

NACOMATIC

Effective: 08-April-2010

Expires: 03-June-2010

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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
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10201 Good Luck Road
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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
invoft	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
lgt	lighted	rstd	restricted
lghts	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
NOLFF	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) N34°41.93' W99°20.20' 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 ⑴ 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

㉒ → 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

㉓ → 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.

㉑ → AIRPORT REMARKS: Special Air Traffic Rules—Part 93, see Regulatory Notices. Attended 1200-0300Z†. Parachute
 Jumping. Deer invof arpt. Heavy jumbo jet training surface to 9000'. Twy A clsd indef. Flight Notification Service
 (ADCUS) avbl.

㉒ → 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.

㉓ → WEATHER DATA SOURCES: AWOS-1 120.3 (202) 426-8000, LLWAS.

㉔ → 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)

Ⓡ 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

㉕ → AIRSPACE: CLASS B See VFR Terminal Area Chart.

㉖ → 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†)

㉗ → COMM/NAV/WEATHER REMARKS: Emerg frequency 121.5 not avbl at twr.

HELIPAD H1: H100X75 (ASPH)

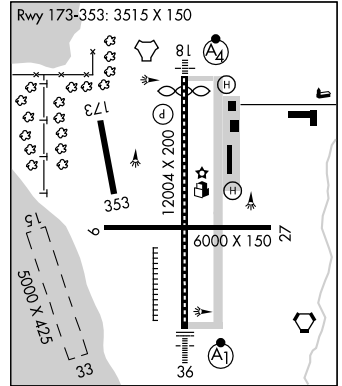
HELIPAD H2: H60X60 (ASPH)

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

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

RADIO AIDS TO NAVIGATION

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

MISCELLANEOUS AERONAUTICAL FEATURES

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

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 (MALSR) 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 ₂ O
B	1 or 2	≥90', <126' ----- ≥126', <159'	≥ 5 ----- <5	Index A + 1500 gal H ₂ O
C	2 or 3	≥126', <159' ----- ≥159', <200'	≥ 5 ----- <5	Index A + 3000 gal H ₂ O
D	3	≥159', <200' ----- >200'	<5	Index A + 4000 gal H ₂ O
E	3	≥200'	≥ 5	Index A + 6000 gal H ₂ O

> Greater Than; < Less Than; ≥ Equal or Greater Than; ≤ Equal or Less Than; H₂O—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.

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,
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).
SBTT	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.
 - R — Rigid
 - F — Flexible
- (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; click on the Commercial Airports button.

See legend item 14 for fuel code and description.

26 SUPPORTING FLUIDS AND SYSTEMS—MILITARYCODE

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).
OXYGEN:	
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):

<u>CODE</u>	<u>GRADE, TYPE</u>
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.

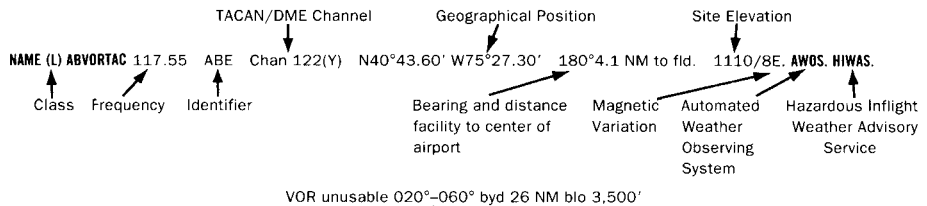
Class E 700' AGL (shown as magenta vignette on sectional charts) and 1200' AGL (blue vignette) areas are designated when necessary to provide controlled airspace for transitioning to/from the terminal and enroute environments. Unless otherwise specified, these 700'/1200' AGL Class E airspace areas remain 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.

ABRAMS MUNI (See GRAND LEDGE)

ADRIAN N41°52.20' W84°04.65' NOTAM FILE ADG.
 NDB (MHW) 278 ADG at Lenawee Co. Unmonitored.

DETROIT
 L-28J

ADRIAN

LENAWEE CO (ADG) 3 SW UTC-5(-4DT) N41°52.06' W84°04.64'

DETROIT
 COPTER
 H-10G, L-28J
 IAP

798 B S4 FUEL 100LL, JET A NOTAM FILE ADG

RWY 05-23: H5001X100 (ASPH) S-20 HIRL

RWY 05: REIL. PAPI(P4L)—GA 3.0° TCH 32'. P-line.

RWY 23: PAPI(P4L)—GA 3.0° TCH 32'. Trees.

RWY 11-29: 1810X150 (TURF)

RWY 11: Trees. RWY 29: Trees.

AIRPORT REMARKS: Attended 1300Z±—dusk. Arpt unattended major holidays except by prior arrangement; call arpt manager 517-265-2827, arpt manager nghts 517-442-8934. 24 hr self serve fuel (100LL only) with credit card. Rwy 11-29 CLOSED Dec-Apr and when snow covered. Snow removal Rwy 05-23 only. Taxi on hard surfaces only during spring thaw and wet conditions. Rwy 11-29 marked with 3' yellow cones. HIRL Rwy 05-23 preset low ints; to increase ints and ACTIVATE PAPI Rwy 05 and Rwy 23—CTAF. Ldg fee for commercial acft waived with fuel purchase.

WEATHER DATA SOURCES: ASOS 118.375 (517) 265-9089.

COMMUNICATIONS: CTAF/UNICOM 122.8

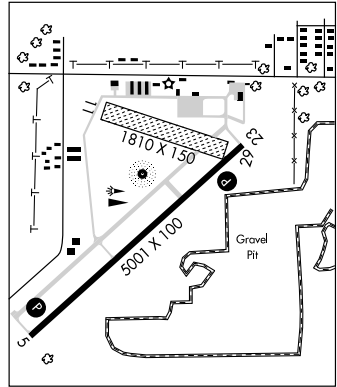
Ⓡ TOLEDO APP/DEP CON 134.35

RADIO AIDS TO NAVIGATION: NOTAM FILE JXN.

JACKSON (L) VOR/DME 109.6 JXN Chan 33 N42°15.55'

W84°27.51' 149° 29 NM to fld. 995/5W.

ADRIAN NDB (MHW) 278 ADG N41°52.20' W84°04.65' at fld. NOTAM FILE ADG. Unmonitored.



AERONUT PARK BALLOONPORT (See HOWELL)

ALBERT J LINDBERG (See HESSEL)

ALLEGAN

PADGGHAM FLD (35D) 1 E UTC-5(-4DT) N42°31.83' W85°49.42'

CHICAGO
 L-28J
 IAP

706 B S4 FUEL 100LL NOTAM FILE LAN

RWY 11-29: H4300X75 (ASPH) S-18 MIRL

RWY 11: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

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

RWY 15-33: 1598X150 (TURF)

RWY 15: Trees. RWY 33: Trees.

AIRPORT REMARKS: Attended 1300Z±—dusk. Parachute Jumping. Rwy 15-33 surface rough. Rwy 15 marked with 3' yellow cones.

ACTIVATE MIRL Rwy 11-29, PAPI Rwy 11 and Rwy 29, REIL Rwy 29—CTAF. Rwy 11-29 parallel twy marked with reflectors.

COMMUNICATIONS: CTAF/UNICOM 122.8

PULLMAN RCO 122.1R 112.1T (LANSING RADIO)

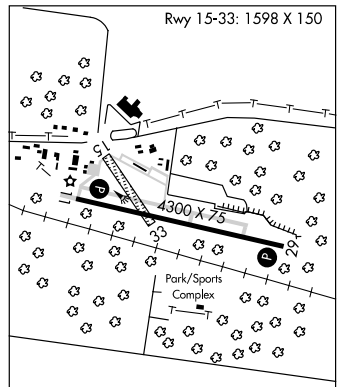
Ⓡ GRAND RAPIDS APP/DEP CON 128.4 (1030-0500Z±)

Ⓡ CHICAGO CENTER APP/DEP CON 128.5 (0500-1030Z±)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

PULLMAN (H) VOR/DME 112.1 PMM Chan 58 N42°27.96'

W86°06.29' 073° 13.1 NM to fld. 640/OE.



ALMA N43°19.40' W84°47.18' NOTAM FILE AMN.
 NDB (MHW) 329 AMN 096° 4.3 NM to RPD.

DETROIT
 L-28J

ALMA

RPD (AMN) 3 SW UTC-5(-4DT) N43°19.33' W84°41.28'

754 B S4 FUEL 100LL, JET A OX 3 NOTAM FILE AMN

RWY 09-27: H4999X75 (ASPH) S-40, D-65, ST-82 MIRL

RWY 09: REIL. VASI(V2L)—GA 3.0° TCH 45'.

RWY 27: REIL. VASI(V2L)—GA 3.0° TCH 53'.

RWY 18-36: H3197X75 (ASPH) S-26 MIRL

RWY 18: Trees. **RWY 36:** Trees.

AIRPORT REMARKS: Attended Mon-Fri 1300-2130Z†. Powered parachute activity on and in/ovf arpt. Animals on and in/ovf arpt. ACTIVATE MIRL Rwys 09-27 and 18-36; VASI Rwys 09 and 27; REIL Rwys 09 and 27—CTAF.

WEATHER DATA SOURCES: AWOS-3 124.175 (989) 463-3433

COMMUNICATIONS: CTAF/UNICOM 122.8

Ⓡ **SAGINAW APP/DEP CON** 126.45 (1100-0400Z†) **CLNC DEL** 119.25

CLEVELAND CENTER APP/DEP CON 127.7 (0400-1100Z†)

RADIO AIDS TO NAVIGATION: NOTAM FILE MBS.

SAGINAW (L) VOR/DME 112.9 MBS Chan 76 N43°31.90'

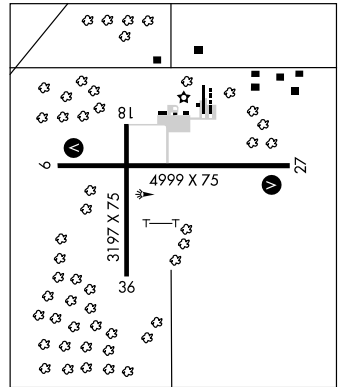
W84°04.64' 248° 29.5 NM to fld. 663/3W. **HIWAS.**

ALMA NDB (MWH) 329 AMN N43°19.40' W84°47.18' 096° 4.3 NM to fld. NOTAM FILE AMN.

DETROIT

L-28J

IAP



ALMENA (See PAW PAW)

ALPENA

ALPENA CO RGNL (APN) 6 W UTC-5(-4DT) N45°04.69' W83°33.62'

690 B S2 FUEL 100LL, JET A LRA Class I, ARFF Index A NOTAM FILE APN

RWY 01-19: H9001X150 (CONC-GRVD) S-95, D-115, DT-170 HIRL

RWY 01: MALSR. PAPI(P4L)—GA 3.0° TCH 52'. Tree.

RWY 19: REIL. PAPI(P4L)—GA 3.0° TCH 36'. Tree.

RWY 07-25: H5028X100 (CONC-GRVD) S-93, D-111, DT-170 MIRL

RWY 07: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

RWY 25: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 01: TORA-9001 TODA-9001 ASDA-9001 LDA-9001

RWY 07: TORA-5031 TODA-5031 ASDA-5031 LDA-5031

RWY 19: TORA-9001 TODA-9001 ASDA-9001 LDA-9001

RWY 25: TORA-5031 TODA-5031 ASDA-5031 LDA-5031

ARRESTING GEAR/SYSTEM

RWY 01 BAK 14 BAK-12A(B) (1500')

BAK 14 BAK-12A(B) (1500') **RWY 19**

AIRPORT REMARKS: Attended 1200-0000Z†. For svc after hrs call 989-920-7988. Birds and other wildlife on and in/ovf arpt. Twy H, east of Rwy 01-19 clsd to military acft. Twy B not visible from twr. Twy A west of Twy C and Twy B rstd to military only. Be alert for uncontrolled vehicles on the twy. Twy to maintenance hangars unlit. 48 hrs PPR for air carrier ops with more than 30 passenger seats—call arpt manager 989-354-2907. ACTIVATE HIRL Rwy 01-19; MIRL Rwy 07-25; REIL Rwy 19, Rwy 07 and Rwy 25; and MALSR Rwy 01—CTAF. ANG-72 hr PPR; ctc Base OPS DSN 741-3226, C989-354-6226 for PPR number. ANG duty hrs Mon-Fri 1300-2130Z† except holidays.

WEATHER DATA SOURCES: ASOS 120.675 (989) 356-3662.

HIWAS 108.8 APN.

COMMUNICATIONS: CTAF 121.35 UNICOM 122.95

RCO 122.1R 108.8T (LANSING RADIO)

Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 125.475 (2100-1300Z†)

Ⓡ **APP/DEP CON** 128.425 (1300-2100Z†).

TOWER 121.35 (Weekdays 1300-2100Z† except holidays.) **GND CON** 121.9

AIRSPACE: CLASS D svc Weekdays 1300-2100Z† except holidays other times CLASS E.

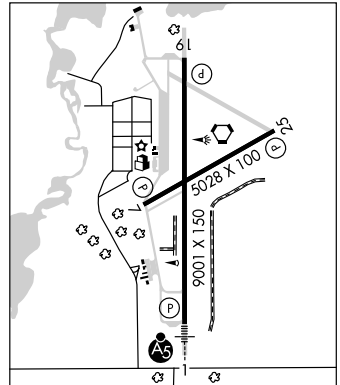
RADIO AIDS TO NAVIGATION: NOTAM FILE APN.

(L) **VORTAC** 108.8 APN Chan 25 N45°04.97' W83°33.42' at fld. 677/7W. **HIWAS.**

DME portion unusable 260°-280°, byd 30 NM blo 4000'.

FELPS NDB (LOM) 206 AP N44°57.65' W83°33.61' 007° 7 NM to fld.

ILS 109.7 I-APN Rwy 01. Class IE. LOM FELPS NDB. ILS unmonitored when twr closed.



LAKE HURON

H-11A, L-31C

IAP

SILVER CITY AIRPARK (53M) 4 N UTC-5(-4DT) N45°07.94' W83°26.88'

LAKE HURON

680 TPA—1480 (800) NOTAM FILE LAN

RWY 08-26: 2400X100 (TURF)

RWY 08: Thld dspcd 600'. Trees.

RWY 26: Thld dspcd 400'. Trees.

AIRPORT REMARKS: Unattended. Arpt CLOSED Nov-Mar and when snow covered except for ski equipped acft. No snow removal. 300' antenna 1/5 mile N of arpt. 30' p-lines in Rwy 08 apch not marked. 35' p-line in Rwy 26 apch marked with orange balls. Rwy 08-26 and dspcd thlds marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

ANDREWS UNIVERSITY AIRPARK (See BERRIEN SPRINGS)

ANN ARBOR MUNI (ARB) 3 S UTC-5(-4DT) N42°13.38' W83°44.74'

DETROIT

839 B S4 FUEL 100LL, JET A OX 1, 2, 3, 4 NOTAM FILE ARB

COPTER

RWY 06-24: H3505X75 (CONC-GRVD) S-20 MIRL

L-281, A

RWY 06: REIL. PAPI(P4L). Trees.

IAP, AD

RWY 24: ODALS. VASI(V2L)—GA 3.0° TCH 20'. Trees.

RWY 12-30: 2750X110 (TURF) 0.6% up NW

RWY 12: Trees. RWY 30: Trees.

AIRPORT REMARKS: Attended Nov-Mar 1300-0100Z, Apr-Oct 1300-2300Z. Terminal open 1200Z-dusk. Birds on and invof the arpt. Runup area to Rwy 24 and first 200' of parallel twy from the runup area of Rwy 24' not visible and uncontrolled by twr. When twr clsd, confirm snow removal ops and winter conditions—CTAF. No snow removal for Rwy 12-30. Rwy 12-30 marked with yellow cones. When twr clsd ACTIVATE ODALS Rwy 24—CTAF.

WEATHER DATA SOURCES: ASOS 134.55 (734) 668-7173.

LAWRS.

COMMUNICATIONS: CTAF 120.3 ATIS 134.55 UNICOM 123.0

Ⓡ DETROIT APP/DEP CON 118.95

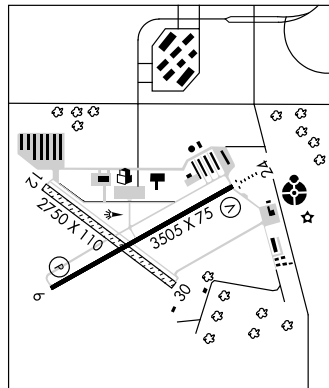
TOWER 120.3 (1300-0100Z) GND CON 121.6 CLNC DEL 121.6

AIRSPACE: CLASS D svc 1300-0100Z other times CLASS G.

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

SALEM (L) VORTAC 114.3 SVM Chan 90 N42°24.53'

W83°35.65' 214° 13 NM to fld. 950/3W.



ANTRIM CO (See BELLAIRE)

ARCHER MEML FLD (See ST JOHNS)

ARNOLD FLD (See CROSWELL)

ATHELONE WILLIAMS MEML (See DAVISON)

ATLANTA MUNI (Y93) 1 SE UTC-5(-4DT) N45°00.00' W84°08.00'

LAKE HURON

875 FUEL 100LL NOTAM FILE LAN

L-31C

RWY 13-31: 3223X100 (TURF) LIRL

RWY 13: Thld dspcd 758'. Trees.

RWY 31: Thld dspcd 569'. Trees.

RWY 05-23: H3000X60 (ASPH) LIRL

RWY 05: Thld dspcd 1230'. Trees.

RWY 23: PAPI(P2L)—GA 4.0° TCH 22'. Thld dspcd 370'. Trees.

AIRPORT REMARKS: Attended on req. For winter condition/snow removal Rwy 05-23 confirm prior to use; call 989-785-4724; no snow removal Rwy 13-31. Rwy 13-31 CLOSED Nov-Apr and when snow covered. Birds and deer on and invof the arpt. ACTIVATE LIRL Rwy 13-31 and Rwy 05-23 and PAPI Rwy 23—CTAF. Rwy 13-31 marked with 3' yellow cones. Rwy 13-31 LIRL ops Jun through Sep. OTS indefinitely.

COMMUNICATIONS: CTAF 122.9

RADIO AIDS TO NAVIGATION: NOTAM FILE APN.

ALPENA (L) VORTAC 108.8 APN Chan 25 N45°04.97' W83°33.42' 266° 25 NM to fld. 677/7W. HIWAS

AU SABLE N44°26.95' W83°23.66'. NOTAM FILE OSC.

LAKE HURON

(H) VOR/DME 116.1 ASP Chan 108 at Oscoda-Wurtsmith. 625/7W. AWOS-3.

H-11A, L-31C

VOR portion unusable 300°-360° byd 35 NM blo 2800°. DME unusable 300°-020° byd 35 NM blo 3000°.

AUSTIN N42°07.86' W85°31.79'. NOTAM FILE AZO.

CHICAGO

NDB (LOM) 371 AZ 354° 6.3 NM to Kalamazoo Co. Unmonitored.

AVOCA (39G) 2 SE UTC-5(-4DT) N43°01.80' W82°40.16'

DETROIT

726 NOTAM FILE LAN

RWY 09-27: 2105X100 (TURF)

RWY 09: Thld dsplcd 267'. Road. Rgt tfc. **RWY 27:** Trees.

AIRPORT REMARKS: Attended irregularly. Ultralight ops at arpt. Rwy 09-27 and Rwy 09 dsplcd thld marked with yellow cones.

COMMUNICATIONS: CTAF 122.9

TACKABERRY (07D) 2 W UTC-5(-4DT) N43°03.87' W82°43.43'

DETROIT

764 NOTAM FILE LAN

RWY 18-36: 2244X65 (TURF)

RWY 18: Brush. **RWY 36:** Thld dsplcd 1000'. Trees.

AIRPORT REMARKS: Attended irregularly. Rwy 36 has 75' radio twr 200' from thld 130' left. Rwy 36 dsplcd thlds marked with 3 tires each side; Rwy 18-36 marked with tires. Rwy 18-36 NSTD LIRL; non-frangible mounting; variable spacing and NSTD lens. Lgts not for public use.

COMMUNICATIONS: CTAF 122.9

BAD AXE N43°47.02' W82°58.99'. NOTAM FILE BAX.

DETROIT

(T) **VORW/DME** 108.2 BAX Chan 19 at Huron Co Mem. 766/5W. **AWOS-3.**

L-28J, 31C

RCO 122.65 (LANSING RADIO)

BAD AXE

HURON CO MEM (BAX) 1 S UTC-5(-4DT) N43°46.81' W82°59.13'

DETROIT

763 B **FUEL** 100LL, JET A NOTAM FILE BAX

H-11A, L-28J, 31C

RWY 17-35: H5009X75 (ASPH) MIRL

IAP

RWY 17: REIL. PAPI(P4L). Trees.

RWY 35: REIL. PAPI(P4L). Trees.

RWY 04-22: H3495X75 (ASPH) S-16 MIRL (NSTD)

RWY 04: Thld dsplcd 300'. Railroad. **RWY 22:** Trees.

AIRPORT REMARKS: Attended 1330-2130Z±. Arpt unattended major holidays and Easter. Birds on and invof arpt. Rwy 04-22 has numerous cracks. Twy A CLOSED winter months. MIRL Rwy 04-22 and MIRL Rwy 17-35 opr dusk-0230Z±; to increase ints and after 0230Z± ACTIVATE—CTAF. ACTIVATE PAPI and REIL Rwy 17 and Rwy 35—CTAF. Rwy 04-22 NSTD MIRL; lgts last 2000' not split amber/white lens.

WEATHER DATA SOURCES: **AWOS-3** 108.2 BAX (989) 269-4137.

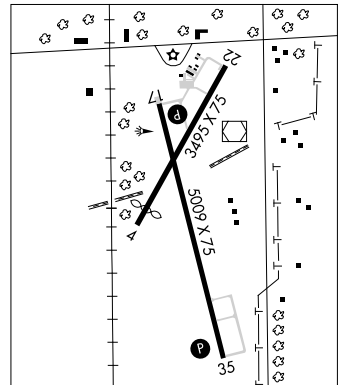
COMMUNICATIONS: CTAF/UNICOM 122.975

BAD AXE RCO 122.65 (LANSING RADIO)

® CLEVELAND CENTER APP/DEP CON 127.7

RADIO AIDS TO NAVIGATION: NOTAM FILE BAX.

BAD AXE (T) VORW/DME 108.2 BAX Chan 19 N43°47.02' W82°58.99' at fld. 766/5W. **AWOS-3.**



BALDWIN MUNI (7D3) 2 S UTC-5(-4DT) N43°52.53' W85°50.53'

CHICAGO

828 NOTAM FILE LAN

L-281

RWY 09-27: H3800X75 (ASPH) S-10 0.3% up E

IAP

RWY 09: Trees. RWY 27: Trees.

RWY 05-23: 2800X100 (TURF)

RWY 05: Thld dsplcd 800'. Trees.

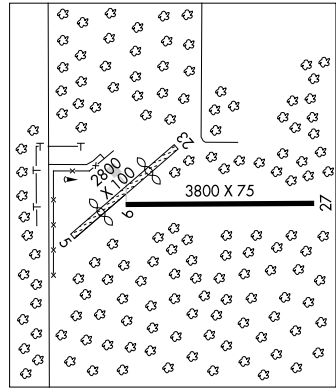
RWY 23: Thld dsplcd 800'. Trees.

AIRPORT REMARKS: Unattended. Deer on and invof arpt. Arpt CLOSED

Nov thru Apr; no snow removal. Rwy 09-27 sfc considerable pavement cracking with vegetation growing through cracks. Rwy 05-23 and dsplcd thlds marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

Ⓜ MINNEAPOLIS CENTER APP/DEP CON 120.85

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.**WHITE CLOUD (L) VOR/DME** 117.6 HIC Chan 123 N43°34.49' W85°42.97' 344° 18.9 NM to fld. 920/1W.**BANGU** N45°00.88' W84°48.48'. NOTAM FILE GLR.

LAKE HURON

NDB (LOM) 375 GL 097° 4.4 NM to Gaylord Rgnl.

BARAGA (2P4) 4 W UTC-5(-4DT) N46°47.10' W88°34.67'

GREEN BAY

845 NOTAM FILE GRB

RWY 09-27: 2200X100 (TURF)

RWY 09: Thld dsplcd 700'. Trees. RWY 27: Trees.

AIRPORT REMARKS: Unattended. Arpt CLOSED Nov-Apr except to ski equipped acft. 25' p-line 850' from thld Rwy 27.

Deer and birds on and invof arpt. Rwy 09-27 and dsplcd thld Rwy 09 marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9**BATH****UNIVERSITY AIRPARK** (41G) 2 NW UTC-5(-4DT) N42°50.42' W84°28.75'

DETROIT

856 B S2 NOTAM FILE LAN

RWY 08-26: 1988X100 (TURF) LIRL

RWY 08: Bldg. RWY 26: Tree.

AIRPORT REMARKS: Attended irregularly. Rwy 08-26 occasionally soft/wet areas E end during spring thaw and after heavy rain. ACTIVATE LIRL Rwy 08-26 and NSTD rotating bcn—122.85. NSTD flashing strobe and alternating white/red bcn. Rwy 08-26 marked with 3' yellow cones.**COMMUNICATIONS:** CTAF 122.9**BATOL** N42°21.72' W85°11.06' NOTAM FILE BTL.

CHICAGO

NDB (MHW/LOM) 272 BT 226° 4.4 NM to W K Kellogg.

L-281

BATTLE CREEK N42°18.59' W85°15.14' NOTAM FILE BTL.

CHICAGO

(T) VORTACW 109.4 BTL Chan 31 at W K Kellogg. 922/2W.

L-281

VOR portion unusable 095°-112° byd 16 NM; 125°-170° and 235°-260° blo 4000'.

RCO 122.2 (LANSING RADIO)

BATTLE CREEK**W K KELLOGG** (BTL) 3 W UTC-5(-4DT) N42°18.44' W85°15.09'

952 B S4 FUEL 100LL, JET A OX 3 LRA Class IV, ARFF Index A

CHICAGO

H-5E, 10F, L-281

IAP, AD

NOTAM FILE BTL

RWY 05-23: H10004X150 (ASPH-PFC) S-100, D-200, ST-175,

DT-400, DDT-900 HIRL

RWY 05: REIL. VASI(V4L)—GA 3.0° TCH 49'. Tree. 0.4% down.**RWY 23:** MALSR. PAPI(P4L). Pole.**RWY 13-31:** H4835X100 (ASPH-GRVD) S-40, D-65, ST-82,

DT-100 MIRL

RWY 13: REIL. VASI(V4L)—GA 3.0° TCH 35'. Railroad.**RWY 31:** REIL. VASI(V4L)—GA 3.0° TCH 56'. Road.**LAND AND HOLD SHORT OPERATIONS**

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 05	13-31	7000

RUNWAY DECLARED DISTANCE INFORMATION**RWY 05:** TORA-10003 TODA-10003 ASDA-10003 LDA-10003**RWY 13:** TORA-4835 TODA-4835 ASDA-4835 LDA-4835**RWY 23:** TORA-10003 TODA-10003 ASDA-10003 LDA-10003**RWY 31:** TORA-4835 TODA-4835 ASDA-4835 LDA-4835

AIRPORT REMARKS: Attended continuously. 48 hr PPR for unscheduled air carrier ops with more than 30 passenger seats call arpt manager 269-966-3470. Deer and birds on and invof arpt. Extensive pilot training within 25 NM of BTL VOR. When twr clsd HIRL Rwy 05-23 preset low ints. To increase ints and ACTIVATE MALSR Rwy 23, MIRL Rwy 13-31 and REIL Rwy 05, Rwy 13 and Rwy 31—CTAF. ARFF provided 24 hrs call 269-969-3349/3317. Index C ARFF avbl on request 48 hrs PPR call 269-966-3470. For customs call 269-965-3349.

WEATHER DATA SOURCES: ASOS (269) 964-0283. LAWRS.**COMMUNICATIONS:** CTAF 126.825 ATIS 128.325 UNICOM 122.95**BATTLE CREEK RCO 122.2** (LANSING RADIO)

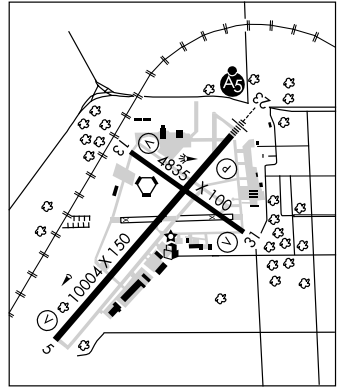
Ⓡ KALAMAZOO APP/DEP CON 119.2 (1100-0400Z‡)

Ⓡ CHICAGO CENTER APP/DEP CON 127.55 (0400-1100Z‡)

BATTLE CREEK TOWER 126.825 (1100-0300Z‡) **GND CON 121.7****AIRSPACE:** CLASS D svc effective 1100-0300Z‡ other times CLASS G.**RADIO AIDS TO NAVIGATION:** NOTAM FILE BTL.**BATTLE CREEK (T) VORTACW 109.4** BTL Chan 31 N42°18.59' W85°15.14' at fld. 922/2W. .**BATOL NDB (MHW/LOM) 272** BT N42°21.72' W85°11.06' 226° 4.4 NM to fld.

ILS 110.5 I-BTL Rwy 23. Class IB. LOM BATOL NDB. Unmonitored when twr clsd.

ASR (1100-0400Z‡)



BELLAIRE**ANTRIM CO** (ACB) 1 NE UTC-5(-4DT) N44°59.32' W85°11.90'623 B **FUEL** 100LL, JET A NOTAM FILE ACB**RWY 02-20:** H5000X100 (ASPH) S-38, D-55 MIRL**RWY 02:** REIL. PAPI(P2L)—GA 3.0° TCH 42'. Tree.**RWY 20:** REIL. PAPI(P2L)—GA 3.25° TCH 45'. Trees.

AIRPORT REMARKS: Attended Jun-Sep 1300-2300Z†, Oct-May 1200-2200Z†. For fuel other times call 231-536-7017. For acft maintenance repairs call 1-800-959-1829. Snow removal equipment on rwy and twy during winter months. Birds on and in/ov arpt. MIRL Rwy 02-20 preset, to increase ints and ACTIVATE REIL Rwy 02-20—CTAF. Ldg fee applies to turbine and jet engine acft; waived with 100 gallon fuel purchase.

WEATHER DATA SOURCES: AWOS-3 119.275 (231) 533-8941.**COMMUNICATIONS:** CTAF/UNICOM 122.7Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 132.9**GCO** 121.725 (MINNEAPOLIS CENTER CLNC and FLIGHT SERVICES)**RADIO AIDS TO NAVIGATION:** NOTAM FILE TVC.

TRAVERSE CITY (H) VORTACW 114.6 TVC Chan 93 N44°40.07' W85°33.00' 040° 24.4 NM to fld. 912/2W. **HIWAS.**

CLAM LAKE NDB (MHW) 251 CXX N44°53.96' W85°14.38' 023° 5.6 NM to fld. NOTAM FILE ACB. Unmonitored.



GREEN BAY
H-2K, L-31B
IAP

BELLEVILLE (43G) 3 SW UTC-5(-4DT) N42°10.60' W83°32.75'696 S4 **FUEL** 100LL NOTAM FILE LAN**RWY 15-33:** 2253X80 (TURF)**RWY 15:** Fence. Thld dspcd 853'. Rgt tfc.**RWY 33:** Thld dspcd 600'. Road.**RWY 18-36:** 2157X160 (TURF) (LOCAL USE ONLY)**RWY 18:** Trees. Rgt tfc. **RWY 36:** Road.

AIRPORT REMARKS: Attended 1300-2200Z†. Rwy 18-36 local use only—displacements not marked. Rwy soft during thawing season. Winter ops verify rwy/snow conditions. Rwy 15-33 thlds and dspcd thlds marked with cones.

COMMUNICATIONS: CTAF 122.9

DETROIT
COPTER

BENTON HARBOR

SOUTHWEST MICHIGAN RGNL (BEH) 2 NE UTC-5(-4DT) N42°07.72' W86°25.71'

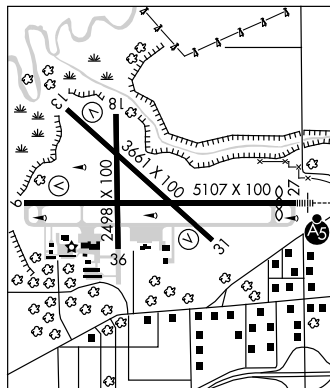
CHICAGO

643 B S4 FUEL 100LL, JET A1+ OX 3 NOTAM FILE BEH
 RWY 09-27: H5107X100 (ASPH-GRVD) S-60, D-100, DT-100 HIRL 0.3% up E

H-5E, 10F, L-281
 IAP

RWY 09: REIL. VASI(V4L)—GA 3.0° TCH 44'.
 RWY 27: MALSR. Thld dspcd 571'. Trees.
 RWY 13-31: H3661X100 (ASPH) S-30, D-45 MIRL
 RWY 13: REIL. VASI(V4L)—GA 3.5° TCH 45'.
 RWY 31: REIL. VASI(V4L)—GA 4.0° TCH 41'. Trees.
 RWY 18-36: H2498X100 (ASPH) S-16 MIRL

AIRPORT REMARKS: Attended Sat-Sun 1200-2100Z, May-Oct Mon-Fri 1200-0100Z, Nov-Apr Mon-Fri 1200-2300Z. For attendant other times call 269-545-3535. 269-757-1634, Call-in fee. For svc after hrs call 269-325-7529. Call-in fee. Rwy 09 +38' lighted ILS antenna, 152' from rwy end, 300' right. Rwy 13 and Rwy 18 drop off begins 90' from paved sfc, Rwy 09 drop off begins 110' from thld. Birds and deer on and invof arpt. Snow removal ops in progress winter months; vehicle operators will monitor CTAF. Acft arriving/departing Benton Harbor announce intentions on CTAF. Rwy 18-36 pavement cracking. ACTIVATE HIRL Rwy 09-27, MIRL Rws 13-31 and 18-36; MALSR Rwy 27; REIL Rwy 09, Rwy 13 and Rwy 31-CTAF. Ldg fee for all multi-engine acft and commercial single engine acft waived with minimum fuel purchase.



WEATHER DATA SOURCES: ASOS 121.55 (269) 925-9008

COMMUNICATIONS: CTAF/UNICOM 123.0

KEELER RCO 122.1R 116.6T (LANSING RADIO)

Ⓡ SOUTH BEND APP/DEP CON 118.55 (Sun-Fri 1030-0500Z, Sat 1030-0445Z), other times ctc

Ⓡ CHICAGO CENTER APP/DEP CON 127.55

SOUTH BEND CLNC DEL 119.7

AIRSPACE: CLASS E svc 1100-0430Z other times CLASS G.

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

KEELER (L) VOR/DME 116.6 ELX Chan 113 N42°08.66' W86°07.36' 266° 13.7 NM to fld. 795/00E.

MALLY NDB (LOM) 397 BE N42°07.61' W86°18.80' 274° 5.1 NM to fld. Unmonitored.

ILS 108.5 I-BEH Rwy 27. LOM MALLY NDB. Unmonitored. LOC unusable byd 20° left of course and byd 16 NM.

BERRIEN SPRINGS N41°57.10' W86°22.06'

CHICAGO

RCD 121.625 (LANSING RADIO)

L-281

BERRIEN SPRINGS

ANDREWS UNIVERSITY AIRPARK (C20) 2 W UTC-5(-4DT) N41°57.10' W86°22.06'

CHICAGO

668 B S4 FUEL 100LL NOTAM FILE LAN

L-281

RWY 13-31: H4161X75 (ASPH) LIRL (NSTD)

IAP

RWY 13: Trees. Rgt tfc.

RWY 31: Thld dspcd 1140'. Trees.

RWY 03-21: 1944X115 (TURF) (LOCAL USE ONLY)

RWY 03: Thld dspcd 613'. Trees.

RWY 21: Thld dspcd 550'. Trees. Rgt tfc.

AIRPORT REMARKS: Attended Sun-Fri 1300-2200Z. Svcs avbl Sun-Fri only. Fuel 24 hour self svc. Rwy 31 NSTD LIRL due to dspcd thld not lighted. Last 3,021' is lighted. ACTIVATE LIRL. Rwy 13-31-CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.7

BERRIEN SPRINGS RCO 121.625 (LANSING RADIO)

Ⓡ SOUTH BEND APP/DEP CON 118.55 (Sun-Fri 1030-0500Z, Sat 1030-0445Z), other times ctc

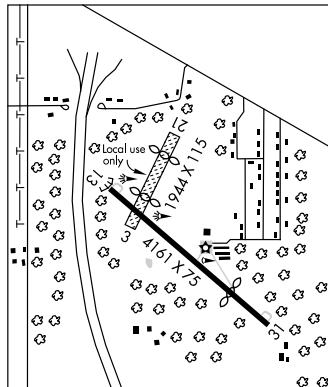
Ⓡ CHICAGO CENTER APP/DEP CON 127.55

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

GIPPER (H) VORTACW 115.4 GIJ Chan 101 N41°46.12'

W86°19.11' 349° 11.2 NM to fld. 804/00E.

HIWAS.



BETZ (See BLISSFIELD)

BIG RAPIDS**ROBEN-HOOD** (RQB) 2 NW UTC-5(-4DT) N43°43.36' W85°30.24'

CHICAGO

L-281

IAP

990 B FUEL 100LL NOTAM FILE RQB

RWY 09-27: H4300X75 (ASPH) S-20 MIRL 1.0% up W**RWY 09:** REIL PAPI(P2L)—GA 3.33° TCH 25'. Trees.**RWY 27:** REIL. PAPI(P4R)—GA 3.08° TCH 25'. Tree.**RWY 14-32:** H2700X75 (ASPH) S-20 MIRL 0.3% up NW**RWY 14:** Trees. **RWY 32:** Tree.

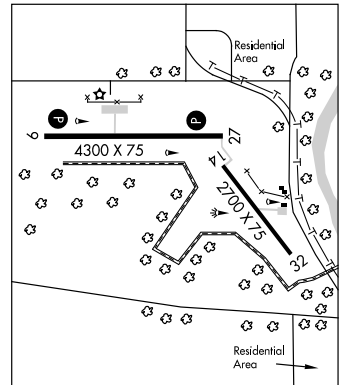
AIRPORT REMARKS: Attended Mon-Fri 1300-2200Z±. 24 hr self serve fuel. Call in fee charged. Deer on and in/ov arpt. Extensive ultralight activity on and in/ov arpt. Rwy 09 REIL OTS indef. ACTIVATE MIRL Rwy 09-27 and Rwy 14-32; PAPI Rwy 09 and Rwy 27; REIL Rwy 09 and Rwy 27—CTAF.

WEATHER DATA SOURCES: AWOS-3 121.125 (231) 796-0884.**COMMUNICATIONS:** CTAF/UNICOM 122.8

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 120.85

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.**WHITE CLOUD (L) VOR/DME** 117.6 HIC Chan 123 N43°34.49'

W85°42.97' 047° 12.8 NM to fld. 920/1W.

**BISHOP INTL** (See FLINT)**BLISSFIELD****BETZ** (44G) 2 N UTC-5(-4DT) N41°51.34' W83°52.25'

DETROIT

COPTER

691 S2 FUEL 100LL NOTAM FILE LAN

RWY 09-27: 2602X92 (TURF)**RWY 09:** Thld dspld 415'. Road. **RWY 27:** Thld dspld 390'. Road.

AIRPORT REMARKS: Attended irregularly. Fuel avbl by prior arrangement; phone 517-902-2292. Rwy 09—3' ditch 10' from thld. To confirm snow conditions winter months call 517-902-2292. Acft parked east end adjacent to rwy on north side. Rwy 27 +20' p-line 375' from thld. Rwy 09-27 NSTD LIRL on arpt not for public use; marked with white lgts. Rwy 09-27 thlds and dspld thlds marked with cones.

COMMUNICATIONS: CTAF 122.9**BOIS BLANC ISLAND** (6Y1) 3 NW UTC-5(-4DT) N45°45.98' W84°30.23'

LAKE HURON

L-31C

664 B NOTAM FILE LAN

RWY 10-28: H3498X75 (ASPH) MIRL**RWY 10:** Thld dspld 90'. Trees. **Rwy 28:** REIL. PAPI(P4L)—GA 4.0° TCH 33'. Trees.**AIRPORT REMARKS:** Unattended. Deer and birds on and in/ov arpt. ACTIVATE MIRL Rwy 10-28—CTAF.**COMMUNICATIONS:** CTAF 122.9**RADIO AIDS TO NAVIGATION:** NOTAM FILE PLN.**PELLSTON (L) VORTACW** 111.8 PLN Chan 55 N45°37.84' W84°39.85' 046° 10.6 NM to fld.

840/6W. HIWAS.

BOYNE CITY MUNI (N98) 1 SE UTC-5(-4DT) N45°12.50' W84°59.42'

GREEN BAY

L-31B

657 FUEL 100LL NOTAM FILE LAN

RWY 09-27: H4000X75 (ASPH) MIRL**RWY 09:** PAPI(P2L)—GA 4.0° TCH 28'. Thld dspld 600'. Road. **RWY 27:** REIL. Trees.

AIRPORT REMARKS: Unattended. Self svc fuel. Deer and birds on and in/ov rws. +4' fence parallel to rwy, 84' south of rwy centerline, +6' fence 122' north of rwy centerline. ACTIVATE MIRL Rwy 09-27, PAPI Rwy 09, REIL Rwy 27—122.9.

COMMUNICATIONS: CTAF/UNICOM 122.8**RADIO AIDS TO NAVIGATION:** NOTAM FILE PLN.**PELLSTON (L) VORTACW** 111.8 PLN Chan 55 N45°37.84' W84°39.85' 215° 28.9 NM to fld. 840/6W. HIWAS

BOYNE FALLS**BOYNE MOUNTAIN** (BFA) 1 W UTC-5(-4DT) N45°09.95' W84°55.45'LAKE HURON
H-2K, L-31B
IAP

719 FUEL 100LL, JET A + NOTAM FILE LAN

RWY 17-35: H5187X60 (ASPH) LIRL(NSTD) 0.3% up S

RWY 17: REIL. Thld dsplcd 300'. Road.

RWY 35: REIL. Thld dsplcd 500'. Trees.

AIRPORT REMARKS: Unattended. For fuel call 231-549-6000. Deer and birds on and in/ov arpt. Rwy 17-35 extensive cracking. Rwy 17-35 NSTD LIRL, 80' from rwy edges. Rwy has reflectors summer months. ACTIVATE NSTD LIRL Rwy 17-35 and REIL Rws 17 and 35-122.85. Rwy 17-35 has 10' paved shoulder each side; last 4700' Rwy 35.

COMMUNICATIONS: CTAF/UNICOM 122.8

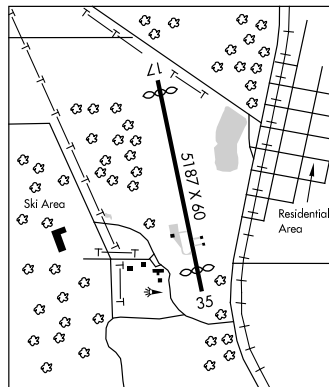
① MINNEAPOLIS CENTER APP/DEP CON 134.6

RADIO AIDS TO NAVIGATION: NOTAM FILE PLN.

PELLSTON (L) VORTACW 111.8 PLN Chan 55

N45°37.84' W84°39.85' 208° 30 NM to fld.

840/6W. HIWAS.

**BOYNE MOUNTAIN** (See BOYNE FALLS)**BRANCH CO MEML** (See COLDWATER)**BRIGHTON** (45G) 3 N UTC-5(-4DT) N42°34.19' W83°46.71'

973 B NOTAM FILE LAN

RWY 04-22: H3120X24 (ASPH) MIRL (NSTD)

RWY 04: Thld dsplcd 195'. Trees.

RWY 22: PAPI(P4L)—GA 3.6° TCH 29'. Thld dsplcd 365'. Trees.

AIRPORT REMARKS: Attended irregularly. Rwy 04-22 NSTD MIRL located 50' from rwy edge, NSTD configuration for thlds. Rwy 22 NSTD PAPI, NSTD installation—may only be visible on short final apch. For local use only. ACTIVATE rotating bcn, MIRL Rwy 04-22 and PAPI Rwy 22—CTAF.

COMMUNICATIONS: CTAF 122.9

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

SALEM (L) VORTAC 114.3 SVM Chan 90 N42°24.53' W83°35.65' 323° 12.7 NM to fld. 950/3W.

DETROIT
COPTER
L-28L, A**BROOKLYN****SHAMROCK FLD** (6G8) 1 SE UTC-5(-4DT) N42°05.70' W84°14.45'DETROIT
COPTER

995 NOTAM FILE LAN

RWY 01-19: 2822X100 (TURF) LIRL

RWY 01: Tree. Rgt tfc.

RWY 19: Thld dsplcd 613'. P-line.

AIRPORT REMARKS: Attended continuously. CAUTION: Deer on and in/ov arpt. 105' unlighted p-line and tower ¼ mile from thld extended left and right of centerline Rwy 19. ACTIVATE LIRL Rwy 01-19—CTAF. All tfc patterns conducted E of Rwy 01-19. Rwy 01-19 marked with 3' yellow cones; dsplcd thld marked with 3 cones each side.

COMMUNICATIONS: CTAF 122.9

BROOKS FLD (See MARSHALL)**BUNCH'S HALF ACRE** (See HARRIETTA)**CAKLEBERRY** (See DEXTER)**CADILLAC** N44°16.50' W85°24.86' NOTAM FILE CAD.GREEN BAY
L-31B

NDB (MHW) 269 CAD at Wexford Co.

CADILLAC**WEXFORD CO** (CAD) 2 N UTC-5(-4DT) N44°16.52' W85°25.14'

1307 B S4 FUEL 100LL, JET A NOTAM FILE CAD

RWY 07-25: H5000X100 (ASPH-PFC) S-30, D-45 MIRL**RWY 07:** REIL. MALS. VASI(V2L)—GA 3.0° TCH 41'.**RWY 25:** REIL. PAPI(P4L)—GA 3.0° TCH 44'. Railroad.**RWY 18-36:** 2006X150 (TURF)**RWY 18:** Trees. **RWY 36:** Stack.

AIRPORT REMARKS: Attended Mon-Fri 1200-2200Z†, Jun-Aug Sat-Sun 1200-2200†, Sep-May Sat-Sun 1200-1800Z†. After hrs attendance avbl on req 231-779-9211. Unattended New Years, Easter, Thanksgiving, Christmas. Fuel 24 hr self svc. Rwy 18-36 CLOSED Dec thru Mar and when snow covered except for ski equipped acft. Deer on and invof arpt. Glider activity on and invof arpt Apr-Nov. Ultralight activity on and invof arpt Apr-Nov. ACTIVATE MIRL Rwy 07-25; MALS Rwy 07; REIL Rwy 07 and Rwy 25; VASI Rwy 07 and PAPI Rwy 25—CTAF. Ldg fee. Ldg fee for commercial ops waived with minimum fuel purchase. Rwy 18-36 marked with 18 inch yellow cones.

WEATHER DATA SOURCES: AWOS-3 128.325 (231) 779-9536.**COMMUNICATIONS:** CTAF/UNICOM 122.8

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 132.9

GCO 121.725 (MINNEAPOLIS CENTER CLNC and LANSING FSS)

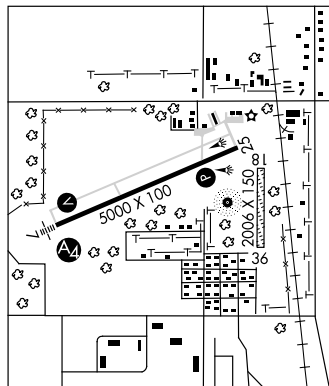
RADIO AIDS TO NAVIGATION: NOTAM FILE TVC.

TRAVERSE CITY (H) VORTACW 114.6 TVC Chan 93 N44°40.07' W85°33.00' 169° 24.2 NM to fld. 912/2W. HIWAS

CADILLAC NDB (MHW) 269 CAD N44°16.50' W85°24.86' at fld. NOTAM FILE CAD.

WEXOR NDB (LOM) 336 MA N44°14.22' W85°32.84' 071° 6 NM to fld.

ILS/DME 108.55 I-MAY Chan 22(Y) Rwy 07. LOM WEXOR NDB.

GREEN BAY
H-2K, L-31B
IAP**CAGNEY** (See CLIO)**CAIN FLD** (See STANWOOD)**CALKINS FLD** (see WAYLAND)**CALVIN CAMPBELL MUNI** (See INDIAN RIVER)**CANTON-PLYMOUTH-METTETAL** (See PLYMOUTH)**CAPITAL CITY** (See LANSING)**CARGL** N42°21.38' W82°57.26'. NOTAM FILE DET.**NDB (MHW/LOM)** 230 VQ 327° 4 NM to Coleman A. Young Muni.DETROIT
A**CARLETON** N42°02.88' W83°27.45' NOTAM FILE LAN.(H) VORTAC 115.7 CRL Chan 104 028° 10.9 NM to Detroit Metropolitan Wayne Co. 629/3W. H-10G, L-28J, A
HIWAS.

VOR portion unusable 360°-040° blo 5000'. DME unusable byd 35 NM blo 2500'.

RCO 122.1R 115.7T (LANSING RADIO)

CARLETON**WICKENHEISER** (W87) 3 S UTC-5(-4DT) N42°01.09' W83°22.63'

610 S2 FUEL 100LL NOTAM FILE LAN

RWY 18-36: 2575X60 (TURF)**RWY 18:** Thld dspclcd 1000'. P-line. **RWY 36:** Trees.**RWY 09-27:** 1920X60 (TURF)**RWY 09:** Thld dspclcd 660'. P-line. **RWY 27:** Trees.

AIRPORT REMARKS: Attended irregularly. No snow removal. Acft maintenance by prior arrangement; call arpt manager on 734-654-6249. Rwy 09-27 thlds marked with tires; Rwy 09 dspclcd thld marked with 3 yellow tires each side. Rwy 18-36 marked with 3' yellow cones.

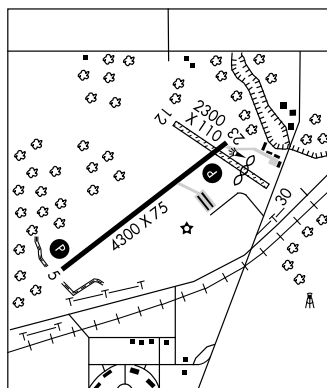
COMMUNICATIONS: CTAF 122.9DETROIT
COPTER

CARO**TUSCOLA AREA** (CFS) 3 SW UTC-5(-4DT) N43°27.53' W83°26.73'

701 B S4 FUEL 100LL, JET A NOTAM FILE CFS

RWY 05-23: H4300X75 (ASPH) MIRL 0.4% up NE.**RWY 05:** REIL. PAPI (P4L)—GA 3.0° TCH 25'. Trees.**RWY 23:** REIL. PAPI(P4L)—GA 4.0°. Trees.**RWY 12-30:** 2300X110 (TURF)**RWY 12:** Trees. **RWY 30:** Thld dsplcd 500'. Trees.**AIRPORT REMARKS:** Attended irregularly. For fuel after hrs call 989-673-2849; if arpt manager is unavbl call 989-673-2849. Deer on arpt. ACTIVATE MIRL Rwy 05-23; REIL and PAPI Rwy 05 and 23—CTAF. Rwy 12-30 thlds and dsplcd thlds marked with cones.**WEATHER DATA SOURCES:** AWOS-3 119.275 (989) 672-4182.**COMMUNICATIONS:** CTAF/UNICOM 123.0Ⓡ **SAGINAW APP/DEP CON** 120.95 (1100-0400Z‡)**CLEVELAND CENTER APP/DEP CON** 127.7 (0400-1100Z‡)**RADIO AIDS TO NAVIGATION:** NOTAM FILE MBS.**SAGINAW (L) VORW/DME** 112.9 MBS Chan 76 N43°31.90'

W84°04.64' 102° 27.9 NM to fld. 663/3W. HIWAS.

DETROIT
L-281, 31C
IAP**CARSONVILLE****CIRCLE U HELIPORT** (F2F) 5 SW UTC-5(-4DT) N43°29.49' W82°37.42'

729 NOTAM FILE LAN

HELIPAD H1: H47X17 (CONC)**HELIPORT REMARKS:** Attended dusk-dawn. Apch departure routes 340°-020° and 115°-140°. Helipad H1 perimeter lgts. Perimeter lgts OTS indef.**COMMUNICATIONS:** CTAF/UNICOM 123.05

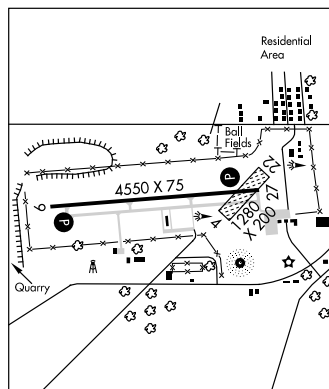
DETROIT

CHARLEVOIX MUNI (CVX) 1 SW UTC-5(-4DT) N45°18.29' W85°16.52'

669 B S4 FUEL 100LL, JET A NOTAM FILE CVX

RWY 09-27: H4550X75 (ASPH) S-12.5 MIRL 0.6% up W**RWY 09:** REIL. PAPI(P4R)—GA 3.0°. Tree.**RWY 27:** REIL. PAPI(P4R)—GA 3.0° TCH 31'. Trees.**RWY 04-22:** 1280X200 (TURF)**RWY 04:** Trees. **RWY 22:** Tree.**AIRPORT REMARKS:** Attended dawn-dusk. For fuel dawn-dusk call 231-547-2141. After hrs call 231-547-2058. Rwy 04-22 CLOSED Nov-Apr. Deer and birds on and invof arpt. Rwy 09 preferred rwy for ldg ngts, jets and turboprop acft. Rwy 27 preferred rwy for tkf ngts, jets and turboprop acft. Rwy 09-27 slopes up from E to W. -100' quarry/mine, 300' from Rwy 9 thld. ACTIVATE MIRL Rwy 09-27; REIL and PAPI Rwy 09 and Rwy 27—CTAF. Rwy 04-22 marked with 3' yellow cones. Landing fee. Landing fee waived with minimum fuel purchase.**WEATHER DATA SOURCES:** AWOS-3 120 (231) 237-9703.**COMMUNICATIONS:** CTAF/UNICOM 122.8Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 134.6 **GCO** 121.725
(MINNEAPOLIS CENTER and FLIGHT SERVICES)**RADIO AIDS TO NAVIGATION:** NOTAM FILE PLN.**PELLSTON (L) VORTACW** 111.8 PLN Chan 55 N45°37.84'

W84°39.85' 239° 32.4 NM to fld. 840/6W. HIWAS

NDB (MHW) 392 CVX N45°18.11' W85°15.20' at fld. NOTAM FILE CVX. Unmonitored. NDB unusable by 15 NM.**COMM/NAV/WEATHER REMARKS:** GCO OTS indef.GREEN BAY
L-31B
IAP

CHARLOTTE**FITCH H BEACH** (FPK) 2 NE UTC-5(-4DT) N42°34.47' W84°48.69'

DETROIT

891 B S4 FUEL 100LL NOTAM FILE FPK

L-28J

RWY 02-20: H3500X75 (CONC) S-26 MIRL 0.3% up S

IAP

RWY 02: REIL. PAPI(P4L)—GA 4.0° TCH 40'. Trees.

RWY 20: REIL. PAPI(P4L)—GA 4.0° TCH 40'. Pole.

RWY 14-32: 2318X100 (TURF)

RWY 14: Thld dspcd 575'. Trees.

RWY 32: Thld dspcd 189'. Road.

AIRPORT REMARKS: Attended 1300Z†—dusk. Military helicopter ops on

and infov arpt, particularly at ngt. Be alert occasional deer on

rws. Rwy 14-32 CLOSED Dec-Mar and when snow covered. Rwy

14-32 thlds and dspcd thlds marked with 3' yellow cones.

ACTIVATE MIRL Rwy 02-20; REIL and PAPI Rwy 02 and 20—CTAF.

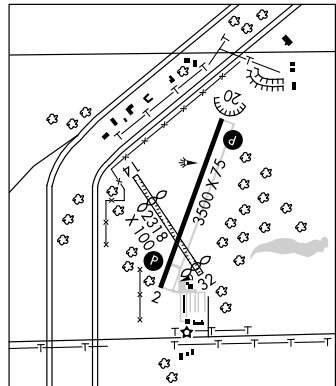
WEATHER DATA SOURCES: AWOS-3 118.075 (517) 543-2288.**COMMUNICATIONS:** CTAF/UNICOM 123.0

Ⓡ LANSING APP/DEP CON 118.65

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

LANSING (L) VORTACW 110.8 LAN Chan 45 N42°43.04'

W84°41.85' 216° 9.9 NM to fld. 887/5W.

**WEND VALLEY** (49G) 3 NW UTC-5(-4DT) N42°34.75' W84°54.50'

DETROIT

859 NOTAM FILE LAN

RWY 18-36: 1800X100 (TURF)

RWY 18: Building. RWY 36: Fence.

AIRPORT REMARKS: Attended irregularly. No snow removal on Rwy 18-36. Arpt CLOSED Dec-Mar and when snow

covered. Ultralight activity on and infov arpt. +30' p-line north end rwy. Rwy 18-36 marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9**CHEBOYGAN****CHEBOYGAN CO** (SLH) 2 W UTC-5(-4DT) N45°39.22' W84°31.16'

LAKE HURON

639 B S4 FUEL 100LL, JET A NOTAM FILE SLH

L-31C

RWY 09-27: H4000X75 (ASPH) S-23, D-34, DT-60 MIRL 0.3% up W

IAP

RWY 09: REIL. PAPI(P2L)—GA 4.0° TCH 25'. Road.

RWY 27: REIL. PAPI(P2L)—GA 4.0° TCH 25'. Trees.

RWY 16-34: 1500X75 (TURF)

RWY 34: Thld dspcd 500'.

AIRPORT REMARKS: Attended 1300-2200Z†. 100LL 24 hr self-serve.

For Jet A after hrs call 231-627-7921, 231-420-0334. Deer and

birds on and infov arpt. Rwy 16-34 CLOSED Dec-Mar and when

snow covered. Rwy 16-34 soft when wet. Rwy 16 rwy and dspcd

thld marked with 3' yellow cones. ACTIVATE MIRL Rwy 09-27,

PAPI Rwy 09 and Rwy 27 and REIL Rwy 09 and Rwy 27—122.5.

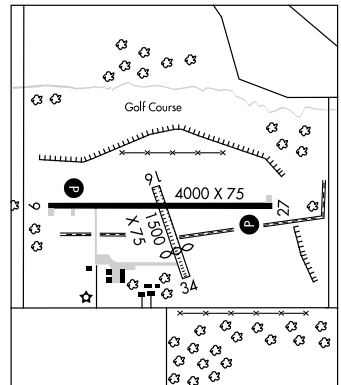
WEATHER DATA SOURCES: AWOS-3 118.175 (231) 627-4671.**COMMUNICATIONS:** CTAF/UNICOM 122.8

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 134.6

RADIO AIDS TO NAVIGATION: NOTAM FILE PLN.

PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84'

W84°39.85' 083° 6.3 NM to fld. 840/6W. HIWAS

**HOFFMAN'S BLACK MOUNTAIN AERODROME** (2M7) 11 SE UTC-5(-4DT)

LAKE HURON

N45°31.92' W84°18.48'

677 S4 NOTAM FILE LAN

RWY 15-33: 2800X90 (TURF)

RWY 15: Thld dspcd 1200'. Trees. RWY 33: Thld dspcd 900'. Trees.

AIRPORT REMARKS: Attended irregularly. Rwy 15-33 ditch on both sides of rwy. Rwy 15-33 soft when wet. Call

231-627-2418 to confirm rwy conditions. Rwy rough, uneven, tire ruts. Rwy 15-33 edges and dspcd thlds are marked with yellow cones.

COMMUNICATIONS: CTAF/UNICOM 122.8

CHERRY CAPITAL (See TRAVERSE CITY)

CHESANING

HOWARD NIXON MEML (5ØG) 1 W UTC-5(-4DT) N43°10.99' W84°08.00' DETROIT
 644 NOTAM FILE LAN
RWY 18-36: 2582X150 (TURF) LIRL
RWY 18: Thld dsplcd 400'. Trees. **RWY 36:** Thld dsplcd 796'. Trees.
RWY 09-27: 2060X150 (TURF)
RWY 09: Trees. **RWY 27:** Thld dsplcd 800'. Trees.
AIRPORT REMARKS: Attended irregularly. No winter snow removal. Rwy 18-36 marked with 3' yellow cones including dsplcd thlds. Rwy 09-27 marked with 3' cones including dsplcd thlds. ACTIVATE LIRL Rwy 18-36—CTAF.
COMMUNICATIONS: CTAF 122.9

CHIPPEWA CO INTL (See SAULT STE MARIE)

CIRCLE U HELIPORT (See CARSONVILLE)

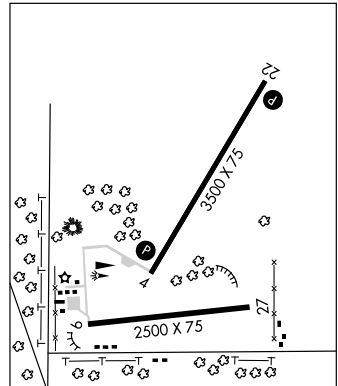
CLAM LAKE N44°53.96' W85°14.38' NOTAM FILE ACB. GREEN BAY
 NDB (MHW) 251 CXK 023° 5.6 NM to Antrim Co. Unmonitored. L-31B

CLARE MUNI (48D) 1 E UTC-5(-4DT) N43°50.07' W84°44.41' DETROIT
 857 B FUEL 100LL NOTAM FILE LAN L-28J, 31C
IAP

RWY 04-22: H3500X75 (ASPH) MIRL 0.9% up NE
RWY 04: REIL. PAPI(P4L)—GA 4.0° TCH 35'. Trees.
RWY 22: REIL. PAPI(P2L)—GA 3.0° TCH 25'. Trees.
RWY 09-27: H2500X75 (ASPH) S-20 MIRL
RWY 09: Trees. **RWY 27:** Fence.
AIRPORT REMARKS: Attended irregularly. 24 hour self serve fuel avbl with credit card. Deer on and invof arpt. Rwy 22 REIL OTS indef. ACTIVATE MIRL Rwy 04-22, Rwy 09-27, REIL Rwy 04 and Rwy 22 and PAPI Rwy 04 and Rwy 22—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8
 Ⓡ SAGINAW APP/DEP CON 126.45 (1130-0400Z‡)
 CLEVELAND CENTER APP/DEP CON 127.7 (0400-1130Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.
MOUNT PLEASANT (L) VORW/DME 110.6 MOP Chan
 43 N43°37.37' W84°44.24' 004° 12.7 NM to fld.
 752/5W.



CLARE CO (See HARRISON)

CLINTON

HONEY ACRES (7N4) 1 W UTC-5(-4DT) N42°04.67' W83°59.16' DETROIT
 820 NOTAM FILE LAN COPTER
RWY 18-36: 3800X90 (TURF)
RWY 18: Thld dsplcd 600'. Tree. **RWY 36:** Thld dsplcd 600'. Bldg.
AIRPORT REMARKS: Attended irregularly. Rwy 36, +18' p-line 430' from thld marked with orange balls. Rwy 18-36 thlds and dsplcd thlds marked with 3' yellow cones.
COMMUNICATIONS: CTAF 122.9

CLIO**CAAGNEY** (51G) 3 SW UTC-5(-4DT) N43°08.58' W83°47.75'

DETROIT

722 S4 TPA-1722(1000) NOTAM FILE LAN

RWY 03-21: 1933X100 (TURF)**RWY 03:** Trees. **RWY 21:** Tree.**RWY 14-32:** 1895X140 (TURF)**RWY 14:** Tree. **RWY 32:** Trees.**RWY 18-36:** 1802X100 (TURF)**RWY 18:** Thld dspclcd 500'. Trees. **RWY 36:** Thld dspclcd 358'. Trees.**AIRPORT REMARKS:** Attended continuously. Deer on and in/ovf arpt. Rwy 03-21, Rwy 14-32 and Rwy 18-36 rough.

Glider ops left and rgt t/c to all rwys. Rwy 32 apch end wet in spring after rain. Rwy 18-36 marked with yellow cones. Rwy 03-21 and Rwy 14-32 irregularly defined by mowing. Rwsy 03-21 and 14-32 local use only. Check NOTAMS for rwy condition winter months-no snow removal.

COMMUNICATIONS: CTAF 122.9**COBO HALL HELIPORT** (See DETROIT)**COLDWATER****BRANCH CO MEML** (OEB) 3 W UTC-5(-4DT) N41°56.01' W85°03.14'

CHICAGO

959 B S4 FUEL 100LL, JET A NOTAM FILE OEB

H-5E, 10F, L-28I

RWY 07-25: H5350X75 (ASPH) S-20 MIRL**RWY 07:** PAPI(P2L)-GA 3.0° TCH 32'. Trees.**RWY 25:** REIL. PAPI(P2L)-GA 3.0° TCH 40'. Road.**RWY 04-22:** H3500X75 (ASPH) S-18 MIRL**RWY 04:** Tree. **RWY 22:** Tree.**RWY 16-34:** 2400X190 (TURF)**RWY 16:** Thld dspclcd 595'. Trees. **RWY 34:** Trees.**AIRPORT REMARKS:** Attended irregularly. Deer on and in/ovf arpt. 24 hr self svc fuel with major credit card. Rwy 04-22 and Rwy 07-25 plowed winter months. Call arpt manager at 517-278-7145 for conditions. Preferred calm wind Rwy 25. ACTIVATE MIRL Rwy 04-22 and Rwy 07-25 and REIL Rwy 25-CTAF. Rwy 16 dspclcd thld marked with 3' yellow cones.**WEATHER DATA SOURCES:** AWOS-3 118.125 (517) 279-1810.**COMMUNICATIONS:** CTAF/UNICOM 122.7

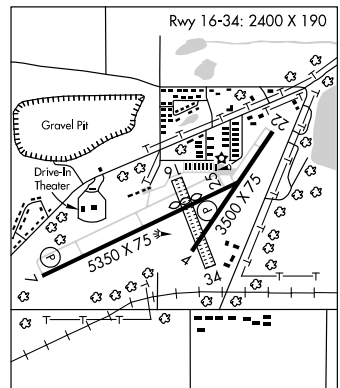
LITCHFIELD RCO 122.1R 111.2T (LANSING RADIO)

Ⓡ KALAMAZOO APP/DEP CON 121.2 (1100-0400Z‡)

Ⓡ CHICAGO CENTER APP/DEP CON 127.55 (0400-1100Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

LITCHFIELD (L) VOR/DME 111.2 LFD Chan 49 N42°03.75' W84°45.91' 244° 15 NM to fld. 1040/05W.

**COLEMAN A. YOUNG MUNI** (See DETROIT)**COWLEY FLD** (See SANDUSKY)**CROSWELL****ARNOLD FLD** (55G) 2 NE UTC-5(-4DT) N43°17.87' W82°36.40'

DETROIT

780 NOTAM FILE LAN

RWY 18-36: 2585X140 (TURF)**RWY 18:** Thld dspclcd 500'. Trees. **RWY 36:** Thld dspclcd 470'. P-line.**RWY 07-25:** 2570X75 (TURF)**RWY 07:** Thld dspclcd 540'. P-line. **RWY 25:** Tree.**AIRPORT REMARKS:** Unattended. Arpt CLOSED Nov-Mar. Winter ops skis only. Rwy 18-36 marked with cones, dspclcd thld marked three 12 inch yellow cones each side. Rwy 07 dspclcd thld marked with 3' boards, Rwy 07-25 thlds defined by mowing.**COMMUNICATIONS:** CTAF/UNICOM 122.8

CRYSTAL FALLS

IRON CO (50D) 6 SE UTC-6(-5DT) N46°00.55' W88°16.43'

GREEN BAY
L-31A

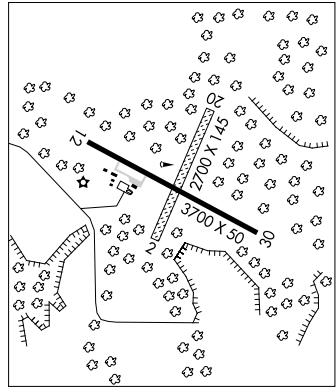
1340 B NOTAM FILE GRB
RWY 12-30: H3700X50 (ASPH) MIRL (NSTD)
RWY 12: Trees **RWY 30:** Trees
RWY 02-20: 2700X145 (TURF)
RWY 02: Trees **RWY 20:** Trees

AIRPORT REMARKS: Unattended. No snow removal. Deer on and invof arpt. Rwy 12-30 has crumbled, has numerous cracks and vegetation in pavement. Rwy 12-30 numerous cracks in pavement. Rwy 02-20 MIRL NSTD; 36' from rwy edge. Rwy 02 also 92' tree; 2300' distance; apch ratio 25:1, based on straight out. ACTIVATE NSTD MIRL Rwy 12-30-121.7. Rwy 02-20 marked with 3' yellow cones. Rwy paint markings have failed.

COMMUNICATIONS: CTAF 122.9

RADIO AIDS TO NAVIGATION: NOTAM FILE IMT.

IRON MOUNTAIN (L) VOR/DME 111.2 IMT Chan 49 N45°48.96' W88°06.73' 330° 13.8 NM to fld. 1128/2W.



CUSTER (See MONROE)

DALTON (See FLUSHING)

DAVID'S LANDING (See ST CLAIR)

DAVISON

ATHELONE WILLIAMS MEML (6G0) 1 W UTC-5(-4DT) N43°01.75' W83°31.78'

DETROIT
L-28J
IAP

780 NOTAM FILE LAN
RWY 08-26: H3469X40 (ASPH) MIRL (NSTD)
RWY 08: Thld dsplcd 170'. P-line.
RWY 26: Thld dsplcd 368'. P-line.

AIRPORT REMARKS: Unattended. Rwy 08-26 surface cracked, peeling, rough and has loose asphalt. Rwy 08-26-4' drainage ditch 60' left and right of rwy centerline along entire length. Rwy 08-26 NSTD MIRL; lgts located 20' from rwy edge.

COMMUNICATIONS: CTAF 122.9

FLINT RCO 122.3 (LANSING RADIO)

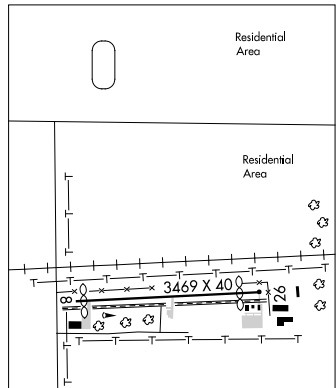
Ⓡ **FLINT APP/DEP CON** 128.55 (N/W of active rwy) 118.8 (E/S of active rwy) (1045-0430Z‡)

CLEVELAND CENTER APP/DEP CON 126.75 (0430-1045Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE FNT.

FLINT (H) VORTACV 116.9 FNT Chan 116 N42°58.01' W83°44.82' 075° 10.3 NM to fld. 772/6W.

COMM/NAV/WEATHER REMARKS: APP CON sectorization based upon Flint rwy usage



DECKERVILLE

INDIAN CREEK RANCH (56G) 5 NE UTC-5(-4DT) N43°34.66' W82°38.86'

DETROIT

745 NOTAM FILE LAN
RWY 09-27: 3569X100 (TURF)
RWY 09: Tank. **RWY 27:** P-line.
RWY 18-36: 2390X100 (TURF)
RWY 18: Trees. **RWY 36:** Road.

AIRPORT REMARKS: Unattended. Arpt CLOSED Nov 1 to Apr 1. Rwys soft in spring. Numerous deer on and invof arpt. Rwy 09-27 and Rwy 18-36 surface rough with irregular mowing. Rwy 09-27 and Rwy 18-36 defined by mowing. Rwy 36 thld marked with 3 cones each side.

COMMUNICATIONS: CTAF 122.9

DELTA CO (See ESCANABA)

DETROIT**COBO HALL HELIPORT** (84G) 0 N UTC-5(-4DT) N42°19.55' W83°02.88'**DETROIT
COPTER**

650 NOTAM FILE LAN

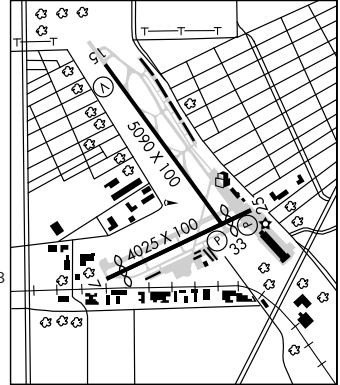
HELIPAD H1: H30X24 (ASPH)

HELIPORT REMARKS: Unattended. Heliport CLOSED indef. For arpt attendant call Cobo Hall contact person at 313-852-6400. Call 313-267-6400 for Cobo Hall combination. Touchdown surface elevated approximately 2' abv the roof top surface. Rwy H1 NSTD markings; red H with white background. Ldg fee. Helipad H1 loose bricks and asph on ldg surface. UNICOM unmonitored. Helipad H1 perimeter lghts. ACTIVATE Perimeter lghts—CTAF.

COMMUNICATIONS: CTAF/UNICOM 123.05**COLEMAN A. YOUNG MUNI** (DET) 5 NE UTC-5(-4DT) N42°24.55' W83°00.59'**DETROIT
COPTER
H-10G, L-28J, A
IAP, AD**626 B **FUEL** 100LL, JET A OX 1, 2, 3 AOE NOTAM FILE DET**RWY 15-33:** H5090X100 (ASPH - GRVD) S-75, D-135, ST-120 HIRL**RWY 15:** REIL. VASI(V2R)—GA 3.0° TCH 56'. Trees.**RWY 33:** REIL. PAPI(P4L)—GA 3.0° TCH 49'. Trees.**RWY 07-25:** H4025X100 (ASPH) S-12.5 MIRL**RWY 07:** Thld dspcld 715'. Railroad.**RWY 25:** PAPI(P4L)—GA 4.0° TCH 40'. Thld dspcld 716'. Pole.**LAND AND HOLD SHORT OPERATIONS**

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 15	07-25	4900

AIRPORT REMARKS: Attended continuously. Birds on and invof arpt. Unlighted twr 275' AGL 1 mile WSW. Loading/Unloading Class A explosives or poisons not permitted. PPR for Class B and C explosives. Due to noise abatement requirements jets and acft over 12,500 lbs GWT must use Rwy 15-33 except when winds exceed 25 knots, then Rwy 07-25 avbl. Twy D1 clsd indef. Ldg fee for acft 6000 lbs or more. Rwy 33 REIL OTS indef. HIRL Rwy 15-33 step five OTS indef. Rwy 15 VASI OTS indef. Flight Notification Service (ADCUS) avbl.

WEATHER DATA SOURCES: ASOS (313) 371-9696.**COMMUNICATIONS:** ATIS 124.875 UNICOM 122.95**RCO** 122.2 122.55 (LANSING RADIO)® **DETROIT APP/DEP CON** 126.85**TOWER** 121.3 **GND CON** 121.85**RADIO AIDS TO NAVIGATION:** NOTAM FILE YQG.**WINDSOR ONT VOR/DME** 113.8 YQG Chan 85 N42°14.99' W82°49.73' 326° 12.5 NM to fld. 620/6W.**MADDS NDB (LOM)** 338 DE N42°29.69' W83°05.60' 149°6.3 NM to fld. Unmonitored.**CARGL NDB (MHW/LOM)** 230 VQ N42°21.38' W82°57.26' 327° 4 NM to fld. NOTAM FILE DET.**ILS** 111.3 I-DET Rwy 15. LOM MADDS NDB.**ILS** 111.3 I-VQM Rwy 33. LOM CARGL NDB.

DETROIT METROPOLITAN WAYNE CO

(DTW) 15 S UTC-5(-4DT) N42°12.75' W83°21.20'

DETROIT

645 B S2 FUEL 100LL, JET A OX 1, 3, 4 AOE Class I, ARFF Index E NOTAM FILE DTW

COPTER

RWY 04R-22L: H12003X200 (CONC-GRVD) S-100, D-185, ST-175, DT-350 HIRL CL

H-10G, L-28I, A

RWY 04R: ALSF2. TDZL. Tree. **RWY 22L:** MALS.R. Railroad.

IAP, AD

RWY 03R-21L: H10001X150 (CONC-GRVD) S-100, D-200, ST-175,

DT-350, DDT-750 HIRL CL

RWY 03R: ALSF2. TDZL. PAPI(P4R)—GA 3.0° TCH 54'. Trees.

RWY 21L: MALS.R. PAPI(P4L)—GA 3.0° TCH 55'. Berm.

RWY 04L-22R: H10000X150 (CONC-GRVD) S-100, D-200,

ST-175, DT-350, DDT-750 HIRL CL

RWY 04L: ALSF2. TDZ. Pole. **RWY 22R:** MALS.R. Antenna.

RWY 09L-27R: H8708X150 (ASPH-CONC-GRVD) S-100, D-185,

ST-175, DT-350 HIRL

RWY 09L: REIL. Antenna.

RWY 27R: MALS.R. PAPI(P4L)—GA 3.0° TCH 61'.

RWY 03L-21R: H8501X200 (ASPH-CONC-GRVD) S-100, D-185,

ST-175, DT-350 HIRL CL

RWY 03L: REIL. PAPI(P4R)—GA 3.0° TCH 58'. Pole.

RWY 21R: REIL. PAPI(P4L)—GA 3.0° TCH 59'. Pole.

RWY 09R-27L: H8500X150 (CONC-GRVD) S-100, D-185, ST-175,

DT-350 HIRL CL

RWY 09R: REIL.

RWY 27L: MALS.R. PAPI(P4L)—GA 3.0° TCH 55'.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 03L: TORA-8501 TODA-8501 ASDA-8501 LDA-8501

RWY 03R: TORA-10001 TODA-10001 ASDA-10001 LDA-10001

RWY 04L: TORA-10000 TODA-10000 ASDA-10000 LDA-10000

RWY 04R: TORA-12003 TODA-12003 ASDA-12003 LDA-12003

RWY 09L: TORA-8708 TODA-8708 ASDA-8618 LDA-8618

RWY 09R: TORA-8500 TODA-8500 ASDA-8500 LDA-8500

RWY 21L: TORA-10001 TODA-10001 ASDA-10001 LDA-10001

RWY 21R: TORA-8501 TODA-8501 ASDA-8501 LDA-8501

RWY 22L: TORA-12003 TODA-12003 ASDA-12003 LDA-12003

RWY 22R: TORA-10000 TODA-10000 ASDA-10000 LDA-10000

RWY 27L: TORA-8500 TODA-8500 ASDA-8500 LDA-8500

RWY 27R: TORA-8708 TODA-8708 ASDA-8708 LDA-8708

AIRPORT REMARKS: Attended continuously. Be alert birds, waterfowl on and in/ovf arpt. Rwy 21R departures be alert for optical illusion, acft taxiing on Twy T may appear as though crossing Rwy 21R centerline. Rwy 22L departures be alert for optical illusion, acft taxiing on Twy Q may appear as though crossing Rwy 22L centerline. Brightly lgtd parking lot 2.6 NM SW of arpt. ASDE-X surveillance system in use: pilots should operate transponders with mode C on all twys and rwys. Rwy 03R ALSF2 req when RVR/visibility is 6000/1 mile or less. SSALR ops when RVR/visibility is 6000/1 mile. Rwy 03L-21R touchdown and rollout rwy visual range avbl. Rwy 04L-22R touchdown, midfield and rollout rwy visual range avbl. Rwy 09L rwy visual range midfield avbl. Rwy 27L touchdown rwy visual range avbl. Acft on Twy F and Twy V do not block fire station exits. Twy G N of Twy V is a non-movement area. Ldg fee. Flight Notification Service (ADCUS) available.

WEATHER DATA SOURCES: ASOS (734) 941-7848. LLWAS. TDWR.

COMMUNICATIONS: D-ATIS 133.675 734-941-5363 UNICOM 122.95

CARLETON RCO 122.1R 115.7T (LANSING RADIO)

Ⓡ APP CON 125.15 118.575 (EAST) 124.05 (WEST) 124.975 124.25

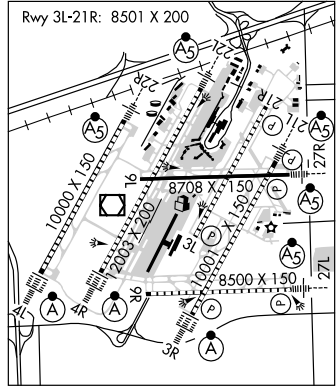
Ⓡ DEP CON 132.025 (TURBOJETS-EAST) 134.3 (TURBOPROPS-EAST) 125.525 (TURBOJETS-WEST) 118.95 (TURBOPROP-WEST) 118.575 (EAST)

METRO TOWER 135.0 (WEST) 118.4 (EAST)

GND CON 121.8 (NORTHWEST) 132.72 (SOUTHWEST) 119.25 (SOUTHEAST) 119.45 (NORTHEAST)

CLNC DEL 120.65 PRE TAXI CLNC 120.65

AIRSPACE: CLASS B: See VFR Terminal Area Chart.



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RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

CARLETON (H) VORTAC 115.7 CRL Chan 104 N42°02.88' W83°27.45' 028° 10.9 NM to fld.
629/3W. HIWAS.

(H) VORW/DME 113.4 DXO Chan 81 N42°12.79' W83°22.00' at fld. 638/6W. NOTAM FILE DTW.
DME unusable byd 30 NM below 2900'.

REVUP NDB (LOM) 388 DT N42°07.21' W83°25.90' 038° 6.6 NM to fld. Unmonitored. SHUTDOWN.
SPENC NDB (LOM) 223 DM N42°13.20' W83°12.20' 272° 6.7 NM to fld.

ILS/DME 111.95 I-HJT Chan 56Y Rwy 04L. Class III E. DME also serves Rwy 22R.

ILS/DME 110.7 I-DTW Chan 44 Rwy 04R. LOM REVUP NDB. OM unmonitored. LOM SHUTDOWN.

ILS/DME 110.7 I-DWC Chan 44 Rwy 22L. Class IE.

ILS/DME 111.95 I-JKI Chan 56Y Rwy 22R. Class IE. DME also serves Rwy 04R.

ILS/DME 111.5 I-HUU Chan 52 Rwy 03R.

ILS/DME 111.5 I-EJR Chan 52 Rwy 21L.

ILS 108.5 I-DMI Rwy 27R. LOM SPENC NDB.

ILS 110.15 I-EPA Rwy 27L. Class IE.

COMM/NAV/WEATHER REMARKS: Dual VHF communications required for Simultaneous Close Parallel ILS PRM

Approaches. Rwy 04L and Rwy 22R Monitor 127.05, Rwy 04R and Rwy 22L Monitor 135.775 and Rwy 03R and Rwy 21L Monitor 128.35.

WILLOW RUN (YIP) 24 SW UTC-5(-4DT) N42°14.36' W83°31.86'

716 B S4 FUEL 100LL, JET A OX 1, 3 LRA ARFF Index—See Remarks NOTAM FILE YIP COPTER

RWY 05R-23L: H7526X150 (ASPH) S-55, D-70, ST-89, DT-120 HIRL

H-10G, L-28J, A

RWY 05R: MALSR. Tree.

IAP, AD

RWY 23L: MALSR. VASI(V4L)—GA 3.0° TCH 56'.

RWY 09-27: H7294X160 (ASPH-GRVD) S-55, D-70, ST-89,
DT-120 MIRL

RWY 09: Thld dsplcd 574'. Railroad.

RWY 14-32: H6312X160 (ASPH-GRVD) S-35, D-45, DT-90 MIRL

RWY 14: Antenna.

RWY 32: REIL. PAPI(P4L)—GA 3.5° TCH 45'. Thld dsplcd 525'.
Ground.

RWY 05L-23R: H5995X160 (ASPH-GRVD) S-35, D-45, DT-90
MIRL

RWY 05L: Trees. RWY 23R: Trees.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 05L: TORA-5995 TODA-5995 ASDA-5995 LDA-5995

RWY 23R: TORA-5995 TODA-5995 ASDA-5995 LDA-5995

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

Class IV, ARFF Index A. ARFF Index E svc avbl on req call
734-485-6660. Rws 09-27, only the 80' center portion is grvd.

48 hr PPR for unscheduled air carrier ops with more than 30
passenger seats call arpt manager 734-485-6670. Flight
Notification Service (ADCUS) avbl call 734-942-9000. Customs avbl 24 hrs, Mon-Fri and on call from Detroit

Metropolitan Wayne Co arpt on weekend. U.S. customs user fee arpt. All billing thru Wayne Co. Arpt Authority;
For customs clearance 1 hr minimum advance notification rqr. Pilots must ctc U.S. customs on 313-226-3140.

Req for customs svc by FAA flight plan is not accepted. Ldg fee. Ldg fee is based on acft gross weight.

WEATHER DATA SOURCES: ASOS 132.350 (734) 485-9056. LAWRS.

COMMUNICATIONS: ATIS 127.425 (734) 482-6590

Ⓡ DETROIT APP/DEP CON 118.95

TOWER 125.275 GND CON 121.75

RADIO AIDS TO NAVIGATION: NOTAM FILE DTW.

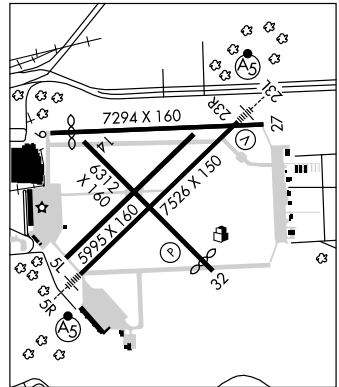
DETROIT (H) VORW/DME 113.4 DXO Chan 81 N42°12.79' W83°22.00' 288° 7.5 NM to fld. 638/6W.

YIPPS NDB (LOM) 359 YI N42°10.45' W83°37.29' 052° 5.6 NM to fld. Unmonitored.

ILS/DME 109.5 I-YIP Chan 32 Rwy 05R. Class IE. LOM YIPPS NDB.

ILS/DME 109.5 I-LSW Chan 32 Rwy 23L. Class IE.

COMM/NAV/WEATHER REMARKS: Emerg frequencies not avbl at twr.



DETROIT/GROSSE ILE**GROSSE ILE MUNI** (ONZ) 2 S UTC-5(-4DT) N42°05.94' W83°09.69'

591 B S4 FUEL 100LL, JET A TPA-1591(1000) NOTAM FILE ONZ

RWY 04-22: H4846X100 (CONC) S-66, D-83, DT-105 MIRL 0.3% up NE

RWY 04: REIL. PAPI(P4L)—GA 3.0° TCH 38'. Rgt tfc.

RWY 22: REIL. PAPI (P4L)—GA 3.0° TCH 38'. Trees.

RWY 17-35: H4425X75 (CONC) S-40, D-55, DT-90 MIRL

RWY 17: PAPI(P4L)—GA 3.0° TCH 26'. Thld dspcd 675'. Trees.

RWY 35: PAPI(P4L)—GA 3.0° TCH 20'. Brush. Rgt tfc.

AIRPORT REMARKS: Attended Mon-Fri 1300-2300Z \ddagger , Sat-Sat 1300-2200Z \ddagger . Birds and deer on and infov arpt. Arpt CLOSED to air carrier ops with more than 30 passenger seats except PPR, call arpt manager 734-675-0155. Rwy 04 PAPI OTS indef. Rwy 04 REIL OTS indef. MIRL Rws 04-22 and 17-35 preset low ints dusk-0400Z \ddagger ; to increase ints and ACTIVATE after 0400Z \ddagger -CTAF. ACTIVATE REIL Rwy 04 and PAPI Rwy 17 and Rwy 35 and Rwy 22 and Rwy 04-CTAF.

WEATHER DATA SOURCES: AWOS-3 119.675 (734) 692-9686**COMMUNICATIONS:** CTAF/UNICOM 123.0

CARLETON RCO 122.1R 115.7T (LANSING RADIO)

Ⓡ **DETROIT APP/DEP CON** 134.3 **GCO** 121.725 (DETROIT CLNC and LANSING FSS)

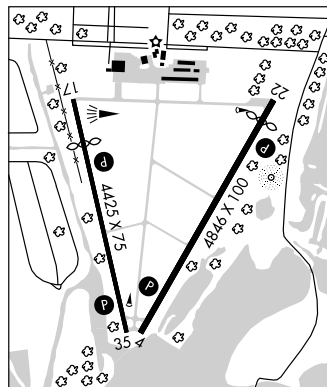
RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

CARLETON (H) VORTAC 115.7 CRL Chan 104 N42°02.88'

W83°27.45' 080° 13.6 NM to fld. 629/3W.

HIWAS.

NDB (MHW) 419 RYS N42°06.07' W83°09.18' at fld. NOTAM FILE ONZ.

DETROIT
COPTER
L-281, A
IAP**DEXTER****CACKLEBERRY** (2E8) 5 NW UTC-5(-4DT) N42°25.50' W83°52.16'

890 NOTAM FILE LAN

RWY 06-24: 2113X100 (TURF)

RWY 06: Thld dspcd 315'. Trees.

RWY 24: Thld dspcd 300'. Tree.

AIRPORT REMARKS: Attended irregularly. Snow removal limited, check rwy condition prior to use winter months. Rwy 06-24 marked with cones; dspcd thlds marked with two cones each side. Rwy 06-24 NSTD LIRL due to color and configuration; not for public use.

COMMUNICATIONS: CTAF 122.9DETROIT
COPTER**DOUBLE JJ RESORT RANCH** (See ROTHBURY)**DOWAGIAC MUNI** (C91) 1 NW UTC-5(-4DT) N41°59.58' W86°07.70'

747 B FUEL 100LL TPA-1548(800) NOTAM FILE LAN

RWY 09-27: H4700X100 (ASPH) S-30, D-60 MIRL

RWY 09: REIL. VASI(V4L)—GA 3.0° TCH 35'. Trees.

RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 35'. Trees. Rgt tfc.

RWY 04-22: 2176X100 (TURF)

RWY 04: Trees.

RWY 22: Thld dspcd 388'. Tree. Rgt tfc.

AIRPORT REMARKS: Attended 1300Z \ddagger -dusk. Self svc fuel avbl 24 hrs. Numerous ultralights and acft with no radio on and infov arpt. Deer on and infov arpt. Model radio ctl acft opr E side of Rwy 04-22. ACTIVATE MIRL Rwy 09-27; VASI Rwy 09 and PAPI Rwy 27; and REIL Rws 09 and 27-122.8. Rwy 04-22 and dspcd thld marked with 3' yellow cones.

COMMUNICATIONS: CTAF/UNICOM 122.8

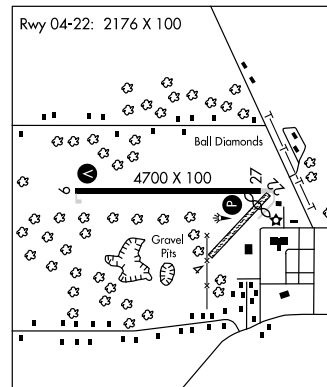
KEELER RCO 122.1R116.6T (LANSING RADIO)

Ⓡ **SOUTH BEND APP/DEP CON** 118.55 (Sun-Fri 1030-0500Z, Sat 1030-0445Z), other times ctc Ⓡ **CHICAGO CENTER APP/DEP CON** 127.55

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

KEELER (L) VOR/DME 116.6 ELX Chan 113 N42°08.66'

W86°07.36' 182° 9.1 NM to fld. 795/00E.

CHICAGO
L-281
IAP

DRUMMOND ISLAND (DRM) 1 SW UTC-5(-4DT) N46°00.56' W83°44.64'

LAKE HURON

668 B S4 FUEL 100LL, JET A, MOGAS OX 1, 3 LRA NOTAM FILE DRM

L-31C

RWY 08-26: H4000X75 (ASPH) MIRL

IAP

RWY 08: PAPI(P2L)—GA 3.0° TCH 35'. Thld dsplcd 650'. Trees.

RWY 26: PAPI(P2L)—GA 3.0° TCH 25'. Thld dsplcd 170'. Road.

RWY 18-36: 2500X150 (TURF)

RWY 18: Trees. RWY 36: Trees.

AIRPORT REMARKS: Attended Mon-Sat 1300-2200Z±. Birds and deer invof arpt. Occasional golf carts and pedestrians crossing Rwy 08-26 due to golf course on both sides. Rwy 18-36 marked with 3' yellow cones. Rwy 18-36 center 20' portion of rwy from intersection Rwy 18-36 N to the hangar line is asph; remainder of rwy turf. ACTIVATE MIRL Rwy 08-26 and PAPI Rwy 08 and 26—CTAF. Flight Notification Service (ADCUS) available.

WEATHER DATA SOURCES: AWOS-3 118.325 (906) 493-6410.

COMMUNICATIONS: CTAF/UNICOM 122.8

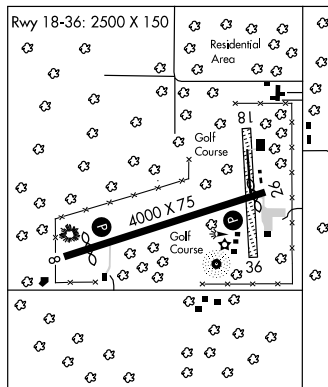
® TORONTO CENTER APP/DEP CON 132.65

RADIO AIDS TO NAVIGATION: NOTAM FILE CIU.

SAULT STE MARIE (H) VOR/DME 112.2 SSM Chan 59 N46°24.73'

W84°18.89' 139° 33.9 NM to fld. 687/4W.

NDB (MHW) 218 DRM N46°00.44' W83°44.53' at fld. NOTAM FILE DRM. Unmonitored.



DUFORD FLD (See GENESSEE)

DUPONT-LAPEER (See LAPEER)

EAST JORDAN CITY (Y94) 2 SE UTC-5(-4DT) N45°07.81' W85°06.40'

GREEN BAY

642 NOTAM FILE LAN

L-31B

RWY 09-27: H3250X50 (ASPH) MIRL

RWY 09: Road. RWY 27: VASI(V2L)—GA 4.0° TCH 32'. Thld dsplcd 125'. Road.

RWY 18-36: 1800X120 (TURF)

RWY 18: Trees. RWY 36: Trees.

AIRPORT REMARKS: Unattended. Birds and deer on and invof arpt. Rwy 18-36 CLOSED indef. 1670' MSL tower 3 NM NE. ACTIVATE MIRL Rwy 9-27 and VASI Rwy 27—122.8. Rwy 18-36 marked with 3' yellow cones. Rwy 18-36 surface rough with bare spots.

COMMUNICATIONS: CTAF 122.9

GAYLORD RCO 122.55 (LANSING RADIO)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

GAYLORD (L) VOR/DME 109.2 GLR Chan 29 N45°00.75' W84°42.26' 299° 18.5 NM to fld. 1318/4W.

EAST TAWAS

IOSCO CO (6D9) 3 NE UTC-5(-4DT) N44°18.77' W83°25.34'

LAKE HURON

606 B S4 FUEL 100LL NOTAM FILE LAN

L-31C

RWY 08-26: H4802X75 (ASPH) S-12 MIRL

IAP

RWY 08: REIL. PAPI(P2L)—GA 3.0° TCH 33'. Tree.

RWY 26: REIL. PAPI(P2L)—GA 3.0° TCH 33'. Trees.

AIRPORT REMARKS: Attended Mon-Fri 1400-2300Z±, Sundays on call 989-362-4515. For airframe repairs call 989-362-4515.

Parachute Jumping. Numerous deer on and invof arpt. ACTIVATE MIRL Rwy 08-26—122.85.

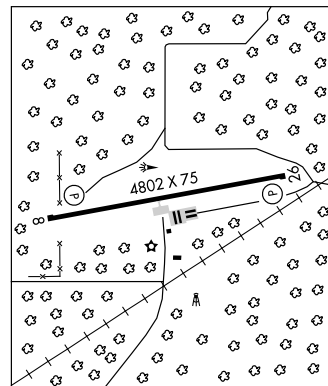
COMMUNICATIONS: CTAF/UNICOM 122.8

® MINNEAPOLIS CENTER APP/DEP CON 118.525

RADIO AIDS TO NAVIGATION: NOTAM FILE OSC.

AU SABLE (H) VOR/DME 116.1 ASP Chan 108 N44°26.95'

W83°23.66' 195° 8.3 NM to fld. 625/7W.



EASTPORT

TORCHPORT (59M) 3 S UTC-5(-4DT) N45°03.35' W85°21.36'

GREEN BAY

640 NOTAM FILE LAN
RWY 09-27: 3300X100 (TURF)
RWY 09: Trees. **RWY 27:** Thld dspclcd 1200'. Trees.
RWY 04-22: 2600X100 (TURF)
RWY 04: Tree. **RWY 22:** Thld dspclcd 600'. Road.

AIRPORT REMARKS: Unattended. No snow removal; 110 V outlets for ski equipped acft. Rwy 09-27 and Rwy 04-22 dspclcd thlds marked with cones. Rwy 09-27 uneven rolling terrain.

COMMUNICATIONS: CTAF: 122.9

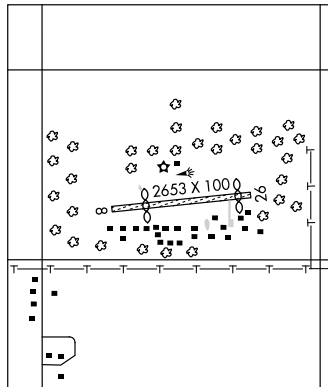
EATON RAPIDS

SKYWAY ESTATES (60G) 4 N UTC-5(-4DT) N42°35.02' W84°39.08'

DETROIT
 L-281
 IAP

931 B NOTAM FILE LAN
RWY 08-26: 2653X100 (TURF) MIRL
RWY 08: Thld dspclcd 685'. Trees.
RWY 26: Thld dspclcd 200'. Trees.
AIRPORT REMARKS: Unattended. Verify arpt condition during winter and spring; call 517-663-2471. Aerobatic box N of Rwy 08-26. Aerobatic practice area in 3 NM radius of arpt during dalgt hrs; 1500' AGL to 6000' MSL. Check with Lansing twr. Rwy 26 also, apch ratio 12:1 over 28' tree, 345' distance, 15' left. ACTIVATE MIRL Rwy 08-26—CTAF. Rwy 08-26 and dspclcd thlds marked with 3' yellow cones. NOTE: See Special Notices—Aerobatic Practice Area.

COMMUNICATIONS: CTAF 122.9
LANSING APP/DEP CON 118.65
RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.
LANSING (L) VORTACW 110.8 LAN Chan 45 N42°43.04' W84°41.85' 171° 8.3 NM to fld. 887/5W.



EDWARD F JOHNSON (See ISHPEMING)

ELK RAPIDS

YUBA (34U) 4 S UTC-5(-4DT) N44°50.33' W85°25.87'

GREEN BAY

645 NOTAM FILE LAN
RWY 18-36: 2975X100 (TURF)
RWY 18: Trees. **RWY 36:** P-line.

AIRPORT REMARKS: Unattended. Arpt CLOSED Nov thru Apr. Orchard/crops both sides of rwy. Rwy slopes down from S to N.

