/DME).

Note: Those DME channel numbers with a (Y) suffix require TACAN to be placed in the "Y" mode to receive distance information.

**HIWAS**—Hazardous Inflight Weather Advisory Service is a continuous broadcast of inflight weather advisories including summarized SIGMETs, convective SIGMETs, AIRMETS and urgent PIREPs. HIWAS is presently broadcast over selected VOR's throughout the U.S.

**ASR/PAR**—Indicates that Surveillance (ASR) or Precision (PAR) radar instrument approach minimums are published in the U.S. Terminal Procedures. Only part-time hours of operation will be shown.

**RADIO CLASS DESIGNATIONS**

VOR/DME/TACAN Standard Service Volume (SSV) Classifications

SSV Class	Altitudes	Distance (NM)
(T) Terminal	1000' to 12,000'	25
(L) Low Altitude	1000' to 18,000'	40
(H) High Altitude	1000' to 14,500'	40
	14,500' to 18,000'	100
	18,000' to 45,000'	130
	45,000' to 60,000'	100

NOTE: Additionally, (H) facilities provide (L) and (T) service volume and (L) facilities provide (T) service. Altitudes are with respect to the station's site elevation. Coverage is not available in a cone of airspace directly above the facility.

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The term VOR is, operationally, a general term covering the VHF omnidirectional bearing type of facility without regard to the fact that the power, the frequency protected service volume, the equipment configuration, and operational requirements may vary between facilities at different locations.

AB _____	Automatic Weather Broadcast.
DF _____	Direction Finding Service.
DME _____	UHF standard (TACAN compatible) distance measuring equipment.
DME(Y) _____	UHF standard (TACAN compatible) distance measuring equipment that require TACAN to be placed in the "Y" mode to receive DME.
GS _____	Glide slope.
H _____	Non-directional radio beacon (homing), power 50 watts to less than 2,000 watts (50 NM at all altitudes).
HH _____	Non-directional radio beacon (homing), power 2,000 watts or more (75 NM at all altitudes).
H-SAB _____	Non-directional radio beacons providing automatic transcribed weather service.
ILS _____	Instrument Landing System (voice, where available, on localizer channel).
IM _____	Inner marker.
ISMLS _____	Interim Standard Microwave Landing System.
LDA _____	Localizer Directional Aid.
LMM _____	Compass locator station when installed at middle marker site (15 NM at all altitudes).
LOM _____	Compass locator station when installed at outer marker site (15 NM at all altitudes).
MH _____	Non-directional radio beacon (homing) power less than 50 watts (25 NM at all altitudes).
MLS _____	Microwave Landing System.
MM _____	Middle marker.
OM _____	Outer marker.
S _____	Simultaneous range homing signal and/or voice.
SABH _____	Non-directional radio beacon not authorized for IFR or ATC. Provides automatic weather broadcasts.
SDF _____	Simplified Direction Facility.
TACAN _____	UHF navigational facility-omnidirectional course and distance information.
VOR _____	VHF navigational facility-omnidirectional course only.
VOR/DME _____	Collocated VOR navigational facility and UHF standard distance measuring equipment.
VORTAC _____	Collocated VOR and TACAN navigational facilities.
W _____	Without voice on radio facility frequency.
Z _____	VHF station location marker at a LF radio facility.

## ILS FACILITY PERFORMANCE CLASSIFICATION CODES

Codes define the ability of an ILS to support autoland operations. The two portions of the code represent Official Category and farthest point along a Category I, II, or III approach that the Localizer meets Category III structure tolerances.

Official Category: I, II, or III; the lowest minima on published or unpublished procedures supported by the ILS.

Farthest point of satisfactory Category III Localizer performance for Category I, II, or III approaches: A – 4 NM prior to runway threshold, B – 3500 ft prior to runway threshold, C – glide angle dependent but generally 750–1000 ft prior to threshold, T – runway threshold, D – 3000 ft after runway threshold, and E – 2000 ft prior to stop end of runway.

ILS information is tabulated as indicated in the following sample:

ILS/DME 108.5 I-ORL Chan 22 Rwy 18. Class IIE. LOM HERNY NDB.

↖  
ILS Facility Performance  
Classification Code

## FREQUENCY PAIRING PLAN AND MLS CHANNELING

MLS CHANNEL	VHF FREQUENCY	TACAN CHANNEL	MLS CHANNEL	VHF FREQUENCY	TACAN CHANNEL	MLS CHANNEL	VHF FREQUENCY	TACAN CHANNEL
500	108.10	18X	568	109.45	31Y	636	114.15	88Y
502	108.30	20X	570	109.55	32Y	638	114.25	89Y
504	108.50	22X	572	109.65	33Y	640	114.35	90Y
506	108.70	24X	574	109.75	34Y	642	114.45	91Y
508	108.90	26X	576	109.85	35Y	644	114.55	92Y
510	109.10	28X	578	109.95	36Y	646	114.65	93Y
512	109.30	30X	580	110.05	37Y	648	114.75	94Y
514	109.50	32X	582	110.15	38Y	650	114.85	95Y
516	109.70	34X	584	110.25	39Y	652	114.95	96Y
518	109.90	36X	586	110.35	40Y	654	115.05	97Y
520	110.10	38X	588	110.45	41Y	656	115.15	98Y
522	110.30	40X	590	110.55	42Y	658	115.25	99Y
524	110.50	42X	592	110.65	43Y	660	115.35	100Y
526	110.70	44X	594	110.75	44Y	662	115.45	101Y
528	110.90	46X	596	110.85	45Y	664	115.55	102Y
530	111.10	48X	598	110.95	46Y	666	115.65	103Y
532	111.30	50X	600	111.05	47Y	668	115.75	104Y
534	111.50	52X	602	111.15	48Y	670	115.85	105Y
536	111.70	54X	604	111.25	49Y	672	115.95	106Y
538	111.90	56X	606	111.35	50Y	674	116.05	107Y
540	108.05	17Y	608	111.45	51Y	676	116.15	108Y
542	108.15	18Y	610	111.55	52Y	678	116.25	109Y
544	108.25	19Y	612	111.65	53Y	680	116.35	110Y
546	108.35	20Y	614	111.75	54Y	682	116.45	111Y
548	108.45	21Y	616	111.85	55Y	684	116.55	112Y
550	108.55	22Y	618	111.95	56Y	686	116.65	113Y
552	108.65	23Y	620	113.35	80Y	688	116.75	114Y
554	108.75	24Y	622	113.45	81Y	690	116.85	115Y
556	108.85	25Y	624	113.55	82Y	692	116.95	116Y
558	108.95	26Y	626	113.65	83Y	694	117.05	117Y
560	109.05	27Y	628	113.75	84Y	696	117.15	118Y
562	109.15	28Y	630	113.85	85Y	698	117.25	119Y
564	109.25	29Y	632	113.95	86Y			
566	109.35	30Y	634	114.05	87Y			

## FREQUENCY PAIRING PLAN AND MLS CHANNELING

The following is a list of paired VOR/ILS VHF frequencies with TACAN channels and MLS channels.

TACAN CHANNEL	VHF FREQUENCY	MLS CHANNEL	TACAN CHANNEL	VHF FREQUENCY	MLS CHANNEL	TACAN CHANNEL	VHF FREQUENCY	MLS CHANNEL
2X	134.5	-	19Y	108.25	544	25X	108.80	-
2Y	134.55	-	20X	108.30	502	25Y	108.85	556
11X	135.4	-	20Y	108.35	546	26X	108.90	508
11Y	135.45	-	21X	108.40	-	26Y	108.95	558
12X	135.5	-	21Y	108.45	548	27X	109.00	-
12Y	135.55	-	22X	108.50	504	27Y	109.05	560
17X	108.00	-	22Y	108.55	550	28X	109.10	510
17Y	108.05	540	23X	108.60	-	28Y	109.15	562
18X	108.10	500	23Y	108.65	552	29X	109.20	-
18Y	108.15	542	24X	108.70	506	29Y	109.25	564
19X	108.20	-	24Y	108.75	554	30X	109.30	512



TACAN CHANNEL	VHF FREQUENCY	MLS CHANNEL	TACAN CHANNEL	VHF FREQUENCY	MLS CHANNEL	TACAN CHANNEL	VHF FREQUENCY	MLS CHANNEL
30Y	109.35	566	63X	133.60	-	95Y	114.85	650
31X	109.40	-	63Y	133.65	-	96X	114.90	-
31Y	109.45	568	64X	133.70	-	96Y	114.95	652
32X	109.50	514	64Y	133.75	-	97X	115.00	-
32Y	109.55	570	65X	133.80	-	97Y	115.05	654
33X	109.60	-	65Y	133.85	-	98X	115.10	-
33Y	109.65	572	66X	133.90	-	98Y	115.15	656
34X	109.70	516	66Y	133.95	-	99X	115.20	-
34Y	109.75	574	67X	134.00	-	99Y	115.25	658
35X	109.80	-	67Y	134.05	-	100X	115.30	-
35Y	109.85	576	68X	134.10	-	100Y	115.35	660
36X	109.90	518	68Y	134.15	-	101X	115.40	-
36Y	109.95	578	69X	134.20	-	101Y	115.45	662
37X	110.00	-	69Y	134.25	-	102X	115.50	-
37Y	110.05	580	70X	112.30	-	102Y	115.55	664
38X	110.10	520	70Y	112.35	-	103X	115.60	-
38Y	110.15	582	71X	112.40	-	103Y	115.65	666
39X	110.20	-	71Y	112.45	-	104X	115.70	-
39Y	110.25	584	72X	112.50	-	104Y	115.75	668
40X	110.30	522	72Y	112.55	-	105X	115.80	-
40Y	110.35	586	73X	112.60	-	105Y	115.85	670
41X	110.40	-	73Y	112.65	-	106X	115.90	-
41Y	110.45	588	74X	112.70	-	106Y	115.95	672
42X	110.50	524	74Y	112.75	-	107X	116.00	-
42Y	110.55	590	75X	112.80	-	107Y	116.05	674
43X	110.60	-	75Y	112.85	-	108X	116.10	-
43Y	110.65	592	76X	112.90	-	108Y	116.15	676
44X	110.70	526	76Y	112.95	-	109X	116.20	-
44Y	110.75	594	77X	113.00	-	109Y	116.25	678
45X	110.80	-	77Y	113.05	-	110X	116.30	-
45Y	110.85	596	78X	113.10	-	110Y	116.35	680
46X	110.90	528	78Y	113.15	-	111X	116.40	-
46Y	110.95	598	79X	113.20	-	111Y	116.45	682
47X	111.00	-	79Y	113.25	-	112X	116.50	-
47Y	111.05	600	80X	113.30	-	112Y	116.55	684
48X	111.10	530	80Y	113.35	620	113X	116.60	-
48Y	111.15	602	81X	113.40	-	113Y	116.65	686
49X	111.20	-	81Y	113.45	622	114X	116.70	-
49Y	111.25	604	82X	113.50	-	114Y	116.75	688
50X	111.30	532	82Y	113.55	624	115X	116.80	-
50Y	111.35	606	83X	113.60	-	115Y	116.85	690
51X	111.40	-	83Y	113.65	626	116X	116.90	-
51Y	111.45	608	84X	113.70	-	116Y	116.95	692
52X	111.50	534	84Y	113.75	628	117X	117.00	-
52Y	111.55	610	85X	113.80	-	117Y	117.05	694
53X	111.60	-	85Y	113.85	630	118X	117.10	-
53Y	111.65	612	86X	113.90	-	118Y	117.15	696
54X	111.70	536	86Y	113.95	632	119X	117.20	-
54Y	111.75	614	87X	114.00	-	119Y	117.25	698
55X	111.80	-	87Y	114.05	634	120X	117.30	-
55Y	111.85	616	88X	114.10	-	120Y	117.35	-
56X	111.90	538	88Y	114.15	636	121X	117.40	-
56Y	111.95	618	89X	114.20	-	121Y	117.45	-
57X	112.00	-	89Y	114.25	638	122X	117.50	-
57Y	112.05	-	90X	114.30	-	122Y	117.55	-
58X	112.10	-	90Y	114.35	640	123X	117.60	-
58Y	112.15	-	91X	114.40	-	123Y	117.65	-
59X	112.20	-	91Y	114.45	642	124X	117.70	-
59Y	112.25	-	92X	114.50	-	124Y	117.75	-
60X	133.30	-	92Y	114.55	644	125X	117.80	-
60Y	133.35	-	93X	114.60	-	125Y	117.85	-
61X	133.40	-	93Y	114.65	646	126X	117.90	-
61Y	133.45	-	94X	114.70	-	126Y	117.95	-
62X	133.50	-	94Y	114.75	648			
62Y	133.55	-	95X	114.80	-			

**35 COMM/NAV/WEATHER REMARKS:**

These remarks consist of pertinent information affecting the current status of communications, NAVAIDs and weather.

**AINSWORTH MUNI** (ANW) 6 NW UTC-6(-5DT) N42°34.75' W99°59.58'

OMAHA  
H-5B, L-12H  
IAP

2589 B FUEL 100LL, JET A NOTAM FILE ANW  
RWY 17-35: H6824X110 (ASPH) S-30, D-45 MIRL  
RWY 17: MALSR. PAPI(P4L)—GA 3.0° TCH 46'.  
RWY 35: MALSR. PAPI(P4L)—GA 3.0° TCH 45'.  
RWY 13-31: H5501X75 (ASPH) S-24, D-36 MIRL  
RWY 13: VASI(V2L)—GA 3.0° TCH 50'.  
RWY 31: REIL. VASI(V2L)—GA 3.0° TCH 50'.

**AIRPORT REMARKS:** Attended Mon-Fri 1400-2300Z. For svc after hrs call 402-387-1255. 24 hr self svc fuel avbl via credit card system. Seasonal migratory waterfowl on and invof arpt. ACTIVATE MIRL Rwy 17-35 and Rwy 13-31, VASI Rwy 13 and Rwy 31, MALSR Rwy 17 and Rws 35 and PAPI Rwy 17 and Rwy 35 and REIL Rwy 31 CTAF.

**WEATHER DATA SOURCES:** AWOS-3 118.325 (402) 387-2329.

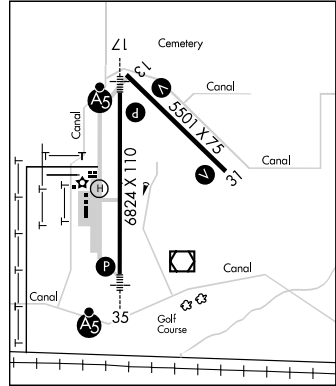
**COMMUNICATIONS:** CTAF/UNICOM 122.8

RCO 122.4 (COLUMBUS RADIO)

DENVER CENTER APP/DEP CON 127.95

**RADIO AIDS TO NAVIGATION:** NOTAM FILE ANW.

(L) VOR/DME 112.7 ANW Chan 74 N42°34.15' W99°59.38' at fld. 2582/9E. HIWAS.



• • • • •  
**HELIPAD H1:** H50X50 (ASPH)  
**HELIPORT REMARKS:** Helipad for refueling only—not avbl for instrument approaches.

**ALABY** N41°43.78' W98°03.16' NOTAM FILE BVN.

OMAHA  
L-12H

NDB (MHW) 332 BVN at Albion Muni.

**ALBION MUNI** (BVN) 3 NW UTC-6(-5DT) N41°43.71' W98°03.35'

OMAHA  
L-12H  
IAP

1806 B FUEL 100LL NOTAM FILE BVN  
RWY 15-33: H3700X60 (CONC) MIRL 0.8% up NW  
RWY 15: PAPI(P2L)—GA 3.0° TCH 40'. Road.  
RWY 33: PAPI(P2L)—GA 3.0° TCH 40'. Tree.

**AIRPORT REMARKS:** Unattended. For fuel call 402-395-2001/5145. ACTIVATE MIRL Rwy 15-33—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 118.575 (402) 395-2052.

**COMMUNICATIONS:** CTAF 122.9

MINNEAPOLIS CENTER APP/DEP CON 128.0

**RADIO AIDS TO NAVIGATION:** NOTAM FILE OLU.

WOLBACH (H) VORTAC 114.8 OBH Chan 95 N41°22.54' W98°21.22' 025° 25.1 NM to fld. 2010/7E.  
ALABY NDB (MHW) 332 BVN N41°43.78' W98°03.16' at fld. NOTAM FILE BVN.

**ALLIANCE MUNI** (AIA) 3 SE UTC-7(-6DT) N42°03.19' W102°48.23'  
 3931 B S4 FUEL 100LL, JET A Class III, ARFF Index A NOTAM FILE AIA  
**RWY 12-30:** H9202X150 (ASPH-AFSC) S-36, D-48, DT-80 MIRL  
**RWY 12:** REIL. VASI(V4L)—GA 3.0° TCH 41'.  
**RWY 30:** MALSR. PAPI(P4L)—GA 3.0° TCH 53'.  
**RWY 08-26:** H6200X75 (ASPH-PFC) S-36, D-48, DT-80 MIRL  
**RWY 17-35:** H6311X75 (ASPH) S-24, D-30

**AIRPORT REMARKS:** Attended continuously. Haying ops on interior of arpt during summer months. Rwy 08-26 designated calm wind. Aerial spraying ops on and in/ov arpt. Occasional use by acft with no radio. Back taxiing. Ultralight and glider ops on and in/ov arpt. Rwy 12-30—PFC first 6,200' on approach end of Rwy 12. Rwy 17-35 unavbl for use by acft with more than 9 passenger seats. ACTIVATE MIRL Rwy 12-30 and Rwy 08-26, VASI Rwy 12, PAPI Rwy 30 and REIL Rwy 12 and MALSR Rwy 30—CTAF.

**WEATHER DATA SOURCES:** ASOS 135.075 (308) 762-1221.

**COMMUNICATIONS:** CTAF/UNICOM 123.0

RCO 122.3 (COLUMBUS RADIO)

Ⓡ DENVER CENTER APP/DEP CON 127.95

**AIRSPACE:** CLASS E svc 1200-0200Z± except holidays other times CLASS G.

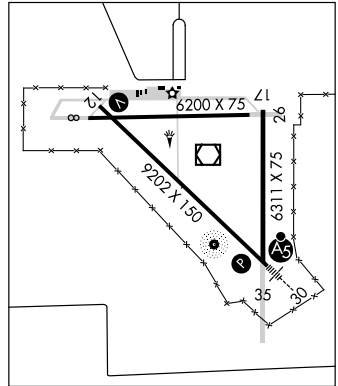
**RADIO AIDS TO NAVIGATION:** NOTAM FILE AIA.

(L) VOR/DME 111.8 AIA Chan 55 N42°03.34' W102°48.27' at fld. 3927/11E.

NDB (MHW) 380 ALU N42°02.59' W102°47.97' at fld.

ILS/DME 108.35 I-BYE Chan 20(Y) Rwy 30 LOC only. ILS unmonitored.

CHEYENNE  
H-5A, L-12G  
IAP, AD



## ALMA

**ALMA MUNI** (4D9) 1 NE UTC-6(-5DT) N40°06.83' W99°20.74'

OMAHA

2070 FUEL 100LL NOTAM FILE OLU

**RWY 17-35:** 3280X120 (TURF)

**RWY 17:** Road. **RWY 35:** Trees.

**AIRPORT REMARKS:** Unattended. 24 hr self svc fuel avbl via credit card system. Rwy 17-35 marked with yellow cones.

**COMMUNICATIONS:** CTAF 122.9

**HARLAN CO LAKE SPB** (H63) 6 SW UTC-6(5-5DT) N40°02.58' W99°15.06'

OMAHA

1946 NOTAM FILE OLU

**WATERWAY E-W:** 15000X4000 (WATER)

**SEAPLANE REMARKS:** Unattended.

**COMMUNICATIONS:** CTAF 122.9

**ANOKE** N40°37.57' W99°01.54' NOTAM FILE EAR.

OMAHA

NDB (LOM) 422 EA 359° 6.1 NM to Kearney Rgnl. Unmonitored.

**ANTELOPE CO** (See NELIGH)

**ARAPAHOE MUNI** (37V) 2 N UTC-6(-5DT) N40°20.37' W99°54.39'

OMAHA  
L-10H

2270 B FUEL 100LL NOTAM FILE OLU

RWY 15-33: H3000X50 (ASPH) LIRL

RWY 33: Road.

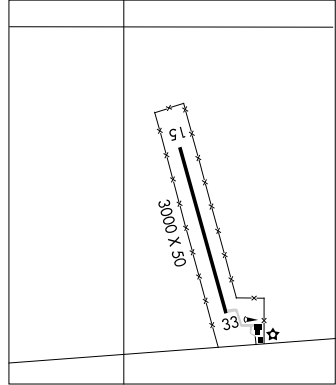
**AIRPORT REMARKS:** Attended 1500-0200Z. 24 hr self svc fuel avbl via credit card system.

**COMMUNICATIONS:** CTAF 122.9

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MCK.

McCOOK (H) VORW/DME 115.3 MCK Chan 100 N40°12.23'

W100°35.65' 067° 32.6 NM to fld. 2571/8E.



**ARTHUR MUNI** (38V) 1 SW UTC-7(-6DT) N41°33.70' W101°42.68'

CHEYENNE

3646 NOTAM FILE OLU

RWY 06-24: 2700X200 (TURF)

RWY 06: Hill. RWY 24: Trees.

**AIRPORT REMARKS:** Unattended. Rwy 06-24 marked with panels.

**COMMUNICATIONS:** CTAF 122.9

## ATKINSON

**STUART-ATKINSON MUNI** (8V2) 3 NW UTC-6(-5DT) N42°33.75' W99°02.27'

OMAHA  
L-12H  
IAP

2130 B FUEL 100LL NOTAM FILE OLU

RWY 11-29: H4040X50 (ASPH) S-4 LIRL

RWY 29: Thld dsplcd 140'. Road.

RWY 05-23: 3000X100 (TURF)

RWY 05: Railroad. RWY 23: Road.

**AIRPORT REMARKS:** Unattended. For fuel call 402-925-5527 or 402-340-0388. Rwy 05-23 narrowed to 100', centerline stayed the same. Rwy 05-23 marked with yellow cones.

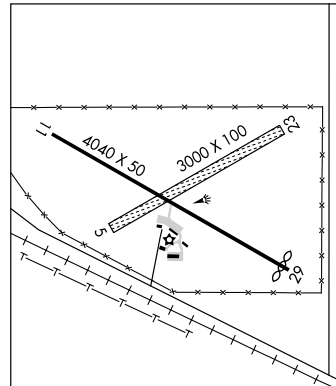
**COMMUNICATIONS:** CTAF 122.9

MINNEAPOLIS CENTER APP/DEP CON 128.0

**RADIO AIDS TO NAVIGATION:** NOTAM FILE ONL.

O'NEILL (H) VORTACW 113.9 ONL Chan 86 N42°28.23'

W98°41.22' 280° 16.5 NM to fld. 2030/10E. HIWAS.



**AUBURN**

**FARINGTON FLD** (K01) 3 E UTC-6(-5DT) N40°23.25' W95°47.35'

OMAHA

932 B FUEL 100LL TPA-1932(1000) NOTAM FILE OLU

RWY 16-34: 4000X100 (TURF) MIRL

RWY 16: Road.

RWY 02-20: 1600X80 (TURF)

RWY 02: Tree. RWY 20: Thld dsplcd 200'. Tree.

**AIRPORT REMARKS:** Unattended. For svc after hours call 402-274-4093. Rwy 02-20 and Rwy 16-34 not plowed winter months. Rwy 20 dsplcd thld marked with three yellow cones each side. ACTIVATE MIRL Rwy 16-34 0400-1200Z±—CTAF.

**COMMUNICATIONS:** CTAF 122.9

**AURORA MUNI-AL POTTER FLD** (AUH) 2 N UTC-6(-5DT) N40°53.65' W97°59.67'

OMAHA

1803 B S4 FUEL 100LL NOTAM FILE AUH

L-101

RWY 16-34: H4301X75 (ASPH) S-5 MIRL

IAP

RWY 16: PAPI(P2L)—GA 3.0° TCH 40'. Road.

RWY 34: PAPI(P2L)—GA 3.0° TCH 40'. Road.

**AIRPORT REMARKS:** Attended Mon-Fri 1400-2300Z±.

**WEATHER DATA SOURCES:** AWOS-3 121.225 (402) 694-5472.

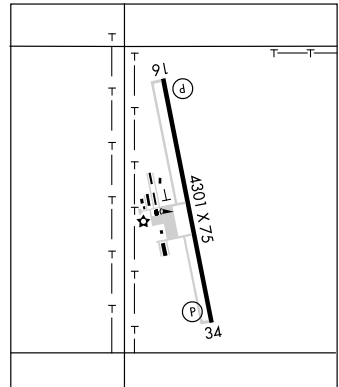
**COMMUNICATIONS:** CTAF/UNICOM 122.8

MINNEAPOLIS CENTER APP/DEP CON 119.4

**RADIO AIDS TO NAVIGATION:** NOTAM FILE GRI.

GRAND ISLAND (L) VORTACW 112.0 GRI Chan 57 N40°59.04'

W98°18.89' 103° 15.5 NM to fld. 1840/7E.



**BASSETT**

**ROCK CO** (RBE) 2 SW UTC-6(-5DT) N42°34.27' W99°34.17'

OMAHA

2349 B FUEL 100LL NOTAM FILE OLU

L-12H

RWY 13-31: H4699X75 (CONC) S-4 MIRL

IAP

RWY 13: PAPI (P2L)—GA 3.0° TCH 40'. Road.

RWY 31: PAPI (P2L)—GA 3.0° TCH 40'.

RWY 02-20: 2202X120 (TURF)

RWY 02: Pole. RWY 20: Road.

**AIRPORT REMARKS:** Unattended. For fuel call 684-3436. Deer on and invof arpt. Rwy 02 pole is an obstruction during irrigation season only. ACTIVATE MIRL Rwy 13-31 and PAPI Rwy 13 and Rwy 31—122.8.

**COMMUNICATIONS:** CTAF 122.9

DENVER CENTER APP/DEP CON 127.95

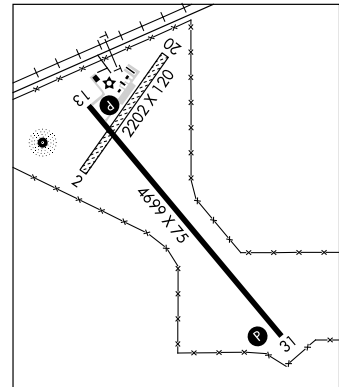
**RADIO AIDS TO NAVIGATION:** NOTAM FILE ANW.

AINSWORTH (L) VORW/DME 112.7 ANW Chan 74 N42°34.15'

W99°59.38' 081° 18.7 NM to fld. 2582/9E. HIWAS.

NDB (MHW) 341 RBE N42°34.42' W99°34.67' at fld.

NOTAM FILE OLU.





**BLAIR MUNI** (BTA) 7 S UTC-6(-5DT) N41°25.89' W96°06.54'

OMAHA

1325 B FUEL 100LL, Jet A NOTAM FILE BTA.

L-121

RWY 13-31: H4200X100 (CONC) S-25 MIRL 0.5% up NW

RWY 13: REIL. PAPI(P2L)—GA 3.25° TCH 43'.

RWY 31: REIL. PAPI(P2L)—GA 3.0° TCH 40'.

**AIRPORT REMARKS:** Attended on call. For svc call 402-493-1530 or 426-4191. 24 hrs self svc fuel avbl via credit card system. Parachute Jumping. Glider activity on and invof arpt. For noise abatement procedures contact arpt manager on 402-426-4191. ACTIVATE MIRL Rwy 13-31, PAPI and REIL Rwy 13 and Rwy 31—CTAF.

WEATHER DATA SOURCES: AWOS-3 120.225 (402) 426-0448.

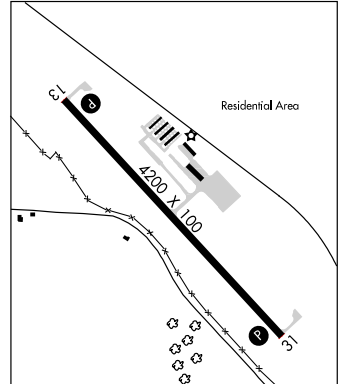
COMMUNICATIONS: CTAF 122.9

Ⓡ OMAHA APP/DEP CON 120.1

RADIO AIDS TO NAVIGATION: NOTAM FILE FOD.

OMAHA (H) VORTAC 116.3 OVR Chan 110 N41°10.04'

W95°44.20' 304° 22.4 NM to fld. 1300/8E. HIWAS.

**BLOOMFIELD MUNI** (84Y) 2 SW UTC-6(-5DT) N42°34.78' W97°40.42'

OMAHA

1673 B NOTAM FILE OLU

RWY 14-32: H2700X50 (ASPH) LIRL

RWY 14: Thld dspcd 200'. Fence. RWY 32: Hill.

**AIRPORT REMARKS:** Attended Mon-Fri 1400-2300Z±. For attendant call 402-373-2452. Rwy 14-32 lgttd thld Rwy 14 relocated 200', 2500' of Rwy 14-32 usable at ngt. ACTIVATE LIRL Rwy 14-32—CTAF.

COMMUNICATIONS: CTAF 122.9

**BRENNER FLD** (See FALLS CITY)**BREWSTER FLD** (See HOLDREGE)**BROKEN BOW MUNI** (BBW) 2 N UTC-6(-5DT) N41°26.19' W99°38.53'

OMAHA

2547 B FUEL 100LL, JET A NOTAM FILE BBW

L-12H

RWY 14-32: H4203X75 (CONC) S-30 MIRL 0.6% up NW

IAP

RWY 14: REIL. PAPI(P2L)—GA 3.0° TCH 32'. Road

RWY 32: PAPI(P2L)—GA 3.0° TCH 41'. Trees

**AIRPORT REMARKS:** Unattended. For svc call numbers listed on notice in terminal building. Fuel avbl by prior arrangement. 24 hrs self svc fuel avbl via credit card system. Courtesy car and van avbl.

ACTIVATE MIRL and PAPI Rwy 14-32, REIL Rwy 14—CTAF.

WEATHER DATA SOURCES: ASOS 120.0 (308) 872-5354.

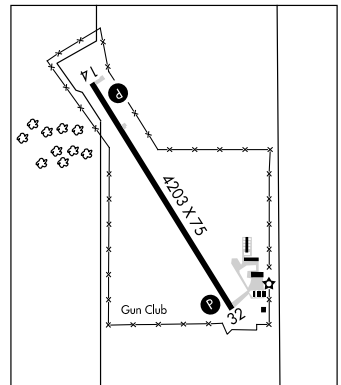
COMMUNICATIONS: CTAF/UNICOM 122.8

DENVER CENTER APP/DEP CON 132.7

RADIO AIDS TO NAVIGATION: NOTAM FILE BBW.

CUSTER COUNTY (L) VORW/DME 108.2 CUZ Chan 19 N41°29.04'

W99°41.34' 135° 3.6 NM to fld. 2850/8E.

**BURWELL** N41°46.48' W99°08.73' NOTAM FILE OLU.

OMAHA

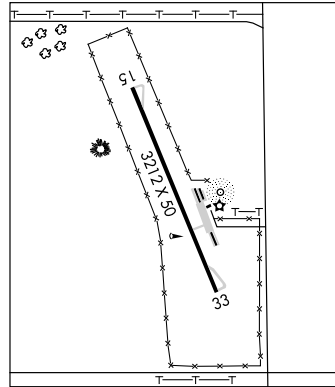
NDB (MHW) 377 BUB at Cram Fld.

L-12H

**BURWELL**

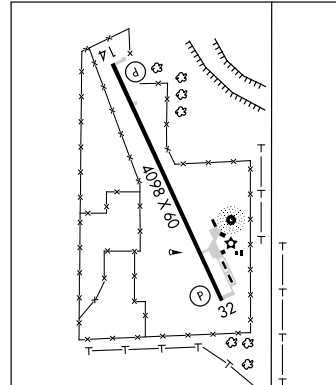
**CRAM FLD** (BUB) 1 SW UTC-6(-5DT) N41°46.60' W99°08.99'  
 2182 B FUEL 100LL NOTAM FILE OLU  
 RWY 15-33: H3212X50 (ASPH) S-10 MIRL 0.3% up SE  
 RWY 15: Trees. RWY 33: Pole lines.  
**AIRPORT REMARKS:** Unattended. For fuel call 308-346-4566,  
 308-750-1460, or 308-214-0246.  
**COMMUNICATIONS:** CTAF 122.9  
**DENVER CENTER APP/DEP CON** 132.7  
**RADIO AIDS TO NAVIGATION:** NOTAM FILE OLU.  
**WOLBACH (H) VORTAC** 114.8 OBH Chan 95 N41°22.54'  
 W98°21.22' 297° 43.2 NM to fld. 2010/7E.  
**BURWELL NDB (MHW)** 377 BUB N41°46.48' W99°08.73'  
 at fld.

OMAHA  
L-12H  
IAP



**CAMBRIDGE MUNI** (CSB) 2 NE UTC-6(-5DT) N40°18.40' W100°09.73'  
 2414 B FUEL 100LL NOTAM FILE OLU  
 RWY 14-32: H4098X60 (ASPH) S-12 MIRL 0.4% up NW  
 RWY 14: PAPI(P2L)—GA 3.0° TCH 40'.  
 RWY 32: PAPI(P2L)—GA 3.0° TCH 40'. Tree.  
**AIRPORT REMARKS:** Attended Mon-Sat 1400-0000Z±. For fuel after hrs  
 call 308-695-0551. Wide transverse cracks on rwy. MIRL Rwy  
 14-32 preset on low ints, to increase ints ACTIVATE—CTAF.  
**COMMUNICATIONS:** CTAF/UNICOM 122.8  
**DENVER CENTER APP/DEP CON** 132.7  
**RADIO AIDS TO NAVIGATION:** NOTAM FILE OLU.  
**HAYES CENTER (H) VORTAC** 117.7 HCT Chan 124 N40°27.24'  
 W100°55.42' 093° 36.0 NM to fld. 3010/11E.  
**HARRY STRUNK NDB (MHW)** 389 CSB N40°18.26' W100°09.46'  
 at fld.

OMAHA  
L-10H  
IAP



**CARSY** N41°53.26' W97°28.82' NOTAM FILE OFK.  
 (MHW/LOM) 510 OF 014° 6.2 NM to Karl Stefan Memorial Arpt.

OMAHA  
L-12H

**CENTRAL CITY MUNI—LARRY REINEKE FLD** (Ø7K) 3 W UTC-6(-5DT) N41°06.69' W98°03.08'  
 1717 B S4 FUEL 100LL NOTAM FILE OLU  
 RWY 15-33: H3700X60 (CONC) S-11 MIRL  
 RWY 15: Road.  
**AIRPORT REMARKS:** Attended Mon-Fri 1300Z±-0030Z±, Sat 1300-1800Z±. For fuel after hrs call Police  
 308-946-3003. Rotating bcn and lgt'd wind sock on SS-SR. ACTIVATE MIRL Rwy 15-33—CTAF.  
**COMMUNICATIONS:** CTAF 122.9  
**RADIO AIDS TO NAVIGATION:** NOTAM FILE GRI.  
**GRAND ISLAND (L) VORTACW** 112.0 GRI Chan 57 N40°59.02' W098°18.53' 050° 14.2 NM to fld. 1840/7E.

OMAHA  
L-10H, 12H

**CENTRAL NEBRASKA** N40°58.05' W98°18.52'  
 RCO 122.45 (COLUMBUS RADIO)

OMAHA  
L-10H

**CENTRAL NEBRASKA RGNL** (See GRAND ISLAND)



**CHADRON MUNI** (CDR) 4 W UTC-7(-6DT) N42°50.25' W103°05.72'

3298 B S4 FUEL 100LL, JET A Class III, ARFF Index A NOTAM FILE CDR

RWY 02-20: H5998X100 (CONC) S-30, D-55, DT-90 HIRL 0.5% up SW IAP

RWY 02: MALSR. REIL. VASI(V4L)—GA 3.0° TCH 39'. Thld dsplcd 289'.

RWY 20: REIL. VASI(V4L)—GA 3.0° TCH 41'. Thld dsplcd 498'. Tree.

RWY 11-29: H4400X75 (CONC) S-21, D-30 MIRL

RWY 11: PAPI(P4L)—GA 3.0° TCH 42'.

RWY 29: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Road.

**RUNWAY DECLARED DISTANCE INFORMATION**

RWY 02: TORA-6002 TODA-6002 ASDA-5502 LDA-5212

RWY 20: TORA-6002 TODA-6002 ASDA-6002 LDA-5502

**AIRPORT REMARKS:** Attended 1500-2300Z†. For fuel after hrs call FBO phone 308-432-8128. On call 24hrs. ACTIVATE HIRL Rwy 02-20 and MIRL Rwy 11-29, REIL Rwy 02, Rwy 20 and Rwy 29, VASI Rwy 02 and Rwy 20 and MALSR Rwy 02—CTAF.

**WEATHER DATA SOURCES:** ASOS 118.05 (308) 432-5574.**COMMUNICATIONS:** CTAF/UNICOM 122.8

RC0 122.5 122.1R, 113.4T (COLUMBUS RADIO)

DENVER CENTER APP/DEP CON 127.95

**AIRSPACE:** CLASS E svc Mon-Fri 1300-0600Z†, Sat and Sun 1500-0600Z† other times CLASS G.

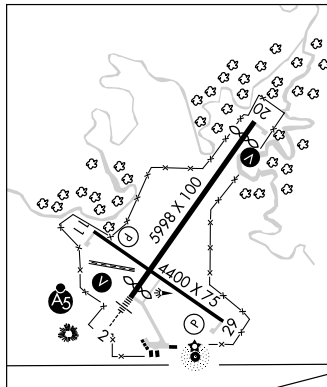
**RADIO AIDS TO NAVIGATION:** NOTAM FILE CDR.

(L) VOR/DME 113.4 CDR Chan 81 N42°33.53' W103°18.73' 017° 19.3 NM to fld. 4630/11E. HIWAS.

WHITNEY NDB (MHW) 275 HIN N42°49.73' W103°05.62' at fld.

DAWES NDB (LOM) 362 CD N42°45.31' W103°10.49' 024° 6.1 NM to fld.

ILS 110.9 I-CDR Rwy 02. LOM DAWES NDB.



CHEYENNE

H-5A, L-12G

IAP

**CHAPPELL** N41°04.60' W102°27.53' NOTAM FILE OLU.

NDB (MHW) 383 CNP at Billy G Ray Fld.

CHEYENNE

L-10G, 12G

**CHAPPELL****BILLY G RAY FLD** (CNP) 1 S UTC-7(-6DT) N41°04.65' W102°27.84'

3682 B FUEL 100LL NOTAM FILE OLU

RWY 12-30: H4000X55 (ASPH) S-15 MIRL

RWY 12: Road. RWY 30: Thld dsplcd 130'. Road.

**AIRPORT REMARKS:** Unattended. MIRL Rwy 12-30 preset on low ints, to increase ints ACTIVATE—CTAF.

**COMMUNICATIONS:** CTAF 122.9

DENVER CENTER APP/DEP CON 118.475

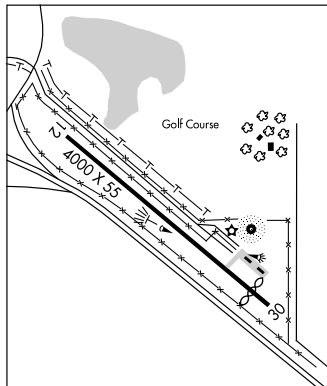
**RADIO AIDS TO NAVIGATION:** NOTAM FILE SNY.

SIDNEY (H) VORTAC 115.9 SNY Chan 106 N41°05.80'

W102°58.98' 080° 23.6 NM to fld. 4300/13E.

CHAPPELL NDB (MHW) 383 CNP N41°04.60' W102°27.53'

at fld. NOTAM FILE OLU.



CHEYENNE

L-10G, 12G

IAP

**COLUMBUS MUNI** (OLU) 1 NE UTC-6(-5DT) N41°26.88' W97°20.56'

OMAHA

1447 B S4 FUEL 100LL, JET A NOTAM FILE OLU

H-5C, L-12H

RWY 14-32: H6800X100 (CONC) S-43, D-58 MIRL

IAP

RWY 14: MALSR. PAPI(P4L)—GA 3.0° TCH 40'.

RWY 32: REIL. VASI(V4L)—GA 3.0° TCH 44'. Thld spldcd 950'. Bldg.

RWY 02-20: 4135X150 (TURF)

RWY 02: T-hangar. RWY 20: P-lines.

**RUNWAY DECLARED DISTANCE INFORMATION**

RWY 14: TORA-6800 TODA-6800 ASDA-6260 LDA-6260

RWY 32: TORA-6800 TODA-6800 ASDA-6800 LDA-5850

**AIRPORT REMARKS:** Attended daylight hours. For fuel after hrs ctc 402-276-5284. For svc after dark call 402-564-0521/7884.

Deer and waterfowl in vicinity of arpt. Rwy 02-20 not plowed winter months. Rwy 32 is designated as the calm wind rwy. Rwy 14 sequence flashing lights OTS indef. ACTIVATE MIRL Rwy 14-32, PAPI Rwy 14, VASI Rwy 32, REIL Rwy 32, and MALSR Rwy 14—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 125.525 (402) 563-3895. HIWAS 111.8 OLU.**COMMUNICATIONS:** CTAF/UNICOM 123.05

RCO 122.4 122.2 (COLUMBUS RADIO)

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 128.75

**RADIO AIDS TO NAVIGATION:** NOTAM FILE OLU.

(L) VOR/DME 111.8 OLU Chan 55 N41°27.00' W97°20.45' at fld. 1442/8E. HIWAS.

VOR/DME unusable:

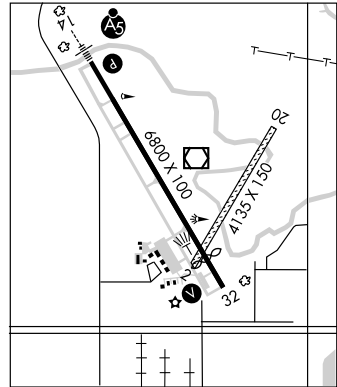
310°-334°byd 18 NM blo 3,500'

335°-309° byd 25 NM blo 3,500'.

PLATTE CENTER NDB (HW) 407 PLT N41°29.79' W97°22.91'

141° 3.4 NM to fld.

ILS 109.1 I-OLU Rwy 14. LOC only.

**COZAD MUNI** (CZD) 1 NW UTC-6(-5DT) N40°52.18' W100°00.26'

OMAHA

2503 B S4 FUEL 100LL, JET A NOTAM FILE OLU

H-5B, L-10H

RWY 13-31: H5000X75 (CONC) S-30 MIRL

IAP

RWY 13: PAPI(P2L)—GA 3.0° TCH 52'.

RWY 31: PAPI(P2L)—GA 3.75° TCH 49'. Elevator.

RWY 18-36: 3000X300 (TURF)

RWY 18: Road. RWY 36: Railroad.

**AIRPORT REMARKS:** Attended Mon-Fri 1400-2300Z±. Jet A fuel serviced by truck. Rwy 18-36 marked with yellow cones. Rwy 18-36 not plowed winter months. ACTIVATE MIRL Rwy 13-31—CTAF.**COMMUNICATIONS:** CTAF/UNICOM 122.8

Ⓡ DENVER CENTER APP/DEP CON 132.7

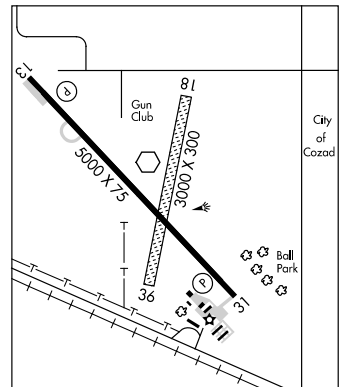
**RADIO AIDS TO NAVIGATION:** NOTAM FILE LBF.

NORTH PLATTE (L) VORTACW 117.4 LBF Chan 121 N41°02.92'

W100°44.83' 096° 35.4 NM to fld. 2964/11E. HIWAS.

(T) VORW 109.0 OZB N40°52.22' W100°00.23' at fld.

NOTAM FILE OLU.

**GRAM FLD** (See BURWELL)

**CREIGHTON MUNI** (6K3) 1 E UTC-6(-5DT) N42°28.30' W97°53.09'

OMAHA

1654 B FUEL 100LL, MOGAS NOTAM FILE OLU

L-12H

RWY 13-31: H3700X60 (CONC) S-12 MIRL

RWY 13: PAPI(P2L)—GA 3.0° TCH 40'.

RWY 31: PAPI(P2L)—GA 3.0° TCH 40'. P-lines.

RWY 18-36: 2100X200 (TURF)

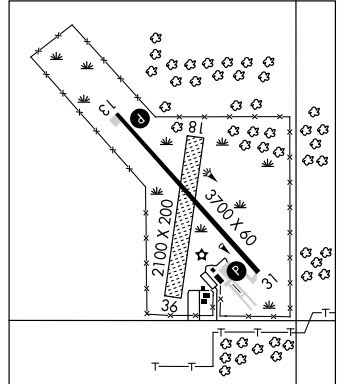
RWY 18: Fence. RWY 36: Road.

**AIRPORT REMARKS:** Unattended. For fuel call 402-358-5252. 24 hr credit card system. ACTIVATE MIRL Rwy 13, PAPI Rwy 13 and Rwy 31—CTAF.

**COMMUNICATIONS:** CTAF 122.9

**RADIO AIDS TO NAVIGATION:** NOTAM FILE YKN.

YANKTON (L) VORW/DME 111.4 YKN Chan 51 N42°55.10'  
W97°23.10' 213° 34.7 NM to fld. 1301/7E.



**CRETE MUNI** (CEK) 2 E UTC-6(-5DT) N40°37.10' W96°55.54'

OMAHA

1500 B S4 FUEL 100LL, JET A, MOGAS

L-10I

NOTAM FILE OLU

IAP

RWY 17-35: H4201X75 (CONC) S-28, D-48 MIRL 0.5% up N

RWY 17: VASI(V2L)—GA 3.0° TCH 26'. Road.

RWY 35: VASI(V2L)—GA 3.0° TCH 35'. Tree.

RWY 13-31: 3370X150 (TURF)

RWY 13: Tree.

**AIRPORT REMARKS:** Attended 1400-0000Z±. For svc after hrs 402-826-3912. Parachute Jumping.

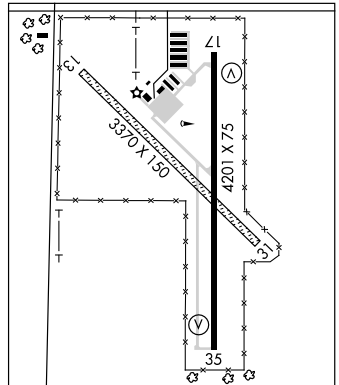
**COMMUNICATIONS:** CTAF/UNICOM 122.8

Ⓡ LINCOLN APP/DEP CON 124.0 (1130-0600Z±).

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 128.75 (0600-1130Z±).

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LNK.

LINCOLN (H) VORTACW 116.1 LNK Chan 108 N40°55.43'  
W96°44.52' 196° 20.2 NM to fld. 1370/9E.



**CREVE** N41°48.16' W103°29.93' NOTAM FILE BFF.

CHEYENNE

NDB (LOM) 263 BF 304° 6.1 NM to Western Neb Rgnl/William B. Heilig Fld. Unmonitored.

**CURTIS MUNI** (47V) 2E UTC-6(-5DT) N40°38.33' W100°28.37'

OMAHA

2678 B FUEL 100LL NOTAM FILE OLU

L-10H

RWY 12-30: H3402X60 (ASPH) S-12 MIRL

RWY 17-35: 2200X100 (TURF)

RWY 17: Fence. RWY 35: P-line.

**AIRPORT REMARKS:** Attended May-Sept Mon-Fri 1400-2300Z±. For fuel after hrs and unattended days call arpt manager 308-367-8772. Rwy 17-35 marked with yellow cones. ACTIVATE MIRL Rwy 12-30—CTAF.

**COMMUNICATIONS:** CTAF 122.9

**RADIO AIDS TO NAVIGATION:** NOTAM FILE OLU.

HAYES CENTER (H) VORTAC 117.7 HCT Chan 124 N40°27.24' W100°55.42' 051° 23.4 NM to fld.  
3010/11E.

**CUSTER COUNTY** N41°29.04' W99°41.34' NOTAM FILE BBW.

OMAHA

(L)VORW/DME 108.2 CUZ Chan 19 135° 3.6 NM to Broken Bow Muni. 2850/8E.

L-12H

**DARR** N40°50.67' W99°51.37' NOTAM FILE LXN.  
NDB (MHW) 326 RRX 124° 4.9 NM to Jim Kelly Fld.

OMAHA  
L-10H

**DAVID CITY MUNI** (93Y) 1 S UTC-6(-5DT) N41°13.82' W97°07.35'  
1617 B FUEL 100LL, MOGAS TPA-2417(800) NOTAM FILE OLU  
RWY 14-32: H3675X60 (ASPH) S-12.5 MIRL  
RWY 14: Thid dsplcd 75'. Road. RWY 32: Rgt tfc.  
RWY 01-19: 2100X120 (TURF)  
RWY 01: Fence. Rgt tfc. RWY 19: Road.

OMAHA  
L-10I, 12I  
IAP

**RUNWAY DECLARED DISTANCE INFORMATION**

RWY 14: TORA-3675 TODA-3675 ASDA-3675 LDA-3600  
RWY 32: TORA-3675 TODA-3675 ASDA-3675 LDA-3675

**AIRPORT REMARKS:** Unattended. For fuel and emerg call 402-367-3133. Rwy 01-19 not plowed winter months.  
**COMMUNICATIONS:** CTAF 122.9

Ⓡ LINCOLN APP/DEP CON 124.0 (1130-0600Z‡)

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 128.75 (0600-1130Z‡)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE OLU.

COLUMBUS (L) VORW/DME 111.8 OLU Chan 55 N41°27.00' W97°20.45' 135° 16.4 NM to fld. 1442/8E.  
HIWAS.

**DAWES** N42°45.31' W103°10.49' NOTAM FILE CDR.  
NDB (LOM) 362 CD 024° 6.1 NM to Chadron Muni.

CHEYENNE

**EPPLEY AIRFIELD** (See OMAHA)

**EVELYN SHARP FLD** (See ORD)

**FAIRBURY MUNI** (FBY) 3 NE UTC-6(-5DT) N40°10.98' W97°10.16'  
1479 B FUEL 100LL TPA-2279(800) NOTAM FILE OLU  
RWY 17-35: H3700X75 (CONC) S-12 MIRL 0.4% up N  
RWY 11-29: 2455X150 (TURF) 0.6% up NW

OMAHA  
L-10I  
IAP

**AIRPORT REMARKS:** Unattended. 24 hr self svc fuel avbl via credit card system. ACTIVATE MIRL Rwy 17-35-CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 122.7

MINNEAPOLIS CENTER APP/DEP CON 126.4

**RADIO AIDS TO NAVIGATION:** NOTAM FILE OLU.

PAWNEE CITY (H) VORTAC 112.4 PWE Chan 71 N40°12.02' W96°12.38' 264° 44.3 NM to fld. 1360/5E.  
HIWAS.

NDB (MHW) 293 FBY N40°10.60' W97°09.95' at fld.

**FAIRMONT STATE AIRFIELD** (FMZ) 3 S UTC-6(-5DT) N40°35.17' W97°34.39'  
1636 B FUEL 100LL TPA-2636(1000) NOTAM FILE OLU

OMAHA  
L-10I  
IAP

RWY 17-35: H4316X75 (CONC) MIRL

RWY 35: VASI (V2L)-GA 3.0° TCH 26'.

RWY 12-30: H3021X60 (CONC)

**AIRPORT REMARKS:** Attended Mon-Fri 1400-2300Z‡. Arpt surface conditions cracking, spalling and vegetation in cracks on abandoned portions of rwnys. ACTIVATE MIRL Rwy 17-35-CTAF.

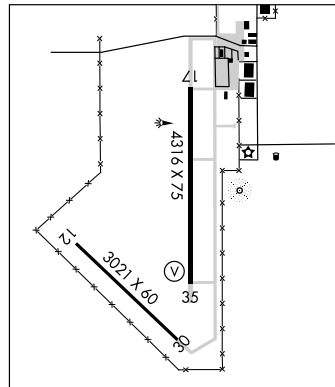
**COMMUNICATIONS:** CTAF 122.9

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 119.4

**RADIO AIDS TO NAVIGATION:** NOTAM FILE HSI.

HASTINGS (L) VOR/DME 108.8 HSI Chan 25 N40°36.27'  
W98°25.78' 084° 39.2 NM to fld. 1950/7E. HIWAS.

BEKLOF NDB (MHW) 392 FMZ N40°35.40' W97°34.08' at fld.  
NOTAM FILE OLU.



**FALLS CITY****BRENNER FLD** (FNB) 1 NE UTC-6(-5DT) N40°04.73' W95°35.52'

984 B S2 FUEL 100LL TPA-1784(800) NOTAM FILE FNB

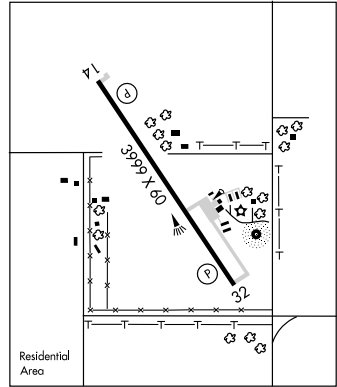
RWY 14-32: H3999X60 (CONC) S-30, D-48 MIRL

RWY 14: PAPI(P2L)-GA 3.0° TCH 24'.

RWY 32: PAPI(P2L)-GA 3.0° TCH 33'.

**AIRPORT REMARKS:** Attended 1400-2300Z±. For svc after hrs call 402-245-3715. Ultralight activity on and in/ov arpt. PAPI Rwy 14 and Rwy 32 opr 24 hrs.**WEATHER DATA SOURCES:** ASOS 119.27 (402) 245-5948.**COMMUNICATIONS:** CTAF/UNICOM 122.8**PAWNEE CITY RCO** 122.1R 112.4T (COLUMBUS RADIO)**RADIO AIDS TO NAVIGATION:** NOTAM FILE ICT.**ROBINSON (L) VOR/DME** 108.2 RBA Chan 19 N39°51.05'

W95°25.38' 326° 15.7 NM to fld. 1126/4E.

**NDB (MHW)** 404 FNB N40°04.58' W95°35.21' at fld.  
NOTAM FILE FNB.OMAHA  
L-101  
IAP**FARINGTON FLD** (See AUBURN)**FLICK** N41°24.11' W95°53.60'. NOTAM FILE OMA.**NDB (LOM)** 513 PP 175° 5.9 NM to Eppeley Airfield. Unmonitored.

OMAHA

**FLYING V** (See UTICA)**FREMONT MUNI** (FET) 2 NW UTC-6(-5DT) N41°26.95' W96°31.21'

1204 B S4 FUEL 100LL, JET A TPA-2004(800) NOTAM FILE FET

RWY 14-32: H5500X100 (ASPH-CONC) S-28, D-48 MIRL

RWY 14: REIL. PAPI(P2L)-GA 3.0° TCH 40'. Pole.

RWY 32: PAPI(P2L)-GA 3.0° TCH 40' Thld dspcd 850'. Road.  
Rgt tfc.

RWY 01-19: H2444X50 (ASPH) S-12.5

RWY 01: Thld dspcd 470' Road.

RWY 19: Thld dspcd 600'. Tree. Rgt tfc.

**RWY DECLARED DISTANCE INFORMATION**

RWY 01: TORA-1974 TODA-1974 ASDA-2444 LDA-1844

RWY 14: TORA-5500 TODA-5500 ASDA-5500 LDA-5500

RWY 19: TORA-1844 TODA-1844 ASDA-2284 LDA-1844

RWY 32: TORA-5500 TODA-5500 ASDA-5500 LDA-4650

**AIRPORT REMARKS:** Attended 1300-0200Z±. For attendant after hrs call 402-727-4665/9341. Rwy 14-32 S 3190' asph; 100' wide.

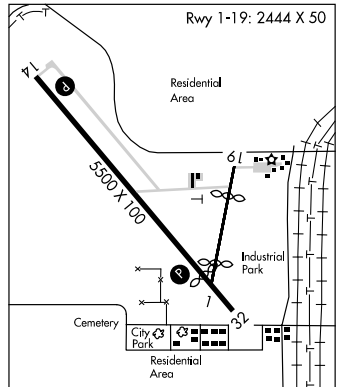
ACTIVATE REIL Rwy 14 and PAPI Rwy 14 and Rwy 32-CTAF.

**WEATHER DATA SOURCES:** AWOS-3 121.275 (402) 727-9135.**COMMUNICATIONS:** CTAF/UNICOM 122.8

Ⓡ OMAHA APP/DEP CON 120.1

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LNK.**LINCOLN (H) VORTACW** 116.1 LNK Chan 108 N40°55.43'

W96°44.52' 009° 33.1 NM to fld. 1370/9E.

OMAHA  
H-5C, L-121  
IAP**GARDEN CO** (See OSHKOSH)**GENOA MUNI** (97Y) 3 SE UTC-6(-5DT) N41°24.25' W97°42.52'

1570 FUEL 100LL TPA-2370(800) NOTAM FILE OLU

RWY 11-29: 2500X75 (TURF)

RWY 11: Road. RWY 29: Fence.

**AIRPORT REMARKS:** Unattended. For fuel call 402-933-6000 or 402-933-2324.**COMMUNICATIONS:** CTAF/UNICOM 122.8

OMAHA

**GERFI** N41°22.02' W95°57.38' NOTAM FILE OMA.  
 NDB (MHW/LOM) 320 OM 139° 4.8 NM to Eppley Airfield.

OMAHA  
 L-101, 121

**GORDON MUNI** (GRN) 1 E UTC-7(-6DT) N42°48.36' W102°10.52'  
 3562 B NOTAM FILE OLU

CHEYENNE  
 H-5B, L-12G  
 IAP

**RWY 04-22:** H5196X75 (ASPH) S-12 MIRL 0.4% up NE  
**RWY 04:** PAPI(P2L)—GA 3.0° TCH 40'. Trees.  
**RWY 22:** PAPI(P2L)—GA 3.0° TCH 41'.  
**RWY 11-29:** H2284X50 (ASPH) S-12 MIRL 0.3% up NW  
**RWY 11:** Pole.

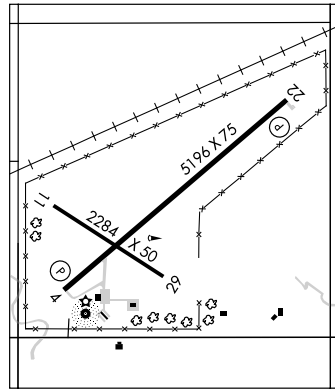
**AIRPORT REMARKS:** Attended Mon-Fri 1500-0000Z†. For svc aftr hrs call 308-360-0696 or 308-282-0631. ACTIVATE MIRL Rwy 11-29 and Rwy 04-22—CTAF. PAPI Rwy 04 and Rwy 22 on 24 hrs.

**COMMUNICATIONS:** CTAF/UNICOM 122.8  
 DENVER CENTER APP/DEP CON 127.95

**RADIO AIDS TO NAVIGATION:** NOTAM FILE PHP.

**PHILIP (L) VORW/DME** 108.4 PHP Chan 21 N44°03.50' W101°39.85' 185° 78.4 NM to fld. 2340/12E. **HIWAS.**

**NDB (MHW)** 414 GRN N42°48.06' W102°10.76' at fld. NOTAM FILE OLU.



**GOthenBURG**

**QUINN FLD** (GTE) 1 E UTC-6(-5DT) N40°55.53' W100°08.79'  
 2559 B **FUEL** 100LL NOTAM FILE OLU

OMAHA  
 L-10H  
 IAP

**RWY 14-32:** 3300X250 (TURF) LIRL

**RWY 14:** Road. **RWY 32:** Tree.

**RWY 03-21:** H2599X50 (CONC) S-28 MIRL

**RWY 03:** Thld dspcd 70'. Railroad. **RWY 21:** Road.

**AIRPORT REMARKS:** Attended Mon-Fri dalgt hours. Rwy 14-32 not plowed winter months. ACTIVATE MIRL Rwy 03-21—CTAF.

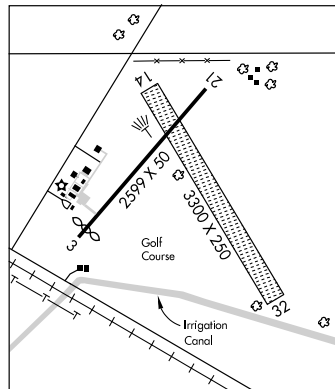
**COMMUNICATIONS:** CTAF/UNICOM 122.8

Ⓡ DENVER CENTER APP/DEP CON 132.7

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LBF.

**NORTH PLATTE (L) VORTACW** 117.4 LBF Chan 121 N41°02.92' W100°44.83' 094° 28.2 NM to fld. 2964/11E. **HIWAS.**

**WILLOW NDB (MHW)** 353 DWL N40°52.37' W100°04.36' 305° 4.6 NM to fld. NOTAM FILE OLU.



**GRAND ISLAND** N40°59.04' W98°18.89' NOTAM FILE GRI.  
 (L) **VORTACW** 112.0 GRI Chan 57 at Central Nebraska Rgnl. 1840/7E.

OMAHA  
 L-10H, 12H



**HARRY STRUNK** N40°18.26' W100°09.46' NOTAM FILE OLU.  
 NDB (MHW) 389 CSB at Cambridge Muni.

OMAHA  
 L-10H

**HARTINGTON MUNI** (ØB4) 2 SE UTC-6(-5DT) N42°36.19' W97°15.21'

OMAHA  
 L-12H  
 IAP

1387 B S4 FUEL 100LL NOTAM FILE OLU  
 RWY 13-31: H3950X60 (CONC) MIRL 0.3% up SE  
 RWY 13: PAPI(P2L)—GA 3.0° TCH 40'.  
 RWY 31: PAPI(P2L)—GA 4.0° TCH 40'. Thld dsplcd 400'. Road.  
 RWY 03-21: 2150X125 (TURF) 0.6% up SW  
 RWY 03: Trees. RWY 21: Road.

**AIRPORT REMARKS:** Attended continuously. For fuel call 402-254-6916/3812. Rwy 03-21 not plowed winter months.  
 ACTIVATE MIRL Rwy 13-31; PAPI Rwy 13 and Rwy 31—CTAF.

**COMMUNICATIONS:** CTAF 122.9

**MINNEAPOLIS CENTER APP/DEP CON** 124.1

**RADIO AIDS TO NAVIGATION:** NOTAM FILE YKN.

YANKTON (L) VOR/DME 111.4 YKN Chan 51 N42°55.10' W97°23.10' 156° 19.8 NM to fld. 1301/7E.

**HARVARD STATE** (Ø8K) 2 NE UTC-6(-5DT) N40°39.08' W98°04.79'

OMAHA  
 L-10I  
 IAP

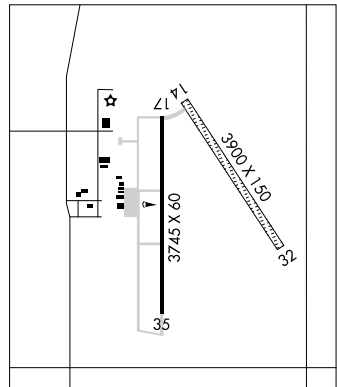
1815 B FUEL 100LL NOTAM FILE OLU  
 RWY 14-32: 3900X150 (TURF)  
 RWY 17-35: H3745X60 (ASPH) MIRL  
**AIRPORT REMARKS:** Attended Mon-Fri 1400-2300Z†. Ultralights on and in/ov arpt. ACTIVATE MIRL Rwy 17-35—CTAF.

**COMMUNICATIONS:** CTAF 122.9

Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 119.4

**RADIO AIDS TO NAVIGATION:** NOTAM FILE HSI.

HASTINGS (L) VOR/DME 108.8 HSI Chan 25 N40°36.27' W98°25.78' 073° 16.2 NM to fld. 1950/7E. HIWAS.





**HASTINGS MUNI** (HSI) 2 NW UTC-6(-5DT) N40°36.32' W98°25.67'

OMAHA

1961 B S4 FUEL 100LL, JET A NOTAM FILE HSI

H-5B, L-10H

RWY 14-32: H6451X100 (CONC) S-36, D-58, DT-106 MIRL 0.4% up NW

IAP

RWY 14: REIL. PAPI(P4L)—GA 3.0° TCH 38'.

RWY 32: REIL. PAPI(P4L)—GA 3.0° TCH 42'. Thld dsplcd 950'.

Road.

RWY 04-22: H4501X75 (CONC) S-36, D-47 MIRL

RWY 04: VASI(V2L)—GA 3.0° TCH 37'. Road.

RWY 22: VASI(V2L)—GA 3.0° TCH 37'. Road.

**RUNWAY DECLARED DISTANCE INFORMATION**

RWY 14: TORA-5500 TODA-6451 ASDA-5500 LDA-5500

RWY 32: TORA-6451 TODA-6451 ASDA-6451 LDA-5500

**AIRPORT REMARKS:** Attended Mon-Fri 1400-2300Z±. For attendant after hrs call 402-461-3060. Self-serve fuel avbl 24 hrs.

ACTIVATE MIRL Rwy 04-22 and Rwy 14-32, PAPI Rwy 14 and Rwy 32 and REIL Rwy 14 and Rwy 32—CTAF.

**WEATHER DATA SOURCES:** ASOS 120.525 (402) 463-4029. HIWAS 108.8 HSI.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

RCO 122.1R 108.8T (COLUMBUS RADIO)

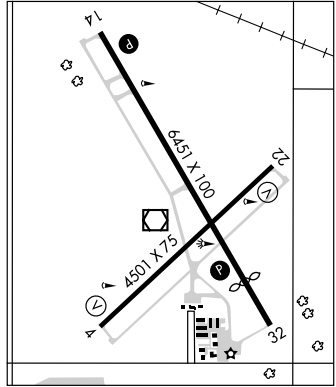
® MINNEAPOLIS CENTER APP/DEP CON 119.4

**AIRSPACE:** CLASS E svc Mon-Fri 1200-0430Z±, Sat 1200-2000Z±, Sun 1600-0430Z± other times CLASS G.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE HSI.

(L) VOR/DME 108.8 HSI Chan 25 N40°36.27' W98°25.78' at fld. 1950/7E. HIWAS.

PROSSER NDB (HW) 338 PSS N40°41.18' W98°28.65' 148° 5.4 NM to fld. Unmonitored.



**HAY SPRINGS MUNI** (4V6) 0 SW UTC-7(-6DT) N42°40.93' W102°42.07'

CHEYENNE

3831 B FUEL 100LL NOTAM FILE OLU

RWY 11-29: 2750X300 (TURF) MIRL

RWY 11: P-line. RWY 29: Thld dsplcd 100'. Pole.

**AIRPORT REMARKS:** Unattended. Rwy 11-29 marked with yellow cones around lgts. Rwy 11-29 MIRL OTS indef. For MIRL Rwy 11-29 and rotating bcn, key 121.9.

**COMMUNICATIONS:** CTAF 122.9

**HAYES CENTER** N40°27.24' W100°55.42' NOTAM FILE OLU.

OMAHA

(H) VORTAC 117.7 HCT Chan 124 123° 21.3 NM to McCook Rgnl. 3010/11E.

H-5B, L-10G

RCO 122.1R 117.7T (COLUMBUS RADIO)

**HEBRON MUNI** (HJH) 1 S UTC-6(-5DT) N40°09.14' W97°35.22'

OMAHA

1466 B FUEL 100LL NOTAM FILE HJH

L-10I

RWY 12-30: H3600X60 (CONC) S-30 MIRL

IAP

RWY 12: REIL. PAPI(P2L)—GA 3.9° TCH 52'. Tree.

RWY 30: REIL. PAPI(P2L)—GA 3.0° TCH 40'. Highway.

RWY 03-21: 2532X150 (TURF) 0.6% up SW

RWY 03: Highway. RWY 21: Highway.

**AIRPORT REMARKS:** Unattended. For fuel call 402-768-7155. Rwy 03-21 marked with reflectors and yellow cones. ACTIVATE MIRL Rwy 12-30 PAPI Rwy 12 and Rwy 30 and REIL Rwy 12 and Rwy 30—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 118.525 (402) 768-2501.

**COMMUNICATIONS:** CTAF 122.9

MINNEAPOLIS CENTER APP/DEP CON 126.4

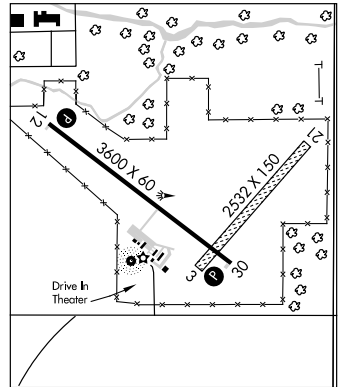
**RADIO AIDS TO NAVIGATION:** NOTAM FILE ICT.

MANKATO (L) VORTAC 109.8 TKO Chan 35 N39°48.38'

W98°15.60' 046° 37.3 NM to fld. 1880/10E.

NDB (MHW) 323 HJH N40°09.02' W97°35.27' at fld.

NOTAM FILE HJH.



**HOLDREGE** N40°26.89' W99°20.45' NOTAM FILE HDE.

OMAHA

NDB (MHW) 396 HDE at Brewster Fld.

L-10H

**HOLDREGE****BREWSTER FLD** (HDE) 2 NE UTC-6(-5DT) N40°27.13' W99°20.19'OMAHA  
L-10H  
IAP

2313 B S4 FUEL 100LL TPA—3313(1000) NOTAM FILE HDE

RWY 18-36: H4701X75 (ASPH-CONC) S-30 MIRL

RWY 18: REIL. PAPI(P2L)—GA 3.0° TCH 40'.

RWY 36: REIL. PAPI(P2L)—GA 3.0° TCH 40'. Railroad.

RWY 11-29: 1769X300 (TURF) 0.3% SE

RWY 11: P-lines. RWY 29: Railroad.

**AIRPORT REMARKS:** Attended Mon-Fri 1400-2300Z†. For attendant after hrs call 308-991-3760. For svc after hrs call 308-991-3760. 24 hr self svc fuel avbl via credit card system. Rwy 18-36 south 3100' and center 50' asph. Extensive crop spraying ops invof arpt Apr-Aug. Ultralight activity invof arpt. Waterfowl invof arpt. Rwy 11-29 not plowed winter months. Rwy 11-29; boundary cones on rwy ends. MIRL Rwy 18-36 preset on low ints, to increase ints and ACTIVATE PAPI and REIL Rwy 18 and Rwy 36—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 121.325 (308) 995-6433.**COMMUNICATIONS:** CTAF/UNICOM 122.8

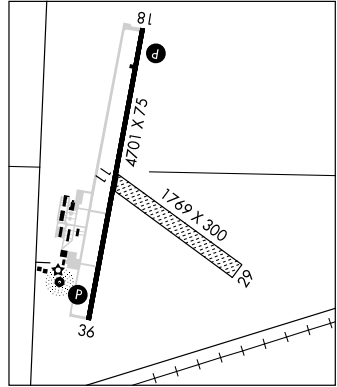
Ⓡ DENVER CENTER APP/DEP CON 132.7

**RADIO AIDS TO NAVIGATION:** NOTAM FILE HSI.

HASTINGS (L) VOR/DME 108.8 HSI Chan 25 N40°36.27'  
W98°25.78' 251° 42.5 NM to fld. 1950/7E. HIWAS.

KEARNEY (L) VORW 111.2 EAR N40°43.54' W99°00.31' 213° 22.3 NM to fld. NOTAM FILE EAR.

HOLDREGE NDB (MHW) 396 HDE N40°26.89' W99°20.45' at fld. NOTAM FILE HDE.

**HOOKER CO** (See MULLEN)**HYANNIS****GRANT COUNTY** (1V2) 1 NW UTC-6(-5DT) N42°00.57' W101°46.16'CHEYENNE  
L-12G

3710 B FUEL 100LL TPA—4510(800) NOTAM FILE OLU

RWY 17-35: H3975X50 (ASPH) MIRL

RWY 17: Thld dspcd 375'. Road. RWY 35: Thld dspcd 675'. Pole.

**AIRPORT REMARKS:** Unattended. For fuel call 308-458-2237. ACTIVATE MIRL Rwy 17-35—CTAF.**COMMUNICATIONS:** CTAF 122.9**RADIO AIDS TO NAVIGATION:** NOTAM FILE AIA.

ALLIANCE (L) VORW/DME 111.8 AIA Chan 55 N42°03.34' W102°48.27' 082° 46.4 NM to fld. 3927/11E.

**IMPERIAL MUNI** (IML) 1 SE UTC-7(-6DT) N40°30.62' W101°37.21'CHEYENNE  
H-5B, L-10G  
IAP

3275 B NOTAM FILE IML

RWY 13-31: H5022X100 (CONC) S-21 MIRL

RWY 13: PAPI(P2L)—GA 3.0°. TCH 42'. Road.

RWY 31: PAPI(P2L)—GA 3.0°. TCH 42'. Fence.

RWY 03-21: 2756X280 (TURF)

RWY 03: Fence. RWY 21: Road.

**AIRPORT REMARKS:** Attended Mon-Fri 1500-0000Z†. Extensive crop spraying ops invof arpt Apr-Aug. Birds invof arpt—seasonal. Rwy 03-21 not plowed during winter months. Rwy 03-21 marked with panels and old lighting cones. ACTIVATE MIRL Rwy 13-31—CTAF.

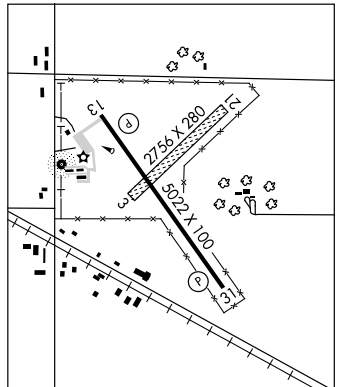
**WEATHER DATA SOURCES:** ASOS 124.175 (308) 882-5186.**COMMUNICATIONS:** CTAF/UNICOM 122.8

DENVER CENTER APP/DEP CON 132.7

**RADIO AIDS TO NAVIGATION:** NOTAM FILE OLU.

HAYES CENTER (H) VORTAC 117.7 HCT Chan 124 N40°27.24'  
W100°55.42' 265° 32.1 NM to fld. 3010/11E.

NDB (MHW) 283 IML N40°30.69' W101°37.65' at fld.  
NOTAM FILE IML.

**JIM KELLY FLD** (See LEXINGTON)**JONES** (See BENKELMAN)

**KARL STEFAN MEM** (See NORFOLK)**KEARNEY RGNL** (EAR) 4 NE UTC-6(-5DT) N40°43.62' W99°00.41'

OMAHA

2131 B S4 FUEL 100LL, JET A Class III, ARFF Index A NOTAM FILE EAR

H-5B, L-10H

**RWY 18-36:** H7094X150 (ASPH) S-48, D-73 HIRL

IAP, AD

**RWY 18:** REIL. VASI(V4L)—GA 3.0° TCH 45'. Building.**RWY 36:** MALSR. PAPI(P4L)—GA 3.0° TCH 44'.**RWY 13-31:** H4498X75 (CONC) S-30, D-38 MIRL**RWY 13:** PAPI(P2L)—GA 3.0° TCH 43'.**RWY 31:** PAPI(P2L)—GA 3.0° TCH 44'.

**AIRPORT REMARKS:** Attended 1200-0200Z†. Arpt CLOSED to air carrier ops with more than 30 passenger seats. Use caution when taxiing on apron due to several clsd areas. HIRL Rwy 18-36 preset on low ints, to increase ints and ACTIVATE MIRL Rwy 13-31, VASI Rwy 18, PAPI Rwy 13, Rwy 31 and Rwy 36, REIL Rwy 18 and MALSR Rwy 36—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 123.875 (308) 237-5608.**COMMUNICATIONS:** CTAF/UNICOM 123.0

RCO 122.55 (COLUMBUS RADIO)

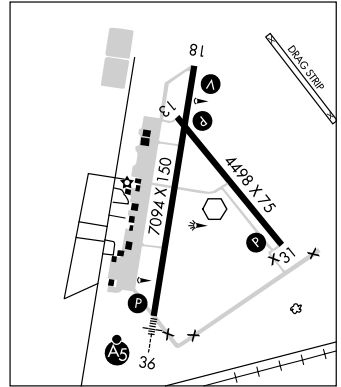
Ⓜ MINNEAPOLIS CENTER APP/DEP CON 119.4

**RADIO AIDS TO NAVIGATION:** NOTAM FILE HSI.**HASTINGS (L) VOR/DME** 108.8 HSI Chan 25 N40°36.27'

W98°25.78' 279° 27.4 NM to fld. 1950/7E. HIWAS.

**(L) VORW** 111.2 EAR N40°43.54' W99°00.31' at fld.

NOTAM FILE EAR.

**ANOKE NDB (LOM)** 422 EA N40°37.57' W99°01.54' 359° 6.1 NM to fld. Unmonitored.**ILS/DME** 110.9 I-EAR Chan 46 Rwy 36 Class IE. LOM ANOKE NDB. GS and LOM unmonitored. ILS unmonitored.**KIMBALL MUNI/ROBERT E ARRAJ FLD** (IBM) 3 S UTC-7(-6DT) N41°11.28' W103°40.64'

CHEYENNE

4926 B S4 FUEL 100LL, JET A NOTAM FILE IBM

H-5A, L-12F

**RWY 10-28:** H6199X75 (CONC) S-30, D-45 MIRL 0.4% up W

IAP

**RWY 10:** PAPI(P2L)—GA 3.0° TCH 40'. Road.**RWY 28:** PAPI(P2L)—GA 3.0° TCH 40'.

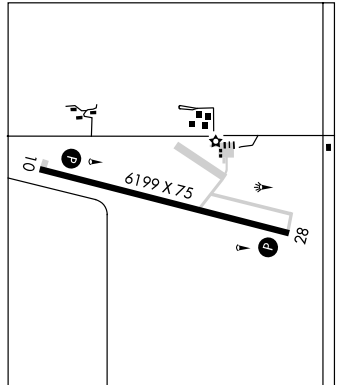
**AIRPORT REMARKS:** Attended Mon-Sat 1500-0100Z†. After hrs call arpt manager 308-235-2858. ACTIVATE MIRL Rwy 10-28, PAPI Rwy 10 and Rwy 28—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 118.075 (308) 235-2516.**COMMUNICATIONS:** CTAF/UNICOM 122.8

DENVER CENTER APP/DEP CON 125.9

**RADIO AIDS TO NAVIGATION:** NOTAM FILE SNY.**SIDNEY (H) VORTAC** 115.9 SNY Chan 106 N41°05.80'

W102°58.98' 267° 32.0 NM to fld. 4300/13E. HIWAS.

**LEE BIRD** N41°07.63' W100°41.39'

OMAHA

RCO 122.5 (COLUMBUS RADIO)

H-5B, L-10H

**LEXINGTON****JIM KELLY FLD** (LXN) 2 NW UTC-6(-5DT) N40°47.43' W99°46.55'2413 B S4 **FUEL** 100LL, JET A+ NOTAM FILE LXN

RWY 14-32: H5489X100 (CONC) S-30 MIRL

RWY 14: PAPI(P2L). TCH 40'.

RWY 32: PAPI(P2L). TCH 40'. Railroad.

RWY 01-19: 3200X250 (TURF)

RWY 01: Railroad. RWY 19: Trees.

**AIRPORT REMARKS:** Attended Mon-Fri 1400-2300Z†, Sat  
1400-1800Z†. Rwy 01-19 not plowed winter months. ACTIVATE  
MIRL Rwy 14-32, PAPI Rwy 14 and Rwy 32—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 121.025 (308) 324-5975.**COMMUNICATIONS:** CTAF/UNICOM 123.0

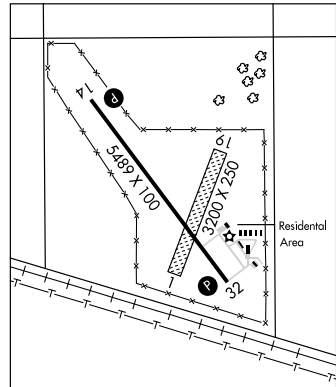
Ⓡ DENVER CENTER APP/DEP CON 132.7

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LBF.

**NORTH PLATTE (L) VORTACW** 117.4 LBF Chan 121 N41°02.92'  
W100°44.83' 098° 46.8 NM to fld. 2964/11E.

**DARR NDB (MHW)** 326 RRX N40°50.67' W99°51.37'  
124° 4.9 NM to fld. NOTAM FILE LXN.

**OMAHA**  
H-5B, L-10H  
IAP



**LINCOLN** (LNK) 4 NW UTC-6(-5DT) N40°51.05' W96°45.55'

OMAHA

1219 B S4 FUEL 100LL, JET A TPA—See Remarks ARFF Index—See Remarks

H-5C, L-101

NOTAM FILE LNK

IAP, AD

**RWY 18-36:** H12901X200 (ASPH-CONC-GRVD) S-100, D-200,

ST-175, DT-400 HIRL

**RWY 18:** MALS.R. PAPI(P4L)—GA 3.0° TCH 55'. Rgt tfc. 0.4% down.

**RWY 36:** MALS.R. PAPI(P4L)—GA 3.0° TCH 57'.

**RWY 14-32:** H8649X150 (ASPH-CONC-GRVD) S-80, D-170,

ST-175, DT-280 MIRL

**RWY 14:** REIL. VASI(V4L)—GA 3.0° TCH 48'. Thld displcd 363'.

**RWY 32:** VASI(V4L)—GA 3.0° TCH 50'. Thld displcd 470'.

Pole. 0.3% up.

