Federal Aviation Administration

U.S. Terminal Procedures Publication

North Central (NC) Vol 1 of 3

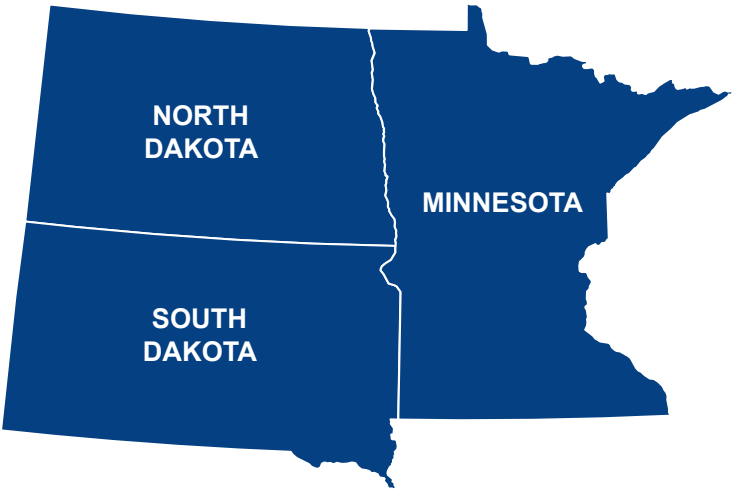
Effective: 0901Z

25 FEB 2021

to: 0901Z

22 APR 2021

Consult the Change Notice (CN) effective 25 MAR 2021 for revised Instrument Procedure Charts for this volume



Consult NOTAMs for latest information

Consult/Subscribe to FAA Safety Alerts and Charting Notices at:

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CORRECTIONS, COMMENTS AND/OR PROCUREMENT

FOR CHARTING ERRORS, OR FOR CHANGES, ADDITIONS, RECOMMENDATIONS ON PROCEDURAL ASPECTS CONTACT:
FAA, Aeronautical Information Services
1305 East-West Highway
SSMC 4, Room 3424
Silver Spring, MD 20910
Telephone: 1-800-638-8972
https://www.faa.gov/air_traffic/flight_info/aeronav/aero_data/

For inquiries regarding military charts, please contact aerohelp@nga.mil

FOR PROCUREMENT:
For digital products, visit our website at:
https://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/

For a list of approved FAA Print Providers, visit our website at:
https://www.faa.gov/air_traffic/flight_info/aeronav/print_providers/

Frequently asked questions (FAQ) are answered on our website at https://www.faa.gov/go/ais
See the FAQs prior to contact via toll free number or email.

Request for the creation or revisions to Airport Diagrams should be in accordance with FAA Order 7910.4.

INOP COMPONENTS 19339

INOPERATIVE COMPONENTS OR VISUAL AIDS TABLE
(For Civil Use Only)

Straight-in and Sidestep landing minimums published on instrument approach procedure charts are based on full operation of all components and visual aids (see exception below for ALSF 1 & 2) associated with the particular approach chart being used. Higher minimums are required with inoperative components or visual aids as indicated below. If more than one component is inoperative, each minimum is raised to the highest minimum required by any single component that is inoperative. ILS glideslope inoperative minimums are published on the instrument approach charts as localizer minimums. This table applies to approach categories A thru D and is to be used unless amended by notes on the approach chart. Such notes apply only to the particular approach category(ies) as stated. Category E inoperative notes will be specified when published on civil charts. The inoperative table does not apply to Circling minimums. See legend page for description of components indicated below.

Full Operation Exception: For ALSF 1 & 2 operated as SSALR, or when the sequenced flashing lights are inoperative, there is no effect on visibility for ILS lines of minima.

(1) ILS, PAR, LPV, GLS minima

Inoperative Component or Visual Aid	Increase Visibility
All ALS types (except ODALS)	¼ mile

(2) ILS, LPV, GLS with visibility minima of RVR 1800†/2000*/2200*

Inoperative Component or Visual Aid	Increase Visibility
ALSF 1 & 2, MALSR, SSALR	To RVR 4000† To RVR 4500*
TDZL or RCLS	To RVR 2400#
RVR	To ½ mile

#For ILS, LPV, GLS procedures with a 200 foot HAT, RVR 1800 authorized with use of FD or AP or HUD to DA.

(3) All Approach Types and all lines of minima other than (1) & (2) above

Inoperative Component or Visual Aid	Increase Visibility
ALSF 1 & 2, MALSR, SSALR	½ mile
MALSF, MALS, SSALF, SSALS, SALSF, SALS	¼ mile

(4) Sidestep minima (CAT C-D)

Inoperative Component or Visual Aid to Sidestep Runway	Increase Visibility
ALSF 1 & 2, MALSR, SSALR	½ mile

(5) All Approach Types, All lines of minima

Inoperative Component or Visual Aid	Increase Visibility
ODALS (CAT A-B)	¼ mile
ODALS (CAT C-D)	⅛ mile

INOP COMPONENTS 19339

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TERMS/LANDING MINIMA DATA 20142

IFR LANDING MINIMA

The United States Standard for Terminal Instrument Procedures (TERPS) is the approved criteria for formulating instrument approach procedures. Landing minima are established for six aircraft approach categories (ABCDE and COPTER).
In the absence of COPTER MINIMA, helicopters may use the CAT A minimums of other procedures.

LANDING MINIMA FORMAT

In this example airport elevation is 1179, and runway touchdown zone elevation is 1152.

Visibility (RVR 100's of feet) — DA — Aircraft Approach Category — HAT

CATEGORY	A	B	C	D
S-ILS 27	1352/24		200 (200-½)	
S-LOC 27	1440/24	288	(300-½)	1440/50 288 (300-1)
CIRCLING	1540-1 361 (400-1)	1640-1 461 (500-1)	1640-1½ 461 (500-1½)	1740-2 561 (600-2)

Straight-in ILS to Runway 27

Straight-in with Glide Slope Inoperative or not used to Runway 27

All **weather** minimums in parentheses not applicable to Civil Pilots. Military Pilots refer to appropriate regulations.

MDA — HAA — Visibility in Statute Miles

COPTER MINIMA ONLY

CATEGORY	COPTER
H-176°	680-½ 363 (400-½)

Copter Approach Direction — Height of MDA/DA Above Landing Area (HAL) — No circling minimums are provided

NOTE: The W symbol indicates outages of the WAAS vertical guidance may occur daily at this location due to initial system limitations. WAAS NOTAMS for vertical outages are not provided for this approach. Use LNAV minima for flight planning at these locations, whether as a destination or alternate. For flight operations at these locations, when the WAAS avionics indicate that LNAV/VNAV or LPV service is available, then vertical guidance may be used to complete the approach using the displayed level of service. Should an outage occur during the procedure, reversion to LNAV minima may be required. As the WAAS coverage is expanded, the W will be removed.

RNAV minimums are dependent on navigation equipment capability, as stated in the applicable AFM, AFMS, or other FAA approved document. See AIM paragraph 5-4-5, AC 90-105 and AC 90-107 for detailed requirements for each line of minima.

COLD TEMPERATURE AIRPORTS

NOTE: A ❄-12°C symbol indicates a cold temperature altitude correction is required at this airport when reported temperature is at or below the published temperature. See the following Cold Temperature Error Table to make manual corrections. Advise ATC with altitude correction. Advising ATC with altitude corrections is not required in the final segment. See Aeronautical Information Manual (AIM), Chapter 7, for guidance and additional information. For a complete list, see the "Cold Temperature Airports" link under the Additional Resources heading at the bottom of the following page: http://www.faa.gov/air_traffic/flight_info/aeronav/digital_products/dtpp/search/

COLD TEMPERATURE ERROR TABLE

HEIGHT ABOVE AIRPORT IN FEET

REPORTED TEMP °C	200	300	400	500	600	700	800	900	1000	1500	2000	3000	4000	5000
+10	10	10	10	10	20	20	20	20	20	30	40	60	80	90
0	20	20	30	30	40	40	50	50	60	90	120	170	230	280
-10	20	30	40	50	60	70	80	90	100	150	200	290	390	490
-20	30	50	60	70	90	100	120	130	140	210	280	420	570	710
-30	40	60	80	100	120	140	150	170	190	280	380	570	760	950
-40	50	80	100	120	150	170	190	220	240	360	480	720	970	1210
-50	60	90	120	150	180	210	240	270	300	450	590	890	1190	1500

AIRCRAFT APPROACH CATEGORIES

Aircraft approach category indicates a grouping of aircraft based on a speed of VREF, if specified, or if VREF not specified, 1.3 VSO at the maximum certificated landing weight. VREF, VSO, and the maximum certificated landing weight are those values as established for the aircraft by the certification authority of the country of registry. Helicopters are Category A aircraft. An aircraft shall fit in only one category. When necessary to operate the aircraft at an airspeed in excess of the maximum airspeed of its certified aircraft approach category, pilots should use the applicable higher category minima. For additional options and to ensure the aircraft remains within protected airspace, consult the AIM. See following category limits:

MANEUVERING TABLE

Approach Category	A	B	C	D	E
Speed (Knots)	0-90	91-120	121-140	141-165	Abv 165

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CIRCLING APPROACH OBSTACLE PROTECTED AIRSPACE

The circling MDA provides vertical obstacle clearance during a circle-to-land maneuver. The circling MDA protected area extends from the threshold of each runway authorized for landing following a circle-to-land maneuver for a distance as shown in the tables below. The resultant arcs are then connected tangentially to define the protected area.

STANDARD CIRCLING APPROACH MANEUVERING RADIUS

Circling approach protected areas developed prior to late 2012 used the radius distances shown in the following table, expressed in nautical miles (NM), dependent on aircraft approach category. The approaches using standard circling approach areas can be identified by the absence of the C symbol on the circling line of minima.

Circling MDA in feet MSL	Approach Category and Circling Radius (NM)				
	CAT A	CAT B	CAT C	CAT D	CAT E
All Altitudes	1.3	1.5	1.7	2.3	4.5

C EXPANDED CIRCLING APPROACH MANEUVERING AIRSPACE RADIUS

Circling approach protected areas developed after late 2012 use the radius distance shown in the following table, expressed in nautical miles (NM), dependent on aircraft approach category, and the altitude of the circling MDA, which accounts for true airspeed increase with altitude. The approaches using expanded circling approach areas can be identified by the presence of the C symbol on the circling line of minima.

Circling MDA in feet MSL	Approach Category and Circling Radius (NM)				
	CAT A	CAT B	CAT C	CAT D	CAT E
1000 or less	1.3	1.7	2.7	3.6	4.5
1001-3000	1.3	1.8	2.8	3.7	4.6
3001-5000	1.3	1.8	2.9	3.8	4.8
5001-7000	1.3	1.9	3.0	4.0	5.0
7001-9000	1.4	2.0	3.2	4.2	5.3
9001 and above	1.4	2.1	3.3	4.4	5.5

Comparable Values of RVR and Visibility

The following table shall be used for converting RVR to ground or flight visibility. For converting RVR values that fall between listed values, use the next higher RVR value; do not interpolate. For example, when converting 4800 RVR, use 5000 RVR with the resultant visibility of 1 mile.

RVR (feet)	Visibility (SM)	RVR (feet)	Visibility (SM)	RVR (feet)	Visibility (SM)	RVR (feet)	Visibility (SM)
1600	¼	2400	½	3500	⅝	5500	1
1800	½	2600	½	4000	¾	6000	1¼
2000	½	3000	⅝	4500	⅞		
2200	½	3200	⅝	5000	1		

RADAR MINIMA

	RWY	GP/TCH/RPI	CAT	DA/ MDA-VIS	HAT HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT HAA	CEIL-VIS
PAR	10	2.5°/42/1000	ABCDE	**195**/16	100	(100-¼)				
	28	2.5°/48/1068	ABCDE	**187**/16	100	(100-¼)				
ASR	10		ABC	**560**/40	463	(500-¾)	DE	**560**/50	463	(500-1)
	28		AB	**600**/50	513	(600-1)	CDE	**600**/60	513	(600-1¼)
CIR	10		AB	**560-**1¼	463	(500-1¼)	CDE	**560-**1½	463	(500-1½)
	28		AB	**600-**1¼	503	(600-1¼)	CDE	**600-**1½	503	(600-1½)

Visibility (RVR 100's of feet)

Visibility in Statute Miles

All minimums in parentheses not applicable to Civil Pilots. Military Pilots refer to appropriate regulations.

Radar Minima:

1. Minima shown are the lowest permitted by established criteria. Pilots should consult applicable directives for their category of aircraft.
2. The circling MDA and weather minima to be used are those for the runway to which the final approach is flown- not the landing runway. In the above RADAR MINIMA example, a category C aircraft flying a radar approach to runway 10, circling to land on runway 28, must use an MDA of 560 feet with weather minima of 500-1½.

NOTE: Military RADAR MINIMA may be shown with communications symbology that indicates emergency frequency monitoring capability by the radar facility as follows: (E) VHF and UHF emergency frequencies monitored
(V) VHF emergency frequency (121.5) monitored
(U) UHF emergency frequency (243.0) monitored

Additionally, unmonitored frequencies which are available on request from the controlling agency may be annotated with an "x".

A Alternate Minimums not standard. Civil users refer to tabulation. USA/USN/USAF pilots refer to appropriate regulations.

A NA Alternate minimums are Not Authorized due to unmonitored facility or absence of weather reporting service.

T Airport is published in the Takeoff Minimums, (Obstacle) Departure Procedures, and Diverse Vector Area (Radar Vectors) tabulation.

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GENERAL INFORMATION

This publication is issued every 56 days and includes Standard Instrument Approach Procedures (SIAPS), Standard Instrument Departures (SIDs), Standard Terminal Arrivals (STARs), IFR Takeoff Minimums and (Obstacle) Departure Procedures (ODPs), IFR Alternate Minimums, and Radar Instrument Approach Minimums for use by civil and military aviation. The organization responsible for SIAPs, Radar Minimums, SIDs, STARs and graphic ODPs is identified in parentheses in the top margin of the procedure; e.g., (FAA), (FAA-O), (USA), (USAF), (USN). SIAPS with the (FAA) and (FAA-O) designation are regulated under 14 CFR, Part 97. SIAPs with the (FAA-O) designation have been developed under Other Transaction Agreement (OTA) by private providers and have been certified by the FAA. See 14 CFR, Part 91.175 (a) and the AIM for further details. 14 CFR, Part 91.175 (g) and the Special Notices section of the Chart Supplement contain information on civil operations at military airports.

The FAA uses an internal numbering system on all charts in the TPP. This Approach and Landing (AL) number is located on the top center margin of the chart followed by the organization responsible for the procedure in parentheses, e.g., AL-18 (FAA), AL-227 (USAF).

CHART CURRENCY INFORMATION

Date of Latest Revision 09365

The Date of Latest Revision identifies the Julian date the chart was added 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 revision of any kind has been made to the chart.

FAA Procedure Amendment Number → Orig 31DEC09 ← Procedure Amendment Effective Date

FAA Procedure Amendment Number → Amdt 2B 12MAR09 ← Procedure Amendment Effective Date

The FAA Procedure Amendment Number represents the most current amendment of a given procedure. The Procedure Amendment Effective Date represents the AIRAC cycle date on which the procedure amendment was incorporated into the chart. Updates to the amendment number & effective date represent procedural/criteria revisions to the charted procedure, e.g., course, fix, altitude, minima, etc. On Departure Procedures and Standard Terminal Arrivals, procedural revisions to the current chart are indicated by an upnumber to the procedure title with the procedure amendment effective date following. On Radar Minima, Takeoff Minimums and (Obstacle) Departure Procedures and Diverse Vector Areas, the FAA Procedure Amendment Number, Procedure Effective Date, and the Julian Date of Last Revision will be shown on the same line, e.g., AMDT 2 10DEC15 (15344).

MISCELLANEOUS

★ Indicates a non-continuously operating facility, see Chart Supplement.

For Civil (FAA) instrument procedures, "RADAR REQUIRED" in the planview of the chart indicates that ATC radar must be available to assist the pilot when transitioning from the en route environment. "Radar required" in the pilot briefing portion of the chart indicates that ATC radar is required on portions of the procedure outside the final approach segment, including the missed approach. Some military procedures also have equipment requirements such as "Radar Required", but do not conform to the same charting application standards used by the FAA.

Distances are in nautical miles (except visibility in statute miles and Runway Visual Range in hundreds of feet). Runway dimensions are in feet. Elevations are in feet, Mean Sea Level (MSL). Ceilings are in feet above airport elevation. Radials/bearings/headings/courses are magnetic. Horizontal Datum: Unless otherwise noted on the chart, all coordinates are referenced to North American Datum 1983 (NAD 83), which for charting purposes is considered equivalent to World Geodetic System 1984 (WGS 84).

Terrain is scaled within the neat lines (planview boundaries) and does not accurately underlie not-to-scale distance depictions or symbols.

STANDARD TERMINAL ARRIVALS AND DEPARTURE PROCEDURES

The use of the associated codified STAR/DP and transition identifiers are requested of users when filing flight plans via teletype and are required for users filing flight plans via computer interface. It must be noted that when filing a STAR/DP with a transition, the first three coded characters of the STAR and the last three coded characters of the DP are replaced by the transition code. Examples: ACTON SIX ARRIVAL, file (AQN.AQN6); ACTON SIX ARRIVAL, EDNAS TRANSITION, file (EDNAS.AQN6). FREEHOLD THREE DEPARTURE, file (FREH3.RBV), FREEHOLD THREE DEPARTURE, ELWOOD CITY TRANSITION, file (FREH3.EWC).

PROCEDURE PBN/EQUIPMENT REQUIREMENTS

Users will begin to see Performance-Based Navigation (PBN) Requirements and Equipment Requirements on Instrument Approach Procedures (IAPs), RNAV STARS and RNAV DPs prominently displayed in separate, standardized notes boxes. For procedures with PBN elements, the PBN box will contain the procedure's navigation specification(s); and, if required: specific sensors or infrastructure needed for the navigation solution; any additional or advanced functional requirements; the minimum Required Navigation Performance (RNP) value and any amplifying remarks. Items listed in this PBN box are REQUIRED for the procedure's PBN elements. The Equipment Requirements Box will list non-PBN requirements. On charts with both PBN elements and equipment requirements, the PBN requirements box will be listed first. The publication of these notes will continue incrementally until all charts have been amended to comply with the new standard.

IAP PBN/Equipment Requirements Notes Box

PBN Requirements Box →	From WINRZ, LIBGE: RNAV-1 GPS, RNAV-1GPS from MAP to YARKU.
Equipment Requirements Box →	DME required for LOC only.
Standard Procedure Notes Box →	T Circling to Rwy 25 NA at night. #For inop MALSR increase S-ILS 16R all cats visibility to 2½ SM.

RNAV STAR and DP PBN/Equipment Requirements Notes Box

PBN Requirements Box →	RNAV 1 - DME/DME/IRU or GPS
Equipment Requirements Box →	RADAR required

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., A1, V, ✿
2. Approach lighting systems that do not bear a system identification are indicated with a negative "L" beside the name.

A star (★) indicates non-standard PCL, consult Chart Supplement, e.g., L★

To activate lights, use frequency indicated in the communication section of the chart with a L or the appropriate lighting system identification e.g., UNICOM 122.8 L, A1, V

KEY MIKE	FUNCTION
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)

ABBREVIATIONS

AAUP.....Attention All Users Page
ADF..... Automatic Direction Finder
ADIZ..... Air Defense Identification Zone
AFIS..... Automatic Flight Information Service
ALS..... Approach Light System
ALSF..... Approach Light System with Sequenced Flashing Lights
AOB..... At Or Below
AP..... Autopilot System
APCH..... Approach
APP CON..... Approach Control
ARR..... Arrival
ASOS..... Automated Surface Observing System
ASR/PAR..... Published Radar Minimums at this Airport
ASSC..... Airport Surface Surveillance Systems
ATIS..... Automatic Terminal Information Service
AUNICOM.....Automated UNICOM
AWOS..... Automated Weather Observing System
AZ..... Azimuth
BC..... Back Course
BND..... Bound
C..... Circling
CAT..... Category
CCW..... Counter Clockwise
CDI..... Course Deviation Indicator
Chan.....Channel
CIFP..... Coded Instrument Flight Procedures
CIR.....Circling
CLNC DEL..... Clearance Delivery
CNF..... Computer Navigation Fix
CPDLC..... Controller Pilot Data Link Communication
CTAF..... Common Traffic Advisory Frequency
CW.....Clockwise
D-ATIS..... Digital-Automatic Terminal Information Service
DA.....Decision Altitude
DER.....Departure End of Runway
DH.....Decision Height
DME..... Distance Measuring Equipment
DTHR..... Displaced Threshold
DVA..... Diverse Vector Area
ELEV..... Elevation
EMAS..... Engineered Material Arresting System
FAF.....Final Approach Fix
FD.....Flight Director System
FM..... Fan Marker
FMS..... Flight Management System
GBAS..... Ground Based Augmentation System
GCO.....Ground Communications Outlet
GLS..... Ground Based Augmentation System Landing System
GP..... Glidepath
GPI.....Ground Point of Interception
GPS.....Global Positioning System
GS.....Glide Slope
HAA.....Height above Airport
HAL..... Height above Landing
HAT.....Height above Touchdown
HATh..... Height Above Threshold
HCH..... Heliport Crossing Height
HGS.....Head-up Guidance System
HIRL.....High Intensity Runway Lights
HUD.....Head-up Display
IAF.....Initial Approach Fix
ICAO.....International Civil Aviation Organization
IF.....Intermediate Fix
IM..... Inner Marker
INOP..... Inoperative
INT..... Intersection
K..... Knots
KIAS..... Knots Indicated Airspeed
LAAS..... Local Area Augmentation System
LDA..... Localizer Type Directional Aid
Ldg..... Landing
LIRL.....Low Intensity Runway Lights
LNAV.....Lateral Navigation
LOC.....Localizer
LP..... Localizer Performance
LPV..... Localizer Performance with Vertical Guidance
LR..... Lead Radial. Provides at least 2 NM (Copter 1 NM) of lead to assist in turning onto the intermediate/final course.
MAA.....Maximum Authorized Altitude
MALS..... Medium Intensity Approach Light System
MALSF..... Medium Approach Lighting System with Sequenced Flashers
MALSR..... Medium Intensity Approach Light System with RAIL
MAP.....Missed Approach Point
MDA..... Minimum Descent Altitude
MIRL..... Medium Intensity Runway Lights
MM..... Middle Marker
MRA..... Minimum Reception Altitude
N/A..... Not Applicable
NA..... Not Authorized
NDB..... Non-directional Radio Beacon
NM..... Nautical Mile
NoPT..... No Procedure Turn Required (Procedure Turn shall not be executed without ATC clearance)

ABBREVIATIONS

ODALS..... Omnidirectional Approach Light System
ODP..... Obstacle Departure Procedure
OM..... Outer Marker
PAR..... Precision Approach Radar
PDC..... Pre-Departure Clearance
PRM..... Precision Runway Monitor
R..... Radial
RA..... Radio Altimeter setting height
RAIL..... Runway Alignment Indicator Lights
RCLS..... Runway Centerline Light System
REIL..... Runway End Identifier Lights
RF..... Radius-to-Fix
RLLS..... Runway Lead-in Light System
RNAV..... Area Navigation
RNP..... Required Navigation Performance
RPI..... Runway Point of Intercept(ion)
RRL..... Runway Remaining Lights
Rwy..... Runway
RVR..... Runway Visual Range
S..... Straight-in
SALS..... Short Approach Light System
SALSF..... Short Approach Lighting System with Sequenced Flashing Lights
SSALF..... Simplified Short Approach Lighting System with Sequenced Flashers
SSALR..... Simplified Short Approach Light System with RAIL
SSALS..... Simplified Short Approach Lighting System
SDF..... Simplified Directional Facility
SM..... Statute Mile
SOIA..... Simultaneous Offset Instrument Approach
SR-SS..... Sunrise-Sunset
TAA..... Terminal Arrival Area
TAC..... TACAN
TCH..... Threshold Crossing Height (height in feet Above Ground level)
TDZ..... Touchdown Zone
TDZE..... Touchdown Zone Elevation
TDZ/CL..... Touchdown Zone and Runway Centerline Lighting
TDZL..... Touchdown Zone Lights
THR..... Threshold
TODA..... Takeoff Distance Available
TORA..... Takeoff Run Available
TR..... Track
VASI..... Visual Approach Slope Indicator
VCOA..... Visual Climb Over Airport
VDP..... Visual Descent Point
VGSI..... Visual Glide Slope Indicator
VNAV..... Vertical Navigation
WAAS..... Wide Area Augmentation System
WP/WPT..... Waypoint (RNAV)

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LEGEND 20086

INSTRUMENT APPROACH PROCEDURES (CHARTS)

PLANVIEW SYMBOLS

TERMINAL ROUTES

Procedure Track

Missed Approach

Visual Flight Path

165°
345°
Procedure Turn
(Type degree and point of turn optional)

3100 NoPT 5.6 NM to GS Intcpt
045°
(14.2 to LOM)
Minimum Route Altitude
2000
155°
Feeder Route
(15.1)
Mileage

HOLDING PATTERNS

Missed Approach
090°
270°

Hold-in-lieu of Procedure Turn
090°
1 min
270°

090°
(IAS)
270°
4 NM

HOLD 8000
Arrival
090°
270°

Holding pattern with max. restricted airspeed:
(175K) applies to all altitudes.
(210K) applies to altitudes above 6000′ to and including 14000′.
Arrival Holding Pattern altitude restrictions will be indicated when they deviate from the adjacent leg.
Timing or distance limits for Hold-in-lieu of Procedure Turn Holding Patterns will be shown.
DME fixes may be shown.

FIXES/ATC REPORTING REQUIREMENTS

Reporting Point
▲ Name (Compulsory)
△ Name (Non-Compulsory)

Intersection

WAYPOINT (Compulsory)

WAYPOINT (Non-Compulsory)

FLYOVER POINT

MAP WP (Flyover)

Computer Navigation Fix (CNF) - No ATC Function
x (NAME) ("x" omitted when it conflicts with runway pattern)

15 DME Distance From Facility

AUSTN INT
ARC/DME/RNAV Fix

R-198 → Radial line and value

LR-198 → Lead Radial

LB-198 → Lead Bearing

ALTITUDES

5500 Mandatory Altitude

2500 Minimum Altitude

4300 Maximum Altitude

3000 Recommended Altitude

5000 Mandatory Block
3000 Altitude

INDICATED AIRSPEED

175K	120K	250K	180K
Mandatory Airspeed	Minimum Airspeed	Maximum Airspeed	Recommended Airspeed

RADIO AIDS TO NAVIGATION

110.1 Underline indicates No Voice transmitted on this frequency

Compulsory:

VOR, VORTAC, DME, VOR/DME, TACAN, NDB, NDB/DME

Non-Compulsory:

VOR, VORTAC, DME, VOR/DME, TACAN, NDB, NDB/DME

LOM/LMM (Compass locator at Outer Marker/Middle Marker)

Marker Beacon

Marker beacons that are not specifically part of the procedure.

Localizer (LOC/LDA) Course
Right side shading- Front course; Left side shading- Back Course

SDF Course

LOC/DME

LOC/LDA/SDF Transmitter
(shown when installation is offset from its normal postion off the end of the runway.)