COMMUNICATIONS: CTAF 122.9

ELWELL

HAMP (68R) 3 W UTC-5(-4DT) N43°23.97' W84°48.05'

DETROIT

825 S4 NOTAM FILE LAN
RWY 09-27: 2580X100 (TURF)
RWY 09: Thld dspclcd 1180'. Pole. **Rwy 27:** Trees.

AIRPORT REMARKS: Attended continuously. Rwy 09-27 rolling terrain. Rwy 09-27 and dspclcd thlds marked with 3' yellow cones. NSTD rwy lighting, for local use only.

COMMUNICATIONS: CTAF 122.9

EMMETT

SHARPE'S STRIP (2E2) 2 N UTC-5(-4DT) N42°57.10' W82°46.56'

DETROIT

810 NOTAM FILE LAN
RWY 18-36: 2700X90 (TURF)
RWY 18: Thld dspclcd 700'. P-line. **Rwy 36:** Trees.

AIRPORT REMARKS: Attended irregularly. Deer and turkeys invof arpt. Rwy 18 and Rwy 36 and dspclcd thld marked with yellow cones.

COMMUNICATIONS: CTAF 122.9

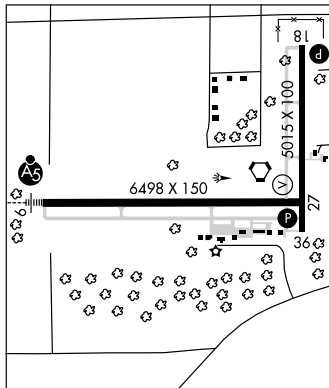
EMPIRE (Y87) 3 SE UTC-5(-4DT) N44°47.25' W86°00.26' **GREEN BAY**
 944 NOTAM FILE LAN
RWY 17-35: H2600X50 (ASPH) S-12.5 LIRL
RWY 17: Thld dsplcd 718'. Trees. **RWY 35:** Thld dsplcd 182'. Trees.
RWY 09-27: 2275X150 (TURF)
RWY 09: Thld dsplcd 200'. Trees. **RWY 27:** Thld dsplcd 280'. Road.
AIRPORT REMARKS: Unattended. Rwy 09-27 CLOSED Dec thru Mar and when snow covered, no snow removal. Ultralight and radio control activity on and infov arpt. Rwy 17-35 loose stones on rwy. Rwy 09-27 uneven rolling terrain. Campground adjacent to arpt; call 231-326-5285. Rwy 09-27 and dsplcd thlds marked with 3' yellow cones. Rwy 35 windsock 110' E of rwy centerline. LIRL Rwy 17-35 inoperative Nov-May. ACTIVATE LIRL Rwy 17-35 Jun-Oct-CTAF.
COMMUNICATIONS: CTAF 122.9

ERIE AERODROME (M84) 1 SW UTC-5(-4DT) N41°46.96' W83°31.07' **DETROIT COPTER**
 605 FUEL MOGAS NOTAM FILE LAN
RWY 18-36: 2670X80 (TURF)
RWY 18: Trees. **RWY 36:** Thld dsplcd 760. P-line.
AIRPORT REMARKS: Attended irregularly. -5' ditch N of Rwy 18; 55' left and right of centerline. Rwy 36, +34' power line 50' distance, marked with orange balls. Rwy 18 and Rwy 36 thlds and Rwy 36 dsplcd thld marked with 3' cones.
COMMUNICATIONS: CTAF 122.9

ESCANABA N45°43.36' W87°05.38' NOTAM FILE ESC. **GREEN BAY**
 (L) VORW/DME 110.8 ESC Chan 45 at Delta Co. 594/00E. HIWAS. **L-31B**
 RCO 122.3 (GREEN BAY RADIO)

ESCANABA

DELTA CO (ESC) 2 SW UTC-5(-4DT) N45°43.36' W87°05.62' **GREEN BAY**
 609 B S2 FUEL 100LL, JET A Class I, ARFF Index A NOTAM FILE ESC **H-21, L-31B**
RWY 09-27: H6498X150 (ASPH-PFC) S-80, D-120, ST-152, DT-210 HIRL **IAP**
RWY 09: MALSR. Trees.
RWY 27: REIL. VASI(V4R)—GA 3.0° TCH 53'. Trees.
RWY 18-36: H5015X100 (ASPH-PFC) S-40, D-60 MIRL
 0.3% up N
RWY 18: PAPI(P4L)—GA 3.0° TCH 42'. Trees.
RWY 36: REIL. PAPI(P4L)—GA 3.0° TCH 27'. Trees.
RUNWAY DECLARED DISTANCE INFORMATION
RWY 09: TORA-6498 TODA-6498 ASDA-6498 LDA-6498
RWY 18: TORA-5015 TODA-5015 ASDA-5015 LDA-5015
RWY 27: TORA-6498 TODA-6498 ASDA-6498 LDA-6498
RWY 36: TORA-5015 TODA-5015 ASDA-5015 LDA-5015
AIRPORT REMARKS: Attended 1100-0400Z±. PPR other times call 906-420-1591. Waterfowl and birds on and infov arpt. Deer on and infov arpt. ACTIVATE HIRL Rwy 09-27; MIRL Rwy 18-36; PAPI Rwys 18 and 36; REIL Rwy 36 and MALSR Rwy 09-CTAF. Fee for multi engine acft.
WEATHER DATA SOURCES: AWOS-3 121.425 (906) 786-9001. HIWAS 110.8 ESC.
COMMUNICATIONS: CTAF/UNICOM 122.8
 ESCANABA RCO 122.3 (GREEN BAY RADIO)
 (R) MINNEAPOLIS CENTER APP/DEP CON 127.65
RADIO AIDS TO NAVIGATION: NOTAM FILE ESC.
 ESCANABA (L) VORW/DME 110.8 ESC Chan 45 N45°43.36' W87°05.38' at fld. 594/00E. HIWAS.
 PIKLE NDB (LOM) 344 ES N45°43.36' W87°13.49' 087° 5.5 NM to fld.
 ILS 109.3 I-ESC Rwy 09. Class IE. LOM PIKLE NDB.



EVART MUNI (9C8) 1 SW UTC-5(-4DT) N43°53.75' W85°16.75'

CHICAGO

1018 NOTAM FILE LAN

L-281, 31B

RWY 06-24: H3800X75 (ASPH) MIRL

RWY 06: REIL. PAPI(P2L)—GA 3.0° TCH 25'. Trees.

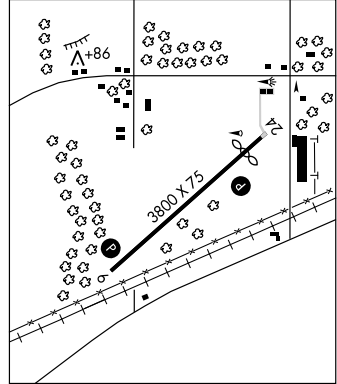
RWY 24: REIL. PAPI(P2L)—GA 4.0° TCH 25'. Thld dspicd 880'.
Trees.

AIRPORT REMARKS: Unattended. Rwy 24 overrun 384'. ACTIVATE MIRL
Rwy 06-24; PAPI and REIL Rwys 06 and 24—CTAF.

COMMUNICATIONS: CTAF 122.9

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

WHITE CLOUD (L) VOR/DME 117.6 HIC Chan 123 N43°34.49'
W85°42.97' 045° 27.1 NM to fld. 920/1W.



FELPS N44°57.65' W83°33.61' NOTAM FILE APN.

LAKE HURON

NDB (LOM) 206 AP 007° 7 NM to Alpena Co Rgnl.

FIELD OF DREAMS (See HALE)

FIFE LAKE SPB (M47) 1 E UTC-5(-4DT) N44°34.05' W85°20.65'

GREEN BAY

1020 FUEL 100LL, MOGAS NOTAM FILE LAN

WATERWAY NW-SE: 6000X500 (WATER)

WATERWAY N-S: 5500X500 (WATER)

WATERWAY E-W: 5500X500 (WATER)

SEAPLANE REMARKS: Unattended. Fuel avbl with 3 day prior notice, 231-313-6794.

COMMUNICATIONS: CTAF 122.9

FITCH H BEACH (See CHARLOTTE)

FLINT N42°58.01' W83°44.82' NOTAM FILE FNT.

DETROIT

(H) VORTACW 116.9 FNT Chan 116 at Bishop Intl. 772/6W.

H-106, 11A, L-281

VOR portion unusable byd 30 NM blo 3000'. DME unusable byd 30 NM blo 3000'.

RCD 122.3 (LANSING RADIO)

FLINT

BISHOP INTL (FNT) 3 SW UTC-5(-4DT) N42°57.93' W83°44.62'

782 B S4 FUEL 100LL, JET A TPA—See Remarks AOE Class I, ARFF Index B
NOTAM FILE FNT

DETROIT
H-106, 11A, L-28J
IAP, AD

RWY 18-36: H7848X150 (ASPH-PFC) S-100, D-169, ST-175, DT-270 HIRL

RWY 18: VASI(V4L)—GA 3.0° TCH 41'. Thld dspcd 200'. Tree.

RWY 36: VASI(V4L)—GA 3.0° TCH 54'. Tree.

RWY 09-27: H7200X150 (ASPH-PFC) S-100, D-169, ST-175,
DT-235 HIRL

RWY 09: MALSR. Trees. **RWY 27:** MALSR. VASI(V4L)—GA 3.0°
TCH 56'. Trees.

LAND AND HOLD SHORT OPERATIONS

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 09	18-36	4100
RWY 36	09-27	6300

RUNWAY DECLARED DISTANCE INFORMATION

RWY 18: TORA-7848 TODA-7848 ASDA-7848 LDA-7648

RWY 36: TORA-7848 TODA-7848 ASDA-7648 LDA-7648

AIRPORT REMARKS: Attended continuously. Birds and deer on and invof
arpt. TPA-1582(800) single-engine, 1982(1200) multi-engine
acft. ACTIVATE MALSR Rwy 09-27—CTAF. Rwy lghts preset—no ints
change avbl when twr clsd.

WEATHER DATA SOURCES: ASOS (810) 232-4477.

COMMUNICATIONS: CTAF 126.3 ATIS 133.15 UNICOM 122.95

FLINT RCO 122.3 (LANSING RADIO)

Ⓡ FLINT APP CON 128.55 (N/W of active rwy) 118.8 (E/S of active rwy) 133.8 (1045-0430Z‡)

CLEVELAND CENTER APP/DEP CON 126.75 (0430-1045Z‡)

FLINT TOWER 126.3 (1045-0430Z‡) GND CON 121.9 CLNC DEL 121.75

AIRSPACE: CLASS C svc 1045-0430Z‡ ctc APP CON 128.55 (N/W of active rwy) 118.8 (E/S of active rwy) other times
CLASS E.

RADIO AIDS TO NAVIGATION: NOTAM FILE FNT.

FLINT (H) VORTACW 116.9 FNT Chan 116 N42°58.01' W83°44.82' at fld. 772/6W.

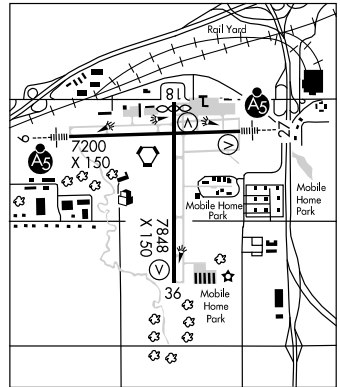
PETLI NDB (LOM) 269 FN N42°58.09' W83°53.41' 097° 6.5 NM to fld.

ILS 109.9 I-FNT Rwy 09. LOM PETLI NDB.

ILS 109.9 I-TUN Rwy 27. Class IB.

ASR (1045-0430Z‡)

COMM/NAV/WEATHER REMARKS: Emerg frequencies not avbl at twr. ILS Rwys 09, 27 and NDB unmonitored when twr clsd.



FLUSHING

DALTON (3DA) 2 E UTC-5(-4DT) N43°03.15' W83°48.29'

DETROIT

733 B FUEL: 100LL NOTAM FILE LAN

RWY 18-36: H2510X50 (ASPH) LIRL

RWY 18: Thld dspcd 771'. Tree. **RWY 36:** Thld dspcd 771'. Trees.

RWY 09-27: 1633X130 (TURF)

RWY 09: Tree. **RWY 27:** Thld dspcd 293'. Road.

AIRPORT REMARKS: Attended irregularly. Fuel available by credit card. Rwy 09-27 CLOSED Oct through Mar. Rwy
09-27 CLOSED to transient acft permanently. Rwy 09-27 marked with 3' yellow cones. ACTIVATE LIRL Rwy
18-36—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

FLYING-A-RANCH (See FRUITPORT)

FLYING M RANCH (See LINCOLN)

FORD (See IRON MOUNTAIN/KINGSFORD)

FOWLerville**MAPLE GROVE** (65G) 3 N UTC-5(-4DT) N42°43.04' W84°03.75'DETROIT
COPTER

908 S4 FUEL 100LL NOTAM FILE LAN

RWY 09-27: 3050X110 (TURF) LIRL

RWY 09: Thld dsplcd 200'. Ground. RWY 27: Thld dsplcd 300'. Road.

RWY 18-36: 2000X113 (TURF)

RWY 18: Thld dsplcd 550'. P-line. RWY 36: Thld dsplcd 275'. Road.

AIRPORT REMARKS: Attended irregularly. Parachute Jumping. Maple Grove Arpt is collocated with Maple Grove Heliport, be alert for rotary wing acft. Extensive acft training, two-way radio communications rgr. ACTIVATE LIRL Rwy 09-27—CTAF. Rwy 09-27 marked with 8 by 12 inch reflective cylinders and 3' cones; dsplcd thld marked with three 3' yellow cones. Rwy 09-27 and Rwy 18-36 and dsplcd thlds marked with cones.

COMMUNICATIONS: CTAF/UNICOM 122.8**MAPLE GROVE HELIPORT** (E66) 4 N UTC-5(-4DT) N42°43.03' W84°03.72'DETROIT
COPTER

908 S4 NOTAM FILE LAN

HELIPAD H1: H32X32 (TURF)

HELIPAD H2: H12X12 (CONC)

HELIPAD H3: H20X20 (MATS)

HELIPORT REMARKS: Attended 1400-2200Z±. Maple Grove Heliport is collocated with Maple Grove Arpt, be alert for fixed wing acft. Extensive aircraft training, two-way communications required. Helipad H2 marked with cones.

H1 gnd level helipad. H2 gnd level helipad. H3 raised level helipad. Max gross weight 3000 lbs. ACTIVATE H2 and H3 perimeter lgts and NSTD TRCV-123.025. H1, H2 and H3 FATO 70'x70'. Helipad H2 TRCV shines E. Helipad H3 TRCV shine N. Helipad H1 perimeter lgts. Helipad H2 and Helipad H3 NSTD TRCV.

COMMUNICATIONS: CTAF 122.8**FRANKENMUTH****WM "TINY" ZEHNDER FLD** (66G) 2 SE UTC-5(-4DT) N43°18.84' W83°42.58'

DETROIT

645 NOTAM FILE LAN

RWY 09-27: 2530X100 (TURF)

RWY 09: Thld dsplcd 400'. Road. RWY 27: P-line.

AIRPORT REMARKS: Attended irregularly. Snow removal intermittent; verify condition call 989-652-3652 or 989-652-9371. Rwy 09-27 soft in spring and after heavy rain. Rwy 09, 7' ditch 60' from thld. Rwy 09-27 marked with 3' yellow cones including Rwy 09 dsplcd thld. Rwy 09-27 LIRL not for public use.

COMMUNICATIONS: CTAF 122.9**FRANKFORD DOW MEMORIAL FIELD** (FKS) 2 SE UTC-5(-4DT) N44°37.51' W86°12.05'

GREEN BAY

633 B FUEL 100LL NOTAM FILE LAN

L-31B

RWY 15-33: H4050X75 (ASPH) S-25 MIRL 0.7% up NW

RWY 15: Thld dsplcd 1094'. Road.

RWY 33: REIL. PAPI(P2R)—GA 3.0° TCH 25'. Thld dsplcd 111'. Trees.

AIRPORT REMARKS: Unattended. Fuel self-service with major credit card. Extensive soaring activity and glider towing ops W of rwy. Radio controlled model acft opr W of rwy. Deer and birds on and invof arpt. Arpt bcn located on hill 1.25 miles NW of arpt. ACTIVATE MIRL Rwy 15-33; REIL Rwy 33; PAPI Rwy 33—CTAF.

WEATHER DATA SOURCES: AWOS-3 118.325 (231) 352-7573.**COMMUNICATIONS:** CTAF/UNICOM 123.05

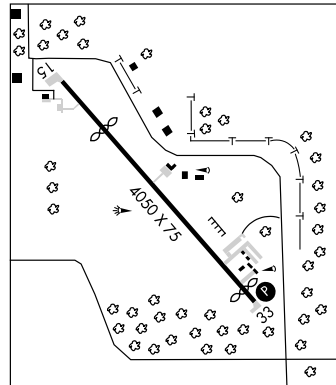
Ⓡ MINNEAPOLIS CENTER APP/DEP CON 132.9

GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)

RADIO AIDS TO NAVIGATION: NOTAM FILE MBL.

MANISTEE (L) VOR/DME 111.4 MBL Chan 51 N44°16.24'

W86°15.24' 011° 21.4 NM to fld. 618/5W.

COMM/NAV/WEATHER REMARKS: AWOS-3 wind unreliable.

FREMONT MUNI (FFX) 3 SW UTC-5(-4DT) N43°26.36' W85°59.69'

CHICAGO

772 B S4 FUEL 100LL, JET A NOTAM FILE LAN

H-2K, 10F, L-28I

RWY 18-36: H6498X100 (ASPH) S-30 MIRL

IAP

RWY 18: REIL. PAPI(P4L)—GA 3.0° TCH 25'. P-line.

RWY 36: REIL. VASI(V2L)—GA 3.0° TCH 45'. Tree.

RWY 09-27: H3502X75 (ASPH) S-16 MIRL

RWY 27: PAPI(P4L)—GA 3.7° TCH 25'. Trees.

AIRPORT REMARKS: Attended 1300Z±-dusk. For svc after hrs call 231-821-0494. Parachute Jumping. Skydiving activity summer months, weekends SR-SS, occasional weekdays noon-SS. Seaplane activity on adjacent lake .5 mile NE of arpt. Rwy 18-36 pavement cracking and loose stones on pavement. +8' crops adjacent to rwys during growing season. PAPI Rwy 18 OTS indef. ACTIVATE MIRL Rwy 09-27 and Rwy 18-36, REIL Rwy 18 and Rwy 36, VASI Rwy 36 and PAPI Rwy 18 and Rwy 27—CTAF.

WEATHER DATA SOURCES: AWOS-3 118.775 (231) 928-0715.

COMMUNICATIONS: CTAF/UNICOM 123.0

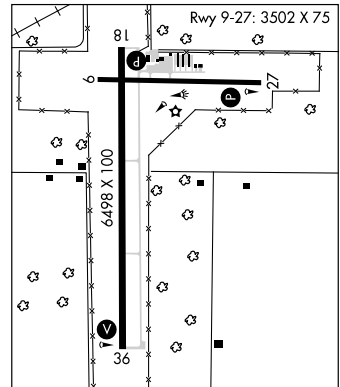
Ⓡ MUSKEGON APP/DEP CON 119.8 (1100-0400Z±) CLNC DEL 118.25

Ⓡ CHICAGO CENTER APP/DEP CON 128.5 (0400-1100Z±)

RADIO AIDS TO NAVIGATION: NOTAM FILE MKG.

MUSKEGON (L) VORTACW 115.2 MKG Chan 99 N43°10.16'

W86°02.36' 008° 16.3 NM to fld. 659/1W. HIWAS.



FRUITPORT

FLYING-A-RANCH (39Z) 2 SE UTC-5(-4DT) N43°06.30' W86°07.42'

CHICAGO

630 S4 TPA-1430(800) NOTAM FILE LAN

RWY 09-27: 1925X70 (TURF)

RWY 09: Thld dspcd 327'. Trees.

RWY 27: Trees. Rgt tfc.

AIRPORT REMARKS: Attended irregularly. Arpt is CLOSED Nov-Mar. No snow removal. Fuel avbl for emerg use only. Rwy 09-27 and dspcd thld marked with 3' yellow cones. Rwy 09-27 LIRL not for public use.

COMMUNICATIONS: CTAF 122.9

GALEY N47°06.94' W88°24.07' NOTAM FILE CMX.

GREEN BAY

NDB (MHW/L0M) 275 CM 313° 4.8 NM to Houghton Co Mem. Unmonitored.

L-14J

GARLAND (See LEWISTON)

GAVAGAN FLD (See YALE)

GAYLORD N45°00.75' W84°42.26' NOTAM FILE LAN.

LAKE HURON

(L) VORW/DME 109.2 GLR Chan 29 at Gaylord Rgnl. 1318/4W.

L-31C

VOR portion unusable 182°-195°. DME unusable byd 30 NM blo 3500'.

RCO 122.55 (LANSING RADIO)

GAYLORD RGNL (GLR) 1 SW UTC-5(-4DT) N45°00.82' W84°42.22'

LAKE HURON
H-2K, L-31C
IAP

1328 B S4 FUEL 100LL, JET A NOTAM FILE GLR
RWY 09-27: H6578X150 (ASPH) D-100, ST-127 HIRL

RWY 09: MALSR. PAPI(P4L)—GA 3.0° TCH 25'. Trees.
RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 25'. Trees.

RWY 18-36: H3319X75 (ASPH) S-12.5 MIRL

RWY 18: PAPI(P4L)—GA 4.0° TCH 41'. Trees.
RWY 36: PAPI(P4L)—GA 4.0° TCH 41'. Trees.

AIRPORT REMARKS: Attended Mon-Fri 1200-0100Z†, Sat-Sun 1300-0100Z†. For attendant call 989-732-4218; after hrs call 989-390-1178 (manager cell). After hours call-in fee.

Unattended Thanksgiving, Christmas and New Years Day. Deer and birds on and in/ov arpt. Rwy 18-36 extensive cracking in pavement. Landing fee for turbines, jets and twins. Landing fee waived with minimum fuel purchase. Overnight parking fee.

Military training activity in/ov arpt associated with Restricted Area R4201A/B. ACTIVATE HIRL Rwy 09-27 and MIRL Rwy 18-36; REIL Rwy 27 and MALSR Rwy 09—CTAF.

WEATHER DATA SOURCES: ASOS 118.375 (989) 732-1571.

COMMUNICATIONS: CTAF/UNICOM 122.8

GAYLORD RCO 122.55 (LANSING RADIO)

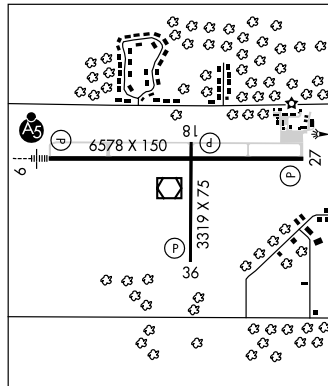
Ⓡ MINNEAPOLIS CENTER APP/DEP CON 134.6

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

GAYLORD (L) VORW/DME 109.2 GLR Chan 29 N45°00.75' W84°42.26' at fld. 1318/4W.

BANGU NDB (LOM) 375 GL N45°00.88' W84°48.48' 097° 4.4 NM to fld.

ILS 111.1 I-GLR Rwy 09. Class IE. LOM BANGU NDB Unmonitored.



LAKES OF THE NORTH (4Y4) 11 SW UTC-5(-4DT) N44°54.75' W84°52.59'

LAKE HURON
L-31B

1286 B NOTAM FILE LAN

RWY 05-23: H4285X40 (ASPH) LIRL

RWY 05: Thld dsplcd 400'. Road.

RWY 23: Thld dsplcd 450'. Road.

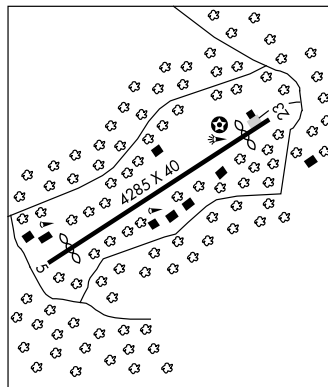
AIRPORT REMARKS: Attended 1400-2200Z†, Sat 1400-1800Z†. Deer on and in/ov arpt. Rwy 05-23 sfc rough and uneven, extensive cracks in pavement. Rwy slopes upward from E to W. West end approximately 20' higher than E end. Acft parking in primary sfc, N side, E end. ACTIVATE arpt beacon and LIRL Rwy 05-23—CTAF.

COMMUNICATIONS: CTAF 122.9

GAYLORD RCO 122.55 (LANSING RADIO)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

GAYLORD (L) VORW/DME 109.2 GLR Chan 29 N45°00.75' W84°42.26' 237° 9.5 NM to fld. 1318/4W.



GENESEE

DUFORD FLD (68G) 1 NW UTC-5(-4DT) N43°07.50' W83°37.58'

DETROIT

773 NOTAM FILE LAN

RWY 18-36: 3068X100 (TURF)

RWY 18: Thld dsplcd 200'. Trees. RWY 36: Thld dsplcd 1020'. Tree.

AIRPORT REMARKS: Attended irregularly. Rwy 18-36 sfc rough with irregular mowing. Rwy 18-36 marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

GERALD R FORD INTL (See GRAND RAPIDS)

GIPPER N41°46.12' W86°19.11'. NOTAM FILE LAN.

CHICAGO

(H) VORTACW 115.4 GIJ Chan 101 179° 3.6 NM to South Bend Rgnl.

H-5E, 10F, L-281

804/OE. HIWAS.

VOR portion unusable 199°-219° blo 17,500' and between 25 and 36 NM.

GLADWIN ZETTEL MEML (GDW) 1 SE UTC-5(-4DT) N43°58.24' W84°28.50'

DETROIT

776 B FUEL 100LL, JET A TPA-1776(1000) NOTAM FILE LAN

L-28J, 31C

RWY 09-27: H4700X75 (ASPH) S-44, D-60, DT-90 MIRL

IAP

RWY 09: REIL. PAPI(P2L)—GA 3.0°. Trees.

RWY 27: REIL. PAPI(P2L). Trees.

RWY 15-33: 2500X150 (TURF)

RWY 15: Trees.

RWY 33: Trees.

AIRPORT REMARKS: Attended 1400-2200Z†. Except Christmas; New Years; Thanksgiving and Easter; for attendant and after hrs call 517-426-9008. Rwy 15-33 CLOSED when snow covered except ski-equipped acft. Rwy 15-33 marked with 3' yellow cones. Deer activity on and in/ov arpt. Radio Control acft ops near W side of Rwy 15-33. Rwy 09 REIL OTS indef. ACTIVATE MIRL Rwy 09-27; PAPI and REIL Rwy 09 and Rwy 27—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

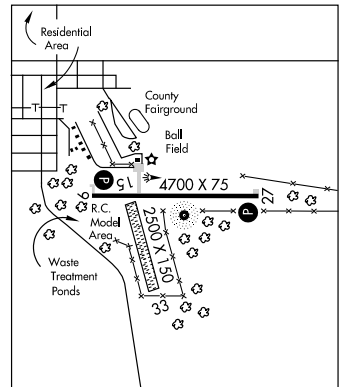
Ⓡ SAGINAW APP/DEP CON 126.45 (1100-0400Z†)

CLEVELAND CENTER APP/DEP CON 127.7 (0400-1100Z†)

RADIO AIDS TO NAVIGATION: NOTAM FILE MBS.

SAGINAW (L) VORW/DME 112.9 MBS Chan 76 N43°31.90' W84°04.64' 330° 31.5 NM to fld. 663/3W. HIWAS.

WIGGINS NDB (MHW) 209 GDW N43°58.20' W84°28.50' at fld. NOTAM FILE LAN.



GLOWACKI (See ST JOHNS)

GOGEBIC-IRON CO (See IRONWOOD)

GRADOLPH FLD (See PETERSBURG)

GRAND HAVEN MEML AIRPARK (3GM) 2 SE UTC-5(-4DT) N43°02.04' W86°11.89'

CHICAGO

604 B S4 FUEL 100LL NOTAM FILE LAN

L-28J

RWY 09-27: H3752X75 (ASPH) S-8 MIRL 0.3% up W

IAP

RWY 09: REIL. PAPI(P2L)—GA 3.0° TCH 32'. Tree.

RWY 27: REIL. PAPI(P2L)—GA 4.0° TCH 54'. Trees.

RWY 18-36: H2058X60 (ASPH) S-8 MIRL

RWY 18: Road.

RWY 36: Tree.

AIRPORT REMARKS: Attended 1300Z†-dusk. Radio control acft flying area NW side of Rwy 18. ACTIVATE MIRL Rwy 09-27 and 18-36; REIL and PAPI Rwy 09 and 27—CTAF.

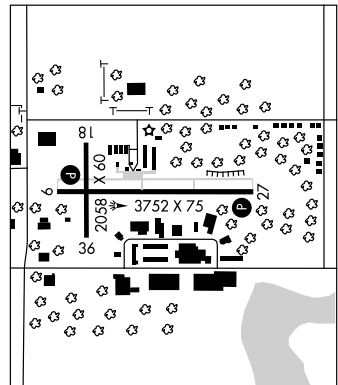
COMMUNICATIONS: CTAF/UNICOM 122.7

Ⓡ MUSKEGON APP/DEP CON 119.8 (1100-0400Z†)

Ⓡ CHICAGO CENTER APP/DEP CON 128.5 (0400-1100Z†)

RADIO AIDS TO NAVIGATION: NOTAM FILE MKG.

MUSKEGON (L) VORTACW 115.2 MKG Chan 99 N43°10.16' W86°02.36' 222° 10.7 NM to fld. 659/1W. HIWAS.



GRAND LEDGE**ABRAMS MUNI** (4D0) P (ARNG) 2 N UTC-5(-4DT) N42°46.45' W84°43.99'DETROIT
L-28J
IAP, DIAP

842 B S4 FUEL 100LL TPA-See Remarks NOTAM FILE LAN

RWY 09-27: H3200X75 (ASPH) MIRL 0.3% up E

RWY 09: PAPI(P4L)-GA 3.0° TCH 25'. Tree.

RWY 27: REIL. PAPI(P2L)-GA 4.0° TCH 25'. Tree.

RWY 18-36: 2580X120 (TURF)

RWY 18: Thld dspcd 400'. Trees.

RWY 36: Thld dspcd 397'. Road.

MILITARY SERVICE: FUEL 100LL, J4. PPR, ctc OPS DSN 623-0671/2/3, C517-483-5671/2/3.

AIRPORT REMARKS: Attended 1300Z±-dusk. Rwy 18-36 CLOSED to fixed wing acft Nov-Apr, soft in spring. Intensive National Guard helicopter training on and in/ov arpt. No fixed wing and limited rotary parking on national guard ramp. Rwy 18-36 and dspcd thld marked with 3' yellow cones. Rwy 36 dspcd thld marked with 3 yellow cones. Exit Rwy 18-36 only at twys. TPA-For helicopters 1700 (858) fixed wing TPA-1900(1058). ACTIVATE MIRL Rwy 09-27; REIL Rwy 27-CTAF.

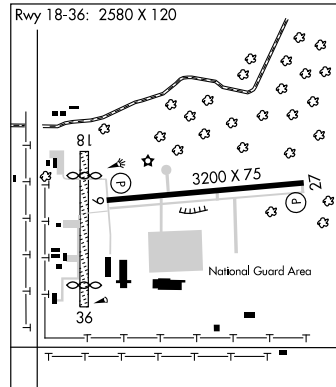
MILITARY REMARKS: CAUTION Avoid over flight of Grand Ledge blo 2000'. Night training conducted using night vision devices.

COMMUNICATIONS: CTAF/UNICOM 122.7

Ⓡ LANSING APP/DEP COM 118.65 226.4 ARNG OPS 41.85 122.7 241.0

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

LANSING (L) VORTACW 110.8 LAN Chan 45 N42°43.04' W84°41.85' 340° 3.8 NM to fld. 887/5W.

**GRAND MARAIS** (Y98) 3 SE UTC-5(-4DT) N46°37.25' W85°55.01'

GREEN BAY

838 NOTAM FILE GRB

RWY 14-32: 2800X100 (TURF)

RWY 14: Trees. RWY 32: Trees.

RWY 05-23: 2600X150 (TURF)

RWY 05: Trees. RWY 23: Trees.

AIRPORT REMARKS: Unattended. Arpt CLOSED Oct 15-May 15. Rwys not plowed winters. Rwy 05-23 marked with 3' yellow cones. Rwy 14-32 marked with 3' yellow cones. Rwy 05-23 and Rwy 14-32 surface rough.

COMMUNICATIONS: CTAF/UNICOM 122.7

GRAND RAPIDS N42°47.20' W85°29.82'. NOTAM FILE GRR.

CHICAGO

(H) VOR/DME 115.95 GRR Chan 106(Y) 353° 5.8 NM to Gerald R Ford Intl. 803/4W.

H-5E, 10F, L-28I

DME unmonitored.

DME unusable byd 30 NM blo 3000'.

RCO 122.25 (LANSING RADIO)

GRAND RAPIDS**GERALD R FORD INTL** (GRR) 6 SE UTC-5(-4DT) N42°52.85' W85°31.37'

CHICAGO

794 B S4 FUEL 100LL, JET A OX 1, 3 LRA Class I, ARFF Index C NOTAM FILE GRR H-5E, 10F, L-281
RWY 08R-26L: H10000X150 (CONC-GRVD) D-190, DT-350 HIRL IAP, AD

RWY 08R: MALSR.

RWY 26L: MALSR. PAPI(P4L)—GA 3.0° TCH 73'.

RWY 17-35: H8501X150 (CONC-GRVD) D-190, ST-175, DT-350
HIRL

RWY 17: REIL. VASI(V4L)—GA 3.0° TCH 38'.

RWY 35: MALSR. PAPI(P4R)—GA 3.0° TCH 74'.

RWY 08L-26R: H5000X100 (CONC-GRVD) S-52, D-60 MIRL

RWY 08L: REIL. VASI(V4L)—GA 3.0° TCH 33'.

RWY 26R: REIL. VASI(V4L)—GA 3.0° TCH 33'.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 08L: TORA-5000 TODA-5000 ASDA-5000 LDA-5000

RWY 08R: TORA-10000 TODA-10000 ASDA-10000 LDA-10000

RWY 17: TORA-8501 TODA-8501 ASDA-8501 LDA-8501

RWY 26L: TORA-10000 TODA-10000 ASDA-10000 LDA-10000

RWY 26R: TORA-5000 TODA-5000 ASDA-5000 LDA-5000

RWY 35: TORA-8501 TODA-8501 ASDA-8501 LDA-8501

AIRPORT REMARKS: Attended continuously. PPR for acft with 171' wingspan or larger. Birds on and in/ovf arpt. Noise abatement procedures: Rwy 08R depart on rwy heading until reaching the highway E of arpt; Rwy 26L on apch to arpt turn final at highway E of arpt. Rwy 08L-26R for apch Cat C acft, wingspan must be less than 79'. Apch Cat D and E acft prohibited. Pushback advisories on the terminal ramp are not provided by ATC. When twr closed ACTIVATE HIRL Rwy 08R-26L; Rwy 17-35; MIRL Rwsy 08L-26R; VASI Rwy 08L; Rwy 17 and Rwy 26R; PAPI Rwy 26L and Rwy 35; REIL Rwy 08L; Rwy 17 and Rwy 26R and MALSR Rwy 08R; 26L and 35—CTAF. Twy Y north of Twy D, Twy Z north of Twy D and Twy N are non-movement areas. Twy F north of Twy V, Twy J btn Twy F and Twy J3 and Twy G clsd to acft over 100000 lbs; Twy F, south of Twy V and remaining sections of Twy J clsd to acft over 47000 lbs; Twy Y 400' north of Twy D clsd to acft over 100,000 lbs; Twy R north of Twy D clsd to acft over 175000 lbs. Twy R north of Twy D, Twy Y north of Twy D, Twy Z north of Twy D and Twy N are non-movement areas. Rwy 08R and 26L touchdown and rollout runway visual range avbl. Rwy 35 touchdown runway visual range avbl. Snow removal personnel will monitor CTAF when twr is clsd. LRA: Mon-Fri 2 hours PPR for customs call 616-942-5245, pager 616-249-5380. Call prior to 2100Z± on preceding Friday for after hours service.

WEATHER DATA SOURCES: ASOS (616) 956-3224. WSP.**COMMUNICATIONS:** CTAF 135.65 ATIS 127.1 616-336-4755 UNICOM 122.95

GRAND RAPIDS RCO 122.25 (LANSING RADIO)

Ⓡ GRAND RAPIDS APP/DEP CON 124.6 (North) 128.4 (South) (1030-0500Z±)

Ⓡ CHICAGO CENTER APP/DEP CON 128.4 (0500-1030Z±)

GRAND RAPIDS TOWER 135.65 (1030-0500Z±) GND CON 121.8 CLNC DEL 119.3

AIRSPACE: CLASS C svc 1030-0500Z± ctc APP CON other times CLASS E.**RADIO AIDS TO NAVIGATION:** NOTAM FILE GRR.GRAND RAPIDS (H) VOR/DME 115.95 GRR Chan 106(Y) N42°47.20' W85°29.82' 353° 5.8 NM to fld.
803/4W. DME unmonitored.

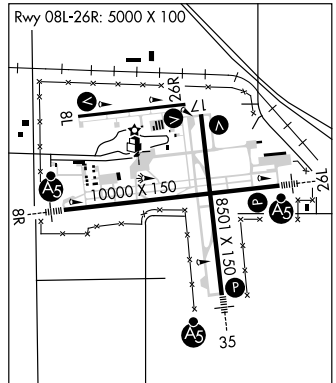
KNOBS NDB (LOM) 263 GR N42°53.74' W85°22.71' 266° 6.4 NM to fld.

ILS 109.7 I-GRR Rwy 26L. Class IB. LOM KNOBS NDB. Unmonitored when twr clsd.

ILS 108.3 I-CYZ Rwy 08R. Unmonitored when twr clsd.

ILS 111.9 I-DVS Rwy 35. ILS unmonitored when twr clsd.

ASR (1030-0500Z±)

**GRANT** (Ø1C) 2 NE UTC-5(-4DT) N43°20.50' W85°46.50'

CHICAGO

815 NOTAM FILE LAN

RWY 09-27: 2517X120 (TURF) LIRL

RWY 09: Thld dsplcd 387'. Trees. RWY 27: Thld dsplcd 580'. Trees.

AIRPORT REMARKS: Attended irregularly. 100LL fuel avbl for emergencies only. Rwy 09-27 and dsplcd thlds marked with 3' yellow cones. Arpt lgts opr dusk-0500Z±. ACTIVATE LIRL Rwy 09-27—CTAF.**COMMUNICATIONS:** CTAF/UNICOM 122.8

GRAYLING AAF (GOV)(KGOV) CIV/MIL 1 NW UTC-5(-4DT) N44°40.82' W84°43.73'

LAKE HURON
H-2K, L-31C
IAP

1158 B TPA—See Remarks NOTAM FILE GOV

RWY 05-23: H5000X150 (CONC) PCN 10 R/C/W/T MIRL

RWY 05: REIL. PAPI(P4L)—GA 4.0° TCH 41'. Trees.

RWY 23: REIL. PAPI(P4L)—GA 3.0° TCH 30'. Trees.

RWY 14-32: H5000X150 (ASPH) PCN 65 F/B/W/T MIRL

RWY 14: REIL. PAPI(P4L)—GA 3.0° TCH 30'. Trees.

RWY 32: REIL. PAPI(P4L)—GA 3.5° TCH 34'. Thld dsplcd 300'.

Trees.

AIRPORT REMARKS: Attended dawn-dusk. Wildlife on and in/ov arpt.

Extensive military helicopter tfc Jun thru Aug. ACTIVATE MIRL Rwy 14-32 and Rwy 05-23, REIL Rwy 05, Rwy 23, Rwy 14 and Rwy 32 and PAPI Rwy 05, Rwy 23, Rwy 14 and Rwy 32—CTAF. Rwy 05-23, Twy A, Twy D and Twy E CLOSED winter months, no snow removal.

MILITARY REMARKS: TFC PAT—Rotary wing 2000(842), fixed wing 2200(1042). MISC Ctc Base OPS DSN 623-3301, C989-344-4301 or C517-648-5339.

WEATHER DATA SOURCES: AWOS-3 119.075 (989) 348-3127.

COMMUNICATIONS: CTAF/UNICOM 122.8

MINNEAPOLIS CENTER APP/DEP CON 132.9 338.3

TOWER 126.2 241.0 (by NOTAM) GND CON 121.9

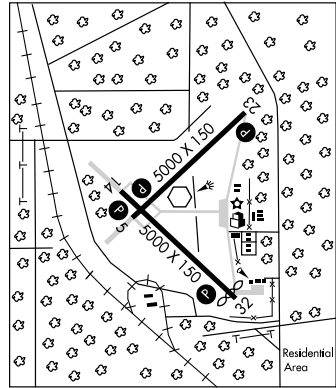
RADIO AIDS TO NAVIGATION: NOTAM FILE TVC.

TRAVERSE CITY (H) VORTACW 114.6 TVC Chan 93 N44°40.07' W85°33.00' 091° 35.2 NM to fld. 912/2W.

HIWAS.

(T) VORW 109.8 CGG N44°40.90' W84°43.74'. at fld. NOTAM FILE GOV. Unmonitored.

NDB (MHW) 359 GYG N44°45.00' W84°49.70' 140° 6 NM to fld. NOTAM FILE GOV.



GREEN LAKE (See INTERLOCHEN)

GREENVILLE MUNI (6D6) 3 S UTC-5(-4DT) N43°08.53' W85°15.23'

CHICAGO
L-281
IAP

855 B S4 FUEL 100LL NOTAM FILE LAN

RWY 10-28: H4199X75 (ASPH) S-23 MIRL 0.4% up W

RWY 10: PAPI(P4L)—GA 3.5° TCH 27'. Trees.

RWY 28: REIL. PAPI(P4L)—GA 3.0° TCH 32'. Trees.

RWY 18-36: 1730X200 (TURF)

RWY 18: Trees. RWY 36: Thld dsplcd 378'. Trees.

AIRPORT REMARKS: Attended Apr-Oct 1300-2200Z†, Nov-Mar

1300-0000Z†. Deer on and in/ov arpt. Snow removal Rwy 10-28 only. Rwy 18-36 no plowing, verify conditions prior to landing. Rwy 18-36 and dsplcd thld marked with 3' yellow cones. ACTIVATE MIRL Rwy 10-28—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

Ⓡ GRAND RAPIDS APP/DEP CON 124.6 (1030-0500Z‡)

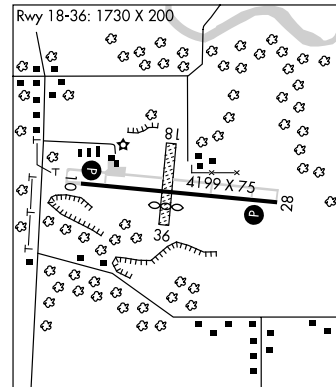
Ⓡ CHICAGO CENTER/APP DEP CON 124.6 (0500-1030Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE GRR.

GRAND RAPIDS (H) VOR/DME 115.95 GRR Chan

106(Y) N42°47.20' W85°29.82' 031° 23.9 NM to fld.

803/4W. DME unmonitored.



GREGORY**RICHMOND FLD** (69G) 2 SE UTC-5(-4DT) N42°26.50' W84°04.00'DETROIT
COPTER

921 NOTAM FILE LAN

RWY 18-36: 2471X100 (TURF)**RWY 18:** Thld dspcd 800'. P-line. **RWY 36:** Trees.**AIRPORT REMARKS:** Attended Apr-Nov, Wed, irregularly, Apr-Nov Sat-Sun dalgt hrs. Extensive glider ops on and in/ov arpt. Rwy not plowed winters. Gliders also use the turf area W of Rwy 18-36. Rwy 18-36 marked with 2' cones. Rwy 18 dspcd thld marked with 2' cones.**COMMUNICATIONS:** CTAF 122.9**COMM/NAV/WEATHER REMARKS:** Glider frequency 123.5.**GROSS** (See PINCONNING)**GROSSE ILE MUNI** (See DETROIT/GROSSE ILE)**GWENN** N44°44.07' W85°25.76' NOTAM FILE TVC.GREEN BAY
L-31B**NDB (MH/LOM)** 365 TV 279° 6.6 NM to Cherry Capital.

Unmonitored when twr clsd.

HALE**FIELD OF DREAMS** (H8Ø) 3 SE UTC-5(-4DT) N44°21.88' W83°45.76'

LAKE HURON

830 NOTAM FILE LAN

RWY 08-26: 2400X90 (TURF)**RWY 08:** Thld dspcd 1000'. Tree. **RWY 26:** Tree.**AIRPORT REMARKS:** Unattended. Arpt CLOSED Nov-Apr. Large hay bales along south edge of rwy. +30' bldg 72' south of rwy centerline, +60' tree 96' north of rwy centerline. Low level military jets opr near arpt, arpt lies within Pike West Military Operation Area and 3 miles from Military Training Route VR 1624. Farm equipment parked in Rwy 26 apch. Rwy 08-26 and dspcd thld Rwy 08 marked with 3' cones. Electric perimeter fence. Rwy may be soft in spring west end. Verify conditions.**COMMUNICATIONS:** CTAF 122.9**HAMP** (See ELWELL)**HANCOCK** N47°10.11' W88°29.34'GREEN BAY
H-2J, L-14J**RCD** 123.65 122.525 (GREEN BAY RADIO)

HANCOCK

HOUGHTON CO MEM (CMX) 4 NE UTC-5(-4DT) N47°10.11' W88°29.34'

GREEN BAY
H-21, L-14J
IAP

1095 B S4 FUEL 100LL, JET A Class I, ARFF Index A NOTAM FILE CMX
RWY 13-31: H6501X150 (ASPH-GRVD) S-70, D-100, ST-127, DT-185 HIRL 0.5% up NW

RWY 13: REIL. PAPI(P4L)—GA 3.0° TCH 44'. Trees.

RWY 31: MALSR. PAPI(P4L)—GA 3,0° TCH 45'.

RWY 07-25: H5196X100 (ASPH-PFC) S-35, D-50 MIRL
0.3% up NE

RWY 07: REIL. PAPI(P2L)—GA 3.0° TCH 30'. Trees.

RWY 25: REIL. PAPI(P4L)—GA 3.0° TCH 41'. Trees.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 07: TORA-5196 TODA-5196 ASDA-5196 LDA-5196

RWY 13: TORA-6501 TODA-6501 ASDA-6501 LDA-6501

RWY 25: TORA-5196 TODA-5196 ASDA-5196 LDA-5196

RWY 31: TORA-6501 TODA-6501 ASDA-6501 LDA-6501

AIRPORT REMARKS: Attended 0900-0500Z±. PAEW on arpt monitor
CTAF. Frequent snow removal ops in progress various times
Nov-Apr monitor CTAF. Airframe and power plant repairs avbl Apr 15 thru Nov 15. Arpt CLOSED to unscheduled air carrier ops with more than 30 passenger seats except PPR call arpt manager 906-482-3970. Deer and gulls on and invof arpt. General aviation acft parking permitted in front of air carrier terminal building. Contact Unicom for permission to park in front of terminal. General aviation acft parking on aprons lctd N and S of terminal building. Arpt has dual PCL. ACTIVATE HIRL Rwy 13-31, MIRL Rwy 07-25, PAPI Rwy 13, Rwy 31, Rwy 07, and Rwy 25, REIL Rwy 13, Rwy 07, and Rwy 25, MALSR Rwy 31 and Twy B—CTAF. Airfield guidance signs snow covered in winter. Ldg fee waived with fuel purchase for multi-engine acft only.

WEATHER DATA SOURCES: ASOS 125.675 (906) 482-4248. HIWAS 112.8 CMX.

COMMUNICATIONS: CTAF/UNICOM 122.7

HANCOCK RCO 123.65 122.525 (GREEN BAY RADIO)

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 127.2

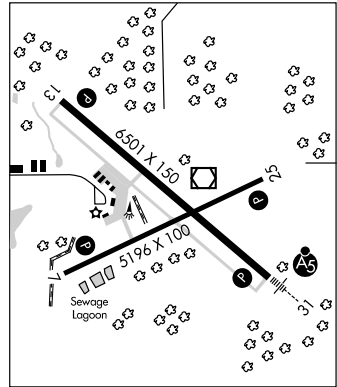
AIRSPACE: CLASS E svc continuous.

RADIO AIDS TO NAVIGATION: NOTAM FILE CMX.

(L) VOR/DME 112.8 CMX Chan 75 N47°10.22' W88°29.12' at fld. 1072/2W. HIWAS.
DME unusable 315°-035° byd 30 NM blo 3500'.

GALEY NDB (MHW/LOM) 275 CM N47°06.94' W88°24.07' 313° 4.8 NM to fld. Unmonitored.

ILS/DME 110.3 I-CMX Chan 40 Rwy 31. Class IT. LOM GALEY NDB. LOC BC unusable byd 13° left and right of course. LOC BC and BC DME unusable byd 10 NM blo 2600'.



HANLEY FLD (See MUNISING)

HARBOR SPRINGS (MGN) 3 E UTC-5(-4DT) N45°25.53' W84°54.80'

LAKE HURON
L-31B
IAP

686 B FUEL 100LL, JET A NOTAM FILE MGN

RWY 10-28: H4157X75 (ASPH) S-22, D-30 MIRL

RWY 10: PAPI(P4R)—GA 3.5° TCH 25. Thld dspcd 445'. Trees.

RWY 28: PAPI(P4L)—GA 4.0° TCH 35. Thld dspcd 445'. Trees.

AIRPORT REMARKS: Attended 1300-dusk. Parachute Jumping. Birds and deer on and invof arpt. Rwy 28 +46' antenna 186' from dspcd thld 234' right. Noise abatement procedures; no turbojet/turbofan acft departures from 0400 to 1200Z±, no low flight over surrounding community, all acft departing to the W turn S over the water as soon as practical. ACTIVATE MIRL Rwy 10-28—CTAF. Landing fee waived with minimum fuel purchase.

WEATHER DATA SOURCES: AWOS-3 119.925 (231) 347-5231.

COMMUNICATIONS: CTAF/UNICOM 122.8

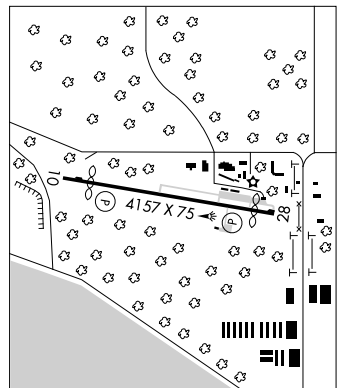
Ⓡ MINNEAPOLIS CENTER APP/DEP CON 134.6

RADIO AIDS TO NAVIGATION: NOTAM FILE PLN.

PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84' W84°39.85' 227° 16.2 NM to fld. 840/6W.

HIWAS.

COMM/NAV/WEATHER REMARKS: AWOS-3 Wind unreliable btn 260°-280°.



HARRIETTA**BUNCH'S HALF ACRE** (4Y9) 3 W UTC-5(-4DT) N44°18.50' W85°46.34'

GREEN BAY

1010 NOTAM FILE LAN

RWY 08-26: 2400X100 (TURF)**RWY 08:** Trees. **RWY 26:** Trees.**AIRPORT REMARKS:** Attended irregularly. Arpt CLOSED when snow covered. Large depression NE of Rwy 26 end. Rwy 08-26 marked with 3' yellow cones. 50' trees both sides of Rwy 08-26 primary surface 100' fm rwy centerline. Rwy 08-26 rough and uneven.**COMMUNICATIONS:** CTAF 122.9**HARRISON****CLARE CO** (8ØD) 2 NW UTC-5(-4DT) N44°03.17' W84°48.75'

LAKE HURON

1142 B NOTAM FILE LAN

RWY 18-36: H2978X50 (ASPH) LIRL (NSTD)**RWY 18:** Thld dsplcd 473'. Trees. **RWY 36:** Thld dsplcd 1152'. Trees.**RWY 09-27:** 2437X100 (TURF)**RWY 09:** Thld dsplcd 1218'. Trees. **RWY 27:** Thld dsplcd 882'. Trees.**AIRPORT REMARKS:** Attended irregularly. Rwy 09-27 CLOSED winter months. Deer on and infov arpt. Rwy 27, 22' p-line, 308' distant, apch ratio 14:1. P-line marked with orange balls. Radio control model acct and ultralight activity on and infov arpt. Rwy 09-27 surface rough. Rwy 18-36 NSTD LIRL 30' from rwy edge and no rwy end lgts. ACTIVATE lgts-122.8. Rwy 09-27 marked with 3' yellow cones.**COMMUNICATIONS:** CTAF/UNICOM 122.8**HARRISVILLE** (5YØ) 1 NW UTC-5(-4DT) N44°40.09' W83°18.31'

LAKE HURON

675 NOTAM FILE LAN

RWY 03-21: 2140X60 (TURF)**RWY 03:** Thld dsplcd 1000'. Trees. **RWY 21:** Thld dsplcd 600'. Trees.**AIRPORT REMARKS:** Unattended. Deer and turkeys occasionally on rwy. +15-45' trees in primary sfc east side 30' from Rwy 03-21 centerline. Rwy 03-21 and dsplcd thlds marked with 3' yellow cones.**COMMUNICATIONS:** CTAF 122.9**HARSENS ISLAND** (Z92) ØN UTC-5(-4DT) N42°35.37' W82°34.54'

DETROIT

578 NOTAM FILE LAN

RWY 04-22: 2225X100 (TURF)**RWY 04:** Thld dsplcd 371'. Trees. **RWY 22:** Thld dsplcd 230'. Road.**AIRPORT REMARKS:** Arpt CLOSED indef. CAUTION: For ops during high water and wet spring condition. No snow removal. Avoid fit over state wildlife refuge areas S and W of arpt. Rwy 04-22 not mowed.**COMMUNICATIONS:** CTAF 122.9**HART/SHELBY****OCEANA CO** (CØ4) 4 SE UTC-5(-4DT) N43°38.51' W86°19.78'

CHICAGO

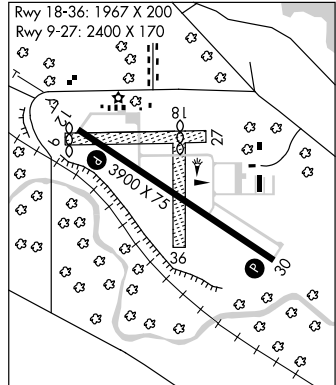
910 S4 FUEL 100LL TPA-1710(800) NOTAM FILE LAN

L-281

RWY 09-27: H3500X75 (ASPH) S-12.5 MIRL**RWY 09:** PAPI(P2L)—GA 4.0° TCH 25'. Road. **RWY 27:** PAPI(P2L)—GA 4.0° TCH 25'.**RWY 15-33:** 2240X100 (TURF)**RWY 15:** Thld dsplcd 375'. Road. **RWY 33:** Thld dsplcd 564'. Trees.**AIRPORT REMARKS:** Attended irregularly. Fuel 24 hr self serve. Rwy 15-33 rough and soft when wet. Radio controlled model acct ops on field daily. Rwy 15-33 dsplcd thld marked with 3' yellow cones. ACTIVATE MIRL Rwy 09-27 and PAPI Rwy 09 and Rwy 27—CTAF.**WEATHER DATA SOURCES:** AWOS-A 122.7 (231) 861- 7415.**COMMUNICATIONS:** CTAF/UNICOM 122.7**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.**WHITECLOUD VOR/DME** 117.6 HIC Chan 123 N43°34.49' W 85°42.97' 280° 27 NM to fld. 920/1W.

HASTINGS (9D9) 3 W UTC-5(-4DT) N42°39.81' W85°20.78'
 801 B S4 FUEL 100LL TPA-1601(800) NOTAM FILE LAN
RWY 12-30: H3900X75 (ASPH) S-20 MIRL
RWY 12: REIL. PAPI(P4R)—GA 4.0°. TCH 25'. Trees.
RWY 30: REIL. PAPI(P4L)—GA 4.0° TCH 25'. Tree.
RWY 09-27: 2400X170 (TURF)
RWY 09: Thld dspcd 185'. Trees.
RWY 27: Thld dspcd 393'. Trees.
RWY 18-36: 1962X200 (TURF)
RWY 18: Trees. **RWY 36:** Tree.
AIRPORT REMARKS: Attended Mon-Sat 1400-2300Z±. Numerous birds on and invof arpt. ACTIVATE MIRL Rwy 12-30; REILS Rwy 12 and Rwy 30 and PAPI Rwy 12 and Rwy 30—CTAF. Rwy 09-27 and Rwy 18-36 marked with yellow cones.
COMMUNICATIONS: CTAF/UNICOM 123.075.
 (R) GRAND RAPIDS APP/DEP CON 128.4 (1030-0500Z±)
 (R) CHICAGO CENTER APP/DEP CON 128.5 (0500-1030Z±)
RADIO AIDS TO NAVIGATION: NOTAM FILE GRR.
GRAND RAPIDS (H) VOR/DME 115.95 GRR Chan
 106(Y) N42°47.20' W 85°29.82' 142° 10 NM to fld.
 803/4W. DME unmonitored.

CHICAGO
 L-281
 IAP

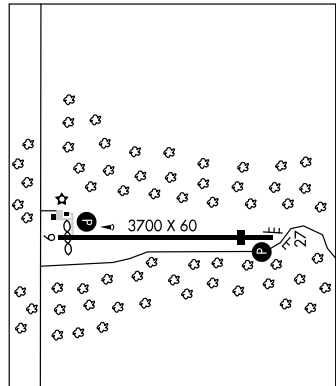


HAT FIELD (See NUNICA)

HESSEL

ALBERT J. LINDBERG (5Y1) 2 N UTC-5(-4DT) N46°02.15' W84°25.19'
 760 B NOTAM FILE GRB
RWY 09-27: H3700X60 (ASPH) MIRL
RWY 09: PAPI(P2L)—GA 4.0° TCH 40'. Trees.
RWY 27: PAPI(P2L)—3.5° TCH 25'. Trees.
AIRPORT REMARKS: Attended Mon-Fri 1400-2200Z±. Arpt manager after hour 1-906-298-0566. ACTIVATE MIRL Rwy 09-27 and PAPI Rwys 09 and 27—CTAF.
COMMUNICATIONS: CTAF 122.9
RADIO AIDS TO NAVIGATION: NOTAM FILE PLN.
PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84' W84°39.85' 029° 26.4 NM to fld. 840/6W. HIWAS.

LAKE HURON
 L-31B



HIGHLAND

PONDEROSA HELIPORT (13D) 2W UTC-5(4DT) N42°37.75' W83°40.99'
 1017 NOTAM FILE LAN
HELIPAD H1: H18X18(CONC)
HELIPORT REMARKS: Unattended. Helipad H1 perimeter lgts. ACTIVATE H1 perimeter lgts and VASI—123.025.
COMMUNICATIONS: CTAF 122.9

DETROIT
 COPTER

HILLMAN (Y95) 2 NW UTC-5(-4DT) N45°04.98' W83°56.04'

LAKE HURON

850 NOTAM FILE LAN

L-31C

Rwy 04-22: H3400X60 (ASPH) MIRL

Rwy 04: Trees. Rwy 22: Thld dspcld 760'. Trees.

Rwy 18-36: 2800X150 (TURF)

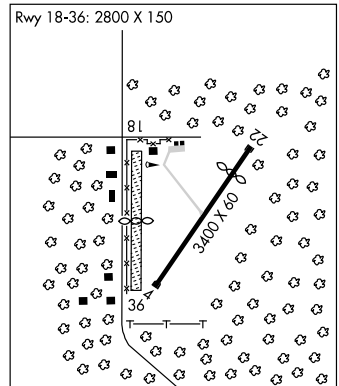
Rwy 18: Thld dspcld 1400'. Trees. Rwy 36: Tree.

AIRPORT REMARKS: Attended irregularly. Rwy 18-36 surface rough and moderately rolling, not mowed. Snow removal second priority, confirm arpt condition before arrival. Rwy 18-36 marked with 3' yellow cones. ACTIVATE MIRL Rwy 04-22—CTAF.

COMMUNICATIONS: CTAF 122.9

RADIO AIDS TO NAVIGATION: NOTAM FILE APN.

ALPENA (L) VORTAC 108.8 APN Chan 25 N45°04.97'
W83°33.42' 277° 16.0 NM to fld. 677/7W. HIWAS.



HILLSDALE MUNI (JYM) 3 E UTC-5(-4DT) N41°55.28' W84°35.15'

DETROIT

1182 B S4 FUEL 100LL, JET A NOTAM FILE JYM

L-28J

Rwy 10-28: H4000X75 (ASPH) S-16 MIRL 0.5% up E

Rwy 10: Tree.

Rwy 28: REIL. PAPI(P4L)—GA 3.0° TCH 34'. Trees.

AIRPORT REMARKS: Attended Nov-Mar 1300-2300Z±, Apr-Oct 1300-0200Z±. Rwy 28 PAPI OTS indef.

WEATHER DATA SOURCES: AWOS-3 121.025 (517) 437-5638.

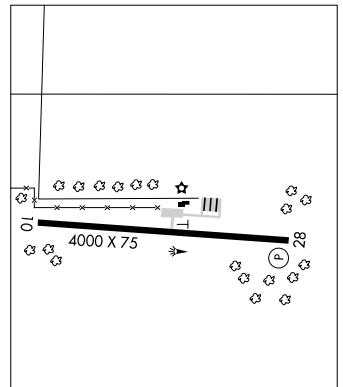
COMMUNICATIONS: CTAF/UNICOM 122.8

LITCHFIELD RCO 122.1R, 111.2T (LANSING RADIO)

® TOLEDO APP/DEP CON 134.35

RADIO AIDS TO NAVIGATIONS: NOTAM FILE LAN.

LITCHFIELD (L) VOR/DME 111.2 LFD Chan 49 N42°03.75'
W84°45.91' 141° 11.7 NM to fld. 1040/05W.



HIRAM CURE (See SUNFIELD)

HOFFMAN'S BLACK MOUNTAIN AERODROME (See Cheboygan)

HOLLAND N42°47.79' W86°09.45'. NOTAM FILE LAN.

CHICAGO

NDB (MHW) 233 HLM at Park Township. NDB unusable byd 5.5 NM.

L-28I

HOLLAND**PARK TOWNSHIP** (HLM) 3 NW UTC-5(-4DT) N42°47.76' W86°09.72'

603 B FUEL 100LL TPA-1403(800) NOTAM FILE LAN

RWY 05-23: H2999X50 (ASPH) MIRL (NSTD)

RWY 05: Thld dsplcd 725'. Road.

RWY 23: Thld dsplcd 1142'. Trees.

RWY 12-30: 2245X90 (TURF)

RWY 12: Thld dsplcd 1019'. Trees.

RWY 30: Thld dsplcd 820'. Trees.

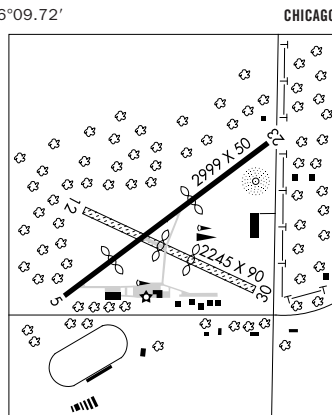
AIRPORT REMARKS: Attended irregularly. Rwy 12-30 CLOSED Nov 1 thru Mar 31 and when snow covered. Departure procedure: Rws 05 and 23 climb straight-out to 1200' MSL before turning. Rwy 12-30 and dsplcd thlds marked with 3' yellow cones. ACTIVATE NSTD MIRL Rwy 05-23—CTAF. Rwy 05-23 NSTD MIRL; lgts 24' from rwy edge.

COMMUNICATIONS: CTAF/UNICOM 122.8

PULLMAN RCO 122.1R 112.1T (LANSING RADIO)

RADIO AIDS TO NAVIGATION

HOLLAND NDB 233 HLM N42°47.79' W86°09.45' at fld.

**TULIP CITY** (BIV) 2 S UTC-5(-4DT) N42°44.57' W86°06.47'

698 B S4 FUEL 100LL, JET A OX 1, 2 NOTAM FILE BIV

RWY 08-26: H6002X100 (ASPH-GRVD) S-75, D-160, DT-175 HIRL

RWY 08: REIL. PAPI (P4L)—GA 3.0° TCH 40'. Rgt tfc.

RWY 26: REIL. MALSR. PAPI (P4L)—GA 3.0° TCH 33'. Trees.

AIRPORT REMARKS: Attended Mon-Fri 1100-0300Z†, Sat and Sun 1200-0200Z†. For arpt attendant other hrs and during emerg call 616-392-7831. Deer and birds on and in/ov arpt. Ldg fee. Ldg fee waived with minimum fuel purchase. HIRL Rwy 08-26 preselect low ints; to increase inst and ACTIVATE MALSR Rwy 26; REIL Rwy 08; PAPI Rwy 08 and Rwy 26—CTAF.

WEATHER DATA SOURCES: ASOS 119.025 (616) 394-0190**COMMUNICATIONS:** CTAF/UNICOM 123.05

PULLMAN RCO 122.1R, 112.1T (LANSING RADIO)

Ⓡ MUSKOGON APP/DEP CON 119.8 (1100-0400Z†)

MUSKOGON CLNC DEL 123.95

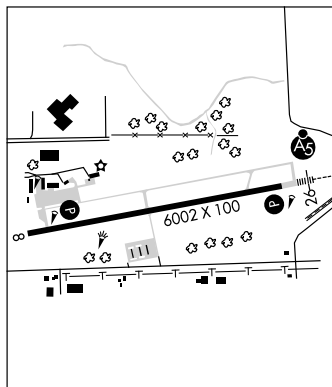
Ⓡ CHICAGO CENTER APP/DEP CON 128.5 (0400-1100Z†)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

PULLMAN (H) VOR/DME 112.1 PMM Chan 58 N42°27.96'

W86°06.29' 360° 16.6 NM to fld. 640/00E.

ILS/DME 110.55 I-BIV Chan 42Y Rwy 26.

**HOME ACRES SKY RANCH** (See LAKE CITY)**HONEY ACRES** (See CLINTON)**HOUGHTON CO MEM** (See HANCOCK)**HOUGHTON LAKE HEIGHTS****HOUGHTON LAKE STATE** (5Y2) 1 W UTC-5(-4DT) N44°19.75' W84°47.50'

LAKE HURON

1165 NOTAM FILE LAN

RWY 16-34: 2750X104 (TURF)

RWY 16: Thld dsplcd 550'. Brush.

RWY 34: Thld dsplcd 900'. Trees.

AIRPORT REMARKS: Attended irregularly. Snow removal irregular—confirm condition with arpt manager on 616-540-1324. Rwy 16 has 35' p-line on centerline 315' from thld. Rwy 16-24 marked with yellow cones.

COMMUNICATIONS: CTAF 122.9**HOUGHTON LAKE** N44°21.53' W84°39.94' NOTAM FILE HTL.

LAKE HURON

(T) VOR/DME 111.6 HTL Chan 53 at Roscommon Co-Blodgett Meml. 1145/5W. ASOS.

L-31C

VOR/DME unmonitored dusk to 1300Z†.

HOUGHTON LAKE**ROSCOMMON CO—BLODGETT MEML** (HTL) 5 NE UTC-5(-4DT) N44°21.59' W84°40.27'

LAKE HURON

1150 B S4 FUEL 100LL, JET A NOTAM FILE HTL

L-31C

RWY 09-27: H4000X75 (ASPH) S-24 HIRL

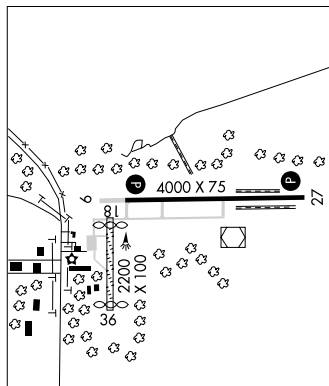
IAF

RWY 09: REIL. PAPI(P4L)—GA 4.0° TCH 32'. Trees.**RWY 27:** REIL. PAPI(P4R)—GA 3.5° TCH 32'. Trees.**RWY 18-36:** 2200X100 (TURF)**RWY 18:** Thld dspclcd 200'. Trees.**RWY 36:** Thld dspclcd 200'. Trees.**AIRPORT REMARKS:** Attended 1300-2230Z±. Arpt unattended

Christmas and Thanksgiving. Rwy 18-36 CLOSED when snow covered except for ski-equipped acft. Animals on and invof arpt. Rwy 18-36 marked with 3' yellow cones. HIRL Rwy 09-27 preset on low ints dusk-0200Z±; after 0200Z± ACTIVATE—CTAF. To increase ints and ACTIVATE REIL and PAPI Rwys 09 and 27—CTAF. 2203' MSL (883' AGL) twr 4.2 NM southwest of arpt.

WEATHER DATA SOURCES: ASOS 111.6 HTL (989) 366-4825.**COMMUNICATIONS:** CTAF/UNICOM 122.8**WEST BRANCH RCO** 122.35 (LANSING RADIO)Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 132.9**RADIO AIDS TO NAVIGATION:** NOTAM FILE HTL.

HOUGHTON LAKE (T) VORW/DME 111.6 HTL Chan 53 N44°21.53' W84°39.94' at fld. 1145/5W. ASOS.

**HOUGHTON LAKE STATE** (See HOUGHTON LAKE HEIGHTS)**HOWARD NIXON MEML** (See CHESANING)**HOWELL** N42°38.03' W83°59.26'. NOTAM FILE OZW.

DETROIT

NDB (MHW) 243 OZW at Livingston Co Spencer J. Hardy.

L-28J

HOWELL**AERONUT PARK BALLOON** (13M) 4 E UTC-5(-4DT) N42°36.25' W83°51.52'

DETROIT

980 NOTAM FILE LAN

Not insp.

RWY B1: 900X250 (TURF)

AIRPORT REMARKS: Attended irregularly. Contact owner at 517-552-1236 when using for first time. Acft in the vicinity using Rwy 09-27 adjacent to the S at McKenzie's Landing (1M15). No snow removal. Support vehicles be alert when driving on grass in spring and fall when wet due to possible soft areas.

COMMUNICATIONS: CTAF 122.9**LIVINGSTON CO SPENCER J. HARDY** (OZW) 3 NW UTC-5(-4DT) N42°37.77' W83°58.93'

DETROIT

962 B S4 FUEL 100LL, JET A TPA—2001(1039) NOTAM FILE OZW

COPTER

RWY 13-31: H5002X100 (CONC-GRVD) S-30 HIRL 0.4% up NW

H-10G, L-28J

RWY 13: MALSR. PAPI(P4L)—GA 3.0° TCH 47'. Trees.

IAF

RWY 31: REIL. PAPI(P4L)—GA 3.0° TCH 30'. Trees.

AIRPORT REMARKS: Attended Mon-Fri 1200-0100Z±, Sat-Sun 1300-0100Z±. For fuel after hrs phone 517-548-4945. Deer and birds on and invof arpt. Rwy 13 PAPI OTS indef. HIRL Rwy 13-31 ops low ints dusk-0300Z±; to increase ints and ACTIVATE after 0300Z±—CTAF. ACTIVATE REIL Rwy 31 and MALSR Rwy 13—CTAF. PAPI Rwy 13 and Rwy 31 ops dawn-dusk, thereafter—CTAF.

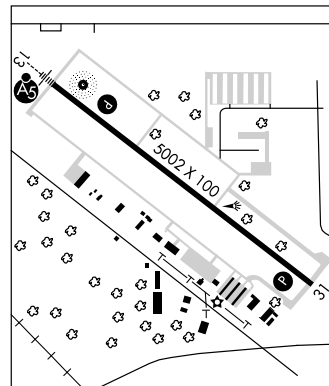
WEATHER DATA SOURCES: AWOS-3 118.875 (517) 546-4450.**COMMUNICATIONS:** CTAF/UNICOM 123.0Ⓡ **DETROIT APP/DEP CON** 127.5 **CLNC DEL** 121.725**GCO** 121.725 (DETROIT METRO CLNC and FLIGHT SERVICES)**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.**SALEM (L) VORTAC** 114.3 SVM Chan 90 N42°24.53'

W83°35.65' 311° 21.7 NM to fld. 950/3W.

HOWELL NDB (MHW) 243 OZW N42°38.03' W83°59.26' at fld. NOTAM FILE OZW.

ILS/DME 108.55 I-OGO Chan 22Y Rwy 13. ILS/DME unmonitored.

COMM/NAV/WEATHER REMARKS: For CLNC DEL key frequency 121.725 4 times. To contact FSS key frequency 121.725 6 times; one second on/one second off; monitor 121.725 while electronic equipment dials Detroit CLNC DEL/Lansing FSS.



RAETHER (4Y1) 6 SE UTC-5(-4DT) N42°33.91' W83°51.38'

DETROIT

982 NOTAM FILE LAN

COPTER

RWY 17-35: 2206X60 (TURF)

RWY 17: Thld dsplcd 540'. Trees. RWY 35: Thld dsplcd 553'. Trees.

AIRPORT REMARKS: Attended irregularly. Deer on and invof rwy. Ultralight activity on and invof arpt. Heavy equipment adjacent to W side of Rwy 35. Rwy 17-35 thld and dsplcd thlds marked with 3' cones.

COMMUNICATIONS: CTAF 122.9

HURON CO MEM (See BAD AXE)

INDIAN CREEK RANCH (See DECKERVILLE)

INDIAN RIVER

CALVIN CAMPBELL MUNI (Y65) 1 E UTC-5(-4DT) N45°24.50' W84°36.00'

LAKE HURON

602 FUEL 100LL NOTAM FILE LAN

L-31C

RWY 10-28: H3006X50 (ASPH) LIRL

RWY 10: Trees. RWY 28: Thld dsplcd 600'. Trees.

AIRPORT REMARKS: Attended irregularly. Snow removal intermittent; to verify condition call 231-238-8614. Deer and birds on and invof arpt. ACTIVATE LIRL Rwy 10-28—CTAF.

COMMUNICATIONS: CTAF 122.9

RADIO AIDS TO NAVIGATION: NOTAM FILE PLN.

PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84' W84°39.85' 175° 13.6 NM to fld. 840/6W.
HIWAS.

INTERLOCHEN

GREEN LAKE (Y88) 3 S UTC-5(-4DT) N44°36.37' W85°45.51'

GREEN BAY

866 NOTAM FILE LAN

RWY 05-23: 2800X170 (TURF)

RWY 05: Trees. RWY 23: Thld dsplcd 600'. Trees.

RWY 16-34: 1700X170 (TURF)

RWY 16: Thld dsplcd 200'. Trees. RWY 34: Thld dsplcd 380'. Trees.

AIRPORT REMARKS: Unattended. CLOSED Nov-Mar. Remote control model acft opr area south of Rwy 34 end. 460' antenna 1.25 NM N of arpt. Noise sensitive area one mile N of arpt. Athletic fids on centerline N end Rwy 16-34; Do not use rwy when in use. Rwy 05-23 and Rwy 16-34 and dsplcd thlds marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

IONIA CO (Y70) 3 S UTC-5(-4DT) N42°56.28' W85°03.63'

CHICAGO

818 B S4 FUEL 100LL, JET A NOTAM FILE LAN

L-281

RWY 09-27: H4300X75 (ASPH) S-19 MIRL 0.3% up W

IAP

RWY 09: PAPI(P4L)—GA 3.0° TCH 25'. Tree.

RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 22'. Trees.

RWY 18-36: 4290X340 (TURF) 0.3% up S

RWY 18: Trees. RWY 36: Tree.

WEATHER DATA SOURCES: AWOS-3 118.9 (616) 523-1852.

AIRPORT REMARKS: Attended 1400-2200Z±. Rwy 18-36 CLOSED Nov 15-Apr 15. Glider ops conducted S of Rwy 09-27 and W of Rwy 18-36 use freq 123.3 in practice area. Gliders use 122.8 in tfc pattern. ACTIVATE rotating bcn—122.8. ACTIVATE MIRL Rwy 09-27, PAPI and REIL Rwy 27—122.8. Rwy 18 ends marked with 3' yellow cones. Acft parked adjacent to Rwy 18-36 and 09-27 during glider operations.

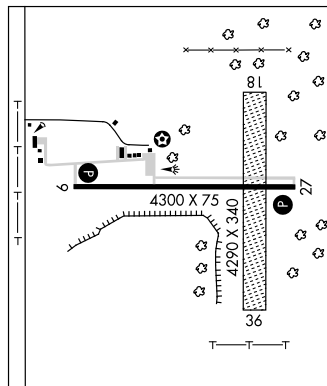
COMMUNICATIONS: CTAF/UNICOM 122.8

GRAND RAPIDS RCO 122.1R 115.95 (LANSING RADIO)

® LANSING APP/DEP CON 118.65

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

LANSING (L) VORTACW 110.8 LAN Chan 45 N42°43.04'
W84°41.85' 315° 20.8 NM to fld. 887/5W.



IOSCO CO (See EAST TAWAS)

IRON CO (See CRYSTAL FALLS)

IRON MOUNTAIN N45°48.96' W88°06.73' NOTAM FILE IMT.

GREEN BAY

(L) VOR/DME 111.2 IMT Chan 49 at Ford. 1128/2W.

L-31A

DME unusable 141°-220° byd 20 NM blo 2900'; 221°-315° byd 15 NM blo 4000'; 316°-019° byd 20 NM blo 5000', 020°-140° blo 10000'.

RCO 122.1R 111.2T (GREEN BAY RADIO)

IRON MOUNTAIN/KINGSFORD**FORD** (IMT) 3 W UTC-6(-5DT) N45°49.10' W88°06.87'

GREEN BAY

1182 B S4 FUEL 100LL, JET A OX 4 TPA—See Remarks

Class II, ARFF Index A

H-21, L-31A

NOTAM FILE IMT

IAP

RWY 01-19: H6501X150 (ASPH-PFC) S-100, D-100, ST-127, DT-190 HIRL 0.8% up N

RWY 01: MALS. Trees.

RWY 19: REIL. VASI(V4L)—GA 3.0° TCH 42'.

RWY 13-31: H3809X75 (ASPH) S-30, D-50, DT-80 MIRL

RWY 13: Trees.

RWY 31: REIL. VASI(V4L)—GA 4.0° TCH 40'. Trees.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 01: TORA-6501 TODA-6501 ASDA-6501 LDA-6501

RWY 13: TORA-3809 TODA-3809 ASDA-3809 LDA-3809

RWY 19: TORA-6501 TODA-6501 ASDA-6501 LDA-6501

RWY 31: TORA-3809 TODA-3809 ASDA-3809 LDA-3809

AIRPORT REMARKS: Attended 1130-0530Z†. Ldg fee. Deer; coyotes and birds on and in/ovf arpt. 48 hr PPR for unscheduled air carrier ops with more than 30 passenger seats call 906-774-4830. Air carrier ops involving acft with more than 9 passenger seats are not authorized in excess of 15 minutes before or after scheduled arrival/dep times without prior coordination with arpt manager and confirmation that ARFF is avbl prior to tkf or landing. ARFF crews will be monitoring UNICOM/CTAF during all air carrier ops. Snow removal crew will be monitoring CTAF/UNICOM during all air carrier ops to pass along updated sfc condition reports. ACTIVATE HIRL Rwy 01-19, MIRL Rwy 13-31, VASI Rwy 19 and 31; REIL Rwy 19 and 31; MALS Rwy 01—CTAF. TPA—1982(800) Jet/Turbo-Jet/Prop over 12,500 lbs 2682(1500).

WEATHER DATA SOURCES: ASOS 119.025 (906) 774-1999.**COMMUNICATIONS:** CTAF/UNICOM 122.8

IRON MOUNTAIN RCO 122.1R 111.2T (GREEN BAY RADIO)

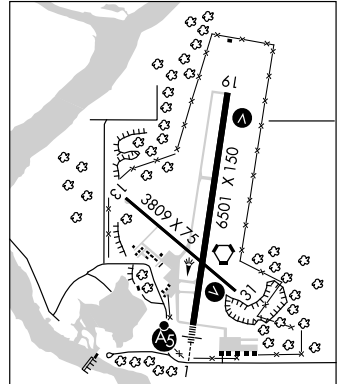
MINNEAPOLIS CENTER APP/DEP CON 121.25

AIRSPACE: CLASS E svc Mon-Fri 1200-0400Z†, Sat 1500-0100Z†, Sun 1500-0400Z† other times CLASS G.**RADIO AIDS TO NAVIGATION:** NOTAM FILE IMT.

IRON MOUNTAIN (L) VOR/DME 111.2 IMT Chan 49 N45°48.96' W88°06.73' at fld. 1128/2W.

KORDS NDB (LOM) 255 IM N45°43.63' W088°07.96' 010° 5.5 NM to fld.

ILS 111.5 I-IMT Rwy 01. Class IC. LOM KORDS NDB.

COMM/NAV/WEATHER REMARKS: UNICOM monitored part-time.**IRON RIVER****STAMBAUGH** (Y73) 1 SE UTC-6(-5DT) N46°04.73' W88°38.13'

GREEN BAY

1622 NOTAM FILE GRB

RWY 17-35: H2000X40 (ASPH) LIRL (NSTD)

RWY 17: Trees.

AIRPORT REMARKS: Unattended. Deer on and in/ovf arpt. 100' drop off at each rwy end. Rwy 17-35 slopes down from S to N. ACTIVATE LIRL Rwy 17-35—121.9. Rwy 17-35 NSTD LIRL 26' from rwy edge. Rwy 17-35 NSTD basic marking; does not start at pavement edge. Rwy 17-35 numerous cracks in rwy.

COMMUNICATIONS: CTAF 122.9**IRONWOOD** N46°31.94' W90°07.55' NOTAM FILE IWD.

GREEN BAY

(L) VORTACW 108.8 IWD Chan 25 at Gogebic-Iron Co. 1230/1E. HIWAS.

L-141

RCO 122.3 (GREEN BAY RADIO)

IRONWOOD**GOGEBIC—IRON CO** (IWD) 7 NE UTC-6(-5DT) N46°31.65' W90°07.88'

GREEN BAY

1230 B FUEL 100LL, JET A Class II, ARFF Index A NOTAM FILE IWD

H-2J, L-14I

RWY 09-27: H6501X130 (ASPH-GRVD) S-85, D-150, ST-175, DT-280 HIRL

IAP

RWY 09: REIL. VASI(V4L)—GA 3.0° TCH 47'. Trees.

RWY 27: MALSR. Trees.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 09: TORA-6501 TODA-6501 ASDA-6501 LDA-6501

RWY 27: TORA-6501 TODA-6501 ASDA-6501 LDA-6501

AIRPORT REMARKS: Attended 1400-0200Z \ddagger . Be alert for PAEW during

snow removal. Arpt CLOSED to unscheduled air carrier ops with more

than 30 passenger seats except 48 hr PPR call arpt manager

906-932-3121. Various wildlife on and in/ovf arpt. Rwy 09 REIL

OTS indef. ACTIVATE HIRL Rwy 09-27; REIL Rwy 09; MALSR Rwy

27—CTAF. Ldg fee. Landing fees waived if fuel purchased.

Firefighting personnel will be monitoring CTAF during all scheduled

air carrier ops. Arpt will be monitoring CTAF during all scheduled

air carrier ops to convey latest rwy conditions during winter wx.

WEATHER DATA SOURCES: AWOS-3 125.175 (906) 932-4039.

HIWAS 108.8 IWD.

COMMUNICATIONS: CTAF/UNICOM 122.8

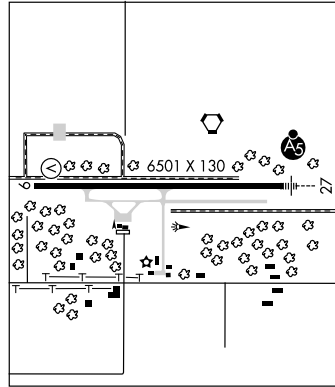
IRONWOOD RCO 122.3 (GREEN BAY RADIO)

Ⓡ MINNEAPOLIS CENTER APP/DEP 133.55

RADIO AIDS TO NAVIGATION: NOTAM FILE IWD.

IRONWOOD (L) VORTACW 108.8 IWD Chan 25 N46°31.94' W90°07.55' at fld. 1230/1E. HIWAS.

ILS 111.5 I-IWD Rwy 27. Class II. Unmonitored.

**ISHPEMING****EDWARD F JOHNSON** (M61) 10 S UTC-5(-4DT) N46°20.71' W87°47.31'

GREEN BAY

1446 NOTAM FILE GRB

RWY 18-36: 2200X100 (TURF)

RWY 18: Trees. RWY 36: Thld dspcd 200'. Trees.

AIRPORT REMARKS: Unattended. CLOSED winter months Dec-Apr and when snow covered. Rwy 18-36 rough with sandy areas. Lgtd 419' AGL twr located 6100' south of arpt and 600' right of extended centerline Rwy 18-36.

Rwy 18 marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9**JABLONSKI** (See NUNICA)**JACK BARSTOW** (See MIDLAND)

JACKSON CO—REYNOLDS FLD (JXN) 2 W UTC−5(−4DT) N42°15.63' W84°27.63'

DETROIT

1001 B S4 FUEL 100LL, JET A NOTAM FILE JXN

H−106, L−28J

RWY 06−24: H5349X150 (ASPH−GRVD) S−75, D−150, DT−200 HIRL

IAP, AD

RWY 06: PAPI(P4L)—GA 3.0° TCH 27'. Thld dsplcd 440'. Railroad.

RWY 24: MALSR. Trees.

RWY 14−32: H4000X100 (ASPH−GRVD) S−75, D−150 MIRL
0.3% up SW

RWY 14: PAPI(P4L)—GA 3.0° TCH 25'. Trees.

RWY 32: REIL. PAPI(P4L)—GA 3.5° TCH 31'. Trees.

LAND AND HOLD SHORT OPERATIONS

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 24	14−32	3406

AIRPORT REMARKS: Attended Apr−Oct Mon−Fri 1200−0100Z†, Nov−Mar Mon−Fri 1300−2300Z†. CAUTION: Deer and birds on and in/ovf arpt. Low altitude acft ops prohibited in/ovf prison 4 mi NE. When twr closed ACTIVATE HIRL Rwy 06−24 and MIRL Rwy 14−32; PAPI Rwy 06, Rwy 14 and Rwy 32; REIL Rwy 32; MALSR Rwy 24—CTAF.

WEATHER DATA SOURCES: ASOS (517) 768−7506.**COMMUNICATIONS:** CTAF 128.475 ATIS 125.725

UNICOM 122.95

RCO 122.2 (LANSING RADIO)

Ⓡ LANSING APP/DEP CON 127.3

TOWER 128.475 (1200−0200Z†) GND CON 121.9

CLNC DEL 121.9

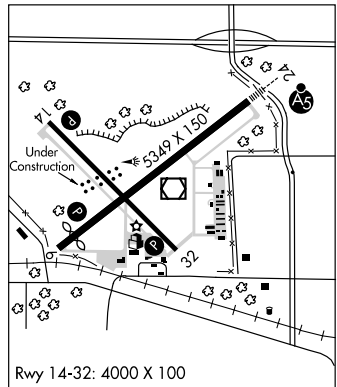
AIRSPACE: CLASS D svc 1200−0200Z† other times CLASS E.**RADIO AIDS TO NAVIGATION:** NOTAM FILE JXN.

(L) VOR/DME 109.6 JXN Chan 33 N42°15.55' W84°27.51' at fld. 995/5W.

VOR portion unusable 250°−310° byd 20 NM. DME portion unusable 075°−225° byd 10 NM blo 3000'.

JAKSO NDB (LOM) 212 JX N42°19.07' W84°21.93' 236° 5.5 NM to fld.

ILS 109.1 I−JXN Rwy 24 LOM JAKSO NDB. ILS and LOM unmonitored when twr clsd.

**JAKSO** N42°19.07' W84°21.93' NOTAM FILE JXN.

DETROIT

NDB (LOM) 212 JX 236° 5.5 NM to Jackson Co−Reynolds Fld. LOM unmonitored when twr clsd.

JAMES CLEMENTS MUNI (See BAY CITY)**JENISON****RIVERVIEW** (Ø8C) 3 NW UTC−5(−4DT) N42°56.15' W85°48.30'

CHICAGO

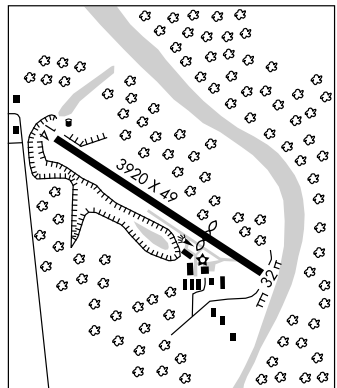
603 B FUEL 100LL NOTAM FILE LAN

L−28I

RWY 14−32: H3920X49 (ASPH) MIRL

RWY 14: Trees. RWY 32: Thld dsplcd 1196'. Trees.

AIRPORT REMARKS: Attended Mon−Fri 1300−2200Z†, Sat−Sun irregularly. Fuel 24 hr self serve. Deer and birds on and in/ovf arpt. Rwy 14−32 trees and shrubs in transition zone both sides. ACTIVATE MIRL Rwy 14−32—CTAF.

COMMUNICATIONS: CTAF 122.9 UNICOM 123.0**RADIO AIDS TO NAVIGATION:** NOTAM FILE MKG.MUSKEGON (L) VORTACW 115.2 MKG Chan 99 N43°10.16'
W86°02.36' 144° 17.4 NM to fld. 659/1W. HIWAS.**JERRY TYLER MEML** (See NILES)

KALAMAZOO

KALAMAZOO/BATTLE CREEK INTL (AZO) 3 SE UTC-5(-4DT) N42°14.06' W85°33.09'

CHICAGO

874 B S4 FUEL 100LL, JET A OX 1, 3 TPA-1674(800) NOTAM FILE AZO

H-5E, 10F, L-28I

LRA Class I, ARFF Index B

IAP, AD

RWY 17-35: H6502X150 (ASPH-GRVD) S-85, D-121, ST-153, DT-240 HIRL

RWY 17: REIL. PAPI(P4L)—TCH 45'. Trees.

RWY 35: MALSR. PAPI(P4L)—GA 3.0° TCH 53'. Railroad.

RWY 05-23: H3438X100 (ASPH-GRVD) S-30, D-45, DT-60

MIRL 0.7% up SW

RWY 05: REIL. PAPI(P4L)—GA 3.0° TCH 28'. Pole.

RWY 23: REIL. PAPI(P4L)—GA 3.5° TCH 34'. Tree.

RWY 09-27: H2800X60 (ASPH) S-30, D-60 MIRL 0.4% up W

RWY 09: Tree.

RWY 27: Railroad.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 05: TORA-3438 TODA-3438 ASDA-3438 LDA-3438

RWY 09: TORA-2800 TODA-2800 ASDA-2800 LDA-2800

RWY 17: TORA-6502 TODA-6502 ASDA-6502 LDA-6502

RWY 23: TORA-3438 TODA-3438 ASDA-3438 LDA-3438

RWY 27: TORA-2800 TODA-2800 ASDA-2800 LDA-2800

RWY 35: TORA-6502 TODA-6502 ASDA-6502 LDA-6502

AIRPORT REMARKS: Attended continuously. Rwy 05-23 avbl for air

carrier twy only and Rwy 09-27 not avbl for air carrier ops with more than 10 passenger seats. Migratory water fowl roosting area 5500' apch end Rwy 35. Birds on and invof arpt. PPR for unscheduled air carrier ops with more than 30 passenger seats call arpt manager 269-388-3668. Rwy 09 and Rwy 05 apch ends are closely aligned. Verify correct rwy and compass heading prior to departure. When twr clsd ACTIVATE HIRL Rwy 17-35, MIRL Rwy 05-23 and Rwy 09-27; MALSR Rwy 35; PAPI Rwy 05, Rwy 23, Rwy 17, and Rwy 35; REIL Rwy 05, Rwy 23 and Rwy 17—CTAF. FAR PART 36 noise limits in effect 0400-1130Z†. For customs call 269-965-3349. Twys F and G east of Rwy 17-35 restricted acft less than 12,500 lbs.

WEATHER DATA SOURCES: ASOS (269) 384-5729. LAWRS.

COMMUNICATIONS: CTAF 118.3 ATIS 127.25 UNICOM 122.95

RCD 122.1R 109.0T (LANSING RADIO)

Ⓡ APP/DEP CON 121.2 (175°-353°) 119.2 (354°-174°) 123.8 (1100-0400Z‡)

Ⓡ CHICAGO CENTER APP/DEP CON 127.55 (0400-1100Z‡)

TOWER 118.3 (1100-0400Z‡) GND CON 121.9 CLNC DEL 121.75

AIRSPACE: CLASS D svc 1100-0400Z‡ other times CLASS G.

TRSA svc etc APP CON

RADIO AIDS TO NAVIGATION: NOTAM FILE AZO.

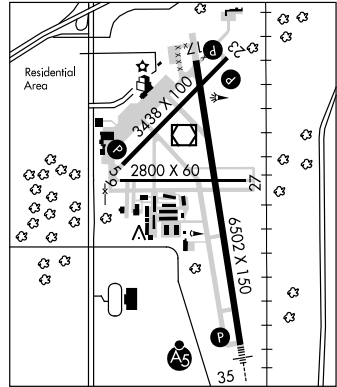
(L) VOR/DME 109.0 AZO Chan 27 N42°14.22' W85°33.19' at fld. 870/1W.

DME portion unusable byd 35 NM blo 2500'.

AUSTN NDB (LOM) 371 AZ N42°07.86' W85°31.79' 354° 6.3 NM to fld. Unmonitored when twr clsd.

ILS 110.9 I-AZO Rwy 35. LOM AUSTN NDB. LOC BC unusable byd 10° left and right of course. LOC BC unusable byd 10 NM. LOC and GS unmonitored when twr closed.

ASR (1100-0400Z‡)



NEWMAN'S (4NØ) 7 W UTC-5(-4DT) N42°17.34' W85°45.00'

CHICAGO

840 NOTAM FILE LAN

RWY 18-36: 2697X125 (TURF) LIRL

RWY 18: Thld dspld 191'. Trees.

RWY 36: Thld dspld 385'. Tree.

AIRPORT REMARKS: Attended irregularly. Deer invof rwy. Rwy 18-36 and dspld thlds marked with 3' yellow cones.

ACTIVATE LIRL Rwy 18-36-122.9.

COMMUNICATIONS: CTAF: 122.9

KALKASKA CITY (Y89) 1 SW UTC-5(-4DT) N44°43.51' W85°12.19'

GREEN BAY

1030 NOTAM FILE LAN

L-31B

RWY 10-28: H3500X75 (ASPH) MIRL

RWY 10: PAPI(P2L)—GA 3.0° TCH 24'. Trees.

RWY 28: PAPI(P2L)—GA 4.0° TCH 32'. Trees.

AIRPORT REMARKS: Unattended. Deer and birds on and invof arpt. ACTIVATE MIRL Rwy 10-28 and PAPI Rwy 10 and Rwy 28—CTAF.

COMMUNICATIONS: CTAF 122.9

RADIO AIDS TO NAVIGATION: NOTAM FILE TVC.

TRAVERSE CITY (H) VORTACW 114.6 TVC Chan 93 N44°40.07' W85°33.00' 079° 15.2 NM to fld. 912/2W.

HIWAS

KEELER N42°08.66' W86°07.36' NOTAM FILE LAN. CHICAGO
 (L) VOR/DME 116.6 ELX Chan 113 182° 9.1 NM to Dowagiac Muni. 795/00E. H-5E, 10F, L-28I
 RCO 122.1R 116.6T (LANSING RADIO)

KENT CITY

WILDERNESS AIRPARK (24M) 3 NE UTC-5(-4DT) N43°14.69' W85°42.70' CHICAGO
 785 NOTAM FILE LAN
RWY 09-27: 2543X100 (TURF)
RWY 09: Thld dsplcd 537'. Trees. **RWY 27:** Thld dsplcd 335'. Road.
AIRPORT REMARKS: Attended irregularly. Rwy 09-27 aerobotic practice area over arprt, 200' AGL to 2500' MSL. Rwy 09-27 and dspl thlds marked with 3' yellow cones.
COMMUNICATIONS: CTAF 122.9

KINGSFORD (See IRON MOUNTAIN/KINGSFORD)

KIRSCH MUNI (See STURGIS)

KNOBS N42°53.74' W85°22.72' NOTAM FILE GRR. CHICAGO
NDB (LOM) 263 GR 266° 6.4 NM to Gerald R Ford Intl. LOM OTS indef.

KOLOE N46°19.93' W84°32.53' NOTAM FILE CIU. LAKE HURON
NDB (MH/LOM) 400 CI 155° 5.7 NM to Chippewa Co Intl. NDB unmonitored. L-31B

KORDS N45°43.63' W088°07.96' NOTAM FILE IMT.
NDB (LOM) 255 IM 010° 5.5 NM to Ford.

LAKE CITY

HOME ACRES SKY RANCH (Y91) 2 E UTC-5(-4DT) N44°19.22' W85°10.27' GREEN BAY
 1247 B TPA-2047(800) NOTAM FILE LAN
RWY 09-27: 3830X160 (TURF) LIRL
RWY 09: Thld dsplcd 376'. Road. **RWY 27:** Thld dsplcd 1164'. Trees.
RWY 18-36: 2550X150 (TURF) LIRL
RWY 18: Thld dsplcd 257'. Road. **RWY 36:** Thld dsplcd 396'. Road.
AIRPORT REMARKS: Attended irregularly. No snow removal. Deer and birds on and invof arprt. Tall trees along both rwys and at the intersection of Rwy 09-27 and Rwy 18-36 blocking the view of intersecting rwy. ACTIVATE LIRL Rwys 09-27 and 18-36-CTAF. Rwy 09-27 and Rwy 18-36 marked with 3' yellow cones. For airframe and power plant repairs call 231-839-4009.
COMMUNICATIONS: CTAF/UNICOM 123.0
COMM/NAV/WEATHER REMARKS: UNICOM unmonitored.

LAKE ISABELLA-CAL BREWER MEML (D15) 1 E UTC-5(-4DT) N43°38.67' W84°58.92' DETROIT
 886 NOTAM FILE LAN
RWY 11-29: H2582X50 (ASPH)
RWY 11: Thld dsplcd 1089' Tree. **RWY 29:** Thld dsplcd 717'. Trees.
AIRPORT REMARKS: Unattended. Snow removal irregular, for arprt conditions call 898-644-8654.
COMMUNICATIONS: CTAF/UNICOM 122.8

LAKES OF THE NORTH (See GAYLORD)

LAKEVIEW ARPT—GRIFFITH FLD (13C) 1 NE UTC-5(-4DT) N43°27.13' W85°15.89'

CHICAGO

969 B S4 FUEL 100LL NOTAM FILE LAN

L-281

RWY 09-27: H3500X75 (ASPH) S-12 MIRL

IAP

RWY 09: REIL. PAPI(P2L)—GA 3.0° TCH 40'. Trees.