**RWY 17-35:** H5800X100 (ASPH-CONC-AFSC) S-49, D-60

HIRL 0.8% up S

**RWY 17:** REIL. PAPI(P4L)—GA 3.0° TCH 44'.

**RWY 35:** ODALS. PAPI(P4L)—GA 3.0° TCH 30'. Rgt tfc.

**RUNWAY DECLARED DISTANCE INFORMATION**

**RWY 14:** TORA-8649 TODA-8649 ASDA-8649 LDA-8286

**RWY 17:** TORA-5800 TODA-5800 ASDA-5400 LDA-5400

**RWY 18:** TORA-12901 TODA-12901 ASDA-12901 LDA-12901

**RWY 32:** TORA-8649 TODA-8649 ASDA-8286 LDA-7816

**RWY 35:** TORA-5800 TODA-5800 ASDA-5800 LDA-5800

**RWY 36:** TORA-12901 TODA-12901 ASDA-12901 LDA-12901

**AIRPORT REMARKS:** Attended continuously. Birds in/ov apt. Rwy 18 designated calm wind rwy. Rwy 32 apch holdline on South A twy. TPA-2219 (1000), heavy military jet 3000 (1781). Class I, ARFF Index B. ARFF Index C level equipment provided. Rwy 18-36 touchdown and rollout rwy visual range avbl. When twr clsd MIRL Rwy 14-32 preset on low ints, HIRL Rwy 18-36 and Rwy 17-35 preset on med ints, ODALS Rwy 35 operate continuously on med ints, MALS.R. Rwy 18 and Rwy 36 operate continuously and REIL Rwy 14 and Rwy 17 operate continuously on low ints. VASI Rwy 14 and Rwy 32, PAPI Rwy 17, Rwy 35, Rwy 18 and Rwy 36 on continuously.

**WEATHER DATA SOURCES:** ASOS (402) 474-9214. LLWAS

**COMMUNICATIONS:** CTAF 118.5 ATIS 118.05 UNICOM 122.95

RCO 122.65 (COLUMBUS RADIO)

Ⓡ APP/DEP CON 124.0 (180°-359°) 124.8 (360°-179°) (1130-0600Z‡)

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 128.75 (0600-1130Z‡)

TOWER 118.5 125.7 (1130-0600Z‡) GND CON 121.9 CLNC DEL 120.7

**AIRSPACE:** CLASS C svc 1130-0600Z‡ ctc APP CON other times CLASS E.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LNK.

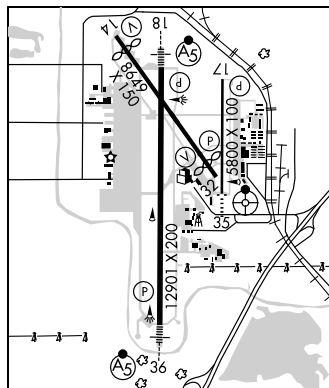
(H) VORTACW 116.1 LNK Chan 108 N40°55.43' W96°44.52' 181° 4.4 NM to fld. 1370/9E

POTTS NDB (MHW/LOM) 385 LN N40°44.83' W96°45.75' 355° 6.2 NM to fld. Unmonitored when twr clsd.

ILS 111.1 I-OCZ Rwy 18. Class IB MM and OM unmonitored.

ILS 109.9 I-LNK Rwy 36 Class IA LOM POTTS NDB. MM unmonitored. LOM unmonitored when twr clsd.

**COMM/NAV/WEATHER REMARKS:** Emerg frequency 121.5 not available at twr.



**LOUP CITY MUNI** (ØF4) 1 NW UTC-6(-5DT) N41°17.20' W98°59.41'

OMAHA

2071 B FUEL 100LL NOTAM FILE OLU

L-10H, 12H

**RWY 16-34:** H3200X60 (ASPH) S-12.5 MIRL

**RWY 34:** Trees.

**RWY 04-22:** 2040X100 (TURF)

**RWY 04:** Tree. **RWY 22:** Road.

**AIRPORT REMARKS:** Unattended. For svc call 308-745-1344/1244/0664.

**COMMUNICATIONS:** CTAF 122.9

**RADIO AIDS TO NAVIGATION:** NOTAM FILE OLU.

WOLBACH (H) VORTAC 114.8 OBH Chan 95 N41°22.54' W98°21.22' 253° 29.3 NM to fld. 2010/7E.

**MARTIN FLD** (See SO SIOUX CITY)

**MC COOK BEN NELSON RGNL** (MCK) 2 E UTC-6(-5DT) N40°12.38' W100°35.53'

OMAHA

2583 B S4 FUEL 100LL, JET A Class III, ARFF Index A NOTAM FILE MCK

H-5B, L-10H

RWY 12-30: H6449X100 (CONC) S-30, D-38 MIRL 0.6% up NW

IAP, AD

RWY 12: MALSR. PAPI(P4L)—GA 3.0° TCH 38'. Tree.

RWY 30: REIL. VASI(V4L)—GA 3.0° TCH 42'. Thld dspclcd 750'.

Rgt tfc.

RWY 04-22: H4000X75 (CONC) S-30, D-38 MIRL

RWY 04: VASI(V2L)—GA 3.0° TCH 26'. Rgt tfc. Pole.

RWY 22: VASI(V2L)—GA 3.0° TCH 26'. Tree.

RWY 17-35: 1350X160 (TURF)

RWY 35: Rgt. tfc.

**RUNWAY DECLARED DISTANCE INFORMATION**

RWY 12: TORA-6448 TODA-6448 ASDA-5698 LDA-5698

RWY 30: TORA-6448 TODA-6448 ASDA-6448 LDA-5698

**AIRPORT REMARKS:** Attended dalgt hrs. Parachute Jumping. Rwy 12 VASI restricted byd 5° right and 8° left of inbound centerline. ACTIVATE VASI Rwy 30 and PAPI Rwy 12 and MALSR Rwy 12—CTAF.

**WEATHER DATA SOURCES:** ASOS 119.025 (308) 345-1193.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

RCD 122.6 (COLUMBUS RADIO)

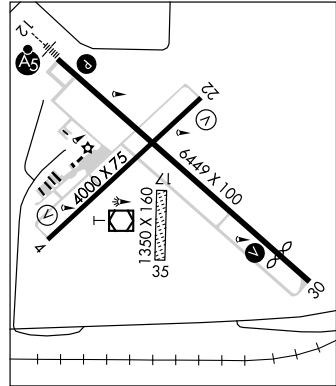
DENVER CENTER APP/DEP CON 132.7

**AIRSPACE:** CLASS E svc 1100-0500Z† except holidays.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MCK.

(H) VOR/DME 115.3 MCK Chan 100 N40°12.23' W100°35.65' at fld. 2571/8E.

ILS/DME 110.95 I-MCK Chan 46(Y) Rwy 12 LOC/DME unmonitored.



**MILLARD** (See OMAHA)

**MILLER FLD** (See VALENTINE)

**MINDEN**

**PIONEER VILLAGE FLD** (ØV3) 1 NE UTC-6(-5DT) N40°30.90' W98°56.74'

OMAHA

2160 B FUEL 100LL, MOGAS NOTAM FILE OLU

L-10H

RWY 16-34: H3900X60 (CONC) S-30, D-52 MIRL

IAP

RWY 16: PAPI(P2L)—GA 3.0° TCH 40'. Fence.

RWY 34: PAPI(P2L)—GA 3.0° TCH 40'. Trees. Rgt tfc.

RWY 05-23: 1275X300 (TURF)

RWY 05: Tree.

RWY 23: Fence.

**AIRPORT REMARKS:** Attended 1300-2300Z†. For svc after hrs call 308-832-2809 or 832-2772. Rwy 16 unlighted pivot irrigation system rotates through approach area during irrigation season. Rwy 05 CLOSED for take offs. Ultralight activity on and infov arpt. Tower 1163' AGL, 3240' MSL 9 NM ENE. Rwy 05-23 marked with yellow markers. ACTIVATE MIRL Rwy 16-34 and PAPI Rwy 16 and Rwy 34—CTAF.

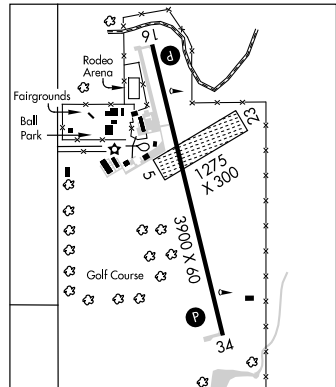
**COMMUNICATIONS:** CTAF/UNICOM 122.7

Ⓜ MINNEAPOLIS CENTER APP/DEP CON 119.4

**RADIO AIDS TO NAVIGATION:** NOTAM FILE HSI.

HASTING (L) VOR/DME 108.8 HSI Chan 25 N40°36.27'

W98°25.78' 250° 24.2 NM to fld. 1950/7E. HIWAS.



**MODISETT** (See RUSHVILLE)

**MULLEN****HOOKER CO** (MHN) 1 W UTC-7(-6DT) N42°03.00' W101°04.03'

CHEYENNE

3260 NOTAM FILE OLU

**RWY 09-27:** H2525X25 (ASPH) S-4**RWY 09:** Thld dsplcd 100'. Hill. **RWY 27:** Thld dsplcd 125'. Hill.**AIRPORT REMARKS:** Unattended. Rwy 09-27 NSTD markings, numbers only, dsplcd thlds marked with white tires.**COMMUNICATIONS:** CTAF 122.9**NEBRASKA CITY MUNI** (AFK) 4 S UTC-6(-5DT) N40°36.33' W95°51.07'

OMAHA

1165 B S2 FUEL 100LL, JET A NOTAM FILE AFK

L-101

**RWY 15-33:** H4500X75 (CONC) S-30 MIRL

IAP

**RWY 15:** PAPI(P2L)—GA 3.0° TCH 52'.**RWY 33:** PAPI(P2L)—GA 3.0° TCH 52'.**RWY 05-23:** 2550X150 (TURF)**AIRPORT REMARKS:** Attended Mon-Sat 1400-0200Z†. For fuel call 402-873-7116. For svc/information call 402-873-7116.

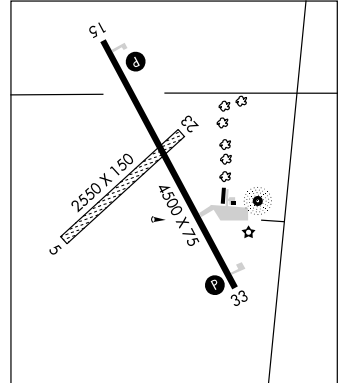
ACTIVATE MIRL Rwy 15-33 and PAPI Rwy 15 and Rwy 33—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 128.325 (402) 873-7375.**COMMUNICATIONS:** CTAF/UNICOM 122.7

Ⓡ OMAHA APP/DEP CON 120.1

**RADIO AIDS TO NAVIGATION:** NOTAM FILE OLU.**PAWNEE CITY (H) VORTAC** 112.4 PWE Chan 71 N40°12.02'

W96°12.38' 027° 28.8 NM to fld. 1360/5E. HIWAS.

**NDB (MHW)** 347 AFK N40°36.33' W095°51.65' at fld.**NELIGH****ANTELOPE CO** (4V9) 1 SW UTC-6(-5DT) N42°06.74' W98°02.39'

OMAHA

1774 B FUEL 100LL NOTAM FILE OLU

L-12H

**RWY 01-19:** H3700X60 (CONC) MIRL

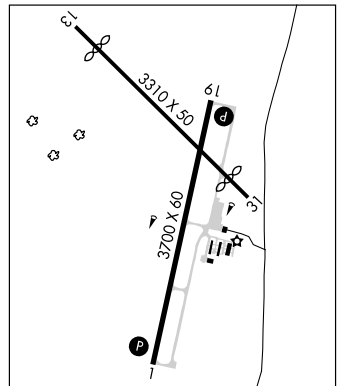
IAP

**RWY 01:** PAPI(P2L)—GA 3.0° TCH 41'. Hill.**RWY 19:** PAPI(P2L)—GA 3.5° TCH 41'. Trees.**RWY 13-31:** H3310X50 (ASPH) S-4 LIRL**RWY 13:** Thld dsplcd 405'. Road.**RWY 31:** Thld dsplcd 405'. Road.**RUNWAY DECLARED DISTANCE INFORMATION****RWY 13:** TORA-3310 TODA-3310 ASDA-3310 LDA-2905**RWY 31:** TORA-3310 TODA-3310 ASDA-3310 LDA-2905**AIRPORT REMARKS:** Attended Mon-Fri 1400-2300Z†. Rwy 13-31 Twy turn off lgts only. ACTIVATE MIRL Rwy 01-19 and PAPI Rwy 01 and Rwy 19—CTAF; after 0200Z† ACTIVATE LIRL Rwy 13-31—CTAF.**COMMUNICATIONS:** CTAF/UNICOM 122.8

MINNEAPOLIS APP/DEP CON 128.0

**RADIO AIDS TO NAVIGATION:** NOTAM FILE ONL.**O'NEILL (H) VORTACW** 113.9 ONL Chan 86 N42°28.23'

W98°41.22' 116° 36.0 NM to fld. 2030/10E. HIWAS.

**COMM/WEATHER REMARKS:** Unicom not monitored.**NORFOLK** N41°59.28' W97°26.08' NOTAM FILE OFK.

OMAHA

(L) VOR/DME 109.6 OFK Chan 33 at Karl Stefan Mem.

L-12H

VOR/DME unusable:

150°-210° byd 30 NM blo 4000'

VOR unusable 210°-255° byd 34 NM blo 3500';

DME unusable 210°-255° byd 34 NM blo 4000'

255°-150° byd 34 NM blo 3300'

**RCO** 122.15 (COLUMBUS RADIO)

**NORFOLK****KARL STEFAN MEM** (OFK) 3 SW UTC-6(-5DT) N41°59.13' W97°26.11'

OMAHA

1573 B S4 FUEL 100LL, JET A NOTAM FILE OFK

H-5C, L-12H

RWY 01-19: H5800X100 (ASPH-PFC) S-60, D-192, ST-175, DT-360 HIRL 0.7% up S IAP, AD

RWY 01: MALSR. PAPI(P4L)—GA 3.0° TCH 49'. Tree.

RWY 19: VASI(V4L)—GA 3.0° TCH 41'. Tree.

RWY 14-32: H5800X100 (ASPH-PFC) S-75, D-192, ST-175, DT-400 + MIRL 0.4% up SE

RWY 14: VASI(V4L)—GA 3.0° TCH 33'. Thld dspcd 283'. Railroad.

RWY 32: REIL. PAPI(P4L)—GA 3.5° TCH 32'. Thld dspcd 357'. Tree.

**RUNWAY DECLARED DISTANCE INFORMATION**

RWY 14: TORA-5443 TODA-5800 ASDA-5443 LDA-5160

RWY 32: TORA-5517 TODA-5800 ASDA-5517 LDA-5160

**AIRPORT REMARKS:** Attended dalgt hrs. For svc after hrs call

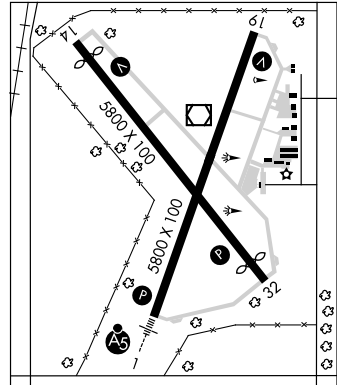
402-841-5130. Rwy 19 designated as the calm wind rwy and all rwys have left hand tfc only. ACTIVATE HIRL Rwy 01-19, and MIRL Rwy 14-32, MALSR Rwy 01, VASI Rwy 19 and Rwy 14 and PAPI Rwy 01 and Rwy 32 and REIL Rwy 32—CTAF.

**WEATHER DATA SOURCES:** ASOS 119.025 (402) 644-4480.**COMMUNICATIONS:** CTAF/UNICOM 122.7**NORFOLK RCO** 122.15 (COLUMBUS RADIO)**RADIO AIDS TO NAVIGATION:** NOTAM FILE OLU.

**NORFOLK (L) VOR/DME** 109.6 OFK Chan 33 N41°59.28' W97°26.08' at fld. NOTAM FILE OFK.

**CARSY NDB (LOM)** 510 OF N41°53.26' W97°28.82' 014° 6.2 NM to fld. NOTAM FILE OFK.

**ILS** 111.5 I-OFK Rwy 01 Class IE. LOM CARSY NDB. ILS unmonitored.

**NORTH OMAHA** (See OMAHA)**NORTH PLATTE RGNL AIRPORT LEE BIRD FLD** (LBF) 3 E UTC-6(-5DT)

OMAHA

N41°07.57' W100°41.02'

H-5B, L-10H, 12G

2777 B S4 FUEL 100LL, JET A OX 2, 3, 4 TPA—See Remarks ARFF Index—See Remarks IAP, AD

NOTAM FILE LBF

RWY 12-30: H8000X150 (CONC-GRVD) S-75, D-110, ST-139, DT-190 HIRL

RWY 12: VASI(V4L)—GA 3.0° TCH 55'.

RWY 30: MALSR. PAPI (P4L)—GA 3.0° TCH 55'.

RWY 17-35: H4436X100 (ASPH) S-28, D-48, DT-86 MIRL

RWY 17: Road.

RWY 35: REIL. VASI(V4L)—GA 3.0° TCH 37'. Thld dspcd 301'. Tree.

**RUNWAY DECLARED DISTANCE INFORMATION**

RWY 17: TORA-4436 TODA-4436 ASDA-4135 LDA-4135

RWY 35: TORA-4436 TODA-4436 ASDA-4436 LDA-4135

**AIRPORT REMARKS:** Attended 1200-0500Z±. 5 foot dike +3' fence 100' from approach end Rwy 35. Waterfowl on and invof the arpt. Class II, ARFF Index A. PPR 24 hrs for unscheduled air carrier ops with more than 30 passenger seats call arpt manager 308-532-1900, ARFF Index B equipment provided. Twy A CLOSED indef. All Category D acft (with speeds of 141-166 knots) operating on Rwy 12-30 must maintain a TPA of 1,500' TPA 4277 (1500) when in the tfc pattern. ACTIVATE HIRL Rwy 12-30, MIRL Rwy 17-35, VASI Rwy 12 and Rwy 35, PAPI Rwy 30, MALSR Rwy 30 and REIL Rwy 35—CTAF.

**WEATHER DATA SOURCES:** ASOS 118.425 (308) 534-1617.**COMMUNICATIONS:** CTAF/UNICOM 123.0**LEE BIRD RCO** 122.5 (COLUMBUS RADIO)

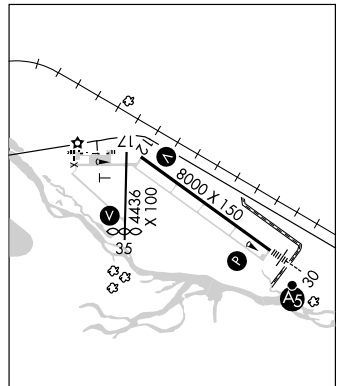
Ⓡ **DENVER CENTER APP/DEP CON** 132.7 **CLNC DEL** 132.7

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LBF.

(L) **VORTACW** 117.4 LBF Chan 121 N41°02.92' W100°44.83' 020° 5.5 NM to fld. 2964/11E. **HIWAS.**

**PANBE NDB (LOM)** 416 LB N41°04.10' W100°34.35' 296° 6.1 NM to fld. Unmonitored.

**ILS** 111.5 I-LBF Rwy 30 Class IC. LOM PANBE NDB. LOM unmonitored.





**OFFUTT AFB** (OFF)(KOFF) AF 8 SE UTC-6(-5DT) N41°07.16' W95°54.51'**OMAHA**

1048 B TPA—See Remarks AOE NOTAM FILE OFF Not insp.

H-5C, L-101, 121

**RWY 12-30:** H11702X150 (PEM-GRVD) PCN 54 R/C/W/T HIRL

DIAP, AD

**RWY 12:** ALSF1. PAPI(P4L)—GA 3.0° TCH 42'.**RWY 30:** ALSF1. PAPI(P4L)—GA 2.80° TCH 56'.**MILITARY SERVICE:** LGT JASU (M32A-86) (AM32A-95) **FUEL J8** **FLUID W SP** PRESAIR LHOX LOX **OIL O-148-156**SOAP **TRAN ALERT** Opr 1200-0530Z† daily. Tran acct not allowed when tran alert not avbl.

**MILITARY REMARKS:** See FLIP AP/1 Supplementary Arpt Information. **RSTD:** PPR all acct, etc AM OPS. Pavement byd rwy edge stripes not stressed for acct. All acct must complete 180° turn inside the 150' rwy width, all others must turn at end of pavement byd thid. Quiet hr policy in effect. Acft with distinguished visitors and passengers contact pilot to dispatcher at least 30 min prior to ETA and when 40 NM out. **CAUTION:** Numerous unlit obstacles on afld. Rwy 12 0.7 percent downgrade, high embankment apch end turbulence and high variable crosswinds during south to southwest SFC winds. Numerous lgt acct at Millard arpt on apch for Rwy 12. Rwy 12-30 150' wide, signs and lgt installed for 300' wide. 1000' distance remaining mark on both rwy missing. **TFC PAT:** All patterns are south of rwy centerline, rectangular 2500', overhead 3000' & remain 5 NM. **MISC:** Rwy grooved. Afld management issues no COMSEC for transient crews. Temporary storage limited to secret. 55 wing command post will provide temporary storage of top secret. AM OPS DSN 271-3207/3240, C402-294-3207/3240, fax DSN 272-4175, C402-232-4175.

**COMMUNICATIONS:** SFA **ATIS** 126.025 273.5 **PTD** 379.4.① **OMAHA APP/DEP CON** 120.1 354.05 (West) 124.5 263.0 (East)**TOWER** 123.7 279.625 **GND CON** 121.7 289.4

**COMD POST** (Call sign RAYMOND 21) 311.0 321.0 **PMSV METRO** 227.4 Augmented ASOS in use, DSN 272-1996, C402-232-1996. Full Wx svc avbl H24 DSN 271-3459, C402-294-3459. Transient brief svc avbl via 15 OWS DSN 576-9755, C618-256-9755. **AG** See Global HF Systems listing in FIH.)

**AIRSPACE:** CLASS C svc continuous ctc **APP CON****RADIO AIDS TO NAVIGATION:** NOTAM FILE OFF.

(L) **TACAN** Chan 54 OFF (111.7) N41°07.03' W95°54.00' at fld. 1090/5E. No NOTAM maintenance period Thu 1300-1500Z†. TACAN unusable: 300°-330° byd 15 NM blo 4,000' 330°-300° byd 30 NM blo 5,000'.

ILS 109.5 I-OFF Rwy 30. No NOTAM maintenance period Mon-Tue 1300-1500Z†.

**ASR/PAR****COMM/NAV/WEATHER REMARKS:** Radar see Terminal FLIP for Radar Minima.**OGALLALA****SEARLE FLD** (OGA) 2 W UTC-7(-6DT) N41°07.17' W101°46.18'**CHEYENNE**3279 B S4 **FUEL** 100LL, JET A+ OX 1 NOTAM FILE OGA

H-5B, L-106, 126

**RWY 08-26:** H5102X75 (CONC) S-12.5, D-12.5 MIRL 0.3% up W

IAP

**RWY 08:** PAPI (P2L)—GA 3.0° TCH 42'.**RWY 26:** PAPI (P2L)—GA 3.0° TCH 49'.**RWY 13-31:** H3700X60 (CONC) S-12.5, D-12.5 MIRL

0.9% up NW

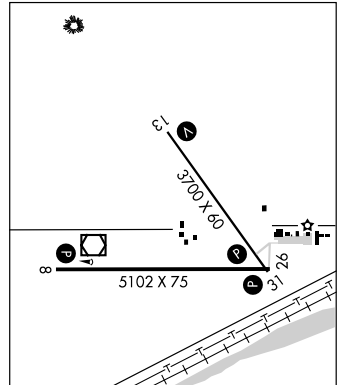
**RWY 13:** VASI(V4L)—GA 3.5° TCH 40'. Pole.**RWY 31:** PAPI(P2L)—GA 3.0° TCH 40'. Pole.

**AIRPORT REMARKS:** Attended Mon-Fri 1430-2330Z†. For attendant after hrs call 308-284-4447/3848. Recharge bottled aviators breathing oxygen for pressured aircraft. Rwy 08 designated as calm wind rwy. ACTIVATE MIRL Rwy 13-31 and Rwy 08-26 and PAPI Rwy 08, Rwy 26 and Rwy 31 and VASI Rwy 13—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 121.275 (308)284-6573.**COMMUNICATIONS:** CTAF/UNICOM 122.8① **DENVER CENTER APP/DEP CON** 132.7**RADIO AIDS TO NAVIGATION:** NOTAM FILE LBF.**NORTH PLATTE (L) VORTACW** 117.4 LBF Chan 121 N41°02.92'W100°44.83' 265° 46.6 NM to fld. 2964/11E. **HIWAS.**(T) **VORW/DME** 110.2 SAE Chan 39 N41°07.15'

W101°46.56' at fld. NOTAM FILE OGA.

DME portion unusable 270°-030° byd 15 NM.



**OMAHA****EPPLEY AIRFIELD**

(OMA) 3 NE UTC-6(-5DT) N41°18.19' W95°53.64'

**OMAHA**

984 B S4 FUEL 100LL, JET A OX 4 LRA Class I, ARFF Index C NOTAM FILE OMA

**H-5C, L-101, 121**

RWY 14R-32L: H9499X150 (CONC-ASPH-GRVD) S-100, D-184, ST-175, DT-346 HIRL CL

**IAP, AD**

RWY 14R: ALSF2. TDZL. PAPI(P4L)—GA 3.0° TCH 55'.

RWY 32L: MALSR. PAPI(P4R)—GA 3.0° TCH 52'.

RWY 18-36: H8153X150 (ASPH-CONC-GRVD) S-150, D-175, ST-175, DT-260 HIRL

RWY 18: MALSR. PAPI(P4L)—GA 3.0° TCH 52'. Thld dsplcd 140'.

RWY 36: MALSR. PAPI(P4L)—GA 3.0° TCH 57'.

RWY 14L-32R: H8500X150 (CONC) S-100, D-209, ST-175, DT-345

HIRL CL

RWY 14L: MALSR.

RWY 32R: ALSF2. TDZL. PAPI(P4R)—GA 3.0° TCH 50'. Rgt tfc.

**RUNWAY DECLARED DISTANCE INFORMATION**

RWY 14L: TORA-8500 TODA-8500 ASDA-8500 LDA-8500

RWY 14R: TORA-9502 TODA-9502 ASDA-9502 LDA-9502

RWY 18: TORA-8153 TODA-8153 ASDA-8153 LDA-8013

RWY 32L: TORA-9502 TODA-9502 ASDA-9502 LDA-9502

RWY 32R: TORA-8500 TODA-8500 ASDA-8500 LDA-8500

RWY 36: TORA-8153 TODA-8153 ASDA-8153 LDA-8153

**AIRPORT REMARKS:** Attended continuously. Birds on and invof of arpt.

Noise mitigation procedures prohibit VFR patterns for military turbojet acft between 0500-1200Z±. Use caution for mowers adjacent to movement area from Mar thru Oct. Rwy 32R touchdown, midfield and rollout rwy visual range avbl. Rwy 18 touchdown, midfield rwy visual range avbl. Rwy 14R touchdown, midpoint and rollout rwy visual range avbl. Acft rated 12,500 pounds or greater, restricted from 180° turns on Rwy 14R-32L, between Twy H and Twy F. Group IV and larger acft with a wingspan greater than 158' are prohibited from using Twy 'E' east of Rwy 18-36 due to the location of the Rwy 36 ILS glideslope antenna. Flight Notification Service (ADCUS) avbl.

**WEATHER DATA SOURCES:** ASOS (402) 344-0324. HIWAS 116.3 OVR. LLWAS.**COMMUNICATIONS:** D-ATIS 120.4 UNICOM 122.95

OMAHA RCO 122.35 (COLUMBUS RADIO)

OMAHA RCO 122.1R 116.3T (FORT DODGE RADIO)

Ⓡ OMAHA APP/DEP CON 120.1 (West) 124.5 (East)

OMAHA TOWER 132.1 GND CON 121.9 CLNC DEL 119.9

**AIRSPACE:** CLASS C svc ctc APP CON**RADIO AIDS TO NAVIGATION:** NOTAM FILE FOD.

OMAHA (H) VORTAC 116.3 OVR Chan 110 N41°10.04' W95°44.20' 311° 10.8 NM to fld. 1300/8E. HIWAS.

GERFI NDB (MHW/LOM) 320 OM N41°22.01' W95°57.38' 139° 4.8 NM to fld.

FLICK NDB (LOM) 513 PP N41°24.11' W95°53.64' 175° 5.9 NM to fld. Unmonitored.

RIKKY NDB (LOM) 426 EN N41°13.18' W95°49.08' 320° 6.1 NM to fld.

ILS/DME 110.9 I-PPY Chan 46 Rwy 18 Class IB LOM FLICK NDB. LOM and MM Unmonitored.

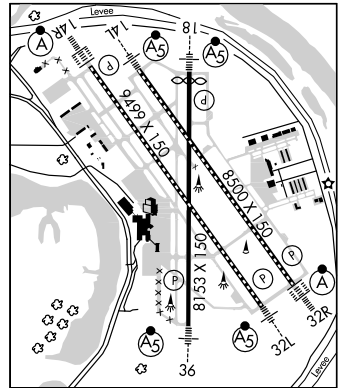
ILS 110.3 I-OMA Rwy 14R. Class IIIE. LOM GERFI NDB.

ILS 111.9 I-ENF Rwy 32L. LOM RIKKY NDB. LOM and MM unmonitored. LOC unusable byd 25° left of centerline.

ILS/DME 111.15 I-EDI Chan 48 Rwy 32R. Class IIIE.

ILS/DME 110.7 I-OGN Chan 44 Rwy 36.

ILS/DME 111.75 I-RAY Chan 54(Y) Rwy 14L. Class IE.



**MILLARD** (MLE) 7 SW UTC-6(-5DT) N41°11.76' W96°06.74'

1051 B S4 FUEL 100LL, JET A OX 2, 4 TPA-2000(949) LRA NOTAM FILE MLE

RWY 12-30: H3801X75 (CONC) S-12.5, D-12.5 MIRL

RWY 12: REIL. PAPI(P2L)—GA 3.08° TCH 39'. Thld dspld 212'. Road.

RWY 30: PAPI(P2L)—GA 3.08° TCH 39'. Pole.

**RUNWAY DECLARED DISTANCE INFORMATION**

RWY 12: TORA-3801 TODA-3801 ASDA-3801 LDA-3588

RWY 30: TORA-3801 TODA-3801 ASDA-3588 LDA-3801

**AIRPORT REMARKS:** Attended 1200-0400Z†. For svc after 0400Z† call 402-895-4974 between 1200-0400Z†. Deer on and invof arpt. Military jet overflying at 3000' MSL. After takeoff on Rwy 30 alter heading 20 degrees to the right to avoid noise sensitive area. Normal calm and cross wind tkfs and ldgs on Rwy 12. No intersection tkfs. Radio controlled acft occasional operation 1.7 miles SW of arpt. VFR acft requesting flight following and IFR acft should contact OMAHA apch on Freq 125.4 prior to taking the rwy for CLNC/traffic advisories/general info. ACTIVATE MIRL Rwy 12-30 and REIL Rwy 12—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 118.25 (402) 895-6778.

**COMMUNICATIONS:** CTAF/UNICOM 123.0

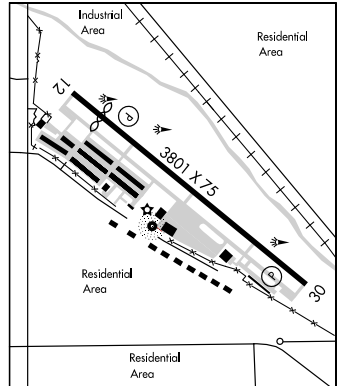
® OMAHA APP/DEP CON 120.1 CLNC DEL 125.4

**RADIO AIDS TO NAVIGATION:** NOTAM FILE FOD.

OMAHA (H) VORTAC 116.3 OVR Chan 110 N41°10.04' W95°44.20' 268° 17.1 NM to fld. 1300/8E.

HIWAS.

NDB (MHW) 371 MLE N41°11.69' W96°06.84' at fld. NOTAM FILE MLE.



**NORTH OMAHA** (3NO) 7 NW UTC-6(-5DT) N41°22.10' W96°01.35'

1322 S2 FUEL 100LL NOTAM FILE OLU

RWY 17-35: H2480X40 (CONC) S-28 LIRL (NSTD)

RWY 17: Trees. RWY 35: Thld dspld 600'. Trees. Rgt tfc.

**AIRPORT REMARKS:** Attended dawn-dusk. For svc other hrs call 402-571-7585. No touch and go ldgs allowed. Rwy 17-35 56' either side of conc usable turf. Rwy 17-35 CLOSED to acft 8000 lbs and over. Rwy 17-35 NSTD LIRL, lgts located 66' from rwy edge; 6 thd lights each end.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

**O'NEILL** N42°28.23' W98°41.22' NOTAM FILE ONL.

(H) VORTACW 113.9 ONL Chan 86 at The O'Neill Muni-John L Baker Fld. 2030/10E. HIWAS.

RCO 122.45 (COLUMBUS RADIO)

**O'NEILL**

**THE O'NEILL MUNI-JOHN L BAKER FLD** (ONL) 2 NW UTC-6(-5DT) N42°28.17' W98°41.24'

2031 B S4 FUEL 100LL, JET A+ NOTAM FILE ONL

RWY 13-31: H4409X75 (CONC) S-30 MIRL

RWY 13: REIL. PAPI(P2L)—GA 3.0° TCH 40'.

RWY 31: PAPI(P2L)—GA 3.0° TCH 40'.

**AIRPORT REMARKS:** Attended 1300-0000Z†. For after hrs svc call 402-336-7588. ACTIVATE MIRL Rwy 13-31 and REIL Rwy 13—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 121.125 (402) 336-4834. HIWAS 113.9 ONL.

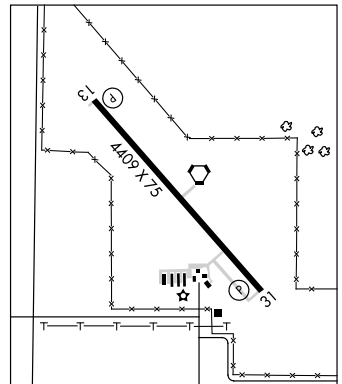
**COMMUNICATIONS:** CTAF/UNICOM 122.8

RCO 122.45 (COLUMBUS RADIO)

MINNEAPOLIS CENTER APP/DEP 128.0

**RADIO AIDS TO NAVIGATION:** NOTAM FILE ONL.

(H) VORTACW 113.9 ONL Chan 86 N42°28.23' W98°41.22' at fld. 2030/10E. HIWAS.



**ORD** N41°37.42' W98°56.88' NOTAM FILE ODX.  
NDB (MHW) 356 ODX at Evelyn Sharp Fld.

OMAHA  
L-12H

**ORD**

**EVELYN SHARP FLD** (ODX) 2 NW UTC-6(-5DT) N41°37.42' W98°57.11'

OMAHA  
L-12H  
IAP

2070 B FUEL 100LL NOTAM FILE ODX

RWY 13-31: H4721X75 (CONC) S-8 MIRL

RWY 13: PAPI(P2L)—GA 3.0° TCH 44'. Trees.

RWY 31: PAPI(P2L)—GA 3.0° TCH 32'. Thld dspld 220'. P-line.

RWY 17-35: 2012X218 (TURF)

RWY 17: Road. RWY 35: Fence.

**AIRPORT REMARKS:** Attended 1400-2300Z†. For services after hours call 308-728-5876.

**WEATHER DATA SOURCES:** ASOS 119.925 (308) 728-7954.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

MINNEAPOLIS CENTER APP/DEP CON 119.4

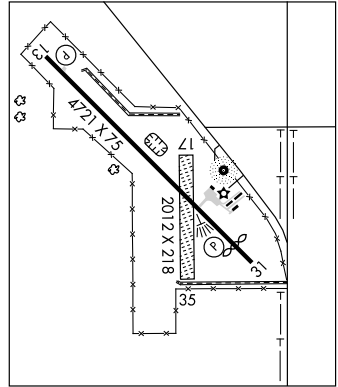
**RADIO AIDS TO NAVIGATION:** NOTAM FILE OLU.

WOLBACH (H) VORTAC 114.8 OBH Chan 95 N41°22.54'

W98°21.22' 292° 5.0 NM to fld. 2010/7E.

ORD NDB (MHW) 356 ODX N41°37.42' W98°56.88' at fld.

NOTAM FILE ODX.



**OSHKOSH** N41°24.07' W102°21.05'. NOTAM FILE OLU.  
NDB (MHW) 233 OKS at Garden Co.

CHEYENNE  
L-12G

**OSHKOSH**

**GARDEN CO** (OKS) 1 SW UTC-7(-6DT) N41°24.11' W102°21.38'

CHEYENNE  
L-12G  
IAP

3394 B FUEL 100LL NOTAM FILE OLU

RWY 12-30: H4699X60 (CONC) S-15 MIRL 0.3% up NW

RWY 30: P-lines.

**AIRPORT REMARKS:** Unattended. For svc call 308-772-4482. 24 hr self svc fuel avbl via credit card system. High pressure oxygen for emerg use only.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

DENVER CENTER APP/DEP CON 118.475

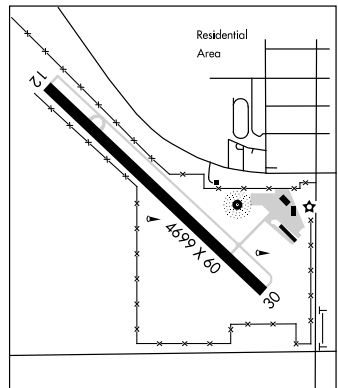
**RADIO AIDS TO NAVIGATION:** NOTAM FILE SNY.

SIDNEY (H) VORTAC 115.9 SNY Chan 106 N41°05.80'

W102°58.98' 044° 33.8 NM to fld. 4300/13E. HIWAS.

OSHKOSH NDB (MHW) 233 OKS N41°24.07' W102°21.05'

at fld. NOTAM FILE OLU.



**PANBE** N41°04.10' W100°34.35' NOTAM FILE LBF.  
NDB (LOM) 416 LB 296° 6.1 NM to North Platte Rgnl Airport Lee Bird Fld. Unmonitored.

OMAHA  
L-10H, 12G

**PAWNEE CITY** N40°12.02' W96°12.38' NOTAM FILE OLU.  
(H) VORTAC 112.4 PWE Chan 71 003° 12.1 NM to Tecumseh Muni. 1360/5E. HIWAS.  
RCO 122.1R 112.4T (COLUMBUS RADIO)

OMAHA  
H-5C, L-101

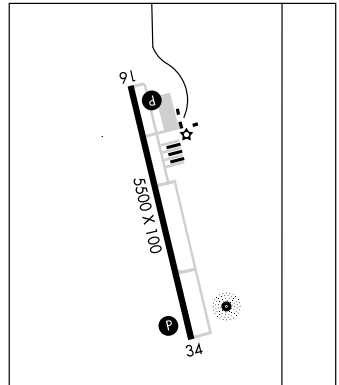
**PAWNEE CITY MUNI** (5ØK) 2 W UTC-6(-5DT) N40°06.97' W96°11.67' **OMAHA**  
 1260 B S2 FUEL 100LL TPA-2060(800) NOTAM FILE OLU  
 RWY 14-32: 3375X125 (TURF) LIRL  
 RWY 14: Tree. RWY 32: Pole.  
**AIRPORT REMARKS:** Attended on call. For arpt attendance call arpt manager on 402-852-2691. For fuel call 402-852-2672. Rotating beacon OTS indef. Rwy 14-32 LIRL OTS indef.  
**COMMUNICATIONS:** CTAF 122.9

**PENDER MUNI** (ØC4) 1 W UTC-6(-5DT) N42°06.81' W96°43.67' **OMAHA**  
 1345 B FUEL 100LL NOTAM FILE OLU **L-121**  
 RWY 15-33: H3600X60 (CONC) MIRL  
 RWY 15: PAPI(P2L)—GA 3.0° TCH 40'. Highway. RWY 33: PAPI(P2L)—GA 3.0° TCH 40'. Fence.  
**AIRPORT REMARKS:** Unattended. For fuel phone 402-385-3229/3089. ACTIVATE MIRL Rwy 15-33, PAPI Rwy 15 and Rwy 33 after 0430Z-122.8.  
**COMMUNICATIONS:** CTAF 122.9  
**RADIO AIDS TO NAVIGATION:** NOTAM FILE SUX.  
 SIOUX CITY (L) VORTAC 116.5 SUX Chan 112 N42°20.67' W96°19.42' 224° 22.7 NM to fld. 1087/9E.  
 HIWAS.

**PIONEER VILLAGE FLD** (See MINDEN)

**PLATTE CENTER** N41°29.79' W97°22.91' NOTAM FILE OLU. **OMAHA**  
 NDB (HW) 407 PLT 141° 3.4 NM to Columbus Muni. **L-12H**

**PLATTSMOUTH MUNI** (PMV) 4 SW UTC-6(-5DT) N40°56.90' W95°55.04' **OMAHA**  
 1204 B S4 FUEL 100LL, JET A NOTAM FILE PMV **H-5C, L-101, 121**  
 RWY 16-34: H5500X100 (CONC) S-30, D-45, DT-90 MIRL 0.3% up SE **IAP**  
 RWY 16: REIL. PAPI(P2L)—GA 3.0° TCH 39'.  
 RWY 34: REIL. PAPI(P2L)—GA 3.0° TCH 29'.  
**AIRPORT REMARKS:** Attended Tue-Sat 1400Z-2300Z. 100LL fuel avbl 24 hrs. Self svc. Jet A avbl after hrs on req; call 402-298-8468 during attended hrs. ACTIVATE MIRL Rwy 16-34, REIL and PAPI Rwy 16 and Rwy 34—CTAF.  
**WEATHER DATA SOURCES:** AWOS-3 118.975 (402) 298-7524.  
**COMMUNICATIONS:** CTAF/UNICOM 122.7  
 Ⓡ OMAHA APP/DEP CON 120.1  
**RADIO AIDS TO NAVIGATION:** NOTAM FILE FOD.  
 OMAHA (H) VORTAC 116.3 OVR Chan 110 N41°10.04' W95°44.20' 204° 15.5 NM to fld. 1300/8E. **HIWAS.**  
 NDB (MHW) 329 PMV N40°56.63' W95°54.75' at fld.  
 NOTAM FILE PMV.



**POTTS** N40°44.83' W96°45.75' NOTAM FILE LNK. **OMAHA**  
 NDB (MHW/LOM) 385 LN 355° 6.2 NM to Lincoln. Unmonitored when twr clsd. **L-101**

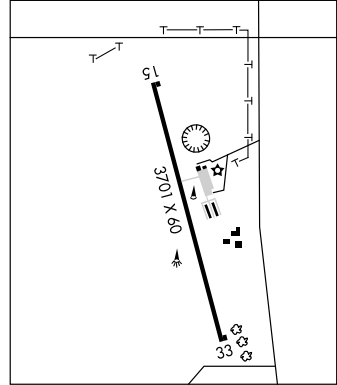
**PROSSER** N40°41.18' W98°28.65' NOTAM FILE HSI. **OMAHA**  
 NDB (HW) 338 PSS 148° 5.4 NM to Hastings. Unmonitored. **L-10H**

**QUINN FLD** (See GOTHENBURG)

**RED CLOUD MUNI** (7V7) 1 W UTC-6(-5DT) N40°05.93' W98°32.48'OMAHA  
L-10H1744 B FUEL 100LL NOTAM FILE OLU  
RWY 15-33: H3701X60 (CONC) S-12.5 MIRL  
RWY 15: Road.AIRPORT REMARKS: Unattended. For fuel call 402-746-3297. ACTIVATE  
MIRL Rwy 15-33—CTAF.

COMMUNICATIONS: CTAF 122.9

RADIO AIDS TO NAVIGATION: NOTAM FILE ICT.

MANKATO (L) VORTAC 109.8 TKO Chan 35 N39°48.38'  
W98°15.60' 312° 21.0 NM to fld. 1880/10E.**RIKKY** N41°13.18' W95°49.07' NOTAM FILE OMA.  
NDB (LOM) 426 EN 320° 6.0 NM to Eppley Airfield.

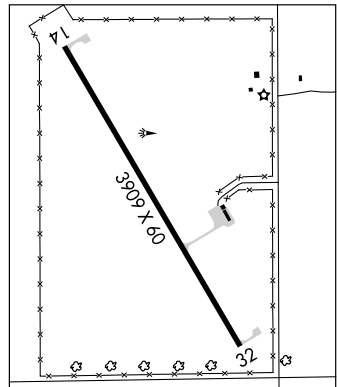
OMAHA

**ROCK CO** (See BASSETT)**RUSHVILLE****MODISSETT** (9V5) 2 NE UTC-7(-6DT) N42°44.19' W102°26.66'CHEYENNE  
L-12G3751 B FUEL 100LL NOTAM FILE OLU  
RWY 14-32: H3909X60 (CONC) S-12 MIRL  
RWY 14: Road. RWY 32: Road.AIRPORT REMARKS: Unattended. 24 hr self svc fuel avbl via credit card  
system. Wildlife on and invof arpt. Ultralights on and invof arpt.  
Numerous crop dusting acct invof arpt. Courtesy car avbl.  
ACTIVATE MIRL Rwy 14-32—CTAF.

COMMUNICATIONS: CTAF 122.9

DENVER CENTER APP/DEP CON 127.95

RADIO AIDS TO NAVIGATION: NOTAM FILE RAP.

RAPID CITY (H) VORTAC 112.3 RAP Chan 70 N43°58.56'  
W103°00.74' 148° 78.4 NM to fld. 3160/13E.**SANCY** N40°52.37' W98°18.88' NOTAM FILE GRI.  
NDB (LOM) 380 GR 356° 5.7 NM to Central Nebraska Rgnl.

OMAHA

**SARGENT MUNI** (Ø9K) 2 E UTC-6(-5DT) N41°38.22' W99°20.42'OMAHA  
L-12H2313 B NOTAM FILE OLU  
RWY 16-34: H3000X50 (ASPH) MIRL  
RWY 16: Road.

AIRPORT REMARKS: Unattended. Deer on and invof arpt. ACTIVATE MIRL Rwy 16-34—CTAF.

COMMUNICATIONS: CTAF 122.9

RADIO AIDS TO NAVIGATION: NOTAM FILE CUZ

CUSTER CO (L) VOR/DME 108.2 CUZ Chan 19 N41°29.04' W99°41.34' 232°18.2 NM to fld. 2850/8E.

**SCOTTSBLUFF** N41°53.65' W103°28.92' NOTAM FILE BFF.CHEYENNE  
H-5A, L-12F(H) VORTAC 112.6 BFF Chan 73 244° 5.2 NM to Western Neb Rgnl/William B. Heilig Fld.  
4170/13E.

RCO 122.6 (COLUMBUS RADIO) RCO 122.1R 112.6T (COLUMBUS RADIO)

**SCOTTSBLUFF****WESTERN NEB RGNL/WILLIAM B. HEILIG FLD** (BFF) 3 E UTC-7(-6DT)CHEYENNE  
H-5A, L-12F  
IAP, AD

N41°52.44' W103°35.74'

3967 B S4 FUEL 100LL, JET A OX 2 ARFF Index—See Remarks NOTAM FILE BFF

RWY 12-30: H8279X150 (ASPH) S-75, D-110, ST-139, DT-190  
HIRL

RWY 12: MALSR. PAPI(P4L)—GA 3.0° TCH 57'

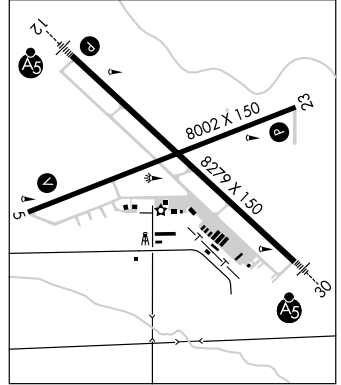
RWY 30: MALSR.

RWY 05-23: H8002X150 (ASPH) S-36, D-58, DT-106 MIRL

RWY 05: VASI(V4L)—GA 3.0° TCH 50'.

RWY 23: PAPI(P4L)—GA 3.0° TCH 52'. Road.

**AIRPORT REMARKS:** Attended 1300-0400Z±. For svc after hrs call 308-635-0162. Waterfowl on and in/ov arpt. Rwy 30 designated calm wind rwy. Line of site restrictions between apch ends of Rwy 05 and Rwy 30 and also between the apch ends of Rwy 12 and Rwy 23. Blind spot areas caused by sun glare during SR and SS at various locations on the fld. Class II, ARFF Index A. PPR 24 hrs for air carrier ops with more than 30 passenger seats call arpt manager 308-635-4941. Air carrier ops over 9 passenger seats not authorized in excess of 15 minutes before or after scheduled arrival/departure times except with prior coordination with arpt manager. ARFF index B equipment is provided. Per arpt manager use CTAF when operating on the arpt. ACTIVATE MIRL Rwy 05-23, HIRL Rwy 12-30, MALSR Rwy 12 and Rwy 30 and VASI Rwy 05, PAPI Rwy 12 and Rwy 23—CTAF.

**WEATHER DATA SOURCES:** ASOS 121.025 (308) 632-8949.**COMMUNICATIONS:** CTAF/UNICOM 123.0

SCOTTSBLUFF RCO 122.6 (COLUMBUS RADIO)

SCOTTSBLUFF RCO 122.1R 112.6T (COLUMBUS RADIO)

Ⓡ DENVER CENTER APP/DEP CON 127.95

**RADIO AIDS TO NAVIGATION:** NOTAM FILE BFF.

SCOTTSBLUFF (H) VORTAC 112.6 BFF Chan 73 N41°53.65' W103°28.92' 244° 5.2 NM to fld. 4170/13E.

CREVE NDB (LOM) 263 BF N41°48.16' W103°29.93' 304° 6.1 NM to fld. Unmonitored.

ILS/DME 109.3 I-BFF Chan 30 Rwy 30. Class IB. LOM CREVE NDB. OM unmonitored.

LOC unusable from 0.2 NM inbound.

LOC/DME 110.35 I-RMT Chan 40(Y) Rwy 12. Class IB. LOC unusable from 0.2 NM inbound.

**SCRIBNER STATE** (SCB) 3 SE UTC-6(-5DT) N41°36.62' W96°37.79'

OMAHA

1325 B FUEL 100LL TPA—2325(1000) NOTAM FILE OLU

L-12I

RWY 17-35: H4200X75 (CONC) S-25 MIRL

IAP

RWY 12-30: H3199X60 (CONC)

RWY 30: Thld dspcd 399'.

**AIRPORT REMARKS:** Attended Mon-Fri 1400-2300Z±. Assistant

Manager lives on arpt 402-654-2723. Unlgtd tower approx 1525'

MSL 0.25 mile East.

**COMMUNICATIONS:** CTAF 122.9

Ⓡ OMAHA APP/DEP CON 120.1

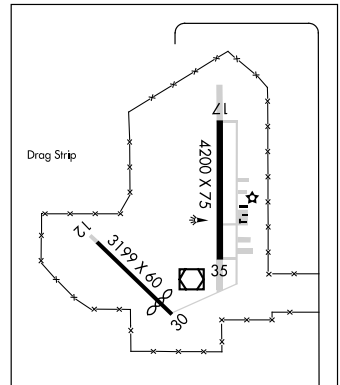
**RADIO AIDS TO NAVIGATION:** NOTAM FILE LNK.

LINCOLN (H) VORTACW 116.1 LNK Chan 108 N40°55.43'

W96°44.52' 358° 41.5 NM to fld. 1370/9E.

(T)VORW/DME 111.0 SCB Chan 47 N41°36.32' W96°37.72'

at fld. 1317/6E. NOTAM FILE OLU. VOR unmonitored.

**SEARLE FLD** (See OGALLALA)

**SEWARD MUNI** (SWT) 3 S UTC-6(-5DT) N40°51.88' W97°06.55'

OMAHA

1506 B S4 FUEL 100LL, JET A NOTAM FILE OLU

L-101

RWY 16-34: H4200X75 (CONC) S-30, D-45, DT-90 MIRL 0.3% up SE

IAP

RWY 16: PAPI(P2L)—GA 3.0° TCH 41'.

RWY 34: PAPI(P2L)—GA 3.0° TCH 41'. Road.

RWY 04-22: 3400X150 (TURF)

**AIRPORT REMARKS:** Attended Mon-Sat 1400-2300Z±. ACTIVATE MIRL

Rwy 16-34; PAPI Rwy 16 and Rwy 34; windsock—CTAF.

NOTE: See Special Notices Section—Aerobatic Practice Areas.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

LINCOLN RCO 122.65 (COLUMBUS RADIO)

Ⓡ LINCOLN APP/DEP CON 124.0 (1130-0600Z±)

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 128.75 (0600-1130Z±)

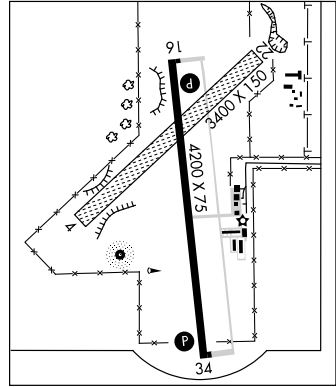
**RADIO AIDS TO NAVIGATION:** NOTAM FILE LNK.

LINCOLN (H) VORTACW 116.1 LNK Chan 108 N40°55.43'

W96°44.52' 249° 17.1 NM to fld. 1370/9E.

NDB (MHW) 269 SWT N40°51.68' W97°06.72' at fld.

NOTAM FILE OLU.

**SIDNEY MUNI/LLOYD W CARR FLD** (SNY) 3 S UTC-7(-6DT) N41°06.99' W102°59.10'

CHEYENNE

4313 B S3 FUEL 100LL, JET A NOTAM FILE SNY

H-5A, L-106, 126

RWY 13-31: H6600X100 (CONC) S-32, D-52, DT-96 HIRL 0.5% up NW

IAP

RWY 13: REIL. PAPI(P2L)—GA 3.0° TCH 44'.

RWY 31: REIL. PAPI(P2L)—GA 3.0° TCH 47'.

RWY 03-21: 4700X75 (TURF) 0.3% up SW

RWY 03: P-line. RWY 21: Hill.

**AIRPORT REMARKS:** Attended 1500-0100Z±. After hrs call

308-254-7898/3379. ACTIVATE HIRL Rwy 13-31, and REIL Rwy

13 and Rwy 31—CTAF.

**WEATHER DATA SOURCES:** ASOS 125.775 (308) 254-3525.**COMMUNICATIONS:** CTAF/UNICOM 122.8

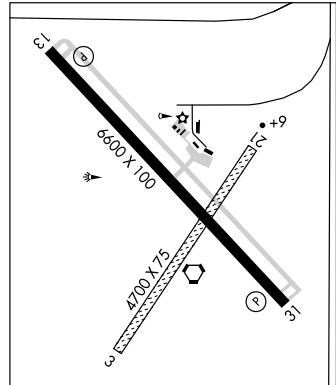
RCO 122.45 122.1R 115.9T (COLUMBUS RADIO)

DENVER CENTER APP/DEP CON 118.475

**AIRSPACE:** CLASS E svc 1200-0500Z± other times CLASS G.**RADIO AIDS TO NAVIGATION:** NOTAM FILE SNY.

(H) VORTAC 115.9 SNY Chan 106 N41°05.80'

W102°58.98' at fld. 4300/13E. HIWAS.

**SO SIOUX CITY****MARTIN FLD** (7K8) 3 SW UTC-6(-5DT) N42°27.25' W96°28.35'

OMAHA

1100 B S4 FUEL 100LL NOTAM FILE OLU

L-121

RWY 14-32: H3323X50 (ASPH) S-12.5 MIRL (NSTD)

RWY 14: Berm. Rgt tfc.

RWY 32: Thld dspcld 650'. Trees.

**AIRPORT REMARKS:** Attended 1400Z±-dusk. For attendant after hours, call 402-494-3667 or 712-258-6722. Rwy

14-32 edge lghts are approximately 75' fm centerline at approximately 400' spacing; 30 watts. For arpt bcn, call

arpt manager on 402-494-3667. ACTIVATE MIRL Rwy 14-32—CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 122.8**RADIO AIDS TO NAVIGATION:** NOTAM FILE SUX.

SIOUX CITY (L) VORTAC 116.5 SUX Chan 112 N42°20.67' W96°19.42' 306° 9.3 NM to fld. 1087/9E.

HIWAS.

TOMMI NDB (MHW/LDM) 305 OI N42°27.61' W96°27.73' at fld. Unmonitored.

**STUART-ATKINSON MUNI** (See ATKINSON)



**SUPERIOR MUNI** (12K) 2 N UTC-6(-5DT) N40°02.78' W98°03.61'

OMAHA

1691 B FUEL 100LL TPA—2491(800) NOTAM FILE OLU

L-101

RWY 14-32: H3702X60 (ASPH-CONC) LIRL 1.1% up NW

IAP

RWY 18-36: 3000X200 (TURF) 0.3% up S

RWY 18: Tree. RWY 36: Tank.

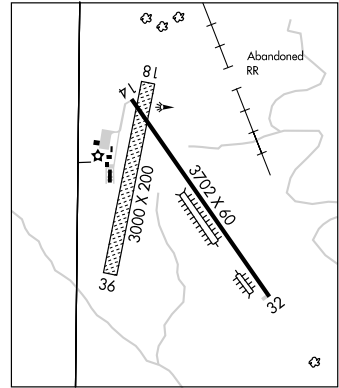
**AIRPORT REMARKS:** Attended Mon-Fri 1400-2300Z $\ddagger$ . For attendant after hours call 402-879-5262 or 402-879-5852. Twy lights OTS indef. ACTIVATE LIRL Rwy 14-32—CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 123.0

MINNEAPOLIS CENTER APP/DEP CON 119.4

**RADIO AIDS TO NAVIGATION:** NOTAM FILE ICT.

MANKATO (L) VORTAC 109.8 TKO Chan 35 N39°48.38'  
W98°15.60' 023° 17.1 NM to fld. 1880/10E.

**TECUMSEH MUNI** (ØG3) 2 NE UTC-6(-5DT) N40°24.06' W96°10.23'

OMAHA

1306 B FUEL 100LL TPA—2106(800) NOTAM FILE OLU

L-101

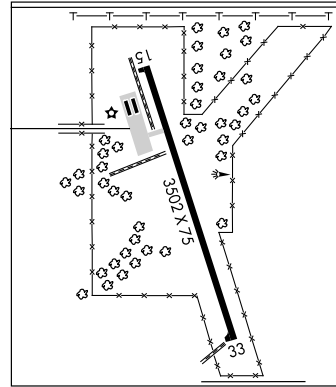
RWY 15-33: H3502X75 (CONC) S-6 MIRL

RWY 15: Trees.

**AIRPORT REMARKS:** Unattended. For fuel call 402-335-3303. ACTIVATE MIRL Rwy 15-33—CTAF.

**COMMUNICATIONS:** CTAF 122.9**RADIO AIDS TO NAVIGATION:** NOTAM FILE OLU.

PAWNEE CITY (H) VORTAC 112.4 PWE Chan 71 N40°12.02'  
W96°12.38' 003° 12.1 NM to fld. 1360/5E. HIWAS.



**TEKAMAH MUNI** (TQE) 2 SE UTC-6(-5DT) N41°45.81' W96°10.68'  
 1027 B S4 FUEL 100LL, JET A TPA-2027(1000) NOTAM FILE TQE  
 RWY 14-32: H4002X75 (CONC) S-30, D-45 MIRL  
 RWY 14: Road. RWY 32: REIL. Road.

OMAHA  
 L-121  
 IAP

**AIRPORT REMARKS:** Attended Mon-Fri 1400-2300Z†. 100LL fuel avbl  
 24 hrs. Self svc. For attendant call 402-374-2505/1755.  
 Airframe and Powerplant repairs-402-374-1700. ACTIVATE REIL  
 Rwy 32-CTAF.

**WEATHER DATA SOURCES:** ASOS 127.275 (402) 374-2853.

**COMMUNICATIONS:** CTAF/UNICOM 123.0

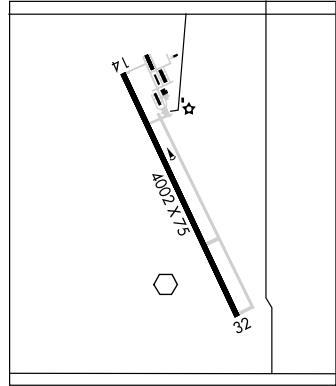
Ⓡ OMAHA APP/DEP CON 124.5

**RADIO AIDS TO NAVIGATION:** NOTAM FILE SUX.

SIoux CITY (L) VORTAC 116.5 SUX Chan 112 N42°20.67'  
 W96°19.42' 160° 35.4 NM to fld. 1087/9E. HIWAS.

(T) VORW 108.4 TQE N41°45.58' W96°10.72' at fld.  
 11030/7E. NOTAM FILE TQE.

VOR unusable 260°-280° byd 15 NM below 4000'.



**THE O'NEILL MUNI-JOHN L BAKER FLD** (See O'NEILL)

**THEDFORD** N41°58.90' W100°43.14' NOTAM FILE TIF.  
 (L) VOR/DME 108.6 TDD Chan 23 091° 6.8 NM to Thomas Co. 3175/9E. VOR unmonitored.  
 RCO 122.4 (COLUMBUS RADIO).

OMAHA  
 L-126

## THEDFORD

**THOMAS CO** (TIF) 1 S UTC-6(-5DT) N41°57.76' W100°34.22'  
 2925 B FUEL 100LL NOTAM FILE TIF Not insp.  
 RWY 11-29: H4400X60 (ASPH) MIRL 0.3% up NW

OMAHA  
 L-126  
 IAP

**AIRPORT REMARKS:** Unattended.

**WEATHER DATA SOURCES:** AWOS-3 120.825 (308) 645-0488.

**COMMUNICATIONS:** CTAF 122.9

DENVER CENTER APP/DEP CON 127.95

**RADIO AIDS TO NAVIGATION:** NOTAM FILE TIF.

THEDFORD (L) VOR/DME 108.6 TDD Chan 23 N41°58.90' W100°43.14' 091° 6.8 NM to fld.  
 3175/9E. VOR unmonitored.

**THOMAS CO** (See THEDFORD)

**TOMMI** N42°27.61' W96°27.73' NOTAM FILE SUX.  
 NDB (MHW/LOM) 305 OI at Martin Fld. Unmonitored.

OMAHA  
 L-121

**TRENTON MUNI** (9V2) 1 NW UTC-7(-6DT) N40°11.25' W101°01.53'  
 2796 B TPA-3796(1000) NOTAM FILE OLU  
 RWY 14-32: 2360X280 (TURF) MIRL

CHEYENNE

RWY 14: Road.

RWY 01-19: 2260X300 (TURF)

RWY 01: Trees. RWY 19: Road.

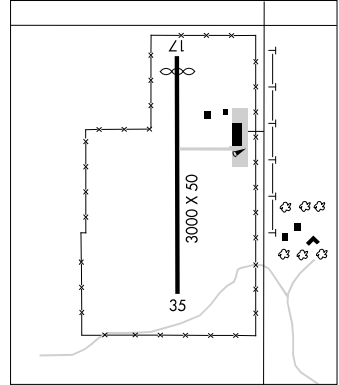
**AIRPORT REMARKS:** Unattended. Rwy 01-19 rough. Rwy 01-19 edges marked with orange cones and thlds marked with panels.

**COMMUNICATIONS:** CTAF 122.9

**UTICA**

**FLYING V** (ØJ9) 2 S UTC-6(-5DT) N40°52.07' W97°21.25'  
 1585 NOTAM FILE OLU  
**RWY 17-35:** H3000X50 (CONC) S-12.5  
**RWY 17:** Thld dsplcd 200'. Road.  
**AIRPORT REMARKS:** Unattended.  
**COMMUNICATIONS:** CTAF 122.9  
**RADIO AIDS TO NAVIGATION:** NOTAM FILE LNK.  
**LINCOLN (H) VORTAC** 116.1 LNK Chan 108 N40°55.43'  
 W96°44.52' 254° 28.1 NM to fld. 1370/9E.

OMAHA  
L-101



**VALENTINE** N42°51.70' W100°32.98' NOTAM FILE VTN.  
**NDB (MHW)** 314 VTN at Miller Fld.

OMAHA  
L-126

**VALENTINE**

**MILLER FLD** (VTN) 1 S UTC-6(-5DT) N42°51.40' W100°32.94'  
 2596 B S4 **FUEL** 100LL, JET A NOTAM FILE VTN  
**RWY 14-32:** H4703X100 (CONC) S-30, D-42.5 MIRL  
**RWY 14:** PAPI(P2L)—GA 3.0° TCH 40'.  
**RWY 32:** REIL. PAPI(P2L)—GA 3.0° TCH 43'. Fence.  
**RWY 03-21:** H3701X60 (ASPH) S-12.5 MIRL 0.3% up S  
**RWY 03:** PAPI(P2L)—GA 3.0° TCH 39'.  
**RWY 21:** PAPI(P2L)—GA 3.0° TCH 45'. Thld dsplcd 300'.

OMAHA  
L-126  
IAP

**RUNWAY DECLARED DISTANCE INFORMATION**

**RWY 03:** TORA-3700 TODA-3700 ASDA-3700 LDA-3700  
**RWY 21:** TORA-3700 TODA-3700 ASDA-3700 LDA-3400  
**AIRPORT REMARKS:** Attended Mon-Sat 1400-2300Z†. Fuel avbl 24 hrs  
 with credit card or by prior arrangement, call 402-376-1611.  
 ACTIVATE MIRL Rwy 03-21 and Rwy 14-32, PAPI Rwy 03, Rwy 21,  
 Rwy 14 and Rwy 32, REIL Rwy 32—CTAF.

**WEATHER DATA SOURCES:** ASOS 118.075 (402) 376-1673.

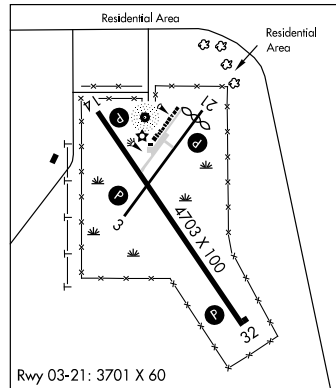
**COMMUNICATIONS:** CTAF/UNICOM 122.8

**DENVER CENTER APP/DEP CON** 127.95

**RADIO AIDS TO NAVIGATION:** NOTAM FILE ANW.

**AINSWORTH (L) VOR/DME** 112.7 ANW Chan 74 N42°34.15'  
 W99°59.38' 296° 30.2 NM to fld. 2582/9E. **HIWAS.**

**VALENTINE NDB (MHW)** 314 VTN N42°51.70' W100°32.98'  
 at fld. NOTAM FILE VTN.



**WAHOO MUNI** (AHQ) 2 NE UTC-6(-5DT) N41°14.44' W96°35.67'OMAHA  
L-101, 121  
IAP

1224 B S4 FUEL 100LL NOTAM FILE OLU

RWY 02-20: H4100X75 (CONC) S-20 MIRL

RWY 02: PAPI(P2L)—GA 3.0°. TCH 41'.

RWY 20: PAPI(P2L)—GA 3.0° TCH 52'.

RWY 13-31: 3290X150 (TURF) LIRL

RWY 13: Fence. RWY 31: Road.

**AIRPORT REMARKS:** Attended dawn-dusk. For svc after dusk call 402-443-1863. Fuel avbl 24 hr self serve. Rwy 13-31 not plowed winter months. Rwy 13-31 LIRL OTS indef. ACTIVATE PAPI Rwy 02 and Rwy 20—CTAF.

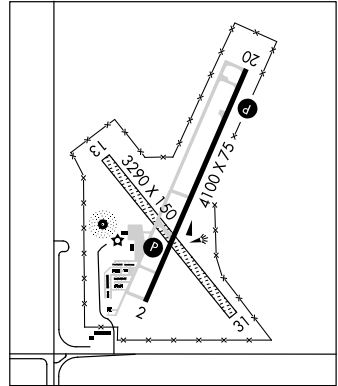
COMMUNICATIONS: CTAF/UNICOM 122.7

Ⓡ OMAHA APP/DEP CON 120.1

RADIO AIDS TO NAVIGATION: NOTAM FILE LNK.

LINCOLN (H) VORTACW 116.1 LNK Chan 108 N40°55.43'  
W96°44.52' 010° 20.1 NM to fld. 1370/9E.

NDB (MHW) 400 AHQ N41°14.35' W96°35.90' at fld.  
NOTAM FILE OLU.

**WALLACE MUNI** (64V) 1 S UTC-6(-5DT) N40°49.93' W101°09.84'

CHEYENNE

3101 B NOTAM FILE OLU

RWY 13-31: H2800X50 (ASPH) LIRL (NSTD)

RWY 13: Thld dsplcd 200'. RWY 31: Irrigation system.

**AIRPORT REMARKS:** Attended Apr-Aug dawn-dusk. Rwy 13 thld dsplcd 200' for day ops, for ngt ops thld dsplcd 400' marked with lgts only. Rwy 13-31 NSTD LIRL. Lgts are 100' from pavement edge on both sides. Rwy 31 irrigation system.

COMMUNICATIONS: CTAF 122.9

**WAYNE MUNI** (LCG) 2 E UTC-6(-5DT) N42°14.50' W96°58.94'OMAHA  
L-121  
IAP

1431 B S4 FUEL 100LL OX 2 NOTAM FILE LCG

RWY 17-35: H4201X75 (ASPH) S-12.5 MIRL

RWY 17: PAPI(P2L)—GA 3.0° TCH 40'.

RWY 35: PAPI(P2L)—GA 3.0° TCH 40'. Road.

RWY 04-22: H3406X60 (ASPH) S-12.5 MIRL

RWY 04: Pole. RWY 22: Hill.

RWY 13-31: 2070X120 (TURF)

RWY 13: Fence. RWY 31: Road.

**AIRPORT REMARKS:** Attended dusk-dawn. Deer on and invof arpt. Rwy 13-31 not plowed winter months. Twy lgts AER 04 only. MIRL Rwy 17-35 and Rwy 04-22 operate SS-0500Z±; after 0500Z± ACTIVATE —122.8.

WEATHER DATA SOURCES: AWOS-3 120.125 (402) 375-0111.

COMMUNICATIONS: CTAF/UNICOM 122.8

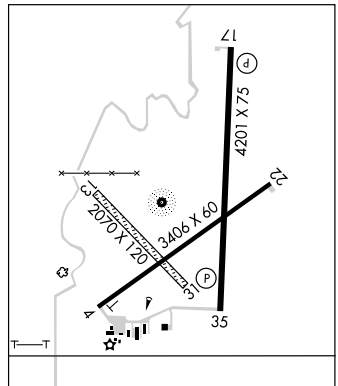
Ⓡ SIOUX CITY APP/DEP CON 124.6 (1200-0330Z±)

MINNEAPOLIS CENTER APP/DEP CON 124.1 (0330-1200Z±)

RADIO AIDS TO NAVIGATION: NOTAM FILE SUX.

SIOUX CITY (L) VORTAC 116.5 SUX Chan 112 N42°20.67'  
W96°19.42' 249° 29.9 NM to fld. 1087/9E. HIWAS.

NDB (MHW) 389 LCG N42°14.55' W96°59.02' at fld.  
NOTAM FILE LCG.

**WESTERN NEB RGNL/WILLIAM B. HEILIG FLD** (See SCOTTSBLUFF)**WHITNEY** N42°49.73' W103°05.63' NOTAM FILE CDR.CHEYENNE  
L-126

NDB (MHW) 275 HIN at Chadron Muni.

**WILLOW** N40°52.37' W100°04.36' NOTAM FILE OLU.OMAHA  
L-10H

NDB (MHW) 353 DWL 305° 4.7 NM to Quinn Fld.

**WOLBACH** N41°22.54' W98°21.22' NOTAM FILE OLU.  
 (H) **VORTAC** 114.8 OBH Chan 95 168° 24.6 NM to Central Nebraska Rgnl. 2010/7E.  
**RCO** 122.1R 114.8T (COLUMBUS RADIO)

OMAHA  
 H-5B, L-12H

**YORK MUNI** (JYR) 1 NW UTC-6(-5DT) N40°53.79' W97°37.45'

OMAHA  
 H-5C, L-10I  
 IAP

1670 B **FUEL** 100LL, JET A NOTAM FILE JYR  
**RWY 17-35:** H5900X100 (CONC) S-30, D-38 MIRL

**RWY 17:** REIL. PAPI(P2L)—GA 3.0° TCH 40'. Pole.

**RWY 35:** REIL. VASI(V2L)—GA 3.0° TCH 25'.

Thld dspcd 400'. Road.

**RWY 05-23:** 4700X150 (TURF)

**RWY 05:** Pole. **RWY 23:** Pole.

**RUNWAY DECLARED DISTANCE INFORMATION**

**RWY 17:** TORA-5900 TODA-5900 ASDA-5500 LDA-5900

**RWY 35:** TORA-5900 TODA-5900 ASDA-5900 LDA-5500

**AIRPORT REMARKS:** Attended 1400-2300Z†. For svc after hrs call 402-366-5876. Rwy 05-23 not plowed winter months. Arpt lights operate dusk-0400Z†, after 0400Z† Rwy 35 designated as calm wind rwy. Rwy 35 VASI unusable byd 6° right and left of centerline. ACTIVATE MIRL Rwy 17-35, PAPI Rwy 17, VASI Rwy 35 and REIL Rwy 17 and Rwy 35—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 124.175 (402) 362-3785.

**COMMUNICATIONS:** CTAF/UNICOM 122.8.

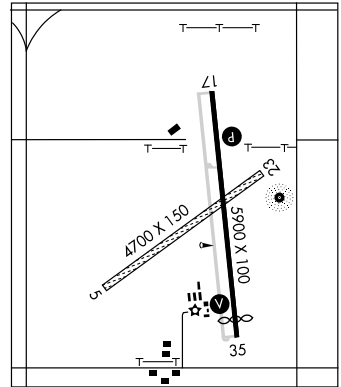
**MINNEAPOLIS CENTER APP/DEP CON** 119.4

**RADIO AIDS TO NAVIGATION:** NOTAM FILE GRI.

**GRAND ISLAND (I) VORTACW** 112.0 GRI Chan 57 N40°59.04'

W98°18.89' 092° 31.8 NM to fld. 1840/7E.

**NDB (MHW)** 257 JYR N40°53.85' W97°37.02' at fld. NOTAM FILE OLU.



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## 2010 U.S. & CANADIAN MILITARY AERIAL AIRCRAFT/PARACHUTE DEMONSTRATIONS

During CY 2010, the U.S. and Canadian Military Aerial Demonstration Teams (Thunderbirds, Blue Angels, Snowbirds, and Golden Knights) will be performing on the dates and locations listed below.

Pilots should expect Temporary Flight Restrictions (TFR) in accordance with 14 CFR Section 91.145, Management of aircraft operations in the vicinity of aerial demonstrations and major sporting events. The dimensions and effective times of the TFRs may vary based upon the specific aerial demonstration event and will be issued via the U.S. NOTAM system. Pilots are strongly encouraged to check FDC NOTAMS to verify they have the most current information regarding these airspace restrictions.

The currently scheduled 2010 aerial demonstration locations, subject to change without notice, are:

DATE:		USAF Thunderbirds	USN Blue Angels	USA Golden Knights	Canadian Snowbirds
April	10-11	Eglin AFB, FL			
	11		NAS Key West, FL		
	17		Charleston AFB, SC		
	17-18	Lakeland, FL			
	24-25	Barksdale AFB, LA	Vidalia, GA	Ft. Lauderdale, FL	
	24-25			Galena, FL	
May	1	Dyess AFB, TX			
	2	Altus AFB, OK			
	1-2		St. Joseph, MO		
	8-9	Shaw AFB, SC	Tuscaloosa, AL	Shaw AFB, SC	Niagara Falls, NY
	8-9			Tuscaloosa, AL	
	13			Union, NJ	
	15-16	Columbus AFB, MS	Andrews AFB, MD	Columbus AFB, MS	
	15-16			Andrews AFB, MD	
	22	Grand Forks AFB, ND			
	22-23		MCAS Cherry Point, NC		
	26	Colorado Springs, CO	Annapolis, MD		
	29-30	Janesville, WI	Jones Beach, NY	Jones Beach, NY	
	29-30			Janesville, WI	
June	5-6	Ocean City, MD	Eau Claire, WI	Eau Claire, WI	
	5-6			Florence, SC	
	12-13		Milwaukee, WI	Milwaukee, WI	
	19-20		Cape Girardeau, MO	Cape Girardeau, MO	
	19-20	Tinker AFB, OK		Gaylord, MI	
	26-27	North Kingstown, RI	St. Cloud, MN	Findlay, OK	
July	3			Madison, WI	
	3			Dubuque, IA	
	3-4		Traverse City, MI		
	4			Ft Bragg, NC	
	10		Pensacola Beach, FL		
	10-11	Gary, IN		Gary, IN	
	17-18	Duluth, MN	Dayton, OH		
	24-25	Fairchild AFB, WA	Idaho Falls, ID		
	28	Cheyenne, WY			
	29			Goshen, IN	
	29			Ft AP Hill, VA	
	31	Rockford, IL	Anchorage, AK	Rockford, IL	Elmendorf AFB, AK
31			Johnstown, PA		



## SPECIAL NOTICES

DATE:		USAF Thunderbirds	USN Blue Angels	USA Golden Knights	Canadian Snowbirds
August	1	Rockford, IL	Anchorage, AK	Rockford, IL	Elmendorf AFB, AK
	1			Johnstown, PA	
	7-8	TBD	Seattle, WA		
	14-15		Chicago, IL	Chicago, IL	
	21-22	Westfield, MA		Westfield, MA	
	21-22			Kansas City, MO	
	25			Atlantic City, NJ	
	26			Ft Monroe, VA	
	28-29	Coney Island (Brooklyn), NY	Portsmouth, NH	Coney Island (Brooklyn), NY	
	28-29			Portsmouth, NH	
September	4-5	Martinsburg, WV		Cleveland, OH	
	4-5			Martinsburg, WV	
	4-6		Cleveland, OH		
	11-12	Corapolis (Pittsburgh), PA	Scott AFB, IL	Corapolis (Pittsburgh), PA	
	11-12			Scott AFB, IL	
	18-19	Whiteman AFB, MO	NAS Oceana, VA	Whiteman AFB, MO	Reno, NV
	25-26	McConnell AFB, KS	MCAS Kaneohe Bay, HI		
October	1-3		MCAS Miramar, CA		MCAS Miramar, CA
	2-3	Salinas, CA		MCAS Miramar, CA	
	2-3			Jackson, MS	
	9-10	Little Rock AFB, AR	San Francisco, CA	Little Rock, AFB, AR	Daytona Beach, FL
	16-17	El Paso, IX	Dobbins AFB, GA	El Paso, TX	Atlanta, GA
	23-24	Houston, TX	NAS Jacksonville, FL	Washington, DC	
	30-31	Cocoa Beach, FL	Ft Worth Alliance, TX	Ft Worth Alliance, TX	
November	6-7	Lackland AFB, TX	Homestead ARB, FL	Lackland AFB, TX	
	6-7			Homestead ARB, FL	
	11-14			Ft Bragg, NC	
	12-13		NAS Pensacola, FL		
	13-14	Nellis AFB, NV			

Note: Dates and locations are scheduled "show dates" only and do not reflect arrival or practice date TFR periods that may precede the specific aerial demonstration events listed above. Again, pilots are strongly encouraged to check FDC NOTAMS to verify they have the most current information regarding any airspace restrictions.

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### **Minneapolis, MN Class B Airspace**

Due to the relocation and magnetic variation changes of the Flying Cloud (FCM), MN VOR/DME, two boundary radials of the Minneapolis, MN, Class B Airspace need to be relabeled on the Minneapolis VFR Terminal Area Chart. To the west of Minneapolis-St. Paul Intl. Airport, the boundary between the 4000' floor airspace and the 7000' floor airspace should be labeled as "FCM 299". And to the southeast of Minneapolis-St. Paul Intl. Airport, the boundary between the 4000' floor airspace and the 7000' floor airspace should be labeled as "FCM 119".

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### **SEARCH LIGHT SHOW Rosebud Casino, Valentine, Nebraska**

Searchlight Activity will be conducted in an area within a 1 NM radius of 42 59 56N/100 34 29W (ANW315/36.5), 1500 AGL and above, from 1900 to 0200 local hours nightly. Searchlight beams may be injurious to pilots/passengers eyes at 1500 AGL and above. Flash blindness or cockpit illumination may occur at greater distances, up to several miles from the source. Huron AFSS, 866-732-1331, is the FAA coordination facility.

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### **SPECIAL NORTH ATLANTIC, CARIBBEAN AND PACIFIC AREA COMMUNICATIONS**

VHF air-to-air frequencies enable aircraft engaged in flights over remote and oceanic areas out of range of VHF ground stations to exchange necessary operational information and to facilitate the resolution of operational problems.