Primary Navaid with Coordinate Values
LIMA
114.5 LIM
Chan 92
S12°00.80′
W77°07.00′

Secondary Navaid
LMM
LIMA
248 NT

SCOTT
Chan 59
SKE
(112.2)
VHF Paired Frequency

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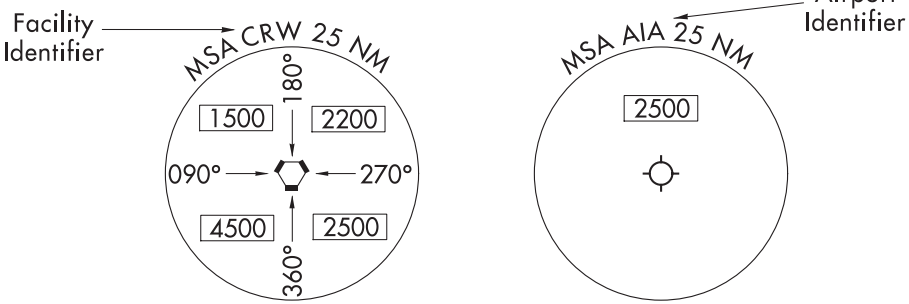
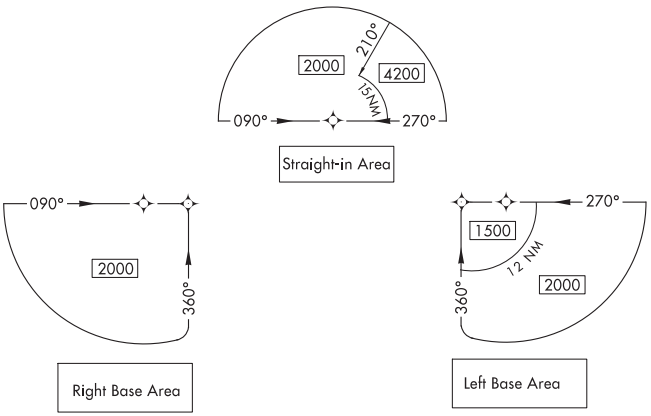
PLANVIEW SYMBOLS

MINIMUM SAFE ALTITUDE (MSA)



(arrows on distance circle identify sectors)

TERMINAL ARRIVAL AREA (TAA)



MISCELLANEOUS

VOR Changeover Point

RWY 15 S12° 00.52′ W77° 06.91′ — End of Rwy Coordinates (DOD only)

Distance not to scale

International Boundary

Air Defense Identification Zone

SPECIAL USE AIRSPACE

R-352

R-Restricted
P-Prohibited
W-Warning
A-Alert

AIRPORTS

Primary and Secondary (named in planview)

Civil

Seaplane Base

Heliport

OBSTACLES

Spot Elevation

Obstacle

Highest Obstacle

Highest Spot Elevation

Group of Obstacles

Doubtful accuracy

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LEGEND 20198

INSTRUMENT APPROACH PROCEDURES (CHARTS)

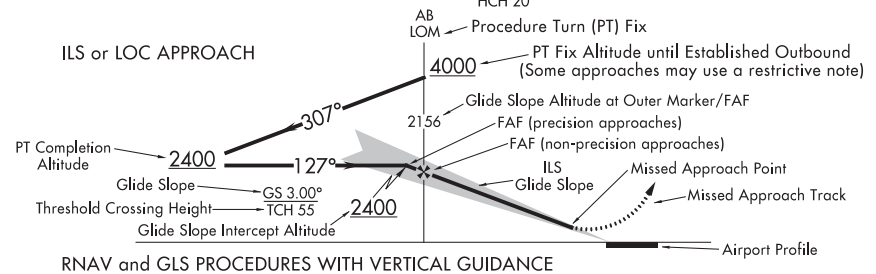
PROFILE VIEW

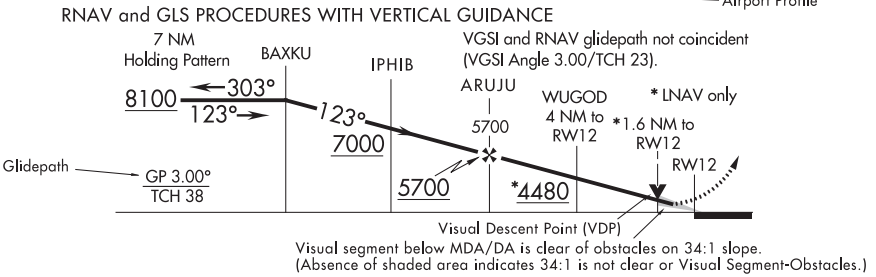
Three different methods are used to depict either electronic or vertical guidance: "GS", "GP", or "VDA".

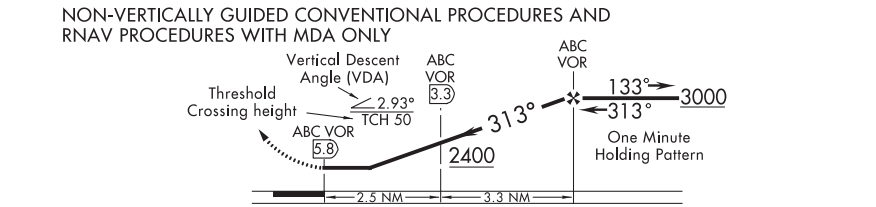
1. "GS" indicates that an Instrument Landing System (ILS) electronic glide slope (a ground antenna) provides vertical guidance. The profile section of ILS procedures depict a GS angle and TCH in the following format: GS 3.00°/TCH 55.

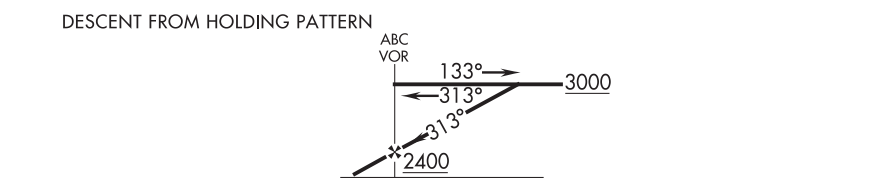
2. "GP" on GLS and RNAV procedures indicates that either electronic vertical guidance (via Wide Area Augmentation System - WAAS or Ground Based Augmentation System - GBAS) or barometric vertical guidance is provided. GLS and RNAV procedures with a published decision altitude (DA/H) depict a GP angle and TCH in the following format: GP 3.00°/TCH 50.

3. An advisory vertical descent angle (VDA) is provided on non-vertically guided conventional procedures and RNAV procedures with only a minimum descent altitude (MDA) to assist in preventing controlled flight into terrain. On Civil (FAA) procedures, this information is placed above or below the procedure track following the fix it is based on. Absence of a VDA or a note that the VDA is not authorized indicates that the prescribed obstacle clearance surface is not clear and the VDA must not be used below MDA. VDA is depicted in the following format: ∠3.00°/TCH 55. On Copter procedures this is depicted in the following format: ∠7.30°/HCH 20.









ALTITUDES

5500	Mandatory Altitude	3000	Recommended Altitude
2500	Minimum Altitude	5000/3000	Mandatory Block Altitude
4300	Maximum Altitude		

PROFILE SYMBOLS

- 2400 — Glide Slope/Glidepath Intercept Altitude and final approach fix for vertically guided approach procedures.
- ▼ Visual Descent Point (VDP)
- Visual Flight Path
- Note: Facilities and waypoints are depicted as a solid vertical line while fixes and intersections are depicted as a dashed vertical line.

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LEGEND 19059

LEGEND
STANDARD TERMINAL ARRIVAL (STAR) CHARTS
DEPARTURE PROCEDURE (DP) CHARTS

Applies to both STAR and DP Charts unless otherwise noted.

RADIO AIDS TO NAVIGATION

Compulsory:

VOR, VORTAC, DME, VOR/DME, TACAN, NDB, NDB/DME

Non-Compulsory:

VOR, VORTAC, DME, VOR/DME, TACAN, NDB, NDB/DME

LMM, LOM (Compass locator)

Marker Beacon

LOC, LOC/DME (shown when installation is offset from its normal position off the end of the runway.) (DP)

Localizer Course

SDF Course

(T) indicates frequency protection range (STAR)

(Y) TACAN must be placed in "Y" mode to receive distance information

Identifier

Frequency

ORLANDO
112.25 (T) ORL
Chan 59 (Y)
N28°32.56′ - W81°20.10′

Geographic Position

L-19, H-5

DME or TACAN Channel

Underline indicates no voice transmitted on this frequency

Enroute Chart Reference

Coordinates

Waypoint Name

PRAYS
N38°58.30′ W89°51.50′
112.7 CAP 187.1°-56.2
590

Frequency

Identifier

Reference Facility Elevation

Radial-Distance (Facility to Waypoint)

FIXES/ATC REPORTING REQUIREMENTS

Reporting Points
N00°00.00′
W00°00.00′

75 → DME Mileage (when not obvious)

▲ Fix-Compulsory and

△ Non-Compulsory Position Report

→ | DME fix

WAYPOINT (Compulsory)

WAYPOINT (Non-Compulsory)

FLYOVER POINT

X Computer Navigation Fix (CNF) - No ATC Function
N00°00.00′
W00°00.00′

ROUTES

4500 MEA-Minimum Enroute Altitude

*3500 MOCA-Minimum Obstruction Clearance Altitude

270° Departure Route - Arrival Route

(65) Mileage between Radio Aids, Reporting Points, and Route Breaks

Transition Route

R-275 Radial line and value

Lost Communications Track

Visual Flight Path (DP)

V12 J80 Airway/Jet Route Identification

DP Holding Pattern (IAS)

STAR Holding Pattern (IAS)

Holding pattern with max. restricted airspeed
(175K) applies to all altitudes
(210K) applies to altitudes above 6000′ to and including 14000′

SPECIAL USE AIRSPACE

R-352

R-Restricted
P-Prohibited
MOA-Military Operations Area
W-Warning
A-Alert

ALTITUDES

5500	2300	4800
Mandatory Altitude (Cross at)	Minimum Altitude (Cross at or above)	Maximum Altitude (Cross at or below)

15000
12000
Block Altitude

Altitude change at other than Radio Aids (STAR)

INDICATED AIRSPEED

175K	120K	250K
Mandatory Airspeed	Minimum Airspeed	Maximum Airspeed

AIRPORTS

(DP)

Heliport

Civil, Military, Joint Civil-Military

Airports not served by the procedure shown in screened color (STAR)

Civil, Military, Joint Civil-Military

MISCELLANEOUS

Changeover Point

Distance not to scale (DP)

International Boundary (DP)

Air Defense Identification Zone

T Takeoff Minimums and (Obstacle) Departure Procedures entry published. (DP)

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LEGEND 19059

19339

LEGEND

INSTRUMENT APPROACH PROCEDURES (CHARTS)

AIRPORT DIAGRAM/AIRPORT SKETCH

Runways

Hard Surface | Other Than Hard Surface | Stopways,Taxiways, Parking Areas | Metal Surface

Closed Runway | Closed Surface | Under Construction | Water Runway

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.

uni-directional | bi-directional | Jet Barrier

ARRESTING SYSTEM (EMAS)

REFERENCE FEATURES

Displaced Threshold.....
Hot Spot .....
Runway Holding Position Markings.....
Buildings.....
24-Hour Self-Serve Fuel ##.....
Tanks.....
Obstructions.....
Airport Beacon #.....
Runway
Radar Reflectors.....
Control Tower #..... TWR

When Control Tower and Rotating Beacon are co-located, Beacon symbol will be used and further identified as TWR.

A fuel symbol is shown to indicate 24-hour self-serve fuel available, see appropriate Chart Supplement for information.

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)

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 PCN 80 F/D/X/U S-75, D-185, 2S-175, 2D-325

Helicopter Alighting Areas

Negative Symbols used to identify Copter Procedures

landing point.....

NOTE:
Landmark features depicted on Copter Approach insets and sketches are provided for visual reference only.

Runway TDZ elevation.....TDZE 123

Runway Slope.....0.8% UP ⟵ 0.3% DOWN
(shown when runway slope is greater than or equal to 0.3%)

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.

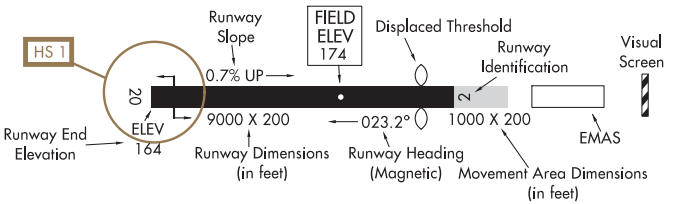
True/magnetic North orientation may vary from diagram to diagram

Coordinate values are shown in 1 or ½ minute increments. They are further broken down into 6 second ticks, within each 1 minute increments.

Positional accuracy within ±600 feet unless otherwise noted on the chart.

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 Chart Supplement for distance information.



SCOPE

Airport diagrams are specifically designed to assist in the movement of ground traffic at locations with complex runway/taxiway configurations. Airport diagrams are not intended to be used for approach and landing or departure operations. For revisions to Airport Diagrams: Consult FAA Order 7910.4.

LEGEND

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LEGEND 15344

INSTRUMENT APPROACH PROCEDURES (CHARTS)

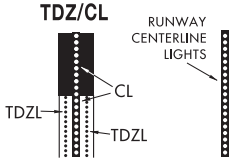
APPROACH LIGHTING SYSTEM - UNITED STATES

Approach lighting and visual glide slope systems are indicated on the airport sketch by an identifier, e.g., A2, V, etc.

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 TOUCHDOWN ZONE AND CENTERLINE LIGHTING SYSTEMS

TDZ/CL

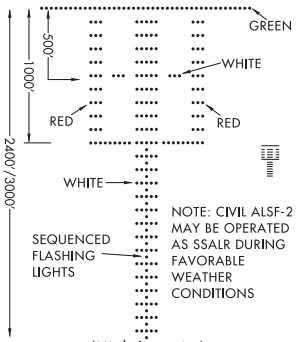


AVAILABILITY of TDZ/CL will be shown by NOTE in SKETCH e.g. "TDZ/CL Rwy 15"

APPROACH LIGHTING SYSTEM

A

ALSF-2



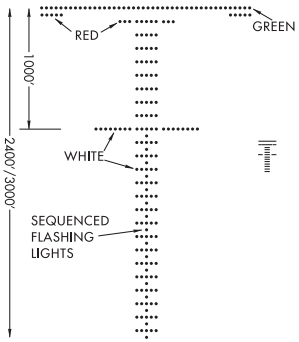
NOTE: CIVIL ALSF-2 MAY BE OPERATED AS SSALR DURING FAVORABLE WEATHER CONDITIONS

(High Intensity)
LENGTH 2400/3000 FEET

APPROACH LIGHTING SYSTEM

A1

ALSF-1



(High Intensity)
LENGTH 2400/3000 FEET

SHORT APPROACH LIGHTING SYSTEM

A2

SALS/SALSF

(High Intensity)

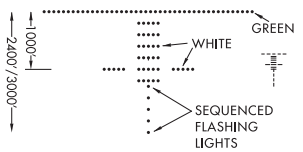
SAME AS INNER 1500' OF ALSF-1

SIMPLIFIED SHORT APPROACH LIGHTING SYSTEM

with Runway Alignment Indicator Lights

A3

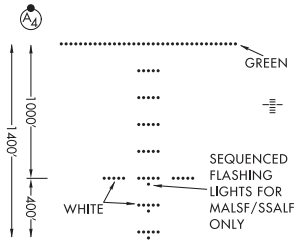
SSALR



(High Intensity)
LENGTH 2400/3000 FEET

MEDIUM INTENSITY (**MALS** and **MALSF**) OR SIMPLIFIED SHORT (**SSALS** and **SSALF**) APPROACH LIGHTING SYSTEMS

A4



LENGTH 1400 FEET

MEDIUM INTENSITY APPROACH LIGHTING SYSTEM

with Runway Alignment Indicator Lights

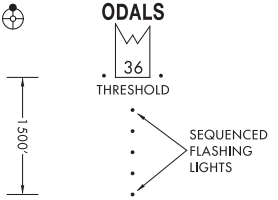
A5

MALSR

SAME LIGHT CONFIGURATION AS SSALR.

OMNIDIRECTIONAL APPROACH LIGHTING SYSTEM

ODALS



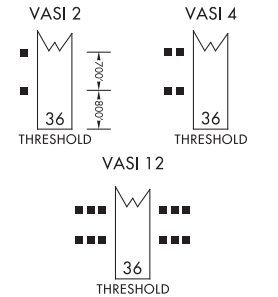
LENGTH 1500 FEET

V VISUAL APPROACH SLOPE INDICATOR

VASI

VISUAL APPROACH SLOPE INDICATOR WITH STANDARD THRESHOLD CLEARANCE PROVIDED.

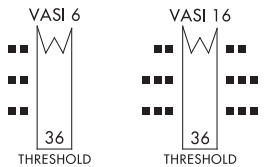
ALL LIGHTS WHITE — TOO HIGH
FAR LIGHTS RED, NEAR LIGHTS WHITE — ON GLIDE SLOPE
ALL LIGHTS RED — TOO LOW



V3 VISUAL APPROACH SLOPE INDICATOR

VASI

3-BAR, 6 OR 16 BOX, VISUAL APPROACH SLOPE INDICATOR THAT PROVIDES 2 GLIDE ANGLES AND 2 THRESHOLD CROSSING HEIGHTS.



LEGEND 15344

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LEGEND 18256

INSTRUMENT APPROACH PROCEDURES (CHARTS)

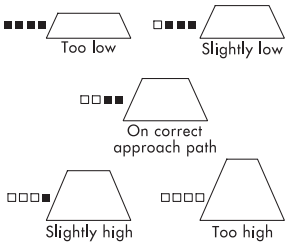
APPROACH LIGHTING SYSTEM - UNITED STATES

Approach lighting and visual glide slope systems are indicated on the airport sketch by an identifier, (A2), (V) etc.

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).

(P) PRECISION APPROACH PATH INDICATOR

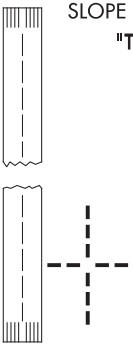
PAPI



Legend: □ White ■ Red

(V1) "T"-VISUAL APPROACH SLOPE INDICATOR

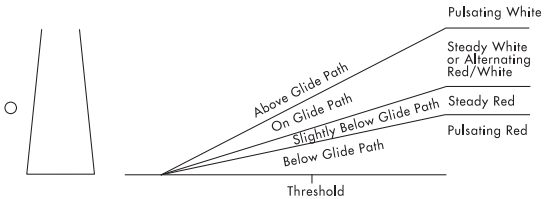
"T"-VASI



"T" ON BOTH SIDES OF RWY ALL LIGHTS VARIABLE WHITE. CORRECT APPROACH SLOPE-ONLY CROSS BAR VISIBLE. UPRIGHT "T"- FLY UP. INVERTED "T"- FLY DOWN. RED "T"- GROSS UNDERSHOOT.

(V2) PULSATING VISUAL APPROACH SLOPE INDICATOR

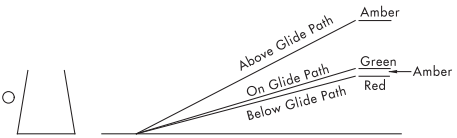
PVASI



CAUTION: When viewing the pulsating visual approach slope indicators in the pulsating white or pulsating red sectors, it is possible to mistake this lighting aid for another aircraft or a ground vehicle. Pilots should exercise caution when using this type of system.

(V4) TRI-COLOR VISUAL APPROACH SLOPE INDICATOR

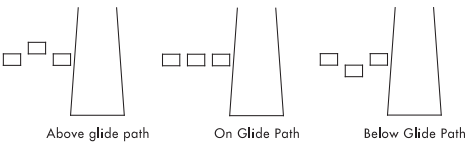
TRCV



CAUTION: When the aircraft descends from green to red, the pilot may see a dark amber color during the transition from green to red.

(V5) ALIGNMENT OF ELEMENTS SYSTEMS

APAP



Painted panels which may be lighted at night. To use the system the pilot positions the aircraft so the elements are in alignment.

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FREQ PAIRING 20198

FREQUENCY PAIRING TABLE

TACAN CHANNEL	VHF FREQUENCY	TACAN CHANNEL	VHF FREQUENCY	TACAN CHANNEL	VHF FREQUENCY
17Y	108.05	40X	110.30	88Y	114.15
18X	108.10	40Y	110.35	89Y	114.25
18Y	108.15	41Y	110.45	90Y	114.35
19Y	108.25	42X	110.50	91Y	114.45
20X	108.30	42Y	110.55	92Y	114.55
20Y	108.35	43Y	110.65	93Y	114.65
21Y	108.45	44X	110.70	94Y	114.75
22X	108.50	44Y	110.75	95Y	114.85
22Y	108.55	45Y	110.85	96Y	114.95
23Y	108.65	46X	110.90	97Y	115.05
24X	108.70	46Y	110.95	98Y	115.15
24Y	108.75	47Y	111.05	99Y	115.25
25Y	108.85	48X	111.10	100Y	115.35
26X	108.90	48Y	111.15	101Y	115.45
26Y	108.95	49Y	111.25	102Y	115.55
27Y	109.05	50X	111.30	103Y	115.65
28X	109.10	50Y	111.35	104Y	115.75
28Y	109.15	51Y	111.45	105Y	115.85
29Y	109.25	52X	111.50	106Y	115.95
30X	109.30	52Y	111.55	107Y	116.05
30Y	109.35	53Y	111.65	108Y	116.15
31Y	109.45	54X	111.70	109Y	116.25
32X	109.50	54Y	111.75	110Y	116.35
32Y	109.55	55Y	111.85	111Y	116.45
33Y	109.65	56X	111.90	112Y	116.55
34X	109.70	56Y	111.95	113Y	116.65
34Y	109.75	80Y	113.35	114Y	116.75
35Y	109.85	81Y	113.45	115Y	116.85
36X	109.90	82Y	113.55	116Y	116.95
36Y	109.95	83Y	113.65	117Y	117.05
37Y	110.05	84Y	113.75	118Y	117.15
38X	110.10	85Y	113.85	119Y	117.25
38Y	110.15	86Y	113.95		
39Y	110.25	87Y	114.05		

See the Chart Supplement for a complete listing.

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FREQ PAIRING 20198

INDEX OF TERMINAL CHARTS AND MINIMUMS

NAME PROC SECT PG

ABERDEEN, SD
ABERDEEN RGNL(ABR)
TAKEOFF MINIMUMS L
ALTERNATE MINIMUMS ....M
IAPS ..... ILS OR LOC RWY 31 1
RNAV (GPS) RWY 13 2
RNAV (GPS) RWY 17 3
RNAV (GPS) RWY 31 4
RNAV (GPS) RWY 35 5
VOR RWY 13 6
VOR RWY 31 7
AIRPORT DIAGRAM 8

ADA/TWIN VALLEY, MN
NORMAN COUNTY ADA/TWIN VALLEY(D00)
TAKEOFF MINIMUMS L
IAPS ..... RNAV (GPS) RWY 33 9

AIRLAKE
---SEE MINNEAPOLIS, MN

AITKIN, MN
AITKIN MUNI-STEVE KURTZ FIELD(AIT)
TAKEOFF MINIMUMS L
ALTERNATE MINIMUMS ....M
IAPS ..... RNAV (GPS) RWY 16 10
RNAV (GPS) RWY 34 11
NDB RWY 16 12

ALBERT LEA, MN
ALBERT LEA MUNI(AEL)
TAKEOFF MINIMUMS L
ALTERNATE MINIMUMS ....M
IAPS ..... RNAV (GPS) RWY 17 13
RNAV (GPS) RWY 35 14
VOR RWY 17 15
VOR RWY 35 16

ALEXANDRIA, MN
CHANDLER FIELD(AXN)
TAKEOFF MINIMUMS L
ALTERNATE MINIMUMS ....M
IAPS ..... ILS OR LOC RWY 31 17
RNAV (GPS) RWY 22 18
RNAV (GPS) RWY 31 19
VOR RWY 22 20

ANOKA COUNTY-BLAINE (JANES FIELD)
---SEE MINNEAPOLIS, MN

APPLETON, MN
APPLETON MUNI(AQP)
TAKEOFF MINIMUMS L
ALTERNATE MINIMUMS ....M
IAPS ..... RNAV (GPS) RWY 13 21

AUSTIN, MN
AUSTIN MUNI(AUM)
TAKEOFF MINIMUMS L
ALTERNATE MINIMUMS ....M
IAPS ..... ILS OR LOC RWY 35 22
RNAV (GPS) RWY 17 23
RNAV (GPS) RWY 35 24
VOR RWY 17 25

BARNES COUNTY MUNI
---SEE VALLEY CITY, ND

BAUDETTE, MN
BAUDETTE INTL(BDE)
TAKEOFF MINIMUMS L
ALTERNATE MINIMUMS ....M
IAPS ..... ILS OR LOC RWY 30 26
RNAV (GPS) RWY 12 27
RNAV (GPS) RWY 30 28

BEACH, ND
BEACH(20U)
TAKEOFF MINIMUMS L
IAPS ..... RNAV (GPS) RWY 12 29
RNAV (GPS) RWY 30 30

BELLE FOURCHE, SD
BELLE FOURCHE MUNI(EFC)
TAKEOFF MINIMUMS L
IAPS ..... RNAV (GPS) RWY 32 31

BEMIDJI, MN
BEMIDJI RGNL(BJI)
TAKEOFF MINIMUMS L
ALTERNATE MINIMUMS ....M
IAPS ..... ILS OR LOC RWY 25 32
ILS OR LOC RWY 31 33
RNAV (GPS) RWY 13 34
RNAV (GPS) RWY 25 35
RNAV (GPS) RWY 31 36
VOR/DME RWY 13 37
AIRPORT DIAGRAM 38

BENSON, MN
BENSON MUNI(BBB)
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RNAV (GPS) RWY 32 649
VOR RWY 14 650
VOR RWY 32 651
AIRPORT DIAGRAM 652
DPS ..... WILLISTON FIVE 653

WILLMAR, MN
WILLMAR MUNI-JOHN L RICE FIELD(BDH)
TAKEOFF MINIMUMS L
ALTERNATE MINIMUMS ..... M
IAPS ..... ILS OR LOC RWY 13 654
RNAV (GPS) RWY 13 655
RNAV (GPS) RWY 31 656
VOR RWY 31 657

WINDOM, MN
WINDOM MUNI(MWM)
TAKEOFF MINIMUMS L
ALTERNATE MINIMUMS ..... M
IAPS ..... RNAV (GPS) RWY 17 658
RNAV (GPS) RWY 35 659

WINNER, SD
WINNER RGNL(ICR)
TAKEOFF MINIMUMS L
ALTERNATE MINIMUMS ..... M
IAPS ..... RNAV (GPS) RWY 13 660
RNAV (GPS) RWY 31 661

WINONA, MN
WINONA MUNI-MAX CONRAD FIELD(ONA)
TAKEOFF MINIMUMS L
ALTERNATE MINIMUMS ..... M
IAPS ..... ILS Y OR LOC Y RWY 30 662
ILS Z OR LOC Z RWY 30 663
RNAV (GPS) RWY 12 664
RNAV (GPS) RWY 30 665

WORTHINGTON, MN
WORTHINGTON MUNI(OTG)
TAKEOFF MINIMUMS L
ALTERNATE MINIMUMS ..... M
IAPS ..... ILS OR LOC RWY 29 666
RNAV (GPS) RWY 11 667
RNAV (GPS) RWY 18 668
RNAV (GPS) RWY 29 669
RNAV (GPS) RWY 36 670
VOR RWY 11 671
VOR RWY 18 672

YANKTON, SD
CHAN GURNEY MUNI(YKN)
TAKEOFF MINIMUMS L
ALTERNATE MINIMUMS ..... M
IAPS ..... ILS OR LOC RWY 31 673
RNAV (GPS) RWY 13 674
RNAV (GPS) RWY 31 675
VOR RWY 13 676

IFR TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude, and/or airports that have civil IFR takeoff minimums other than standard, are listed below. Takeoff Minimums and Departure Procedures apply to all runways unless otherwise specified. An entry may also be listed that contains only Takeoff Obstacle Notes. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are textually described below, or published separately as a graphic procedure. If the ODP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or the applicable military volume, as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not specifically assigned an ODP, SID, or radar vector as part of an IFR clearance, an ODP may be required to be flown for obstacle clearance, even though not specifically stated in the IFR clearance. When doing so in this manner, ATC should be informed when the ODP being used contains a specified route to be flown, restrictions before turning, and/or altitude restrictions.

Some ODPs, which are established solely for obstacle avoidance, require a climb in visual conditions to cross the airport, a fix, or a NAVAID in a specified direction, at or above a specified altitude. These procedures are called Visual Climb Over Airport (VCOA). To ensure safe and efficient operations, the pilot must verbally request approval from ATC to fly the VCOA when requesting their IFR clearance.

At some locations where an ODP has been established, a diverse vector area (DVA) may be created to allow radar vectors to be used in lieu of an ODP. DVA information will state that headings will be as assigned by ATC and climb gradients, when applicable, will be published immediately following the specified departure procedure.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard takeoff rules and establishes takeoff minimums for certain operators as follows: (1) For aircraft, other than helicopters, having two engines or less – one statute mile visibility. (2) For aircraft having more than two engines – one-half statute mile visibility. (3) For helicopters – one-half statute mile visibility. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) takeoff minima are published below. For military takeoff minima, refer to appropriate service directives.