RWY 27: REIL. PAPI(P2L)—GA 3.0° TCH 50'. Trees.

AIRPORT REMARKS: Attended 1300Z‡-dusk. For service after hrs call assistant arpt manager on 616-527-0915. ACTIVATE MIRL Rwy 09-27; PAPI and REIL Rwys 09 and 27—CTAF. Agricultural and Helicopter ops on grass area N of Rwy 09-27.

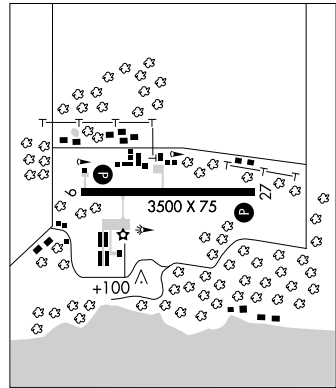
COMMUNICATIONS: CTAF/UNICOM 122.8

Ⓡ GRAND RAPIDS APP/DEP CON 124.6 (1030-0500Z‡)

Ⓡ CHICAGO CENTER APP/DEP CON 128.5 (0500-1030Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

WHITE CLOUD (L) VOR/DME 117.6 HIC Chan 123 N43°34.49'
W85°42.97' 111° 21 NM to fld. 920/1W.



LAMBERTVILLE

TOLEDO SUBURBAN (DUH) 2 SW UTC-5(-4DT) N41°44.15' W83°39.35'

DETROIT

669 B S4 FUEL 100LL, JET A NOTAM FILE DUH

L-281

RWY 09-27: H4851X50 (ASPH) MIRL

IAP

RWY 09: Thld dsplcd 1298'. Trees.

RWY 27: Thld dsplcd 1017'. Road.

AIRPORT REMARKS: Attended May-Sept 1300-0100Z‡, Oct-Apr 1300-2300Z‡. Deer on and invof arpt. Parallel twy CLOSED indef. 4' fence 110' N side of rwy. Crops 50' S side of rwy in primary surface. ACTIVATE NSTD MIRL Rwy 09-27—CTAF.

WEATHER DATA SOURCES: AWOS-3 119.175 (734) 856-1563.

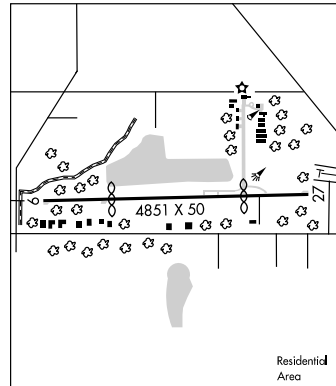
COMMUNICATIONS: CTAF/UNICOM 122.7

WATERVILLE RCO 122.1R 113.1T (CLEVELAND RADIO)

Ⓡ TOLEDO APP/DEP CON 134.35

RADIO AIDS TO NAVIGATION: NOTAM FILE CLE.

WATERVILLE (L) VOR/DME 113.1 VVW Chan 78 N41°27.09'
W83°38.32' 359° 17.1 NM to fld. 660/2W.



LANSING N42°43.05' W84°41.86' NOTAM FILE LAN.

DETROIT

(L) VORTACW 110.8 LAN Chan 45 340° 3.8 NM to Abrams Muni. 887/5W.

H-5E, 10G, L-281

VOR unusable 102°-158° blo 5000'.

RCO 122.2 (LANSING RADIO)

LANSING

CAPITAL RGNL INTL (LAN) 3 NW UTC-5(-4DT) N42°46.72' W84°35.17'

861 B S4 FUEL 100LL, JET A OX 1 AOE ARFF Index—See Remarks

DETROIT
H-5E, 10G, L-28J
IAP, AD

NOTAM FILE LAN

RWY 10R-28L: H8506X150 (ASPH-GRVD) S-100, D-175, ST-175,

DT-300 HIRL

RWY 10R: MALSR. **RWY 28L:** MALSR.

RWY 06-24: H5002X120 (ASPH) S-45, D-65, ST-82,

DT-100 MIRL

RWY 06: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Road.

RWY 24: REIL. PAPI(P4L)—GA 3.0° TCH 42'. Trees.

RWY 10L-28R: H3601X75 (ASPH) S-12 MIRL

RWY 10L: Trees.

RWY 28R: Road.

AIRPORT REMARKS: Attended continuously. Birds on and in/ov arpt.

Class I, ARFF Index B. ARFF index C avbl on request; call arpt manager 517-321-6121. Rwy 10L-28R not avbl to air carrier acft with more than 9 passenger seats. Twy A N of Rwy 28; Twys E and G not avbl to air carrier acft with more than 9 passenger seats. Ldg fee. Acft blo 6500 lbs exempt from ldg fee. Intl arrivals accepted up to 20 passenger seats. Flight Notification Service (ADCUS) avbl.

WEATHER DATA SOURCES: ASOS (517) 886-0015. LLWAS.

COMMUNICATIONS: ATIS 119.75 UNICOM 122.95

LANSING FSS (LAN) on arpt.

LANSING RCO 122.2 (LANSING RADIO)

Ⓡ LANSING APP/DEP CON 133.475 (North) 118.65 (South)

LANSING TOWER 119.9 GND CON 121.9 CLNC DEL 123.675

AIRSPACE: CLASS C svc continuous ctc APP CON

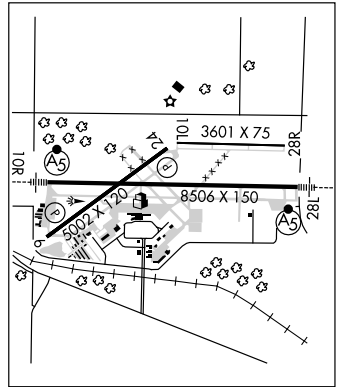
RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

LANSING (L) VORTACW 110.8 LAN Chan 45 N42°43.04' W84°41.85' 058° 6.1 NM to fld. 887/5W.

ILS 110.1 I-LAN Rwy 28L.

ILS 111.7 I-CPQ Rwy 10R. Class ID. ILS unusable byd 25° left and right of course.

ASR



LAPEER

DUPONT-LAPEER (D95) 2 NE UTC-5(-4DT) N43°03.99' W83°16.31'

834 B S4 FUEL 100LL NOTAM FILE LAN

DETROIT
L-28J
IAP

RWY 18-36: H3800X75 (ASPH) MIRL

RWY 18: REIL. PAPI(P4L)—GA 4.0° TCH 36'. Trees.

RWY 36: REIL. PAPI (P2L)—GA 4.0° TCH 33'. Trees.

RWY 09-27: 1900X150 (TURF)

RWY 09: Thld dspcd 500'. Bldg. **RWY 27:** Trees.

AIRPORT REMARKS: Attended 1300-2300Z±. Arpt unattended

Christmas, New Year's, Easter Sun and Thanksgiving day. Rwy 09-27 CLOSED Nov thru Apr. Two center and S twy connectors clsd indef. Rwy 09-27 and dspcd thld marked with 3' yellow cones. Rotating bcn opr dusk-0400Z±. For rotating bcn after 0400Z± ACTIVATE—CTAF. ACTIVATE MIRL Rwy 18-36, PAPI Rwy 18 and Rwy 36 and REIL Rwy 18 and Rwy 36—CTAF.

COMMUNICATIONS: CTAF/UNICOM 123.0

FLINT RCO 122.3 (LANSING RADIO)

Ⓡ FLINT APP/DEP CON 128.55 (N/W of active rwy) 118.8 (E/S of active rwy) (1045-0430Z±)

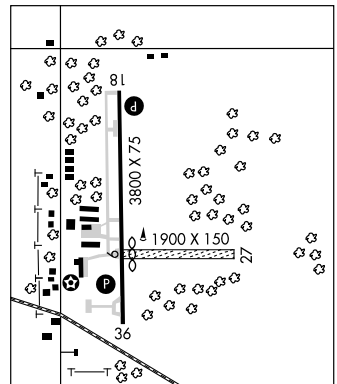
CLEVELAND CENTER APP/DEP CON 127.7 (0430-1045Z±)

RADIO AIDS TO NAVIGATION: NOTAM FILE FNT.

FLINT (H) VORTACW 116.9 FNT Chan 116 N42°58.01'

W83°44.82' 079° 21.8 NM to fld. 772/6W.

COMM/NAV/WEATHER REMARKS: APP CON sectorization based upon Flint rwy usage. APP/DEP CON and CLNC DEL not available on the ground.



LENAWEE CO (See ADRIAN)

LEO E. GOETZ CO (See ONAWAY)

LEWISTON**GARLAND** (8M8) 5 SE UTC-5(-4DT) N44°48.39' W84°16.57'

LAKE HURON

1218 B NOTAM FILE LAN

H-2K, 11A, L-31C

RWY 18-36: H5047X75 (ASPH) S-15 MIRL

RWY 18: Trees. RWY 36: PAPI(P2L)—GA 3.0° TCH 41'. Thld dsplcd 400'. Tree.

AIRPORT REMARKS: Unattended. Rwy 18-36 sfc large cracks in pavement. Non-aviation related cargo ops on north ramp. No acft parking. Acft use west ramp. Fence around arpt—keep gate clsd. ACTIVATE MIRL Rwy 18-36—CTAF. Landing fee.

COMMUNICATIONS: CTAF/UNICOM 122.8**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

GAYLORD (L) VORW/DME 109.2 GLR Chan 29 N45°00.75' W84°42.26' 130° 22NM to fld. 1318/4W.

LINCOLN**FLYING M RANCH** (3L7) 3 NE UTC-5(-4DT) N44°44.30' W83°22.78'

LAKE HURON

830 NOTAM FILE LAN

RWY 09-27: 2200X90 (TURF)

RWY 09: Thld dsplcd 600'. P-line. RWY 27: Trees.

AIRPORT REMARKS: Attended May-Oct irregularly. Arpt CLOSED Nov-Apr and when snow covered. No snow removal.

Occasional deer on rwy. Rwy 09-27 surface slightly rough and irregular on rolling terrain. Rwy slopes down from west to east. Rwy soft in spring. Rwy 09 p-line marked with orange balls.

COMMUNICATIONS: CTAF/UNICOM 123.0**LINDEN****PRICES** (9G2) 1 S UTC-5(-4DT) N42°48.46' W83°46.20'

DETROIT

920 B S2 FUEL 100LL NOTAM FILE LAN

COPTER

RWY 09-27: H4000X75 (ASPH) MIRL 0.3% up W

L-28J

RWY 09: REIL. Thld dsplcd 268'. Trees.

IAP

RWY 27: Thld dsplcd 800'. Trees.

AIRPORT REMARKS: Attended irregularly. Deer and birds on and in/ovf arpt. Airframe repairs: prior arrangement. ACTIVATE MIRL Rwy 09-27 and REIL Rwy 09—CTAF.

COMMUNICATIONS: CTAF/UNICOM 123.0

FLINT RCO 122.3 (LANSING RADIO)

Ⓡ FLINT APP/DEP CON 128.55 (N/W of active rwy) 118.8 (E/S of active rwy) (1045-0430Z†)

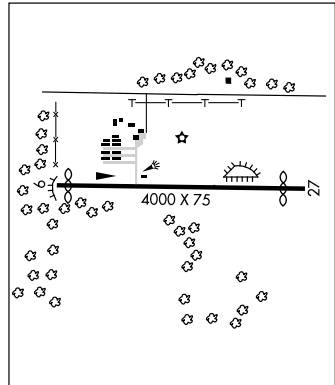
CLEVELAND CENTER APP/DEP CON 126.75 (0430-1045Z†)

RADIO AIDS TO NAVIGATION: NOTAM FILE FNT.

FLINT (H) VORTACW 116.9 FNT Chan 116 N42°58.01'

W83°44.82' 193° 9.6 NM to fld. 772/6W.

COMM/NAV/WEATHER REMARKS: APP CON sectorization based upon Flint rwy usage.

**LITCHFIELD** N42°03.75' W84°45.91' NOTAM FILE LAN.

DETROIT

(L) VOR/DME 111.2 LFD Chan 49 141° 11.7 NM to Hillsdale Muni. 1040/05W.

H-5E, 10G, L-28J

DME unusable 110°-165° byd 35 NM below 3000'.

RCO 122.1R 111.2T (LANSING RADIO)

LIVINGSTON CO SPENCER J. HARDY (See HOWELL)**LOST CREEK** (See LUZERNE)

LOWELL CITY (24C) 1 N UTC-5(-4DT) N42°57.24' W85°20.64'

CHICAGO

681 S4 FUEL 100LL NOTAM FILE LAN

RWY 06-24: 2700X100 (TURF)

RWY 06: Thld dspclcd 1100'. Trees. RWY 24: Thld dspclcd 1200'. Trees.

RWY 12-30: H2394X48 (ASPH) LIRL

RWY 12: Thld dspclcd 603'. Tree. RWY 30: Thld dspclcd 597'. Tree.

RWY 15-33: 1940X100 (TURF)

RWY 15: Thld dspclcd 582'. Tree. RWY 33: Thld dspclcd 388'. Tree.

AIRPORT REMARKS: Attended Apr-Oct Mon-Fri 1230-2200Z†, Nov-Mar Mon-Fri 1300-2100Z†. Snow removal Rwy 12-30 only. Rwy 12-30 extensive cracking length rwy. ACTIVATE LIRL Rwy 12-30-CTAF. Rwy 15-33 and dspclcd thlds marked with three 3' yellow cones. Rwy 06-24 and dspclcd thlds marked with 3' yellow cones.

COMMUNICATIONS: CTAF/UNICOM 123.0

LUCE CO (See NEWBERRY)

LUDINGTON N43°57.77' W86°24.57' NOTAM FILE LDM.

CHICAGO

NDB (MHW) 341 LDM at Mason Co.

L-281

RCO 122.45 (LANSING RADIO)

LUDINGTON

MASON CO (LDM) 2 NE UTC-5(-4DT) N43°57.75' W86°24.48'

CHICAGO

646 B S4 FUEL 100LL, JET A NOTAM FILE LDM

H-2K, L-281

RWY 08-26: H5003X75 (ASPH-PFC) S-25 MIRL

IAP

RWY 08: PAPI(P2L)—GA 3.0° TCH 28'. Trees.

RWY 26: REIL. PAPI(P4L)—GA 3.0° TCH 43'. Trees.

RWY 01-19: H3503X75 (ASPH-PFC) S-19 MIRL

RWY 01: PAPI(P2L). RWY 19: PAPI(P2L). Trees.

AIRPORT REMARKS: Attended Apr-Sep 1300-2200Z†, Oct-Mar 1400-2200Z† Birds and deer on and in/ovf arpt. ACTIVATE MIRL Rwy 08-26 and Rwy 01-19 PAPI Rwy 08, Rwy 26, Rwy 01 and Rwy 19, and REIL Rwy 26-CTAF.

WEATHER DATA SOURCES: AWOS-3 119.925 (231) 843-0459.

COMMUNICATIONS: CTAF/UNICOM 123.0

MANISTEE RCO 122.1R 111.4T (LANSING RADIO)

LUDINGTON RCO 122.45 (LANSING RADIO)

MINNEAPOLIS CENTER APP/DEP CON 120.85

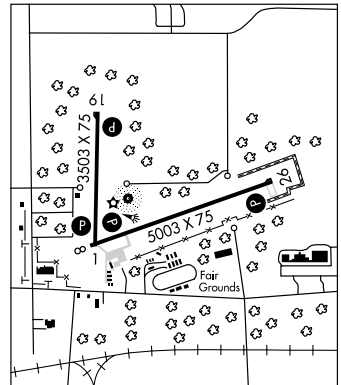
RADIO AIDS TO NAVIGATION: NOTAM FILE MBL.

MANISTEE (L) VOR/DME 111.4 MBL Chan 51 N44°16.24'

W86°15.24' 205° 19.6 NM to fld. 618/5W.

LUDINGTON NDB (MHW) 341 LDM N43°57.77' W86°24.57' at

fld. NOTAM FILE LDM.



LUZERNE

LOST CREEK (5Y4) 3 NE UTC-5(-4DT) N44°39.60' W84°14.25'

LAKE HURON

1051 NOTAM FILE LAN

RWY 18-36: 2600X100 (TURF)

RWY 18: Thld dspclcd 440'. Trees. RWY 36: Thld dspclcd 715'. Trees.

RWY 05-23: 2200X100 (TURF)

RWY 05: Thld dspclcd 200'. Trees. RWY 23: Thld dspclcd 415'. Trees.

AIRPORT REMARKS: Unattended. Arpt CLOSED Nov 14-Apr 15 and when snow covered. Remote ctl model acft ops S end Rwy 05-23. Deer on and in/ovf arpt. Rwy 36 first 200' soft sand. Rwy 05-23 and Rwy 18-36 and dspclcd thlds marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

MACKINAC CO (See ST IGNACE)

MACKINAC ISLAND (MCD) 1 NW UTC-5(-4DT) N45°51.90' W84°38.24'

LAKE HURON

739 B TPA-1900 (1159) NOTAM FILE MCD

L-31B

RWY 08-26: H3500X75 (ASPH) S-13 MIRL 0.4% up NE

IAP

RWY 08: REIL. PAPI(P4L)-GA 3.0° TCH 25'. Tree.

RWY 26: REIL. PAPI(P4L)-GA 3.5° TCH 34'. Trees.

AIRPORT REMARKS: Attended Jun-Oct 1300-2300Z; Jan-May 1230-2230Z; Nov-Dec 1300-2200Z. Noise abatement procedures: Tfc pattern altitude 1900' MSL; climb to 1900' MSL before turning; avoid flight over shore and town; no touch and go lds. Birds on and in/ov arpt. Ldg fee. ACTIVATE MIRL RWY 08-26 and PAPI RWYS 08 and 26 and REIL RWYS 08 and 26-122.8.

WEATHER DATA SOURCES: AWOS-3 118.275 (906) 847-3778.

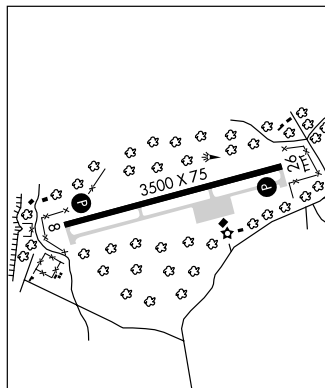
COMMUNICATIONS: CTAF/UNICOM 122.7

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 134.6

RADIO AIDS TO NAVIGATION: NOTAM FILE PLN.

PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84' W84°39.85' 011° 14.1 NM to fld. 840/6W. HIWAS.

COMM/NAV/WEATHER REMARKS: AWOS-3 visibility unreliable.



MACKINAC ISLAND N45°53.48' W84°44.09'

LAKE HURON

RCD 122.35 (GREEN BAY RADIO) at Mackinac Co.

L-31B

MADDS N42°29.69' W83°05.60' NOTAM FILE DET.

DETROIT

NDB (LOM) 338 DE 149° 6.3 NM to Coleman A. Young Muni. Unmonitored.

MAIDENS (See WILLIAMSTON)

MALLY N42°07.61' W86°18.80' NOTAM FILE BEH.

CHICAGO

NDB (LOM) 397 BE 274° 5.1 NM to Southwest Michigan Rgnl. Unmonitored.

MANCELONA MUNI (D90) 2 N UTC-5(-4DT) N44°55.50' W85°04.00'

GREEN BAY

1133 NOTAM FILE LAN

RWY 18-36: 3400X140 (TURF)

RWY 18: Trees. RWY 36: Tree.

RWY 10-28: 2050X120 (TURF)

RWY 10: Thld dspcd 830'. Trees. RWY 28: Thld dspcd 200'. Tree.

AIRPORT REMARKS: Unattended. Arpt CLOSED when snow covered and Nov thru Apr 15 rwy not plowed. Rwy 18-36 marked with 3' yellow cones. Rwy 10-28 marked with tires.

COMMUNICATIONS: CTAF 122.9

MANCHESTER

ROSSETTIE (75G) 3 N UTC-5(-4DT) N42°11.70' W84°01.85'

DETROIT

1005 NOTAM FILE LAN

COPTER

RWY 18-36: 2480X100 (TURF) LIRL (NSTD)

RWY 18: Trees. RWY 36: Thld dspcd 665'. Road. Rgt tfc.

AIRPORT REMARKS: Attended irregularly. Field gets muddy in spring. Rwy on rolling terrain. Rwy 18-36 NSTD LIRL due to spacing. Rwy 18-36 marked with 2' yellow cones and painted tires.

COMMUNICATIONS: CTAF 122.9

MANISTEE N44°16.24' W86°15.24'. NOTAM FILE MBL.

GREEN BAY

(L) VOR/DME 111.4 MBL Chan 51 at Manistee Co-Blacker. 618/5W. AWOS-3.

L-281, 31B

VOR unusable 140°-165° byd 20 NM below 5000'. DME unusable 320°-070° byd 20 NM below 3000'.

RCD 122.1R 111.4T (LANSING RADIO)

MANISTEE CO—BLACKER (MBL) 3 NE UTC-5(-4DT) N44°16.35' W86°14.81'

GREEN BAY

621 B S2 FUEL 100LL, JET A Class III, ARFF Index A NOTAM FILE MBL

H-2K, L-281, 31B

RWY 09-27: H5500X100 (ASPH) S-26, D-31 HIRL

IAP

RWY 09: REIL. PAPI(P4L)—GA 3.0° TCH 30'. Tree.

RWY 27: MALSR. PAPI(P4L)—GA 3.0° TCH 45'. Trees.

RWY 18-36: H2721X75 (ASPH) S-12.5 MIRL

RWY 18: PAPI(P2L)—GA 4.0° TCH 30'. Trees.

RWY 36: PAPI(P2L)—GA 4.0° TCH 26'. Tree.

AIRPORT REMARKS: Attended Apr-Oct 1300-0100Z† Nov-Mar 1300-2200Z†. Deer and birds on and in/ov arpt. ARFF unavbl exc air carrier, others 24 hr PPR 231-723-4351. ARFF monitoring CTAF during air carrier ops. Part 139 certified for scheduled air carriers 10-30 seats only. Unscheduled air carriers over 30 seats not authorized. Maintenance personnel monitoring CTAF during work on twys and rwys. Twys marked with reflectors. ACTIVATE HIRL Rwy 09-27 and MIRL Rwy 18-36, REIL Rwy 09, PAPI Rwys 09, 18, 27 and 36—CTAF.

WEATHER DATA SOURCES: AWOS-3 111.4 MBL (231) 723-6073.**COMMUNICATIONS:** CTAF/JUNICOM 122.8

RCO 122.1R 111.4T (LANSING RADIO)

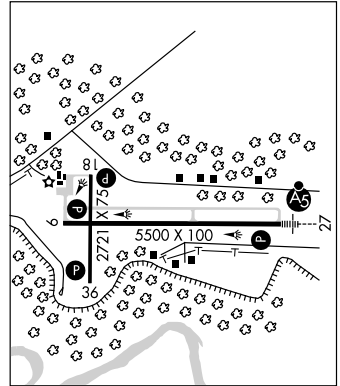
RADIO AIDS TO NAVIGATION: NOTAM FILE MBL.

(L) VOR/DME 111.4 MBL Chan 51 N44°16.24'

W86°15.24' at fld. 618/5W. AWOS-3.

JEPOT NDB (LOM) 254 MB N44°16.25' W86°08.57' 276° 4.5NM to fld.

ILS 108.35 I-MBL Rwy 27. LOM JEPOT NDB. Unmonitored 0100-1300Z†.

**MANISTIQUE****SCHOOLCRAFT CO** (ISQ) 3 NE UTC-5(-4DT) N45°58.48' W86°10.31'

GREEN BAY

684 B FUEL 100LL, JET A NOTAM FILE ISQ

H-2K, L-31B

RWY 10-28: H5001X100 (ASPH) S-26 D-45 MIRL

IAP

RWY 10: PAPI(P2L)—GA 3.0° TCH 35'. Trees.

RWY 28: REIL. PAPI(P2L)—GA 3.0° TCH 38'. Trees.

RWY 01-19: H2501X50 (ASPH) S-26, D-45

RWY 01: Trees. RWY 19: Trees.

AIRPORT REMARKS: Attended Mon-Fri 1200-2200Z†, Sat-Sun 1330-2300Z†. For arpt attendance call 906-341-5522 during attendance hrs; or 906-341-0515 after hours (manager residence). Birds and deer on and in/ov arpt. Rwy 19 +100' unmarked p-line 1 mile north of rwy end. Rwy 10 PAPI OTS indef. ACTIVATE MIRL Rwy 10-28 and PAPI Rwy 10 and Rwy 28 and REIL Rwy 28—CTAF. Rwy 28 south side REIL OTS indef.

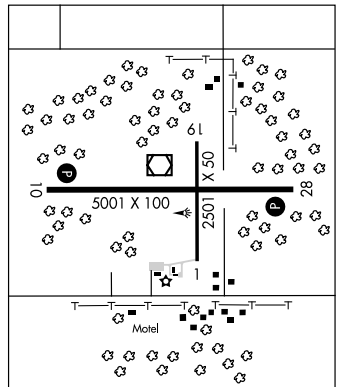
WEATHER DATA SOURCES: AWOS-3 110.4 ISQ (906) 341-8585.**COMMUNICATIONS:** CTAF/JUNICOM 122.8

RCO 122.25 (GREEN BAY RADIO)

RADIO AIDS TO NAVIGATION: NOTAM FILE ISQ.

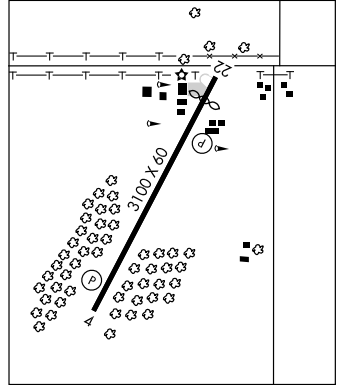
(L) VOR/DME 110.4 ISQ Chan 41 N45°58.58'

W86°10.41' at fld. 680/5W. AWOS-3.

**MAPLE GROVE** (See FOWLERVILLE)**MARE GROVE HELIPORT** (See FOWLERVILLE)

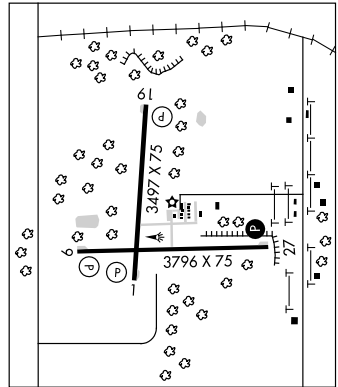
MARINE CITY (76G) 4 W UTC-5(-4DT) N42°43.25' W82°35.75'
 613 B S4 FUEL 100LL, JET A TPA-1413(800) NOTAM FILE LAN
RWY 04-22: H3100X60 (ASPH) MIRL (NSTD)
RWY 04: REIL. PAPI(P2L)—GA 4.0° TCH 25'. P-line.
RWY 22: PAPI(P2L)—GA 4.0° TCH 25'. Thld dsplcd 295'. Brush.
AIRPORT REMARKS: Attended continuously. Rwy 04-22 NSTD MIRL lctd 23' from rwy edge.
COMMUNICATIONS: CTAF/UNICOM 123.0
RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.
PECK (H) VORTAC 114.0 ECK Chan 87 N43°15.36'
 W82°43.08' 177° 32.5 NM to fld. 810/7W. HIWAS.

DETROIT
L-30F



MARLETTE (77G) 1 SW UTC-5(-4DT) N43°18.71' W83°05.46'
 895 B S4 FUEL 100LL NOTAM FILE LAN
RWY 09-27: H3796X75 (ASPH) MIRL (NSTD)
RWY 09: PAPI(P4R)—GA 3.0° TCH 20'. Trees.
RWY 27: REIL. PAPI(P4R)—GA 3.0° TCH 20'. Trees.
RWY 01-19: H3497X75 (ASPH) MIRL 0.7% up N
RWY 01: PAPI(P4L)—GA 3.0° TCH 20'.
RWY 19: PAPI(P4L)—GA 3.0° TCH 20'. Trees.
AIRPORT REMARKS: Attended Mon-Fri 1300-2200Z±. Glider ops on and in vof arpt. Rwy 09-27 NSTD MIRL; lghts last 2000' not split amber/white lens. ACTIVATE MIRL Rwy 01-19 and Rwy 09-27; PAPI and REIL Rwy 27—CTAF.
COMMUNICATIONS: CTAF/UNICOM 122.8
PECK RCO 122.1R 114.0T (LANSING RADIO)
 Ⓜ CLEVELAND CENTER APP/DEP CON 127.7
RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.
PECK (H) VORTAC 114.0 ECK Chan 87 N43°15.35'
 W82°43.08' 289° 16.7 NM to fld. 810/7W. HIWAS.

DETROIT
L-28J
IAP



MARQUETTE**SAWYER INTL**

(SAW) 17 S UTC-5(-4DT) N46°21.22' W87°23.72'

GREEN BAY1221 B S4 FUEL 100LL, JET A OX 1,2 LRA ARFF Index—See Remarks
RWY 01-19: H12366X150 (ASPH-CONC-GRVD) S-75, D-175, ST-175, DT-490NOTAM FILE SAW
HIRLH-21, L-31A
IAP, AD

RWY 01: MALS R. PAPI(P4L)—GA 3.0° TCH 66'.

RWY 19: REIL. PAPI(P4L)—GA 3.0° TCH 62'. 0.4% down.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 01: TORA-12366 TODA-12366 ASDA-12366 LDA-12366

RWY 19: TORA-12366 TODA-12366 ASDA-12366 LDA-12366

AIRPORT REMARKS: Attended 1000-0100Z†. For svc after hrs call 906-222-3062 (pager). Fuel avbl 24 hrs with credit card, multi-svc and av card. Self svc fuel located adjacent FBO ramp. FBO svc after hrs contact 906-222-3062. Birds and deer on and in/ov arpt. PAEW on arpt monitor 119.975 (CTAF). Class I, ARFF Index D avbl. Call arpt mgr at 906-458-6336 to confirm availability of personnel and equipment. Air carrier ops involving acft with more than 30 passenger seats are not authorized in excess of 15 minutes before or after scheduled arrival/dep times without prior coordination with arpt manager. 48 hrs prior to unscheduled air carrier operations with more than 30 passenger seats call arpt manager 906-458-6336. General aviation and charter acft parking avbl at general aviation terminal only, lctd SE corner of arpt. North entrance to air carrier ramp, south of ARFF/SRE building, closed Nov-Mar. S half of air carrier terminal ramp not plowed Oct-Apr. Frequent snow removal ops in progress various times Oct-Apr. Monitor CTAF. Twy A north of Twy C clsd 15 Nov-15 Apr. Twy B clsd 15 Nov-15 Apr. Twy G clsd 15 Nov-15 Apr. North air carrier ramp entrance/exit clsd 15 Nov-15 Apr. ACTIVATE HIRL Rwy 01-19, MALS Rwy 01 and REIL Rwy 19—119.975. All lighting pilot controlled CTAF 119.975 when ATCT closed. Rwy 01-19 75' paved shoulders each side. Ramp fees in effect. Ramp fees may be waived with fuel purchase. FBO svc after hrs ctc 906-222-3062 (pager).

WEATHER DATA SOURCES: AWOS-3 118.375 (906) 346-5126.**COMMUNICATIONS:** CTAF 119.975 UNICOM 122.7

SAWYER RCD 123.6 (GREEN BAY RADIO)

® MINNEAPOLIS CENTER APP/DEP CON 119.1

SAWYER TOWER 119.975 (1100-0300Z†) GND CON 121.65

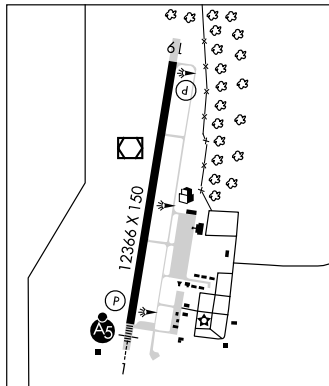
AIRSPACE: CLASS D svc 1100-0300Z† other times CLASS E.**RADIO AIDS TO NAVIGATION:** NOTAM FILE SAW.

(H) VORW/DME 117.1 SAW Chan 118 N46°21.54' W87°23.83' at fld. 1220/4W.

VOR portion unusable 330°-090° byd 10 NM blo 8000'. DME unusable 250°-090° byd 30 NM blo 4500'.

SUOMI NDB (LOM) 410 SO N46°15.73' W87°24.97' 013° 5.6NM to fld.

ILS 110.1 I-SOU Rwy 01. Class IE. LOM SOUMI NDB. ILS unmonitored.

COMM/NAV/WEATHER REMARKS: No emergency frequencies at twr.

MARSHALL

BROOKS FLD (RMY) 1 S UTC-5(-4DT) N42°15.07' W84°57.33'

DETROIT
L-28J
IAP

941 B FUEL 100LL, TPA-1941(1000) NOTAM FILE RMY

RWY 10-28: H3501X75 (ASPH) S-20 MIRL

RWY 10: PAPI (P4L)-GA 4.0° TCH 25'. Tree.

RWY 28: PAPI (P4R)-GA 4.0° TCH 36'. Trees.

AIRPORT REMARKS: Attended 1300Z-dusk except major holidays.

Parachute activity on and in/ovf arpt. Snow removal in progress 15 Nov-15 Apr. Vehicle operators monitor CTAF. Noise abatement procedures in effect ctc arpt manager 269-781-5183 extension 1150. CAUTION: Deer on and in/ovf arpt. Extensive glider and ultralight activity on and in/ovf arpt. Ultralight acft ops south of Rwy 10-28. Ultralight acft fly left hand pattern 500' AGL, S of Rwy 10-28. MIRL Rwy 10-28 and H1 perimeter lgts preset low ints, to increase ints ACTIVATE-CTAF.

WEATHER DATA SOURCES: AWOS-3 120.025 (269) 781-9070.

COMMUNICATIONS: CTAF/UNICOM 122.8

BATTLE CREEK RCO 122.2 (LANSING RADIO)

Ⓡ KALAMAZOO APP/DEP CON 119.2 (1100-0400Z‡)

Ⓡ CHICAGO CENTER APP/DEP CON 127.55 (0400-1100Z‡)

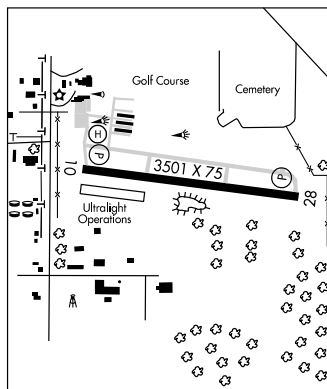
RADIO AIDS TO NAVIGATION: NOTAM FILE BTL.

BATTLE CREEK (T) VORTACW 109.4 BTL Chan 31 N42°18.59'
W85°15.14' 107° 13.7 NM to fld. 922/2W.

HELIPAD H1: H50X50 (CONC) S-12.5 PERIMETER LGTS

HELIPAD H1: Pole.

HELIPORT REMARKS: 150' lgt'd water twr 3000' south of pad. 21' lgt'd pole 195' northeast of pad. No snow removal.



MASON JEWETT FLD (TEW) 1 SE UTC-5(-4DT) N42°33.95' W84°25.39'

DETROIT
L-28J
IAP

920 B FUEL 100LL, JET A NOTAM FILE TEW

RWY 10-28: H4000X75 (ASPH) S-12.5 MIRL

RWY 10: REIL. PAPI(P4L)-GA 4.0° TCH 35'. Antenna. Rgt tfc.

RWY 28: REIL. PAPI(P4L)-GA 3.0° TCH 25'. Road.

AIRPORT REMARKS: Unattended. Powered parachutes prohibited. Deer and birds on and in/ovf arpt. Hangar space as avbl; confirm by prior arrangement. MIRL Rwy 10-28; PAPI and REIL Rwy 10 and 28 and rotating bcn ops SS-0500Z‡, after 0500Z‡ ACTIVATE-CTAF. Rwy 28 PAPI unusable byd 7° right and left of centerline.

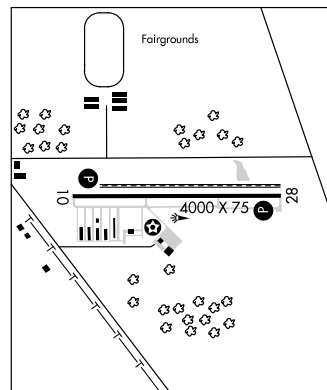
WEATHER DATA SOURCES: AWOS-3 119.425 (517) 676-5607.

COMMUNICATIONS: CTAF/UNICOM 122.7

Ⓡ LANSING APP/DEP CON 118.65

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

LANSING (L) VORTACW 110.8 LAN Chan 45 N42°43.04'
W84°41.85' 132° 15.2 NM to fld. 887/5W.



MASON CO (See LUDINGTON)

MBS INTL (See SAGINAW)

MECOSTA MORTON (27C) 2 W UTC-5(-4DT) N43°37.75' W85°15.75'

CHICAGO

1022 NOTAM FILE LAN

RWY 09-27: 2027X100 (TURF)

RWY 09: Thld dsplcd 546'. Road. RWY 27: Tree.

RWY 03-21: 2010X100 (TURF)

RWY 03: Thld dsplcd 760'. Trees. RWY 21: Thld dsplcd 460'. Trees.

AIRPORT REMARKS: Unattended. Arpt CLOSED when rwy's are snow covered or with standing water. No winter snow removal. Model aircraft area east of Rwy 03-21 intersection. Rwy 03-21 and dsplcd thld marked with 18 inch yellow cones. Rwy 09-27 and dsplcd thld marked with 18 inch yellow cones.

COMMUNICATIONS: CTAF 122.9

MENOMINEE—MARINETTE TWIN CO (MNM) 1 NW UTC-6(-5DT)

GREEN BAY

H-21, L-31B

IAP

N45°07.60' W87°38.31'

625 B S2 FUEL 100LL, JET A NOTAM FILE MNM

RWY 03-21: H6000X100(ASPH) S-80, D-100, ST-127,
DT-175 HIRL

RWY 03: MALSR. RWY 21: PAPI(P4L)—GA 3.0° TCH 43'.

RWY 14-32: H5100X100 (ASPH-PFC) S-30, D-35,
DT-60 MIRL 0.3% up NW

RWY 14: VASI(V4L)—GA 3.0° TCH 41'. Trees.

RWY 32: PAPI(P4L)—GA 3.0° TCH 39'. Tree.

AIRPORT REMARKS: Attended Mon-Fri 1400-2300Z†, Sat 1400-1800Z†, for attendant after hrs call 715-938-2006 or 906-282-0260. 24 hr self-serve 100LL with major credit card. Deer and gulls on and in/ovf arpt. Avoid over flight of noise sensitive area lctd 7 miles S of arpt. 48 hr PPR for unscheduled air carrier ops with more than 30 passenger seats call 906-863-8408. ACTIVATE HIRL Rwy 03-21, MIRL Rwy 14-32; VASI Rwy 14, PAPI Rwy 21 and Rwy 32; MALSR Rwy 03—CTAF.

WEATHER DATA SOURCES: AWOS-3 109.6 MNM (906) 863-8801.**COMMUNICATIONS:** CTAF/JUNICOM 122.8

RCO 122.1R 109.6T (GREEN BAY RADIO)

GREEN BAY APP/DEP CON 119.5 (1130-0530Z†)

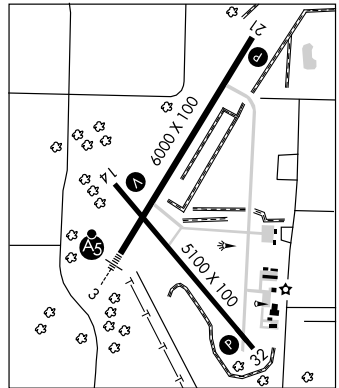
Ⓡ MINNEAPOLIS CENTER APP/DEP CON 125.55 (0530-1130Z†)

RADIO AIDS TO NAVIGATION: NOTAM FILE MNM.

(L) VOR/DME 109.6 MNM Chan 33 N45°10.81' W87°38.83' 173° 3.2 NM to fld. 650/00E. AWOS-3.

TRIBE NDB (LOM) 239 TN N45°03.70' W87°41.76' 035° 4.6 NW to fld.

ILS 108.7 I-TNQ Rwy 03. Class IB. LOM TRIBE NDB. ILS unmonitored.

**MERILLAT** (See TECUMSEH)**MEYERS—DIVER'S** (See TECUMSEH)**MIDLAND****JACK BARSTOW** (IKW) 3 NW UTC-5(-4DT) N43°39.78' W84°15.68'

DETROIT

L-281, 31C

IAP

635 B S4 FUEL 100LL, JET A NOTAM FILE LAN

RWY 06-24: H3801X75 (ASPH) S-24 MIRL 0.4% up NE

RWY 06: REIL. PAPI(P2L). Road.

RWY 24: REIL. PAPI(P2L). Trees.

RWY 18-36: H3001X75 (ASPH) S-24 MIRL

RWY 18: REIL. PAPI(P2L). Trees.

RWY 36: REIL. PAPI(P2L). Trees.

AIRPORT REMARKS: Attended Mon-Fri 1300-2300Z†, Sat-Sun 1300-2100Z†. Arpt unattended major holidays. Deer on and in/ovf arpt. Occasional ultralight activity. Noise sensitive area S of arpt; use preferred Rwy 06-24. MIRL Rwy 06-24 and Rwy 18-36 preset on low ints dusk-0400Z†. After 0400Z† ACTIVATE—CTAF. To increase ints and ACTIVATE PAPI and REIL Rwys 06, 24, 18 and 36—CTAF.

WEATHER DATA SOURCES: AWOS-3 119.525 (989) 835-5841.**COMMUNICATIONS:** CTAF/JUNICOM 122.8

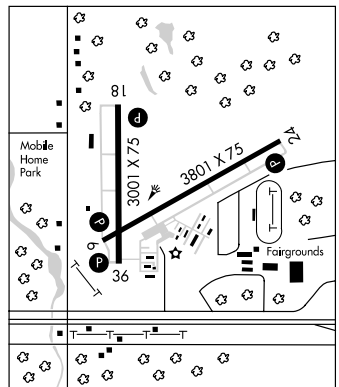
Ⓡ SAGINAW APP/DEP CON 126.45 (1100-0400Z†)

Ⓡ CLEVELAND CENTER APP/DEP CON 127.7 (0400-1100Z†)

GCO 121.725 (SAGINAW CLNC and FLIGHT SERVICES)

RADIO AIDS TO NAVIGATION: NOTAM FILE MBS.

(L) VOR/DME 112.9 MBS Chan 76 N43°31.90' W84°04.64' 318° 11.2 NM to fld. 663/3W. HIWAS.

COMM/NAV/WEATHER REMARKS: GCO OTS indef.

MIO**OSCODA CO** (51M) 2N UTC-5(-4DT) N44°40.83' W84°07.50'

LAKE HURON

1050 NOTAM FILE LAN

RWY 09-27: 2800X90 (DIRT) LIRL**RWY 09:** Thld dsplcd 978'. Trees.**RWY 27:** Thld dsplcd 784'. Trees.**AIRPORT REMARKS:** Unattended. Arpt CLOSED Dec thru Apr except PPR; confirm rwy condition. Rwy 09-27 sfc rough with large areas of soft sand on rwy. Rwy 09-27 marked with 3' yellow cones. ACTIVATE LIRL Rwy 09-27—CTAF.**COMMUNICATION:** CTAF 122.9**MONROE****CLUSTER** (TTF) 2 NW UTC-5(-4DT) N41°56.39' W83°26.08'

DETROIT

616 B S4 FUEL 100LL, JET A OX 1 NOTAM FILE TTF

COPTER

RWY 03-21: H4997X100 (ASPH) S-60, D-80 MIRL

L-28J

RWY 03: VASI(V2L)—GA 4.0° TCH 49'. Trees.

IAP

RWY 21: REIL. PAPI(P2L)—GA 3.5° TCH 42'. Trees.**AIRPORT REMARKS:** Attended 1300Z±-dusk. ACTIVATE MIRL Rwy 03-21, REIL Rwy 21, VASI Rwy 03 and PAPI Rwy 21—CTAF.**WEATHER DATA SOURCES:** AWOS-3 119.075 (734) 384-0259.**COMMUNICATIONS:** CTAF/UNICOM 122.7

CARLETON RCO 122.1R 115.7T (LANSING RADIO)

Ⓡ DETROIT APP/DEP CON 134.3

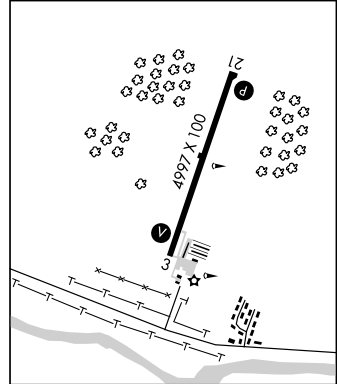
GCO 121.725 (DETROIT METRO CLNC and FLIGHT SERVICES)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

CARLETON (H) VORTAC 115.7 CRL Chan 104 N42°02.88'

W83°27.45' 174° 6.6 NM to fld. 629/3W.

HIWAS.

**MOORESTOWN AIRPARK** (6YØ) 1 SE UTC-5(-4DT) N44°27.75' W84°59.75'

LAKE HURON

1213 NOTAM FILE LAN

RWY 03-21: 2797X100 (TURF)**RWY 03:** Thld dsplcd 799'. Tree.**RWY 21:** Thld dsplcd 998'. Trees.**RWY 09-27:** 2599X100 (TURF)**RWY 09:** Thld dsplcd 399'. Trees.**RWY 27:** Thld dsplcd 429'. Road.**AIRPORT REMARKS:** Attended Apr-Nov dawn-dusk. No snow removal in winter. Open winter months to ski equipped acft only. Rwy 03-21 marked with 3' yellow cones. Rwy 09-27 marked with 3' yellow cones.**COMMUNICATIONS:** CTAF/UNICOM 122.8

MOUNT PLEASANT MUNI (MOP) 2 NE UTC-5(-4DT) N43°37.30' W84°44.24'

DETROIT

755 B S4 FUEL 100LL, JET A NOTAM FILE MOP

H-2K, 10F, L-28J

RWY 09-27: H5001X100 (ASPH) S-50, D-65, ST-82, DT-118 MIRL

IAP

RWY 09: Trees. RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 35'.

RWY 05-23: 2500X160 (TURF)

RWY 05: Tree. RWY 23: Trees.

AIRPORT REMARKS: Attended 1300Z±-dusk. Fuel 24 hour major credit card self svc. Deer and birds on and in/ov arpt. Parachute Jumping. Rwy 27 noise abatement: climb to 1500' AGL before turning over city. Rwy 05-23 marked with 3' yellow cones.

ACTIVATE MIRL Rwy 09-27, REIL Rwy 27 and PAPI Rwy 27—CTAF.

WEATHER DATA SOURCES: AWOS-3 110.6 MOP (989) 773-2885.

COMMUNICATIONS: CTAF/UNICOM 123.0

RCO 122.6 (LANSING RADIO)

® SAGINAW APP/DEP CON 126.45 (1100-0400Z±)

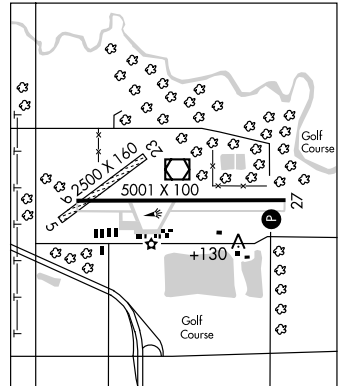
CLEVELAND CENTER APP/DEP CON 127.7 (0400-1100Z±)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

(L) VORW/DME 110.6 MOP Chan 43 N43°37.37'

W84°44.24' at fld. 752/5W. AWOS-3.

DME portion unusable byd 33 NM blo 4000'.



MUNISING

HANLEY FLD (5Y7) 3 SE UTC-5(-4DT) N46°21.25' W86°37.26'

GREEN BAY

984 B NOTAM FILE GRB

RWY 18-36: 4000X120 (TURF)

RWY 18: Trees. RWY 36: Trees.

AIRPORT REMARKS: Attended irregularly May-Nov. Arpt CLOSED Nov-May 14. Rwy 18-36 sfc rough. Birds and deer on and in/ov arpt. Rwy 18-36 marked with cones.

COMMUNICATIONS: CTAF 122.9

MUSKEGON CO (MKG) 4 S UTC-5(-4DT) N43°10.13' W86°14.26'

CHICAGO

629 B S4 FUEL 100LL, JET A OX 2 Class I, ARFF Index A NOTAM FILE MKG

H-5E, 10F, L-28I

RWY 06-24: H6501X150 (ASPH-PFC) S-100, D-160, ST-175, DT-300 HIRL

IAP, AD

RWY 06: REIL. VASI(V4L)—GA 3.0° TCH 45'. Trees.
 RWY 24: MALSR. VASI(V4L)—GA 3.0° TCH 51'. Tree.

RWY 14-32: H6100X150 (ASPH-PFC) S-80, D-120, ST-165, DT-210 HIRL

RWY 14: REIL. PAPI(P4L)—GA 3.0° TCH 45'.
 RWY 32: MALSR. Tree.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 06: TORA-6501 TODA-6501 ASDA-6501 LDA-6501
 RWY 24: TORA-6501 TODA-6501 ASDA-6501 LDA-6501

AIRPORT REMARKS: Attended 1100-0200Z†, other hrs call 231-798-2126. Rwy 14-32 CLOSED between 0400Z† and 1100Z† daily. Deer and birds on and invof of arpt. 24 hr PPR for unscheduled air carrier ops with more than 30 passenger seats between 0400-1100Z†, call airport manager 231-798-4596. After hours 231-798-1329. VASI Rwy 06, Rwy 24, PAPI Rwy 14 opr continuously. When twr clsd, ACTIVATE HIRL Rwy 06-24 and Rwy 14-32, REIL Rwy 06 and Rwy 14, MALSR Rwy 24 and Rwy 32—CTAF. Ldg fee.

WEATHER DATA SOURCES: ASOS (231) 798-1317. HIWAS 115.2 MKG.

COMMUNICATIONS: CTAF 126.25 ATIS 124.3 UNICOM 122.95

RCO 122.5 (LANSING RADIO)

Ⓡ APP/DEP CON 118.2 North of V-2. 119.8 South of V-2.

Ⓡ CHICAGO CENTER APP/DEP CON 132.27 (0400-1100Z†)

TOWER 126.25 (1100-0400Z†) GND CON 121.6

AIRSPACE: CLASS D svc 1100-0400Z† other times CLASS E.

TRSA svc ctc APP CON within 20 NM.

RADIO AIDS TO NAVIGATION: NOTAM FILE MKG.

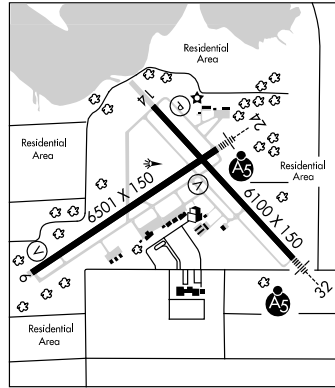
(L) VORTACW 115.2 MKG Chan 99 N43°10.16' W86°02.36' 271° 8.7 NM to fld. 659/1W. HIWAS.

MUSKO NDB (LOM) 219 MK N43°07.27' W86°10.12' 316°4.2 NM to fld. Unmonitored. LOM unusable byd 10 NM.

ILS 109.9 I-MKG Rwy 32. Class IE. LOM MUSKO NDB. LOM unusable byd 10 NM. LOC BC unusable byd 12° left of course byd 20° right of course. Unmonitored when twr clsd.

ILS/DME 109.5 I-CJH Chan 32 Rwy 24. Class IB. LOC only. Unmonitored when twr clsd.

ASR (1100-0400Z†)



MUSKO N43°07.27' W86°10.12' NOTAM FILE MKG.

CHICAGO

NDB (LOM) 219 MK 316° 4.2 NM to Muskegon Co. Unmonitored. Unusable byd 10 NM.

L-28I

NAPOLEON

NAPOLEON (3NP) 1 NW UTC-5(-4DT) N42°10.25' W84°15.58'

DETROIT

963 S2 NOTAM FILE LAN

RWY 09-27: 2740X200 (TURF)

RWY 09: Thld dsplcd 1200'. Road. RWY 27: Trees.

RWY 15-33: 2500X160 (TURF)

RWY 15: Thld dsplcd 290'. Road. RWY 33: Thld dsplcd 550'. Trees.

AIRPORT REMARKS: Attended irregularly. Oil tanks S of arpt. Ultralight ops in grass W of Rwy 15-33. Rwy 33 +11' parked vehicles at the thld and buildings 150' distance. Rwy 09-27 and Rwy 15-33 marked with 3' yellow cones; dsplcd thlds marked with three 3' yellow cones each side of rwy.

COMMUNICATIONS: CTAF 122.9

VAN WAGNEN (6H4) 5W UTC-5(-4DT) N42°09.39' W84°20.06'

DETROIT

980 NOTAM FILE LAN

RWY 09-27: 2105X55 (TURF) LIRL

RWY 09: Trees. RWY 27: P-line.

AIRPORT REMARKS: Attended continuously. Rwy 09-27 marked with yellow tires.

COMMUNICATIONS: CTAF 122.9

NARTRON FLD (See REED CITY)

NEWBERRY N46°18.75' W85°27.81' NOTAM FILE ERY.

GREEN BAY

(T) VOR/DME 108.2 ERY Chan 19 at Luce Co. 871/6W. AWOS-3.

L-31B

VOR/DME unmonitored Mon-Fri 2130-1230Z† and unmonitored Sat-Sun.

RCO 122.4 (GREEN BAY RADIO)

NEWBERRY

LUCE CO

(ERY) 3 SE UTC-5(-4DT) N46°18.66' W85°27.43'

GREEN BAY

869 B FUEL 100LL NOTAM FILE ERY

L-31B

RWY 11-29: H4304X75 (ASPH) S-8 MIRL 0.5% up W

RWY 11: REIL. PAPI(P4L)—GA 3.0° TCH 25. Trees.

RWY 29: REIL. PAPI(P4L)—GA 3.0° TCH 35'. Trees.

RWY 04-22: 2856X150 (TURF)

RWY 04: Thld dspld 936'. Trees.

RWY 22: Trees.

AIRPORT REMARKS: Attended Mon-Fri 1330-2100Z†. For svcs other

times call 906-293-3703. Rwy 04-22 CLOSED Nov-Mar and

when snow covered. Rwy 04-22 marked with 3' yellow cones.

ACTIVATE MIRL Rwy 11-29; REIL Rwy 11 and Rwy 29; PAPI Rwy

11 and Rwy 29 and windcone—CTAF.

WEATHER DATA SOURCES: AWOS-3 108.2 ERY (906) 293-2979.

COMMUNICATIONS: CTAF/UNICOM 122.8

NEWBERRY RCO 122.4 (GREEN BAY RADIO)

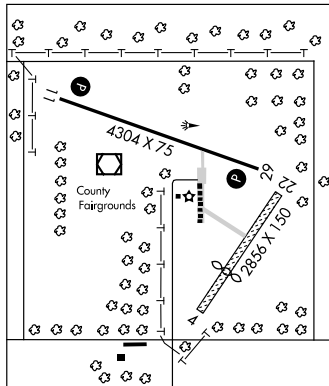
RADIO AIDS TO NAVIGATION: NOTAM FILE ERY.

NEWBERRY (T) VOR/DME 108.2 ERY Chan 19 N46°18.75'

W85°27.81' at fld. 871/6W. AWOS-3.

VOR/DME unmonitored Mon-Fri 2130-1230Z† and unmonitored

Sat-Sun.



NEW HUDSON

OAKLAND SOUTHWEST

(Y47) 1 SW UTC-5(-4DT) N42°30.19' W83°37.42'

DETROIT

926 B S4 FUEL 100LL NOTAM FILE LAN

COPTER

RWY 08-26: H3128X40 (ASPH) LIRL

L-28J, A

RWY 08: VASI(V2R)—GA 3.0°. Thld dspld 1266'. Brush.

IAP

RWY 26: VASI(V2L)—GA 3.0°. Thld dspld 864'. Trees.

AIRPORT REMARKS: Attended 1330Z†-dusk. Occasional 4"-6" drop off

on rwy and twy shoulders. Trees and brush in primary surface

70'-120' left and right. ACTIVATE LIRL Rwy 08-26 CTAF 5 times.

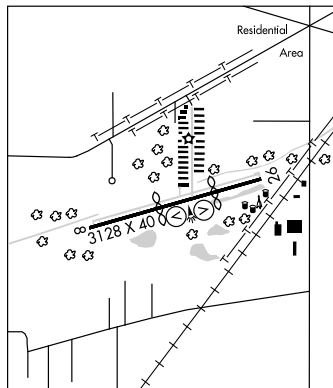
COMMUNICATIONS: CTAF/UNICOM 122.7

® DETROIT APP/DEP CON 127.5

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

SALEM (L) VORTAC 114.3 SVM Chan 90 N42°24.53'

W83°35.65' 350° 5.8 NM to fld. 950/3W.



NEWMAN'S (See KALAMAZOO)

NILES

JERRY TYLER MEMORIAL (3TR) 2 NE UTC-5(-4DT) N41°50.15' W86°13.51'

CHICAGO
L-281
IAP

750 B S4 FUEL 100LL, JET A TPA—See Remarks. NOTAM FILE LAN

RWY 15-33: H4100X75 (ASPH) S-25 MIRL

RWY 15: REIL. Thld dspclcd 300'. Road.

RWY 33: REIL. Trees.

RWY 04-22: H3315X50 (ASPH) S-8

RWY 04: Thld dspclcd 900'. Road.

RWY 22: Thld dspclcd 750'. Trees.

AIRPORT REMARKS: Attended 1400-2200Z. Arpt unattended major holidays. Obstruction lgtd poles, in Rwy 15 transition zone. Trees between Rwy 04 and Rwy 33 and between Rwy 33 and Rwy 22 obstruct view of Rwy ends. Rwy 04-22 pavement cracked and broken. TPA piston acct 1750(1000), turbine acct 2250(1500). ACTIVATE MIRL Rwy 15-33, REILS Rwy 15 and Rwy 33—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

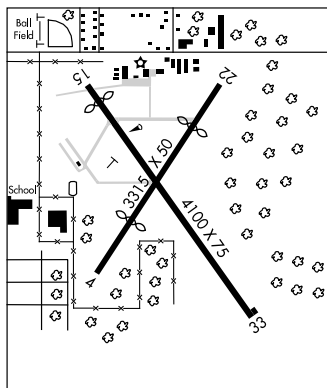
Ⓡ SOUTH BEND APP/DEP CON 118.55 (Sun-Fri 1030-0500Z, Sat 1030-0445Z), other times etc

Ⓡ CHICAGO CENTER APP/DEP CON 127.55

GCO 121.725 (SOUTH BEND CLNC and FLIGHT SERVICES)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

GIPPER (H) VORTACW 115.4 GIJ Chan 101 N41°46.12' W86°19.11' 046° 5.8 NM to fld. 804/00E. HIWAS



NORTHPORT

WOOLSEY MEMORIAL (5D5) 3 NE UTC-5(-4DT) N45°09.90' W85°34.31'

GREEN BAY

628 NOTAM FILE LAN

RWY 09-27: 3663X120 (TURF) LIRL

RWY 09: Thld dspclcd 266'. Road. RWY 27: Trees.

RWY 16-34: 2670X150 (TURF)

RWY 16: Thld dspclcd 800'. Trees. RWY 34: Thld dspclcd 269'. Trees.

AIRPORT REMARKS: Unattended. Arpt CLOSED Nov-Mar and when snow covered. Birds and deer on and invof arpt. Rwy 09-27 slopes up E to W, and Rwy 16-34 slopes up N to S. Rwy 09-27 and Rwy 16-34 and dspclcd thlds marked with 3' yellow cones. ACTIVATE LIRL Rwy 09-27-122.9.

COMMUNICATIONS: CTAF 122.9

NUNICA

HAT FIELD (5N7) 2 NW UTC-5(-4DT) N43°05.83' W86°05.68'

CHICAGO

625 S4 NOTAM FILE LAN.

RWY 08-26: 3600X100 (TURF)

RWY 08: Thld dspclcd 600'. Trees. RWY 26: Thld dspclcd 1200'. Tree.

AIRPORT REMARKS: Attended irregularly. Arpt CLOSED Nov thru Mar. Deer and birds on and invof arpt. Rwy 08-26 and dspclcd thlds marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

JABLONSKI (33C) 1 W UTC-5(-4DT) N43°04.94' W86°05.69'

CHICAGO

634 NOTAM FILE LAN

RWY 09-27: 2995X100 (TURF) LIRL

RWY 09: Thld dspclcd 998'. Tree. RWY 27: Thld dspclcd 796'. Fence.

AIRPORT REMARKS: Attended irregularly. Deer on and invof rwys. Rwy 09-27 rough with mole hills. For LIRL Rwy 09-27 call arpt manager 616-837-6282. Rwy 09-27 and dspclcd thlds marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

OAKLAND CO INTL (See PONTIAC)

OAKLAND SOUTHWEST (See NEW HUDSON)

OAKLAND/TROY (See TROY)

OCEANA CO (See HART/SHELBY)

OJIBWA AIRPARK (See WEIDMAN)

OLSTE N43°27.69' W84°10.79' NOTAM FILE MBS.

DETROIT

NDB (LOM) 257 MB 050° 6.1 NM to MBS Intl. Unmonitored. Unusable byd 10 NM and between 150°-180°.

ONAWAY**LEO E. GOETZ CO** (Y96) 1 N UTC-5(-4DT) N45°22.25' W84°13.50'

LAKE HURON

830 B NOTAM FILE LAN

RWY 15-33: H2600X60 (ASPH) MIRL**RWY 15:** Road. **RWY 33:** Trees.**RWY 03-21:** 1400X100 (TURF)**RWY 03:** Trees. **RWY 21:** Trees.**AIRPORT REMARKS:** Unattended. Confirm snow removal and winter conditions phone 989-734-2216; or arpt manager residence 989-734-4309. 11' p-line 750' from thld 125' R of centerline. Rwy 03-21 marked with 3' yellow cones.**COMMUNICATIONS:** CTAF 122.9**ONONDAGA****GORILLA** (11J) 2 SW UTC-5(-4DT) N42°25.50' W84°34.68'

DETROIT

980 NOTAM FILE LAN

Not insp

HELIPAD H1: 75X50 (TURF)**HELIPORT REMARKS:** Attended irregularly. Marked with yellow steel plates. 45' trees 180'W of pad.**COMMUNICATIONS:** CTAF 122.9**ONTONAGON CO—SCHUSTER FLD** (OGM) 3 W UTC-5(-4DT) N46°50.73' W89°22.03'

GREEN BAY

669 B **FUEL** 100LL NOTAM FILE GRB

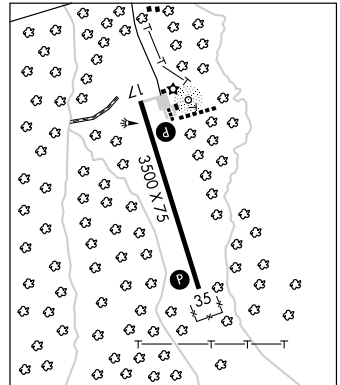
L-14J

RWY 17-35: H3500X75 (ASPH-AFSC) S-12 MIRL 0.7% up S

IAP

RWY 17: REIL. PAPI(P2L) - GA 3.45° TCH 25'. Trees.**RWY 35:** REIL. PAPI(P2L) - GA 3.45° TCH 25'. Trees.**AIRPORT REMARKS:** Unattended. 24 hr self serve fuel with VISA or Master Charge. Deer and birds on and invof arpt. MIRL Rwy 17-35 and PAPI Rwy 17 and Rwy 35 dusk-0400Z±; after 0400Z± ACTIVATE—CTAF.**COMMUNICATIONS:** CTAF 122.9

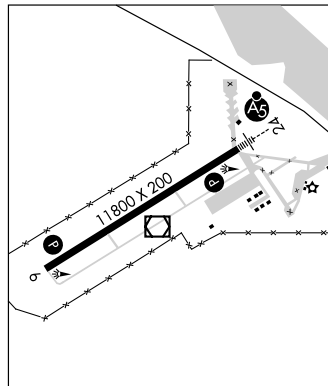
Ⓡ MINNEAPOLIS CENTER APP/DEP CON 127.2

RADIO AIDS TO NAVIGATION: NOTAM FILE IWD.**IRONWOOD (L) VORTACW** 108.8 IWD Chan 25 N46°31.94' W90°07.55' 058° 36.6 NM to fld. 1230/1E. **HIWAS.****NDB (MHW)** 375 OGM N46°51.01' W89°21.91' at fld. Unmonitored. NOTAM FILE GRB.**OSCODA CO** (See MIO)

OSCODA—WURTSMITH (OSC) 3 NW UTC-5(-4DT) N44°27.09' W83°23.65'LAKE HURON
H-11A, L-31C
IAP633 B S4 FUEL 100LL, JET A OX 2 NOTAM FILE OSC
RWY 06-24: H11800X200 (ASPH-GRVD) S-155, D-330, ST-175,
DT-550 HIRL

RWY 06: PAPI(P4L)—GA 3.0° TCH 75'. Tree.

RWY 24: MALSR. PAPI(P4L)—GA 3.0° TCH 72'.

AIRPORT REMARKS: Attended Mon-Fri dawn-dusk. During dalgt hrs tailwinds may exist over approach ends Rwy 06 and Rwy 24 simultaneously. Seagulls and migratory birds on and in/ov arpt. Be alert for potential jet blast on Twy A in/ov losco ramp. ACTIVATE HIRL Rwy 06-24, PAPI Rwy 06 and Rwy 24 and MALSR Rwy 24—CTAF.**WEATHER DATA SOURCES:** AWOS-3 116.1 ASP (989) 739-1310**COMMUNICATIONS:** CTAF/UNICOM 123.0**MINNEAPOLIS CENTER APP/DEP CON** 118.525**RADIO AIDS TO NAVIGATION:** NOTAM FILE OSC.**AU SABLE (H) VOR/WME** 116.1 ASP Chan 108 N44°26.95'
W83°23.66' at fld. 625/7W. **AWOS-3.****ILS** 108.5 I-LJU Rwy 24. LOC and Glide Slope unmonitored.**OTTAWA EXECUTIVE** (See ZEELAND)**OWOSSO COMMUNITY** (RNP) 2 E UTC-5(-4DT) N42°59.58' W84°08.31'DETROIT
L-28J
IAP

736 B S4 FUEL 100LL NOTAM FILE RNP

RWY 10-28: H4300X75 (ASPH) S-18 MIRL

RWY 10: REIL. PAPI(P4L)—GA 3.0° TCH 20'. Trees.

RWY 28: REIL. PAPI(P4L)—GA 4.0° TCH 20'. Trees.

RWY 18-36: 2599X260 (TURF)

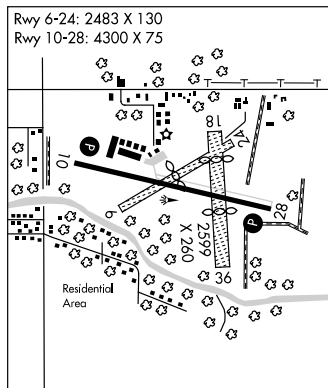
RWY 18: Thld dsplcd 396'. Bldg.

RWY 36: Thld dsplcd 990'. Trees.

RWY 06-24: 2483X130 (TURF)

RWY 06: Thld dsplcd 1057'. Trees.

RWY 24: Pole.

AIRPORT REMARKS: Attended 1400-2200Z†. Rwy 06-24 and Rwy 18-36 CLOSED Dec 1 thru Mar 31 and when snow covered. Deer and birds on and in/ov arpt. Rwy 10-28 has numerous cracks. Rwy 06-24 and Rwy 18-36 marked with cones; Rwy 06; Rwy 18; Rwy 36 dsplcd thlds marked with 3 cones each side. ACTIVATE MIRL Rwy 10-28, PAPI Rwy 10 and 28 and REIL Rwy 10 and Rwy 28—CTAF.**WEATHER DATA SOURCES:** AWOS-3 118.025 (989)729-2967.**COMMUNICATIONS:** CTAF/UNICOM 123.0**FLINT RCD** 122.3 (LANSING RADIO)Ⓡ **FLINT APP/DEP CON** 128.55 (N/W of active rwy) 118.8 (E/S of active rwy) (1045-0430Z†)**CLEVELAND CENTER APP/DEP CON** 126.75 (0430-1045Z†)**RADIO AIDS TO NAVIGATION:** NOTAM FILE FNT.**FLINT (H) VORTACW** 116.9 FNT Chan 116 N42°58.01' W83°44.82' 281° 17.3 NM to fld. 772/6W.**COMM/NAV/WEATHER REMARKS:** APP CON sectorization based upon Flint rwy usage.**PADGHAM FLD** (See ALLEGAN)**PARCHMENT****TRIPLE H** (2H4) 3N UTC-5(-4DT) N42°21.92' W85°33.35'

CHICAGO

785 NOTAM FILE LAN

RWY 01-19: 2400X100 (TURF)

RWY 01: Thld dsplcd 400'. Tree. Rgt tfc.

RWY 19: Thld dsplcd 968'. Trees.

RWY 09-27: 2600X100 (TURF)

RWY 09: Trees. Rgt tfc.

RWY 27: Thld dsplcd 1200'. Trees.

AIRPORT REMARKS: Attended irregularly. Deer in/ov arpt. Rwy 09-27, 80' trees along both rwy edges. Rwy 09-27 fence at west end. Rwy 01-19 and dsplcd thlds marked with 3' yellow cones. Rwy 09-27 and dsplcd thld marked with yellow cones. Rwy 01-19 NSTD LIRL not for public use.**COMMUNICATIONS:** CTAF: 122.9

PARK TOWNSHIP (See HOLLAND)

PAUL C. MILLER-SPARTA (See SPARTA)

PAW PAW

ALMENA (2C5) 3 NE UTC-5(-4DT) N42°15.15' W85°51.02'

CHICAGO

740 NOTAM FILE LAN

RWY 09-27: 3300X100 (TURF)

RWY 09: Thld dspcd 1085'. Trees. **RWY 27:** Thld dspcd 1159'. Trees.

AIRPORT REMARKS: Attended irregularly. Occasional deer on rwy. Rwy 09-27 and dspcd thlds marked with 3' yellow cones; dspcd thlds marked with three 3' yellow cones on each side of rwy.

COMMUNICATIONS: CTAF 122.9

PBEAAYE (See TOPINABEE)

PECK N43°15.35' W82°43.08' NOTAM FILE LAN.

DETROIT

(H) VORTAC 114.0 ECK Chan 87 289° 16.7 NM to Marlette. 810/7W. HIWAS.

H-106, 11A, L-28J

RCO 122.1R 114.0T (LANSING RADIO)

PELLSTON RGNL ARPT OF EMMET CO (PLN) 1 NW UTC-5(-4DT)

LAKE HURON

N45°34.26' W84°47.80'

H-2K, L-31B

721 B S4 FUEL 100LL, JET A Class I, ARFF Index A NOTAM FILE PLN

IAP

RWY 14-32: H6513X150 (ASPH-GRVD) D-65, ST-82, DT-120,

DDT-200 HIRL

RWY 14: REIL. VASI(V4L)—GA 3.0° TCH 52'. Trees.

RWY 32: MALSR. Tree.

RWY 05-23: H5401X150 (ASPH-GRVD) D-65, ST-82, DT-120,

DDT-200 MIRL

RWY 05: REIL. VASI(V4R)—GA 3.0° TCH 48'. Trees.

RWY 23: REIL. VASI(V4L)—GA 3.0° TCH 45'. Road.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 05: TORA-5395 TODA-5395 ASDA-5395 LDA-5395

RWY 14: TORA-6512 TODA-6512 ASDA-6512 LDA-6512

RWY 23: TORA-5395 TODA-5395 ASDA-5395 LDA-5395

RWY 32: TORA-6512 TODA-6512 ASDA-6512 LDA-6512

AIRPORT REMARKS: Attended 1100-0400Z†. Arpt CLOSED to unscheduled air carriers with more than 30 passenger seats except by 24 hr PPR. Deer and gulls occasionally on and infov arpt. Be alert for snow removal equipment and activity on and infov rwys during winter months. Twy B1 and E1 CLOSED 1 Nov thru 15 Apr. MIRL Rwy 05-23 and HIRL Rwy 14-32; REIL Rwys 05 and 14 and 23 and MALSR Rwy 32 preset low ints 0530-1000Z†, after 1000Z† to increase ints and ACTIVATE—CTAF. Rwy 05 and Rwy 23 REIL lctd 100' from their respective apch ends. Ldg fee (waived with fuel purchase).

WEATHER DATA SOURCES: ASOS 119.025 (231) 539-7700. HIWAS 111.8 PLN.

COMMUNICATIONS: CTAF/UNICOM 123.0

RCO 122.3 (LANSING RADIO) RCO 123.6 122.2 (LANSING RADIO)

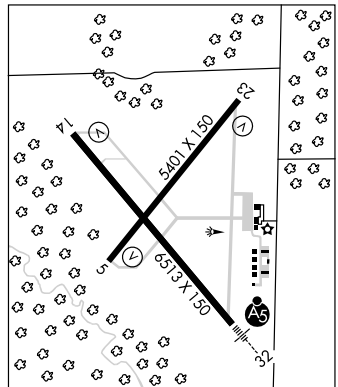
MINNEAPOLIS CENTER APP/DEP CON 134.6

RADIO AIDS TO NAVIGATION: NOTAM FILE PLN.

(L) VORTACW 111.8 PLN Chan 55 N45°37.84' W84°39.85' 243° 6.6 NM to fld. 840/6W. HIWAS.

VOR unusable 301°-339°.

ILS 111.3 I-PLN Rwy 32. Class IE.



PETERSBURG

GRADOLPH FLD (88G) 2 NW UTC-5(-4DT) N41°55.19' W83°44.10'

DETROIT

673 B S4 NOTAM FILE LAN

COPTER

RWY 09-27: 2306X110 (TURF) LIRL (NSTD)

RWY 09: Thld dspcd 310'. Trees. **RWY 27:** Thld dspcd 230'. P-line.

AIRPORT REMARKS: Attended continuously. For LIRL Rwy 09-27 and rotating bcn call 734-279-1679. Rwy 09-27 and dspcd thlds marked with yellow cones. Rwy 09-27 NSTD LIRL due to lens color and configuration. Rotating bcn OTS indef.

COMMUNICATIONS: CTAF 122.9

PETLI N42°58.09' W83°53.41' NOTAM FILE FNT.

DETROIT

NDB (LOM) 269 FN 097° 6.5 NM to Bishop Intl. Unmonitored when twr clsd.

PHURN N42°50.58' W82°35.80'. NOTAM FILE PHN.
 NDB (LOM) 332 PH 043° 5.1 NM to St Clair Co Intl.

DETROIT

PIKLE N45°43.36' W87°13.49' NOTAM FILE ESC.
 NDB (LOM) 344 ES 087° 5.5 NM to Delta Co.

PINCONNING

GROSS (521) 3 W UTC-5(-4DT) N43°50.81' W84°00.68'

DETROIT

615 NOTAM FILE LAN

RWY 09-27: 2565X100 (TURF) LIRL

RWY 09: Trees. **RWY 27:** Thld dsplcd 442'. Road.

AIRPORT REMARKS: Attended phone req-call 517-879-9915. Fuel avbl emerg only. For snow removal call 989-708-7583. Buildings in primary surface east end, 70' N; 93' S of centerline; also 4' fence along rwy edge, first 140', S side; +15'-45' trees 95' S of centerline west end. Rwy 09-27 marked with 3' yellow cones.

ACTIVATE LIRL Rwy 09-27-CTAF.

COMMUNICATIONS: CTAF 122.9

PLAINWELL MUNI (61D) 2 N UTC-5(-4DT) N42°28.07' W85°38.88'

CHICAGO

722 S4 FUEL 100LL NOTAM FILE LAN

RWY 09-27: H2650X50 (ASPH) LIRL

RWY 09: Thld dsplcd 191'. Expressway. **RWY 27:** Thld dsplcd 775'. Trees.

RWY 01-19: 2550X150 (TURF)

RWY 01: Thld dsplcd 268'. Tree. **RWY 19:** Thld dsplcd 980'. Trees.

AIRPORT REMARKS: Attended irregularly. Rwy 09-27 sfc extensive cracking. For LIRL Rwy 09-27 key 122.8 five times on. Rwy 01-19 and dsplcd thlds marked with yellow cones.

COMMUNICATIONS: CTAF/UNICOM 122.8

PLYMOUTH

CANTON-PLYMOUTH-METTETAL (1D2) 2 S UTC-5(-4DT) N42°20.89' W83°27.38'

DETROIT

696 B S4 FUEL 100LL TPA-1696(1000) NOTAM FILE LAN

COPTER

RWY 18-36: H2303X75 (ASPH-GRVD) S-12.5 MIRL 0.5% up N

L-281, A

RWY 18: PAPI(P2L)-GA 4.0° TCH 25'. Road.

IAP

RWY 36: PAPI (P4R)-GA 3.0° TCH 25'. Trees.

AIRPORT REMARKS: Attended 1300Z±-dusk. Fuel 24 hour self serve.

Noise sensitive areas N and S of arpt. Ctc arprt manager

734-459-0012 for noise abatement procedures. ACTIVATE MIRL

Rwy 18-36, PAPI Rwy 18 and Rwy 36-CTAF.

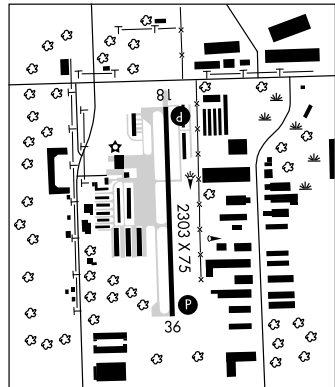
COMMUNICATIONS: CTAF/UNICOM 122.7

Ⓡ DETROIT APP/DEP CON 118.95

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

SALEM (L) VORTAC 114.3 SVM Chan 90 N42°24.53'

W83°35.65' 124° 7.1 NM to fld. 950/3W.



PONDEROSA HELIPORT (See HIGHLAND)

PONTIAC N42°42.05' W83°31.97' NOTAM FILE PTK.

DETROIT

(L) VORTAC 111.0 PSI Chan 47 116° 5.4 NM to Oakland Co Intl. 1148/3W.

VOR unusable 170°-210°.

L-281, A

RCD 122.15R 111.0T (LANSING RADIO)

PONTIAC

OAKLAND CO INTL (PTK) 5 W UTC-5(-4DT) N42°39.94' W83°25.23'

980 B S4 FUEL 100LL, JET A OX 1 LRA Class IV, ARFF Index A NOTAM FILE PTK

RWY 09R-27L: H6520X150 (ASPH-PFC) S-90, D-200, ST-175, DT-280 HIRL

RWY 09R: MALSR. PAPI (P4R)—GA 3.0° TCH 45'.

RWY 27L: REIL. VASI(V4L)—GA 3.0° TCH 45'. Trees.

RWY 09L-27R: H5675X100 (ASPH-PFC) S-38, D-60, DT-65

MIRL

RWY 09L: REIL. PAPI(P4L).

RWY 27R: REIL. PAPI(P4L)—GA 3.0° TCH 51'.

RWY 18-36: H2585X75 (ASPH)

RWY 18: PAPI(P2L)—GA 3.0°. Thld dspld 650'.

RWY 36: PAPI(P2L)—GA 3.0°.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 09L: TORA-5675 TODA-5675 ASDA-5675 LDA-5675

RWY 09R: TORA-6520 TODA-6520 ASDA-6520 LDA-6520

RWY 27L: TORA-6520 TODA-6520 ASDA-6520 LDA-6520

RWY 27R: TORA-5675 TODA-5675 ASDA-5675 LDA-5675

AIRPORT REMARKS: Attended continuously. Air carrier ops with more than 30 passenger seats req PPR call arpt manager 248-666-3900. Seaplane Idgs and tkfs on Lake Angelus 4.5 miles ENE is prohibited by local ordinances. Birds and deer on and in/ov arpt. Control twr unable to see more than 200' S of Rwy 35 thld and Twy G between Twy A and Twy B. Twy H and Twy U unlighted north of Rwy 09R-27L. Rwy 18 PAPI OTS indef. ACTIVATE MALSR Rwy 09R, PAPI Rwy 09R—CTAF. ACTIVATE PAPI Rwy 09L, REIL Rwy 27R, PAPI Rwy 27R, and VASI Rwy 27L ctc twr. Ldg fee for acft over 12500 lbs. US Customs user fee arpt. Contact U.S. Customs 1200-0100Z† Mon-Fri on 248-666-7717; other times minimum 3 hrs advance notification on 734-942-9000.

WEATHER DATA SOURCES: ASOS (248) 666-1818.

COMMUNICATIONS: CTAF 120.5 ATIS 125.025

UNICOM 122.95

PONTIAC RCO 122.15R 111.0T (LANSING RADIO)

Ⓡ DETROIT APP/DEP CON 127.5

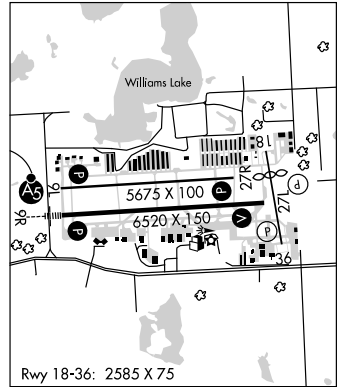
PONTIAC TOWER 120.5 123.7 (1100-0500Z†) GND CON 121.9 121.65 CLNC DEL 118.25

AIRSPACE: CLASS D svc 1100-0500Z† other times CLASS G.

RADIO AIDS TO NAVIGATION: NOTAM FILE PTK.

PONTIAC (L) VORTAC 111.0 PSI Chan 47 N42°42.05' W83°31.97' 116° 5.4 NM to fld. 1148/3W.

ILS 111.1 I-PTK Rwy 09R. Class IE. Unmonitored when twr clsd. LOC BC unusable byd 14 NM blo 3300'.



DETROIT

COPTER

H-106, L-28J, A

IAP, AD

PORT HURON

ST CLAIR CO INTL (PHN) 5 SW UTC-5(-4DT) N42°54.66' W82°31.73'

DETROIT

650 B S4 FUEL 100LL, JET A TPA-1650 (1000) LRA NOTAM FILE PHN

H-10G, 11A, L-30F

RWY 04-22: H5104X100 (ASPH-GRVD) S-40, D-55, DT-90 HIRL

IAP

RWY 04: MALS R. PAPI(P4L)—GA 3.0° TCH 31'. Trees.

RWY 22: REIL. PAPI(P4L)—GA 3.0° TCH 30'. Trees.

RWY 10-28: H4000X75 (ASPH) S-16 MIRL

RWY 10: REIL. PAPI (P4L). GA 3.0° TCH 25'. Trees.

RWY 28: REIL. PAPI (P4L). GA 3.5° TCH 31'. Trees.

AIRPORT REMARKS: Attended 1300Z±—dusk. Arpt unattended Easter; Thanksgiving and Christmas. Deer and gulls on and invof arpt. Rwy 10 REIL OTS indef. Rwy 28 REIL OTS indef. HIRL Rwy 04-22 and MIRL Rwy 10-28 preset on low ints; to increase ints and ACTIVATE REIL Rwys 22; 10 and 28 and MALS Rwy 04—CTAF. Ldg fee for commercial and corporate acct. Trans Atlantic flights will have to notify U.S. Customs at 810-985-9541 one hr prior to entry into the U.S. Notify U.S. Dept of Agriculture at 810-985-6126 and arpt manager at 810-364-6890 24 hrs in advance for disposal of acct international trash. Flight Notification Service (ADCUS) avbl.

WEATHER DATA SOURCES: AWOS-3 118.375 (810) 364-7787.

COMMUNICATIONS: CTAF/UNICOM 123.05

Ⓡ SELF RIDGE APP/DEP CON 119.6 (1230-0400Z±) clsd hol, other times uncontrolled for DHS, ARNG, USCG or emergency ops.

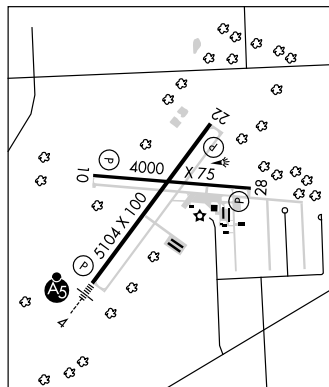
Ⓡ CLEVELAND CENTER APP/DEP CON 127.7 (0400-1230Z±)

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

PECK (H) VORTAC 114.0 ECK Chan 87 N43°15.35' W82°43.08' 165° 22.3 NM to fld. 810/7W. HIWAS.

PHURN NDB (LOM) 332 PH N42°50.57' W82°35.80' 043° 5.1 NM to fld.

ILS 110.9 I-PHN Rwy 04. LOM PHURN NDB.



PRESQUE ISLE CO (See ROGERS CITY)

PRICES (See LINDEN)

PRICKETT-GROOMS FLD (See SIDNAW)

PULLMAN N42°27.96' W86°06.29' NOTAM FILE LAN.

CHICAGO

(H) VOR/DME 112.1 PMM Chan 58 072° 13.0 NM to Padgham Fld. 640/00E.

H-5E, 10F, L-281

VOR/DME unusable 080°-068°

DME unusable byd 30 NM blo 3000'.

RCO 122.1R 112.1T (LANSING RADIO)

RAETHER (See HOWELL)

RANDOLPH'S LANDING AREA (See ST JOHNS)

RAY COMMUNITY (57D) 2 SE UTC-5(-4DT) N42°44.21' W82°53.33'

DETROIT

632 B S4 FUEL 100LL NOTAM FILE LAN

COPTER

RWY 09-27: H2494X60 (ASPH) MIRL

RWY 09: REIL. PAPI(P2L)—GA 3.0° TCH 40'. Trees.

RWY 27: PAPI(P2L). Thld dspld 210'. Trees.

RWY 18-36: 2187X123 (ASPH-TURF)

RWY 18: Thld dspld 140'. Trees. RWY 36: Trees.

AIRPORT REMARKS: Attended irregularly. Ultralight ops. Rwy 18-36 asph peeling and cracking. Rwy 18-36 north 900' asph, asph 28' wide. Rwy 18-36 marked with cones. ACTIVATE rotating bcn, MIRL Rwy 09-27 and PAPI Rwy 09 and Rwy 27—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.7

REED CITY**NARTRON FLD** (RCT) 2 N UTC-5(-4DT) N43°54.00' W85°31.00'CHICAGO
L-281, 31B

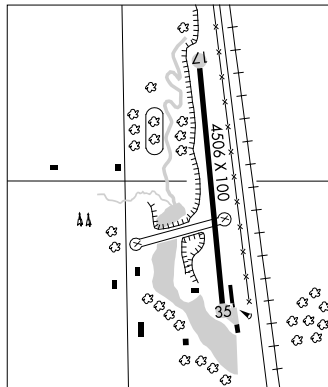
1055 NOTAM FILE LAN

RWY 17-35: H4506X100 (ASPH) S-11**RWY 17:** Trees. **RWY 35:** Tree.

AIRPORT REMARKS: Unattended. Arpt CLOSED Nov thru Mar and when snow covered. Rwy 17-25 -15' drop off/pond, 201' distance, 100' left. 26' buildings 195' east of Rwy 35, +50' building 235' east of extended centerline, south end of the rwy. Rwy 17-35 surface rough; cracks in rwy; considerable amount of loose stones, vegetation, and sand on pavement. 40' trees in primary and transition surfaces Rwy 17-35, west side.

COMMUNICATIONS: CTAF 122.9**RADIO AIDS TO NAVIGATION:** NOTAM FILE LAN.

WHITE CLOUD (L) VOR/DME 117.6 HIC Chan 123 N43°34.49'
W85°42.97' 025° 21.4 NM to fld. 920/1W.

**REVUP** N42°07.21' W83°25.90' NOTAM FILE DTW.DETROIT
A**NDB (LOM)** 388 DT 038° 6.6 NM to Detroit Metropolitan Wayne Co. SHUTDOWN.**RICHMOND FLD** (See GREGORY)**RIVERVIEW** (See JENISON)**ROBEN-HOOD** (See BIG RAPIDS)**ROCKFORD****WELLS** (35C) 3 NE UTC-5(-4DT) N43°07.70' W85°30.32'

CHICAGO

890 NOTAM FILE LAN

RWY 18-36: 2200X100 (TURF)**RWY 18:** Tree. **RWY 36:** Thld dsplcd 400'. Tree.

AIRPORT REMARKS: Attended May-Nov dalgt hrs. CLOSED Dec to Apr. Rwy 18-36 and dsplcd thld marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9**ROGERS CITY** N45°24.28' W83°49.22' NOTAM FILE LANLAKE HURON
L-31C**NDB (MHW)** 215 PZQ At Presque Isle Co.

ROGERS CITY

PRESQUE ISLE CO (PZQ) 1 S UTC-5(-4DT) N45°24.43' W83°48.77'

LAKE HURON
L-31C
IAP

670 B NOTAM FILE LAN

RWY 09-27: H4105X75 (ASPH) S-22 MIRL

RWY 09: REIL. PAPI(P4L)—GA 3.0° TCH 35'. Thld dspcd 220'.
Trees.

RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 34'. Thld dspcd 380'.
P-line.

AIRPORT REMARKS: Unattended. Deer and birds on and invof arpt.
Confirm snow removal and winter conditions; phone
989-734-2216 or arpt manager 989-734-4309. ACTIVATE MIRL
Rwy 09-27, PAPI Rwy 09 and Rwy 27, REIL Rwy 09 and Rwy
27—CTAF.

WEATHER DATA SOURCES: AWOS-3 118.125 (989) 734-7419.

COMMUNICATIONS: CTAF 122.9

ALPENA RCO 122.1R 108.8T (LANSING RADIO)

Ⓡ ALPENA APP/DEP CON 128.425 (Weekdays 1300-2100Z‡)

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 128.425 (2100-1300Z‡)

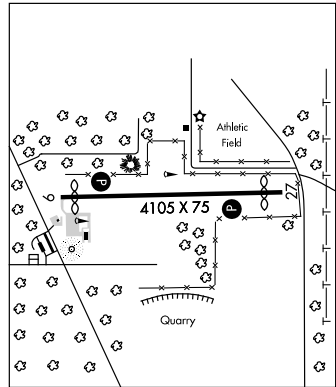
RADIO AIDS TO NAVIGATION: NOTAM FILE APN.

ALPENA (L) VORTAC 108.8 APN Chan 25 N45°04.97'

W83°33.42' 338° 22.3 NM to fld. 677/7W. HIWAS.

ROGERS CITY NDB (MHW) 215 PZQ N45°24.28' W83°49.22' at fld.

NOTAM FILE LAN.



ROMEO STATE (D98) 2 E UTC-5(-4DT) N42°47.78' W82°58.46'

DETROIT
COPTER
L-28J
IAP

739 B FUEL 100LL, JET A NOTAM FILE LAN

RWY 18-36: H4000X75 (ASPH) MIRL

RWY 18: REIL. PAPI(P4L)—GA 3.0° TCH 20'. Trees.

RWY 36: REIL. PAPI(P4L)—GA 3.0° TCH 22'. Road.

AIRPORT REMARKS: Attended Jun-Sep 1400Z‡-dusk, Oct-May
1400-2300Z‡. Deer on and invof rwy. ACTIVATE MIRL Rwy 18-36,
PAPI Rwy 18 and Rwy 36 and REIL Rwy 18 and Rwy 36—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

PONTIAC RCO 122.15R 111.0T (LANSING RADIO)

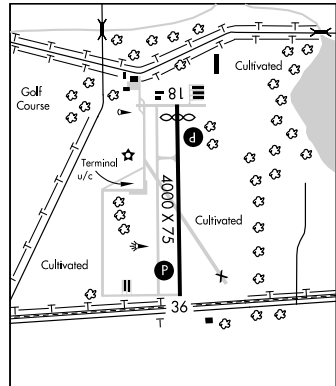
Ⓡ SELFRIDGE APP/DEP CON 119.6 (1230-0400Z‡) clsd hol, other times
uncontrolled for DHS, ARNG, USCG or emergency ops.

Ⓡ CLEVELAND CENTER APP/DEP CON 127.7 (0400-1230Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE PTK.

PONTIAC (L) VORTAC 111.0 PSI Chan 47 N42°42.05'

W83°31.97' 080° 25.3 NM to fld. 1148/3W.



ROSCOMMON CONSERVATION (3RC) 2 SE UTC-5(-4DT) N44°28.40' W84°34.01'

LAKE HURON

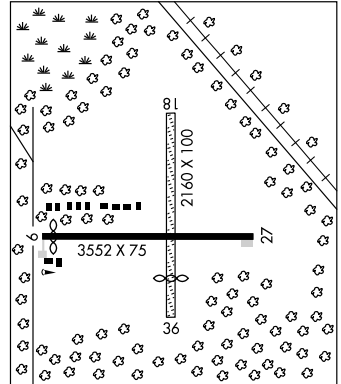
1156 NOTAM FILE LAN

RWY 09-27: H3552X75 (ASPH) LIRL (NSTD)**RWY 09:** REIL (NSTD). Thld dsplcd 165'. Trees.**RWY 27:** REIL (NSTD). Trees.**RWY 18-36:** 2160X100 (TURF)**RWY 18:** Trees. **RWY 36:** Thld dsplcd 600'. Trees.

AIRPORT REMARKS: Attended irregularly. Rwy 18-36. CLOSED Nov-Apr and when snow covered. Rwy 18-36 surface rough with patches of gravel. Deer on and in/ovf arpt. Rwy 09-27 NSTD LIRL located 20' from rwy edge with 30 inch risers. Rwy 18-36 marked with 3' yellow cones. ACTIVATE NSTD LIRL Rwy 09-27—122.7. Rwy 09-27 REIL non-flashing.

COMMUNICATIONS: CTAF 122.9**RADIO AIDS TO NAVIGATION:** NOTAM FILE TVC.

HOUGHTON LAKE (T) VORW/DME 111.6 HTL Chan 53 N44°21.53' W84°39.94' 037° 8.1 NM to fld. 1145/5W.



L-31C

ROSCOMMON CO-BLODGETT MEML (See HOUGHTON LAKE)**ROSSETTIE** (See MANCHESTER)**ROTHBURY****DOUBLE JJ RESORT RANCH** (42N) 2 NW UTC-5(-4DT) N43°31.02' W86°22.40'

CHICAGO

689 NOTAM FILE LAN

RWY 09-27: 3600X100 (TURF)**RWY 09:** Thld dsplcd 406'. Trees. **RWY 27:** Thld dsplcd 1000'. Trees.

AIRPORT REMARKS: Attended Apr-Oct 1300Z±—dusk. Arpt CLOSED Nov-Mar. Powered parachute training area. Rwy 09-27 and dsplcd thlds marked with 3' yellow cones. Horse residue on rwy.

COMMUNICATIONS: CTAF 122.9**RPD** (See Alma)**SAGINAW** N43°31.90' W84°04.64' NOTAM FILE MBS.

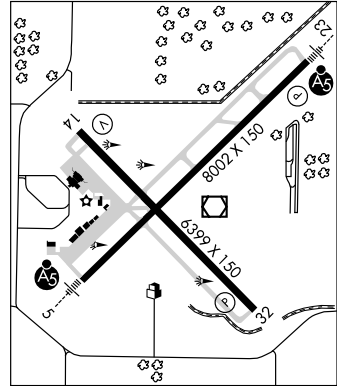
DETROIT

(L) **VORW/DME** 112.9 MBS Chan 76 at MBS Intl. 663/3W. **HIWAS.**

H-10G, 11A, L-28J

VOR unusable 192°-200°. DME unusable 192°-200°.

RCO 122.4 122.2 (LANSING RADIO)**SAGINAW CO H.W. BROWNE** (See SAGINAW)

SAGINAW**MBS INTL** (MBS) 9 NW UTC-5(-4DT) N43°31.98' W84°04.78'668 B S2 FUEL 100LL, JET A OX 1, 3 LRA ARFF Index—See Remarks
NOTAM FILE MBS**DETROIT**
H-10G, 11A, L-28J
IAP, AD**RWY 05-23:** H8002X150 (ASPH-GRVD) S-135, D-160, ST-175, DT-265 HIRL**RWY 05:** MALSR.**RWY 23:** MALSR. PAPI(P4L)—GA 3.0° TCH 54'. 0.3% up.**RWY 14-32:** H6399X150 (ASPH-GRVD) S-135, D-160, ST-175, DT-265 HIRL**RWY 14:** REIL. VASI(V4L)—GA 3.0° TCH 42'. Trees.**RWY 32:** REIL. PAPI(P4L)—GA 3.0° TCH 50'. Trees.**RUNWAY DECLARED DISTANCE INFORMATION****RWY 05:** TORA-8002 TODA-8002 ASDA-8002 LDA-8002**RWY 14:** TORA-6399 TODA-6399 ASDA-6399 LDA-6399**RWY 23:** TORA-8002 TODA-8002 ASDA-8002 LDA-8002**RWY 32:** TORA-6399 TODA-6399 ASDA-6399 LDA-6399**AIRPORT REMARKS:** Attended 1000-0600Z†. For svc after hrs call 989-695-2554. Birds on and in/ovf arpt. When twr clsd HIRL Rwy 05-23 and 14-32 are preset med ints. Twy B is a one way only twy from the rwy to the ramp. ACTIVATE MALSR Rwy 05 and 23—CTAF. Class I, ARFF Index B. Index C ARFF svc available upon req. Ldg fee. Ldg fee waived in lieu of fuel purchase.**WEATHER DATA SOURCES:** ASOS (989) 695-2488. HIWAS 112.9 MBS.**LAWRS** (1100-0400Z†)**COMMUNICATIONS:** CTAF 120.1 ATIS 125.925 UNICOM 122.95**SAGINAW RCO** 122.4 122.2 (LANSING RADIO)Ⓡ **SAGINAW APP/DEP CON** 126.45 (230°-049°), 120.95 (050°-229°)(1100-0400Z†).**CLEVELAND CENTER APP/DEP CON** 127.7 (0400-1100Z†).**SAGINAW TOWER** 120.1 (1100-0400Z†) **GND CON** 121.7**CLNC DEL** 121.85**AIRSPACE:** CLASS D svc 1100-0400Z† other times CLASS E.**TRSA** svc ctc **APP CON** within 20 NM.**RADIO AIDS TO NAVIGATION:** NOTAM FILE MBS.**SAGINAW (L) VORW/DME** 112.9 MBS Chan 76 N43°31.90' W84°04.64' at fld. 663/3W. **HIWAS.****OLSTE NDB (LOM)** 257 MB N43°27.69' W84°10.79' 050° 6.1 NM to fld. Unmonitored.**ILS** 108.7 I-MBS Rwy 05. Class IE. LOM **OLSTE NDB.** ILS unmonitored when twr clsd.**ILS** 108.7 I-TQR Rwy 23. Class ID. ILS unmonitored when twr clsd.**ASR** (1100-0500Z†)**COMM/NAV/WEATHER REMARKS:** Emerg frequency, 121.5 not available at twr. **OLSTE NDB** unusable byd 10 NM and between 150°-180°.