Frequencies have been designated as follows:

North Atlantic area:	123.45 MHz
Caribbean area:	123.45 MHz
Pacific area:	123.45 MHz

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### **MILITARY TRAINING ROUTES**

The DOD Flight Information Publication AP/1B provides textual and graphic descriptions and operating instructions for all military training routes (IR, VR, SR) and refueling tracks/anchors. Complete and more comprehensive information relative to policy and procedures for IRs and VRs is published in FAA Handbook 7610.4 (Special Military Operations) which is agreed to by the DOD and therefore directive for all military flight operations. The AP/1B is the official source of route data for military users.

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### **AEROBATIC PRACTICE AREA FORT SCOTT MUNICIPAL AIRPORT (FSK), FORT SCOTT, KS**

Aerobatic practice will be conducted within 1 NM radius of Fort Scott Municipal Airport (FSK), SFC to 5,000 feet AGL. The practice area is for waiver holders only. Pilots should use caution when operating in this area. For further information contact Flight Services at 1-800-WX-BRIEF (992-7433).

### **HAROLD KRIER FIELD (K58), ASHLAND, KS**

Aerobatic practice will be conducted within 2 NM radius of Harold Krier Field (K58), SFC to 3,500 feet AGL. The practice area is for waiver holders only. Pilots should use caution when operating in this area. For further information contact Flight Services at 1-800-WX-BRIEF (992-7433).

### **WAMEGO MUNICIPAL AIRPORT (69K), MANHATTAN, KS**

Aerobatic practice will be conducted within 1 NM radius of Wamego Municipal Airport (69K) SFC to 4,500 feet MSL, SR-SS. For further information contact Flight Services at 1-800-WX-BRIEF (992-7433).

### **GRANITE FALLS MUNI/LENZEN-ROE, AIRPORT, (GDB) GRANITE FALLS, MN**

Aerobatic practice will be conducted within 2 NM radius of MVE160012, SFC to 6,000 feet MSL, SR-SS. For further information contact Flight Services at 1-800-WX-BRIEF (992-7433).

### **SEWARD COUNTY AIRPORT (SWT), SEWARD, NE**

Aerobatic practice will be conducted within 1 NM radius of Seward County Airport (SWT), SFC to 7,000 feet MSL. The practice area is for waiver holders only. Pilots should use caution when operating in this area. For further information contact Flight Services at 1-800-WX-BRIEF (992-7433).

### **PIERRE REGIONAL AIRPORT (PIR), PIERRE, SD**

Aerobatic practice will be conducted within 2 NM radius of Pierre Regional Airport (PIR, SFC to 3,300 feet MSL. The practice area is for waiver holders only. Pilots should use caution when operating in this area. For further information contact Flight Services at 1-800-WX-BRIEF (992-7433).

### **SKIE-LINCOLN AIRPORT (Y14), TEA, SD**

Aerobatic practice will be conducted within 1 NM radius of Skie-Lincoln County Airport (Y14), SFC to 5,000 feet MSL. The practice area is for waiver holders only. Pilots should use caution when operating in this area. For further information contact Flight Services at 1-800-WX-BRIEF (992-7433).

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**MODEL ROCKET ACTIVITY****ANTHONY, KS**

Model Rocket activity will be conducted within a 5 NM radius of ANY081021, SFC to 34,500 feet AGL, SR-SS. For further information contact Flight Services at 1-800-WX-BRIEF (992-7433).

**ELLINWOOD, KS**

Model Rocket activity will be conducted within a 3 NM radius of the Ellinwood Airport (1K6), with an alternate site of 2 NM Northwest of Ellinwood Airport (1K6), SFC to 10,000 feet AGL, SR-SS. For further information contact Flight Services at 1-800-WX-BRIEF (992-7433).

**PITTSBURG, KS**

Model Rocket activity will be conducted within a 3 NM radius of OSW045034, SFC to 18,000 feet MSL, SR-SS. For further information, contact Flight Services at 1-800-WX-BRIEF (992-7433).

**HALLSVILLE, MO**

Model Rocket activity will be conducted within a 2 NM radius of HLV299010, SFC to 6,000 feet AGL, SR-SS. For further information contact Flight Services at 1-800-WX-BRIEF (992-7433).

**CIVIL USE OF MILITARY FIELDS:**

U.S. Army, Air Force, Navy and Coast Guard Fields are open to civil fliers only in emergency or with prior permission.

Army installations, prior permission is required from the Commanding Officer of the installation.

For Air Force installations, prior permission should be requested at least 30 days prior to first intended landing from either Headquarters USAF (PRPOC) or the Commander of the installation concerned (who has authority to approve landing rights for certain categories of civil aircraft). For use of more than one Air Force installation, requests should be forwarded direct to Hq USAF (PRPOC), Washington, D.C. 20330.

Use of USAF installations must be specifically justified.

For Navy and Marine Corps installations, prior permission should be requested at least 30 days prior to first intended landing. An Aviation Facility License must be approved and executed by the Navy prior to any landing by civil aircraft.

Forms and further information may be obtained from the nearest U.S. Navy or Marine Corps aviation activity.

For Coast Guard fields prior permission should be requested from the Commandant, U.S. Coast Guard via the Commanding Officer of the field.

When instrument approaches are conducted by civil aircraft at military airports, they shall be conducted in accordance with the procedures and minimums approved by the military agency having jurisdiction over the airport.

**AIRCRAFT LANDING RESTRICTIONS**

Landing of aircraft at locations other than public use airports may be a violation of Federal or local law. All land and water areas are owned or controlled by private individuals or organizations, states, cities, local governments, or U.S. Government agencies. Except in emergency, prior permission should be obtained before landing at any location that is not a designated public use airport or seaplane base.

Landing of aircraft is prohibited on lands or waters administered by the National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service, and on many areas controlled by the U.S. Army Corps of Engineers, unless prior authorization is obtained from the respective agency.

**CONTROLLED FIRING****Parsons, Kansas  
(Until Further Notice)**

Controlled Firing Area 1 NM radius 37°17'39"N/95°08'46"W, SFC-3200 MSL, Eff weekdays 0630-1700 LCL

**INTERSECTION DEPARTURES DURING PERIOD OF DARKNESS  
MINNEAPOLIS-ST PAUL INTERNATIONAL/WOLD-CHAMBERLAIN AIRPORT (MSP)  
MINNEAPOLIS, MINNESOTA**

Minneapolis International Airport Traffic Control Tower has been granted a waiver to the guideline that prohibits the control tower from taxiing an aircraft into "position and hold" at an intersection, between sunset and sunrise.

This waiver allows the tower to taxi the aircraft into "position and hold" during period of darkness, at the intersections listed below.

**Runway 4 at Taxiways "S", "C2", "C3", "M2", or "M3"**

Aircraft shall not taxi into position and hold under the provisions of this waiver when the subject intersection is not visible from the tower. When the provisions of this waiver are being exercised, the affected runway shall be used for departures only. Intersection departures will continue to be utilized at other locations between sunset and sunrise. However, aircraft cannot be taxied into "position and hold" prior to takeoff clearance.

## LAMBERT-ST LOUIS INTERNATIONAL (STL), MISSOURI

STL Precision Runway Monitor Electronic Scan Radar System (PRM) commissioned. Full utilization of PRM is pending the future implementation of simultaneous instrument approaches. Until then no operational impact will result from the commissioning of PRM.

### SIMULTANEOUS OFFSET INSTRUMENT APPROACH (SOIA) PROCEDURE FOR PILOTS FILING FLIGHT PLANS TO LAMBERT-ST LOUIS INTERNATIONAL AIRPORT (STL)

Effective Thursday, October 27, 2005. During the hours of 0700–2200 local, STL ATC may utilize LDA PRM and ILS PRM approaches as weather and traffic demand dictate. Aircraft arriving from the northeast and northwest (primarily over PETTI and LORLE intersections) should expect ILS PRM Runway 30R. Aircraft arriving from the west and southeast (primarily over FTZ and QBALL) should expect LDA PRM Runway 30L. If unable to participate in PRM apchs acft operators are required to contact FAA ATCSCC directly at 1–800–333–4286 or 703–904–4452 prior to departure to obtain a precoordinated arrival time. Non-participating acft may encounter delays. Pilot requirements and procedures are outlined in U.S. Terminal Procedures Publications available on pages entitled "ATTENTION ALL USERS OF ILS PRECISION RUNWAY MONITOR (PRM)" or "ATTENTION ALL USERS OF LDA PRECISION RUNWAY MONITOR (PRM)". This notice is effective until further notice.

### CONTINUOUS POWER FACILITIES

In order to insure that a basic ATC system remains in operation despite an areawide or catastrophic commercial power failure, key equipment and certain airports have been designated to provide a network of facilities whose operational capability can be utilized independent of any commercial power supply.

In addition to those facilities comprising the basic ATC system, the following approach and lighting aids have been included in this program for a selected runway.

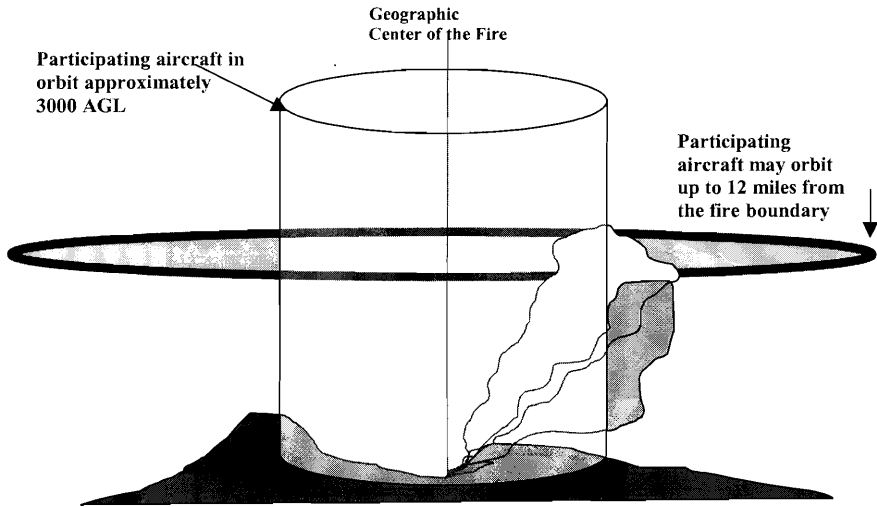
1. ILS (Localizer, Glide Slope, COMLO, Inner, Middle and Outer Markers)
2. Wind Measuring Capability
3. Approach Light System (ALS) or Short ALS (SALS)
4. Ceiling Measuring Capability
5. Touchdown Zone Lighting (TDZL)
6. Centerline Lighting (CL)
7. Runway Visual Range (RVR)
8. High Intensity Runway Lighting (HIRL)
9. Taxiway Lighting
10. Apron Light (Perimeter Only)

The following have been designated "Continuous Power Airports," and have independent back up capability for the equipment installed.

Airport/Ident	Runway No.	Airport/Ident	Runway No.
Albuquerque, NM (ABQ) .....	08	Milwaukee, WI (MKE) .....	01L
Anchorage, AK (ANC) .....	07R	Minneapolis, MN (MSP) .....	30L
Andrews AFB, MD (ADW) .....	01L	Nashville, TN (BNA) .....	02L
Atlanta, GA (ATL) .....	09R	New Orleans, LA (MSY) .....	10
Baltimore, MD (BWI) .....	10	New York, NY (JFK) .....	04R
Bismarck, ND (BIS) .....	31	New York, NY (LGA) .....	22
Boise, ID (BOI) .....	10R	Newark, NJ (EWR) .....	04R
Boston, MA (BOS) .....	04R	Oklahoma City, OK (OKC) .....	35R
Charlotte, NC (CLT) .....	36L	Omaha, NE (OMA) .....	14R
Chicago, IL (ORD) .....	14R	Ontario, CA (ONT) .....	26L
Cincinnati, OH (CVG) .....	36C	Philadelphia, PA (PHL) .....	09R
Cleveland, OH (CLE) .....	06R	Phoenix, AZ (PHX) .....	08
Dallas/Fort Worth, TX (DFW) .....	17C	Pittsburgh, PA (PIT) .....	10L
Denver, CO (DEN) .....	35R	Reno, NV (RNO) .....	16R
Des Moines, IA (DSM) .....	31	Salt Lake City, UT (SLC) .....	34L
Detroit, MI (DTW) .....	03R	San Antonio, TX (SAT) .....	12R
El Paso, TX (ELP) .....	22	San Diego, CA (SAN) .....	09
Fairbanks, AK (FAI) .....	01L	San Francisco, CA (SFO) .....	28R
Great Falls, MT (GTF) .....	03	San Juan, PR (SJU) .....	08
Honolulu, HI (HNL) .....	08L	Seattle, WA (SEA) .....	16C
Houston, TX (IAH) .....	26L	St. Louis, MO (STL) .....	30R
Indianapolis, IN (IND) .....	05L	Tampa, FL (TPA) .....	36L
Jacksonville, FL (JAX) .....	07	Tulsa, OK (TUL) .....	36R
Kansas City, MO (MCI) .....	19R	Washington, DC (DCA) .....	01
Los Angeles, CA (LAX) .....	24R	Washington, DC (IAD) .....	01R
Memphis, TN (MEM) .....	36L	Wichita, KS (ICT) .....	01L
Miami, FL (MIA) .....	08R		

**NOTE**—The existing CPA runway is listed. Pending and future changes at some locations will require a revised runway designation.

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**FIREFIGHTING TRAFFIC AREAS**


Pilots are advised to stay clear of Firefighting Traffic Areas. Remain 15 miles from the area of activity. If you must over-fly the area, do so at an altitude of 5000 feet AGL above. However, to remain safe and out of the way of working aircraft, it is best to circumnavigate the area.

The wild-land fire environment can be very complex and involve a large number and variety of aircraft types including fixed and rotary wing aircraft. Some of the aircraft are small single and multi-engine command and control platforms that can be especially difficult to see and may give the appearance that the fire is not staffed. The aircraft participating in firefighting can orbit as far out as 12 miles from the perimeter of the fire. Any intrusion by aircraft not directly involved in the firefighting operation could delay the delivery of much needed retardant or water to ground firefighters and will adversely affect the safety of participating aircraft. Please stay well away from wild-land fires even if you feel that aircraft are not working the fire; they may be en route or unseen.

If you see a fire developing along your route, report it immediately to air traffic control who will advise the US Forest Service. The firefighting community would welcome this information.

The following narratives summarize the FAR Part 93 Special Air Traffic Rules, and Airport Traffic Patterns in effect as prescribed in the rule. This information is advisory in nature and in no way relieves the pilot from compliance with the specific rules set forth in FAR Parts 91 and 93.

Special Airport Traffic Areas prescribed in Part 93 are depicted on Sectional Aeronautical Charts, World Aeronautical Charts, Enroute Low Altitude Charts, and where applicable, on VFR Terminal Area Charts.

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## OPERATIONS RESERVATIONS FOR HIGH DENSITY TRAFFIC AIRPORTS KENNEDY, LAGUARDIA, AND WASHINGTON REAGAN NATIONAL

The Federal Aviation Administration (FAA) has designated New York's Kennedy and LaGuardia Airports and Washington Reagan National Airport as High Density Traffic Airports (HDTA), Title 14, Code of Federal Regulations, part 93, subpart K, and has prescribed air traffic rules and requirements for operating aircraft (excluding helicopters) to and from those airports during certain hours.

Reservations are required for operations from 6 a.m. through 11:59 p.m. local time at LaGuardia Airport and Washington Reagan National Airport. Reservations at Kennedy Airport are required from 3 p.m. through 7:59 p.m. local time.

Reservation procedures are detailed in Advisory Circular 93-1, Reservations for Unscheduled Operations at High Density Traffic Airports. A copy of the advisory circular is available on the FAA website at <http://www.faa.gov>. Reservations for unscheduled operations are allocated through the Enhanced Computer Voice Reservation System (e-CVRS) accessible via telephone or the Internet. This system may not be used to make reservations for scheduled air carrier or commuter flights.

The toll-free telephone number for accessing e-CVRS is 1-800-875-9694 and is available for calls originating within the United States, Canada, and the Caribbean. Users outside the toll-free areas may access e-CVRS by calling the toll number of 703-707-0568. The Internet web address for accessing the e-CVRS is <http://www.fly.faa.gov/ecvrs>. If you have any questions about reservation requirements or are experiencing problems with the system, you may telephone the Airport Reservation Office at the Air Traffic Control System Command Center at (703) 904-4452.

Requests for instrument flight rules (IFR) reservations will be accepted beginning 72 hours prior to the proposed time of operation at the high-density airport. For example, a request for an 11 a.m. reservation on a Thursday will be accepted beginning at 11 a.m. on the previous Monday.

IFR reservations must be obtained prior to IFR landing or takeoff at an HDTA during slot controlled hours. An air traffic control (ATC) clearance does not constitute a reservation. A reservation does not constitute permission to operate at an HDTA if additional operational limits or procedures are required by NOTAM and/or regulation.

Aircraft involved in medical emergencies will be handled by ATC without regard to a reservation after obtaining prior approval of the ATC System Command Center on (703) 904-4452. ATC will accommodate declared other emergency situations without regard to slot reservations.

NOTE: Visual flight rule (VFR) reservations via ATC for unscheduled operations at LaGuardia are not authorized from 7 a.m. through 8:59 a.m. local time and 4 p.m. through 6:59 p.m. local time, Monday through Friday and Sunday evenings, unless otherwise announced by NOTAM. Both IFR and VFR operations during those time periods must obtain an advance reservation through e-CVRS.

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**FSS  
TELEPHONE NUMBERS**

**Flight Service Station (FSS)** facilities provide flight planning and weather briefing services to pilots. FSS services in the contiguous United States, Hawaii and Puerto Rico, are provided by a network of large hub facilities and smaller remote facilities which are interconnected with the hubs.

**Selected remote FSS** facilities across the contiguous United States have variable part-time operating hours. Because of the interconnectivity between remote and hub facilities, all FSS services are available continuously using published telephone numbers and radio frequencies.

**NORTH CENTRAL U.S.**

**MINNESOTA:** Princeton Municipal (PNM)—**PNM FSS**

**MISSOURI:** Columbia, Columbia Regional (COU)—**COU FSS**

**Telephone Information Briefing Service (TIBS)** is a FSS service that provides continuous recordings of meteorological and/or aeronautical information including area and/or route briefings, airspace procedures and special announcements. A touch-tone telephone is required to fully utilize this service.

Further information can be found in the Aeronautical Information Manual (AIM).

**NATIONAL FSS TELEPHONE NUMBER**

Pilot Weather Briefings ..... 1-800-WX-BRIEF (1-800-992-7433)

**OTHER FSS TELEPHONE NUMBERS (except in Alaska)**

TIBS (see description above) ..... 1-877-4TIBS-WX(1-877-484-2799)

Clearance Delivery Only ..... 1-888-766-8267

Lifeguard Flights Only ..... 1-877-LIF-GRD3 (1-877-543-4733)

Flights within DC SFRA & FRZ \* ..... 1-866-225-7410

\* District of Columbia Special Flight Rules Area & Flight Restricted Zone



## KEY to AERODROME FORECAST (TAF) and AVIATION ROUTINE WEATHER REPORT (METAR)

**TAF** KPIT 091730Z 091818 15005KT 5SM HZ.FEW020 WS010/31022KT  
 FM1930 30015G25KT 3SM SHRA OVC015 TEMPO 2022 1/2SM +TSRA  
 OVC008CB  
 FM0100 27008KT 5SM SHRA BKN020 OVC040 PROB40 0407 1SM -RA BR  
 FM1015 18005KT 6SM -SHRA OVC020 BECMG 1315 P6SM NSW SKC

**METAR** KPIT 091955Z COR 22015G25KT 3/4SM R28L/2600FT TSRA OVC010CB  
 18/16 A2992 RMK SLP045 T01820159

Forecast	Explanation	Report
<b>TAF</b>	Message type: <u>TAF</u> -routine or <u>TAF AMD</u> -amended forecast, <u>METAR</u> -hourly, <u>SPECI</u> -special or <u>TESTM</u> -non-commissioned ASOS report	<b>METAR</b>
<b>KPIT</b>	ICAO location indicator	<b>KPIT</b>
<b>091730Z</b>	Issuance time: ALL times in UTC " <u>Z</u> ", 2-digit date, 4-digit time	<b>091955Z</b>
<b>091818</b>	Valid period: 2-digit date, 2-digit beginning, 2-digit ending times	
	In U.S. <b>METAR</b> : <u>COR</u> rected ob; or <u>AUTO</u> mated ob for automated report with no human intervention; omitted when observer logs on	<b>COR</b>
<b>15005KT</b>	Wind: 3 digit true-north direction, nearest 10 degrees (or <u>VaRiaBle</u> ); next 2-3 digits for speed and unit, <u>KT</u> (KMH or MPS); as needed, <u>G</u> ust and maximum speed; 00000KT for calm; for <b>METAR</b> , if direction varies 60 degrees or more, <u>Variability</u> appended, e.g. 180 <u>V</u> 260	<b>22015G25KT</b>
<b>5SM</b>	Prevailing visibility: in U.S., <u>Statute M</u> iles & fractions; above 6 miles in <b>TAF Plus6SM</b> . (Or, 4-digit minimum visibility in meters and as required, lowest value with direction)	<b>3/4SM</b>
	Runway Visual Range: <u>R</u> ; 2-digit runway designator <u>Left</u> , <u>Center</u> , or <u>Right</u> as needed; <u>"/</u> ; <u>Minus</u> or <u>Plus</u> in U.S., 4-digit value, <u>FeeT</u> in U.S., (usually meters elsewhere); 4-digit value <u>Variability</u> 4-digit value (and tendency <u>Down</u> , <u>Up</u> or <u>No change</u> )	<b>R28L/2600FT</b>
<b>HZ</b>	Significant present, forecast and recent weather: see table (on back)	<b>TSRA</b>
<b>FEW020</b>	Cloud amount, height and type: <u>SKy</u> Clear 0/8, <u>FEW</u> >0/8-2/8, <u>SCaTtered</u> 3/8-4/8, <u>BroKeN</u> 5/8-7/8, <u>OverCast</u> 8/8; 3-digit height in hundreds of ft; <u>Towering CU</u> mulus or <u>CumulonimBus</u> in <b>METAR</b> ; in <b>TAF</b> , only <u>CB</u> . <u>Vertical V</u> isibility for obscured sky and height "VV004". More than 1 layer may be reported or forecast. In automated <b>METAR</b> reports only, <u>CLeaR</u> for "clear below 12,000 feet"	<b>OVC010CB</b>
	Temperature: degrees Celsius; first 2 digits, temperature <u>"/</u> last 2 digits, dew-point temperature; <u>Minus</u> for below zero, e.g., M06	<b>18/16</b>
	Altimeter setting: indicator and 4 digits; in U.S., <u>A</u> -inches and hundredths; ( <u>Q</u> -hectoPascals, e.g., Q1013)	<b>A2992</b>

## KEY to AERODROME FORECAST (TAF) and AVIATION ROUTINE WEATHER REPORT (METAR)

Forecast	Explanation	Report
<b>WS010/31022KT</b>	In U.S. <b>TAF</b> , non-convective low-level ( $\leq 2,000$ ft) <u>Wind Shear</u> ; 3-digit height (hundreds of ft); <u>"/";</u> 3-digit wind direction and 2-3 digit wind speed above the indicated height, and unit, <u>KT</u>	<b>RMK</b> <b>SLP045</b> <b>T01820159</b>
<b>FM1930</b>	In <b>METAR</b> , <u>ReMarK</u> indicator & remarks. For example: <u>Sea-Level Pressure</u> in hectoPascals & tenths, as shown: 1004.5 hPa; <u>Temp/dew-point</u> in tenths °C, as shown: temp. 18.2°C, dew-point 15.9°C	
<b>TEMPO 2022</b>	<u>FroM</u> and 2-digit hour and 2-digit minute <b>beginning</b> time: indicates significant change. Each FM starts on new line, indented 5 spaces.	
<b>PROB40 0407</b>	<u>TEMPO</u> rary: changes expected for < 1 hour and in total, < half of 2-digit hour <b>beginning</b> and 2-digit hour <b>ending</b> time period	
<b>BECMG 1315</b>	<u>PROB</u> ability and 2-digit percent (30 or 40): probable condition during 2-digit hour <b>beginning</b> and 2-digit hour <b>ending</b> time period	
<b>BECMG 1315</b>	<u>BEC</u> oMinG: change expected during 2-digit hour <b>beginning</b> and 2-digit hour <b>ending</b> time period	

**Table of Significant Present, Forecast and Recent Weather - Grouped in categories and used in the order listed below; or as needed in TAF, No Significant Weather.**

<b>QUALIFIER</b>			
<b>Intensity or Proximity</b>			
- Light	"no sign"	Moderate	+ Heavy
VC Vicinity; but not at aerodrome; in U.S. <b>METAR</b> , between 5 and 10SM of the point(s) of observation; in U.S. <b>TAF</b> , 5 to 10SM from center of runway complex (elsewhere within 8000m)			
<b>Descriptor</b>			
MI Shallow	BC Patches	PR Partial	TS Thunderstorm
BL Blowing	SH Showers	DR Drifting	FZ Freezing
<b>WEATHER PHENOMENA</b>			
<b>Precipitation</b>			
DZ Drizzle	RA Rain	SN Snow	SG Snow grains
IC Ice crystals	PL Ice pellets	GR Hail	GS Small hail/snow pellets
UP Unknown precipitation in automated observations			
<b>Obscuration</b>			
BR Mist ( $\geq 5/8SM$ )	FG Fog ( $< 5/8SM$ )	FU Smoke	VA Volcanic ash
SA Sand	HZ Haze	PY Spray	DU Widespread dust
<b>Other</b>			
SQ Squall	SS Sandstorm	DS Duststorm	PO Well developed dust/sand whirls
FC Funnel cloud	+FC tornado/waterspout		

- Explanations in parentheses "( )" indicate different worldwide practices.
- Ceiling is not specified; defined as the lowest broken or overcast layer, or the vertical visibility.
- **NWS TAFs** exclude turbulence, icing & temperature forecasts; **NWS METARs** exclude trend fcsts
- Although not used in US, Ceiling And Visibility OK replaces visibility, weather and clouds if: visibility  $\geq 10$  km; no cloud below 5000 ft (1500 m) or below the highest minimum sector altitude, whichever is greater and no CB; and no precipitation, TS, DS, SS, MIFG, DRDU, DRSA or DRSN.

**UNITED STATES DEPARTMENT OF COMMERCE**

**NOAA/PA 96052      National Oceanic and Atmospheric Administration—National Weather Service**

## KEY AIR TRAFFIC FACILITIES

## Air Traffic Control System Command Center

Main Number.....703-904-4400

## RGNL AIR TRAFFIC DIVISIONS

REGION	TELEPHONE
Alaskan	907-271-5464
Central	816-329-2500
Eastern	718-553-4502
Great Lakes	847-294-7202
New England	781-238-7500
Northwest Mountain	425-227-2500
Southern	404-305-5500
Southwest	817-222-5500
Western Pacific	310-725-6500

## AIR ROUTE TRAFFIC CONTROL CENTERS (ARTCCs)

ARTCC NAME	*24 HR RGNL DUTY OFFICE TELEPHONE #	BUSINESS HOURS	BUSINESS TELEPHONE #
Albuquerque	817-222-5006	7:30 a.m.-4:00 p.m.	505-856-4300
Anchorage	907-271-5936	7:30 a.m.-4:00 p.m.	907-269-1137
Atlanta	404-305-5180	7:30 a.m.-5:00 p.m.	770-210-7601
Boston	617-238-7001	7:30 a.m.-4:00 p.m.	603-879-6633
Chicago	847-294-8400	8:00 a.m.-4:00 p.m.	630-906-8221
Cleveland	847-294-8400	8:00 a.m.-4:00 p.m.	440-774-0310
Denver	425-227-1389	7:30 a.m.-4:00 p.m.	303-651-4100
Ft. Worth	817-222-5006	7:30 a.m.-4:00 p.m.	817-858-7300
Houston	817-222-5006	7:30 a.m.-4:00 p.m.	281-230-5300
Indianapolis	847-294-8400	8:00 a.m.-4:00 p.m.	317-247-2231
Jacksonville	404-305-5180	8:00 a.m.-4:30 p.m.	904-549-1501
Kansas City	816-329-3000	7:30 a.m.-4:00 p.m.	913-254-8500
Los Angeles	661-265-8200	7:30 a.m.-4:00 p.m.	661-265-8200
Memphis	404-305-5180	7:30 a.m.-4:00 p.m.	901-368-8103
Miami	404-305-5180	7:00 a.m.-3:30 p.m.	305-716-1500
Minneapolis	847-294-8400	8:00 a.m.-4:00 p.m.	651-463-5580
New York	718-995-5426	8:00 a.m.-4:40 p.m.	516-468-1001
Oakland	310-725-3300	6:30 a.m.-3:00 p.m.	510-745-3331
Salt Lake City	425-227-1389	7:30 a.m.-4:00 p.m.	801-320-2500
Seattle	425-227-1389	7:30 a.m.-4:00 p.m.	253-351-3500
Washington	718-995-5426	8:00 a.m.-4:30 p.m.	703-771-3401

## MAJOR TERMINAL RADAR APPROACH CONTROLS (TRACONS)

TRACON NAME	*24 HR RGNL DUTY OFFICE TELEPHONE #	BUSINESS HOURS	BUSINESS TELEPHONE #
Atlanta	404-305-5180	7:00 a.m.-3:30 p.m.	404-669-1200
Chicago	847-294-8400	8:00 a.m.-4:00 p.m.	847-608-5509
Dallas/Ft. Worth	817-222-5006	7:30 a.m.-4:00 p.m.	972-615-2500
Denver	425-227-1389	7:30 a.m.-4:00 p.m.	303-342-1500
Houston	817-222-5006	7:30 a.m.-4:00 p.m.	281-230-8400
New York	718-995-5426	8:00 a.m.-4:30 p.m.	516-683-2901
Northern CA	310-725-3300	7:00 a.m.-3:30 p.m.	916-366-4001
Potomac	718-995-5426	8:00 a.m.-4:30 p.m.	540-349-7500
Southern CA	310-725-3300	7:30 a.m.-4:00 p.m.	858-537-5800

\*Facilities can be contacted through the Rgnl Duty Officer during non-business hours.

KEY AIR TRAFFIC FACILITIES  
DAILY NAS REPORTABLE AIRPORTS

AIRPORT NAME	*24 HR RGNL DUTY OFFICE TELEPHONE #	BUSINESS HOURS	BUSINESS TELEPHONE #
Albuquerque Intl Sunport, NM	817-222-5006	8:00 a.m.-5:00 p.m.	505-842-4366
Andrews AFB, MD	718-995-5426	8:00 a.m.-4:30 p.m.	301-735-2380
Baltimore/Washington Intl Thurgood Marshall, MD	718-995-5426	8:00 a.m.-4:30 p.m.	410-962-3555
Boston Logan Intl, MA	781-238-7001	7:30 a.m.-4:00 p.m.	617-455-3100
Bradley Intl, CT	617-238-7001	7:30 a.m.-4:00 p.m.	203-627-3428
Burbank/Bob Hope, CA	310-725-3300	7:00 a.m.-5:30 p.m.	818-567-4806
Charlotte Douglas Intl, NC	404-305-5180	8:00 a.m.-4:30 p.m.	704-344-6487
Chicago Midway, IL	847-294-8400	8:00 a.m.-4:00 p.m.	773-884-3670
Chicago O'Hare Intl, IL	847-294-8400	8:00 a.m.-4:00 p.m.	773-601-7600
Cleveland Hopkins Intl, OH	847-294-8400	8:00 a.m.-4:00 p.m.	216-898-2020
Covington/Cincinnati, OH	708-294-7401	8:00 a.m.-4:30 p.m.	606-767-1006
Dallas/Ft. Worth Intl, TX	817-222-5006	8:30 a.m.-5:00 p.m.	972-615-2531
Dayton Cox Intl, OH	847-294-8400	7:30 a.m.-4:00 p.m.	937-454-7300
Denver Intl, CO	425-227-1389	7:30 a.m.-4:00 p.m.	303-342-1600
Detroit Metro, MI	847-294-8400	8:00 a.m.-4:00 p.m.	734-955-5000
Fairbanks Intl, AK	907-271-5936	7:30 a.m.-4:00 p.m.	907-474-0050
Fort Lauderdale Intl, FL	404-305-5180	7:00 a.m.-3:30 p.m.	305-356-7932
George Bush Intercontinental/Houston, TX	817-222-5006	7:30 a.m.-4:00 p.m.	713-230-8400
Hartsfield-Jackson Atlanta Intl, GA	404-305-5180	7:00 a.m.-3:30 p.m.	404-669-1200
Honolulu Intl, HI	310-643-3200	7:30 a.m.-4:00 p.m.	808-840-6100
Houston Hobby, TX	817-222-5006	8:00 a.m.-5:00 p.m.	713-847-1400
Indianapolis Intl, IN	847-294-8400	8:00 a.m.-4:00 p.m.	317-484-6600
Kahului/Maui, HI	310-643-3200	7:30 a.m.-4:00 p.m.	808-877-0725
Kansas City Intl, MO	816-329-3000	7:30 a.m.-4:00 p.m.	816-329-2700
Las Vegas McCarran, NV	310-725-3300	7:30 a.m.-4:00 p.m.	702-262-5978
Los Angeles Intl, CA	310-725-3300	7:00 a.m.-3:30 p.m.	310-342-4900
Louis Armstrong New Orleans Intl, LA	817-222-5006	7:00 a.m.-4:30 p.m.	504-471-4300
Memphis Intl, TN	404-305-5180	7:30 a.m.-4:00 p.m.	901-322-3350
Miami Intl, FL	404-305-5180	7:00 a.m.-4:00 p.m.	305-869-5400
Minneapolis/St. Paul, MN	847-294-8400	8:00 a.m.-4:00p.m.	612-713-4000
Nashville Intl, TN	404-305-5180	7:00 a.m.-3:30 p.m.	615-781-5460
New York Kennedy Intl, NY	718-995-5426	8:00 a.m.-4:30 p.m.	718-656-0335
New York La Guardia, NY	718-995-5426	8:00 a.m.-4:30 p.m.	718-335-5461
Newark Liberty Intl, NJ	718-995-5426	8:00 a.m.-4:30 p.m.	973-645-3103
Norman Y. Mineta San Jose Intl, CA	310-643-3200	7:30 a.m.-4:00 p.m.	408-982-0750
Ontario Intl, CA	310-643-3200	7:30 a.m.-4:00 p.m.	909-983-7518
Orlando Intl, FL	404-305-5180	7:30 a.m.-5:00 p.m.	407-850-7000
Philadelphia Intl, PA	718-995-5426	8:00 a.m.-4:30 p.m.	215-492-4100
Phoenix Sky Harbor Intl, AZ	310-643-3200	7:30 a.m.-4:00 p.m.	602-379-4226
Pittsburgh Intl, PA	718-995-5426	8:00 a.m.-4:30 p.m.	412-269-9237
Portland Intl, OR	425-227-1389	7:30 a.m.-4:00 p.m.	503-493-7500
Raleigh-Durham, NC	404-305-5180	8:00 a.m.-4:30 p.m.	919-840-5544
Ronald Reagan Washington National, DC	718-995-5426	8:00 a.m.-4:30 p.m.	703-413-1535
Salt Lake City, UT	425-227-1389	7:30 a.m.-4:00 p.m.	801-325-9600
San Antonio Intl, TX	817-222-5006	8:00 a.m.-4:30 p.m.	210-805-5507
San Diego Lindbergh Intl, CA	310-725-3300	8:00 a.m.-4:30 p.m.	619-299-0677
San Francisco Intl, CA	310-643-3200	7:00 a.m.-3:30 p.m.	650-876-2883
San Juan Intl, PR	404-305-5180	7:30 a.m.-5:00 p.m.	809-253-8663
Seattle-Tacoma Intl, WA	425-227-1389	7:30 a.m.-4:00 p.m.	206-768-2900
St. Louis Lambert, MO	816-329-3000	7:30 a.m.-4:00 p.m.	314-890-1000
Tampa Intl, FL	404-305-5180	7:30 a.m.-4:00 p.m.	813-371-7700
Ted Stevens Anchorage Intl, AK	907-271-5936	7:30 a.m.-4:00 p.m.	907-271-2700
Teterboro, NJ	718-995-5426	8:00 a.m.-4:30 p.m.	201-288-1889
Washington Dulles Intl, DC	718-995-5426	8:00 a.m.-4:30 p.m.	703-661-6031
West Palm Beach, FL	404-305-5180	8:00 a.m.-4:30 p.m.	561-683-1867
Westchester Co, NY	718-995-5426	8:00 a.m.-4:30 p.m.	914-948-6520

\*Facilities can be contacted through the Rgnl Duty Officer during non-business hours.

Air Route Traffic Control Center frequencies and their remoted transmitter sites are listed below for the coverage of this volume. Bold face type indicates high altitude frequencies, light face type indicates low altitude frequencies. To insure unrestricted IFR operations within the high altitude enroute sectors, the use of 720 channel communications equipment (25 kHz channel spacing) is required.

**®CHICAGO CENTER**H-2-5-10, L-12-27-28-31, A-1  
(KZAU)

Burlington – 135.6  
 Cedar Rapids – 132.8  
 Des Moines – 127.05  
 Dubuque – 133.95 **127.775 125.225**  
 Moline – **135.825** 118.75  
 Ottumwa – 118.15  
 Washington – **134.325 133.35 125.575**

**®DENVER CENTER – 124.8**H-1-2-3-4-5-6, L-8-9-10-11-12-13-14-15  
(KZDV)

Ainsworth – 132.7 127.95  
 Cheyenne – 125.9  
 Colby – **132.175 127.65**  
 Crawford – **135.025** 127.95  
 Goodland – 132.5  
 Grand Island West – 132.7  
 Hayes Center – **127.025**  
 Hill City – 132.5  
 North Platte – 132.7 **124.225**  
 Ogallala – 132.7 **126.325**  
 O'Neill – **135.025** 132.7  
 Rapid City – 127.95  
 Scottsbluff – 127.95  
 Sterling – 118.475

**®KANSAS CITY CENTER – 132.325**H-5-6, L-10-15-16-27, A-2  
(KZKC)

Anthony – **133.2** 118.35  
 Butler – 125.55  
 Chanute – 132.9  
 Chillicothe – 125.25  
 Columbia – **134.5** 134.5 **119.475** 118.4  
 Dodge City – **120.725**  
 Edna – 128.6 **118.125**  
 Emporia – **132.25** 127.725 **124.975** 120.2  
 Farmington – **132.65 120.825** 127.475  
 Garden City – **133.45** 125.2  
 Hallsville – **126.975**  
 Hutchinson – **134.3 132.825** 118.8  
 Independence – **121.65**  
 Kansas City – **127.125**  
 Kirksville – **134.625 133.725** 132.6  
 Liberal – **134.675** 134.0  
 Manhattan – 127.35  
 Maples – 128.35  
 Richland – 128.35 **125.675** 124.1  
 Russell – 124.4  
 St. Charles – 125.9  
 St. Joseph – 127.9  
 St. Louis – **133.15** 128.35  
 Salina – 134.9 **125.175**  
 Springfield – **133.475** 127.5  
 Topeka – **134.725 125.425** 123.8

**®MEMPHIS CENTER**H-5-6-9, L-15-16-17-18-22-25-26  
(KZME)

Malden – 134.65

**® MINNEAPOLIS CENTER – 134.45** 125.5 120.3

H-2-5-10-11, L-10-12-13-14-27-28-31

(KZMP)

Aberdeen – 120.6  
 Alexandria – **133.4** 126.1  
 Bemidji – 134.75  
 Bismark – 125.6 **125.6**  
 Brainerd – 118.05  
 Darwin – 125.5  
 Des Moines – **135.775 118.825** 125.65  
 Dickinson – 124.25  
 Duluth – **134.55** 134.55 127.9  
 Dupree – 126.8  
 Fairmont – 127.75  
 Fargo – **127.35**  
 Farmington – 133.7  
 Ft. Dodge – 134.0  
 Grand Forks – **132.15**  
 Grand Island – 126.05  
 Green Bay – 125.55  
 Hastings – **135.1** 119.4  
 Huron – **126.25**  
 International Falls – 120.9  
 Iron Mountain – 133.45 121.25  
 Jamestown – 126.8 **124.2**  
 La Crosse – 128.6 **118.85**  
 Lincoln – **119.525**  
 Mankato – 135.0  
 Marysville – **134.225** 126.4  
 Mason City – **134.25** 127.3  
 Minot – **127.6** 127.6 118.9  
 Mosinee – 124.4  
 Omaha – **132.725** 128.75 119.6  
 O'Neill – 128.0 **124.875**  
 Pierre – **128.425** 125.1  
 Princeton – 121.05  
 Redwood Falls – **133.075** 127.1 **119.875**  
 Rochester – 132.35  
 Roseau – 134.75  
 Sioux City – **119.725** 124.1  
 Sioux Falls – 132.05  
 Traverse City – 338.3  
 Watertown – 128.5  
 White Cloud – **132.55** 120.85

**® SALT LAKE CITY CENTER**

H-1-2-3, L-9-11-12-13-14

Watford City – **126.85** 126.85

(KZLC)

VHF frequencies available at Flight Service Stations and at their remote communication outlets (RCO's) are listed below for the coverage of this volume. Frequencies in bold type are available all altitudes but recommended for use FL180 and above. "T" indicates transmit only and "R" indicates receive only. RCO's available at NAVAID's are listed after the NAVAID name. RCO's not at NAVAID's are listed by name.

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**COLUMBIA AFSS**

BUTLER VORTAC 115.9T 122.1R  
CHILLICOTHE RCO 122.25  
CLINTON RCO 122.4  
COLUMBIA RCO 119.3 122.2 122.65  
DOGWOOD VORTAC 109.4T 122.1R  
DOWNTOWN RCO **122.6**  
HALLSVILLE VORTAC 114.2T 122.1R  
JEFFERSON CITY RCO 122.25  
JOHNSON COUNTY RCO 122.15  
JOPLIN RCO 122.6  
KANSAS CITY VORTAC 113.25T 122.1R 122.65  
KIRKSVILLE VORTAC 114.6T 122.1R 122.2  
LEBANON RCO 122.5  
MACON VOR/DME 112.9T 122.1R  
MAPLES VORTAC 113.4T 122.1R  
NEOSHO VOR/DME 117.3 122.1R  
POINT LOOKOUT RCO 122.65  
ST JOSEPH VORTAC 115.5T 122.1R 122.3  
SEDALIA RCO 122.05  
SPRINGFIELD VORTAC 116.9T 122.1R **122.55**  
SUNSHINE RCO 122.15  
VICHY VOR/DME 117.7T 122.1R 122.35  
WEST PLAINS RCO 122.15

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**COLUMBUS AFSS**

AINSWORTH RCO 122.4  
ALLIANCE RCO 122.3  
BEATRICE RCO 122.5  
CENTRAL NEBRASKA RCO 122.45  
CHADRON VOR/DME 113.4T 122.1R 122.5  
COLUMBUS RCO 122.2 122.4  
HASTINGS VOR/DME 108.8T 122.1R  
HAYES CENTER VORTAC 117.7T 122.1R  
KEARNEY RCO 122.55  
LEE BIRD RCO **122.5**  
LINCOLN RCO **122.65**  
MC COOK RCO **122.6**  
NORFOLK VOR/DME 109.6T 122.15  
OMAHA RCO **122.35**  
O'NEILL RCO 122.45  
PAWNEE CITY VORTAC 112.4T 122.1R  
SCOTTSBLUFF VORTAC 112.6T 122.1R **122.6**  
SIDNEY VORTAC 115.9T 122.1R **122.45**  
THEDFORD RCO 122.4  
WOLBACH VORTAC 114.8T 122.1R

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**FORT DODGE AFSS**

BURLINGTON RCO 122.65  
CEDAR RAPIDS RCO 122.55  
CHARLES CITY RCO 122.4  
DAVENPORT RCO 122.5  
DENISON RCO 122.25  
DES MOINES RCO 122.65  
DUBUQUE RCO 122.05  
FORT DODGE RCO 122.2 122.3  
GRINNELL RCO **122.35**  
IOWA CITY VORTAC 116.2T 122.1R 122.25  
LAMONI VORTAC 116.7T 122.1R  
MASON CITY RCO 122.6  
NEWTON VOR/DME 112.5T 122.1R  
OMAHA VORTAC 116.3T 122.1R  
OTTUMWA RCO 122.4  
SIOUX CITY VORTAC 116.5T 122.1R 122.45  
SPENCER RCO 122.15  
WATERLOO RCO 122.05  
WAUKON VORTAC 116.6T 122.1R

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**GRAND FORKS AFSS**

BISMARCK RCO 122.2  
BOWMAN RCO 122.4  
DEVILS LAKE RCO 122.3  
DICKINSON RCO 122.2  
FARGO RCO 122.425  
GRAND FORKS RCO 122.2 **122.6**  
GRAND FORKS VOR/DME 114.3T  
HAZEN RCO 122.45  
JAMESTOWN VOR/DME 114.5T 122.2 123.6  
MINOT RCO 122.2  
ROLLA RCO 122.65  
WILLISTON RCO **123.6**

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**GREEN BAY AFSS** 122.2 122.55

RED WING RCO 122.6

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**HURON AFSS**

ABERDEEN VOR/DME 113.0T 122.1R 122.4  
BROOKINGS RCO 122.65  
BUFFALO RCO 122.15  
DUPREE RCO 122.6  
HURON VORTAC 117.6T 122.1R 122.2 122.6 123.6  
MITCHELL RCO 122.3  
MOBRIDGE RCO 122.35  
PHILIP RCO 122.4  
PIERRE RCO 122.2  
RAPID CITY VORTAC 112.3T 122.1R 122.65  
SIOUX FALLS RCO 122.2  
SPEARFISH RCO 122.55  
WATERTOWN RCO 122.5  
WINNER VOR 112.8T 122.1R  
YANKTON RCO 122.55

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**PRINCETON AFSS**

ALBERT LEA RCO 122.05  
ALEXANDRIA RCO 122.6  
ANOKA COUNTY RCO 122.55  
AUSTIN RCO 122.5  
BAUDETTE RCO 122.4  
BEMIDJI RCO 123.6  
BRAINERD RCO 123.65  
CRANE LAKE RCO 122.2  
DARWIN VORTAC 109.0T 122.1R  
DETROIT LAKES RCO 122.5  
DULUTH RCO 122.35  
ELY VOR/DME 109.6T 122.1R  
EVELETH RCO 122.45  
FAIRMONT VOR/DME 110.2T 123.6R  
FARMINGTON VORTAC 115.7T 122.1R  
FERGUS FALLS RCO 122.35  
GRAND MARAIS RCO 122.3  
GRAND RAPIDS RCO 122.05  
HIBBING RCO 122.6  
HUMBOLDT VORTAC 112.4T 122.1R  
INTL FALLS RCO 123.6  
MADISON RCO 122.3  
MANKATO VOR/DME 110.8T 122.1R  
MARSHALL RCO 122.35  
MINNEAPOLIS RCO 122.3  
MONTEVIDEO RCO 122.45  
MORA RCO 122.4  
MORRIS RCO 122.25  
NODINE VORTAC 117.9T 122.1R  
OWATONNA RCO 122.25  
PARK RAPIDS VOR/DME 110.6T 122.1R  
PRINCETON RCO 122.2  
REDWOOD FALLS RCO 122.4  
THIEF RIVER FALLS VOR/DME 108.4T 122.1R 123.6R  
ROCHESTER RCO 122.45  
ROSEAU RCO 122.25  
ST CLOUD RCO 122.5  
WARROAD RCO 122.55  
WILLMAR RCO 122.15  
WINONA RCO 122.15  
WORTHINGTON VOR/DME 110.6T 122.1R 123.6R

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**SAINT LOUIS AFSS**

BIBLE GROVE VORTAC 109.0T 122.05R  
CAPE GIRARDEAU VOR/DME 112.9T 122.1R **122.4**  
CAPITAL VORTAC 112.7T 122.1R 122.25  
CENTRALIA VORTAC 115.0T 122.1R  
CHAMPAIGN (URBANA) RCO 122.45  
DECATUR RCO 122.3  
FARMINGTON VORTAC 115.7T 122.1R 122.3  
FORISTELL VORTAC 110.8T 122.1R  
MALDEN VORTAC 111.2T 122.1R  
MARION VOR/DME 110.4T 122.1R  
MATTOON VOR/DME 109.4T 123.6R  
QUINCY VORTAC 113.6T 122.1R 122.5  
ST LOUIS VORTAC 117.4T 122.1R 122.2 122.6 122.45  
ST LOUIS RGNL RCO 122.45 122.6  
SAMSVILLE VOR/DME 116.6T 122.1R  
SPINNER RCO 122.25  
SPIRIT of ST LOUIS RCO 122.2 124.75  
VANDALIA VORTAC 114.3T 122.1R

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**WICHITA AFSS**

ANTHONY VORTAC 112.9T 122.1R  
CHANUTE RCO 122.35  
DODGE CITY RCO 122.35  
EMPORIA RCO 122.3  
FT LEAVENWORTH RCO 122.35  
GARDEN CITY RCO 122.45  
GOODLAND RCO 122.4  
GREAT BEND RCO 122.5  
HAYS RCO 122.3  
HILL CITY RCO **122.65**  
HUTCHINSON RCO 122.05  
LIBERAL RCO 122.4  
MANHATTAN RCO **122.65**  
MANKATO VORTAC 109.8T 122.1R  
MC PHERSON RCO 122.15  
OSWEGO VORTAC 117.6T 122.1R  
PARSONS RCO 122.35  
RUSSELL RCO 122.6  
SALINA RCO 122.4  
STROTHER RCO 122.5  
TOPEKA RCO 122.45  
ULYSSES RCO 122.3  
WICHITA RCO 122.2 **122.65**

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**FLIGHT STANDARDS DISTRICT OFFICES (FSDO)**

Below is a list of FSDO's in the area of coverage of this directory. These offices serve the aviation industry and the general public on matters relating to certification and operation of general aviation aircraft. Address letters to Manager, Flight Standards District Office—Federal Aviation Administration.

**IOWA**

Des Moines FSDO  
3753 Convenience Blvd  
Ankeny, IA 50021  
Telephone: 515-289-3840

**KANSAS**

Wichita FSDO  
1801 Airport Road  
Wichita, KS 67209  
Telephone: 316-941-1200

**MINNESOTA**

Minneapolis FSDO  
6020 28TH Ave. South, Room 201  
Minneapolis, MN 55450  
Telephone: 612-713-4211

**MISSOURI**

Kansas City FSDO  
901 Locust, Room 403  
Kansas City, MO 64106  
Telephone: 816-329-4000

St. Louis FSDO  
10801 Pear Tree Lane  
St. Ann, MO 63074  
Telephone: 314-429-1006

**NEBRASKA**

Lincoln FSDO  
3431 Aviation Rd, Suite 120  
Lincoln, NE 68524  
Telephone: 402-475-1738

**NORTH DAKOTA**

Fargo FSDO  
4620 Amber Valley Pkwy  
Fargo, ND 58104  
Telephone: 701 277-1245

**SOUTH DAKOTA**

Rapid City FSDO  
909 St. Joseph Street  
Suite 700  
Rapid City, SD 57701  
Telephone: 605-737-3050



PREFERRED IFR ROUTES

A system of preferred routes has been established to guide pilots in planning their route of flight, to minimize route changes during the operational phase of flight, and to aid in the efficient orderly management of the air traffic using federal airways. The preferred IFR routes which follow are designed to serve the needs of airspace users and to provide for a systematic flow of air traffic in the major terminal and en route flight environments. Cooperation by all pilots in filing preferred routes will result in fewer traffic delays and will better provide for efficient departure, en route and arrival air traffic service.

The following lists contain preferred IFR routes for the low altitude stratum and the high altitude stratum. The high altitude list is in two sections; the first section showing terminal to terminal routes and the second section showing single direction route segments. Also, on some high altitude routes low altitude airways are included as transition routes.

The following will explain the terms/abbreviations used in the listing:

1. Preferred routes beginning/ending with an airway number indicate that the airway essentially overlies the airport and flights are normally cleared directly on the airway.
2. Preferred IFR routes beginning/ending with a fix indicate that aircraft may be routed to/from these fixes via a Standard Instrument Departure (SID) route, radar vectors (RV), or a Standard Terminal Arrival Route (STAR).
3. Preferred IFR routes for major terminals selected are listed alphabetically under the name of the departure airport. Where several airports are in proximity they are listed under the principal airport and categorized as a metropolitan area; e.g., New York Metro Area.
4. Preferred IFR routes used in one direction only for selected segments, irrespective of point of departure or destination, are listed numerically showing the segment fixes and the direction and times effective.
5. Where more than one route is listed the routes have equal priority for use.
6. Official location identifiers are used in the route description for VOR/VORTAC nav aids.
7. Intersection names are spelled out.
8. Navaid radial and distance fixes (e.g., ARD201113) have been used in the route description in an expediency and intersection names will be assigned as soon as routine processing can be accomplished. Navaid radial (no distance stated) may be used to describe a route to intercept a specified airway (e.g., MIV MIV101 V39); another navaid radial (e.g., UIM UIM255 GSW081); or an intersection (e.g., GSW081 FITCH).
9. Where two nav aids, an intersection and a navaid, a navaid and a navaid radial and distance point, or any navigable combination of these route descriptions follow in succession, the route is direct.
10. The effective times for the routes are in UTC. During periods of daylight saving time effective times will be one hour earlier than indicated. All states observe daylight saving time except Arizona, Puerto Rico and the Virgin Islands. Pilots planning flight between the terminals or route segments listed should file for the appropriate preferred IFR route.
11. (90–170 incl) altitude flight level assignment in hundred of feet.
12. The notations "pressurized" and "unpressurized" for certain low altitude preferred routes to Kennedy Airport indicate the preferred route based on aircraft performance.
13. High Altitude Preferred IFR Routes are in effect during the following time periods unless otherwise noted.  
 Sun ..... 1300–2259 local time.  
 Mon thru Fri ..... 0701–2259 local time.  
 Sat ..... 0701–1459 local time.
14. Use current SIDs and STARs for flight planning.
15. For high altitude routes, the portion of the routes contained in brackets [ ] is suggested but optional. The portion of the route outside the brackets will likely be required by the facilities involved.

LOW ALTITUDE

Terminals	Route	Effective Times (UTC)
<b>DES MOINES (DSM)</b>		
Memphis (MEM) .....	V175 MAW .....	0000–2359
<b>KANSAS CITY METRO AREA</b>		
Chicago Midway (MDW) .....	PIA MOTIF–STAR .....	0000–2359
Chicago O'Hare (ORD) .....	EXCEL V116 PIA V262 BDF V10 PLANO .....	0000–2359
Indianapolis (IND) .....	EXCEL V116 UIN V50 .....	0000–2359
Louisville (SDF) .....	ANX V12 COU V44 HODGS V175 VIH V178 FAM V190 PXV V4 .....	0000–2359
	or	
	ANX V159 AUGIE V234 VIH V178 FAM V190 PXV V4 .....	0000–2359
St. Louis (STL) .....	LAKES–DP COU TRAKE TRAKE–STAR .....	0000–2359
Terre Haute (HUF) .....	EXCEL V116 UIN V50 .....	0000–2359
<b>MINNEAPOLIS METRO AREA</b>		
Chicago Midway (MDW) .....	V2 LNR V171 RFD V128 V8 JOT .....	0000–2359
Chicago O'Hare (ORD) .....	V2 V97 KRENA .....	0000–2359
<b>ST. LOUIS METRO AREA</b>		
Chicago Midway (MDW) .....	CARDS–DP SPI V9 PNT V69 JOT .....	0000–2359

Terminals	Route	Effective Times (UTC)
Chicago O'Hare (ORD).....	(at or blo 170) CARDS-DP SPI V9 PNT V227 PLANO .....	0000-2359
Cleveland (CLE).....	(non-turbojets) TURBO-DP DEC VHP V14 MIE V210 ROD ABERZ-STAR .....	
Columbus (CMH).....	TOY V12 J134 GBEES CVG V5 JOGER .....	0000-2359
Indianapolis (IND) .....	(Turbojets) GATWY-DP VHP .....	
	or	
Kansas City (MCI).....	(Non-turbojets) TURBO-DP DEC VHP .....	0000-2359
<b>SPRINGFIELD (SGF)</b>	OZARK-DP MCM BQS-STAR .....	
Indianapolis (IND) .....	V190 FAM V72 BIB V12 KELLY .....	0000-2359
	or	
Springfield (SPI) .....	V190 PXV V11 .....	0000-2359
Terre Haute (HUF).....	V63 UIN V50 SPI .....	0000-2359
	V190 PXV V7 .....	0000-2359
<b>WICHITA (ICT)</b>		
Indianapolis (IND) .....	V12 EMP V234 ENL V72 BIB V12 KELLY .....	0000-2359
Louisville (IIU).....	V350 CNU V132 SGF V190 PXV V4 .....	0000-2359
Terre Haute (HUF).....	V12 EMP V234 ENL V72 BIB .....	0000-2359

## HIGH ALTITUDE

Terminals	Route	Effective Times (UTC)
<b>KANSAS CITY (MCI)</b>		
Baltimore (BWI).....	LAKES-DP COU STL J24 VHP ROD J152 J162 MGW EMI-STAR .....	0000-2359
Chicago O'Hare (ORD).....	ROYAL-DP JTHRO IRK BDF BDF-STAR .....	
Cleveland Metro Area (CLE) (CGF) (BKL) (LNN) (LPR) .....	OBK CRL HIMEZ-STAR.....	0000-2359
Dallas/Fort Worth (DFW) .....	RACER TUL UKW .....	
Detroit Metro-Wayne (DTW).....	MKG POLAR-STAR.....	0000-2359
Kennedy (JFK).....	LAKES-DP COU STL J24 VHP ROD J29 JHW J70 LVZ LENDY-STAR .....	
La Guardia (LGA) .....	ROYAL-DP JTHRO IRK BDF JOT J146 ETG MIP-STAR .....	1100-0400
Milwaukee (MKE) .....	ROYAL-DP JTHRO IRK BDF JOT VEENA-STAR .....	
Newark (EWR).....	ROYAL-DP JTHRO IRK BDF JOT J146 GIJ J554 CRL J584 SLT FQM-STAR .....	1100-0400
Washington Dulles (IAD).....	LAKES-DP COU STL J24 VHP J80 J30 BUCKO JASEN-STAR .....	
	or	
	LAKES-DP COU STL J24 VHP J80 AIR MGW MGW 121 VERNI ESL ROYIL-STAR.....	1100-0400
	or	
	(GPS or DME/DME IRU equipped)	
	or	
	LAKES-DP COU STL J24 VHP J80 AIR MGW VERNI ESL SHNON (RNAV)-STAR .....	1100-0400
Washington Natl (DCA).....	LAKES-DP COU STL J24 VHP J80 J30 BUCKO BUCKO-STAR .....	
	or	
	LAKES-DP COU STL J24 VHP J80 J30 SHAAR WZRRD-STAR .....	1100-0400
	or	
	LAKES-DP COU STL J24 VHP J80 J30 SHAAR ELDEE (RNAV)-STAR.....	1100-0400
<b>LINCOLN (LNK)</b>		
Chicago O'Hare (ORD).....	FOD DBQ JVL-STAR .....	0700-2359
<b>MINNEAPOLIS (MSP)</b>		
Atlanta (ATL).....	ZMBRO-DP ODI J30 BRIBE BDF ENL ENL162 PLESS TINGS J45 BNA RMG-STAR .....	1100-0400
	or	

PREFERRED IFR ROUTES

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Terminals	Route	Effective Times (UTC)
	(RNAV only) ZMBRO-DP ODI J30 BRIBE ENL ENL162 PLESS TINGS J45 BNA ERLIN (RNAV)-STAR.....	1100-0400
Baltimore (BWI).....	DLL J34 AIR J162 MGW EMI-STAR .....	
Chicago Midway (MDW).....	DBQ CVA MOTIF-STAR .....	1100-0400
Chicago O'Hare (ORD).....	RST JVL-STAR .....	0000-2359
Cleveland Metro Area (CLE) (CGF) (BKL) (LNN) (LPR) .....	COULT-DP DLL J34 GRR HIMEZ-STAR .....	
Dallas/Fort Worth (DFW) .....	J21 IRW UKW .....	
Denver (DEN).....	FSD J114 SNY LANDR-STAR .....	
Detroit Metro Area (PTK), (YIP), (ARB) (DET), (CYQG) .....	DLL BAE MKG LAN SPRTN-STAR .....	
Fort Lauderdale (FLL).....	ROCHESTER-DP ALO J233 J45 STL J45 BNA J73 SZW J43 PIE FORTL-STAR .....	
	or (DME/DME-IRU or GPS) MSP ROCHESTER-DP ALO J233 J45 STL J45 BNA J73 SZW JINGL (RNAV)-STAR .....	
Fort Myers (RSW) .....	(DME/DME-IRU or GPS) ODI J30 BRIBE BDF ENL ENL162 PLESS J45 BNA J73 SZW TYNEE (RNAV)-STAR .....	1100-0300
Kansas City (MKC) .....	FOD RBA-STAR .....	
Kennedy (JFK).....	DLL BAE J70 JHW J70 LVZ LENDY-STAR .....	0000-2359
La Guardia (LGA).....	DLL BAE J34 J146 ETG MIP-STAR .....	
Madison (MSN).....	ODI MSN .....	0700-2359
Marco Island (MKY) .....	(DME/DME/IRU or GPS) ODI J30 BRIBE BDF ENL ENL162 PLESS J45 BNA J73 SZW PIKKR (RNAV)-STAR .....	
Memphis (MEM).....	ALO J233 STL J35 FAM GQE-STAR .....	
Miami (MIA).....	ROCHESTER-DP ALO J233 J45 STL J45 BNA J73 SZW J43 PIE CYY-STAR .....	
	or (/E, /G, /R, /J, /L, /Q) MSP ROCHESTER-DP ALO J233 J45 STL J45 BNA J73 SZW J43 PIE DEEDS (RNAV)-STAR .....	
Milwaukee (MKE) .....	ODI MSN V2 WAITS .....	0700-2359
Myrtle Beach (MYR).....	EARND ELANR EMMLY ERECO III RYANS .....	
Naples (APF).....	(GPS required) ODI J30 BRIBE BDF ENL ENL162 PLESS J45 BNA J73 SZW PIKKR (RNAV)-STAR .....	
Nashville (BNA).....	ODI J30 BRIBE BDF ENL ENL162 PLESS J45 .....	1100-0400
Newark (EWR).....	DLL BAE J34 CRL J584 SLT FQM-STAR .....	
Oakland (OAK).....	ABR J32 MLD J158 MVA ECA .....	
Orlando (ORL) (MCO) .....	ODI J30 BRIBE BDF ENL ENL162 PLESS J45 ATL J89 OTK LEESE-STAR .....	1100-0400
	or (GPS or DME/DME-IRU equipped) ODI J30 BRIBE BDF ENL ENL162 PLESS J45 ATL J89 OTK PIGLT (RNAV)-STAR.....	1100-0400
Palm Beach (PBI) .....	(GPS or DME/DME-IRU equipped) ROCHESTER-DP ALO J233 J45 STL J45 BNA J73 SZW WLACE .....	
Philadelphia (PHL).....	COULT-DP DLL BAE J34 CRL CXR EWC JST BUNTS-STAR.....	
Phoenix (PHX).....	ONL LBF PUB ALS J102 ZUN FOSSL-STAR .....	
Pottstown (PTW).....	COULT-DP DLL BAE J34 CRL CXR EWC JST	
St. Louis (STL).....	RST ALO J233 CNOTA RIVRS-STAR .....	
Salt Lake City (SLC).....	ABR J158 DDY J202 OCS OGD.....	
San Francisco (SFO).....	ABR J32 FMG ILA PYE .....	
Sarasota/Bradenton (SRQ).....	ODI J30 BRIBE BDF ENL ENL162 PLESS J45 BNA J73 SZW CLAMP-STAR .....	1100-0400
Tampa (TPA).....	ODI J30 BRIBE BDF ENL ENL162 PLESS J45 BNA J73 SZW DARBS-STAR .....	1100-0400

Terminals	Route	Effective Times (UTC)
Washington Dulles (DCA).....	DLL J34 SHAAR WZRRD-STAR .....	
	or	
	DLL J34 SHAAR ELDEE (RNAV)-STAR .....	
Washington Natl (IAD).....	DLL J34 AIR MGW MGW121 VERNI ESL ROYIL-STAR .....	
	or	
	(GPS or DME/DME-IRU equipped) DLL J34 AIR MGW VERNI SHNON (RNAV)-STAR .....	
West Palm Beach (PBI) .....	(GPS or DME/DME-IRU equipped) ROCHESTER-DP ALO J233 J45 STL J45 BNA J73 SZW CTY GULLO (RNAV)-STAR .....	
	or	
	ROCHESTER-DP ALO J233 J45 STL J45 BNA J73 SWZ CTY LLAKE-STAR .....	1100-0400
<b>OMAHA (OMA)</b>		
Chicago O'Hare (ORD).....	FOD DBQ JVL-STAR .....	0700-2359
<b>ROCHESTER (RST)</b>		
Chicago O'Hare (ORD).....	RST JVL-STAR .....	0000-2359
<b>ST LOUIS (STL)</b>		
Baltimore (BWI).....	GATWY-DP IIU J526 BKW J147 CSN OTT-STAR .....	
Boca Raton (BCT).....	(DME/DME/IRU OR GPS) PLESS-DP BNA J73 SZW PRRIE (RNAV)-STAR .....	
Boston (BOS).....	GATWY-DP ROD J29 JHW J82 ALB GDM GDM-STAR .....	
Chicago Midway (MDW).....	CARDS-DP SPI MOTIF-STAR .....	1200-0400
Chicago O'Hare (ORD).....	CARDS-DP BDF BDF-STAR, .....	0000-2359
Cleveland Metro Area (CLE) (CGF) (BKL) (LNN) (LPR) .....	GATWY-DP JIGSY J134 JUDDI CVG ABERZ-STAR .. or (turbojets) GATWY-DP JIGSY J134 JUDDI CVG ABERZ-STAR .....	
Columbus (CMH).....	GATWY-DP ROD V210 GUNNE .....	
Dallas/Fort Worth (DFW) .....	LINDY-DP MAP RZC FSM BYP .....	
Detroit Metro Area (PTK), (YIP), (ARB) (DET), (CYQG) .....	GATWY-DP VHP FWA CRUXX-STAR .....	
	GATWY-DP VHP FWA V96 VVV VVV051 POOFE.... (all others) PLESS-DP BNA J73 SZW J43 PIE FORTL-STAR.....	
Fort Lauderdale (FLL).....	or	
	(DME/DME/IRU OR GPS) PLESS-DP BNA J73 SZW JINGL (RNAV)-STAR.....	
Fort Myers (FMY).....	(DME/DME/IRU OR GPS TURBOJET) LINDBERGH-DP MAW VUZ J39 MGM J41 SZW TYNEE (RNAV)-STAR.....	
Houston George Bush Intcntl (IAH) .....	(Turbojets-GPS or DME/DME-IRU equipped) LINDY-DP LIT J180 SWB TXMEX (RNAV)-STAR .. or (non-advanced NAV only) LINDY-DP LIT J180 SWB DAS-STAR .....	
Houston Hobby (HOU) .....	(GPS or DME/DME-IRU equipped) LINDY-DP LIT J180 SWB ROKIT (RNAV)-STAR .....	
	or	
	(non-advanced NAV only) LINDY-DP LIT J180 SWB DAS-STAR .....	
La Guardia (LGA).....	GATWY-DP ROD J29 J146 ETG MIP-STAR .....	
Miami (MIA).....	(all others) PLESS-DP BNA J73 SZW J43 PIE CYY-STAR .....	
	or	
	(DME/DME/IRU OR GPS TURBOJET) PLESS-DP BNA J73 SZW SSCOT (RNAV)-STAR .....	
Orlando Executive (ORL).....	PLESS-DP BNA J73 SZW OTK LEESE-STAR .....	
	or	
	(GPS or DME/DME-IRU equipped) PLESS BNA J73 SZW OTK PIGLT (RNAV)-STAR .....	1100-0400

Terminals	Route	Effective Times (UTC)
Orlando Intl (MCO) .....	(GPS or DME/DME-IRU equipped) PLESS BNA J73 SZW OTK PIGLT (RNAV)-STAR .....	1000-0400
Tampa (TPA) .....	LINDY-DP MAW VUZ J41 SZW DARBS-STAR .....	1100-0400
Washington Dulles (IAD).....	BLUES-DP IIU J526 BKW ROYIL-STAR .....	
	or	
Washington Natl (DCA) .....	BLUES-DP IIU J526 BKW SHNON (RNAV)-STAR ... GATWY-DP IIU J526 BKW WZRRD-STAR .....	
	or	
West Palm Beach (PBI) .....	GATWY-DP IIU J526 BKW ELDEE (RNAV)-STAR .... (DME/DME/IRU OR GPS) PLESS-DP BNA J73 SZW WLACE (RNAV)-STAR .....	

**SPECIAL HIGH ALTITUDE DIRECTIONAL ROUTES**

Terminals	Route	Effective Times (UTC)
Traffic overflying Kansas City VORTAC (MCI to IAD): MCI .....	J24 IIU J8 HVQ ROYIL-STAR .....	
	or	
	J24 IIU J8 HVQ SHNON (RNAV)-STAR.....	
Traffic overflying Lamoni VORTAC (LMN) to IAD: LMN .....	(GPS or DME/DME-IRU equipped) J64 FWA APE AIR MGW VERNI ESL ROYIL-STAR .....	
	or	
	(GPS or DME/DME-IRU equipped) J64 FWA APE AIR MGW VERNI ESL SHNON (RNAV)-STAR .....	
Traffic overflying Saint Louis VORTAC (STL) to IAD: STL .....	IIU J8 HVQ ROYIL-STAR .....	
	or	
	IIU J8 HVQ SHNON (RNAV)-STAR.....	



## Q-ROUTES

### Q ROUTES REGULATORY

**Q1, Q3, Q5, Q7, Q9 and Q11 are preferred single direction (Southbound) Q routes; flight planning Northbound not authorized.**

Q routes are RNAV routes that require the use of GNSS or DME/DME/IRU RNAV, unless otherwise indicated. Please note that this section does not apply to Q routes in the Gulf of Mexico. Gulf of Mexico Q routes are explained in the Southeast and South Central A/FD volumes. Q routes listed in this A/FD volume have at least part of one of their leg segments within this volume's area of coverage.

GNSS and DME/DME/IRU RNAV operations are authorized along Q routes at FL 180 and above. GNSS and DME/DME/IRU RNAV MEAs will only be published if above FL 180.

DME facilities that have been assessed for RNAV operations are listed below. Q routes with no DME facilities listed are limited to GNSS RNAV operations only. Those routes will have an enroute chart note "GNSS REQUIRED".

Route	Segment	DME
<b>Q1</b>	ELMAA-ERAVE	BTG, OLM, HQM, HUH, UBG
	ERAVE-EASON	BTG, OLM, HQM, HUH, LTJ, CVO, DSD, OED, UBG, ONP, EUG
	EASON-EBINY	CVO, DSD, OED, BTG, UBG, ONP, EUG, LMT
	EBINY-ENVIE	CVO, OED, EUG, LMT, RBL, ENI, ONP, FJS
	ENVIE-ETCHY	OED, PYE, OAK, LIN, ECA, LMT, RBL, ENI, SAC, FJS
<b>Q2</b>	ETCHY-POINT REYES	LIN, ECA, RBL, ENI, SAC, OAK
	BOILE-HEDVI	HEC, PDZ, OCN, PMD, LAX, RZS, IPL, TRM, PKE, BLH, EED, BZA, GBN, PXR
	HEDVI-HOBOL	BZA, GBN, BLH, EED, PXR, IPL, TFD, DRK, TUS
	HOBOL-ITUCO	TFD, GBN, BLH, PXR, TUS, CIE, SSO
	ITUCO-NEWMAN	EWM, TFD, PXR, CIE, SSO, TUS, TCS
<b>Q3</b>	FEPOT-FAMUK	OLM, TOU, HQM, CVO, BTG, DSD, LTJ, UBG, ONP, EUG
	FAMUK-FRFLY	BTG, DSD, OED, CVO, EUG, ONP, UBG, RBL, LMT
	FRFLY-FINER	OED, EUG, RBL, LMT, ENI, CVO, FJS
<b>Q4</b>	FINER-FOWND	OED, PYE, ECA, LIN, OAK, ENI, RBL, LMT, SAC, FJS
	FOWND-POINT REYES	LIN, ECA, PYE, RBL, SAC, ENI
	BOILE-HEDVI	HEC, PDZ, OCN, PMD, LAX, RZS, IPL, TRM, PKE, BLH, EED, BZA, GBN, PXR
	HEDVI-SCOLE	EED, BLH, BZA, GBN, TRM, IPL, TFD
	SCOLE-SPTFR	EED, BLH, BZA, GBN, TRM, IPL, TFD
<b>Q5</b>	SPTFR-ZEBOL	EED, IPL, BZA, GBN, TFD, PXR, BLH
	ZEBOL-SKTR	PXR, BLH, BZA, GBN, TFD, TUS, SSO, CIE, SVC, TCS
	SKTR-EL PASO	EWM, CUS, SVC, TCS, SSO, CIE, ELP, DMN, CME
	HAROB-HISKU	OLM, ONP, CVO, EUG, HQM, UBG, BTG, LTJ, DSD, HUH
	HISKU-HARPR	ONP, CVO, EUG, LTJ, DSD, UBG, BTG, RBL, OED, LMT, FJS, LKV
<b>Q7</b>	HARPR-HOMEG	CVO, EUG, OED, RBL, LMT, ENI, FJS, LKV
	HOMEG-HUPTU	SAC, PYE, LIN, OAK, ECA, LMT, RBL, ENI, OED, FJS
	HUPTU-STIKM	OAK, ECA, PYE, LIN, SAC, ENI, RBL
<b>Q9</b>	JINMO-JOGEN	CVO, HQM, LTJ, UBG, BTG, ONP, IMB, EUG, OLM, DSD, YKM, PDT, SEA
	JOGEN-JUNEJ	LTJ, IMB, UBG, EUG, CVO, RBL, LMT, FMG, DSD, LKV, OED, BTG
	JUNEJ-JAGWA	RBL, LMT, FMG, LIN, SAC, ECA, ENI, MOD, SWR, OAK, LKV, CZQ, AVE, SNS
<b>Q11</b>	JAGWA-AVENAL	OAK, MOD, ECA, EHF, PRB, AVE, SNS, CZQ
	SUMMA-SMIGE	OLM, UBG, SEA, YKM, BTG, ONP, IMB, HQM, PDT, EUG, LTJ, CVO, DSD, OED, EPH, MWH
	SMIGE-SUNBE	IMB, UBG, EUG, IMB, RBL, LMT, FMG, SAC, OED, CVO, LKV, DSD, BTG
	SUNBE-REBRG	RBL, LMT, FMG, SAC, ECA, MVA, CZQ, OAK, EHF, PMD, LKV, LIN, MOD, AVE, OED, SWR
	REBRG-DERBB	CZQ, PMD, EHF, LAX, RZS, AVE, MOD, ECA
<b>Q13</b>	PAAGE-PAWLI	EPH, UBG, CVO, EUG, HQM, YKM, OLM, PDT, BTG, ONP, IMB, LTJ, DSD, LKV, OED, SEA
	PAWLI-PITVE	EUG, FMG, SAC, IMB, LKV, OED, DSD, RBL, LMT, CVO, REO
	PITVE-PUSHH	FMG, SAC, LIN, SWR, MOD, OAL, RBL, LKV, LMT, MVA, CZQ
<b>Q15</b>	PUSHH-LOS ANGELES	SAC, ECA, FMG, LIN, OAL, MOD, EHF, LAX, PMD, PDZ, HEC, OCN, CZQ, AVE, RZS
<b>Q19</b>	All segments	None; GNSS required
<b>Q20</b>	All segments	None; GNSS required
<b>Q21</b>	PLESS-NASHVILLE	ENL, GQO, PXV, BNA, IJU, FAM, BWG, CSX
	CORONA-HONDS	CNX, ABQ, ACH, ONM, TXO, LVS, TCC, CME
	HONDS-UNNOS	CNX, INK, CME, TXO, TCC
	UNNOS-FUSCO	FST, ACH, INK, CME, SGT, TXO, TCC
	FUSCO-JUNCTION	ABI, CWK, CSI, INK, LZZ, JCT, SGT, STV, FST
<b>Q22</b>	JONEZ-RAZORBACK	BYP, EOS, TUL, TXK, ADM, RZC, OKM
	GUSTI-OYSTY	AEX, DAS, MCB, LLA, BTR, LCH, HRV, LFT, LEV
	OYSTY-ACMES	RQR, GCV, MCB, BTR, PCU, GPT, HRV, LEV, SJI
	ACMES-CATLN	SJI, MGM, MCB, BFM, GPT, GCV, HRV, CEW, MVC, PCU, MEI

**Q-ROUTES**

Route	Segment	DME
<b>Q23</b>	FORT SMITH–RAZORBACK	OKM, RZC, EOS, TUL
<b>Q24</b>	LAKE CHARLES–BATON ROUGE BATON ROUGE–IRUBE IRUBE–PAYTN	AEX, DAS, LCH, MCB, LFT, BTR  AEX, LEV, MCB, LCH, RQR, HRV, BTR, GCV, MCB, PCU, SJI, LBY GCV, MCB, JYU, PCU, MEI, HRV, CEW, SJI
<b>Q25</b>	MEEOW–WALNUT RIDGE WALNUT RIDGE–WLSUN WLSUN–POCKET CITY	ELD, MEM, LIT, FAM, RZC MEM, STL, BWG, PXV, ENL, FAM, ARG, BNA, CSX, TTH BWG, PXV, ENL, BNA, TTH
<b>Q26</b>	WALNUT RIDGE–DEVAC	LIT, JKS,GQO, MEM, BNA, FAM, ARG, DYR, VUZ, RMG
<b>Q27</b>	FORT SMITH–ZALDA	OKM, SGF, RZC, EOS, TUL
<b>Q28</b>	GRAZN–PYRMD PYRMD–HAKAT HAKAT–ESTEE ESTEE–POCKET CITY	EIC, LIT, ELD, OKM, TXK ARG, LIT, FAM, ELD, SGF, RZC, MEM, TXK ARG, LIT, FAM, SGF, MEM ARG, CSX, FAM, PXV, ENL, MEM, STL, BWG, TTH, BNA
<b>Q29</b>	HARES–MEMPHIS MEMPHIS–SIDAE SIDAE–POCKET CITY	MEM, ARG, LIT, JAN, ELD, SQS MEM, PXV, BNA, BWG, ARG, ENL PXV, TTH, BWG, ENL
<b>Q30</b>	SIDON–VULCAN	GLH, MEM, VUZ, JAN, JYU, MEI, MGM, SQS, RMG
<b>Q31</b>	DHART–JODOX JODOX–MARVELL MARVELL–TIIDE TIIDE–POCKET CITY	SQS, LIT, TXK SQS, LIT, ELD, MEM, ARG ARG, BWG, PXV, FAM, LIT, MEM, ENL, TTH BWG, PXV, ENL, TTH
<b>Q32</b>	EL DORADO–GAGLE GAGLE–CRAMM CRAMM–NASHVILLE NASHVILLE–SWAPP	AEX, JAN, MEM, SQS, SWB, ELD, LIT, TXK JAN, SQS, MEM, ARG, VUZ, BNA, LIT BWG, MEM, VUZ, BNA, GQO BWG, IJU, PXV, VXV, BNA, GQO
<b>Q33</b>	DHART–LITTLE ROCK LITTLE ROCK–PROWL	AEX, ELD, LIT, TXK, SWB, ARG, MEM, SQS ELD, SGF, FAM, LIT, ARG, MEM, RZC, CSX, STL
<b>Q34</b>	TEXARKANA–MATIE MATIE–MEMPHIS MEMPHIS–SWAPP KIMBERLY–NEERO	LIT, SWB, TXK, BYP, EIC, ELD, SQS LIT, ARG, MEM, ELD, SQS BWG, ARG, MEM, MKL, SQS,PXV, BNA, GQO, IJU, VXV LTJ, PDT, DSD, IMB, LKV, BOI, REO, BAM, SDO
<b>Q35</b>	NEERO–WINEN WINEN–CORKR CORKR–DRAKE	BQU, SDO, BAM, REO, BVL, ILC, DTA, ELY, CDC, MLF, BCE CDC, BCE, BLD, ILC, MLF, TBC, PGS, INW, DRK TBC, BCE, BLD, DRK, PGS, FLG, GCN, INW, TFD
<b>Q36</b>	RAZORBACK–TWITS TWITS–DEPEC DEPEC–NASHVILLE NASHVILLE–SWAPP	RZC, MEM, SGF, BUM, TUL, EOS, FAM, ARG, LIT MEM, GQO, BNA, BWG, FAM, ARG, PXV, IJU GQO, BWG, BNA, PXV, IJU VXV, BWG, BNA, GQO, PXV, IJU
<b>Q38</b>	ROKIT–INCIN INCIN–LAREY LAREY–BESOM	DAS, LCH, SWB, IAH, LFK, HUB, AEX JAN, MCB, SWB, AEX JAN, JYU, MEI, SQS, VUZ
<b>Q40</b>	ALEXANDRIA–DOOMS DOOMS–WINAP WINAP–MISLE	AEX, SWB, LCH, JAN, HEZ, MCB JAN, SQS, MEI, MCB MEI, VUZ, JYU
<b>Q42</b>	KIRKSVILLE–STRUK STRUK–DANVILLE  DANVILLE–MUNCIE MUNCIE–HIDON  HIDON–BUBAA BUBAA–PSYKO PSYKO–BRNAN BRNAN–MAALS MAALS–SUZIE SUZIE–EAST TEXAS EAST TEXAS–ELIOT	CID, IOW, UIN, LMN, IRK, BDF, STL, DEC, ENL, CSX ENL, IOW, UIN, BDF, DEC, STL, CSX, SPI, TTH, BVT, JOT, VHP, OXI, ENL, OKK, OBK, GIJ, FWA, GSH, IRK  GIJ, SPI, BDF, OBK, OKK, VHP, BVT, DEC, GSH, FWA, JOT, TTH, OXI, ROD, FLM FLM, VHP, GSH, TTH, GIJ, OKK, FWA, ROD, OXI, CRL, GSH, APE, DJB, DXO, HNN, AIR, HVQ, CXR, EWC  AIR, APE, HNN, CXR, HVQ, EWC, DJB AIR, APE, DJB, CXR, HNN, EWC, SLT, CSN, JHW, ETG, PSB PSB, JHW, EWC, AIR, ETG, CSN, EMI, SLT EMI, SLT, CSN, EWC, PSB, ETG, SAX, RBV, HNK, HUO, SIE ETG, EMI, CSN, HUO, SIE, JFK, PSB, SLT, HNK JFK, EMI, PSB, SLT, HNK, SIE, RBV, SAX, HUO, CYN HUO, RBV, EMI, CYN, SAX, JFK, PSB, HNK
<b>Q104</b>	DEFUN–HEVVN HEVVN–PLYER PLYER–SWABE SWABE–ST PETERSBURG ST PETERSBURG– CYPRESS	PIE, PZD, CRG, SZW, TAY, JYU, CEW, MGM, OTK, CRG PIE, ORL, OMN, SRQ, TAY, LAL, CRG, SZW, PZD PIE, ORL, OMN, SRQ, TAY LAL, ORL, OMN, SRQ, PHK, PIE PHK, PBI, SRQ, PIE, VRB, ORL, FLL, LAL, OMN

Route	Segment	DME
Q106	SMELZ-BULZI BULZI-DRABK DRABK-GADAY	LAL, ORL, OMN, PHK, PIE, CRG, VRB, TAY, OTK, PZD, AMG, SZW AMG, PZD, TAY, CRG, SZW, MGM, OTK, JYU, CEW, SJI MGM, PZD, OTK, JYU, SZW, CEW, SJI
Q108	GADAY-HKUNA	CEW, JYU, MGM, SZW, RRS, PZD, MAI, OTK, GEF, MGR, TAY, AMG, CRG
Q110	THNDR-JAYMC JAYMC-RVERO RVERO-KPASA KPASA-BRUTS BRUTS-GULFR GULFR-FEONA	SRQ, VRB, PHK, PIE, LAL, VKZ, ORL, PBI VKZ, VRB, PHK, PIE, LAL, SRQ, ORL, OMN, PBI, DHP OMN, PIE, PBI, SRQ, ORL, LAL SRQ, VRB, ORL, PHK, TAY, PIE, OMN, OTK, LAL, CRG, SZW, AMG OMN, AMG, CRG, SZW, PIE, TAY, PZD, OTK TAY, MCN, PZD, CRG, OTK, SZW, AMG, MCN, ATL, MGM
Q112	DEFUN-HEVVN HEVVN-INPIN	PIE, OTK, CRG, OMN, LAL, SZW, SRQ, ORL, VRB JYU, PZD, CEW, SZW, MGM, OTK, TAY, AMG, PIE, CRG
Q116	KPASA-BRUTS BRUTS-GULFR GULFR-CEEYA	SRQ, VRB, ORL, PHK, TAY, PIE, OMN, OTK, LAL, CRG, SZW, AMG OMN, AMG, CRG, TAY, LAL, PZD, SZW, OTK MCN, AMG, PZD, OTK, SZW, TAY
Q118	KPASA-BRUTS BRUTS-LENIE	SRQ, VRB, ORL, PHK, TAY, PIE, OMN, OTK, LAL, CRG, SZW, AMG OMN, AMG, CRG, TAY, LAL, PZD, SZW, OTK, MCN
Q501	VIXIS-GOPHER	ECK, FNT, APN, SSM, GRR, MBL, SAW, BAE, MNM, DLL, AUW, ODI, STE, FGT, EAU, DLH, GEP, BRD, MCW, MSP, ASP, TVC, GRB, RWF
Q502	GOPHER-SOBME KENPA-GOPHER	FGT, BRD, MCW, GEP, ABR, FAR, DLH, ODI, RWF, FSD SSM, FNT, ECK, APN, SAW, GRB, BAE, DLL, AUW, ODI, FGT, DLH, EAU, MCW, MSP, MNM, ASP, TVC, GEP, RWF, BRD
Q504	GOPHER-SOBME NOTAP-CESNA	FGT, DLH, ODI, MCW, ABR, FAR, MSP, GEP, RWF, FSD, BRD SSM, ECK, APN, GLR, PLN, ISQ, MNM, DLL, RHI, DLH, GEP, FGT, ODI, ASP, TVC, SAW, GRB, BRD
Q505	CESNA-HEMDI OMAGA-RIMBE RIMBE-CESNA CESNA-HEMDI	ODI, GEP, DLH, FGT, RWF, FAR, AXN, FSD, ABR, DLL, BRD SSM, TVC, ASP, SAW, GRB SSM, RHI, DLL, DLH, GEP, FGT, TVC, SAW, GRB, BRD, ODI GEP, DLH, FGT, RWF, FAR, AXN, FSD, ABR, BRD, ODI, GRB

### RNAV Routing Pitch and Catch Points

The purpose of this section of the Special High Altitude Routes is to present user routing options for flight within the initial HAR Phase I expansion airspace. Users are able to fly user-preferred routes, referred to as non-restrictive routing (NRR), between specific fixes described by **pitch** (entry into) and **catch** (exit out of) fixes in the HAR airspace. Pitch points indicate an end of departure procedures, preferred IFR routings, or other established routing programs where a flight can begin a segment of NRR. The catch point indicates where a flight ends a segment of NRR and joins published arrival procedures, preferred IFR routing, or other established routing programs.