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

ABERDEEN, SD

ABERDEEN RGNL (ABR)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 02MAR17 (17061) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 13, lt 4' from DER, 1' right of centerline, 1' AGL/1302' MSL.
Sign 12' from DER, 256' left of centerline, 4' AGL/1302' MSL.
Rwy 31, runway end ident, beginning 39' from DER, 125' right of centerline, up to 5' AGL/1304' MSL.
Runway end ident 40' from DER, 126' left of centerline, 5' AGL/1303' MSL.
Tree 1278' from DER, 745' left of centerline, 1351' MSL.
Tree 1309' from DER, 716' left of centerline, 1352' MSL.

ADA/TWIN VALLEY, MN

NORMAN COUNTY ADA/TWIN VALLEY (D00)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 13JAN11 (11013) (FAA)

TAKEOFF MINIMUMS:

Rwy 15, 300-2 or std. w/min climb of 205' per NM to 1300, or alternatively, with std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1300' prior to DER.

TAKEOFF OBSTACLE NOTES:

Rwy 15, tree 176' from DER 383' left of centerline, 50' AGL/999' MSL.
Tree 178' from DER 307' right of centerline, 50' AGL/999' MSL.
Tree 1,305' from DER 493' right of centerline, 50' AGL/1,004' MSL.
Tree 176' from DER 383' left of centerline, 50' AGL/999' MSL.
Rwy 33, tree 85' from DER 282' left of centerline. 50' AGL/989' MSL.
Multiple buildings beginning 2' from DER 468' right of centerline. up to 50' AGL/954' MSL.

AITKIN, MN

AITKIN MUNI-STEVE KURTZ FIELD (AIT)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4 20AUG15 (15232) (FAA)

DEPARTURE PROCEDURE:

Rwy 8, 26, NA-Environmental.

TAKEOFF OBSTACLE NOTES:

Rwy 16, trees beginning 6' from DER, 86' left of centerline, up to 32' AGL/1238' MSL.
Trees and road beginning 239' from DER, 357' left of centerline, up to 59' AGL/1265' MSL.
Trees beginning 335' from DER, 114' right of centerline, up to 54' AGL/1260' MSL.
Trees beginning 1352' from DER, 189' left of centerline, up to 94' AGL/1300' MSL.
Trees beginning 1759' from DER, 5' right of centerline, up to 93' AGL/1299' MSL.
Trees beginning 3354' from DER, 16' left of centerline, up to 100' AGL/1332' MSL.
Trees beginning 3558' from DER, 48' right of centerline, up to 100' AGL/1333' MSL.
Rwy 34, trees beginning 121' from DER, 408' right of centerline, up to 29' AGL/1235' MSL.
Trees beginning 320' from DER, 406' right of centerline, up to 62' AGL/1268' MSL.
Trees beginning 2084' from DER, 108' right of centerline, up to 74' AGL/1280' MSL.
Trees beginning 1906' from DER, 179' left of centerline, up to 82' AGL/1288' MSL.

ALBERT LEA, MN

ALBERT LEA MUNI (AEL)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 20OCT11 (11293) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 5, sign 2074' from DER, 952' right of centerline, 47' AGL/1316' MSL.
Rwy 17, tree 9' from DER, 349' right of centerline, 14' AGL/1263' MSL.
Trees beginning 711' from DER, 121' left of centerline, up to 71' AGL/1330' MSL.
Rwy 23, trees beginning 77' from DER, 259' left of centerline, up to 75' AGL/1324' MSL.
Trees beginning 127' from DER, 326' right of centerline, up to 36' AGL/1285' MSL.
Rwy 35, trees beginning 8' from DER, 397' right of centerline, up to 51' AGL/1290' MSL.

ALEXANDRIA, MN

CHANDLER FIELD (AXN)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

DEPARTURE PROCEDURE:

Rwys 4, 13, 22, when weather is below 200-1, climb runway heading to 1800 before turning.

APPLETON, MN

APPLETON MUNI (AQP)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 06MAY10 (10126) (FAA)

DEPARTURE PROCEDURE:

Rwy 4, climb heading 039° to 2000 before turning right.
Rwy 13, climb heading 130° to 2500 before turning right.
Rwy 22, climb heading 219° to 2400 before turning left.
Rwy 31, climb heading 300° to 2000 before turning left.

TAKEOFF OBSTACLE NOTES:

Rwy 13, trees beginning 91' from DER, 464' left of centerline, up to 100' AGL/1134' MSL.
Trees beginning 576' from DER, 388' right of centerline, up to 100' AGL/1120' MSL.
Tower 2.3 NM from DER, 2.4 right of centerline, 1283' AGL/2318' MSL.

AUSTIN, MN

AUSTIN MUNI (AUM)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 14FEB08 (08045) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 17, Multiple trees beginning 809' from DER, 663' right of centerline, up to 61' AGL/1285' MSL.
Rwy 35, Tree 1380' from DER, 484' right of centerline, 100' AGL/1314' MSL.

BEACH, ND

BEACH (20U)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 21JUL16 (16203) (FAA)

DEPARTURE PROCEDURE:

Rwy 12, climb heading 125° to 4000 before turning left.

TAKEOFF OBSTACLE NOTES:

Rwy 12, airfield lt 9' from DER, 27' right of centerline, 2749' MSL.
Vehicles on road beginning 39' from DER, 371' right of centerline, up to 2764' MSL.
Terrain 95' from DER, 416' left of centerline, 2751' MSL.
Vehicles on road beginning 444' from DER, 379' right of centerline, up to 2766' MSL.
Vehicle on road 1230' from DER, 182' left of centerline, 2780' MSL.
Vehicle on road 1237' from DER, 198' left of centerline, 2781' MSL.
Vehicle on road 1276' from DER, 226' left of centerline, 2782' MSL.
Vehicles on road beginning 1326' from DER, 273' left of centerline, up to 2785' MSL.
Vehicle on road 1474' from DER, 418' left of centerline, 2786' MSL.
Vehicles on road 1652' from DER, 586' left of centerline, 2790' MSL.
Vehicles on road, tree, and building beginning 1671' from DER, 664' left of centerline, up to 2808' MSL.
Rwy 30, airfield lt beginning 10' from DER, 9' right of centerline, up to 1' AGL/2757' MSL.

BAUDETTE, MN

BAUDETTE INTL (BDE)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1A 20JUN19 (19171) (FAA)

TAKEOFF MINIMUMS:

Rwys 13W, 31W, NA - Environmental.

DEPARTURE PROCEDURE:

Rwy 12, climb on heading 116° to 1700 before turning northbound.

TAKEOFF OBSTACLE NOTES:

Rwy 12, tree, pole beginning 5' from DER, 30' left of centerline, up to 1085' MSL.
General utility 61' from DER, 353' right of centerline, 5' AGL/1086' MSL.
Tree, vehicles on road beginning 424' from DER, 60' right of centerline, up to 1116' MSL.
Trees beginning 503' from DER, 538' right of centerline, up to 1121' MSL.
Tree 594' from DER, 139' left of centerline, 1100' MSL.
Water tower, tank beginning 4131' from DER, 1229' right of centerline, up to 1204' MSL.
Rwy 30, lighting 9' from DER, 30' left of centerline, 3' AGL/1086' MSL.
NAVAID 9' from DER, 29' right of centerline, 2' AGL/1086' MSL.
Tree 15' from DER, 349' right of centerline, 1096' MSL.
Trees beginning 16' from DER, 498' right of centerline, up to 1098' MSL.
Tree 341' from DER, 516' right of centerline, 1102' MSL.
Tree 365' from DER, 550' right of centerline, 1106' MSL.
Vehicles on road 724' from DER, 675' left of centerline, 1103' MSL.
Trees beginning 1348' from DER, 745' right of centerline, up to 1129' MSL.
Trees beginning 1757' from DER, 746' left of centerline, up to 1138' MSL.
Trees beginning 1919' from DER, 129' left of centerline, up to 1142' MSL.
Trees beginning 1955' from DER, 357' left of centerline, up to 1144' MSL.
Trees beginning 2198' from DER, 84' left of centerline, up to 1145' MSL.
Tree 3008' from DER, 26' left of centerline, 1170' MSL.

BELLE FOURCHE, SD

BELLE FOURCHE MUNI (EFC)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 15JAN09 (09015) (FAA)

TAKEOFF MINIMUMS:

Rwys 18,36, NA.
Rwy 14, std. w/ min. climb of 240' per NM to 9000 or 1400-3 for climb in visual conditions.
Rwy 32, std. w/ min. climb of 413' per NM to 3900.

DEPARTURE PROCEDURE:

Rwy 14, for climb in visual conditions: cross Belle Fourche Muni airport at or above 4400 MSL before proceeding on course.
Rwy 32, climb heading 321° to 3900 before proceeding southbound.

TAKEOFF OBSTACLE NOTES:

Rwy 14, trees 651' from DER, 547' left of centerline, up to 20' AGL/3299' MSL.
Rwy 32, trees 857' from DER, 150' left of centerline, up to 20' AGL/3199' MSL.
Trees 3880' from DER, 966' right of centerline, up to 20' AGL/3289' MSL.

BEMIDJI, MN

BEMIDJI RGNL (BJI)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 31JUL08 (08213) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 7, vegetation beginning 859' from DER, 544' right of centerline, up to 62' AGL/1442' MSL.
Vegetation beginning 1404' from DER, 683' left of centerline, up to 44' AGL/1424' MSL.
Rwy 13, vehicle on road, 541' from DER, 525' right of centerline, 15' AGL/1398' MSL.
Rwy 25, poles beginning 1337' from DER, 205' right of centerline up to 61' AGL/1445' MSL.
Trees beginning 1414' from DER, 254' left of centerline, up to 57' AGL/1441' MSL.
Tree 1406' from DER, 233' right of centerline, 53' AGL/1437' MSL.

BENSON, MN

BENSON MUNI (BBB)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 07MAY09 (09127) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 14, numerous trees beginning 838' from DER, 246' right of centerline, up to 33' AGL/1087' MSL.
Numerous trees beginning 1232' from DER, 64' left of centerline, up to 69' AGL/1108' MSL.
Sign 206' from DER, 198' left of centerline, 19' AGL/1044' MSL.
Tower 4884' from DER, 274' right of centerline, 126' AGL/1161' MSL.
Rwy 32, Tree 2380' from DER, 646' left of centerline, 68' AGL/1107' MSL.
Multiple fences beginning 13' from DER, 361' left of centerline, up to 8' AGL/1043' MSL.

BIGFORK, MN

BIGFORK MUNI (FOZ)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 29MAR18 (18088) (FAA)

DEPARTURE PROCEDURE:

Rwy 15, climb on heading 149° to 1800 before turning right.

TAKEOFF OBSTACLE NOTES:

Rwy 15, sign 20' from DER, 115' left of centerline, 3' AGL/1348' MSL.
Tree 29' from DER, 326' right of centerline, 1354' MSL.
Trees beginning 63' from DER, 168' right of centerline, up to 1370' MSL.
Traverse way 67' from DER, 432' left of centerline, 1363' MSL.
Trees beginning 154' from DER, 393' left of centerline, up to 1378' MSL.
Trees beginning 189' from DER, 348' right of centerline, up to 1371' MSL.
Trees beginning 261' from DER, 413' left of centerline, up to 1379' MSL.
Tree 274' from DER, 292' right of centerline, 1374' MSL.
Tree 392' from DER, 556' left of centerline, 1387' MSL.
Trees beginning 393' from DER, 344' right of centerline, up to 1375' MSL.
Trees beginning 493' from DER, 177' right of centerline, up to 1396' MSL.
Tree 513' from DER, 604' left of centerline, 1417' MSL.
Trees beginning 556' from DER, 185' left of centerline, up to 1420' MSL.
Trees beginning 580' from DER, 272' right of centerline, up to 1403' MSL.
Tree 957' from DER, 679' right of centerline, 1407' MSL.
Trees beginning 996' from DER, 123' right of centerline, up to 1414' MSL.
Trees beginning 2109' from DER, 539' right of centerline, up to 1423' MSL.
Trees beginning 2698' from DER, 448' right of centerline, up to 1434' MSL.
Trees beginning 2800' from DER, 93' right of centerline, up to 1442' MSL.
Trees beginning 3374' from DER, 519' right of centerline, up to 1444' MSL.
Rwy 33, tree 56' from DER, 374' right of centerline, 1375' MSL.
Trees beginning 81' from DER, 257' left of centerline, up to 1378' MSL.
Trees beginning 82' from DER, 245' right of centerline, up to 1376' MSL.
Trees beginning 178' from DER, 287' left of centerline, up to 1413' MSL.
Trees beginning 503' from DER, 300' right of centerline, up to 1381' MSL.
Trees beginning 543' from DER, 390' left of centerline, up to 1414' MSL.
Trees beginning 720' from DER, 329' right of centerline, up to 1384' MSL.
Trees beginning 757' from DER, 1' left of centerline, up to 1424' MSL.
Trees beginning 1207' from DER, 73' right of centerline, up to 1396' MSL.
Tree 1231' from DER, 63' right of centerline, 1399' MSL.
Tree 1246' from DER, 142' right of centerline, 1401' MSL.
Trees beginning 1249' from DER, 42' right of centerline, up to 1403' MSL.
Tree 1354' from DER, 184' right of centerline, 1405' MSL.
Tree 1378' from DER, 167' right of centerline, 1406' MSL.
Trees beginning 1397' from DER, 149' right of centerline, up to 1410' MSL.
Trees beginning 1609' from DER, 254' right of centerline, up to 1418' MSL.
Trees beginning 1746' from DER, 1' right of centerline, up to 1426' MSL.
Trees beginning 2435' from DER, 8' right of centerline, up to 1429' MSL.
Trees beginning 2566' from DER, 7' right of centerline, up to 1430' MSL.
Tree 2777' from DER, 596' left of centerline, 1425' MSL.

BISMARCK, ND
BISMARCK MUNI (BIS)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 8 10MAR11 (11069) (FAA)
DEPARTURE PROCEDURE:
Rwy 13, climb heading 131° to 2400 before turning right.
Rwy 21, climb heading 212° to 3700 before turning left.
Rwy 31, climb heading 311° to 2200 before turning right.
TAKEOFF OBSTACLE NOTES:
Rwy 13, trees and pole beginning 864' from DER, 721' left of centerline, up to 56' AGL/1696' MSL.
Rwy 31, light pole 1424' from DER, 872' right of centerline, 43' AGL/1702' MSL.

BLUE EARTH, MN
BLUE EARTH MUNI (SBU)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 31MAR16 (16091) (FAA)
TAKEOFF MINIMUMS:
Rwy 3, 21, NA-Environmental.
TAKEOFF OBSTACLE NOTES:
Rwy 16, poles beginning 1017' from DER, 586' left of centerline, up to 32' AGL/1142' MSL.
Rwy 34, trees beginning 3407' from DER, 523' right of centerline, up to 100' AGL/1200' MSL.

BOTTINEAU, ND
BOTTINEAU MUNI (D09)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 03JUN10 (10154) (FAA)
TAKEOFF MINIMUMS:
Rwys 3, 21, NA.
DEPARTURE PROCEDURE:
Rwy 13, climb heading 127° to 2200 before turning left.
Rwy 31, climb heading 307° to 2600 before turning right.
TAKEOFF OBSTACLE NOTES:
Rwy 31, street light 116' from DER, 474' left of centerline, 16' AGL/1700' MSL.

BOWMAN, ND
BOWMAN RGNL (BWW)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 31MAR16 (16091) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 13, terrain beginning 171' from DER, 334' right of centerline, 3013' MSL.
Terrain 4199' from DER, 1275' left of centerline, 3077' MSL.
Rwy 31, terrain beginning 18' from DER, 182' left of centerline, 2958' MSL.
Pole 2360' from DER, 395' right of centerline, 33' AGL/3005' MSL.

BRAINERD, MN
BRAINERD LAKES RGNL (BRD)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6 15NOV12 (12320) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 16, multiple trees beginning 1830' from DER, 749' left of centerline, up to 74' AGL/1314' MSL.
Rwy 23, multiple trees beginning 1485' from DER, 91' left of centerline, up to 50' AGL/1299' MSL.
Tree 2426' from DER, 184' right of centerline, 50' AGL/1297' MSL.
Rwy 34, trees beginning 1635' from DER, left and right of centerline, up to 86' AGL/1312' MSL.

BRITTON, SD
BRITTON MUNI (BTN)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 10JAN13 (13010) (FAA)
TAKEOFF MINIMUMS:
Rwys 1, 19, NA-Environmental.
TAKEOFF OBSTACLE NOTES:
Rwy 13, trees, poles and terrain beginning 382' from DER, 9' right of centerline, up to 81' AGL/1439' MSL.
Trees, poles, vehicles on road and terrain beginning 1286' from DER, 17' left of centerline, up to 75' AGL/1449' MSL.
Rwy 31, trees and vehicles on road beginning 578' from DER, 185' right of centerline, up to 66' AGL/ 1375' MSL.
Tree and vehicles on road beginning 234' from DER, 413' left of centerline, up to 61' AGL/1370' MSL.

BROOKINGS, SD

BROOKINGS RGNL (BKX)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 25JUN15 (15176) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 12, building 1297' from DER, 734' right of centerline, 38' AGL/1681' MSL.
Rwy 17, trees beginning 1219' from DER, 562' left of centerline, up to 82' AGL/1733' MSL.
Trees beginning 2097' from DER, 252' left of centerline, up to 82' AGL/1728' MSL.
Rwy 35, trees beginning 481' from DER, 407' right of centerline, up to 45' AGL/1641' MSL.
Railroad beginning 514' from DER, crossing centerline from right to left, 23' AGL/1626' MSL.
Trees 701' from DER, 216' left of centerline, 35' AGL/1631' MSL.

BUFFALO, MN

BUFFALO MUNI (CFE)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 13JAN11 (11013) (FAA)

TAKEOFF MINIMUMS:

Rwy 18, 300-1½ or std. w/min climb of 403' per NM to 1200.

TAKEOFF OBSTACLE NOTES:

Rwy 18, building 613' from DER, 608' right of centerline, up to 25' AGL/984' MSL.
Vehicle on road 710' from DER, 641' right of centerline, up to 17' AGL/986' MSL.
Trees beginning 1000' from DER, 615' left of centerline, up to 100' AGL/1059' MSL.
Rwy 36, building 361' from DER, 262' left of centerline, up to 25' AGL/994' MSL.
Vehicle on road 845' from DER, 701' left of centerline, up to 15' AGL/994' MSL.
Trees beginning 1506' from DER, 350' right of centerline, up to 100' AGL/1089' MSL.
Trees beginning 1508' from DER, 129' left of centerline, up to 100' AGL/1109' MSL.

CAMBRIDGE, MN

CAMBRIDGE MUNI (CBG)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 05APR12 (12096) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 16, navaid 38' from DER, 78' left of centerline, 2' AGL/941' MSL.
Poles beginning 1203' from DER, 140' left of centerline, up to 66' AGL/1007' MSL.
Navaid 40' from DER 81' right of centerline, 2' AGL/941' MSL.
Trees beginning 198' from DER, 8' left and right of centerline, up to 100' AGL/1011' MSL.
Fence post 176' from DER, 403' right of centerline, 8' AGL/947' MSL.
Vehicles on road 191' from DER, 431' right of centerline, 15' AGL/954' MSL.
Rwy 34, terrain beginning 167' from DER, 374' left of centerline, up to 951' MSL.
Fence post 178' from DER, 481' left of centerline, 14' AGL/959' MSL.
Fence 615' from DER, 329' left of centerline, 13' AGL/958' MSL.
Vehicles on road 12' from DER, 492' left and right of centerline, 15' AGL/969' MSL.
Trees beginning 498' from DER, 12' left and right of centerline, up to 100' AGL/1 020' MSL.
Building 427' from DER,538' right of centerline, 24' AGL/969' MSL.

CANBY, MN

MYERS FIELD (CNB)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 29JUL10 (10210) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 12, numerous poles beginning 40' from DER, 421' left and right of centerline, up to 36' AGL/1216' MSL.
Truck on roads beginning 134' from DER, 37' left and right of centerline, up to 22' AGL/1202' MSL.
Tree 3' from DER, 159' right of centerline, 7' AGL/1187' MSL.
Rwy 30, numerous trees beginning 726' from DER, 176' left of centerline, up to 70' AGL/1278' MSL.
Tree 1338' from DER, 716' right of centerline, 68' AGL/1268' MSL.

CANDO, ND

CANDO MUNI (9D7)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 20AUG15 (15232) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 16, vehicles on road 443' from DER, 524' left of centerline, 15' AGL/1495' MSL.
Lt support structure 10' from DER, 10' right of centerline, 3' AGL/1484' MSL.
Rwy 34, poles beginning 382' from DER, 465' right of centerline, up to 32' AGL/1513' MSL.
Building 277' from DER, 574' right of centerline, 22' AGL/1503' MSL.
Vehicles on road beginning 596' from DER, 25' right of centerline, 15' AGL/1500' MSL.
Vehicles on road beginning 754' from DER, 16' left of centerline, 15' AGL/1504' MSL.
Lt support structure 10' from DER, 9' right of centerline, 3' AGL/1483' MSL.
Tank 344' from DER,470' right of centerline, 9' AGL/1490' MSL.

CARRINGTON, ND

CARRINGTON MUNI (46D)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 27JUN13 (13178) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 13, trees beginning 2097' from DER, 314' left of centerline, up to 100' AGL/1676' MSL.
Rwy 31, terrain 60' from DER, 481' left of centerline, 1614' MSL.
Trees beginning 603' from DER, 341' left of centerline, up to 100' AGL/1709' MSL.

CASSELTON, ND

CASSELTON ROBERT MILLER RGNL (5N8)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 20DEC07 (07354) (FAA)

TAKEOFF MINIMUMS:

Rwy 31, 400-2½ or std. w/min. climb of 212' per NM to 1400 or alternatively, with std. takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1700' prior to DER.

TAKEOFF OBSTACLE NOTES:

Rwy 13, railroad 30' from DER, 505' right of centerline, 23' AGL/945' MSL.
Vehicle on road 449' from DER, 300' left of centerline, 15' AGL/949' MSL.
Rwy 31, trees 2251' from DER, 456' left of centerline, up to 100' AGL/1052' MSL.

CAVALIER, ND

CAVALIER MUNI (2C8)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 20SEP12 (12264) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 16, trees beginning 83' from DER, 454' left of centerline, up to 77' AGL/963' MSL.
Trees beginning 751 ' from DER, 615' right of centerline, up to 77' AGL/963' MSL.
Power pole 1233' from DER, 544' right of centerline, 38' AGL/927' MSL.
Power poles beginning 1445' from DER, 330' left of centerline, up to 45' AGL/931' MSL.
Bean elevator 1603' from DER, 450' left of centerline, 83' AGL/1003' MSL.
Tank 1736' from DER, 434' left of centerline, 83' AGL/969' MSL.
Rwy 34, trees beginning 1053' from DER, 623' left of centerline, up to 65' AGL/959' MSL.
Trees beginning 2005' from DER, 393' right of centerline, up to 65' AGL/954' MSL.

CHAMBERLAIN, SD

CHAMBERLAIN MUNI (9V9)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 13DEC12 (12348) (FAA)

TAKEOFF MINIMUMS:

Rwys 18,36, NA-Environmental.

TAKEOFF OBSTACLE NOTES:

Rwy 13, trees left and right of centerline beginning 100' from DER, up to 47' AGL/1725' MSL.
Pole 1116' from DER, 712' left of centerline, 32' AGL/1710' MSL.
Rwy 31, rising terrain 91' from DER, 290' right of centerline, 1702' MSL.
Vehicle on road 1072' from DER, from 553' to 781' right of centerline, 15' AGL/1728' MSL.
Trees left and right of centerline beginning 1359' from DER, up to 71' AGL/1767' MSL.
Pole 1201' from DER, 701' right of centerline, 45' AGL/1741' MSL.

CLARK, SD

CLARK COUNTY (8D7)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 17AUG17 (17229) (FAA)

TAKEOFF MINIMUMS:

Rwys 3, 21, NA - Environmental.
Rwy 31, std. w/min climb of 207' per NM to 2500 or 1800-3 for VCOA or alternatively, with std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1600' prior to DER.

DEPARTURE PROCEDURES:

Rwy 13, climb on heading 131° to 2900 before turning northeast.
Rwy 31, climb on heading 311° to 2600 before proceeding on course.

VCOA:

Rwy 31, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Clark County airport at or above 3400 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 13, fence 4' from DER, 346' right of centerline, 1791' MSL.
Tree 63' from DER, 475' right of centerline, 1796' MSL.
Tree 83' from DER, 262' left of centerline, 1797' MSL.
Tree 130' from DER, 425' left of centerline, 1800' MSL.
Tree 277' from DER, 522' left of centerline, 1807' MSL.
Tree 2500' from DER, 1100' left of centerline, 1898' MSL.
Trees and pole beginning 2675' from DER, 320' left of centerline, up to 1908' MSL.

CON'T

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

CLARK, SD (CON'T)
CLARK COUNTY (8D7) (CON'T)
Rwy 31, tree 268' from DER, 560' left of centerline, 1817' MSL.
Vehicle on road beginning 416' from DER, 155' left of centerline, up to 1812' MSL.
Tree 1407' from DER, 676' right of centerline, 1842' MSL.

CLOQUET, MN
CLOQUET CARLTON COUNTY (COQ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 10SEP20 (20254) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 7, trees beginning abeam DER, 264' left of centerline, up to 100' AGL/1369' MSL.
Trees beginning 897' from DER, 358' right of centerline, up to 100' AGL/1349' MSL.
Vehicles on road beginning abeam, 431' right of centerline, 15' AGL/1274' MSL.
Rwy 18, electrical system 30' from DER, 109' left of centerline, 14' AGL/1273' MSL.
Trees beginning 68' from DER, 371' right of centerline, up to 1302' MSL.
Trees beginning 325' from DER, 511' right of centerline, up to 1340' MSL.
Rwy 25, trees beginning 152' from DER, 446' right of centerline, up to 1310' MSL.
Tree 541' from DER, 365' left of centerline, 1313' MSL.
Trees beginning 826' from DER, 479' right of centerline, up to 1323' MSL.
Trees beginning 1190' from DER, 505' right of centerline, up to 1362' MSL.
Trees beginning 1624' from DER, 461' left of centerline, up to 1359' MSL.
Trees beginning 1845' from DER, 741' left of centerline, up to 1365' MSL.
Tree 2003' from DER, 539' left of centerline, 1378' MSL.
Trees beginning 2127' from DER, 476' left of centerline, up to 1388' MSL.
Rwy 36, tree 40' from DER, 433' left of centerline, 1318' MSL.
Trees beginning 2267' from DER, 9' left of centerline, up to 1337' MSL.
Tree 2677' from DER, 10' right of centerline, 1346' MSL.
Tree 2765' from DER, 103' right of centerline, 1360' MSL.
Trees beginning 2767' from DER, 10' right of centerline, up to 1366' MSL.

COOK, MN
COOK MUNI (CQM)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 09FEB12 (12040) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 13, trees and terrain beginning 17' from DER, left and right of centerline, up to 60' AGL/1379' MSL.
Buildings beginning 326' from DER, 561' left of centerline, up to 20' AGL/1349' MSL.
Rwy 31, trees beginning 134' from DER, 376' left and right of centerline, up to 60' AGL/1389' MSL.

COOPERSTOWN, ND
COOPERSTOWN MUNI (S32)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 18NOV10 (10322) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 13, power lines 4085' from DER, 1585' right to 1588' left of centerline, up to 80' AGL/1526' MSL.
Rwy 31, building12' from DER, 369' left of centerline, 14' AGL/1443' MSL.
Vehicles 312' from DER, 550' left of centerline, 15' AGL/1444' MSL.
Vehicles 353' from DER, 585' right of centerline, 15' AGL/1434' MSL.

CROOKSTON, MN
CROOKSTON MUNI-KIRKWOOD FIELD (CKN)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 25OCT07 (07298) (FAA)
TAKEOFF MINIMUMS:
Rwys 6, 17, 24, 35, NA-turf runways.
TAKEOFF OBSTACLE NOTES:
Rwy 13, tree 1998' from DER, 587' left of centerline, 94' AGL/970' MSL.
Pole 1127' from DER, 662' left of centerline, 46' AGL/926' MSL.

CROSBY, ND
CROSBY MUNI (D50)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 03JUN10 (10154) (FAA)
TAKEOFF MINIMUMS:
Rwys 3, 21, NA-Environmental.
TAKEOFF OBSTACLE NOTES:
Rwy 12, hangars and poles beginning 133' from DER, 263' right of centerline, up to 35' AGL/1983' MSL.
Vehicle on road 800' from DER, 200' right of centerline, 22' AGL/1967' MSL.
Rwy 30, power line, 2100' from DER, on centerline, 60' AGL/2011' MSL.