SAGINAW CO H.W. BROWNE (HYX) 4 E UTC-5(-4DT) N43°26.01' W83°51.74'

DETROIT

601 B S4 FUEL 100LL, JET A NOTAM FILE HYX

H-10G, 11A, L-28J

RWY 09-27: H5000X100 (ASPH) S-60, D-72, DT-101 MIRL

IAP

RWY 09: REIL. PAPI(P2L)—GA 3.0° TCH 30'. P-line.

RWY 27: MALSR. PAPI(P2L)—GA 3.0° TCH 30'.

RWY 05-23: H2951X60 (ASPH) S-12.5 MIRL

RWY 05: PAPI(P2L)—GA 3.0° TCH 25'. Thld dspcd 120'. Fence.

RWY 23: PAPI(P2R)—GA 3.0° TCH 25'. Thld dspcd 130'. Road.

AIRPORT REMARKS: Attended Mon-Fri 1230-2300Z, Sat-Sun

1300-2030Z. Arpt unattended holidays. 24 hr self serve fuel.

Parachute Jumping. Birds on and in/ov arpt. Rwy 23 has 2' high concrete culvert, 120' left, 20' from rwy end and ditch 15' deep across the apch end, 120' left to 21' right, 20' to 197' from rwy end. Rwy 05-23 sfc numerous transverse and longitudinal cracks.

ACTIVATE MALSR Rwy 27, MIRL Rwy 05-23 and Rwy 09-27, REIL

Rwy 09 and PAPI Rwy 05, Rwy 23, Rwy 09 and Rwy 27—CTAF.

WEATHER DATA SOURCES: AWOS-3 118.325 (989) 752-3408. HIWAS 112.9 MBS.

COMMUNICATIONS: CTAF/UNICOM 122.8

SAGINAW RCO 122.4 122.2 (LANSING RADIO)

Ⓡ SAGINAW APP/DEP CON 120.95 (1100-0400Z)

CLEVELAND CENTER APP/DEP CON 127.7 (0400-1100Z)

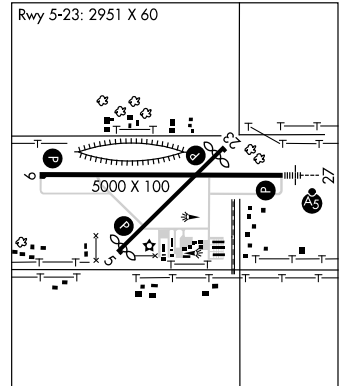
GCO 121.725 (SAGINAW CLNC and FLIGHT SERVICES)

RADIO AIDS TO NAVIGATION: NOTAM FILE MBS.

SAGINAW (L) VOR/DME 112.9 MBS Chan 76 N43°31.90' W84°04.64' 125° 11.1 NM to fld. 663/3W.

HIWAS.

ILS/DME 111.35 I-HQW Chan 50(Y) Rwy 27.



ST CLAIR

DAVID'S LANDING (5Y5) 3 SW UTC-5(-4DT) N42°47.87' W82°32.19'

DETROIT

615 NOTAM FILE LAN

RWY 18-36: 2500X100 (TURF)

RWY 18: Thld dspcd 1100'. P-line. RWY 36: Trees.

AIRPORT REMARKS: Attended irregularly. Arpt CLOSED Dec-Mar and when snow covered. 100' p-line 5/8 mile S of Rwy 36. Rwy 18-36 soft in spring and when wet. Rwy 18-36 -4' ditch 10' W of Rwy. Rwy 18-36 and dspcd thld marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

ST CLAIR CO INTL (See PORT HURON)

ST HELEN (6Y6) 1SE UTC-5(-4DT) N44°22.00' W84°24.00'

LAKE HURON

1198 NOTAM FILE LAN

RWY 12-30: 2600X120 (TURF)

RWY 12: Thld dspcd 830'. Trees. RWY 30: Thld dspcd 800'. Trees.

RWY 18-36: 2600X110 (TURF)

RWY 18: Thld dspcd 825'. Trees. RWY 36: Thld dspcd 620'. Road.

AIRPORT REMARKS: Unattended. CLOSED Dec thru Mar and when snow covered. Hangars located 135' west of centerline Rwy 18-36. Rwy 12-30 and Rwy 18-36 dspcd thlds marked with cones.

COMMUNICATIONS: CTAF 122.9

ST IGNACE**MACKINAC CO** (83D) 2 NW UTC-5(-4DT) N45°53.49' W84°44.29'

LAKE HURON

624 B S4 FUEL 100LL NOTAM FILE GRB

L-31B

RWY 07-25: H3800X75 (CONC) S-24 MIRL 0.4% up SW

IAP

RWY 07: REIL. PAPI(P4L)—GA 4.0° TCH 33'. Trees.

RWY 25: REIL. PAPI(P4L)—GA 3.0° TCH 21'. Road.

AIRPORT REMARKS: Attended dawn-dusk. After hours 906-643-7161 (manager residence). Deer and birds on and in/ovf arpt. ACTIVATE MIRL Rwy 07-25 and PAPI RWys 07 and 25 and REIL RWys 07 and 25 and ramp lghts—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.7

MACKINAC ISLAND RCO 122.35 (GREEN BAY RADIO)

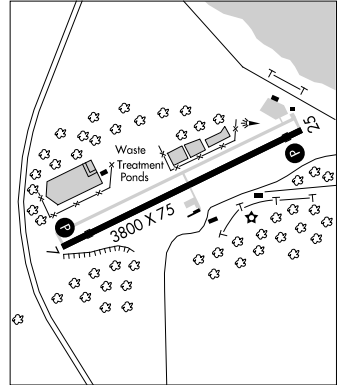
Ⓡ MINNEAPOLIS CENTER APP/DEP CON 134.6

RADIO AIDS TO NAVIGATION: NOTAM FILE PLN.

PELLSTON (L) VORTACW 111.8 PLN Chan 55 N45°37.84'

W84°39.85' 355° 16.0 NM to fld. 840/6W. HIWAS.

COMM/NAV/WEATHER REMARKS: Mackinac Island (MCD) AWOS 118.27 can be received on the ground.

**ST JAMES** N45°41.60' W85°33.52' NOTAM FILE SJX.

GREEN BAY

NDB (MHW) 382 SJX at Beaver Island. Unmonitored.

L-31B

ST JOHNS**ARCHER MEML FLD** (2S3) 7 SE UTC-5(4DT) N42°54.42' W84°28.33'

DETROIT

794 TPA-1600(806) NOTAM FILE LAN

RWY 17-35: 2496X110 (TURF)

RWY 35: Thld dspcd 1145'.

AIRPORT REMARKS: Attended May-Nov irregularly. No snow removal. Rwy 17 thld may be obstructed by 8' corn during growing season. Rwy 17-35 marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9**GLOWACKI** (97G) 2 W UTC-5(4DT) N43°00.00' W84°35.75'

DETROIT

775 NOTAM FILE LAN

RWY 09-27: 1528X100 (TURF)

RWY 09: Trees. RWY 27: Building.

AIRPORT REMARKS: Attended irregularly. 15' tree N side of rwy on rwy edge, 132' E of Rwy 09. Rwy 27 terrain slopes downward E to W; Rwy soft in spring. Radio control acct ops on arpt. Rwy 09-27 marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9**RANDOLPH'S LANDING AREA** (61G) 7 NE UTC-5(-4DT) N43°06.75' W84°31.25'

DETROIT

700 NOTAM FILE LAN

RWY 05-23: 2175X100 (TURF)

RWY 05: Thld dspcd 767'. Road.

AIRPORT REMARKS: Attended irregularly. Deer on and in/ovf arpt. Rwy 23 3' fence L side 65' from centerline. Rwy 05-23 and dspcd thlds marked with yellow tires; Rwy 05 dspcd thld marked with 6 yellow tires 3 each side.

COMMUNICATIONS: CTAF 122.9**SCHIFFER ACRES** (3S5) 4 E UTC-5(-4DT) N43°02.15' W84°26.03'

DETROIT

735 S4 NOTAM FILE LAN

RWY 07-25: 2777X120 (TURF)

RWY 07: Rgt tfc. Trees. RWY 25: Thld dspcd 798'. Trees.

AIRPORT REMARKS: Attended irregularly. Power plant repairs are for emerg use only. Extensive summer agricultural ops. Deer and turkeys on and in/ovf rwy. Rwy 07-25 LIRL not for public use. Rwy 25 displaced thld marked by 3 yellow tires each side of rwy. Rwy defined by mowing.

COMMUNICATIONS: CTAF 122.9

TRIPP CREEK (39T) 6 NE UTC-5(-4DT) N43°03.89' W84°29.35'

DETROIT

717 S2 NOTAM FILE LAN

RWY 09-27: 2509X50 (TURF)

RWY 09: Thld dspcd 280'. Road. **RWY 27:** Thld dspcd 425'. Road.

AIRPORT REMARKS: Attended 1300Z±-dusk. Snow removal irregular, confirm arpt condition with arpt manager, call 989-862-4413. For minor airframe and powerplant repairs, call 989-862-4413. Deer on and invof arpt. Rwy 09-27 and dspcd thlds marked with 3' yellow cones. NSTD rotating bcn red flashing lgt. LIRL Rwy 09-27 not for public use.

COMMUNICATIONS: CTAF 122.9

SALEM N42°24.53' W83°35.65' NOTAM FILE LAN.

DETROIT

(L) VORTAC 114.3 SVM Chan 90 350° 5.8 NM to Oakland Southwest. 950/3W.

H-106, L-281, A

RCO 122.1R 114.3T (LANSING RADIO)

SANDUSKY

COWLEY FLD (96G) 3 S UTC-5(-4DT) N43°22.59' W82°48.87'

DETROIT

770 NOTAM FILE LAN

RWY 09-27: 2465X50 (TURF)

RWY 09: Tree.

AIRPORT REMARKS: Attended irregularly. Snow removal irregular; verify condition, call 810-648-2352. Deer and turkeys on and invof arpt. Be alert for close proximity of power poles along twy on west end. Rwy 09-27 marked with cones.

COMMUNICATIONS: CTAF 122.9

SANDUSKY CITY (Y83) 3 N UTC-5(-4DT) N43°27.32' W82°50.48'

DETROIT

L-281, 31C

776 B S4 FUEL 100LL NOTAM FILE LAN

RWY 09-27: H3105X75 (ASPH) S-16 MIRL

RWY 09: REIL. PAPI(P2L)—GA 3.0° TCH 31'. Tree.

RWY 27: PAPI(P2L)—GA 3.0° TCH 39'. Road.

RWY 18-36: 2300X150 (TURF)

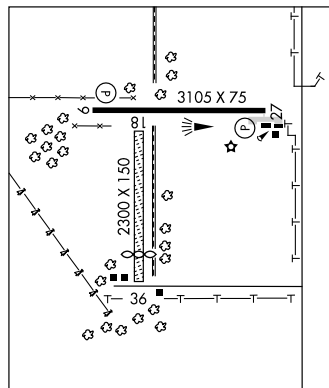
RWY 18: Ground. **RWY 36:** Thld dspcd 383'. Road.

AIRPORT REMARKS: Attended irregularly. For fuel call 810-648-4194, 810-414-3009 or 810-648-2000 (Sheriff). Birds and deer on and invof arpt. +3' embankment 50' from Rwy 36 thld, -10' ditch 100' east of Rwy 18-36. ACTIVATE MIRL Rwy 09-27—CTAF. Rwy 18-36 marked with yellow cones.

COMMUNICATIONS: CTAF/UNICOM 122.8

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

PECK (H) VORTAC 114.0 ECK Chan 87 N43°15.35' W82°43.08' 343° 13.1 NM to fld. 810/7W. HIWAS.



SAULT STE MARIE N46°24.73' W84°18.89' NOTAM FILE CIU.

LAKE HURON

(H) VOR/DME 112.2 SSM Chan 59 218° 11.7 NM to Chippewa Co Intl. 687/4W.

H-2K, 11A, L-31B

RCO 122.1R 112.2T (GREEN BAY RADIO)

SAULT STE MARIE**CHIPPEWA CO INTL**

(CIU) 15 S UTC-5(-4DT) N46°15.05' W84°28.34'

LAKE HURON

800 B FUEL 100LL, JET A TPA-1600(800) AOE Class I, ARFF Index A NOTAM FILE CIU H-2K, L-31B

RWY 16-34: H7200X200 (CONC-GRVD) S-155, D-330, ST-175, DT-600 HIRL IAP, AD

RWY 16: MALSR. PAPI(P4L)—GA 3.0° TCH 58'. Rgt tfc.

RWY 34: REIL. PAPI(P4L)—GA 3.0° TCH 40'.

RWY 09-27: H4999X75 (ASPH-GRVD) S-30, D-30 MIRL

RWY 09: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 40'. Trees.

AIRPORT REMARKS: Attended 1100-2300Z†. After hrs call

906-495-5532. Birds on and invof arpt. 24 hours PPR for unscheduled air carrier ops with more than 9 passenger seats; call arpt manager on 906-495-5631. Airfield sfc condition unmonitored 2100-1300Z†. Expect snow removal activity daily Dec-Mar. All twys closed except A, C and D from Dec to Apr. Check NOTAMs for specific schedule or ctc arpt manager 906-495-5631. Vehicle testing in progress during winter months on sections of closed/abandoned parallel twy, SE of apch end Rwy 34. Area may be plowed to bare surface but is not avbl for acft arrivals or departures. ACTIVATE HIRL Rwy 16-34, MIRL Rwy 09-27, PAPI Rwy 16, Rwy 09 and Rwy 27, REIL Rwy 09, Rwy 27 and MALSR Rwy 16 and PAPI and REIL Rwy 34 Apr-Nov—CTAF. Rwy 34 PAPI and REIL opr continuously Dec-Mar. ARFF coverage provided scheduled FAR 121 acft only, other times by prior arrangement with airport manager. Flight Notification Service (ADCUS) available.

WEATHER DATA SOURCES: AWOS-3 127.575 (906) 495-7134.**COMMUNICATIONS:** CTAF/UNICOM 123.0

CHIPPEWA RCO 123.65 (GREEN BAY RADIO)

SAULT STE MARIE RCO 122.1R 112.2T (GREEN BAY RADIO)

TORONTO CENTER APP/DEP CON 132.65 (SAULT ENROUTE)

RADIO AIDS TO NAVIGATION: NOTAM FILE CIU.

SAULT STE MARIE (H) VOR/DME 112.2 SSM Chan 59 N46°24.73' W84°18.89' 218° 11.7 NM to fld. 687/4W.

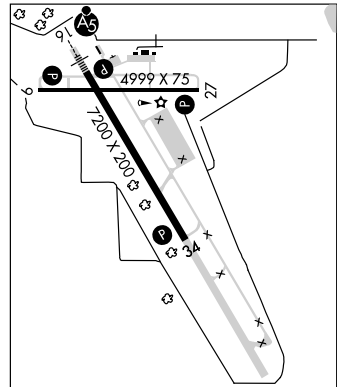
KOLOE NDB (MH/LDM) 400 CI N46°19.93' W84°32.53' 155° 5.7 NM to fld.

NDB unmonitored.

ILS 110.3 I-CIU Rwy 16, Class IA. LOM KOLOE NDB. ILS unmonitored 0430Z† Sun-1000Z† Mon,

0430-1000Z† Mon-Fri, 0430Z† Fri-1145Z† Sat and 1715Z† Sat-1600Z† Sun. ILS unusable blo 1012'.

Glide slope unusable blo 1012'.

**SAULT STE MARIE MUNI/SANDERSON FLD**

(ANJ) 1SW UTC-5(-4DT) N46°28.75' W84°22.10'

LAKE HURON

716 FUEL 100LL, JET A NOTAM FILE ANJ

H-2K, 11A, L-31B

RWY 14-32: H5234X100 (ASPH) MIRL (NSTD) 0.4% up SE IAP

RWY 14: REIL. PAPI (P2L)—GA 3.0° TCH 40'. Thld dspcd 180'.

RWY 32: REIL. PAPI (P2L)—GA 3.0° TCH 29'. Thld dspcd 178'. Road. Rgt tfc.

AIRPORT REMARKS: Attended 1400-2200Z†. Fuel after hrs self svc with credit card. Deer and birds on and invof arpt.

50' drop off, north end, 200' from rwy end. ACTIVATE MIRL Rwy 14-32, PAPI Rws 14, Rwy 32 and REIL Rws 14 and Rwy 32—CTAF-122.7. US customs on req call 906-632-2631.

WEATHER DATA SOURCES: ASOS 118.375 (906) 632-8501.**COMMUNICATIONS:** CTAF/UNICOM 122.7

TORONTO CENTER APP/DEP CON 132.65

GCO 135.075 (GREEN BAY FSS)

RADIO AIDS TO NAVIGATION: NOTAM FILE CIU.

SAULT STE MARIE (H) VOR/DME 112.2 SSM Chan 59 N46°24.73' W84°18.89' 335° 4.6 NM to fld. 687/4W.

COMM/NAV/WEATHER REMARKS: Acft operating within Sault Ste Marie. Ontario Arpt traffic area maintain communications with Sault Ste Marie Ontario twr on frequency 118.8. Pilots operating in Canadian/US Class D Airspace are required to establish and maintain two-way communication and obtain ATC clearance from Sault Ste Marie Twr (SOO TOWER 118.8) prior to operating in the Class D Airspace. Traffic Advisory Service (118.8) is avbl in the US Class E Surface Extension 1200-0100Z†.

SAWYER INTL (See MARQUETTE)**SCHIFFER ACRES** (See ST JOHNS)**SCHOOLCRAFT CO** (See MANISTIQUE)

SEBEWAING (98G) OW UTC-5(-4DT) N43°43.75' W83°27.75'

DETROIT

584 FUEL 100LL NOTAM FILE LAN

RWY 18-36: H2178X50 (ASPH) S-10 LIRL

RWY 18: Trees. RWY 36: Thld dsplcd 245'. Railroad.

RWY 06-24: 2150X130 (TURF)

RWY 06: Brush. RWY 24: Thld dsplcd 483'. Railroad.

AIRPORT REMARKS: Attended irregularly. For fuel call 989-883-3787 or 989-550-1145. Rwy 06-24 not plowed winter months, may be wet or unusable during spring thaw. Seagulls and deer on and inofw rmys. Rwy 06-24 marked with 3' cones. Rwy 18-36 numerous cracks, vegetation and deterioration. ACTIVATE LIRL Rwy 18-36-CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8**SELFRIDGE ANGB** (MTC)(KMTC) ANG (ARNG) 2 NE UTC-5(-4DT)

DETROIT

N42°36.50' W82°50.13'

580 B TPA—See Remarks NOTAM FILE MTC Not insp.

H-106, L-281, A

RWY 01-19: H9000X150 (PEM) PCN 54 R/B/W/T HIRL

DIAP, AD

RWY 01: SALS. REIL. PAPI(P4L). Rgt tfc. RWY 19: ALSF1. REIL. PAPI(P4L). Rgt tfc.

MILITARY SERVICE: LGT When twr clsd ACTIVATE arpt lgt freq 120.15.

JASU 1(M32A-60) 1(A/M32A-86D) 1(MC-11) FUEL J8. Avbl Mon-Fri 1200-0300Z†, Sat-Sun 1430-2100Z†,

closed holidays. FLUID SP PRESAIR LPOX LOX HPOX OIL O-128-133-148 SOAP. SOAP Mon-Fri

1215-2100Z†, other times DSN 273-5777. TRAN ALERT Opr 1230-0130Z† clsd hol. Ltd fleet scv avbl prior notice required ctc DSN 273-5640 or C586-239-5640.

MILITARY REMARKS: Opr 1230-0400Z†, clsd hol. Other times uncontrolled for Department of Homeland Security, ARNG, USCG or emergency ops. See FLIP AP/1 Supplementary Arpt Remark. **RSTD** Hazardous cargo pad can accommodate C130 and ltd C17 use. No tie downs on pad. No long term parking that location. Helipad on Twy B day VFR only. PPR all acft, DSN 273-5322/4402. **CAUTION** Moderate bird activity common. Twy B btn Twy H and 500' north of Twy J not visible from twr. **TFC PAT** TPA—Fighter rectangular and clsd 2200(1620), all others 1700(1120). **MISC** VIP acft ctc PTD 30 minutes prior to arrival with firm chock time. Base OPS DSN 273-5322, C586-307-5322, fax DSN 273-5814, C586-239-5814; NOTAM DSN 273-4069, C586-239-4069. Snow removal accomplished 1215-2100Z† weekdays. Tran acft req use of Selfridge ANGB Drop Zones (DZs). Rwy 01-19 transversely grooved. Rwy 01-19 S 1500' concrete, center 5700' asphalt, N 1800' concrete. Rwy 01-19 S overrun hardened may be used for tkf, day VFR condition only.

COMMUNICATIONS: ATIS 125.325 270.1 PTD 134.85 372.2

Ⓡ **APP CON** 119.6 318.2 (1230-0400Z†), clsd hol, other times uncontrolled for DHS, ARNG, USCG or emergency ops, other times ctc Ⓡ **CLEVELAND CENTER APP CON** 127.7 308.7.

TOWER 120.15 225.4 **GND CON** 128.3 275.8 **CLNC DEL** 119.0 259.95

Ⓡ **DEP CON** 119.6 391.9 (1230-0400Z†), clsd hol, other times uncontrolled for DHS, ARNG, USCG or emergency ops, other times ctc

CLEVELAND CENTER DEP CON 127.7 290.425.**PMSV METRO** 342.5 (Full svc avbl 1000-0400Z†, clsd hol.)**WING COMD POST** (QUARTERBACK Control) 311.0 321.0**SELFRIDGE** 120.15 **USCG DETROIT AIR** 381.8X 5692X**AIRSPACE: CLASS D** svc continuous.**RADIO AIDS TO NAVIGATION:** NOTAM FILE MTC.(L) **TACAN** Chan 64 MTC (133.7) N42°36.78' W82°49.91' at fld. 580/6W. No NOTAM MP Thu 1300-1500Z† (1500/3).

TACAN unusable:

020-345° byd 20 NM blo 3,000' 345°-020° byd 30 NM blo 3,000'

ILS 110.1 I-RFB Rwy 01. ILS BC unusable. No NOTAM MP ILS Tue 1300-1500Z† (1500/3), Glide Slope Wed 1300-1700Z† (1500/3).

ILS 110.1 I-MTC Rwy 19. ILS BC unusable. No NOTAM MP ILS Tue 1300-1500Z† (1500/3), Glide Slope Wed 1300-1700Z† (1500/3).

COMM/NAV/WEATHER REMARKS: VFR ARR contact Selfridge App Con 30 NM out 119.6 318.2.**SHAMROCK FLD** (See BROOKLYN)**SHARPE'S STRIP** (See EMMETT)

SIDNAW

PRICKETT—GROOMS FLD (6Y9) 1 NE UTC-5(-4DT) N46°31.00' W88°42.01' **GREEN BAY**
 1372 NOTAM FILE GRB
RWY 10-28: 2000X100 (TURF)
RWY 10: Thld dspcd 300'. **RWY 28:** Trees.
AIRPORT REMARKS: Unattended. Rws not plowed. Arpt CLOSED Nov-Apr and when snow covered. Rwy 10-28 sfc soft when wet, call 906-355-2257 to verify condition. Rwy 10-28 marked with 3' yellow cones. Rwy 28 +30' trees, 30' both sides of rwy, 300' from rwy end.
COMMUNICATIONS: CTAF 122.9

SILVER CITY AIRPARK (See ALPENA)

SKYWAY ESTATES (See EATON RAPIDS)

SOUTH HAVEN AREA RGNL (LWA) 3 S UTC-5(-4DT) N42°21.07' W86°15.34' **CHICAGO**
 666 B S4 **FUEL** 100LL, JET A NOTAM FILE LAN **L-281**
RWY 04-22: H4801X75 (ASPH) S-12 MIRL 0.3% up NE **IAP**
RWY 04: REIL. PAPI (P4L)—GA 3.5° TCH 33'. Trees.
RWY 22: REIL. PAPI (P4L)—GA 3.5° TCH 33'. Tree.
RWY 14-32: 3275X190 (TURF)
RWY 14: Thld dspcd 963'. Trees. **RWY 32:** Thld dspcd 762'. Tree.
AIRPORT REMARKS: Attended 1400-2200Z±. Deer on and invof arpt. Rwy 14 and Rwy 32 dspcd thlds marked with three 3' yellow cones. MIRL Rwy 04-22 preset low ints; dusk-0400Z±; to increase ints and ACTIVATE REIL and PAPI Rwy 04 and Rwy 22—CTAF. After 0400Z± ACTIVATE CTAF.
WEATHER DATA SOURCES: AWOS-3 118.025 (269)637-7016.
COMMUNICATIONS: CTAF/UNICOM 122.8
PULLMAN RCO 122.1R, 112.1T (LANSING RADIO)
SOUTH BEND APP/DEP CON 118.55 (Sun-Fri 1030-0500Z±, Sat 1030-0445Z±, other times ctc)
CHICAGO CENTER APP/DEP CON 128.5
GCO 121.725 (FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.
PULLMAN (H) VOR/DME 112.1 PMM Chan 58 N42°27.96' W86°06.29' 224° 9.6 NM to fld. 640/00E.

SOUTHWEST MICHIGAN RGNL (See BENTON HARBOR)

SPARTA

PAUL C. MILLER—SPARTA (8D4) 3 SE UTC-5(-4DT) N43°07.63' W85°40.70' **CHICAGO**
 775 B S4 **FUEL** 100LL, MOGAS NOTAM FILE LAN **L-281**
RWY 07-25: H4033X75 (ASPH) S-24 MIRL **IAP**
RWY 07: REIL. PAPI(P2L)—GA 3.5° TCH 22'. Trees.
RWY 25: REIL. PAPI(P2R)—GA 3.5° TCH 27'. Trees. 0.7% up W.
AIRPORT REMARKS: Attended irregularly. Powered parachute ops north side of rwy. Deer on and invof arpt. ACTIVATE MIRL Rwy 07-25 and PAPI Rwy 07-25—CTAF.
WEATHER DATA SOURCES: AWOS-A 132.95 (616) 887-2039.
COMMUNICATIONS: CTAF/UNICOM 122.8
 Ⓡ **GRAND RAPIDS APP/DEP CON** 124.6 (1030-0500Z±) **CHICAGO CENTER APP/DEP CON** 128.5 (0500-1030Z±)
RADIO AIDS TO NAVIGATION: NOTAM FILE MKG.
MUSKEGON (L) VORTACW 115.2 MKG Chan 99 N43°10.16' W86°02.36' 100° 16.1 NM to fld. 659/1W.
 HIWAS.

SPENC N42°13.20' W83°12.20' NOTAM FILE DTW. **DETROIT**
NDB (LOM) 223 DM 272° 6.7 NM to Detroit Metropolitan Wayne Co. **A**

STAMBAUGH (See IRON RIVER)

STANWOOD

CAIN FLD (38C) 2 SE UTC-5(-4DT) N43°36.00' W85°29.59' **CHICAGO**
 889 S4 NOTAM FILE LAN
RWY 18-36: 3450X100 (TURF)
RWY 18: Thld dspcd 486'. Trees. **RWY 36:** Thld dspcd 384'. Tree.
AIRPORT REMARKS: Attended irregularly. Fuel avbl for emergencies only. Radio control acft activity on and invof arpt. Occasional deer activity on and invof arpt. Rwy 18-36 and dspcd thlds marked with 3' yellow cones.
COMMUNICATIONS: CTAF 122.9

STURGIS N41°48.79' W85°26.03' NOTAM FILE IRS. **CHICAGO**
NDB (MHW) 382 IRS at Kirsch Muni. **L-281**

STURGIS**KIRSCH MUNI** (IRS) 2 NW UTC-5(-4DT) N41°48.80' W85°26.34'

924 B S4 FUEL 100LL, JET A1 + OX 4 TPA-1924(1000) NOTAM FILE IRS

CHICAGO

H-5E, 10F, L-28I

IAF

RWY 18-36: H5200X100 (ASPH) S-47, D-57.5 DT-90 MIRL

RWY 18: REIL. PAPI(P4L)—GA 3.0° TCH 27'. Tree.

RWY 36: REIL. PAPI(P4L)—GA 3.0° TCH 25'.

RWY 06-24: H3451X75 (ASPH) S-19, D-25, DT-58 MIRL

0.3% up NE.

RWY 06: Trees.

RWY 24: REIL. PAPI(P2L)—GA 4.0° TCH 22'. Trees.

AIRPORT REMARKS: Attended 1300Z±-dusk. Rwy 18-36 MIRL OTS

indef. ACTIVATE MIRL Rwy 06-24 and Rwy 18-36, REIL Rwy 18

and Rwy 24, PAPI Rwy 24, Rwy 18, and Rwy 36—CTAF.

WEATHER DATA SOURCES: AWOS-3 121.325 (269) 659-8715.

COMMUNICATIONS: CTAF/UNICOM 123.05

Ⓡ KALAMAZOO APP/DEP CON 121.2 (1100-0400Z±)

KALAMAZOO CLNC DEL 133.55

Ⓡ CHICAGO CENTER APP/DEP CON 127.55 (0400-1100Z±)

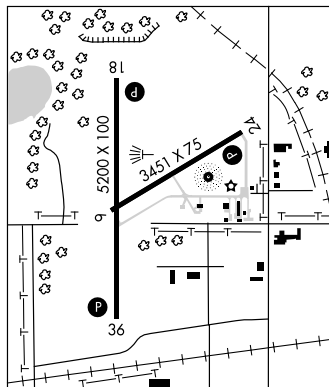
RADIO AIDS TO NAVIGATION: NOTAM FILE AZO.

KALAMAZOO (L) VOR/DME 109.0 AZO Chan 27 N42°14.22'

W85°33.19' 170° 25.9 NM to fld. 870/1W.

STURGIS NDB (MHW) 382 IRS N41°48.79' W85°26.03' at fld.

NOTAM FILE IRS.

**SUGAR LOAF RESORT** (See TRAVERSE CITY)**SUNFIELD****HIRAM CURE** (C43) 2 NE UTC-5(-4DT) N42°46.20' W84°57.90'

DETROIT

853 NOTAM FILE LAN

RWY 09-27: 2314X100 (TURF)

RWY 09: Tree.

AIRPORT REMARKS: Attended irregularly. Arprt CLOSED Dec thru Mar and when snow covered. Rwy 09-27 soft when

wet. Deer invof rwy. Crops adjacent to rwy. Rwy 09-27 marked with 3' yellow cones.

COMMUNICATIONS: CTAF 122.9

SUOMI N46°15.73' W87°24.97' NOTAM FILE SAW.

GREEN BAY

NDB (LOM) 410 SO 009° 5.6 NM to Sawyer Intl.

TACKABERRY (See AVOCA)**TECUMSEH****MEYERS-DIVER'S** (3TE) 2 N UTC-5(-4DT) N42°01.51' W83°56.35'

DETROIT

815 B S3 FUEL 100LL NOTAM FILE LAN

COPTER

RWY 18-36: H2660X75 (ASPH) S-6 LIRL 0.6% up N

L-28J

RWY 18: Thld dsplcd 780'. Trees.

RWY 36: Thld dsplcd 500'. Trees. Rgt tfc.

IAF

RWY 09-27: 1820X100 (TURF)

RWY 09: Trees.

RWY 27: Post.

AIRPORT REMARKS: Attended 1300-2300Z±. Fuel avbl Mon-Sat 1300-2230Z±. Parachute Jumping. Skydiving activity.

Rwy 18-36 pavement cracking. Rwy 09-27 not plowed after winter storms. Maintenance for Meyers acft only.

Rwy 18-36 acft Ind/tkof adjacent W of asph rwy. Area not marked to delineate area being used. Rwy 09-27

marked with tires; Rwy 09 dsplcd thld marked with three tires each side. ACTIVATE LIRL Rwy 18-36—CTAF.

COMMUNICATIONS: CTAF 122.9

Ⓡ DETROIT APP/DEP CON 118.95

RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.

CARLETON (H) VORTAC 115.7 CRL Chan 104 N42°02.88' W83°27.45' 270° 21.6 NM to fld. 629/3W.

HIWAS.

MERRILLAT (34G) 3 SE UTC-5(-4DT) N41°58.50' W83°55.51' DETROIT
COPTER
 820 B S4 FUEL 100LL NOTAM FILE LAN
RWY 18-36: 3608X100 (TURF) LIRL
RWY 18: Thld dsplcd 261'. Trees. **RWY 36:** Thld dplcd 486'. Fence.
AIRPORT REMARKS: Attended 1400-2200Z†. Ultralight activity on and invof arpt. Rwy 18-36 opposite rwy not visible from thld. Rwy 18-36 LIRL not for public use. Airframe and power plant repairs by prior arrangement, call arpt attendant 517-423-7600. Rwy 18-36 marked with cones; dsplcd thld marked with three 3' yellow cones each side. ACTIVATE rotating bcn—CTAF.
COMMUNICATIONS: CTAF/UNICOM 122.8

VAN CAMP'S HELIPORT (2T7) 5 NE UTC-5(-4DT) N42°01.15' W83°50.92' DETROIT
COPTER
 740 S4 NOTAM FILE LAN
HELIPAD H1: 90X50 (TURF)
HELIPORT REMARKS: Attended irregularly. Helipad H1 marked with cones. 35' tree 102' from heliport at 180°, apch ratio 2:1. 60' tree 80' from heliport at 270° apch ratio 2:1.
COMMUNICATIONS: CTAF 122.9

THOMPSONVILLE (7Y2) 2 W UTC-5(-4DT) N44°31.00' W85°58.51' GREEN BAY
 793 B NOTAM FILE LAN
RWY 09-27: H2900X75 (ASPH) D-12.5 LIRL
RWY 09: Thld dsplcd 50'. Road. Rgt tfc. **RWY 27:** PAPI(P2L)—GA 4.0° TCH 20'. Trees.
RWY 17-35: H2475X150 (TURF)
RWY 17: Thld dsplcd 1220'. Trees. **RWY 35:** Thld dsplcd 1100'. Trees. Rgt tfc.
AIRPORT REMARKS: Unattended. Rwy 17-35 CLOSED Nov thru Mar and when snow covered. Rwys not plowed. Rwy 17-35 surface rough. +450' unlighted ski hill ½ mile west of arpt. Radio controlled model acct, ultralight and glider activity. Arpt rotating bcn on ski hill 450' above arpt elevation 1.0 miles northwest. ACTIVATE LIRL Rwy 09-27 and PAPI Rwy 27—CTAF. Rwy 17-35 and dsplcd thlds marked with 3' yellow cones.
COMMUNICATIONS: CTAF 122.9

THREE RIVERS MUNI DR HAINES (HAI) 2 NE UTC-5(-4DT) N41°57.59' W85°35.60' CHICAGO
L-281
IAP
 824 B S4 FUEL 100LL, JET A TPA—1824(1000) NOTAM FILE LAN
RWY 09-27: H4000X75 (ASPH) S-26, D-30 MIRL
RWY 09: REIL. PAPI(P4L)—GA 3.5° TCH 25'. **RWY 27:** REIL. PAPI(P4L)—GA 3.5° TCH 29'. Trees.
RWY 05-23: H2729X60 (ASPH) S-16 MIRL
RWY 05: Road. **RWY 23:** Road.
AIRPORT REMARKS: Attended 1300Z†-dusk. Rwy 05-23 PAEW. Possibility of crop irrigation equipment ops in NE apch to Rwy 23. MIRL Rwys 09-27 and 05-23 and PAPI Rwy 09 and 27 preset low ints dusk-0300Z†; after 0300Z† ACTIVATE—CTAF. Radio controlled airplanes opr S of apch end Rwy 27.
WEATHER DATA SOURCES: AWOS-3 119.975 (269) 273-6705.
COMMUNICATIONS: CTAF/UNICOM 122.8
 Ⓡ KALAMAZOO APP/DEP CON 121.2 (1100-0400Z†)
 Ⓡ CHICAGO CENTER APP/DEP CON 127.55 (0400-1100Z†)
 GCO 121.725 (KALAMAZOO CLNC and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE AZO.
 KALAMAZOO (L) VOR/DME 109.0 AZO Chan 27 N42°14.22' W85°33.19' 187° 16.7 NM to fld. 870/1W.
 NDB (MHW) 407 HAI N41°57.50' W85°35.50' on fld. NOTAM FILE LAN. OTS indef.

TOLEDO SUBURBAN (See LAMBERTVILLE)

TOPINABEE

PBEAAYE (Y3Ø) 3 NE UTC-5(-4DT) N45°31.87' W84°33.42' LAKE HURON
 690 NOTAM FILE LAN
RWY 01-19: 2470X90 (TURF)
RWY 01: Thld dsplcd 450'. Trees. **RWY 19:** Thld dsplcd 800'. Trees.
AIRPORT REMARKS: Attended irregularly. Deer and birds invof arpt. Winter ops skis only. Trees in primary sfc; all quadrants. Rwy 01-19 rwy sfc rolling terrain, rough. Rwy 01-19 and dsplcd thlds marked with cones. +60' windsock located at north end.
COMMUNICATIONS: CTAF 122.9

TORCHPORT (See EASTPORT)

TRAVERSE CITY N44°40.07' W85°33.00' NOTAM FILE TVC.

GREEN BAY

(H) **VORTACW** 114.6 TVC Chan 93

H-2K, L-31B

345° 4.6 NM to Cherry Capital. 912/2W. **HIWAS.**

VOR portion unusable 276°–334° byd 20 NM blo 5000'. VOR portion unusable 063°–157° byd 16 NM blo 2600; 063°–157° byd 27 NM blo 5000'.

DME portion unusable 020°–335° byd 30 NM blo 3500'.

RCO 122.65 122.2 (LANSING RADIO)

TRAVERSE CITY

CHERRY CAPITAL (TVC) 2 S UTC-5(-4DT) N44°44.50' W85°34.94'

GREEN BAY

624 B S4 **FUEL** 100LL, JET A LRA Class I, ARFF Index B NOTAM FILE TVC

H-2K, L-31B

RWY 10-28: H6500X150 (ASPH-PFC) S-90, D-130, ST-165, DT-240 HIRL

IAP, AD

RWY 10: VASI(V4L)—GA 3.0° TCH 46'. Tree.

RWY 28: MALSR. PAPI(P4L)—GA 2.9° TCH 52'. Tower.

RWY 18-36: H5378X150 (ASPH-PFC) S-70, D-110, ST-140, DT-190 MIRL

RWY 18: VASI(V4L)—GA 3.0° TCH 50'. Thld dsplcd 270'. Trees.

RWY 36: REIL. VASI(V4L)—GA 3.0° TCH 50'. Tree.

LAND AND HOLD SHORT OPERATIONS

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 18	10-28	2850
RWY 28	18-36	5500

RUNWAY DECLARED DISTANCE INFORMATION

RWY 10: TORA-6500 TODA-6500 ASDA-6500 LDA-6500

RWY 18: TORA-5379 TODA-5379 ASDA-5109 LDA-4839

RWY 28: TORA-6500 TODA-6500 ASDA-6500 LDA-6500

RWY 36: TORA-5379 TODA-5379 ASDA-5109 LDA-5109

AIRPORT REMARKS:

Attended Oct-Apr 1200-0200Z†, May-Sep

1200-0300Z†. During hrs when arpt is unattended call arpt ops

231-313-0928 or FBO at 231-929-1126. Arpt CLOSED to

unscheduled air carrier acft with over 30 passenger seats without

48 hour prior permission—call 231-947-2250. CAUTION: Birds and deer on and invof arpt. Twy C-1 east of

Twy C not avbl to air carrier acft. Snow removal ops in progress winter months, Snow Command will be

monitoring CTAF during non-twr hours. Acft ldg/departing TVC should announce their intentions on CTAF when

twr clsd. Flt crews should read back all advisory information provided by Snow Command. Arpt surface

conditions unmonitored btn 0600-0900Z†. ACTIVATE HIRL Rwy 10-28, MIRL Rwy 18-36, VASI Rwy 18 and

MALSR Rwy 28 and REIL Rwy 36—CTAF. Ldg fee based on acft weight, private owned single engine acft

exempt.

WEATHER DATA SOURCES: ASOS (231) 933-0401. **HIWAS** 114.6 TVC.

COMMUNICATIONS: CTAF 124.2 ATIS 119.175 **UNICOM** 122.95

TRAVERSE CITY RCO 122.65 122.2 (LANSING RADIO)

® **MINNEAPOLIS CENTER APP/DEP CON** 132.9

TRAVERSE CITY TOWER 124.2 (1200-0200Z, 1100-0200Z EDT) **GND CON** 121.8

AIRSPACE: CLASS D svc (1200-0200Z, 1100-0200Z EDT) other times CLASS E.

RADIO AIDS TO NAVIGATION: NOTAM FILE TVC.

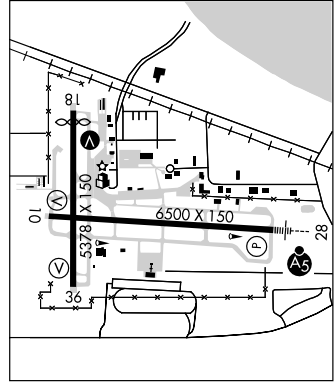
TRAVERSE CITY (H) VORTACW 114.6 TVC Chan 93 N44°40.07' W85°33.00' 345° 4.6 NM to fld. 912/2W.

HIWAS.

GWENN NDB (MH/LOM) 365 TV N44°44.07' W85°25.76' 279° 6.6 NM to fld. Unmonitored when twr clsd.

ILS 110.7 I-TVC Rwy 28. Class IE. LOM **GWENN NDB.** ILS and LOM unmonitored when twr clsd.

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



SUGAR LOAF RESORT (Y04) 14 NW UTC-5(-4DT) N44°54.75' W85°48.84'

GREEN BAY

825 NOTAM FILE LAN
RWY 02-20: H3519X50 (ASPH)

L-31B

RWY 02: Trees. RWY 20: Thld dsplcd 572'. Trees.

AIRPORT REMARKS: Unattended. Ski hill adjacent to rwy NW side.

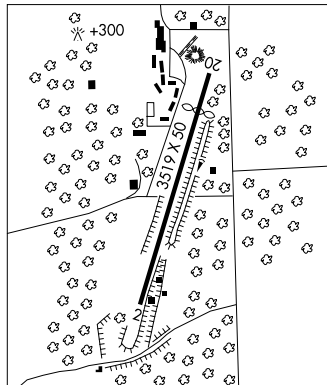
Adjacent ski facility CLOSED. +10' hill on each side of rwy, 10' from pavement edges in midsection of rwy. Pedestrians and dog course adjacent to rwy N end, pedestrians and equipment crossing rwy. Rwy 02-20 extensive pavement cracking.

WEATHER DATA SOURCES: HIWAS 114.6 TVC.

COMMUNICATIONS: CTAF 122.9

RADIO AIDS TO NAVIGATION: NOTAM FILE TVC.

TRAVERSE CITY (H) VORTACW 114.6 TVC Chan 93 N44°40.07' W85°33.00' 325° 18.5 NM to fld. 912/2W. HIWAS



TRIBE N45°03.70' W87°41.76' NOTAM FILE MNM.

GREEN BAY

NDB (LOM) 239 TN 035°4.6 NM to Menominee-Marquette Twin Co.

TRIPLE H (See PARCHMENT)

TRIPP CREEK (See ST JOHNS)

TROY

OAKLAND/TROY (VLL) 2 E UTC-5(-4DT) N42°32.58' W83°10.67'

DETROIT

727 B FUEL 100LL, JET A TPA-1727(1000) NOTAM FILE LAN

COPTER

RWY 09-27: H3549X60 (ASPH) MIRL 0.7% up W

L-281, A

RWY 09: PAPI(P2R)—GA 4.0° TCH 30'. P-line.

IAP

RWY 27: PAPI(P2L)—GA 4.0° TCH 31'. Building.

AIRPORT REMARKS: Attended Sep-May Mon-Fri 1300-2300Z Sat-Sun 1300-2300Z, Jun-Aug Mon-Fri 1300-0100Z, Sat-Sun 1300-2300Z. Deer and birds on and in/ovf arpt. No touch and go landings or practice traffic patterns. Rwy 09 +3' berm 316' from thld. ACTIVATE MIRL Rwy 09-27 and PAPI Rwy 09 and Rwy 27—CTAF.

WEATHER DATA SOURCES: AWOS-3 119.475 (248) 288-4649.

COMMUNICATIONS: CTAF/UNICOM 123.05

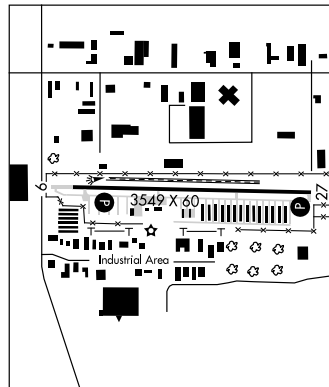
Ⓡ DETROIT APP/DEP CON 126.85 CLNC DEL 121.725

RADIO AIDS TO NAVIGATION: NOTAM FILE PTK.

PONTIAC (L) VORTAC 111.0 PSI Chan 47 N42°42.05'

W83°31.97' 124° 18.4 NM to fld. 1148/3W.

COMM/NAV/WEATHER REMARKS: For CLNC DEL key frequency 121.725 4 times. To contact FSS key freq 121.725 6 times. One second on/one second off; monitor 121.725 while electronic equipments dials Detroit CLNC DEL/Lansing FSS.



TULIP CITY (See HOLLAND)

TUSCOLA AREA (See CARO)

UNIVERSITY AIRPARK (See BATH)

VAN CAMP'S HELIPORT (See TECUMSEH)

VAN WAGNER (See NAPOLEON)

WATERLIET MUNI (40C) 1 NE UTC-5(-4DT) N42°12.00' W86°15.00' CHICAGO
 656 NOTAM FILE LAN
RWY 02-20: 2600X200 (TURF)
RWY 02: Thld dspcd 603'. Trees. **RWY 20:** Thld dspcd 771'. Trees.
RWY 07-25: 1975X200 (TURF) (LOCAL USE ONLY)
RWY 07: Trees. **RWY 25:** Trees.
AIRPORT REMARKS: Unattended. Ultralight activity. Rwy 02-20 and Rwy 07-25 soft when wet and during spring; Rwys have poor drainage. Rwy 02-20 and dspcd thld marked with 3' yellow cones. Rwy 07-25 defined by mowing.
COMMUNICATIONS: CTAF 122.9

WAYLAND

CALKINS FLD (41C) 1 N UTC-5(-4DT) N42°41.50' W85°38.75' CHICAGO
 740 NOTAM FILE LAN
RWY 01-19: 2200X75 (TURF)
RWY 01: Thld dspcd 800'. Tree. **RWY 19:** Tree.
RWY 09-27: 1800X100 (TURF)
RWY 09: Thld dspcd 200'. Trees. **RWY 27:** Tree.
AIRPORT REMARKS: Unattended. No snow removal—verify conditions call 616-698-5041, manager's cell. Rwy 09-27 surface rough and uneven, soft when wet. Rwy 01-19 local use only. Rwy 09-27 and Rwy 01-19 and dspcd thlds marked with 3' yellow cones.
COMMUNICATIONS: CTAF 122.9

WEIDMAN

OJIBWA AIRPARK (D11) 3NW UTC-5(-4DT) N43°43.20' W85°00.17' CHICAGO
 950 NOTAM FILE LAN
RWY 05-23: 3600X125 (TURF) LIRL
RWY 05: Thld dspcd 700'. Road. **RWY 23:** Thld dspcd 400'. Trees.
AIRPORT REMARKS: Attended Apr-Nov irregularly. Arpt CLOSED when snow covered except ski equipped acft; approximately Nov thru Apr. Rwy 05 has 14' road and 3' fence at thld, and tall trees all quads. Rwy 23 E 400' is soft when wet. Trees both sides of rwy. Rwy 05 and Rwy 23 marked with 3' yellow cones.
COMMUNICATIONS: CTAF 122.9

WELKE (See BEAVER ISLAND)

WELLS (See ROCKFORD)

WEND VALLEY (See CHARLOTTE)

WEST BRANCH COMMUNITY (Y31) 3 SE UTC-5(-4DT) N44°14.69' W84°10.79' LAKE HURON
 883 B S4 FUEL 100LL, JET A NOTAM FILE LAN H-11A, L-31C
RWY 09-27: H5000X100 (ASPH) S-26 MIRL 0.4% up W IAF
RWY 09: REIL. PAPI(P4L)—GA 3.0° TCH 41'. Trees. **RWY 27:** REIL. PAPI(P4L)—GA 3.0° TCH 41'. Trees.
AIRPORT REMARKS: Attended Mon-Fri 1300-2200Z±, Sat-Sun 1400-2200Z±. For attendant after hrs call 989-345-3524; svc charge. Deer on and invof arpt. ACTIVATE MIRL Rwy 09-27; PAPI and REIL Rwy 09 and 27—CTAF.
COMMUNICATIONS: CTAF/UNICOM 122.8
 RCO 122.35 (LANSING RADIO)
 MINNEAPOLIS CENTER APP/DEP CON 118.525
RADIO AIDS TO NAVIGATION: NOTAM FILE LAN.
 (T)VORW/DME 113.2 BXZ Chan 79 N44°14.57' W84°11.03' at fld. 884/6W.
 DME unusable 020°-205° byd 19 NM blo 3000', 205°-020° byd 19 NM blo 3500'.

WESTPHALIA

FOREST HILL (3F5) 6SE UTC-5(-4DT) N42°54.74' W84°40.53' DETROIT
 775 NOTAM FILE LAN
RWY 09-27: 2070X80 (TURF)
RWY 09: Trees. **RWY 27:** Trees.
RWY 18-36: 1900X80 (TURF)
RWY 18: Thld dspcd 185'. Road. **RWY 36:** Thld dspcd 380'. Tree.
AIRPORT REMARKS: Unattended. Deer and birds on and invof arpt. Rwy 09-27 and Rwy 18-36 soft in spring. Rwy 09 has a 30' p-line in apch 606' from thld. Rwy 09-27 and Rwy 18-36 edges and dspcd thlds marked with 3' yellow cones.
COMMUNICATIONS: CTAF 122.9

WEXFORD CO (See CADILLAC)

WEXOR N44°14.22' W85°32.84' NOTAM FILE CAD.
NDB (LOM) 336 MA 071° 6 NM to Wexford Co.

WHITE CLOUD N43°34.49' W85°42.97' NOTAM FILE LAN. **CHICAGO**
(L) VOR/DME 117.6 HIC Chan 123 047° 12.8 NM to Roben-Hood. 920/1W. **L-281**
VOR/DME unusable 020°-090° beyond 30 NM below 3000'
DME portion unusable 270°-290° byd 35 NM blo 3000'.
RCO 122.1R 117.6T (LANSING RADIO)

WHITE CLOUD (42C) 1 N UTC-5(-4DT) N43°33.59' W85°46.45' **CHICAGO**
914 FUEL 100LL NOTAM FILE LAN
RWY 18-36: H2917X60 (ASPH) MIRL
RWY 18: Thld dspclcd 500'. Tree. RWY 36: Trees.
AIRPORT REMARKS: Attended irregularly. Call arpt manager at 231-689-6126 (residence) or 231-286-3467 (cell) or
assistant manager at 231-250-2844 (residence) to verify snow removal. ACTIVATE MIRL Rwy 18-36—CTAF.
COMMUNICATIONS: CTAF/UNICOM 122.8

WICKENHEISER (See CARLETON)

WIGGINS N43°58.20' W84°28.50'. NOTAM FILE LAN. **DETROIT**
NDB (MHW) 209 GDW at Gladwin Zettel Meml. **L-281, 31C**

WILDERNESS AIRPARK (See KENT CITY)

WILLIAMSTON

MAIDENS (89Y) 3 NW UTC-5(4DT) N42°44.00' W84°19.42' **DETROIT**
920 NOTAM FILE LAN
RWY 09-27: 2300X70 (TURF)
RWY 09: Thld dspclcd 214'. Tree. Rgt tfc. RWY 27: Thld dspclcd 1070'. P-line.
AIRPORT REMARKS: Attended irregularly. Rwy 09 apch may be obstructed by seasonal +8' crops. Rwy 09-27 acft
inside primary sfc south side of rwy. Rwy 09-27 rwy sfc rough with ruts and rocks due to ongoing construction
project. Rwy 27 p-line marked with three orange balls. Rwy 09-27 slopes down to the W. Rwy 09 and 27 thlds
and dspclcd thlds marked with three 3' yellow cones each side.
COMMUNICATIONS: CTAF 122.9.

WILLOW RUN (See DETROIT)

WINN

WOODRUFF LAKE (53W) 4 NW UTC-5(4DT) N43°33.27' W84°58.71' **DETROIT**
940 NOTAM FILE LAN
RWY 09-27: 3700X105 (TURF)
RWY 09: Thld dspclcd 341'. Road. RWY 27: Thld dspclcd 260'. Road.
AIRPORT REMARKS: Attended irregularly. Rwy 09-27 and dspclcd thld marked with 3' yellow cones.
COMMUNICATIONS: CTAF 122.9.

W K KELLOGG (See BATTLE CREEK)

WM "TINY" ZEHNDER FLD (see FRANKENMUTH)

WOODRUFF LAKE (see WINN)

WOOLSEY MEM (See NORTHPORT)

YALE

GAVAGAN FLD (48G) 4 SW UTC-5(-4DT) N43°06.21' W82°53.41' **DETROIT**
800 NOTAM FILE LAN
RWY 14-32: 1986X95 (TURF)
RWY 14: Thld dspclcd 515'. Tree. RWY 32: Trees.
AIRPORT REMARKS: Attended Sat-Sun irregularly. No snow removal. Rwy 14-32 has 2' ditch adjacent to rwy both
sides. Rwy 14-32 soft when wet. Rwy 14-32 thlds and Rwy 14 dspclcd thld marked with tires.
COMMUNICATIONS: CTAF 122.9

YALE (D20) 1 SE UTC-5(-4DT) N43°06.75' W82°47.25'

DETROIT

814 NOTAM FILE LAN

RWY 09-27: 2300X110 (TURF) LIRL (NSTD)

RWY 09: Thld dsplcd 315'. Road. **RWY 27:** Thld dsplcd 300'. Brush.

AIRPORT REMARKS: Attended irregularly. Rwy 09-27 soft in spring. Rwy 09-27 and dsplcd thlds marked with cones; pails and tires. Rwy 09-27 NSTD LIRL—NSTD color and configuration. Rwy lgtd on S side only with NSTD color; not for public use.

COMMUNICATIONS: CTAF 122.9

YIPPS N42°10.45' W83°37.29' NOTAM FILE YIP.

DETROIT

NDB (LOM) 359 YI 052° 5.6 NM to Willow Run. Unmonitored.

YUBA (See ELK RAPIDS)

ZEELAND

OTTAWA EXECUTIVE (Z98) 3 E UTC-5(-4DT) N42°49.04' W85°55.69'

CHICAGO

740 S4 FUEL 100LL NOTAM FILE LAN

L-28I

RWY 02-20: H3800X60 (ASPH) LIRL

RWY 02: Thld dsplcd 294'. **RWY 20:** Thld dsplcd 191'. Tree.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 02: TORA-3609 TODA-3800 ASDA-3609 LDA-3315

RWY 20: TORA-3506 TODA-3800 ASDA-3590 LDA-3399

AIRPORT REMARKS: Attended Mon-Fri 1300-2200Z. 200' lgtd antenna approximately 1900' NE of Rwy 20. Rwy slopes up from S to N. ACTIVATE LIRL Rwy 02-20—CTAF, 5 clicks on SS-SR.

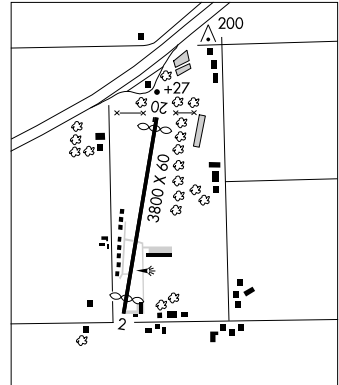
COMMUNICATIONS: CTAF 122.9

RADIO AIDS TO NAVIGATION: NOTAM FILE GRR.

GRAND RAPIDS (H) VOR/DME 115.95 GRR Chan

106(Y) N42°47.20' W85°29.83' 280° 19.1 NM to fld.

803/4W. DME unmonitored.



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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.

CHICAGO, ILLINOIS
MAJOR CONSTRUCTION PROJECT CHICAGO O'HARE RWY 14R-32L

On May 6, 2010 Chicago O'Hare Runway 14R-32L will be shortened from 13,000 feet to 9,685 feet via a relocation of the Runway 32L threshold. At that time, all approaches into Runway 32L will be cancelled. The new declared distances are shown below. (Note that there is no LDA for Runway 32L since it will no longer be an arrival runway.)

Runway 14R:	Runway 32L:
TORA-9685	TORA-9685
TODA-9685	TODA-9685
ASDA-9662	ASDA-9685
LDA-8650	

MODEL ROCKET ACTIVITY IN ILLINOIS

Hillsboro Municipal Airport (3K4), Hillsboro, IL

Model Rocket activity will be conducted within a 2 NM radius of the VLA273011, SFC to 8,000 Feet MSL, SR-SS. For further information contact Flight Services at 1-800-WX-BRIEF (992-7433).

Tuscola Airport (K96), Tuscola, IL

Model Rocket activity will be conducted within a 2 NM radius of Tuscola Airport (K96), SFC to 10,000 feet MSL, SR-SS. For further information contact Flight Services at 1-800-WX-BRIEF (992-7433).

AEROBATIC PRACTICE AREAS IN ILLINOIS

Litchfield Municipal Airport (3LF), Litchfield, IL

Aerobatic practice will be conducted within 2 NM radius of Litchfield Municipal Airport (3LF), from 1,700 feet MSL to 4,200 feet MSL. The practice area is for waiver holders only. Pilots should use caution when opr within this area. For further information contact Flight Services at 1-800-WX-BRIEF (992-7433).

Smith Airport (LL27), Macomb, IL

Aerobatic practice will be conducted within 2 NM radius of Smith Airport (LL27), SFC to 4,100 feet MSL, SR-SS. For further information contact Flight Services at 1-800-WX-BRIEF (992-7433).

Williamson County Regional Airport (MWA), Marion, IL

Aerobatic practice will be conducted within 1 NM radius of Williamson County Regional Airport (MWA), SFC to 5,000 feet MSL, SR-SS. For further information contact Flight Services at 1-800-WX-BRIEF (992-7433).

Pinckneyville-DuQuoin Airport (PJY), Pinckneyville, IL

Aerobatic practice will be conducted within 2 NM radius of Pinckneyville-DuQuoin Airport (PJY), SFC to 3,900 feet MSL, SR-SS. For further information contact Flight Services at 1-800-WX-BRIEF (992-7433).

Springfield IL, Abraham Lincoln Capital Airport (SPI)

Aerobatic practice will be conducted within 1.5 NM radius of Springfield VOR SPI160010, from 2,100 feet MSL to 4,600 feet MSL, SR-SS. For further information contact Flight Services at 1-800-WX-BRIEF (992-7433).

AEROBATIC PRACTICE AREA

Norris Field (8II2), Richmond, IN

Aerobatic Flight Activity will be conducted within 1 (one) NM radius of the Richmond (RID) VORTAC 193R/6 DME. Flights will occur from 800' AGL to 3,500' AGL. Pilots should use caution when operating within this area. For further information, Contact Dayton APP CON at 1-937-454-7310 or freq. 134.45.

AEROBATIC PRACTICE AREA

Skyway Estates Airport (60G), Eaton Rapids, MI

Aerobatic Flight Activity will be conducted within a 1 (one) NM radius of the Lansing (LAN) VORTAC 171R/8DME. Flights will occur from SR to SS from 2,500 MSL to 6,000 MSL.

Pilots should use caution when operating within this area. For further information, contact Lansing ATCT at 1-517-321-1355 or freq. 119.9.

Search Light Activity Dayton, OH

Search light activity will be conducted at the Dayton Schuster Performing Arts Center, Dayton, OH (FFO VORTAC 241/7.23, Lat 39-45-39.56N, Lon 084-11-32.94W) at and above 1500 MSL, from dusk until midnight. Searchlight beams may be injurious to pilots/passengers eyes at 1500 MSL and above. Flash blindness or cockpit illumination may occur at greater distances, to several miles. For further information, contact Dayton AFSS at 937-454-8398.

COMMUNICATIONS ADVISORIES

Indianapolis ARTCC

NABB INDIANA AREA

New Hope, London, Lexington Kentucky Area

Indianapolis Center has installed frequencies in the southern portion of their airspace that require 720-channel radio capability.

Pilots should be aware that if they fly in the Nabb, IN, or the New Hope, London, and Lexington, KY, area without a 720-channel radio, ATC services will be greatly reduced. Traffic advisories, weather information, airport information, along with any other direct communication services will not be available.

While in this area of Indianapolis Center, pilots without 720-channel capability will, in most cases, monitor Flight Service Stations. There will be a noticeable delay in all clearance activity. Please ensure that ATC has adequate lead time in the event of problems or clearance requirements.

INTERSECTION DEPARTURES DURING PERIOD OF DARKNESS CHICAGO O'HARE INTERNATIONAL AIRPORT (ORD) CHICAGO, ILLINOIS

Chicago O'Hare 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 10 at Taxiway ZH
Runway 14L at Taxiway U2
Runway 14L at Taxiway V
Runway 28 at Taxiway ZW
Runway 28 at Taxiway ZV
Runway 32R at Taxiway V
Runway 32L at Taxiway T10
Runway 32L at Taxiway M

Aircraft shall not taxi into position and hold under the provisions of this waiver when the subject intersection is not visible from the tower unless the aircraft's position can be verified by the Airport Surface Detection Equipment (ASDE) prior to the issuance of a departure clearance. When the provisions of this waiver are being exercised, the affected runways shall be used for departures only, departures shall not be permitted from any point on the runway other than the intersections listed above, and only one aircraft at a time is permitted to taxi into position and hold on each respective runway.

INTERSECTION DEPARTURES DURING PERIOD OF DARKNESS INDIANAPOLIS INTERNATIONAL AIRPORT (IND) INDIANAPOLIS, INDIANA

Indianapolis 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 23L at Taxiways "C2" and "D2"
Runway 23R at Taxiways "A2" and "B2"

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 runways 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.

**INTERSECTION DEPARTURES DURING PERIOD OF DARKNESS
GENERAL MITCHELL INTERNATIONAL AIRPORT (MKE)
MILWAUKEE, WISCONSIN**

Milwaukee Mitchell 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 intersection listed below.

Runway 19R at Taxiway Victor

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.

**INTERSECTING RUNWAY OPERATIONS
CHICAGO O'HARE INTERNATIONAL AIRPORT (ORD)
CHICAGO, ILLINOIS**

Chicago O'Hare International (ORD) Airport Traffic Control Tower (ATCT) has been authorized to conduct intersecting runway operations to Runway 28 and Runway 14R whereby an aircraft departing Runway 28 shall be through the intersection of Runway 14R prior to the arriving aircraft on Runway 14R reaching a point no closer than 5,000 feet from the intersection of both runways.

**SIMULTANEOUS OPPOSITE DIRECTION OPERATIONS
CHICAGO O'HARE INTERNATIONAL AIRPORT (ORD)
CHICAGO, ILLINOIS**

Chicago O'Hare International (ORD) Airport Traffic Control Tower (ATCT) has been authorized to conduct arrivals to Runways 14L & 14R while conducting simultaneous opposite direction departures off of runways 09R & 28 during IFR weather conditions. ORD ATCT is authorized to conduct simultaneous converging instrument approaches to runways 14R & 22R while conducting simultaneous opposite direction departures off of runways 09R & 28 during IFR weather conditions.

**SIMULTANEOUS ILS APPROACHES WITH ONE GLIDE SLOPE OUT OF SERVICE
CHICAGO O'HARE INTERNATIONAL AIRPORT (ORD)
CHICAGO, ILLINOIS**

Chicago O'Hare International Airport Traffic Control Tower and Chicago TRACON have been authorized to conduct independent simultaneous ILS approaches with the glide slope of one parallel runway inoperative.

**ILS PRM (SIMULTANEOUS CLOSE PARALLEL) PROCEDURE FOR
PILOTS FILING FLIGHT PLANS TO CLEVELAND-HOPKINS
INTERNATIONAL (CLE)**

Effective Thursday, May 12, 2005. During the hours of 0700-2200 local, CLE ATCT may utilize ILS PRM and LDA PRM apchs to Runways 6L/6R as weather and arrival traffic demand dictate. Aircraft arriving from the west and north (primarily over ZABER and HIMEZ INT.) should expect ILS PRM Runway 6L, aircraft arriving from the east and south (primarily over CXR and KEATN INT.) should expect LDA PRM Runway 6R. If unable to participate in PRM apchs acft operators are required to contact FAA ATCSCC directly at 1-800-333-4286 or at 703-904-4452 prior to departure to obtain a pre-coordinated arrival time. Non-participating acft may encounter DLAS attributable to PRM flow. Pilot requirements and procedures are outlined in the U.S. Terminal Procedures Publications on the pages entitled Attention All Users of ILS Precision Runway Monitor (PRM) or LDA Precision Runway Monitor (PRM).

**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

CHICAGO, ILLINOIS CHICAGO O'HARE VOR/DME

DME unlocks can occur periodically due to ground station overload when more than 100 aircraft interrogations are received at the same time. The problem may occur when aircraft are being held in the Chicago (O'Hare) terminal area awaiting approach clearance at O'Hare. Possibilities of the problem occurring are reduced by users deactivating interrogators during nonuse or switching to an ILS DME whenever possible. Deactivating interrogators on the ground is especially important since nearby aircraft cause more overload than distant ones.

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.

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 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 and 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.

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.

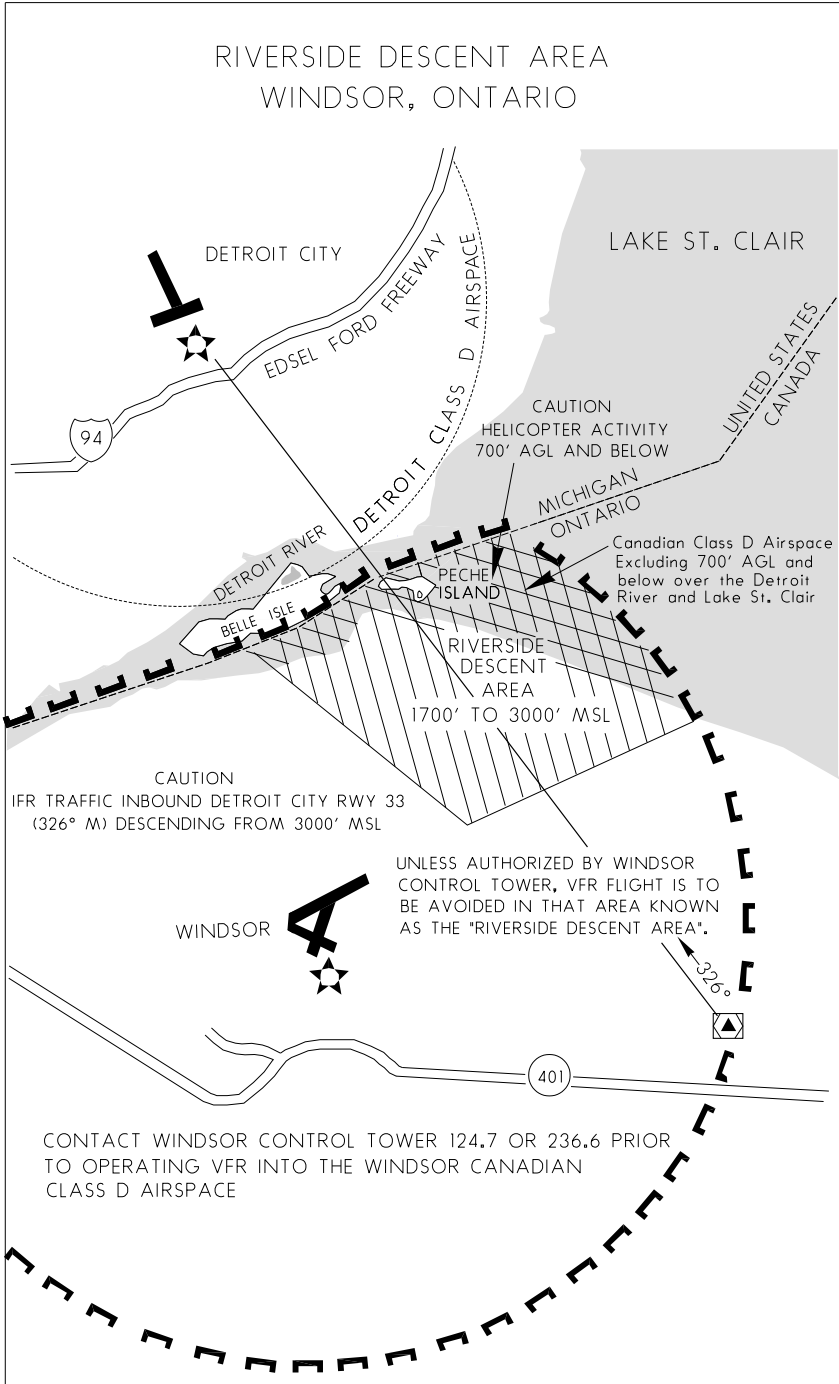
In addition to those facilities comprising the basic ATC system, the following approach and lighting aids have been included in this program for a selected runway.

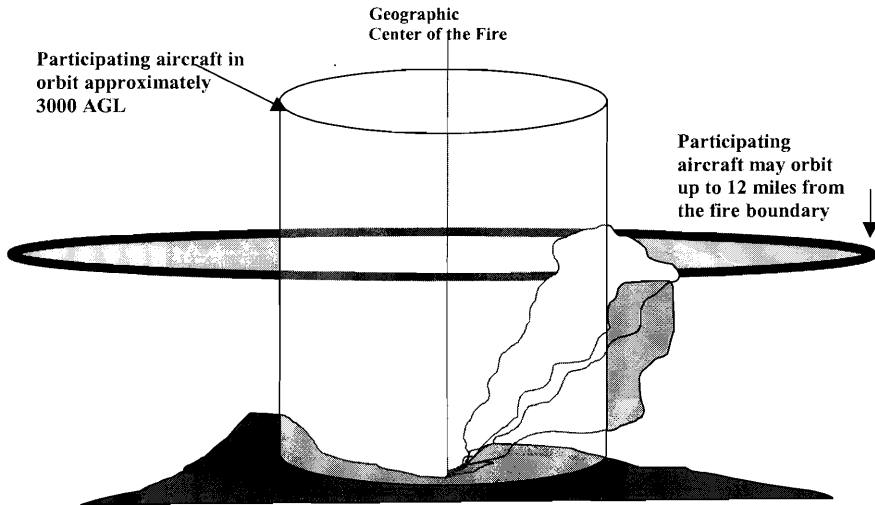
1. ILS (Localizer, Glide Slope, COMLO, Inner, Middle and Outer Markers)
2. Wind Measuring Capability
3. Approach Light System (ALS) or Short ALS (SALS)
4. Ceiling Measuring Capability
5. Touchdown Zone Lighting (TDZL)
6. Centerline Lighting (CL)
7. Runway Visual Range (RVR)
8. High Intensity Runway Lighting (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.



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.

LORAIN (ELYRIA), OHIO LORAIN COUNTY AIRPORT TRAFFIC RULE

Part 93, Subpart J, requires each person piloting an airplane landing at the Lorain County Rgnl Airport shall enter the traffic pattern north of the airport and shall execute a right traffic pattern for a landing to the southwest or a left traffic pattern for a landing to the northeast. Each person taking off from the airport shall execute departure turn to the north as soon as practicable after takeoff.

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.

**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.

EAST CENTRAL U.S.

ILLINOIS: Kankakee, Greater Kankakee (IKK)–**IKK FSS**

MICHIGAN: Lansing, Capital City (LAN)–**LAN FSS**

Telephone Information Briefing Service (TIBS) is the 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) 1-800-4TIBS-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
TAF	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	METAR
KPIT	ICAO location indicator	KPIT
091730Z	Issuance time: ALL times in UTC " <u>Z</u> ", 2-digit date, 4-digit time	091955Z
091818	Valid period: 2-digit date, 2-digit beginning, 2-digit ending times	
	In U.S. METAR : <u>COR</u> rected ob; or <u>AUTO</u> mated ob for automated report with no human intervention; omitted when observer logs on	COR
15005KT	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 METAR , if direction varies 60 degrees or more, <u>Variability</u> appended, e.g. 180 <u>V</u> 260	22015G25KT
5SM	Prevailing visibility: in U.S., <u>Statute M</u> iles & fractions; above 6 miles in TAF Plus6SM . (Or, 4-digit minimum visibility in meters and as required, lowest value with direction)	3/4SM
	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</u> change)	R28L/2600FT
HZ	Significant present, forecast and recent weather: see table (on back)	TSRA
FEW020	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 METAR ; in TAF , 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 METAR reports only, <u>CLeaR</u> for "clear below 12,000 feet"	OVC010CB
	Temperature: degrees Celsius; first 2 digits, temperature <u>"/</u> last 2 digits, dew-point temperature; <u>Minus</u> for below zero, e.g., M06	18/16
	Altimeter setting: indicator and 4 digits; in U.S., <u>A</u> -inches and hundredths; (<u>Q</u> -hectoPascals, e.g., Q1013)	A2992

KEY to AERODROME FORECAST (TAF) and AVIATION ROUTINE WEATHER REPORT (METAR)

Forecast	Explanation	Report
WS010/3102ZKT	In U.S. TAF , non-convective low-level ($\leq 2,000$ ft) <u>Wind Shear</u> ; 3-digit height (hundreds of ft); <u>"Z"</u> ; 3-digit wind direction and 2-3 digit wind speed above the indicated height, and unit, <u>KT</u>	RMK SLP045 T01820159
FM1930	In METAR , <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	
TEMPO 2022	<u>FroM</u> and 2-digit hour and 2-digit minute beginning time: indicates significant change. Each FM starts on new line, indented 5 spaces.	
PROB40 0407	<u>TEMPO</u> rary: changes expected for < 1 hour and in total, < half of 2-digit hour beginning and 2-digit hour ending time period	
BECMG 1315	<u>PROB</u> ability and 2-digit percent (30 or 40): probable condition during 2-digit hour beginning and 2-digit hour ending time period	
	<u>BECM</u> inG: change expected during 2-digit hour beginning and 2-digit hour ending 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.

QUALIFIER			
Intensity or Proximity			
- Light	"no sign"	Moderate	+ Heavy
VC Vicinity; but not at aerodrome; in U.S. METAR , between 5 and 10SM of the point(s) of observation; in U.S. TAF , 5 to 10SM from center of runway complex (elsewhere within 8000m)			
Descriptor			
MI Shallow	BC Patches	PR Partial	TS Thunderstorm
BL Blowing	SH Showers	DR Drifting	FZ Freezing
WEATHER PHENOMENA			
Precipitation			
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			
Obscuration			
BR Mist ($\geq 5/8SM$)	FG Fog ($< 5/8SM$)	FU Smoke	VA Volcanic ash
SA Sand	HZ Haze	PY Spray	DU Widespread dust
Other			
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 ≥ 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

**FAA AND NWS
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
Memphis Intl, TN	404-305-5180	7:30 a.m.-4:00 p.m.	901-322-3350
Louis Armstrong New Orleans Intl, LA	817-222-5006	7:00 a.m.-4:30 p.m.	504-471-4300
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 127.8 125.2

H-2-5-10-12, L-12-27-28-31, A-1
(KZAU)

Aurora – 123.75
Burlington – 135.6
Chicago Heights – 132.95
Crown Point – 127.8
Danville – 135.75
Des Plaines – 133.2 128.65 120.35
Downers Grove – 135.75 127.6
Dubuque – **127.775** 133.95 **125.225**
Ft. Wayne – **126.325** 119.85
Goshen – 133.9 135.9 127.55
Grand Rapids – **126.125** 128.4
Hampshire – 134.2 133.35
Horicon – 135.55 **132.75** **132.225**
Jones – **125.975** **120.225**
Kankakee – 132.5 120.125 **118.225**
Lafayette – 123.85
Leroy – 119.225
Lone Rock – 133.3
Maple Park – 127.075
Milford – **135.4** **132.5** 127.45 125.05 120.175
Milwaukee – 134.75 132.3 125.1
Moline – **135.825** 118.75
Monee – **133.425**
Muskegon – **132.27**
Oshkosh – 132.1
Pullman – 128.5
Rockford – **120.375**
Rossville 125.375 **120.975**
South Bend – **135.35**
Volk Fld 125.05

®CLEVELAND CENTER
H-2-5-10-11, L-27-28-29-30-31-32, A-2
(KZOB)

Algonac – **134.775** 132.25 **126.525**
Belmont – **135.175** **124.425** 120.4
Carleton – **134.775** 119.95
Chardon – 120.775
Detroit (North) – **120.075**
Findlay – 135.1 **127.675**
Flint – 127.7 126.75
Holland – **135.775** **121.175**
Jackson – 134.65 127.3
Litchfield – **135.725** 134.65 120.45
Mansfield – 134.9 **133.375**
Mt Hope – 120.6
Paris – 128.15 120.6
Saginaw – **133.525** 127.7
Sandusky – 132.45 127.9 **119.875** **119.325**
Waterville – 128.625

® INDIANAPOLIS CENTER – 133.425 132.775 128.375

H-5-9-10-12, L-16-25-26-27-29

125.55 124.525 119.55

(KZID)

Brookville – 135.8 135.125 120.575**Evansville – 132.525 128.3****Henryville – 134.275 133.05 124.775****London – 134.0 128.775 126.57 124.8 120.475****Marietta – 125.55****Merwyn – 135.575 134.7 123.925****Muncie – 120.65****New Hope – 124.625 121.175****Portsmouth – 135.575 135.75 124.225 120.275****Rosewood – 128.075****Terre Haute – 134.175 132.2****Winchester – 128.22 126.375 123.775****Zanesville – 133.775 132.825 125.075 124.45****® KANSAS CITY CENTER – 135.3**

H-5-6, L-10-15-16-27, A-2

Decatur – 132.1 124.3

(KZKC)

Effingham – 135.05 133.225 124.3**Kirksville – 134.625 132.6**

Marion – 125.3

Mt Vernon – 132.875 127.7

Quincy – 135.525

St Charles – 125.9 121.25

St Louis – 128.1 **127.225** 125.5**Vandalia – 125.725****® MINNEAPOLIS CENTER**

H-2-5-10-11, L-10-12-13-14-27-28-31

(KZMP)

Central Wisconsin – 124.4

Duluth – 134.675 134.55 134.55 127.9**Eau Claire – 133.75 125.3**

Escanaba – 127.65

Farmington – 133.7

Flying Cloud – 133.7 121.05

Green Bay – 125.55

Hayward – 126.45

Houghton – 127.2

Iron Mountain – 133.45 121.25

Ironwood – 133.55

La Crosse – 128.6 118.85

Mosinee – 124.4

Pellston – 134.6 132.425

Princeton – 121.05

Rhineland – 123.725 133.65

Rochester – 132.35

Saginaw – 118.05

Sawyer – 119.1

Swinns Valley – 135.7 134.85

Traverse City – 132.9

White Cloud – 132.55 120.85

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 NAVAIDS are listed after the NAVAID name. RCO's not at NAVAID's are listed by name.

CLEVELAND AFSS

AKRON VOR/DME 114.4T 122.1R
BELLAIRE VOR/DME 117.1T 122.1R
BRIGGS VOR/DME 112.4T 122.1R
CHARDON VOR/DME 112.7T 122.1R
CLEVELAND RCO 122.1R 122.2 **122.35**
DRYER VOR/DME 113.6T 122.1R
FINDLAY VORTAC 108.2T 122.1R 122.2 **122.65**
JEFFERSON VOR/DME 115.2T 122.1R
MANSFIELD VORTAC 108.8T 122.1R **122.6**
NEWCOMERSTOWN VOR/DME 111.8T 122.1R
SANDUSKY VOR/DME 109.2T 122.1R
WATERVILLE VOR/DME 113.1T 122.1R
YOUNGSTOWN VORTAC 109.0T 122.1R 122.2
ZANESVILLE VOR/DME 111.4T 122.1R 122.2 **122.5**

DAYTON AFSS

ALLEN COUNTY VOR 108.4T 122.1R
ATHENS-ALBANY RCO 122.25
APPLETON VORTAC 116.7T 122.1R
CINCINNATI RCO **122.4**
COLUMBUS RCO 122.2 **122.3**
DAYTON RCO 114.5T 122.1R 122.2 **122.55**
DAYTON VOR/DME 114.5T 122.1R
GALLIPOLIS RCO 121.65
HILLSBORO RCO 122.2
ROSEWOOD VORTAC 117.5T 122.1R
YELLOW BUD VOR 112.5T 122.1R

GREEN BAY AFSS

ASHLAND RCO 122.25
BLACK RIVER FALLS RCO 122.5
CHIPPEWA RCO 123.65
DELLS VORTAC 117.0T 122.1R
EAU CLAIRE RCO 122.65 123.6
ESCANABA RCO 122.3
FALLS VOR/DME 110.0T 122.1R
FOND DU LAC RCO 122.5
GREEN BAY RCO 122.2 122.55
HANCOCK RCO **122.525** 123.65
HAYWARD VOR/DME 113.4T 122.1R
IRON MOUNTAIN VOR/DME 111.2T 122.1R
IRONWOOD RCO 122.3
JANESVILLE VOR/DME 114.3T 122.1R
KENOSHA VOR/DME 109.2T 123.6R
LA CROSSE RCO 122.2 122.35
LONE ROCK RCO 122.35
MACKINAC ISLAND RCO 122.35
MADISON RCO 122.6
MARSHFIELD RCO 122.55
MANITOWOC VOR/DME 111.0T 122.1R
MENOMINEE VOR/DME 109.6T 122.1R
MILWAUKEE RCO 122.4 122.65
MOSINEE RCO **122.525**
NEWBERRY RCO 122.4
OSHKOSH VORTAC 111.8T 122.1R 122.25
PHILLIPS RCO 122.05
PLATTEVILLE RCO 122.5
PRAIRIE DU CHIEN RCO 122.25
RHINELANDER VORTAC 109.2T 122.1R
RICE LAKE RCO 122.3
SAULT STE MARIE VOR/DME 112.2T 122.1R
SAWYER RCO 123.6
SCHOOLCRAFT COUNTY RCO 122.25
SIREN VOR/DME 109.4T 122.1R
STEVENS POINT VORTAC 110.6T 122.1R
TIMMERMAN VOR/DME 112.5T 123.6R
WAUSAU RCO 122.4
WEST BEND VOR 109.8T 122.1R
WISCONSIN RAPIDS RCO 122.45
WOODRUFF RCO 122.6

KANKAKEE AFSS

BLOOMINGTON VOR/DME 108.2T 123.6R
BRADFORD VORTAC 114.7T 122.05R 123.6
CHICAGO HEIGHTS VORTAC 114.2T 122.1R
CHICAGO MEIGS RCO **122.15**
DUPAGE VOR/DME 108.4T 122.1R 122.3
GALESBURG VOR/DME 109.8T 122.1R
JOLIET VORTAC 112.3T 122.1R 122.5
KANKAKEE VOR/DME 111.6T 122.1R 122.2
MACOMB RCO **122.15**
MOLINE RCO **122.6**
NEW LENOX RCO 122.5
PEORIA RCO 122.35
PEOTONE VORTAC 113.2T 122.05R
POLO VOR/DME 111.2T 122.1R
PONTIAC VOR/DME 109.6T 122.1R
ROCKFORD VOR/DME 110.8T 122.1R 122.65
WAUKEGAN RCO 122.55

LANSING AFSS

ALPENA VORTAC 108.8T 122.1R
BAD AXE RCO 122.65
BATTLE CREEK RCO 122.2
BARRIEN SPRINGS RCO 121.625
CARLETON VORTAC 115.7T 122.1R
DETROIT RCO 122.2 **122.55**
FLINT RCO 122.3
GAYLORD RCO 122.55
GRAND RAPIDS VOR/DME 115.95T 122.1R
JACKSON RCO 122.2
KALAMAZOO VOR/DME 109.0T 122.1R
KEELER VOR/DME 116.6T 122.1R
LANSING RCO 122.2
LITCHFIELD VOR/DME 111.2T 122.1R
LUDINGTON RCO 122.45
MANISTEE VOR/DME 111.4T 122.1R
MOUNT PLEASANT RCO 122.6
MUSKEGON RCO 122.5
PECK VORTAC 114.0T 122.1R
PELLSTON RCO 122.2 122.3 123.6
PONTIAC VORTAC 111.0T 122.15R
PULLMAN VOR/DME 112.1T 122.1R
SAGINAW RCO 122.2 122.4
SALEM VORTAC 114.3T 122.1R
TRAVERSE CITY RCO 122.2 **122.65**
WEST BRANCH RCO 122.35
WHITE CLOUD VORTAC 117.6T 122.1R

SAINT LOUIS AFSS 122.2 122.45

BIBLE GROVE VORTAC 109.0T 122.05R
CENTRALIA VORTAC 115.0T 122.1R
CHAMPAIGN VORTAC 110.0T 122.1R 122.45
DANVILLE VORTAC 111.0T 122.1R
DECATUR VORTAC 117.2T 122.1R 122.3
MARION VOR/DME 110.4T 122.1R
MATTOON VOR/DME 109.4T 123.6R
MOUNT VERNON VOR/DME 113.8T 122.05R
QUINCY VORTAC 113.6T 122.1R 122.5
ROBERTS VOR/DME 116.8T 122.1R
SAINT LOUIS REGIONAL RCO 122.05
SAMSVILLE VOR/DME 116.6T 122.1R
SPINNER VORTAC 112.7T 122.25
VANDALIA VORTAC 114.3T 122.1R

TERRE HAUTE AFSS

CROWNPOINT RCO 123.65
EVANSVILLE RCO 122.65
FORT WAYNE RCO 122.2 122.45
GOSHEN VORTAC 113.7T 122.1R
HOOSIER VORTAC 110.2T 122.1R
INDIANAPOLIS RCO 122.55
KNOX VOR/DME 115.6T 122.1R
KOKOMO VORTAC 113.5T 122.1R
LAFAYETTE RCO 122.2 122.35
MUNCIE VOR/DME 114.4T 122.1R
NABB VORTAC 112.4T 122.1R
OSGOOD RCO 122.25
RICHMOND VORTAC 110.6T 122.1R
SHELBYVILLE VORTAC 112.0T 122.1R
SOUTH BEND RCO 122.6
TERRE HAUTE RCO **122.65**
WASHINGTON RCO 122.2

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.

ILLINOIS

DuPage Airport
31W775 North Avenue
West Chicago, Illinois 60185-1056
Telephone: 630-443-3100

Capital Airport
1250 North Airport Drive, Suite 1
Springfield, Illinois 62707-8417
Telephone: 217-744-1910

9950 West Lawrence Ave., Suite 400
Schiller Park, Illinois 60176
Telephone: 847-928-8000

INDIANA

8303 W. Southern Avenue
Indianapolis, Indiana 46241
Telephone: 317-487-2400

1843 Commerce Drive, Suite 200
South Bend, Indiana 46628
Telephone: 219-245-4600

MICHIGAN

3196 Kraft Ave. SE, Suite 103
Grand Rapids, Michigan 49512
Telephone: 616-954-6657

Willow Run Airport
8800 Beck Road
Belleville, Michigan 48111
Telephone: 734-487-7222

OHIO

Great Northern Technology Park II
25249 Country Club Blvd.
North Olmsted, Ohio 44070
Telephone: 440-686-2001

Lunken Airport Executive Building
Ground Floor
4242 Airport Road
Cincinnati, Ohio 45226
Telephone: 513-979-6400

Port Columbus International Airport
2780 Airport Drive, Suite 300
Columbus, Ohio 43219
Telephone: 614-255-3120

WISCONSIN

General Mitchell Intl Airport
4915 S. Howell Ave.
Milwaukee, Wisconsin 53207
Telephone: 414-486-2920

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ROUTES

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 flight 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 GSW031); 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 STARSS 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)
CHICAGO METRO AREA		
From Midway (MDW) or O'Hare (ORD)		
Atlanta (ATL)	EON V171 TTH V243 GQO V333 DALAS ATL	
Denver (DEN)	SIMMN V172 OBH V219 HCT V8 DVV	
Indianapolis (IND)	EON V399 KENLA V128 JELLS	
Louisville (LOU)	EON V171 TTH V243 IIU279 CHERI	1100-0300
Memphis (MEM)	RBS V429 MWA V67 CNG V11 MIOLA	1600-2300
Miami (MIA)	EON V171 TTH V243 LGC V321 PZD V159 CTY V7 LAL V157 LBV V529 V35 CURVE	1100-0300
Pittsburgh (PIT)	GIJ V6 DJB V30 ACO V337 CUTTA	1100-0300
San Francisco (SFO)	SIMMN V172 PLL V158 DBQ V100 MBW V6 FMG V6	
Tampa (TPA)	EON V171 TTH V243 LGC V321 PZD V159 CTY V35 ENDED	
	or	
	(GPS or DME/DME-IRU Equipped) EON V171 TTH V243 LGC V321 PZD V159 CTY V35 ENDED	
Tulsa (TUL)	MZV BRL V63 SGF V14	0000-2359
Washington Natl (DCA)	EON V144 ESL V4 MANNE	1100-0300

Terminals	Route	Effective Times (UTC)
From Midway (MDW) only		
Des Moines (DSM)	SIMMN V172 TNU	1100-0300
Detroit Metro-Wayne Co. (DTW)	GIJ V10 LFD MIZAR-STAR.....	
Detroit Satellites:		
Ann Arbor (ARB)		
Pontiac (PTK)		
Willow Run (YIP)	GIJ V10 LFD CRUX-STAR	
Windsor (YQG)		
Young (DET).....	GIJ ELX V218 LAN SPRTN-STAR.....	
Kansas City (MKC)	MZV BRL V10 IRK BQS-STAR.....	1100-0300
Omaha (OMA)	SIMMN V172 OVR	0000-2359
From O'Hare (ORD) only		
Cleveland (CLE).....	GIJ V6 VWV WAKEM-STAR.....	1100-0300
Des Moines (DSM)	SIMMN V172 TNU	0000-2359
Detroit Metro-Wayne Co (DTW)	PETTY MKG POLAR-STAR	
Detroit Satellites:		
Ann Arbor (ARB)		
Pontiac (PTK)		
Willow Run (YIP)		
Windsor (YQG)		
Young (DET).....	MUSKY V100 ELX V218 LAN SPRTN-STAR	
Kansas City (MKC)	MZV BRL V10 IRK BQS-STAR.....	
Memphis (MEM).....	RBS V429 MWA V67 CNG V11 MIOLA	0000-2359
Muskegon (MKG).....	PETTY V216	
Omaha (OMA)	SIMMN V172 OVR	0000-2359
Saginaw (MBS)	PETTY MKG V216	
From O'Hare (ORD) and North Satellite Airports		
Detroit Metro-Wayne Co. (DTW)	(150-230 incl) PETTY MKG POLAR-STAR	1100-0300
CINCINNATI METRO AREA (CVG, LUK)		
Detroit/Wayne (DTW)	DQN MIZAR-STAR	1100-0300
	or	
	(RNAV only) HAGOL (RNAV)-DP DQN	
	MIZAR-STAR	1100-0300
Detroit Satellites:		
(ARB)	DQN CRUX-STAR	1100-0300
	or	
	(RNAV only) HAGOL (RNAV)-DP DQN	
	CRUX-STAR	1100-0300
(PTK, YIP)	(RNAV only) HAGOL (RNAV)-DP DQN	
	CRUX-STAR	
	or	
	(all others) DQN CRUX-STAR.....	
(DET, YQG)	(RNAV only) HAGOL (RNAV)-DP DQN V275 KLINE	
	VXV VXV064 LYNTN	
	or	
	(all others) DQN V275 KLINE VWV VWV064	
	LYNTN	
From COVINGTON (CVG) only:		
Atlanta (ATL).....	BLUEGRASS-DP HYK V97 VXV V267 HRS V463	
	WOMAC ATL	1100-0300
Chicago (MDW)	WHITEWATER-DP LOVEY VHP BVT V97 CGT	1100-0300
	or	
	(RNAV only) LOVEY (RNAV)-DP LOVEY VHP BVT	
	V97 CGT	1100-0300
Chicago (ORD)	(RNAV only) LOVEY (RNAV)-DP LOVEY VHP BVT	
	V97 CGT V7 BEBEE	1100-0300
	or	
	(all others) WHITEWATER-DP VHP BVT V97 CGT	
	V7 BEBEE	1100-0300
Indianapolis (IND)	V128 VHP	1100-0300
Knoxville (TYS).....	(RNAV only) KENLNL (RNAV)-DP HYK V97	
	or	
	(all others) BLUEGRASS-DP HYK V97	
Louisville (SDF).....	CVG206 IUU055 IUU	1100-0300
Pittsburgh (PIT)	(60-170 incl-RNAV only) GIPLE (RNAV)-DP YRK	
	V44 JPU V117 WISKE WISKE-STAR	1100-0300
	or	

Terminals	Route	Effective Times (UTC)
	(all others, 60–170 incl) RHOMM–DP YRK V44 JPU V117 WISKE WISKE–STAR.....	1100–0300
CLEVELAND METRO AREA (CLE, CGF, BKL, LNN, LPR)		
Baltimore (BWI).....	(90–170 incl) ACO AIR V75 MGW V44 MRB V3 EMI.....	1100–0300
Boston (BOS).....	(60–170 incl) V522 ERI V270 CFB V72 ALB V2 GDM GDM–STAR.....	1100–0300
Buffalo (BUF).....	(60–170 incl) V522 ERI V43 WELLA.....	
Chicago Midway (MDW).....	(60–170 incl) SKY VVV V126 CGT.....	1100–0300
Chicago O'Hare (ORD).....	(60–170 incl) V45 VVV V126 HALIE V340 BEARZ.....	1100–0300
Columbus (CMH).....	(60–170 incl) DJB DJB173 HERAK APE035 APE.....	
Dayton (DAY).....	(60–170 incl) OBRLN–DP ROD.....	
Detroit/Wayne (DTW).....	(60–170 incl) DJB DJB314 GEMNI– STAR.....	
Detroit Satellites:		
Ann Arbor (ARB).....		
Pontiac (PTK).....		
Willow Run (YIP).....		
Windsor (YQG).....		
Young (DET).....	(60–170 incl) DJB LLEE0–STAR.....	1100–0300
Indianapolis (IND).....	(60–170 incl) OBRLN–DP MIE MIE244 CLANG CLANG–STAR.....	
Pittsburgh (PIT).....	(60–170 incl) ACO V337 CUTTA.....	1100–0300
Rochester (ROC).....	(60–170 incl) V522 ERI V14 BUF V2 CLUNG.....	1100–0300
Washington Dulles (IAD).....	(90–170 incl) ACO AIR V75 MGW V144 ESL V4 AML.....	1100–0300
	or	
Washington Natl (DCA).....	(90–170 incl) ACO AIR V75 MGW V44 MRB AML .. (90–170 incl) ACO AIR V75 MGW V144 ESL V4 AML.....	1100–0300
		1100–0300
COLUMBUS (CMH)		
Cleveland (CLE).....	(60–170 incl) V43 TVT KEATN–STAR.....	1100–0300
Pittsburgh (PIT).....	(60–170 incl) APE V12 CTW WISKE–STAR.....	1100–0300
Toledo (TOL).....	V493 VVV.....	1100–0300
DAYTON (DAY)		
Chicago Midway (MDW).....	V55 V422 CGT.....	1100–0300
Chicago O'Hare (ORD).....	V55 FWA V340 BEARZ.....	1100–0300
Cleveland (CLE).....	DQN ABERZ–STAR.....	1100–0300
Detroit Metro–Wayne Co (DTW).....	DQN MIZAR–STAR.....	1100–0300
Detroit Satellites:		
Ann Arbor (ARB).....		
Pontiac (PTK).....		
Willow Run (YIP).....	DQN CRUXX–STAR.....	
Windsor (YQG).....		
Young (DET).....	V275 KLINE VVV VVV064 LYNTN.....	
Washington Dulles (IAD).....	(90–170 incl) ZZV V144 ESL V4 AML.....	1100–0300
	or	
Washington Natl (DCA).....	(90–170 incl) ZZV V14 MGW V44 MRB AML..... (90–170 incl) ZZV V144 ESL V4 AML.....	1100–0300
		1100–0300
DETROIT METRO AREA		
(Detroit Metro–Wayne Co & Satellites)		
Albany (ALB).....	(60–170 incl) TYCOB V116 BFD V72.....	1100–0300
Atlantic City (ACY).....	(60–170 incl) ERRTH–DP CXR YNG V6 SEG V170 MXE V184.....	1100–0300
Boston (BOS).....	(60–170 incl) TYCOB V116 BFD V72 ALB V2 GDM.....	1100–0300
Buffalo (BUF).....	(60–170 incl) TYCOB V90 DKK.....	1100–0300
Chicago Midway (MDW).....	HARWL JXN V116 LEROY GSH CGT.....	1100–0300
Chicago O'Hare (ORD).....	FWA–DP FWA KNOX–STAR.....	
	or	
	FWA–DP FWA WATSON (RNAV)–STAR.....	
	or	
	HARWL JXN V116 ELX V100 DEERE.....	
	or	

PREFERRED IFR ROUTES

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Terminals	Route	Effective Times (UTC)
Cleveland (CLE).....	GRR MKG V510 FAH BJB OBK	
Columbus (CMH).....	MAARS AC0319 HIMEZ HIMEZ-STAR.....	
Fort Wayne (FWA).....	CAVVS VVW FDY V279 GUNNE.....	1100-0300
	(60-170 incl, Props) HARWL JXN V221	1100-0300
	or	
	(60-170 incl, Jets) ANNTS DX0217 FWA071	1100-0300
Indianapolis (IND)	HARWL JXN V221 MIE V14 CLANG-STAR.....	1100-0300
Milwaukee (MKE)	(60-170 incl) DUNKS V170 PMM V170 PETTY.....	1100-0300
Montreal (CYUL).....	(60-170 incl) TYCOB V116 ERI V270 ELZ V501	
	SYR MSS V203 FRANX FRANX-STAR.....	1100-0300
Pittsburgh (PIT).....	(60-170 incl) ACO CUTTA-STAR.....	1100-0300
Rochester (ROC)	(60-170 incl) TYCOB YQG 098 SURLY DKK V14	
	BUF.....	1100-0300
Syracuse (SYR).....	(60-170 incl) TYCOB V116 ERI V14 GEE V84	1100-0300
Washington Natl (DCA).....	(60-170 incl) ACO AIR V75 MGW V144 ESL V4	
	MANNE	1100-0300
Westchester Co (HPN)	(60-170 incl) TYCOB V116 ERI V270 V433 V157	
	HAARP.....	1100-0300
	or	
	(60-170 incl, props less than 250 kts) TYCOB	
	V116 ERI V270 V433 V123 HAARP	1100-0300
FORT WAYNE (FWA)		
Moline (MLI)	V144 BDF V156 MZV	0000-2359
Rockford (RFD).....	V144 SMARS V128	0000-2359
GREATER PEORIA RGNL (PIA)		
Chicago Midway (MDW).....	PIA PIA056 MOTIF JOT	
Chicago O'Hare (ORD).....	PIA PIA035 V10 PLANO	
INDIANAPOLIS (IND)		
Cleveland Metro Area (CLE) (CGF) (BKL)		
(LNN) (LPR)	(RNAV only/60-170 incl) DQN T000K MFD	
	ABERZ ABERZ-STAR	
	or	
	(all others/60-170 incl) DQN MFD MFD048	
	ABERZ ABERZ-STAR	
Detroit Metro-Wayne Co (DTW).....	FWA MIZAR-STAR.....	
	FWA CRUX-STAR	
Detroit Satellites:		
Ann Arbor (ARB)		
Pontiac (PTK).....		
Willow Run (YIP).....	FWA CRUX-STAR	
Windsor (YQG)		
Young (DET).....	V275 KLINE VVW VVW051 POOFE	
Evansville (EVV).....	V305	
Kansas City (MKC)	V50 SPI BQS-STAR	0000-2359
Pittsburgh (PIT).....	(60-170 incl) V50 DQN V12 CTW WISKE-STAR....	1100-0300
Springfield (SGF).....	V11 PXV V190	0000-2359
	or	
	TTH BIB V72 FAM V190	0000-2359
Tulsa (TUL).....	V11 PXV V190 SGF V14	0000-2359
Wichita (ICT).....	TTH BIB V72 ENL V234 EMP V12	0000-2359
MILWAUKEE (MKE)		
Detroit Metro-Wayne Co (DTW).....	(60-170 incl) SQUIB MKG POLAR-STAR.....	
Detroit Satellites:		
Ann Arbor (ARB)		
Pontiac (PTK).....		
Willow Run (YIP).....		
Windsor (YQG)		
Young (DET).....	GRR LAN SPRTN-STAR.....	
MOLINE (MLI)		
Fort Wayne (FWA)	V156 BDF V144	0000-2359
South Bend (SBN)	V156 BDF V144 MAPPS V156.....	0000-2359
ROCKFORD (RFD)		
Fort Wayne (FWA).....	V128 SMARS V144	0000-2359
South Bend (SBN)	V128 SMARS V144 MAPPS V156.....	0000-2359
SOUTH BEND (SBN)		
Moline (MLI)	V156 MAPPS V144 BDF V156 MZV	0000-2359
Rockford (RFD).....	V156 MAPPS V144 SMARS V128.....	0000-2359

Terminals	Route	Effective Times (UTC)
SPRINGFIELD (SPI)		
Chicago Midway (MDW)	PNT MOTIF-STAR	0000-2359
Chicago O'Hare (ORD)	PNT V227 PLANO	0000-2359
Springfield (SGF)	V50 UIN V63 SGF V14	0000-2359
Tulsa (TUL)	V50 UIN V63 SGF V14	0000-2359
TERRE HAUTE (HUF)		
Kansas City (MKC)	V50 SPI BQS-STAR	0000-2359
Springfield (SGF)	V7 PXV V190	0000-2359
Tulsa (TUL)	V7 PXV V190 SGF V14	0000-2359

SPECIAL LOW ALTITUDE DIRECTIONAL ROUTES

Route	Effective Times (UTC)
Low Altitude IFR single-direction route for traffic overflying ZOB ARTCC landing at ORD: Westbound	JXN V116 ELX V100 DEERE
Low Altitude IFR single-direction route for traffic overflying ZOB ARTCC landing at ORD: Westbound	OXI KNOX-STAR

HIGH ALTITUDE

Terminals	Route	Effective Times (UTC)
AKRON (CAK)		
Detroit/Wayne (DTW)	DJB DJB314 GEMNI GEMNI-STAR	
CHICAGO METRO AREA (ORD, MDW)		
Atlanta (ATL)	(RNAV only) GUIDO J73 PXV BNA ERLIN (RNAV)-STAR	
	or	
	(all others) GUIDO J73 PXV BNA ROME-STAR	
Baltimore (BWI)	GIJ J146 J34 DJB J162 MGW EMI-STAR	
Birmingham (BHM)	EON DNB BNA VUZ	
Boca Raton (BCT)	(GPS or DME/DME-IRU equipped) EON DNV TTH SWAPP ATL J89 OTK PRRIE (RNAV)-STAR	
Boston (BOS)	ELX CRL J554 JHW J82 ALB GDM GDM-STAR	
Bristol/Johnson/Kingsport (TRI)	EON DNV VHP J24 FLM HMV	
Charleston (CHS)	EON DNV VHP J24 FLM	
Charleston (CRW)	EON DNV VHP J24 FLM HVQ	
Charlotte (CLT)	EON DNV VHP J24 FLM JOHNS (RNAV)-STAR	
Chattanooga (CHA)	EON DNV	
Cincinnati (CVG)	(RNAV only) EON DNV CEGRM (RNAV)-STAR	
	or	
	(all others) EON DNV SHELBYVILLE-STAR	
Columbia (CAE)	EON DNV VHP J24 FLM	
Columbus (CMH)	GIJ GIJ092036 FWA J178 APE	
Dallas/Fort Worth (DFW)	RBS STL RZC FSM BYP	
Dayton (DAY)	GIJ GIJ092036 FWA ROD DQN	
Denver (DEN)	IOW DSM J10 LBF SAYGE-STAR	
	or	
	PLL PLL275065 FOD J94 ONL J114 SNY LANDR-STAR	
Detroit/Wayne (DTW)	PETTY MKG POLAR-STAR	
Evansville (EVV)	GUIDO	
Fort Lauderdale (FLL)	GUIDO J73 SZW J43 PIE FORTL-STAR	
	or	
	EON DNV TTH SWAPP ATL J89 HITR PIE FORTL-STAR	
	or	
	(GPS or DME/DME-IRU equipped) EON DNV TTH SWAPP ATL J89 OTK JINGL (RNAV)-STAR	
Greensboro (GSO)	EON DNV VHP J24 FLM	
Greer (GSP)	EON DNV VHP J24 FLM SOT SUG V185 UNMAN	
Harrisburg (MDT)	GIJ J146 J34 DJB J518 J152 HAR	

PREFERRED IFR ROUTES

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Terminals	Route	Effective Times (UTC)
Huntsville (HSV).....	EON DNV.....	
Jacksonville (JAX).....	EON DNV TTH SWAPP ATL AMG ALMA-STAR	
Kennedy (JFK).....	ELX CRL J554 JHW J70 LVZ LENDY-STAR	
Knoxville (TYS).....	EON DNV VHP J24 FLM J43 VXV	
La Guardia (LGA).....	GIJ J146 MIP MIP-STAR.....	
Memphis (MEM).....	RBS FAM ARG GQE-STAR	
	or	
	GUIDO J73 PXV WLDER-STAR	
Miami (MIA).....	GUIDO J73 SZW J43 PIE CYY-STAR	
	or	
	(Turbojets-GPS or DME/DME-IRU equipped) EON	
	DNV TTH SWAPP ATL SZW SSCOT	
	(RNAV)-STAR.....	
Myrtle Beach (MYR).....	EON DNV VHP J24 FLM	
Nashville (BNA).....	EON DNV TTH HEHAW-STAR	
Newark (EWR).....	ELX CRL J584 SLT FQM-STAR.....	
Norfolk (ORF).....	EON DNV VHP J24 MOL TERKS-STAR	
Oakland (OAK).....	PLL PLL275065 FOD J94 ONL J148 OAL MOD	
	or	
	PLL PLL275065 FOD J94 LCU J158 MVA.....	1500-0400
Orlando Exec (ORL)	EON DNV TTH BWG GQO ATL J89 OTK	
	LEESE-STAR	
Orlando Intl (MCO)	EON DNV TTH SWAPP ATL J89 OTK LEESE-STAR..	
Philadelphia (PHL).....	GIJ J146 CXR EWC JST BUNTS-STAR.....	
Phoenix (PHX).....	MZV STJ J18 FTI J19 ZUN BUNTR-STAR	1200-0400
	or	
	IOW J192 PWE J64 PUB ALS J102.....	
Pittsburgh (PIT).....	GIJ J146 J34 DJB ACO V337 CUTTA.....	
Pottstown (PTW)	GIJ J146 CXR EWC JST	
Raleigh-Durham (RDU)	EON DNV VHP J24 FLM BKW ROA SBV-STAR	
Richmond (RIC).....	EON DNV VHP J24 FLM MOL FAK.....	
Roanoke (ROA)	EON DNV VHP J24 FLM	
St. Petersburg-Clearwater (PIE)	GUIDO J73 SZW DARBS-STAR	
San Francisco (SFO).....	PLL PLL275065 FOD J94 FMG ILA PYE.....	1500-0400
San Jose (SJC)	PLL PLL275065 FOD J94 FMG HYP-STAR	
	or	
	DBQ J94 LCU HYP-STAR	1500-0400
Sarasota/Bradenton (SRQ)	GUIDO J73 PXV J73 SZW CLAMP-STAR	
Tampa (TPA).....	GUIDO J73 PXV J73 SZW DARBS-STAR	
	or	
	(GPS or DME/DME-IRU equipped) GUIDO J73 PXV	
	J73 SZW FOXX (RNAV)-STAR	
Toledo (TOL).....	GIJ J146 PLAIN VVV	
Washington Dulles (IAD)	GIJ J146 J34 BUCKO-STAR	
Washington Natl (DCA)	GIJ J146 J34 SHAAR WZRRD-STAR	
	or	
	(GPS or DME/DME-IRU equipped) GIJ J146 J34	
	BUCKO ELDEE (RNAV)-STAR.....	
	or	
	GIJ J146 J34 SHAAR ELDEE (RNAV)-STAR	
West Palm Beach (PBI)	(all others) EON DNV TTH SWAPP ATL OTK WLACE	
	(RNAV)-STAR.....	
	or	
	(GPS or DME/DME-IRU equipped) DENNT DARCY	
	DREGS DUMGE SWAPP ATL J89 OTK WLACE	
	(RNAV)-STAR.....	
	or	
	(GPS or DME/DME-IRU equipped) EON DNV TTH	
	IUI J99 VXV J43 WLACE (RNAV)-STAR	
	or	
	(all others) ORD EON DNV TTH SWAPP ATL OTK	
	WLACE (RNAV)-STAR	
Windsor Locks (BDL)	ELX CRL J554 JHW J82 WILET RKA292 RKA	
	SWEDE-STAR	
CHICAGO Midway (MDW) only		
Albany (ALB).....	LEWKE GIJ EVOTE NELLS KEEHO JHW J82.....	
Allentown (ABE)	LEWKE GIJ J146 FJC.....	