The HAR Phase I expansion airspace is defined as that airspace at and above FL 350 in fourteen of the western and southern Air Route Traffic Control Centers (ARTCCs). The airspace includes Minneapolis (ZMP), Chicago (ZAU), Kansas City (ZKC), Denver (ZDV), Salt Lake City (ZLC), Oakland (ZOA), Seattle Centers (ZSE), Los Angeles (ZLA), Albuquerque (ZAB), Fort Worth (ZFW), Memphis (ZME), and Houston (ZHU). Jacksonville (ZJX) and Miami (ZMA) are included for east-west routes only.

To develop a flight plan, select pitch and catch points based upon your desired route across the Phase I airspace. Filing requirements to pitch points, and from catch points, remain unchanged from current procedures. For the portion of the route between the pitch and catch points, non-restrictive routing is permitted.

Where pitch points for a specific airport are not identified, aircraft should file an appropriate departure procedure (DP), or any other user preferred routing prior to the NRR portion of their routing. Where catch points for a specific airport are not identified aircraft should file, after the NRR portion of their routing, an appropriate arrival procedure or other user preferred routing to their destination.

Additionally, information concerning the location and schedule of Special Use Airspace (SUA) and Air Traffic Control Assigned Airspace (ATCAA) can be found on the Web Site: <http://sua.faa.gov/sua/Welcome.do>. ATCAA refers to airspace in the high altitude structure supporting military and other special operations. Users are encouraged to file around these areas when they are scheduled to be active, thereby avoiding unplanned reroutes around them.

In conjunction with the HAR program RNAV routes have been established to provide for a systematic flow of air traffic in specific portions of the enroute flight environment. The designator for these RNAV routes begin with the letter Q, for example, Q-501. Where those routes aid in the efficient orderly management of air traffic they will be published as preferred IFR routes.



### HAR Special High Altitude Pitch (entry) Points for Nonrestrictive Routing for Airports Located Outside HAR Phase I Expansion Airspace

Westbound traffic originating outside of HAR airspace entering ZMP, ZAU, ZKC and ZME can begin non-restrictive routing over any of the following pitch points (listed from north to south):

DLH, CESNA, GEP, BAE, MKG, GRR, PMM, GSH, CADIZ, FWA, VHP, FLM, IIU, PXV, SGF, RZC, BNA, SALMS, VUZ, BOYDD, MIE.

Traffic originating outside of HAR airspace may also begin Nonrestrictive Routing upon crossing the pitch line depicted on the associated graphic.

### HAR Special High Altitude Pitch Points for Airports Located Within (below) HAR Phase I Expansion Airspace

This section lists pitch points for airports within the HAR Phase I expansion airspace.

Albuquerque	ABQ, GUP, HANOS or ZUN
Austin	ABI, FUZ, JCT, MQP, NAVYS, SJT or TNV
Boca Raton, FL	TBIRD KPASA Q118 LENIE or TBIRD KPASA Q116 CEEYA or TBIRD KPASA Q110 FEONA or TBIRD SMELZ Q106 BULZI or TBIRD SMELZ Q106 GADAY
Burbank includes Santa Monica and Van Nuys	GMN, MARKS or DAG LAS or HEC EED or PMD BLH
Chicago Terminal Area	IOW, PLL275065, MZV or BAE
Dallas/Fort Worth Terminal Area	ABI, LBB, GTH, CDS, MRMAC, IRW, TUL, MLC, TXK ELD, SWB or Aircraft destined the Chicago terminal area Except MDW EAKER MIDEE BDF BRADFORD-STAR Or MLC J105 SGF BDF BRADFORD-STAR
Denver Terminal Area	PUB, DVC, DBL, RLG, EKR, LAR, MBW, CYS, BFF, HANKI, NATTI, ASHBY, BELKE, CABET, WEEDS, OR BINKE
Fort Lauderdale (or) Fort Lauderdale Executive	THNDR KPASA Q118 LENIE or THNDR KPASA Q116 CEEYA or THNDR KPASA Q110 FEONA or THNDR SMELZ Q106 GADAY or THNDR SMELZ Q106 BULZI
Houston Bush	LIT, ELD, MLC, JCT or Aircraft destined Atlanta Terminal Area LCH Q24 PAYTN HONIE-RNAV STAR or Aircraft joining J37 to the northeast, GUSTI SID GUSTI Q22 CATLN or Aircraft joining J42 to the northeast, EL DORADO SID ELD Q32 J42

Houston Hobby	LIT, ELD, MLC, JCT, or Aircraft joining J42 to the northeast, EL DORADO SID ELD Q32 J42
Jacksonville, FL	TAY
Kansas City Terminal Area	TIFTO, CATTS or KENTN
Los Angeles, includes Ontario	GMN, RZS or DAG LAS or TRM EED or TRM PKE
Las Vegas	DOBNE, MOSBI, NICLE, TRALR or ZELOT
Long Beach includes Orange County	GMN SNS, EHF, LANDO or TRM PKE or TRM EED
Memphis	BNA, HAAWK, SALMS or SQS
Miami Terminal Area	WINCO KPASA Q118 LENIE or WINCO KPASA Q116 CEEYA or WINCO KPASA Q110 FEONA or WINCO SMELZ Q106 GADAY or WINCO SMELZ Q106 BULZI
Milwaukee	GREAS
Minneapolis Terminal Area*	ONL, ABR, FAR, OBH, OVR, FOD
New Orleans Terminal Area	AEX, MEI, SQS, KAPLN
Orlando Terminal Area	WEBBS BRUTS Q118 LENIE or WEBBS GULFR Q116 CEEYA or WEBBS BULZI Q106 GADAY or WEBBS FEONA or WEBBS BULZI
Palm Beach, FL	TBIRD KPASA Q118 LENIE or TBIRD KPASA Q116 CEEYA or TBIRD KPASA Q110 FEONA or TBIRD SMELZ Q106 BULZI or TBIRD SMELZ Q106 GADAY
Palm Springs	TRM JOTNU BLD or TRM EED or TRM PKE
Phoenix	CHILY, CIE, CULTS, RSK, DOVEE, GCN, MESSI, SJN, DRYHT or MOHAK
Portland, OR	PDT, TIMEE

Salt Lake City	HVE, DTA, MLF, BCE, OAL, MTU, BVL, OCS, TWF, DBS, BPI or TCH J56 CHE or TCH J173 EKR
Saint Louis	VIH, MAP, MYERZ, MCM or HLV MCI
San Antonio Terminal Area	FUZ, SJT, MQP, ABI or Aircraft North of LFK, LFK or Aircraft South of HUB, ELA or Aircraft South of LFK and North of HUB LCH
San Diego	TRM EED or TRM PKE or TRM JOTNU BLD
San Francisco Bay Area Oakland San Jose	GALLI, INSLO, HAROL JSICA GALLI, INSLO, HAROL JSICA GALLI or INSLO
Seattle	BLUIT
Southwest Florida Airports (RSW/FMY)	JOCKS KPASA Q118 LENIE or JOCKS KPASA Q116 CEEYA or JOCKS KPASA Q110 FEONA or JOCKS SMELZ Q106 GADAY or JOCKS SMELZ Q106 BULZI
Tampa Terminal Area	FEONA, BULZI or BRUTS Q118 LENIE or GULFR Q116 CEEYA or BULZI Q106 GADAY

\*MSP area departures with destinations east of 93 degrees west longitude via preferred IFR routing.

### **Catch Points for Airports Located Outside HAR Phase I Expansion Airspace**

This section lists exit points for aircraft destined to specific destinations which are outside the HAR Phase I airspace.

Atlanta Terminal Area	Aircraft through ZME airspace from ZKC airspace east of FAM, Pless Q19 BNA or Aircraft through ZME airspace from ZKC airspace west of FAM, ARG Q26 DEVAC or MEM or Aircraft through ZME airspace from ZID airspace west of a line from VHP to BWG, BNA or Aircraft through ZME airspace from ZID airspace east of a line from VHP to BWG, BWG or Aircraft through ZME airspace from ZFW airspace, MEM or MEI HONIE (RNAV)-STAR or PATYN HONIE (RNAV)-STAR
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Baltimore–Washington*	GIJ, GEP, FLM, IIU, BAE, VHP, WHETT, BNA or VUZ
Boston*	GEP, CRL, ECK, IIU, BNA or VUZ
Buffalo*	GEP, CRL
Hartford Bradley*	GEP, CRL
Canton–Akron*	GIJ, VHP, GEP
Charlotte	BNA, VUZ
Cincinnati Terminal Area	BNA, PXV or Aircraft north of SLC, JOT or Aircraft over or south of SLC, ENL or SLC or SFO departures, ENL, JOT
Cleveland Terminal Area*	OBK
Detroit Terminal Area	BAE MKG POLAR–STAR or VHP FWA MIZAR–STAR
Detroit Young	VHP FWA or LAN SPRTN–STAR
Indianapolis Terminal Area	BIB, SPI, JOT
Louisville	ENL, MEM
Newark*	GEP, VHP, FLM, IIU, BNA, VUZ or IOW GIJ J554 CRL J584 SLT FQM
New York Kennedy*	GEP, VHP, FLM, IIU, BNA, VUZ or DBQ J94 PMM J70 LVZ LENDY–STAR
New York LaGuardia*	GIJ, GEP, VHP, BAE, FLM, IIU, BNA, VUZ
Philadelphia Terminal Area*	GIJ, GEP, VHP, BAE, WHETT, BNA, VUZ
Pittsburgh Terminal Area*	VHP, GIJ, BAE, GEP
Pontiac	LFD, LAN, VHP, FWA, GEP
Providence	JHW, HEMDI, CESNA, GEP, GRB, TVC, ASP, VHP, IIU, BNA, VUZ
Raleigh–Durham	FLM, IIU, BNA, VUZ
Toronto Terminal Area	ECK, SVM, SSM, GEP
Teterboro*	GEP, VHP, CRL, BNA, VUZ
Washington Dulles/National*	GIJ, GEP, FLM, IIU, BAE, VHP, WHETT, BNA, VUZ
White Plains*	GEP, VHP, CRL, FLM, IIU, BNA, VUZ
Willow Run*	LAN, LFD, VHP, FWA, GEP

\*Eastbound aircraft over flying ZMP center airspace entering Toronto center airspace, file direct SSM or via J63, J522, Q505, Q504, Q502, Q501

or

Entering ZAU or ZOB airspace from north of DPR J16 MCW, GEP

or

Entering ZAU or ZOB airspace from or south of DPR J16 MCW, CRL.

**Catch Points for Airports Located Within (below) HAR Phase I Expansion Airspace**

This section lists exit points for aircraft destined to airports which are below HAR Phase I airspace.

Albuquerque Terminal Area	CURLY CURLY-STAR or ESPAN FRIHO-STAR or LAVAN LAVAN-STAR or FTI FRIHO-STAR or MIERA MIERA-STAR
Austin Terminal Area	Aircraft west of a north-south line at LFK, BLEWE or Aircraft east of a north-south line at LFK, IDU or LLO
Boca Raton, FL	CEW DEFUN Q112 INPIN SHDAY (RNAV)-STAR Aircraft through ZHU remain south of ZME and ZTL airspace or DEFUN Q112 INPIN SHDAY (RNAV)-STAR Aircraft through ZHU remain south of ZME and ZTL airspace or SZW INPIN SHDAY (RNAV)-STAR
Chicago Midway	CVA MOTIF-STAR or PIA MOTIF-STAR or DBQ CVA MOTIF-STAR or LMN MOTIF-STAR
Chicago O'Hare Terminal Area	GEP DLL MSN JVL JANESVILLE-STAR or TVC PULLMAN-STAR or FOD DBQ JVL JANESVILLE-STAR or MCW JANESVILLE-STAR or GCK IRK BRADFORD-STAR
Dallas/Fort Worth Terminal Area	IRW, LOSZY, FSM, LIT, SQS, MLU, AEX, JUMBO, TQA, TURKI, HEATR Aircraft through ZME airspace from north and west of PXV, RZC, Q23 FSM or Aircraft through ZME airspace from east of PXV, PXV Q25 MEEOW or Aircraft through ZME airspace from J6 down to, but not including J52, LIT, SQS or Aircraft through ZME airspace from J52 and south of J52, SQS

Denver Terminal Area	<p>OATHE DANDD-STAR  or  HGO QUAIL-STAR  or  LOPEC-STAR  or  ALS LARKS-STAR  or  HBU POWDR-STAR  or  EKR TOMSN-STAR  or  CHE TOMSN-STAR  or  BFF LANDR-STAR  or  LBF SAYGE-STAR  or  HCT SAYGE-STAR  or  RSK LARKS-STAR  or  LAA QUAIL-STAR  or  GCK J154 RYLIE DANDD-STAR  or  OCS J154 ALPOE RAMMS-STAR  or  YANKI J114 SNY LANDR-STAR  or  Aircraft filed BIL or east, MBW RAMMS-STAR</p>
Ft Lauderdale or Ft Lauderdale Executive	<p>CEW DEFUN Q104 PIE SWAGS (RNAV)-STAR  Aircraft through ZHU airspace remain south ZME and ZTL  airspace  or  SZW HEVFN Q104 PIE SWAGS (RNAV)-STAR</p>
Houston Bush	<p>CRP, CVE, LLO, LUKIY, SAT  or  Aircraft south and east of LLA, JEPEG  or  MISLE Q40 AEX  or  Aircraft north and east of SJI, SJI  or  Aircraft east of PXV, PXV Q31 DHART SWB  or  Aircraft north and west of PXV, PROWL Q33 DHART SWB</p>
Houston Hobby	<p>CRP, ELLVR, SAT, SWB  or  Aircraft south and east of GIRLY, KCEEE  or  Aircraft north and east of SJI, SJI  or  BESOM Q38 ROKIT ROKIT-STAR  or  Aircraft east of PXV, PXV Q29 HARES SWB  or  Aircraft north and west of PXV, PROWL Q33 DHART SWB</p>
Jacksonville	<p>GADAY ZOOSS TAY  Aircraft through ZHU airspace remain south of ZME and ZTL  airspace  or  ZOOSS TAY</p>

John Wayne–Orange County	HEC, PGS, BLD or Aircraft south of TBC from ZAB airspace, HIPPI
Kansas City Terminal Area	LMN BRAYMER–STAR or PWE ROBINSON–STAR or EMP JHAWK–STAR
Las Vegas	DILCO, LIDAT, IGM or Aircraft over PGA or north of PGA KSINO or Aircraft south of PGA PGS LYNSY
Los Angeles Terminal Area	Aircraft North of TBC, HEC, PGS or Aircraft South of TBC from ZAB airspace, HIPPI, MESSI
Miami Terminal Area	CEW DEFUN Q104 CYY DEEDS (RNAV)–STAR Aircraft through ZHU airspace remain south ZME and ZTL airspace or SZW HEVVN Q104 CYY DEEDS (RNAV)–STAR
Minneapolis Terminal Area	Aircraft from north, west, south, FAR GOPHER–STAR or RWF SKETR–STAR or ALO KASPR–STAR or BRD GOPHER–STAR or BAE EAU CLAIRE–STAR or FOD TWOLF–STAR
Memphis Terminal Area	ARG, BWG, FSM, PXV, LIT, RZC, SQS, VUZ, BNA, GQO, ELD
Naples, FL	CEW DEFUN Q104 PLYER PIKKR (RNAV)–STAR Aircraft through ZHU AIRSPACE remain south of ZME and ZTL airspace or SZW HEVVN Q104 PLYER PIKKR (RNAV)–STAR
Nashville	CCT, GHM, GUITR, TINGS, VOLLS
New Orleans Terminal Area	BLUEZ, GPT, LCH, MCB, TBD, FATSO
Oakland	ILA or KATTS PAMMY or Aircraft over or south of a line ILC J16 DVC REANA KATTS PAMMY or Aircraft from north of ILC, JOPER PAMMY or KATTS PAMMY or Aircraft over or south of ILC, REANA KATTS PAMMY
Orlando Terminal Area	GADAY Q108 CLAWZ LEESE–STAR Aircraft through ZHU airspace remain south of ZME/ZTL airspace or OTK LEESE–STAR

Palm Beach, FL	CEW DEFUN Q112 INPIN GULLO (RNAV)–STAR Aircraft through ZHU airspace remain south of ZME and ZTL airspace or SZW INPIN GULLO (RNAV)–STAR
Phoenix	CORKR DRK or Aircraft from ZDV airspace, GUP or Aircraft from ZAB airspace, ZUN, MOHAK, SSO or VYLLA TUS
Phoenix Satellites	FLG, SSO, MOHAK or VYLLA, TUS
Portland, OR Terminal Area	ARNIT BONVL–STAR or LARNO BONVL–STAR or MOXEE MOXEE–STAR
St. Louis Terminal Area	SGF TRAKE–STAR or BUM TRAKE–STAR or ANX TRAKE–STAR or LMN IRK RIVRS–STAR or RBS VANDALIA–STAR
Salt Lake City Terminal Area	JNC J12 HELPR SPANE–STAR or EKR MTU SPANE–STAR or BCE DTA–TCH or MLF DTA–TCH or BVL BONNEVILLE–STAR or BYI BEARR–STAR or PIH BEARR–STAR or DBS BRIGHAM CITY–STAR or JAC BRIGHAM CITY–STAR or BPI BRIGHAM CITY–STAR or OCS BRIGHAM CITY–STAR
San Diego Terminal Area	EED, LAX, GBN
Santa Ana	HEC, PGS, BLD, HIPPI
San Antonio Terminal Area	IDU, CSI, JCT, LLO, CRP, LRD or West of a north–south line at LFK, BLEWE or East of a north–south line at LFK, IDU

San Francisco	FMG GOLDEN GATE-STAR or MVA MODESTO-STAR or ENI GOLDEN GATE-STAR or OAL MODESTO-STAR or South of a line ILC to DVC, REANA KATTS OAL MODESTO-STAR
San Jose	FMG HYP EL NIDO-STAR or OAL HYP EL NIDO-STAR or ENI GOLDEN GATE-STAR or South of a line ILC to DVC, REANA KATTS KICHI CANDA EL NIDO-STAR
Seattle Terminal Area	Aircraft From northeast, southeast, south, TEMPL GLASR-STAR or SUNED CHINS-STAR or BTG OLYMPIA-STAR
Southwest Florida Airports RSW and FMY	CEW DEFUN Q104 SWABE JOSFF-STAR Aircraft through ZHU airspace remain south of ZME and ZTL airspace or SZW HEVVN Q104 SWABE JOSFF-STAR
Tampa Terminal Area	CEW DEFUN Q104 HEVVN DARBS-STAR Aircraft through ZHU airspace remain south of ZME and ZTL airspace or SZW DARBS-STAR
Tucson	DRK PXR or MOHAK GBN

## VISUAL FLIGHT RULES (VFR) WAYPOINTS

VFR Waypoint names consist of five letters beginning with "VP". Stand-alone VFR Waypoints are portrayed on VFR Charts using the same four-point star symbol currently used for Instrument Flight Rules (IFR) Waypoints.

VFR Waypoints collocated with Visual Checkpoints (Visual Reporting Points) are portrayed with a Visual Check Point flag. The VFR Waypoint name is shown in parentheses adjacent to the Visual Check Point name.

VFR Waypoint names are not intended to be pronounceable and shall not be used in ATC communications.

CAUTION: GPS accuracy necessitates extra vigilance for other aircraft when navigating near any fix retrieved from a GPS database.

## BALTIMORE–WASHINGTON TERMINAL AREA CHART/FLYWAY CHART

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPAXI	_____	N38°34.57' /W076°20.38'
VPONX	_____	N39°06.65' /W076°55.92'
VPOOP	_____	N38°56.32' /W076°36.90'

## BOSTON HELICOPTER CHART

VPBAY	_____	N42°16.17' /W070°49.48'
VPBLT	_____	N42°19.67' /W070°53.40'
VPCGS	_____	N42°22.08' /W071°03.13'
VPEVS	_____	N42°23.52' /W071°04.10'
VPFEN	_____	N42°12.58' /W071°08.88'
VPFRE	_____	N42°25.03' /W071°12.32'
VPGVL	_____	N42°21.88' /W070°52.18'
VPHAM	_____	N42°30.13' /W071°07.15'
VPIIK	_____	N42°20.37' /W071°15.93'
VPQUA	_____	N42°12.10' /W071°04.78'
VPQUB	_____	N42°12.60' /W070°59.83'
VPSPF	_____	N42°24.20' /W071°09.47'
VPTOB	_____	N42°31.42' /W070°59.82'
VPWAN	_____	N42°36.88' /W071°19.45'

## BOSTON TERMINAL AREA CHART

VPCHH	Cohasset	N42°13.58' /W070°48.94'
VPCTH	Cuttyhunk Harbor	N41°25.50' /W070°55.03'
VPFRA	Framingham Shopping Center	N42°18.16' /W071°23.65'
VPHOL	Woods Hole	N41°31.06' /W070°40.60'
VPHUL	Hull	N42°18.20' /W070°55.30'
VP LPT	Nantucket Great Point	N41°23.41' /W070°02.78'
VP NED	Needham Towers	N42°18.51' /W071°14.64'
VPPEA	Peabody Shopping Center	N42°32.52' /W070°56.69'
VPROC	Rockingham Race Track	N42°46.29' /W071°13.57'
VPSCI	Scituate	N42°11.89' /W070°43.69'
VP TPT	Nantucket Third Point	N41°18.51' /W070°03.37'
VP TUC	Tuckernuck	N41°18.31' /W070°15.43'
VPWAK	Wakefield	N42°30.72' /W071°05.24'
VPWAN	Wang Towers	N42°36.88' /W071°19.45'

## CHARLOTTE SECTIONAL CHART

VPATO	_____	N34°37.37' /W076°31.47'
VPAVA	_____	N34°57.00' /W077°16.50'
VPBFE	_____	N32°16.38' /W080°47.50'
VPBRA	_____	N36°13.75' /W076°08.08'
VPGCE	_____	N36°03.90' /W076°36.42'
VPGHI	_____	N35°15.30' /W075°31.25'
VPGIO	_____	N35°32.50' /W076°37.33'
VPKJU	_____	N35°26.58' /W076°10.22'
VPLMN	_____	N34°55.43' /W077°46.42'
VPMAB	_____	N34°42.20' /W077°03.50'
VPNPO	ISLE OF PALMS	N32°47.78' /W079°46.45'
VPOKY	_____	N35°06.53' /W075°59.17'
VPREP	_____	N32°33.98' /W080°21.82'
VPRRS	_____	N33°25.45' /W079°07.60'
VPUMO	_____	N35°35.63' /W075°28.08'
VPWZO	_____	N36°00.87' /W075°40.07'
VPZIE	_____	N32°01.62' /W080°53.42'

**CHICAGO SECTIONAL CHART**

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPCOH	_____	N31°49.35' / W081°51.07'

**DENVER TERMINAL AREA CHART/FLYWAY CHART**

VPBEN	_____	N39°44.28' / W104°26.00'
VPFTG	_____	N39°44.35' / W104°32.75'
VPNIC	NORTH INTERCHANGE	N39°58.90' / W104°59.27'

**HOUSTON TERMINAL AREA CHART/FLYWAY CHART**

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPBWY	_____	N29°46.25' / W095°09.24'
VPDTN	_____	N29°46.59' / W095°22.01'
VPGLA	_____	N30°08.32' / W095°06.62'
VPGLB	_____	N30°07.80' / W094°55.70'
VPKTY	_____	N29°47.05' / W095°44.92'
VPPLN	_____	N30°08.80' / W095°50.42'
VPRSN	_____	N29°30.00' / W095°41.00'
VPSND	_____	N29°23.13' / W095°28.86'
VPSNT	_____	N29°49.29' / W094°53.94'
VPTNE	_____	N29°47.48' / W095°03.34'
VPTNW	_____	N29°47.06' / W095°33.81'
VPTRK	_____	N29°24.06' / W095°10.44'

**JACKSONVILLE SECTIONAL CHART**

VPAFI	_____	N31°49.35' / W081°51.07'
VPAFY	_____	N30°07.00' / W081°21.33'
VPBEC	_____	N29°46.25' / W081°15.10'
VPCJA	_____	N29°30.00' / W081°06.00'
VPCKY	_____	N28°46.50' / W082°34.00'
VPCNY	_____	N28°30.00' / W080°45.00'
VPDAD	DADE CITY	N28°22.57' / W082°11.25'
VPDAR	_____	N31°22.38' / W081°24.13'
VPDFI	_____	N29°00.17' / W081°20.85'
VPDUT	_____	N27°37.70' / W082°09.10'
VPEAR	CLEARWATER BEACH	N27°58.67' / W082°49.83'
VPEGV	_____	N29°39.97' / W081°24.87'
VPFFU	_____	N28°57.08' / W081°00.33'
VPGPE	ST PETE BEACH	N27°43.50' / W082°44.67'
VPHAA	_____	N30°04.02' / W083°40.02'
VPHUC	_____	N28°19.87' / W082°43.77'
VPIWA	MIDWAY	N31°48.33' / W081°25.85'
VPJMY	_____	N29°26.92' / W081°18.27'
VPKER	LAKE PARKER	N28°04.00' / W081°56.00'
VPLEV	_____	N28°48.00' / W080°52.00'
VPLJA	_____	N29°00.00' / W080°51.00'
VPMAI	_____	N30°50.02' / W084°56.63'
VPTLH	_____	N30°32.70' / W083°52.22'
VPXZY	_____	N29°35.00' / W083°10.00'
VPYIW	_____	N30°42.28' / W081°27.25'
VPZIE	_____	N32°01.62' / W080°53.42'

**KANSAS CITY SECTIONAL CHART**

VPAGO	_____	N37°50.33' / W090°29.03'
VPBEK	_____	N37°15.07' / W092°30.67'
VPDEN	_____	N37°46.75' / W092°19.20'
VPENE	_____	N37°44.75' / W091°55.78'
VPSSS	_____	N36°59.48' / W091°00.88'
VPFME	_____	N37°41.00' / W092°38.33'
VPGXY	_____	N37°15.50' / W091°40.17'
VPMBE	_____	N37°11.08' / W090°27.92'
VPMKE	_____	N37°24.47' / W092°40.00'
VPROV	_____	N38°01.72' / W091°12.81'
VPUTT	_____	N37°52.05' / W092°01.20'



WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPWOC	_____	N37°18.03' /W092°18.63'
VPWRO	_____	N37°39.12' /W091°45.68'
VPXIZ	_____	N37°26.60' /W092°05.42'

### KANSAS CITY TERMINAL AREA CHART

VPATN	ATCHISON	N39°33.62' /W095°07.65'
VPBGS	BLUE SPRINGS	N39°01.82' /W094°16.32'
VPBSP	BONNER SPRINGS	N39°03.78' /W094°53.10'
VPCHB	CHOUTEAU BRIDGE	N39°08.77' /W094°32.03'
VPDSO	DE SOTO	N38°58.68' /W094°58.48'
VPESG	EXCELSIOR SPRINGS	N39°20.68' /W094°13.77'
VPGTB	GARRETSBURG	N39°40.92' /W094°41.45'
VPLAT	LATHROP WATER TANK	N39°32.87' /W094°20.00'
VPLEN	LENEXA	N38°57.77' /W094°43.68'
VPLVL	LONGVIEW LAKE	N38°54.63' /W094°28.28'
VPMCL	MC LOUTH	N39°11.65' /W095°12.50'
VPNHA	NASHUA	N39°17.83' /W094°34.80'
VPSCX	SPORTS COMPLEX	N39°03.00' /W094°29.02'
VPSKR	SUGAR CREEK REFINERY	N39°07.00' /W094°27.02'
VPSPK	SWOPE PARK	N39°00.47' /W094°31.93'
VPTSK	TWIN STACKS	N39°09.05' /W094°38.22'
VPWOF	WORLDS OF FUN	N39°10.42' /W094°29.12'

### KLAMATH FALLS SECTIONAL CHART

VPORO	_____	N43°57.38' /W123°02.22'
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### LOS ANGELES HELICOPTER CHART

VPANA	_____	N33°44.43' /W117°50.03'
VPART	MAGNOLIA	N33°51.45' /W117°58.92'
VPAUT	HWY 91 & 55	N33°50.63' /W117°49.57'
VPBOB	_____	N33°59.60' /W117°21.45'
VPCAR	_____	N33°49.90' /W118°17.23'
VPCNG	CONEJO GRADE US HWY 101	N34°12.54' /W118°59.61'
VPCOR	_____	N33°52.90' /W117°32.95'
VPCRX	_____	N34°01.40' /W117°44.88'
VPCSU	CSU CHANNEL ISLANDS	N34°09.76' /W119°02.53'
VPDOW	_____	N33°56.47' /W118°05.80'
VEPEL	_____	N34°00.98' /W118°10.35'
VPETY	_____	N33°38.70' /W117°44.12'
VPFCB	_____	N34°02.03' /W118°01.63'
VPFPL	OXNARD FINANCIAL PLAZA	N34°13.71' /W119°10.39'
VPGOL	_____	N34°09.33' /W118°17.37'
VPIMP	_____	N33°55.85' /W118°16.85'
VPKAT	_____	N33°48.23' /W117°54.22'
VPKEL	_____	N34°03.92' /W117°48.40'
VPLAC	_____	N34°03.75' /W118°14.93'
VPLLU	_____	N34°03.85' /W117°17.82'
VPLQM	QUEEN MARY	N33°45.17' /W118°11.37'
VPLRT	SANTA ANITA RACE TRACK	N34°08.45' /W118°02.65'
VPLVT	VINCENT THOMAS BRIDGE	N33°44.97' /W118°16.32'
VPMDR	_____	N33°59.27' /W118°23.97'
VPNEW	NEWHALL PASS	N34°20.18' /W118°30.72'
VPNUY	_____	N34°09.63' /W118°28.18'
VPPCH	_____	N33°28.07' /W117°40.32'
VPPKC	_____	N34°03.32' /W118°12.83'
VPPOR	_____	N34°00.10' /W117°50.12'
VPRRT	_____	N33°59.37' /W118°16.83'
VPSEP	_____	N34°05.80' /W118°28.63'
VPSFR	_____	N34°17.45' /W118°28.07'
VPSTC	SATICOY BRIDGE	N34°16.62' /W119°08.34'
VPSTK	_____	N34°13.97' /W118°24.60'

## LOS ANGELES SECTIONAL CHART

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPCNG	CONEJO GRADE US HWY 101	N34°12.54'/W118°59.61'
VPCSU	CSU CHANNEL ISLANDS	N34°09.76'/W119°02.53'
VPFPL	OXNARD FINANCIAL PLAZA	N34°13.71'/W119°10.39'
VPSTC	SATICOY BRIDGE	N34°16.62'/W119°08.34'

## LOS ANGELES TERMINAL AREA CHART/FLYWAY CHART

VPCNG	CONEJO GRADE US HWY 101	N34°12.54'/W118°59.61'
VPCSU	CSU CHANNEL ISLANDS	N34°09.76'/W119°02.53'
VPGTY	GETTY CENTER	N34°04.84'/W118°28.66'
VPLBP	BANNING PASS	N33°56.05'/W116°59.63'
VPLCC	CHAFFEY COLLEGE	N34°08.87'/W117°34.33'
VPLCP	CAJON PASS	N34°18.07'/W117°27.68'
VPLDL	DISNEYLAND	N33°48.72'/W117°55.13'
VPLDP	DANA POINT	N33°27.62'/W117°42.87'
VPLDS	DODGER STADIUM	N34°04.42'/W118°14.42'
VPLFX	91/605 INTERCHANGE	N33°52.38'/W118°06.08'
VPLGF	GRIFFITH PARK OBSERVATORY	N34°07.10'/W118°18.02'
VPLHF	110/405 FWYS	N33°51.42'/W118°17.10'
VPLHP	HUNTINGTON PIER	N33°39.32'/W118°00.25'
VPLKH	KING HARBOR	N33°50.75'/W118°23.88'
VPLLC	L.A. COLISEUM	N34°00.83'/W118°17.27'
VPLLM	LAKE MATHEWS	N33°50.58'/W117°26.85'
VPLMM	MAGIC MOUNTAIN	N34°26.20'/W118°36.28'
VPLMS	MILE SQUARE PARK	N33°43.40'/W117°56.77'
VPLPD	PRADO DAM	N33°53.40'/W117°38.48'
VPLPP	PACIFIC PALISADES	N34°02.13'/W118°32.15'
VPLQM	QUEEN MARY	N33°45.17'/W118°11.37'
VPLRB	ROSE BOWL	N34°09.67'/W118°10.05'
VPLRT	SANTA ANITA RACE TRACK	N34°08.45'/W118°02.65'
VPLSA	SANTA ANA CANYON	N33°52.03'/W117°42.68'
VPLSB	SANTA FE FLOOD BASIN	N34°07.72'/W117°57.30'
VPLSC	STATE COLLEGE	N33°52.97'/W117°53.13'
VPLSF	SAN FERNANDO RESERVOIR	N34°17.87'/W118°29.00'
VPLSP	SIGNAL PEAK	N33°36.33'/W117°48.63'
VPLSR	HAWTHORNE & 405 FREEWAY	N33°53.07'/W118°21.13'
VPLSS	SANTA SUSANA PASS	N34°16.00'/W118°38.43'
VPLTW	TUJUNGA WASH & FOOTHILL	N34°16.40'/W118°20.30'
VPLVT	VINCENT THOMAS BRIDGE	N33°44.97'/W118°16.32'
VPLWT	WATER TANK	N34°10.82'/W118°46.27'
VPNEW	NEWHALL PASS	N34°20.18'/W118°30.72'
VPSTC	SATICOY BRIDGE	N34°16.62'/W119°08.34'

## MIAMI SECTIONAL CHART

VPACH	HOLLYWOOD BEACH	N26°00.92'/W080°06.93'
VPBOV	_____	N27°57.00'/W080°46.75'
VPCLC	_____	N26°27.07'/W082°00.88'
VPCTE	_____	N26°09.28'/W081°20.70'
VPDAD	DADE CITY	N28°22.57'/W082°11.25'
VPDUT	_____	N27°37.70'/W082°09.10'
VPDZE	_____	N27°19.00'/W080°44.17'
VPEAR	CLEARWATER BEACH	N27°58.67'/W082°49.83'
VPEDY	ANDYTOWN TOLLGATE	N26°08.78'/W080°28.00'
VPFAH	_____	N26°25.40'/W081°29.67'
VPGPE	ST PETE BEACH	N27°43.50'/W082°44.67'
VPHRO	_____	N27°05.97'/W082°12.20'
VPHUC	_____	N28°19.87'/W082°43.77'
VPIBR	_____	N27°12.47'/W081°40.22'
VPKER	LAKE PARKER	N28°04.00'/W081°56.00'
VPKOE	_____	N24°40.08'/W081°20.55'
VPLYY	_____	N24°49.07'/W080°49.17'
VPMBO	GULFSTREAM PARK	N25°58.57'/W080°08.17'
VPOBA	PUMPING STATION	N26°28.30'/W080°26.75'
VPRBI	_____	N25°50.67'/W080°55.18'
VPRNL	RANGER STATION	N25°22.92'/W080°36.58'
VPWMO	_____	N27°03.00'/W080°35.00'

## MIAMI TERMINAL AREA CHART/FLYWAY CHART

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPACH	HOLLYWOOD BEACH	N26°00.92' /W080°06.93'
VPEDY	ANDYTOWN TOLLGATE	N26°08.78' /W080°28.00'
VPMOB	GULFSTREAM PARK	N25°58.57' /W080°08.17'
VPOBA	PUMPING STATION	N26°28.30' /W080°26.75'
VPRBI	_____	N25°50.67' /W080°55.18'
VPRNL	RANGER STATION	N25°22.92' /W080°36.58'

## NEW ORLEANS SECTIONAL CHART

VPGPT	_____	N30°25.95' /W089°05.62'
VPLIP	PHILLIPS INLET	N30°16.23' /W085°59.25'
VPMAI	_____	N30°50.02' /W084°56.63'
VPMOB	_____	N30°23.00' /W088°31.72'
VPRAM	_____	N30°18.95' /W089°35.88'
VPRER	_____	N30°13.87' /W085°20.67'
VPRIV	_____	N30°54.85' /W087°57.82'
VPSAW	_____	N30°49.65' /W089°07.42'
VPTHR	_____	N30°19.93' /W087°08.50'

## NEW YORK HELICOPTER CHART

VPJAY	_____	N40°59.00' /W073°07.00'
VPLYD	_____	N40°57.37' /W073°29.59'
VPROK	_____	N40°52.70' /W073°44.24'

## PHOENIX TERMINAL AREA CHART/FLYWAY CHART

VPALL	ALLENVILLE	N33°20.97' /W112°35.20'
VPAQU	AQUEDUCT PUMPING STATION	N33°40.05' /W112°41.38'
VPARM	ARROWHEAD MALL	N33°38.52' /W112°13.48'
VPAWG	AHWATUKEE GOLF COURSE	N33°19.98' /W111°59.08'
VPAZM	ARIZONA MILLS	N33°23.43' /W111°57.88'
VPBAR	BARTLETT DAM	N33°49.10' /W111°37.92'
VPCCC	COUNTRY CLUB & CANAL	N33°30.73' /W111°50.37'
VPCLN	CANAL	N33°33.23' /W111°46.89'
VPFRB	FIREBIRD LAKE	N33°16.35' /W111°58.10'
VPFTN	FOUNTAIN HILLS	N33°36.12' /W111°42.72'
VPGLX	GILA CROSSING	N33°16.55' /W112°10.08'
VPGPP	GLENDALE POWER PLANT	N33°33.27' /W112°13.00'
VPMAR	MARICOPA	N33°03.42' /W112°02.88'
VPMHS	MESQUITE HIGH SCHOOL	N33°20.53' /W111°49.58'
VPNRV	NEW RIVER	N33°55.08' /W112°08.45'
VPNTT	NORTH TEST TRACK	N33°03.50' /W111°55.83'
VPPIR	PIR	N33°22.52' /W112°18.90'
VPQTR	QUINTERO GOLF COURSE	N33°49.53' /W112°23.58'
VPRVC	RIO VERDE COMMUNITY	N33°44.37' /W111°39.62'
VPSMC	SOUTH MOUNTAIN COLLEGE	N33°23.02' /W112°02.12'
VPSQP	SQUAW PEAK	N33°32.83' /W112°01.27'
VPSSS	SUPERSTITION SPRINGS MALL	N33°23.50' /W111°41.37'
VPSTN	SANTAN MOUNTAINS	N33°09.23' /W111°40.92'
VPSTT	SOUTH TEST TRACK	N32°56.25' /W111°59.67'
VPZZZ	_____	N33°20.18' /W111°26.53'

## ST LOUIS TERMINAL AREA CHART/FLYWAY CHART

VPAGN	TV ANTENNA	N38°32.08' /W090°22.42'
VPBPE	_____	N38°23.80' /W090°20.38'
VPCJY	HOLIDAY SHORES	N38°55.00' /W089°56.00'
VPCOJ	WINFIELD DAM	N39°00.28' /W090°41.23'
VPDFA	JEFFERSON BARRACKS BRIDGE	N38°29.18' /W090°16.47'
VPEAZ	BUSCH STADIUM	N38°37.43' /W090°11.55'
VPEDJ	WATER TANKS	N38°45.30' /W090°34.87'
VPEGR	GAS TANKS	N38°35.80' /W090°19.32'
VPEOX	ST PETERS	N38°47.17' /W090°39.25'

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPFAI	HOWELL ISLAND	N38°40.00'/W090°43.00'
VPPFY	_____	N38°55.37'/W090°17.30'
VPGPF	_____	N38°35.60'/W090°26.92'
VPGVI	_____	N38°32.30'/W090°27.80'
VPHRQ	CHAIN OF ROCKS BRIDGE	N38°45.88'/W090°10.42'
VPIBO	WATERLOO	N38°20.00'/W090°09.00'
VPJMU	HORSESHOE LAKE	N38°41.00'/W090°05.00'
VPKNY	PACIFIC	N38°29.00'/W090°44.00'
VPLES	ST CHARLES	N38°47.00'/W090°30.00'
VPLIW	SIX FLAGS	N38°30.67'/W090°40.47'
VPLXU	GATEWAY ARCH	N38°37.50'/W090°11.00'
VPNSY	WOOD RIVER REFINERIES	N38°50.00'/W090°05.00'
VPNZY	WENTZVILLE	N38°48.83'/W090°50.98'
VPRAZ	JERSEYVILLE	N39°07.00'/W090°20.00'
VPRMO	FOREST PARK	N38°38.00'/W090°17.00'
VPWKO	COLUMBIA	N38°27.00'/W090°12.00'
VPXXI	MILLSTADT	N38°27.50'/W090°05.68'
VPYID	MOSENTHEIN ISLAND	N38°43.00'/W090°12.25'

**SALT LAKE CITY HELICOPTER CHART**

VPAIR	SALTAIR	N40°44.85'/W112°11.22'
VPBEE	SOUTH INTERCHANGE	N40°38.18'/W111°54.23'
VPBRN	BARN	N40°54.28'/W112°10.15'
VPCAP	STATE CAPITOL	N40°46.67'/W111°53.25'
VPCHS	_____	N40°42.28'/W112°05.92'
VPCOP	BINGHAM COPPER MINE	N40°31.38'/W112°09.00'
VPCWY	CAUSEWAY	N41°05.37'/W112°07.17'
VPCYN	PARLEYS CANYON	N40°42.67'/W111°48.10'
VPFFC	FREE PORT CENTER	N41°05.92'/W112°02.27'
VPFFK	FRANCIS PEAK	N41°01.98'/W111°50.30'
VPGFS	GARFIELD STACK	N40°43.28'/W112°11.88'
VPHVE	SPAGHETTI BOWL	N40°43.50'/W111°54.22'
VPJRT	JORDAN RIVER TEMPLE	N40°35.02'/W111°55.58'
VPKSL	KSL ANTENNA	N40°46.80'/W112°05.80'
VPLGN	LAGOON AMUSEMENT PARK	N40°59.08'/W111°53.57'
VPMDH	MCKAY DEE HOSPITAL	N41°11.50'/W111°57.08'
VPMMT	MICROWAVE TOWERS	N40°48.50'/W111°53.37'
VPMSH	_____	N41°01.67'/W112°02.47'
VPNSL	_____	N40°50.15'/W111°54.90'
VPNTP	_____	N41°03.57'/W112°14.23'
VPOGE	GRAIN ELEVATOR	N41°13.13'/W112°00.45'
VPOPS	POWER STATION	N41°20.38'/W112°02.78'
VPPEN	STATE PRISON	N40°29.88'/W111°53.62'
VPPPT	PROMONTORY POINT	N41°12.28'/W112°25.73'
VPPTM	POINT OF THE MOUNTAIN	N40°27.42'/W111°54.83'
VPPOV	PROVO CANYON	N40°18.77'/W111°39.45'
VPRWY	_____	N40°48.48'/W112°00.33'
VPSLC	I-15/I-80 INTERCHANGE	N40°45.83'/W111°54.85'
VP TIP	SOUTH TIP	N40°50.93'/W112°10.92'
VPWBR	WEBER CANYON	N41°08.17'/W111°54.83'
VPWBT	_____	N40°38.00'/W112°03.33'

**SALT LAKE CITY TERMINAL AREA CHART/FLYWAY CHART**

VPAIR	SALTAIR	N40°44.85'/W112°11.22'
VPBEE	SOUTH INTERCHANGE	N40°38.18'/W111°54.23'
VPBRN	BARN	N40°54.28'/W112°10.15'
VPCAP	STATE CAPITOL	N40°46.67'/W111°53.25'
VPCHS	_____	N40°42.28'/W112°05.92'
VPCOP	BINGHAM COPPER MINE	N40°31.38'/W112°09.00'
VPCVI	CENTERVILLE INTERCHANGE	N40°55.30'/W111°53.43'
VPCWY	CAUSEWAY	N41°05.37'/W112°07.17'
VPCYN	PARLEYS CANYON	N40°42.67'/W111°48.10'
VPFFC	FREE PORT CENTER	N41°05.92'/W112°02.27'
VPFFK	FRANCIS PEAK	N41°01.98'/W111°50.30'
VPGFS	GARFIELD STACK	N40°43.28'/W112°11.88'

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPVHE	SPAGHETTI BOWL	N40°43.50'/W111°54.22'
VPJRT	JORDAN RIVER TEMPLE	N40°35.02'/W111°55.58'
VPKSL	KSL ANTENNA	N40°46.80'/W112°05.80'
VPLGN	LAGOON AMUSEMENT PARK	N40°59.08'/W111°53.57'
VPMDH	MCKAY DEE HOSPITAL	N41°11.50'/W111°57.08'
VPMMT	MICROWAVE TOWERS	N40°48.50'/W111°53.37'
VPMSH	_____	N41°01.67'/W112°02.47'
VPNSL	_____	N40°50.15'/W111°54.90'
VPNTP	_____	N41°03.57'/W112°14.23'
VPOGE	GRAIN ELEVATOR	N41°13.13'/W112°00.45'
VPOPS	POWER STATION	N41°20.38'/W112°02.78'
VPPEN	STATE PRISON	N40°29.88'/W111°53.62'
VPPPT	PROMONTORY POINT	N41°12.28'/W112°25.73'
VPPTM	POINT OF THE MOUNTAIN	N40°27.42'/W111°54.83'
VPVVO	PROVO CANYON	N40°18.77'/W111°39.45'
VPRWY	_____	N40°48.48'/W112°00.33'
VPSLC	I-15/I-80 INTERCHANGE	N40°45.83'/W111°54.85'
VPTIP	SOUTH TIP	N40°50.93'/W112°10.92'
VPUOU	U OF U EVENTS CENTER	N40°45.73'/W111°50.28'
VPWBR	WEBER CANYON	N41°08.17'/W111°54.83'
VPWBT	_____	N40°38.00'/W112°03.33'
VPZOO	HOGLE ZOO	N40°45.00'/W111°48.95'

### SAN DIEGO TERMINAL AREA CHART/FLYWAY CHART

VPLDP	DANA POINT	N33°27.62'/W117°42.87'
VPLSP	SIGNAL PEAK	N33°36.33'/W117°48.63'
VPOCN	_____	N33°14.15'/W117°26.63'
VPSBC	BARONA CASINO	N32°56.25'/W116°52.60'
VPSBL	_____	N33°05.18'/W117°18.55'
VPSBM	BLACK MOUNTAIN	N32°58.87'/W117°07.00'
VPSCF	_____	N32°48.55'/W117°09.17'
VPSCM	COWLES MOUNTAIN	N32°48.72'/W117°01.97'
VPSCP	CRYSTAL PIER	N32°47.77'/W117°15.42'
VPSCR	_____	N32°39.37'/W117°07.30'
VPSFB	IRON MOUNTAIN	N32°58.25'/W116°57.33'
VPSLJ	LAKE JENNINGS	N32°51.53'/W116°53.28'
VPSMB	_____	N32°45.57'/W117°12.22'
VPSMP	_____	N33°22.70'/W117°36.75'
VPSMS	MOUNT SOLEDAD	N32°50.40'/W117°15.10'
VPSMV	_____	N32°45.75'/W117°09.80'
VPSMW	MOUNT WOODSON	N33°00.52'/W116°58.23'
VPSOP	OTAY MESA PRISON	N32°35.82'/W116°55.28'
VPSOT	LOWER OTAY LAKE	N32°37.73'/W116°55.38'
VPSPL	SOUTH POINT LOMA	N32°39.90'/W117°14.55'
VPSPP	POWER PLANT	N33°08.25'/W117°20.23'
VPSQS	QUALCOMM STADIUM	N32°46.98'/W117°07.23'
VPSRT	DEL MAR RACE TRACK	N32°58.58'/W117°15.95'
VPSSM	SAN MIGUEL MOUNTAIN	N32°41.78'/W116°56.18'
VPSSV	SAN VICENTE ISLAND	N32°55.53'/W116°55.00'
VPSTP	TORREY PINES GOLF COURSE	N32°54.17'/W117°14.68'
VPSVA	_____	N33°11.48'/W117°16.38'

### SAN FRANCISCO SECTIONAL CHART

VPKBG	KINGSBURY GRADE	N38°58.75'/W119°53.20'
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### SAN FRANCISCO TERMINAL AREA CHART/FLYWAY CHART

VPALT	ALTAMONT PASS	N37°44.35'/W121°35.42'
VPANT	ANTIOCH BRIDGE	N38°01.45'/W121°45.02'
VPBBR	BENICIA BRIDGE	N38°02.50'/W122°07.45'
VPCAL	CALAVERAS RESERVOIR	N37°28.16'/W121°48.93'
VPCBT	LAKE CHABOT	N37°43.68'/W122°06.94'
VPCOY	COYOTE HILLS	N37°32.50'/W122°05.06'
VPCQZ	CARQUINEZ BRIDGE	N38°03.66'/W122°13.52'
VPCRL	_____	N37°11.00'/W121°41.06'
VPCRY	CRYSTAL SPRINGS CAUSEWAY	N37°30.56'/W122°21.10'

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPCSH	CAL STATE UNIVERSITY	N37°39.52' /W122°03.52'
VPDAM	DEL VALLE DAM	N37°36.91' /W121°44.78'
VPDLR	_____	N37°07.00' /W121°47.06'
VPDUB	DUBLIN	N37°42.06' /W121°55.36'
VPEMB	EMBASSY SUITES	N37°26.05' /W121°53.83'
VPGGF	GOLDEN GATE FIELDS	N37°53.07' /W122°18.71'
VPGIL	GILROY	N37°01.37' /W121°33.99'
VPHHH	HAMILTON	N38°03.58' /W122°30.66'
VPKGO	KGO	N37°31.58' /W122°06.10'
VPLEX	LEXINGTON RESERVOIR	N37°11.66' /W121°59.18'
VPMID	MID-SPAN SAN MATEO BRIDGE	N37°36.28' /W122°11.81'
VPMOR	MORMON TEMPLE	N37°48.46' /W122°11.95'
VPNUM	NUMMI PLANT	N37°29.56' /W121°56.58'
VPPAC	_____	N37°38.00' /W122°32.07'
VPPRU	PRUNEYARD	N37°17.33' /W121°56.01'
VPSAR	SARATOGA	N37°15.26' /W122°02.33'
VPSLA	SLAC/LINEAR ACCELERATOR	N37°24.75' /W122°14.35'
VPSTB	STINSON BEACH	N37°54.45' /W122°40.41'
VPSUN	SUNOL GOLF COURSE	N37°34.85' /W121°53.23'
VPUTC	U.T.C.	N37°13.93' /W121°41.35'
VPWAL	WALNUT CREEK	N37°53.78' /W122°04.30'
VPWAM	_____	N37°30.28' /W122°10.00'
VPWFR	CEMENT PLANT	N37°30.88' /W122°12.26'

**TAMPA/ORLANDO TERMINAL AREA CHART/FLYWAY CHART**

VPBOV	_____	N27°57.00' /W080°46.75'
VPCNY	_____	N28°30.00' /W080°45.00'
VPDAD	DADE CITY	N28°22.57' /W082°11.25'
VPDFI	_____	N29°00.17' /W081°20.85'
VPDUT	_____	N27°37.70' /W082°09.10'
VPEAR	CLEARWATER BEACH	N27°58.67' /W082°49.83'
VPFFU	_____	N28°57.08' /W081°00.33'
VPGPE	ST PETE BEACH	N27°43.50' /W082°44.67'
VPHUC	_____	N28°19.87' /W082°43.77'
VPKER	LAKE PARKER	N28°04.00' /W081°56.00'
VPLEV	_____	N28°48.00' /W080°52.00'
VPLJA	_____	N29°00.00' /W080°51.00'

**WASHINGTON SECTIONAL CHART**

VPACE	_____	N38°07.82' /W076°48.75'
VPAXI	_____	N38°34.57' /W076°20.38'
VPBRA	_____	N36°13.75' /W076°08.08'
VPGCE	_____	N36°03.90' /W076°36.42'
VPWZO	_____	N36°00.87' /W075°40.07'

## VOR RECEIVER CHECK VOR RECEIVER CHECKPOINTS AND VOR TEST FACILITIES (VOT)

The use of VOR airborne and ground checkpoints is explained in Aeronautical Information Manual, Basic Flight Information and ATC Procedures.

NOTE: Under columns headed "Type of Checkpoint" & "Type of VOT Facility" G stands for ground. A/ stands for airborne followed by figures (2300) or (1000-3000) indicating the altitudes above mean sea level at which the check should be conducted. Facilities are listed in alphabetical order, in the state where the checkpoints or VOTs are located.

### IOWA

#### VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type	Azimuth	Dist.	Checkpoint Description
		Check Pt. Gnd.	from Fac. Mag	from Fac. N.M.	
<b>Burlington</b> (Southeast Iowa Rgnl) .....	111.4/BRL	A/2500	288	9.6	Over intersection of Rwys 18-36 and 12-30.
<b>Cedar Rapids</b> (The Eastern Iowa) .....	114.1/CID	G	086	3.9	On runup pad Rwy 27.
	114.1/CID	G	087	2.6	On runup pad Rwy 09.
	114.1/CID	G	092	4	On runup pad Rwy 31.
<b>Dubuque</b> (Dubuque Rgnl) .....	115.8/DBQ	G	109	0.5	Apch end Rwy 31.
<b>Fort Dodge</b> (Fort Dodge Rgnl) .....	113.5/FOD	G	118	6.1	On W edge of terminal ramp.
<b>Iowa City</b> (Iowa City Municipal) .....	116.2/IOW	A/2000	019	8	Over rotg beacon.
	112.5/TNU	A/2500	145	8	Over apch end Rwy 32.
<b>Ottumwa</b> (Ottumwa Rgnl) .....	111.6/OTM	A/2500	303	7.3	Over intersection of Rwys 13-31 and 04-22.
<b>Sheldon</b> (Sheldon Muni) .....	108.6/DDL	A/2700	098	8.0	Over grain elevator in city of Sanborn.
<b>Spencer</b> (Spencer Muni) .....	110.0/SPW	G	316	0.7	On painted circle on twy AER 12.
<b>Waterloo</b> (Waterloo Muni) .....	112.2/ALO	G	304	0.8	Twy B apch end Rwy 12.

#### VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
<b>Davenport Muni</b> .....	111.8	G	
<b>Des Moines Intl.</b> .....	109.2	G	

### KANSAS

#### VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type	Azimuth	Dist.	Checkpoint Description
		Check Pt. Gnd.	from Fac. Mag	from Fac. N.M.	
<b>Chanute</b> (Chanute Martin Johnson) .....	109.2/CNU	A/2000	058	5.6	Over center of N/S rwy.
<b>Emporia</b> (Emporia Muni) .....	112.8/EMP	A/2700	320	9.0	Over intersection of Hwy 50 and I-35.
<b>Fort Riley</b> (Marshall AAF) .....	109.4/FRI	G	032	6.8	On parking ramp adjacent to radar antenna.

# VOR RECEIVER CHECK

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Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
<b>Garden City</b> (Garden City Rgnl) .....	113.3/GCK	G	359	1.0	Intersection of Twys A and D.
<b>Goodland</b> (Renner Fld/Goodland Muni) .....	115.1/GLD	G	201	1.2	On parking ramp in front of air terminal.
<b>Hays</b> .....	110.4/HYS	A/3000	071	12.2	Over grain elevator in Gorham.
<b>Hill City</b> (Hill City Muni) .....	113.7/HLC	A/4200	060	19.6	Over rotg bcn.
<b>Hutchinson</b> (Hutchinson Rgnl) .....	116.8/HUT	A/3500	033	5	Over apch end Rwy 04.
<b>Manhattan</b> .....	110.2/MHK	A/2500	054	3.9	Over water twr.
<b>Manhattan</b> (Manhattan Rgnl) .....	110.2/MHK	G	197	0.6	0.6 NM parallel twy at B intersection.
	110.2/MHK	G	201	0.9	Twy at Rwy 3 holdline.
<b>Salina</b> (Salina Muni) .....	117.1/SLN	G	180	7.8	On twy north of Twy E.
<b>Topeka</b> (Philip Billard Muni).....	117.8/TOP	G	215	5.6	East side of terminal ramp.
<b>Wichita</b> (Wichita Mid-Continent) .....	113.8/ICT	A/3500	216	7.1	Over grain elevator. SW corner of Garden Plains.

## VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
<b>Topeka</b> (Forbes Fld) .....	111.0	G	
<b>Wichita</b> (Wichita Mid-Continent) .....	114.0	G	

# MINNESOTA

## VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
<b>Albert Lea</b> (Albert Lea Muni) .....	109.8/AEL	G	140	.5	Apch end Rwy 34.
<b>Alexandria</b> (Chandler Fld) .....	112.8/AXN	A/2600	224	8.3	Over apch end Rwy 22.
<b>Baudette</b> (Baudette Intl) .....	111.6/BDE	A/2000	277	13.8	Over grain elevator Williams, MN.
<b>Baudette</b> (Baudette Intl) .....	111.6/BDE	G	310	.8	Rwy 12 runup pad.
<b>Detroit Lakes</b> (Detroit Lakes-Wething Fld) ..	111.2/DTL	A/3000	132	19	Over grain elevator in Perham Mn.
<b>Duluth</b> (Duluth Intl) .....	112.6/DLH	G	012	2.2	Intersection of Taxiways C and D near Rwy 03 thld.
<b>Ely</b> (Ely Muni) .....	109.6/ELO	A/2500	266	17.1	Over water tower in 'TOWER MN'.
<b>Fergus Falls</b> .....	110.4/FFM	A/2500	126	7.5	Over underpass intersection of 2 hways.
<b>Flying Cloud</b> .....	117.7/FCM	A/2000	278	6.0	Over Chaska water tower.
<b>Gopher</b> (Crystal) .....	117.3/GEP	A/1900	166	4.9	Over apch end Rwy 14L.
<b>International Falls</b> .....	111.0/INL	A/2200	135	11.0	Over highway bridge over railroad track.
<b>International Falls</b> (Falls Intl) .....	111.0/INL	G	113	0.6	On taxiway apch end Rwy 31.
<b>Mankato</b> (Mankato Rgnl) .....	110.8/MKT	G	317	.9	Twy A4 AER 15.
<b>Marshall</b> .....	111.0/MML	A/2700	308	9.6	Over grain elevator at Minneota.
<b>Montevideo</b> (Montevideo-Chippewa Co) .....	111.6/MVE	A/2000	105	11.1	Over grain elevator straddling train tracks.



## VOR RECEIVER CHECK

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
<b>Park Rapids</b> (Park Rapids Muni)	110.6/PKD	G	322	.6	On twy AER 13.
<b>Rochester</b> (Rochester Intl) .....	112.0/RST	A/3000	024	8.8	Over intersection of Rwys 02-20 and 13-31.
<b>Roseau</b> .....	108.8/ROX	A/2400	178	6.5	Over microwave twr.
<b>Saint Cloud</b> (St Cloud Rgnl) .....	112.1/STC	G	291	0.5	Runup area AER 13.
<b>Worthington</b> .....	110.6/OTG	A/2800	050	5.6	Over grain elevator Brewster.

## VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
<b>Minneapolis</b> (Minneapolis St. Paul Intl/Wold Chamberlain) .....	111.0	G	Usable airborne 2500-4000' MSL within a 15 NM radius of VOT.
<b>St Paul</b> (St Paul Downtown Holman Fld) .....	114.4	G	

## MISSOURI

## VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
<b>Butler</b> .....	115.9/BUM	A/1800	035	9.2	Grain elevator. VOR Checkpoint unusable. On Twy C1 N of Twy C.
<b>Cape Girardeau</b> (Cape Girardeau Rgnl) .....	112.9/CGI	G	112	.6	On N edge of Army ramp.
<b>Forney</b> (Waynesville-St Robert Rgnl Forney Fld) .....	110.0/TBN	G	173	0.53	Over water tank at La Plata. Checkpoint unusable.
<b>Kirkville</b> .....	114.6/IRK	A/2500	136	7.4	On twy just W of terminal area.
<b>Kirkville</b> (Kirkville Rgnl) .....	114.6/IRK	G	132	3.4	Over intersection of Rwys 18-36 and 04-22 of Dexter Muni Arpt.
<b>Malden</b> .....	111.2/MAW	A/1500	351	13.4	Over apch end Rwy 31.
<b>Neosho</b> (Joplin Muni) .....	117.3/EOS	A/2500	344	19	Over apch end Rwy 17.
<b>Saint Joseph</b> (Rosecrans Mem) .....	115.5/STJ	A/2500	167	10.7	At E end of Twy B.
<b>Springfield</b> (Springfield-Branson Natl) .....	116.9/SGF	G	193	6.8	Highway bridge over Osage River.
<b>Sunshine</b> (Lee C Fine Mem) .....	108.4/SHY	A/2500	353	9	

## VOR RECEIVER CHECK VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
<b>Jefferson City</b> (Jefferson City Mem) .....	112.0	G	
<b>Kansas City</b> (Downtown) .....	108.6	G	
<b>St. Louis</b> (Lambert–St Louis Intl) .....	111.0	G	
<b>Spirit of St. Louis</b> .....	112.2	G	

## NEBRASKA

### VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type			Dist. from Fac. N.M.	Checkpoint Description
		Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.		
<b>Ainsworth</b> .....	112.7/ANW	A/3600	090	13.0	Over grain elevator south edge at Long Pine.	
<b>Alliance</b> .....	111.8/AIA	A/5000	310	12.1	Over grain elevator 1 NM SE of Berea.	
<b>Beatrice</b> .....	110.6/BIE	A/2400	046	6.1	Over 260' AGL antenna.	
<b>Chadron</b> (Chadron Muni) .....	113.4/CDR	A/4500	017	19	Over intersection of Rwy 20 and 29.	
<b>Columbus</b> .....	112.2/OLU	A/2500	082	12.7	Over bridge/railroad tracks at center of Schuyler.	
<b>Columbus</b> (Columbus Muni) .....	112.2/OLU	G	167	0.5	On twy at apch end Rwy 32.	
<b>Grand Island</b> (Central Nebraska Rgnl) .....	112.0/GRI	G	177	1.5	On parallel twy at AER 35.	
<b>Hastings</b> .....	108.8/HSI	A/3200	266	8.1	Bridge over railroad.	
<b>Hastings</b> (Hastings Muni) .....	108.8/HSI	G	330		Apch end Rwy 14.	
<b>Kearney</b> (Kearney Muni) .....	111.2/EAR	G	211	0.5	South end of main ramp.	
		G	319	0.5	North end of main ramp.	
<b>Lincoln</b> (Lincoln) .....	116.1/LNK	G	176	4.9	On runup ramp for Rwy 35.	
<b>Norfolk</b> .....	109.6/OFK	A/2600	098	10.0	Bridge over river south at Stanton.	
<b>Norfolk</b> (Karl Stefan Mem) .....	109.6/OFK	G	144	0.5	On runup pad for Rwy 31.	
<b>North Platte</b> (North Platte Rgnl Airport Lee Bird Field) .....	117.4/LBF	G	013	5.5	On S edge of ramp 200' N of Twy B.	
<b>O'Neill</b> .....	113.9/ONL	A/3000	119	13	Over triangle in road intersection.	
<b>Omaha</b> (Eppley Airfield) .....	116.3/OVR	A/2500	310	10.2	Over apch end Rwy 32L.	
<b>Scottsbluff</b> (William B. Heilig Fld) .....	112.6/BFF	G	240	5.1	On NE edge ramp opposite terminal bldg & W of twy to Rwy 30.	
<b>Searle</b> (Searle Field) .....	110.2/SAE	A/4800	030	7.2	Over flood-ctl spillway SE end of Lake McConaughy.	
<b>Theftord</b> (Thomas Co) .....	108.6/TDD	A/4000	090		Over apch end Rwy 11.	

## VOR RECEIVER CHECK VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
<b>Omaha</b> (Eppley Airfield) .....	109.0	G	

## NORTH DAKOTA

### VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
<b>Bismarck</b> (Bismarck Muni) .....	116.5/BIS	G	262	3.0	On Twy C5.
<b>Dickinson</b> (Dickinson–Theodore Roosevelt Rgnl) .....	112.9/DIK	G	182	3.7	Twy B near ramp.
<b>Fargo</b> (Hector Intl) .....	116.2/FAR	A/2000	360	9.4	Over apch end Rwy 36.
<b>Grand Forks</b> (Grand Forks Intl) .....	114.3/GFK	G	157	1.0	On twy A5.
<b>Jamestown</b> (Jamestown Rgnl) .....	114.5/JMS	G	141	0.6	On twy strip adjacent to Rwy 31.
<b>Minot</b> .....	117.1/MOT	A/2800	091	6.5	Over railroad and highway overpass.

## SOUTH DAKOTA

### VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
<b>Brookings</b> .....	108.8/BKX	A/3000	072	7.5	Over grain elevator.
<b>Mitchell</b> (Mitchell Muni) .....	109.2/MHE	A/2500	238	11.0	Over intersection of highways ½ NM south of town of Mt. Vernon.
<b>Phillip</b> .....	109.2/MHE	G	194	0.5	On main ramp.
<b>Pierre</b> (Pierre Rgnl) .....	108.4/PHP	A/3300	156	4.7	Over radio twr.
<b>Pierre</b> (Pierre Rgnl) .....	112.5/PIR	G	251	5.5	On twy in front of terminal building. VOR Checkpoint unusable.
<b>Rapid City</b> (Rapid City Rgnl) .....	112.3/RAP	G	320	4.5	On ramp in front of administration building adjacent to center twy.
<b>Sioux Falls</b> .....	115.0/FSD	A/2500	009	6.9	Over water twr in Baltic S.D.
<b>Sioux Falls</b> (Joe Foss Field) .....	115.0/FSD	G	143	4.3	At intersection of E/W twy and east ramp.
<b>Watertown</b> (Watertown Muni) .....	116.6/ATY	G	184	3.8	On SE corner of terminal ramp.
<b>Winner</b> .....	112.8/ISD	A/3100	204	8.6	Over blue water tank S edge of town.

The following tabulation lists all reported parachute jumping sites in the area of coverage of this directory. Unless otherwise indicated, all activities are conducted during daylight hours and under VFR conditions. The busiest periods of activity are normally on weekends and holidays, but jumps can be expected at anytime during the week at the locations listed. Jumps within restricted airspace are not listed.

All times are local and altitudes MSL unless otherwise specified.

Contact facility and frequency is listed at the end of the remarks, when available, in bold face type.

Refer to Federal Aviation Regulations Part 105 for required procedures relating to parachute jumping.

Organizations desiring listing of their jumping activities in this publication should contact the nearest FSS, tower or ARTCC.

Qualified parachute jumping sites will be depicted on the appropriate visual chart(s).

Note: (c) in this publication indicates that the parachute jump area is charted.

To qualify for charting, a jump area must meet the following criteria:

- (1) Been in operation for at least 1 year.
- (2) Operate year round (at least on weekends).
- (3) Log 4,000 or more jumps each year.

In addition, jump sites can be nominated by FAA Regions if special circumstances require charting.

LOCATION	DISTANCE AND RADIAL FROM NEAREST VOR/VORTAC	MAXIMUM ALTITUDE	REMARKS
<b>IOWA</b>			
(c) Boone Muni Arpt .....	37 NM; 293° Newton .....	15,000	6 NM radius. Continuous.
(c) Cherokee Co Rgnl .....	30 NM; 206° Spencer .....	12,500	5 NM radius. Summer continuous, winter weekends and holidays
(c) Dallas Center, Husband Field .....	25 NM; 305° Des Moines .....	12,800	3 NM radius. Weekends and holidays
Davenport .....	13 NM; 258° Davenport .....	12,500	2 NM radius. Daily
Decorah Arpt .....	15 NM; 264° Waukon .....	7,000 AGL	Summer. Tue–Thu 1700–SS, Sat–Sun 1000–SS. Winter. 1000–SS Sat, Sun.
Fairfield Muni Arpt .....	16 NM; 079° Ottumwa .....	12,500	5 NM radius. Sat, Sun and holidays SR–SS.
Marion Arpt .....	14 NM; 047° Cedar Rapids .....	15,000 AGL	3 NM radius. Continuous.
(c) New Hampton Muni Arpt .....	32 NM; 359° Waterloo .....	15,000 AGL	1 NM radius. Daily.
(c) Northwood Muni Arpt .....	22 NM; 010° Mason City .....	11,500	5 NM radius. Apr–Oct, Sat–Sun SR–SS.
Perry Muni .....	33 NM; 310° Des Moines .....	12,500	3 NM radius. Weekends and holidays
Sioux City .....	13 NM; 285° Sioux City .....	10,000	0.5 NM radius. 0800–2000 daily
(c) Vinton Veterans Mem Airpark Arpt ...	24 NM; 330° Cedar Rapids .....	15,000	5 NM radius. Continuous.
(c) Waterloo, Flyers Arpt .....	10 NM; 140° Waterloo .....	12,000	3 NM radius. Summer continuous, winter weekends and holidays SR–SS.
(c) Winterset–Madison Co Arpt .....	17 NM; 248° Des Moines .....	14,000	5 NM radius. SR–SS daily.
<b>KANSAS</b>			
Atchison, Amelia Earhart Arpt .....	26.2 NM; 199° St Joseph .....	12,500	5 NM radius. Continuous.
(c) Baldwin City, Vinland Valley			
Aerodrome Arpt .....	24 NM; 130° Topeka .....	13,000	5 NM radius. Sat–Sun Continuous.
(c) Derby, Cook Airfield Inc. ....	23 NM; 110° Wichita	13,500	5 NM radius. Daily.
(c) Junction City, Ft. Riley, Marshall AAF	6.3 NM; 034° Ft. Riley .....	10,000	1 NM radius. Daily SR–SS
(c) Kingman, Kingman Arpt–Clyde Cessna Fld .....	22 NM; 195° Hutchinson .....	15,000	1 NM radius. Fri, Sat, Sun and holidays, SR–SS.
(c) Lyons–Rice Co Muni Arpt .....	24.7 NM; 317° Hutchinson .....	14,000	5 NM radius. Continuous.
Osage Muni .....	26 NM; 030° Emporia .....	12,000	2 NM radius. Sat–Sun, SR–SS.
St Francis, Cheyenne County Muni .....	22.9 NM; 336° Goodland .....	16,000	3 NM radius Continuous.
Salina .....	20 NM; 247° Salina .....	2,700	0.3 NM radius. Occasional use
(c) Suppesville .....	18 NM; 200° Wichita	15,000	5 NM radius. Sat–Sun and holidays, SR–SS.
(c) Topeka, Mesa Verde Arpt .....	9 NM; 267° Topeka .....	13,000 AGL	2 NM radius weekdays 1600–SS weekdays SR–SS weekends and holidays.
(c) Wamego Muni Arpt .....	19.4 NM; 075° Manhattan .....	11,000	5 NM radius. Continuous.
Wichita, Maize Arpt .....	7 NM; 070° Wichita .....	11,500	1 NM radius. Continuous.
(c) Wichita, Sauerman Field .....	14NM; 253° Wichita .....	13,000	5 NM radius. Continuous.

## PARACHUTE JUMPING AREAS

LOCATION	DISTANCE AND RADIAL FROM NEAREST VOR/VORTAC	MAXIMUM ALTITUDE	REMARKS
<b>MINNESOTA</b>			
Duluth .....	5 NM; 120° Duluth .....	10,000	Jun–Aug, Fridays 1800–2030
(c) Hutchinson Muni—Butler Fld Arpt ...	14 NM; 160° Darwin .....	13,000	5 NM radius. 0800–2359 daily.
Waseca Muni .....	11 NM; 223° Halfway .....	15,000	5 NM radius. Continuous.
<b>MISSOURI</b>			
(c) Butler Mem Arpt .....	7 NM; 074° Butler .....	13,000	5 NM radius. Sat–Mon 0500–2200.
(c) Charleston, Mississippi Co Arpt .....	25 NM; 150° Cape Girardeau	13,000	2 NM radius SR–SS weekends and holidays.
(c) Elton Hensley Mem Arpt .....	10 NM; 078° Columbia .....	12,000	5 NM radius. Daily 0700–1900.
(c) Kimberling Airways Arpt .....	22 NM; 323° Harrison .....	10,000	2 NM radius. SR–SS Mon–Sat.
(c) Lexington Muni Arpt .....	13 NM; 048° Napoleon .....	12,500 AGL	SR–SS Sat, Sun, holidays & weekday evenings.
(c) Mt Vernon Muni Arpt .....	31.5 NM; 235° Springfield .....	15,000	2 NM radius. Daily SR–SS. <b>Springfield–Branson Natl Twr 124.95</b>
Neosho .....	28.7 NM; 337° Neosho .....	10,000	
(c) Sullivan Rgnl Arpt .....	26 NM; 073° Vichy .....	15,000	5 NM radius. SR–SS weekends. Occasional ngt and weekdays.
<b>NEBRASKA</b>			
(c) Blair Muni Arpt .....	23 NM; 310° Omaha .....	14,000	2 NM radius. Sat–Sun SR–SS. <b>Omaha App/Dep Con 120.1</b>
(c) Crete Muni Arpt .....	22 NM; 195° Lincoln .....	14,500	2 NM radius. Continuous. <b>Lincoln App/Dep Con 124.0</b> (1130–0600Z‡) <b>Mineapolis Center 128.75</b> (0600–1130Z‡)
Mc Cook Rgnl Arpt .....	2 NM; 363° Mc Cook .....	10,500	2 NM radius Mon–Fri 1600–SS and Sat–Sun 0800–SS.
(c) Weeping Water, Browns Arpt .....	27 NM; 090° Lincoln .....	14,000	3 NM radius. Apr–Oct, SR–30 min after SS, daily; Oct–Apr, SR–30 min after SS, weekends and Federal holidays.
<b>NORTH DAKOTA</b>			
(c) West Fargo Muni Arpt .....	9 NM; 335° Fargo .....	13,500	1 NM radius. SR–SS Weekends. Occasional nghts and weekdays.

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The purpose of this bulletin is to provide major changes in aeronautical information that have occurred since the last publication date of each Sectional Aeronautical, VFR Terminal Area, and Helicopter Route Charts listed. The general policy is to include only those changes to controlled airspace and special use airspace that present a hazardous condition or impose a restriction on the pilot, and major changes to airports and radio navigational facilities, thereby providing the VFR pilot with the essential data necessary to update and maintain chart currency. The data is grouped by type and then by effective date. When a new edition of the Aeronautical Chart is published, the corrective tabulation will be removed from this bulletin. Inasmuch as this Bulletin provides major changes only, pilots should consult the airport listing in this directory for all new information. Users of U.S. World Aeronautical Charts (WAC) and U.S. Gulf Coast VFR Aeronautical Charts should consult the appropriate Sectional and VFR Terminal Area Charts for revisions.

Military Training Routes (MTRs) are shown on Sectional Aeronautical Charts, VFR Terminal Area, and Helicopter Route Charts. Only the route centerline, direction of flight and the route designator are shown — route widths and altitudes are not shown. Since these routes are subject to change every 56 days and the charts are reissued generally every 6 months, routes with a change in the alignment of the charted route centerline will be listed in this Aeronautical Chart Bulletin below. You are advised to contact the nearest FSS for route dimensions and current status for those routes affecting your flight.