DETROIT LAKES, MN

DETROIT LAKES-WETHING FIELD (DTL)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 25FEB21 (21056) (FAA)

TAKEOFF MINIMUMS:

Rwys 18, 36, NA – Environmental.

DEPARTURE PROCEDURE:

Rwy 14, climb on heading 138° to 1900 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 14, lighting 5' from DER, 112' left of centerline, 3' AGL/1363' MSL.
Lighting 6' from DER, 113' right of centerline, 3' AGL/1364' MSL.
Tree 28' from DER, 377' right of centerline, 1366' MSL.
Tree, pole, beginning 50' from DER, 3' right of centerline, up to 62' AGL/1428' MSL.
Vehicle on road 195' from DER, 509' left of centerline, 1377' MSL.
Vehicle on road, beginning 397' from DER, 498' left of centerline, up to 1378' MSL.
Trees, beginning 964' from DER, 449' left of centerline, up to 1392' MSL.
Tree 1216' from DER, 175' left of centerline, 1399' MSL.
Trees, beginning 1440' from DER, 194' left of centerline, up to 1420' MSL.
Rwy 32, vehicle on road, lighting beginning 1' from DER, 112' left of centerline, up to 1415' MSL.
Lighting 5' from DER, 112' right of centerline, 3' AGL/1399' MSL.
Vehicle on road beginning 18' from DER, 215' right of centerline, up to 1407' MSL.
Building 378' from DER, 514' left of centerline, 27' AGL/1417' MSL.
Pole, building beginning 390' from DER, 317' left of centerline, up to 29' AGL/1420' MSL.
Tree 1166' from DER, 797' left of centerline, 53' AGL/1427' MSL.

DEVILS LAKE, ND

DEVILS LAKE RGNL (DVL)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 12DEC13 (13346) (FAA)

DEPARTURE PROCEDURE:

Rwy 3, Climb heading 038° to 1900 before turning left.

TAKEOFF OBSTACLE NOTES:

Rwy 3, tree 1523' from DER, 136' right of centerline, 49' AGL/1489' MSL.
Tree 1531' from DER, 319' left of centerline, 50' AGL/1490' MSL.
Trees beginning 3105' from DER, 544' right of centerline, 71' AGL/1522' MSL.
Rwy 13, tree 1144' from DER, 716' right of centerline, 37' AGL/1482' MSL.
Pole 1601' from DER, 609' right of centerline, 39' AGL/1484' MSL.
Rwy 21, vehicle on road beginning 335' from DER, 404' right of centerline, up to 15' AGL/1477' MSL.
Antenna on pole 552' from DER, 595' left of centerline, 61' AGL/1506' MSL.
Trees beginning 613' from DER, 355' left of centerline, up to 47' AGL/1492' MSL.
Vehicles on road beginning 674' from DER, left and right of centerline, up to 15' AGL/1483' MSL.
Transmission tower 3566' from DER, 441' left of centerline, 123' AGL/1549' MSL.

DICKINSON, ND

DICKINSON-THEODORE ROOSEVELT RGNL (DIK)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2A 25FEB21 (21056) (FAA)

DEPARTURE PROCEDURE:

Rwy 25, climb on heading 250° to 3500 before turning left.

TAKEOFF OBSTACLE NOTES:

Rwy 7, lighting beginning 9' from DER, 26' left and right of centerline, up to 3' AGL/2594' MSL.
Lighting beginning 128' from DER, 113' left of centerline, up to 4' AGL/2596' MSL.
Vehicle on road beginning 822' from DER, left and right of centerline, up to 2620' MSL.
Rwy 15, terrain beginning 14' from DER, 192' right of centerline, up to 2585' MSL.
Terrain 86' from DER, 299' right of centerline, 2586' MSL.
Terrain 107' from DER, 296' left of centerline, 2584' MSL.
Terrain 130' from DER, 474' left of centerline, 2585' MSL.
Terrain beginning 187' from DER, 218' right of centerline, up to 2587' MSL.
Rwy 25, lighting 10' from DER, 94' right of centerline, 3' AGL/2572' MSL.
Lighting 40' from DER, 113' left and right of centerline, 4' AGL/2574' MSL.
Fence 193' from DER, 349' left of centerline, 10' AGL/2581' MSL.
Terrain beginning 642' from DER, 566' left of centerline, up to 2595' MSL.
Fence 922' from DER, 349' left of centerline, 11' AGL/2603' MSL.
Rwy 33, vehicle on road beginning 3' from DER, 69' right of centerline, up to 2583' MSL.

DODGE CENTER, MN

DODGE CENTER (TOB)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 15JAN09 (09015) (FAA)

TAKEOFF MINIMUMS:

Rwy 22, NA-Environmental.

TAKEOFF OBSTACLE NOTES:

Rwy 16, trees 3945' from DER, 1542' left of centerline, 100' AGL/1409' MSL.

DULUTH, MN

DULUTH INTL (DLH)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 10OCT19 (19283) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 3, tree 5' from DER, 306' right of centerline, 12' AGL/1424' MSL.
Trees, terrain beginning 11' from DER, 300' right of centerline, up to 1442' MSL.
Tree 234' from DER, 542' right of centerline, 1464' MSL.
Tree 612' from DER, 26 ' left of centerline, 1432' MSL.
Trees beginning 655' from DER, 441' right of centerline, up to 1471' MSL.
Tree 1217' from DER, 789' left of centerline, 1449' MSL.
Trees beginning 1469' from DER, 596' left of centerline, up to 54' AGL/1468' MSL.
Trees beginning 1501' from DER, 519' right of centerline, up to 1478' MSL.
Tree 1600' from DER, 704' right of centerline, 1481' MSL.
Trees beginning 1673' from DER, 225' right of centerline, up to 1484' MSL.
Trees beginning 1892' from DER, 622' left of centerline, up to 59' AGL/1476' MSL.
Trees beginning 2112' from DER, 598' left of centerline, up to 60' AGL/1479' MSL.
Trees beginning 2171' from DER, 532' left of centerline, up to 64' AGL/1482' MSL.
Rwy 21, sign 30' from DER, 399' right of centerline, 3' AGL/1416' MSL.
Vehicles on road 178' from DER, 412' right of centerline, 1426' MSL.
Vehicles on road 359' from DER, 423' right of centerline, 1429' MSL.
Tree 471' from DER, 563' left of centerline, 37' AGL/1440' MSL.
Tree, vehicles on road, poles, transmission line beginning 576' from DER, 423' right of centerline, up to 1457' MSL.
Trees beginning 1183' from DER, 778' left of centerline, up to 44' AGL/1460' MSL.
Tower 3751' from DER, 408' left of centerline, 92' AGL/1522' MSL.
Rwy 27, lighting beginning 4' from DER, 80' left of centerline, up to 2' AGL/1428' MSL.
Lighting 4' from DER, 120 ' right of centerline, 2' AGL/1428' MSL.
Lighting beginning 4' from DER, 20' right of centerline, up to 2' AGL/1429' MSL.
Lighting beginning 4' from DER, 29' left of centerline, up to 2' AGL/1429' MSL.
Lighting 99' from DER, 6' left of centerline, 3' AGL/1431' MSL.
Vegetation 347' from DER, 484' left of centerline, 1437' MSL.
Trees beginning 1190' from DER, 791' left of centerline, up to 1470' MSL.
Tree 1606' from DER, 558' right of centerline, 33' AGL/1468' MSL.
Trees beginning 1829' from DER, 961' right of centerline, up to 60' AGL/1505' MSL.
Trees beginning 2137' from DER, 989 ' right of centerline, up to 1507' MSL.
Trees beginning 2257' from DER, 997' left of centerline, up to 36' AGL/1509' MSL.
Trees beginning 2390' from DER, 986' left of centerline, up to 1519' MSL.
Trees beginning 2425' from DER, 985' right of centerline, up to 1522' MSL.
Trees beginning 2561' from DER, 326' left of centerline, up to 1524' MSL.
Trees beginning 2573' from DER, 1065' right of centerline, up to 1528' MSL.
Trees beginning 2651' from DER, 389' right of centerline, up to 1531' MSL.
Trees beginning 2903' from DER, 981' right of centerline, up to 1534' MSL.
Trees beginning 2960' from DER, 306' right of centerline, up to 1541' MSL.
Trees beginning 3117' from DER, 531' left of centerline, up to 1533' MSL.
Trees beginning 3142' from DER, 412' left of centerline, up to 52' AGL/1539' MSL.

EAGLE BUTTE, SD

CHEYENNE EAGLE BUTTE (84D)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 04FEB16 (16035) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 13, vehicles on road beginning 55' from DER, 77' left of centerline, up to 15' AGL/2463' MSL.
Fence beginning 14' from DER, 347' left of centerline, up to 16' AGL/2458' MSL.
Rwy 31, terrain 26' from DER, 284' left of centerline, 2435' MSL.
Fence 21' from DER, 390' right of centerline, 5' AGL/2433' MSL.
Vehicles on road beginning 70' from DER, 283' right of centerline, up to 15' AGL/2444' MSL.
Fence beginning 122' from DER, 364' left of centerline, up to 9' AGL/2441' MSL.

EDGELEY, ND

EDGELEY MUNI (51D)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 13OCT16 (16287) (FAA)

TAKEOFF MINIMUMS:

Rwy 9, 27, NA-Turf strip.

TAKEOFF OBSTACLE NOTES:

Rwy 14, ground 5' from DER, 11' left of centerline, 1592' MSL.
Electric sys 11' from DER, 10' right of centerline, 2' AGL/1594' MSL.
Electric sys 11' from DER, 9' left of centerline, 2' AGL/1594' MSL.
Rwy 32, electric system 8' from DER, 10' left of centerline, 3' AGL/1603' MSL.
Fence 47' from DER, 250' left of centerline, 4' AGL/1604' MSL.
Pole 759' from DER, 672' right of centerline, 26' AGL/1626' MSL.
Tree 1276' from DER, 635' left of centerline, 47' AGL/1652' MSL.
Tree 1383' from DER, 823' left of centerline, 51' AGL/1652' MSL.
Tree 2075' from DER, 800' left of centerline, 58' AGL/1659' MSL.
Tree 2477' from DER, 854' left of centerline, 68' AGL/1669' MSL.

ELBOW LAKE, MN

ELBOW LAKE MUNI-PRIDE OF THE PRAIRIE (Y63)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 17OCT13 (13290) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 14, trees, sign, and terrain beginning 128' from DER, 73' right of centerline, up to 29' AGL/1229' MSL.
Navaid and terrain beginning 28' from DER, 69' left of centerline, up to 10' AGL/1210' MSL.
Rwy 32, trees beginning 405' from DER, 190' left of centerline, up to 32' AGL/1232' MSL.

ELLENDALE, ND

ELLENDALE MUNI (4E7)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 01FEB18 (18032) (FAA)

TAKEOFF MINIMUMS:

Rwys 17, 35, NA-environmental.

TAKEOFF OBSTACLE NOTES:

Rwy 13, fence, pole, terrain beginning 10' from DER, 36' right of centerline, up to 6' AGL/1462' MSL.
Trees, terrain beginning 89' from DER, 206' right of centerline, up to 26' AGL/1481' MSL.
Tree 122' from DER, 179' left of centerline, 1461' MSL.
Tree 268' from DER, 442' right of centerline, 1482' MSL.
Tree 983' from DER, 740' left of centerline, 1481' MSL.
Trees beginning 994' from DER, 455' right of centerline, up to 1501' MSL.
Tree 1077' from DER, 658' left of centerline, 1487' MSL.
Trees beginning 1149' from DER, 509' left of centerline, up to 1500' MSL.
Trees, transmission line, pole, tower beginning 1367' from DER, 384' right of centerline, up to 1507' MSL.
Trees beginning 1468' from DER, 243' left of centerline, up to 1501' MSL.
Tree 1573' from DER, 456' left of centerline, 57' AGL/1502' MSL.
Rwy 31, tree 4' from DER, 405' left of centerline, 27' AGL/1481' MSL.
Pole 19' from DER, 35' right of centerline, 2' AGL/1458' MSL.
Trees beginning 87' from DER, 295' left of centerline, up to 32' AGL/1485' MSL.
Tree 1056' from DER, 692' right of centerline, 59' AGL/1512' MSL.
Trees beginning 1474' from DER, 76' right of centerline, up to 80' AGL/1530' MSL.
Trees beginning 1729' from DER, 39' right of centerline, up to 85' AGL/1536' MSL.

ELLSWORTH AFB (KRCA),

RAPID CITY, SD

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 13NOV14 (14317)

TAKEOFF OBSTACLE NOTES:

Rwy 13, Terrain 3182' MSL, 1' from DER, 490' left of centerline.
Terrain 3182' MSL, inward of DER, 500' left of centerline.
Terrain 3182' MSL, 0' from DER, 500' left of centerline.
Tree 140' AGL/3289' MSL, 2405' from DER, 1044' left of centerline.
B1 tail 34' AGL/3208' MSL, 64' inward of DER, 582' right of centerline.
Rwy 31, Building 12' AGL/3311' MSL, 1804' from DER, 762' left of centerline.

ELY, MN

ELY MUNI (ELO)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 09FEB12 (12040) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 12, rising terrain and trees beginning 148' from DER, 18' right of centerline, up to 53' AGL/1539' MSL.
Trees beginning 181' from DER, 247' left of centerline, up to 81' AGL/1542' MSL.
Rwy 30, trees beginning 61' from DER, 242' left of centerline, up to 73' AGL/1520' MSL.
Trees beginning 665' from DER, 652' right of centerline, up to 100' AGL/1551' MSL.
Pole 670' from DER, 529' right of centerline, 49' AGL/1460' MSL.

EVELETH, MN

EVELETH-VIRGINIA MUNI (EVM)

TAKEOFF MINIMUMS AND (OBSTACLE)DEPARTURE PROCEDURES

AMDT 3A 09NOV17 (17313)

TAKEOFF MINIMUMS:

Rwys 14,32, NA - environmental.

DEPARTURE PROCEDURE:

Rwy 27, northwest departures (270-050) climb heading 274° to 2000 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 9, trees beginning 1842' from DER, crossing centerline left to right, up to 88' AGL/1455' MSL.
Trees and vehicle on road beginning 13' from DER, 188' right of centerline, up to 88' AGL/433' MSL.
Rwy 27, trees and poles beginning 989' from DER, crossing centerline left to right, up to 110' AGL/1502' MSL.
Trees and vehicle on road beginning 66' from DER, 285' left of centerline, up to 37' AGL/1416' MSL.

FAIRMONT, MN

FAIRMONT MUNI (FRM)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 07MAY09 (09127) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 2, trees beginning 2466' from DER, 1105' right of centerline, up to 100' AGL/1269' MSL.
Rwy 13, tree 2340' from DER, 1039' left of centerline, 100' AGL/1269' MSL.
Rwy 20, trees beginning 1640' from DER, 914' right of centerline, up to 100' AGL/1289' MSL.
Trees beginning 913' from DER, 449' left of centerline, up to 100' AGL/1299' MSL.
Rwy 31, trees beginning 954' from DER, 161' left of centerline, up to 100' AGL/1299' MSL.
Trees and road beginning 791' from DER, 339' right of centerline, up to 57' AGL/1226' MSL.

FARGO, ND

HECTOR INTL (FAR)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4A 15DEC11 (11349) (FAA)

TAKEOFF MINIMUMS:

Rwys 13,31, NA.

TAKEOFF OBSTACLE NOTES:

Rwy 9, tree 1876' from DER 686' left of centerline, 53' AGL/952' MSL.
Tree 2620' from DER, 1100' right of centerline, 66' AGL/965' MSL.
Road and vehicle beginning 420' from DER, 601' right of centerline, up to 15' AGL/913' MSL.
Road and vehicle beginning 543' from DER, 619' left of centerline, up to 15' AGL/912' MSL.
Runway end lights beginning 41' from DER, left and right of centerline, up to 3' AGL/901' MSL.
Sign 39' from DER, 201' left of centerline, 2' AGL/900' MSL.
Multiple light poles beginning 1082' from DER, left and right of centerline, up to 27' AGL/927' MSL.
Rwy 18, road and vehicle 536' from DER, 19' right of centerline, 15' AGL/914' MSL.
Rwy 27, road and vehicle beginning 451' from DER, 479' right of centerline, up to 15' AGL/910' MSL.
Tree 2912' from DER, 944' left of centerline, 72' AGL/971' MSL.
Runway end lights 42' from DER, 126' right of centerline, 2' AGL/898' MSL.
Rwy 36, light support structure 11' from DER, 55' right of centerline, 1' AGL/901' MSL.

FARIBAULT, MN

FARIBAULT MUNI-LIZ WALL STROHFUS FIELD (FBL)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 07DEC17 (17341) (FAA)

TAKEOFF MINIMUMS:

Rwys 1, 19, NA - environmental

TAKEOFF OBSTACLE NOTES:

Rwy 12, road beginning 27' from DER, 496' right of centerline, 1063' MSL.
Tree, road beginning 123' from DER, 369' right of centerline, up to 1069' MSL.
Tree, road beginning 270' from DER, 308' right of centerline, up to 1092' MSL.
Road 323' from DER, 401' left of centerline, 1062' MSL.
Tree 331' from DER, 490' right of centerline, 1096' MSL.
Tree, road beginning 366' from DER, 286' right of centerline, up to 1105' MSL.
Pole, road, building, stack beginning 371' from DER, 334' left of centerline, up to 42' AGL/1085' MSL.
Rwy 30, tree, NAVAID beginning 17' from DER, 111' left of centerline, up to 1099' MSL.
Tree 39' from DER, 260' left of centerline, 1104' MSL.
Tree, 68' from DER, 498' left of centerline, 1121' MSL.
Trees beginning 125' from DER, 61' left of centerline, up to 1127' MSL.
Tree 249' from DER, 334' right of centerline, 1081' MSL.
Tree 338' from DER, 425' right of centerline, 1085' MSL.
Tree 377' from DER, 550' right of centerline 1111' MSL.
Trees beginning 511' from DER, 364' right of centerline, up to 1115' MSL.
Tree 2368' from DER, 649' right of centerline, 1129' MSL.
Tree 2836' from DER, 1178' right of centerline, 1136' MSL.
Trees beginning 2921' from DER, 1148' right of centerline, up to 1146' MSL.

FERGUS FALLS, MN

FERGUS FALLS MUNI-EINAR MICKELSON FIELD (FFM)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 27AUG09 (09239) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 13, trees beginning 2612' from DER, 128' right of centerline, up to 100' AGL/1269' MSL.
Trees beginning 2514' from DER, 42' left of centerline, up to 100' AGL/1259' MSL.
Rwy 17, trees beginning 1100' from DER 663' right of centerline, up to 100' AGL/1269' MSL.
Road 222' from DER, 469' right of centerline, 15' AGL/1173' MSL.
Rwy 35, trees beginning 2156' from DER, 176' right of centerline, up to 100' AGL/1289' MSL.

FOSSTON, MN

FOSSTON MUNI-ANDERSON FIELD (FSE)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2A 08NOV18 (18312) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 16, road 17' from DER, 114' left of centerline, 10' AGL/1289' MSL.
Road 27' from DER, 127' left of centerline, 10' AGL/1289' MSL.
Rwy 34, multiple trees and REIL beginning 39' from DER, 78' left of centerline, up to 56' AGL/1329' MSL.
Tree 192' from DER, 537' right of centerline, 13' AGL/1273' MSL.

GARRISON, ND

GARRISON MUNI (D05)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 13JAN11 (11013) (FAA)

TAKEOFF MINIMUMS:

Rwys 3,21, NA - Environmental.

TAKEOFF OBSTACLE NOTES:

Rwy 13, trees 849' from DER, 190' left of centerline, up to 100' AGL/1989' MSL.
Grain silos 1588' from DER, 895' left of centerline, 100' AGL/1989' MSL.
Rwy 31, vehicles on roadway beginning 424' from DER, left and right of centerline, up to 15' AGL/1974' MSL.
Trees 538' from DER, 425' left of centerline, up to 100' AGL/2059' MSL.

GETTYSBURG, SD

GETTYSBURG MUNI (0D8)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 18JAN07 (07018) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 4, multiple trees beginning 1011' from DER, 420' left of centerline, up to 60' AGL/2119' MSL.
Rwy 13, multiple trees beginning 1897' from DER, 975' left of centerline, 60' AGL/2119' MSL.
Rwy 22, multiple trees beginning 679' from DER, 117' left of centerline, up to 60' AGL/2109' MSL.

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GLENCOE, MN
GLENCOE MUNI (GYL)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 12MAR09 (09071) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 13, trees beginning349' from DER, 257' right of centerline, up to 100' AGL/1099' MSL.
Trees beginning 1211' from DER, 314' left of centerline, up to 100' AGL/1109' MSL.
Terrain beginning 53' from DER, 166' left of centerline, up to 998' MSL.
Terrain beginning 286' from DER, 435' right of centerline, up to 1001' MSL.
Rwy 31, trees beginning 501' from DER, 530' right of centerline, up to 100' AGL/1099' MSL.
Tree 2577' from DER, 129' left of centerline, 100' AGL/1109' MSL.

GLENWOOD, MN
GLENWOOD MUNI (GHW)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 26AUG10 (10233) (FAA)
TAKEOFF MINIMUMS:
Rwys 5, 23 N/A Environmental.
TAKEOFF OBSTACLE NOTES:
Rwy 15, road beginning 278' from DER, 521' left of centerline, 15' AGL/1414' MSL.
Trees beginning 3257' from DER, 1239' right of centerline, up to 100' AGL/1489' MSL.
Terrain beginning 42' from DER, 448' left of centerline, 1378' MSL.
Rwy 33, trees beginning 1266' from DER, 174' left of centerline, up to 100' AGL/1499' MSL.
Power lines beginning 1259' from DER, 793' left of centerline, up to 50' AGL/1439' MSL.

GLEN ULLIN, ND
GLEN ULLIN RGNL (D57)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 08NOV18 (18312) (FAA)
TAKEOFF MINIMUMS:
Rwy 11, 300-1¼ or std. w/ min. climb of 205' per NM to 2300, or alternatively, with std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1200' prior to DER.
TAKEOFF OBSTACLE NOTES:
Rwy 11, lighting 10' from DER, 9' right of centerline, 2' AGL/2093' MSL.
Lighting 10' from DER, 9' left of centerline, 2' AGL/2093' MSL.
Tree 577' from DER, 235' left of centerline, 2106' MSL.
Trees beginning 660' from DER, 403' right of centerline, up to 2128' MSL.
Trees beginning 793' from DER, 158' right of centerline, up to 2129' MSL.
Trees beginning 830' from DER, 352' left of centerline, up to 2127' MSL.
Trees beginning 903' from DER, 115' left of centerline, up to 2130' MSL.
Trees beginning 992' from DER, 240' right of centerline, up to 2133' MSL.
Tree 1054' from DER, 695' right of centerline, 2139' MSL.
Trees beginning 1148' from DER, 558' right of centerline, up to 2141' MSL.
Trees beginning 1174' from DER, 770' left of centerline, up to 2144' MSL.
Pole 6057' from DER, 1661' left of centerline, 29' AGL/2246' MSL.
Rwy 29, lighting 10' from DER, 11' left of centerline, 2' AGL/2092' MSL.
Lighting 10' from DER, 9' right of centerline, 2' AGL/2092' MSL.

GRAFTON, ND
HUTSON FIELD (GAF)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 29JUL10 (10210) (FAA)
TAKEOFF MINIMUMS:
Rwys 8, 26, NA-Environmental.
TAKEOFF OBSTACLE NOTES:
Rwy 17, vehicle on roads beginning 23' from DER, 300' left of centerline, up to 15' AGL/837' MSL.
Tree 2612' from DER, 857' left of centerline, 100' AGL/929' MSL.
Rwy 35, building 107' from DER, 344' left of centerline, 17' AGL/836' MSL.
Electrical system 153' from DER, 398' left of centerline, 21' AGL/840' MSL.
Vehicle on roads beginning 260' from DER, 74' left of centerline, up to 15' AGL/841' MSL.
Obstruction light on airport beacon 471' from DER, 601' left of centerline, 54' AGL/873' MSL.

GRAND FORKS, ND
GRAND FORKS INTL (GFK)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 12MAR09 (09071) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 9L, tree 127' from DER, 451' left of centerline, 12' AGL/853' MSL.
Rwy 27R, bush 38' from DER, 474' right of centerline, 5' AGL/844' MSL.
Rwy 35L, obstruction light on DME 645' from DER, 198' left of centerline, 21' AGL/860' MSL.
Rwy 35R, tree 1259' from DER, 521' right of centerline, 41' AGL/880' MSL.
Tree 1655' from DER, 271' left of centerline, 45' AGL/884' MSL.

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GRAND MARAIS, MN

GRAND MARAIS/COOK COUNTY (CKC)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 02MAR17 (17061) (FAA)

TAKEOFF OBSTACLE NOTES:
Rwy 10, runway lights beginning 9' from DER, 16' right of centerline, up to 2' AGL/1796' MSL.
Trees, REIL, runway lights, and terrain beginning 39' from DER, 77' right of centerline, up to 1818' MSL.
REIL 40' from DER, 76' left of centerline, 3' AGL/1797' MSL.
Trees beginning 147' from DER, 35' left of centerline, up to 1819' MSL.
Trees beginning 536' from DER, 249' right of centerline, up to 1820' MSL.
Trees beginning 739' from DER, 82' right of centerline, up to 1835' MSL.
Rwy 28, tree and terrain beginning 8' from DER, 202' left of centerline, up to 1838' MSL.
Tree and terrain beginning 43' from DER, 58' right of centerline, up to 1824' MSL.
Tree and terrain beginning 177' from DER, 41' right of centerline, up to 38' AGL/1837' MSL.
Trees beginning 359' from DER, 201' left of centerline, up to 1849' MSL.
Trees beginning 388' from DER, 223' right of centerline, up to 1847' MSL.
Trees beginning 552' from DER, 222' right of centerline, up to 1856' MSL.
Trees beginning 844' from DER, 236' right of centerline, up to 1865' MSL.
Trees and terrain beginning 1061' from DER, 320' right of centerline, up to 1867' MSL.
Trees beginning 1355' from DER, 536' right of centerline, up to 20' AGL/1880' MSL.
Trees beginning 1540' from DER, 123' right of centerline, up to 1896' MSL.
Trees beginning 1542' from DER, 5' left of centerline, up to 1867' MSL.
Trees beginning 2953' from DER, 92' right of centerline, up to 1900' MSL.
Trees beginning 3035' from DER, 32' left of centerline, up to 1890' MSL.
Trees beginning 4461' from DER, 344' right of centerline, up to 1924' MSL.

GRAND RAPIDS, MN

GRAND RAPIDS/ITASCA COUNTY-GORDON NEWSTROM FIELD (GPZ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4A 20JUN19 (19171) (FAA)

TAKEOFF MINIMUMS:
Rwys 5, 23, NA - Environmental.

TAKEOFF OBSTACLE NOTES:
Rwy 16, lighting beginning 4' from DER, on centerline, up to 1' AGL/1357' MSL.
Lighting 11' from DER, 30' left of centerline, 2' AGL/1357' MSL.
Tree 398' from DER, 582' left of centerline, 1368' MSL.
Trees beginning 1122' from DER, 569' right of centerline, up to 52' AGL/1409' MSL.
Tree 1654' from DER, 898' left of centerline, 1410' MSL.
Tree 2232' from DER, 1086' right of centerline, 1421' MSL.
Trees beginning 2267' from DER, 502' right of centerline, up to 1425' MSL.
Tree 2859' from DER, 1240' left of centerline, 1429' MSL.
Tree 3055' from DER, 1264' right of centerline, 1434' MSL.
Trees beginning 3187' from DER, 1130' right of centerline, up to 1443' MSL.
Tree 3221' from DER, 1175' left of centerline, 1441' MSL.
Trees beginning 3255' from DER, 1284' right of centerline, up to 1448' MSL.
Trees beginning 3329' from DER, 1337' left of centerline, up to 1447' MSL.
Rwy 34, lighting beginning 3' from DER, 59' left of centerline, up to 2' AGL/1299' MSL.
Lighting 9' from DER, 50' right of centerline, 2' AGL/1299' MSL.
Lighting, poles beginning 9' from DER, 29' left of centerline, up to 2' AGL/1300' MSL.
Tree 3267' from DER, 1353' left of centerline, 109' AGL/1405' MSL.