Terminals	Route	Effective Times (UTC)
Atlanta (ATL)	CMSKY CARYN CYBIL PXV J73 BNA ROME-STAR .. or CMSKY CARYN CYBIL PXV BNA ERLIN (RNAV)-STAR	
Baltimore (BWI)	LEWKE GIJ OTENS ANEWA RIEKE DJB J34 AIR KEMAN WESTMINSTER-STAR	
Birmingham (BHM)	CMSKY CARYN CYBIL PXV	
Bristol/Johnson/Kingsport (TRI)	EARND ELANR EMMLY ETAME EMEGE FLM	
Boca Raton (BCT)	(GPS or DME/DME-IRU equipped) GUIDO J73 SZW PRRIE (RNAV)-STAR	
	or (GPS or DME/DME-IRU equipped) EON DNV TTH SWAPP ATL J89 OTK PRRIE (RNAV)-STAR	
	or (GPS or DME/DME-IRU equipped) DENNT DARCY DREGS DUMGE SWAPP ATL J89 OTK PRRIE (RNAV)-STAR	
Boston (BOS)	LEWKE GIJ EVOTE NELLS KEEHO JHW J82 ALB GARDNER-STAR	
Buffalo (BUF)	LEWKE GIJ EVOTE NELLS KEEHO DKK	
Charleston (CHS, CRW)	EARND ELANR EMMLY ETAME EMEGE FLM	
Charlotte (CLT)	EARND ELANR EMMLY ETAME FLM JOHNS (RNAV)-STAR	
Chattanooga (CHA)	DENNT DARCY DREGS DONVE BWG	
Cincinnati (CVG)	DENNT DARCY DNV CEGRM (RNAV)-STAR	
	or DENNT DARCY DNV SHB-STAR	
Cleveland (CLE)	ELX CRL HIMEZ-STAR	
	or LEWKE GIJ CRL HIMEZ-STAR	
Columbia (CAE)	EARND ELANR EMMLY ETAME EMEGE FLM	
Columbus (CMH)	LEWKE GIJ SEWTO FWA GUNNE-STAR	
Dallas/Fort Worth (DFW)	ACITO ADELL ARLYN STL RZC FSM BONHAM-STAR	
Detroit Metro-Wayne Co (DTW)	GIJ LFD MIZAR-STAR	
Detroit Metro Area (ARB, PTK, YIP)	GIJ LFD CRUX-STAR	
Detroit Metro Area (DET, CYQG)	GIJ LAN SPRTN-STAR	
Evansville (EVV)	DENNT DARCY DREGS DONVE	1200-0400
Fort Lauderdale (FLL)	DENNT DARCY DREGS DUMGE SWAPP ATL J89 OTK JINGL (RNAV)-STAR	
	or (GPS or DME/DME-IRU equipped) DENNT DARCY DREGS DUMGE SWAPP ATL J89 OTK JINGL (RNAV)-STAR	
	or EON DNV TTH IIU J99 VXV J46 AMG TAY JINGL (RNAV)-STAR	
	or (GPS or DME/DME-IRU equipped) EON DNV TTH SWAPP ATL J89 OTK JINGL (RNAV)-STAR	
Fort Myers (RSW)	CMSKY CARYN CYBIL PXV J73 SZW TYNEE (RNAV)-STAR	
	or (GPS or DME/DME-IRU equipped) GUIDO J73 PXV J73 SZW TYNEE (RNAV)-STAR	
Greensboro (GSO)	EARND ELANR EMMLY ETAME FLM PSK SMOKN-STAR	
Greenville-Spartanburg (GSP)	EARND ELANR EMMLY ERECO IIU	
Houston (HOU)	(GPS or DME/DME-IRU equipped) BACEN BLOKR BEKKI FAM J137 LIT J180 SWB ROKIT (RNAV)-STAR	
	or (Non-advanced NAV only) BACEN BLOKR BEKKI FAM J137 LIT J180 SWB DAS-STAR	

PREFERRED IFR ROUTES

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Terminals	Route	Effective Times (UTC)
Houston (IAH)	(Turbojets-GPS or DME/DME-IRU equipped) BACEN BLOKR BEKKI FAM J137 LIT J180 SWB TXMEX (RNAV)-STAR	
	or (Non-advanced NAV only) BACEN BLOKR BEKKI FAM J137 LIT J180 SWB DAS-STAR	
Huntsville (HSV)	DENNT DARCY DREGS DONVE BWG	
Islip (ISP)	LEWKE GIJ EVOTE NELLE KEEHO JHW J70 STW LENDY	
Jacksonville (JAX)	DENNT DARCY DREGS DUMGE SWAPP AMG ALMA-STAR	
La Guardia (LGA)	LEWKE GIJ J146 ETG MILTON-STAR	
Memphis (MEM)	BACEN BLOKR BEKKI FAM ARG GILMORE-STAR ... or CMSKY CARYN CYBIL PXV WLDER-STAR	
Miami (MIA)	DENNT DARCY DREGS DUMGE SWAPP ATL SZW J43 PIE CYPRESS-STAR	
	or (Turbojets-GPS or DME/DME-IRU equipped) DENNT DARCY DREGS DUMGE SWAPP ATL SZW J86 OTK SSCOT (RNAV)-STAR	
	or (Turbojets-GPS or DME/DME-IRU equipped) GUIDO J73 SZW SSCOT (RNAV)-STAR	
	or (Turbojets-GPS or DME/DME-IRU equipped) EON DNV TTH IJU J99 VXV J46 AMG TAY SSCOT (RNAV)-STAR	
	or EON DNV TTH SWAPP ATL SZW J43 PIE CYPRESS-STAR	
Minneapolis (MSP)	BAE EAU-STAR	1200-0400
Manchester (MHT)	LEWKE GIJ EVOTE NELLE KEEHO JHW J82 ALB EEN	
Nashville (BNA)	CMSKY CARYN CYBIL PXV CCT HEHAW-STAR	
Newark (EWR)	LEWKE GIJ EVOTE NELLE KEEHO J584 SLT FQM WILLIAMSPORT-STAR	
New Orleans (MSY)	BACEN BLOKR BEKKI ENL J71 MEM J35 MCB RYTHM-STAR	
Norfolk (ORF)	EARND ELANR EMMLY ETAME EMEGE FLM J24 MOL TERKS-STAR	
Orlando (MCO/ORL)	DENNT DARCY DREGS DUMGE SWAPP ATL J89 OTK PIGLT (RNAV)-STAR	
	or DENNT DARCY DREGS DUMGE SWAPP ATL J89 OTK LEESE-STAR	1100-0400
Phoenix (PHX)	MZV J18 FTI J19 ZUN EAGUL (RNAV)-STAR	1200-0400
	or MZV LMN J64 HLC LAA J102 GUP EAGUL (RNAV)-STAR	
Philadelphia (PHL)	LEWKE GIJ J146 CXR EWC JST BUNTS-STAR	
Pittsburgh (PIT)	LEWKE GIJ OTENS ANEWA RIEKE DJB ACO CUTTA-STAR	
Providence (PVD)	LEWKE GIJ EVOTE NELLE KEEHO JHW J82 MEMMS J522 HNK TEDDY	
Raleigh/Durham (RDU)	EARND ELANR EMMLY ETAME EMEGE FLM BKW ROA SOUTH BOSTON-STAR	
Richmond (RIC)	EARND ELANR ETAME EMEGE FLM J24 FAK	
Rochester (ROC)	LEWKE GIJ EVOTE NELLE KEEHO DKK BUF	
Saint Petersburg/Clearwater (PIE)	CMSKY CARYN CYBIL PXV J73 SZW DARBS-STAR	
Sarasota/Bradenton (SRQ)	CMSKY CARYN CYBIL PXV J73 SZW CLAMP-STAR	
Tampa (TPA)	CMSKY CARYN CYBIL PXV J73 SZW FO0XX (RNAV)-STAR	
	or	

Terminals	Route
	CMSKY CARYN CYBIL PXV J73 SZW
	DARBS-STAR
Teterboro (TEB).....	LEWKE GIJ EVOTE NELLS KEEHO JHW J70 LVZ
	WILKES BARRE-STAR
Trenton (TTN)	LEWKE GIJ J146 CXR EWC JST BUNTS-STAR
Washington Dulles (IAD)	LEWKE GIJ OTENS ANEWA RIEKE DJB J34 AIR
	MGW MGW121 VERNI ESL ROYIL-STAR
	or
	(GPS or DME/DME-IRU equipped) LEWKE GIJ
	OTENS ANEWA RIEKE DJB J34 AIR MGW VERNI
	ESL SHNON (RNAV)-STAR
Washington Natl (DCA)	(GPS or DME/DME-IRU equipped) GIJ J146 J34
	BUCKO ELDEE (RNAV)-STAR
	or
	LEWKE GIJ OTENS ANEWA RIEKE DJB J34 SHAA
	WZRRD-STAR
	or
	(GPS or DME/DME-IRU equipped) LEWKE GIJ
	OTENS ANEWA RIEKE DJB J34 SHAA ELDEE
	(RNAV)-STAR
White Plains (HPN)	LEWKE GIJ EVOTE NELLS KEEHO JHW ITH DNY
	VALRE-STAR
Windsor Locks (BDL)	LEWKE GIJ EVOTE NELLS KEEHO JHW J82 WILET
	SWEDE-STAR
CHICAGO O'Hare (ORD) only	
Akron (CAK).....	MOBLE ADIME OTENS VVW MFD V8 DALTS
Albany (ALB).....	EBAKE WISMO POSTS PADDE SVM DKK
Allentown (ABE).....	MOBLE ADIME GERBS J146 MIP
Andrews AFB (ADW).....	MOBLE ADIME OTENS ANEWA RIEKE DJB J34
	SHAAR WZRRD-STAR.....
Atlanta (ATL)	CMSKY CARYN CYBIL PXV J73 BNA ROME-STAR ..
	or
	CMSKY CARYN CYBIL PXV BNA ERLIN
	(RNAV)-STAR
Atlantic City (ACY)	MOBLE ADIME GERBS J146 CXR EWC JST J152
	HAR SIE
Baltimore (BWI)	MOBLE ADIME OTENS ANEWA RIEKE DJB J34 AIR
	KEMAN WESTMINSTER-STAR
Bedford (BED).....	EBAKE WISMO POSTS PADDE SVM DKK ALB GDM
	V431 LOBBY
Birmingham (BHM)	CMSKY CARYN CYBIL PXV
Boca Raton (BCT).....	(GPS or DME/DME-IRU equipped) GUIDO J73
	SZW PRRIE (RNAV)-STAR
	or
	(GPS or DME/DME-IRU equipped) EON DNV TTH
	SWAPP ATL J89 PRRIE (RNAV)-STAR.....
	or
	(GPS or DME/DME-IRU equipped) DENNT DARCY
	DREGS DUMGE SWAPP ATL J89 OTK PRRIE
	(RNAV)-STAR
Boston (BOS)	EBAKE WISMO POSTS PADDE SVM DKK ALB
	GARDNER-STAR.....
Bristol/Johnson/Kingsport (TRI)	EARND ELANR EMMLY ETAME EMEGE FLM
Buffalo (BUF)	DUFEE ELX HAACK DOXXY SOSIC COHOW DKK
Burlington (BTV).....	EBAKE WISMO POSTS PADDE SVM DKK SYR J29
	LAGGS
Charleston (CHS, CRW).....	EARND ELANR EMMLY ETAME EMEGE FLM
Charlotte (CLT)	EARND ELANR EMMLY ETAME FLM JOHNS
	(RNAV)-STAR
Chattanooga (CHA).....	DENNT DARCY DREGS DONVE BWG
Cincinnati (CVG).....	DENNT DARCY DNV CEGRM (RNAV)-STAR
	or
	DENNT DARCY DNV SHELBYVILLE-STAR
Cleveland (CLE)	DUFEE ELX HIMEZ-STAR
Columbia (CAE).....	EARND ELANR EMMLY ETAME EMEGE FLM
Columbus (CMH).....	MOBLE ADIME SEWTO FWA GUNNE-STAR

Terminals	Route	Effective Times (UTC)
Dallas/Fort Worth (DFW)	ACIO ADELL ARLYN STL RZC FSM BONHAM-STAR	
Denver (DEN).....	IOW DSM J10 LBF SAYGE-STAR	
	or DBQ J94 ONL J114 SNY LANDR-STAR	
Detroit Metro-Wayne Co (DTW)	PETTY MKG POLAR-STAR	
Detroit Metro Area (DET, CYQG, PTK, YIP, ARB)		1200-0400
Evansville (EVV)	PETTY GRR LAN SPRTN-STAR	
Fort Lauderdale (FLL).....	DENNT DARCY DREGS DONVE..... DENNT DARCY DREGS DUMGE SWAPP ATL J89 OTK JINGL (RNAV)-STAR	
	or DENNT DARCY DREGS SWAPP ATL J89 OTK JINGL (RNAV)-STAR	
	(GPS or DME/DME-IRU equipped) EON DNV TTH IIU J99 VXV J46 AMU TAY JINGL (RNAV)-STAR ..	
Fort Myers (RSW)	(GPS or DME/DME-IRU equipped) CMSKY CARYN CYBIL PXV J73 SZW TYNEE (RNAV)-STAR	
	or (GPS or DME/DME-IRU equipped) GUIDO J73 PXV J73 SZW TYNEE (RNAV)-STAR	
Greensboro (GSO)	EARND ELANR EMMLY ETAME EMEGE FLM PSK SMOKN-STAR	
Greenville/Spartanburg (GSP).....	EARND ELANR EMMLY ERECO IIU	
Harrisburg (MDT).....	MOBLE ADIME GERBS J146 CXR EWC HAR	
Houston (HOU)	(GPS or DME/DME-IRU equipped) BACEN BLOKR BEKKI FAM J137 LIT J180 SWB ROKIT (RNAV)-STAR.....	
	or (Non-advanced NAV only) BACEN BLOKR BEKKI FAM J137 LIT J180 SWB DAS-STAR	
Houston (IAH)	(Turbojets-GPS or DME/DME-IRU equipped) BACEN BLOKR BEKKI FAM J137 LIT J180 SWB TXMEX (RNAV)-STAR	
	or (Non-advanced NAV only) BACEN BLOKR BEKKI FAM J137 LIT J180 SWB DAS-STAR	
Huntsville (HSV).....	DENNT DARCY DREGS DONVE BWG	
Hyannis (HYA).....	EBAKE WISMO POSTS PADDE SVM DKK ALB ENE LJV	
Indianapolis (IND)	EARND ELANR EMMLY JAKKS	
Jacksonville (JAX).....	DENNT DARCY DREGS DUMGE SWAPP ATL AMG ALMA-STAR.....	
Kennedy (JFK).....	DUFEE ELX HAAKK DOXXY SOSIC JHW J70 LVZ LENDY-STAR	
Knoxville (TYS).....	EARND ELANR EMMLY ETAME EMEGE J43 VXV ...	
La Guardia (LGA).....	MOBLE ADIME GERBS J146 ETG MILTON-STAR ...	
Louisville (LOU)	DENNT DARCY DREGS DUMGE CHERI	
Manchester (MHT).....	EBAKE WISMO POSTS PADDE SVM DKK ALB EEN .	
Memphis (MEM).....	BACEN BLOKR BEKKI FAM ARG GILMORE-STAR ...	
	or CMSKY CARYN CYBIL PXV WLDER-STAR	
Miami (MIA).....	DENNT DARCY DREGS DUMGE SWAPP ATL SZW J43 PIE CYPRESS-STAR.....	
	or (Turbojets-GPS or DME/DME-IRU equipped) DENNT DARCY DREGS DUMGE SWAPP ATL J89 SSCOT (RNAV)-STAR	
	or (Turbojets-GPS or DME/DME-IRU equipped) GUIDO J73 SZW SSCOT (RNAV)-STAR	
	or (Turbojets-GPS or DME/DME-IRU equipped) EON DNV TTH IIU J99 VXV J46 AMG TAY SSCOT (RNAV)-STAR.....	
	or	

Terminals	Route	Effective Times (UTC)
	EON DNV TTH SWAPP ATL SZW J43 PIE CY-STAR	
Minneapolis (MSP)	PLL PLL275065 ALO KASPR-STAR	1200-0400
Nashville (BNA)	CMSKY CARYN CYBIL PXV CCT HEHAW-STAR	
Niagara Falls (IAG)	EBAKE WISMO POSTS PADDE SVM YXU	
Newark (EWR)	DUFEE ELX HAAKK DOXXY SOSIC KEEHO J584 SLT FQM WILLIAMSPORT-STAR	
New Orleans (MSY)	BACEN BLOKR BEKKI ENL J71 MEM J35 MCB RYTHM-STAR	
	or	
Norfolk (ORF)	EARND ELANR EMMLY ERECO IIU RYANS	
	EARND ELANR EMMLY ETAME EMEGE FLM J24 MOL TERKS-STAR	
Newburgh (SWF)	DUFEE ELX HAAKK DOXXY SOSIC JHW ITH DNY V483 FILPS	
New Haven (HVN)	DUFEE ELX HAAKK DOXXY SOSIC JHW RKA DENNA-STAR	
Orlando (MCO/ORL)	DENNT DARCY DREGS DUMGE SWAPP ATL J89 OTK PIGLT (RNAV)-STAR	
	or	
	DENNT DARCY DREGS DUMGE SWAPP ATL LEESE-STAR	
	or	
	DENNT DARCY DREGS DUMGE SWAPP ATL J89 OTK LEESE-STAR	1100-0400
Philadelphia (PHL)	MOBLE ADIME GERBS J146 CXR EWC JST BUNTS-STAR	
Phoenix (PHX)	MZV J18 FTI J19 ZUN EAGUL (RNAV)-STAR	1200-0400
	or	
	MZV LMN J64 HLC LAA J102 GUP EAGUL (RNAV)-STAR	
Pittsburgh (PIT)	MOBLE ADIME OTENS ANEWA RIEKE DJB ACO CUTTA-STAR	
Portland (PWM)	EBAKE WISMO POSTS PADDE SVM DKK ALB CON PARSO	
	or	
Providence (PVD)	MOBLE ADIME GERBS J146 CXR EWC JST SIE	
	DUFEE ELX HAAKK DOXXY SOSIC JHW J82 MEMMS J522 HNK TEDDY-STAR	
Raleigh/Durham (RDU)	EARND ELANR EMMLY ETAME EMEGE FLM BKW ROA SOUTH BOSTON-STAR	
Richmond (RIC)	EARND ELANR EMMLY ETAME EMEGE FLM J24 FAK	
Roanoke (ROA)	EARND ELANR EMMLY ETAME EMEGE FLM	
Rochester (ROC)	DUFEE ELX HAAKK DOXXY SOSIC COHOW DKK BUF	
Saint Petersburg/Clearwater (PIE)	CMSKY CARYN CYBIL PXV J73 SZW DARBS-STAR	
San Juan (TJSJ)	MOBLE ADIME GERBS J146 CXR EWC JST SIE	
Sarasota/Bradenton (SRQ)	CMSKY CARYN CYBIL PXV J73 SZW CLAMP-STAR	
Syracuse (SYR)	EBAKE WISMO POSTS PADDE SVM DKK	
Tampa (TPA)	CMSKY CARYN CYBIL PXV J73 SZW DARBS-STAR	
	or	
	CMSKY CARYN CYBIL PXV J73 SZW FO0XX (RNAV)-STAR	
Washington Dulles (IAD)	MOBLE ADIME OTENS ANEWA RIEKE DJB J34 AIR MGW MGW121 VERNI ESL ROYIL-STAR	
	or	
	(GPS or DME/DME-IRU equipped) MOBLE ADIME OTENS ANEWA RIEKE DJB J34 AIR MGW VERNI ESL SHNON (RNAV)-STAR	
Washington Natl (DCA)	MOBLE ADIME OTENS ANEWA RIEKE DJB J34 BUCKO BUCKO-STAR	
	or	

Terminals	Route	Effective Times (UTC)
	MOBLE ADIME OTENS ANEWA RIEKE DJB J34 SHAAR WZRRD-STAR..... or (GPS OR DME/DME-IRU equipped) MOBLE ADIME OTENS ANEWA RIEKE DJB J34 SHAAR ELDEE (RNAV)-STAR.....	
White Plains (HPN)	DUFEE ELX HAAKK DOXXY SOSIC JHW ITH DNY VALRE-STAR	
Wilkes-Barre/Scranton (AVP)	DUFEE ELX HAAKK DOXXY SOSIC JHW J106 LVZ ..	
Windsor Locks (BDL)	DUFEE ELX HAAKK DOXXY SOSIC JHW J82 WILET SWEDE-STAR	
CINCINNATI (CVG)		
Albany (ALB)	(RNAV only) ROCKT (RNAV)-DP AHTIY PSB	
Allentown (ABE)	(RNAV only) ROCKT (RNAV)-DP AHTIY JST HAR.....	
Atlanta (ATL)	(RNAV only) CHCLL-DP BWG ERLIN (RNAV)-STAR . or (all others) BLUEGRASS-DP BWG ROME-STAR..... (above FL220-GPS or DME/DME-IRU equipped) GIPLE (RNAV)-DP YRK HVQ J8 CSN RAVNN (RNAV)-STAR..... or (above FL220-all others) RHOMM-DP YPK HVQ J8 CSN OTT-STAR	
Baltimore (BWI)	or (above FL230-GPS or DME/DME-IRU equipped) GIPLE (RNAV)-DP HVQ J8 CSN RAVNN (RNAV)-STAR..... or (above FL230-all others) RHOMM-DP HVQ J8 CSN NOTTINGHAM-STAR	
Birmingham (BHM)	(RNAV only) SILKS TRFWA LVT SYI VUZ	
Boca Raton (BCT).....	or (all others) BLUEGRASS-DP TRFWA LVT SYI VUZ.. (GPS or DME/DME-IRU equipped) KENLN-DP TRFWA NOTWO WALET HITTR LATHY PRRIE (RNAV)-STAR..... or (GPS or DME/DME-IRU equipped) KENLN-DP HYK VXV J43 ATL J89 OTK PRRIE (RNAV)-STAR.	
Boston (BOS)	(RNAV only) ROCKT (RNAV)-DP AHTIY PSB HNK ALB GDM GARDNER-STAR.....	
Chicago (ORD)	(advanced NAV only) JBNCH (RNAV)-DP MIE MZZ ROYKO (RNAV)-STAR	
	or (Non-advanced RNAV only) DQN FWA KNOX-STAR..... or (RNAV only) HAGOL (RNAV)-DP DQN FWA WATSN (RNAV)-STAR.....	
Dallas/Fort Worth (DFW)	(RNAV only) CHCLL IIU PXV J131 LIT BYP..... or (all others) BLUEGRASS-DP IIU PXV J131 LIT BYP	
Fort Lauderdale (FLL).....	(GPS or DME/DME-IRU equipped) SILKS-DP TRFWA NOTWO OTK JINGL (RNAV)-STAR	
	or (all others) BLUEGRASS-DP HYK VXV J43 ATL J89 HITTR J75 FORTL-STAR	
Fort Myers (FMY).....	(Turbojets-GPS or DME/DME-IRU equipped) KENLN (RNAV)-DP HYK VXV J43 SZW TYNEE (RNAV)-STAR..... or (all others-Turbojets) BLUEGRASS-DP HYK VXV J43 SZW PIE JOSFF-STAR	

Terminals	Route	Effective Times (UTC)
Fort Myers (RSW)	(GPS or DME/DME-IRU equipped) KENLN (RNAV)-DP HYK VXV J43 SZW TYNEE (RNAV)-STAR	1100-0300
	or	
	(all others) BLUEGRASS-DP HYK VXV J43 SZW PIE JOSFF-STAR	1100-0300
Harrisburg (MDT)	(RNAV only) ROCKT (RNAV)-DP AHTIY JST HAR	
Houston (HOU)	(GPS or DME/DME-IRU equipped) CHCLL (RNAV)-DP BWG J6 LIT J180 SWB ROKIT (RNAV)-STAR	
	or	
	(Non-advanced NAV only) BLUEGRASS-DP BWG J6 LIT J180 SWB DAS-STAR	
Houston (IAH)	(Turbojets-GPS or DME/DME-IRU equipped) LIT J180 SWB TXMEX (RNAV)-STAR	
	or	
	(Non-advanced NAV only) LIT J180 SWB DAS-STAR	
Jackson (JAN)	(RNAV only) SILKS TRFWA LVT SYI VUZ JAN	
	or	
	(all others) BLUEGRASS-DP TRFWA LVT SYI VUZ JAN	
La Guardia (LGA)	(RNAV only) ROCKT (RNAV)-DP AHTIY PSB MILTON-STAR	1000-1800
Manchester (MHT)	(RNAV only) ROCKT (RNAV)-DP AHTIY PSB ALB EEN	
Marco Island (MKY)	(RNAV only) KENLN (RNAV)-DP HYK VXV J43 SZW PIKKR (RNAV)-STAR	
	or	
	(all others) BLUEGRASS-DP HYK VXV J43 SZW PIKKR (RNAV)-STAR	
Miami (MIA)	(Turbojets-GPS or DME/DME-IRU equipped) SILKS-DP TRFWA NOTWO SZW SSCOT (RNAV)-STAR	
	or	
	(all others) BLUEGRASS-DP HYK VXV J43 ATL SZW J43 PIE CYY-STAR	
Mobile (MOB)	(RNAV only) SILKS (RNAV)-DP TRFWA LVT SYI VUZ SJI	
	or	
	(all others) BLUEGRASS-DP TRFWA LVT SYI VUZ SJI	
Naples (APF)	(GPS required) BLUEGRASS-DP HYK VXV J43 SZW PIKKR (RNAV)-STAR	
Newark (EWR)	(RNAV only) BNGLE (RNAV)-DP DJB J29 J584 SLT WILLIAMSPORT-STAR	
	or	
	(all others) CVG033 RIKLE DJB J29 J584 SLT FQM-STAR	
Newburg (SWF)	(RNAV only) ROCKT (RNAV)-DP AHTIY PSB J49 HNK DNY V483 FILPS	
New Orleans (MSY)	(RNAV only) SILKS (RNAV)-DP TRFWA LVT SYI VUZ J22 MEI RYTHM-STAR	
	or	
	(all others) BLUEGRASS-DP TRFWA LVT SYI VUZ J22 MEI RYTHM-STAR	
Orlando (MCO)	(GPS or DME/DME-IRU equipped) KENLN (RNAV)-DP HYK VXV J99 IRQ J85 AMG BUGGZ (RNAV)-STAR	1100-0400
	or	
	(all others) BLUEGRASS-DP HYK VXV J99 IRQ J85 AMG LEESE-STAR	1100-0300
Orlando (ORL)	(GPS or DME/DME-IRU equipped) KENLN (RNAV)-DP HYK VXV J99 IRQ J85 AMG SHEMP MTATA PIGLT (RNAV)-STAR	1100-0400
	or	

Terminals	Route	Effective Times (UTC)
Philadelphia (PHL)	(all others) BLUEGRASS-DP HYK VXV J99 IRQ J85 AMG LEESE-STAR	1100-0300
Phoenix (PHX)	(RNAV only) ROCKT (RNAV)-DP AHTIY JST BOJID (RNAV)-STAR	
Portland (PWM)	(Turbojets-all others) BLUEGRASS-DP IIU PXV J78 IRW J74 CNX ZUN BUNTR-STAR	
Providence (PVD)	or (Turbojets-all others) BLUEGRASS-DP IIU PXV J78 ZUN BUNTR-STAR	
Sarasota/Bradenton (SRQ)	or (RNAV only-Turbojets) CHCLL (RNAV)-DP IIU PXV J78 ZUN EAGUL (RNAV)-STAR	
Tampa (TPA)	or (RNAV only-Turbojets) CHCLL (RNAV)-DP IIU PXV J78 IRW J74 CNX ZUN EAGUL (RNAV)-STAR	
Washington (DCA)	(RNAV only) ROCKT (RNAV)-DP AHTIY PSB J49 ALB ENE	
Washington (IAD)	(RNAV only) ROCKT (RNAV)-DP AHTIY PSB J49 HNK TEDDY-STAR	
West Palm Beach (PBI)	(RNAV only) KENLIN (RNAV)-DP HYK VXV J43 SZW CLAMP-STAR	
Wilkes Barre/Scranton (AVP)	or (all others) BLUEGRASS-DP HYK VXV J43 SZW CLAMP-STAR	
Windsor Locks (BDL)	(GPS or DME/DME-IRU equipped) KENLN (RNAV)-DP HYK VXV J43 SZW FOXXX (RNAV)-STAR	
From LUNKEN (LUK) only:	or (all others) BLUEGRASS-DP HYK VXV J43 SZW DARBS-STAR	
Albany (ALB)	(RNAV only) RHOMM-DP HVQ ELDEE (RNAV)-STAR	
Boston (BOS)	or (all others) GIPLE (RNAV)-DP HVQ WZRRD-STAR.. (RNAV only) GIPLE (RNAV)-DP HVQ SHNON (RNAV)-STAR	
La Guardia (LGA)	or (all others) RHOMM-DP HVQ ROYIL-STAR	
Manchester (MHT)	(GPS or DME/DME-IRU equipped) SILKS (RNAV)-DP TRFWA NOTWO OTK WLACE (RNAV)-STAR	
Newburgh (SWF)	or (GPS or DME/DME-IRU equipped) KENLN (RNAV)-DP HYK VXV J43 ATL J89 OTK WLACE (RNAV)-STAR	
Philadelphia (PHL)	(RNAV only) ROCKT (RNAV)-DP AHTIY PSB LVZ..... (RNAV only) ROCKT (RNAV)-DP AHTIY RKA SWEDE SWEDE-STAR	
Providence (PVD)	(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE AHTIY PSB.....	1000-1800
Portland (PWM)	(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE AHTIY PSB HNK ALB GDM GARDNER-STAR	
Wilkes Barre/Scranton (AVP)	(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE AHTIY PSB MILTON-STAR	
	(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE AHTIY PSB ALB EEN.....	
	(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE AHTIY PSB J49 HNK DNV V483 FILPS	
	(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE AHTIY JST BUNTS-STAR	
	(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE AHTIY PSB J49 HNK TEDDY-STAR	
	(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE AHTIY PSB J49 ALB ENE.....	
	(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE AHTIY PSB LVZ.....	

Terminals	Route
Windsor Locks (BDL)	(RNAV only) ROCKT (RNAV)-DP ROCKT CADRE AHTIY PSB RKA SWEDE SWEDE-STAR.....
CLEVELAND METRO (CLE, CGF, BKL, LNN, LPR)	
Atlanta (ATL)	(RNAV only) DJB DJB173 HERAK APE035 APE J186 SOT ODF FLCON (RNAV)-STAR
	or
	(all others) DJB DJB173 HERAK APE035 APE J186 SOT ODF WHINZ-STAR
Battle Creek (BTL).....	AMRST-DP VVW
Birmingham (BHM).....	DJB DJB173 HERAK APE035 APE J186 BULEY
Boca Raton (BCT).....	(GPS or DME/DME-IRU equipped) DJB DJB173 HERAK APE035 APE J83 SPA J85 TAY PRRIE (RNAV)-STAR
Charleston (CHS)	DJB DJB173 HERAK APE035 APE J186 BULEY
Charleston (CRW).....	DJB DJB173 HERAK APE035 APE
Charlotte (CLT)	DJB DJB173 HERAK APE035 APE HVQ HMV JOHNS (RNAV)-STAR
Chicago Midway (MDW).....	AMRST-DP VVW GSH GSH-STAR
Chicago O'Hare (ORD)	AMRST-DP VVW ZANLA WATSON (RNAV)-STAR
	or
	AMRST-DP VVW OXI KNOX-STAR
Chicago Rockford (RFD)	ALPHE-DP ALPHE J70 PMM
Cincinnati (CVG).....	(RNAV only) DJB HERAK APE TIGRR (RNAV)-STAR
	or
	(all others) DJB DJB173 HERAK APE035 APE CINCE-STAR
Dallas/Fort Worth (DFW)	OBRLN-DP RID RID234/40 PXV LIT BONHAM-STAR
Denver (DEN).....	AMRST-DP VVW GSH
Elkhart (EKM)	AMRST-DP VVW GSH
Fort Lauderdale (FLL).....	DJB DJB173 HERAK APE035 APE J83 SPA J85 TAY J75 HITTR PIE FORTL-STAR
	or
	(GPS or DME/DME-IRU equipped) DJB DJB173 HERAK APE035 APE J83 SPA J85 TAY J75 JINGL (RNAV)-STAR
Fort Myers (FMY).....	DJB DJB200 APE021 APE J186 J91 VXV J43 SZW TYNEE (RNAV)-STAR
Fort Myers (RSW)	(GPS OR DME/DME-IRU equipped) DJB DJB173 HERAK APE035 APE J186 J91 VXV J43 SZW TYNEE (RNAV)-STAR
Fort Wayne (FWA)	OBRLN-DP FWA
Grand Rapids (GRR)	(RNAV only) ALPHE-DP ALPHE.....
Greensboro (GSO).....	DJB DJB173 HERAK APE035 APE J186 BULEY
Houston (HOU)	(GPS or DME/DME-IRU equipped) OBRLN-DP RID RID234/40 PXV LIT J180 SWB ROKIT (RNAV)-STAR
	or
	(Non-advanced NAV only) OBRLN-DP RID RID234/40 PXV LIT J180 SWB DAS-STAR
Houston (IAH)	(Non-advanced NAV only) OBRLN-DP RID RID234/40 PXV LIT J80 SWB DAS-STAR
	or
	(Turbojets-GPS or DME/DME-IRU equipped) OBRLN-DP RID234/40 PXV LIT J180 SWB TXMEX (RNAV)-STAR
Jacksonville (JAX).....	DJB DJB173 HERAK APE035 APE J83 SPA J85 AMG ALM-STAR
Kalamazoo/Battle Creek (AZO)	AMRST-DP VVW
Kansas City (MCI)	OBLRN-DP VHP J80 SPI BRAYMER-STAR
Kennedy (JFK).....	FAILS V522 ERI JHW J70 LVZ LENDY-STAR
La Guardia (LGA).....	V522 FAILS V188 JFN ETG MIP-STAR
Knoxville (TYS).....	DJB DJB173 HERAK APE035 APE J186 BULEY
Las Vegas (LAS).....	OBRLN-DP VHP STL
	or

PREFERRED IFR ROUTES

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Terminals	Route	Effective Times (UTC)
Lewisburg (LWB)	AMRST-DP VVW GSH	
Lexington (LEX)	DJB DJB173 HERAK APE035 APE	
Little Rock (LIT)	OBRLN-DP ROD CVG CLEGG-STAR	
Los Angeles (LAX)	OBLRN-DP RID RID234/40 PXV	
Louisville (SDF)	AMRST-DP VVW GSH	
Minneapolis (MSP)	OBRLN-DP ROD CVG REDSTONE-STAR	
	(RNAV only) ALPHE-DP ALPHE J70 PMM BAE	
	EAU-STAR	
	or	
	AMRST-DP CRL J34 BAE EAU-STAR	
Madison (MSN)	(RNAV only) ALPHE-DP ALPHE J70 PMM	
Marco Island (MKY)	DJB DJB200 APE021 APE J186 J91 VXV J43 SZW	
	PIKKR (RNAV)-STAR	
	or	
	DJB DJB200 APE021 APE J186 J91 ATL J89 J75	
	TEPEE ZEILR-STAR	
Memphis (MEM)	OBRLN-DP RID RID234/40 PXV WLDER-STAR	
Miami (MIA)	DJB DJB173 HERAK APE035 APE J83 SPA J85	
	TAY J75 HITTR PIE CYPRESS-STAR	
	or	
	(/E/G/R/J/L/Q only) DJB DJB173 HERAK	
	APE035 APE J83 SPA J85 TAY J75 RSW DEEDS	
	(RNAV)-STAR	
Milwaukee (MKE)	AMRST-DP CRL CRL316/75 MKG V2 SUDDS	
Myrtle Beach (MYR)	DJB DJB173 HERAK APE035 APE	
Naples (APF)	DJB DJB200 APE021 APE J186 J91 VXV J43 SZW	
	PIKKR (RNAV)-STAR	
Nashville (BNA)	OBRLN-DP IJU GUITR-STAR	
Newark (EWR)	V522 J584 SLT FQM-STAR	
New Orleans (MSY)	OBRLN-DP RID IJU MCB RYTHM-STAR	
Orlando (ORL)	(RADAR and DME required) DJB DJB200 APE021	
	APE J83 SPA CAE SAV OMN CORLL-STAR	1100-0400
Orlando (MCO)	DJB DJB173 HERAK APE035 APE J83 SPA CAE	
	SAV OMN BITHO-STAR	
	or	
	(GPS or DME/DME-IRU equipped) DJB DJB173	
	HERAK APE035 APE J83 SPA CAE SAV OMN	
	CWRLD (RNAV)-STAR	1100-0400
Palwaukee (PWK)	(RNAV only) ALPHE-DP ALPHE J70 PMM OBK	
Philadelphia (PHL)	ACO ACO145 J518 J152 HAR V210 BUNTS	
Phoenix (PHX)	OBRLN-DP VHP STL	
	or	
	AMRST-DP VVW GSH	
Raleigh/Durham (RDU)	DJB DJB173 HERAK APE035 APE HVQ BKW ROA	
	SOUTH- BOSTON-STAR	
San Antonio (SAT)	OBRLN-DP RID RID234/40 PXV J131 LIT J101	
	LFK MARCS-STAR	
San Francisco (SFO)	AMRST-DP VVW GSH	
St. Louis (STL)	OBRLN-DP VHP VANDALIA-STAR	
Sarasota/Bradenton (SRQ)	DJB DJB200 APE021 APE J186 J91 VXV J43 SZW	
	CLAMP-STAR	
Seattle/Tacoma (SEA)	(RNAV only) ALPHE-DP ALPHE J70 PMM	
	or	
	(RNAV only) ALPHE-DP ALPHE J34 BAE	
South Bend (SBN)	AMRST-DP VVW GSH	
Tampa (TPA)	DJB DJB173 HERAK APE035 APE J186 J91 VXV	
	J43 SZW DARBS-STAR	
	or	
	(GPS or DME/DME-IRU equipped) DJB DJB173	
	HERAK APE035 APE J186 J91 VXV J43 SZW	
	FOXXX (RNAV)-STAR	
Toledo (TOL)	AMRST-DP VVW	
Toronto (CYYZ)	FAILS V443 DOGGS YXU V098 YWT YWT-STAR	
West Chicago/Dupage (DPA)	AMRST-DP VVW EON JOT	
West Palm Beach (PBI)	(GPS or DME/DME-IRU equipped) DJB DJB173	
	HERAK APE035 APE J83 SPA J85 TAY WLACE ...	
	or	

Terminals	Route	Effective Times (UTC)
	(all others) DJB DJB173 HERAK APE035 APE J83 SPA TAY WLACE (RNAV)-STAR	
Wilmington (ILN)	DJB DJB173 HERAK APE035 APE	
COLUMBUS (CMH)		
Dallas/Fort Worth (DFW)	DQN CVG PXV J131 LIT BYP	
Detroit/Wayne (DTW)	DJB DJB314 GEMNI GEMNI-STAR	
Houston (HOU)	(GPS or DME/DME-IRU equipped) LIT J180 SWB ROKIT (RNAV)-STAR	
	or (Non-advanced NAV only) LIT J180 SWB DAS-STAR	
Houston (IAH)	(Turbojets-GPS or DME/DME-IRU equipped) LIT J180 SWB TXMEX (RNAV)-STAR	
	or (Non-advanced NAV only) LIT J180 SWB DAS-STAR	
La Guardia (LGA)	HLG ETG MIP-STAR	
Miami (MIA)	J83 SPA J85 TAY J75 HITTR PIE CYY-STAR	
	or (Turbojets-GPS or DME/DME-IRU equipped) J83 SPA J85 TAY SSCOT (RNAV)-STAR	
Newark (EWR)	DJB J29 J584 SLT FQM-STAR	
Washington (IAD)	APE APE100 AIR280 AIR J34 SHAAR ROYIL-STAR or (GPS or DME/DME-IRU equipped) APE APE100 AIR280 AIR MGW VERNI ESL SHNON (RNAV)-STAR	
Washington (DCA)	APE APE100 AIR280 AIR J34 SHAAR WZRRD-STAR	
	or APE APE100 AIR280 AIR J34 SHAAR ELDEE (RNAV)-STAR	
DAYTON (DAY)		
Atlanta (ATL)	(RNAV only) IIU BWG ERLIN (RNAV)-STAR	
	or IIU BWG ROME-STAR	
Boca Raton (BCT)	(GPS or DME/DME-IRU equipped) V47 CVG HYK VXV J99 IRQ J85 TAY PRRIE (RNAV)-STAR	1100-0300
Charlotte (CLT)	CVG FLM JOHNS (RNAV)-STAR	0700-2300
Dallas/Fort Worth (DFW)	J29 PXV J131 LIT BYP	
Fort Lauderdale (FLL)	V47 CVG HYK VXV J43 ATL J89 HITTR PIE FORTL-STAR	
	or (GPS or DME/DME-IRU equipped) V47 CVG HYK VXV J43 ATL J89 OTK JINGL (RNAV)-STAR	
Fort Myers (FMY)	V47 CVG HYK VXV J43 SZW TYNEE (RNAV)-STAR	
Fort Myers (RSW)	(GPS or DME/DME-IRU equipped) V47 CVG HYK VXV J43 SZW TYNEE (RNAV)-STAR	1100-0300
Houston (HOU)	GPS or DME/DME-IRU equipped) LIT J180 SWB ROKIT (RNAV)-STAR	
	or (Non-advanced NAV only) LIT J180 SWB DAS-STAR	
Houston (IAH)	(Turbojets-GPS or DME/DME-IRU equipped) LIT J180 SWB TXMEX (RNAV)-STAR	
	or (Non-advanced NAV only) LIT J180 SWB DAS-STAR	
La Guardia (LGA)	J29 J146 ETG MIP-STAR	
Marco Island (MKY)	V47 CVG HYK VXV J43 SZW PIKKR (RNAV)-STAR ..	
Miami (MIA)	V47 CVG HYK VXV J43 ATL SZW J43 PIE CYY-STAR	
	or (Turbojets-GPS or DME/DME-IRU equipped) V47 CVG HYK VXV J43 ATL SZW SSCOT (RNAV)-STAR	

Terminals	Route	Effective Times (UTC)
Naples (APF).....	V47 CVG HYK VXV J43 SZW PIKKR (RNAV)-STAR..	
Orlando Executive (ORL).....	V47 CVG HYK VXV J99 IRQ J85 AMG LEESE-STAR	1100-0300
	or (GPS or DME/DME-IRU equipped) V47 CVG HYK VXV J99 IRQ J85 AMG SHEMP MTATA PIGLT (RNAV)-STAR.....	1100-0400
Orlando Intl (MCO).....	V47 CVG HYK VXV J99 IRQ J85 AMG LEESE-STAR	1100-0300
	or (GPS or DME/DME-IRU equipped) V47 CVG HYK VXV J99 IRQ J85 AMG BUGGZ (RNAV)-STAR	1100-0400
Sarasota/Bradenton (SRQ).....	V47 CVG HYK VXV J43 SZW CLAMP-STAR	
Tampa (TPA).....	V47 CVG HYK VXV J43 SZW DARBS-STAR.....	
	or (GPS or DME/DME-IRU equipped) V47 CVG HYK VXV J43 SZW FOXXX (RNAV)-STAR	
West Palm Beach (PBI).....	(GPS or DME/DME-IRU equipped) V47 CVG HYK VXV J99 IRQ J85 TAY WLACE	1100-0300
	or V47 CVG HYK VXV J99 IRQ TAY WLACE (RNAV)-STAR.....	1100-0300
DETROIT METRO AREA (DTW, DET, YQG, PTK, YIP, ARB)		
Albany (ALB).....	MOONN-DP JHW	
Allentown (ABE).....	ERRTH-DP ETG	
Atlanta (ATL).....	RICHMOND-DP RID IIU BWG ROME-STAR..... or (RNAV only) RICHMOND-DP RID IIU BWG ERLIN (RNAV)-STAR.....	
Atlantic City (ACY).....	ERRTH-DP CXR EWC JST J152 HAR SIE	
Baltimore (BWI).....	ACO AIR AIR111 KEMAN WESTMINSTER-STAR....	
Bedford (BED).....	MOONN-DP JHW J82 ALB.....	
Binghamton (BGM).....	MOONN-DP JHW	
Birmingham (BHM).....	RICHMOND-DP RID IIU.....	
Boston (BOS).....	MOONN-DP JHW J82 ALB GARDNER-STAR	
Buffalo (BUF).....	(60-170 incl) MOONN-DP BROKDK DK	
Burlington (BTV).....	MOONN-DP J29 JHW LAGGS	
Cancun (MMUN).....	RICHMOND-DP RID IIU.....	
Charleston (CHS).....	ROSEWOOD-DP ROD FLM HMV	
Charleston (CRW).....	ACO AIR HVQ	
	or (Turboprops/Props-at or below FL210) SCORR CHOOT APE HVQ	
Charlotte (CLT).....	ROSEWOOD-DP ROD FLM HMV JOHNS (RNAV)-STAR.....	
Chicago Midway (MDW).....	JXN V116 LEROY GSH GSH-STAR	
Cincinnati (CVG).....	FDY DEBAR-STAR.....	
Cleveland Metro Area (CLE) (CGF) (BKL) (LNN) (LPR).....	MAARS HIMEZ HIMEZ-STAR	
Columbus (CMH).....	SCOOR CHOOT YOGGI GUNNE-STAR.....	
Dallas/Fort Worth (DFW).....	FORT WAYNE-DP FWA RBS STL RZC FSM BONHAM-STAR.....	
Denver (DEN).....	DUNKS J70 PMM J94 ONL J114 SNY LANDR-STAR.....	1100-0359
Elmira (ELM).....	MOONN-DP JHW	
Ft. Lauderdale (FLL).....	ROSEWOOD-DP ROD FLM VXV CRG OMN GISSH-STAR	
	or ROSEWOOD-DP ROD FLM VXV CRG OMN FISEL (RNAV)-STAR.....	
Fort Myers (FMY & RSW).....	(Turbojets-GPS or DME/DME-IRU equipped) ROSEWOOD-DP ROD FLM VXV AMG SHFTY (RNAV)-STAR.....	
Greensboro (GSO).....	AIR EKN ROA HENBY.....	
Greer (GSP).....	ROSEWOOD-DP ROD FLM SOT V185 UNMAN.....	

Terminals	Route	Effective Times (UTC)
Houston (HOU)	(GPS or DME/DME-IRU equipped) RID-DP RID PXV J131 LIT J180 SWB ROKIT (RNAV)-STAR..... or (Non-advanced NAV only) RID-DP RID PXV J131 LIT J180 SWB DAS-STAR	
Houston (IAH)	CAVVS VVW ROD J29 PXV J131 LIT J180 CLUBS DAS-STAR	
	or (Turbojets-GPS or DME/DME-IRU equipped) RID-DP RID PXV J131 LIT J180 SWB TXMEX (RNAV)-STAR	
	or (Non-advanced NAV only) RID-DP RID PXV J131 LIT J180 SWB DAS-STAR	
Huntsville (HSV).....	RICHMOND-DP RID IIU J39 BNA	
Indianapolis (IND)	ANNTS DXO217 FWA071 FWA MIE V14 CLANG-STAR	
Jacksonville (JAX).....	ROSEWOOD-DP ROD FLM VXV AMG ALMA-STAR ..	
Kennedy (JFK).....	MOONN-DP JHW J70 LVZ LENDY-STAR	
La Guardia (LGA).....	ERRTH-DP ETG ETG MILTON-STAR	
Lexington (LEX).....	ROSEWOOD-DP ROD CVG CLEGG-STAR	
Los Angeles (LAX)	DUNKS J70 PMM OBK IOW J60 HEC J64	1100-0300
Louisville (SDF).....	ROSEWOOD-DP ROD CVG REDSTONE-STAR	
Manchester (MHT).....	MOONN-DP JHW J82 ALB EEN	
Memphis (MEM).....	RICHMOND-DP CAVVS VVW ROD PXV WLDER-STAR	
Miami (MIA).....	(RNAV only) ROSEWOOD-DP ROD FLM VXV CRG OMN HILEY (RNAV)-STAR	
	or ROSEWOOD-DP ROD FLM VXV CRG OMN ANNEY-STAR	
Minneapolis (MSP)	LAYNE DX0006 YQG341 J38 GRB EAU-STAR	
Montreal (CYUL).....	TYCOB YQG098 J554 JHW J29 SYR ART ART040 J594 MSS FRANX FRANX-STAR	1100-0300
Myrtle Beach (MYR).....	ACO AIR EKN RDU	
Nashville (BNA).....	RICHMOND-DP RID IIU GUITR-STAR	
Newark (EWR).....	ERRTH SLT FQM-STAR	
New Orleans (MSY)	RICHMOND-DP RID IIU J39 BNA MEI RYTHM-STAR	
Niagara Falls (IAG)	MOONN-DP BROKK DKK	
Norfolk (ORF).....	ACO AIR MOL TERKS-STAR	
Norwood (OWD).....	MOONN-DP JHW J82 ALB GDM	
Orlando Exec (ORL)	CAVVS VVW ROD J43 VXV J99 IRQ J85 AMG LEESE-STAR	
	or (GPS or DME/DME-IRU equipped) ROSEWOOD-DP ROD J43 VXV J99 IRQ J85 AMG SHEMP MTATA PIGLT (RNAV)-STAR	1100-0400
Orlando Intl (MCO)	ROSEWOOD-DP ROD FLM VXV AMG LEESE-STAR ..	
	or (GPS or DME/DME-IRU equipped) ROSEWOOD-DP ROD FLM VXV AMG BUGGZ (RNAV)-STAR	1100-0400
Philadelphia (PHL).....	ERRTH-DP CXR EWC JST BUNTS-STAR	
Pittsburgh (PIT)	ACO CUTTA-STAR	
Portland (PWM).....	MOONN-DP JHW J82 ALB CAM CON CON061 NEETS	
Pottstown (PTW)	ERRTH-SID CXR EWC JST	
Providence (PVD)	MOONN-DP JHW J82 MEMMS J522 HNK TEDDY-STAR	
Raleigh/Durham (RDU)	ACO AIR EKN ROA SOUTH BOSTON-STAR	
Reading (RDG).....	ERRTH-DP ETG	
Richmond (RIC).....	ACO AIR MOL FAK	
Roanoke (ROA)	ACO AIR EKN ROA	
	or	

Terminals	Route	Effective Times (UTC)
	(Turboprops/Props/at or below 230) SCORR	
	CHOOT APE ROA	
Rochester (ROC)	MOONN-DP BROKK DKK	
San Antonio (SAT)	FORT WAYNE-DP FWA RBS STL RZC MLC ACT	
	MARCS-STAR	
	or	
	RICHMOND-DP RID RID234/40 PXV J131 TXK	
	FZT TNV IDU MARCS-STAR	
San Francisco (SFO)	DUNKS J70 PMM J94 FMG ILA PYE	
Sarasota/Bradenton (SRQ)	ROSEWOOD-DP ROD FLM VXV AMG TAY LAL	
Shreveport (SHV)	RICHMOND-DP RID RID234/40 PXV	
St. Louis (STL)	ANNTS DX0217 FWA071 FWA RBS VLA-STAR	
Syracuse (SYR)	MOONN-DP JHW	
Tampa (TPA)	ROSEWOOD-DP ROD FLM VXV AMG TAY	
	LZARD-STAR	
	or	
	(GPS or DME/DME-IRU equipped) ROD-DP ROD	
	FLM VXV AMG TAY DADES (RNAV)-STAR	
Teterboro (TEB)	MOONN-DP JHW J70 LVZ WILKES BARRE-STAR...	
Toronto (CYYZ)	PISTN DX0020 V450 YWT V216	
Trenton (TTN)	ERRTH-DP CXR EWC JST BUNTS-STAR	
Washington Dulles (IAD)	J42 BKW ROYIL-STAR	
	or	
	J42 BKW SHNON (RNAV)-STAR	
	or	
	PXV IIU J8 HVQ ROYIL-STAR	
	or	
	PXV IIU J8 HVQ SHNON (RNAV)-STAR	
Washington Natl (DCA)	(all others) ACO AIR J34 BUCKO BUCKO-STAR....	
	or	
	(GPS or DME/DME-IRU equipped) ACO AIR J34	
	BUCKO ELDEE (RNAV)-STAR	
Westhampton Beach (FOK)	MOONN-DP JHW J70 STW LENDY	
West Palm Beach (PBI)	(GPS or DME/DME-IRU equipped)	
	ROSEWOOD-DP ROD FLM VXV CRG OMN	
	TUXXI-STAR	
	or	
	ROSEWOOD-DP ROD FLM VXV CRG OMN FRWAY	
	(RNAV)-STAR	
White Plains (HPN)	MOONN-DP JHW ITH DNY VALRE-STAR	
Wilkes-Barre (AVP)	MOONN-DP JHW	
Wilmington (ILG)	ERRTH-DP CXR EWC JST BUNTS-STAR	
Windsor Locks (BDL)	MOONN-DP JHW J82 WILET SWEDE-STAR	
Winston Salem (INT)	AIR EKN ROA HENBY	
ELKHART (EKM)		
Cleveland Metro Area (CLE) (CGF) (BKL)		
(LNN) (LPR)	LFD CRL HIMEZ-STAR	
EVANSVILLE (EVV)		
Chicago O' Hare (ORD)	(/E/G/R/J/L/Q only) HEVAN MZZ ROYKO	
	(RNAV)-STAR	0000-2359
	or	
	(non-advanced RNAV only) HEVAN MZZ	
	MZZ344/33 OXI KNOX-STAR	0000-2359
FLINT (FNT)		
Atlanta (ATL)	(RNAV-only) VVW RID IIU BWG ERLIN	
	(RNAV)-STAR	
	or	
	VVW RID IIU BWG ROME-STAR	
Cincinnati (CVG)	FWA DEBAR-STAR	
FORT WAYNE (FWA)		
Cincinnati (CVG)	FWA DEBAR-STAR	
GRAND RAPIDS (GRR)		
Atlanta (ATL)	IIU BWG ROME-STAR	
	or	
	(RNAV only) IIU BWG ERLIN (RNAV)-STAR	
Cincinnati (CVG)	FWA DEBAR-STAR	

Terminals	Route	Effective Times (UTC)
Cleveland Metro (CLE) (CGF) (BKL) (LNN) (LPR)	GRR HIMEZ-STAR	
HAMILTON (CYHM)		
Detroit/Wayne Area (DET, YIP, PTK, CYQG)	YXU PICES-STAR	
INDIANAPOLIS (IND)		
Dallas/Fort Worth (DFW)	J24 STL RZC FSM BYP	
Houston (HOU)	(GPS or DME/DME-IRU equipped) LIT J180 SWB ROKIT (RNAV)-STAR	
	or	
	(Non-advanced NAV only) LIT J180 SWB DAS-STAR	
Houston (IAH)	(Turbojets-GPS or DME/DME-IRU equipped) LIT J180 SWB TXMEX (RNAV)-STAR	
	or	
	(Non-advanced NAV only) LIT J180 SWB DAS-STAR	
KALAMAZOO/BATTLE CREEK (AZO)		
Cincinnati (CVG)	FWA DEBAR-STAR	
Cleveland Metro Area (CLE, CGF, BKL, LNN, LPR)	LFD CRL HIMEZ-STAR	
LANSING (LAN)		
Atlanta (ATL)	(RNAV only) VVW RID IJU BWG ERLIN (RNAV)-STAR	
	or	
	VVW RID IJU BWG ROME-STAR	
Cincinnati (CVG)	FWA DEBAR-STAR	
Cleveland Metro Area (CLE, CGF, BKL, LNN, LPR)	SVM HIMEZ-STAR	
LONDON (CYXU)		
Detroit Metro Area (YIP, PTK, DET, CYQG)	YXU PICES-STAR	
MADISON (MSN)		
Cleveland Metro Area (CLE, CGF, BKL, LNN, LPR)	SQUIB GRR HIMEZ-STAR	
MILWAUKEE (MKE)		
Akron (CAK)	OBK SAMPL ADIME OTENS VVW MFD V8 DALTS ... SQUIB MKG ECK YXU BUF	
Albany (ALB)	OBK SAMPL ADIME OTENS ANEWA RIEKE DJB J34 SHAAR WZRRD-STAR	
Andrews AFB (ADW)	OBK SAMPL ADIME OTENS ANEWA RIEKE DJB J34 AIR KEMAN WESTMINSTER-STAR	
Baltimore (BWI)	(GPS or DME/DME-IRU equipped) OBK J73 SZW PRRIE (RNAV)-STAR	
Boca Raton	SQUIB MKG ECK YXU BUF ALB GDM V431 LOBBY SQUIB MKG ECK YXU BUF ALB GARDNER-STAR	
Bedford (BED)	SQUIB MKG ECK YXU BUF ALB GARDNER-STAR	
Boston (BOS)	SQUIB MKG ECK YXU BUF ALB GARDNER-STAR	
Buffalo (BUF)	SQUIB MKG ECK YXU	
Burlington (BTV)	SQUIB MKG ECK YXU BUF SYR J29 LAGGS	
Cleveland Metro Area (CLE)	SQUIB LAN SVM HIMEZ-STAR	
Detroit/Wayne (DTW)	BAE POLAR-STAR	
Detroit Metro Area (YIP)	SQUIB LAN SPRTN-STAR	
Flint (FNT)	SQUIB	
Fort Lauderdale (FLL)	OBK J73 SZW JINGL (RNAV)-STAR	1100-0300
	or	
	(GPS or DME/DME-IRU equipped) OBK J73 SZW JINGL (RNAV)-STAR	1100-0300
Fort Myers (FMY)	OBK J73 SZW TYNEE (RNAV)-STAR	1100-0300
Harrisburg (MDT)	OBK SAMPL ADIME GERBS J146 CXR EWC HAR ...	
Houston (HOU)	(GPS or DME/DME-IRU equipped) LIT J180 SWB ROKIT (RNAV)-STAR	
	or	
	(Non-advanced NAV only) LIT J180 SWB DAS-STAR	
Houston (IAH)	(Turbojets-GPS or DME/DME-IRU equipped) LIT J180 SWB TXMEX (RNAV)-STAR	
	or	

PREFERRED IFR ROUTES

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Terminals	Route	Effective Times (UTC)
	(Non-advanced NAV only) LIT J180 SWB	
	DAS-STAR.....	
Hyannis (HYA).....	SQUIB MKG ECK YXU BUF ENE LFA.....	
Jackson (JXN).....	SQUIB.....	
Kansas City (MCI).....	DBQ BRAYMER-STAR.....	
Kansas City (MKC).....	DBQ IRK BRAYMER-STAR.....	
Kennedy (JFK).....	SQUIB MKG ECK J16 HANKK J522 HNK IGN KINGSTON-STAR.....	
La Guardia (LGA).....	SQUIB MKG ECK YXU BUF GEE ROCKDALE-STAR ..	
Lansing (LAN).....	SQUIB.....	
Mansfield (MFD).....	OBK SAMPL ADIME OTENS VVV	
Miami (MIA).....	OBK J73 SZW J43 PIE CYY-STAR	1100-0300
	or (Turbojets-GPS or DME/DME-IRU equipped) OBK J73 SZW SSCOT (RNAV)-STAR	1100-0300
Montreal (CYUL).....	SQUIB MKG ECK YYZ J594 MSS.....	
Morristown (MMU).....	SQUIB MKG ECK J16 HANKK IGN WEARD V489 COATE	
Nashville (BNA).....	OBK J73 PXV CCT HEHAW-STAR	
Newark (EWR).....	SQUIB MKG ECK J16 HANKK J522 HNK SHAFF-STAR	
Niagara Falls (IAG).....	SQUIB MKG ECK YXU.....	
Orlando Executive (ORL).....	OBK J84 DNV TTH BWG GQO ATL J89 OTK LEESE-STAR	
	or (GPS or DME/DME-IRU equipped) OBK J84 DNV TTH BWG GQO ATL J89 OTK PIGLT (RNAV)-STAR.....	1100-0400
Orlando Intl (MCO).....	OBK J84 DNV TTH BWG GQO ATL J89 OTK LEESE-STAR	1100-0300
	or (GPS or DME/DME-IRU equipped) OBK J84 DNV TTH BWG GQO ATL J89 OTK PIGLT (RNAV)-STAR.....	1100-0400
Philadelphia (PHL).....	OBK SAMPL ADIME GERBS J146 CXR EWC JST BUNTS-STAR.....	
Pittsburgh (PIT).....	OBK SAMPL ADIME OTENS ANEWA RIEKE DJB ACO CUTTA-STAR.....	
Portland (PWM).....	SQUIB MKG ECK YXU BUF ALB CON PARSO	
Pottstown (PTW).....	SQUIB ADALE J34 CRL CXR EWC JST	
Providence (PVD).....	SQUIB MKG ECK J16 HANKK J522 HNK TEDDY-STAR	
Sarasota/Bradenton (SRQ).....	OBK J73 SZW CLAMP-STAR	1100-0300
Syracuse (SYR).....	SQUIB MKG ECK YXU BUF	
Tampa (TPA).....	OBK J73 SZW DARBS-STAR	1100-0300
	or (GPS or DME/DME-IRU equipped) OBK J73 SZW FOXXX (RNAV)-STAR	1100-0300
Teterboro (TEB).....	SQUIB MKG ECK J16 HANKK IGN WEARD V489 COATE	
Toledo (TOL).....	SQUIB PMM LFD	
Toronto (CYYZ).....	SQUIB MKG ECK V216.....	
Washington Dulles (IAD).....	OBK GIJ J146 J34 DJB J34 AIR MGW MGW121 VERNI ESL SHAAR ROYIL-STAR.....	
	or OBK SAMPL ADIME OTENS ANEWA RIEKE DJB J34 AIR MGW VERNI ESL SHNON (RNAV)-STAR	
Washington Natl (DCA).....	OBK GIJ J146 J34 DJB J34 SHAAR WZRRD-STAR ..	
	or OBK SAMPL ADIME OTENS ANEWA RIEKE DJB J34 SHAAR ELDEE (RNAV)-STAR	
West Palm Beach (PBI).....	(GPS or DME/DME-IRU equipped) OBK J73 SZW WLACE.....	
White Plains (HPN).....	SQUIB MKG ECK J16 BUF ITH DNY VALRE-STAR ..	
Windsor Locks (BDL).....	SQUIB MKG ECK J16 AUDIL SWEDE-STAR.....	
Youngstown (YNG).....	OBK SAMPL ADIME GERBS CXR	

Terminals	Route	Effective Times (UTC)
MOLINE (MLI)		
Cleveland Metro Area (CLE) (CGF) (BKL) (LNN) (LPR)	ELX CRL HIMEZ-STAR	
Detroit/Wayne (DTW)	MKG POLAR-STAR	
MONTREAL (CYUL)		
Cincinnati (CVG)	(RNAV only) YOW J546 YSO MAULL KODIE CTW TIGRR (RNAV)-STAR	
	or	
	(all others) YOW J546 YSO YYZ JHW JHW194 MAULL SLT249 KODIE CTW081 CTW CINCE-STAR	
Detroit/Wayne (DET)	YOW J546	
Kennedy (JFK)	V282 J524 BUGSY J570 ALB IGN IGN-STAR	
La Guardia (LGA)	V282 J542 BUGSY J570 ALB PWL IGN V157	
OSHAWA (CYOO)		
Detroit Metro Area (DTW, DET, YQG, PTK, YIP, ARB)	YSN YHM YXU PICES-STAR	
OTTAWA (CYOW)		
Detroit Metro Area (DTW, DET, YQG, PTK, YIP ARB)	YOW J546 YSO YXU PICES-STAR	
PEORIA (PIA)		
Detroit/Wayne (DTW)	MKG POLAR-STAR	
ROCKFORD (RFD)		
Cleveland Metro Area (CLE) (CGF) (BKL) (LNN) (LPR)	ELX CRL HIMEZ-STAR	
SAGINAW (MBS)		
Cleveland Metro Area (CLE) (CGF) (BKL) (LNN) (LPR)	MBS V133 SVM HIMEZ-STAR	
SAINT THOMAS (CYQS)		
Detroit Metro Area (DTW, DET, YQG, PTK, YIP, ARB)	AXXIS PICES-STAR	
SOUTH BEND (SBN)		
Atlanta (ATL)	(RNAV only) IIU BWG ERLIN (RNAV)-STAR	
	or	
	IIU BWG ROME-STAR	
Cincinnati (CVG)	FWA DEBAR-STAR	
Cleveland Metro Area (CLE) (CGF) (BKL) (LNN) (LPR)	LFD CRL HIMEZ-STAR	
TOLEDO (TOL)		
Atlanta (ATL)	VWV RID IIU BWG ROME-STAR	
TORONTO (CYYZ)		
Cincinnati (CVG)	(RNAV only) THORL JHW MAULL KODIE CTW TIGRR (RNAV)-STAR	
	or	
	(all others) THORL JHW JHW194 MAULL SLT249 KODIE CTW081 CTW CINCE-STAR	
Detroit Metro Area (DTW, DET, YQG, PTK, YIP, ARB)	ANCOL V104 YXU PICES-STAR	
La Guardia (LGA)	(above 250 kts) V252 GEE RKA-STAR	1100-0300
	or	
	(250 kts or less) V252 GEE V14 BEEPS J522 EXTOL RKA292 RKA NOBB-STAR	
San Francisco (SFO)	GRB J106 GEP J70 ABR J32 FMG ILA PYE	
WATERLOO (CYKF)		
Detroit Metro Area (DTW, DET, YQG, PTK, YIP, ARB)	YXU PICES-STAR	

PREFERRED IFR ROUTES
SPECIAL HIGH ALTITUDE DIRECTIONAL ROUTES

Terminals	Route	Effective Times (UTC)
Traffic originating east of Chicago Terminating Denver:		
DJB	J60 IOW DSM J144 OBH J10 LBF SAYGE-STAR	1300-0100
J16 MCW ONL J114 SNY LANDR-STAR	STL J110 GCK J154 RYLIE DANDD-STAR	1300-0100
Traffic overflying Cleveland Center and south of SLT:		
HPN	(above 250 kts) SLT J190 CFB DNY280 DNY VALRE-STAR	
	or PSB J49 CFB220 CFB DNY280 DNY VALRE-STAR	
	or (250 kts or less) SLT J190 CFB DNY280 DNY NOBBI-STAR	
	or PSB J49 CFB220 CFB DNY280 DNY NOBBI-STAR	
EWB	ROD J29 J584 FQM-STAR	1100-0300
ROD J29 J70 LVZ LENDY-STAR	1100-0300 or BKW J42 GVE KORRY-STAR	
	1100-0300 ROD J152 HAR V210 BUNTS	1100-0300
	or BKW J42 GVE DPNT-STAR	1100-0300
PIT	APE CTW V443 WISKE	
	or HNN JPU V117 WISKE	
TEB/MMU/CDW/Satellites	(Non-Advanced Nav Aircraft only) ROD J29 JHW J70 LVZ LVZ-STAR	
Traffic overflying Badger VORTAC, BAE to Washington Dulles IAD:		
BAE	J34 AIR MGW MGW121 VERNI ESL ROYIL-STAR	
	or (GPS or DME/DME-IRU equipped) J34 AIR MGW VERNI ESL SHNON (RNAV)-STAR	
Traffic overflying Gipper VORTAC, GIJ to Washington Dulles IAD:		
GIJ	J146 WOOST J34 AIR MGW MGW121 VERNI ESL ROYIL-STAR	
	or (GPS or DME/DME-IRU equipped) J146 WOOST J34 AIR MGW VERNI ESL SHNON (RNAV)-STAR	
Traffic overflying Indianapolis Center area eastbound originating north and west of a line from DFW to JFK:		
ABE	ROD CXR J146	
BDL	ROD J29 JHW J82 WILET RKA SWEDE-STAR	
BWI	ROD J152 J162 MGW EMI-STAR	
CEF	ROD J29 JHW J82 ALB	
FRG	ROD J29 JHW J82 J522 HNK IGN V58 V91 CCC	
HPN	(above 250 kts) ROD J29 JHW J82 WILET DNY VALRE-STAR)	
	or (250 kts or less) ROD J29 JHW J82 WILET DNY NOBBI-STAR	
ISP	(above 250 kts) ROD J152 J78 PSB J49 HNK J68 V130 TOMES MAD V34 CREAM V16 CCC	
	or (250 kts or less) ROD J152 J78 PSB J49 HNK DNY LOVES-STAR	
TEB/MMU/CDW/LDJ	ROD J29 JHW J70 LVZ-STAR	

Terminals	Route	Effective Times (UTC)
Traffic overflying Indianapolis Center area eastbound originating south and east of a line from DFW to JFK:		
ABE	BKW LDN LDN031 V377 HAR V162 DUMMR.	
ACY	BKW J42 OTT SIE	
BWI	BKW J147 CSN OTT-STAR	
DAA	BKW J213 V143 V4 AML	
DCA/ADW	BKW WZRRD-STAR	
	or	
	BKW ELDEE (RNAV)-STAR	
DOV	BKW J42 GVE ENO-STAR	
HPN	BKW J42 OOD J150 CYN BOUNO-STAR	
IAD	BKW ROYIL-STAR	1100-1830 and 2230-0300
	or	
	BKW SHNON (RNAV)-STAR	1100-1830 and 2230-0300
	or	
	GSO J14 CREWE J51 FAK COATT-STAR	1830-2230
	or	
	GSO J14 CREWE J51 FAK BARIN (RNAV)-STAR	1830-2230
LFI	BKW J42 MOL J24 HCM	
NSF	BKW J213 FINKS AML259 AML	
PHL	BKW J42 GVE DPNT-STAR	
TEB/MMU/CDW/LDJ	(Advanced Nav Aircraft only) BKW J42 GVE JAIKE-STAR	
WRI	BKW J42 OTT SIE-STAR	
Traffic overflying Indianapolis Center from Kansas City Center landing at Cleveland Metro:		
CLE	(GPS or DME/DME-IRU equipped) STL J134 JUDDI CVG ABERZ-STAR	
Traffic overflying Indianapolis Center from Kansas City Center landing at Detroit/Wayne:		
DTW	(GPS or DME/DME-IRU equipped) PXV VHP FWA MIZAR-STAR	
Traffic overflying Indianapolis (ZID) or Cleveland (ZOB) Centers landing in the Washington Metropolitan Area:		
BWI	MGW EMI-STAR	1100-0300
	or	
	BKW J147 CSN OTT-STAR	1100-0300
DCA	APE J30 BUCKO BUCKO-STAR	1100-0300
	or	
	BKW FINKS-STAR	1100-0300
	or	
	(GPS or DME/DME-IRU equipped) BKW ELDEE (RNAV)-STAR	1100-0300
	or	
	APE J30 SHAAR WZRRD-STAR	
	or	
	BKW WZRRD-STAR	
	or	
	APE J30 SHAAR ELDEE	
	or	
	BKW ELDEE (RNAV)-STAR	
	or	
IAD	APE AIR MGW MGW121 VERNI ESL ROYIL-STAR	
	or	
	BKW ROYIL-STAR	
	or	
	HVQ ROYIL-STAR	
	or	
	(GPS or DME/DME-IRU equipped) APE AIR MGW VERNI ESL SHNON (RNAV)-STAR	
	or	
	BKW SHNON (RNAV)-STAR	
	or	
	HVQ SHNON (RNAV)-STAR	

Terminals	Route	Effective Times (UTC)
Traffic overflying Indianapolis Center (ZID) to Chicago O'Hare (ORD)		
ORD	(Non-Advanced Nav Aircraft only) ATL J89 IIU MZZ OXI KNOX-STAR	
	or	
	(Non-Advanced Nav Aircraft only) BNA IIU MZZ OXI KNOX-STAR	
	or	
	(Non-Advanced Nav Aircraft only) FLM J24 BIGXX MZZ OXI KNOX-STAR	
	or	
	(Non-Advanced Nav Aircraft only) IRQ J99 IIU MZZ OXI KNOX-STAR	
	or	
	(Non-Advanced Nav Aircraft only, Washington/Baltimore Metro Area Only: BWI, DCA, IAD) ROD J149 FWA KNOX-STAR	

HIGH ALTITUDE—SINGLE DIRECTION ROUTES

Airway	Segment Fixes	Direction Effective	Effective Times (UTC)
J24/110	Indianapolis, IN to St. Louis, MO	West	1100-0300
J30	Joliet, IL to TRIXY Intn, VA	East	1100-0300
J34	Bellaire, OH to TRIXY Intn, VA	East	1100-0300
J149	Armel, VA to Rosewood, OH	West	1100-0300
J162	Bellaire, OH to Martinsburg, WV	East	1100-0300

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
Q1	ELMAA-ERAVE	BTG, OLM, HQM, HUH, UBQ
	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
	ETCHY-POINT REYES	LIN, ECA, RBL, ENI, SAC, OAK
Q2	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
Q3	ITUCO-NEWMAN	EWM, TFD, PXR, CIE, SSO, TUS, TCS
	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
Q4	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
Q5	SCOLE-SPTFR	EED, BLH, BZA, GBN, TRM, IPL, TFD
	SPTFR-ZEBOL	EED, IPL, BZA, GBN, TFD, PXR, BLH
	ZEBOL-SKTRR	PXR, BLH, BZA, GBN, TFD, TUS, SSO, CIE, SVC, TCS
	SKTRR-EL PASO	EWM, CUS, SVC, TCS, SSO, CIE, ELP, DMN, CME
	HAROB-HISKU	OLM, ONP, CVO, EUG, HQM, UBG, BTG, LTJ, DSD, HUH
Q7	HISKU-HARPR	ONP, CVO, EUG, LTJ, DSD, UBG, BTG, RBL, OED, LMT, FJS, LKV
	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
Q9	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
Q11	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
Q13	REBRG-DERBB	CZQ, PMD, EHF, LAX, RZS, AVE, MOD, ECA
	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
Q15	PITVE-PUSHH	FMG, SAC, LIN, SWR, MOD, OAL, RBL, LKV, LMT, MVA, CZQ
	PUSHH-LOS ANGELES	SAC, ECA, FMG, LIN, OAL, MOD, EHF, LAX, PMD, PDZ, HEC, OCN, CZQ, AVE, RZS
Q19	All segments	None; GNSS required
Q20	All segments	None; GNSS required
Q21	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, SJT, TXO, TCC
Q22	FUSCO-JUNCTION	ABI, CWK, CSI, INK, LZZ, JCT, SJT, STV, FST
	JUNCTION-RAZORBACK	BYP, EOS, TUL, TXK, ADM, RZC, OKM
Q23	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
Q23	FORT SMITH-RAZORBACK	OKM, RZC, EOS, TUL

Q-ROUTES

Route	Segment	DME
Q24	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
Q25	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
Q26	WALNUT RIDGE–DEVAC	LIT, JKS, GQO, MEM, BNA, FAM, ARG, DYR, VUZ, RMG
Q27	FORT SMITH–ZALDA	OKM, SGF, RZC, EOS, TUL
Q28	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
Q29	HARES–MEMPHIS MEMPHIS–SIDAE SIDAE–POCKET CITY	MEM, ARG, LIT, JAN, ELD, SQS MEM, PXV, BNA, BWG, ARG, ENL PXV, TTH, BWG, ENL
Q30	SIDON–VULCAN	GLH, MEM, VUZ, JAN, JYU, MEI, MGM, SQS, RMG
Q31	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
Q32	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, IIU, PXV, VXV, BNA, GQO
Q33	DHART–LITTLE ROCK LITTLE ROCK–PROWL	AEX, ELD, LIT, TXK, SWB, ARG, MEM, SQS ELD, SGF, FAM, LIT, ARG, MEM, RZC, CSX, STL
Q34	TEXARKANA–MATIE MATIE–MEMPHIS MEMPHIS–SWAPP	LIT, SWB, TXK, BYP, EIC, ELD, SQS LIT, ARG, MEM, ELD, SQS BWG, ARG, MEM, MKL, SQS, PXV, BNA, GQO, IIU, VXV
Q35	KIMBERLY–NEERO NEERO–WINEN WINEN–CORKR CORKR–DRAKE	LTJ, PDT, DSD, IMB, LKV, BOI, REO, BAM, SDO 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
Q36	RAZORBACK–TWTIS TWTIS–DEPEC DEPEC–NASHVILLE NASHVILLE–SWAPP	RZC, MEM, SGF, BUM, TUL, EOS, FAM, ARG, LIT MEM, GQO, BNA, BWG, FAM, ARG, PXV, IIU GQO, BWG, BNA, PXV, IIU VXV, BWG, BNA, GQO, PXV, IIU
Q38	ROKIT–INCIN INCIN–LAREY LAREY–BESOM	DAS, LCH, SWB, IAH, LFK, HUB, AEX JAN, MCB, SWB, AEX JAN, JYU, MEI, SQS, VUZ
Q40	ALEXANDRIA–DOOMS DOOMS–WINAP WINAP–MISLE	AEX, SWB, LCH, JAN, HEZ, MCB JAN, SQS, MEI, MCB MEI, VUZ, JYU
Q42	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
Q104	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'
VPFRS	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'
VPNTP	Nantucket Great Point	N41°23.41' /W070°02.78'
VPNED	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'
VPTPT	Nantucket Third Point	N41°18.51' /W070°03.37'
VPTUC	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'
VPFJU	_____	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'
VPLGP	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'
VPMB0	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'
VPCNL	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'
VPLGX	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.

ILLINOIS

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
Centralia (Centralia Muni)	115.0/ENL	A/2000	027	6.1	Over apch end Rwy 36.
Champaign (Urbana)	110.0/CMI	A/2000	177	7.8	Over grain elevator at Pesotum.
Champaign (University of Illinois-Willard) ...	110.0/CMI	G	332	0.9	On runup pad Rwy 14L.
Decatur (Decatur)	117.2/DEC	A/1700	348	5.4	Over apch end Rwy 36.
Galesburg	109.8/GBG	A/3000	237	12	Over railroad bridge.
Joliet (Aurora Muni)	112.3/JOT	A/2500	331	15	Over intersection of rwys.
Joliet (Joliet Rgnl)	112.3/JOT	A/1500	102	6.5	Over centerline of NW end of Rwy 04-22.
Lawrenceville (Lawrenceville-Vincennes Intl)	108.8/LWV	G	177	.6	South side of Echo.
Marion (Williamson Co Rgnl)	110.4/MWA	A/1500	287	11	Railroad intersection in town of De Soto.
Mattoon/Charleston (Coles Co Memorial) ...	110.4/MWA 109.4/MTO	G G	139 066	.5 .7	On parallel twy to Rwy 29. Runup pad Rwy 24. VOR checkpoint unusable.
Moline (Quad City Intl)	114.4/MZV	A/2000	034	9.8	Over intersection of Rwys 05-23, 09-27, 13-31.
Mount Vernon (Mount Vernon)	113.8/VNN	G	223	3.2	At intersection of taxiways B and B2.
Peoria (Greater Peoria Rgnl)	115.2/PIA	A/2000	100	4.9	Over intersection Rwys 13-31 and 4-22.
Quincy (Quincy Rgnl-Baldwin Fld)	113.6/UIN	G	029	6.6	On W side of terminal ramp.
Roberts	116.8/RBS	A/2000	151	7.8	Over grain elevator in Paxton, IL.
Rockford (Chicago/Rockford Intl)	110.8/RFD	G	108	5.1	Over intersection of twys A/B/D.
Samsville (Mount Carmel Muni)	116.6/SAM	A/1500	063	18.4	Over intersection of Rwys 04-22 and 13-31.
Troy (St Louis Rgnl)	116.0/TOY	A/1600	322	11	Over intersection of N/S and NW/SE rwys.
Vandalia (Vandalia Muni)	114.3/VLA	A/1700	177	5.8	Over centerline at N end N/S rwy.

VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
Chicago (Midway)	111.0	G	
Chicago (O'Hare)	112.0	G	

VOR RECEIVER CHECK INDIANA

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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		
Boiler (Purdue Univ)	115.1/BVT	A/1800	286	12	Over water twr in town of Fowler.
Goshen (Goshen Muni)	113.7/GSH	A/2000	090	10.7	Over center of E/W rwy.
Hoosier (Monroe County)	110.2/OOM	G	349	.9	On runup pad Rwy 17.
Huntingburg	109.2/HNB	A/2500	010	8	Over water tower S edge Jasper.
Kokomo (Kokomo Muni)	113.5/OKK	G	242	.6	On taxiway A at AER 05.
Marion (Marion Muni)	108.6/MZZ	G	206	.6	Runup Pad Rwy 04
Muncie (Delaware Co–Johnson Fld)	114.4/MIE	A/2500	181	5.8	Over intersection of highway and railroad.
	114.4/MIE	G	328	0.7	On taxiway A–4 on runup area for Rwy 14.
Pocket City (Evansville Rgnl)	113.3/PXV	A/2000	056	13	Over intersection of E/W and NE/SW rwys.
Terre Haute (Sky King)	115.3/TTH	A/2000	300	7	Over intersection of E/W and N/S rwys.

VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
Fort Wayne Intl	111.0	G	
Indianapolis Intl.	109.6	G	

MICHIGAN

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		
Alpena (Alpena Co Rgnl)	108.8/APN	G	203	1.1	On runup for Rwy 01.
Au Sable (Oscoda–Wurtsmith)	116.1/ASP	G	249	.9	Approach end Rwy 6.
	116.1/ASP	G	063	1.0	Approach end Rwy 24.
Battle Creek (W.K. Kellogg)	109.4/BTL	A/2000	096	11.3	NS and EW highway intersection.
Escanaba	110.8/ESC	A/2500	002	14.5	Over microwave twr 1 NM S of Perkins.
Gaylord (Gaylord Rgnl)	109.2/GLR	G	077	.6	SE corner of ramp.
Grand Rapids (Gerald R Ford Intl)	115.95/GRR	A/2500	231	10	Over intersection of N/S highway & E/W road 1 NM W of Wayland.
Houghton (Houghton Co Meml)	112.8/CMX	A/2300	077	13.5	Over smoke stack.
Kalamazoo (Kalamazoo/Battle Creek Intl) ..	109.0/AZO	G	167	.7	On twy to Rwy 35.
Lansing (Capital City)	110.8/LAN	G	058	5.4	On Twy C; 500 E of apch end Rwy 06.
Litchfield	111.2/LFD	A/2000	328	17.5	Over intersection of NS/EW expressway.
Muskegon (Muskegon County)	115.2/MKG	A/2000	272	8.4	Over intersection of NW/SE and NE/SW rwys.
Peck (St Clair County Intl)	114.0/ECK	A/2000	166	22.5	Over apch end Rwy 04.

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
Pellston (Cheboygan City-County)	111.8/PLN	A/2000	084	6.4	Over center of E/W rwy.
Pellston (Pellston Rgnl Arpt of Emmet Co) ...	111.8/PLN	G	241	6.4	At intersection of N/S and E/W twys.
Pontiac (Oakland Co Intl)	111.0/PSI	G	113	5.8	On circle on warmup pad apch end Rwy 27L.
	111.0/PSI	G	120	5.0	On circle on warmup pad apch end Rwy 09R.
Saginaw	112.9/MBS	A/1700	058	6.7	Over intersection US 10 and I-75.

VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
Detroit City	111.6	G	
Detroit (Detroit Metropolitan Wayne Co.)..	109.8	G	

OHIO

VOR RECEIVER CHECKPOINTS

Facility Name (Airport Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag	Dist. from Fac. N.M.	Checkpoint Description
Buckeye (Port Bucyrus-Crawford Co).....	109.8/BUD	A/2500	027	10.5	Over intersection E/W grass strip and Rwy 04-22.
Dryer (Loraine County Rgnl)	113.6/DJB	G	222	1.3	At intersection of taxiway and ramp.
Jefferson (Ashtabula Co)	115.2/JFN	G	067	2.4	On ramp.
Jefferson (Germack).....	115.2/JFN	A/2000	278	9.0	At intersection of E/W interstate highway and N-S highway south of town of Geneva Ohio.
Mansfield (Shelby Community).....	108.8/MFD	A/2000	277	4.8	Over hangar NW corner of arpt.
Mansfield (Mansfield Lahm Rgnl)	108.8/MFD	G	134	4.7	At intersection of taxiways A and D.
Springfield (Springfield-Beckley Muni).....	113.2/SGH	G	050	1.2	On NE taxiway abeam approach end Rwy 24.
Waterville (Fulton Co.)	113.1/VWV	A/1800	295	24.2	Over hangar on WSW side of arpt.
Zanesville (Zanesville Muni)	111.4/ZZV	A/2000	270	5.5	Over water tank.
	111.4/ZZV	G	028	.5	On taxiway near apch end of Rwy 22.

VOR RECEIVER CHECK VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
Akron Canton Rgnl	110.6	G	
Cincinnati Muni Arpt Lunken Field	108.4	G	
Cleveland Hopkins Intl	110.4	G	
Columbus (Port Columbus Intl.)	111.0	G or	
		A/2300-5000	Within 10 NM radius of airport.
Dayton (James M Cox Dayton Intl.)	111.0	G or	Within a 10 NM radius of arpt.
		A/2500-4000	
Sidney (Sidney Muni)	111.0	A/2500-4000	

WISCONSIN

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
Eau Claire (Chippewa Valley Rgnl)	112.9/EAU	G	182	2.1	Center of ramp.
Green Bay (Austin Straubel Intl)	115.5/GRB	G	141	4.6	On Twy M1 at Rwy 18R apch end.
Janesville	114.3/JVL	A/1900	287	12.7	Over water tower N of Brodhead.
Janesville (Southern Wisconsin Rgnl)	114.3/JVL	G	035	4.3	On taxiway A1.
Kenosha (Sylvania)	109.2/ENW	A/2100	353	5.9	Over N/S interstate highway bridge over E/W highway N of arpt.
LaCrosse (La Crosse Muni)	108.4/LSE	G	356	1.0	Runup pad AER Rwy 18.
Madison (Dane Co Rgnl/Truax Fld)	108.6/MSN	G	151	0.6	On NE corner air national guard ramp adjacent to taxiway D.
Manitowoc (Manitowoc Co)	111.0/MTW	G	196	0.5	SW corner of terminal ramp.
Oshkosh (Wittman Rgnl)	111.8/OSH	G	282	0.6	On taxiway at Rwy 09 apch end
	111.8/OSH	G	173	0.7	On N/S taxiway abeam control tower.
Rhineland (Rhineland-Oneida Co)	109.2/RHI	G	212	0.5	At intersection of E-W taxiway at terminal.
Sheboygan Falls (Sheboygan Co Meml)	110.0/FAH	G	232	.4	On taxiway at Rwy 03 apch end.
Stevens Point (Stevens Point Muni)	110.6/STE	A/2500	257	12.1	Over N/S railroad and E/W road in Rudolph.
	110.6/STE	G	022	0.6	From AER 21.
Wausau (Central Wisconsin)	111.6/AUW	A/2800	222	5.5	Over intersection of N-S and E-W rwys.
West Bend	109.8/BJB	A/2500	220	7.6	Over microwave tower E of Slinger.

VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type VOT Facility	Remarks
Milwaukee (Gen Mitchell Intl)	109.0	G	

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
ILLINOIS			
(c) Carmi Muni	19.7 NM; 298°Pocket City.....	9,500 AGL	3 NM radius. SR-SS weekends.
Deer Grove	25 NM; 343°Bradford	12,500	3 NM radius. SR-SS Year round.
Greenville Arpt	18 NM; 210°Vandalia	13,500	3 NM radius. Weekends and holidays, SR-1 hour after SS.
(c) Hinckley Arpt	22 NM; 308°Joliet.....	14,500 AGL	Kansas City Center 127.7 2 NM radius. Mon-Fri 0800 to 1 hour after SS, Sat-Sun 0700 to 1 hour after SS.
(c) Minier, Illinois Valley Parachute Club Arpt	25 NM; 122°Peoria	15,000	Daily SR to 1 hour after SS.
(c) Ottawa, Skydive Chicago Arpt	23.1 NM; 250° Joliet.....	17,500 AGL	2 NM radius. SR to 1 hour past SS.
(c) Rantoul National Aviation Center-Frank Elliott Fld	16.5 NM; 019° Champaign	13,500	2 NM radius. Daily 0600-2200.
Sterling	16 NM; 206° Polo	12,000 AGL	Year round SR-SS. 10 NM radius.
Tampico	23 NM; 200°Polo	12,500	1 NM radius. 1000-SS daily.
(c) Taylorville, Taylorville Muni.....	24 NM; 138° Spinner	15,000	5 NM radius. SR-1 hr past SS.
(c) Vandalia, Vandalia Muni	6.2 NM; 178° Vandalia	15,000	5 NM radius. Fri, Sat, Sun and holidays, SR-½ hour past SS.
INDIANA			
(c) Angola, Tri-State Steuben Co Arpt	33 NM; 040°Wolf Lake	14,500	5 NM radius, Mon, Wed, Fri, Sat, Sun 0900-SS.
Cloverdale, Swope Airstrip.....	25 NM; 085° Terre Haute.....	12,500	5 NM radius. SR-SS daily.
(c) Connersville.....	14 NM; 257° Richmond	13,500	5 NM radius. Daily SR-SS.
Crawfordsville, Crawfordsville Muni	27.2 NM; 290° Brickyard	15,000	3 NM radius. Fri-Sat-Sun SR-SS.
(c) Flora, Flora Muni	22.4 NM; 272° Kokomo	13,000	5 NM radius. Weekends and holidays, 0900-SS daily.
Franklin Flying Fld	17 NM; 220° Shelbyville	13,500	5 NM radius. SR-SS daily.
(c) Goshen Muni	10 NM; 090° Goshen	14,500 AGL	1 NM radius. Weds, Fri-Sat-Sun SR-SS. South Bend Rgnl Tower 132.05
(c) Greensburg Muni	25 NM; 145° Shelbyville	12,000 AGL	2 NM radius. 0900-2000 daily.
Hobart Sky Ranch Arpt.....	15 NM; 077° Chicago Heights ...	10,000 AGL	2 NM radius. Weds, weekends 0800-SS.
Kingsbury.....	23 NM; 230°Gipper	1,500	0.3 NM radius. Occasional use.
Mentone.....	26 NM; 183° Goshen	12,500	3 NM radius. SR-SS daily.
Muncie, Horizon Fld	10 NM; 360°Muncie	13,000	Daily 0600-1900.
(c) Richmond, Richmond Muni.....	0 NM; Richmond	14,500	3 NM radius. SR-1 hour after SS-daily.
Veedsburg, Songer Arpt.....	24 NM; 220°Boiler.....	10,000	5 NM radius. Weekends and holidays, SR-SS.
MICHIGAN			
(c) Allegan, Padgham Fld.....	13 NM; 072° Pullman	10,700	2 NM radius. Daily SR-SS.
East Tawas, Iosco Co Arpt.....	8 NM; 192° Au Sable.....	15,000	5 NM radius. May-Oct SR-SS daily.
Fowlerville.....	20 NM; 225° Flint	12,000	5 NM radius. Apr-Oct 0800-SS.
Fremont Muni	16.2 NM; 008° Muskegon	12,000	3 NM radius. Apr-Oct Sat-Sun SR-SS.
Harbor Springs	17 NM; 235° Pellston.....	12,000	3 NM radius. May-Sep daily SR-SS.

PARACHUTE JUMPING AREAS

LOCATION	DISTANCE AND RADIAL FROM NEAREST VOR/VORTAC	MAXIMUM ALTITUDE	REMARKS
Marshall, Brooks Fld.....	14 NM; 107° Battle Creek.....	15,000	5 NM radius. Apr–Oct daily 0900–SS.
(c) Mount Pleasant Muni Arpt.....	Ø NM; Mount Pleasant.....	14,000	2 NM radius. Jan–Dec daily 0900–SS.
(c) Romeo.....	26 NM; 085° Pontiac.....	15,000	2 NM radius. Apr–Oct daily SR–SS.
(c) Saginaw, Saginaw Co H.W. Browne Arpt.....	11 NM; 125° Saginaw.....	12,000	2 NM radius. Apr–Nov daily SR–SS.
(c) Tecumseh, Meyers–Diver’s.....	22 NM; 272° Carleton.....	17,000	5 NM radius. Apr–Oct daily SR–SS.
OHIO			
Alliance, Barber Arpt.....	9 NM; 155° Akron.....	13,500	5 NM radius. Mon, Wed, Thur, Fri and weekends SR–SS.
Alliance, Miller Arpt.....	10 NM; 139° Akron.....	13,500 AGL	5 NM radius. Daily SR–SS.
Bellville.....	15 NM; 168° Mansfield.....	8,500	5 NM radius. SR–SS weekend.
(c) Bowling Green, Bordner Arpt.....	8 NM; 212° Waterville.....	14,000	Daily. Radius 2 NM.
(c) Celina, Lakefield Arpt.....	26.5 NM; 298° Rosewood.....	14,000	1 NM radius. Daily SR–SS.
Centerburg, Chapman Mem.....	12 NM; 325° Appleton.....	12,000	SR–SS weekends.
(c) Chesapeake, Lawrence Co Airpark.....	26 NM; 052° Newcombe.....	11,000	1 NM radius. 0900–2300 Sat–Sun. 1600–2300 Wed–Fri. Tri–State/Milton J. Ferguson Field Tower 119.75
(c) Circleville, Clark Dream Strip.....	13 NM; 332° Yellow Bud.....	17,500	2 NM radius. Wed 0600–Sun 2400. Port Columbus Intl Tower 125.95
Commercial Point.....	32 NM; 233° Appleton.....	10,000	0800–2100 Sat, Sun.
Findlay.....	9 NM; 355° Findlay.....	12,500 AGL	Daily.
Fulton County Arpt.....	24.5; 295° Waterville.....	10,500	Daily SR–SS.
(c) Garrettsville, Gates Arpt.....	11 NM; 172° Chardon.....	13,500 AGL	SR–SS daily.
Grafton, Mole Arpt.....	10 NM; 139° Dryer.....	12,500	0700–0930 daily.
Lebanon, Lebanon–Warren Co Arpt.....	21 NM; 280° Midwest.....	14,500 AGL	5 NM radius. Daily SR–SS.
Mansfield.....	4 NM; 132° Mansfield.....	3,000	3 NM radius. Tue–Fri 0800–2200. Unit training assemblies 1 weekend a month.
Ottawa, Putnam County Arpt.....	10.9 NM; 298° Findlay.....	10,500 AGL	SR–2400.
(c) Petersburg.....	16NM; 294° Eilwood City.....	12,500 AGL	2 NM radius, Mon–Fri 1700–SS, weekends SR–SS.
(c) Rittman, Hilty Fld.....	21 NM; 314° Briggs.....	16,000 AGL	5 NM radius. Daily 1 hour before SR–1 hour after SS.
Salem, Phillis Lakefront Arpt.....	27 NM; 088° Briggs.....	10,000	Evening and weekends to SS
Stonelick Parachute Center.....	27 NM; 068° Cincinnati.....	10,000	SR–SS daily.
Sycamore.....	25 NM; 285° Mansfield.....	12,500 AGL	1 NM radius. Daily SR–SS.
Van Wert County.....	27.3 NM; 104° Fort Wayne.....	10,000	Weekdays 1600–SS, Weekends SR–SS
Vickery, Wrights Fld.....	12 NM; 270° Sandusky.....	10,000 AGL	SR–SS weekends.
(c) Xenia, Skydive Green County Inc.....	32 NM; 129° Dayton.....	12,500 AGL	Daily SR–2400.
WISCONSIN			
(c) Baldwin Arpt.....	45 NM; 095° Gopher.....	15,000 AGL	Wed–Fri 1500–½ hour past SS, Weekends SR–½ hour past SS.
(c) Bristol, Winfield Arpt.....	37.5 NM; 160° Badger.....	12,500 AGL	SR–½ hour past SS.
(c) Chippewa Falls, Wissota Arpt.....	9 NM; 070° Eau Claire.....	15,000	5 NM radius. Daily SR–1 hour past SS.
(c) East Troy Muni Arpt.....	20 NM; 190° Badger.....	14,500 AGL	SR–½ hour past SS.
Edgerton, Jana Arpt.....	20 NM; 142° Madison.....	11,000	10 NM radius. Wed–Sun & Holidays SR–SS.
(c) Fort Atkinson Muni.....	25 NM; 247° Badger.....	14,000	3 NM radius. Daily SR–SS.
Lake Delton.....	3 NM; 332° Dells.....	12,500	Daily May 15–Sept 25.
(c) Lancaster Muni Arpt.....	22.8 NM; 359° Dubuque.....	13,500 AGL	2 NM radius. Sat–Sun 0900–1 hr past SS. Wed and Fri 1500–1 hr past SS.
(c) Marshall, Mathaire Fld.....	16 NM; 058° Madison.....	12,500 AGL	SR–½ hour past SS.
(c) Oshkosh.....	8 NM; 293° Oshkosh.....	13,500 AGL	Daily SR–SS.
(c) Pulaski, Carter Arpt.....	5 NM; 350° Green Bay.....	12,000 AGL	Daily SR–SS.
(c) Shiocton.....	17 NM; 250° Green Bay.....	13,500	5 NM SR–SS daily.
(c) Superior, Richard I Bong.....	8 NM; 143° Duluth.....	12,500 AGL	3 NM radius. Daily SR–1 hour past SS.

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.

CG-21 WORLD AERONAUTICAL CHART

39th Edition, 24 Sep 2009

OBSTRUCTIONS

22 Oct 2009 Add obst 1348' MSL (600' AGL), 34°15'06"N, 84°59'12"W.

Change obst from 312' MSL to 1312' MSL, 33°35'33"N, 083°58'31"W.

17 Dec 2009 – 8 Apr 2010 No Major Changes.

AIRPORTS

22 Oct 2009 Change elevation from 191' to 1911' at Blairsville arpt, 34°51'16"N, 083°59'50"W. Change runway orientation to 01/19 at Halifax-Northhampton Co Rgnl arpt, 36°19'47"N, 077°38'07"W.

17 Dec 2009 – 8 Apr 2010 No Major Changes.

NAVAIDS

22 Oct 2009 – 8 Apr 2010 No Major Changes.

AIRSPACE

22 Oct 2009 – 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 – 8 Apr 2010 No Major Changes.

CHICAGO HELICOPTER ROUTE CHART
5th Edition, 12 May 2005**OBSTRUCTIONS**

12 May 2005 – 7 Jul 2005 No Major Changes.

1 Sep 2005 Add obst 896' MSL (300' AGL) UC, 41°46'40"N, 87°49'16"W.

27 Oct 2005 – 5 Jul 2007 No Major Changes.

30 Aug 2007 Change group obst from 1780'MSL (1195'AGL) to 1973'MSL (1375'AGL)UC, 41°53'20"N, 87°37'36"W.

25 Oct 2007 Change obst from 1130'MSL (335'AGL) to 1195'MSL (400'AGL), 41°36'01"N, 87°58'44"W.

20 Dec 2007 – 31 Jul 2008 No Major Changes.

25 Sep 2008 Add obst 968'MSL (370'AGL)UC, 41°34'40"N, 87°31'33"W.

20 Nov 2008 – 17 Dec 2009 No Major Changes.

11 Feb 2010 Add obst 2589'MSL (2000'AGL) UC, 41°53'24"N, 87°36'54"W.

8 Apr 2010 NO Major Changes.

AIRPORTS

12 May 2005 – 7 Jul 2005 No Major Changes.

1 Sep 2005 Delete MILL ROSE arpt, 42°04'38"N, 88°09'35"W.

27 Oct 2005 Delete DARIEN-WOODRIDGE FIRE DEPT heliport, 41° 45'15"N, 88°00'26"W.

22 Dec 2005 – 5 Jul 2007 No Major Changes.

30 Aug 2007 Change CTAF freq 123.05 to 122.9 at SCHAUMBURG MUNI HELISTOP heliport, 42°02'53"N, 88°03'09"W.

Delete ADDISON FIRE DEPARTMENT STATION 3 heliport, 41°55'48"N, 88°02'28"W.

25 Oct 2007 – 10 Apr 2008 No Major Changes.

5 Jun 2008 Delete LANDIS PLASTICS heli, 41°40'43"N, 87°45'45"W.

Delete CRYSTAL LAKE HOLIDAY INN heli, 42°13'14"N, 88°17'05"W.

Delete CLARK heli, 42°22'06"N, 87°59'30"W.

31 Jul 2008 – 20 Nov 2008 No Major Changes.

15 Jan 2009

Change CHICAGO O'HARE ATCT frequencies from 120.75(S), 126.9(N), 127.925 132.7 390.9 to 120.75 126.9 (CNTR TWR), 132.7 390.9 (CNTR TWR), 135.925 (N TWR), 41°58'51"N, 87°54'23"W.

12 Mar 2009 No Major Changes.

7 May 2009 Delete SEARS MERCHANDISE GROUP heli, 42°04'35"N, 088°13'01"W.

Change CHICAGO O'HARE ATCT freq from 135.925(N TWR) to 128.15(N TWR), 41°58'51"N, 87°54'23"W.

2 Jul 2009 – 11 Feb 2010 No Major Changes.

8 Apr 2010 Delete LEFKOWITZ heli, 42°09'40"N, 87°59'10"W.

Delete SHERMAN heli, 42°03'16"N, 88°16'50"W.

NAVAIDS

12 May 2005 – 8 Apr 2010 No Major Changes.

AIRSPACE

12 May 2005 – 25 Sep 2008 No Major Changes.

20 Nov 2008 Change CHICAGO Class B freq from 128.45 to 133.625.

12 Mar 2009 – 8 Apr 2010 No Major Changes.

SPECIAL USE AIRSPACE

12 May 2005 – 8 Apr 2010 No Major Changes.

MILITARY TRAINING ROUTES

12 May 2005 – 8 Apr 2010 No Major Changes.

MISCELLANEOUS

12 May 2005 – 17 Dec 2009 No Major Changes.

11 Feb 2010 Change MEF 2⁵ to 2⁷ in quadrant 41°45'–42°00'N, 87°30'–87°45'W.

8 Apr 2010 No Major Changes.

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.

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AIRPORTS**22 Oct 2009** No Major Change.**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 MORAIN 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 2⁵ to 2⁷ in quadrant 41°30'-42°00'N, 87°30'-88°00'W.**8 Apr 2010** Change MEF 1⁸ to 1⁹ in quadrant 43°00'-43°30'N, 92°00'-92°30'W.**CHICAGO TERMINAL AREA CHART****79th Edition, 22 Oct 2009****OBSTRUCTIONS****22 Oct 2009 – 17 Dec 2009** No Major Changes.**11 Feb 2010** Add obst 2589'MSL (2000'AGL) UC, 41°53'24"N, 87°36'54"W.**8 Apr 2010** No Major Changes.**AIRPORTS****22 Oct 2009 – 11 Feb 2010** No Major Changes.**8 Apr 2010** Delete abandoned arpt symbol, 42°22'30"N, 88°19'30"W.**NAVAIDS****22 Oct 2009 – 8 Apr 2010** No Major Changes.**AIRSPACE****22 Oct 2009 – 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 2⁵ to 2⁷ in quadrant 41°45'-42°00'N, 87°30'-87°45'W.**8 Apr 2010** No Major Changes.

CINCINNATI SECTIONAL 83rd Edition, 17 Dec 2009

OBSTRUCTIONS**17 Dec 2009** No Major Changes.**11 Feb 2010** Add obst 1129' MSL (300' AGL) UC, 38°29'49"N, 82°51'18"W.

Add obst 1276' MSL (300' AGL) UC, 38°24'01"N, 83°09'38"W.

Add obst 1097' MSL (275' AGL) UC, 39°03'46"N, 84°59'04"W.

Add obst 1522' MSL (258' AGL) UC, 39°39'44"N, 80°04'00"W.

Add obst 1580' MSL (289' AGL) UC, 39°43'33"N, 80°12'37"W.

Add obst 2642' MSL (304' AGL) UC, 38°24'24"N, 80°47'10"W.

Add windmill farm. 4411' MSL UC, 38°05'27"N, 80°25'48"W.

8 Apr 2010 Add obst 1566' MSL (204' AGL) UC, 37°39'55"N, 83°57'21"W.

Add obst 1142' MSL (295' AGL) UC, 38°45'58"N, 84°53'45"W.

Add obst 1385' MSL (279' AGL) UC, 36°10'15"N, 84°02'17"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 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 1734' MSL (314' AGL) UC, 37°09'53"N, 83°23'10"W.

Add obst 1477' MSL (255' AGL) UC, 36°55'42"N, 84°14'33"W.

Add obst 786' MSL (310' AGL) UC, 36°14'41"N, 78°19'50"W.

Add obst 2210' MSL (260' AGL) UC, 36°23'13"N, 84°20'11"W.

Add obst 4716' MSL (389' AGL) UC, 38°04'46"N, 80°32'37"W.

Add obst 1695' MSL (315' AGL) UC, 37°10'09"N, 83°31'54"W.

Add obst 1792' MSL (306' AGL) UC, 37°36'25"N, 83°59'58"W.

Add obst 1138' MSL (300' AGL) UC, 38°20'21"N, 82°47'08"W.

Add obst 1280' MSL (258' AGL) UC, 38°51'21"N, 82°55'52"W.

Add obst 1008' MSL (216' AGL) UC, 39°20'01"N, 84°46'34"W.

Add obst 2610' MSL (415' AGL) UC, 38°49'04"N, 79°51'29"W.

Add obst 1612' MSL (311' AGL) UC, 38°09'58"N, 81°12'13"W.

Add obst 2509' MSL (315' AGL) UC, 39°02'16"N, 79°56'33"W.

Add obst 2434' MSL (315' AGL) UC, 39°00'23"N, 79°48'52"W.

Add obst 2422' MSL (289' AGL) UC, 39°18'45"N, 79°41'09"W.

Add obst 4726' MSL (389' AGL) UC, 38°03'56"N, 80°29'48"W.

Add obst 1917' MSL (290' AGL) UC, 39°24'46"N, 80°03'09"W.

Add obst 2314' MSL (260' AGL) UC, 37°46'35"N, 81°22'05"W.

Add obst 1872' MSL (408' AGL) UC, 37°41'43"N, 81°38'23"W.

Add obst 1433' MSL (340' AGL) UC, 38°18'44"N, 82°13'42"W.

Add obst 1798' MSL (360' AGL) UC, 39°29'40"N, 80°23'16"W.

Add obst 3352' MSL (315' AGL) UC, 38°21'38"N, 80°38'51"W.

Add obst 1772' MSL (315' AGL) UC, 39°35'16"N, 80°15'02"W.

Add obst 1318' MSL (300' AGL) UC, 38°13'32"N, 82°27'05"W.

Add obst 4248' MSL (320' AGL) UC, 37°46'25"N, 80°42'19"W.

Add obst 1498' MSL (289' AGL) UC, 39°42'45"N, 80°10'06"W.

Add obst 2189' MSL (289' AGL) UC, 39°19'20"N, 79°49'37"W.

Add obst 2905' MSL (360' AGL) UC, 38°09'10"N, 81°06'53"W.

Change windmill farm highest MSL from 4411' MSL to 4726' MSL (389' AGL) UC, 38°03'46"N, 80°30'08"W.

AIRPORTS**17 Dec 2009** No Major Changes.**11 Feb 2010** Delete KNORE arpt, 38°50'15"N, 82°50'05"W.

Delete ACTION arpt, 39°07'57"N, 84°49'43"W.

8 Apr 2010 No Major Changes.**NAVAIDS****17 Dec 2009 – 8 Apr 2010** No Major Changes.**AIRSPACE****17 Dec 2009** No Major Changes.**11 Feb 2010** Add MOUNTAIN CITY, TN Class E. That airspace extending upward from 700 feet above the surface within a 6.7-mile radius of the Johnson County Airport and within 1.3 miles each side of the 065° bearing from the airport extending from the 6.7-mile radius to 10.9 miles northeast of the airport.**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 – 11 Feb 2010** No Major Changes.**8 Apr 2010** Change MEF 4⁷ to 4⁹ in quadrant 38°00'-38°30'N, 80°30'-81°00'W.

CINCINNATI TERMINAL AREA CHART**22nd Edition, 17 Dec 2009****OBSTRUCTIONS****17 Dec 2009** No Major Changes.**11 Feb 2010** Add obst 1097' MSL (275' AGL) UC, 39°03'46N, 84°59'04"W.**8 Apr 2010** Add obst 1142' MSL (295' AGL) UC, 38°45'58"N, 84°53'45"W. Add obst 1008' MSL (216' AGL) UC, 39°20'01"N, 84°46'34"W.**AIRPORTS****17 Dec 2009** No Major Changes.**11 Feb 2010** Delete ACTION arpt, 39°07'57"N, 84°49'43"W.**8 Apr 2010** No Major Changes.**NAVAIDS****17 Dec 2009 – 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.

CLEVELAND TERMINAL AREA CHART

73rd 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.

DETROIT HELICOPTER ROUTE CHART

1st Edition, 4 Aug 2005

OBSTRUCTIONS

1 Sep 2005 No Major Changes.

27 Oct 2005 Add group obst 1009' MSL (388' AGL) UC, 42°03'58"N, 83° 23'40"W.

22 Dec 2005 – 12 Mar 2009 No Major Changes.

7 May 2009 Add obst 1293' MSL (330' AGL), 42°09'30"N, 84°01'31"W.

2 Jul 2009 – 8 Apr 2010 No Major Changes.

AIRPORTS

1 Sep 2005 Add SELFRIDGE ANGB ATCT 340.7, 42°36'46"N, 82°49'54"W.

27 Oct 2005 Delete HYNES arpt, 42°36'39"N, 83°43'58"W.

22 Dec 2005 – 8 Jun 2006 No Major Changes.

3 Aug 2006 Delete CTAf freq. 122.9 at SALINE arpt., 42°08'47"N, 83°47'31"W.

28 Sep 2006 – 10 May 2007 No Major Changes.

5 Jul 2007 Delete CARRIAGE LANE arpt, 42°27'52"N, 84°02'05"W.

30 Aug 2007 – 14 Feb 2008 No Major Changes.

10 Apr 2008 Delete FULLER heliport, 42°33'34"N, 83°10'40"W.

5 Jun 2008 – 31 Jul 2008 No Major Changes.

25 Sep 2008 Add SELFRIDGE ANGB ATCT freq 225.4, 42°36'30"N, 82°50'07"W.

20 Nov 2008 – 7 May 2009 No Major Changes.

2 Jul 2009 Delete INDEPENDENCE GREEN heliport, 42°28'12"N, 83°25'09"W. Delete COBO HALL heliport, 42°19'33"N, 83°02'52"W.

27 Aug 2009 – 17 Dec 2009 No Major Changes.

11 Feb 2010 Delete TECUMSEH arpt, 42°01'59"N, 83°52'37"W.

8 Apr 2010 No Major Changes.

NAVAIDS

1 Sep 2005 – 13 Apr 2006 No Major Changes.

8 Jun 2006 Delete LAUREL NDB, 42°14'38"N, 83°02'51"W.

3 Aug 2006 – 8 Apr 2010 No Major Changes.

AIRSPACE

1 Sep 2005 – 15 Mar 2007 No Major Changes.

10 May 2007 Change DETROIT Class B freq from 124.9 to 127.5.

5 Jul 2007 – 8 Apr 2010 No Major Changes.

SPECIAL USE AIRSPACE

1 Sep 2005 – 8 Apr 2010 No Major Changes.

MILITARY TRAINING ROUTES

1 Sep 2005 – 8 Apr 2010 No Major Changes.

MISCELLANEOUS

1 Sep 2005 – 16 Feb 2006 No Major Changes.

13 Apr 2006 Change MEF 1¹ to 1² in quadrant 42°00' – 42°15'N, 83°15' – 83°30' W.

8 Jun 2006 – 8 Apr 2010 No Major Changes.

DETROIT SECTIONAL
80th 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.

DETROIT TERMINAL AREA CHART
73rd 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.

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) UC, 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 Forstell 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.

LAKE HURON SECTIONAL

79th 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.

MINNEAPOLIS-ST. PAUL TERMINAL AREA CHART
73rd Edition, 14 Jan 2010

OBSTRUCTIONS

11 Feb 2010 No Major Changes.

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 Change 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 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 1.1 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.

PITTSBURGH TERMINAL AREA CHART
73rd 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.

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.

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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.

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.

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.
Add RP 9R to GRAND FORKS INTL arpt, 47°56'50"N, 97°10'25"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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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
Frankfort, IL (LL40) Chicago App/Dep Con 133.1 285.6	L-28H
Glasgow Industrial, MT (07MT) Salt Lake Center App/Dep Con 126.85 305.2	H-1E, 2F, L-13D
USAF Academy Bullseye Aux Airstrip, CO (CO90) ASOS 118.325	L-10F
West Kentucky Airpark, KY (5KY3) Memphis Center App/Dep Con 133.65 292.15	L-16I
William P Gwinn, FL (06FA) 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
Abbotsford, BC (CYXX) ATIS 119.8 (1500-0700Z) Victoria Trml App/Dep Con 132.7 (Avbl on ground) 290.8 Tower 119.4 (Inner) 121.0 (Outer) 295.0 (1500-0700Z) Gnd Con 121.8 MF 119.4 295.0 (0700-1500Z) (Shape irregular to 4500')	H-1B, L-12F
Amos/Magny, QC (CYEY) Montreal Center App/Dep Con 125.9	H-11B
Atikokan Muni, ON (CYIB) MF 122.3 (5 NM to 4500' No ground station)	L-14I
Barrie-Orillia (Lake Simcoe Rgnl), ON (CYLS) AWOS 122.55 (Pvt) Toronto Center App/Dep Con 124.025	H-11B, L-31D
Bar River, ON (CPF2) Toronto Center App/Dep Con 132.65	L-31C
Bathurst, NB (CZBF) Moncton Center App/Dep Con 134.25	L-32J
Boundary Bay, BC (CZBB) ATIS 125.5 (1500-0700Z) Vancouver App/Dep Con 132.3 363.8 Tower 118.1 (Inner) 127.6 (Outer) (1500-0700Z) Gnd Con 124.3 MF 118.1 (0700-1500Z) to 2000'. Vancouver Trml 125.2 above 2000'. Shape irregular to 2500')	H-1B, L-1E
Brampton, ON (CNC3) Toronto Trml App/Dep Con 119.3 253.1	L-31D
Brandon Muni, MB (CYBR) Winnipeg Center App/Dep Con 132.25 285.4 MF 122.1 (5 NM to 4000')	H-2H
Brantford, ON (CYFD) Toronto Trml App/Dep Con 128.27	L-31D
Brockville-Thousand Islands Rgnl Tackaberry, ON (CNL3) Montreal Center App/Dep Con 134.675	L-32G
Bromont, QC (CZBM) Montreal Center App/Dep Con 132.35 MF 122.15 (5 NM to 3400')	L-32G
Burlington Airpark, ON (CZBA) Toronto Center App/Dep Con 119.3 253.1	L-31D
Castlegar/West Kootenay Rgnl, BC (CYCG) Vancouver Center App/Dep Con 134.2 227.3 MF 122.1 (5 NM to 6500')	H-1C
Centralia/James T. Fld Muni, ON (CYCE) Toronto Center App/Dep Con 135.30	H-10G, 11B, L-31D
Charlottetown, PE (CYYG) Moncton Center App/Dep Con 135.65 384.8 MF 118.0 (5 NM to 3200')	H-11E, L-32J
Chatham-Kent, ON (CNZ3) Cleveland Center App/Dep Con 132.25	H-10G, L-30G

FACILITY NAME	CHART & PANEL
Collingwood, ON (CNY3) Toronto Center App/Dep Con 124.02	H-11B, L-31D
Cornwall Rgnl, ON (CYCC) Boston Center App/Dep Con 135.25 377.1	L-32G
Cranbrook/Canadian Rockies Intl, BC (CYXC) Vancouver Center App/Dep Con 133.6 MF 122.3 (5 NM to 6100')	H-1C
Debert, NS (CCQ3) Halifax Trml App/Dep Con 119.2	H-11E, L-32J
Digby, NS (CYID) Moncton Center App/Dep Con 123.9	L-32J
Downsview, ON (CYZD) 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
Drummondville, QC (CSC3) Montreal Center App/Dep Con 132.35	L-32H
Earlton (Timiskaming Rgnl), ON (CYXR) MF 122.0 (5 NM to 3800') AWOS 128.6	H-11B
Elliot Lake Muni, ON (CYEL) Toronto Center App/Dep Con 135.4	L-31C
Fort Frances Muni, ON (CYAG) Minneapolis Center App/Dep Con 120.9	L-14H
Fredericton Intl, NB (CYFC) 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
Goderich, ON (CYGD) Toronto Center App/Dep 135.3 266.3	H-11B, L-31D
Greenwood, NS (CZVX) 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
Grimsby Air Park, ON (CNZ8) Toronto Trml App/Dep Con 128.27 268.75 Tower 125.0 308.475	L-31E
Halifax/Shearwater, NS (CYAW) 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
Halifax/Stanfield Intl, NS (CYHZ) 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
Hamilton, ON (CYHM) 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
Kingston, ON (CYGK) 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
Kitchener/Waterloo, ON (CYKF) 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
Lachute, QC (CSE4) Montreal Center App Con 124.65 132.85 268.3 Montreal Center Dep Con 132.85 268.3	L-32G
La Tuque, QC (CYLQ) Montreal Center App/Dep Con 134.5	H-11C
Langley, BC (CYNJ) 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
Leamington, ON (CLM2) Cleveland Center App/Dep Con 132.45	L-30F
Lethbridge, AB (CYQL) ATIS 124.4 (1300-0545Z‡) Edmonton Center App/Dep Con 132.75 265.2 MF 121.0 (5 NM to 6000')	H-1D
Lindsay, ON (CNF4) Toronto Center App/Dep 134.25	L-31E, L-32F
Liverpool/South Shore Rgnl, NS (CYAU) Moncton Center App/Dep Con 123.9	L-32J
London, ON (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
Manitowaning/Manitoulin East Muni, ON (CYEM) Toronto Center App/Dep 135.4 260.9	L-31C
Maniwaki, QC (CYMW) Montreal Center App/Dep Con 126.57	L-32G
Mascouche, QC (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
Medicine Hat, AB (CYXH) AWOS 124.875 (0345-1245Z‡) MF 122.2 (1245-0345Z‡ 5 NM to 5400')	H-1D
Midland/Huronina, ON (CYEE) Toronto Center App/Dep 124.025	L-31D
Miramichi, NB (CYCH) Moncton Center App/Dep Con 123.7	H-11E, L-32J
Moncton/Greater Moncton Intl, NB (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
Mont-Laurier, QC (CSD4) Montreal Center App/Dep Con 126.57	L-32G
Montreal Intl (Mirabel), QC (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
Montreal/Pierre Elliott Trudeau Intl, QC (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
Montreal/St-Hubert, QC (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
Muskoka, ON (CYQA) AWOS 124.575 MF 122.3 (5 NM to 3900')	H-11B, L-31D
Nanaimo, BC (CYCD) Victoria Trml App/Dep 120.8 133.95 252.3 MF 122.1 1330-0530Z‡ (5 NM to 2500')	H-1B, L-1E
North Bay, ON (CYYB) ATIS 124.9 (1130-0300Z‡) Toronto Center App/Dep 121.225 127.25 MF 118.3 (1130-0330Z‡ 7 NM to 5000')	L-31E
Oshawa, ON (CYOO) 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')	H-11B, L31D

FACILITY NAME	CHART & PANEL
Ottawa/Carp, ON (CYRP) ATIS 121.15 Ottawa Trml App/Dep Con 128.175 252.5	L-31E, 32F
Ottawa/Gatineau, QC (CYND) 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
Ottawa/MacDonald-Cartier Intl, ON (CYOW) ATIS 121.15 Ottawa App Con 135.15 Tower 118.8 120.1 341.3 Gnd Con 121.9 Cinc Del 119.4 Ottawa Dep Con 128.175	L-11C
Owen Sound/Billy Bishop Rgnl, ON (CYOS) Toronto Center App/Dep 132.575 290.6	L-31D
Pelee Island, ON (CYPT) Cleveland Center App/Dep Con 126.35 360.0	L-30F
Pembroke, ON (CYTA) Montreal Center App/Dep Con 135.2 Petawawa Advisory 126.4 250.1 (Mon-Fri 1300-2130Z†, OT PPR)	H-11C, L-31E, 32F
Penticton, BC (CYFF) Vancouver Center App/Dep Con 133.5 351.3 MF 118.5 (5 NM to 4100')	H-1B
Peterborough, ON (CYPQ) AWOS 126.925 Toronto Center App/Dep 134.25	H-11B, L-31E, 32F
Pincher Creek, AB (CZPC) Edmonton Center App/Dep Con 132.75 265.2	H-1D
Pitt Meadows, BC (CYPK) 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
Quebec/Jean Lesage Intl, QC (CYQB) 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
Riviere Du Loup, QC (CYRI) AWOS 122.025 (Pvt) Montreal Center App/Dep Con 125.1 299.6	H-11D
Rouyn Noranda, QC (CYUY) Montreal Center App/Dep Con 125.9 MF 122.2 (5 NM to 4000')	H-11B
Saint John, NB (CYSJ) Moncton Center App/Dep Con 124.3 135.5 270.8 MF 118.5 (5 NM to 3400')	H-11E, L-32J
Sarnia (Chris Hadfield), ON (CZYR) Toronto Center 134.375	H-10G, 11B, L-30F
Sault Ste Marie, ON (CYAM) 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
Sherbrooke, QC (CYAM) AWOS 126.25 Montreal Center App/Dep Con 132.55 MF 123.5 (Ltd hrs 5 NM to 3800')	H-11D, L-32H
South Renfrew Muni, ON (CNP3) Montreal Center App/Dep 124.275	L-31E, 32F
Southport, MB (CYPG) 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

FACILITY NAME	CHART & PANEL
Springwater Barrie Airport, ON (CNA3) Toronto Center App/Dep Con 124.025	L-31D
St. Catharines/Niagara District, ON (CYSN) 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
St. Frederic, QC (CSZ4) Montreal Center App/Dep Con 135.025 270.9	L-32H
St. Georges, QC (CYSG) Montreal Center App/Dep Con 132.35 MF 122.15 (5 NM 3900' ASL)	H-32H, L-11D
St. Jean, QC (CYJN) 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
Sudbury, ON (CYSB) ATIS 127.4 Toronto Center App/Dep Con 135.5 MF 125.5 (7 NM to 4000')	H-31B, 10G, L-31D
Summerside, PE (CYSU) AWOS 122.55 (Pvt) Moncton Center App/Dep Con 124.4 384.8	H-11E, L-32J
Thunder Bay, ON (CYQT) 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
Timmins/Victor M. Power, ON (CYTS) ATIS 124.95 (1000-0500Z) Toronto Center App/Dep Con 128.3 MF 122.3 (5 NM to 4000')	H-11B
Toronto/Butterville Muni, ON (CYKZ) 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
Toronto/Billy Bishop Toronto City Airport, ON (CYTZ) 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
Toronto/Lester B Pearson Intl, ON (CYYZ) 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 Cinc Del 121.3 (1200-0400Z)	H-11B, L-31D
Trenton, ON (CYTR) ATIS 135.45 257.7 App/Dep Con 128.4 324.3 Tower 128.7 236.6 Gnd Con 121.9 275.8 Cinc Del 124.35 286.4	H-11C, L-31E, 32F
Trenton/Mountain View, ON (CPZ3) Trenton Mil Advisory 268.0	H-11C, L-31E, 32F
Trois-Rivieres, QC (CYRQ) Montreal Center App/Dep Con 128.225 229.2 MF 123.0 (5 NM to 3200')	H-11C, L-32H
Val-d'Or, QC (CYVO) Montreal Center App/Dep Con 125.9 308.3 MF 118.5 (1030-0325Z± 5 NM to 4000')	H-11B
Vancouver Intl, BC (CYVR) 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

FACILITY NAME	CHART & PANEL
Victoria Intl, BC (CYYJ) 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
Victoriaville, QC (CSR3) Montreal Center App Con 132.35	L-32H
Waterville/Kings Co Muni, NS (CCW3) Greenwood Trml App/Dep Con 120.6 335.9 Greenwood Tower 119.5 324.3	L-32J
Warton, ON (CYVW) Toronto Center App/Dep Con 132.575 MF 122.2 (5 NM to 3700')	H-11B, L-31D
Windsor, ON (CYQG) 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
Yarmouth, NS (CYQI) 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
Abraham Gonzalez Intl (MMCS) Juarez App Con 119.9 Juarez Tower 118.9	H-4K, L-6F
Del Norte Intl (MMAN) ATIS 127.55 (1300-0300Z‡) Monterrey App 119.75 120.4 Tower 118.6	H-7B, L-20G
Durango Intl (MMDO) ATIS 132.1 Tower 118.1 Durango Info 122.3	H-7A
General Abelardo L Rodriguez Intl (MMTJ) 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
General Lucio Blanco Intl (MMRX) Reynosa App Con 118.8 Reynosa Tower 118.8	H-7B, L-20H
General Mariano Escobedo Intl (MMMY) ATIS 127.7 Monterrey App Con 119.75 120.4 Monterrey Tower 118.1 Gnd Con 121.9	H-7B, L-20G
General R Fierro Villalobos Intl (MMCU) ATIS 127.9 Chihuahua App Con 121.0 Chihuahua Tower 118.4	L-6I
General Rodolfo Sanchez Taboada Intl (MMML) ATIS 127.6 Mexicali App Con 118.2 Mexicali Tower 118.2 Mexicali Info 123.9 122.3	H-4H, L-4J, 5A
General Servando Canales (MMMA) Matamoros App Con 118.0 Matamoros Tower 118.0	H-7C, L-21A
Plan De Guadalupe Intl (MMIO) Saltillo App Con 127.4 Saltillo Tower 118.4	H-7B
Quetzalcoatl Intl (MMNL) Nuevo Laredo App Con 118.3 Nuevo Laredo Tower 118.3	H-7B, L-20G
Torreon Intl (MMTC) 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

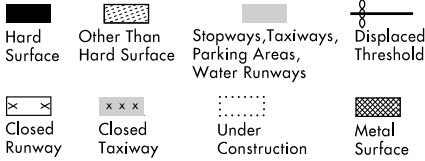
- * Indicates a non-continuously operating facility, see the individual airport in the front portion of the A/FD.
- # Indicates control tower temporarily closed UFN.

10042
LEGEND

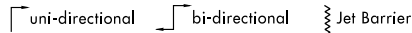
INSTRUMENT APPROACH PROCEDURES (CHARTS)

AIRPORT DIAGRAM/AIRPORT SKETCH

Runways

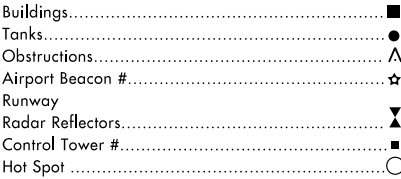


ARRESTING GEAR: Specific arresting gear systems; e.g., BAK12, MA-1A etc., shown on airport diagrams, not applicable to Civil Pilots. Military Pilots refer to appropriate DOD publications.



ARRESTING SYSTEM

REFERENCE FEATURES



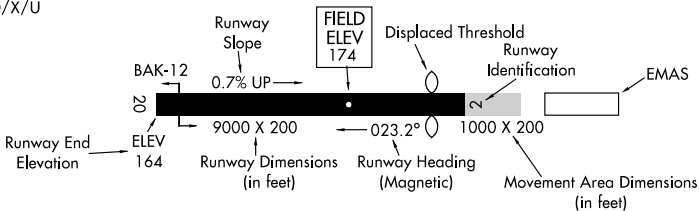
When Control Tower and Rotating Beacon are co-located, Beacon symbol will be used and further identified as TWR.

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



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.

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)

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 "HOT¹", "HOT²", 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
ILLINOIS		
ALTON/ST. LOUIS ST. LOUIS RGNL (ALN)	HOT ¹	Twy C and Rwy 11, rwy in close proximity of ramp. Be prepared to hold short of the rwy entering the Twy C.
	HOT ²	Twy A and Rwy 17-35, rwy in close proximity of ramp. Be prepared to hold short of the rwy entering the Twy A.
CHICAGO CHICAGO-O'HARE INTL (ORD)	HOT ¹	Taxiing tfc on Twy R cannot stop on Twy R between Rwy 09R-27L and Rwy 04L-22R.
	HOT ²	Rwy 27L arrivals prohibited from turning onto Rwy 04L-22R without ATC clearance.
	HOT ³	Acft northeast bound on Twy B turning right onto Twy H use caution - close proximity to Rwy 09R-27L.
	HOT ⁴	Ldg Rwy 22R tfc must receive clearance to cross Rwy 09R-27L on Twy A1.
	HOT ⁵	Rwy 14L arrivals exiting Twy U5 use caution - close proximity to Rwy 09R-27L.
	HOT ⁶	Acft northwest bound on Twy U turning left onto Twy H use caution - close proximity to Rwy 09R-27L.
	HOT ⁷	Acft turning left onto Twy K from Twy T10 use caution to avoid inadvertent turn onto Twy M.
	HOT ⁸	Twy S5 - north bound tfc only exiting Rwy 04R.
	HOT ⁹	Tfc inbound to the terminals from Twy G and Twy E can expect a right turn on Twy Z to avoid active rwys.
	HOT ¹⁰	Ldg Rwy 27R first avbl turn off is Twy C1 6500' for Rwy 27R thld.
MOLINE QUAD CITY INTL (MLI)	HOT ¹	When holding short of Rwy 23 on Twy B2, be aware that it is a very short twy and the hold lines are very close to the ramp. On Twy A, you may be asked to hold short of the approach for Rwy 23.
	HOT ²	Wrong Rwy Departure Risk. Intersection of three rwys. Be aware of hold short markings and signs. After entering the intersection, each rwy is identified by rwy location signs.
	HOT ³	The holding position for Rwy 31 on Twy K is in an unusual location. Watch for holding position markings and signs as you apch.
	HOT ⁴	The centerlines of Twy F and Twy H diverge on a gradual curve when proceeding east to west on the north ramp. Watch for the surface painted markings where the centerlines of Twy F and Twy H diverge to ensure the proper route is followed.
	HOT ⁵	It is a short distance from the south tee parking area to the Rwy 05 hold lines on Twy K. Pilots are reminded they will be at the hold lines within seconds after beginning to taxi.

INDIANA

EVANSVILLE
EVANSVILLE RGNL (EVV)

HOT¹

Pilots taxiing to Rwy 09 enter the rwy mid-field. Do not taxi to the "numbers" without ATC clearance. Rwy 09-27 is a short distance from the General Aviation Ramp-use appropriate vigilance.

HOT²

Pilots cleared to taxi to Rwy 27 sometimes enter Rwy 27 without a clearance.

HOT³

Rwy 18-36 in close proximity to General Aviation Ramp-use appropriate vigilance.

HOT⁴

Rwy 18-36 in close proximity to General Aviation Ramp-use appropriate vigilance.

MICHIGAN

DETROIT
DETROIT
METROPOLITAN
WAYNE CO (DTW)

HOT¹

Intersection of Rwy 09L-27R and Rwy 04R-22L. When taxiing on Rwy 09L-27R, be prepared to hold at the holding position markings on the rwy.

HOT²

Intersection of Rwy 09L-27R and Rwy 03L-21R. When taxiing on Rwy 09L-27R, be prepared to hold at the holding position markings on the rwy.

HOT³

Twy F and Rwy 03L-21R - pilots taxiing on Twy F sometimes enter Rwy 03L-21R without a clearance.

JACKSON
JACKSON CO-REYNOLDS FLD (JXN)

HOT¹

Caution confusing signage.

HOT²

No signage.

WISCONSIN

JANESVILLE
SOUTHERN WISCONSIN RGNL (JVL)

HOT¹

Rwy 32 and Rwy 26 approach ends are closely aligned and may be confused when lining up for departure.

MILWAUKEE
GENERAL MITCHELL INTL (MKE)

HOT¹

Pilots taxiing northbound on Twy E for an intersection departure on Rwy 19R at Twy V can end up entering Rwy 07L-25R if they miss the right turn for Twy V. To avoid a runway incursion, pilots on Twy E should use extreme caution approaching Rwy 07L-25R.

HOT²

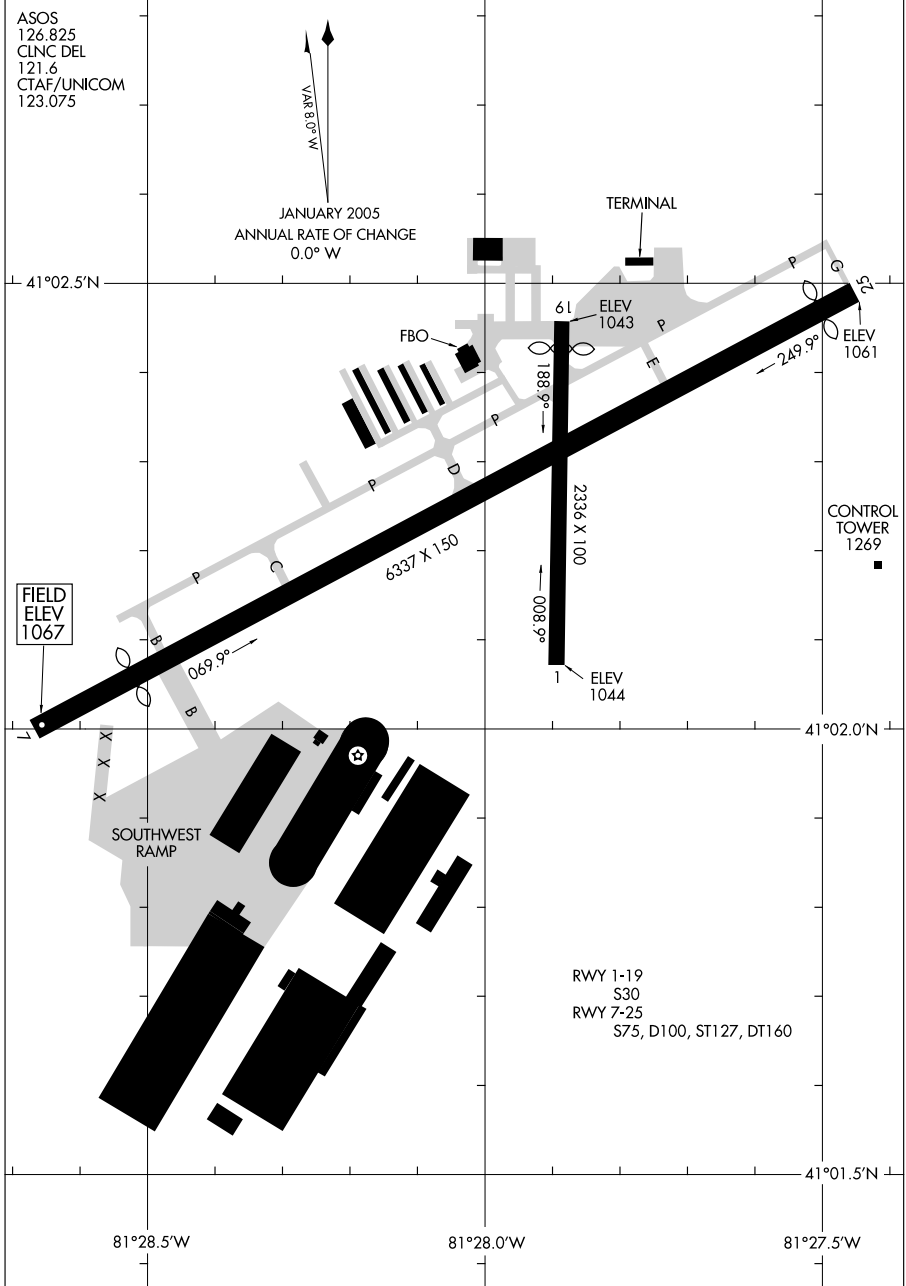
Use caution in the area of Twy M and Rwy 01L-19R. Pavement widens out as the taxiway approaches the runway and may cause confusion.

09071

AIRPORT DIAGRAM

AL-6 (FAA)

AKRON FULTON INTL (AKR)
AKRON, OHIO



AIRPORT DIAGRAM

09071

AKRON, OHIO
AKRON FULTON INTL (AKR)

10098

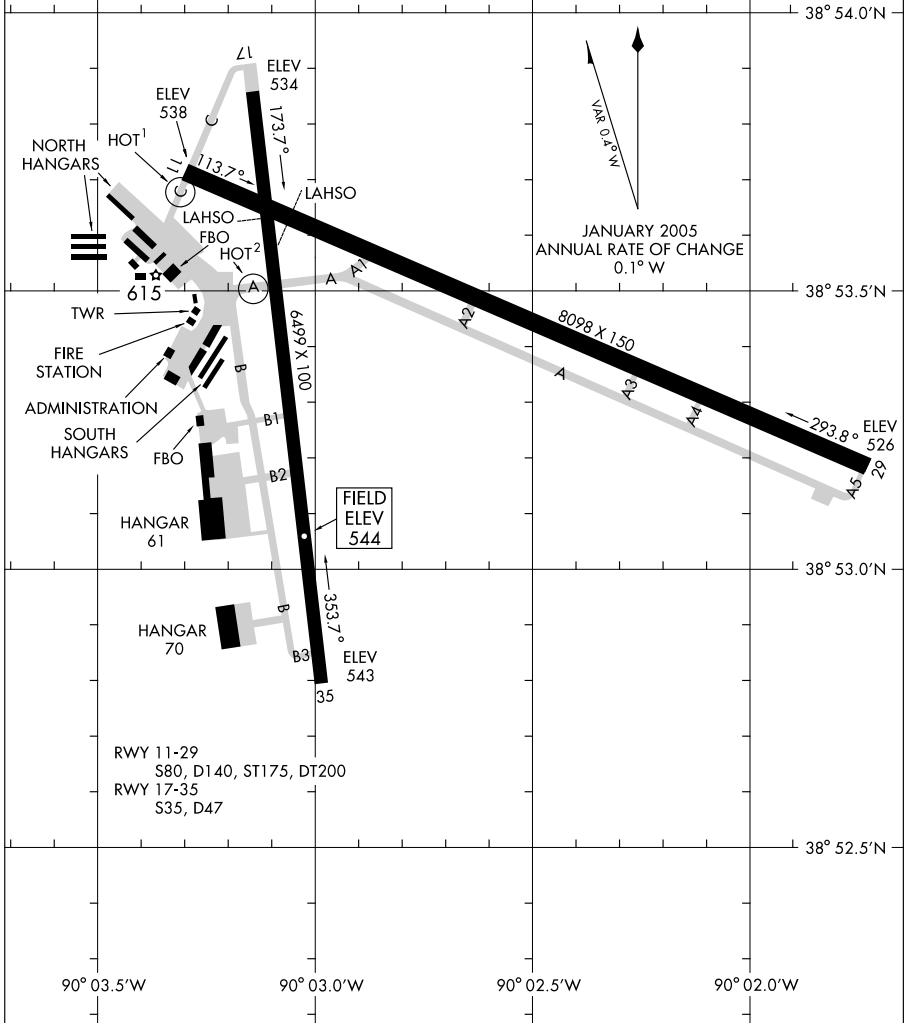
AIRPORT DIAGRAM

AL-5178 (FAA)

ALTON/ST. LOUIS RGNL (ALN)
ALTON/ST. LOUIS, ILLINOIS

ATIS
 128.0
 REGIONAL TOWER ★
 126.0 239.0
 GND CON
 120.2
 CLNC DEL
 120.2

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.



AIRPORT DIAGRAM

10098

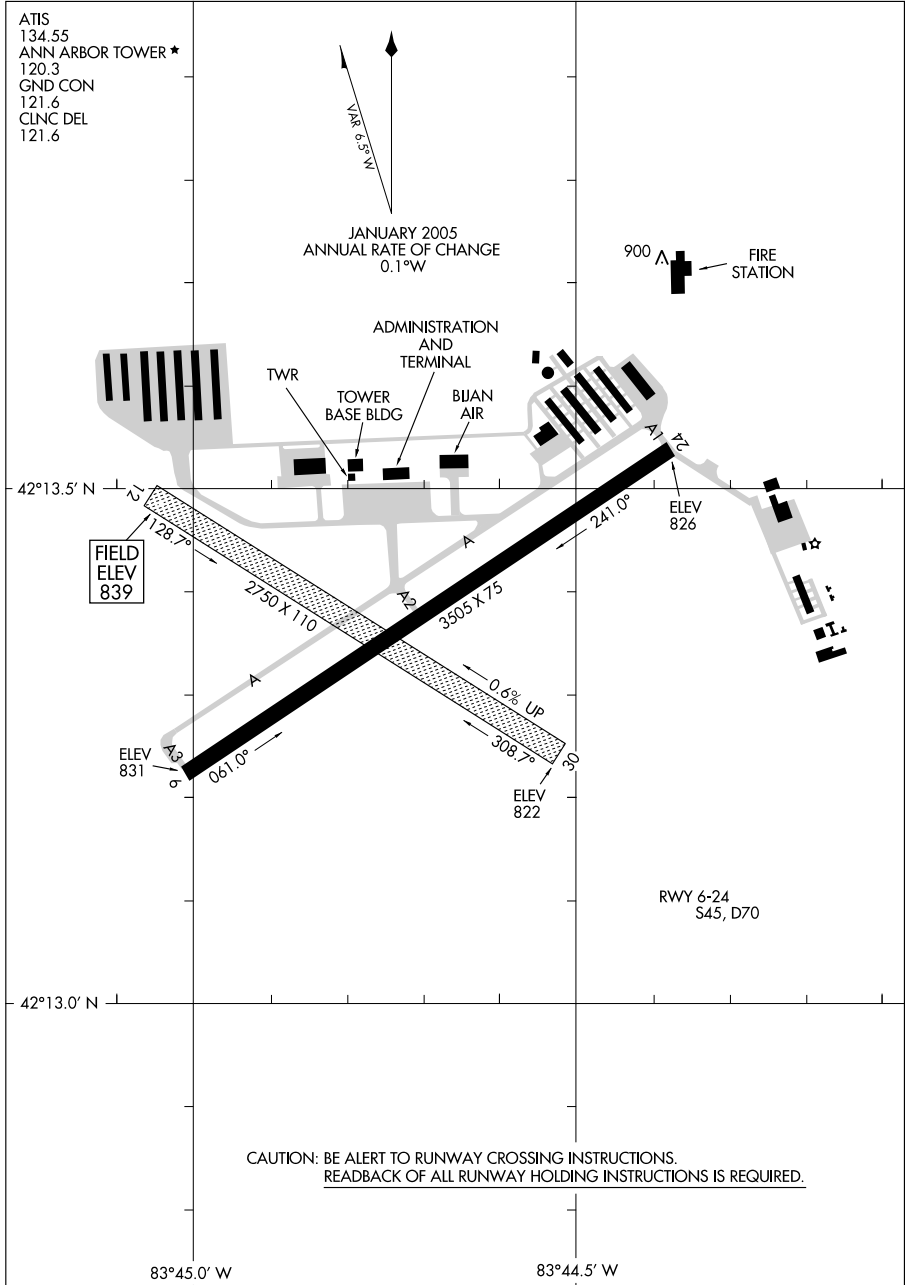
ALTON/ST. LOUIS, ILLINOIS
ALTON/ST. LOUIS RGNL (ALN)

10098

AIRPORT DIAGRAM

ANN ARBOR MUNI (ARB)
ANN ARBOR, MICHIGAN

AL-5506 (FAA)



AIRPORT DIAGRAM

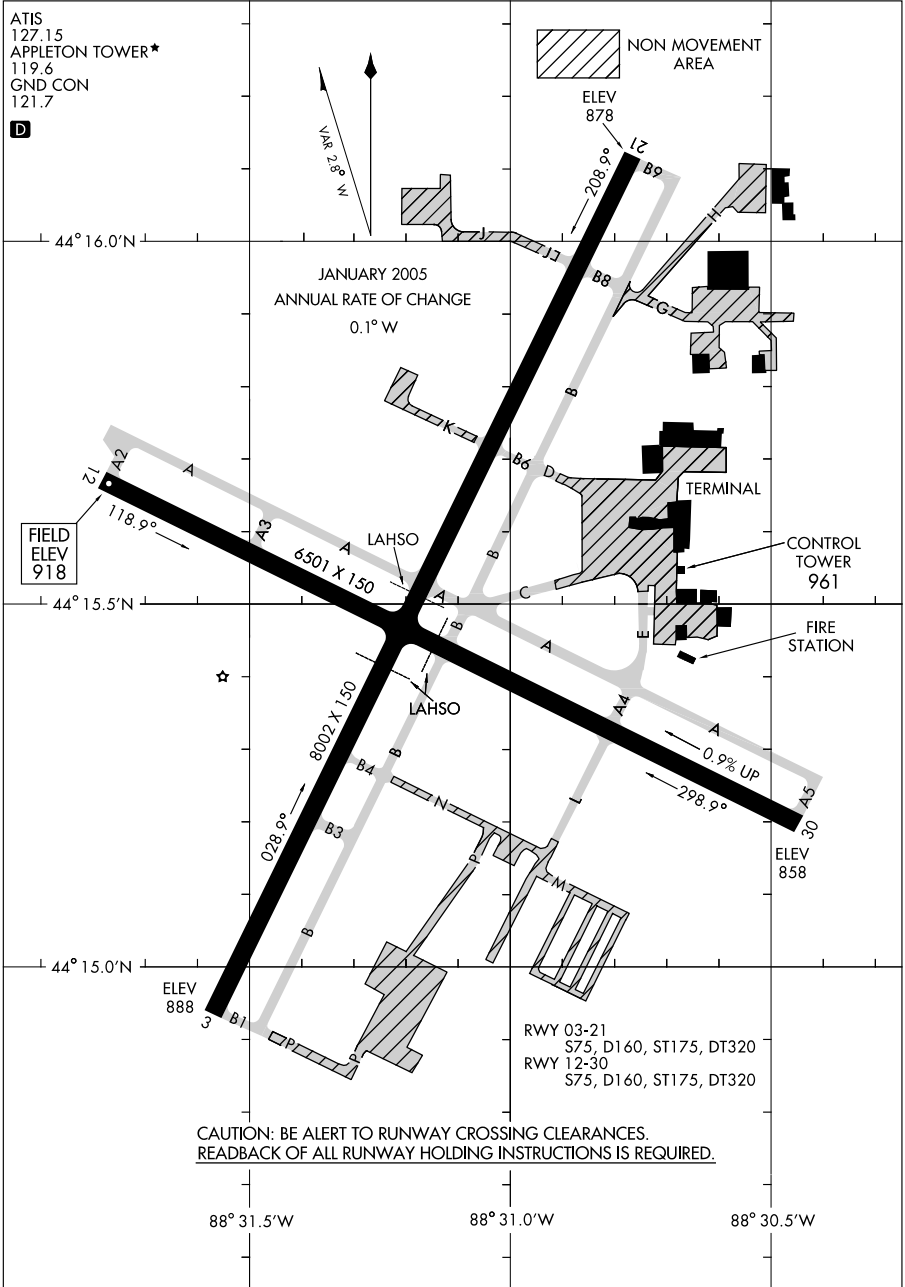
10098

ANN ARBOR, MICHIGAN
ANN ARBOR MUNI (ARB)

10042

AIRPORT DIAGRAM

APPLETON/OUTAGAMIE COUNTY RGNL (ATW)
AL-5216 (FAA) APPLETON, WISCONSIN



AIRPORT DIAGRAM

APPLETON, WISCONSIN
APPLETON/OUTAGAMIE COUNTY RGNL (ATW)

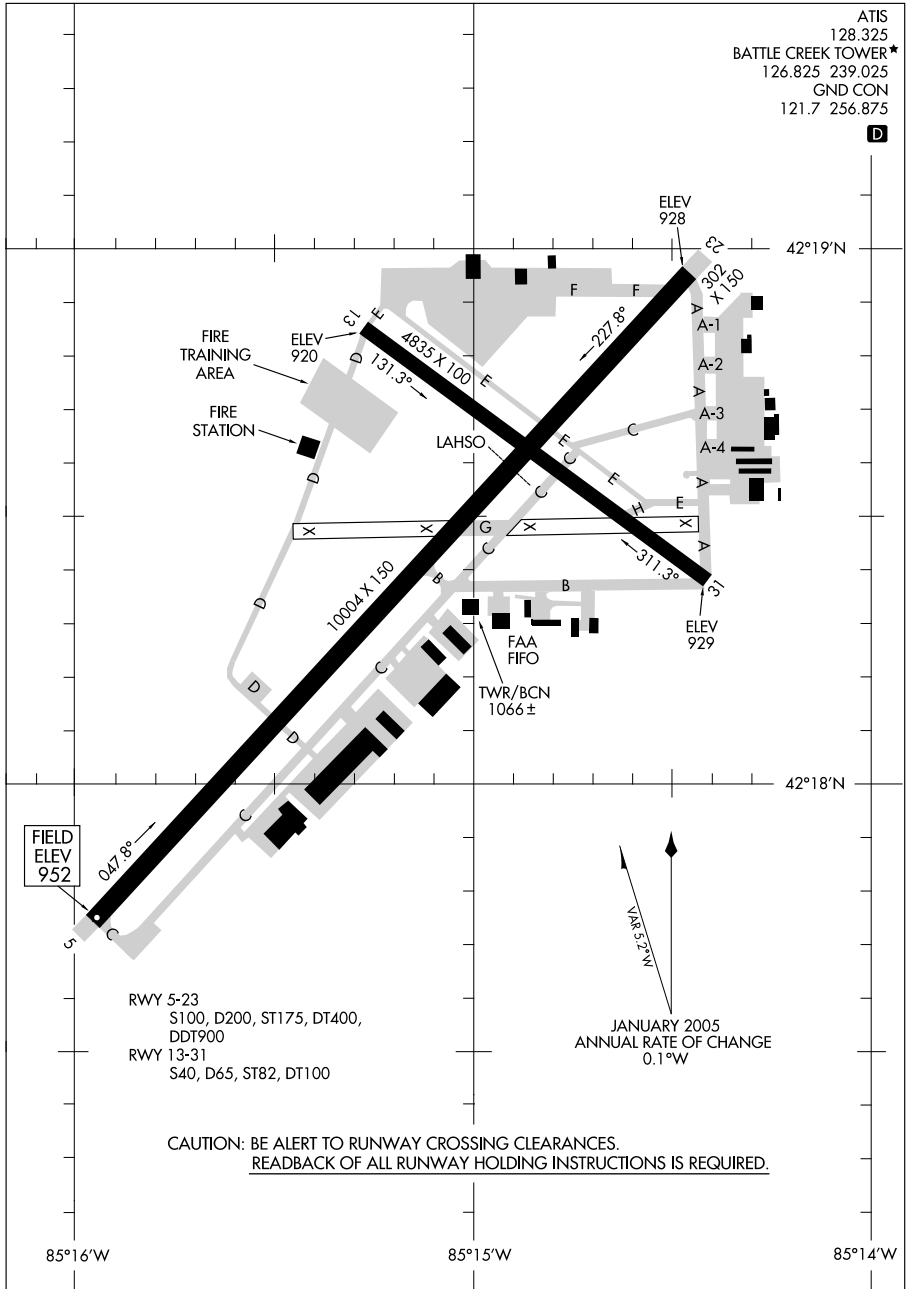
10042

10042

AIRPORT DIAGRAM

BATTLE CREEK/W.K. KELLOGG (BTL)
BATTLE CREEK, MICHIGAN

AL-41 (FAA)



ATIS 128.325
 BATTLE CREEK TOWER* 126.825 239.025
 GND CON 121.7 256.875

D

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

AIRPORT DIAGRAM

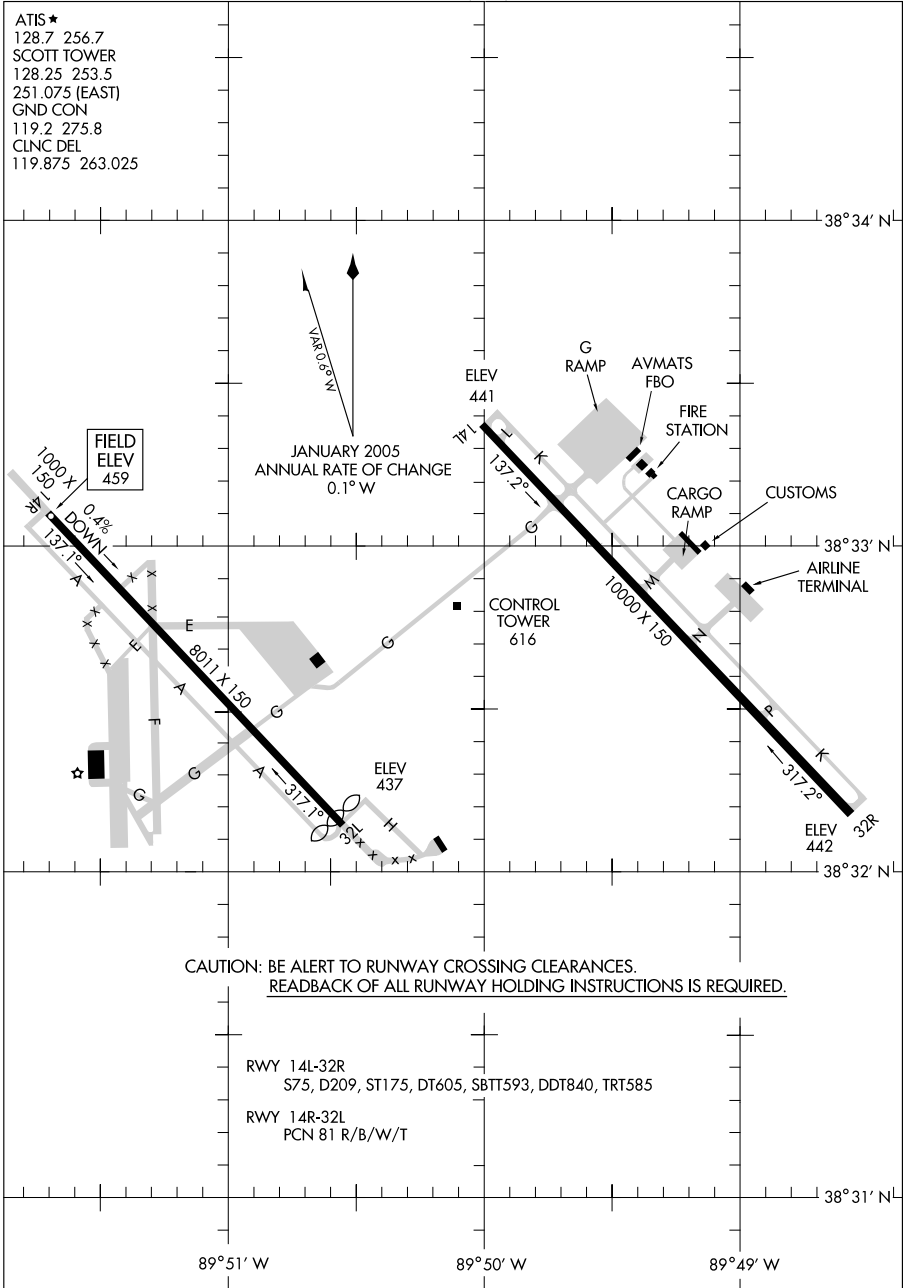
10042

BATTLE CREEK, MICHIGAN
BATTLE CREEK/W.K. KELLOGG (BTL)

09239

AIRPORT DIAGRAM

BELLEVILLE/SCOTT AFB/MIDAMERICA (B.L.V)
AL-46 (FAA)
BELLEVILLE, ILLINOIS



AIRPORT DIAGRAM

09239

BELLEVILLE, ILLINOIS
BELLEVILLE/SCOTT AFB/MIDAMERICA (B.L.V)

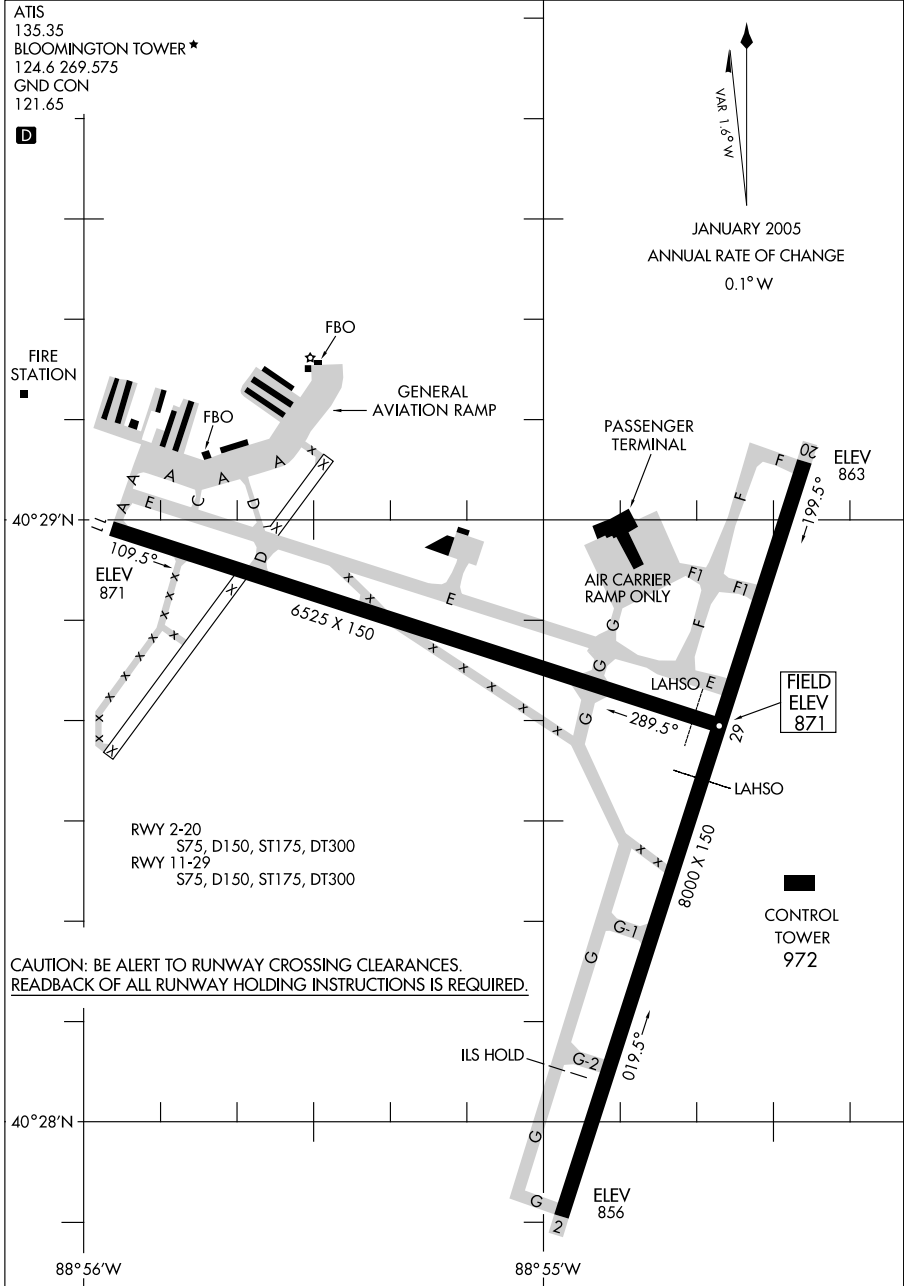
09295

BLOOMINGTON/CENTRAL IL RGNL ARPT AT BLOOMINGTON-NORMAL(B.M.I)

AIRPORT DIAGRAM

AL-5058 (FAA)

BLOOMINGTON, ILLINOIS



AIRPORT DIAGRAM

BLOOMINGTON, ILLINOIS

09295

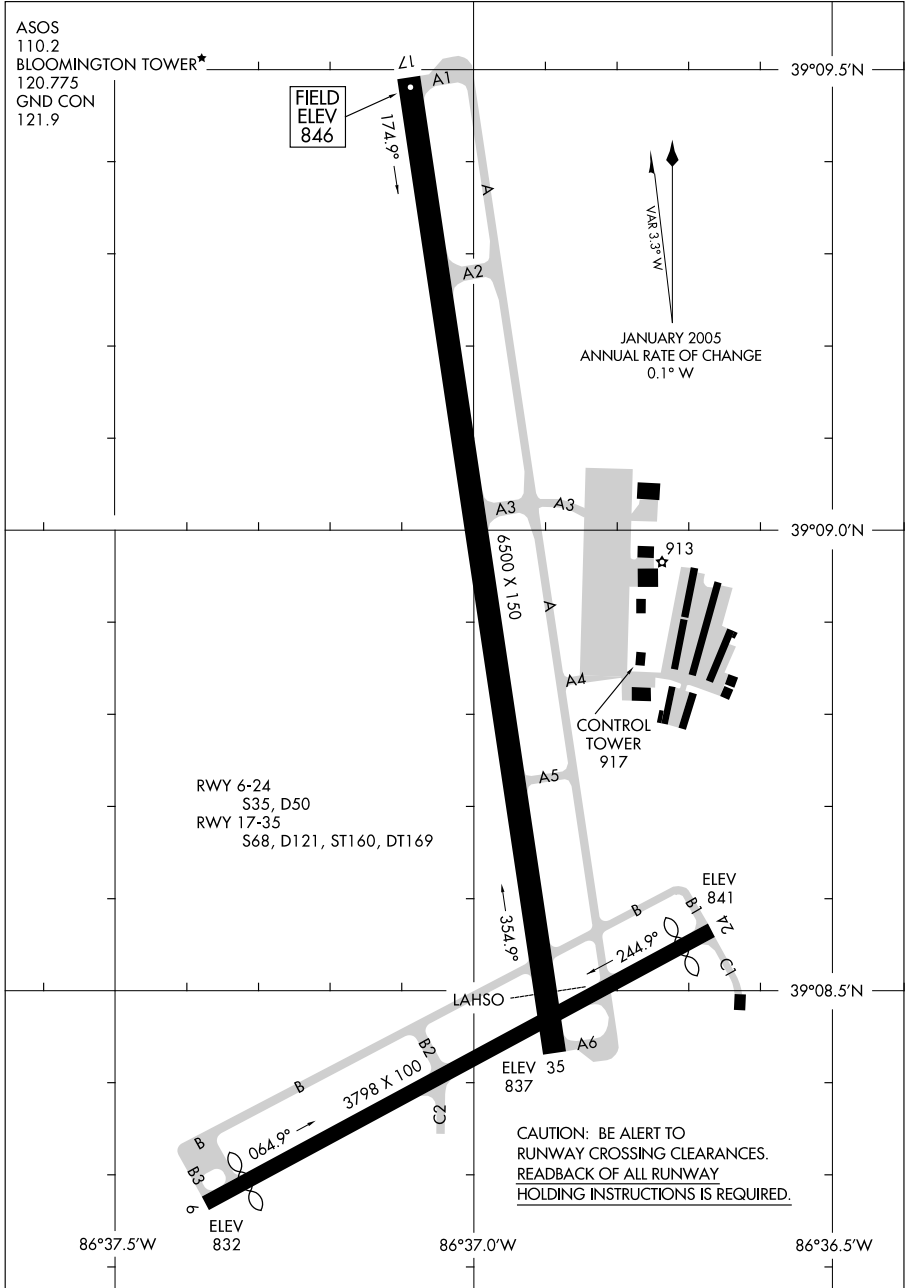
BLOOMINGTON/CENTRAL IL RGNL ARPT AT BLOOMINGTON-NORMAL(B.M.I)

09295

AIRPORT DIAGRAM

AL-5168 (FAA)

BLOOMINGTON / MONROE COUNTY (BMG)
BLOOMINGTON, INDIANA



AIRPORT DIAGRAM

09295

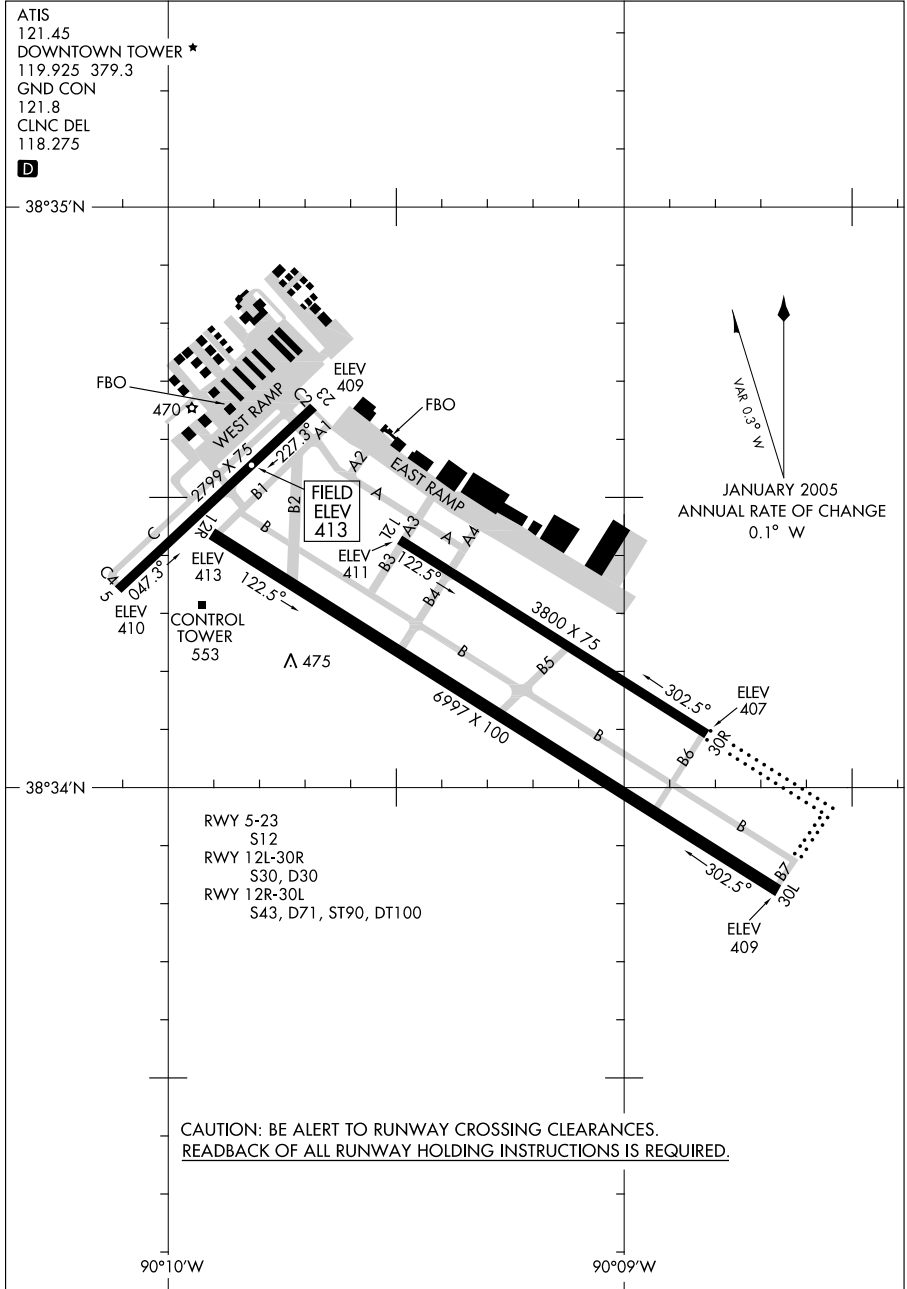
BLOOMINGTON, INDIANA
BLOOMINGTON / MONROE COUNTY (BMG)

09351

AIRPORT DIAGRAM

CAHOKIA/ ST. LOUIS DOWNTOWN (CPS)
CAHOKIA/ST. LOUIS, ILLINOIS

AL-5316 (FAA)



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

AIRPORT DIAGRAM

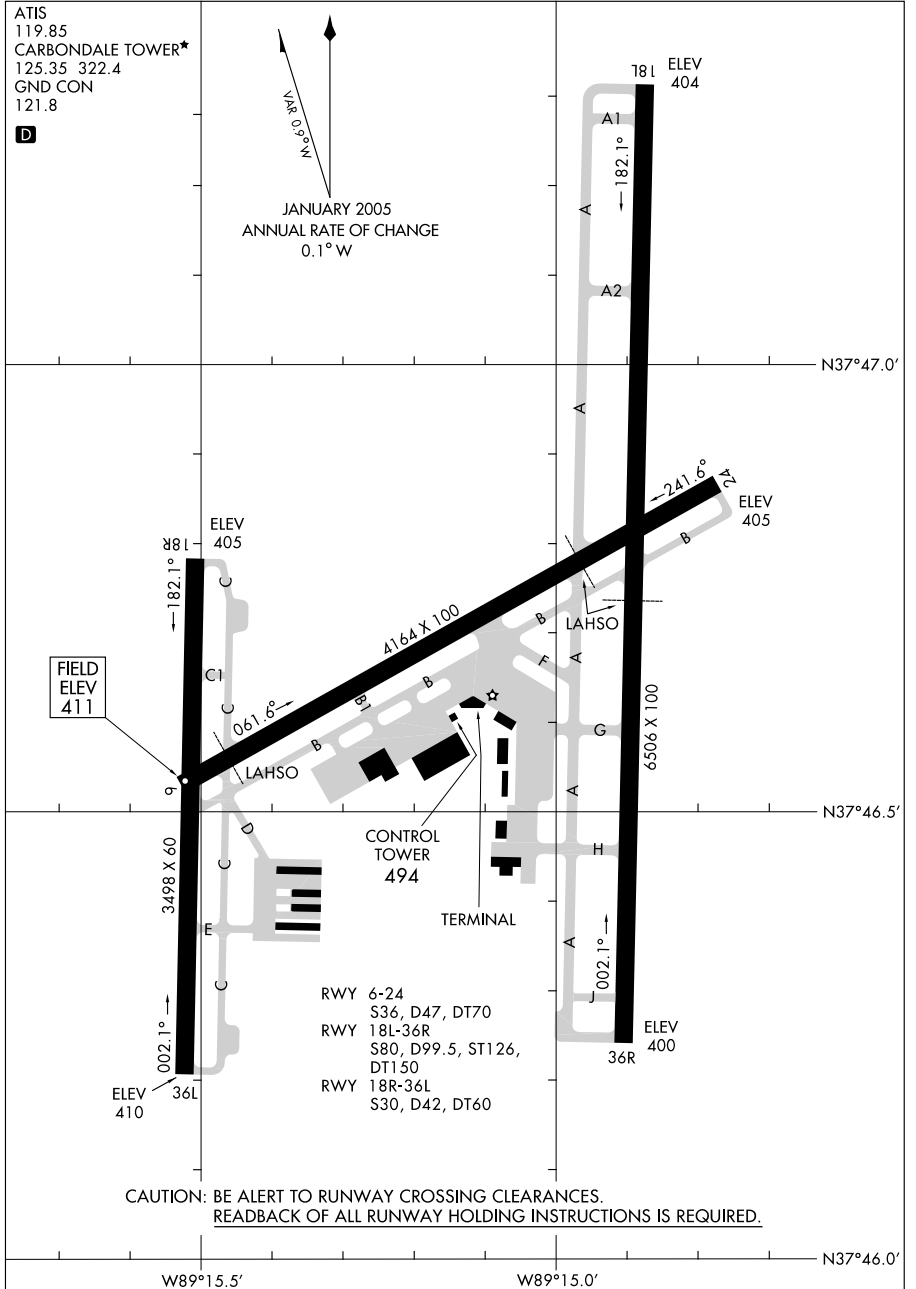
09351

CAHOKIA/ST. LOUIS, ILLINOIS
CAHOKIA/ST. LOUIS DOWNTOWN (CPS)

09295

AIRPORT DIAGRAM

CARBONDALE-MURPHYSBORO/ SOUTHERN ILLINOIS (MDH)
AL-5091 (FAA)
CARBONDALE-MURPHYSBORO, ILLINOIS



AIRPORT DIAGRAM

09295

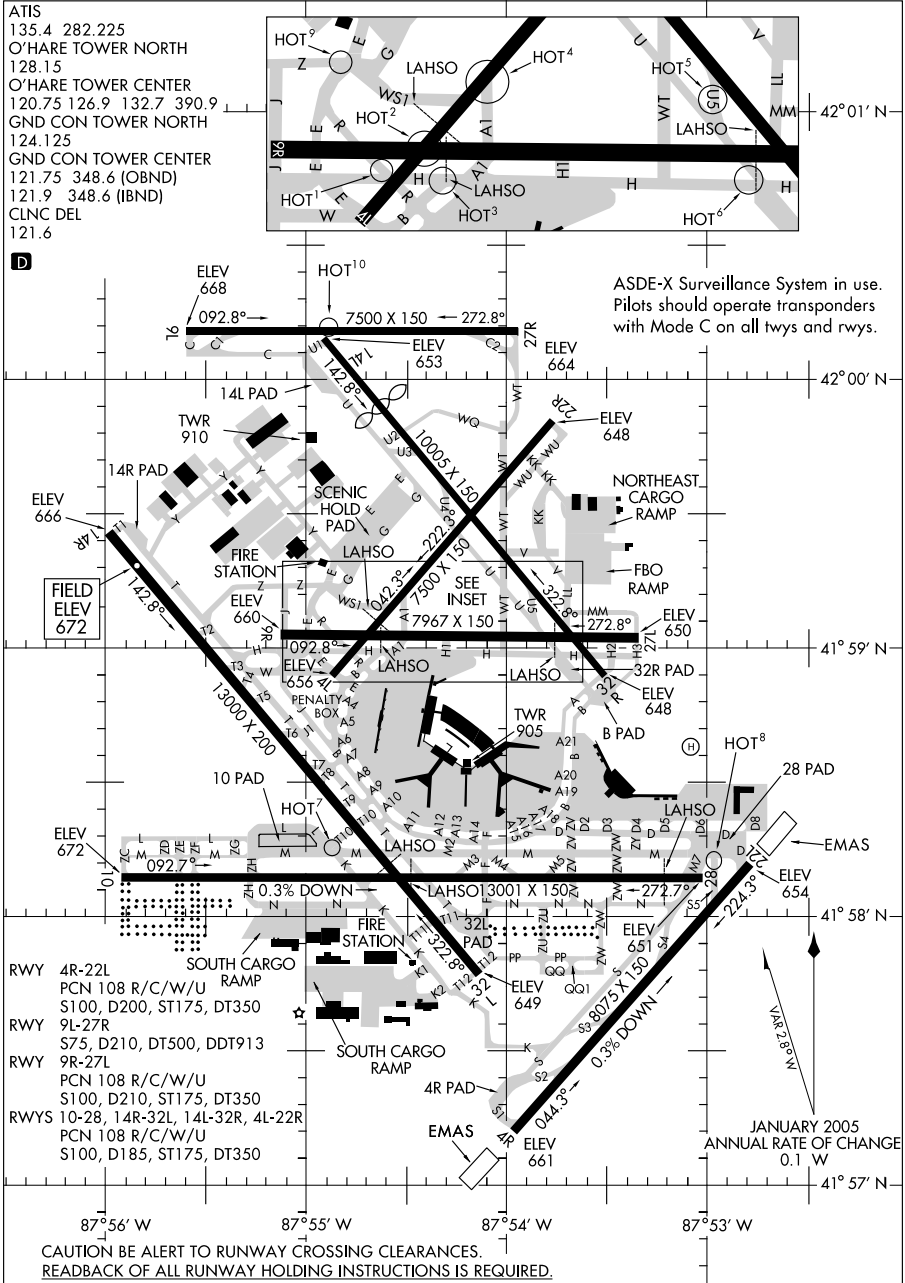
CARBONDALE-MURPHYSBORO, ILLINOIS
CARBONDALE-MURPHYSBORO/ SOUTHERN ILLINOIS (MDH)

10098

AIRPORT DIAGRAM

AL-166 (FAA)

CHICAGO-O'HARE INTL (ORD)
CHICAGO, ILLINOIS



AIRPORT DIAGRAM

10098

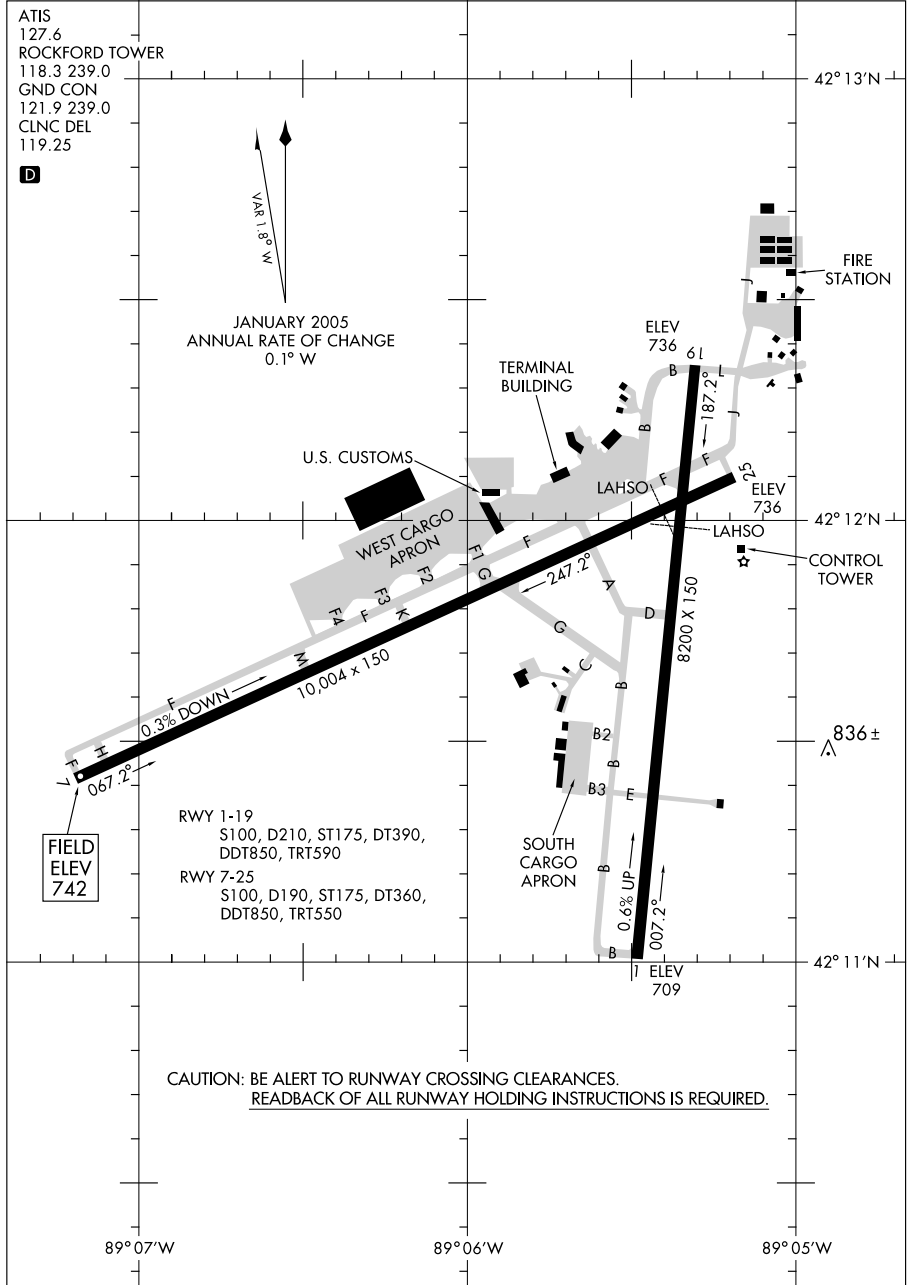
CHICAGO, ILLINOIS
CHICAGO-O'HARE INTL (ORD)

09015

AIRPORT DIAGRAM

AL-954 (FAA)

CHICAGO/ROCKFORD INTL (R.F'D)
CHICAGO/ROCKFORD, ILLINOIS



AIRPORT DIAGRAM

09015

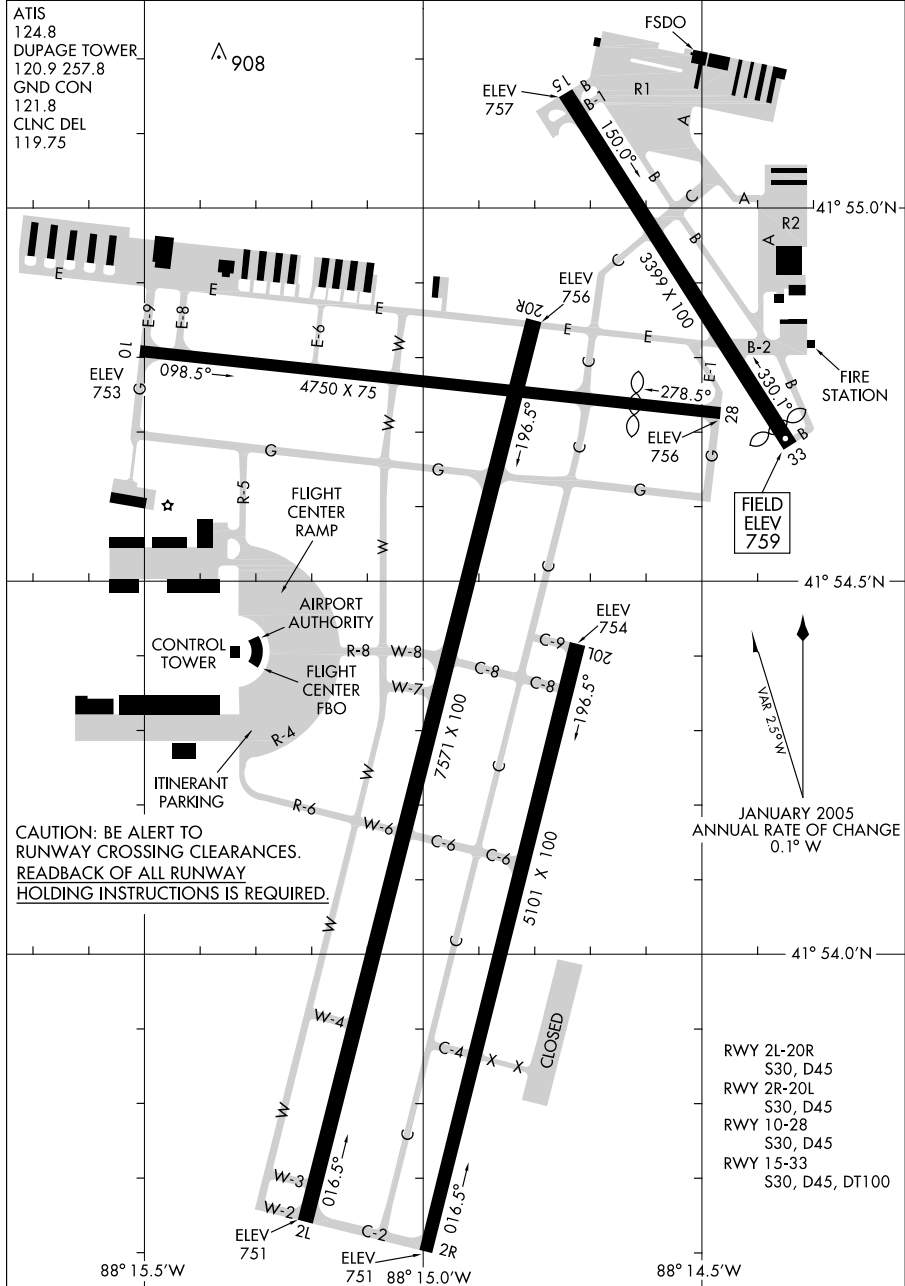
CHICAGO/ROCKFORD, ILLINOIS
CHICAGO/ROCKFORD INTL (R.F'D)

09015

AIRPORT DIAGRAM

AL-5104 (FAA)

CHICAGO/DU PAGE (DPA)
CHICAGO (WEST CHICAGO), ILLINOIS



AIRPORT DIAGRAM

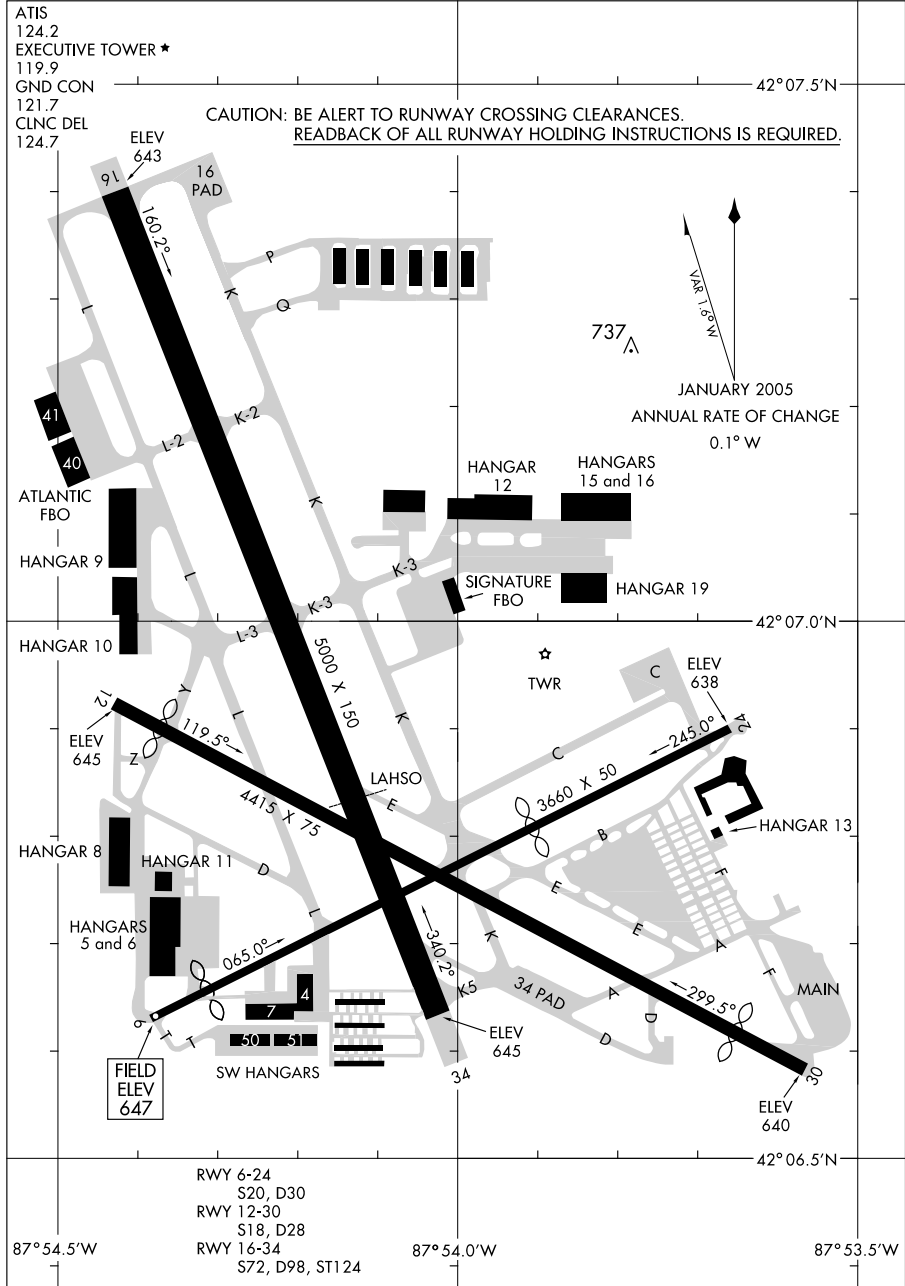
09015

CHICAGO (WEST CHICAGO), ILLINOIS
CHICAGO/DU PAGE (DPA)