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## BILLINGS SECTIONAL

### 79th Edition, 11 Mar 2010

#### **OBSTRUCTIONS**

**8 Apr 2010** Add obst 3780' MSL (350' AGL) UC, 45°30'43"N, 104°28'25"W.

#### **AIRPORTS**

**8 Apr 2010** Change CTAF freq. 122.9 to 122.8 at SOUTH BIG HORN COUNTY arpt, 44°31'00"N, 108°04'58"W.

Add CTAF freq. 122.8 at POPLAR MUNI arpt, 48°08'04"N, 105°09'43"W.

#### **NAVAIDs**

**8 Apr 2010** No Major Changes.

#### **AIRSPACE**

**8 Apr 2010** No Major Changes.

#### **SPECIAL USE AIRSPACE**

**8 Apr 2010** No Major Changes.

#### **MILITARY TRAINING ROUTES**

**8 Apr 2010** No Major Changes.

#### **MISCELLANEOUS**

**8 Apr 2010** No Major Changes.

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**CG-19 WORLD AERONAUTICAL CHART**  
**39th Edition, 4 Jun 2009**
**OBSTRUCTIONS**

**2 Jul 2009 – 8 Apr 2010** No Major Changes.

**AIRPORTS**

**2 Jul 2009** Add arpt elev 1071, lighting code \*L, runway length 71 and unicom at GLENDALE arpt, 33°31'36"N, 112°17'42"W.

**27 Aug 2009 – 8 Apr 2010** No Major Changes.

**NAVAIDs**

**2 Jul 2009 – 8 Apr 2010** No Major Changes.

**AIRSPACE**

**2 Jul 2009 – 8 Apr 2010** No Major Changes.

**SPECIAL USE AIRSPACE**

**2 Jul 2009 – 8 Apr 2010** No Major Changes.

**MILITARY TRAINING ROUTES**

**2 Jul 2009 – 8 Apr 2010** No Major Changes.

**MISCELLANEOUS**

**2 Jul 2009 – 8 Apr 2010** No Major Changes.

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**CHEYENNE SECTIONAL**  
**81st Edition, 14 Jan 2010**
**OBSTRUCTIONS**

**11 Feb 2010** Add obst 4844' MSL (350' AGL) UC, 40°21'23"N, 104°08'48"W.

Add obst 6184' MSL (390' AGL) UC, 43°02'26"N, 105°58'50"W.

**8 Apr 2010** Add obst 5024' MSL (367' AGL) UC, 44°11'51"N, 106°16'13"W.

Add windmill farm. 7643' UC is highest MSL, 41°39'33"N, 106°03'26"W.

Add windmill farm. 6269' UC is highest MSL, 43°01'45"N, 106°00'03"W.

Add obst 4749' MSL (500' AGL) UC, 44°23'17"N, 105°27'34"W.

Add obst 2485' MSL (306' AGL) UC, 44°02'17"N, 101°41'15"W.

Add obst 7189' MSL (270' AGL) UC, 41°40'47"N, 107°03'49"W.

Add obst 5832' MSL (300' AGL) UC, 43°18'20"N, 107°41'37"W.

Add obst 8603' MSL (270' AGL) UC, 41°31'41"N, 107°22'18"W.

Add obst 5591' MSL (389' AGL) UC, 42°53'04"N, 106°13'59"W.

Add obst 7062' MSL (407' AGL) UC, 41°08'21"N, 105°01'30"W.

Add obst 4489' MSL (350' AGL) UC, 41°31'40"N, 103°13'48"W.

**AIRPORTS**

**11 Feb 2010** No Major Changes.

**8 Apr 2010** Change CTAF 122.9 to 122.8 at SOUTH BIG HORN CO arpt, 44°31'01"N, 108°04'58"W.

**NAVAIDs**

**11 Feb 2010 – 8 Apr 2010** No Major Changes.

**AIRSPACE**

**11 Feb 2010** Revise RIVERTON, WY Class E: That airspace extending upward from 700 feet above the surface within an 8.7-mile radius of the Riverton Regional Airport and within 4 miles each side of the Riverton VOR/DME 291° radial extending from the 8.7-mile radius to 16.6 miles west of the VOR/DME, and within 3.1 miles each side of the Riverton VOR/DME 123° radial extending from the 8.7-mile radius to 10.5 miles southeast of the VOR/DME; that airspace extending upward from 1200 feet above the surface within a 21.8-mile radius of the Riverton VOR/DME within 8.7 miles east and 6.1 miles west of the Riverton VOR/DME 016° radial extending from the 21.8-mile radius to 33.1 miles north of the VOR/DME, and within 6.1 miles northeast and 12.7 miles southwest of the Riverton VOR/DME 301° radial extending from the 21.8-mile radius to 32.2 miles northwest of the VOR/DME, on the east within an area bounded by a point beginning at 42°56'30"N, 107°59'45"W; to 42°54'53"N, 107°44'31" W; to 42°42'35"N, 107°53'00"W; to 42°49'00"N, 108°06'00"W; thence to the point of beginning.

**8 Apr 2010** No Major Changes.

**SPECIAL USE AIRSPACE**

**11 Feb 2010 – 8 Apr 2010** No Major Changes.

**MILITARY TRAINING ROUTES**

**11 Feb 2010 – 8 Apr 2010** No Major Changes.

**MISCELLANEOUS**

**11 Feb 2010 – 8 Apr 2010** No Major Changes.

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**CHICAGO SECTIONAL**  
**79th Edition, 22 Oct 2009**

**OBSTRUCTIONS****22 Oct 2009** No Major Changes.**17 Dec 2009** Add obst 1055' MSL (268' AGL) UC, 40°39'52"N, 90°44'58"W.

Add obst 1047' MSL (240' AGL) UC, 40°02'51"N, 86°49'03"W.

Add obst 1270' MSL (600' AGL) UC, 41°38'06"N, 87°02'59"W.

Add obst 955' MSL (255' AGL) UC, 41°19'16"N, 87°12'38"W.

Add obst 875' MSL (215' AGL) UC, 41°30'57"N, 87°59'55"W.

Add obst 1087' MSL (260' AGL) UC, 43°58'08"N, 89°14'37"W.

Add obst 901' MSL (268' AGL) UC, 40°48'02"N, 90°10'30"W.

Add obst 984' MSL (250' AGL) UC, 41°01'59"N, 89°13'51"W.

Add obst 773' MSL (260' AGL) UC, 40°48'28"N, 89°34'47"W.

Add obst 1078' MSL (300' AGL) UC, 41°18'40"N, 90°10'40"W.

Add obst 1017' MSL (260' AGL) UC, 40°53'36"N, 89°02'03"W.

Add obst 998' MSL (258' AGL) UC, 40°13'17"N, 88°57'55"W.

Add obst 1200' MSL (450' AGL) UC, 40°37'48"N, 88°46'53"W.

Add obst 795' MSL (298' AGL) UC, 40°13'44"N, 90°45'34"W.

Add obst 974' MSL (228' AGL) UC, 40°52'58"N, 89°07'42"W.

Add obst 1428' MSL (280' AGL) UC, 44°15'56"N, 89°25'00"W.

Add obst 1295' MSL (299' AGL) UC, 40°17'18"N, 85°00'34"W.

Add obst 1054' MSL (310' AGL) UC, 40°12'26"N, 87°05'29"W.

Add obst 1119' MSL (260' AGL) UC, 40°56'34"N, 85°39'55"W.

Add obst 1220' MSL (330' AGL) UC, 41°15'05"N, 85°38'22"W.

Add obst 1017' MSL (325' AGL) UC, 41°15'57"N, 86°44'10"W.

Add obst 945' MSL (250' AGL) UC, 41°04'17"N, 86°46'20"W.

Add obst 1105' MSL (260' AGL) UC, 40°39'20"N, 85°09'16"W.

Add obst 1509' MSL (349' AGL) UC, 44°03'59"N, 92°01'14"W.

Add obst 1680' MSL (350' AGL) UC, 43°39'34"N, 92°17'59"W.

Add obst 1650' MSL (350' AGL) UC, 43°34'13"N, 91°36'42"W.

Add obst 1599' MSL (349' AGL) UC, 43°55'34"N, 91°26'10"W.

Add obst 1526' MSL (350' AGL) UC, 43°40'08"N, 91°24'15"W.

Add obst 1508' MSL (350' AGL) UC, 43°33'02"N, 91°21'41"W.

Add obst 1559' MSL (349' AGL) UC, 44°06'11"N, 91°51'18"W.

Add obst 1598' MSL (350' AGL) UC, 43°52'58"N, 92°00'11"W.

Add obst 1570' MSL (350' AGL) UC, 43°48'39"N, 91°38'41"W.

Add windmill farm. 1142' UC is highest MSL, 40°38'31"N, 86°58'09"W.

Add windmill farm. 1111' UC is highest MSL, 41°06'48"N, 88°39'20"W.

Add windmill farm. 1230' UC is highest MSL, 40°41'52"N, 87°15'19"W.

Add windmill farm. 1163' UC is highest MSL, 40°56'36"N, 88°24'22"W.

**11 Feb 2010** Add obst 1410' MSL (630' AGL) UC, 40°03'14"N, 85°59'22"W.

Add obst 993' MSL (285' AGL) UC, 40°46'21"N, 86°29'33"W.

Add obst 1324' MSL (276' AGL) UC, 41°41'02"N, 84°54'15"W.

Add obst 837' MSL (235' AGL) UC, 41°28'55"N, 88°01'32"W.

Add obst 1049' MSL (256' AGL) UC, 41°05'37"N, 90°26'52"W.

Add obst 784' MSL (260' AGL), 40°18'17"N, 89°39'46"W.

Add obst 844' MSL (268' AGL), 40°18'18"N, 90°11'32"W.

Add obst 2589' MSL (2000' AGL) UC, 41°53'24"N, 87°36'54"W.

Add obst 939' MSL (213' AGL) UC, 40°19'20"N, 88°59'07"W.

Add obst 1399' MSL (320' AGL) UC, 43°45'01"N, 90°15'33"W.

Add obst 1227' MSL (310' AGL) UC, 43°56'20"N, 87°54'38"W.

Add obst 1003' MSL (258' AGL) UC, 40°12'40"N, 88°44'43"W.

Add obst 1156' MSL (300' AGL) UC, 41°49'10"N, 91°44'59"W.

Add obst 937' MSL (258' AGL) UC, 40°13'52"N, 90°59'17"W.

Add obst 959' MSL (258' AGL) UC, 40°55'56"N, 90°00'46"W.

Add obst 893' MSL (258' AGL) UC, 40°19'55"N, 89°19'14"W.

Add obst 969' MSL (258' AGL) UC, 40°18'41"N, 88°20'24"W.

Add obst 916' MSL (255' AGL) UC, 40°37'06"N, 87°41'28"W.

Add obst 1023' MSL (266' AGL) UC, 40°25'00"N, 87°57'08"W.

Add obst 902' MSL (265' AGL) UC, 40°52'57"N, 87°44'23"W.

**8 Apr 2010** Add obst 1164' MSL (400' AGL) UC, 40°10'06"N, 89°05'56"W.

Add obst 1015' MSL (310' AGL) UC, 40°27'04"N, 87°13'40"W.

Add obst 899' MSL (260' AGL) UC, 40°17'03"N, 91°35'12"W.

Add obst 903' MSL (258' AGL), 40°17'26"N, 90°54'33"W.

Add obst 998' MSL (258' AGL), 40°37'59"N, 90°09'07"W.

Add obst 900' MSL (250' AGL), 40°06'39"N, 90°33'35"W.

Add obst 1053' MSL (258' AGL), 41°19'19"N, 90°29'29"W.

Add obst 1370' MSL (500' AGL) UC, 41°25'24"N, 84°51'36"W.

Add obst 1425' MSL (270' AGL) UC, 44°10'54"N, 89°22'36"W.

Add obst 1587' MSL (262' AGL) UC, 43°17'16"N, 92°25'42"W.

Add obst 930' MSL (260' AGL), 41°22'16"N, 89°29'02"W.

Add obst 1774' MSL (398' AGL) UC, 43°24'22"N, 92°29'54"W.

CONTINUED ON NEXT PAGE

**AIRPORTS****22 Oct 2009** No Major Changes.**17 Dec 2009** Add CTAF 122.9 at FLYING FEATHERS arpt, 44°03'40"N, 88°11'42"W.

Delete KUNTZ arpt, 40°43'23"N, 88°52'00"W.

Delete MURKS arpt, 40°44'20"N, 90°22'50"W.

**11 Feb 2010** Add CTAF 122.9 at DYERSVILLE arpt, 42°29'46"N, 91°10'47"W.

Add RP 29 to DYERSVILLE arpt, 42°29'46"N, 91°10'47"W.

**8 Apr 2010** Delete BUSBOOM arpt, 40°18'40"N, 88°00'55"W.

Delete WALDERS arpt, 41°39'11"N, 89°00'05"W.

Delete abandoned arpt symbol, 42°22'30"N, 88°19'30"W.

**NAVAIDS****22 Oct 2009** No Major Changes.**17 Dec 2009** Shutdown KETTLE MORaine NDB, 43°25'30"N, 88°07'38"W.**11 Feb 2010** Delete BELLE PLAINE NDB, 41°53'08"N, 92°16'59"W.**8 Apr 2010** Delete GARRISON NDB, 42°13'18"N, 92°01'13"W.**AIRSPACE****22 Oct 2009** No Major Changes.**17 Dec 2009** Revise PEORIA, IL Class E: That airspace extending upward from 700 feet above the surface bounded by a line beginning at 40°54'00"N, 89°59'00"W; to 40°53'31"N, 89°41'35"W; to 40°54'41"N, 89°35'28"W; to 40°52'16"N, 89°29'22"W; to 40°46'40"N, 89°27'38"W; to 40°44'01"N, 89°29'35"W; to 40°22'00"N, 89°32'00"W; to lat.40°26'00"N, 90°07'00"W; to 40°34'00"N, 90°12'00"W; to 40°47'00"N, 90°08'00"W; to the point of beginning.

Revise WINONA, MN Class E: That airspace extending upward from 700 feet above the surface within a 7-mile radius of Winona Municipal Airport–Max Conrad Field, and within 8 miles southwest and 4 miles northeast of the 121° bearing from the airport extending from the 7-mile radius to 21 miles southeast of the airport, excluding that airspace within the La Crosse, WI Class D airspace area.

Revise PLATTEVILLE, WI Class E: That airspace extending upward from 700 feet above the surface within a 7.4-mile radius of Platteville Municipal Airport and within 4 miles each side of the 145° bearing from the airport extending from the 7.4-mile radius to 10.2 miles southeast of the airport.

**11 Feb 2010 – 8 Apr 2010** No Major Changes.**SPECIAL USE AIRSPACE****22 Oct 2009 – 8 Apr 2010** No Major Changes.**MILITARY TRAINING ROUTES****22 Oct 2009 – 8 Apr 2010** No Major Changes.**MISCELLANEOUS****22 Oct 2009 – 17 Dec 2009** No Major Changes.**11 Feb 2010** Change MEF 2<sup>5</sup> to 2<sup>7</sup> in quadrant 41°30'–42°00"N, 87°30'–88°00"W.**8 Apr 2010** Change MEF 1<sup>8</sup> to 1<sup>9</sup> in quadrant 43°00'–43°30"N, 92°00'–92°30"W.**GREEN BAY SECTIONAL**  
**79th Edition, 17 Dec 2009****OBSTRUCTIONS****17 Dec 2009** No Major Changes.**11 Feb 2010** Add obst 1681' MSL (320' AGL) UC, 46°58'34"N, 92°36'23"W.

Add obst 1626' MSL (320' AGL) UC, 45°41'43"N, 91°40'07"W.

Add obst 1642' MSL (420' AGL) UC, 46°19'56"N, 91°34'14"W.

Add obst 1383' MSL (259' AGL) UC, 44°58'37"N, 90°58'24"W.

Add obst 1455' MSL (350' AGL) UC, 44°15'20"N, 92°26'17"W.

Add obst 1722' MSL (320' AGL) UC, 47°30'04"N, 92°19'29"W.

Add obst 1299' MSL (318' AGL) UC, 45°53'25"N, 92°23'40"W.

**8 Apr 2010** Add obst 1425' MSL (270' AGL) UC, 45°24'34"N, 91°36'42"W.

Add obst 1795' MSL (320' AGL) UC, 45°18'32"N, 89°28'56"W.

**AIRPORTS****17 Dec 2009 – 8 Apr 2010** No Major Changes.**NAVAIDS****17 Dec 2009** No Major Changes.**11 Feb 2010** Shutdown BONG NDB, 46°41'29"N, 92°06'12"W.**8 Apr 2010** No Major Changes.**AIRSPACE****17 Dec 2009 – 8 Apr 2010** No Major Changes.**SPECIAL USE AIRSPACE****17 Dec 2009 – 8 Apr 2010** No Major Changes.**MILITARY TRAINING ROUTES****17 Dec 2009 – 8 Apr 2010** No Major Changes.**MISCELLANEOUS****17 Dec 2009 – 8 Apr 2010** No Major Changes.

## KANSAS CITY SECTIONAL

### 83rd Edition, 19 Nov 2009

**OBSTRUCTIONS**

**17 Dec 2009** Add obst 1174' MSL (305' AGL) UC, 36°05'01"N, 96°35'42"W.

Change to group obst 1178' MSL (335' AGL) UC, 37°01'30"N, 94°45'08"W.

Add obst 1460' MSL (280' AGL), 36°32'20"N, 93°34'31"W.

Add obst 1624' MSL (339' AGL) UC, 36°02'15"N, 93°55'05"W.

Add obst 1591' MSL (315' AGL) UC, 36°53'31"N, 93°34'44"W.

Add obst 1230' MSL (320' AGL) UC, 40°11'57"N, 95°02'00"W.

**11 Feb 2010** Change obst from 827' MSL (243' AGL) to 882' MSL (300' AGL), 38°44'06"N, 89°57'02"W.

Add obst 722' MSL (260' AGL) UC, 38°17'56"N, 89°59'34"W.

Add obst 1305' MSL (305' AGL) UC, 38°05'01"N, 95°37'34"W.

Add obst 1799' MSL (276' AGL) UC, 37°13'06"N, 92°17'24"W.

Add obst 888' MSL (258' AGL) UC, 39°40'32"N, 89°50'15"W.

Add obst 1265' MSL (315' AGL) UC, 37°45'31"N, 90°46'15"W.

Add obst 1512' MSL (334' AGL) UC, 36°52'52"N, 92°00'19"W.

Add obst 879' MSL (258' AGL) UC, 39°56'42"N, 89°55'56"W.

Add obst 937' MSL (258' AGL) UC, 40°13'52"N, 90°59'17"W.

Add obst 1040' MSL (318' AGL) UC, 39°29'32"N, 91°58'26"W.

Add obst 836' MSL (242' AGL) UC, 40°01'00"N, 89°51'49"W.

Add obst 885' MSL (258' AGL) UC, 39°02'32"N, 89°53'08"W.

Add obst 838' MSL (258' AGL) UC, 39°50'25"N, 89°48'10"W.

Add obst 887' MSL (258' AGL) UC, 39°04'50"N, 89°48'26"W.

Add obst 1142' MSL (324' AGL) UC, 39°44'31"N, 92°14'37"W.

Add obst 947' MSL (320' AGL) UC, 39°57'22"N, 91°37'59"W.

Add windmill farm. 1522' is highest MSL, 40°05'46"N, 94°29'59"W.

Add windmill farm. 1540' is highest MSL, 40°12'42"N, 94°42'11"W.

**8 Apr 2010** Add obst 1419' MSL (275' AGL) UC, 39°14'53"N, 95°43'14"W.

Add obst 1101' MSL (260' AGL) UC, 39°30'57"N, 92°23'55"W.

Add obst 1565' MSL (334' AGL) UC, 37°06'24"N, 91°48'50"W.

Add obst 1132' MSL (260' AGL) UC, 39°17'56"N, 92°30'58"W.

Add obst 1491' MSL (298' AGL) UC, 36°15'37"N, 94°40'55"W.

Add obst 900' MSL (250' AGL) UC, 40°06'39"N, 90°33'35"W.

Add obst 1066' MSL (330' AGL) UC, 36°18'11"N, 91°24'06"W.

Add obst 1469' MSL (320' AGL) UC, 36°49'34"N, 91°48'00"W.

Add obst 977' MSL (260' AGL) UC, 39°09'51"N, 90°48'57"W.

Add obst 1087' MSL (265' AGL) UC, 39°57'13"N, 92°38'46"W.

Add obst 1031' MSL (215' AGL) UC, 39°40'44"N, 92°21'57"W.

Add obst 1187' MSL (275' AGL) UC, 37°55'01"N, 93°20'44"W.

Add obst 834' MSL (234' AGL) UC, 38°17'02"N, 90°35'42"W.

Add obst 955' MSL (232' AGL) UC, 38°19'22"N, 90°50'28"W.

**AIRPORTS**

**17 Dec 2009** Delete TERAMIRANDA arpt, 36°36'30"N, 94°52'21"W.

**11 Feb 2010** Delete RP 36 at MIDWEST NATL, 39°19'57"N, 94°18'35"W.

**8 Apr 2010** No Major Changes.

**NAVAIDS**

**17 Dec 2009** No Major Changes.

**11 Feb 2010** Delete BOONVILLE NDB, 38°56'58"N, 92°41'03"W.

Shutdown KENNETT NDB, 36°13'43"N, 90°02'21"W.

**8 Apr 2010** No Major Changes.

**AIRSPACE**

**17 Dec 2009** Revise TOPEKA, KS Class D: That airspace extending upward from the surface to and including 3,600 feet MSL within a 4.9-mile radius of Forbes Field Airport, and within 2.2 miles each side of the RIPLY LOM 317° bearing extending from the 4.9-mile radius to 5.3 miles northwest of the airport and within 1.8 miles each side of the Forbes Field Airport ILS Localizer southeast course extending from the 4.9-mile radius to 0.9 miles southeast of the RIPLY LOM. This Class D airspace area is effective during the specific dates and times established in advance by a Notice to Airmen. The effective dates and times will thereafter be continuously published in the Airport/Facility Directory.

Revise TOPEKA, KS Class E: That airspace within a 4.9-mile radius of Forbes Field Airport, and within 2.2 miles each side of the RIPLY LOM 317° bearing extending from the 4.9-mile radius to 5.3 miles northwest of the airport and within 1.8 miles each side of the Forbes Field Airport ILS Localizer southeast course extending from the 4.9-mile radius to 0.9 miles southeast of the RIPLY LOM. That airspace extending upward from 700 feet above the surface within a 7.4-mile radius of Forbes Field Airport, and within 3.1 miles each side of the Forbes Field Airport ILS localizer course extending from the 7.4-mile radius to 13 miles southeast of the airport, and within 3.5 miles each side of the Forbes Field Airport ILS localizer course extending from the 7.4-mile radius to 13 miles northwest of the airport.

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Revise ST. LOUIS, MO Class E: That airspace extending upward from 700 feet above the surface within a 7.1-mile radius of Lambert-St. Louis International Airport, and within 4 miles southeast and 7 miles northwest of the Lambert- St. Louis International Airport Runway 24 ILS localizer course extending from the airport to 10.5 miles northeast of the ZUMAY LOM, and within 4 miles southwest and 7.9 miles northeast of the Lambert- St. Louis International Airport Runway 12R ILS localizer course extending from the airport to 10.5 miles northwest of the OBLIO LOM, and within 4 miles southwest and 7.9 miles northeast of the Lambert- St. Louis International Airport Runway 30L ILS localizer course extending from the airport to 8.7 miles southeast of the airport, and within a 6.8-mile radius of Spirit of St. Louis Airport, and within 3.9 miles each side of the 258° bearing from Spirit of St. Louis Airport extending from the 6.8-mile radius of Spirit of St. Louis Airport to 10.6 miles west of the airport, and within 2.6 miles each side of the 098° radial of the Foristell VORTAC extending from the 6.8-mile radius of Spirit of St. Louis Airport to 8.3 miles west of the airport, and within a 6.4-mile radius of St. Charles County Smartt Airport, and within a 6.9-mile radius of St. Louis Regional Airport, and within 4 miles each side of the 014° bearing from the Civic Memorial NDB extending from the 6.9-mile radius of St. Louis Regional Airport to 7 miles north of the airport, and within 4.4 miles each side of the 190° radial of the St. Louis VORTAC extending from 2 miles south of the VORTAC to 22.1 miles south of the VORTAC.

**11 Feb 2010** No Major Changes.

**8 Apr 2010** Revise ST. LOUIS, MO Class D: That airspace extending upward from the surface to and including 3,000 feet MSL within a 4.3-mile radius of Spirit of St. Louis Airport, and within 1 mile each side of the 258° bearing from the airport extending from the 4.3-mile radius to 4.6 miles west of the airport, excluding that airspace within the St. Louis, MO Class B airspace area. This Class D airspace area is effective during the specific dates and times established in advance by a Notice to Airmen. The effective dates and times will thereafter be continuously published in the Airport/Facility Directory.

**SPECIAL USE AIRSPACE**

**17 Dec 2009** No Major Changes.

**11 Feb 2010** Add SHIRLEY A MOA: That airspace beginning at 35°19'00"N, 92°38'00"W to 35°19'00"N, 93°12'00"W to 35°38'15"N, 93°35'00"W to 36°02'00"N, 93°13'00"W to 36°02'00"N, 92°38'00"W to the point of beginning.

Add SHIRLEY B MOA: That airspace beginning at 35°19'00"N, 92°38'00"W to 36°02'00"N, 92°38'00"W to 36°02'00"N, 91°55'00"W to 35°58'53"N, 91°46'00"W to 35°19'00"N, 92°02'00"W to the point of beginning.

**8 Apr 2010** No Major Changes.

**MILITARY TRAINING ROUTES**

**17 Dec 2009 – 8 Apr 2010** No Major Changes.

**MISCELLANEOUS**

**17 Dec 2009 – 8 Apr 2010** No Major Changes.

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**KANSAS CITY TERMINAL AREA CHART**  
**70th Edition, 19 Nov 2009****OBSTRUCTIONS****17 Dec 2009 – 11 Feb 2010** No Major Changes.**8 Apr 2010** Add obst 1419' MSL (275' AGL) UC, 39°14'53"N, 95°43'14"W.  
Add windmill farm. 1522' UC is highest MSL, 40°05'46"N, 94°29'59"W.**AIRPORTS****17 Dec 2009** No Major Changes.**11 Feb 2010** Delete RP 36 at MIDWEST NATL, 39°19'57N, 94°18'35"W.**8 Apr 2010** No Major Changes.**NAVAIDS****17 Dec 2009 – 8 Apr 2010** No Major Changes.**AIRSPACE****17 Dec 2009** Revise TOPEKA, KS Class D: That airspace extending upward from the surface to and including 3,600 feet MSL within a 4.9-mile radius of Forbes Field Airport, and within 2.2 miles each side of the RIPLY LOM 317° bearing extending from the 4.9-mile radius to 5.3 miles northwest of the airport and within 1.8 miles each side of the Forbes Field Airport ILS Localizer southeast course extending from the 4.9-mile radius to 0.9 miles southeast of the RIPLY LOM. This Class D airspace area is effective during the specific dates and times established in advance by a Notice to Airmen. The effective dates and times will thereafter be continuously published in the Airport/Facility Directory.

Revise TOPEKA, KS Class E: That airspace within a 4.9-mile radius of Forbes Field Airport, and within 2.2 miles each side of the RIPLY LOM 317° bearing extending from the 4.9-mile radius to 5.3 miles northwest of the airport and within 1.8 miles each side of the Forbes Field Airport ILS Localizer southeast course extending from the 4.9-mile radius to 0.9 miles southeast of the RIPLY LOM. That airspace extending upward from 700 feet above the surface within a 7.4-mile radius of Forbes Field Airport, and within 3.1 miles each side of the Forbes Field Airport ILS localizer course extending from the 7.4-mile radius to 13 miles southeast of the airport, and within 3.5 miles each side of the Forbes Field Airport ILS localizer course extending from the 7.4-mile radius to 13 miles northwest of the airport.

**11 Feb 2010 – 8 Apr 2010** No Major Changes.**SPECIAL USE AIRSPACE****17 Dec 2009 – 8 Apr 2010** No Major Changes.**MILITARY TRAINING ROUTES****17 Dec 2009 – 8 Apr 2010** No Major Changes.**MISCELLANEOUS****17 Dec 2009 – 8 Apr 2010** No Major Changes.

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**MEMPHIS SECTIONAL**  
**84th Edition, 8 Apr 2010****OBSTRUCTIONS****8 Apr 2010** No Major Changes.**AIRPORTS****8 Apr 2010** No Major Changes.**NAVAIDS****8 Apr 2010** No Major Changes.**AIRSPACE****8 Apr 2010** No Major Changes.**SPECIAL USE AIRSPACE****8 Apr 2010** No Major Changes.**MILITARY TRAINING ROUTES****8 Apr 2010** No Major Changes.**MISCELLANEOUS****8 Apr 2010** No Major Changes.

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**MINNEAPOLIS-ST. PAUL TERMINAL AREA CHART**  
**73rd Edition, 14 Jan 2010**
**OBSTRUCTIONS****11 Feb 2010 – 8 Apr 2010** No Major Changes.**AIRPORTS****11 Feb 2010** Delete RP 4, 22 at MAPLE LAKE arpt, 45°14'10"N, 93°59'08"W.**8 Apr 2010** Chang FLYING CLOUD ATCT freq from 118.1 to 119.15, 44°49'38"N, 93°27'30"W.**NAVAIDS****11 Feb 2010** Change FLYING CLOUD VOR/DME position from 44°49'33"N, 93°27'24"W to 44°49'31"N, 93°26'34"W. Raise all outbound bearings from FLYING CLOUD VOR/DME by 6 degrees, 44°49'31"N, 93°26'34"W.**8 Apr 2010** Change FLYING CLOUD VOR/DME freq from 111.8 to 117.7, 44°49'32"N, 93°27'24"W.**AIRSPACE****11 Feb 2010** Add MANKATO, MN Class E: That airspace extending upward from 700 feet above the surface within a 7-mile radius of Mankato Regional Airport, and within 2 miles each side of the 047° bearing from the airport extending from the 7-mile radius to 8 miles northeast of the airport; and within 4 miles each side of the 020° bearing from the airport extending from the 7-mile radius to 11 miles north of the airport; and within a 6-mile radius of the point in space serving Immanuel-St. Joseph's Hospital, 44°09'48"N, 93°57'40"W.**8 Apr 2010** No Major Changes.**SPECIAL USE AIRSPACE****11 Feb 2010 – 8 Apr 2010** No Major Changes.**MILITARY TRAINING ROUTES****11 Feb 2010 – 8 Apr 2010** No Major Changes.**MISCELLANEOUS****11 Feb 2010 – 8 Apr 2010** No Major Changes.

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**OMAHA SECTIONAL**
**81st Edition, 11 Feb 2010****OBSTRUCTIONS****11 Feb 2010** No Major Changes.**8 Apr 2010** Add obst 2180'MSL (1000'AGL)UC, 40°48'04"N, 94°54'07"W.

Add obst 1892'MSL (356'AGL)UC, 41°54'40"N, 95°17'22"W.

Add obst 1693'MSL (305'AGL)UC, 44°21'31"N, 97°51'14"W.

Add obst 1718'MSL (350'AGL)UC, 42°48'54"N, 98°11'28"W.

Add obst 2078'MSL (300'AGL)UC, 43°52'11"N, 99°35'57"W.

Add obst 1624'MSL (398'AGL)UC, 42°18'04"N, 93°27'37"W.

Add obst 1969'MSL (327'AGL)UC, 43°58'53"N, 96°25'10"W.

**AIRPORTS****11 Feb 2010 – 8 Apr 2010** No Major Changes.**NAVAIDS****11 Feb 2010** No Major Changes.**8 Apr 2010** Delete PILOT ROCK NDB, 42°43'54"N, 95°33'11"W.**AIRSPACE****11 Feb 2010** No Major Changes.**8 Apr 2010** Revise RED OAK, IA Class E: That airspace extending upward from 700 feet above the surface within a 6.4-mile radius of Red Oak Municipal Airport; and within 2 miles each side of the 354° bearing from the airport extending from the 6.4-mile radius to 1.1 miles north of the airport; and within 2.6 miles each side of the 326° bearing from the Red Oak NDB extending from the 6.4-mile radius to 8.3 miles northwest of the airport.**SPECIAL USE AIRSPACE****11 Feb 2010 – 8 Apr 2010** No Major Changes.**MILITARY TRAINING ROUTES****11 Feb 2010 – 8 Apr 2010** No Major Changes.**MISCELLANEOUS****11 Feb 2010** No Major Changes.**8 Apr 2010** Change MEF 1<sup>8</sup> to 2<sup>3</sup> in quadrant 40°30'-41°00'N, 94°30'-95°00'W.



**ST. LOUIS SECTIONAL**  
**81st Edition, 17 Dec 2009**

**OBSTRUCTIONS****17 Dec 2009** No Major Changes.**11 Feb 2010** Add obst 1097' MSL (275' AGL) UC, 39°03'46"N, 84°59'04"W.

Add obst 1410' MSL (630' AGL) UC, 40°03'14"N, 85°59'22"W.

Change obst from 827' MSL (243' AGL) to 882' MSL (300' AGL), 38°44'06"N, 89°57'02"W.

Add obst 738' MSL (226' AGL) UC, 38°11'11"N, 89°40'09"W.

Add obst 722' MSL (260' AGL) UC, 38°17'56"N, 89°59'34"W.

Add obst 692' MSL (260' AGL) UC, 37°15'35"N, 88°58'50"W.

Add obst 851' MSL (349' AGL) UC, 38°45'25"N, 89°06'09"W.

Add obst 756' MSL (275' AGL) UC, 38°32'04"N, 89°31'26"W.

Add obst 865' MSL (220' AGL), 39°17'43"N, 88°00'03"W.

Add obst 1200' MSL (237' AGL) UC, 39°12'34"N, 86°38'31"W.

Add obst 917' MSL (227' AGL) UC, 37°53'08"N, 86°03'40"W.

Add obst 1003' MSL (258' AGL) UC, 40°12'40"N, 88°44'43"W.

Add obst 851' MSL (258' AGL) UC, 39°55'55"N, 89°40'00"W.

Add obst 888' MSL (258' AGL) UC, 39°40'32"N, 89°50'15"W.

Add obst 1265' MSL (315' AGL) UC, 37°45'31"N, 90°46'15"W.

Add obst 868' MSL (258' AGL) UC, 39°58'06"N, 89°43'48"W.

Add obst 879' MSL (258' AGL) UC, 39°56'42"N, 89°55'56"W.

Add obst 838' MSL (258' AGL) UC, 39°50'25"N, 89°48'10"W.

Add obst 885' MSL (258' AGL) UC, 39°02'32"N, 89°53'08"W.

Add obst 887' MSL (258' AGL) UC, 39°04'50"N, 89°48'26"W.

**8 Apr 2010** Add obst 1164' MSL (400' AGL) UC, 40°10'06"N, 89°05'56"W.

Add obst 1566' MSL (204' AGL) UC, 37°39'55"N, 83°57'21"W.

Add obst 817' MSL (300' AGL) UC, 38°37'03"N, 86°42'35"W.

Add obst 1142' MSL (295' AGL) UC, 38°45'58"N, 84°53'45"W.

Add obst 1022' MSL (256' AGL) UC, 37°30'50"N, 86°25'55"W.

Add obst 703' MSL (258' AGL) UC, 38°15'24"N, 89°03'24"W.

Add obst 900' MSL (250' AGL) UC, 40°06'39"N, 90°33'35"W.

Add obst 1385' MSL (279' AGL) UC, 36°10'15"N, 84°02'17"W.

Add obst 712' MSL (280' AGL) UC, 36°40'56"N, 88°44'19"W.

Add obst 1578' MSL (235' AGL) UC, 36°52'32"N, 84°12'59"W.

Add obst 1409' MSL (255' AGL) UC, 36°46'20"N, 84°45'59"W.

Add obst 863' MSL (280' AGL) UC, 37°48'34"N, 85°34'52"W.

Add obst 1133' MSL (299' AGL) UC, 38°20'55"N, 85°02'02"W.

Add obst 1170' MSL (280' AGL) UC, 38°15'12"N, 84°37'40"W.

Add obst 1199' MSL (299' AGL) UC, 38°16'32"N, 84°57'02"W.

Add obst 1119' MSL (265' AGL) UC, 38°26'43"N, 85°10'39"W.

Add obst 829' MSL (255' AGL) UC, 37°16'08"N, 86°40'28"W.

Add obst 902' MSL (255' AGL) UC, 36°45'38"N, 86°43'03"W.

Add obst 682' MSL (300' AGL) UC, 36°55'13"N, 87°58'37"W.

Add obst 1032' MSL (255' AGL) UC, 36°50'24"N, 85°56'34"W.

Add obst 905' MSL (310' AGL) UC, 37°51'44"N, 86°45'00"W.

Add obst 1477' MSL (255' AGL) UC, 36°55'42"N, 84°14'33"W.

Add obst 1052' MSL (255' AGL) UC, 37°05'29"N, 85°36'52"W.

Add obst 977' MSL (260' AGL) UC, 39°09'51"N, 90°48'57"W.

Add obst 834' MSL (234' AGL) UC, 38°17'02"N, 90°35'42"W.

Add obst 955' MSL (232' AGL) UC, 38°19'22"N, 90°50'28"W.

Add obst 787' MSL (400' AGL) UC, 36°15'29"N, 88°11'11"W.

Add obst 1178' MSL (286' AGL) UC, 36°30'51"N, 86°33'57"W.

Add obst 988' MSL (290' AGL) UC, 36°27'48"N, 87°37'08"W.

Add obst 2210' MSL (260' AGL) UC, 36°23'13"N, 84°20'11"W.

Add obst 1792' MSL (306' AGL) UC, 37°36'25"N, 83°59'58"W.

Add obst 1020' MSL (349' AGL) UC, 37°06'51"N, 87°56'32"W.

Add obst 887' MSL (259' AGL) UC, 39°35'02"N, 89°44'44"W.

Add obst 1008' MSL (216' AGL) UC, 39°20'01"N, 84°46'34"W.

Add obst 959' MSL (260' AGL) UC, 38°24'38"N, 90°45'42"W.

Add obst 962' MSL (215' AGL) UC, 37°41'57"N, 84°29'03"W.

**AIRPORTS****17 Dec 2009** No Major Changes.**11 Feb 2010** Delete ACTION arpt, 39°07'57"N, 84°49'43"W.

Delete RP 19, RP 14 at SMYRNA arpt, 36°00'32"N, 86°31'12"W.

**8 Apr 2010** Delete RICHARDSON arpt, 38°22'50"N, 87°13'14"W.**NAVAIDS****17 Dec 2009** No Major Changes.**11 Feb 2010** Delete CLAYE NDB, 39°03'23"N, 86°35'58"W.

Shutdown KENNETT NDB, 36°13'43"N, 90°02'21"W.

Shutdown LITCHFIELD NDB, 39°09'55"N, 89°40'32"W.

**8 Apr 2010** No Major Changes.

CONTINUED ON NEXT PAGE



**AIRSPACE****17 Dec 2009 – 11 Feb 2010** No Major Changes.**8 Apr 2010** Revise ST. LOUIS, MO. Class D: That airspace extending upward from the surface to and including 3,000 feet MSL within a 4.3-mile radius of Spirit of St. Louis Airport, and within 1 mile each side of the 258° bearing from the airport extending from the 4.3-mile radius to 4.6 miles west of the airport, excluding that airspace within the St. Louis, MO Class B airspace area. This Class D airspace area is effective during the specific dates and times established in advance by a Notice to Airmen. The effective dates and times will thereafter be continuously published in the Airport/Facility Directory.**SPECIAL USE AIRSPACE****17 Dec 2009 – 8 Apr 2010** No Major Changes.**MILITARY TRAINING ROUTES****17 Dec 2009 – 8 Apr 2010** No Major Changes.**MISCELLANEOUS****17 Dec 2009 – 8 Apr 2010** No Major Changes.

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**ST. LOUIS TERMINAL AREA CHART****73rd Edition, 17 Dec 2009****OBSTRUCTIONS****17 Dec 2009** No Major Changes.**11 Feb 2010** Change obst from 827' MSL (243' AGL) to 882' MSL (300' AGL), 38°44'06"N, 89°57'02"W.

Add obst 738' MSL (226' AGL) UC, 38°11'11"N, 89°40'09"W.

Add obst 722' MSL (260' AGL) UC, 38°17'56"N, 89°59'34"W.

Add obst 885' MSL (258' AGL) UC, 39°02'32"N, 89°53'08"W.

Add obst 887' MSL (258' AGL) UC, 39°04'50"N, 89°48'26"W.

**8 Apr 2010** Add obst 977' MSL (260' AGL) UC, 39°09'51"N, 90°48'57"W.

Add obst 834' MSL (234' AGL) UC, 38°17'02"N, 90°35'42"W.

Add obst 955' MSL (232' AGL) UC, 38°19'22"N, 90°50'28"W.

Add obst 959' MSL (260' AGL) UC, 38°24'38"N, 90°45'42"W.

**AIRPORTS****17 Dec 2009 – 8 Apr 2010** No Major Changes.**NAVAIDS****17 Dec 2009 – 8 Apr 2010** No Major Changes.**AIRSPACE****17 Dec 2009 – 11 Feb 2010** No Major Changes.**8 Apr 2010** Revise ST. LOUIS, MO. Class D: That airspace extending upward from the surface to and including 3,000 feet MSL within a 4.3-mile radius of Spirit of St. Louis Airport, and within 1 mile each side of the 258° bearing from the airport extending from the 4.3-mile radius to 4.6 miles west of the airport, excluding that airspace within the St. Louis, MO Class B airspace area. This Class D airspace area is effective during the specific dates and times established in advance by a Notice to Airmen. The effective dates and times will thereafter be continuously published in the Airport/Facility Directory.**SPECIAL USE AIRSPACE****17 Dec 2009 – 8 Apr 2010** No Major Changes.**MILITARY TRAINING ROUTES****17 Dec 2009 – 8 Apr 2010** No Major Changes.**MISCELLANEOUS****17 Dec 2009 – 8 Apr 2010** No Major Changes.

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**TWIN CITIES SECTIONAL**  
**79th Edition, 14 Jan 2010****OBSTRUCTIONS**

**11 Feb 2010** Add obst 1519' MSL (349' AGL) UC, 45°43'12"N, 94°23'04"W.

**8 Apr 2010** Add obst 2523' MSL (398' AGL) UC, 47°07'12"N, 100°32'48"W.

Add obst 1949' MSL (499' AGL) UC, 45°27'13"N, 98°48'12"W.

Add obst 1688' MSL (299' AGL) UC, 45°45'56"N, 98°29'27"W.

Add obst 2135' MSL (306' AGL) UC, 44°58'09"N, 99°10'36"W.

Add obst 1465' MSL (225' AGL) UC, 46°40'26"N, 94°06'28"W.

Add obst 1441' MSL (350' AGL) UC, 48°50'42"N, 95°50'20"W.

Add obst 1647' MSL (300' AGL) UC, 47°01'13"N, 93°34'45"W.

Add obst 1600' MSL (228' AGL) UC, 47°10'36"N, 93°31'49"W.

**AIRPORTS**

**11 Feb 2010** Delete RP 4, 22 at MAPLE LAKE arpt, 45°14'10"N, 93°59'08"W.

**8 Apr 2010** Change FLYING CLOUD ATCT freq from 118.1 to 119.15, 44°49'38"N, 93°27'30"W.

Add RP 9R to GRAND FORKS INTL arpt, 47°56'50"N, 97°10'25"W.

**NAVAIDS**

**11 Feb 2010** Change FLYING CLOUD VOR/DME position from 44°49'33"N, 93°27'24"W to 44°49'31"N, 93°26'34"W. Raise all outbound bearings from FLYING CLOUD VOR/DME by 6 degrees, 44°49'31"N, 93°26'34"W.

**8 Apr 2010** Change FLYING CLOUD VOR/DME freq from 111.8 TO 117.7, 44°49'32"N, 93°27'24"W.

**AIRSPACE**

**11 Feb 2010 – 8 Apr 2010** No Major Changes.

**SPECIAL USE AIRSPACE**

**11 Feb 2010 – 8 Apr 2010** No Major Changes.

**MILITARY TRAINING ROUTES**

**11 Feb 2010 – 8 Apr 2010** No Major Changes.

**MISCELLANEOUS**

**11 Feb 2010 – 8 Apr 2010** No Major Changes.

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**WICHITA SECTIONAL**  
**84th Edition, 14 Jan 2010****OBSTRUCTIONS**

**11 Feb 2010** Add obst 1665' MSL (349' AGL) UC, 36°21'39"N, 98°33'03"W.

Add obst 4492' MSL (350' AGL) UC, 38°07'04"N, 103°31'00"W.

Add obst 5430' MSL (350' AGL) UC, 39°50'33"N, 103°53'05"W.

**8 Apr 2010** Add obst 1729' MSL (349' AGL) UC, 36°24'58"N, 98°44'43"W.

Add obst 2487' MSL (730' AGL) UC, 37°24'09"N, 98°34'52"W.

Add obst 3688' MSL (270' AGL) UC, 38°31'06"N, 101°29'49"W.

Add obst 1755' MSL (349' AGL) UC, 36°32'58"N, 98°15'31"W.

Add obst 2753' MSL (295' AGL) UC, 36°08'18"N, 99°32'31"W.

**AIRPORTS**

**11 Feb 2010** Add RP 8 and RP 26 to MC PHERSON arpt, 38°21'08"N, 97°41'28"W.

**8 Apr 2010** Change RP 8 to RP 18 at MC PHERSON arpt, 38°21'08"N, 97°41'28"W.

**NAVAIDS**

**11 Feb 2010 – 8 Apr 2010** No Major Changes.

**AIRSPACE**

**11 Feb 2010 – 8 Apr 2010** No Major Changes.

**SPECIAL USE AIRSPACE**

**11 Feb 2010 – 8 Apr 2010** No Major Changes.

**MILITARY TRAINING ROUTES**

**11 Feb 2010** No Major Changes.

**8 Apr 2010** IR-504 Revised

**MISCELLANEOUS**

**11 Feb 2010** No Major Changes.

**8 Apr 2010** Change MEF 2<sup>5</sup> to 2<sup>6</sup> in quadrant 37°00'-37°30'N, 98°30'-99°00'W.

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## SUPPLEMENTAL COMMUNICATION REFERENCE

Contained within this tabulation, and listed alphabetically by airport name, are all private-use airports charted on the U.S. IFR Enroute Low and High Altitude charts in the United States, having terminal approach and departure control facilities. Additionally, listed by country, are all Canadian and Mexican airports that appear on the U.S. IFR Enroute charts with approach and departure control services. All frequencies transmit and receive unless otherwise noted. Radials defining sectors are outbound from the facility.

## UNITED STATES

FACILITY NAME	CHART & PANEL
<b>Frankfort, IL (LL40)</b> Chicago App/Dep Con 133.1 285.6	L-28H
<b>Glasgow Industrial, MT (Ø7MT)</b> Salt Lake Center App/Dep Con 126.85 305.2	H-1E, 2F, L-13D
<b>USAF Academy Bullseye Aux Airstrip, CO (C09Ø)</b> ASOS 118.325	L-10F
<b>West Kentucky Airpark, KY (5KY3)</b> Memphis Center App/Dep Con 133.65 292.15	L-16I
<b>William P Gwinn, FL (Ø6FA)</b> Gwinn Tower 120.4 279.25 (Mon-Fri 1300-2100Z‡) Gnd Con 121.65 279.25	H-8I, L-23C

## CANADA

FACILITY NAME	CHART & PANEL
<b>Abbotsford, BC (CYXX)</b> ATIS 119.8 (1500-Ø700Z‡) Victoria Trml App/Dep Con 132.7 (Avbl on ground) 290.8 Tower 119.4 (Inner) 121.0 (Outer) 295.0 (1500-Ø700Z‡) Gnd Con 121.8 MF 119.4 295.0 (Ø700-1500Z‡) (Shape irregular to 4500')	H-1B, L-12F
<b>Amos/Magny, QC (CYEY)</b> Montreal Center App/Dep Con 125.9	H-11B
<b>Atikokan Muni, ON (CYIB)</b> MF 122.3 (5 NM to 4500' No ground station)	L-14I
<b>Barrie-Orillia (Lake Simcoe Rgnl), ON (CYLS)</b> AWOS 122.55 (Pvt) Toronto Center App/Dep Con 124.025	H-11B, L-31D
<b>Bar River, ON (CPF2)</b> Toronto Center App/Dep Con 132.65	L-31C
<b>Bathurst, NB (CZBF)</b> Moncton Center App/Dep Con 134.25	L-32J
<b>Boundary Bay, BC (CZBB)</b> ATIS 125.5 (1500-Ø700Z‡) Vancouver App/Dep Con 132.3 363.8 Tower 118.1 (Inner) 127.6 (Outer) (1500-Ø700Z‡) Gnd Con 124.3 MF 118.1 (Ø700-1500Z‡ to 2000'. Vancouver Trml 125.2 above 2000'. Shape irregular to 2500'.)	H-1B, L-1E
<b>Brampton, ON (CNC3)</b> Toronto Trml App/Dep Con 119.3 253.1	L-31D
<b>Brandon Muni, MB (CYBR)</b> Winnipeg Center App/Dep Con 132.25 285.4 MF 122.1 (5 NM to 4000')	H-2H
<b>Brantford, ON (CYFD)</b> Toronto Trml App/Dep Con 128.27	L-31D
<b>Brockville-Thousand Islands Rgnl Tackaberry, ON (CNL3)</b> Montreal Center App/Dep Con 134.675	L-32G
<b>Bromont, QC (CZBM)</b> Montreal Center App/Dep Con 132.35 MF 122.15 (5 NM to 3400')	L-32G
<b>Burlington Airpark, ON (CZBA)</b> Toronto Center App/Dep Con 119.3 253.1	L-31D
<b>Castlegar/West Kootenay Rgnl, BC (CYCG)</b> Vancouver Center App/Dep Con 134.2 227.3 MF 122.1 (5 NM to 6500')	H-1C
<b>Centralia/James T. Fld Muni, ON (CYCE)</b> Toronto Center App/Dep Con 135.30	H-10G, 11B, L-31D
<b>Charlottetown, PE (CYYG)</b> Moncton Center App/Dep Con 135.65 384.8 MF 118.0 (5 NM to 3200')	H-11E, L-32J
<b>Chatham-Kent, ON (CNZ3)</b> Cleveland Center App/Dep Con 132.25	H-10G, L-30G

FACILITY NAME	CHART & PANEL
<b>Collingwood, ON (CNY3)</b> Toronto Center App/Dep Con 124.02	H-11B, L-31D
<b>Cornwall Rgnl, ON (CYCC)</b> Boston Center App/Dep Con 135.25 377.1	L-32G
<b>Cranbrook/Canadian Rockies Intl, BC (CYXC)</b> Vancouver Center App/Dep Con 133.6 MF 122.3 (5 NM to 6100')	H-1C
<b>Debert, NS (CCQ3)</b> Halifax Trml App/Dep Con 119.2	H-11E, L-32J
<b>Digby, NS (CYID)</b> Moncton Center App/Dep Con 123.9	L-32J
<b>Downsview, ON (CYZD)</b> Toronto Center App Con 133.4 Toronto Center Dep Con 133.4 MF 126.2 (1300-2300Z±, 3 NM to 1700')	H-11B, L-31E
<b>Drummondville, QC (CSC3)</b> Montreal Center App/Dep Con 132.35	L-32H
<b>Earlton (Timiskaming Rgnl), ON (CYXR)</b> MF 122.0 (5 NM to 3800') AWOS 128.6	H-11B
<b>Elliot Lake Muni, ON (CYEL)</b> Toronto Center App/Dep Con 135.4	L-31C
<b>Fort Frances Muni, ON (CYAG)</b> Minneapolis Center App/Dep Con 120.9	L-14H
<b>Fredericton Intl, NB (CYFC)</b> ATIS 127.55 Moncton Center App/Dep Con 124.3 135.5 270.8 Tower 119.0 (1200-2000Z±) Gnd Con 121.7 (Ltd hrs) MF 119.0 (2000-1200Z±, 5 NM to 3500')	H-11E, L-32I
<b>Goderich, ON (CYGD)</b> Toronto Center App/Dep 135.3 266.3	H-11B, L-31D
<b>Greenwood, NS (CZVX)</b> ATIS 128.85 244.3 (1100-0000Z±) App/Dep Con 120.6 335.9 Tower 119.5 126.2 236.6 324.3 Gnd Con 133.75 289.4 Clnc Del 128.05 283.9	H-11E, L-32J
<b>Grimsby Air Park, ON (CNZ8)</b> Toronto Trml App/Dep Con 128.27 268.75 Tower 125.0 308.475	L-31E
<b>Halifax/Shearwater, NS (CYAW)</b> ATIS 129.175 (Ltd hrs) App/Dep Con 119.2 Tower 119.0 126.2 340.2 360.2 (Ltd hrs) Gnd Con 121.7 250.1	H-11E, L-32J
<b>Halifax/Stanfield Intl, NS (CYHZ)</b> ATIS 121.0 Moncton Center App/Dep Con 118.7 119.2 128.55 135.3 225.2 363.8 Tower 118.4 236.6 Gnd Con 121.9 275.8 Clnc Del 123.95 Apron Advisory 122.125	H-11E, L-32J
<b>Hamilton, ON (CYHM)</b> ATIS 128.1 Toronto Trml App/Dep Con 128.27 268.75 Tower 119.7 125.0 Gnd Con 121.6	H-10H, 11B, L-11B
<b>Kingston, ON (CYGK)</b> Montreal Center App/Dep Con 135.05 398.4 (0400-1115Z±) MF 122.5 (1115-0400Z± 5 NM to 3300')	H-11C, L-31E, 32F
<b>Kitchener/Waterloo, ON (CYKF)</b> ATIS 125.1 (1200-0400Z±) Toronto Trml App/Dep Con 128.275 Waterloo Tower 126.0 118.55 (1200-0400Z±) Gnd Con 121.8 MF 126.0 (0400-1200Z± 5 NM to 4000')	H-11B, L-31D
<b>Lachute, QC (CSE4)</b> Montreal Center App Con 124.65 132.85 268.3 Montreal Center Dep Con 132.85 268.3	L-32G
<b>La Tuque, QC (CYLQ)</b> Montreal Center App/Dep Con 134.5	H-11C
<b>Langley, BC (CYNJ)</b> ATIS 124.5 (1630-0230Z, DT 1530-0330Z) Victoria Trml 132.7 290.8 Tower 119.0 (1630-0230Z, DT 1530-0330Z) Gnd Con 121.9 MF 119.0 (0230-1630Z, DT 0330-1530Z 3 NM to 1900')	L-1E

FACILITY NAME	CHART & PANEL
<b>Leamington, ON</b> (CLM2) Cleveland Center App/Dep Con 132.45	L-30F
<b>Lethbridge, AB</b> (CYQL) ATIS 124.4 (1300-0545Z‡) Edmonton Center App/Dep Con 132.75 265.2 MF 121.0 (5 NM to 6000')	H-1D
<b>Lindsay, ON</b> (CNF4) Toronto Center App/Dep 134.25	L-31E, L-32F
<b>Liverpool/South Shore Rgnl, NS</b> (CYAU) Moncton Center App/Dep Con 123.9	L-32J
<b>London, ON</b> (CYXU) ATIS 127.8 (1120-0345Z‡) Toronto Center App/Dep 135.3 135.625 Tower 119.4 125.65 (1120-0345Z‡) Gnd Con 121.9 MF 119.4 (0345-1120Z‡ 5 NM to 3000')	H-10G, 11B, L-30G, 31D
<b>Manitowaning/Manitoulin East Muni, ON</b> (CYEM) Toronto Center App/Dep 135.4 260.9	L-31C
<b>Maniwaki, QC</b> (CYMW) Montreal Center App/Dep Con 126.57	L-32G
<b>Mascouche, QC</b> (CSK3) MF 122.35 (5 NM to 2500'. No gnd station. Excluding the portion S of the N shore of Riviere des Milles-Iles and 1 NM around Lac Agile Mascouche arpt.)	L-32G
<b>Medicine Hat, AB</b> (CYXH) AWOS 124.875 (0345-1245Z‡) MF 122.2 (1245-0345Z‡ 5 NM to 5400')	H-1D
<b>Midland/Huronina, ON</b> (CYEE) Toronto Center App/Dep 124.025	L-31D
<b>Miramichi, NB</b> (CYCH) Moncton Center App/Dep Con 123.7	H-11E, L-32J
<b>Moncton/Greater Moncton Intl, NB</b> (CYQM) ATIS 128.65 App/Dep 124.4 Tower 120.8 236.6 Gnd Con 121.8 275.8 Apron Advisory 122.075	H-11E, L-32J
<b>Mont-Laurier, QC</b> (CSD4) Montreal Center App/Dep Con 126.57	L-32G
<b>Montreal Intl (Mirabel), QC</b> (CYMX) ATIS 125.7 Montreal Center App Con 124.65 132.85 268.3 Montreal Dep Con 132.85 MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15	H-11C, 12K, L-32G
<b>Montreal/Pierre Elliott Trudeau Intl, QC</b> (CYUL) ATIS 133.7 Montreal Trml App Con 118.9 124.65 126.9 132.85 268.3 Tower 119.9 267.1 Gnd Con 121.9 275.8 Cinc Del 125.6 Apron 122.075 Montreal Trml Dep Con 118.9 (SE-S-SW) 124.65 268.3 (W-NW-NE) VFR Advisory 134.15	H-11C, 12K, L-32G
<b>Montreal/St-Hubert, QC</b> (CYHU) ATIS 124.9 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) AWOS 124.9 Montreal Center App/Dep Con 125.15 268.3 St. Hubert Tower 118.4 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) Gnd Con 126.4 MF 118.4 (Apr-Oct 0500-1045Z‡, Nov-Mar 0400-1045Z 5 NM shape irregular to 2500') VFR Advisory 134.15	H-11C, L-32G
<b>Muskoka, ON</b> (CYQA) AWOS 124.575 MF 122.3 (5 NM to 3900')	H-11B, L-31D
<b>Nanaimo, BC</b> (CYCD) Victoria Trml App/Dep 120.8 133.95 252.3 MF 122.1 1330-0530Z‡ (5 NM to 2500')	H-1B, L-1E
<b>North Bay, ON</b> (CYYB) ATIS 124.9 (1130-0300Z‡) Toronto Center App/Dep 121.225 127.25 MF 118.3 (1130-0330Z‡ 7 NM to 5000')	H-11B, L31D

FACILITY NAME	CHART & PANEL
<b>Oshawa, ON (CYOO)</b> ATIS 125.675 (1130-0330Z‡) Toronto Trml App Con 133.4 Tower 120.1 (1130-0330Z‡) Gnd Con 118.4 Toronto Trml Dep Con 133.4 MF 120.1 (0330-1130Z‡ 5 NM to 3000')	L-31E
<b>Ottawa/Carp, ON (CYRP)</b> ATIS 121.15 Ottawa Trml App/Dep Con 128.175 252.5	L-31E, 32F
<b>Ottawa/Gatineau, QC (CYND)</b> Ottawa Trml App/Dep Con 127.7 128.175 252.5 MF 122.3 (5 NM shape irregular to 2500') VFR Advisory Ottawa Trml 127.7	H-11C, L-32G
<b>Ottawa/MacDonald-Cartier Intl, ON (CYOW)</b> ATIS 121.15 Ottawa App Con 135.15 Tower 118.8 120.1 341.3 Gnd Con 121.9 Clnc Del 119.4 Ottawa Dep Con 128.175	L-11C
<b>Owen Sound/Billy Bishop Rgnl, ON (CYOS)</b> Toronto Center App/Dep 132.575 290.6	L-31D
<b>Pelee Island, ON (CYPT)</b> Cleveland Center App/Dep Con 126.35 360.0	L-30F
<b>Pembroke, ON (CYTA)</b> Montreal Center App/Dep Con 135.2 Petawawa Advisory 126.4 250.1 (Mon-Fri 1300-2130Z‡, OT PPR)	H-11C, L-31E, 32F
<b>Penticton, BC (CYF)</b> Vancouver Center App/Dep Con 133.5 351.3 MF 118.5 (5 NM to 4100')	H-1B
<b>Peterborough, ON (CYPQ)</b> AWOS 126.925 Toronto Center App/Dep 134.25	H-11B, L-31E, 32F
<b>Pincher Creek, AB (CZPC)</b> Edmonton Center App/Dep Con 132.75 265.2	H-1D
<b>Pitt Meadows, BC (CYPK)</b> ATIS 125.0 (1500-0700Z‡) Vancouver Center App Con 128.6 352.7 (Outer) Pitt Tower 126.3 (1500-0700Z‡) Gnd Con 123.8 Vancouver Center Dep Con 132.3 363.8 (South) MF 126.3 (0700-1500Z‡) (3NM to 2500')	L-1E
<b>Quebec/Jean Lesage Intl, QC (CYQB)</b> ATIS 134.6 Montreal Center App/Dep Con 124.0 127.85 135.025 270.9 322.8 Tower 118.65 236.6 Gnd Con 121.9 250.0	H-11D, L-32H
<b>Riviere Du Loup, QC (CYRI)</b> AWOS 122.025 (Pvt) Montreal Center App/Dep Con 125.1 299.6	H-11D
<b>Rouyn Noranda, QC (CYUY)</b> Montreal Center App/Dep Con 125.9 MF 122.2 (5 NM to 4000')	H-11B
<b>Saint John, NB (CYSJ)</b> Moncton Center App/Dep Con 124.3 135.5 270.8 MF 118.5 (5 NM to 3400')	H-11E, L-32J
<b>Sarnia (Chris Hadfield), ON (CYZR)</b> Toronto Center 134.375	H-10G, 11B, L-30F
<b>Sault Ste Marie, ON (CYAM)</b> ATIS 133.05 (1300-0100Z‡) Toronto Center App/Dep Con 132.65 344.5 Tower 118.8 (1300-0100Z‡) Gnd Con 121.7 MF 118.8 (0100-1300Z‡ 5 NM irregular shape to 3000')	H-2K, L-31B
<b>Sherbrooke, QC (CYAM)</b> AWOS 126.25 Montreal Center App/Dep Con 132.55 MF 123.5 (Ltd hrs 5 NM to 3800')	H-11D, L-32H
<b>South Renfrew Muni, ON (CNP3)</b> Montreal Center App/Dep 124.275	L-31E, 32F

FACILITY NAME	CHART & PANEL
<b>Southport, MB (CYPG)</b> ATIS 120.85 (Mon–Fri 1400–2300Z† except holidays) Tower 126.2 384.2 (Mon–Fri 1400–2300Z† except holidays) Gnd Con 121.7 275.8	H–2H
<b>Springwater Barrie Airpark, ON (CNA3)</b> Toronto Center App/Dep Con 124.025	L–31D
<b>St. Catharines/Niagara District, ON (CYSN)</b> ATIS 128.525 (1215–0200Z†) Toronto Trml App/Dep Con 133.4 253.1 MF 123.25 (1215–0200Z† 5 NM to 3300')	H–10H, 11B, L–31E
<b>St. Frederic, QC (CSZ4)</b> Montreal Center App/Dep Con 135.025 270.9	L–32H
<b>St. Georges, QC (CYSG)</b> Montreal Center App/Dep Con 132.35 MF 122.15 (5 NM 3900' ASL)	H–32H, L–11D
<b>St. Jean, QC (CYJN)</b> Montreal Center App/Dep Con 125.15 268.3 Tower 118.2 (Apr–Oct 1230–0230Z† Nov–Mar 1300–0200Z†) Gnd Con 121.7	L–32G
<b>Sudbury, ON (CYSB)</b> ATIS 127.4 Toronto Center App/Dep Con 135.5 MF 125.5 (7 NM to 4000')	H–31B, 10G, L–31D
<b>Summerside, PE (CYSU)</b> AWOS 122.55 (Pvt) Moncton Center App/Dep Con 124.4 384.8	H–11E, L–32J
<b>Thunder Bay, ON (CYQT)</b> ATIS 128.8 (1100–0400Z†) Winnipeg Center App/Dep Con 132.125 (0400–1100Z†) Tower 118.1 (1100–0400Z†) Gnd Con 121.9 App/Dep 119.2 MF 118.1 (0400–1100Z† 5 NM to 4000')	H–2J, L–14J
<b>Timmins/Victor M. Power, ON (CYTS)</b> ATIS 124.95 (1000–0500Z†) Toronto Center App/Dep Con 128.3 MF 122.3 (5 NM to 4000')	H–11B
<b>Toronto/Buttontville Muni, ON (CYKZ)</b> ATIS 127.1 (1200–0400Z†) Toronto Center App Con 133.4 Toronto Center Dep Con 133.4 Tower 124.8 119.9 (1200–0400Z†) Gnd Con 121.8 MF 124.8 (0400–1200Z† No gnd station. 5 NM shape irregular to below 2500')	L–31E
<b>Toronto/Billy Bishop Toronto City Airport, ON (CYTZ)</b> ATIS 133.6 (1130–0400Z†) App Con 133.4 Dep Con 133.4 Tower 118.2 119.2 (1130–0400Z†) Gnd Con 121.7	L–31E
<b>Toronto/Lester B Pearson Intl, ON (CYYZ)</b> ATIS 120.825 App Con 124.475 125.4 132.8 Dep Con 127.575 128.8 Tower 118.35 118.7 Gnd Con 118.0 119.1 121.65 121.9 Clnc Del 121.3 (1200–0400Z†)	H–11B, L–31D
<b>Trenton, ON (CYTR)</b> ATIS 135.45 257.7 App/Dep Con 128.4 324.3 Tower 128.7 236.6 Gnd Con 121.9 275.8 Clnc Del 124.35 286.4	H–11C, L–31E, 32F
<b>Trenton/Mountain View, ON (CPZ3)</b> Trenton Mil Advisory 268.0	H–11C, L–31E, 32F
<b>Trois–Rivieres, QC (CYRQ)</b> Montreal Center App/Dep Con 128.225 229.2 MF 123.0 (5 NM to 3200')	H–11C, L–32H
<b>Val–D'or, QC (CYVO)</b> Montreal Center App/Dep Con 125.9 308.3 MF 118.5 (1030–0325Z† 5 NM to 4000')	H–11B

FACILITY NAME	CHART & PANEL
<b>Vancouver Intl, BC (CYVR)</b> ATIS 124.6 124.75 App Con 128.6 128.17 352.7 (Outer) 133.1 134.225 352.7 (Inner) Dep Con 126.125 (north) 132.3 (south) 363.8 Tower 118.7 (south) 119.55 (north) VFR 124.0 125.65 226.5 236.6 Gnd Con 121.7 (south) 127.15 (north) 275.8 Cinc Del 121.4	H-1B, L-1E
<b>Victoria Intl, BC (CYYJ)</b> ATIS 118.8 (1400-0800Z‡) App Con 125.95 308.4 Dep Con 133.85 308.4 Tower 119.1 (Outer) 119.7 (Inner) 239.6 Gnd Con 121.9 361.4 (1400-0800Z‡ OT ctc Kamloops 119.7) Cinc Del 126.4 (1400-0800Z‡)	H-1B, L-1E
<b>Victoriaville, QC (CSR3)</b> Montreal Center App Con 132.35	L-32H
<b>Waterville/Kings Co Muni, NS (CCW3)</b> Greenwood Trml App/Dep Con 120.6 335.9 Greenwood Tower 119.5 324.3	L-32J
<b>Warton, ON (CYVV)</b> Toronto Center App/Dep Con 132.575 MF 122.2 (5 NM to 3700')	H-11B, L-31D
<b>Windsor, ON (CYQG)</b> ATIS 134.5 (1130-0330Z‡) Detroit App/Dep Con 126.85 127.5 134.3 348.3 363.2 Tower 124.7 (1130-0330Z‡) Gnd Con 121.7 MF 124.7 (0330-1130Z‡ 6 NM irregular shape to below 3000') VFR Advisory Detroit App Con 134.3	H-10G, L-8J
<b>Yarmouth, NS (CYQI)</b> Moncton Center App/Dep Con 123.9 368.5 MF 123.0 (5 NM to 3100')	H-11E, L-32I

MEXICO

FACILITY NAME	CHART & PANEL
<b>Abraham Gonzalez Intl (MMCS)</b> Juarez App Con 119.9 Juarez Tower 118.9	H-4K, L-6F
<b>Del Norte Intl (MMAN)</b> ATIS 127.55 (1300-0300Z‡) Monterrey App 119.75 120.4 Tower 118.6	H-7B, L-20G
<b>Durango Intl (MMDO)</b> ATIS 132.1 Tower 118.1 Durango Info 122.3	H-7A
<b>General Abelardo L Rodriguez Intl (MMTJ)</b> ATIS 127.9 Tijuana App Con 119.5 120.3 Tijuana Tower 118.1 Cinc Del 122.35 Tijuana Info 132.1	H-4H, L-4H
<b>General Lucio Blanco Intl (MMRX)</b> Reynosa App Con 118.8 Reynosa Tower 118.8	H-7B, L-20H
<b>General Mariano Escobedo Intl (MMMM)</b> ATIS 127.7 Monterrey App Con 119.75 120.4 Monterrey Tower 118.1 Gnd Con 121.9	H-7B, L-20G
<b>General R Fierro Villalobos Intl (MMCU)</b> ATIS 127.9 Chihuahua App Con 121.0 Chihuahua Tower 118.4	L-6I
<b>General Rodolfo Sanchez Taboada Intl (MMML)</b> ATIS 127.6 Mexicali App Con 118.2 Mexicali Tower 118.2 Mexicali Info 123.9 122.3	H-4H, L-4J, 5A
<b>General Servando Canales (MMMA)</b> Matamoros App Con 118.0 Matamoros Tower 118.0	H-7C, L-21A
<b>Plan De Guadalupe Intl (MMIO)</b> Saltillo App Con 127.4 Saltillo Tower 118.4	H-7B
<b>Quetzalcoatl Intl (MMNL)</b> Nuevo Laredo App Con 118.3 Nuevo Laredo Tower 118.3	H-7B, L-20G
<b>Torreon Intl (MMTC)</b> App Con 119.6 Tower 118.5	H-7A











In support of the Federal Aviation Administration's Runway Incursion Program, selected towered airport diagrams have been published in the Airport Diagram section of the A/FD. Diagrams will be listed alphabetically by associated city and airport name. Airport diagrams, depicting runway and taxiway configurations, will assist both VFR and IFR pilots in ground taxi operations. The airport diagrams in this publication are the same as those published in the U.S. Terminal Procedures Publications. For additional airport diagram legend information see the U.S. Terminal Procedures Publication.

NOTE: Some text data published under the individual airport in the front portion of the A/FD may be more current than the data published on the Airport Diagrams. The airport diagrams are updated only when significant changes occur.

## GENERAL INFORMATION

### PILOT CONTROLLED AIRPORT LIGHTING SYSTEMS

Available pilot controlled lighting (PCL) systems are indicated as follows:

1. Approach lighting systems that bear a system identification are symbolized using negative symbology, e.g., , , .
  2. Approach lighting systems that do not bear a system identification are indicated with a negative "0" beside the name. A star (\*) indicates non-standard PCL, consult the individual airport in the front portion of the A/FD, e.g., .
- To activate lights use frequency indicated in the communication section of the chart with a  or the appropriate lighting system identification e.g., UNICOM 122.8 , , .

<u>KEY MIKE</u>	<u>FUNCTION</u>
7 times within 5 seconds	Highest intensity available
5 times within 5 seconds	Medium or lower intensity (Lower REIL or REIL-off)
3 times within 5 seconds	Lowest intensity available (Lower REIL or REIL-off)

### CHART CURRENCY INFORMATION

FAA procedure amendment number  $\leftarrow$  Amdt 11A 99365  $\rightarrow$  Date of latest change  
 $\leftarrow$  Orig 00365  $\rightarrow$

The Chart Date identifies the Julian date the chart was added to the volume or last revised for any reason. The first two digits indicate the year, the last three digits indicate the day of the year (001 to 365/6) in which the latest addition or change was first published.

The Procedure Amendment Number precedes the Chart Date, and changes any time instrument information (e.g., DH, MDA, approach routing, etc.) changes. Procedure changes also cause the Chart Date to change.

### MISCELLANEOUS

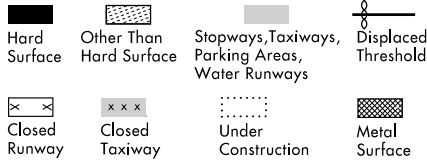
- \* Indicates a non-continuously operating facility, see the individual airport in the front portion of the A/FD.
- # Indicates control tower temporarily closed UFN.

10042  
LEGEND

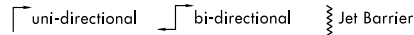
INSTRUMENT APPROACH PROCEDURES (CHARTS)

AIRPORT DIAGRAM/AIRPORT SKETCH

Runways

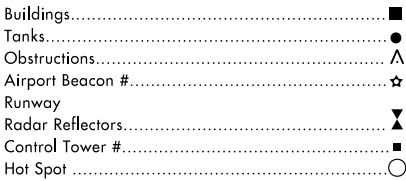


ARRESTING GEAR: Specific arresting gear systems; e.g., BAK12, MA-1A etc., shown on airport diagrams, not applicable to Civil Pilots. Military Pilots refer to appropriate DOD publications.



ARRESTING SYSTEM

REFERENCE FEATURES



# When Control Tower and Rotating Beacon are co-located, Beacon symbol will be used and further identified as TWR.

Runway length depicted is the physical length of the runway (end-to-end, including displaced thresholds if any) but excluding areas designated as stopways.

A **D** symbol is shown to indicate runway declared distance information available, see appropriate A/FD, Alaska or Pacific Supplement for distance information.

Runway Weight Bearing Capacity/or PCN Pavement Classification Number is shown as a codified expression.

Refer to the appropriate Supplement/Directory for applicable codes e.g., RWY 14-32 S75, T185, ST175, TT325 PCN 80 F/D/X/U

Helicopter Alighting Areas

Negative Symbols used to identify Copter Procedures landing point.....

Runway Threshold elevation.....THRE 123  
Runway TDZ elevation.....TDZE 123  
Runway Slope.....0.3% DOWN

(shown when runway slope is greater than or equal to 0.3%)  
Runway Slope measured to midpoint on runways 8000 feet or longer.

NOTE:

Runway Slope measured to midpoint on runways 8000 feet or longer.

**U.S. Navy Optical Landing System (OLS)** "OLS" location is shown because of its height of approximately 7 feet and proximity to edge of runway may create an obstruction for some types of aircraft.

Approach light symbols are shown in the Flight Information Handbook.

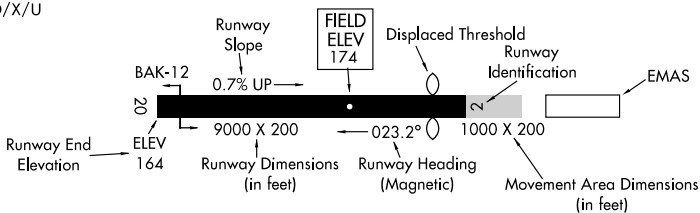
Airport diagram scales are variable.

True/magnetic North orientation may vary from diagram to diagram

Coordinate values are shown in 1 or 1/2 minute increments. They are further broken down into 6 second ticks, within each 1 minute increments.

NOTE:

All new and revised airport diagrams are shown referenced to the World Geodetic System (WGS) (noted on appropriate diagram), and may not be compatible with local coordinates published in FLIP. (Foreign Only)



SCOPE

Airport diagrams are specifically designed to assist in the movement of ground traffic at locations with complex runway/taxiway configurations and provide information for updating Computer Based Navigation Systems (I.E., INS, GPS) aboard aircraft. Airport diagrams are not intended to be used for approach and landing or departure operations. For revisions to Airport Diagrams: Consult FAA Order 7910.4.

LEGEND

## HOT SPOTS

An "Airport surface hot spot" is a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

A "hot spot" is a runway safety related problem area on an airport that presents increased risk during surface operations. Typically it is a complex or confusing taxiway/taxiway or taxiway/runway intersection. The area of increased risk has either a history of or potential for runway incursions or surface incidents, due to a variety of causes, such as but not limited to: airport layout, traffic flow, airport marking, signage and lighting, situational awareness, and training. Hot spots are depicted on airport diagrams as open circles or polygons designated as "HOT<sup>1</sup>", "HOT<sup>2</sup>", etc. and tabulated in the list below with a brief description of each hot spot. Hot spots will remain charted on airport diagrams until such time the increased risk has been reduced or eliminated.

CITY/AIRPORT	HOT SPOT	DESCRIPTION
<b>IOWA</b>		
CEDAR RAPIDS THE EASTERN IOWA (CID)	HOT <sup>1</sup>	Twy A crosses Rwy 13–31. Twy A is used frequently by vehicles and aircraft to transition to and from the west hangar/FBO area.
	HOT <sup>2</sup>	Intersection of Rwy 13–31 and Rwy 9–27.
	HOT <sup>3</sup>	Twy C becomes Twy A on the north side of the approach end of Rwy 27. Aircraft taxiing from the east hangars to Rwy 9 and Rwy 13 are required to cross Rwy 9–27.
DES MOINES DES MOINES INTS (DSM)	HOT <sup>1</sup>	Westbound tfc on Twy B must remain alert so as to not miss the right turn onto Twy D when taxiing to Rwy 13. Comply with rwy hold signs, sfc painted signs and elevated rwy guard lgts at the intersection of Twy B and Rwy 13–31.
	HOT <sup>2</sup>	Use caution and comply with the signs and markings when taxiing near this complex intersection.
	HOT <sup>3</sup>	The apch end of Rwy 5 at Twy P has limited visibility from the twr.
	HOT <sup>4</sup>	Iowa ANG complex is located north of Twy D on the northwest part of the arpt. Vehicle movement in this area is obstructed from the tower's view. Be vigilant for vehicles while taxiing in the area.
DUBUQUE DUBUQUE RGNL (DBQ)	HOT <sup>1</sup>	Use caution when taxiing to Rwy 18 or Rwy 13 via Twy A. Comply with rwy hold signs, sfc painted signs and elevated rwy guard lgts at the intersection of Twy A and Rwy 18–36.
	HOT <sup>2</sup>	Use caution exiting the ramp area on Twy D. Twy D crosses Runway 13–31 immediately after leaving ramp area.
	HOT <sup>3</sup>	Use caution exiting the ramp area on Twy C. Twy C crosses Rwy 13–31 immediately after leaving ramp area.
FORT DODGE FORT DODGE RGNL (FOD)	HOT <sup>1</sup>	Westbound tfc on Twy B must remain alert at the intersection where Twy B splits with Twy D. Holding position markings for Rwy 6–24 and Rwy 12–30 are immediately after the twy split.
MASON CITY MASON CITY MUNI (MCW)	HOT <sup>1</sup>	Single twy leads to the apch end of Rwy 30 and Rwy 35. When departing northbound, cross check compass on rwy to verify use of correct rwy for departure. Approximately half of Rwy 12 and Rwy 18 are not mutually visible due to rising terrain and trees located between rwys. Use caution when operating on either Rwy 12 or Rwy 18 for crossing traffic. Broadcast your position and intentions on CTAF.
SIOUX CITY SIOUX GATEWAY/ COLONEL BUD DAY FIELD (SUX)	HOT <sup>1</sup>	Rwy 17–35 and Rwy 13–31 intersect at Twy B. When departing northbound, cross check compass on rwy to verify use of correct rwy for departure.
	HOT <sup>2</sup>	Twy A and Twy G are located in the movement area near the approach end of Rwy 31. Do not traverse from Twy A and G visa versa without ATC authorization.

WATERLOO  
WATERLOO RGNL (ALO)

- HOT<sup>1</sup> The intersection of Twy B and Twy C outbound holding position markings for Rwy 12–30 and Rwy 18–36 are immediately after the split of Twy B and Twy C.
- HOT<sup>2</sup> Twy A crosses the apch end of Rwy 36 prior to Rwy 6. When departing northbound, cross check compass on rwy to verify use of correct rwy for departure.
- HOT<sup>3</sup> Use caution exiting the ramp area on Twy B. Twy B intersects Rwy 6–24 immediately after leaving ramp area.
- HOT<sup>4</sup> Use caution when crossing Rwy 12–30 on Twy A inbound and outbound. Twy A is used as a pass through twy to the ANG hangar and Rwy 6–24.

**KANSAS**

DODGE CITY  
DODGE CITY RGNL (DDC)

- HOT<sup>1</sup> Ramp is in close proximity to rwys.

GARDEN CITY  
GARDEN CITY RGNL (GCK)

- HOT<sup>1</sup> Twy C intersects Rwy 12–30 1300 feet from approach end. Back taxi clearance required for full length departure on Rwy 12.
- HOT<sup>2</sup> Use caution exiting the ramp area on Twy C. Twy C crosses Rwy 17–35 immediately after leaving ramp area. Pilots must use caution when exiting the rwy on Twy C, as the non-movement area boundary is on the twy prior to the ramp.
- HOT<sup>3</sup> While taxiing southbound on Twy A to Rwy 30, left turn on Twy B required to reach approach end of Rwy 30. If pilot is not extra vigilant, it is easy for an aircraft to miss the turn on Twy B and cross the active rwy.

HUTCHINSON  
HUTCHINSON MUNI (HUT)

- HOT<sup>1</sup> Twy A and Twy C intersect with multiple rwys.
- HOT<sup>2</sup> Twy B hold markings for Rwy 4 and Rwy 35 are very close. Use caution to hold short at proper hold marking.