GRANITE FALLS, MN

GRANITE FALLS MUNI/LENZEN-ROE FAGEN MEMORIAL FIELD (GDB)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 06MAY10 (10126) (FAA)

TAKEOFF OBSTACLE NOTES:
Rwy 15, trees beginning 1780' from DER, 94' left of centerline, up to 100' AGL/1149' MSL.
Rwy 33, trees beginning 1196' from DER, right and left of centerline, up to 100' AGL/1149' MSL.
Power line 1242' from DER, 762' left of centerline, 80' AGL/1129' MSL.
Train 1390' from DER, 149' left of centerline, 23' AGL/1162' MSL.
Vehicle on road 1389' from DER, 156' left of centerline, up to 15' AGL/1154' MSL.

GREGORY, SD

GREGORY MUNI-FLYNN FIELD (9D1)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 01JUL10 (10182) (FAA)

TAKEOFF MINIMUMS:
Rwy 31, 400-2¼ or std. with a min. climb of 228' per NM to 2600.

TAKEOFF OBSTACLE NOTES:
Rwy 31, tower 11377' from DER, 816' right of centerline, 210' AGL/2491' MSL.

GWINNER, ND

GWINNER-ROGER MELROE FIELD (GWR)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT1 18SEP14 (14261) (FAA)

TAKEOFF MINIMUMS:

Rwys 6, 24, NA-Environment.

DEPARTURE PROCEDURE:

Rwy 34, climbing right turn heading 010° to 2000 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 34, tree 84' from DER, 469' right of centerline, 43' AGL/1293' MSL.
Pole 523' from DER, 626' right of centerline, 47' AGL/1296' MSL.

HALLOCK, MN

HALLOCK MUNI (HCO)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 05MAY11 (11125) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 13, tree 1076' from DER, 620' right of centerline, 100' AGL/919' MSL.
Trees beginning 81' from DER, from 472' left of centerline, up to 100' AGL/919' MSL.
Rwy 31, tree 1668' from DER, 560' right of centerline, 100' AGL/919' MSL.

HARVEY, ND

HARVEY MUNI (5H4)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 23SEP10 (10266) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 11, vehicle on road beginning 50' from DER, 318' left of centerline, up to 15' AGL/1654' MSL.
Tree 300' from DER, 329' right of centerline, 20' AGL/1621' MSL.
Tree 350' from DER, 444' right of centerline, 20' AGL/1619' MSL.
Rwy 29, vehicle on road beginning 4' from DER, left and right of centerline, up to 15' AGL/1654' MSL.
Rising terrain beginning 7' from DER, 31' left of centerline, up to 1608' MSL.

HAWLEY, MN

HAWLEY MUNI (04Y)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 15MAR07 (07074) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 34, road 15' from DER, 421' left of centerline, 15' AGL/1224' MSL.

HAZEN, ND

MERCER COUNTY RGNL (HZE)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 29JUL10 (10210) (FAA)

TAKEOFF MINIMUMS:

Rwy 32, std. w/min. climb of 215' per NM to 2700, or 900-3 for climb in visual conditions.

DEPARTURE PROCEDURE:

Rwy 32, for climb in visual conditions: cross Mercer County Rgnl airport at or above 2600 MSL before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 14, numerous fences beginning 196' from DER, 108' left of centerline, up to 12' AGL/1843' MSL.
Terrain beginning 501' from DER, 271' left of centerline, up to 1837' MSL.
Rwy 32, tree 1291' from DER, 592' right of centerline, 25' AGL/1833' MSL.
Terrain 495' from DER, 360' left of centerline, 1803' MSL.
Fence 5' from DER, 298' left of centerline, 8' AGL/1790' MSL.
Tree 1444' from DER, 520' right of centerline, 25' AGL/1823' MSL.

HETTINGER, ND

HETTINGER MUNI (HEI)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 08NOV18 (18312) (FAA)

TAKEOFF MINIMUMS:

Rwys 17, 35, NA – environmental.

Rwy 12, 300-1¼ or std. w/min. climb of 301' per NM to 3000.

DEPARTURE PROCEDURE:

Rwy 30, climb heading 308° to 3200 before turning right.

TAKEOFF OBSTACLE NOTES:

Rwy 12, fence 26' from DER, 435' right of centerline, 2703' MSL.
Tree 1655' from DER, 857' left of centerline, 2743' MSL.
Tree 1763' from DER, 733' left of centerline, 2754' MSL.
Tree 2443' from DER, 1095' left of centerline, 2764' MSL.
Tree 3135' from DER, 628' left of centerline, 2779' MSL.
Tree 3137' from DER, 1028' left of centerline, 2780' MSL.
Tree 3403' from DER, 1276' left of centerline, 2786' MSL.
Tree 3513' from DER, 1427' left of centerline, 2792' MSL.
Tree 3527' from DER, 1216' left of centerline, 2809' MSL.
Tree 3589' from DER, 1354' left of centerline, 2816' MSL.
Trees beginning 3613' from DER, 1137' left of centerline, up to 2826' MSL.
Tree 4520' from DER, 1293' left of centerline, 2838' MSL.
Trees beginning 4569' from DER, 1262' left of centerline, up to 60' AGL/2849' MSL.
Tree 5487' from DER, 1936' left of centerline, 60' AGL/2869' MSL.
Tower, trees beginning 5516' from DER, 1129' left of centerline, up to 100' AGL/2906' MSL.
Trees beginning 5926' from DER, 1917' left of centerline, up to 60' AGL/2859' MSL.
Rwy 30, fence 26' from DER, 401' left of centerline, 2706' MSL.
Terrain 93' from DER, 252' right of centerline, 2709' MSL.
Fence 199' from DER, 349' right of centerline, 2713' MSL.
Terrain 290' from DER, 569' right of centerline, 2714' MSL.
Terrain 888' from DER, 703' right of centerline, 2732' MSL.
Fence 1134' from DER, 670' right of centerline, 2743' MSL.

HIBBING, MN

RANGE RGNL (HIB)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 6 05AUG04 (04218) (FAA)

DEPARTURE PROCEDURE:

Rwy 22, climb via heading 227° to 2200 before turning right.

Rwy 31, climb via heading 310° to 2200 before turning left.

TAKEOFF OBSTACLE NOTES:

Rwy 4, antenna on pole, 361' from DER, 409' right of centerline, 1377' MSL.
Rwy 13, obstacle light on pole, 1184' from DER, 636' left of centerline.
Numerous trees beginning 1291' from DER, 745' left of centerline up to 1419' MSL.
Trees 1497' from DER, 563' right of centerline, 1388' MSL.
Rwy 22, multiple trees beginning 368' from DER, 170' right of centerline, up to 1416' MSL.
Multiple trees beginning 413' from DER, 117' left of centerline, up to 1400' MSL.
Rwy 31, light standard, 865' from DER, 595' right of centerline, 1381' MSL.

HIGHMORE, SD

HIGHMORE MUNI (9D0)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 15SEP16 (16259) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 13, tank 245' from DER, 564' left of centerline, 44' AGL/1890' MSL.
Tank 9' from DER, 492' left of centerline, 30' AGL/1877' MSL.
Building 169' from DER, 449' left of centerline, 23' AGL/1871' MSL.
Vehicles on road beginning 70' from DER, 397' left of centerline, 15' AGL/1865' MSL.
Ground beginning 7' from DER, 413' right of centerline, 0' AGL/1856' MSL.
NAVAID 10' from DER, 11' right of centerline, 3' AGL/1855' MSL.
Rwy 31, fence beginning 83' from DER, 453' left of centerline, up to 12' AGL/1852' MSL.
Fence beginning 129' from DER, 449' right of centerline, up to 12' AGL/1851' MSL.
Trees beginning 1079' from DER, 397' left of centerline, up to 50' AGL/1898' MSL.
Vertical structure 25' from DER, 450' right of centerline, up to 33' AGL/1845' MSL.
NAVAID 9' from DER, 8' right of centerline, 2' AGL/1843' MSL.
Vertical structure 201' from DER, 439' left of centerline, 32' AGL/1847' MSL.

HILLSBORO, ND

HILLSBORO MUNI (3H4)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 08JAN15 (15008) (FAA)

DEPARTURE PROCEDURE:

Rwy 16, climb heading 166° to 1700 before turning right.

Rwy 34, climb heading 346° to 2000 before turning left.

TAKEOFF OBSTACLE NOTES:

Rwy 16, REILs 11' from DER, 52' right of centerline, 1' AGL/906' MSL.
Vehicles on road beginning 9' from DER, 463' right of centerline, up to 17' AGL/922' MSL.
Vehicles on road beginning 109' from DER, 326' right of centerline, up to 17' AGL/923' MSL.
Vehicles on road beginning 355' from DER, 326' right of centerline, 17' AGL/924' MSL.
Vehicles on roads beginning 632' from DER, 61' right of centerline, 17' AGL/925' MSL.
Rwy 34, post 4' from DER, 140' right of centerline, 5' AGL/908' MSL.
NAVAID 21' from DER, 126' left of centerline, 2' AGL/907' MSL.
Vehicles on road beginning 65' from DER, 411' right of centerline, up to 20' AGL/919' MSL.

HINCKLEY, MN

FIELD OF DREAMS (04W)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 14FEB08 (08045) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 6, Tree 82' from DER, 480' right of centerline, 100' AGL/1114' MSL.
Tree 143' from DER, 161' left of centerline, 100' AGL/1114' MSL.
Rwy 24, Tree 48' from DER, 165' left of centerline, 100' AGL/1124' MSL.

HOT SPRINGS, SD

HOT SPRINGS MUNI (HSR)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 26JUL12 (12208) (FAA)

TAKEOFF MINIMUMS:

Rwys 6, 24, NA-environmental.
Rwy 1, 400-2½ or std. w/min. climb of 235' per NM to 3700.
Rwy 19, 400-2¾ or std. w/min. climb of 255' per NM to 3600.

DEPARTURE PROCEDURE:

Rwy 1, climb heading 026° to 4700 before turning westbound.
Rwy 19, climb heading 192° to 4700 before turning westbound.

TAKEOFF OBSTACLE NOTES:

Rwy 1, terrain 55' from DER, 468' right of centerline, 3144' MSL.
Vehicle on road beginning 312' from DER, left and right of centerline, up to 15' AGL/3154' MSL.
Trees beginning 528' from DER, left and right of centerline, up to 100' AGL/3239' MSL.
Trees 2.1 NM from DER, 3246' left of centerline, up to 100' AGL/3519' MSL.
Rwy 19, vehicle on road beginning 5' from DER, 369' left of centerline, up to 15' AGL/3161' MSL.
Vehicle on road beginning 407' from DER, left and right of centerline, up to 15' AGL/3166' MSL.
Poles beginning 607' from DER, left and right of centerline, up to 30' AGL/3181' MSL.
Multiple trees and poles beginning 1875' from DER, left and right of centerline, up to 100' AGL/3281' MSL.
Buildings 3031' from DER, 149' left of centerline, up to 20' AGL/3230' MSL.
Fence beginning 3033' from DER, 559' left of centerline, up to 6' AGL/3236' MSL.
Rising terrain beginning 3477' from DER, 545' left of centerline, up to 3241' MSL.
Trees beginning 1.6 NM from DER, 764' left of centerline, up to 100' AGL/3489' MSL.
Power lines beginning 1.4 NM from DER, 166' left of centerline, up to 120' AGL/3440' MSL.

HURON, SD

HURON RGNL (HON)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5 27AUG09 (09239) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 12, trees and pole beginning 918' from DER, 525' left of centerline, up to 62' AGL/1341' MSL.
Trees beginning 291' from DER, 234' right of centerline, up to 100' AGL/1389' MSL.
Rwy 17, trees beginning 236' from DER, 307' left of centerline, up to 67' AGL/1346' MSL.
Trees beginning 264' from DER, 262' right of centerline, 73' AGL/1352' MSL.
Rwy 30, trees beginning 3428' from DER, 1378' left of centerline, up to 100' AGL/1394' MSL.
Rwy 35, trees beginning 60' from DER, 104' left of centerline, up to 49' AGL/1328' MSL.
Trees beginning 251' from DER, 97' right of centerline, 52' AGL/1331' MSL.

HUTCHINSON, MN

HUTCHINSON MUNI-BUTLER FIELD (HCD)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 30JUN11 (11181) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 15, tree 3342' from DER, 425' right of centerline, 89' AGL/1148' MSL.
Trees beginning 545' from DER, 394' left of centerline, up to 64' AGL/1113' MSL.
Rwy 33, tree 994' from DER, 561' right of centerline, 40' AGL/1 099' MSL.

INTERNATIONAL FALLS, MN

FALLS INTL-EINARSON FIELD (INL)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3A 08JAN15 (15008) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 4, Tree 392' from DER 311' left of centerline, 51' AGL/1231' MSL.
Rwy 13, multiple trees beginning 1999' from DER, 773' left of centerline, up to 63' AGL/1233' MSL.
Pole 1091, from DER, 703' right of centerline, 37' AGL/1207' MSL.
Road 1005' from DER, 766' left of centerline, 15' AGL/1195' MSL.
Rwy 22, Multiple trees beginning 433' from DER 273' left of centerline, up to 33' AGL/1213' MSL.
Trees 1144' from DER 136' right of centerline, 28' AGL/1208' MSL.
Rwy 31, Trees 968' from DER, 752' left of centerline, 56' AGL/1236' MSL.

JACKSON, MN

JACKSON MUNI (MJQ)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 14FEB08 (08045) (FAA)

TAKEOFF MINIMUMS:

Rwys 4,22, NA-TURF.

DEPARTURE PROCEDURE:

Rwy 13, Climb heading 134° to 1900 before turning right.

TAKEOFF OBSTACLE NOTES:

Rwy 13, Trees beginning 1474' from DER, 556' left of centerline, up to 80' AGL/1539' MSL.
Vehicle on road 258' from DER, 559' from centerline, 15' AGL/1459' MSL.
Rwy 31, Vehicle on road 465' from DER, 618' left of centerline, 15' AGL/1446' MSL.
Trees beginning 1616' from DER, 580' right of centerline, up to 80' AGL/1519' MSL.
Trees beginning 1110' from DER, 429' left of centerline, up to 80' AGL/1509' MSL.

JAMESTOWN, ND

JAMESTOWN RGNL (JMS)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 30AUG07 (07242) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 22, antenna and tank beginning 2960' from DER, 1007' left of centerline, up to 150' AGL/1631' MSL.
Rwy 31, multiple trees beginning 2129' from DER 47' right of centerline, up to 60' AGL/1560' MSL.

KENMARE, ND

KENMARE MUNI (7K5)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 05MAY11 (11125) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 8, vehicles on roadway 359' from DER, left and right of centerline, up to 15' AGL/1980' MSL.
Trees 374 ' from DER, 359' right of centerline, 50' AGL/2004' MSL.
Rwy 26, aircraft on taxiway beginning abeam DER, 385' right of centerline, up to 17' AGL/1981' MSL.
Hangars beginning 147' from DER, 506' right of centerline, up to 30' AGL/1994' MSL.
Pole 1259' from DER, 49' right of centerline, 40' AGL/2002' MSL.
Trees beginning 1342' from DER, 85' right of centerline, up to 50' AGL/2014' MSL.

KILLDEER, ND

DUNN COUNTY WEYDAHL FIELD (9Y1)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 28JAN21 (21028) (FAA)

TAKEOFF MINIMUMS:

Rwy 31, std. w/ min. climb of 306' per NM to 4100 or 1400-3 for VCOA.

DEPARTURE PROCEDURE:

Rwy 13, climb on heading 126° to 2700 before proceeding on course.

VCOA:

Rwy 31, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Dunn County Weydahl Field at or above 3500 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 31, T-L towers beginning 1.03 NM from DER, 404' right of centerline, up to 125' AGL/2388' MSL.

KINDRED, ND

ROBERT ODEGAARD FIELD (K74)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 05MAR15 (15064) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 29, tree 991' from DER, 367' left of centerline, 38' AGL/982' MSL.
Tree 1073' from DER, 221' left of centerline, 38' AGL/982' MSL.

LANGDON, ND

ROBERTSON FIELD (D55)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 03JUN10 (10154) (FAA)

TAKEOFF MINIMUMS:

Rwys 8, 26, NA - Environmental.

TAKEOFF OBSTACLE NOTES:

Rwy 14, vehicles on road beginning 479' to 684' from DER, from 238' to 413' left of centerline, up to 15' AGL/1627' MSL.
Rwy 32, windsock 13' from DER, 416' right of centerline, 16' AGL/1619' MSL.
Fence 24' from DER, 301' left of centerline, 5' AGL/1608' MSL.
Fence 199' from DER, 293' left of centerline, 5' AGL/1608' MSL.
Trees beginning 485' from DER 203' right of centerline, up to 30' AGL/1628' MSL.
Trees beginning 1912' from DER, from 241' to 418' left of centerline, up to 78' AGL/1677' MSL.

LAKOTA, ND

LAKOTA MUNI (5L0)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 22JUN17 (17173) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 15, tree 129' from DER, 141' right of centerline, 1511' MSL.
Tree 849' from DER, 214' left of centerline, 1531' MSL.
Tree 877' from DER, 202' left of centerline, 1532' MSL.
T-L tower 906' from DER, 439' left of centerline, 27' AGL/1533' MSL.
Pole beginning 907' from DER, 430' left of centerline, up to 29' AGL/1534' MSL.
Trees beginning 979' from DER, 197' left of centerline, up to 1553' MSL.
Rwy 33, tree 29' from DER, 290' right of centerline, 1524' MSL.
Building 482' from DER, 576' left of centerline, 23' AGL/1531' MSL.
Road (N) beginning 587' from DER, 113' right of centerline, up to 1527' MSL.
Tree 817' from DER, 536' right of centerline, 1541' MSL.
Trees beginning 894' from DER, 173' right of centerline, up to 1554' MSL.
Trees beginning 904' from DER, 175' right of centerline, up to 1557' MSL.
Trees beginning 937' from DER, 158' right of centerline, up to 1558' MSL.
Trees beginning 1004' from DER, 56' right of centerline, up to 1560' MSL.
Tree 1063' from DER, 72' left of centerline, 1542' MSL.
Trees and pole beginning 1099' from DER, 77' left of centerline, up to 1551' MSL.

LEMMON, SD

LEMMON MUNI (LEM)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 22AUG13 (13234) (FAA)

TAKEOFF MINIMUMS:

Rwys 7, 25, NA - Environmental.

TAKEOFF OBSTACLE NOTES:

Rwy 11, rising terrain beginning 43' from DER, 318' right of centerline, up to 2575' MSL.
Vehicles on road beginning 861' from DER, 369' left of centerline, up to 15' AGL/2596' MSL.
Rwy 29, vehicles on road beginning 445' from DER, 231' left of centerline, up to 15' AGL/2583' MSL.

LINTON, ND

LINTON MUNI (7L2)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 22AUG13 (13234) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 9, trees beginning 902' from DER, 210' right of centerline, up to 100' AGL/1830' MSL.
Flag pole 37' from DER, 465' left of centerline, 30' AGL/1810' MSL.
Vehicle on road beginning 72' from DER, 237' right of centerline, up to 15' AGL/1815' MSL.
Rwy 27, trees beginning 14' from DER, 286' left of centerline, up to 100' AGL/1806' MSL.

LISBON, ND

LISBON MUNI (6L3)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 05JAN17 (17005) (FAA)

TAKEOFF MINIMUMS:

Rwy 3, 21, NA, Environmental.

TAKEOFF OBSTACLE NOTES:

Rwy 14, terrain beginning 2' from DER, 168' right of centerline, up to 1231' MSL.
Pole 51' from DER, 499' left of centerline, 1250' MSL.
Vehicle on road beginning 441' from DER, left and right of centerline, up to 1248' MSL.
Trees beginning 1136' from DER, 405' right of centerline, up to 1280' MSL.
Rwy 32, terrain beginning 60' from DER, 297' left of centerline, up to 1234' MSL.
Tree 109' from DER, 167' left of centerline, 1238' MSL.
Fence beginning 123' from DER, 497' right of centerline, up to 3' AGL/1235' MSL.
Fence and tree beginning 270 from DER, 149' right of centerline, up to 1242' MSL.

LITCHFIELD, MN

LITCHFIELD MUNI (LJF)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 23SEP10 (10266) (FAA)

DEPARTURE PROCEDURE:

Rwy 31, climb heading 316° to 1700 before turning left.

TAKEOFF OBSTACLE NOTES:

Rwy 13, trees beginning 11' from DER, 417' left and right of centerline, up to 90' AGL/1234' MSL.
Trees beginning 1251' from DER, 830' left of centerline, up to 89' AGL/1228' MSL.
Rwy 31, trees beginning 958' from DER, 73' left of centerline, up to 46' AGL/1185' MSL.
Trees beginning 13' from DER, 370' right of centerline, up to 95' AGL/1234' MSL.

LITTLE FALLS, MN

LITTLE FALLS/MORRISON COUNTY-LINDBERGH FIELD (LXL)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4A 01MAY14 (14121) (FAA)

TAKEOFF MINIMUMS:

Rwy 13, 300-1½ or std. w/min. climb of 301' per NM to 1500.
Rwys 18,36, NA– Environmental.

DEPARTURE PROCEDURE:

Rwy 31, climb heading 308° to 1600 before turning right.

TAKEOFF OBSTACLE NOTES:

Rwy 13, numerous trees beginning 76' from DER, right and left of centerline, up to 100' AGL/1389' MSL.
Rwy 31, numerous trees beginning 1986' from DER, right and left of centerline, up to 100' AGL/1214' MSL.

LONG PRAIRIE, MN

TODD FIELD (14Y)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 21MAY20 (20142) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 16, roads beginning 62' from DER, 476' left of centerline, up to 1342' MSL.
Terrain 89' from DER, 228' right of centerline, 1330' MSL.
Rwy 34, buildings and light beginning 0' from DER, 114' right of centerline, up to 21' AGL/1349' MSL.
Light 9' from DER, 18' left of centerline, 2' AGL/1334' MSL.
Trees, building, and pole beginning 313' from DER, 110' left of centerline, up to 1361' MSL.
Poles beginning 652' from DER, 638' right of centerline, up to 36' AGL/1363' MSL.
Trees and pole beginning 738' from DER, 98' left of centerline, up to 1375' MSL.
Trees beginning 851' from DER, 497' left of centerline, up to 1383' MSL.

LONGVILLE, MN

LONGVILLE MUNI (XVG)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 21MAY20 (20142) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 13, vehicle on road 1' from DER, 125' left of centerline, 1338' MSL.
Tree 5' from DER, 428' left of centerline, 15' AGL/1341' MSL.
Trees, vehicles on road beginning 9' from DER, 55' left of centerline, up to 1343' MSL.
Trees, vehicles on road beginning 33' from DER, 81' right of centerline, up to 1350' MSL.
Trees beginning 179' from DER, 124' right of centerline, up to 1364' MSL.
Trees beginning 188' from DER, 103' right of centerline, up to 1365' MSL.
Trees beginning 217' from DER, 120' right of centerline, up to 1385' MSL.
Trees beginning 269' from DER, 10' right of centerline, up to 1388' MSL.
Tree 334' from DER, 354' left of centerline, 26' AGL/1344' MSL.
Tree 381' from DER, 498' left of centerline, 1366' MSL.
Tree 444' from DER, 592' left of centerline, 1380' MSL.
Trees beginning 495' from DER, 295' left of centerline, up to 1392' MSL.
Trees beginning 748' from DER, 595' left of centerline, up to 1393 ' MSL.
Trees beginning 853' from DER, 2' left of centerline, up to 1403' MSL.
Trees beginning 1444' from DER, 12' right of centerline, up to 1389' MSL.
Trees beginning 1722' from DER, 69' right of centerline, up to 1393' MSL.
Trees beginning 1790' from DER, 22' right of centerline, up to 64' AGL/1395' MSL.
Trees beginning 1857' from DER, 9' right of centerline, up to 85' AGL/1399' MSL.
Trees beginning 2038' from DER, 5' right of centerline, up to 1406' MSL.
Trees beginning 2455' from DER, 46' left of centerline, up to 1406' MSL.
Rwy 31, vegetation 1' from DER, 154' right of centerline, 6' AGL/1340' MSL.
Vegetation, lighting beginning 2' from DER, 47' right of centerline, up to 10' AGL/1343' MSL.
Terrain 8' from DER, 186' left of centerline, 1335' MSL.
Building, lighting, sign beginning 9' from DER, 77' left of centerline, up to 17' AGL/1352' MSL.
Building, terrain, vehicles on road, vegetation, pole, sign beginning 23' from DER, 126' left of centerline, up to 64' AGL/1399' MSL.
Vegetation beginning 43' from DER, 103' right of centerline, up to 14' AGL/1347' MSL.
Vehicles on road, vegetation, trees beginning 198' from DER, 139' right of centerline, up to 1349' MSL.
Trees, vehicles on road beginning 288' from DER, 131' right of centerline, up to 24' AGL/1359' MSL.
Trees, vehicles on road beginning 362' from DER, 4' left of centerline, up to 1414' MSL.
Tree 368' from DER, 524' right of centerline, 48' AGL/1383' MSL.
Trees beginning 370' from DER, 216' right of centerline, up to 1406' MSL.
Trees, vehicles on road beginning 505' from DER, 18' right of centerline, up to 1408' MSL.
Trees, vehicles on road beginning 666' from DER, 80' right of centerline, up to 1412' MSL.
Tree 758' from DER, 457' right of centerline, 1414' MSL.
Trees, vehicles on road, buildings beginning 780' from DER, 4 ' right of centerline, up to 83' AGL/1426' MSL.
Trees beginning 1456' from DER, 2' left of centerline, up to 76' AGL/1415' MSL.
Trees beginning 1545' from DER, 110' left of centerline, up to 65' AGL/1416' MSL.
Trees beginning 1564' from DER, 180' left of centerline, up to 64' AGL/1418' MSL.
Trees beginning 1575' from DER, 105' left of centerline, up to 70' AGL/1425' MSL.
Trees beginning 1589' from DER, 92' left of centerline, up to 69' AGL/1426' MSL.
Trees beginning 1640' from DER, 101' left of centerline, up to 1430' MSL.
Trees beginning 1667' from DER, 19' left of centerline, up to 1432' MSL.
Trees beginning 1748' from DER, 4' right of centerline, up to 80' AGL/1431' MSL.
Trees beginning 1792' from DER, 50' left of centerline, up to 86' AGL/1434' MSL.
Trees beginning 1808' from DER, 3' left of centerline, up to 1435' MSL.
Trees beginning 1894' from DER, 15' left of centerline, up to 1441' MSL.
Trees beginning 1915' from DER, 1' left of centerline, up to 1442' MSL.
Trees beginning 1974' from DER, 0' left of centerline, up to 1446' MSL.
Trees, pole beginning 1994' from DER, 49' right of centerline, up to 82' AGL/1434' MSL.
Trees beginning 2009' from DER, 3' left of centerline, up to 1448' MSL.
Trees beginning 2016' from DER, 1' right of centerline, up to 92' AGL/1442' MSL.
Trees beginning 2058' from DER, 5' left of centerline, up to 1449' MSL.
Trees beginning 2104' from DER, 51' left of centerline, up to 1454' MSL.
Trees beginning 2110' from DER, 32' left of centerline, up to 1456' MSL.
Trees beginning 2165' from DER, 3' left of centerline, up to 1467' MSL.
Trees beginning 2910' from DER, 211' right of centerline, up to 1445' MSL.
Trees beginning 3288' from DER, 101' right of centerline, up to 83' AGL/1448' MSL.
Trees beginning 4165' from DER, 62' right of centerline, up to 1449' MSL.
Trees beginning 4203' from DER, 115' right of centerline, up to 1456' MSL.
Tree 4245' from DER, 122' right of centerline, 1459' MSL.
Trees beginning 4250' from DER, 28' right of centerline, up to 1463' MSL.
Trees beginning 4610' from DER, 306' right of centerline, up to 1465' MSL.
Trees beginning 4623' from DER, 130' right of centerline, up to 77' AGL/1467' MSL.
Trees beginning 4736' from DER, 52' left of centerline, up to 1477' MSL.
Trees beginning 4832' from DER, 280' right of centerline, up to 1480' MSL.

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

LUVERNE, MN
QUENTIN AANENSON FIELD (LYV)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 03JUN10 (10154) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 18, tree 813' from DER, 578' left of centerline, 50' AGL/1469' MSL.
Road plus vehicle 685' from DER, 574' right of centerline, 15' AGL/1454' MSL.
Terrain 20' from DER, on centerline, 1429' MSL.
Rwy 36, transmission tower, 5752' from DER, 1036' right of centerline, 139' AGL/1581' MSL.