10042

AIRPORT DIAGRAM

AL-5028 (FAA) CHICAGO/PROSPECT HEIGHTS/WHEELING, ILLINOIS
CHICAGO EXECUTIVE (PWK)



AIRPORT DIAGRAM

CHICAGO/PROSPECT HEIGHTS/WHEELING, ILLINOIS
CHICAGO EXECUTIVE (PWK)

10042

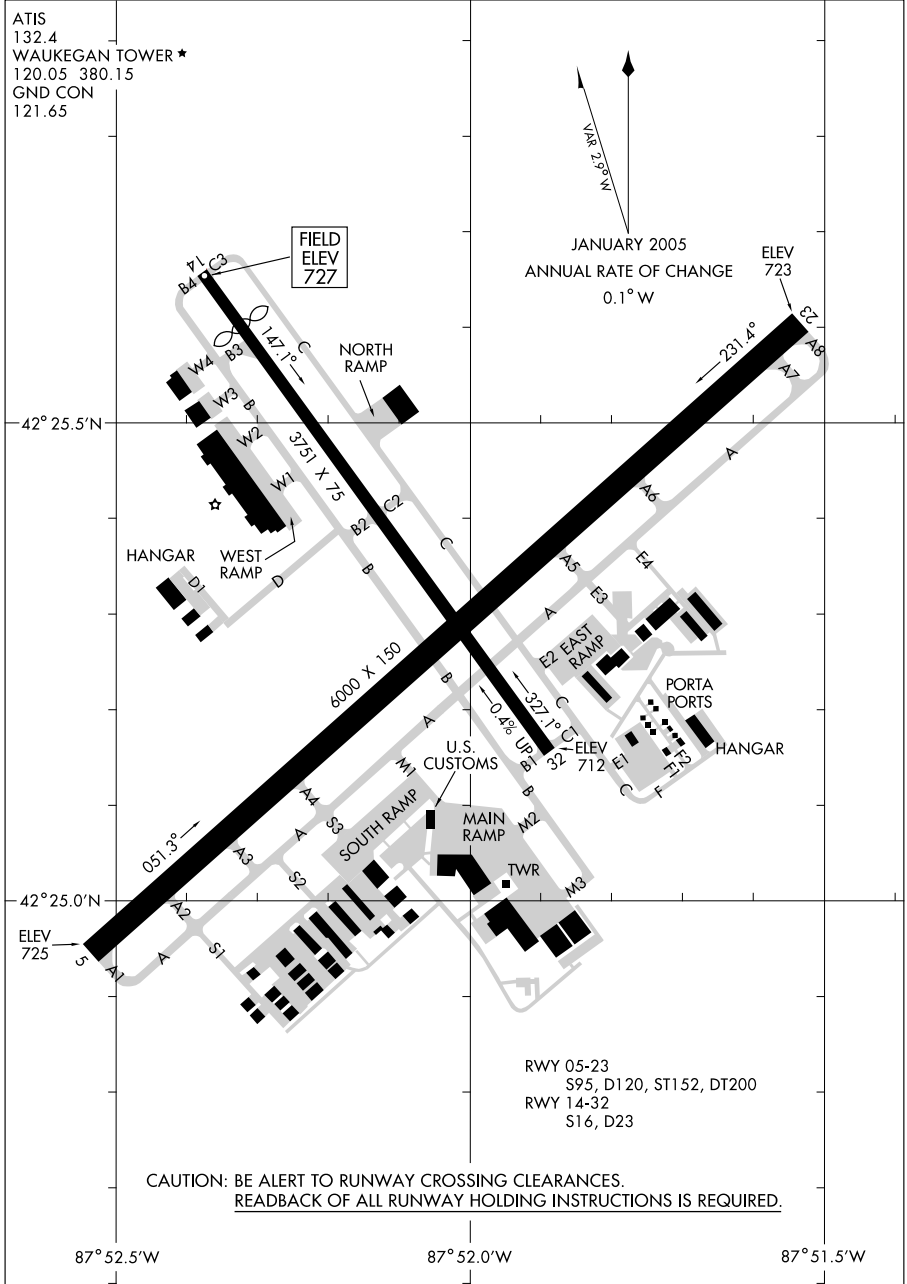
09351

AIRPORT DIAGRAM

AL-5324 (FAA)

CHICAGO/WAUKEGAN RGNL (UGN)

CHICAGO/WAUKEGAN, ILLINOIS



AIRPORT DIAGRAM

09351

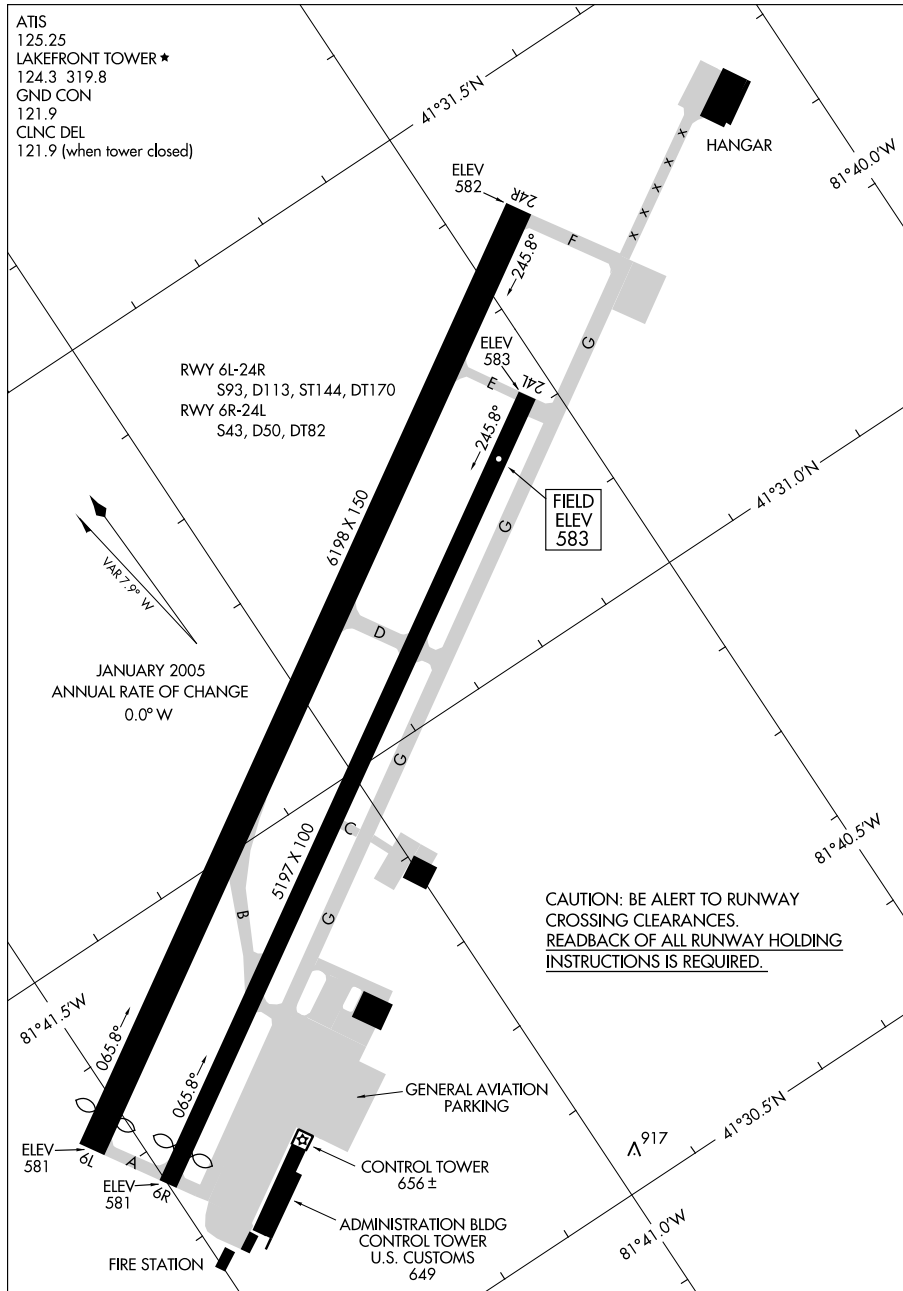
CHICAGO/WAUKEGAN, ILLINOIS
CHICAGO/WAUKEGAN RGNL (UGN)

09015

AIRPORT DIAGRAM

AL-5370 (FAA)

CLEVELAND/ BURKE LAKEFRONT (BKL)
CLEVELAND, OHIO



AIRPORT DIAGRAM

09015

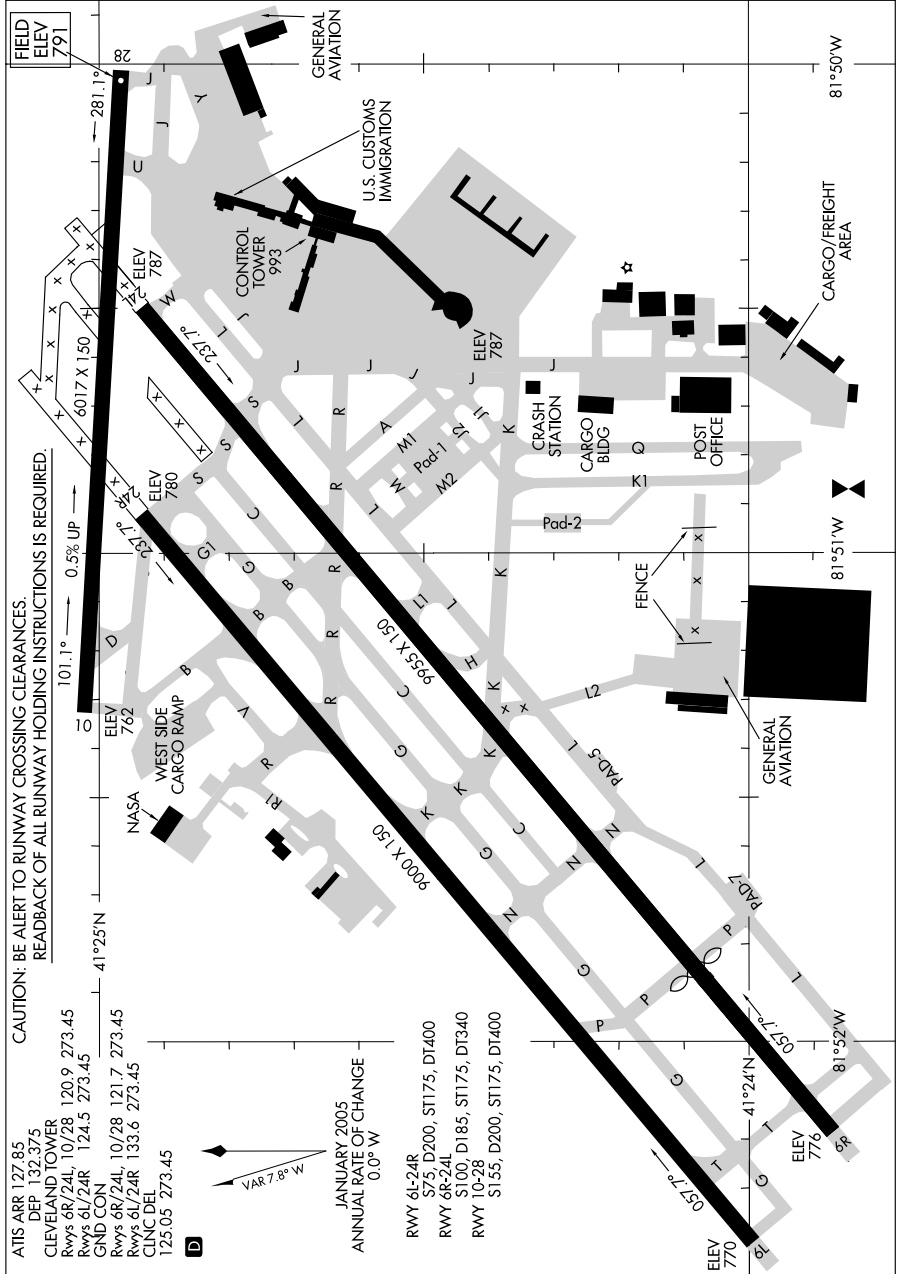
CLEVELAND, OHIO
CLEVELAND/ BURKE LAKEFRONT (BKL)

09183

AIRPORT DIAGRAM

AL-84 (FAA)

CLEVELAND-HOPKINS INTL (CLE)
CLEVELAND, OHIO



AIRPORT DIAGRAM

09183

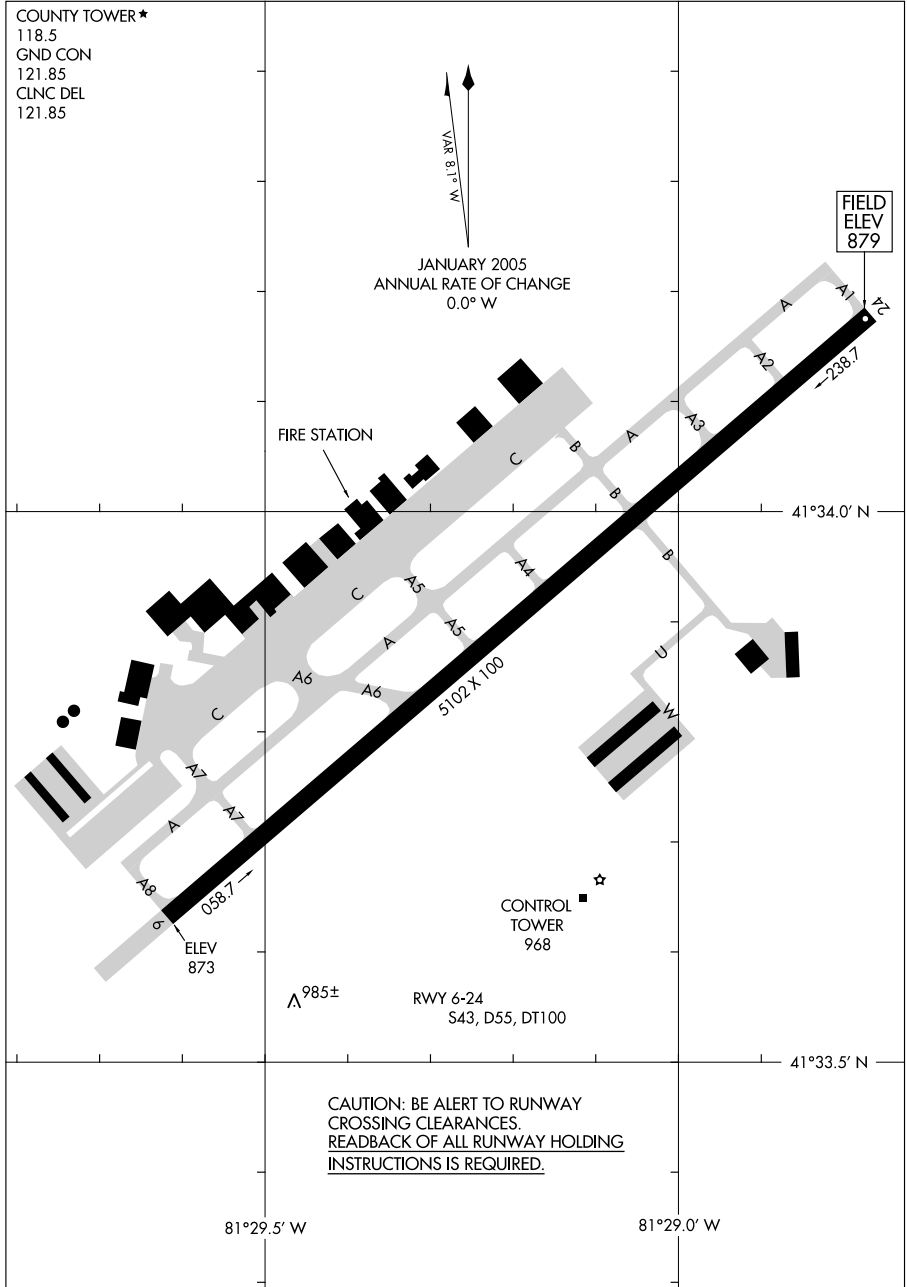
CLEVELAND, OHIO
CLEVELAND-HOPKINS INTL (CLE)

08269

AIRPORT DIAGRAM

AL-5027 (FAA)

CLEVELAND / CUYAHOGA COUNTY (CGF)
CLEVELAND, OHIO



AIRPORT DIAGRAM

08269

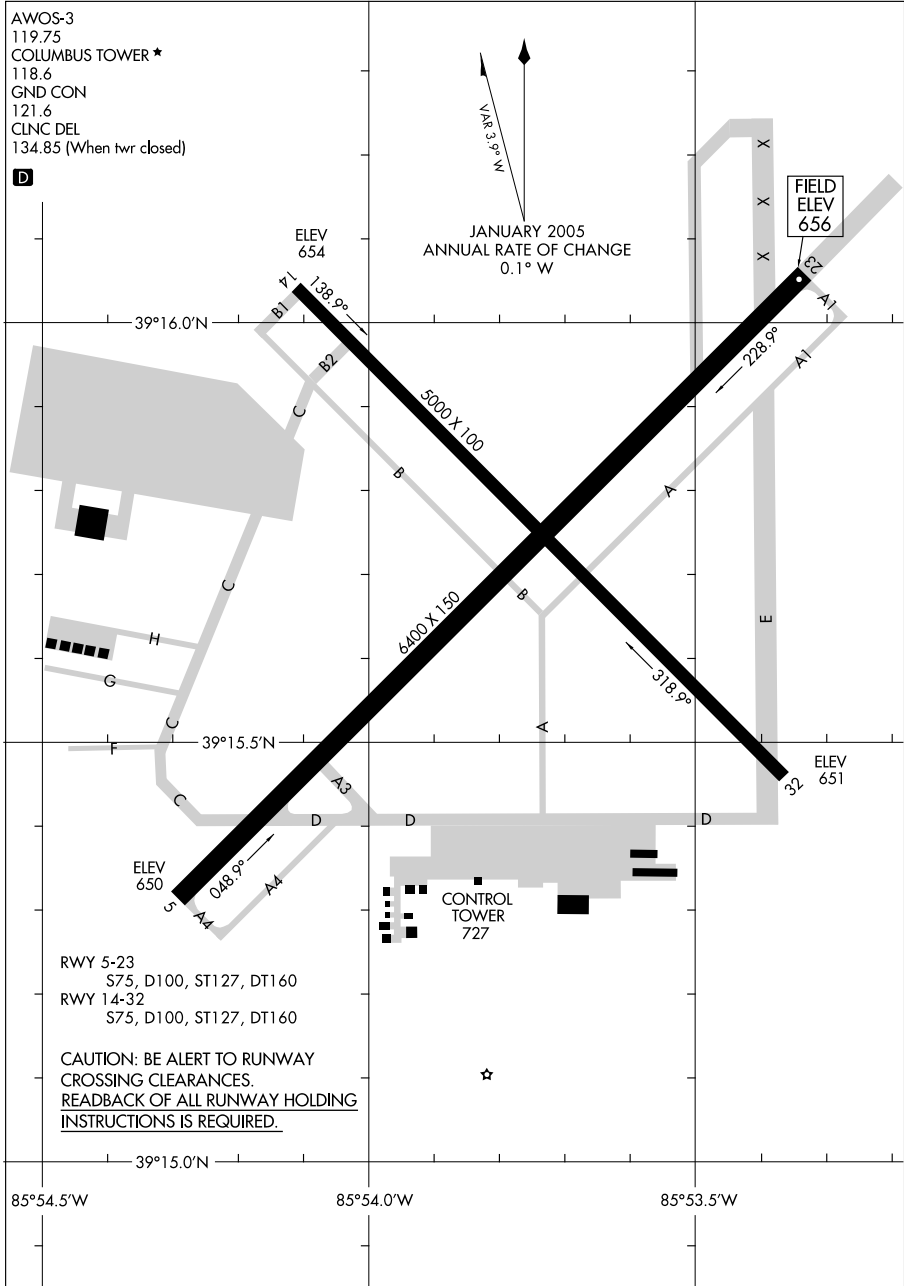
CLEVELAND, OHIO
CLEVELAND / CUYAHOGA COUNTY (CGF)

09295

AIRPORT DIAGRAM

COLUMBUS MUNI (BAK)
COLUMBUS, INDIANA

AL-594 (FAA)



AWOS-3
119.75
COLUMBUS TOWER ★
118.6
GND CON
121.6
CLNC DEL
134.85 (When twr closed)

D

FIELD ELEV 656

JANUARY 2005
ANNUAL RATE OF CHANGE
0.1° W

RWY 5-23
S75, D100, ST127, DT160
RWY 14-32
S75, D100, ST127, DT160

CAUTION: BE ALERT TO RUNWAY
CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING
INSTRUCTIONS IS REQUIRED.

CONTROL TOWER 727

AIRPORT DIAGRAM

COLUMBUS, INDIANA
COLUMBUS MUNI (BAK)

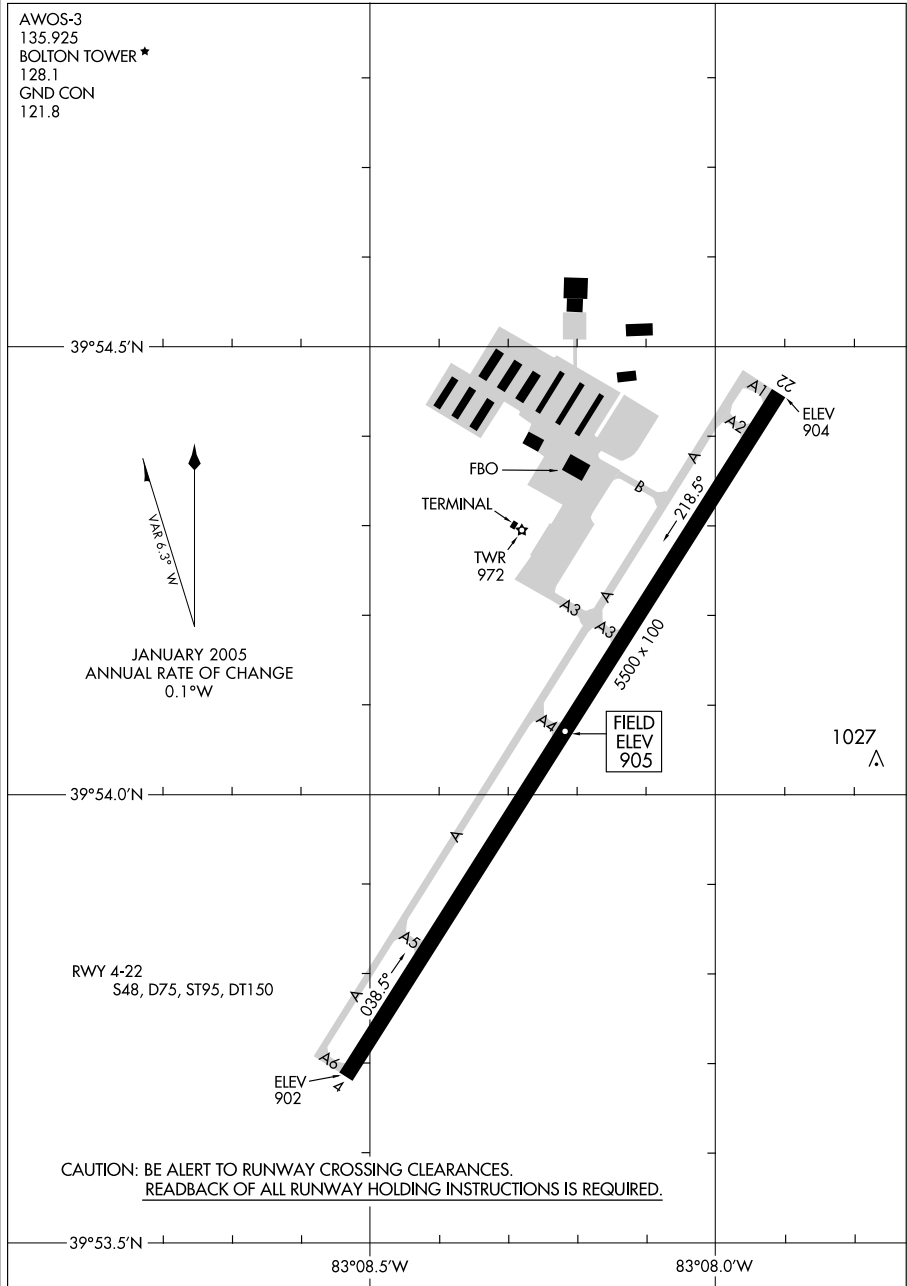
09295

10098

AIRPORT DIAGRAM

AL-5958 (FAA)

COLUMBUS/BOLTON FIELD (TZR)
COLUMBUS, OHIO



AIRPORT DIAGRAM

10098

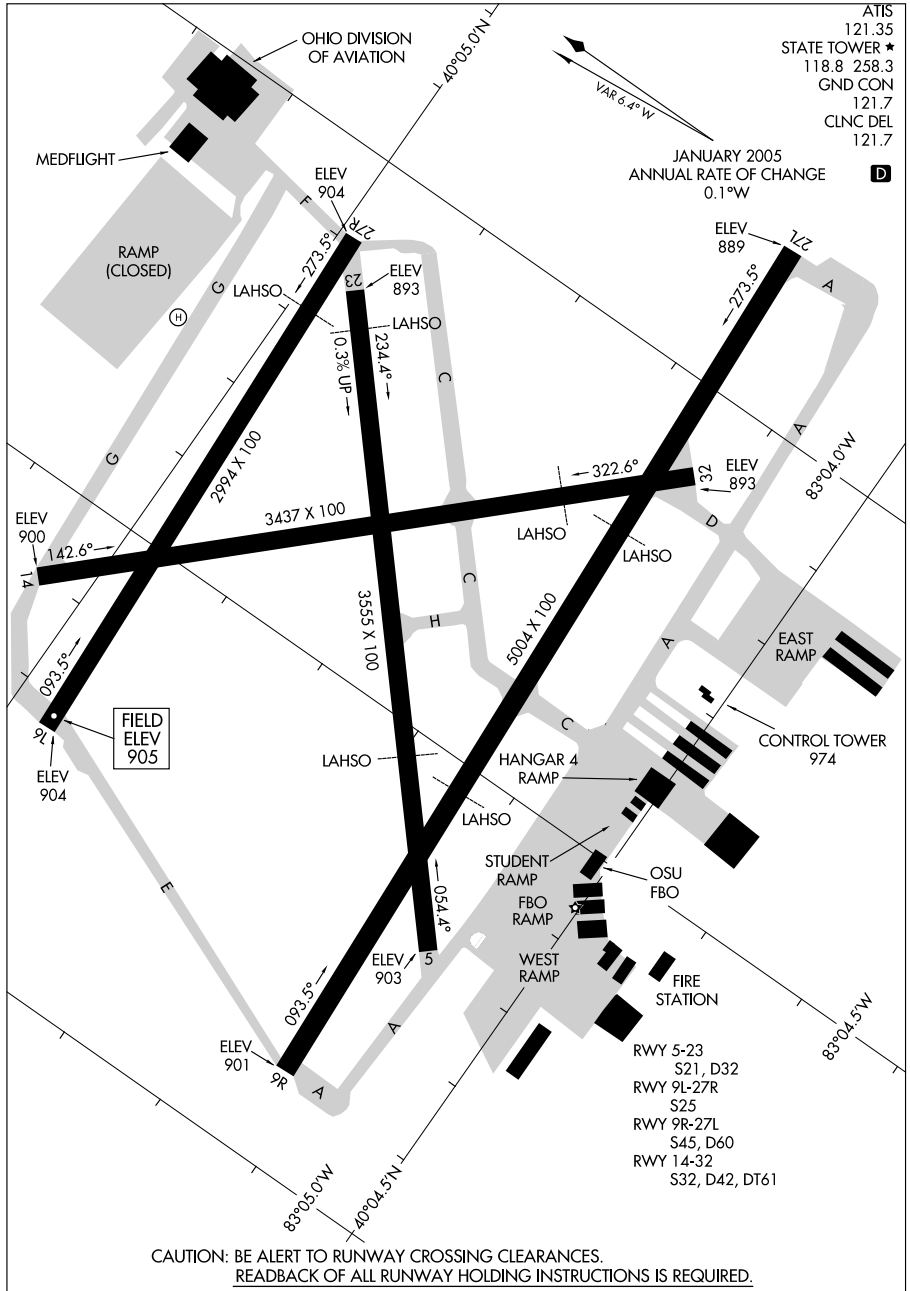
COLUMBUS, OHIO
COLUMBUS/BOLTON FIELD (TZR)

09351

AIRPORT DIAGRAM

AL-5387 (FAA)

COLUMBUS/OHIO STATE UNIVERSITY (OSU)
COLUMBUS, OHIO



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
REARBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

AIRPORT DIAGRAM

COLUMBUS, OHIO
COLUMBUS/OHIO STATE UNIVERSITY (OSU)

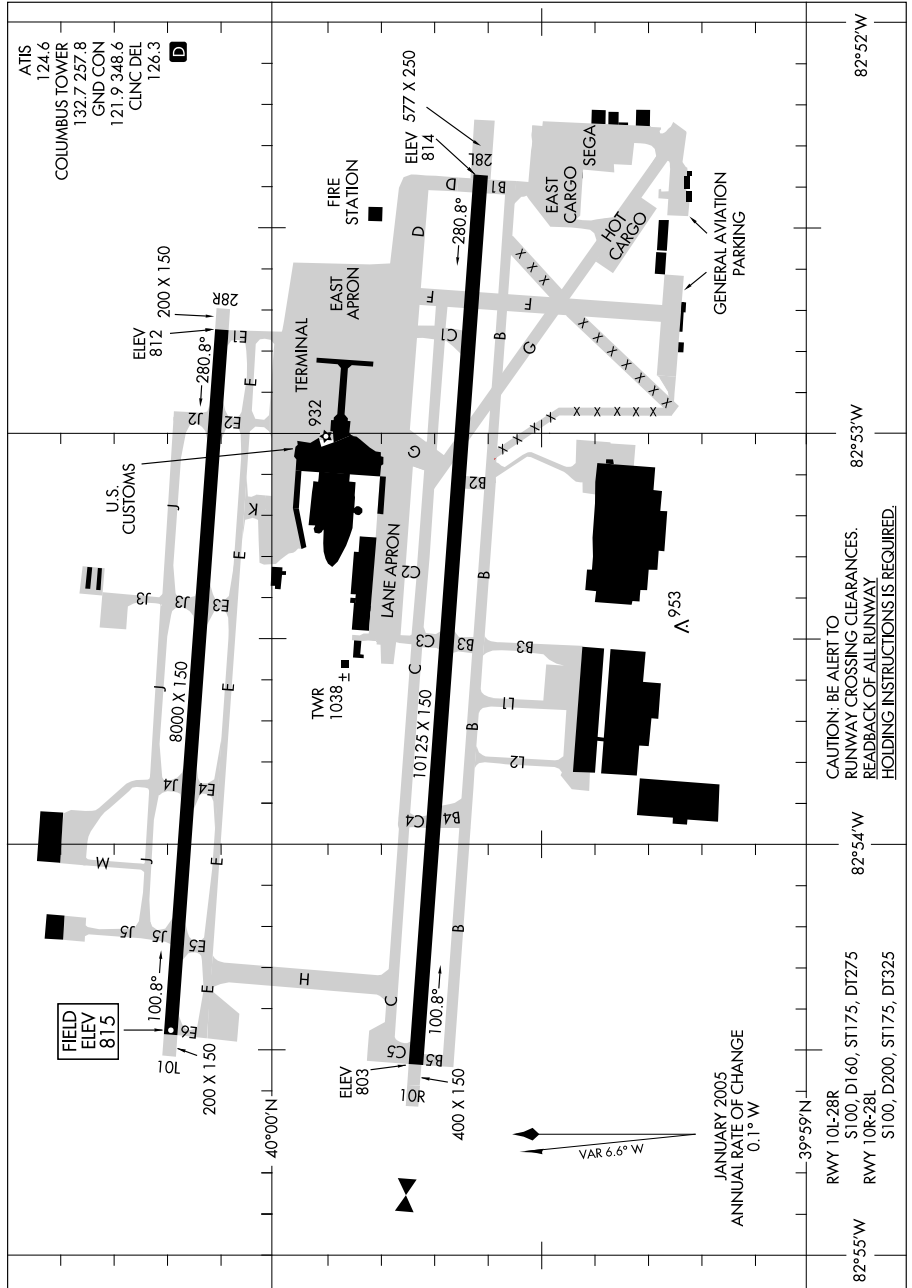
09351

10098

AIRPORT DIAGRAM

AL-94 (FAA)

COLUMBUS/ PORT COLUMBUS INTL (CMH)
COLUMBUS, OHIO



AIRPORT DIAGRAM

10098

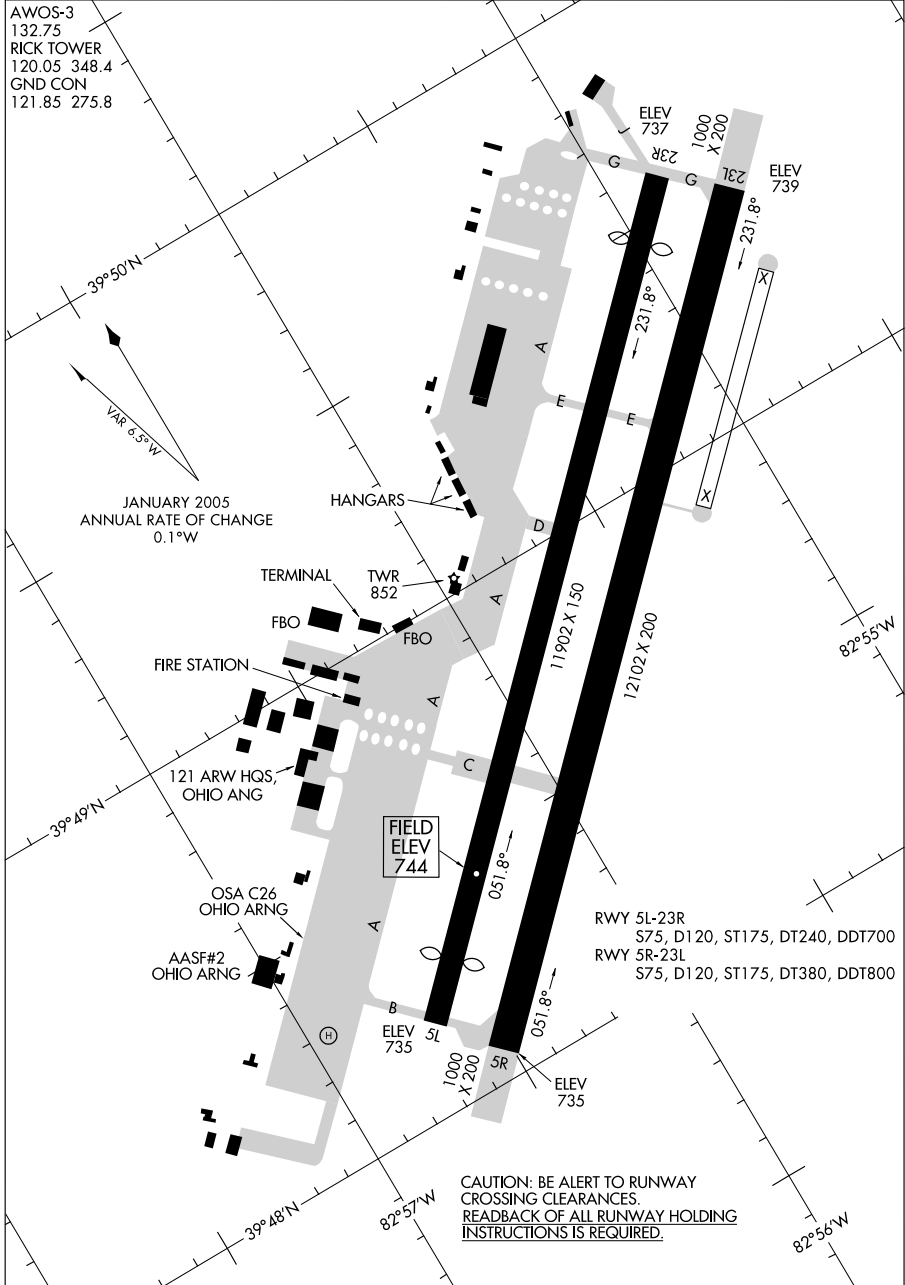
COLUMBUS, OHIO
COLUMBUS/ PORT COLUMBUS INTL (CMH)

10042

AIRPORT DIAGRAM

COLUMBUS/RICKENBACKER INTL (LCK)
COLUMBUS, OHIO

AL-6846 (FAA)



AIRPORT DIAGRAM

10042

COLUMBUS, OHIO
COLUMBUS/RICKENBACKER INTL (LCK)

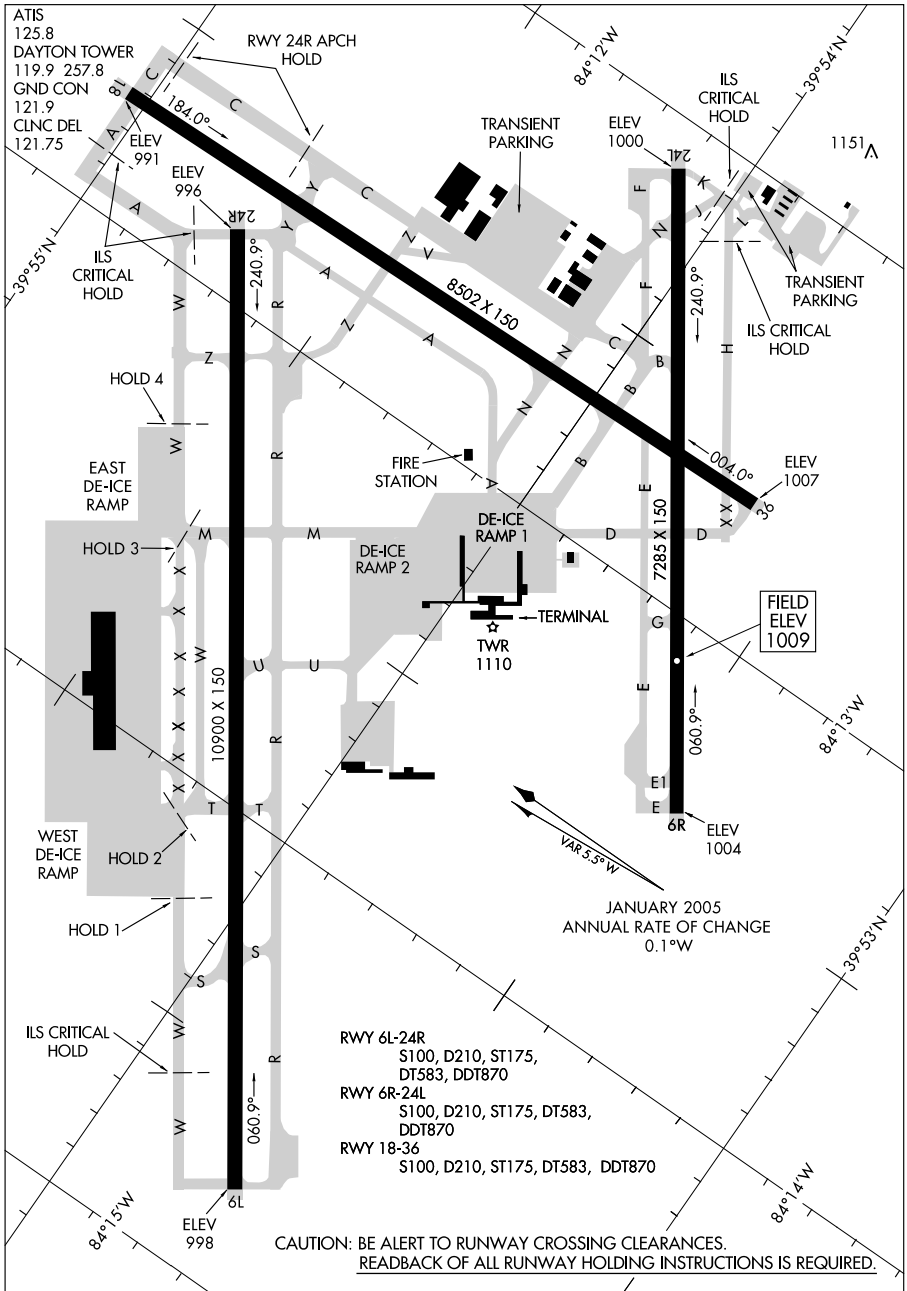
10042

AIRPORT DIAGRAM

DAYTON / JAMES M. COX-DAYTON INTL (DAY)

AL-107 (FAA)

DAYTON, OHIO



- RWY 6L-24R**
S100, D210, ST175, DT583, DDT870
- RWY 6R-24L**
S100, D210, ST175, DT583, DDT870
- RWY 18-36**
S100, D210, ST175, DT583, DDT870

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

JANUARY 2005
 ANNUAL RATE OF CHANGE
 0.1°W

AIRPORT DIAGRAM

DAYTON, OHIO

DAYTON / JAMES M. COX-DAYTON INTL (DAY)

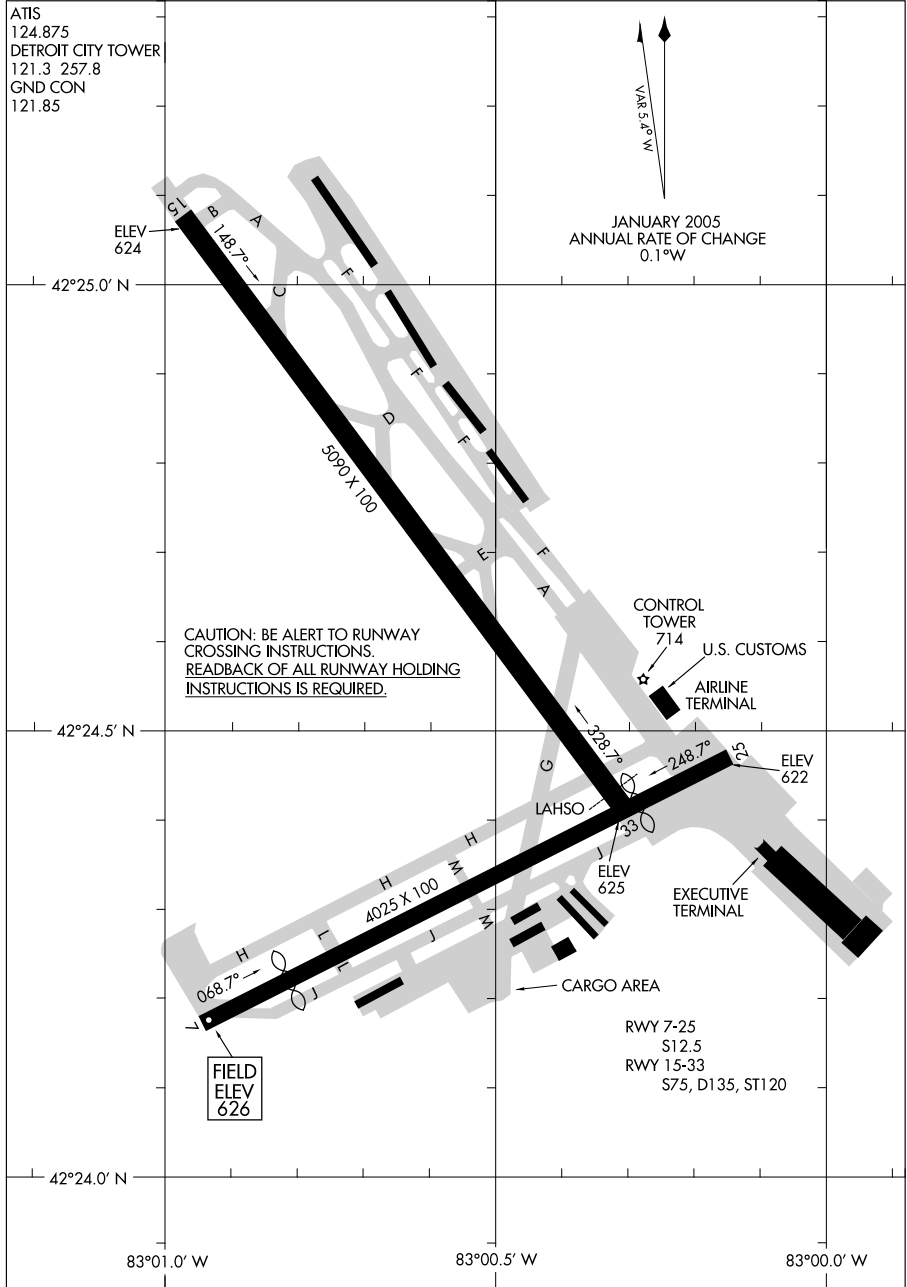
10042

09015

AIRPORT DIAGRAM

DETROIT/ COLEMAN A. YOUNG MUNI (DET)
DETROIT, MICHIGAN

AL-118 (FAA)



AIRPORT DIAGRAM

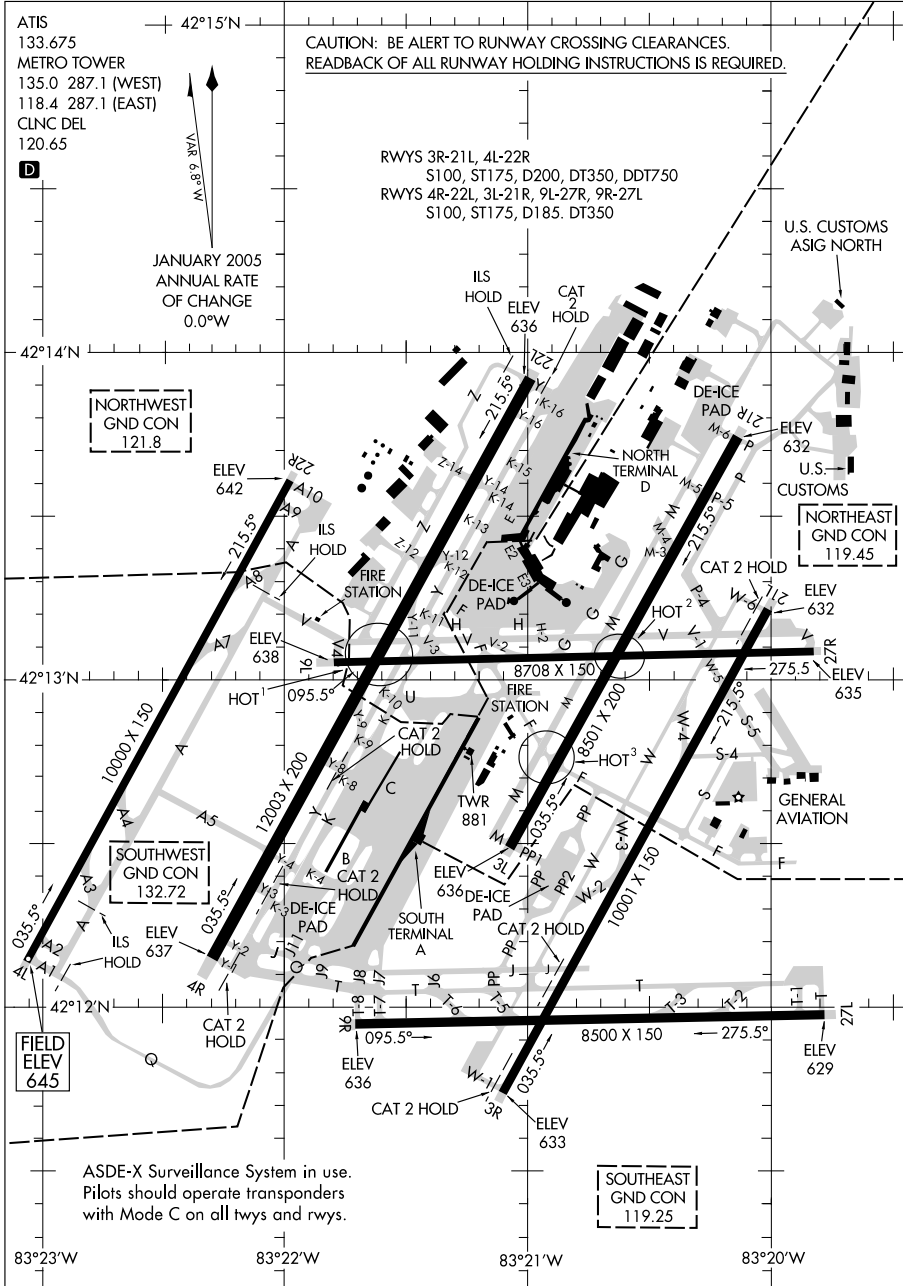
09015

DETROIT, MICHIGAN
DETROIT/ COLEMAN A. YOUNG MUNI (DET)

10098

AIRPORT DIAGRAM

DETROIT METROPOLITAN WAYNE COUNTY (DTW)
AL-119 (FAA)
DETROIT, MICHIGAN



AIRPORT DIAGRAM

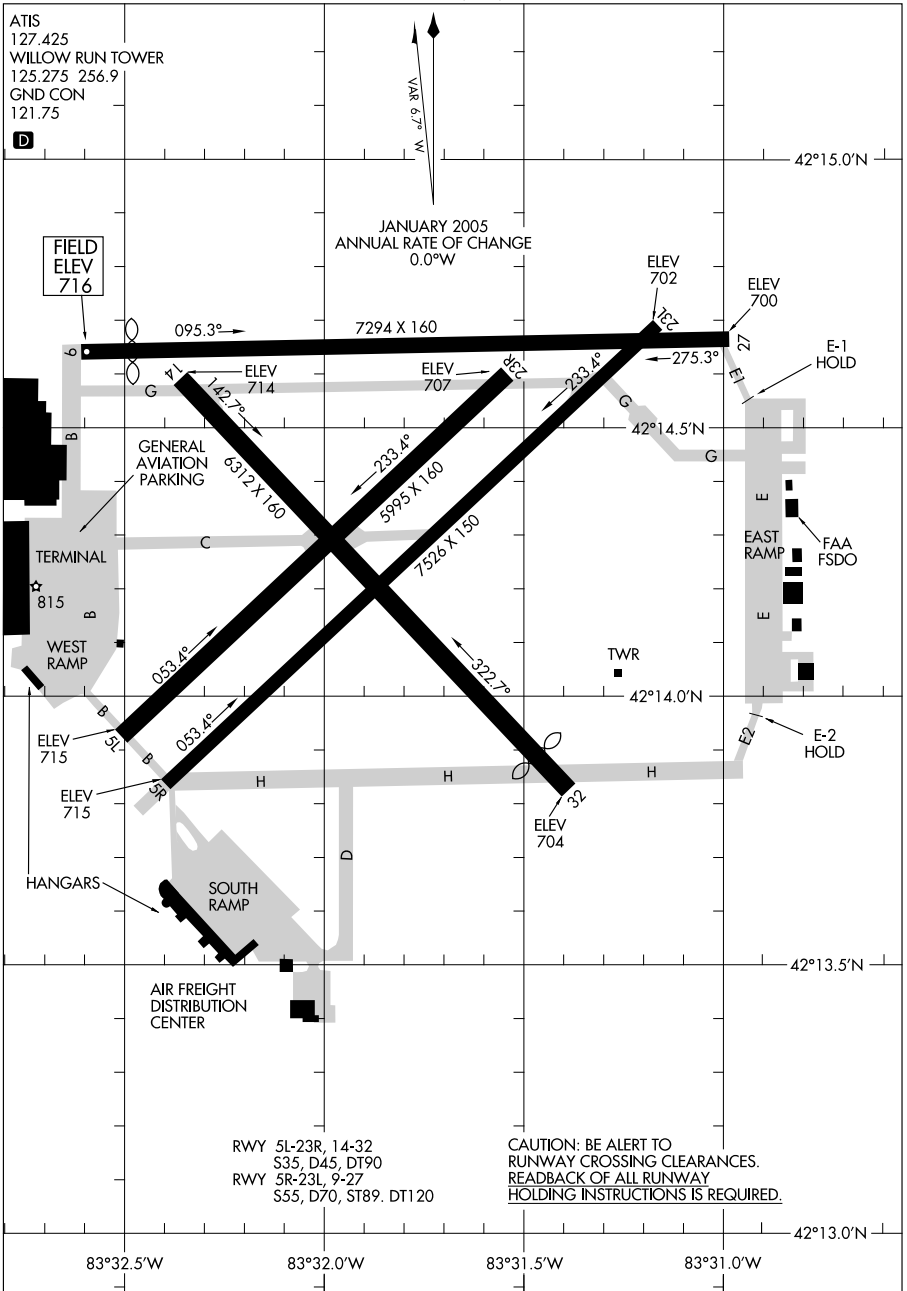
DETROIT, MICHIGAN
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

10098

10098

AIRPORT DIAGRAM

DETROIT/WILLOW RUN (YIP)
DETROIT, MICHIGAN



AIRPORT DIAGRAM

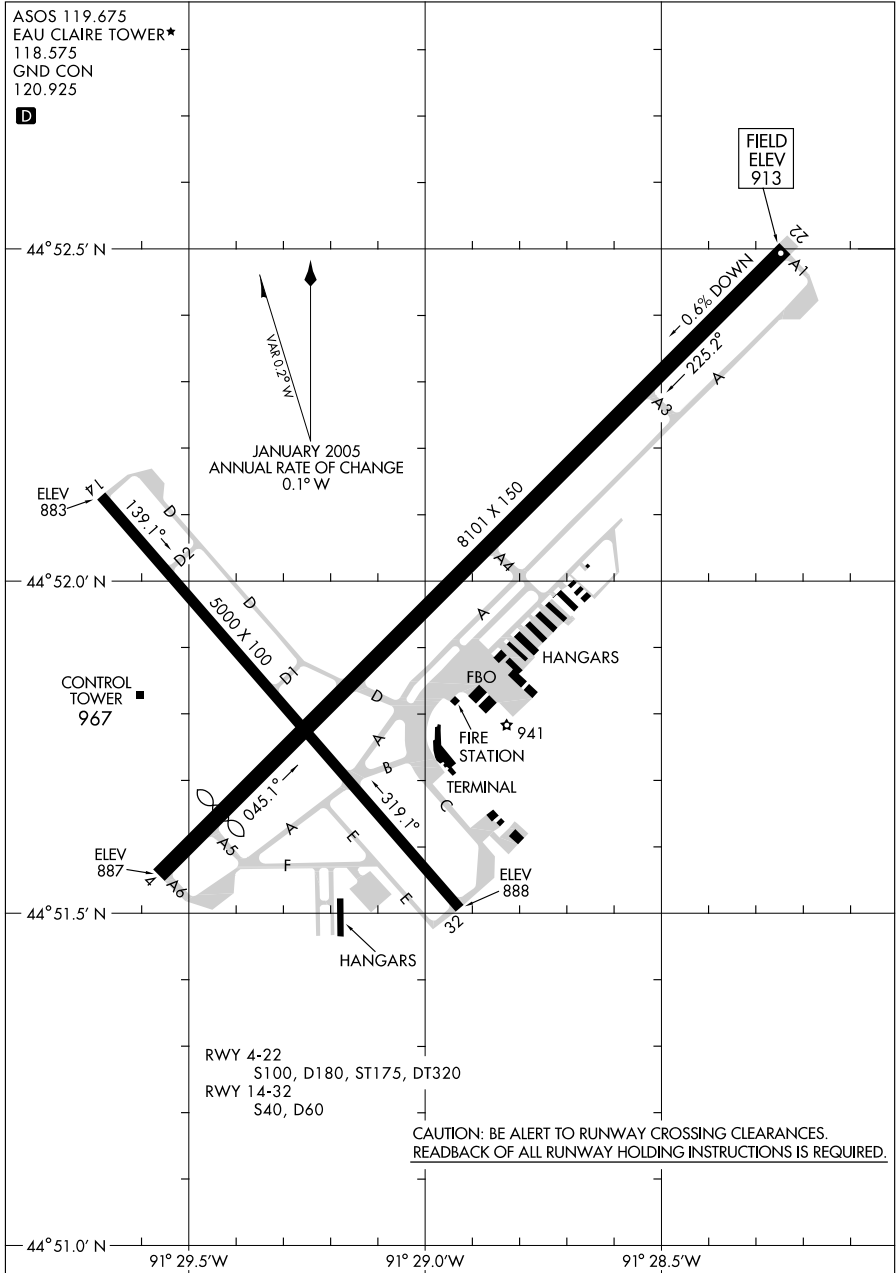
10098

DETROIT, MICHIGAN
DETROIT/WILLOW RUN (YIP)

09071

AIRPORT DIAGRAM

EAU CLAIRE/CHIPPEWA VALLEY RGNL (E.A.U)
AL-937 (FAA) EAU CLAIRE, WISCONSIN



AIRPORT DIAGRAM

09071

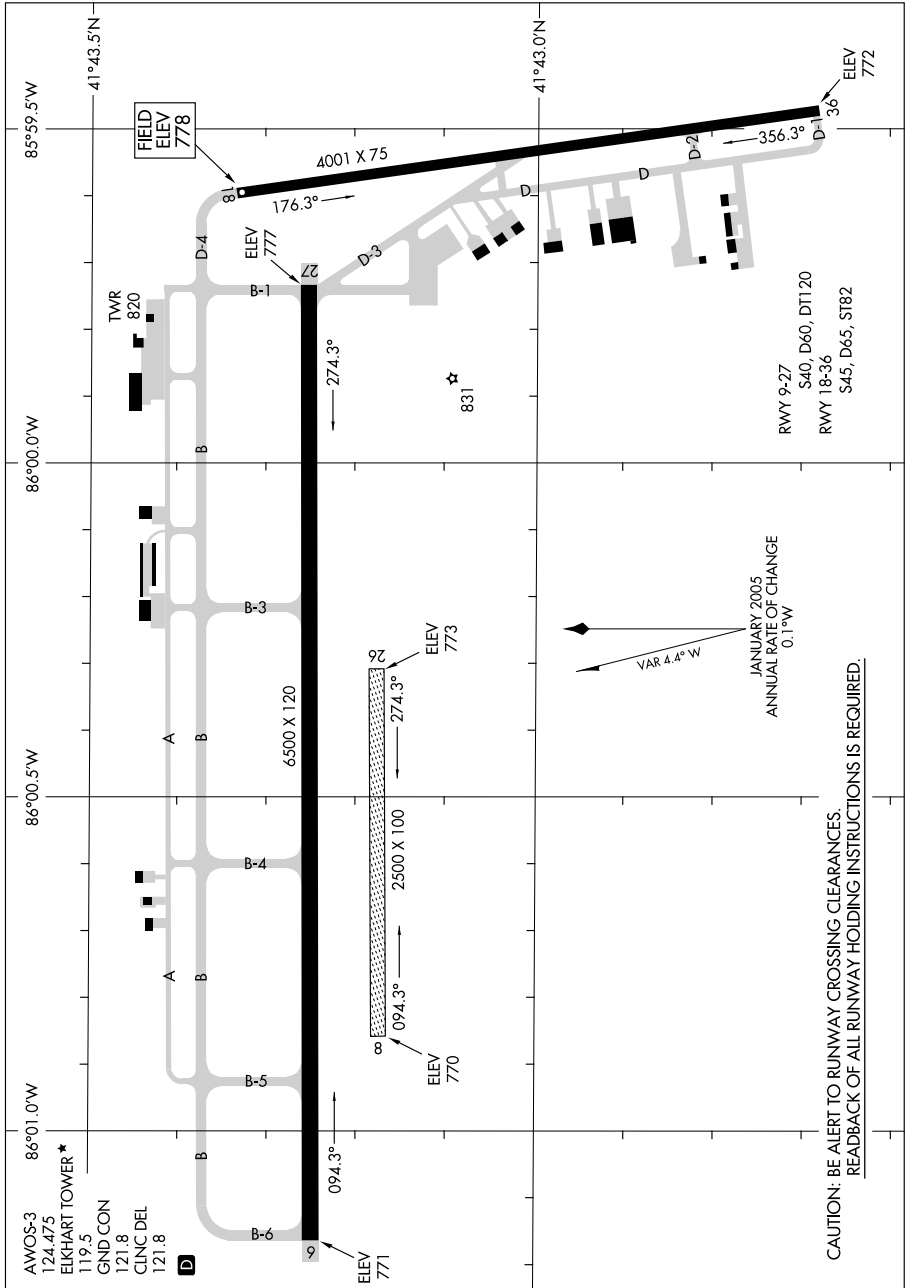
EAU CLAIRE, WISCONSIN
EAU CLAIRE/CHIPPEWA VALLEY RGNL (E.A.U)

10042

AIRPORT DIAGRAM

AL-5287 (FAA)

ELKHART MUNI (EKM)
ELKHART, INDIANA



AIRPORT DIAGRAM

ELKHART, INDIANA
ELKHART MUNI (EKM)

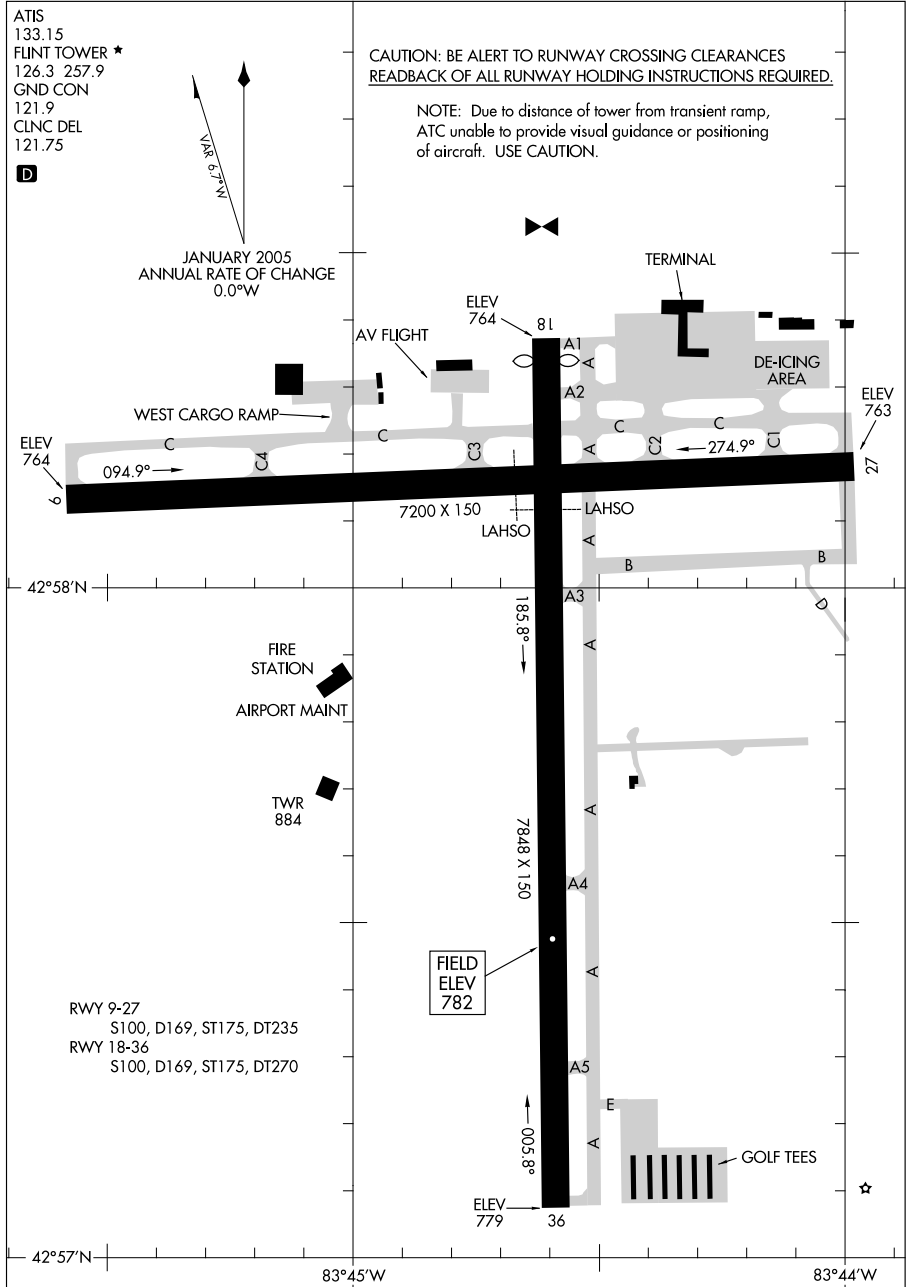
10042

10042

AIRPORT DIAGRAM

AL-618 (FAA)

FLINT / BISHOP INTL (FNT)
FLINT, MICHIGAN



AIRPORT DIAGRAM

10042

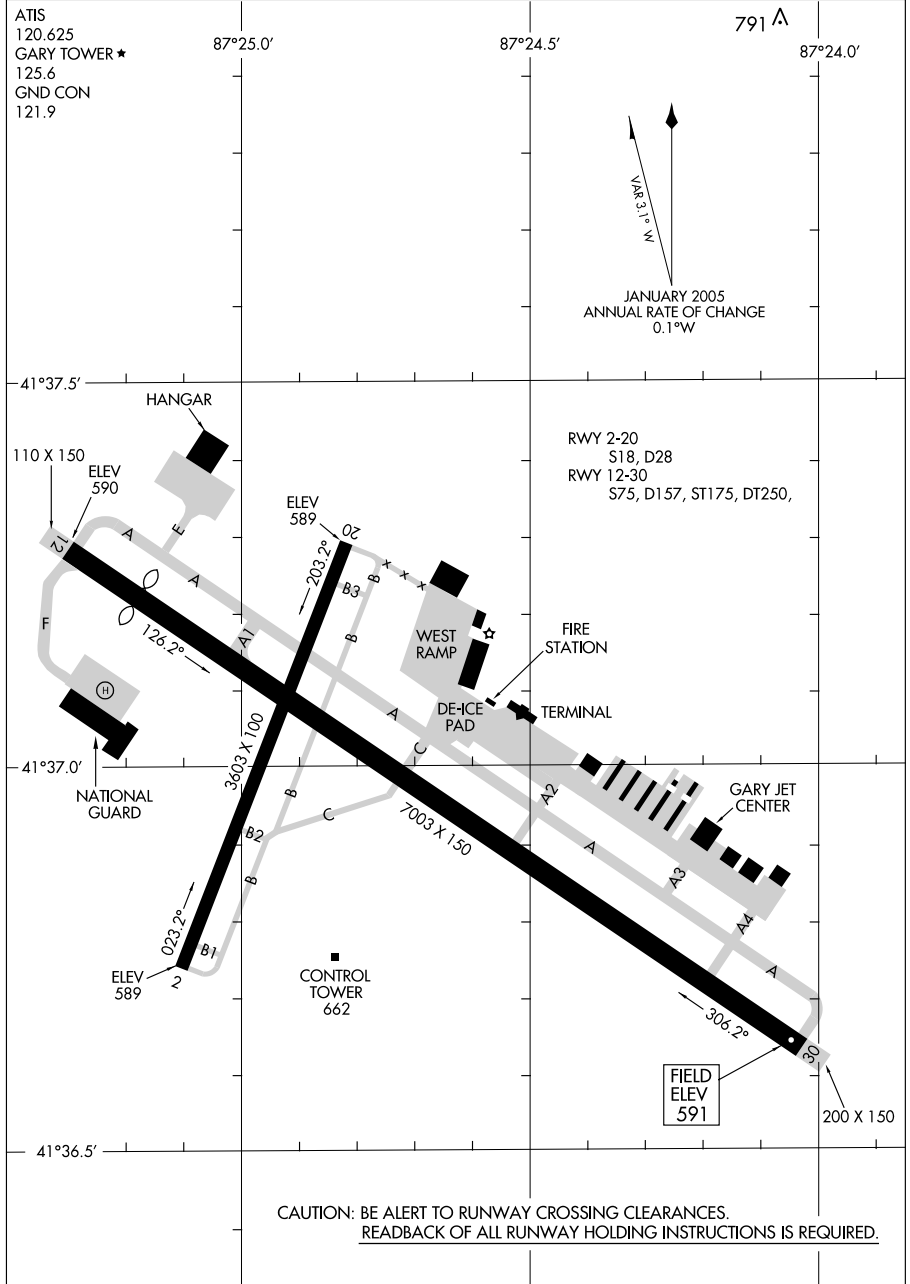
FLINT, MICHIGAN
FLINT / BISHOP INTL (FNT)

09015

AIRPORT DIAGRAM

AL-748 (FAA)

GARY/CHICAGO INTL (GYY)
GARY, INDIANA



AIRPORT DIAGRAM
09015

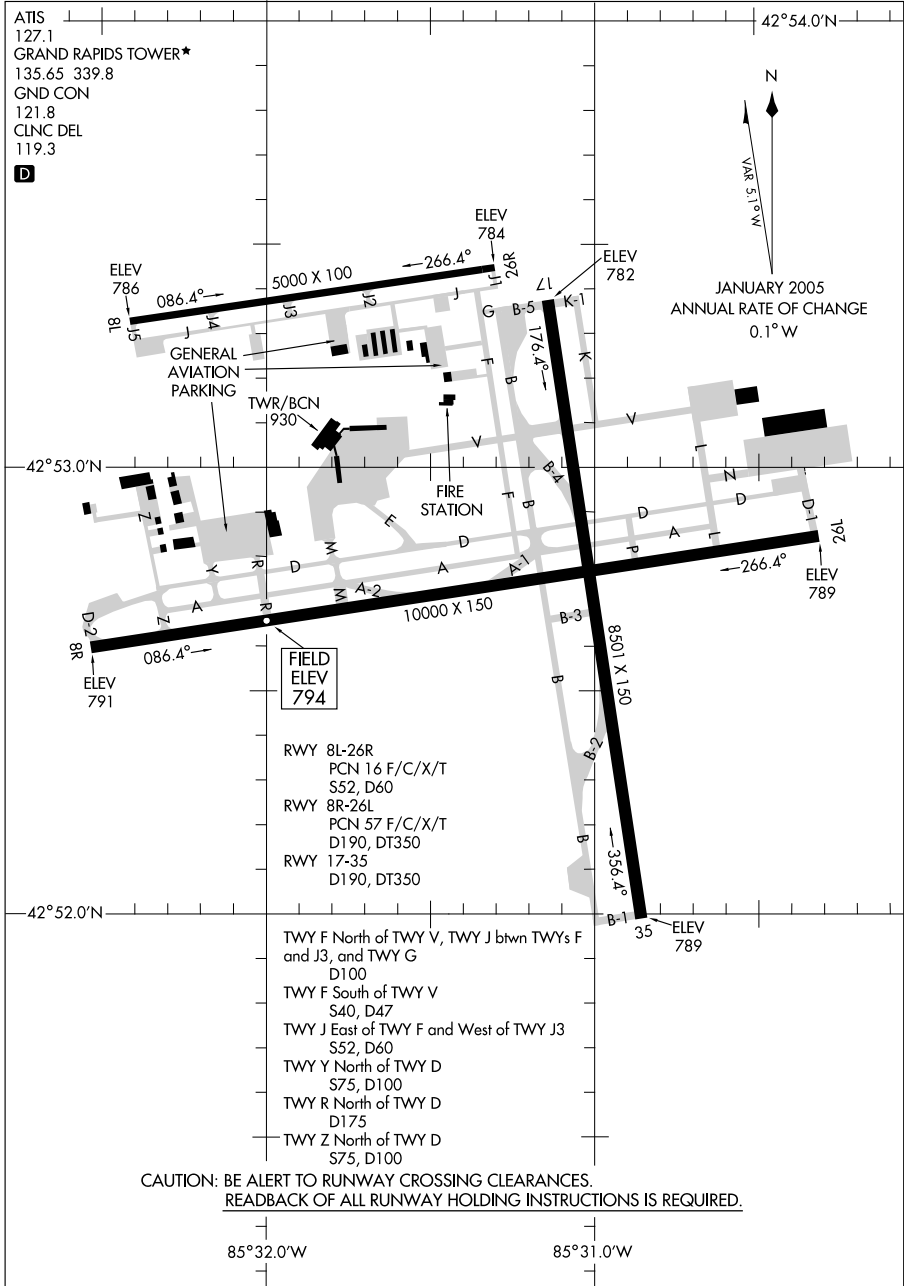
GARY, INDIANA
GARY/CHICAGO INTL (GYY)

10098

AIRPORT DIAGRAM

AL-5184 (FAA)

GRAND RAPIDS / GERALD R. FORD INTL (G.R.R.)
GRAND RAPIDS, MICHIGAN



AIRPORT DIAGRAM

10098

GRAND RAPIDS, MICHIGAN
GRAND RAPIDS / GERALD R. FORD INTL (G.R.R.)

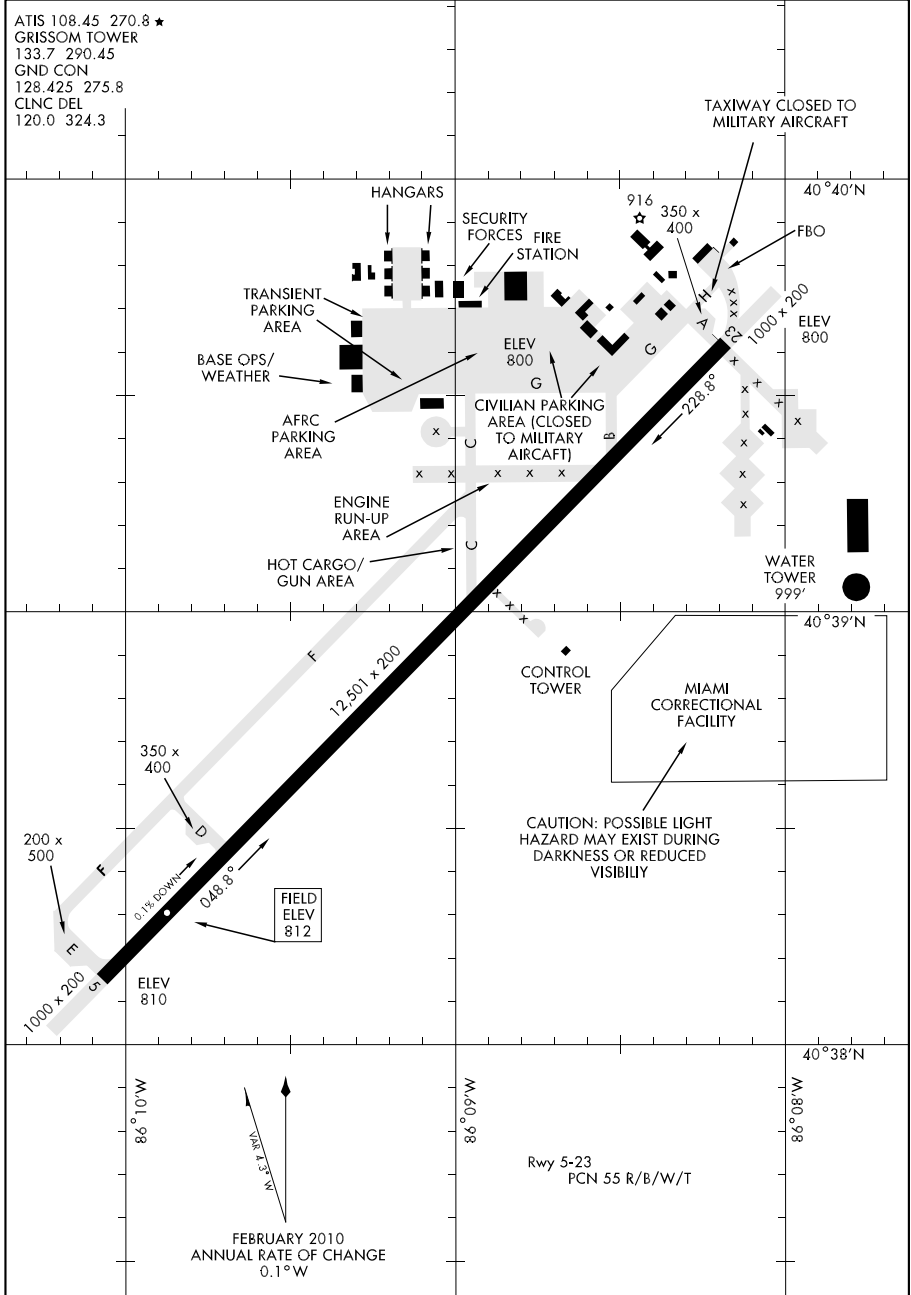
10042

AIRPORT DIAGRAM

AFD-470 [USAF]

GRISSOM ARB (KGUS)

PERU, INDIANA



AIRPORT DIAGRAM

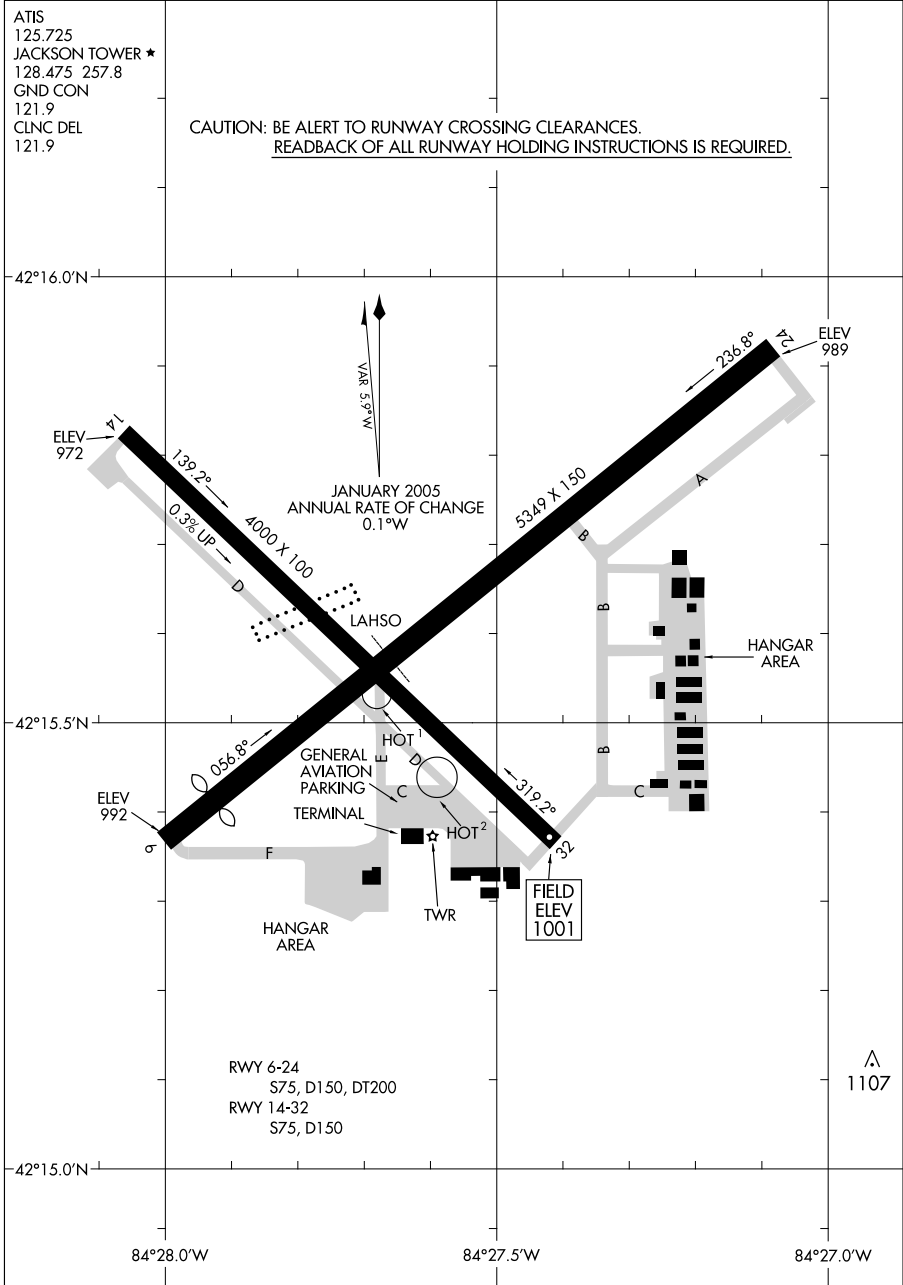
PERU, INDIANA
GRISSOM ARB (KGUS)

10042

AIRPORT DIAGRAM

AL-861 (FAA)

JACKSON COUNTY-REYNOLDS FIELD (JXXN)
JACKSON, MICHIGAN



AIRPORT DIAGRAM

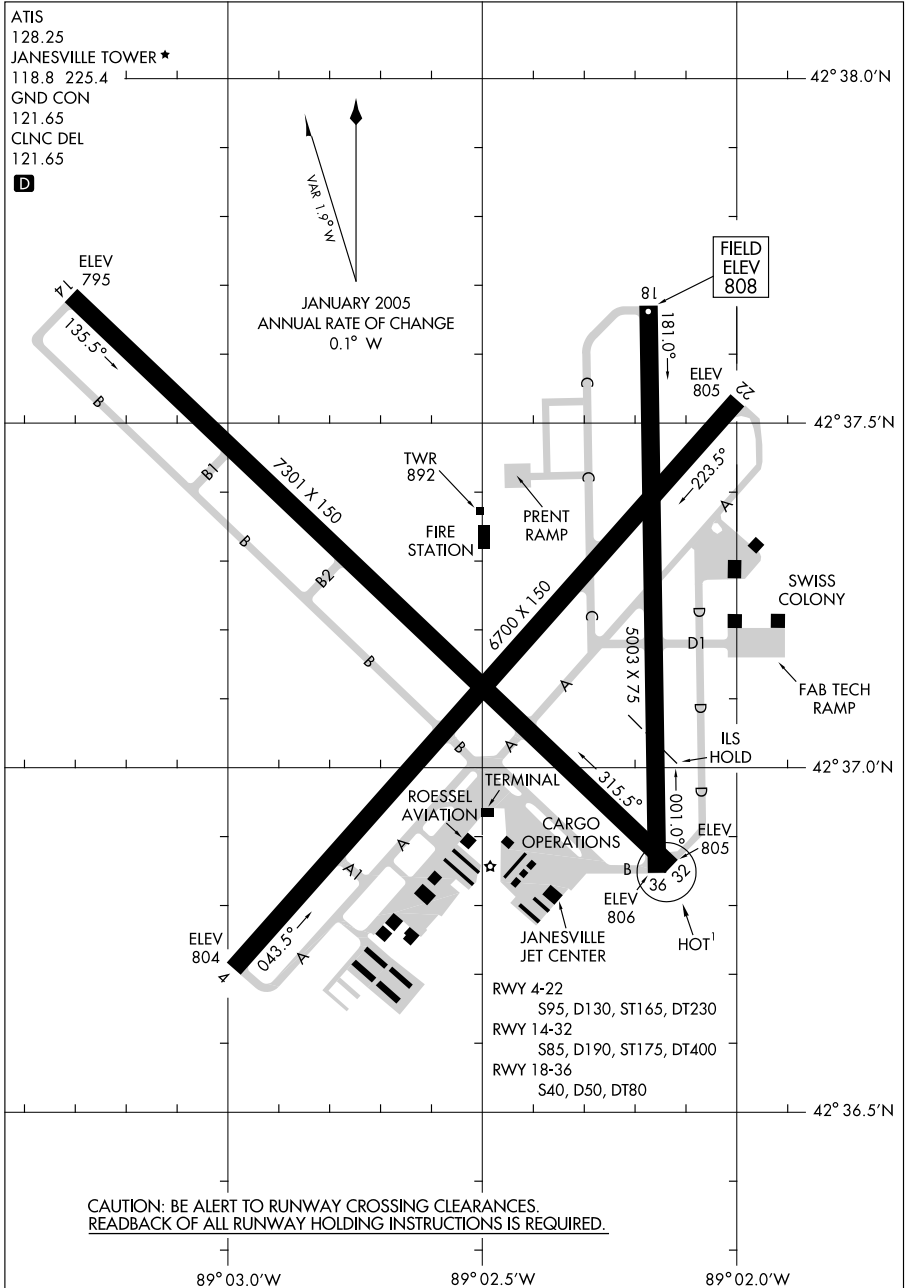
10042

JACKSON, MICHIGAN
JACKSON COUNTY-REYNOLDS FIELD (JXXN)

10098

AIRPORT DIAGRAM

JANESVILLE/SOUTHERN WISCONSIN RGNL (JVL)
AL-938 (FAA) JANESVILLE, WISCONSIN



AIRPORT DIAGRAM

10098

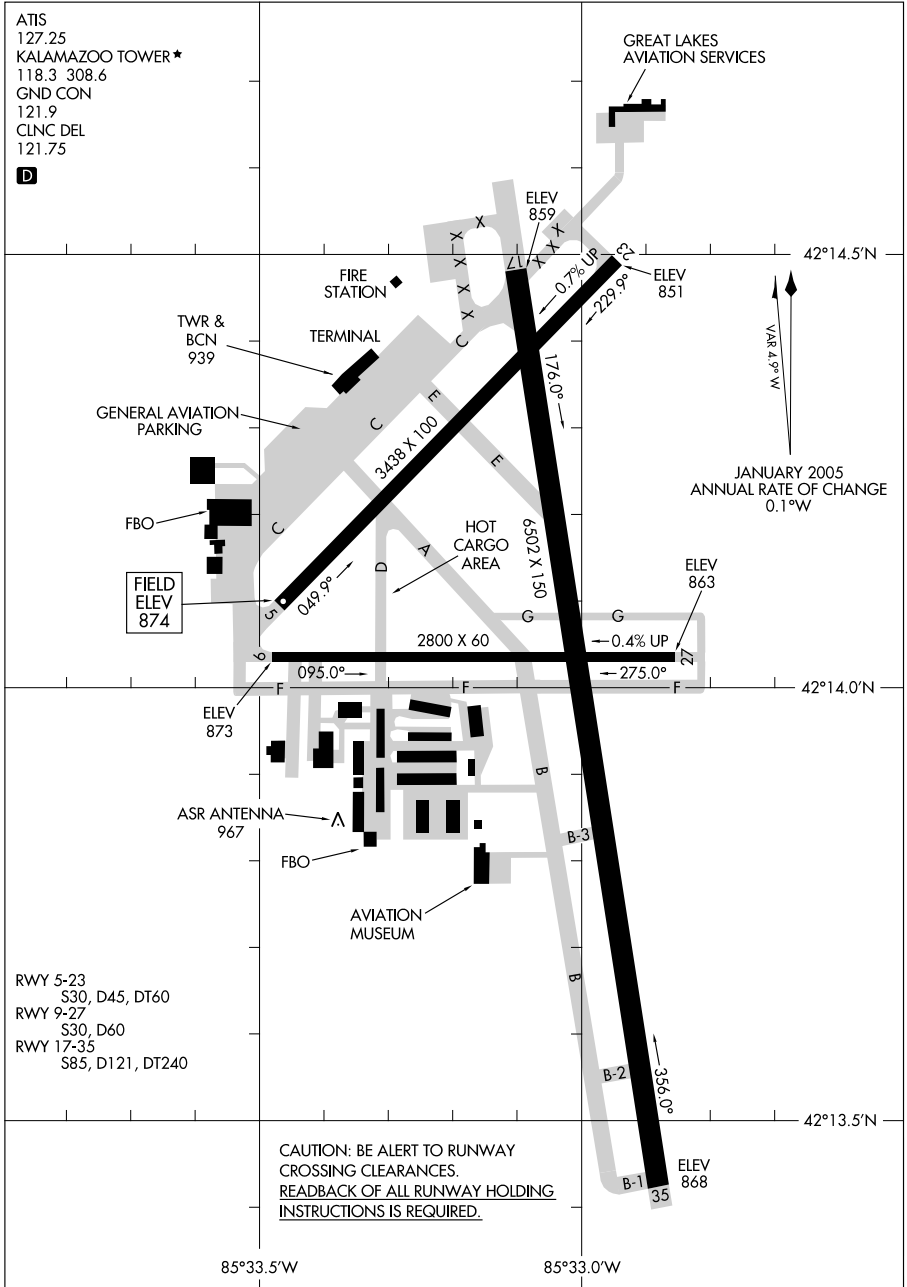
JANESVILLE, WISCONSIN
JANESVILLE/SOUTHERN WISCONSIN RGNL (JVL)

10098

AIRPORT DIAGRAM

KALAMAZOO/ BATTLE CREEK INTL (AZO)
KALAMAZOO, MICHIGAN

AL-717 (FAA)



AIRPORT DIAGRAM

10098

KALAMAZOO, MICHIGAN
KALAMAZOO/ BATTLE CREEK INTL (AZO)

09239

AIRPORT DIAGRAM

AL-5449 (FAA)

KENOSHA RGNL (ENW)
KENOSHA, WISCONSIN

ATIS

127.175

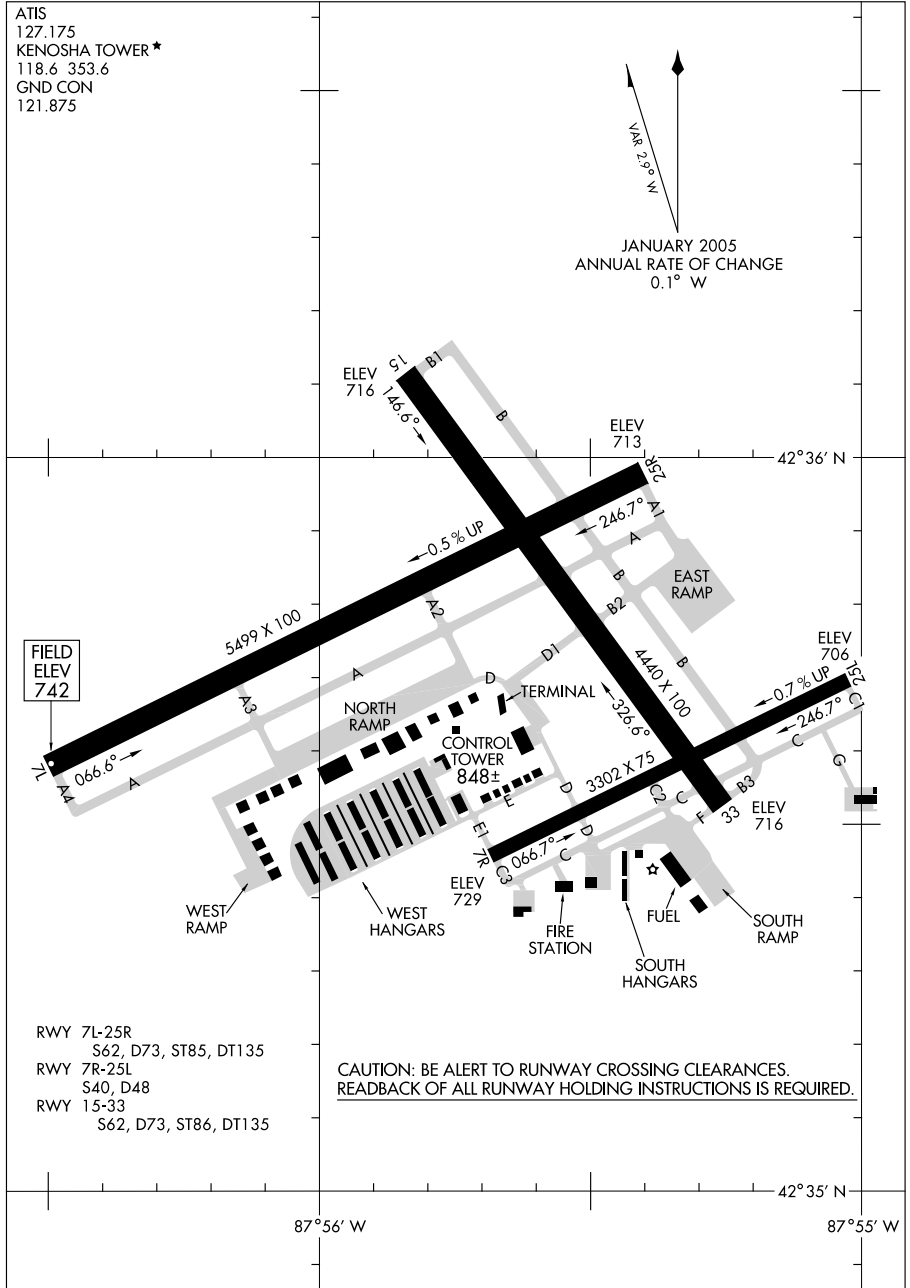
KENOSHA TOWER ★

118.6 353.6

GND CON

121.875

VAR 2.9° W
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1° W



FIELD
ELEV
742

RWY 7L-25R
S62, D73, ST85, DT135

RWY 7R-25L
S40, D48

RWY 15-33
S62, D73, ST86, DT135

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

AIRPORT DIAGRAM

09239

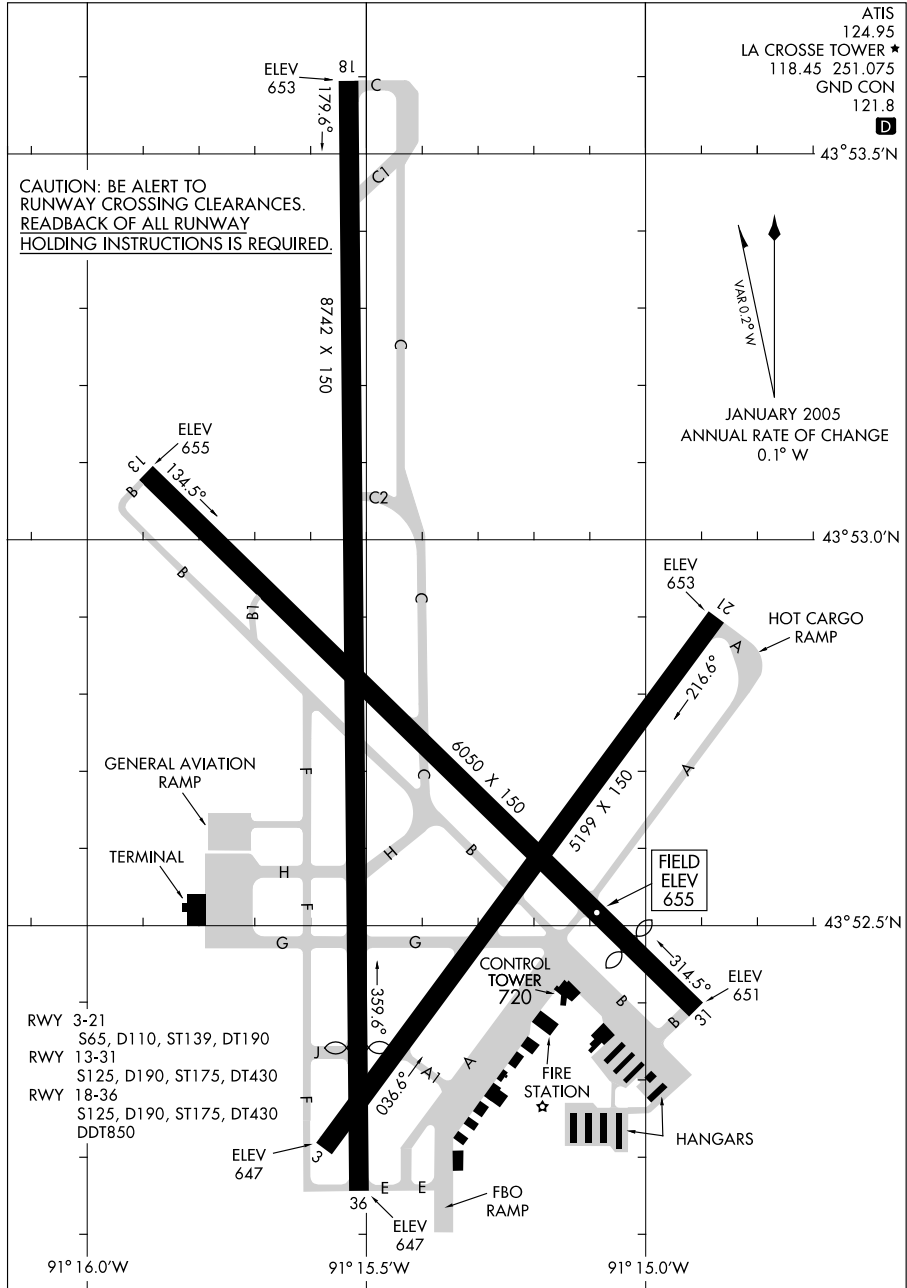
KENOSHA, WISCONSIN
KENOSHA RGNL (ENW)

09295

AIRPORT DIAGRAM

AL-219 (FAA)

LA CROSSE MUNI (LSE)
LA CROSSE, WISCONSIN



AIRPORT DIAGRAM

09295

LA CROSSE, WISCONSIN
LA CROSSE MUNI (LSE)

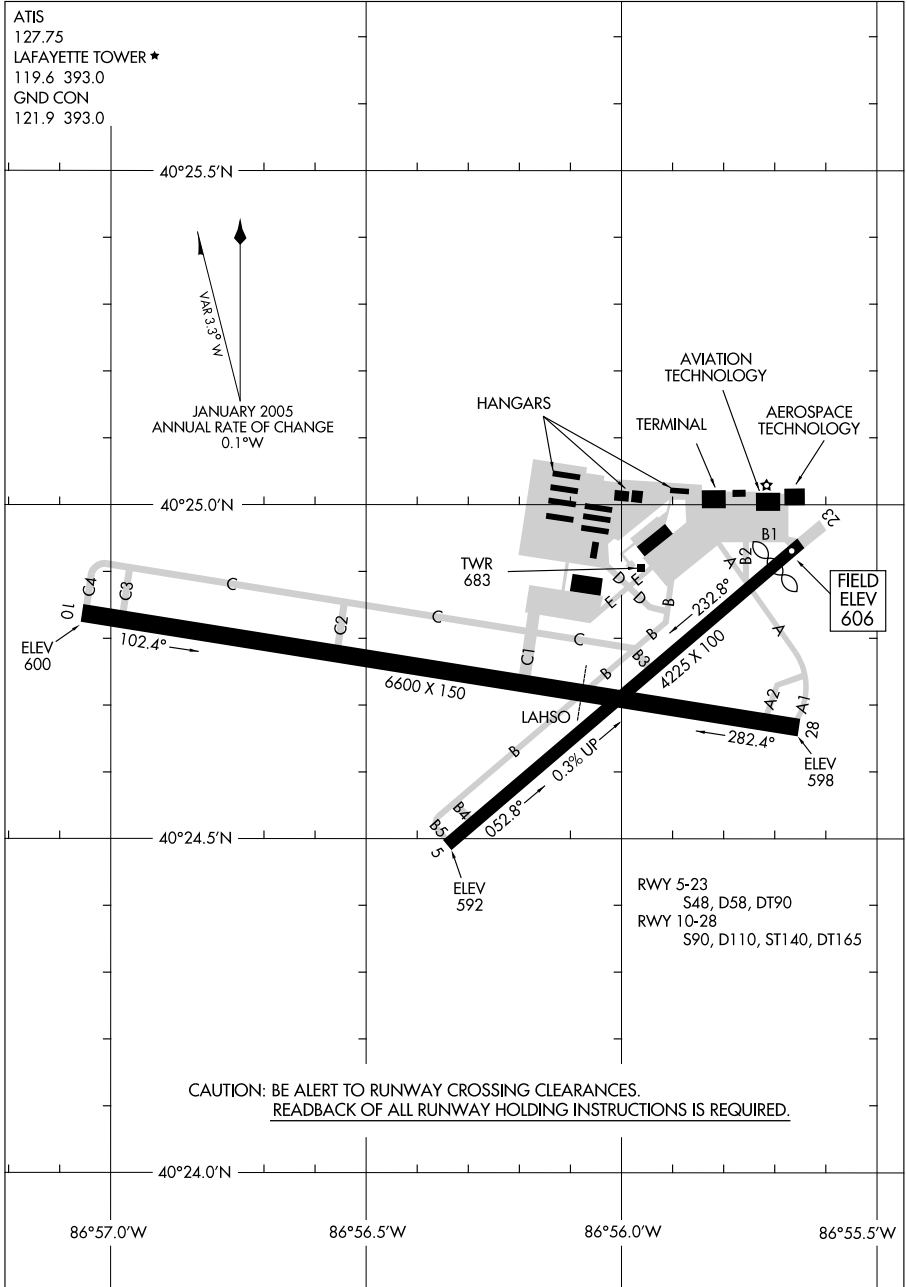
10098

AIRPORT DIAGRAM

AL-220 (FAA)

LAFAYETTE/ PURDUE UNIVERSITY (LAF)
LAFAYETTE, INDIANA

ATIS
 127.75
 LAFAYETTE TOWER ★
 119.6 393.0
 GND CON
 121.9 393.0



AIRPORT DIAGRAM

10098

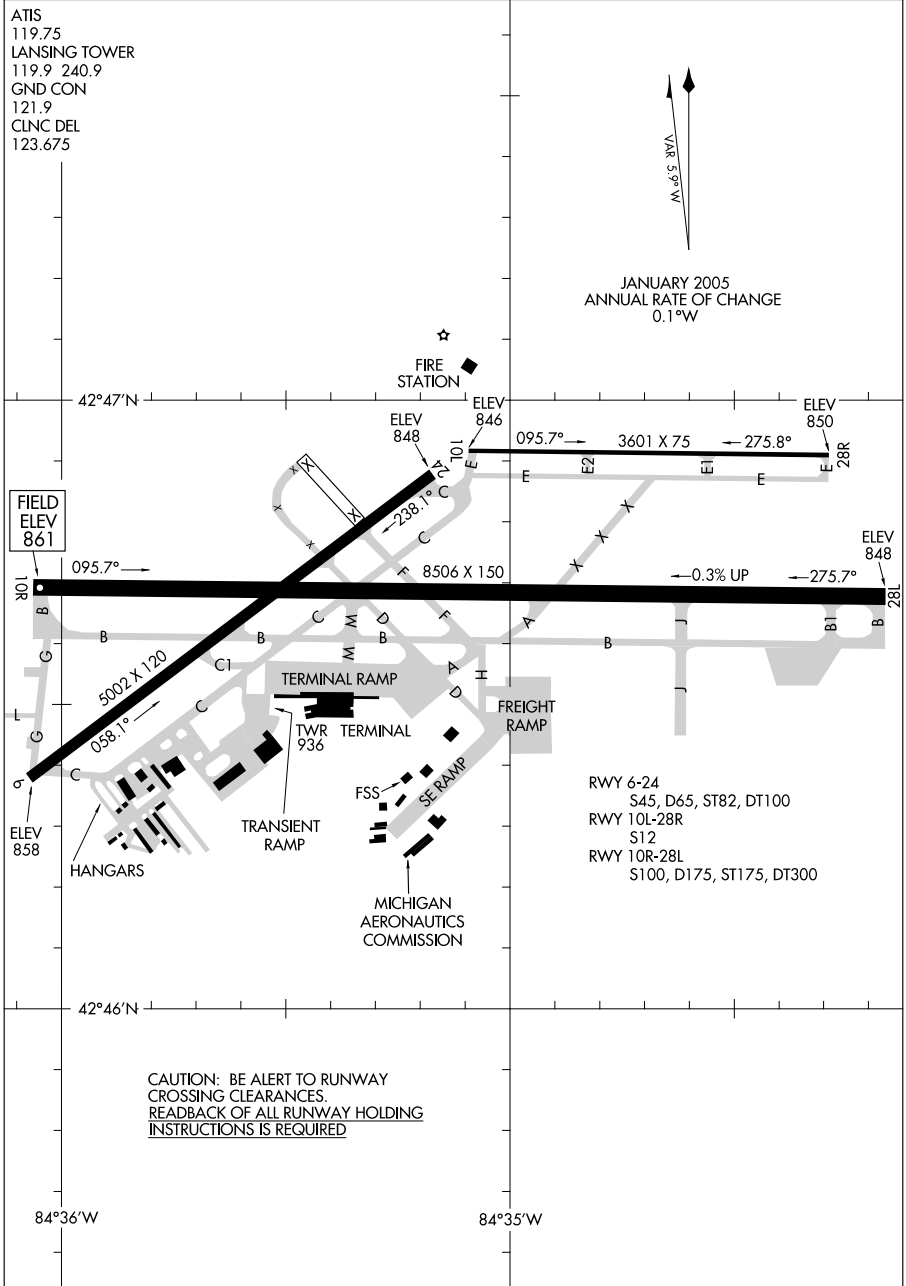
LAFAYETTE, INDIANA
LAFAYETTE/ PURDUE UNIVERSITY (LAF)

10098

AIRPORT DIAGRAM

AL-224 (FAA)

LANSING/CAPITAL REGION INTL (L.A.N)
LANSING, MICHIGAN



AIRPORT DIAGRAM

10098

LANSING, MICHIGAN
LANSING/CAPITAL REGION INTL (L.A.N)

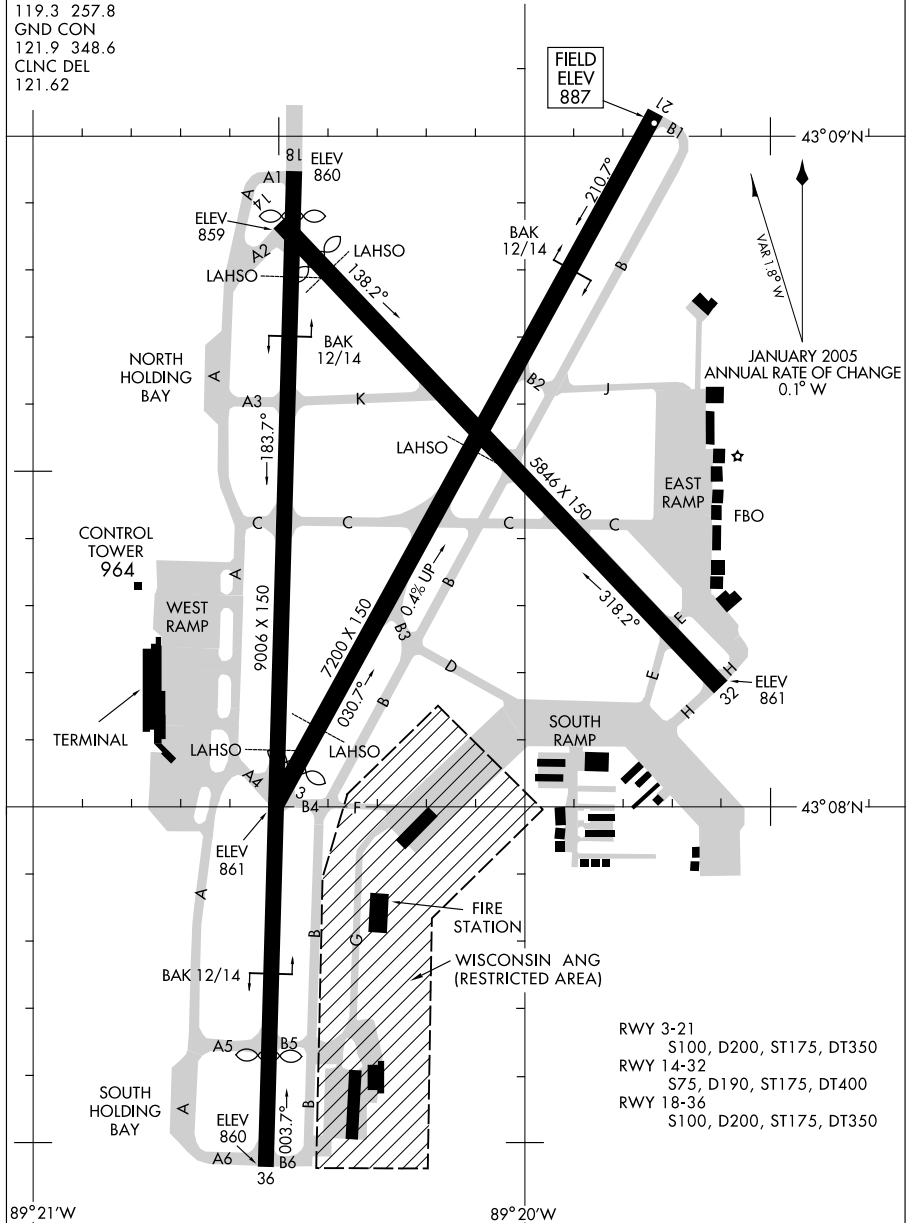
09351

AIRPORT DIAGRAM

MADISON/DANE COUNTY RGNL TRUAX FIELD (MSN)
AL-245 (FAA) MADISON, WISCONSIN

ATIS
 124.65 278.3
 MADISON TOWER ★
 119.3 257.8
 GND CON
 121.9 348.6
 CLNC DEL
 121.62

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
 READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.