LIBERAL  
LIBERAL MID-AMERICA  
RGNL (LBL)

- HOT<sup>1</sup> After leaving main ramp on Twy A northbound, use caution for traffic landing Rwy 22. Rwy 22 Rwy Boundary marking is on Twy A prior to the left turn on Twy B. Twy B is an extension of the Rwy 22 overrun. Rwy 17 Runway Boundary is on Twy A past Twy B. Use caution for close proximity approach ends of Rwy 17 and Rwy 22.
- HOT<sup>2</sup> Use caution exiting the ramp area on Twy C. Twy C intersects Rwy 17–35 immediately after leaving ramp area. Pilots must use caution when exiting the ramp and the rwy on Twy C, as Twy C is identified with blue reflectors.

MANHATTAN  
MANHATTAN RGNL (MHK)

- HOT<sup>1</sup> Use caution when taxiing to/from the terminal area via Twy D. Twy D is the primary entrance and exit from the main ramp and is in close proximity to Rwy 3–21.
- HOT<sup>2</sup> Use caution when taxiing northeast on Twy A to the east ramp. Do not mistake Rwy 13–31 for Twy E.

OLATHE  
JOHNSON CO  
EXECUTIVE (OJC)

- HOT<sup>1</sup> Twy C crosses the approach end of Rwy 18.
- HOT<sup>2</sup> Aircraft on the east side of the rwy taxiing to Rwy 36 utilizing Twy B, cross Rwy 18–36. Rwy holding position marking is not fully visible until after marking the westbound turn.

SALINA  
SALINA MUNI (SLN)

- HOT<sup>1</sup> Twy E crossing Rwy 17–35 is active with student pilot midfield departures. Note the elevated rwy guard lights located on the east side of Rwy 17–35 at Twy E.
- HOT<sup>2</sup> Traffic landing Rwy 12 use caution when exiting onto Twy B. Hold line for Rwy 17–35 approaches quickly. Note the elevated rwy guard lights located on the west side of Rwy 17–35 on Twy B.

TOPEKA FORBES FIELD (FOE)	HOT <sup>1</sup>	Southbound traffic on Twy A must remain alert so as to not miss the right turn on Twy A when taxiing to Rwy 3. Twy D continues to an intersection with Rwy 3. Twy A turns to the southwest.
	HOT <sup>2</sup>	Use caution Twy A becomes Twy E just past access to the approach end of Rwy 3. Twy A turns left, Twy E continues southwest bound to the KS ANG ramp.
	HOT <sup>3</sup>	Twy E is not visible from the ATCT. Twy E also accesses KS ANG ramp and is not maintained by the Airport Authority.
PHILIP BILLARD MUNI (TOP)	HOT <sup>1</sup>	Twy A and Twy D intersect inside of the Runway Safety Area for Rwy 4–22. Twy A intersects 4–22 at two different locations.
WICHITA WICHITA MID-CONTINENT (ICT)	HOT <sup>1</sup>	Twy R exits Air Carrier Gates & Ramps. Aircraft may enter Twy R from different directions at different angles.
	HOT <sup>2</sup>	Twy B crosses or intersects all rws. Intersection with Rwy 14–32 can be confusing.
	HOT <sup>3</sup>	Twy K and Twy C complex on west side of the Air Carrier Ramp leads to Twy K1 intersection with Rwy 14–32 which is a common intersection departure point.

## MINNESOTA

MINNEAPOLIS MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLIAN (MSP)	HOT <sup>1</sup>	Expansive pavement at the intersection of Twy A, Twy B, Twy C, Twy D, and Twy H in near proximity to Rwy 12R–30L and Rwy 4–22. Use caution for rwy crossings in this area.
	HOT <sup>2</sup>	Complex twy/rwy geometry.
	HOT <sup>3</sup>	Expansive pavement at the intersection of Twy C, Twy D, Twy P, and Twy Q in near proximity to Rwy 12R–30L and Rwy 4–22. Use caution for rwy crossings in this area.
	HOT <sup>4</sup>	Complex geometry at Rwy 4 apch end. Rwy 4 depart check compass to verify correct rwy heading.

## MISSOURI

BRANSON BRANSON (BBG)	HOT <sup>1</sup>	Westbound traffic on Twy C must remain alert so as to not mistake Rwy 14–32 for a parallel twy. First left turn out of ramp area is Rwy 14–32.
	HOT <sup>2</sup>	Use caution for aircraft utilizing Twy E and Twy F as a turn around after landing on Rwy 14 or taxiing to hold while waiting to depart Rwy 32. Back taxi required on Rwy 14–32 for full length departure on Rwy 32 and frequently utilized by aircraft landing Rwy 14.
COLUMBIA COLUMBIA RGNL (COU)	HOT <sup>1</sup>	Use caution approaching the intersection of Twy A and Twy B due to the close proximity of rwy holding position markings for Rwy 2–20 and Rwy 13–31.
	HOT <sup>2</sup>	Aircraft departing Rwy 20. Taxiing on Rwy 13–31 may be authorized to reach the apch end of Rwy 20. Use caution not to confuse rwy holding position marking for Rwy 13 with the marking for Rwy 20.
	HOT <sup>3</sup>	Acht departing Rwy 20. Runway holding position line for Rwy 20 is on Rwy 13–31.

FORT LEONARD WOOD WAYNESVILLE-ST. ROBERT RGNL FORNEY FLD (TBN)	HOT <sup>1</sup>	Arriving and departing aircraft must use the intersection at the southeast end of Rwy 14–32 to access the rwy. There is no parallel twy. Arriving and departing traffic may be required to back-taxi.
JEFFERSON CITY JEFFERSON CITY MEMORIAL (JEF)	HOT <sup>1</sup>	Complex intersection of twys and rwys. Rwy 12–30 intersects with Twy B and Rwy 9–27. Aircraft eastbound on Twy B from Rwy 12–30, holding position markings are for Rwy 12–30.
	HOT <sup>2</sup>	Aircraft taxiing on Twy B to Rwy 27, be prepared for the holding position markings just out of the turn.
KANSAS CITY CHARLES B. WHEELER DOWNTOWN (MKC)	HOT <sup>1</sup>	On Twy G, holding position markings for Rwy 3–21 are unusual due to the angle that Rwy G intersects with Rwy 3–21.
	HOT <sup>2</sup>	Twy D intersects with Rwy 3–21 and Rwy 1–19. Holding position markings for Rwy 3–21 and Rwy 1–19 are within the runway safety area for each other. Twy D is also utilized by aircraft and vehicles to transition from the east ramps to the west ramps. Aircraft/vehicles often mistake the second hold short markings when exiting Rwy 1–19 at Twy D as the hold short markings for Rwy 3–21.
	HOT <sup>3</sup>	Twy F, Twy D, Twy L transition when aircraft are taxiing northbound. Aircraft have the tendency to miss the left turn onto Twy L to continue across Rwy 1–19. Utilize extreme caution at night and in low visibility conditions.
KANSAS CITY KANSAS CITY INTL (MCI)	HOT <sup>1</sup>	Busy vehicle svc road crosses Twy G east of Twy B. Non-movement area begins just west of svc road.
	HOT <sup>2</sup>	Twy E and Twy F intersection with Rwy 9–27. Immediately after crossing Twy C, both Twy E and Twy F cross Rwy 9–27.
	HOT <sup>3</sup>	Twy C and Twy D intersection with Rwy 1R–19L. Immediately after crossing Twy E, both Twy C and Twy D cross Rwy 1R–19L.
	HOT <sup>4</sup>	The intersection of Twy B–2 and Ottawa Ave. (vehicle svc road). Twy B–2 is the only entrance to the general aviation ramp. This svc road is a high traffic vehicle route for airlines and cargo carriers.
KIRKSVILLE KIRKSVILLE RGNL (IRK)	HOT <sup>1</sup>	Turf Rwy 9–27 taxi route enters Rwy 18–36 approximately 1000 feet south of the approach end of Rwy 18 between Twy A and Twy B.
ST. JOSEPH, MO ROSECRANS MEMORIAL (STJ)	HOT <sup>1</sup>	Use caution exiting the ramp area on Twy B. Twy B crosses Rwy 17–35 immediately after leaving ramp area.
	HOT <sup>2</sup>	Apch ends of Rwy 35 and Rwy 31 are both accessed via Twy A. When departing northbound, cross check compass on runway to verify use of correct runway for departure.
	HOT <sup>3</sup>	Twy B intersects Rwy 13 approximately 2000 feet from apch end. Back taxi clearance required for full length departure on Rwy 13.
ST. LOUIS LAMBERT-ST. LOUIS INTL. (STL)	HOT <sup>1</sup>	Use caution when approaching the intersection of Twy D and Twy L be careful not to cross the hold marking for Rwy 12R–30L without ATC authorization.
	HOT <sup>2</sup>	Aircraft approaching Rwy 29 on Twy T, do not turn left on Twy A. Taxi straight ahead to Rwy 29.

## AIRPORT DIAGRAMS

	HOT <sup>3</sup>	Aircraft northwest on Twy F from the FBO or cargo ramp to Rwy 12L use diligence to not miss the left turn onto Twy S. If the left turn at Twy S is missed, do not cross the hold marking for Rwy 6–24 without ATC authorization.
ST. LOUIS SPIRIT OF ST. LOUIS (SUS)	HOT <sup>1</sup>	Northwest bound tfc on Twy B use caution entering complex intersection with Twy Z, Twy D, and Twy C. The close proximity of Twy C and Twy D, immediately after the turn onto Twy Z can be confusing.
	HOT <sup>2</sup>	On Twy B west of the blue port–a–ports, twr can not maintain visual contact with vehicles and small acft.
	HOT <sup>3</sup>	On Twy B northwest of Twy A, twr can not maintain visual contact with vehicles and acft.
SPRINGFIELD SPRINGFIELD-BRANSON NATIONAL (SGF)	HOT <sup>1</sup>	Acft exiting the Old Terminal ramp to the west, use caution as Twy D and Twy N are in close proximity to the rwy and angles create unusual holding positions.
	HOT <sup>2</sup>	Northeast bound tfc on Twy F must remain alert so as to not mistake Rwy 14–32 for a parallel twy. First left turn out of ramp area is Rwy 14–32.
	HOT <sup>3</sup>	Due to large acft parked on the Air Cargo Ramp, Twr may be unable to maintain visual ctc with small acft taxiing northbound on Twy U north of Twy B.

## NEBRASKA

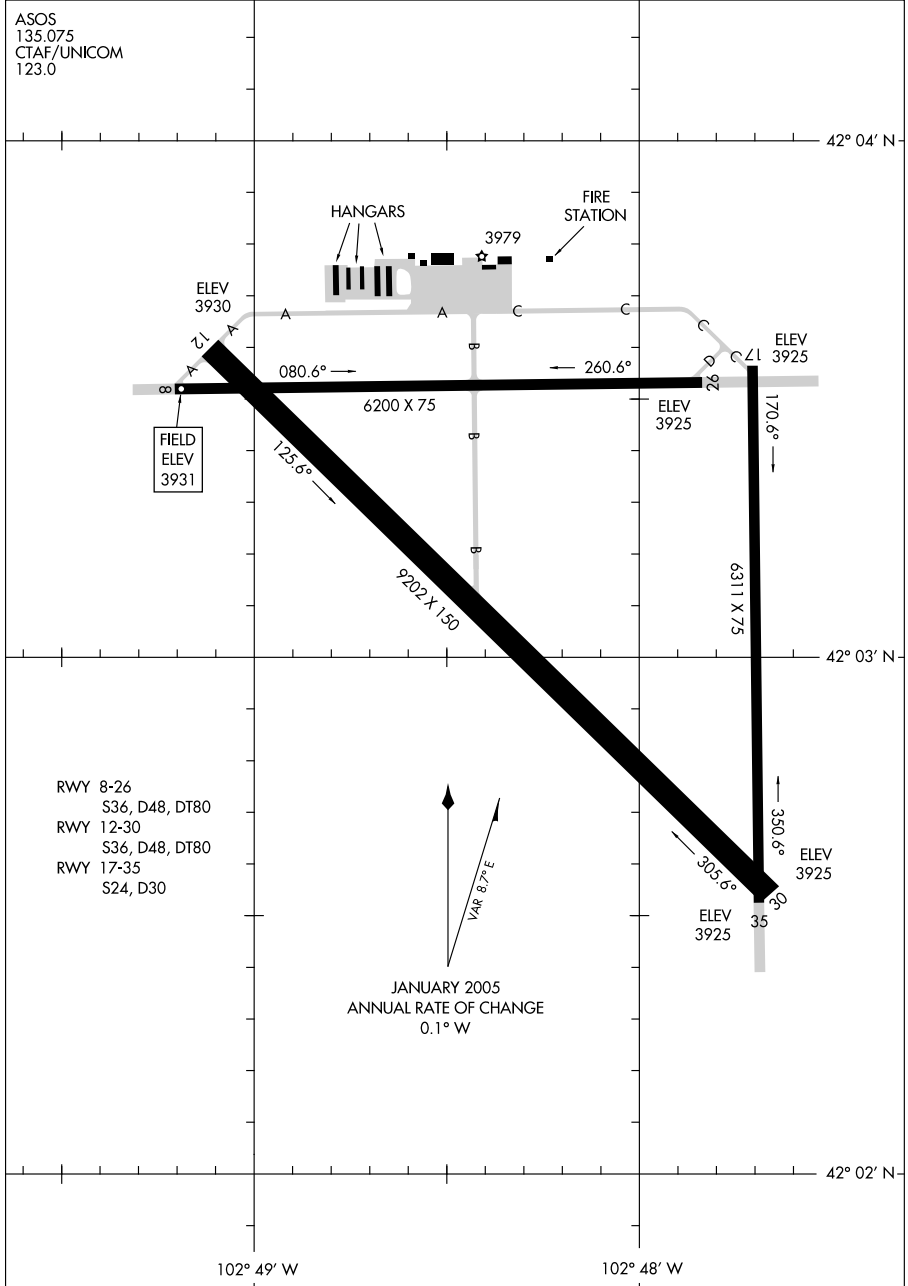
GRAND ISLAND CENTRAL NEBRASKA RGNL (GRI)	HOT <sup>1</sup>	When taxiing to the apch end of Rwy 13, use caution as Twy B crosses the apch end of Rwy 17. Rwy 17 holding position markings are accompanied by rwy guard lights on both sides of the rwy.
	HOT <sup>2</sup>	Twy C crossed Rwy 17 immediately after leaving ramp area. Intersection of Rwy 17–35 and Twy C has rwy guard lights on both sides of the rwy.
OMAHA EPPLEY AIRFIELD (OMA)	HOT <sup>1</sup>	A complex intersection of Twy S, Twy F, and Twy B is located between Rwy 14R–32L and the intersection of Rwy 14L–32R and Rwy 18–36.
	HOT <sup>2</sup>	Intersection of Twy F and Rwy 14R–32L is in close proximity to the ramp at Twy C.
	HOT <sup>3</sup>	Intersection of Twy A and Rwy 18–36 is in close proximity to the ramp at Twy C.

09183

AIRPORT DIAGRAM

AL-16 (FAA)

ALLIANCE MUNI (AIA)  
ALLIANCE, NEBRASKA



AIRPORT DIAGRAM

09183

ALLIANCE, NEBRASKA  
ALLIANCE MUNI (AIA)

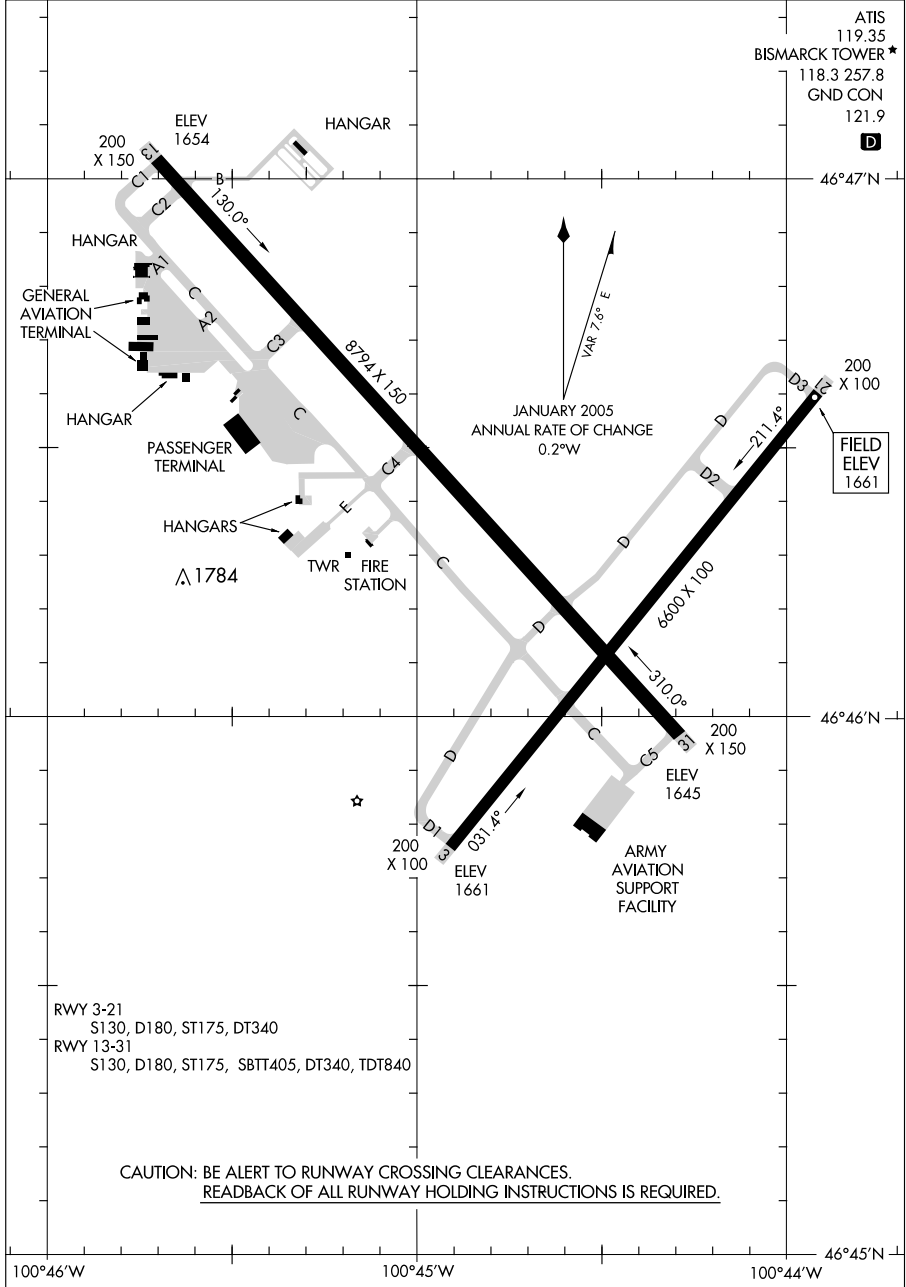


10098

# AIRPORT DIAGRAM

AL-51 (FAA)

BISMARCK MUNI (BIS)  
BISMARCK, NORTH DAKOTA



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.  
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

# AIRPORT DIAGRAM

10098

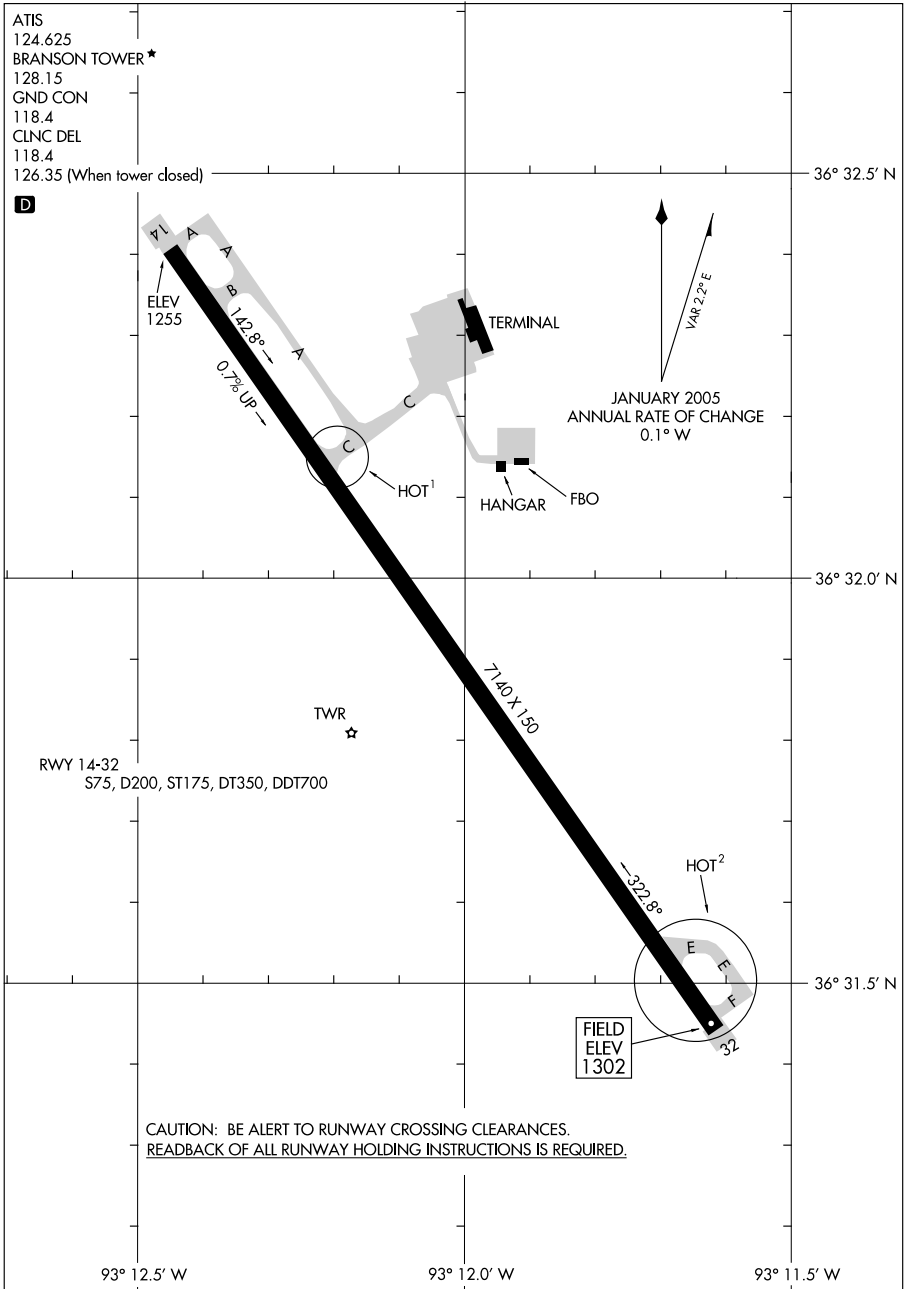
BISMARCK, NORTH DAKOTA  
BISMARCK MUNI (BIS)

10042

AIRPORT DIAGRAM

AL-10372 (FAA)

BRANSON (BBG)  
BRANSON, MISSOURI



AIRPORT DIAGRAM

10042

BRANSON, MISSOURI  
BRANSON (BBG)

09071

# AIRPORT DIAGRAM

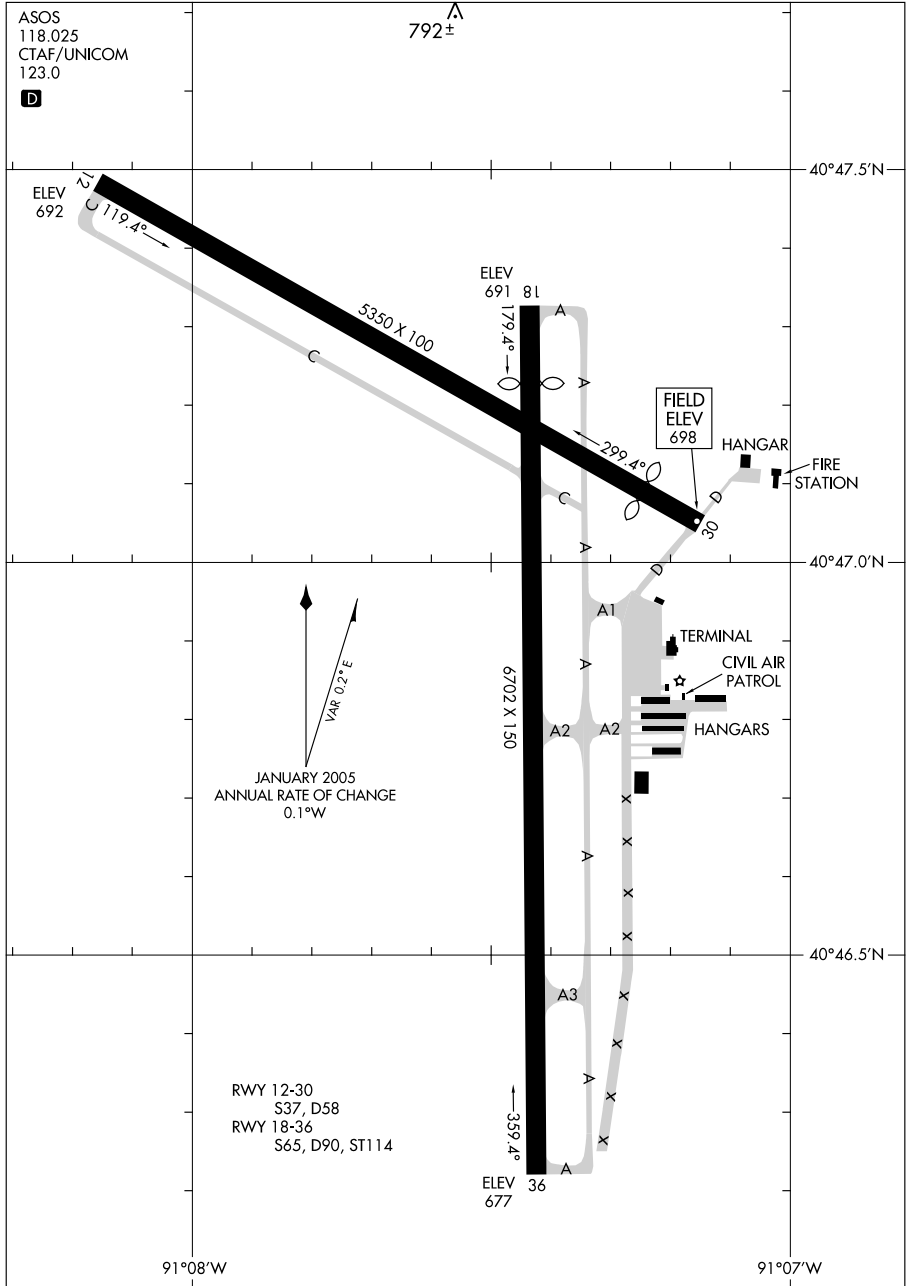
BURLINGTON/SOUTHEAST IOWA RGNL (BRL)  
BURLINGTON, IOWA

AL-69 (FAA)

ASOS  
118.025  
CTAF/UNICOM  
123.0



792±



# AIRPORT DIAGRAM

09071

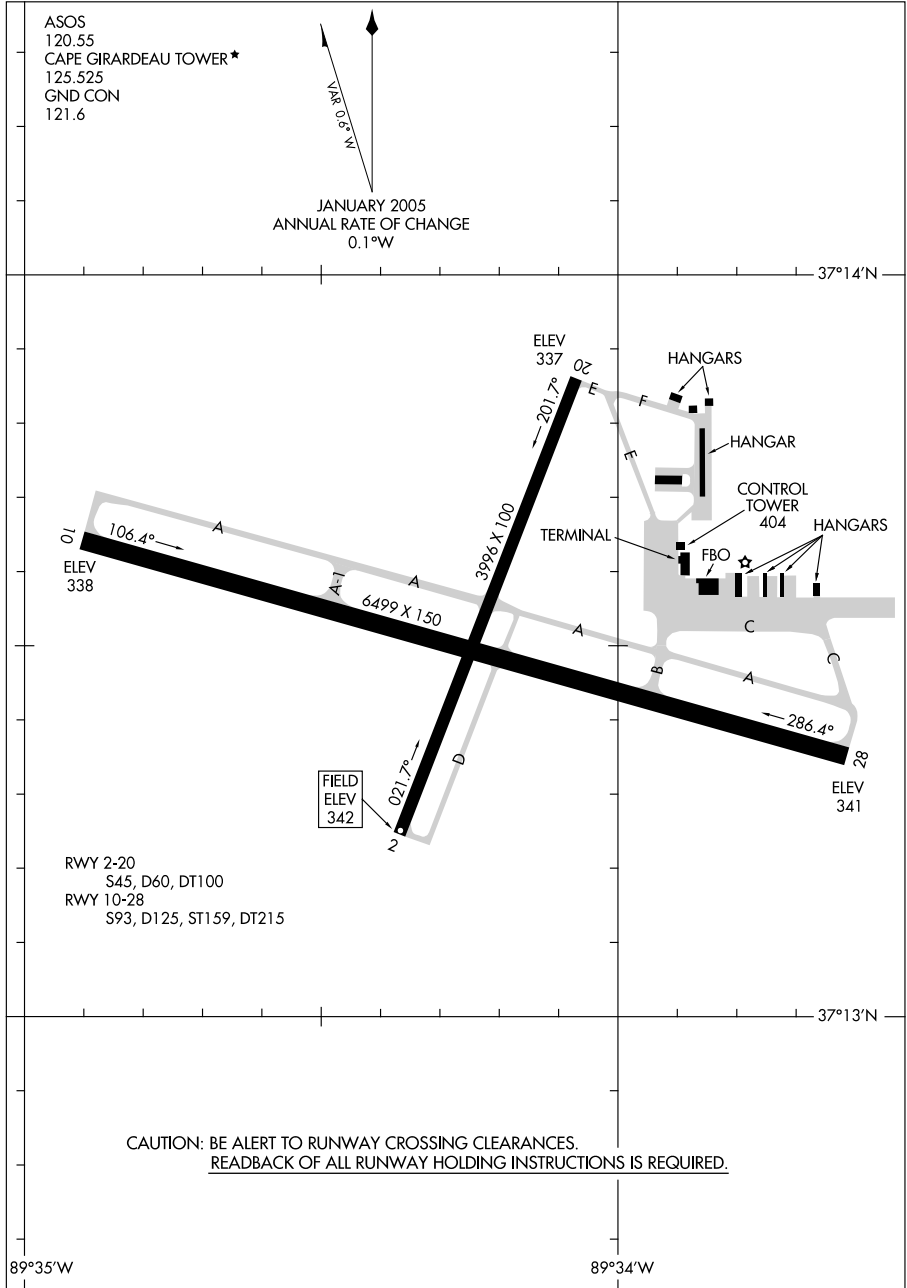
BURLINGTON, IOWA  
BURLINGTON/SOUTHEAST IOWA RGNL (BRL)

09295

AIRPORT DIAGRAM

CAPE GIRARDEAU RGNL (CGI)  
CAPE GIRARDEAU, MISSOURI

AL-943 (FAA)



AIRPORT DIAGRAM

09295

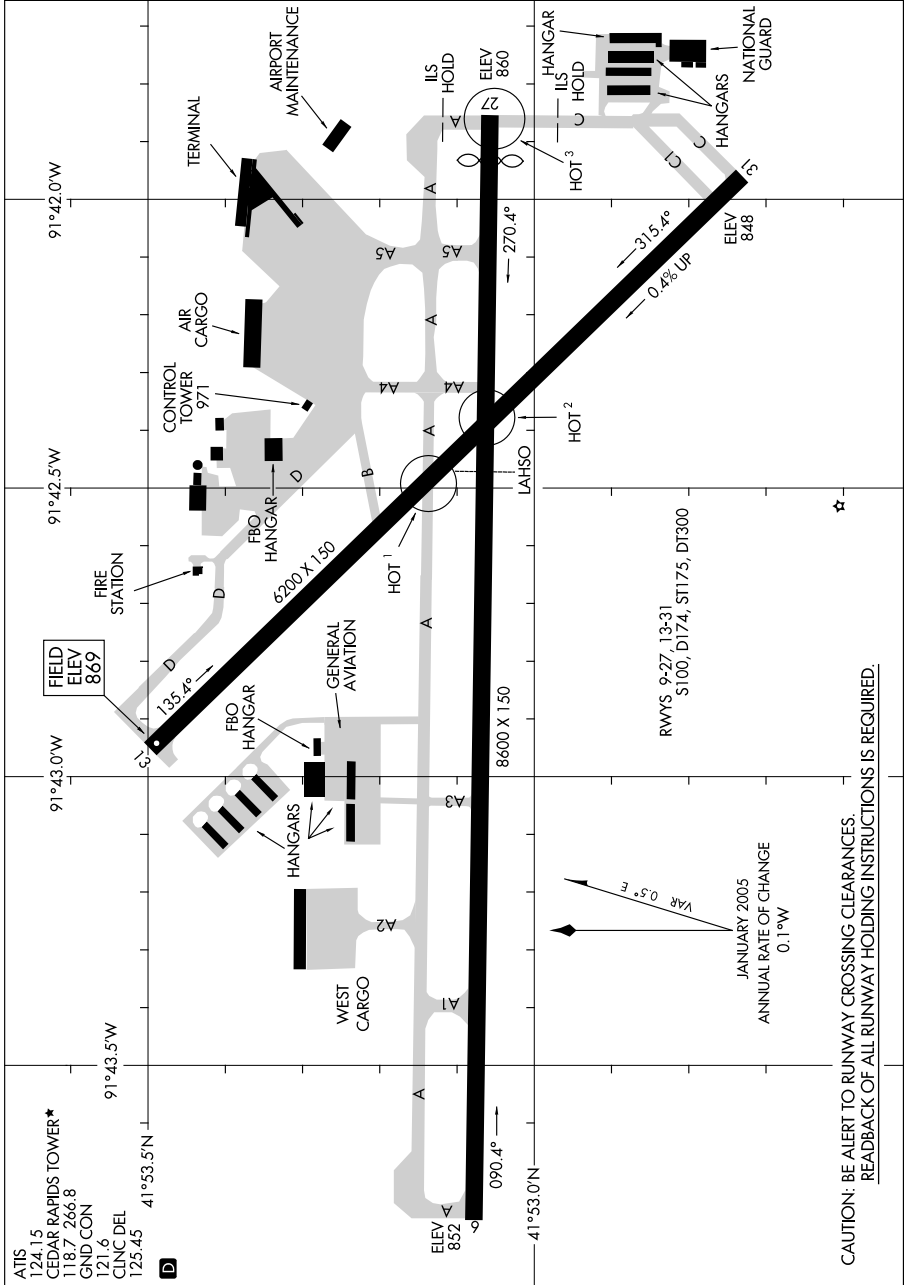
CAPE GIRARDEAU, MISSOURI  
CAPE GIRARDEAU RGNL (CGI)

09239

# AIRPORT DIAGRAM

CEDAR RAPIDS/ THE EASTERN IOWA (CID)  
CEDAR RAPIDS, IOWA

AL-250 (FAA)



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.  
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

# AIRPORT DIAGRAM

CEDAR RAPIDS, IOWA  
CEDAR RAPIDS/ THE EASTERN IOWA (CID)

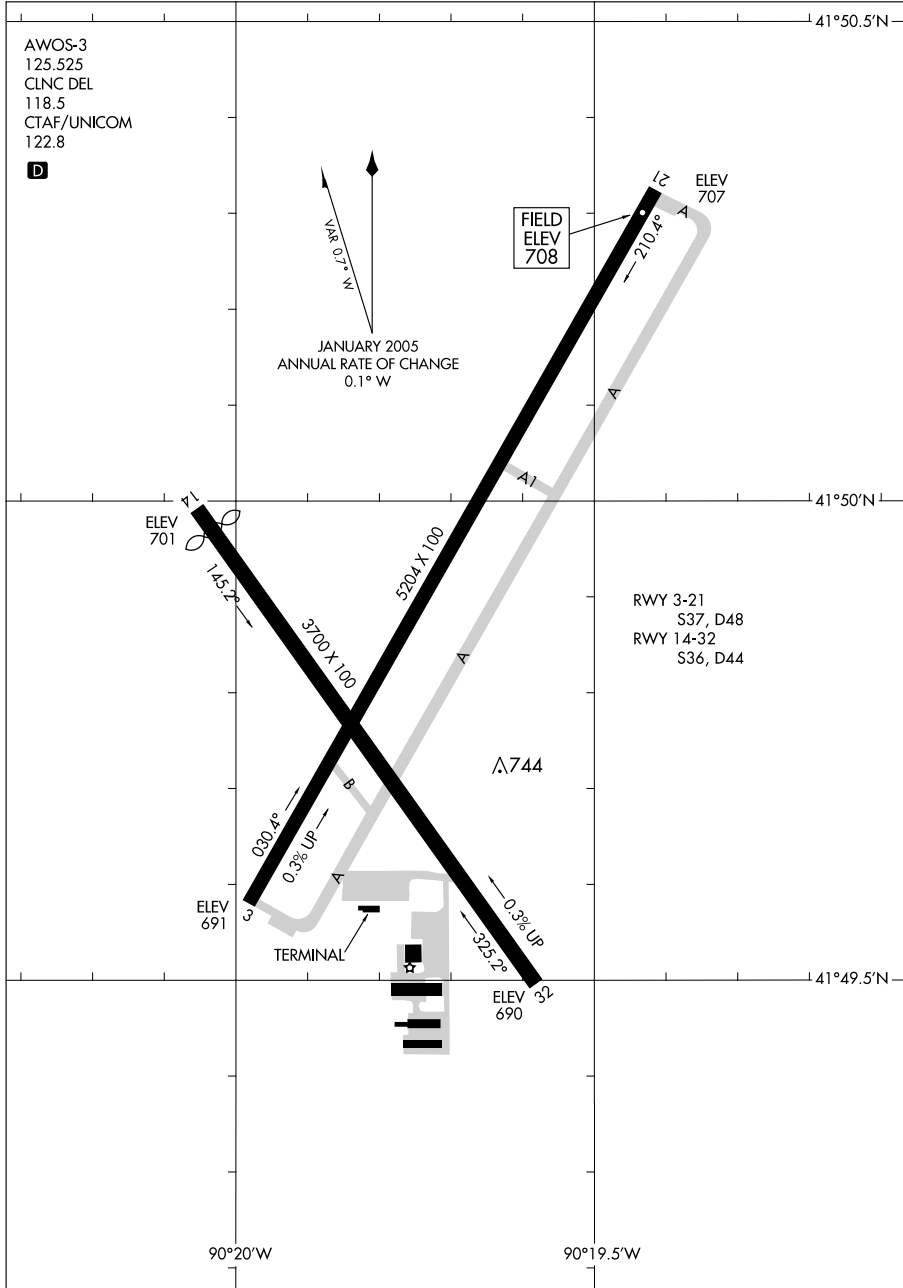
09239

09071

AIRPORT DIAGRAM

AL-972 (FAA)

CLINTON MUNI (CWI)  
CLINTON, IOWA



AIRPORT DIAGRAM

09071

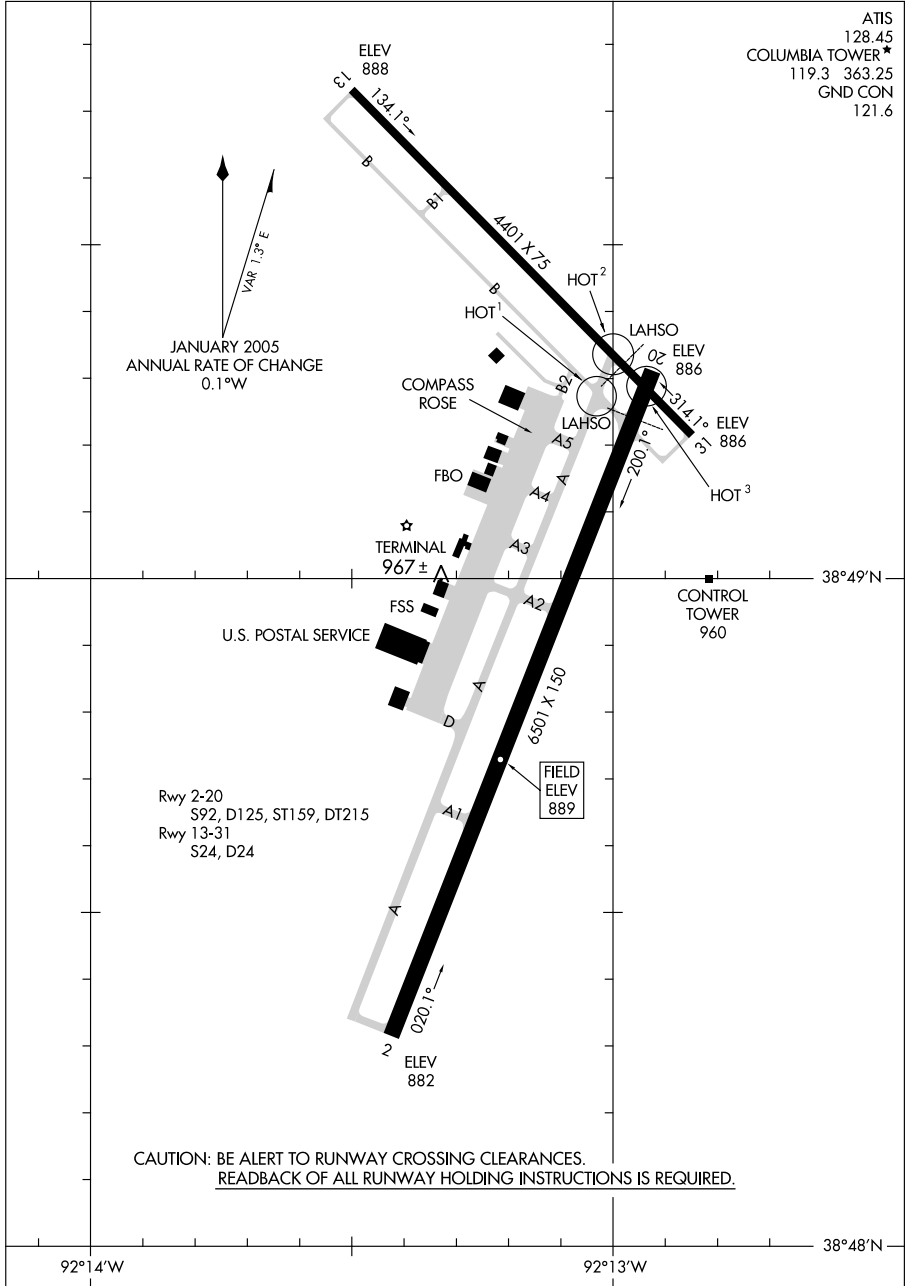
CLINTON, IOWA  
CLINTON MUNI (CWI)

09351

# AIRPORT DIAGRAM

AL-5595 (FAA)

COLUMBIA RGNL (COU)  
COLUMBIA, MISSOURI



ATIS 128.45  
 COLUMBIA TOWER\* 119.3 363.25  
 GND CON 121.6

JANUARY 2005  
 ANNUAL RATE OF CHANGE  
 0.1°W

Rwy 2-20  
 S92, D125, ST159, DT215  
 Rwy 13-31  
 S24, D24

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.  
 READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

# AIRPORT DIAGRAM

09351

COLUMBIA, MISSOURI  
COLUMBIA RGNL (COU)



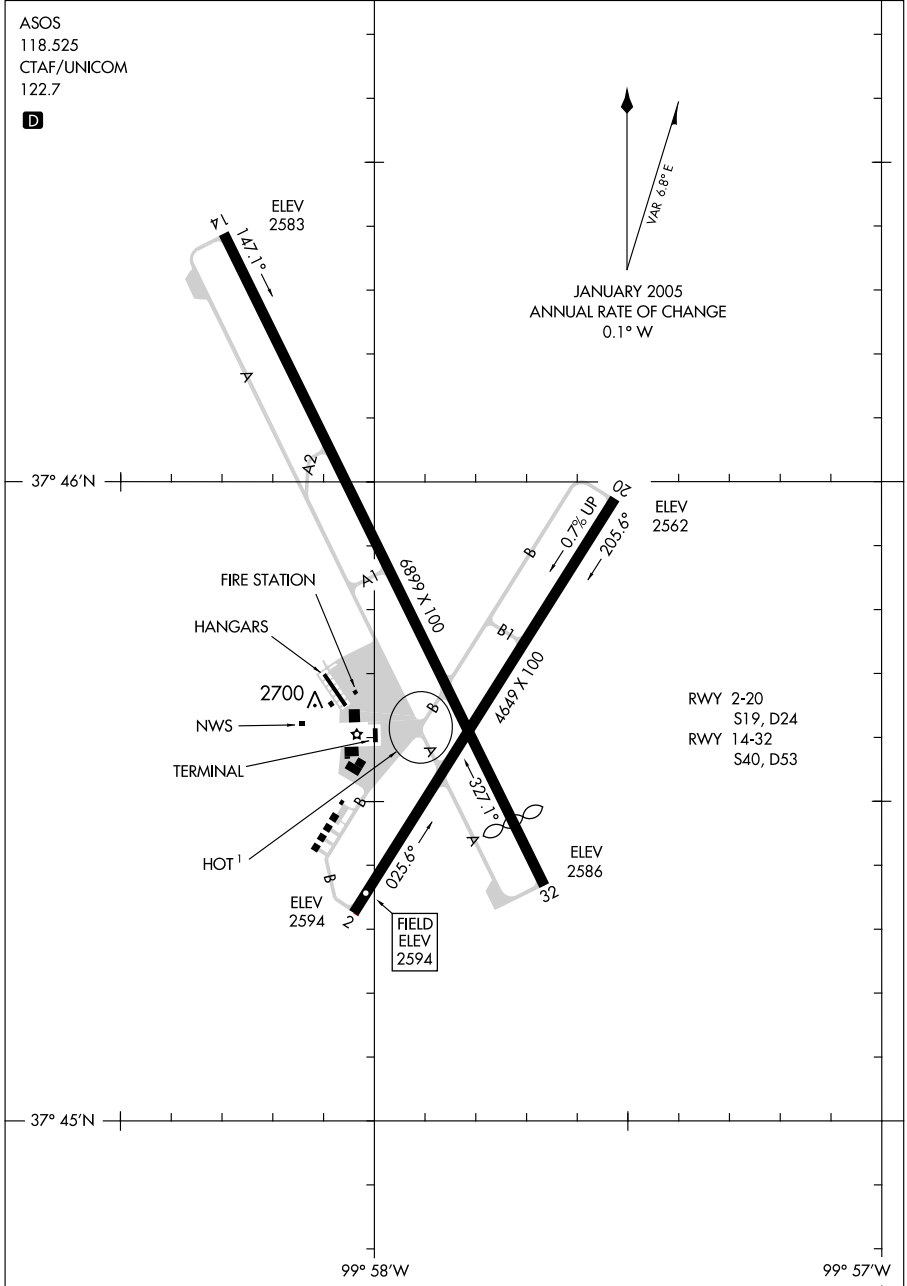


09295

# AIRPORT DIAGRAM

AL-676 (FAA)

DODGE CITY RGNL (DDC)  
DODGE CITY, KANSAS



# AIRPORT DIAGRAM

09295

DODGE CITY, KANSAS  
DODGE CITY RGNL (DDC)

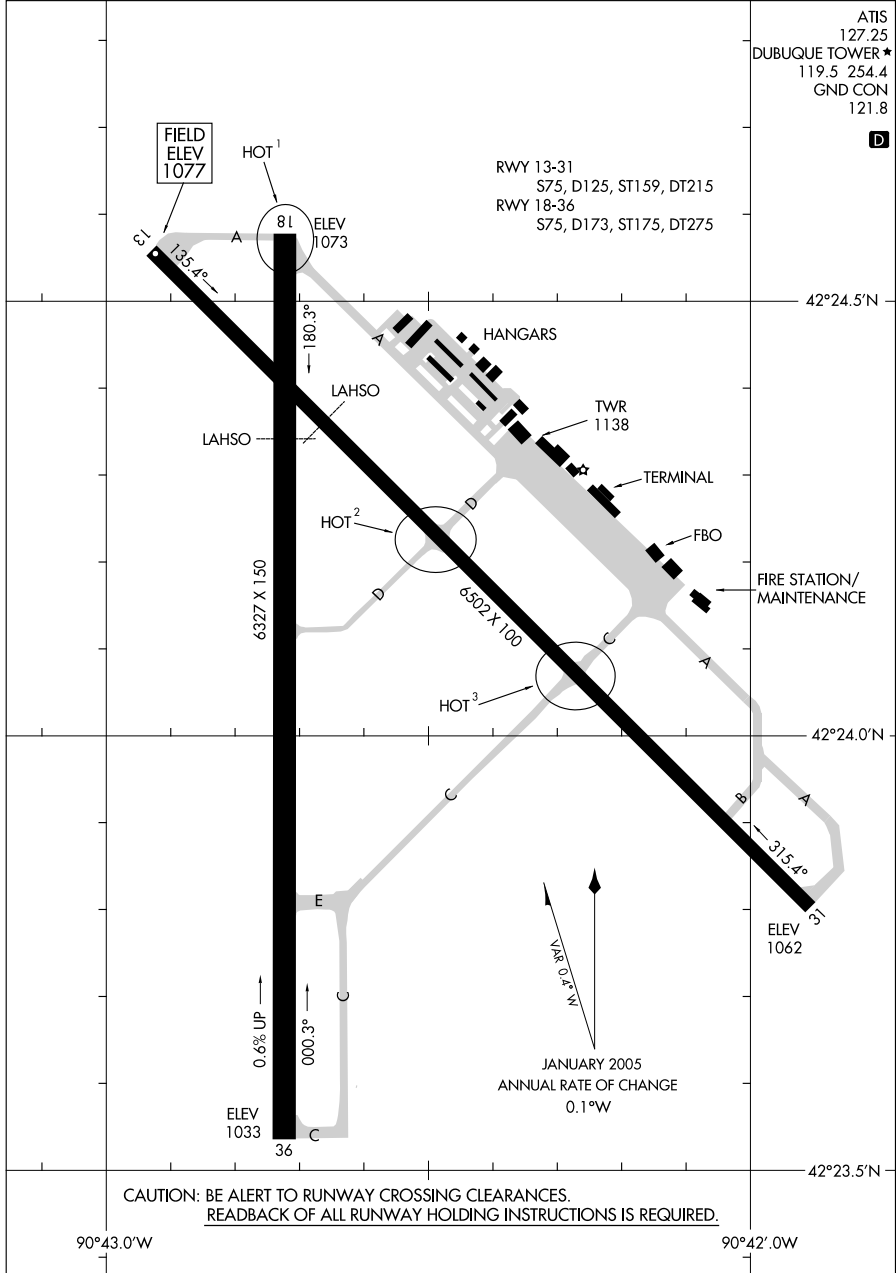
10042

AIRPORT DIAGRAM

AL-923 (FAA)

DUBUQUE RGNL (DBQ)

DUBUQUE, IOWA



AIRPORT DIAGRAM

10042

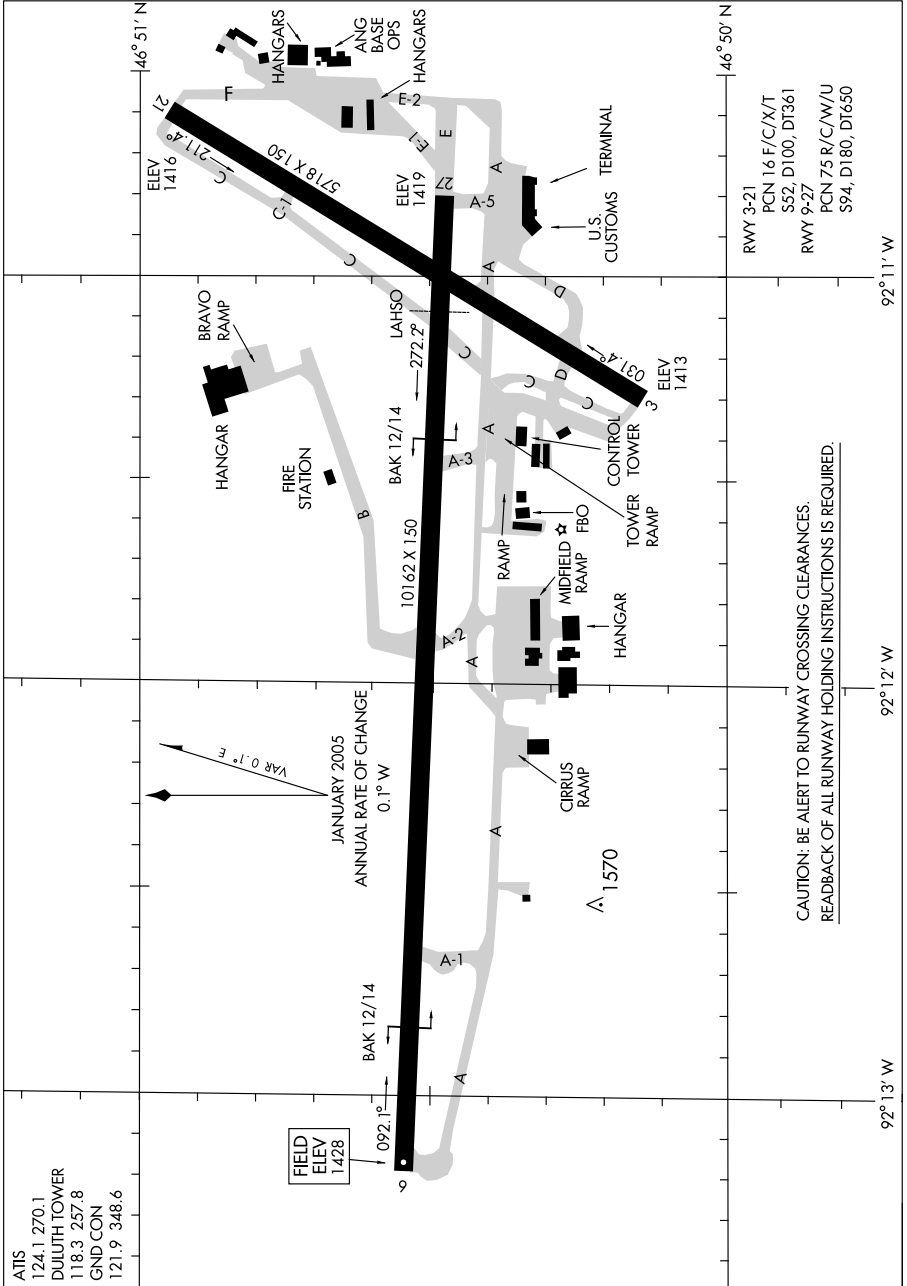
DUBUQUE, IOWA  
DUBUQUE RGNL (DBQ)

09071

# AIRPORT DIAGRAM

AL-125 (FAA)

DULUTH INTL (DLH)  
DULUTH, MINNESOTA



# AIRPORT DIAGRAM

09071

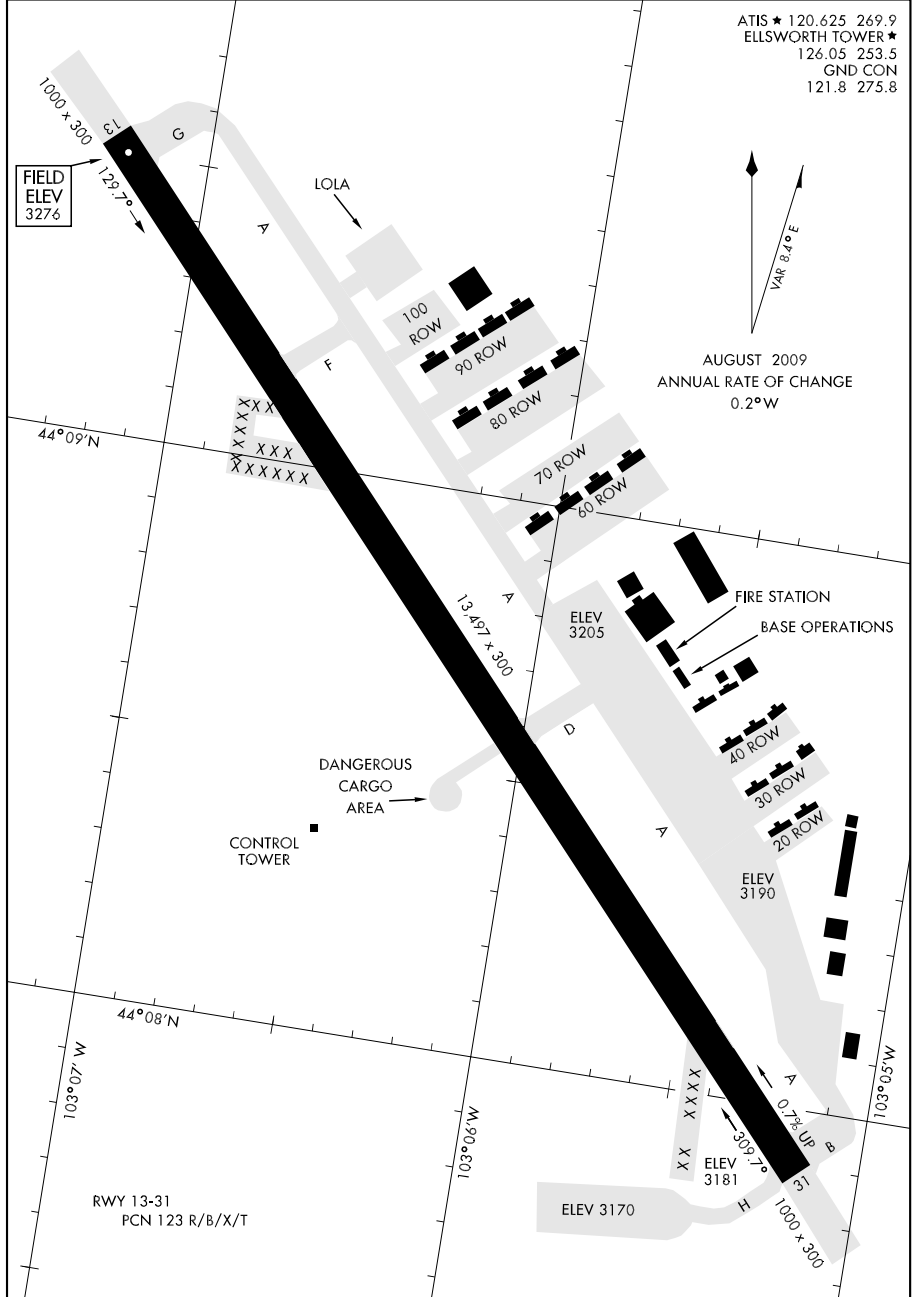
DULUTH, MINNESOTA  
DULUTH INTL (DLH)

09239

AIRPORT DIAGRAM

AFD-343 [USAF]

ELLSWORTH AFB (KRCA)  
RAPID CITY, SOUTH DAKOTA



AIRPORT DIAGRAM

RAPID CITY, SOUTH DAKOTA  
ELLSWORTH AFB (KRCA)





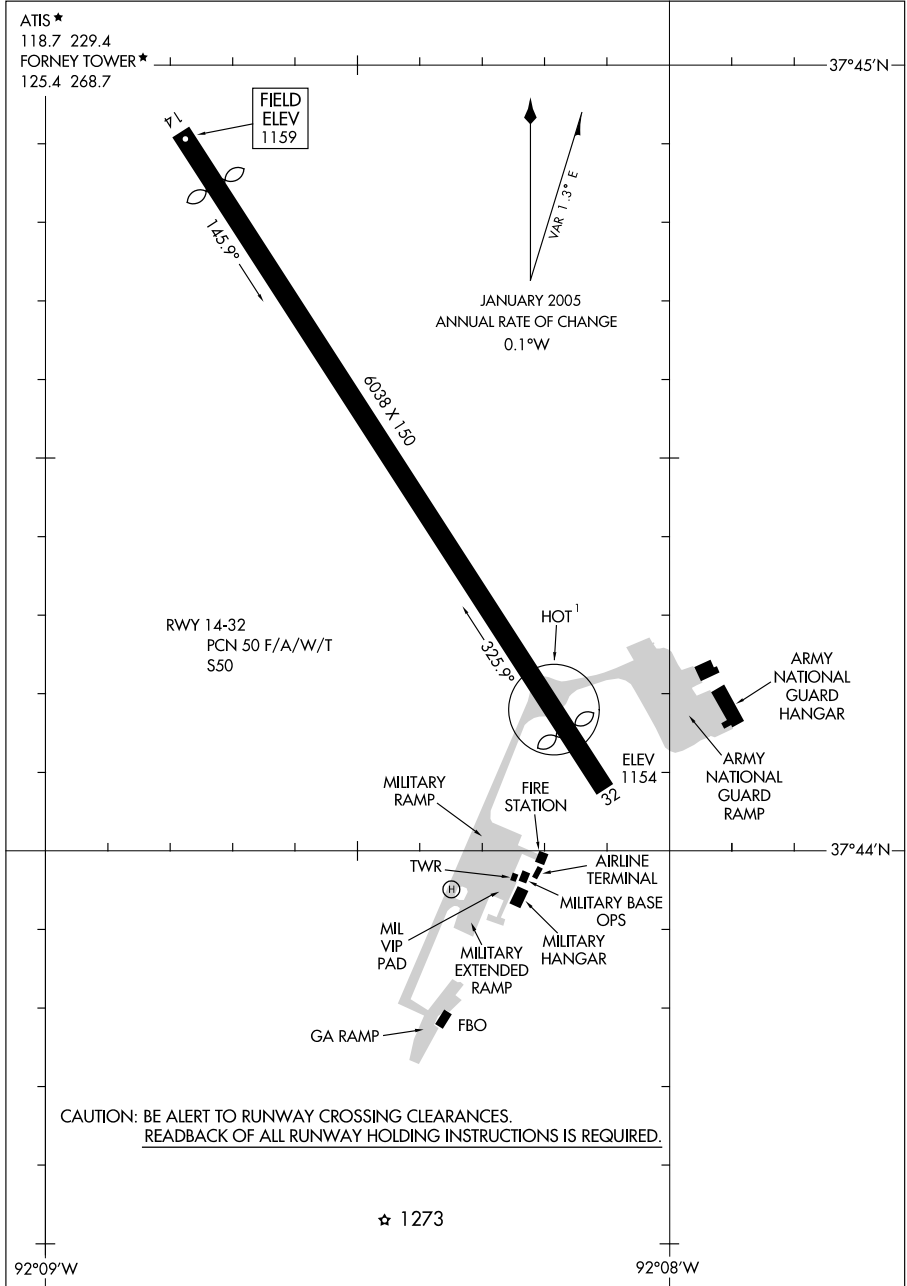
10042

FT. LEONARD WOOD/WAYNESVILLE-ST. ROBERT RGNL FORNEY FIELD (TBN)

AIRPORT DIAGRAM

AL-5093 (FAA)

FT. LEONARD WOOD, MISSOURI



AIRPORT DIAGRAM

FT. LEONARD WOOD, MISSOURI

10042

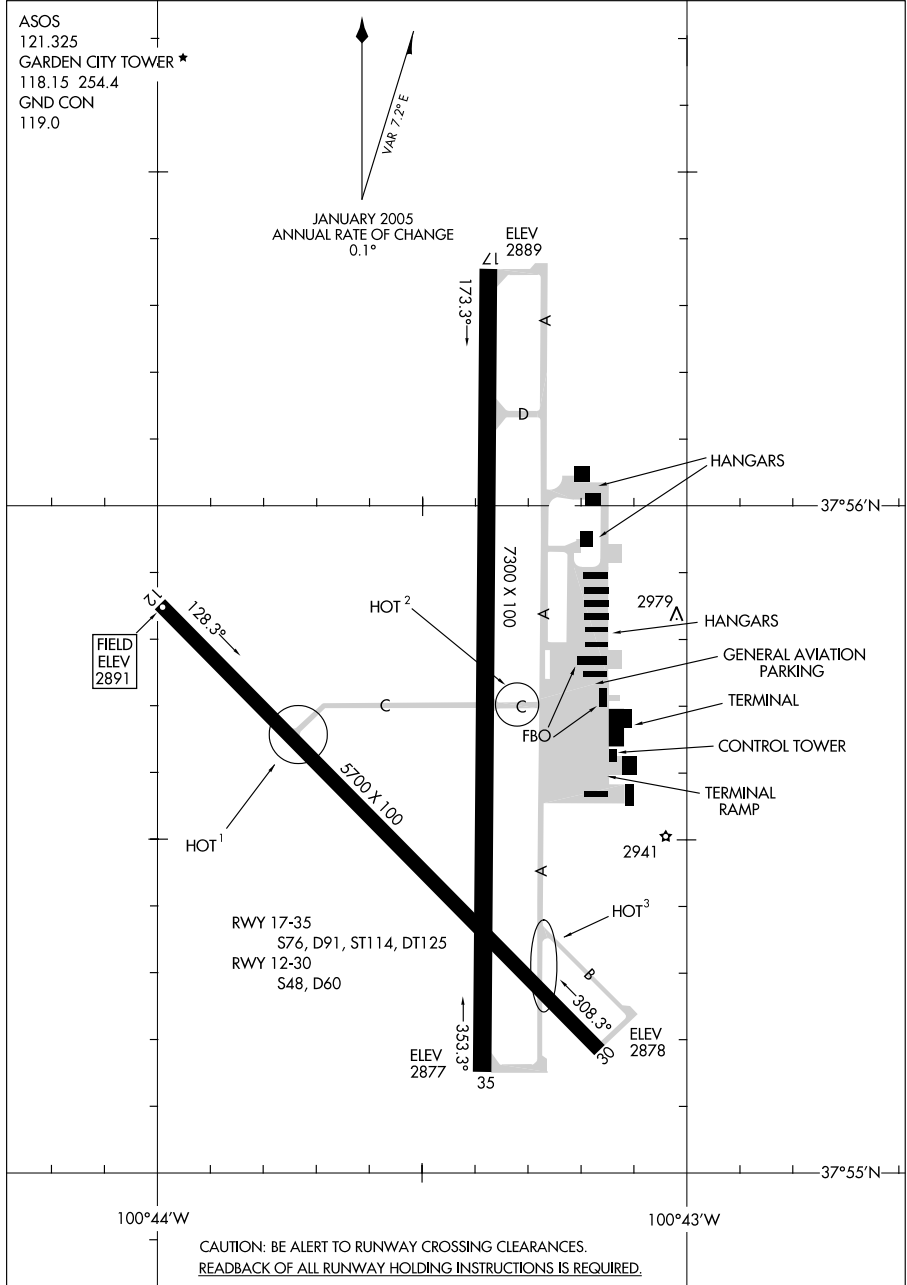
FT. LEONARD WOOD/WAYNESVILLE-ST. ROBERT RGNL FORNEY FIELD (TBN)

09295

# AIRPORT DIAGRAM

GARDEN CITY RGNL (GCK)  
GARDEN CITY, KANSAS

AL-491 (FAA)



# AIRPORT DIAGRAM

09295

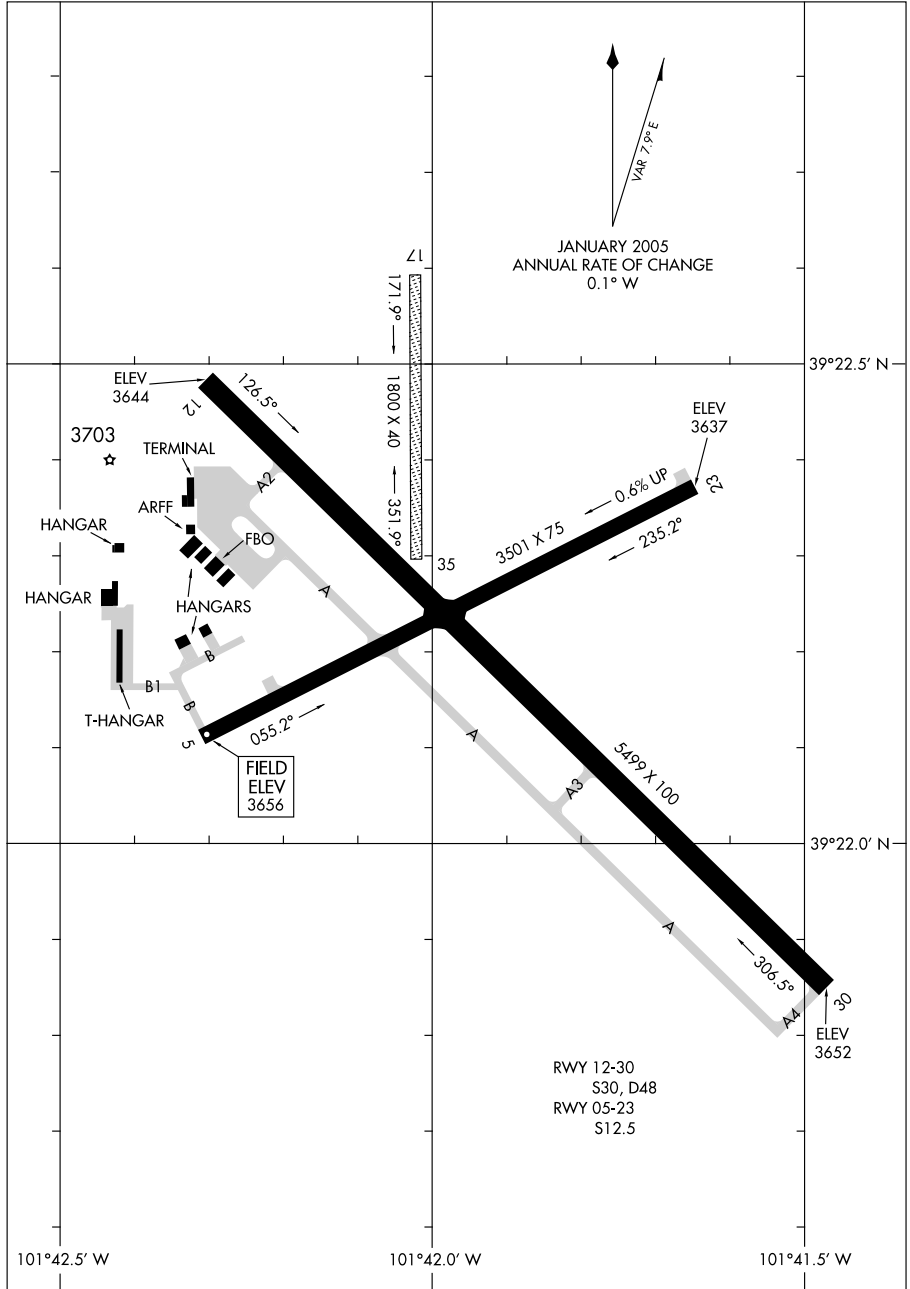
GARDEN CITY, KANSAS  
GARDEN CITY RGNL (GCK)



06271

# AIRPORT DIAGRAM

GOODLAND/RENNER FIELD/GOODLAND MUNI (GLD)  
AL-684 (FAA) GOODLAND, KANSAS



# AIRPORT DIAGRAM

06271

GOODLAND, KANSAS  
GOODLAND/RENNER FIELD/GOODLAND MUNI (GLD)

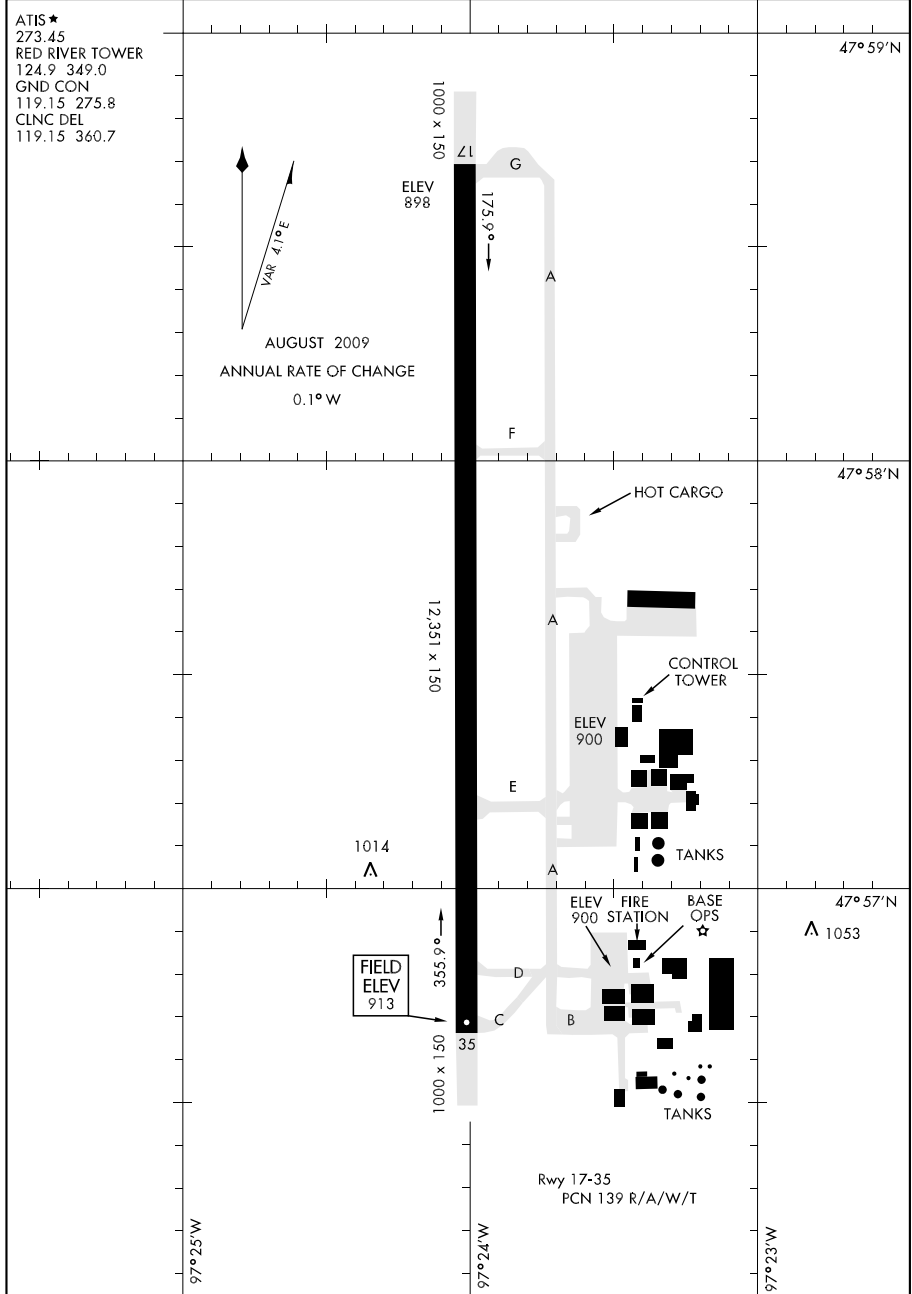
09239

GRAND FORKS AFB (KRDR)

AIRPORT DIAGRAM

AFD-5010 [USAF]

GRAND FORKS, NORTH DAKOTA



AIRPORT DIAGRAM

GRAND FORKS, NORTH DAKOTA  
GRAND FORKS AFB (KRDR)



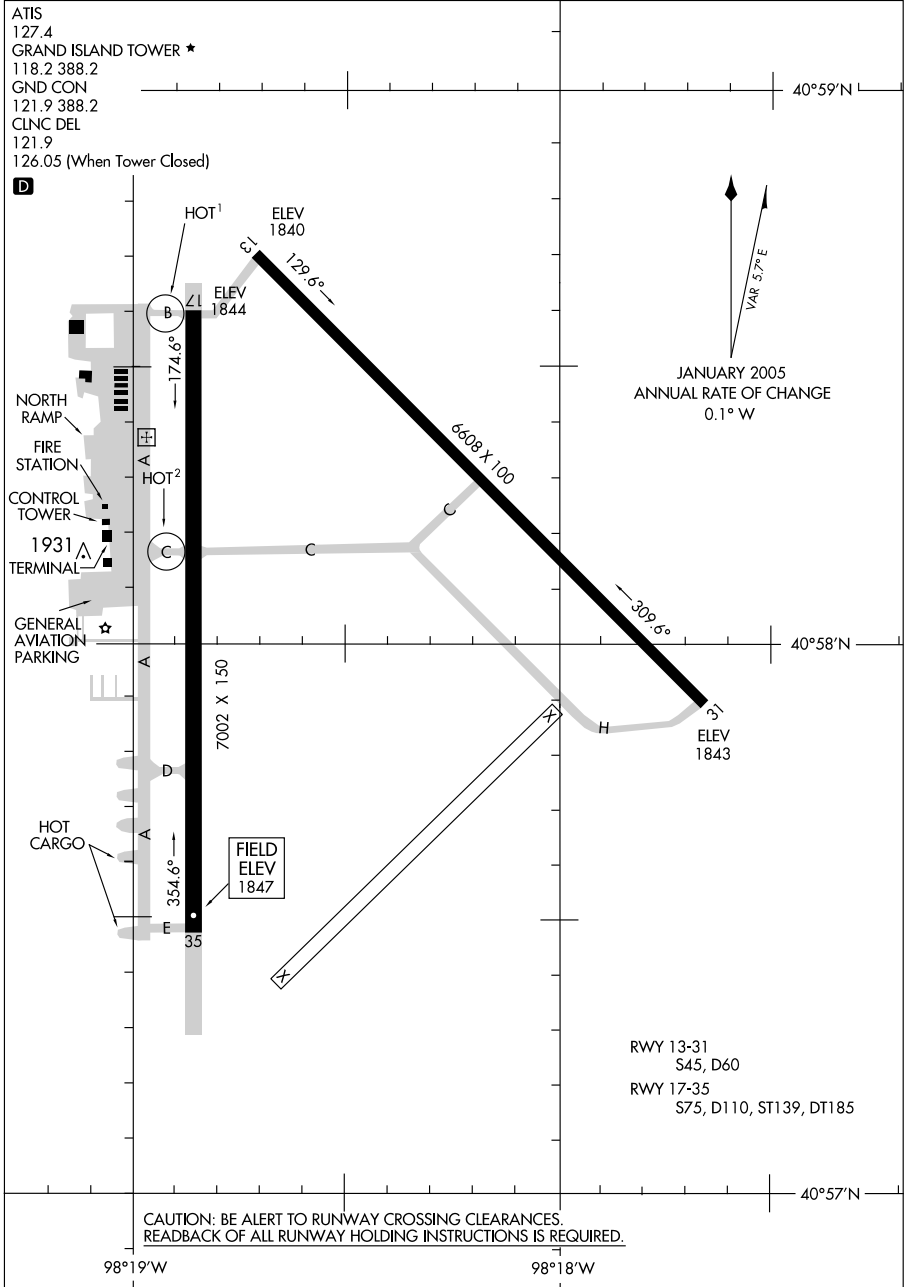
10042

GRAND ISLAND/ CENTRAL NEBRASKA RGNL (G.R.I)

AL-173 (FAA)

GRAND ISLAND, NEBRASKA

# AIRPORT DIAGRAM



# AIRPORT DIAGRAM

GRAND ISLAND, NEBRASKA

GRAND ISLAND/ CENTRAL NEBRASKA RGNL (G.R.I)

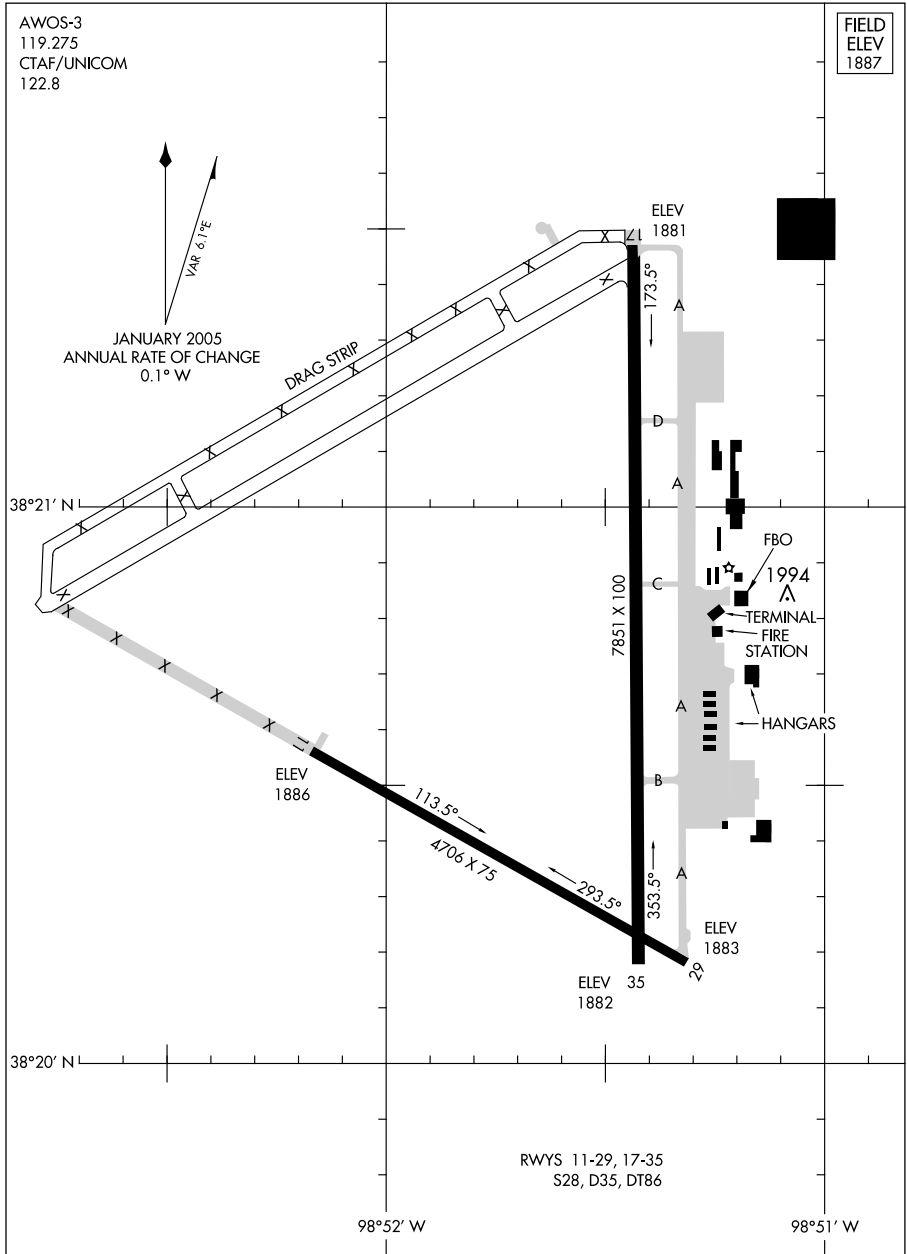
10042

10042

AIRPORT DIAGRAM

AL-175 (FAA)