MADISON, MN
LAC QUI PARLE COUNTY (DXX)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 15NOV12 (12320) (FAA)
TAKEOFF MINIMUMS:
Rwys 9, 27, NA - Environmental.
Rwy 32, 300-1½ or std. w/min. climb of 213' per NM to 1400, or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1500' prior to DER.
TAKEOFF OBSTACLE NOTES:
Rwy 14, trees beginning 40' from DER, 463' right of centerline, up to 100' AGL/1081' MSL.
Terrain 22' from DER, 175' left of centerline, 1080' MSL.
Rwy 32, vehicles on roadway beginning 538' from DER, left to right of centerline, up to 15' AGL/1098' MSL.
Trees beginning 1485' from DER, 790' left of centerline, up to 100' AGL/1152' MSL.
Tower 1.2 NM from DER, 2112' right of centerline, 200' AGL/1277' MSL.

MADISON, SD
MADISON MUNI (MDS)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 30JUN11 (11181) (FAA)
TAKEOFF MINIMUMS:
Rwys 3, 21, NA - environmental.
TAKEOFF OBSTACLE NOTES:
Rwy 15, trees beginning 764' from DER, 284' left of centerline, up to 76' AGL/1766' MSL.
Plant and fence beginning 65' from DER, 384' right of centerline, up to 24' AGL/1733' MSL.
Rwy 33, road 82' from DER, 399' left of centerline, 23' AGL/1723' MSL.
Road and trees beginning 131' from DER, 9' right of centerline, up to 100' AGL/1859' MSL.

MAHNOMEN, MN
MAHNOMEN COUNTY (3N8)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 17OCT13 (13290) (FAA)
TAKEOFF MINIMUMS:
Rwys 9,27, NA-Environmental.
TAKEOFF OBSTACLE NOTES:
Rwy 17, terrain beginning 14' from DER, 402' right of centerline, up to 1248' MSL.
Rwy 35, vehicles on roadway, poles, and telephone lines beginning 201' from DER, 450' left of centerline, up to 42' AGL/1273' MSL.
Telephone line 972' from DER, 590' right of centerline, 35' AGL/1266' MSL.
Trees beginning 1597' from DER 605' left of centerline, 75' AGL/1306' MSL.

MANDAN, ND
MANDAN MUNI (Y19)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 29MAY14 (14149) (FAA)
TAKEOFF MINIMUMS:
Rwys 4, 22, NA-Environmental.
TAKEOFF OBSTACLE NOTES:
Rwy 13, fence and trees beginning 26' from DER, 310' left of centerline, up to 48' AGL/1988' MSL.
Transmission lines and pole beginning 1604' from DER, from left to right of centerline, up to 64' AGL/1984' MSL.
Rwy 31, trees beginning 1256' from DER, from left to right of centerline up to 65' AGL/1995' MSL.

MANKATO, MN

MANKATO RGNL (MKT)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 24SEP09 (09267) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 4, trees beginning 447' from DER, 408' right of centerline, up to 100' AGL/1078' MSL.
Trees beginning 1996' from DER, 17' left of centerline, up to 100' AGL/1084' MSL.
Rwy 15, trees beginning 1552' from DER, 719' left of centerline, up to 100' AGL/1088' MSL.
Rwy 22, trees beginning 2370' from DER, 989' right of centerline, up to 100' AGL/1069' MSL.
Rwy 33, trees beginning 2085' from DER, 780' right of centerline, up to 100' AGL/1077' MSL.
Rising terrain 9' from DER, 65' right of centerline, up to 1029' MSL.
Terrain beginning 82' from DER, 60' left of centerline, up to 1029' MSL.

MARSHALL, MN

SOUTHWEST MINNESOTA RGNL MARSHALL/RYAN FIELD (MML)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2A 10DEC15 (15344) (FAA)

TAKEOFF MINIMUMS:

Rwy 20, Std. w/ min. climb of 270' per NM to 2000, or 1000-3 for climb in visual conditions.

DEPARTURE PROCEDURE:

Rwy 20, for climb in visual conditions, cross Marshall Airport at or above 2000 MSL before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 2, runway light 39' from DER, 79' left of centerline, 3' AGL/1174' MSL;
Trees beginning 1324' from DER, 796' left of centerline, up to 89' AGL/1256' MSL.
Rwy 12, Pole 706' from DER, 671' right of centerline, 60' AGL/1212' MSL.
Pole 1580' from DER, 732' left of centerline, 70' AGL/1225' MSL.
Antenna 1496' from DER, 620' right of centerline, 64' AGL/1219' MSL.
Pole 1185' from DER, 540' right of centerline, 55' AGL/1210' MSL.
Tree 3564' from DER, 400' right of centerline, 110' AGL/1269' MSL.
Tree 2135' from DER, 113' left of centerline, 77' AGL/1232' MSL.
Rwy 20, runway light 42' from DER, 77' left of centerline, 2' AGL, 1183' MSL.
Runway light 41' from DER, 78' right of centerline, 2' AGL/1182' MSL.
Rwy 30, Vehicle on road 1' from DER, 435' left of centerline, 24' AGL/1200' MSL.

MARTIN, SD

MARTIN MUNI (9V6)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 26MAY16 (16147) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 14, lt support structure 9' from DER, 20' left of centerline, 3280' MSL.
Lt support structure 10' from DER, 9' right of centerline, 3278' MSL.
Ground 13' from DER, 408' left of centerline, 3282' MSL.
Ground 27' from DER, 199' left of centerline, 15' AGL/3282' MSL.
Fence and ground beginning 74' from DER, 219' left of centerline, up to 3287' MSL.
Vehicle on road 145' from DER, 289' right of centerline, 15' AGL/3283' MSL.
Rwy 32, building, pole, ground and, vehicle on road, beginning 1' from DER, 9' left of centerline, up to 23' AGL/3317 MSL.
Tree 1083' from DER, 19' left of centerline, 3322' MSL.
Tree 1095' from DER, 387' right of centerline, 3382' MSL.
Tree 1172' from DER, 130' left of centerline, 3340' MSL.
Tree and pole beginning 1270' from DER, 9' left of centerline, up to 3341' MSL.
Tree 1315' from DER, 219' left of centerline, 3343' MSL.
Poles and trees beginning 1366' from DER, 174' left of centerline, up to 44' AGL/3349' MSL.
Trees beginning 1463' from DER, 94' right of centerline, up to 3334' MSL.
Poles and trees beginning 1481' from DER, 406' left of centerline, up to 43' AGL/3350' MSL.

MC GREGOR, MN

ISEDOR IVERSON (HZX)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 15DEC11 (11349) (FAA)

DEPARTURE PROCEDURE:

Rwy 14, climb heading 139° to 1900 before turning left.

TAKEOFF OBSTACLE NOTES:

Rwy 14, trees beginning 72' from DER, 440' left of centerline, up to 100' AGL/1324' MSL.
Trees beginning 1158' from DER, 724' right of centerline, up to 100' AGL/1324' MSL.
Trees beginning 2888' from DER, 589' left of centerline, up to 100' AGL/1334' MSL.
Rwy 32, vehicles on roadway beginning 499' from DER, 577' left of centerline, up to 17' AGL/1246' MSL.
Trees beginning 2919' from DER, left and right of centerline, up to 100' AGL/1329' MSL.

MILBANK, SD

MILBANK MUNI (1D1)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 10APR08 (08101) (FAA)

TAKEOFF MINIMUMS:

Rwy 25, std. w/min. climb of 207' per NM to 1900, or 900-2½ for climb in visual conditions.

DEPARTURE PROCEDURE:

Rwy 25, for climb in visual conditions cross Milbank Muni airport at or above 1900 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 7, trees beginning 1207' from DER, 387' left of centerline, up to 100' AGL/ 1219' MSL.
Vehicle on road 829' from DER, 373' right of centerline, 15' AGL/ 1134' MSL.
Building 322' from DER, 582' right of centerline, 25' AGL/ 1134' MSL.
Rwy 13, trees beginning 1448' from DER, 394' right of centerline, up to 100' AGL/ 1219' MSL.
Vehicle on road 218' from DER, 490' left of centerline, 15' AGL/ 1134' MSL.
Building 78' from DER, 397' left of centerline, 25' AGL/ 1134' MSL.
Rwy 25, tree 3584' from DER, 477' left of centerline, 100' AGL/ 1249' MSL.
Rwy 31, tree 2992' from DER, 715' left of centerline, 100' AGL/ 1239' MSL.

MILLER, SD

MILLER MUNI (MKA)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 25SEP08 (08269) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 15, vehicle on road 769' from DER, 642' right of centerline, 15' AGL/1599' MSL.
Snow removal equipment 206' from DER, 475' right of centerline, 21' AGL/1594' MSL.
Tree 3903' from DER, 998' left of centerline, 100' AGL/1684' MSL.
Rwy 33, vehicle on road 450' from DER, 560' left of centerline, 15' AGL/1584' MSL.
Tree 762' from DER, 628' left of centerline, 100' AGL/1669' MSL.

MINNEAPOLIS, MN

AIRLAKE (LVN)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 03JUN10 (10154) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 12, ground 198' from DER, 533' right of centerline, 0' AGL/963' MSL.
Tree and vehicle on road, beginning 422' from DER, 379' right of centerline, up to 15' AGL/978' MSL.
Tree 1291' from DER, 506' left of centerline, 62' AGL/1002' MSL.
Rwy 30, ground 104' from DER, 479' left of centerline, 0' AGL/965' MSL.
Tree, pole, and antenna on building beginning 171' from DER, 259' right of centerline, up to 50' AGL/1000' MSL.
Tree, railroad, and antenna on building 486' from DER, 268' left of centerline, up to 41' AGL/1001' MSL.
Trees and a building beginning 821' from DER, 30' right of centerline, up to 49' AGL/1009' MSL.

ANOKA COUNTY-BLAINE (JANES FIELD) (ANE)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5B 17AUG17 (17229) (FAA)

TAKEOFF MINIMUMS;

Rwy 9, 300-1½ or std. w/min. climb of 205' per NM to 1200, or alternatively, with std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1200' prior to DER.
Rwy 18, 300-1 or std. w/min. climb of 370' per NM to 1200.

DEPARTURE PROCEDURE:

Rwy 9, climb heading 089° to 2200 before turning right.
Rwy 18, climb heading 179° to 2600 before turning left.
Rwy 27, climb heading 269° to 1700 before proceeding southeast bound.
Rwy 36, climb heading 359° to 1700 before proceeding southeast bound.

TAKEOFF OBSTACLE NOTES:

Rwy 9, tree 821' from DER, 618' right of centerline, 961' MSL.
Water tank 1.1 NM from DER, 1278' right of centerline, 170' AGL/1082' MSL.
Rwy 18, road beginning 2' from DER, 49' right of centerline, up to 925' MSL.
Trees beginning 405' from DER, 286' left of centerline, up to 946' MSL.
Trees beginning 487' from DER, 353' left of centerline, up to 954' MSL.
Tree 757' from DER, 385' left of centerline, 955' MSL.
Trees beginning 769' from DER, 335' left of centerline, up to 959' MSL.
Tower 5016' from DER, 200' left of centerline, 120' AGL/1178' MSL.
Rwy 27, tree 7' from DER, 270' right of centerline, 908' MSL.
Trees beginning 70' from DER, 247' right of centerline, up to 912' MSL.
Tree 185' from DER, 390' right of centerline, 926' MSL.
Tree 447' from DER, 509' right of centerline, 930' MSL.
Tree 684' from DER, 671' left of centerline, 946' MSL.
Tree 1189' from DER, 811' left of centerline, 957' MSL.
Tree 1296' from DER, 697' right of centerline, 946' MSL.
Tree 3028' from DER, 553' right of centerline, 983' MSL.

CON'T

MINNEAPOLIS, MN (CON'T)

ANOKA COUNTY-BLAINE (JANES FIELD) (ANE) (CON'T)

Rwy 36, trees beginning 85' from DER, 308' right of centerline, up to 927' MSL.
Trees beginning 190' from DER, 267' right of centerline, up to 971' MSL.
Trees beginning 1544' from DER, 249' right of centerline, up to 987' MSL.
Tree 1985' from DER, 358' left of centerline, 962' MSL.

CRYSTAL (MIC)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4 31DEC20 (20366) (FAA)

TAKEOFF MINIMUMS:
Rwys 6R, 24L, NA - Environmental.

DEPARTURE PROCEDURE:
Rwy 6L, climb on heading 051° to 2200 before proceeding on course.
Rwy 14, climb on heading 139° to 1800 before proceeding on course.

TAKEOFF OBSTACLE NOTES:
Rwy 6L, pole 117' from DER, 440' left of centerline, 30' AGL/895' MSL.
Hanger, tree beginning 241' from DER, 89' left of centerline, up to 40' AGL/906' MSL.
Trees beginning 466' from DER, 51' left of centerline, up to 948' MSL.
Tree 746' from DER, 542' right of centerline, 904' MSL.
Trees beginning 793' from DER, 155' right of centerline, up to 909' MSL.
Trees beginning 1283' from DER, 412' left of centerline, up to 954' MSL.
Tree 3593' from DER, 382' right of centerline, 968' MSL.
Rwy 14, tree 709' from DER, 550' left of centerline, 917' MSL.
Trees, pole beginning 767' from DER, 335' left of centerline, up to 943' MSL.
Trees beginning 883' from DER, on centerline, up to 940' MSL.
Trees beginning 983' from DER, 7' left of centerline, up to 953' MSL.
Rwy 24R, sign 21' from DER, 138' left of centerline, 2' AGL/870' MSL.
Sign 41' from DER, 131' right of centerline, 3' AGL/872' MSL.
Trees beginning 73' from DER, 498' right of centerline, up to 920' MSL.
Tree, building, beginning 262' from DER, 286' right of centerline, up to 921' MSL.
Vehicles on road 970' from DER, crossing extended runway centerline, 18' AGL/895' MSL.
Tree 1083' from DER, 515' right of centerline, 926' MSL.
Trees beginning 1172' from DER, 216' left of centerline, up to 930' MSL.
Tree 2048' from DER, 497' left of centerline, 962' MSL.
Rwy 32, trees beginning 698' from DER, 11' left of centerline, up to 948' MSL.
Tree 775' from DER, 606' right of centerline, 911' MSL.
Tree 934' from DER, 679' right of centerline, 925' MSL.
Trees, pole beginning 998' from DER, 12' right of centerline, up to 957' MSL.
Trees beginning 1441' from DER, 122' left of centerline, up to 954' MSL.
Trees beginning 1766' from DER, 27' left of centerline, up to 956' MSL.
Trees beginning 1911' from DER, 39' right of centerline, up to 960' MSL.

FLYING CLOUD (FCM)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6 06FEB14 (14037) (FAA)

TAKEOFF OBSTACLE NOTES:
Rwy 10L, tree, buildings, and poles beginning 78' from DER, 346' left of centerline, up to 45' AGL/945' MSL.
Vehicle on road, sign, and trees beginning 645' from DER, 442' right of centerline, up to 37' AGL/937' MSL.
Rwy 10R, buildings beginning 260' from DER, 321' right of centerline, up to 40' AGL/943' MSL.
Trees, poles, and general utility beginning 331' from DER, 106' right of centerline, up to 38' AGL/939' MSL.
Rwy 28R, tree, buildings, and general utility beginning 105' from DER, 353' right of centerline, up to 38' AGL/938' MSL.
Rwy 18, buildings beginning 212' from DER, 318' right of centerline, up to 34' AGL/938' MSL.
Vehicle on road 262' from DER, 195' left of centerline, 15' AGL/918' MSL.
Trees beginning 401' from DER, 165' left of centerline, up to 51' AGL/961' MSL.
Rwy 36, building 3' from DER, 478' left of centerline, 18' AGL/920' MSL.
Trees beginning 426' from DER, 323' right of centerline, up to 61' AGL/951' MSL.
Trees, buildings, poles, and windmill beginning 541' from DER, 302' left of centerline, up to 59' AGL/960' MSL.

MINNEAPOLIS-ST. PAUL INTL / WOLD-CHAMBERLAIN (MSP)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 12 02MAY13 (13122) (FAA)

TAKEOFF MINIMUMS:
Rwy 12L, 300-1½ or std. w/min. climb of 207' per NM to 1100, or alternatively, with std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1300' prior to DER.
Rwy 35, std. w/min. climb of 219' per NM to 2100.

DEPARTURE PROCEDURE:
Rwy 4, climb heading 045° to 2100 before turning left.
Rwys 30L,30R, climb heading 301° to 2100 before turning right.
Rwy 35, climb heading 350° to 2100 before proceeding on course.

CON'T

MINNEAPOLIS, MN (CON'T)

MINNEAPOLIS-ST. PAUL INTL / WOLD-CHAMBERLAIN (MSP) (CON'T)

TAKEOFF OBSTACLE NOTES:
Rwy 4, trees beginning 800' from DER, 301' left of centerline, up to 75' AGL/925' MSL.
Rod on building 2528' from DER, 1174' left of centerline, 78' AGL/922' MSL.
Fence beginning 13' from DER, 486' left of centerline, up to 6' AGL/860' MSL.
Stack 4535' from DER, 480' left of centerline, 139' AGL/949' MSL.
Rwy 12L, tree 1.1 NM from DER, 1691' left of centerline, 92' AGL/991' MSL.
Light pole and camera on wall beginning 398' from DER, 561' right of centerline, up to 23' AGL/832' MSL.
Rwy 12R, tree 1479' from DER, 561' left of centerline, 86' AGL/855' MSL.
Obstruction light on pole 1002' from DER, 753' left of centerline, 53' AGL/852' MSL.
Rwy 17, pole 409' from DER, 530' right of centerline, 29' AGL/866' MSL.
Building 2619' from DER, 881' left of centerline, 97' AGL/918' MSL.
Building 1956' from DER, 904' left of centerline, 61' AGL/866' MSL.
Tree 2619' from DER, on centerline, 79' AGL/900' MSL.
Rwy 22, trees beginning 2659' from DER, 867' right of centerline, 94' AGL/934' MSL.
Rwy 30L, antenna on tower 3555' from DER, 1334' left of centerline, 116' AGL/935' MSL.
Rwy 30R, billboard sign 1463' from DER, 848' right of centerline, 31' AGL/880' MSL.
Rwy 35, trees beginning 2553' from DER, 770' right of centerline, 100' AGL/919' MSL.
Trees beginning 1989' from DER, 194' left of centerline, up to 87' AGL/906' MSL.
Buildings beginning 5.4 NM from DER, 1781' left of centerline, up to 889' AGL/1743' MSL.

MINOT, ND

MINOT INTL (MOT)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3A 07APR11 (11097) (FAA)

TAKEOFF MINIMUMS:
Rwy 26, 300-1½ or std. with a min. climb of 219' per NM to 2000.

DEPARTURE PROCEDURE:
Rwy 13, climb via heading 128° to 2200 before turning right.
Rwy 26, climb via heading 260° to 2300 before turning left.

TAKEOFF OBSTACLE NOTES:
Rwy 8, fence 261' from DER, 415' right of centerline, 9' AGL/1669' MSL.
Rwy 26, poles beginning 952' from DER, 523' left of centerline, up to 42' AGL/1761' MSL.
Tower 1297' from DER, 405' right of centerline, 29' AGL/1751' MSL.
Sign 1372' from DER, 323' left of centerline, 31' AGL/1750' MSL.
Sign 1377' from DER, 832' right of centerline, 59' AGL/1778' MSL.
Light pole 1419' from DER, 24' right of centerline, 36' AGL/1752' MSL.
Trees beginning 1463' from DER, 73' right of centerline, up to 76' AGL/1795' MSL.
Building 1432' from DER, 303' right of centerline, 33' AGL/1753' MSL.
Tree 2071' from DER, 60' left of centerline, 53' AGL/1772' MSL.
Tank 1.1 NM from DER, 1812' right of centerline, 140' AGL/1900' MSL.
Rwy 31, trees beginning 2908' from DER, 560' left of centerline, up to 64' AGL/1778' MSL.

MITCHELL, SD

MITCHELL MUNI (MHE)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1A 10DEC15 (15344) (FAA)

TAKEOFF OBSTACLE NOTES:
Rwy 18, trees beginning 829' from DER, 505' right of centerline, up to 80' AGL/1386' MSL.
NAVAID 119' from DER, 409' left of centerline, 9' AGL/1308' MSL.
Rwy 36, trees beginning 552' from DER, 575' right of centerline, up to 80' AGL/1328' MSL.
NAVAIDs beginning 34' from DER, 100' right and left of centerline, up to 3' AGL/1286' MSL.

MOBRIDGE, SD

MOBRIDGE MUNI(MBG)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 30JUN11 (11181) (FAA)

TAKEOFF MINIMUMS:
Rwys 17,35,NA - environmental

DEPARTURE PROCEDURE:
Rwy 12, climb heading 118° to 2600 before turning left.

TAKEOFF OBSTACLE NOTES:
Rwy 12, tower 2587' from DER, 651' right of centerline, 40' AGL/ 1810' MSL.
Pole 3567' from DER, 12' right of centerline, 11' AGL/ 1790' MSL.
Tree 1495' from DER, 230' right of centerline, 29' AGL/ 1738' MSL.
Trees and poles beginning 1698' from DER, 160' left of centerline, up to 75' AGL/ 1811' MSL.
Terrain and road beginning 153' from DER, 307' left of centerline, up to 17' AGL/1749' MSL.
Rwy 30, terrain and road beginning 36' from DER, left to right across centerline, up to 17' AGL/1710' MSL.

MOHALL, ND
HOHALL MUNI (HBC)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 20OCT11 (11293) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 13, vehicles on roadway, 361' from DER, left and right of centerline, up to 15' AGL/1664' MSL.

MONTEVIDEO, MN
MONTEVIDEO-CHIPPEWA COUNTY (MVE)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 20AUG15 (15232) (FAA)
TAKEOFF MINIMUMS:
Rwy 3, 21, NA-Environmental.
DEPARTURE PROCEDURE:
Rwy 14, climb runway heading to 1500 before turning.

MOORHEAD, MN
MOORHEAD MUNI (JKJ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 20OCT11 (11293) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 12, building 263' from DER, 495' left of centerline, 15' AGL/932' MSL.
Tree 657' from DER, 449' left of centerline, 114' AGL/1031' MSL.
Trees 1463' from DER, 711' left of centerline, up to 69' AGL/986' MSL.
Poles beginning 868' from DER, left and right of centerline, up to 48' AGL/965' MSL.
Rwy 30, tree 119' from DER, 104' left of centerline, 4' AGL/918' MSL.
Poles beginning 1342' from DER, 855' right of centerline, up to 55' AGL/969' MSL.

MOOSE LAKE, MN
MOOSE LAKE CARLTON COUNTY (MZH)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 06JAN94 (94006) (FAA)
TAKEOFF MINIMUMS:
Rwys 4, 22, 300-1.

MORA, MN
MORA MUNI (JMR)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 24MAY18 (18144) (FAA)
TAKEOFF MINIMUMS:
Rwys 11, 29, NA - environmental.
TAKEOFF OBSTACLE NOTES:
Rwy 17, light pole 16' from DER, 17' right of centerline, 3' AGL/1012' MSL.
Terrain 27' from DER, 311' from DER, 1012' MSL.
Vehicle on road, building, and trees beginning 162' from DER, 410' right of centerline, up to 33' AGL/1034' MSL.
Trees beginning 208' from DER, 443' left of centerline, up to 44' AGL/1045' MSL.
Trees beginning 644' from DER, 455' right of centerline, up to 53' AGL/1054' MSL.
Trees beginning 864' from DER, 178' right of centerline, up to 76' AGL/1068' MSL.
Trees beginning 1055' from DER, 37' left of centerline, up to 62' AGL/1063' MSL.
Trees beginning 1619' from DER, 491' right of centerline, up to 72' AGL/1074' MSL.
Tree 1975' from DER, 405' left of centerline, 68' AGL/1069' MSL.
Tree 2054' from DER, 2' right of centerline, 68' AGL/1069' MSL.
Trees beginning 2237' from DER, crossing centerline, up to 88' AGL/1089' MSL.
Trees beginning2645' from DER, 777' right of centerline, up to 89' AGL/1105' MSL.
Rwy 35, terrain beginning 168' from DER, 290' left of centerline, up to 1018' MSL.
Terrain 178' from DER, 383' right of centerline, 1005' MSL.
Terrain, vehicle on road, and trees beginning 349' from DER, 387' right of centerline, up to 58' AGL/1059' MSL.
Trees beginning 441' from DER, 388' left of centerline, up to 46' AGL/1057' MSL.
Trees beginning 634' from DER, 354' left of centerline, up to 70' AGL/1071' MSL.
Trees beginning 617' from DER, 427' right of centerline, up to 66' AGL/1067' MSL.
Trees beginning 1032' from DER, 267' left of centerline, up to 68' AGL/1086' MSL.
Trees beginning 1563' from DER, 582' right of centerline, up to 61' AGL/1072' MSL.
Tree 1791' from DER, 964' left of centerline, 66' AGL/1097' MSL.
Trees beginning 2085' from DER, crossing centerline, up to 73' AGL/1104' MSL.

MORRIS, MN
MORRIS MUNI-CHARLIE SCHMIDT FLD (MOX)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 14FEB08 (08045) (FAA)
TAKEOFF MINIMUMS:
Rwys 4, 22, NA-Environmental.
TAKEOFF OBSTACLE NOTES:
Rwy 32, Trees 2888' from DER, 1125' left of centerline, 100' AGL/1209' MSL.

NEW TOWN, ND
NEW TOWN MUNI (05D)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 31DEC20 (20366) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 12, trees 329' from DER, 267' right of centerline, up to 50' AGL/1979' MSL.
Trees 1113' from DER, 655' left of centerline, up to 50' AGL/1989' MSL.
Rwy 30, pole, tower and transmission lines beginning 1790' from DER, 366' right of centerline, up to 129' AGL/2027' MSL.

NEW ULM, MN
NEW ULM MUNI (ULM)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 17SEP15 (15260) (FAA)
TAKEOFF MINIMUMS:
Rwy 4, 22, NA-Environmental.
TAKEOFF OBSTACLE NOTES:
Rwy 33, tree 628' from DER, 417' right of centerline, 33' AGL/1034' MSL.
Tree 1457' from DER, 650' left of centerline, 38' AGL/1047' MSL.
Ground 4' from DER, 154' left of centerline, 1007' MSL.
Rwy 15, tree 1935' from DER, 610' left of centerline, 100' AGL/1099' MSL.

NORTHWOOD, ND
NORTHWOOD MUNI-VINCE FIELD (4V4)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 09FEB12 (12040) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 8, trees beginning 3317' from DER, 737' left of centerline, up to 100' AGL/1214' MSL.
Rwy 26, trees beginning 1171' from DER, left and right of centerline, up to 100' AGL/1214' MSL.

OAKES, ND
OAKES MUNI (2D5)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1A 26APR18 (18116) (FAA)
TAKEOFF MINIMUMS:
Rwys 17, 35, NA - Environmental.
TAKEOFF OBSTACLE NOTES:
Rwy 12, trees beginning 2071' from DER, left and right of centerline, up to 100' AGL/1459' MSL.
Rwy 30, trees beginning 2509' from DER, 744' left of centerline, up to 100' AGL/1454' MSL.

OLIVIA, MN
OLIVIA RGNL (OVL)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 13FEB86 (86044) (FAA)
TAKEOFF MINIMUMS:
Rwy 11, 300-1.

ONIDA, SD
ONIDA MUNI (98D)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 01FEB18 (18032) (FAA)
TAKEOFF MINIMUMS:
Rwy 8, 26, NA - environmental.
Rwy 13, 300-1⅜ or std. w/min. climb gradient of 250 feet per NM to 2500.
TAKEOFF OBSTACLE NOTES:
Rwy 13, light pole 10' from DER, 10' left of centerline, 2' AGL/1887' MSL.
Light pole 10' from DER, 10' right of centerline, 3' AGL/1887' MSL.
Rwy 31, light pole 11' from DER, 10' right of centerline, 3' AGL/1864' MSL.
Light pole 11' from DER, 11' left of centerline, 3' AGL/1863' MSL.

ORR, MN

ORR RGNL (ORB)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 31MAY12 (12152) (FAA)

TAKEOFF MINIMUMS:

Rwy 13, 300-1½ or std. w/ min. climb of 260' per NM to 1600.

DEPARTURE PROCEDURE:

Rwy 13, climb heading 136° to 1900 before turning right.