AIRPORT DIAGRAM

MADISON, WISCONSIN
MADISON/DANE COUNTY RGNL TRUAX FIELD (MSN)

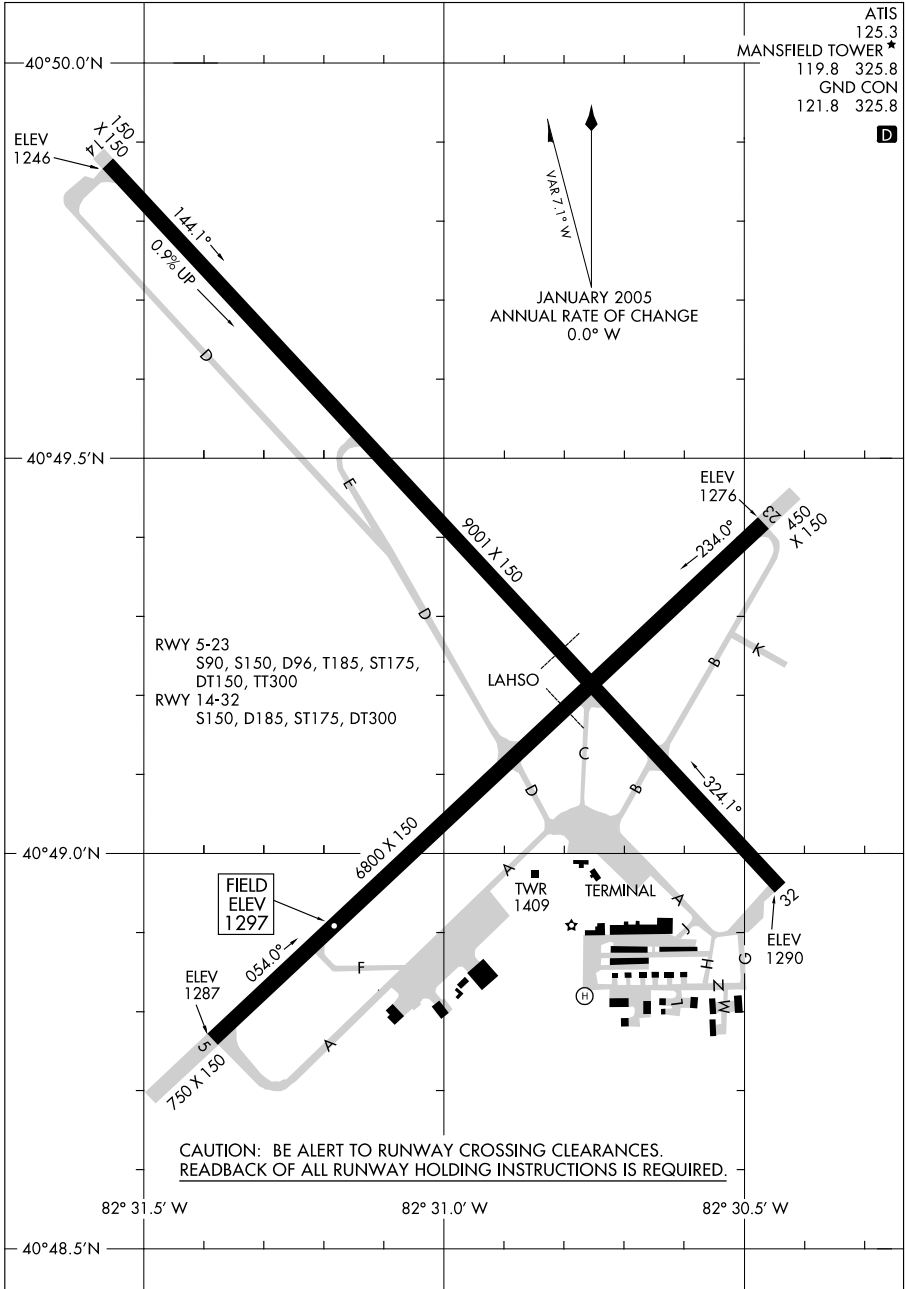
09351

10042

AIRPORT DIAGRAM

AL-860 (FAA)

MANSFIELD LAHM RGNL (MFD)
MANSFIELD, OHIO



AIRPORT DIAGRAM

10042

MANSFIELD, OHIO
MANSFIELD LAHM RGNL (MFD)

10042

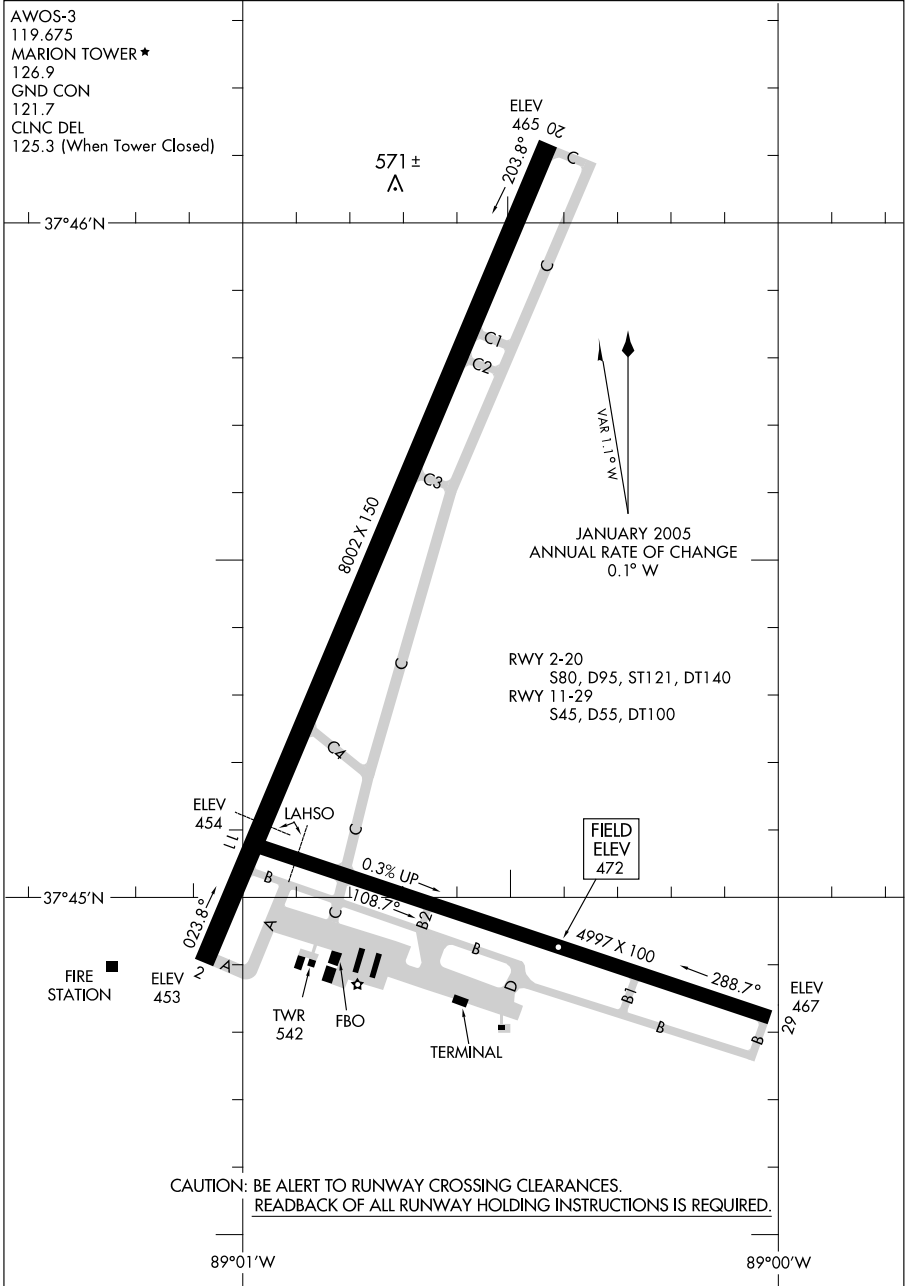
AIRPORT DIAGRAM

MARION/WILLIAMSON COUNTY RGNL (MWA)

AL-5215 (FAA)

MARION, ILLINOIS

AWOS-3
 119.675
 MARION TOWER ★
 126.9
 GND CON
 121.7
 CLNC DEL
 125.3 (When Tower Closed)



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
 READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

AIRPORT DIAGRAM

10042

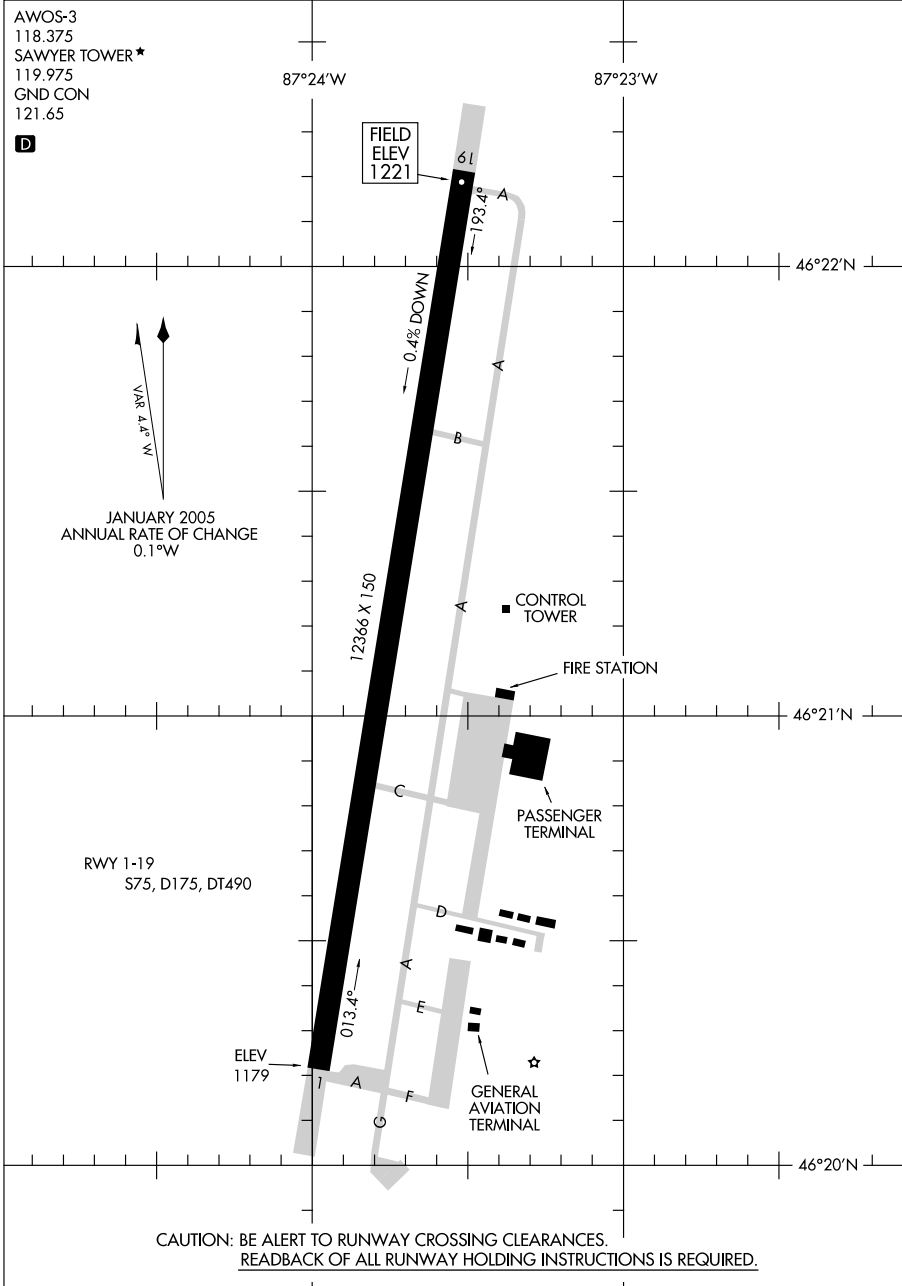
MARION, ILLINOIS
MARION/WILLIAMSON COUNTY RGNL (MWA)

09295

AIRPORT DIAGRAM

AL-773 (FAA)

MARQUETTE/ SAWYER INTL (SAW)
MARQUETTE, MICHIGAN



AIRPORT DIAGRAM

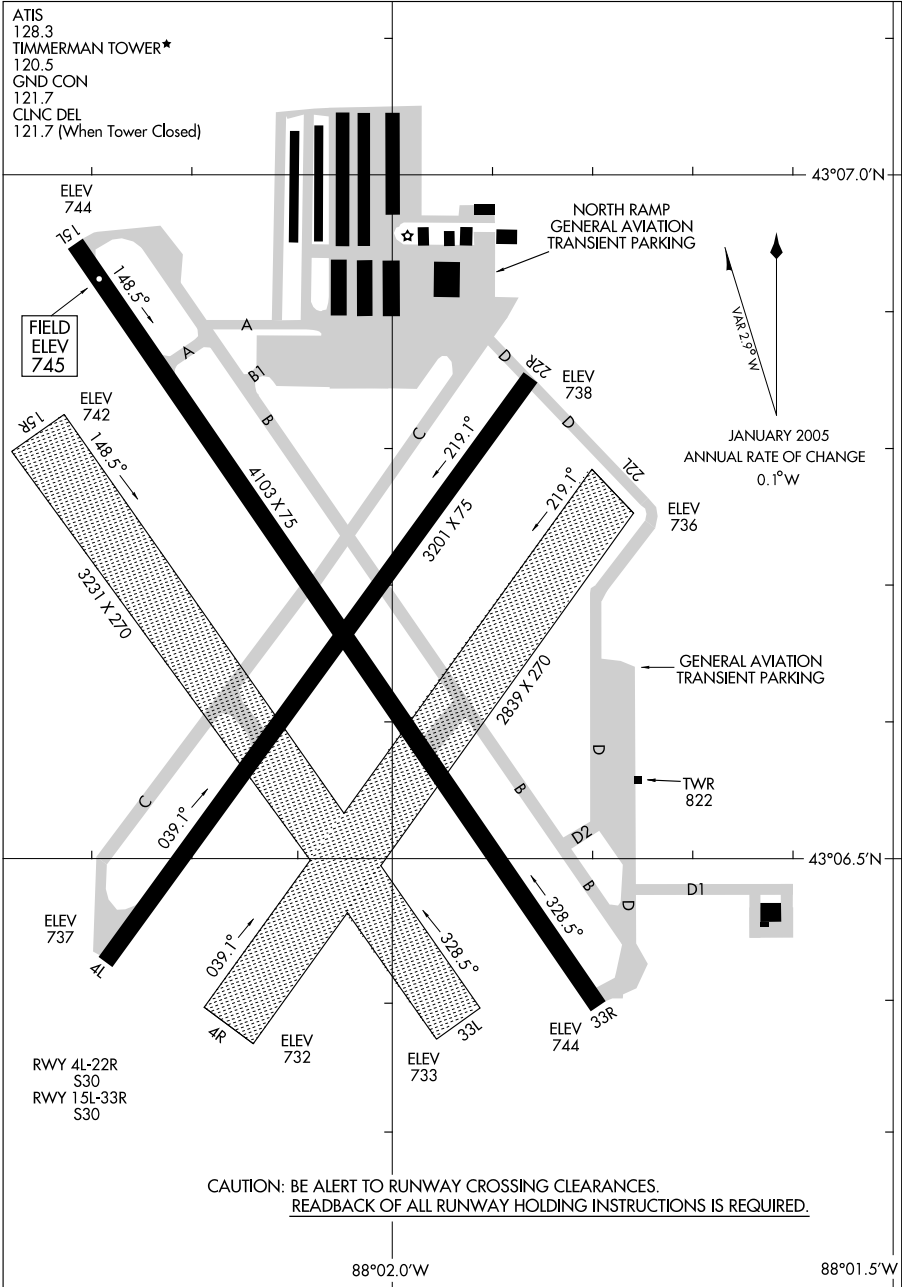
09295

MARQUETTE, MICHIGAN
MARQUETTE/ SAWYER INTL (SAW)

10098

AIRPORT DIAGRAM

MILWAUKEE/LAWRENCE J. TIMMERMAN (MWC)
AL-5077 (FAA) MILWAUKEE, WISCONSIN



AIRPORT DIAGRAM

10098

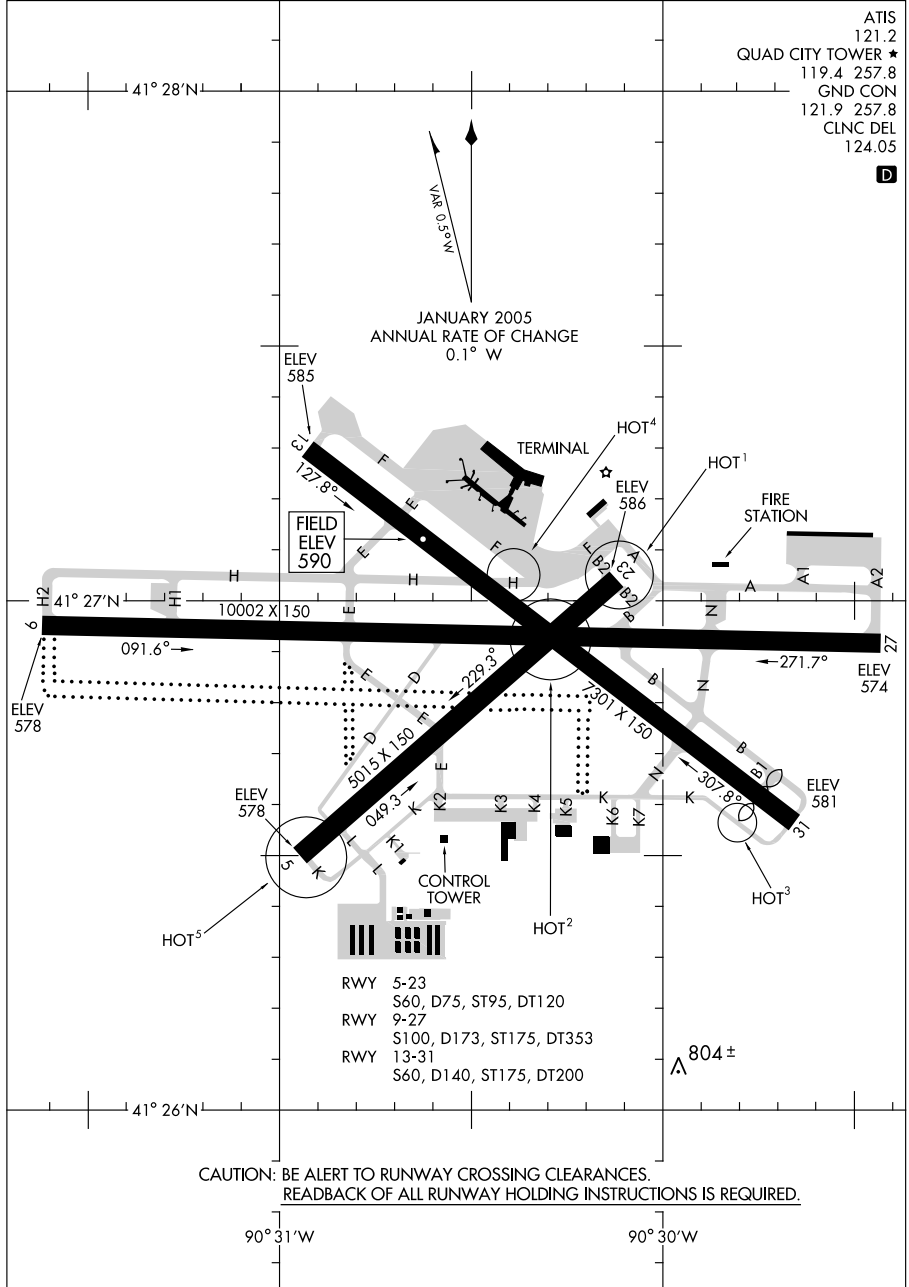
MILWAUKEE, WISCONSIN
MILWAUKEE/LAWRENCE J. TIMMERMAN (MWC)

10042

AIRPORT DIAGRAM

AL-269 (FAA)

MOLINE/QUAD CITY INTL (MLI)
MOLINE, ILLINOIS



- ATIS 121.2
- QUAD CITY TOWER ★ 119.4 257.8
- GND CON 121.9 257.8
- CLNC DEL 124.05

D

AIRPORT DIAGRAM

10042

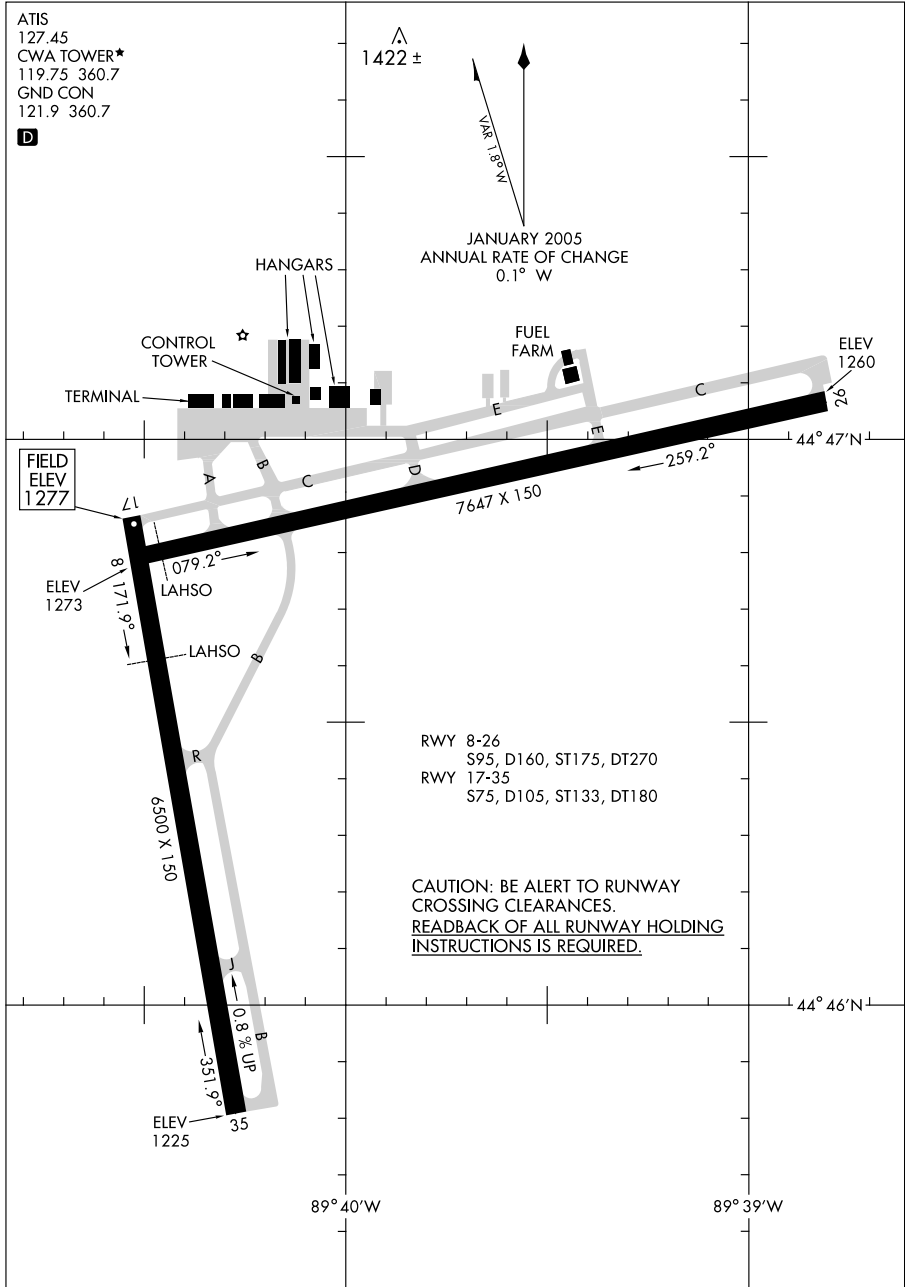
MOLINE, ILLINOIS
MOLINE/QUAD CITY INTL (MLI)

09295

AIRPORT DIAGRAM

AL-5674 (FAA)

MOSINEE/CENTRAL WISCONSIN (CWA)
MOSINEE, WISCONSIN



AIRPORT DIAGRAM

09295

MOSINEE, WISCONSIN
MOSINEE/CENTRAL WISCONSIN (CWA)

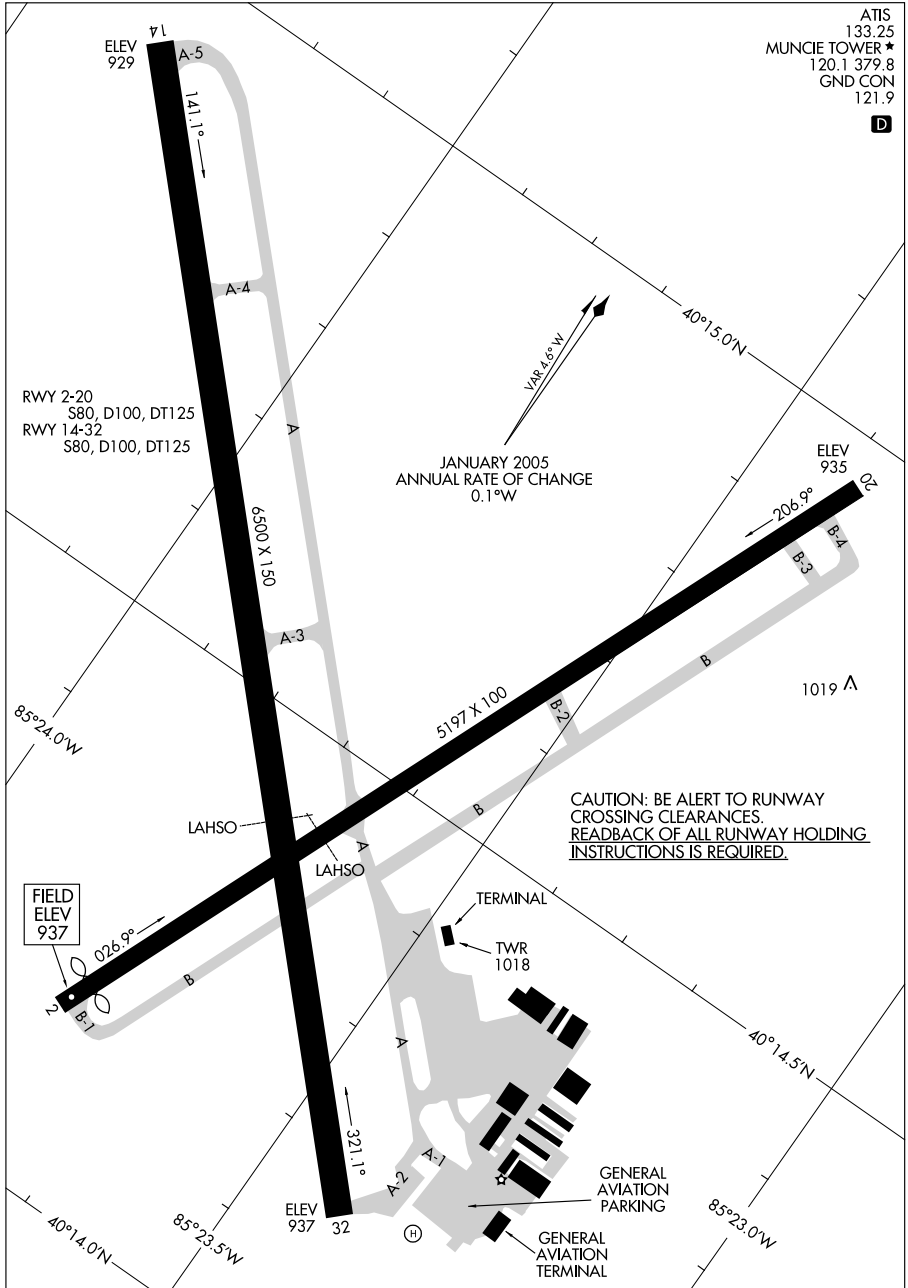
10098

AIRPORT DIAGRAM

AL-5011 (FAA)

MUNCIE/DELAWARE COUNTY RGNL (MIE)
MUNCIE, INDIANA

ATIS 133.25
 MUNCIE TOWER ★ 120.1 379.8
 GND CON 121.9
D



AIRPORT DIAGRAM

10098

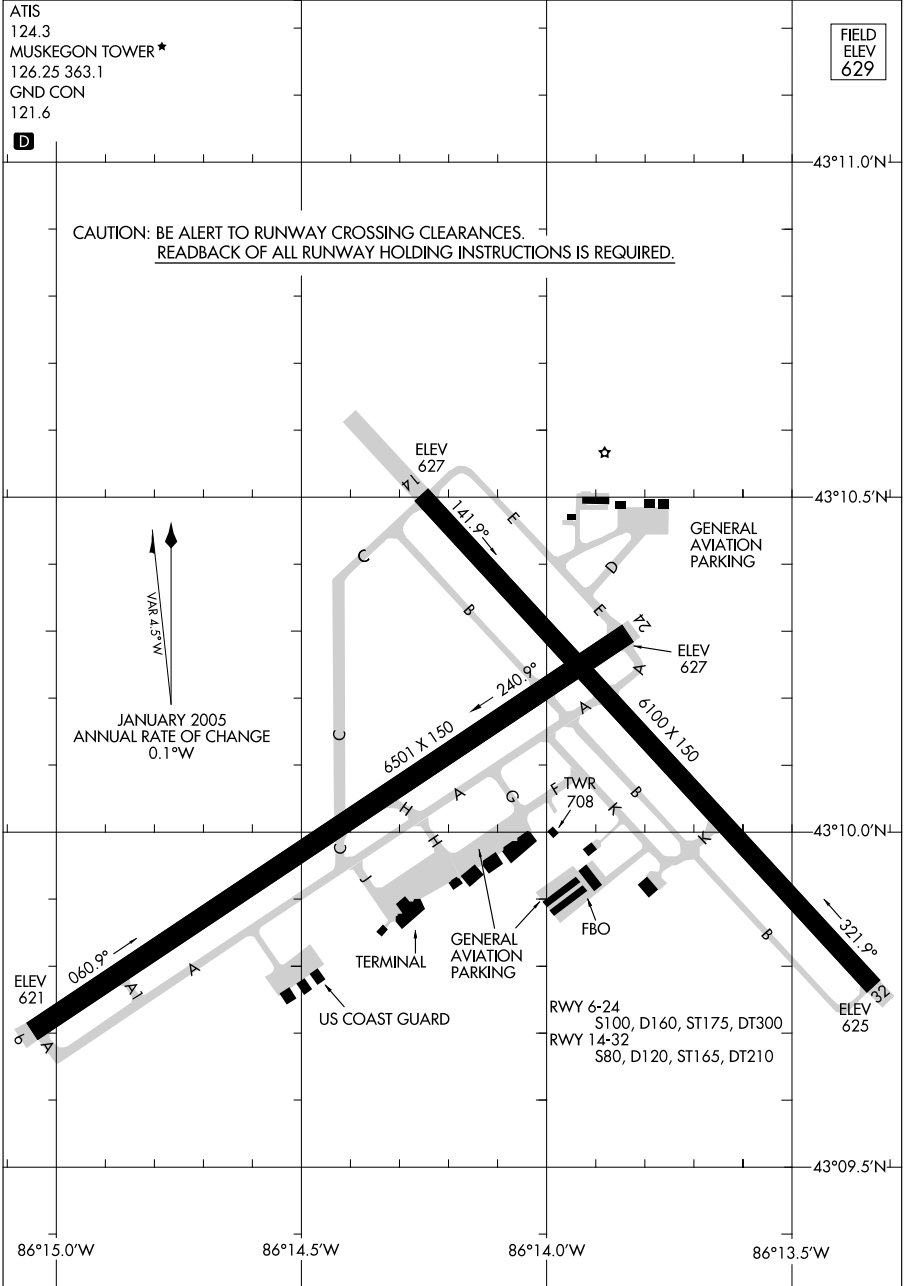
MUNCIE, INDIANA
MUNCIE/DELAWARE COUNTY RGNL (MIE)

10098

AIRPORT DIAGRAM

AL-278 (FAA)

MUSKEGON COUNTY (MKG)
MUSKEGON, MICHIGAN



AIRPORT DIAGRAM

10098

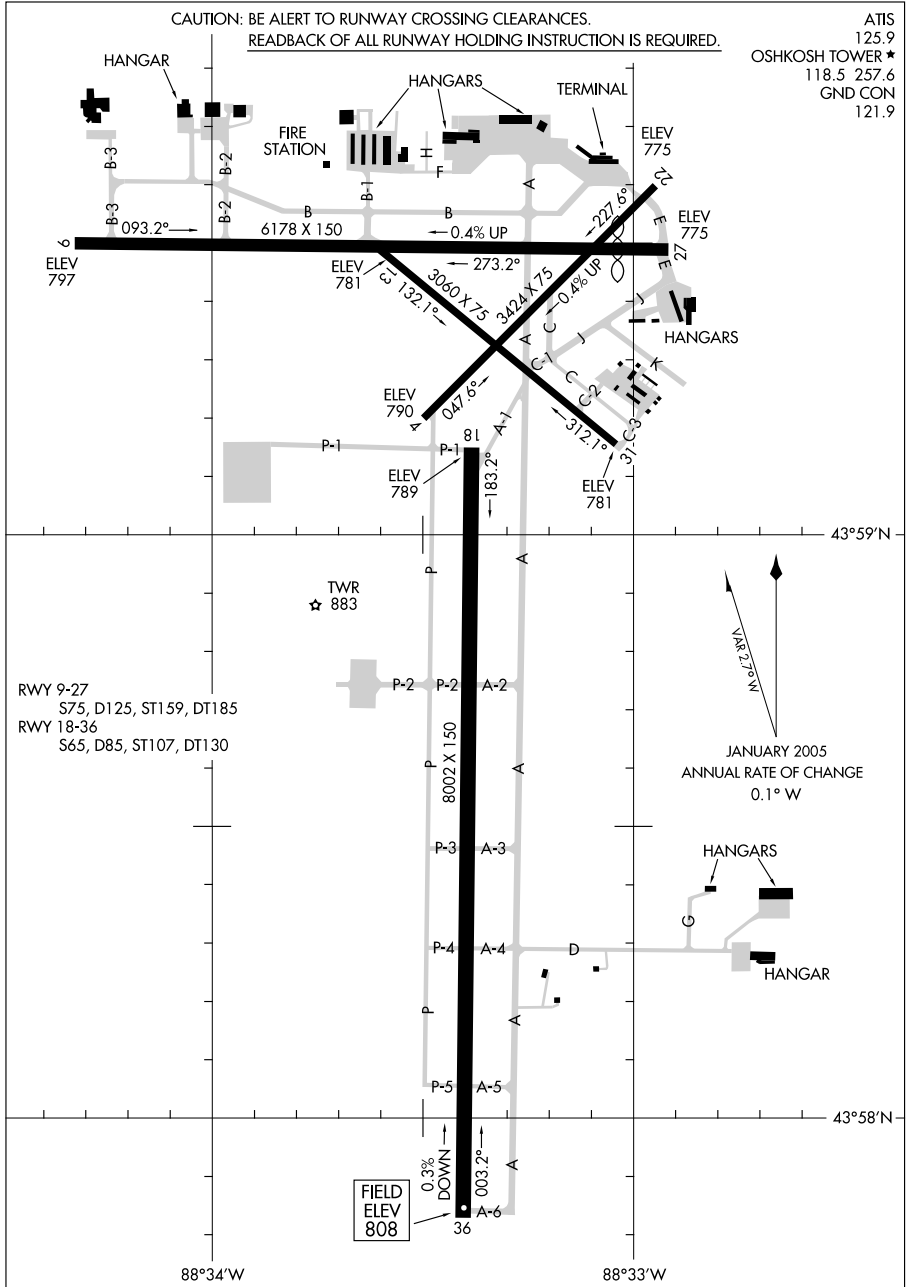
MUSKEGON, MICHIGAN
MUSKEGON COUNTY (MKG)

09295

AIRPORT DIAGRAM

AL-730 (FAA)

OSHKOSH/ WITTMAN RGNL (OSH)
OSHKOSH, WISCONSIN



AIRPORT DIAGRAM

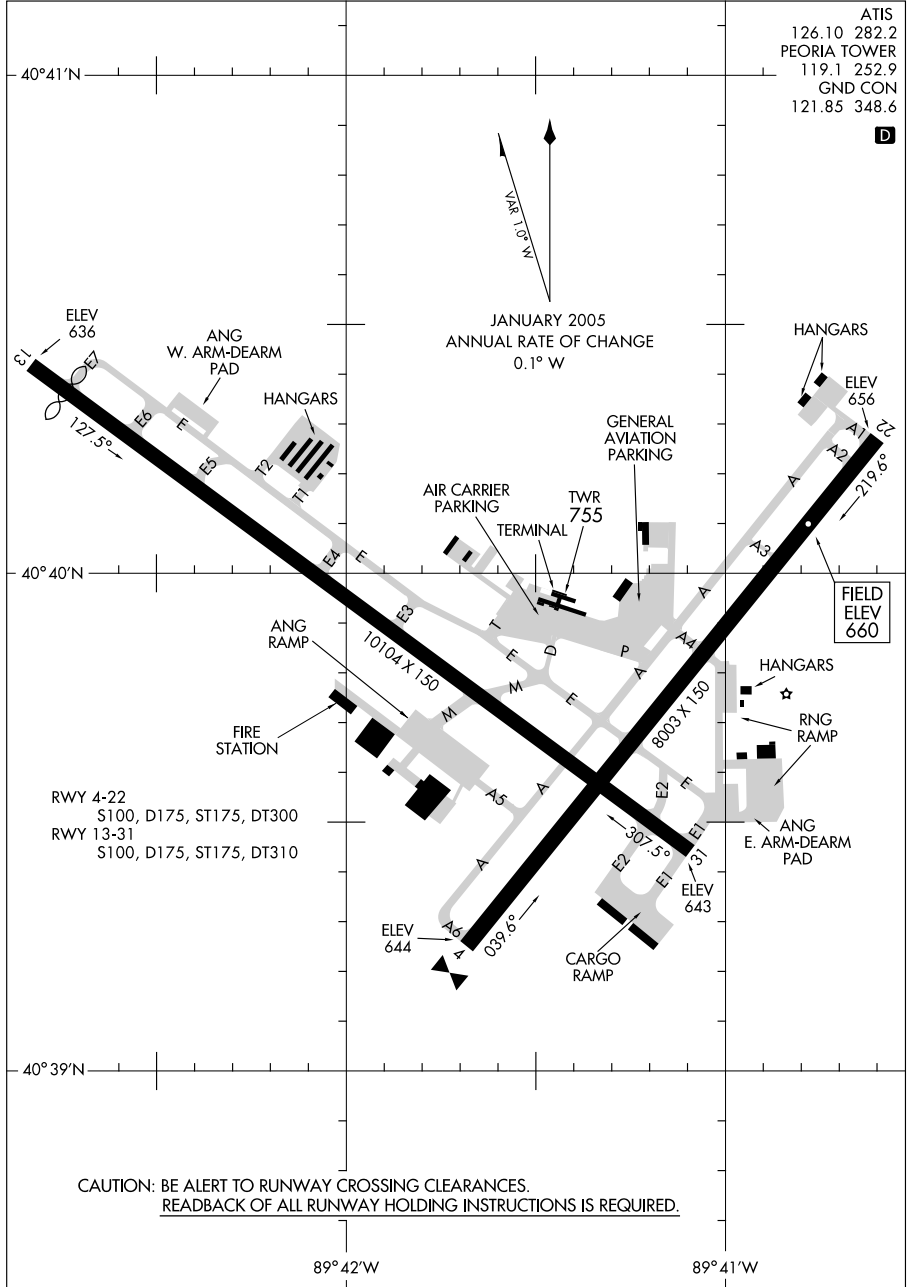
09295

OSHKOSH, WISCONSIN
OSHKOSH/ WITTMAN RGNL (OSH)

10098

AIRPORT DIAGRAM

PEORIA/ GENERAL DOWNING-PEORIA INTL (PIA)
AL-597 (FAA)
PEORIA, ILLINOIS



AIRPORT DIAGRAM

10098

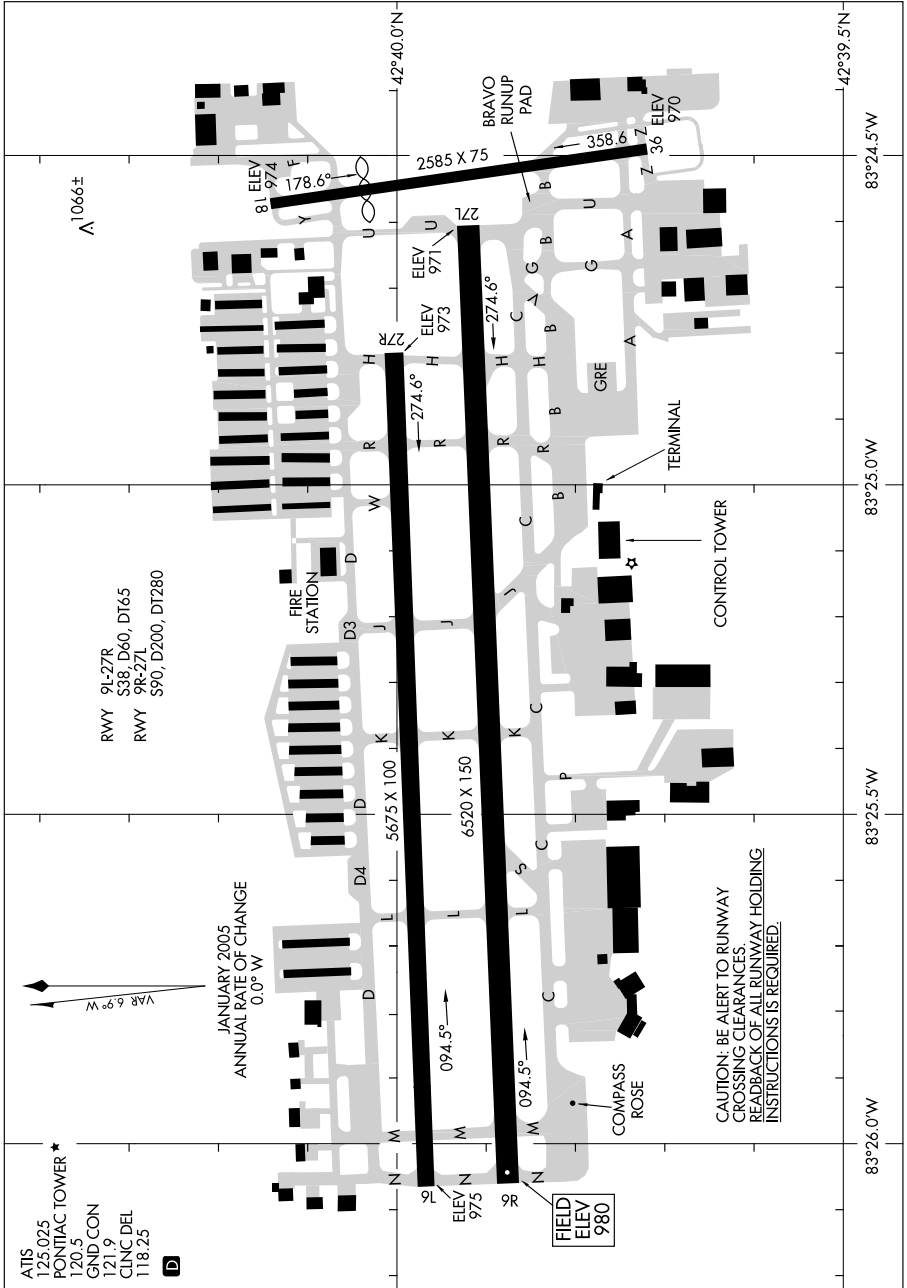
PEORIA, ILLINOIS
PEORIA/GENERAL DOWNING-PEORIA INTL (PIA)

10042

AIRPORT DIAGRAM

PONTIAC/OAKLAND COUNTY INTL (PTK)
PONTIAC, MICHIGAN

AL-5052 (FAA)



AIRPORT DIAGRAM

10042

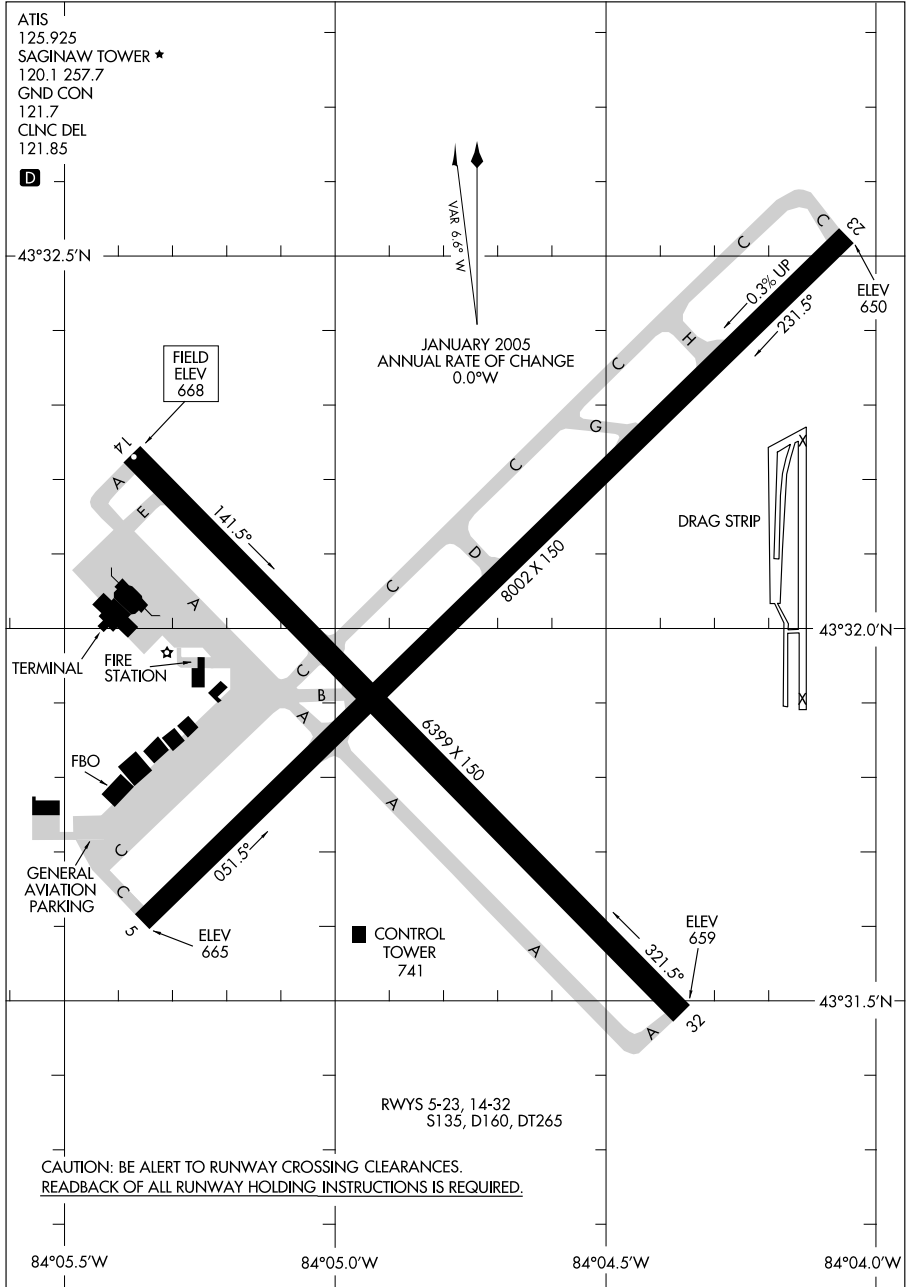
PONTIAC, MICHIGAN
PONTIAC/OAKLAND COUNTY INTL (PTK)

09351

AIRPORT DIAGRAM

AL-648 (FAA)

SAGINAW / MBS INTL (MBS)
SAGINAW, MICHIGAN



AIRPORT DIAGRAM

09351

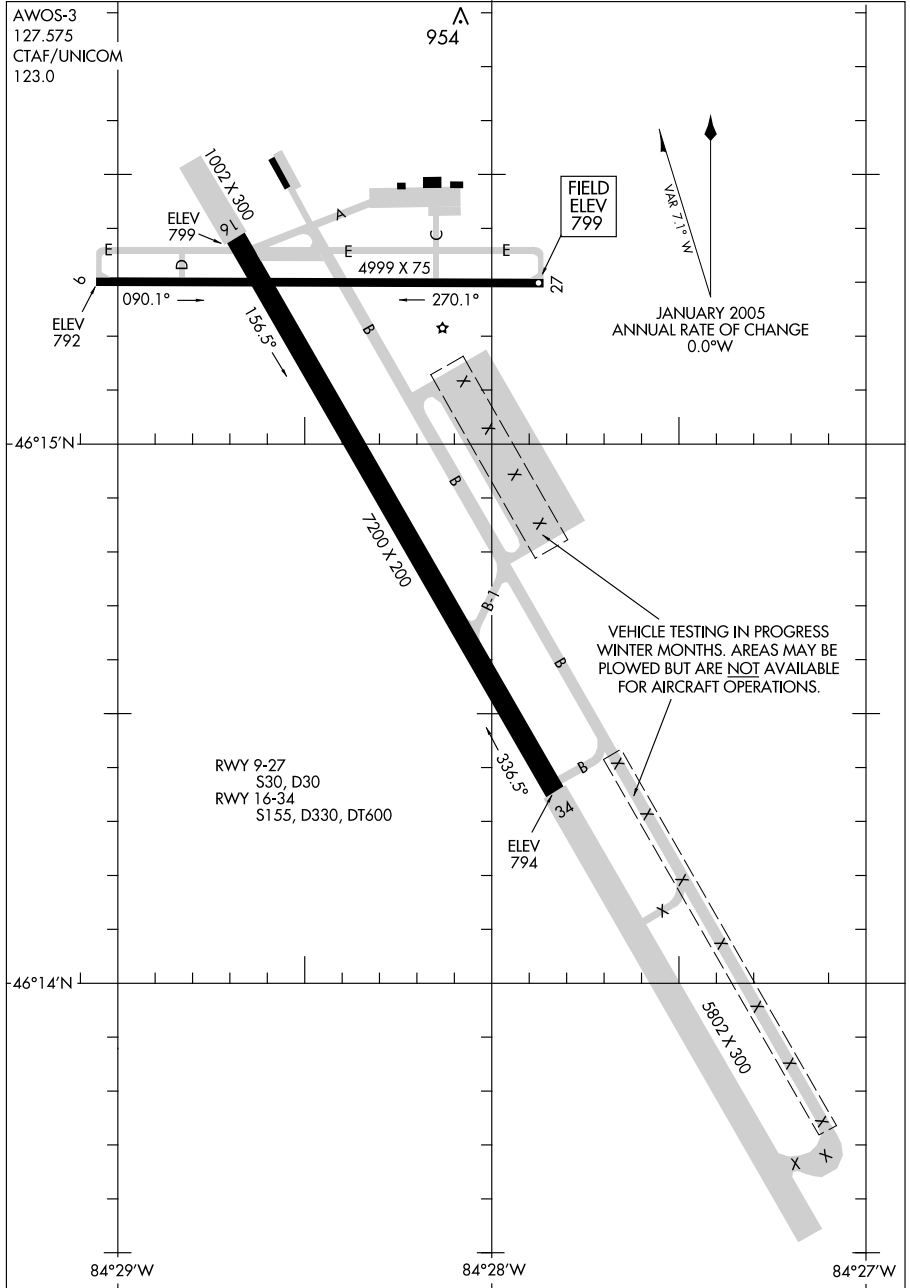
SAGINAW, MICHIGAN
SAGINAW / MBS INTL (MBS)

09071

AIRPORT DIAGRAM

SAULT STE MARIE/CHIPPEWA COUNTY INTL (CIU)
SAULT STE MARIE, MICHIGAN

AL-810 (FAA)



AIRPORT DIAGRAM

SAULT STE MARIE, MICHIGAN
SAULT STE MARIE/CHIPPEWA COUNTY INTL (CIU)

09071

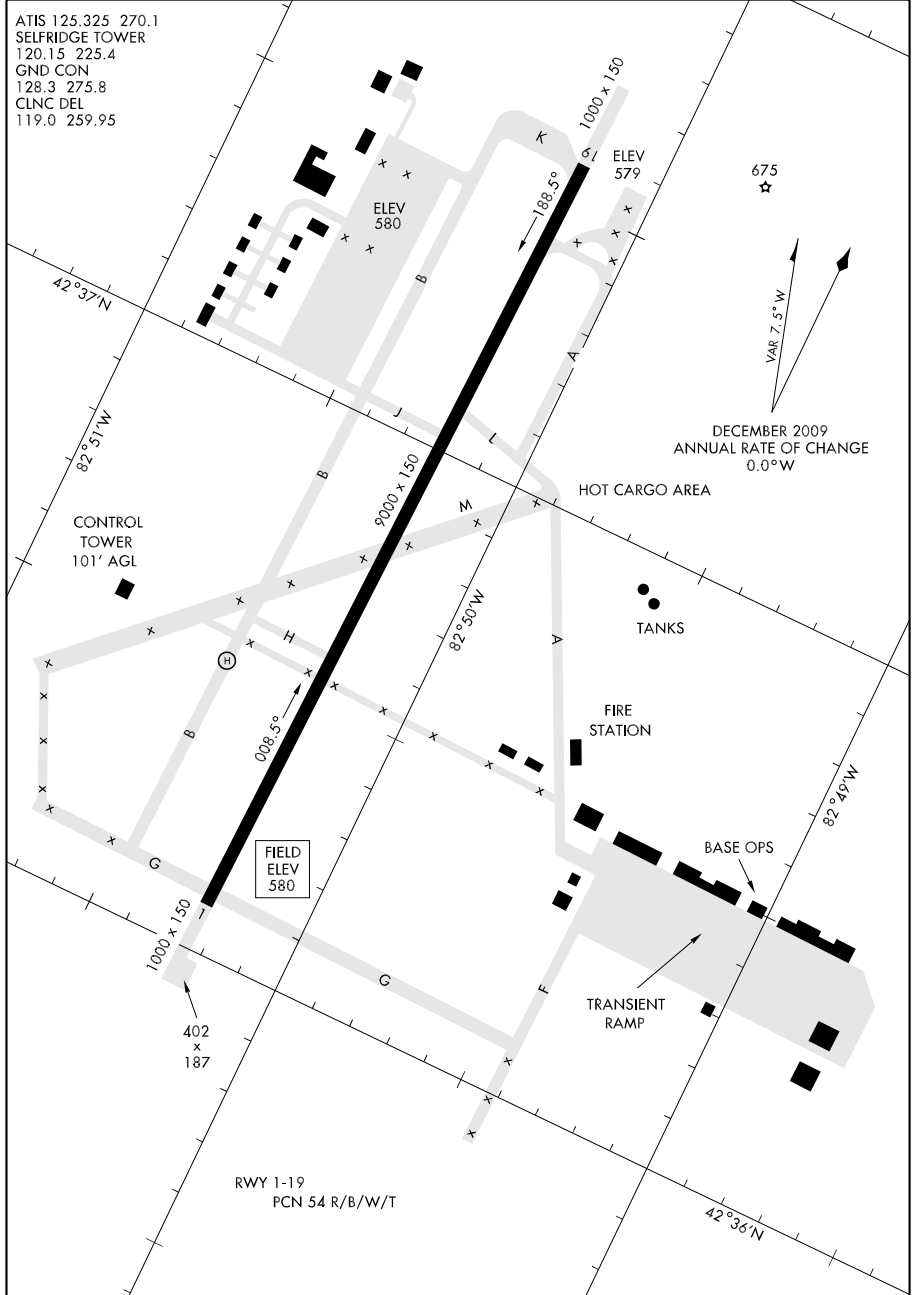
09351

AIRPORT DIAGRAM

AFD-276 [USAF]

SELFRIDGE ANGB (KMTC)

MT. CLEMENS, MICHIGAN



AIRPORT DIAGRAM

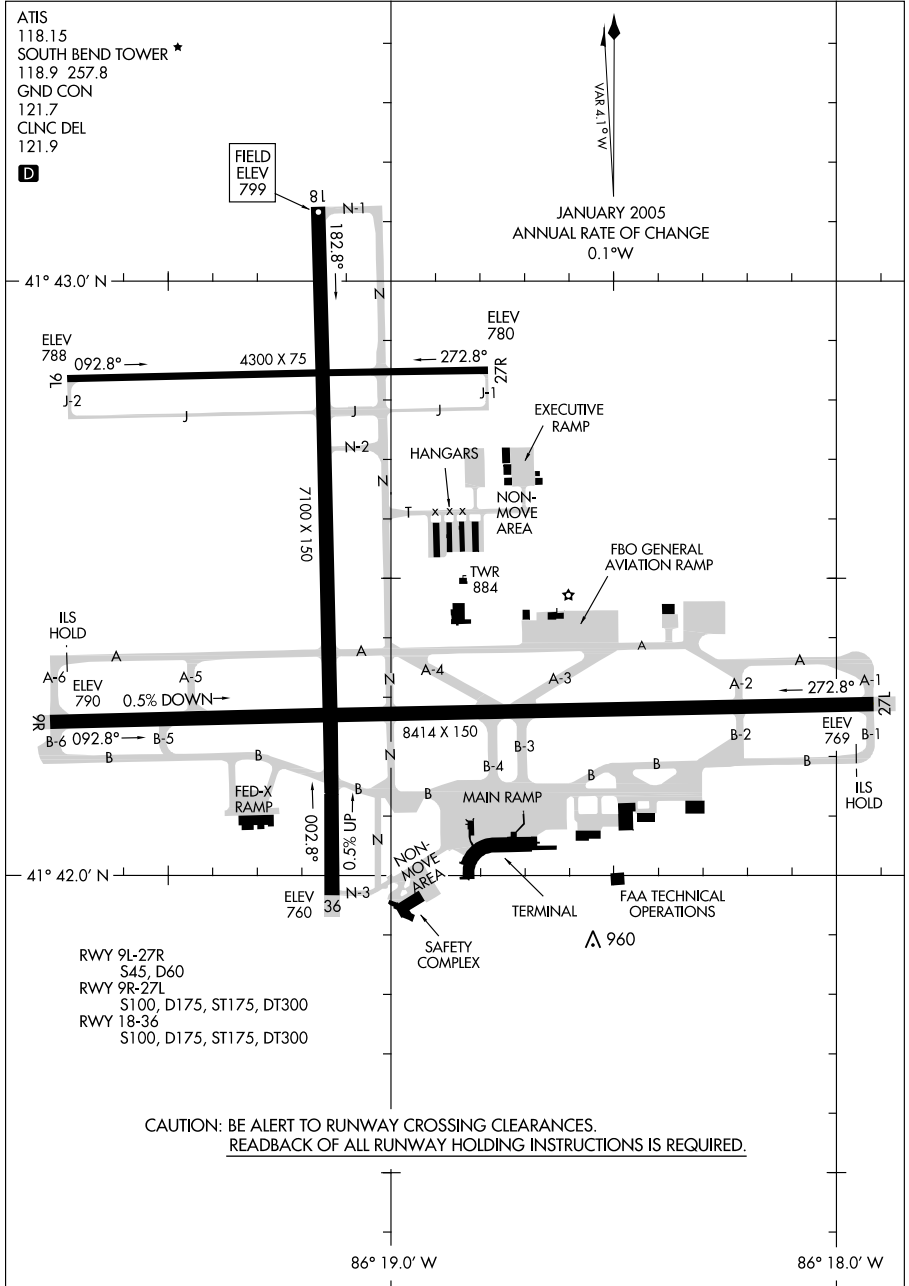
MT. CLEMENS, MICHIGAN
SELFRIDGE ANGB (KMTC)

10042

AIRPORT DIAGRAM

AL-399 (FAA)

SOUTH BEND RGNL (SBN)
SOUTH BEND, INDIANA



AIRPORT DIAGRAM

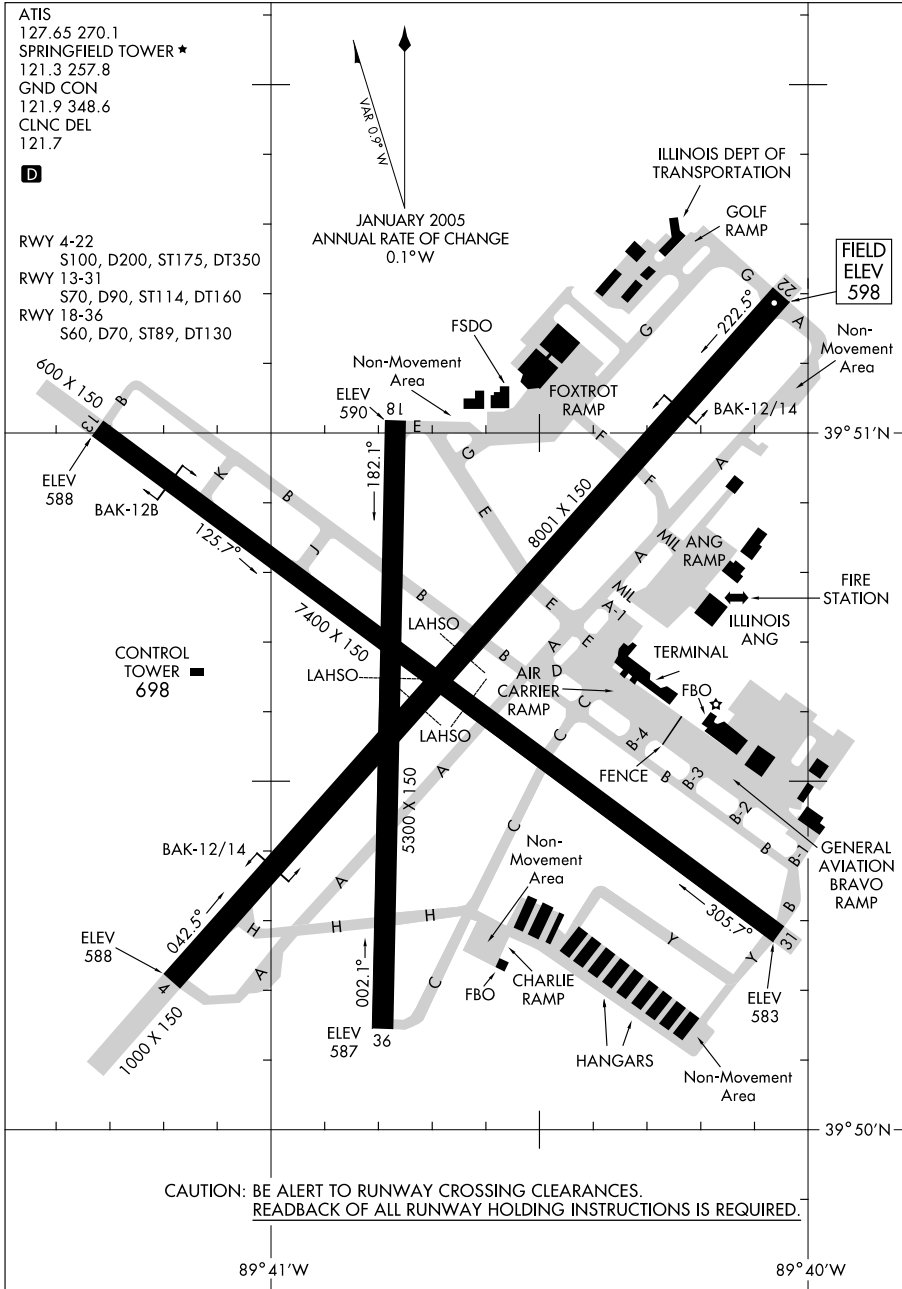
10042

SOUTH BEND, INDIANA
SOUTH BEND RGNL (SBN)

09351

AIRPORT DIAGRAM

SPRINGFIELD/ABRAHAM LINCOLN CAPITAL (SPI)
AL-518 (FAA) SPRINGFIELD, ILLINOIS



AIRPORT DIAGRAM
09351

SPRINGFIELD, ILLINOIS
SPRINGFIELD/ABRAHAM LINCOLN CAPITAL (SPI)

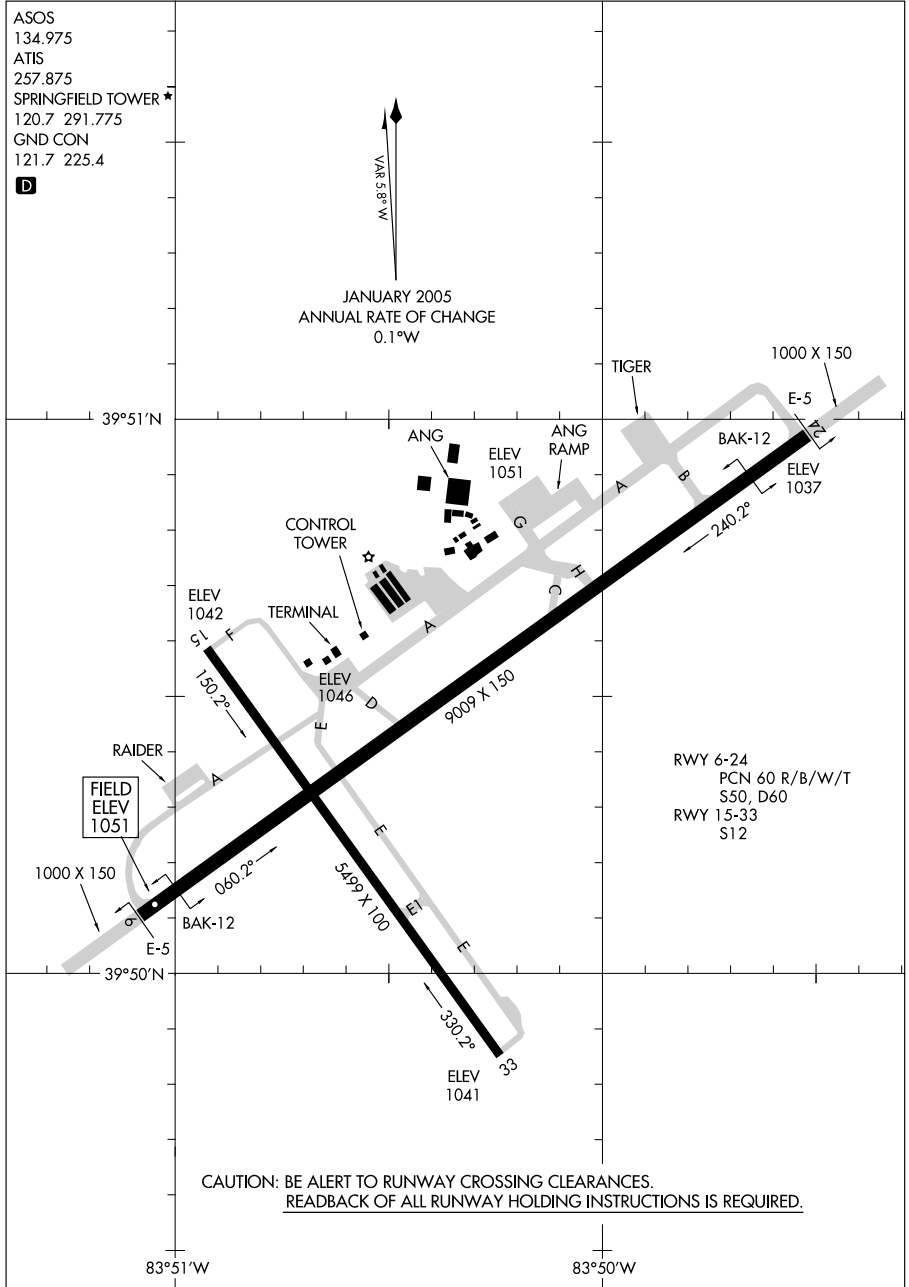
09295

AIRPORT DIAGRAM

AL-958 (FAA)

SPRINGFIELD-BECKLEY MUNI (SGH)

SPRINGFIELD, OHIO



AIRPORT DIAGRAM

09295

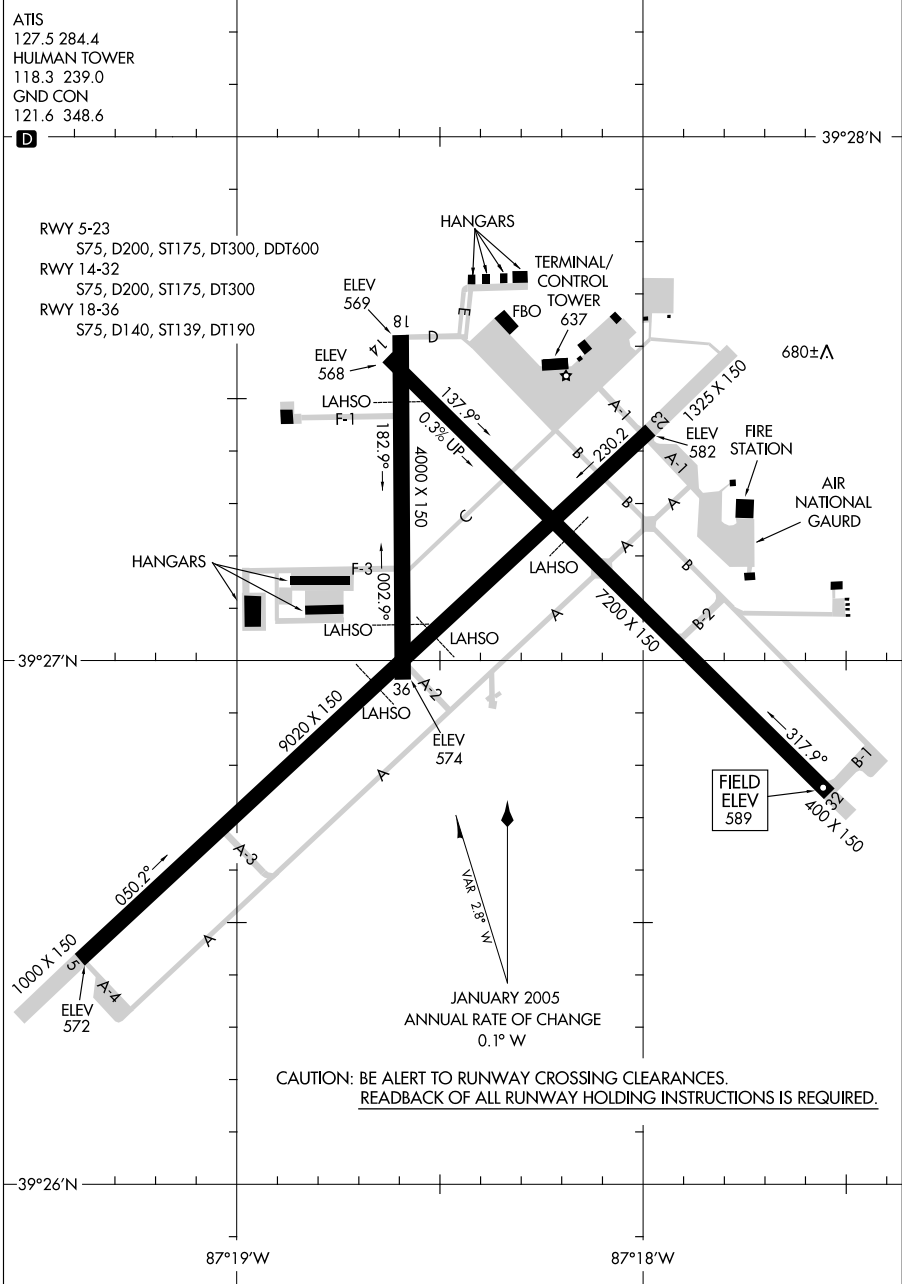
SPRINGFIELD, OHIO
SPRINGFIELD-BECKLEY MUNI (SGH)

09295

AIRPORT DIAGRAM

AL-608 (FAA)

TERRE HAUTE INTL-HULMAN FIELD (HUF)
TERRE HAUTE, INDIANA



AIRPORT DIAGRAM

09295

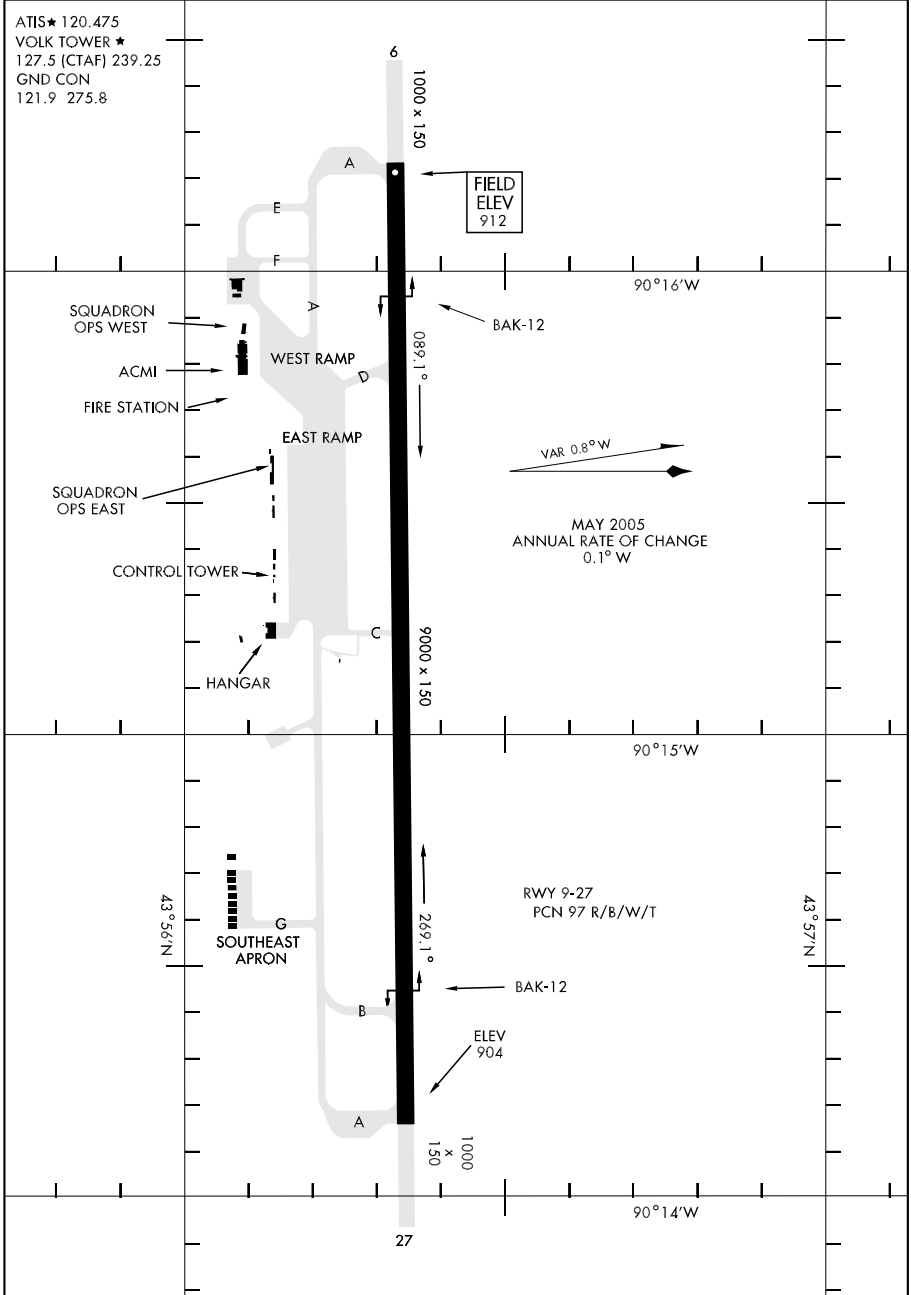
TERRE HAUTE, INDIANA
TERRE HAUTE INTL-HULMAN FIELD (HUF)

06271

AIRPORT DIAGRAM

AFD-714 [USAF]

VOLK FIELD (VOK)
CAMP DOUGLAS, WISCONSIN



AIRPORT DIAGRAM

WGS DATUM

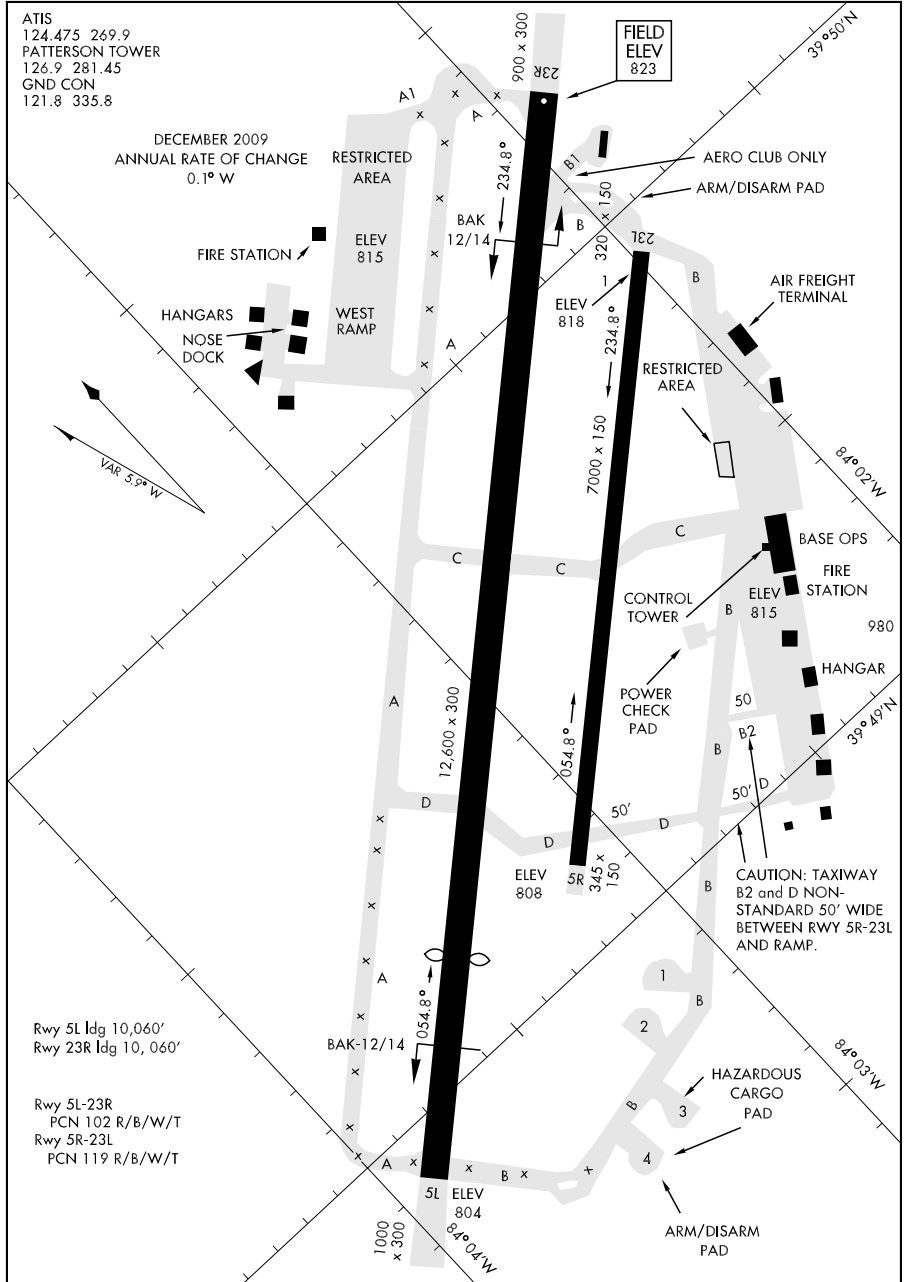
CAMP DOUGLAS, WISCONSIN
VOLK FIELD (VOK)

09351

AIRPORT DIAGRAM

WRIGHT-PATTERSON AFB (KFFO)

DAYTON, OHIO



AIRPORT DIAGRAM

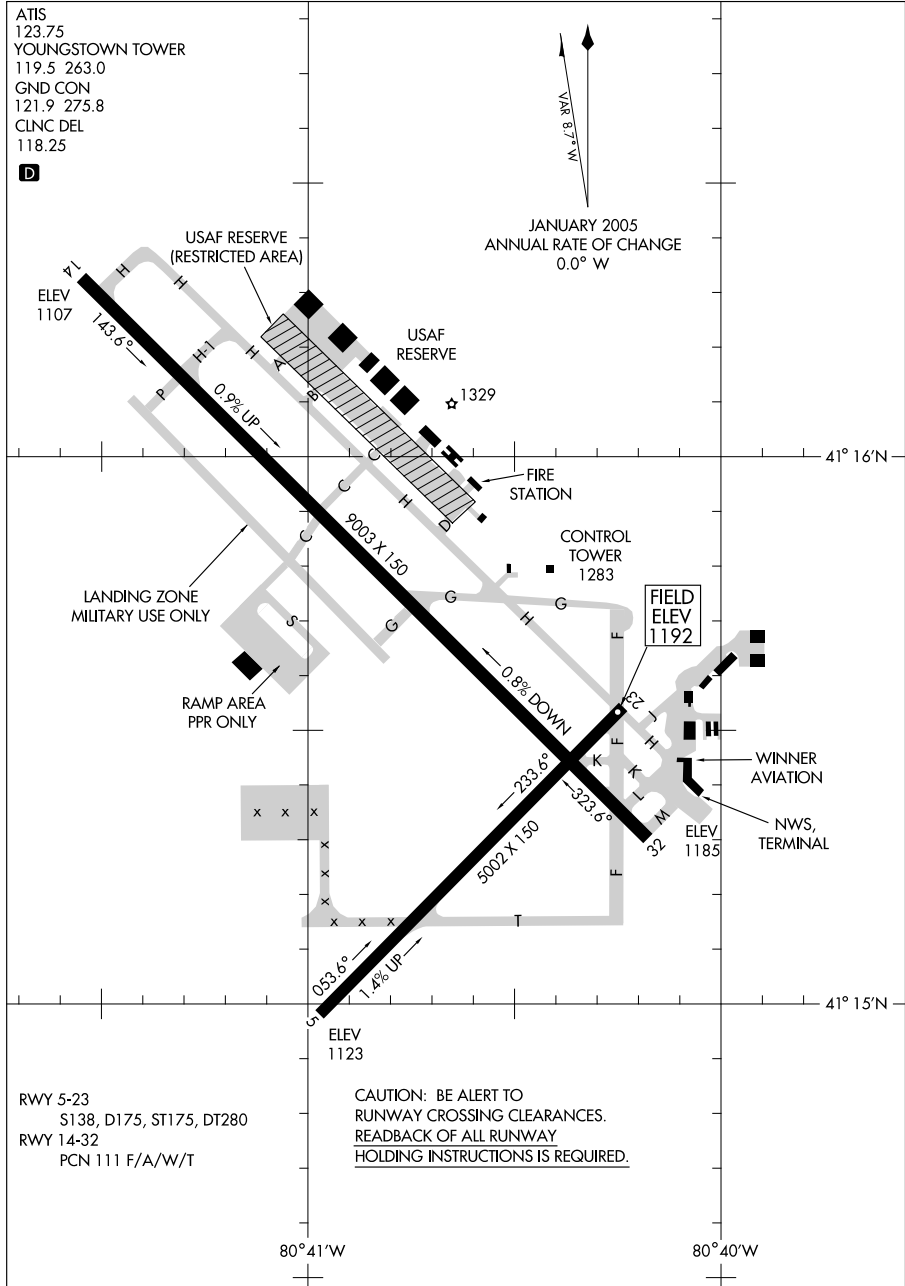
DAYTON, OHIO
WRIGHT-PATTERSON AFB (KFFO)

09295

AIRPORT DIAGRAM

AL-466 (FAA)

YOUNGSTOWN-WARREN RGNL (YNG)
YOUNGSTOWN-WARREN, OHIO



AIRPORT DIAGRAM

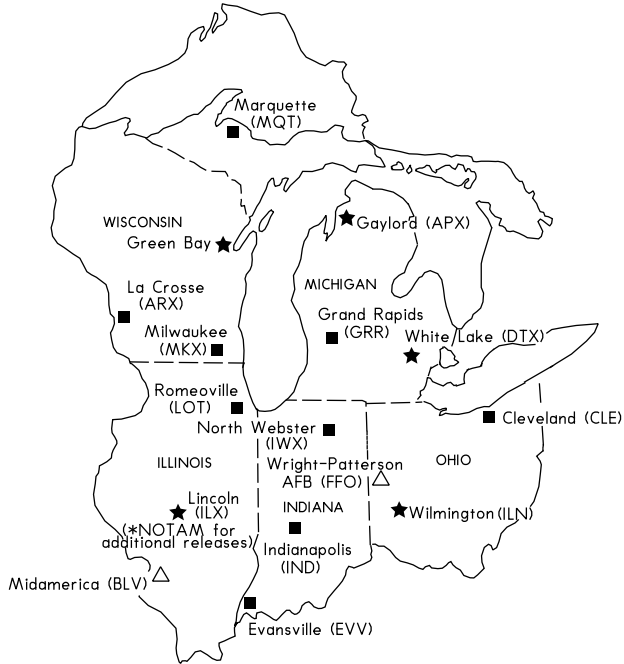
09295

YOUNGSTOWN-WARREN, OHIO
YOUNGSTOWN-WARREN RGNL (YNG)

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NATIONAL WEATHER SERVICE (NWS)
UPPER AIR OBSERVING STATION (UAOS)
AND
WEATHER RADAR NETWORK



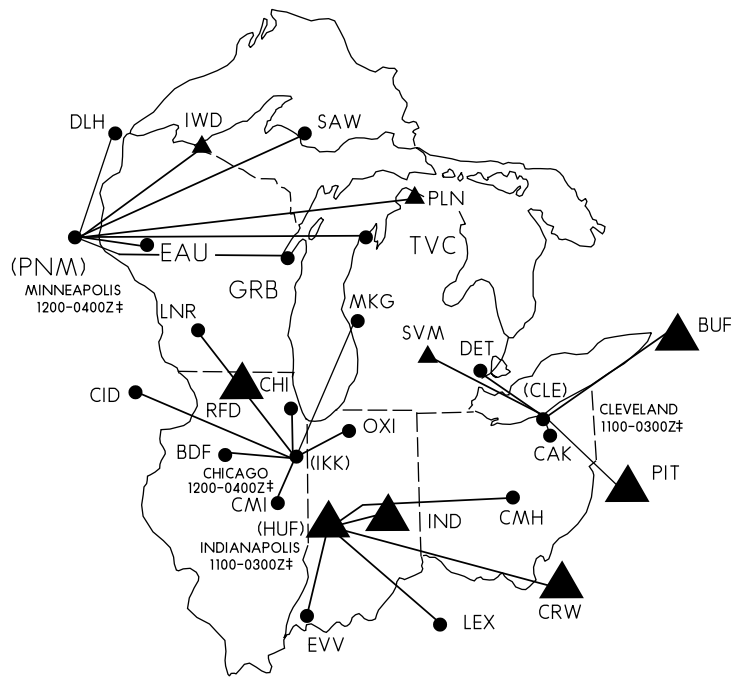
LEGEND

- △ AVIATION WEATHER SERVICE (MILITARY)
- ▲ AIR TRAFFIC CONTROL RADAR
- ★ UPPER AIR OBSERVING STATION
HYDROGEN FILLED BALLOON RELEASES AROUND
1100 UTC AND 2300 UTC DAILY/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 2330 UTC, AND FOR SPECIAL RELEASES AT OTHER THAN THE SCHEDULED HOURS, AN AERONAUTICAL INFORMATION MESSAGE OR NOTAM* WILL BE FILED.

ENROUTE FLIGHT ADVISORY SERVICE (EFAS)

See Aeronautical Information Manual (AIM) for available services



CHICAGO EFAS HIGH ALTITUDE FREQUENCY 134.875
 CLEVELAND EFAS HIGH ALTITUDE FREQUENCY 135.425
 INDIANAPOLIS EFAS HIGH ALTITUDE FREQUENCY 134.825
 MINNEAPOLIS EFAS HIGH ALTITUDE FREQUENCY 135.675

- LOW ALTITUDE COMMUNICATIONS OUTLET (122.0)
- ▲ HIGH ALTITUDE COMMUNICATIONS OUTLET
- ▲ BOTH LOW AND HIGH ALTITUDE COMMUNICATIONS OUTLET