GREAT BEND MUNI (GBD)  
GREAT BEND, KANSAS



AIRPORT DIAGRAM

10042

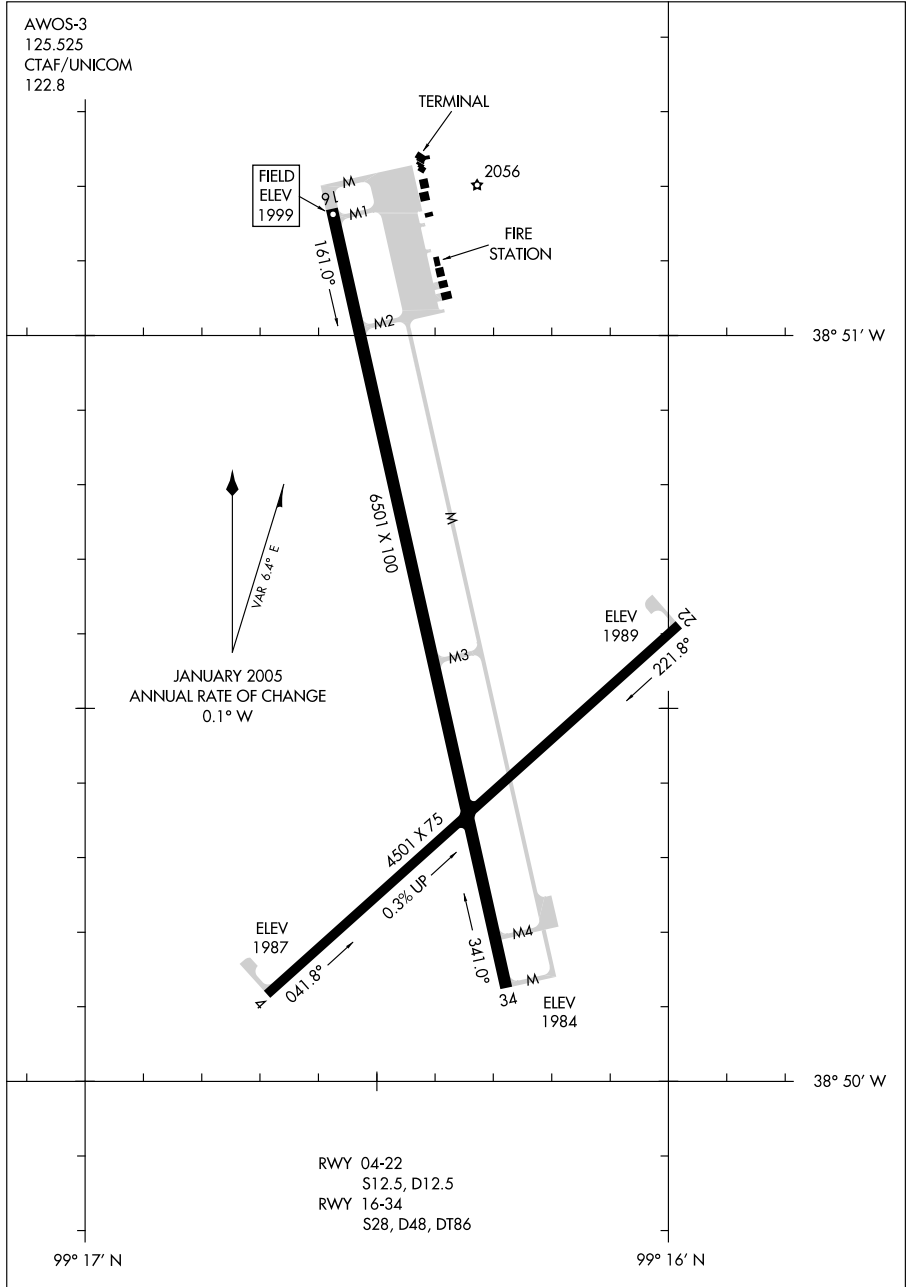
GREAT BEND, KANSAS  
GREAT BEND MUNI (GBD)

09127

AIRPORT DIAGRAM

AL-5440 (FAA)

HAYS RGNL (HYS)  
HAYS, KANSAS



AIRPORT DIAGRAM

09127

HAYS, KANSAS  
HAYS RGNL (HYS)

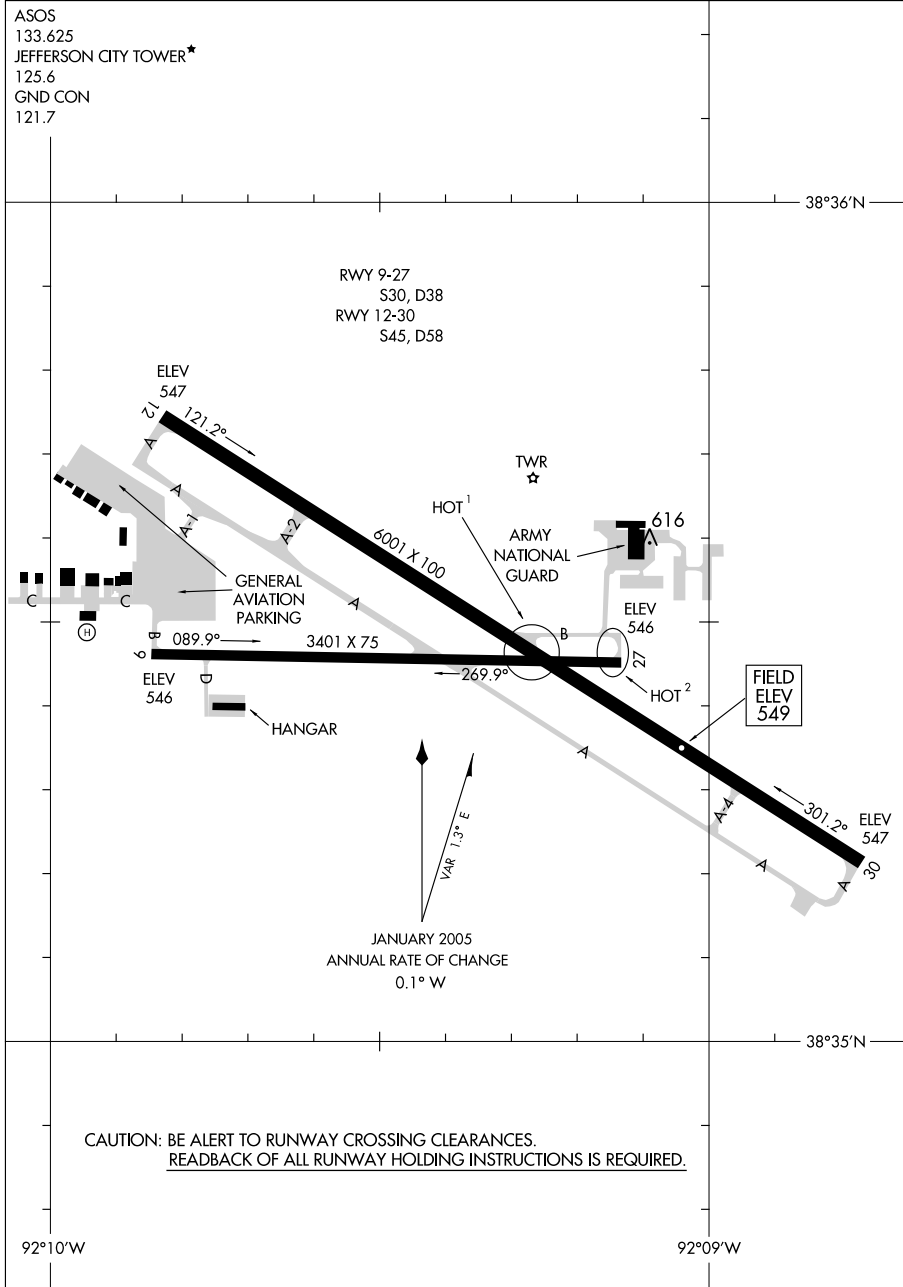


09351

AIRPORT DIAGRAM

AL-796 (FAA)

JEFFERSON CITY MEMORIAL (JEF)  
JEFFERSON CITY, MISSOURI



AIRPORT DIAGRAM

09351

JEFFERSON CITY, MISSOURI  
JEFFERSON CITY MEMORIAL (JEF)



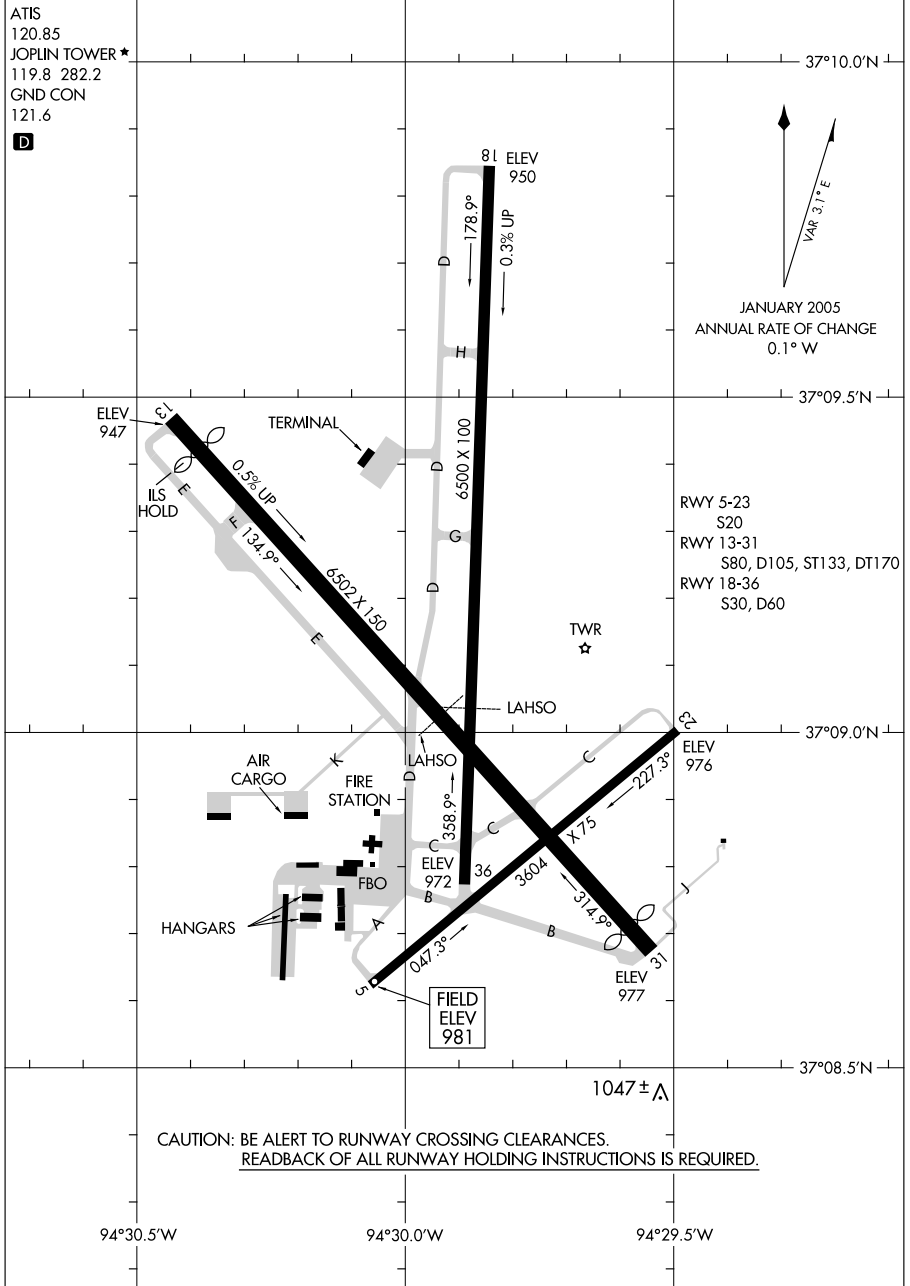
10042

# AIRPORT DIAGRAM

AL-540 (FAA)

JOPLIN RGNL (JLN)

JOPLIN, MISSOURI



# AIRPORT DIAGRAM

10042

JOPLIN, MISSOURI

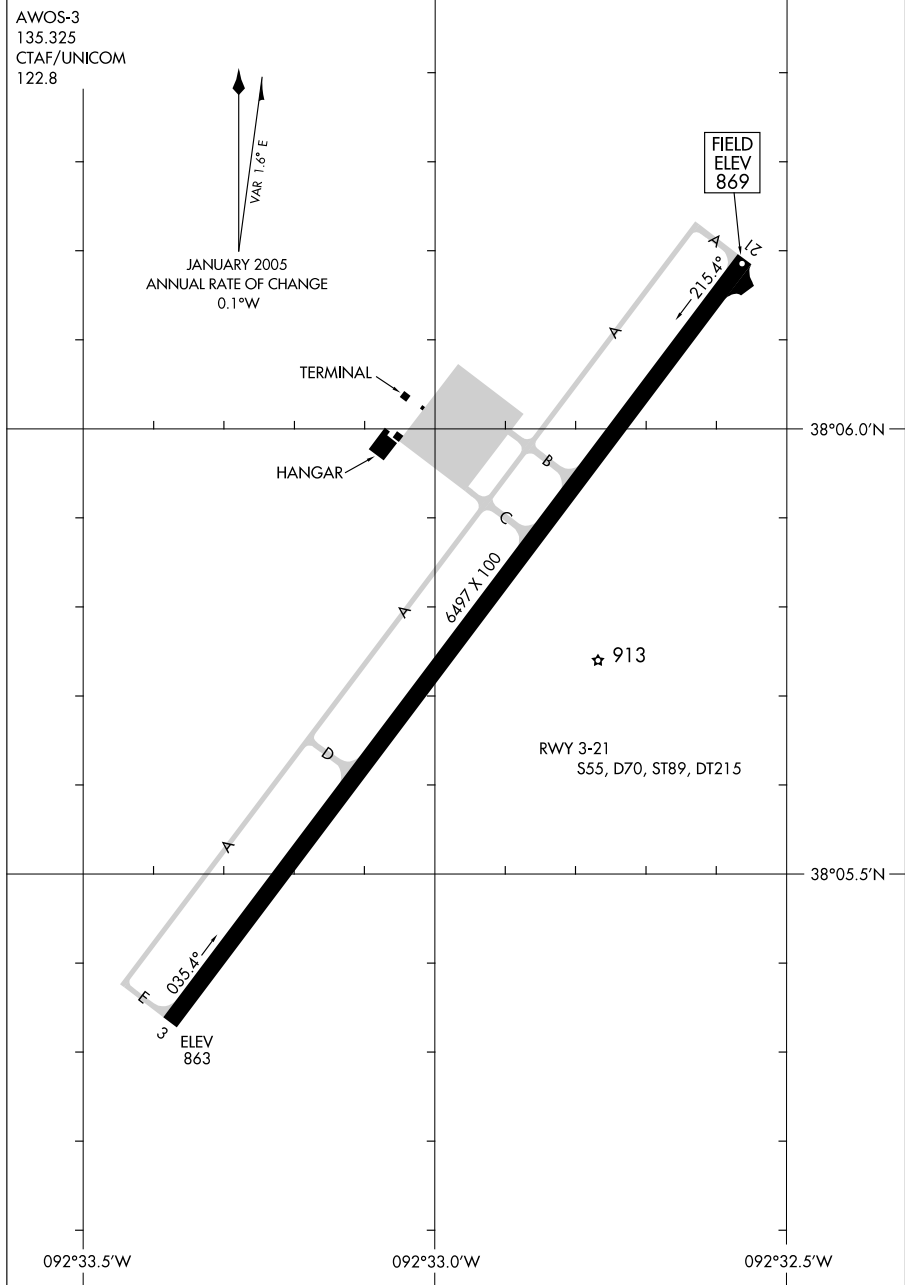
JOPLIN RGNL (JLN)

09295

AIRPORT DIAGRAM

AL-5765 (FAA)

KAISER/LEE C. FINE MEMORIAL (AIZ)  
KAISER/LAKE OZARK, MISSOURI



AIRPORT DIAGRAM

09295

KAISER/LAKE OZARK, MISSOURI  
KAISER/LEE C. FINE MEMORIAL (AIZ)

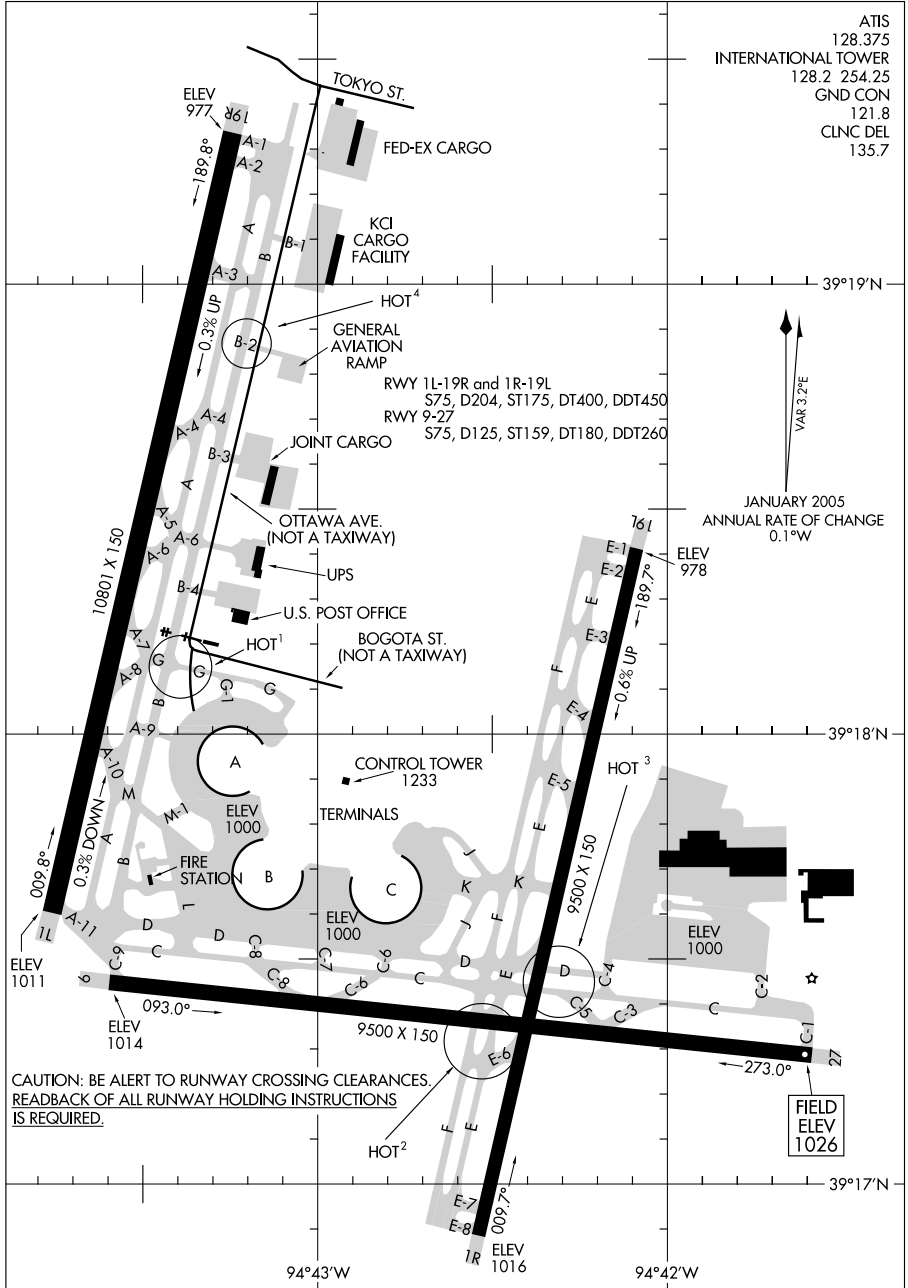


09295

AIRPORT DIAGRAM

AL-780 (FAA)

KANSAS CITY INTL (MCI)  
KANSAS CITY, MISSOURI



AIRPORT DIAGRAM

09295

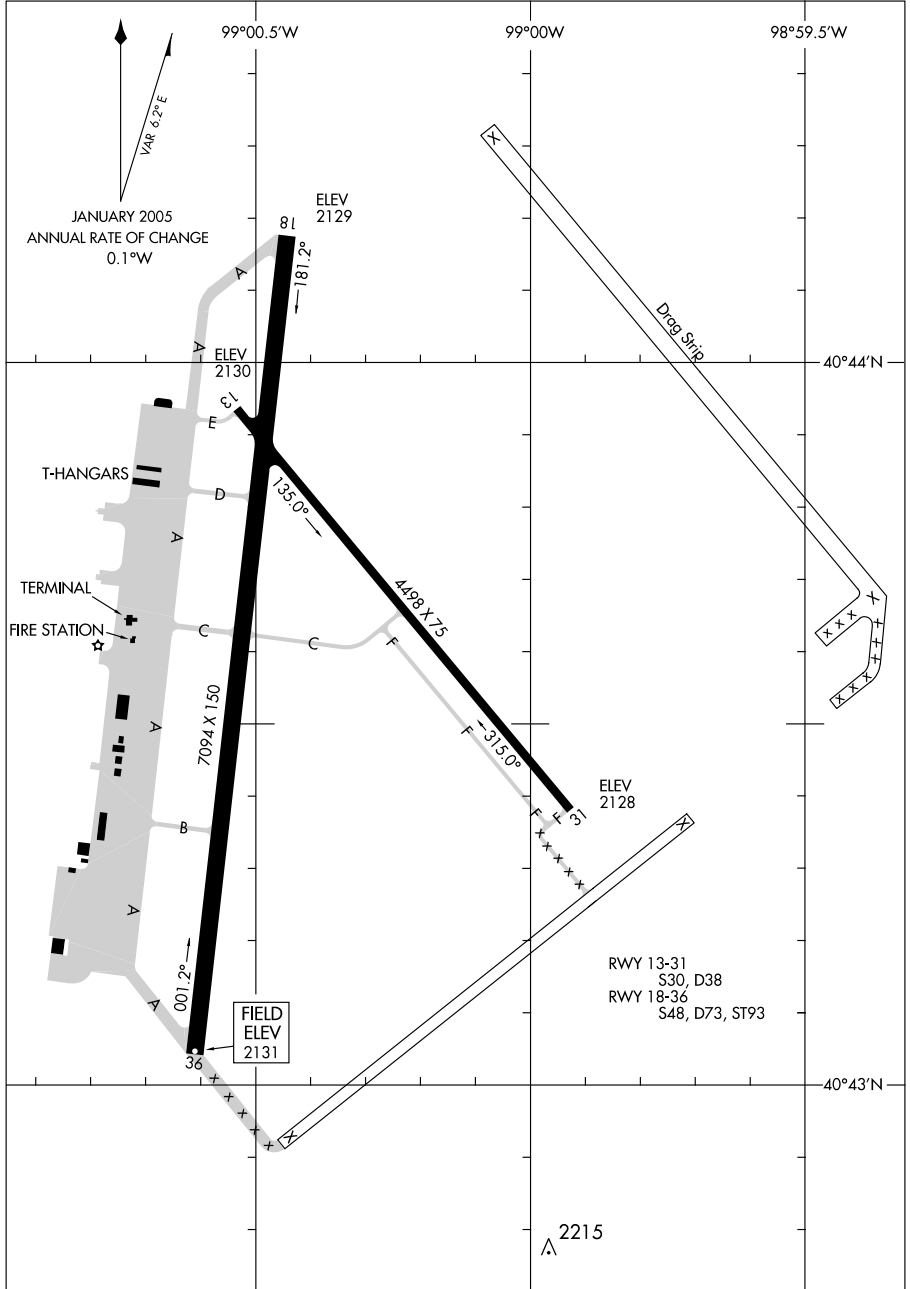
KANSAS CITY, MISSOURI  
KANSAS CITY INTL (MCI)

07298

# AIRPORT DIAGRAM

AL-541 (FAA)

KEARNEY RGNL (E.A.R)  
KEARNEY, NEBRASKA



# AIRPORT DIAGRAM

07298

40°44'N-99°00'W

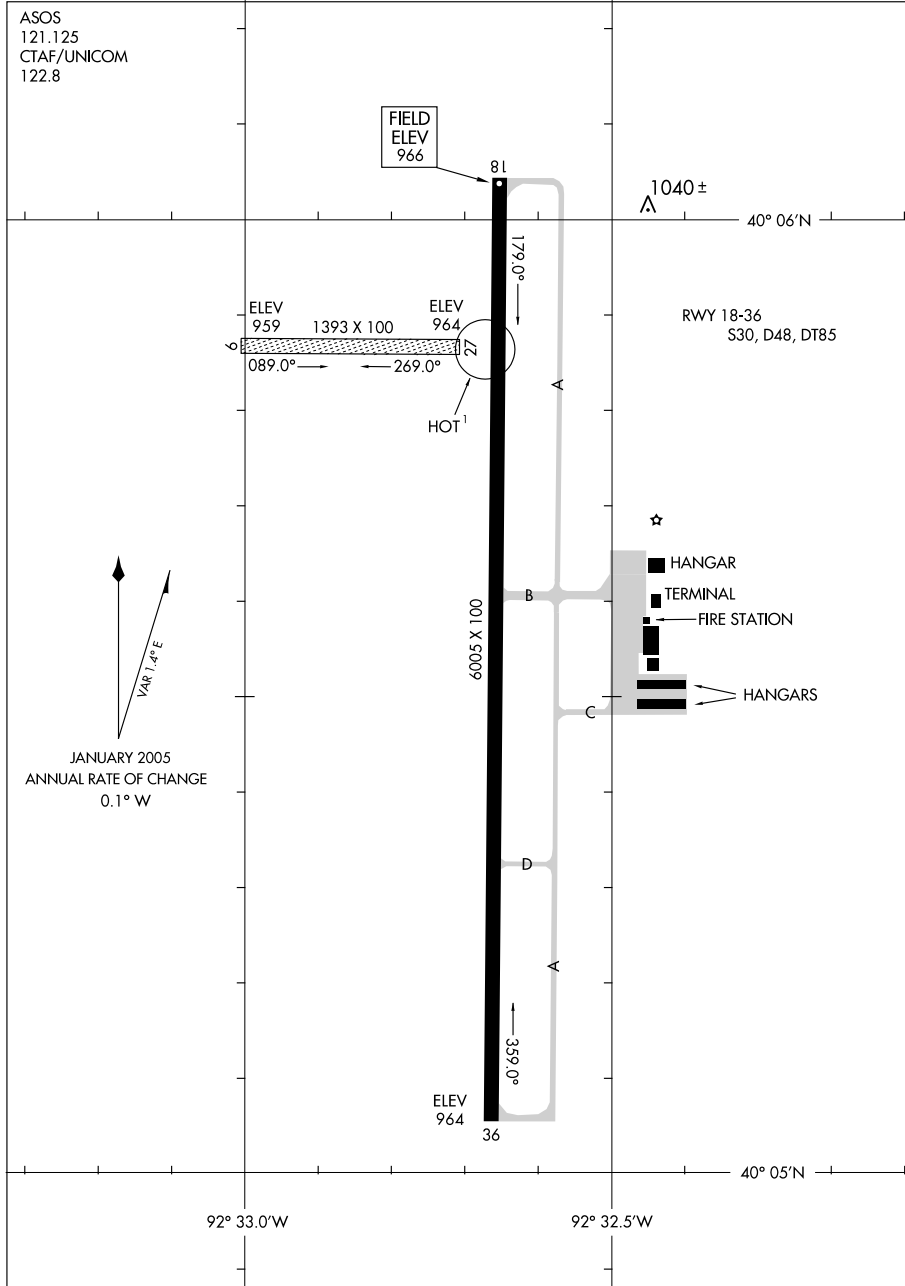
KEARNEY, NEBRASKA  
KEARNEY RGNL (E.A.R)

09239

AIRPORT DIAGRAM

AL-217 (FAA)

KIRKSVILLE RGNL (IRK)  
KIRKSVILLE, MISSOURI



AIRPORT DIAGRAM

09239

KIRKSVILLE, MISSOURI  
KIRKSVILLE RGNL (IRK)

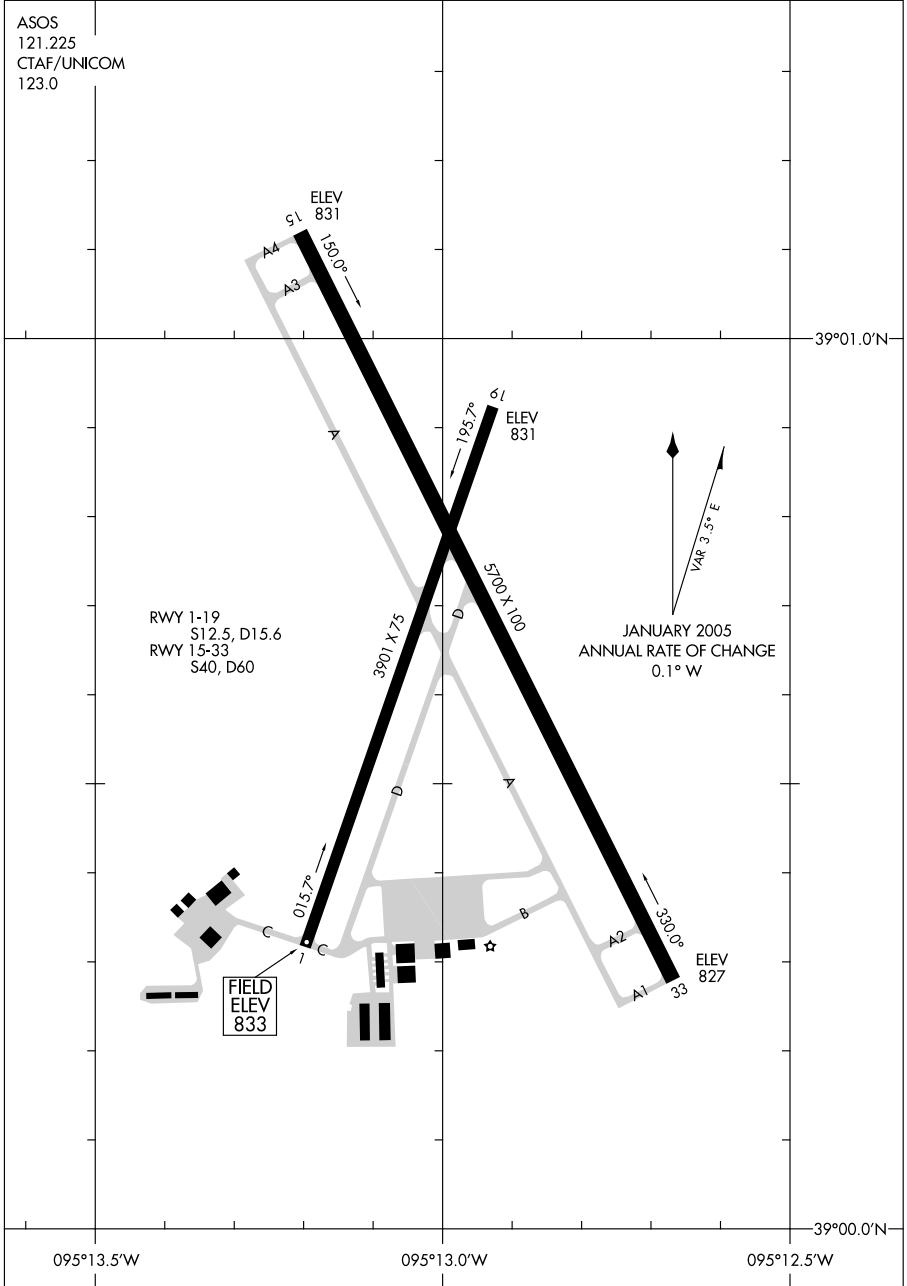
10098

# AIRPORT DIAGRAM

AL-5481 (FAA)

LAWRENCE MUNI (LWC)  
LAWRENCE, KANSAS

ASOS  
121.225  
CTAF/UNICOM  
123.0



RWY 1-19  
S12.5, D15.6  
RWY 15-33  
S40, D60

JANUARY 2005  
ANNUAL RATE OF CHANGE  
0.1° W

# AIRPORT DIAGRAM

10098

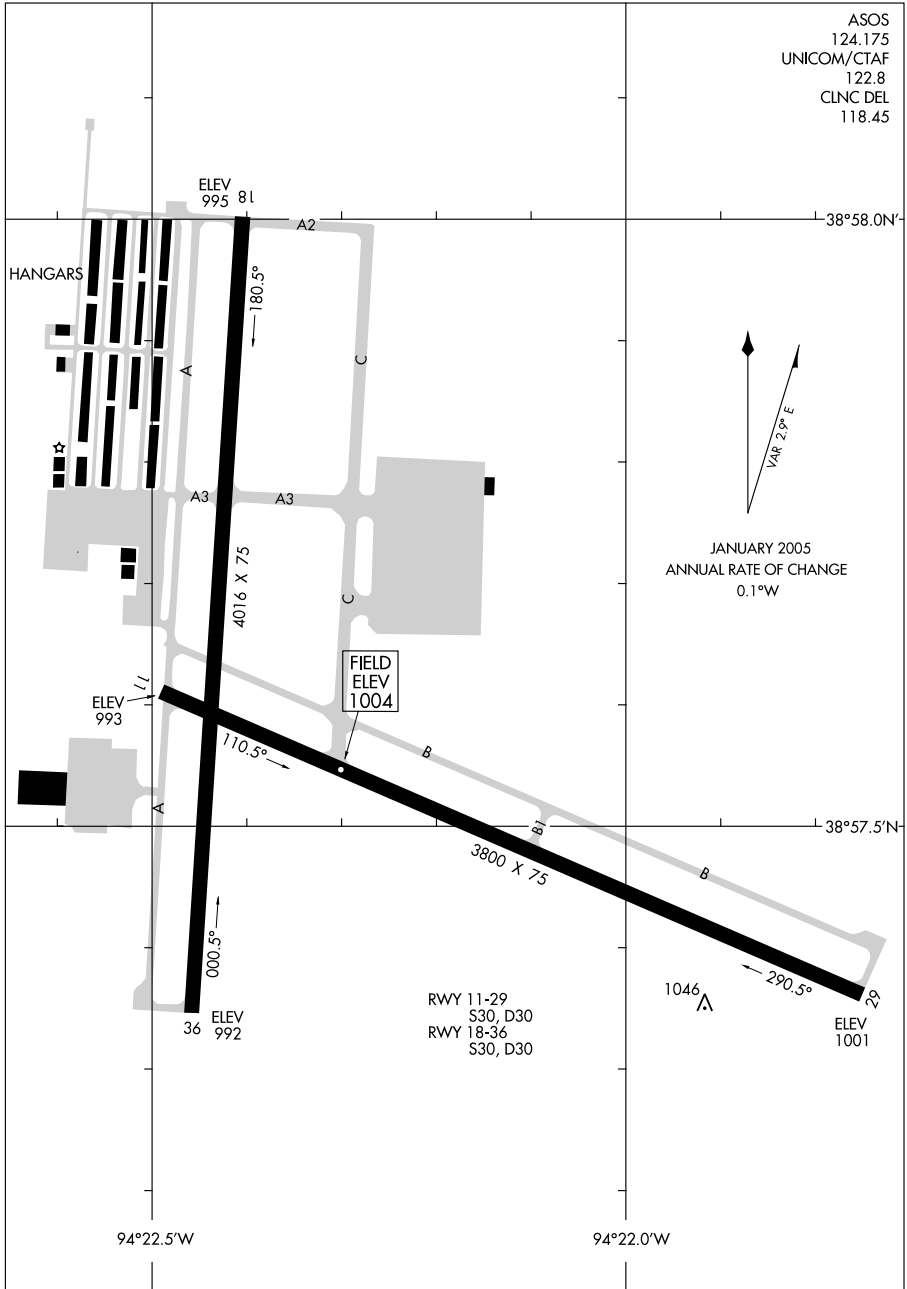
LAWRENCE, KANSAS  
LAWRENCE MUNI (LWC)

10098

AIRPORT DIAGRAM

AL-6104 (FAA)

LEE'S SUMMIT MUNI (LXT)  
LEE'S SUMMIT, MISSOURI



ASOS  
124.175  
UNICOM/CTAF  
122.8  
CLNC DEL  
118.45

JANUARY 2005  
ANNUAL RATE OF CHANGE  
0.1° W

RWY 11-29  
S30, D30  
RWY 18-36  
S30, D30

AIRPORT DIAGRAM

10098

LEE'S SUMMIT, MISSOURI  
LEE'S SUMMIT MUNI (LXT)

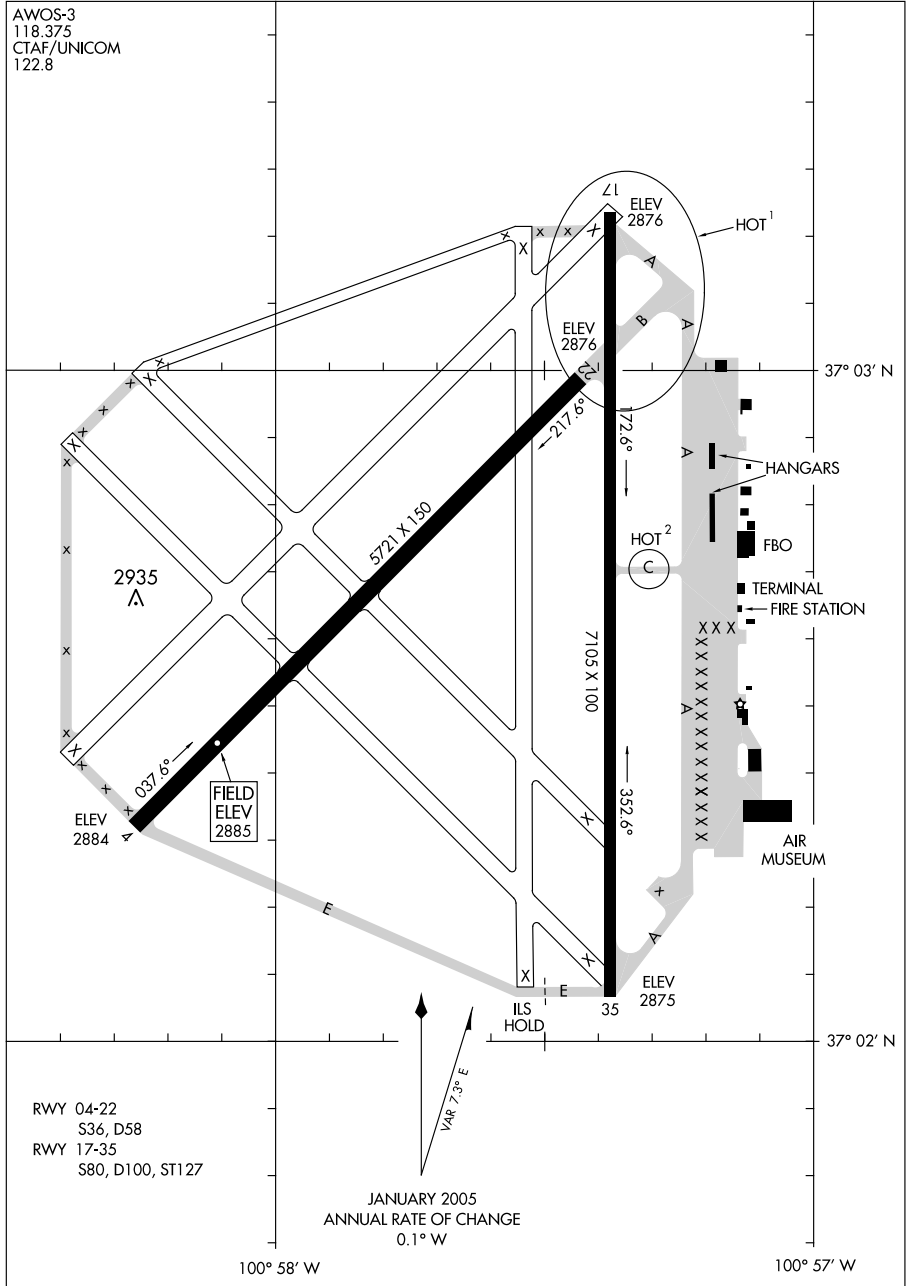


09351

AIRPORT DIAGRAM

AL-498 (FAA)

LIBERAL MID-AMERICA RGNL (LBL)  
LIBERAL, KANSAS



AIRPORT DIAGRAM

09351

LIBERAL, KANSAS  
LIBERAL MID-AMERICA RGNL (LBL)

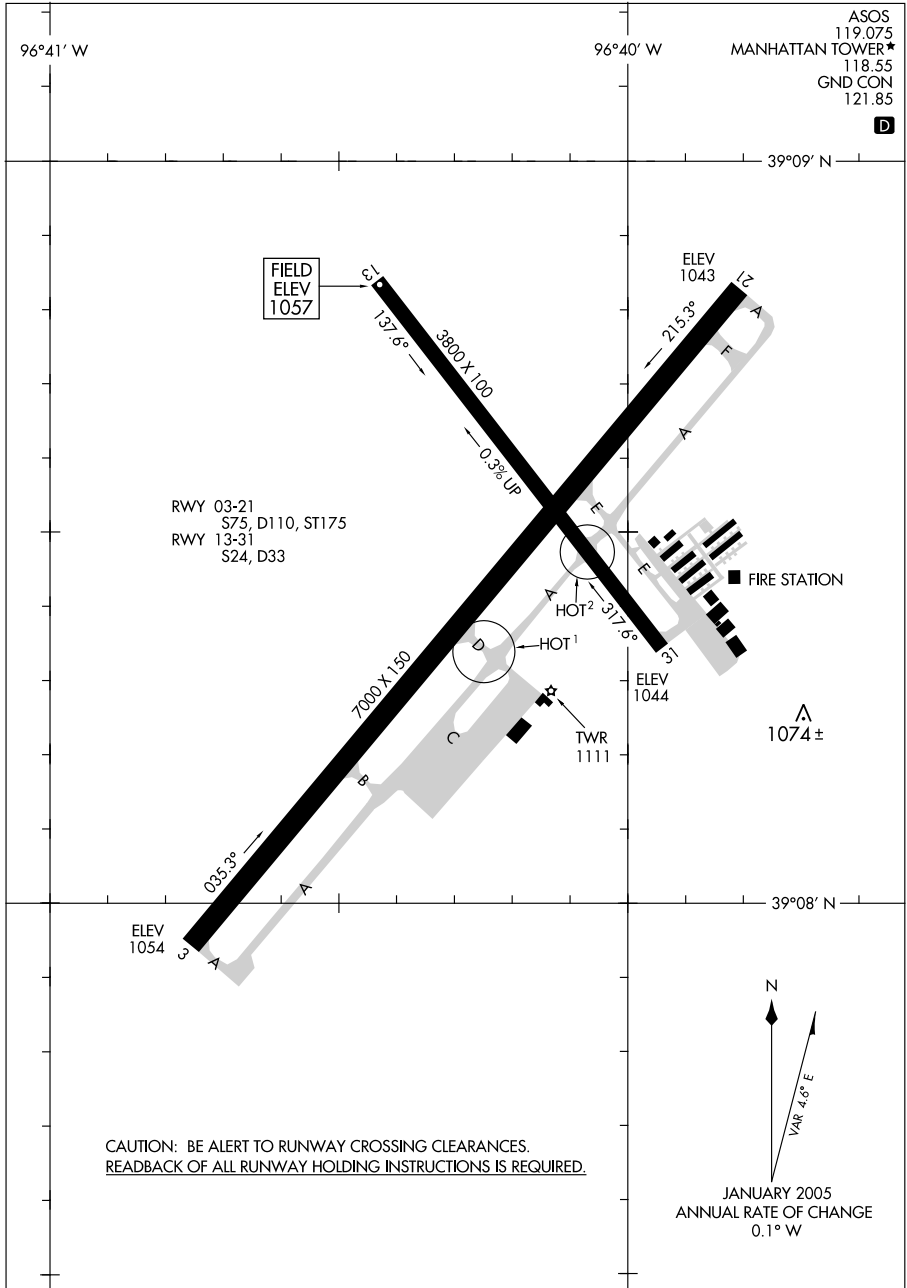


09351

# AIRPORT DIAGRAM

AL-5241 (FAA)

MANHATTAN RGNL (M<sup>H</sup>K)  
MANHATTAN, KANSAS



# AIRPORT DIAGRAM

09351

MANHATTAN, KANSAS  
MANHATTAN RGNL (M<sup>H</sup>K)

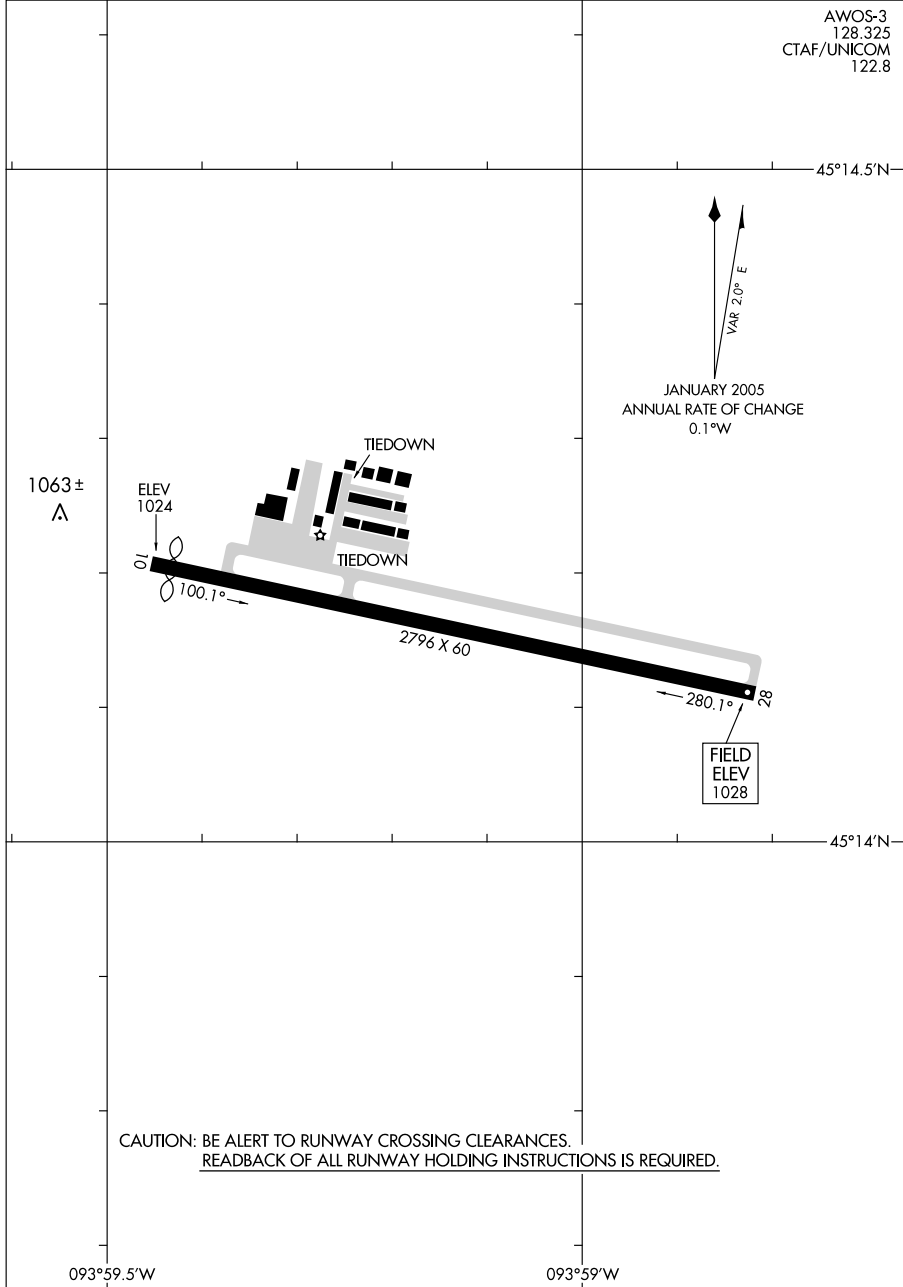
09071

AIRPORT DIAGRAM

AL-6585 (FAA)

MAPLE LAKE MUNI (MGG)  
MAPLE LAKE, MINNESOTA

AWOS-3  
128.325  
CTAF/UNICOM  
122.8



1063±  
A

ELEV  
1024

TIEDOWN  
TIEDOWN

2796 X 60

FIELD  
ELEV  
1028

JANUARY 2005  
ANNUAL RATE OF CHANGE  
0.1°W



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.  
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

093°59.5'W

093°59'W

AIRPORT DIAGRAM

09071

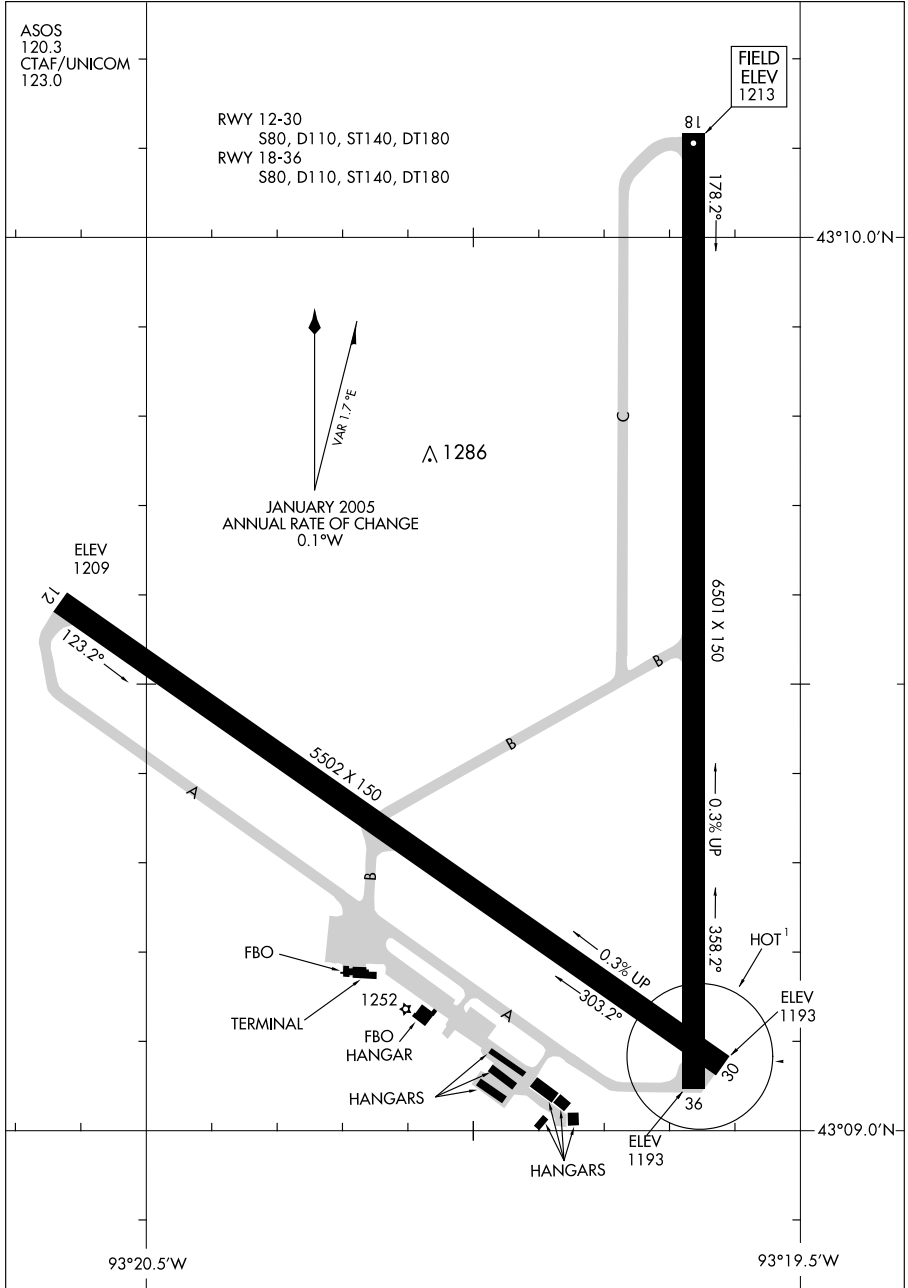
MAPLE LAKE, MINNESOTA  
MAPLE LAKE MUNI (MGG)

09295

AIRPORT DIAGRAM

AL-667 (FAA)

MASON CITY MUNI (MCW)  
MASON CITY, IOWA



AIRPORT DIAGRAM

09295

MASON CITY, IOWA  
MASON CITY MUNI (MCW)

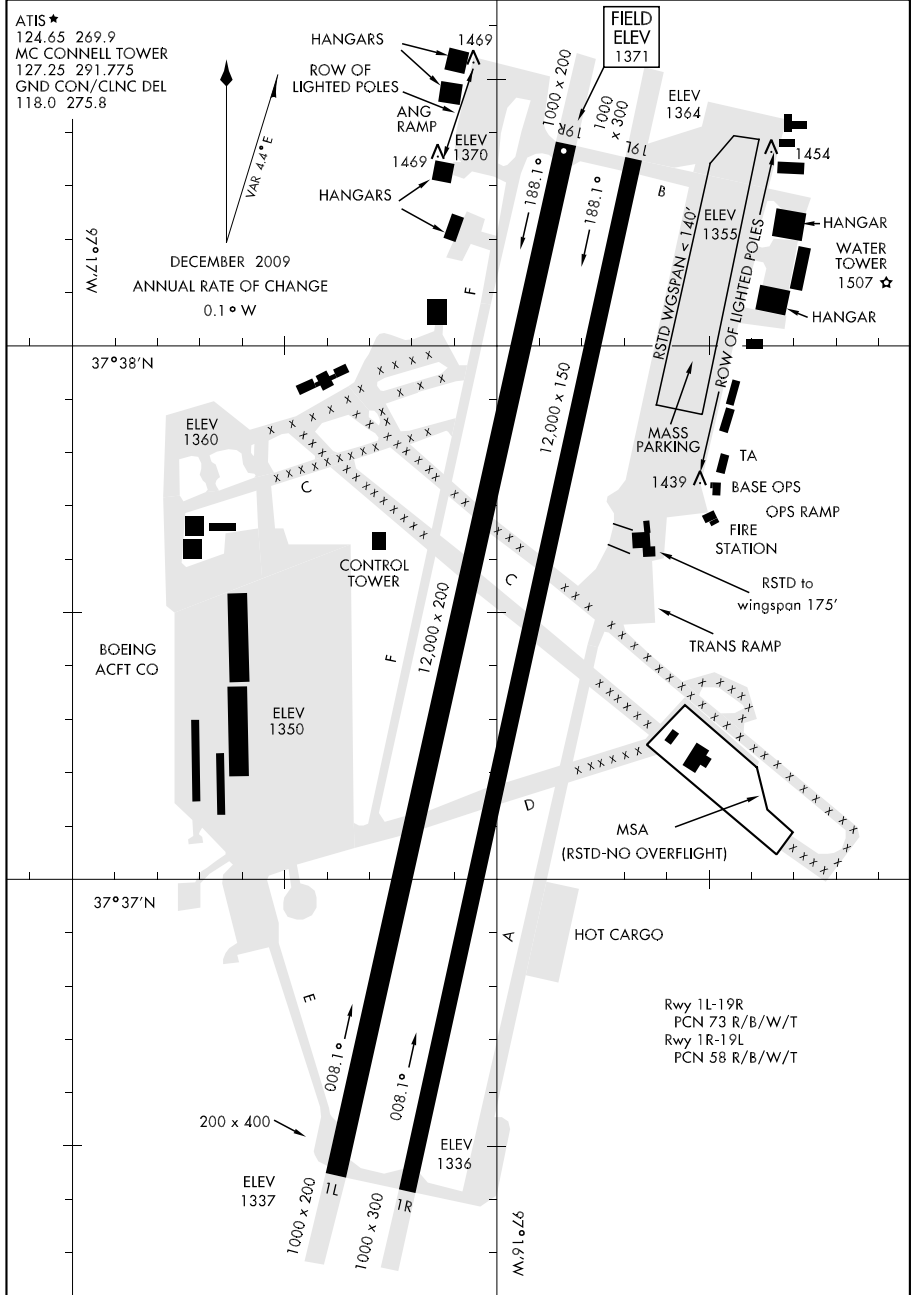
09351

MC CONNELL AFB (KIAB)

WICHITA, KANSAS

# AIRPORT DIAGRAM

AFD-453 [USAF]



# AIRPORT DIAGRAM

WICHITA, KANSAS  
MC CONNELL AFB (KIAB)

09351

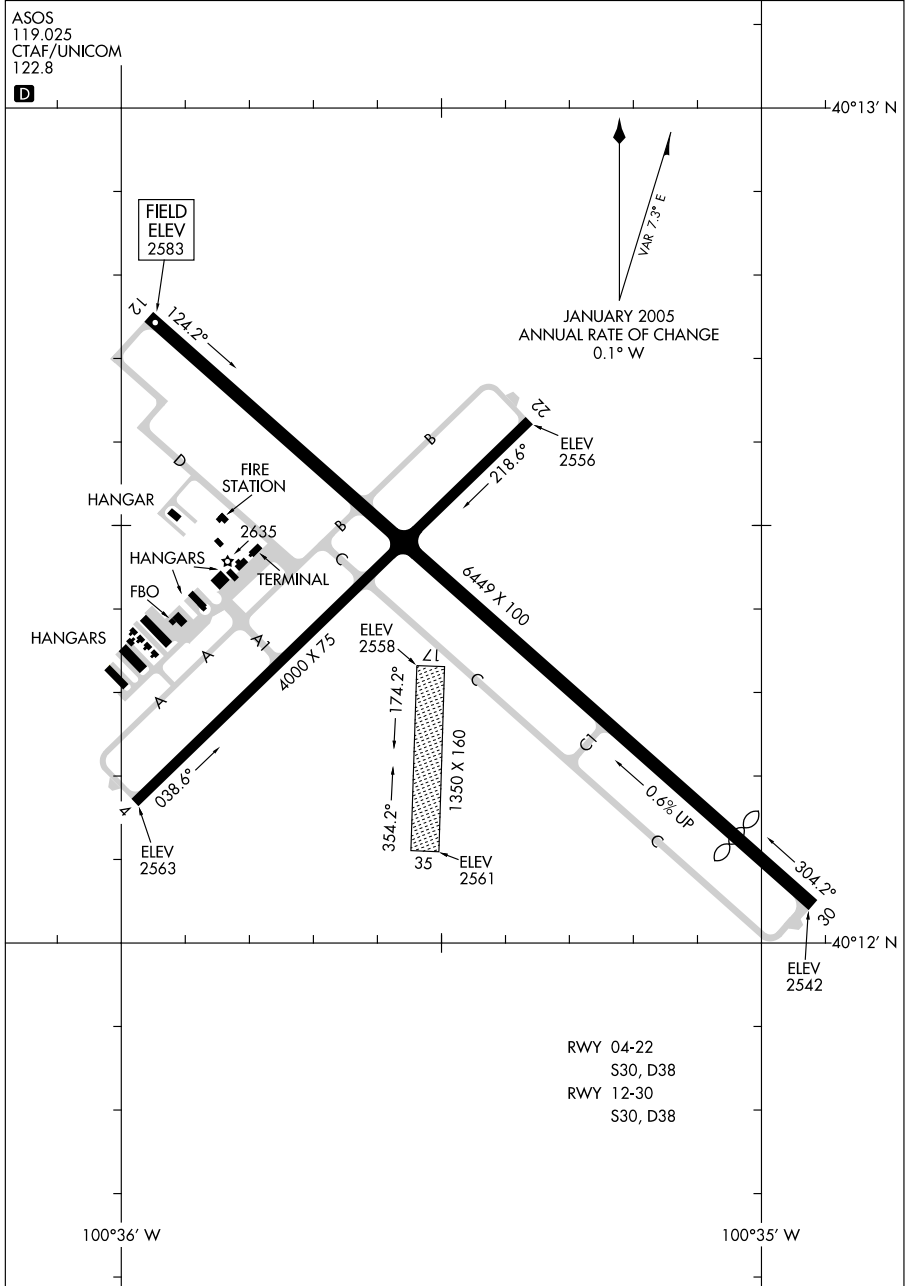
# AIRPORT DIAGRAM

AL-5301 (FAA)

MC COOK BEN NELSON RGNL (MCK)  
MC COOK, NEBRASKA

ASOS  
119.025  
CTAF/UNICOM  
122.8

**D**



# AIRPORT DIAGRAM

09351

MC COOK, NEBRASKA  
MC COOK BEN NELSON RGNL (MCK)



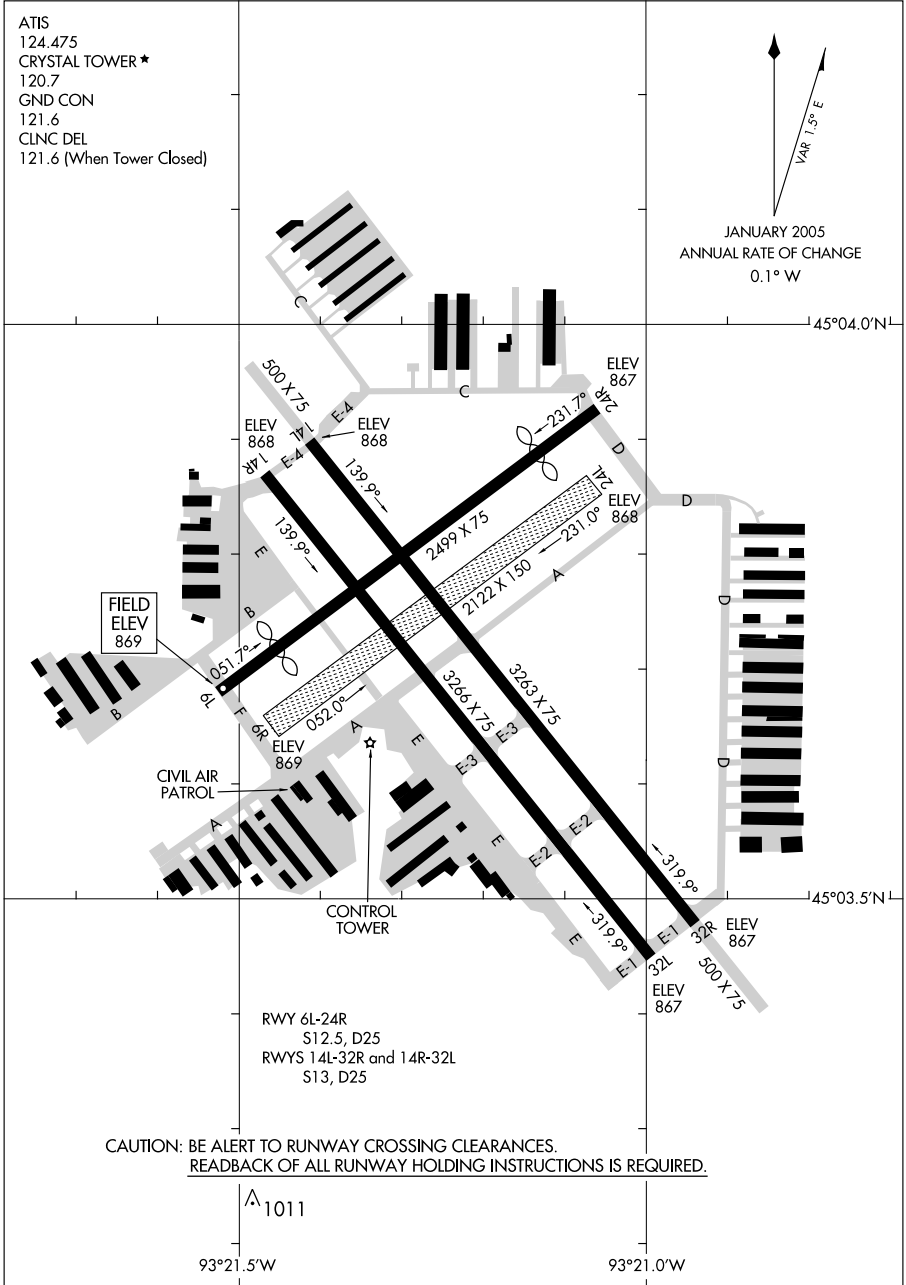


09127

AIRPORT DIAGRAM

AL-5158 (FAA)

MINNEAPOLIS/CRYSTAL (M/C)  
MINNEAPOLIS, MINNESOTA



AIRPORT DIAGRAM

09127

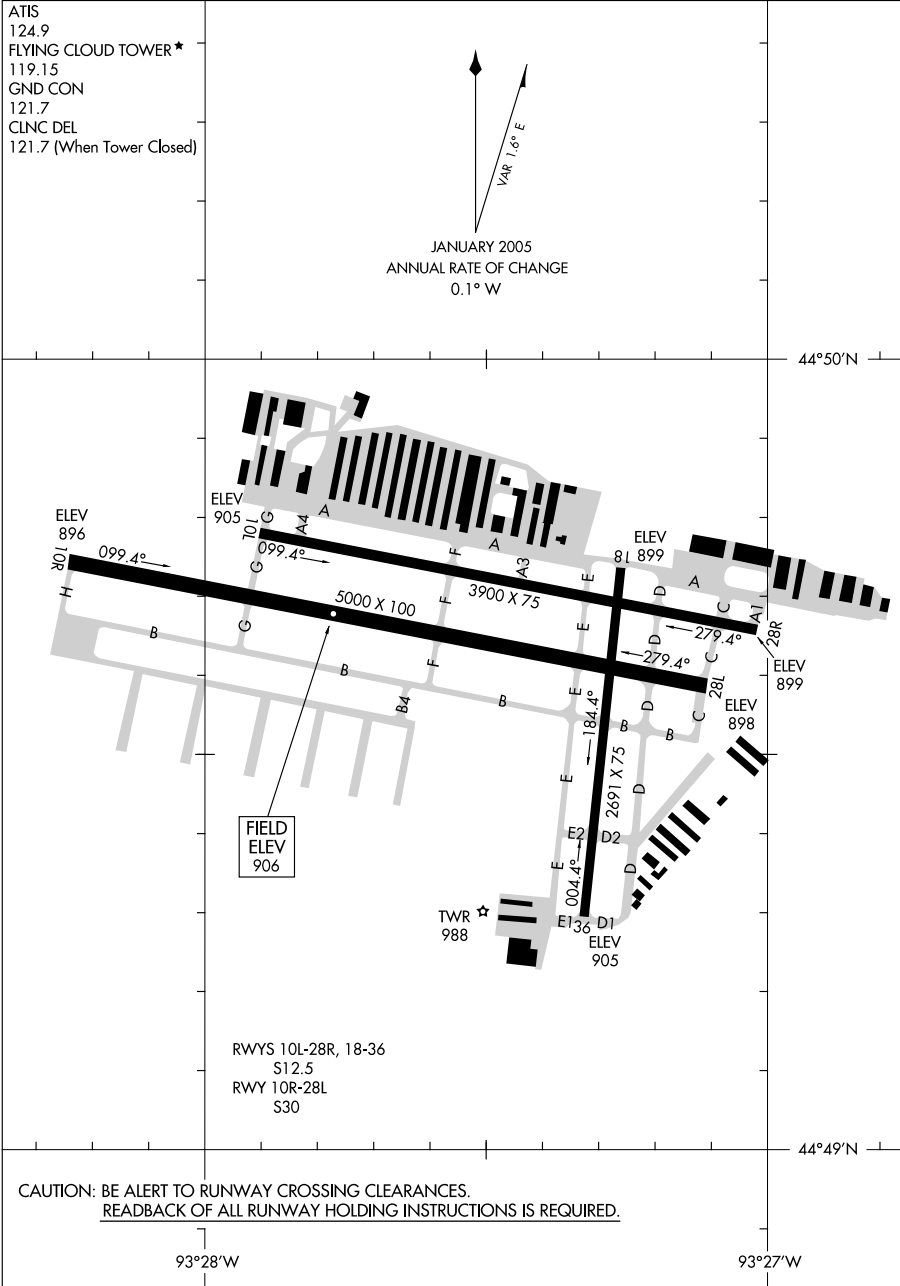
MINNEAPOLIS, MINNESOTA  
MINNEAPOLIS/CRYSTAL (M/C)

10098

# AIRPORT DIAGRAM

AL-5094 (FAA)

MINNEAPOLIS/ FLYING CLOUD (FCM)  
MINNEAPOLIS, MINNESOTA



# AIRPORT DIAGRAM

10098

MINNEAPOLIS, MINNESOTA  
MINNEAPOLIS/ FLYING CLOUD (FCM)



07186

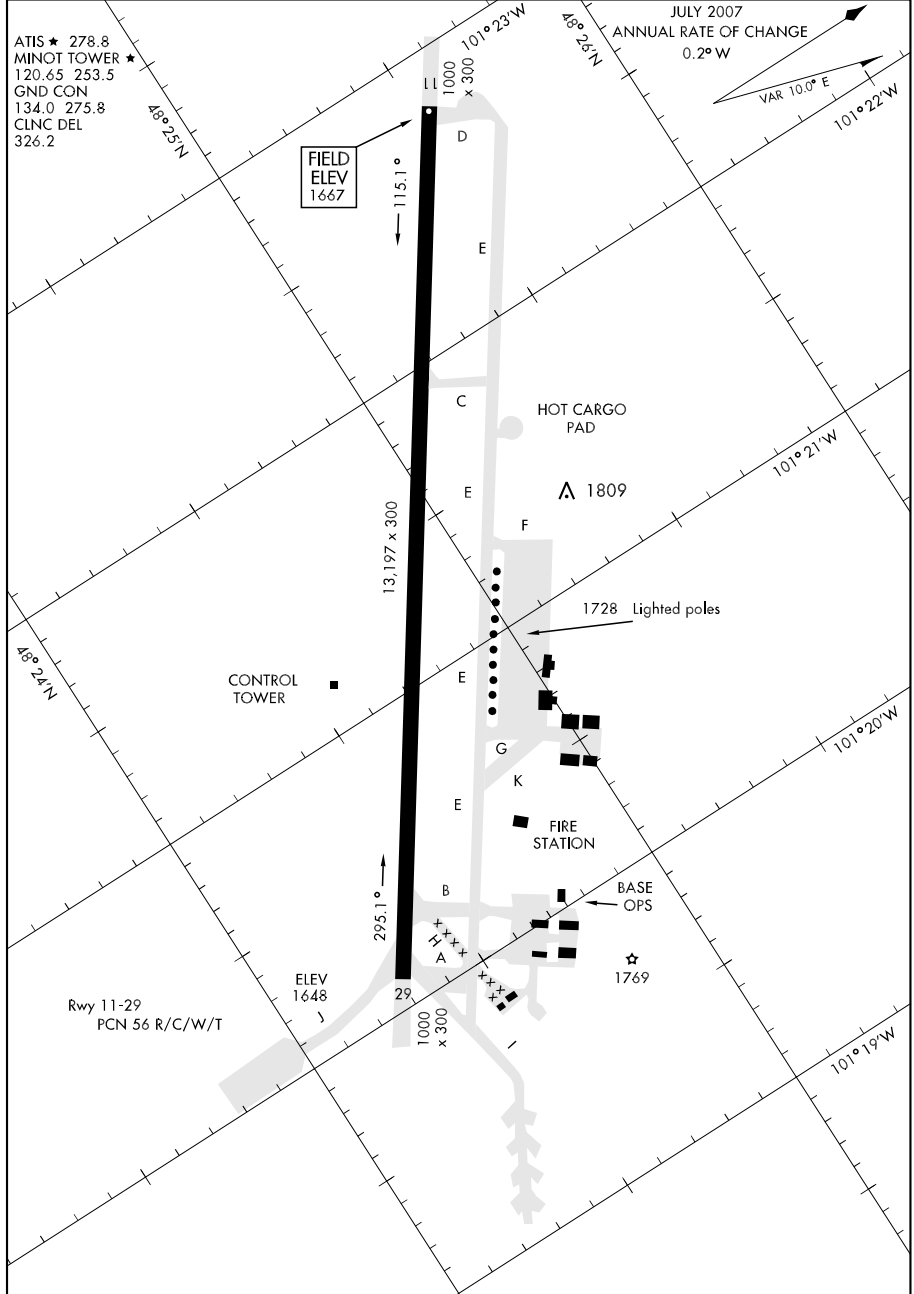
AIRPORT DIAGRAM

MINOT AFB (KMIB)

MINOT, NORTH DAKOTA

AFD-5013 [USAF]

JULY 2007  
ANNUAL RATE OF CHANGE  
0.2° W



AIRPORT DIAGRAM

MINOT, NORTH DAKOTA

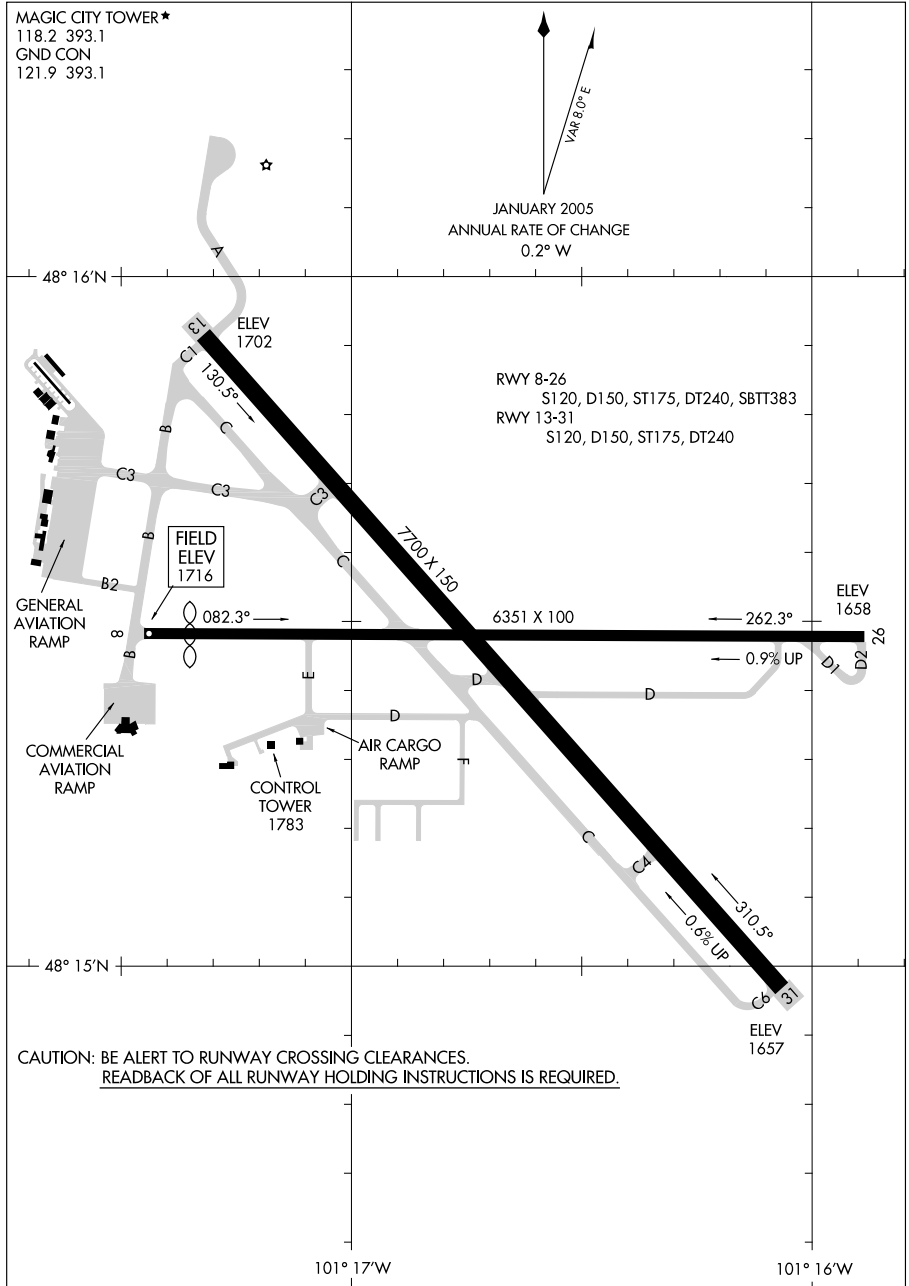
MINOT AFB (KMIB)

09015

# AIRPORT DIAGRAM

AL-635 (FAA)

MINOT INTL (MOT)  
MINOT, NORTH DAKOTA



# AIRPORT DIAGRAM

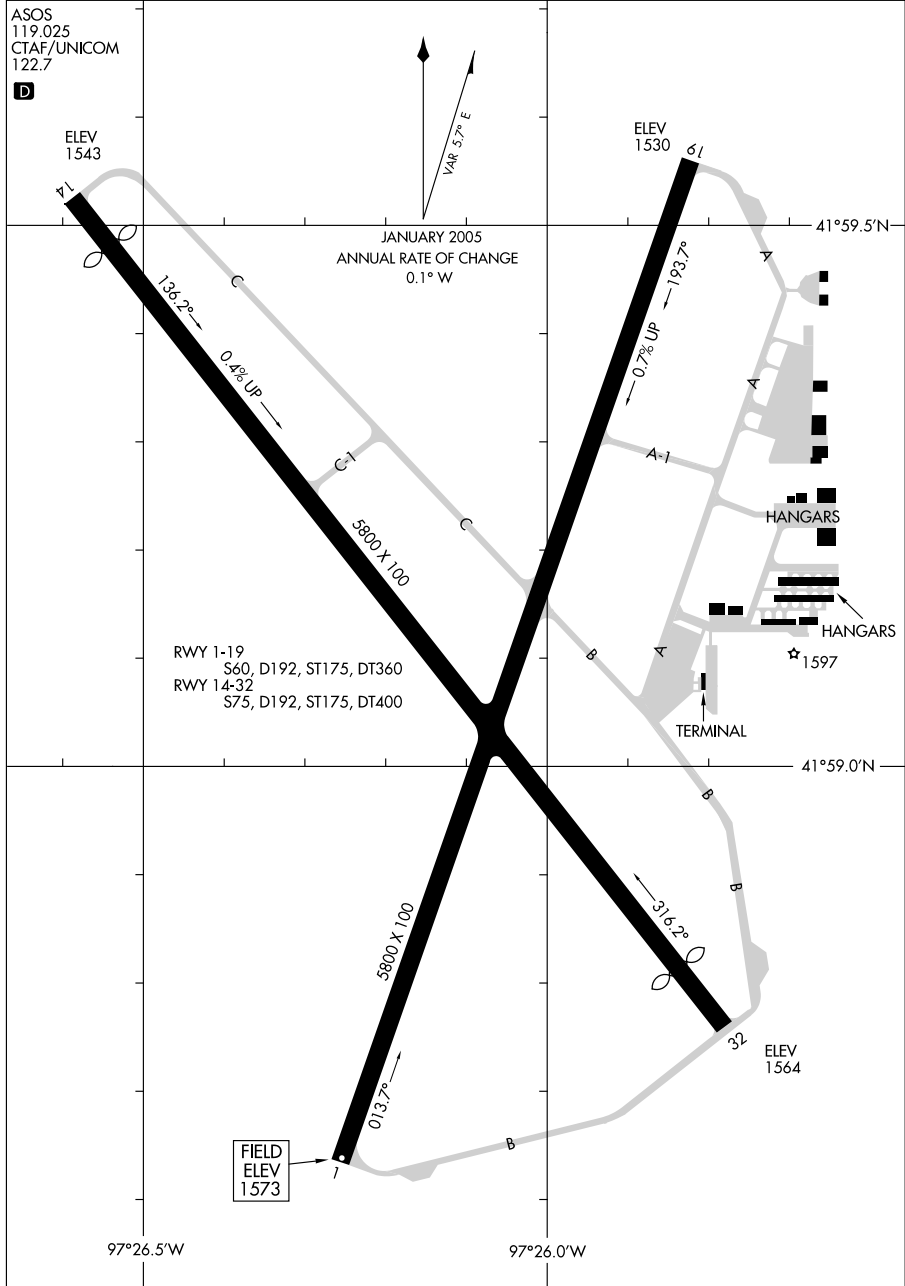
09015

MINOT, NORTH DAKOTA  
MINOT INTL (MOT)