TAKEOFF OBSTACLE NOTES:

Rwy 13, trees beginning 630' from DER, 476' right of centerline, up to 80' AGL/1389' MSL.
Trees beginning 759' from DER, 361' left of centerline, up to 80' AGL/1459' MSL.
Trees beginning 1.1 NM from DER, 1343' right of centerline, up to 80' AGL/1499' MSL.
Rwy 31, trees beginning 366' from DER, 162' left of centerline, up to 80' AGL/429' MSL.
Trees beginning 867' from DER, 719' right of centerline, up to 80' AGL/1429' MSL.
Trees beginning 5401' from DER, 148' right of centerline, up to 80' AGL/1449' MSL.

ORTONVILLE, MN

ORTONVILLE MUNI-MARTINSON FIELD (VVV)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 01OCT81 (81274) (FAA)

TAKEOFF MINIMUMS:

Rwy 16, 300-1 or std. with a min. climb of 210' per NM to 1300.

OWATONNA, MN

OWATONNA DEGNER RGNL (OWA)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 30JAN97 (97030) (FAA)

DEPARTURE PROCEDURE:

Rwy 12, climb runway heading to 1500 before turning on course.

PARK RAPIDS, MN

PARK RAPIDS MUNI-KONSKHOK FIELD (PKD)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 23JUN16 (16175) (FAA)

DEPARTURE PROCEDURE:

Rwy 36, climb heading 356° to 2000 before turning right.

TAKEOFF OBSTACLE NOTES:

Rwy 13: Pole 880' from DER, 711' left of centerline, 26' AGL/1467' MSL.
Rwy 18: Trees beginning 1371' from DER, left and right of centerline, up to 1549' MSL.
Trees beginning 3080' from DER, left and right of centerline, up to 1539' MSL.
Rwy 31: Vehicles on road beginning 66' from DER, right and left of centerline, up to 1462' MSL.
Trees beginning 359' from DER, 454' right of centerline, up to 1468' MSL.
Trees beginning 799' from DER, 236' left of centerline, up to 1479' MSL.
Trees beginning 854' from DER, 296' right of centerline, up to 1476' MSL.
Rwy 36: Trees and buildings beginning 575' from DER, left and right of centerline, up to 1549' MSL.
Trees beginning 2802' from DER, 95' right of centerline, up to 1559' MSL.

PARKSTON, SD

PARKSTON MUNI (8V3)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 17OCT13 (13290) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 15, poles beginning 628' from DER, left and right of centerline, up to 37' AGL/1452' MSL.
Transmission towers beginning 758' from DER, left and right of centerline, up to 29' AGL/1444' MSL.
Train on railroad, 777' from DER, 573' left of centerline, 24' AGL/1439' MSL.
Building 1189' from DER, 694' left of centerline, 35' AGL/1450' MSL.
Trees beginning 1227' from DER, 268' left of centerline, up to 36' AGL/1459' MSL.
Rwy 33, trees beginning 300' from DER, left and right of centerline, up to 63' AGL/1478' MSL.
Poles beginning 662' from DER, left and right of centerline, up to 48' AGL/1463' MSL.
Transmission towers beginning 896' from DER, left and right of centerline, up to 44' AGL/1459' MSL.
Lighted support structures beginning 1076' from DER, left and right of centerline, up to 48' AGL/1463' MSL.
Fences beginning 17' from DER, left and right of centerline, up to 6' AGL/1421' MSL.
Silo, 1677' from DER, 43' AGL/1458' MSL. Vehicle on road, 54' from DER, 14' AGL/1459' MSL.

PAYNESVILLE, MN
PAYNESVILLE MUNI (PEX)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 08NOV18 (18312) (FAA)
TAKEOFF MINIMUMS:
Rwy 11, 300-1⅞ or std. w/min. climb of 234' per NM to 1600.
Rwy 29, 300-1¾ or std. w/min. climb of 210' per NM to 1500.
TAKEOFF OBSTACLE NOTES:
Rwy 11, trees beginning 61' from DER, 482' right of centerline, up to 1231' MSL.
Tree 3539' from DER, 1234' right of centerline, 1309' MSL.
Tower 1.5 NM from DER, 1956' left of centerline, 184' AGL/1456' MSL.
Tower 1.5 NM from DER, 1318' left of centerline, 193' AGL/1458' MSL.
Rwy 29, tree 1951' from DER, 990' right of centerline, 1240' MSL.
Power lines 1.3 NM from DER, 2625' left of centerline, 200' AGL/1399' MSL.

PEMBINA, ND
PEMBINA MUNI (PMB)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 21NOV85 (85325) (FAA)
DEPARTURE PROCEDURE:
Rwy 33, climb runway heading 3200 before turning left.

PERHAM, MN
PERHAM MUNI (16D)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 22AUG13 (13234) (FAA)
DEPARTURE PROCEDURE:
Rwy 13, climb heading 128° to 1900 before turning left.
TAKEOFF OBSTACLE NOTES:
Rwy 13, REILs 8' from DER, 79' right of centerline, 2' AGL/1373' MSL.
Trees beginning 6' from DER, 350' right of centerline, up to 50' AGL/1386' MSL and trees beginning 138' from DER, 115' right of centerline, up to 50' AGL/1433' MSL.
Light 8' from DER, 79' left of centerline, 2' AGL/1373' MSL.
Trees beginning 261' from DER, 251' left of centerline, up to 50' AGL/1387' MSL.
Rwy 31, REILs 9' from DER, 79' right of centerline, 2' AGL/1378' MSL.
Ground 8' from DER, 223' right of centerline, 1377' MSL.
Poles and tower beginning 627' from DER, 570' right of centerline, up to 43' AGL/1430' MSL.
Light, 8' from DER, 79' left of centerline, 2' AGL/1377' MSL.
Vehicles on road beginning 431' from DER, 32' left of centerline, up to 18' AGL/1394' MSL.
Trees, pole, and building beginning 93' from DER, 377' left of centerline, up to 50' AGL/1409' MSL.

PHILIP, SD
PHILIP (PHP)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 06FEB14 (14037) (FAA)
TAKEOFF MINIMUMS:
Rwys 5, 23, NA-Environmental.
TAKEOFF OBSTACLE NOTES:
Rwy 12, tree and fence beginning 2' from DER, 334' right of centerline, up to 25' AGL/2204' MSL.
Sign, fence and trees beginning 27' from DER, 127' left of centerline, up to 30' AGL/2212' MSL.
Rwy 30, fence beginning 174' from DER, 286' left of centerline, up to 10' AGL/2219' MSL.
Fence and vehicles on road beginning 3' from DER, 448' right of centerline, up to 15' AGL/2219' MSL.
Poles beginning 950' from DER, 308' right of centerline, up to 36' AGL/2250' MSL.
Terrain beginning 2598' from DER, 251' right of centerline, up to 2277' MSL.
Road beginning 4019' from DER, 1413' right of centerline, up to 15' AGL/2322' MSL.

PIERRE, SD
PIERRE RGNL (PIR)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 25APR85 (85115) (FAA)
TAKEOFF MINIMUMS:
Rwy 25, 300-1.

PINE RIDGE, SD

PINE RIDGE (IEN)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 26JUL12 (12208) (FAA)

TAKEOFF MINIMUMS:

Rwy 6, 24, NA- closed indefinitely.

Rwy 12, 300-1 or std. w/min. climb of 450' per NM to 3700.

Rwy 30, 300-1 or std. w/min. climb of 407' per NM to 3600.

TAKEOFF OBSTACLE NOTES:

Rwy 12, vehicle on road 10' from DER, left to right of centerline, 15' AGL/3347' MSL.

Fence 200' from DER, 350' right of centerline, 10' AGL/3338' MSL.

Rwy 30, tree 638' from DER, 492' right of centerline, 50' AGL/3339' MSL.

Vehicle on road 10' from DER, right of centerline, 15' AGL/3316' MSL.

Vehicle on road 407' from DER, right to left of centerline, 15' AGL/3313' MSL.

PINECREEK, MN

PINEY PINECREEK BORDER (48Y)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 15NOV12 (12320) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 15, poles beginning 459' from DER, 415' left of centerline, up to 32' AGL/1092' MSL.

Airfield light 8' from DER, 45' right of centerline, 8' AGL/1068' MSL.

Vehicle on road 900' from DER, left and right of centerline, 15' AGL/1078' MSL.

Rwy 33, trees beginning 11' from DER, 47' left of centerline, up to 100' AGL/1084' MSL.

Trees beginning 167' from DER, 406' right of centerline, up to 100' AGL/1101' MSL.

PINE RIVER, MN

PINE RIVER RGNL (PWC)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 08MAR12 (12068) (FAA)

TAKEOFF MINIMUMS:

Rwy 16, 300-1¼ or std. w/min. climb gradient of 218' per NM to 1500.

DEPARTURE PROCEDURE:

Rwy 16, climb heading 160° to 1800 before turning right.

TAKEOFF OBSTACLE NOTES:

Rwy 16, trees 2' from DER, 181' right of centerline, up to 5' AGL/1296' MSL.

Trees beginning 10' from DER, 113' left of centerline, up to 67' AGL/1366' MSL.

Road beginning 63' from DER, 381' right of centerline, up to 15' AGL/1310' MSL.

Poles beginning 611' from DER, 424' right of centerline, 26' AGL/1325' MSL.

REIL 50' from DER, 76' right of centerline, 7' AGL/1298' MSL.

Trees beginning 1267' from DER, 15' right of centerline, up to 100' AGL/1449' MSL.

Rwy 34, trees beginning 13' from DER, 121' right of centerline, up to 65' AGL/1374' MSL.

Trees beginning 1059' from DER, left and right of centerline, up to 101' AGL/1400' MSL.

REIL 50' from DER, 77' left of centerline, 7' AGL/1298' MSL.

Poles beginning 522' from DER, 520' left of centerline, up to 35' AGL/1334' MSL.

Buildings beginning 373' from DER, 465' left of centerline, up to 18' AGL/1327' MSL.

PIPESTONE, MN

PIPESTONE MUNI (PQN)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 14FEB08 (08045) (FAA)

TAKEOFF MINIMUMS:

Rwys 9,27, NA-Environmental.

TAKEOFF OBSTACLE NOTES:

Rwy 18, Trees beginning 3811' from DER, 854' right of centerline, up to 100' AGL/1859' MSL.

PRESTON, MN

FILLMORE COUNTY (FKA)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 23APR98 (98113) (FAA)

TAKEOFF MINIMUMS:

Rwys 11,29, 300-1.

PRINCETON, MN

PRINCETON MUNI (PNM)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1A 31DEC20 (20366) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 16, vehicles on road abeam DER, 149' left of centerline, 992' MSL.
Sign, terrain beginning 20' from DER, 216' right of centerline, up to 987' MSL.
Trees, vehicles on road beginning 141' from DER, 150' left of centerline, up to 1000' MSL.
Antenna 332' from DER, 558' right of centerline, 42' AGL/1022' MSL.
Tower, vehicles on road, building, trees beginning 335' from DER, 264' right of centerline, up to 50' AGL/1024' MSL.
Trees beginning 460' from DER, 433' left of centerline, up to 29' AGL/1007' MSL.
Trees beginning 841' from DER, 94' right of centerline, up to 1027' MSL.
Tree 1482' from DER, 86' left of centerline, 1021' MSL.
Tree 2085' from DER, 220' left of centerline, 1039' MSL.
Tree 2107' from DER, 458' right of centerline, 1042' MSL.
Trees beginning 2199' from DER, 123' left of centerline, up to 1040' MSL.
Rwy 34, trees beginning 31' from DER, 273' left of centerline, up to 52' AGL/1032' MSL.
Trees beginning 196' from DER, 32' left of centerline, up to 64' AGL/1044' MSL.
Tree 1218' from DER, 409' right of centerline, 1037' MSL.
Tree 1223' from DER, 652' right of centerline, 1039' MSL.
Tree 1391' from DER, 693' right of centerline, 59' AGL/1047' MSL.
Trees beginning 1477' from DER, 482' right of centerline, up to 80' AGL/1066' MSL.
Trees beginning 1663' from DER, 30' right of centerline, up to 1071' MSL.
Trees beginning 2001' from DER, 113' left of centerline, up to 1056' MSL.

RAPID CITY, SD

RAPID CITY RGNL (RAP)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 7 10MAR11 (11069) (FAA)

DEPARTURE PROCEDURE:

Rwy 5, climb on heading between 255° CW to 210° from DER, or min. climb of 240' per NM to 8800 for all other courses.
Rwy 14, climb on heading between 325° CW to 210° from DER, or min. climb of 245' per NM to 8900 for all other courses.
Rwy 23, climb on heading between 210° CCW to 055° from DER, or min. climb of 245' per NM to 8900 for all other courses.
Rwy 32, climb on heading 324° to 3700 for courses between 255° CW to 140° from DER, or min. climb of 244' per NM to 8800 for all other courses.

TAKEOFF OBSTACLE NOTES:

Rwy 5, fence 132' from DER, 249' left of centerline, up to 13' AGL/3215' MSL.
Trees beginning 16' from DER, 188' right of centerline, up to 25' AGL/3234' MSL.
Trees beginning 11' from DER, 111' left of centerline, up to 25' AGL/3234' MSL.
Rwy 14, trees beginning 136' from DER, 123' right of centerline, up to 25' AGL/3174' MSL.
Trees beginning 33' from DER, 229' left of centerline, up to 25' AGL/3164' MSL.
Rwy 23, vehicle on road 36' from DER, 121' left of centerline, up to 15' AGL/3175' MSL.
Hanger 201' from DER, 298' left of centerline, up to 30' AGL/3193' MSL.
Fence 333' from DER, 255' right of centerline, up to 14' AGL/3184' MSL.
Trees beginning 199' from DER, 175' right of centerline, up to 25' AGL/3194' MSL.
Trees beginning 158' from DER, 159' left of centerline, up to 25' AGL/3194' MSL.
Rwy 32, fence 1001' from DER, 750' right of centerline, up to 13' AGL/3233' MSL.
Obstruction light 661' from DER, 242' left of centerline, up to 43' AGL/3213' MSL.
Trees beginning 31' from DER, 262' right of centerline, up to 25' AGL/3254' MSL.
Trees beginning 61' from DER, 146' left of centerline, up to 25' AGL/3204' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

ORIG 12OCT17 (17285) (FAA)

Rwy 32, heading as assigned by ATC.

RAY S. MILLER AAF (KRYM)

CAMP RIPLEY, MN

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 04JUN09 (09155)

TAKEOFF OBSTACLES:

Rwy 13, Terrain 1270' MSL, 73' from DER, 8' left and right of centerline.
Vehicle 15' AGL/1180' MSL, 765' from DER, 638' left of centerline.
Rwy 31, Terrain 1273' MSL, 54' from DER, 9' left and right of centerline.
Trees 64' AGL/1282' MSL, 798' from DER, 325' left and right of centerline.

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

RED WING, MN

RED WING RGNL (RGK)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2A 13SEP18 (18256) (FAA)

TAKEOFF MINIMUMS:

Rwy 9, std. w/min. climb of 339' per NM to 1700.

TAKEOFF OBSTACLE NOTES:

Rwy 9, NAVAID 51' from DER, 75' left of centerline, 14' AGL/778' MSL.
Trees beginning 273' from DER, 457' left of centerline, up to 787' MSL.
Tree 523' from DER, 427' left of centerline, 790' MSL.
Pole beginning 1079' from DER, 554' left of centerline, up to 37' AGL/812' MSL.
Tree 1334' from DER, 332' right of centerline, 823' MSL.
Tree 1369' from DER, 384' left of centerline, 816' MSL.
Trees beginning 1383' from DER, 480' left of centerline, up to 820' MSL.
Tree 1413' from DER, 771' right of centerline, 824' MSL.
Trees beginning 1487' from DER, 264' right of centerline, up to 826' MSL.
Trees beginning 1911' from DER, 429' right of centerline, up to 835' MSL.
Trees beginning 1.2 NM from DER, 2172' left of centerline, up to 1032' MSL.
Tree 1.2 NM from DER, 2019' left of centerline, 1039' MSL.
Trees beginning 1.3 NM from DER, 1731' left of centerline, up to 1103' MSL.
Tree, vehicles, terrain beginning 1.3 NM from DER, 3' left of centerline, up to 1119' MSL.
Tree 1.6 NM from DER, 89' right of centerline, 1088' MSL.
Trees beginning 1.6 NM from DER, 36' right of centerline, up to 1097' MSL.
Trees beginning 1.6 NM from DER, 33' right of centerline, up to 1099' MSL.
Trees beginning 1.8 NM from DER, 9' left of centerline, up to 1120' MSL.
Trees beginning 1.8 NM from DER, 176' right of centerline, up to 1108' MSL.
Tree 1.9 NM from DER, 20' right of centerline, 1123' MSL.
Trees beginning 2 NM from DER, 13' left of centerline, up to 1127' MSL.
Trees beginning 2 NM from DER, 24' right of centerline, up to 1125' MSL.
Trees beginning 2 NM from DER, 12' right of centerline, up to 1130' MSL.
Tree 2.1 NM from DER, 1401' right of centerline, 1134' MSL.
Building, tree beginning 2.2 NM from DER, 307' right of centerline, up to 68' AGL/1139' MSL.
Trees beginning 2.2 NM from DER, 7' left of centerline, up to 1162' MSL.
Tree 2.2 NM from DER, 17' right of centerline, 1152' MSL.
Tree 2.5 NM from DER, 1342' right of centerline, 1192' MSL.
Rwy 27, vehicles beginning 12' from DER, 33' right of centerline, up to 807' MSL.
Trees beginning 379' from DER, 510' right of centerline, up to 800' MSL.
Tree 2290' from DER, 1034' left of centerline, 838' MSL.

REDWOOD FALLS, MN

REDWOOD FALLS MUNI (RWF)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 12MAR09 (09071) (FAA)

TAKEOFF MINIMUMS:

Rwys 5, 23, NA-Environmental.

TAKEOFF OBSTACLE NOTES:

Rwy 12, numerous buildings beginning 388' from DER, 376' right of centerline, up to 13' AGL/1052' MSL.
Numerous fences beginning 6' from DER, 329' right of centerline, up to 13' AGL/1052' MSL.
Tree 62' from DER, 444' left of centerline, 11' AGL/1040' MSL.
Rwy 30, multiple trees beginning 865' from DER, 401' right of centerline, up to 100' AGL/1119' MSL.
Vehicle on road 128' from DER, 306' right of centerline, 15' AGL/1027' MSL.

ROCHESTER, MN

ROCHESTER INTL (RST)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 15JAN09 (09015) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 2, road 73' from DER, 385' right of centerline, 10' AGL/1292' MSL.
Tree 4377' from DER, 1132' right of centerline, 100' AGL/1399' MSL.
Road 268' from DER, 366' right of centerline, 10' AGL/1290' MSL.
Rwy 13, tree 1498' from DER, 840' right of centerline, 44' AGL/1348' MSL.
Rwy 20, pole 259' from DER, 407' right of centerline, 23' AGL/1338' MSL.
Roads beginning 1' from DER, 231' right of centerline, up to 10' AGL/1327' MSL.
Rwy 31, tree 4760' from DER, 1103' left of centerline, 100' AGL/1389' MSL.

ROLLA, ND

ROLLA MUNI (06D)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 13JAN11 (11013) (FAA)

TAKEOFF MINIMUMS:

Rwys 7, 25, NA-Environmental.

TAKEOFF OBSTACLE NOTES:

Rwy 14, vehicle on road 49' from DER, 23' left of centerline, 15' AGL/1830' MSL.
Trees beginning 1232' from DER, 209' left of centerline, up to 80' AGL/1867' MSL.
Rwy 32, trees beginning 2207' from DER, 59' left of centerline, up to 80' AGL/1929' MSL.
Trees beginning 651' from DER, 80' right of centerline, up to 80' AGL/1939' MSL.

ROSEAU, MN

ROSEAU MUNI-RUDY BILLBERG FIELD (ROX)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 30AUG07 (07242) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 16, building 258' from DER, 505' right of centerline, 24' AGL/1078' MSL.
Tree 1582' from DER, 337' left of centerline, 47' AGL/1101' MSL.
Rwy 34, truck on road 41' from DER, 511' left of centerline, 15' AGL/1069' MSL.

ROSEBUD, SD

ROSEBUD SIOUX TRIBAL (SUO)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 07DEC17 (17341) (FAA)

TAKEOFF MINIMUMS:

Rwy 16, 300-1 ¾ or std. w/min. climb gradient of 240’ per NM to 3500 or 1300-3 for VCOA.

DEPARTURE PROCEDURE:

Rwy 16, climb heading 177° to 3500 before turning left.

VCOA:

Rwy 16, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Rosebud Sioux Tribal Airport at or above 3900 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 16, light 10’ from DER, 18’ right of centerline, 2’ AGL/2725’ MSL.
Light 10’ from DER, 17’ left of centerline, 2’ AGL/2725’ MSL.
Fence 867’ from DER, 184’ left of centerline,10’ AGL/ 2751’ MSL.
Ground 1256’ from DER, 679’ left of centerline, 2795’ MSL.
Secondary Rd 1526’ from DER, 809’ left of centerline, 2807’ MSL.
Tree 1770’ from DER, 882’ left of centerline, 2818’ MSL.
Rwy 34, light 10’ from DER, 17’ right of centerline, 2’ AGL/2684’ MSL.
Light 10’ from DER, 18’ left of centerline, 2’ AGL/2685’ MSL.
Ground 448’ from DER, 213’ right of centerline, 2695’ MSL.
Ground 493’ from DER, 40’ right of centerline, 2697’ MSL.
Ground 496’ from DER, 108’ right of centerline, 2697’ MSL.
Ground 504’ from DER, 8’ left of centerline, 2698’ MSL.
Bush 555’ from DER, 166’ right of centerline, 2698’ MSL.
Ground 556’ from DER, 107’ left of centerline, 2698’ MSL.
Fence 623’ from DER, 110’ left of centerline, 3’ AGL/2698’ MSL.

RUGBY, ND

RUGBY MUNI (RUG)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 24JUL14 (14205) (FAA)

TAKEOFF MINIMUMS:

Rwy 12, 300-1¾ or std. w/min. climb of 300’ per NM to 2000.

TAKEOFF OBSTACLE NOTES:

Rwy 12, trees beginning 1186’ from DER, 432’ left of centerline, up to 67’ AGL/1620’ MSL.
Elevators beginning 1.4 NM from DER, 819’ right of centerline, up to 246’ AGL/1804’ MSL.
Rwy 30, edge light 11’ from DER, 9’ right of centerline, 1’ AGL/1534’ MSL.
Edge light 11’ from DER, 20’ left of centerline, 1’ AGL/1534’ MSL.

RUSH CITY, MN

RUSH CITY RGNL (ROS)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 10FEB11 (11041) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 16, multiple trees beginning 27' from DER, 315' left of centerline, up to 100' AGL/ 969' MSL.
Multiple trees beginning 838' from DER, 226' right of centerline, up to 100' AGL/ 997' MSL.
Pole 1712' from DER, 811' left of centerline, 50' AGL/ 970' MSL.
Rwy 34, trees 91' from DER, 472' left of centerline, 100' AGL/ 939' MSL.
Trees 1173' from DER, 375' right of centerline, 100' AGL/ 1029' MSL.
Trees 2250' from DER, 928' left of centerline, 100' AGL/ 1009' MSL.

RUSHFORD, MN

RUSHFORD MUNI-ROBERT W BUNKE FIELD (55Y)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2A 01FEB18 (18032) (FAA)

DEPARTURE PROCEDURE:

Rwy 16, climb heading 161° to 1800 before turning left.

TAKEOFF OBSTACLE NOTES:

Rwy 16, trees beginning 132' from DER, 448' left of centerline, up to 100' AGL/1280' MSL.
Trees beginning 899' from DER, 685' right of centerline, up to 100' AGL/1319' MSL.
Rwy 34, Trees beginning 308' from DER, 147' right of centerline, up to 100' AGL/1299' MSL.
Trees beginning 761' from DER, 34' left of centerline, up to 100' AGL/1319' MSL.
Trees beginning 1169' from DER, 23' right of centerline, up to 100' AGL/1344' MSL.

ST. CLOUD, MN

ST. CLOUD RGNL (STC)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 27AUG09 (09239) (FAA)

TAKEOFF MINIMUMS:

Rwy 5, 300-1¼ or std. w/ min. climb of 201' per NM to 1300 or alternatively, with standard TAKEOFF minimums and a normal 200'/NM climb gradient, TAKEOFF must occur no later than 1100' prior to DER.

TAKEOFF OBSTACLE NOTES:

Rwy 5, tower 6201' from DER, 1416' left of centerline, 149' AGL/1179' MSL.
Multiple trees beginning 17' from DER, 373' right of centerline, up to 59' AGL/1081' MSL.
Multiple trees beginning 1752' from DER, 56' left of centerline, up to 80' AGL/1102' MSL.
Rwy 13, tree 1654' from DER, 884' right of centerline, 61' AGL/1078' MSL.
Tree 1265' from DER, 794' left of centerline, 42' AGL/1059' MSL.
Rwy 23, trees 2109' from DER, 29' right of centerline, up to 61' AGL/1082' MSL.
Trees 1725' from DER, 93' left of centerline, up to 55' AGL/1076' MSL.
Fence 74' from DER, 216' left of centerline, 2' AGL, 1023' MSL.
Rwy 31, terrain beginning 29' from DER, 50' right of centerline, up to 1083' MSL.
Terrain beginning 107' from DER, 7' left of centerline, up to 1060' MSL.

ST. JAMES, MN

ST. JAMES MUNI (JYG)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 24MAY18 (18144) (FAA)

DEPARTURE PROCEDURE:

Rwy 15, climb to 1900 on heading 148° before turning eastbound.

TAKEOFF OBSTACLE NOTES:

Rwy 15, pole 8' from DER, 78' left of centerline, 4' AGL/1067' MSL.
Tree 58' from DER, 379' left of centerline, 1072' MSL.
Pole 1489' from DER, 611' left of centerline, 41' AGL/1112' MSL.
Tree, pole beginning 1510' from DER, 309' left of centerline, up to 1133' MSL.
Tree 2209' from DER, 79' right of centerline, 1124' MSL.
Trees beginning 2834' from DER, 25' left of centerline, up to 1139' MSL.
Tree 2849' from DER, 6' right of centerline, 1145' MSL.
Tree 2937' from DER, 5' left of centerline, 1142' MSL.
Rwy 33, pole 11' from DER, 78' left of centerline, 3' AGL/1063' MSL.
Pole 11' from DER, 78' right of centerline, 3' AGL/1063' MSL.
Tree 120' from DER, 326' left of centerline, 1066' MSL.
Trees beginning 2030' from DER, 911' left of centerline, up to 1134' MSL.

ST. PAUL MN

LAKE ELMO (21D)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1A 28MAY15 (15148) (FAA)

TAKEOFF MINIMUMS:

Rwy 14, 400-2¼ or std. w/min. climb of 233' per NM to 1400.

DEPARTURE PROCEDURE:

Rwy 4, climb heading 038° to 1600 before turning right.

TAKEOFF OBSTACLE NOTES:

Rwy 4, trees beginning at DER, 458' right of centerline, up to 100' AGL/1039' MSL.
Trees and buildings beginning 94' from DER, 377' left of centerline up to 100' AGL/1049' MSL.
Rwy 14, trees and vehicles on road beginning 152' from DER, left and right of centerline, up to 100' AGL/933' MSL.
Trees beginning 1106' from DER, right and left of centerline, up to 100' AGL/1005' MSL.
Rwy 22, buildings and pole beginning 100' from DER, 476' right of centerline, up to 39' AGL/962' MSL.
Trees beginning 1912' from DER, left and right of centerline, up to 100' AGL/986' MSL.
Rwy 32, sign 13' from DER, 154' right of centerline, 3' AGL/924' MSL.
Pole 388' from DER, 388' left of centerline, 34' AGL/951' MSL.
Poles and trees beginning 876' from DER, 73' right of centerline, up to 100' AGL/1004' MSL.

ST. PAUL DOWNTOWN HOLMAN FIELD (STP)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 8A 17AUG17 (17229) (FAA)

TAKEOFF MINIMUMS:

Rwy 31, NA - obstacles.
Rwy 9, std. w/min. climb of 340' per NM to 1300.
Rwy 13, std. w/min. climb of 235' per NM to 1500.
Rwy 27, 600-2 or std. w/min. climb of 442' per NM to 1500.
Rwy 32, std. w/min. climb of 340' per NM to 3000.