09295

# AIRPORT DIAGRAM

NORFOLK/KARL STEFAN MEMORIAL (OFK)  
NORFOLK, NEBRASKA



# AIRPORT DIAGRAM

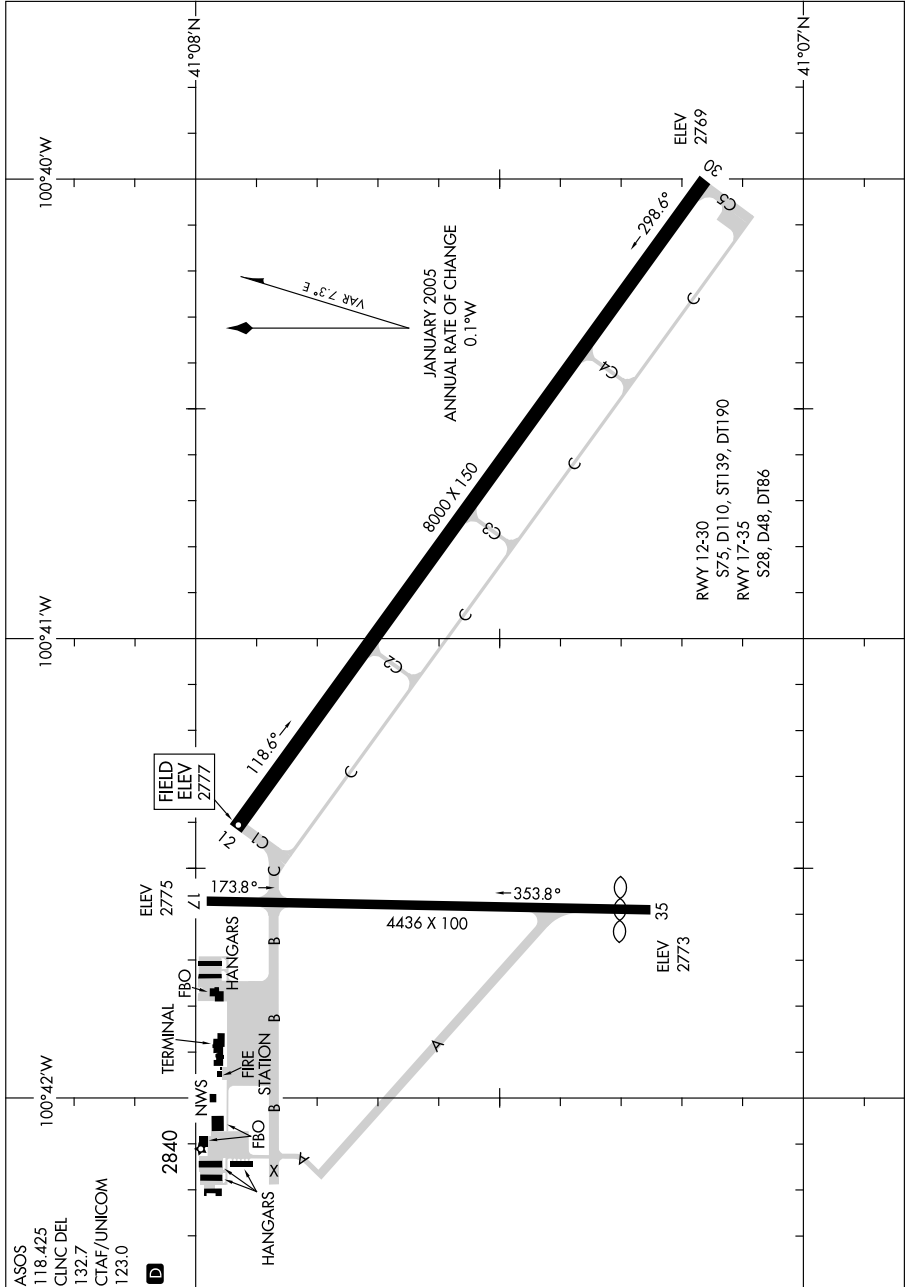
NORFOLK, NEBRASKA  
NORFOLK/KARL STEFAN MEMORIAL (OFK)

09295

09295

AIRPORT DIAGRAM

NORTH PLATTE RGNL AIRPORT LEE BIRD FIELD (LBF)  
AL-292 (FAA) NORTH PLATTE, NEBRASKA



AIRPORT DIAGRAM

09295

NORTH PLATTE, NEBRASKA  
NORTH PLATTE RGNL AIRPORT LEE BIRD FIELD (LBF)

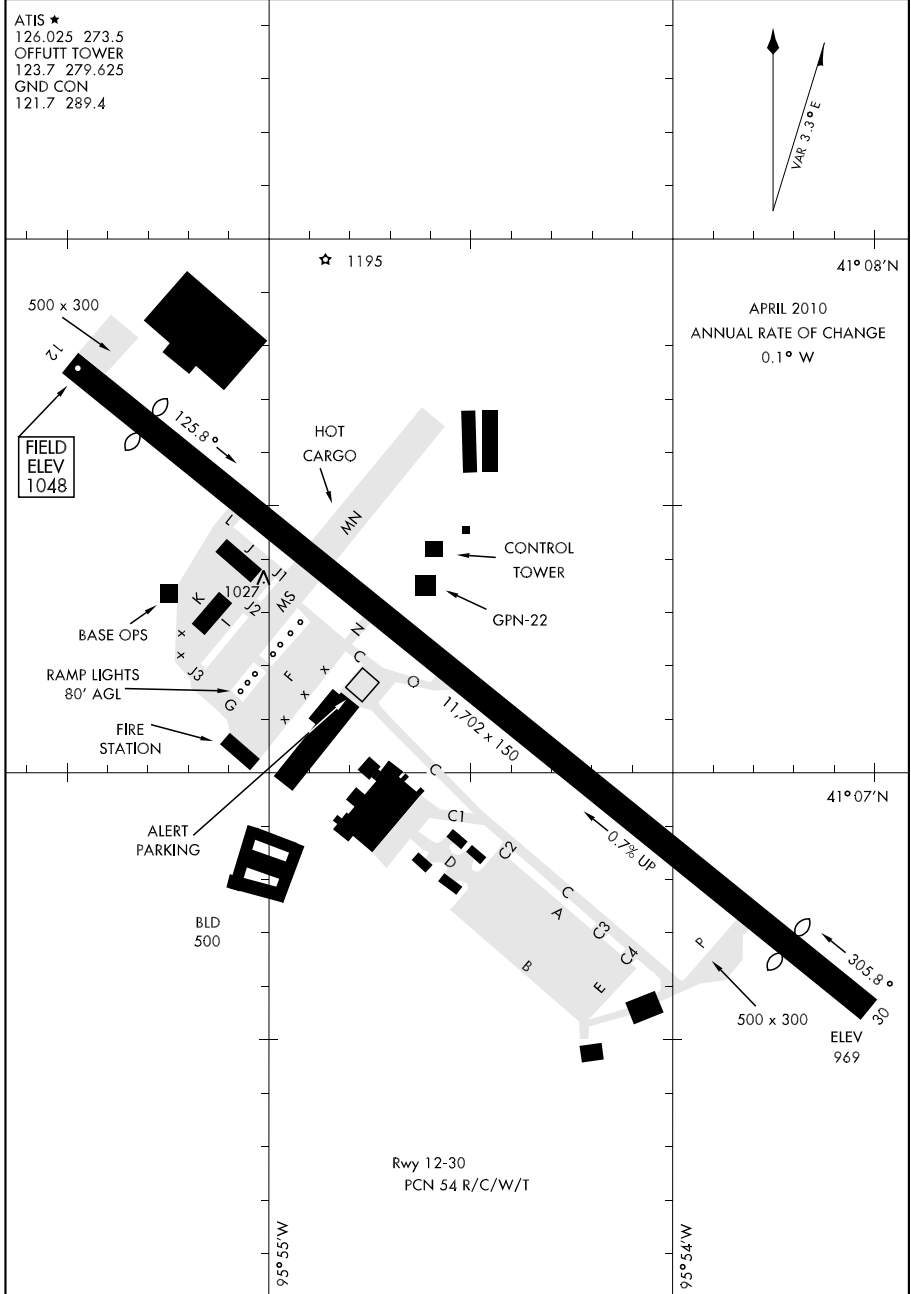
10098

AIRPORT DIAGRAM

AFD-544 [USAF]

OFFUTT AFB (KOFF)

OMAHA, NEBRASKA



AIRPORT DIAGRAM

OMAHA, NEBRASKA  
OFFUTT AFB (KOFF)

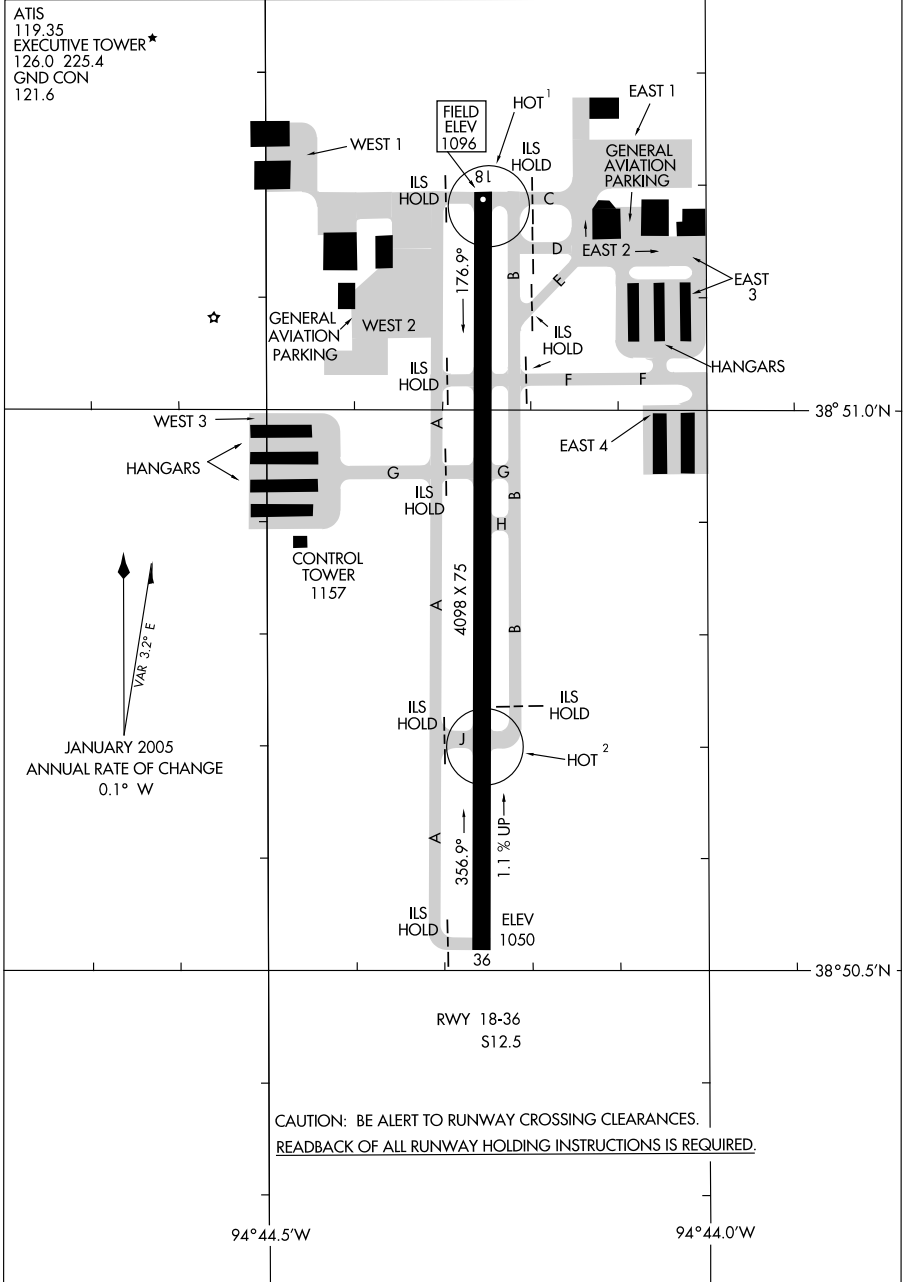


09351

# AIRPORT DIAGRAM

AL-5687 (FAA)

OLATHE/JOHNSON COUNTY EXECUTIVE (OJC)  
OLATHE, KANSAS



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.  
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

# AIRPORT DIAGRAM

09351

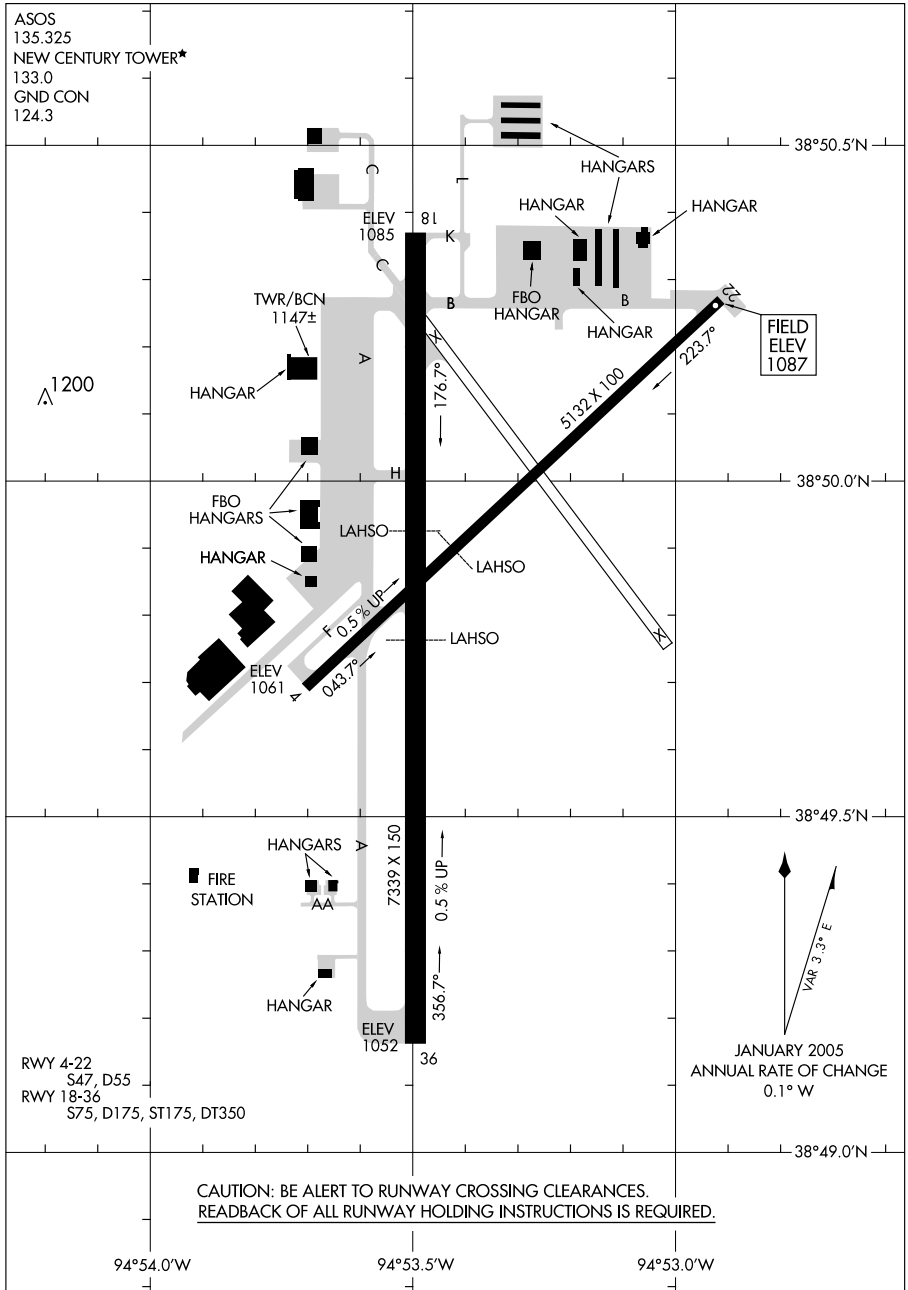
OLATHE, KANSAS  
OLATHE/JOHNSON COUNTY EXECUTIVE (OJC)

10098

AIRPORT DIAGRAM

AL-302 (FAA)

OLATHE/NEW CENTURY AIRCENTER (IXD)  
OLATHE, KANSAS



AIRPORT DIAGRAM

10098

OLATHE, KANSAS  
OLATHE/NEW CENTURY AIRCENTER (IXD)

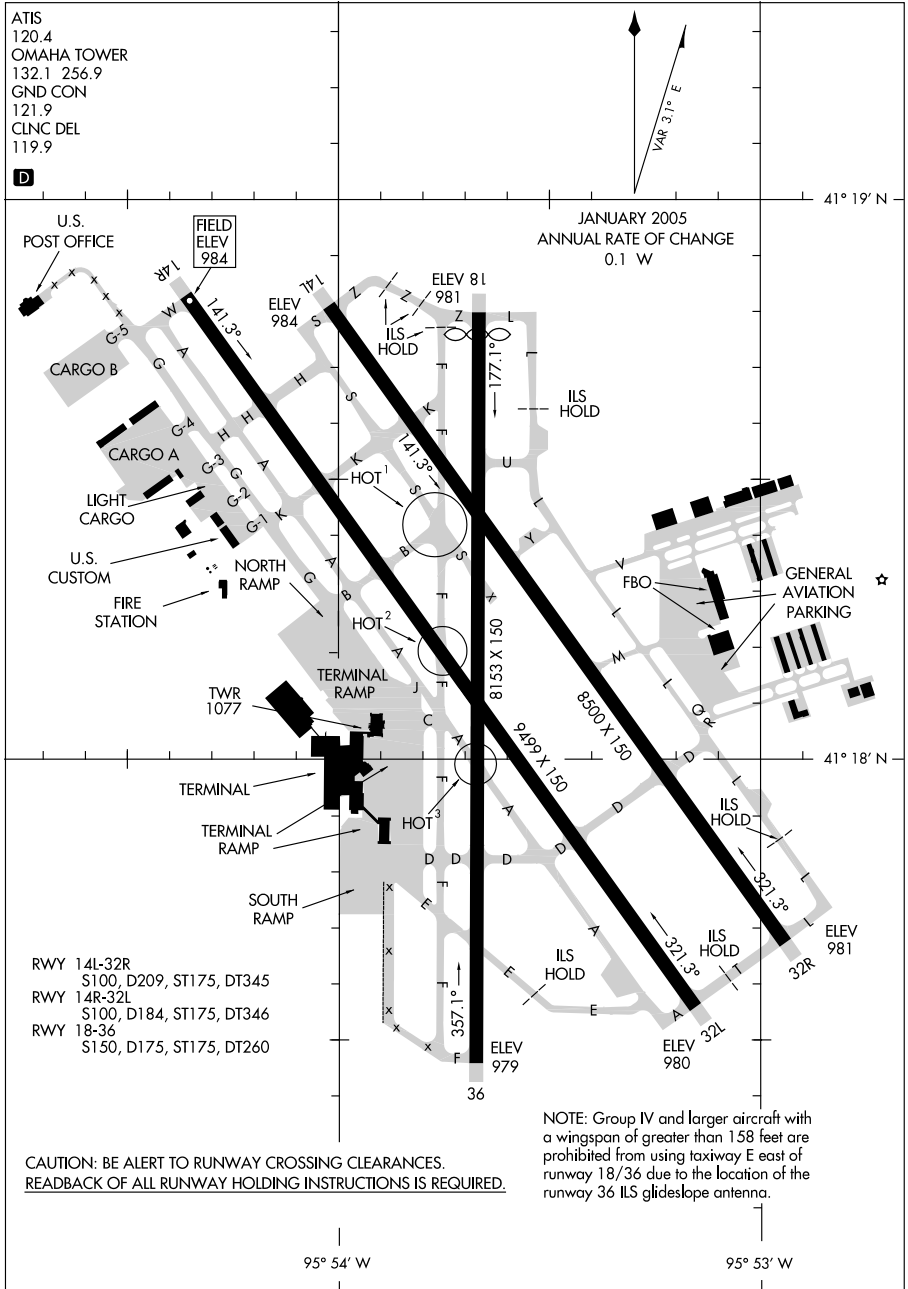
10042

AIRPORT DIAGRAM

AL-304 (FAA)

OMAHA/EPPLEY AIRFIELD (OMA)

OMAHA, NEBRASKA



AIRPORT DIAGRAM

10042

OMAHA, NEBRASKA

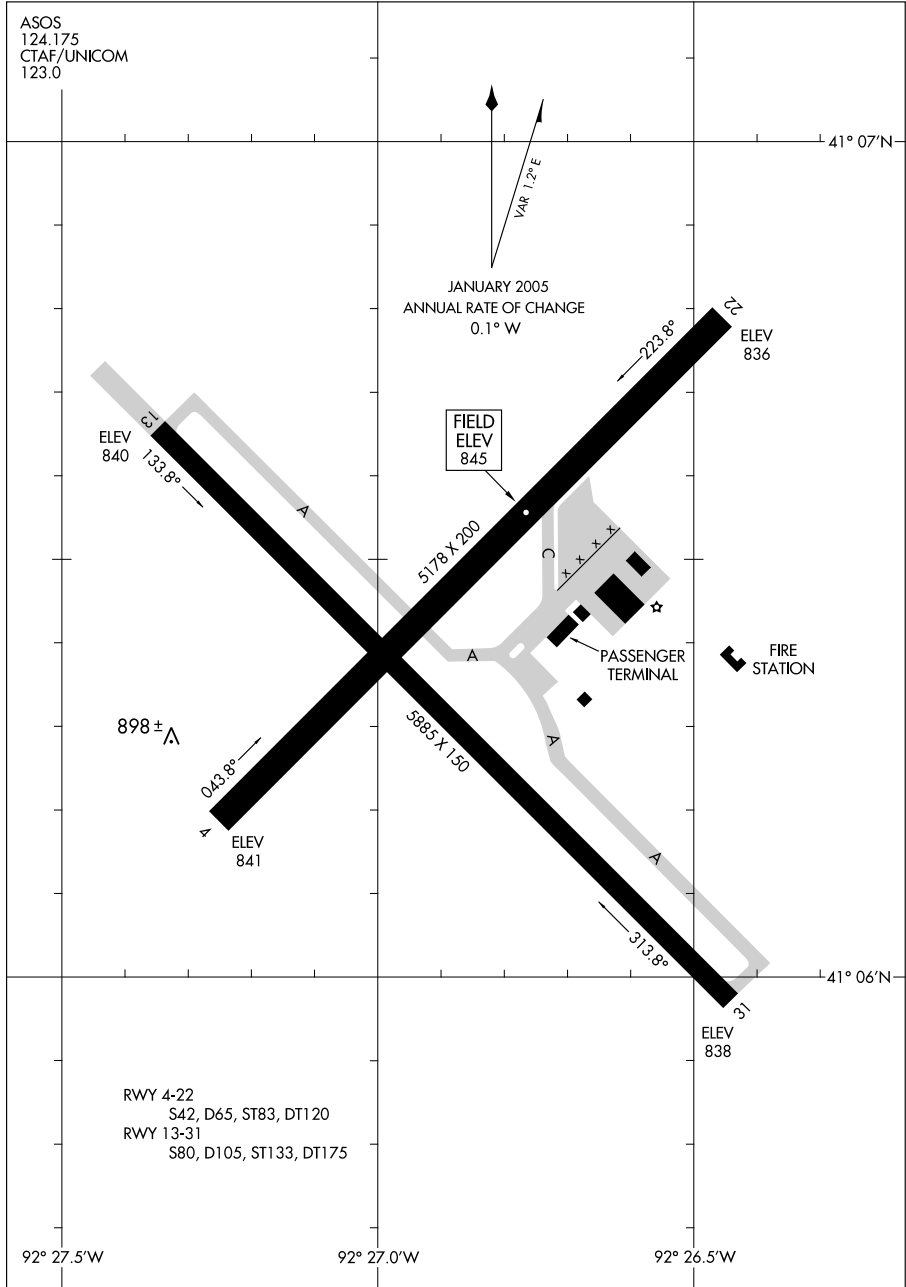
OMAHA/EPPLEY AIRFIELD (OMA)

09071

AIRPORT DIAGRAM

AL-915 (FAA)

OTTUMWA RGNL (OTM)  
OTTUMWA, IOWA



AIRPORT DIAGRAM

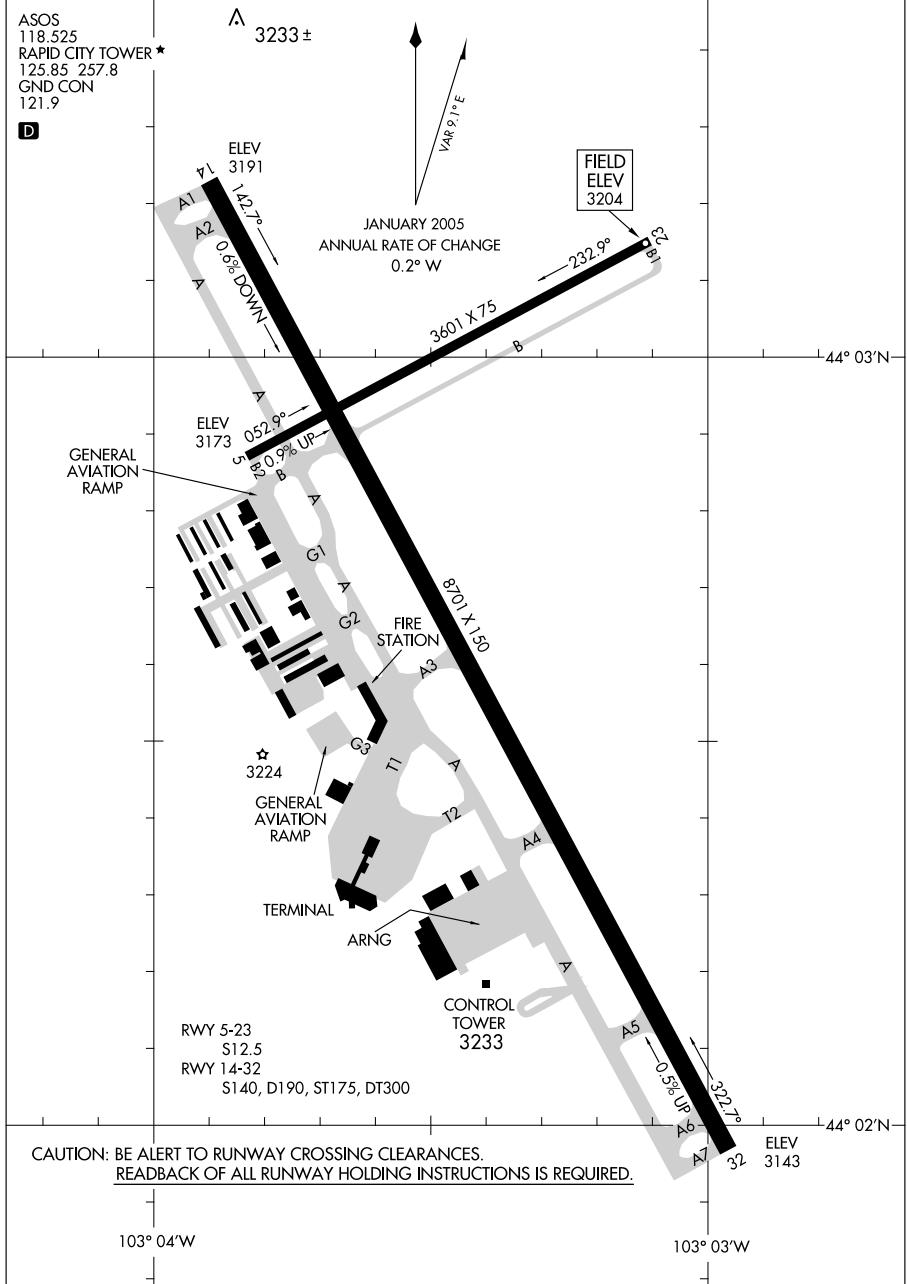
09071

OTTUMWA, IOWA  
OTTUMWA RGNL (OTM)

09295

# AIRPORT DIAGRAM

RAPID CITY RGNL (R.A.P)  
RAPID CITY, SOUTH DAKOTA



# AIRPORT DIAGRAM

09295

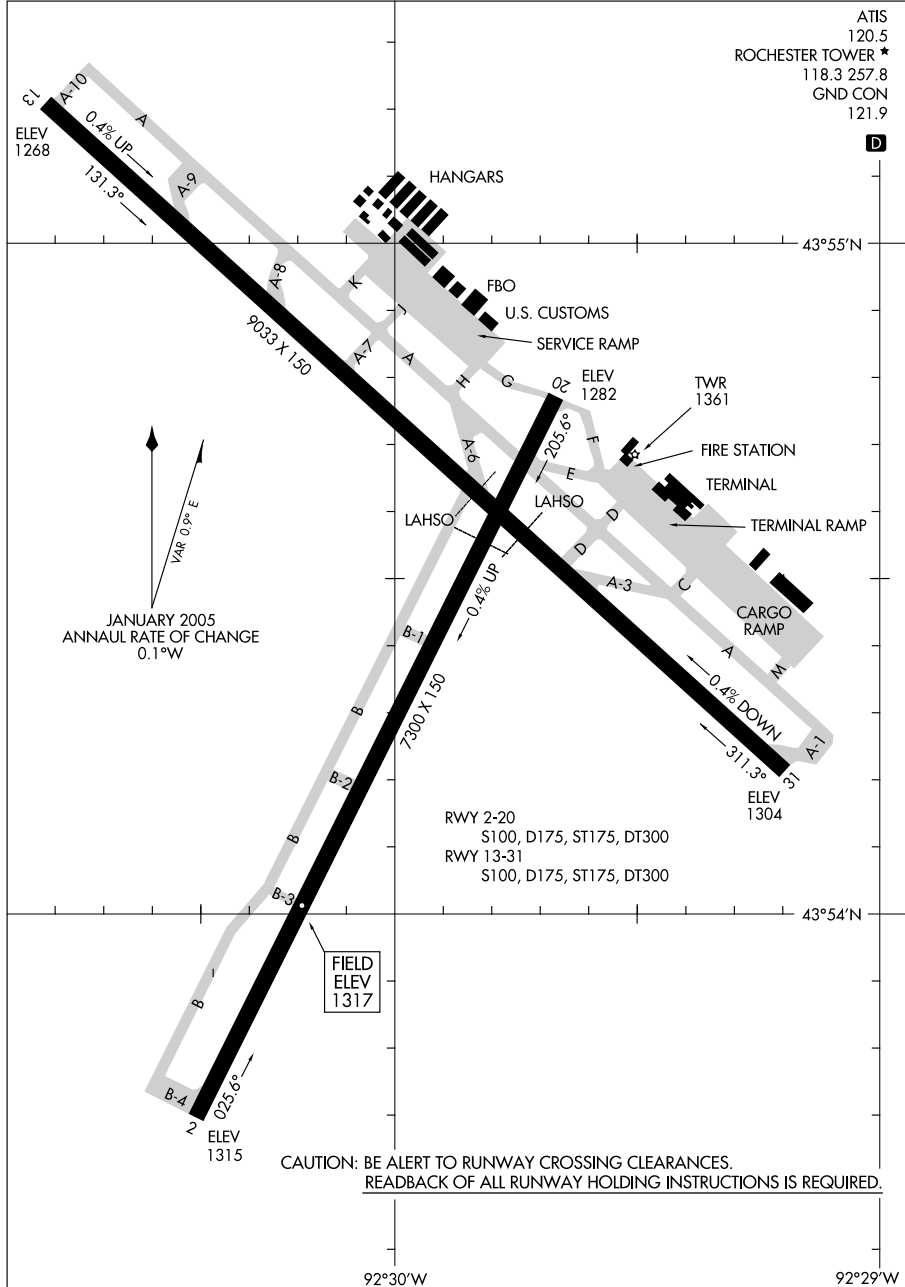
RAPID CITY, SOUTH DAKOTA  
RAPID CITY RGNL (R.A.P)

09295

AIRPORT DIAGRAM

AL-5041 (FAA)

ROCHESTER INTL (RST)  
ROCHESTER, MINNESOTA



AIRPORT DIAGRAM

09295

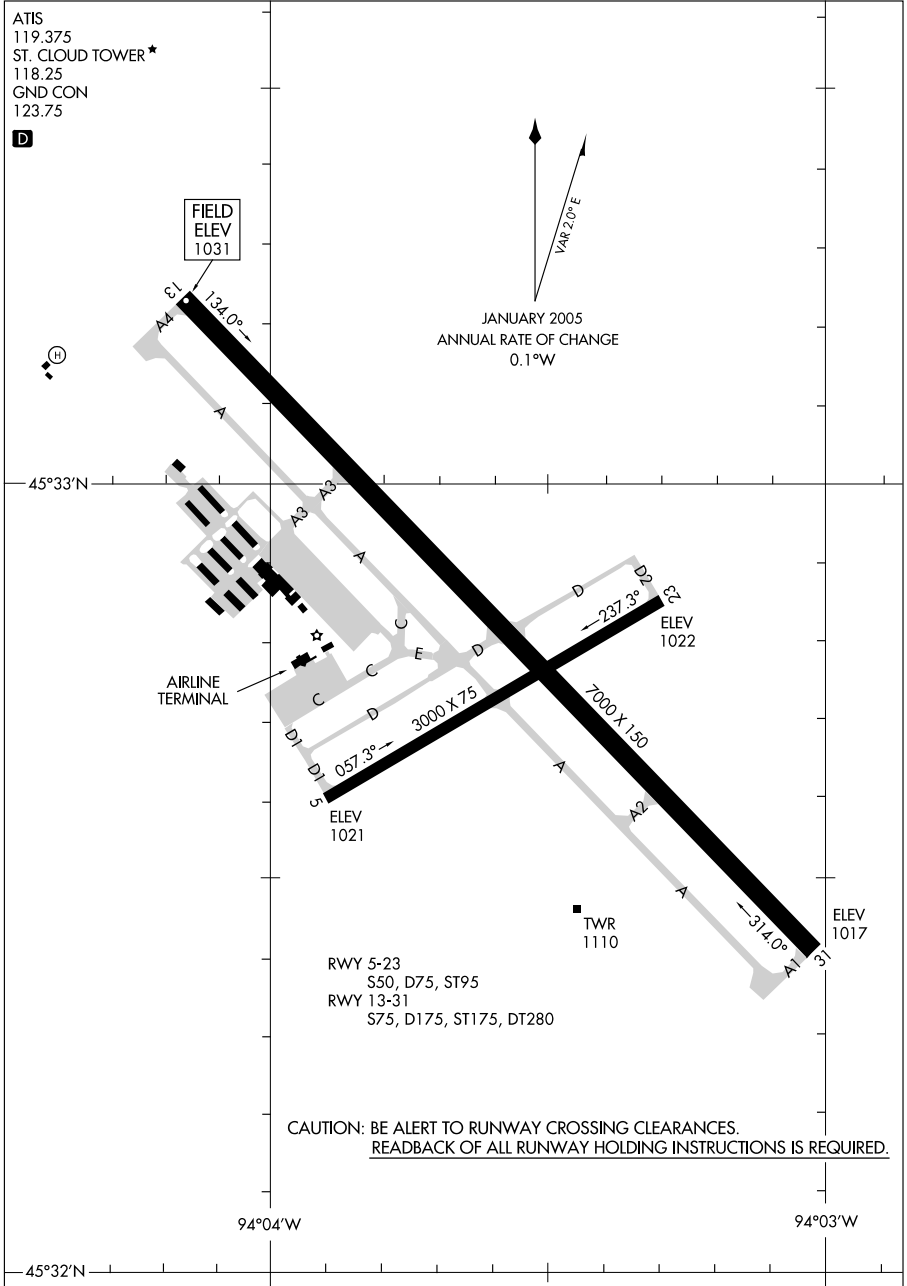
ROCHESTER, MINNESOTA  
ROCHESTER INTL (RST)

10042

# AIRPORT DIAGRAM

AL-5799 (FAA)

ST. CLOUD RGNL (STC)  
ST. CLOUD, MINNESOTA



# AIRPORT DIAGRAM

10042

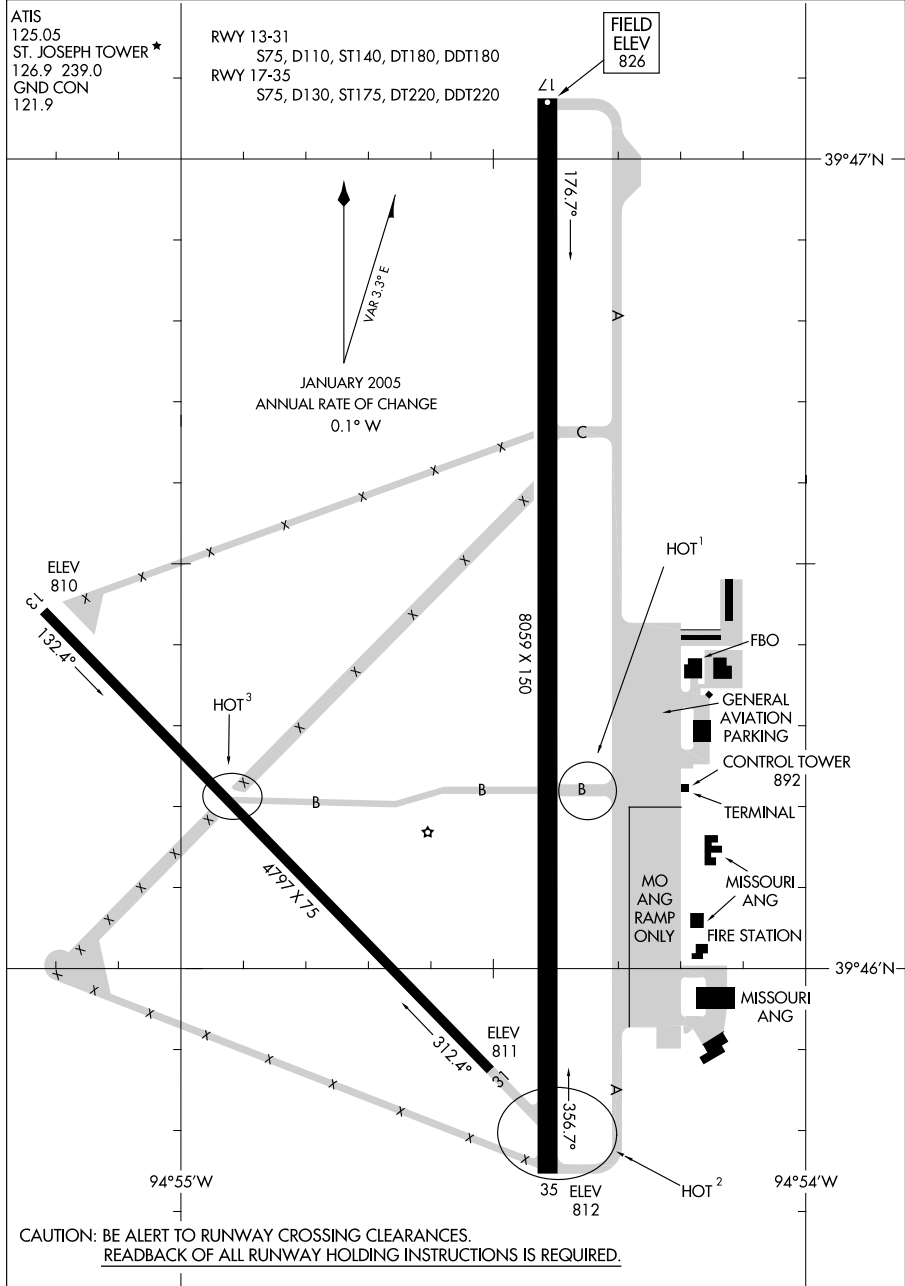
ST. CLOUD, MINNESOTA  
ST. CLOUD RGNL (STC)

09351

AIRPORT DIAGRAM

AL-359 (FAA)

ST. JOSEPH/ROSECRANS MEMORIAL (STJ)  
ST. JOSEPH, MISSOURI



AIRPORT DIAGRAM

09351

ST. JOSEPH, MISSOURI  
ST. JOSEPH/ROSECRANS MEMORIAL (STJ)



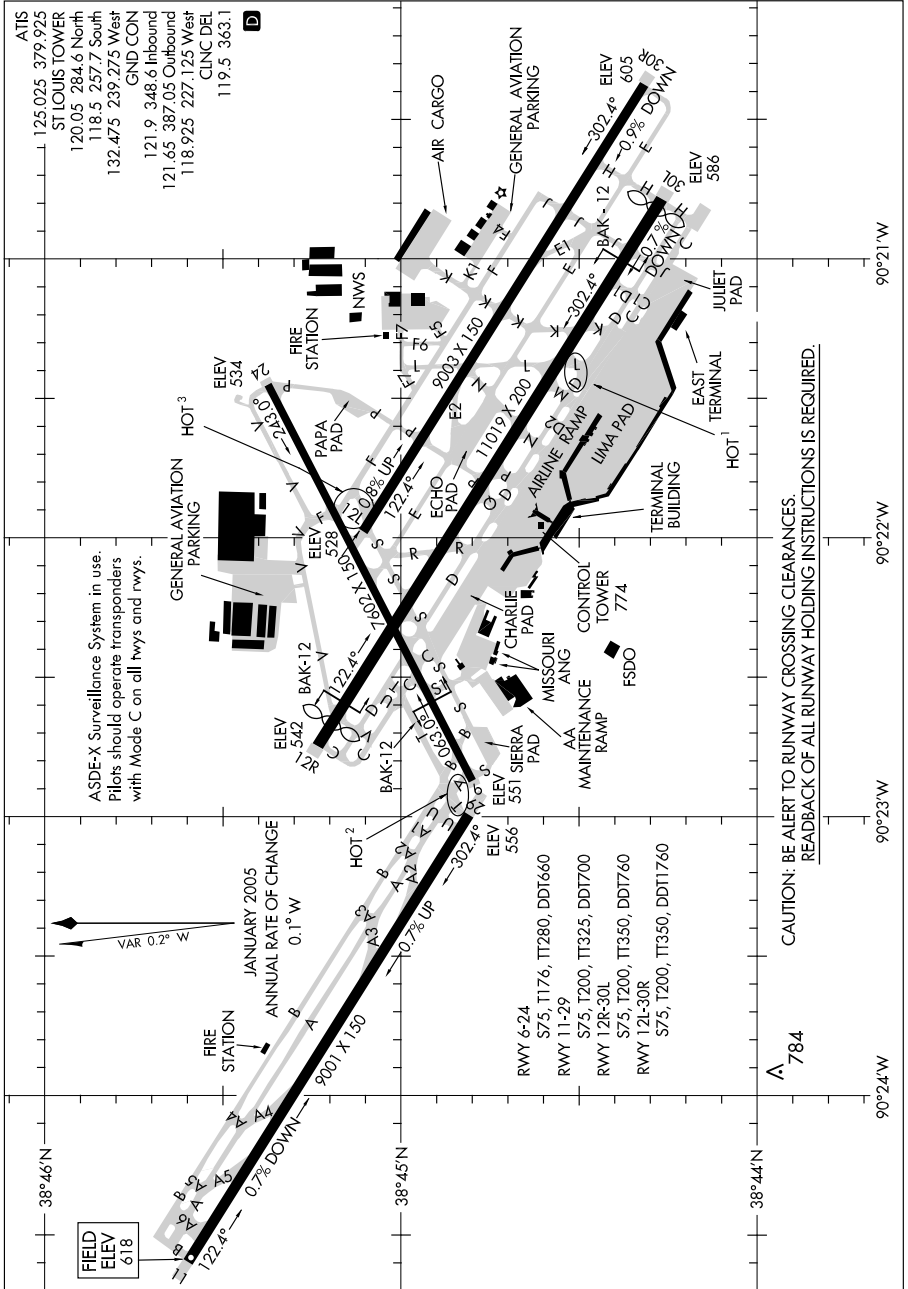
09351

# AIRPORT DIAGRAM

ST. LOUIS/LAMBERT-ST. LOUIS INTL (STL)

AL-360 (FAA)

ST. LOUIS, MISSOURI



# AIRPORT DIAGRAM

ST. LOUIS, MISSOURI  
ST. LOUIS/LAMBERT-ST. LOUIS INTL (STL)

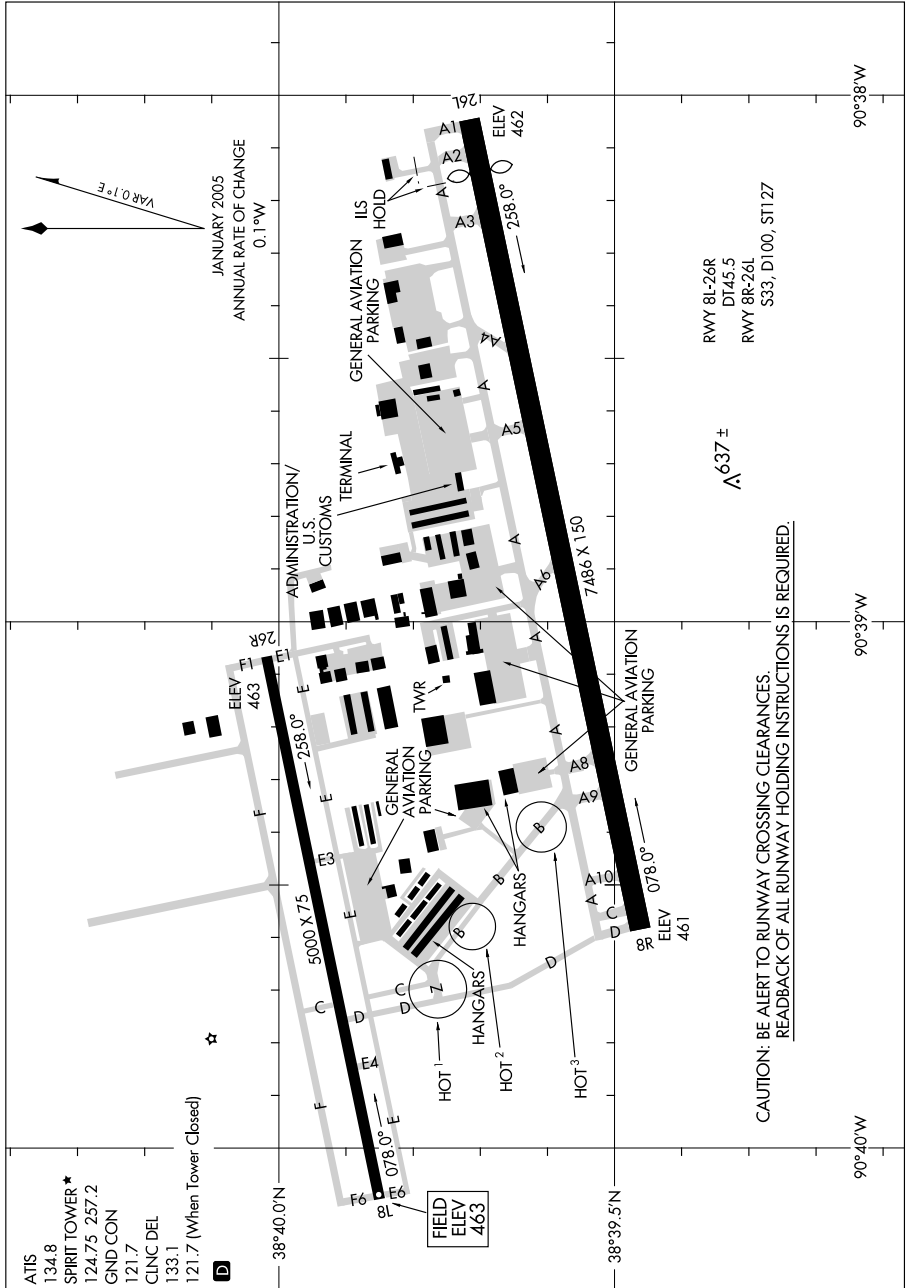
09351

10042

AIRPORT DIAGRAM

AL-5400 (FAA)

ST. LOUIS/ SPIRIT OF ST. LOUIS (STL)  
ST. LOUIS, MISSOURI



AIRPORT DIAGRAM

10042

ST. LOUIS, MISSOURI  
ST. LOUIS/ SPIRIT OF ST. LOUIS (STL)







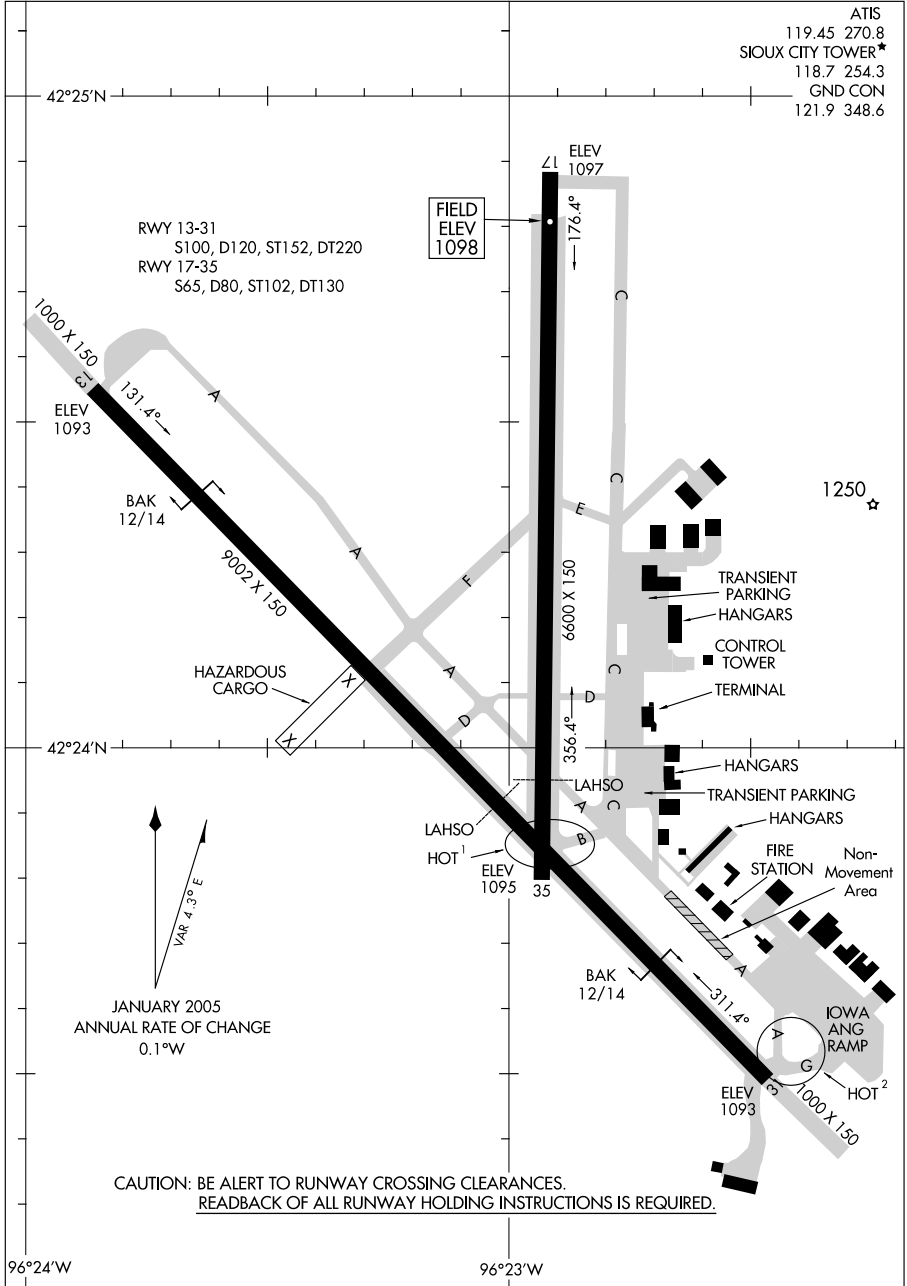
09239

AIRPORT DIAGRAM

AL-395 (FAA)

SIoux GATEWAY/COLONEL BUD DAY FIELD (SU $\times$ )

SIoux CITY, IOWA



AIRPORT DIAGRAM

09239

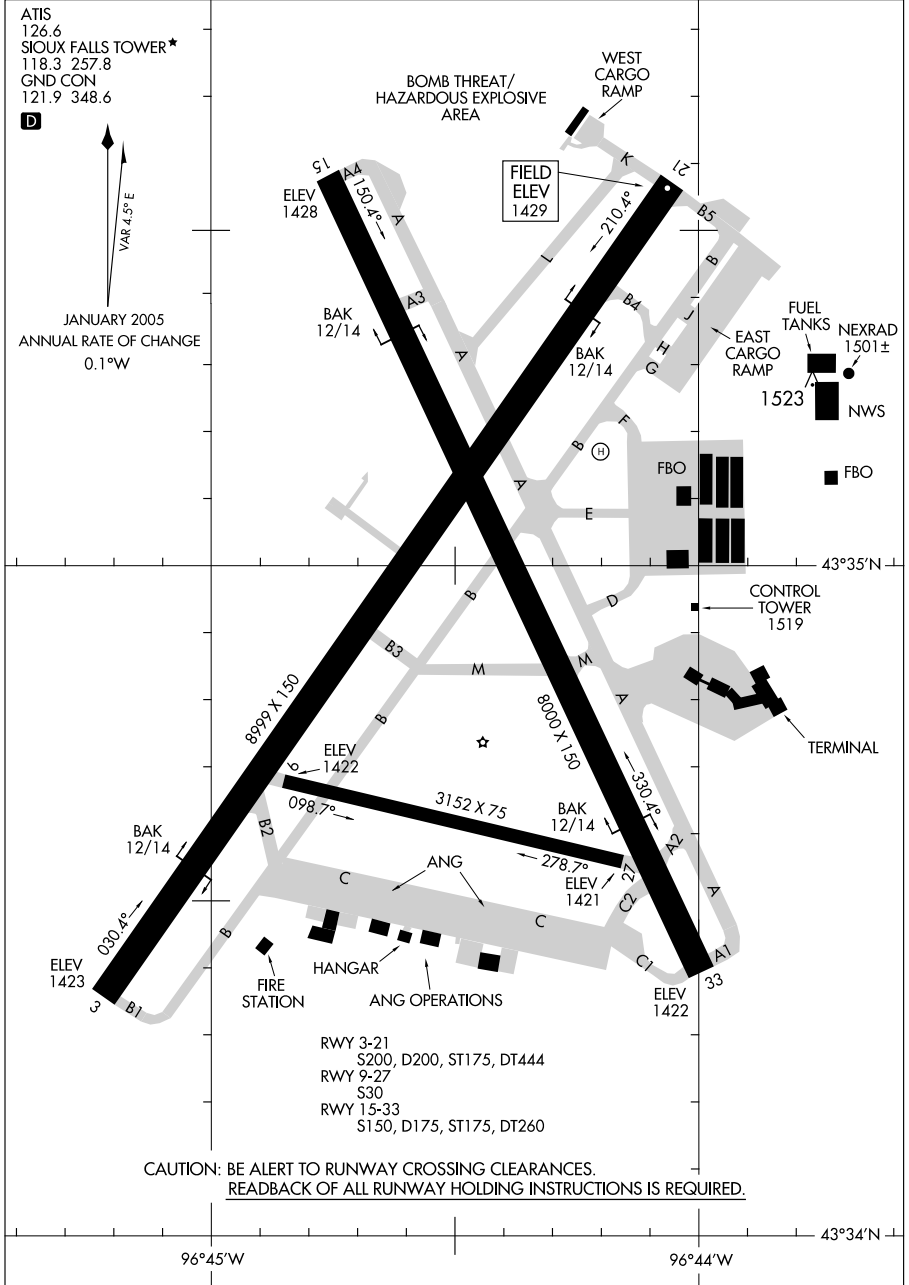
SIoux CITY, IOWA  
SIoux GATEWAY/COLONEL BUD DAY FIELD (SU $\times$ )

09295

# AIRPORT DIAGRAM

AL-396 (FAA)

SIoux FALLS/JOE FOSS FIELD (FSD)  
SIoux FALLS, SOUTH DAKOTA



# AIRPORT DIAGRAM

09295

SIoux FALLS, SOUTH DAKOTA  
SIoux FALLS/JOE FOSS FIELD (FSD)



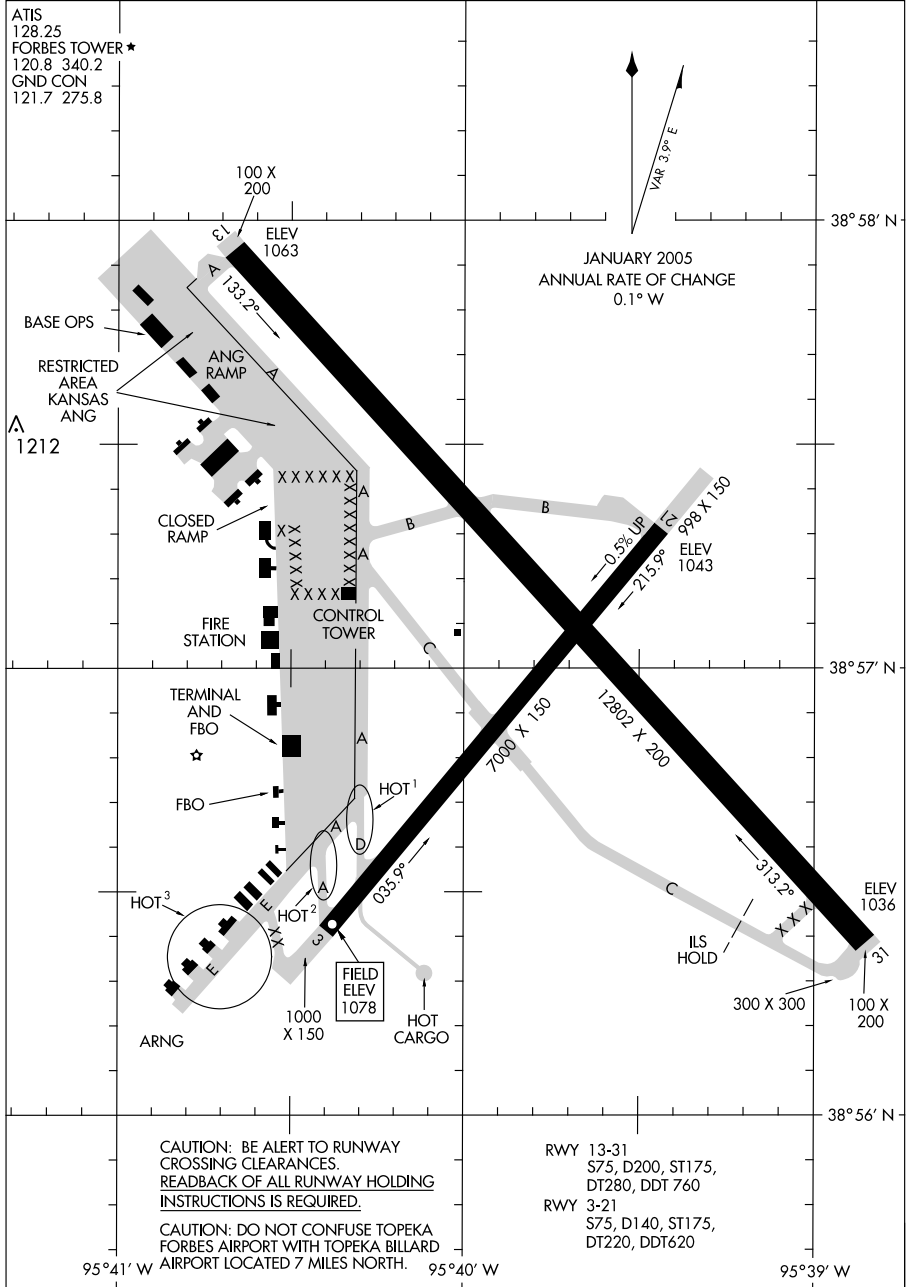


09351

# AIRPORT DIAGRAM

AL-424 (FAA)

TOPEKA/FORBES FIELD (F<sup>O</sup>E)  
TOPEKA, KANSAS



# AIRPORT DIAGRAM

09351

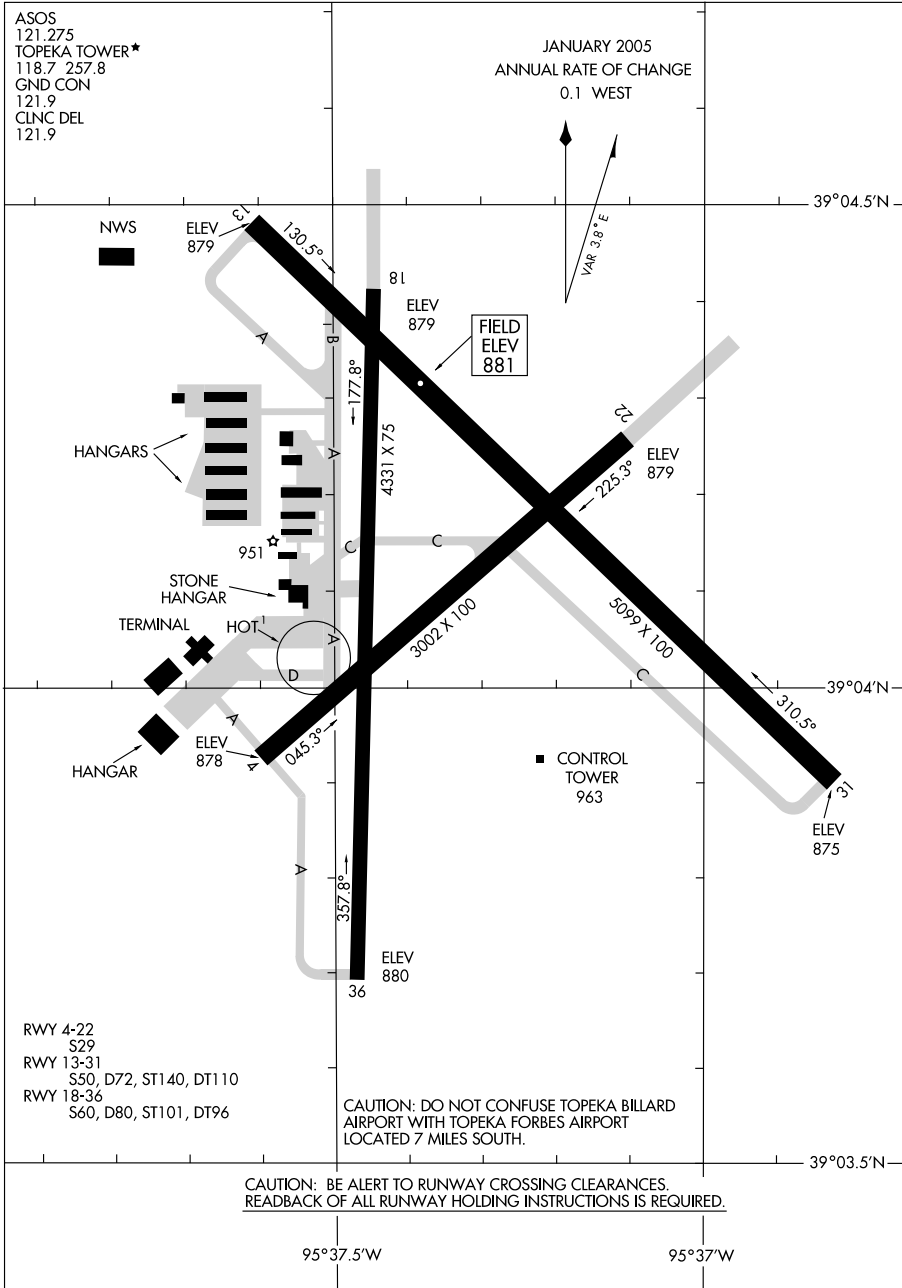
TOPEKA, KANSAS  
TOPEKA/FORBES FIELD (F<sup>O</sup>E)

09239

AIRPORT DIAGRAM

AL-620 (FAA)

TOPEKA/PHILIP BILLARD MUNI (TOP)  
TOPEKA, KANSAS



AIRPORT DIAGRAM

09239

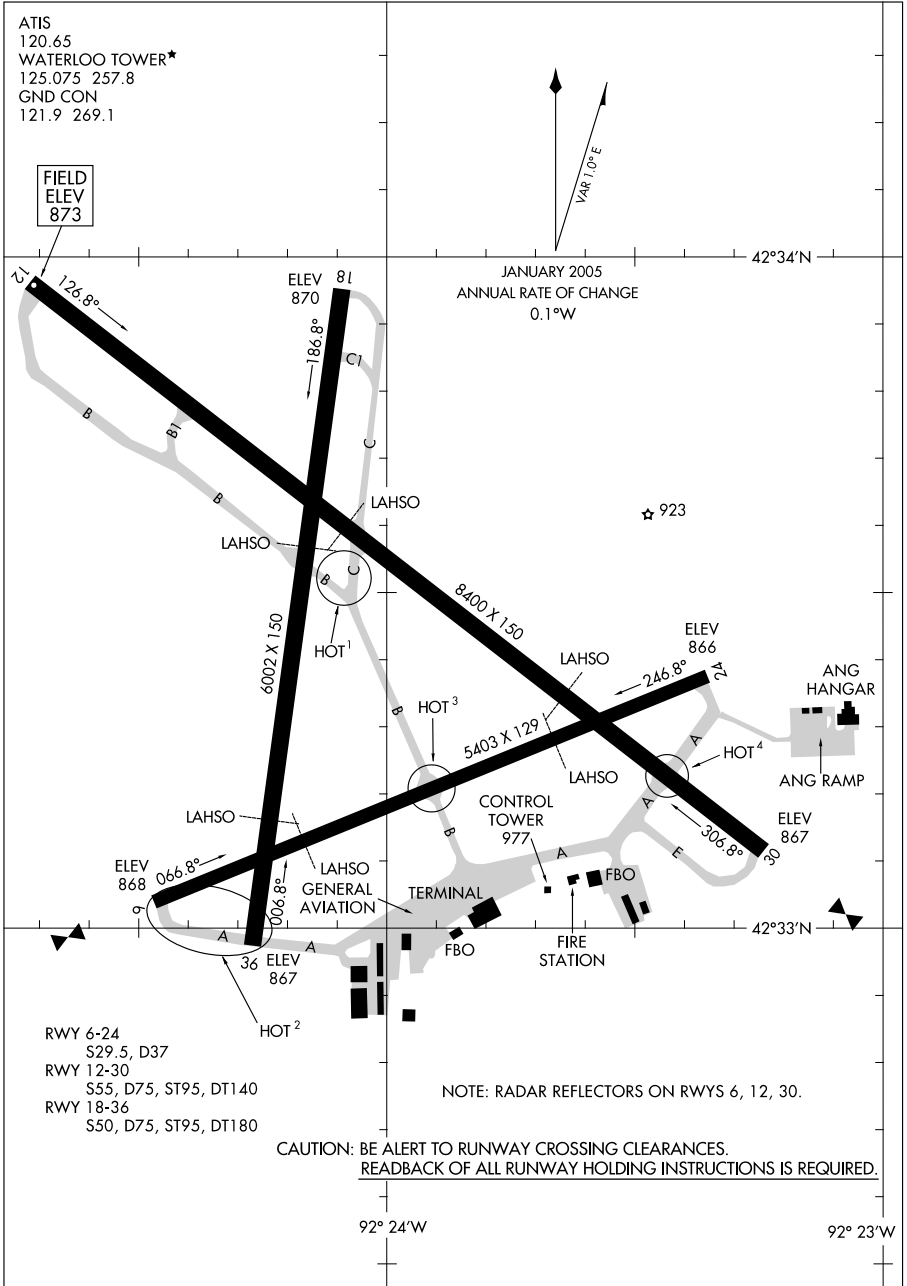
TOPEKA, KANSAS  
TOPEKA/PHILIP BILLARD MUNI (TOP)

09295

# AIRPORT DIAGRAM

AL-945 (FAA)

WATERLOO RGNL (A.L.O)  
WATERLOO, IOWA



# AIRPORT DIAGRAM

09295

WATERLOO, IOWA  
WATERLOO RGNL (A.L.O)

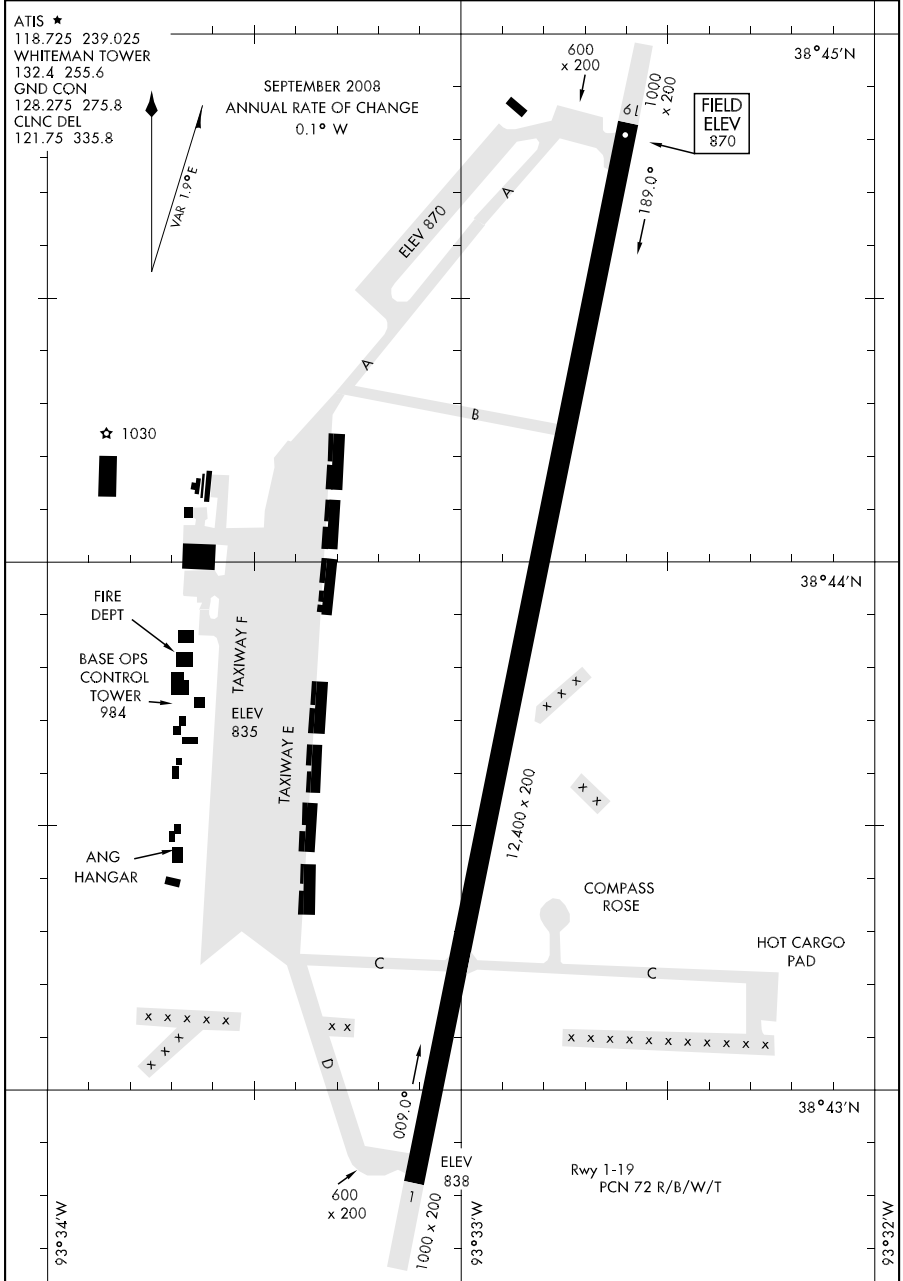
08325

AIRPORT DIAGRAM

AFD-496 [USAF]

WHITEMAN AFB (KSZL)

KNOB NOSTER, MISSOURI



AIRPORT DIAGRAM

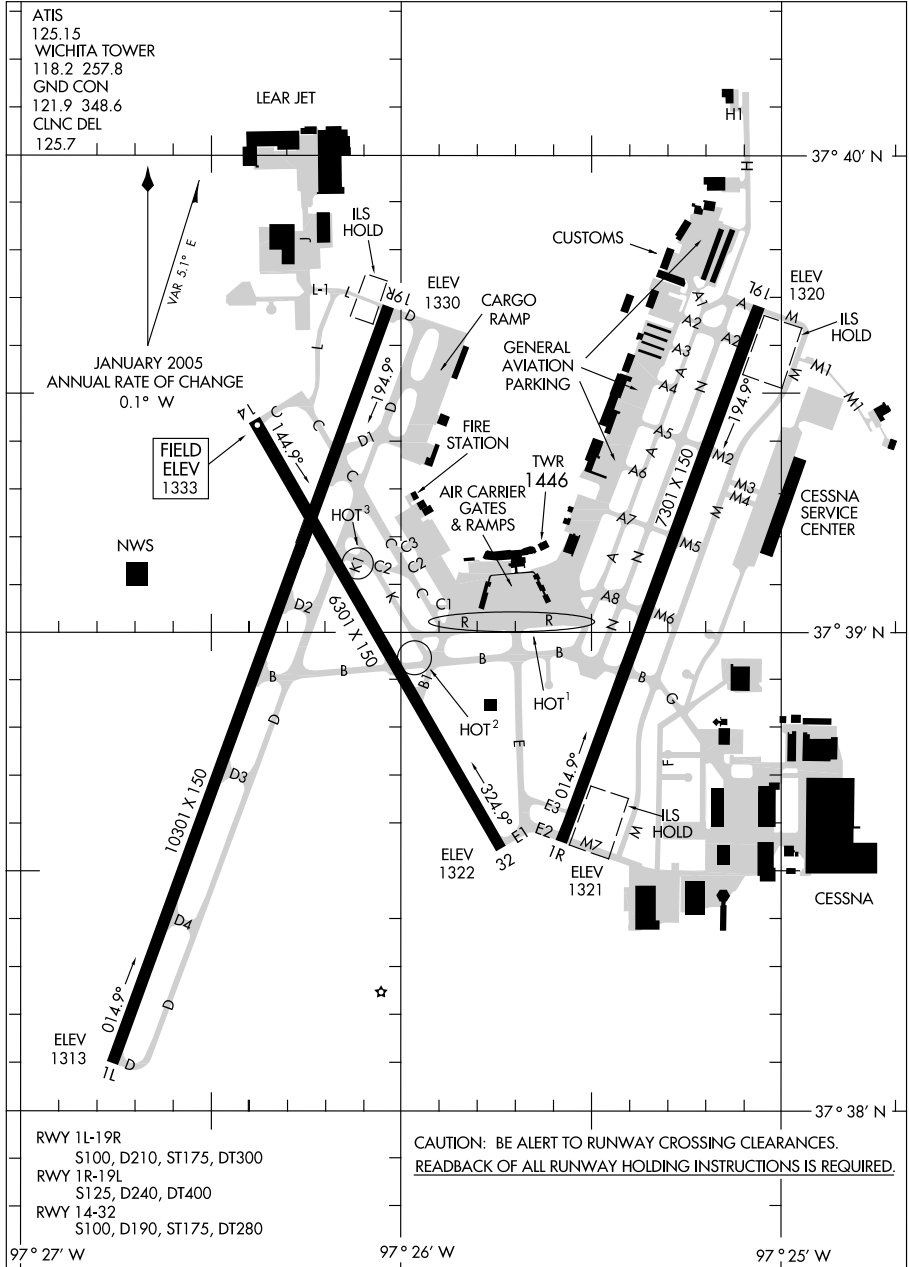
KNOB NOSTER, MISSOURI  
WHITEMAN AFB (KSZL)

09295

# AIRPORT DIAGRAM

AL-987 (FAA)

WICHITA MID-CONTINENT (ICT)  
WICHITA, KANSAS



# AIRPORT DIAGRAM

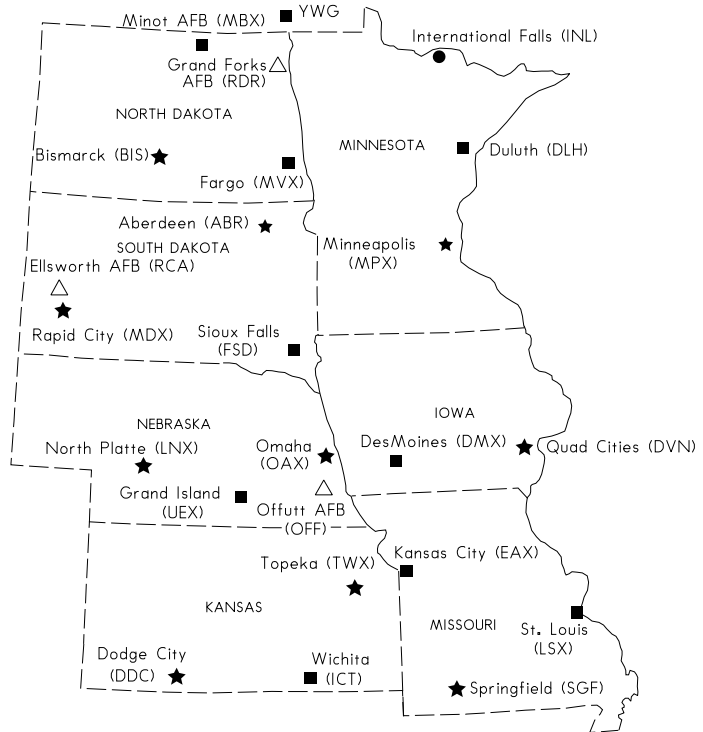
09295

**CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.  
READEBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.**

WICHITA, KANSAS  
WICHITA MID-CONTINENT (ICT)

**INTENTIONALLY  
LEFT  
BLANK**

NATIONAL WEATHER SERVICE (NWS)  
UPPER AIR OBSERVING STATIONS (UAOS)  
AND  
WEATHER RADAR NETWORK

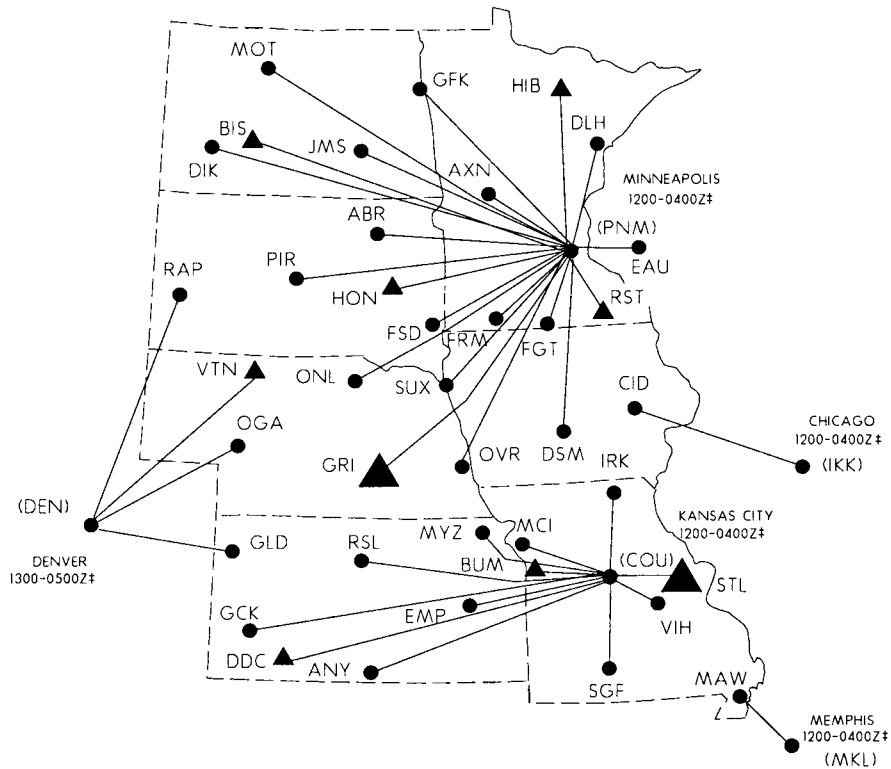


LEGEND

- △ AVIATION WEATHER SERVICE (MILITARY)
- ▲ AIR TRAFFIC CONTROL RADAR
- ★ UPPER AIR OBSERVING STATION/RADAR
- RADAR ONLY
- UAOS-BALLOON RELEASES AROUND 1100 UTC AND 2300 UTC DAILY
- OTHER NWS UPPER AIR STATIONS-BALLOON RELEASE TIMES ARE FLEXIBLE BUT GENERALLY AROUND SUNRISE AND/OR EARLY AFTERNOON

NOTE: FOR RELEASES LATER THAN 1130 UTC AND 2300 UTC, AND FOR SPECIAL RELEASES AT OTHER THAN THE SCHEDULED HOURS, AN AERONAUTICAL INFORMATION MESSAGE WILL BE FILED.

ENROUTE FLIGHT ADVISORY SERVICE (EFAS)  
See Aeronautical Information Manual (AIM) for available services



DENVER EFAS HIGH ALTITUDE FREQUENCY 124.675

KANSAS CITY EFAS HIGH ALTITUDE FREQUENCY 123.625

MINNEAPOLIS EFAS HIGH ALTITUDE FREQUENCY 135.675

- LOW ALTITUDE COMMUNICATIONS OUTLET (122.0)
- ▲ HIGH ALTITUDE COMMUNICATIONS OUTLET
- ▲● BOTH LOW AND HIGH ALTITUDE COMMUNICATIONS OUTLET