DEPARTURE PROCEDURE:

Rwy 9, climb heading 091° to 1400 before proceeding on course.
Rwy 13, climb heading 128° to 1300 before proceeding on course.
Rwy 14, climb heading 146° to 1400 before proceeding on course.
Rwy 27, climb heading 271° to 1700 before proceeding on course.
Rwy 32, climb heading 326° to 1400 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 9, mobile crane 1362' from DER, 124' left of centerline, 68' AGL/758' MSL.
Trees and silo 1464' from DER, 178' right of centerline, up to 116' AGL/816' MSL.
Trees and pole beginning 1.1 NM from DER, left and right of centerline, up to 100' AGL/1099' MSL.
Rwy 13, tree and tower beginning 1125' from DER, 609' left of centerline, up to 67' AGL/767' MSL.
Tree, pole, vent on building, stacks, and ol on stack beginning 1672' from DER, 55' right of centerline, up to 120' AGL/820' MSL.
Trees beginning 1.9 NM from DER, 2938' left of centerline, up to 100' AGL/1020' MSL.
Rwy 14, trees, OL on DME antenna, and pole beginning 290' from DER, 1' right of centerline, up to 129' AGL/819' MSL.
Trees and pole beginning 1099' from DER, 6' left of centerline, up to 87' AGL/777' MSL.
Rwy 27, trees, light pole, and flagpole beginning 617' from DER, 198' left of centerline, up to 119' AGL/829' MSL.
OL on antenna, buildings, tower, and tree beginning 810' from DER, 26' right of centerline, up to 165' AGL/955' MSL.
Trees and building beginning 3886' from DER, 120' left of centerline, up to 84' AGL/1014' MSL.
Tower 1.7 NM from DER, 633' left of centerline, 569' AGL/1279' MSL.
Rwy 32, vehicle on road, trees, railroad, poles, and NAVAID beginning 179' from DER, 267' right of centerline, up to 58' AGL/758' MSL.
Vehicle on road, railroad, and trees beginning 192' from DER, left and right of centerline, up to 59' AGL/759' MSL.
NAVAID 257' from DER, on centerline, 26' AGL/726' MSL.
Trees, poles, buildings, and tower beginning 3674' from DER, 616' right of centerline, up to 157' AGL/973' MSL.
Trees, buildings, tower, sign, and stack beginning 1924' from DER, 378' left of centerline, up to 143' AGL/969' MSL.

SAUK CENTRE, MN

SAUK CENTRE MUNI (D39)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 25AUG11 (11237) (FAA)

TAKEOFF MINIMUMS:

Rwys 8, 26, NA -Environmental.

TAKEOFF OBSTACLE NOTES:

Rwy 14, tree 1269' from DER, 39' right of centerline, 80' AGL/1319' MSL.
Rwy 32, tree 1105' from DER, 136' left of centerline, 80' AGL/1299' MSL.

SIOUX FALLS, SD

JOE FOSS FIELD (FSD)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 8A 07DEC17 (17341) (FAA)

TAKEOFF MINIMUMS:

Rwy 9, 27, NA -ATC request

Rwy 33, 200 - 1⅜ or std. w/ min. climb of 345' per NM to 1700.

DEPARTURE PROCEDURE:

Rwy 3, climb heading 30° to 2300 before turning eastbound.

Rwy 15, climb heading 150° to 2000, then right turn direct FSD VORTAC, continue climb in FSD VORTAC holding pattern (hold NW, left turn, 147° inbound) to cross FSD VORTAC at or above MEA for route of flight.

Rwy 21, climb heading 210° to 2200 before turning eastbound.

Rwy 33, climb heading 330° to 2300 before turning eastbound.

TAKEOFF OBSTACLE NOTES:

Rwy 3, rwy light, poles beginning 5' from DER, 3' left of centerline, up to 2' AGL/1432' MSL.
Rwy light 5' from DER, 5' right of centerline, 2' AGL/1432' MSL.

Rwy 15, pole, rwy light beginning 11' from DER, 39' left of centerline, up to 2' AGL/1424' MSL.
Rwy light 11' from DER, 40' right of centerline, 2' AGL/1424' MSL.
Fence 112' from DER, 457' left of centerline, 10' AGL/1435' MSL.
Poles beginning 553' from DER, 419' left of centerline, up to 22' AGL/1444' MSL.
Pole 919' from DER, 351' left of centerline, 26' AGL/1448' MSL.
Tank, tree beginning 1282' from DER, 222' left of centerline, up to 47' AGL/1472' MSL.
Poles beginning 1330' from DER, 708' right of centerline, up to 39' AGL/1460' MSL.
Pole 1609' from DER, 530' right of centerline, 44' AGL/1463' MSL.
T-L twr 1627' from DER, 806' left of centerline, 53' AGL/1474' MSL.
Poles beginning 1701' from DER, 180' right of centerline, up to 48' AGL/1468' MSL.
T-L twr, pole, tree beginning 1725' from DER, 210' left of centerline, up to 58' AGL/1480' MSL.
T-L twr 2592' from DER, 893' right of centerline, 68' AGL/1489' MSL.
Pole 2857' from DER, 314' right of centerline, 73' AGL/1495' MSL.
Building, tower, T-L twr, tree beginning 3053' from DER, 228' left of centerline, up to 106' AGL/1573' MSL.
Tree 3297' from DER, 413' right of centerline, 1514' MSL.
Tree 3344' from DER, 441' right of centerline, 1520' MSL.

Rwy 21, rwy light 4' from DER, 4' right of centerline, 2' AGL/1426' MSL.
Rwy light, sign beginning 4' from DER, 5' left of centerline, up to 2' AGL/1426' MSL.
Tree 424' from DER, 607' right of centerline, 1457' MSL.
Trees beginning 567' from DER, 543' right of centerline, up to 1458' MSL.
Trees beginning 986' from DER, 531' right of centerline, up to 1479' MSL.

Rwy 33, NAVAIDs beginning 34' from DER, 113' right of centerline, up to 4' AGL/1431' MSL.
Tree, tank beginning 2121' from DER, 746' left of centerline, up to 1511' MSL.
Trees beginning 2403' from DER, 654' left of centerline, up to 1519' MSL.
Trees beginning 2483' from DER, 844' left of centerline, up to 1536' MSL.
Tree, pole beginning 2707' from DER, 263' left of centerline, up to 1537' MSL.
Poles beginning 3491' from DER, 366' right of centerline, up to 44' AGL/1518' MSL.
Tree, pole beginning 3546' from DER, 148' left of centerline, up to 1545' MSL.
NAVAID, pole beginning 3559' from DER, 147' left of centerline, up to 58' AGL/1577' MSL.
Pole 3594' from DER, 138' right of centerline, 40' AGL/1521' MSL.
Pole 3596' from DER, 139' right of centerline, 40' AGL/1522' MSL.
Tower, pole, NAVAID, tree beginning 3638' from DER, 79' left of centerline, up to 65' AGL/1586' MSL.
Tree 3677' from DER, 108' right of centerline, 1525' MSL.
Tree 3784' from DER, 362' right of centerline, 1537' MSL.
Trees beginning 4205' from DER, 5' right of centerline, up to 1545' MSL.
Tree 5300' from DER, 769' left of centerline, 1587' MSL.
Tree 5319' from DER, 1650' left of centerline, 1593' MSL.
Tree 5345' from DER, 888' left of centerline, 1601' MSL.
Tree, pole beginning 5392' from DER, 1026' left of centerline, up to 1607' MSL.
Trees beginning 6034' from DER, 1681' left of centerline, up to 1613' MSL.

SISSETON, SD

SISSETON MUNI (8D3)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 21JUL16 (16203) (FAA)

TAKEOFF MINIMUMS:

Rwys 4, 22, NA-Environmental.

DEPARTURE PROCEDURE:

Rwy 34, climb heading 344° to 1600 before turning left.

TAKEOFF OBSTACLE NOTES:

Rwy 16, poles beginning 1462' from DER, 709' left of centerline, 1216' MSL.
Fence beginning 51' from DER, crossing left to right, 5' AGL/1166' MSL.
Trees beginning 934' from DER, 710' right of centerline, 1235' MSL.
Pole 1508' from DER, 878' right of centerline, 41' AGL/1201' MSL.
Pole 1562' from DER, 638' right of centerline, 45' AGL/1205' MSL.

Rwy 34, trees beginning 832' from DER, 618' left of centerline, 1194' MSL.

SLAYTON, MN

SLAYTON MUNI (DVP)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 22SEP11 (11265) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 17, trees beginning 951' from DER, 345' right of centerline, up to 100' AGL/1723' MSL.
Power lines beginning 1531' from DER, left and right of centerline, 40' AGL/1663' MSL.
Vehicle on road beginning at DER, 234' right of centerline, 15' AGL/1638' MSL.
Terrain beginning 65' from DER, left and right of centerline up to 1657' MSL.
Rwy 35, trees beginning 1034' from DER, left and right of centerline, up to 100' AGL/1715' MSL.
Power lines beginning 892' from DER, 206' left of centerline, 40' AGL/1655' MSL.
Vehicle on roads beginning at DER, 230' left and right of centerline, 15' AGL/1630' MSL.
Terrain beginning 271' from DER, left and right of centerline up to 1650' MSL.

SOUTH ST PAUL, MN

SOUTH ST PAUL MUNI-RICHARD E FLEMING FIELD (SGS)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 13NOV14 (14317) (FAA)

TAKEOFF MINIMUMS:

Rwy 16, 300 -1¾ or std. w/min. climb of 225' per NM to 1200 or alternatively, with std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1900' prior to DER.
Rwy 34, 200-1¼ or std. w/min. climb of 220' per NM to 1100 or alternatively, with std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1500' prior to DER.

TAKEOFF OBSTACLE NOTES:

Rwy 16, tree, 1' from DER, 321' left of centerline, 56' AGL/877' MSL.
Trees beginning 108' from DER, 103' left of centerline, up to 68' AGL/889' MSL.
Trees beginning 1021' from DER, 88' left of centerline, up to 85' AGL/898' MSL.
Trees beginning 116' from DER, 193' right of centerline, up to 75' AGL/894' MSL.
Trees beginning 1108' from DER, 78' right of centerline up to 64' AGL/875' MSL.
Trees beginning 2123' from DER, 444' right of centerline, up to 100' AGL/1069' MSL.
Rwy 34, poles, trees and buildings beginning 76' from DER, 274' left of centerline, up to 79' AGL/880' MSL.
Poles and trees beginning 1021' from DER, 6' left of centerline, up to 82' AGL/901' MSL.
Trees beginning 2048' from DER, 71' left of centerline, up to 68' AGL/889' MSL.
Tower 1 mile from DER, 657' left of centerline, 103' AGL/987' MSL.
Trees and buildings beginning 84' from DER, 351' right of centerline, up to 38' AGL/856' MSL.
Trees beginning 1042' from DER, 54' right of centerline, up to 72' AGL/892' MSL.
Trees beginning 2017' from DER, 10' right of centerline, up to 80' AGL/899' MSL.

SPEARFISH, SD

BLACK HILLS-CLYDE ICE FIELD (SPF)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 08NOV18 (18312) (FAA)

DEPARTURE PROCEDURE:

Use SWUNG (RNAV) DEPARTURE.

TAKEOFF OBSTACLE NOTES:

Rwy 13, lighting 9' from DER, 17' right of centerline, 2' AGL/3897' MSL.
Lighting beginning 9' from DER, 17' left of centerline, up to 2' AGL/3897' MSL.
Terrain beginning 185' from DER, 320' right of centerline, up to 3904' MSL.
Terrain 338' from DER, 496' right of centerline, 3905' MSL.
Lighting 487' from DER, 579' right of centerline, 1' AGL/3909' MSL.
Terrain 562' from DER, 628' right of centerline, 3911' MSL.
Vehicle on traverse way 1071' from DER, 480' right of centerline, 3931' MSL.
Rwy 31, lighting 9' from DER, 18' left of centerline, 2' AGL/3886' MSL.
Lighting 9' from DER, 17' right of centerline, 2' AGL/3886' MSL.
Terrain beginning 53' from DER, 356' left of centerline, up to 3918' MSL.
Terrain 142' from DER, 394' right of centerline, 3897' MSL.
Terrain 192' from DER, 492' right of centerline, 3902' MSL.
Terrain beginning 328' from DER, 395' right of centerline, up to 3907' MSL.
Terrain beginning 346' from DER, 450' left of centerline, up to 3929' MSL.
Terrain 592' from DER, 641' left of centerline, 3942' MSL.
Pole, terrain beginning 734' from DER, 446' left of centerline, up to 9' AGL/3986' MSL.
Tree 1.1 NM from DER, 2402' right of centerline, 4084' MSL.
Trees, vehicle on traverse way beginning 1.2 NM from DER, 1993' right of centerline, up to 4112' MSL.
Trees, terrain, vehicle on traverse way beginning 1.2 NM from DER, 1883' right of centerline, up to 4126' MSL.
Terrain, trees beginning 1.2 NM from DER, 1786' right of centerline, up to 4155' MSL.
Vehicle on traverse way 1.3 NM from DER, 2624' right of centerline, 4217' MSL.
Trees, terrain beginning 1.3 NM from DER, 744' right of centerline, up to 4228' MSL.

SPRINGFIELD, MN
SPRINGFIELD MUNI (D42)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 10JAN13 (13010) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 13, trees beginning 267' from DER, 267' right of centerline, up to 100' AGL/1149' MSL.
Building 802' from DER, 684' left of centerline, up to 30' AGL/1089' MSL.
Trees beginning 763' from DER, 603' left of centerline, up to 100' AGL/1159' MSL.
Trees beginning 1083' from DER, 240' right of centerline, up to 100' AGL/1169' MSL.
Trees beginning 3562' from DER, 98' left of centerline, up to 100' AGL/1169' MSL.
Rwy 31, trees beginning 2248' from DER, 183' left of centerline, up to 100' AGL/1189' MSL.
Building 604' from DER, 563' right of centerline, up to 30' AGL/1109' MSL.
Trees beginning 656' from DER, 481' right of centerline, up to 100' AGL/1169' MSL.
Trees beginning 3889' from DER, 1495' right of centerline, up to 100' AGL/1199' MSL.

STANLEY, ND
STANLEY MUNI (08D)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 13JAN11 (11013) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 27, Power line beginning 23' from DER, right to left of centerline, up to 40' AGL/2299' MSL.

STAPLES, MN
STAPLES MUNI (SAZ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 31MAY12 (12152) (FAA)
TAKEOFF MINIMUMS:
Rwy 14, 400-2 or std. w/min. climb of 285' per NM to 1800.
TAKEOFF OBSTACLE NOTES:
Rwy 14, towers beginning 1.60 NM from DER, 1868' right of centerline, up to 367' AGL/1634' MSL.
Vehicles on road and trees beginning 38' from DER, 76' right of centerline, up to 63' AGL/1332' MSL.
Vehicles on road, trees and pole beginning 38' from DER, 77' left of centerline, up to 63' AGL/1342' MSL.
Rwy 32, vehicles on road and trees beginning 228' from DER, 8' right of centerline, up to 85' AGL/1374' MSL.
Vehicles on road and trees beginning 2' from DER, 18' left of centerline, up to 79' AGL/1368' MSL.

STURGIS, SD
STURGIS MUNI (49B)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1A 15OCT15 (15288) (FAA)
TAKEOFF MINIMUMS:
Rwys 5, 23, NA-Environmental.
DEPARTURE PROCEDURE:
Rwy 11, climb heading 096° to 5200, then climbing right turn to 7000 direct RAP VORTAC.
Rwy 29, climb heading 291° to 5000, then climbing right turn to 7000 direct RAP VORTAC.
TAKEOFF OBSTACLE NOTES:
Rwy 11, fence 37' from DER, 347' left of centerline, 6' AGL/3210' MSL.
Rwy 29, trees 63' from DER, 271' right of centerline, up to 20' AGL/3265' MSL.
Ground 134' from DER, 443' left of centerline, 3248' MSL.

THIEF RIVER FALLS, MN
THIEF RIVER FALLS RGNL (TVF)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 13NOV14 (14317) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 4, light 41' from DER, 77' left of centerline, 2' AGL/1120' MSL.
Terrain 2' from DER, 255' right of centerline, 1119' MSL.
Light 41' from DER, 75' right of centerline, 2' AGL/1120' MSL.
Road with vehicle beginning 578' from DER, 595' right of centerline, up to 15' AGL/1135' MSL.
Rwy 13, lights beginning 6' from DER, 4' left of centerline, up to 2' AGL/1114' MSL.
Sign 22' from DER, 253' left of centerline, 3' AGL/1114' MSL.
Lights beginning 6' from DER, 5' right of centerline, up to 2' AGL/1114' MSL.
Rwy 22, utilities and lights beginning 10' from DER, 77' left of centerline, up to 4' AGL/1115' MSL.
Sign 38' from DER, 197' left of centerline, 4' AGL/1115' MSL.
Light 40' from DER, 77' right of centerline, 3' AGL/1114' MSL.
Trees beginning 545' from DER, 183' right of centerline, up to 91' AGL/1181' MSL.
Rwy 31, lights beginning 9' from DER, 39' left of centerline, up to 3' AGL/1116' MSL.
Trees beginning 275' from DER, 549' left of centerline, up to 61' AGL/1172' MSL.
Lights beginning 9' from DER, 40' right of centerline, up to 2' AGL/1116' MSL.

TIOGA, ND

TIOGA MUNI (D60)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 13SEP18 (18256) (FAA)

TAKEOFF MINIMUMS:

Rwys 3, 21, NA - Environmental.

Rwy 30, 300 - 1 ⅛ or std. w/min. climb of 249' per NM to 2500, or alternately, with std. takeoff minimums and a normal 200' per mile climb gradient, takeoff must occur no later than 2200' prior to DER.

TAKEOFF OBSTACLE NOTES:

Rwy 12, lighting 10' from DER, 18' right of centerline, 2' AGL/2272' MSL.
Lighting 10' from DER, 15' left of centerline, 2' AGL/2273' MSL.
Pole, traverse way beginning 630' from DER, 144' right of centerline, up to 23' AGL/2311' MSL.
Rwy 30, lighting 9' from DER, 18' right of centerline, 2' AGL/2242' MSL.
Lighting 9' from DER, 18' left of centerline, 2' AGL/2242' MSL.
Building 554' from DER, 640' right of centerline, 27' AGL/2264' MSL.
General utility 4410' from DER, 1465' right of centerline, 170' AGL/2366' MSL.
Stack 5674' from DER, 1751' right of centerline, 167' AGL/2417' MSL.

TOWER, MN

TOWER MUNI (12D)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 07MAY09 (09127) (FAA)

TAKEOFF MINIMUMS:

Rwy 8, NA - Obstacles.

TAKEOFF OBSTACLE NOTES:

Rwy 26, tree 2315' from DER, 700' right of centerline, 100' AGL/1479' MSL.

TRACY, MN

TRACY MUNI (TKC)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 31DEC20 (20366) (FAA)

TAKEOFF MINIMUMS:

Rwys 17, 35, NA - Environmental.

Rwy 29, 300-2¾ or std. w/ min. climb of 250' per NM to 1800.

TAKEOFF OBSTACLE NOTES:

Rwy 11, tree 56' from DER, 174' right of centerline, 20' AGL/1342' MSL.
Numerous trees and bushes beginning 137' from DER, 86' left of centerline, up to 100' AGL/1410' MSL.
Rwy 29, tower 1.9 NM from DER, 1951' left of centerline, 265' AGL/1625' MSL.

TWO HARBORS, MN

RICHARD B. HELGESON (TWM)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 30JUN11 (11181) (FAA)

TAKEOFF MINIMUMS:

Rwys 15, 33, NA - Environmental.

TAKEOFF OBSTACLE NOTES:

Rwy 6, multiple trees, beginning 20' from DER, 44' right of centerline, up to 40' AGL/1122' MSL.
Multiple trees, beginning 46' from DER, 201' left of centerline, up to 40' AGL/1126' MSL.
Rwy 24, multiple trees, beginning 13' from DER, 61' right of centerline, up to 40' AGL/1156' MSL.
Multiple trees, beginning 56' from DER, 97' left of centerline, up to 40' AGL/1138' MSL.

VALLEY CITY, ND

BARNES COUNTY MUNI (BAC)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 10SEP20 (20254) (FAA)

TAKEOFF MINIMUMS:

Rwys 5, 8, 17, 23, 26, 35, NA - Environmental.

TAKEOFF OBSTACLE NOTES:

Rwy 13, vehicle on road, 111' from DER, 356' right of centerline, 15' AGL/1396' MSL.
Trees beginning 644' from DER, 242' right of centerline, up to 40' AGL/1421' MSL.
Rwy 31, terrain beginning 32' from DER, 20' right of centerline, up to 1424' MSL.
Vehicle on road 38' from DER, 285' right of centerline, 15' AGL/1418' MSL.
Fence 71' from DER, 292' left of centerline, 4' AGL/1407' MSL.
Terrain beginning 120' from DER, 125' left of centerline, up to 1447' MSL.
Fence 198' from DER, 299' right of centerline, 4' AGL/1408' MSL.
Trees beginning 365' from DER, 10' left of centerline, up to 40' AGL/1457' MSL.
Tree 545' from DER, 607' right of centerline, 16' AGL/1436' MSL.

VERMILLION, SD
HAROLD DAVIDSON FIELD (VMR)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 27AUG09 (09239) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 12, road 1' from DER, 200' right of centerline, up to 15' AGL/1156' MSL.
Multiple trees beginning 541' from DER, 366' right of centerline, up to 62' AGL/1202' MSL.
Rwy 30, road 79' from DER 342' left of centerline 15' AGL/1155' MSL.
Road 200' from DER, 450' right of centerline, 15' AGL/1160' MSL.
Fence 199' from DER, 347' left of centerline, 6' AGL/1150' MSL.

WADENA, MN
WADENA MUNI (ADC)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 22AUG13 (13234) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 34, runway lights beginning 38' from DER, 76' left and right of centerline 5' AGL/1369' MSL.
Rising terrain and trees beginning 69' from DER, 267' left of centerline, up to 20' AGL/1381' MSL.
Trees beginning 1678' from DER, 213' right of centerline, up to 91' AGL/1436' MSL.
Trees beginning 2445' from DER, 272' right of centerline, up to 96' AGL/1447' MSL.

WAGNER, SD
WAGNER MUNI (AGZ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 17OCT13 (13290) (FAA)
TAKEOFF MINIMUMS:
Rwys 14, 32, NA-Environmental.
TAKEOFF OBSTACLE NOTES:
Rwy 9, vehicles on roadway beginning 629' from DER, 162' right of centerline, up to 15' AGL/1485' MSL.
Trees beginning 700' from DER, 227' right of centerline, up to 49' AGL/1514' MSL.
Trees beginning 727' from DER, 532' left of centerline, up to 44' AGL/1508' MSL.
Building and pole beginning 781' from DER, 416' left of centerline, up to 26' AGL/1491' MSL.
Trees beginning 881' from DER, 229' right of centerline, up to 40' AGL/1505' MSL.
Tree 1239' from DER, 558' left of centerline, 36' AGL/1501' MSL.
Rwy 27, terrain 13' from DER, 371' right of centerline, 1478 MSL.
Vehicles on roadway beginning 338' from DER, 556' right of centerline, up to 15' AGL/1494' MSL.
Tree 939' from DER, 462' left of centerline, 32' AGL/1509' MSL.
Trees beginning 1331' from DER, 409' right of centerline, up to 53' AGL/1530' MSL.

WAHPETON, ND
HARRY STERN (BWP)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 30JUN11 (11181) (FAA)
TAKEOFF MINIMUMS:
Rwys 3,21, NA - environmental.
TAKEOFF OBSTACLE NOTES:
Rwy 15, trees beginning 1020' from DER, 114' left of centerline, up to 74' AGL/ 1033' MSL.
Trees beginning 2753' from DER, 457' right of centerline, up to 86' AGL/1045' MSL.
Rwy 33, electrical system 657' from DER, 632' right of centerline, 71' AGL/1010' MSL.
Trees beginning 714' from DER, 33' right of centerline, up to 70' AGL/ 1039' MSL.
Electrical system 1570' from DER, 258' right of centerline, 68' AGL/1032' MSL.
Trees beginning 1326' from DER, 15' left of centerline, up to 75' AGL/1039' MSL.

WALHALLA, ND
WALHALLA MUNI (96D)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 05MAY11 (11125) (FAA)
TAKEOFF MINIMUMS:
Rwy 15, 400-2¾ or std. w/min. climb gradient of 260' per NM to 1500.
DEPARTURE PROCEDURE:
Rwy 15, Climb heading 164° to 1500 before turning right.
TAKEOFF OBSTACLE NOTES:
Rwy 15, vehicles on roadway beginning 478' from DER, 583' right of centerline, 15' AGL/969' MSL.
Trees beginning 734' from DER, 623' right to 708' left of centerline, up to 100' AGL/1054' MSL.
Rwy 33, trees beginning 53' from DER, 12' left to 654' right of centerline, up to 100' AGL/1 049' MSL.
Power lines beginning 81' from DER, 266' left of centerline, up to 70' AGL/1019' MSL.
Vehicles on roadway beginning 113' from DER, 490' left of centerline, 15' AGL/964' MSL.

WALKER, MN

WALKER MUNI (Y49)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 03APR14 (14093) (FAA)

TAKEOFF MINIMUMS:

Rwy 33, 300-1¼ or std. w/min. climb of 235' per NM to 1600, or alternatively, with std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1800' prior to DER.

TAKEOFF OBSTACLE NOTES:

Rwy 15, terrain beginning 1' from DER, 1' right of centerline crossing left of centerline, 1408' MSL.
Lights 38' from DER, 76' left and right of centerline, 2' AGL/1348' MSL.
Trees beginning 220' from DER, 466' right of centerline, up to 50' AGL/1396' MSL.
Trees beginning 330 from DER, 408' left of centerline, up to 38' AGL/1384' MSL.
Trees beginning 453' from DER, 400' left and right crossing centerline, up to 48' AGL/1453' MSL.
Rwy 33, lights 38' from DER, 77' left and right of centerline, 3' AGL/1348' MSL.
Terrain beginning 84' from DER, 37' left and right of centerline, 1418' MSL.
Vehicle on road 250' from DER, 455' right of centerline, 15' AGL/1360' MSL.
Tree 328' from DER, 200' right of centerline, 6' AGL/1354' MSL.
Trees beginning 420' from DER, 370' left of centerline, up to 55' AGL/1388' MSL.
Trees beginning 903' from DER, 19' right and left of centerline, up to 39' AGL/1392' MSL.
Trees beginning 2213' from DER, 100' left and right crossing centerline, up to 72' AGL/1404' MSL.
Terrain beginning 2916' from DER, 20' left and right of centerline, 1503' MSL.
Trees beginning 3597' from DER, 400' left and right crossing centerline, up to 128' AGL/1509' MSL.

WARREN, MN

WARREN MUNI (D37)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 08JAN15 (15008) (FAA)

TAKEOFF MINIMUMS:

Rwys 4,22, NA - environmental.

DEPARTURE PROCEDURE:

Rwy 30, climb runway heading to 1400 before turning on course.

TAKEOFF OBSTACLE NOTES:

Rwy 12, trees beginning 379' from DER, 306' left of centerline, up to 86' AGL/973' MSL.
Light support structure 3' from DER, 17' right of centerline, 2' AGL/888' MSL.
Trees beginning 926' from DER, left and right of centerline, up to 71' AGL/955' MSL.
Rwy 30, trees beginning 30' from DER, 86' right of centerline, up to 15' AGL/904' MSL.
Trees, poles and antenna beginning 331' from DER, 373' right of centerline, up to 62' AGL/948' MSL.
Trees and bush beginning 51' from DER, 36' left of centerline, up to 68' AGL/954' MSL.
Vehicles on road beginning 233' from DER, 179' right of centerline, up to 15' AGL/906' MSL.

WARROAD, MN

WARROAD INTL MEMORIAL (RRT)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 23JUN16 (16175) (FAA)

TAKEOFF MINIMUMS:

Rwys 4, 22, NA-Environmental.

TAKEOFF OBSTACLE NOTES:

Rwy 13, pole 148' from DER, 471' right of centerline, 24' AGL/1093'MSL.

WASECA, MN

WASECA MUNI (ACQ)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 15JAN09 (09015) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 15, tree 560' from DER, 560' right of centerline, 100' AGL/1239' MSL.
Terrain beginning 172' from DER, on centerline, up to 1149' MSL.
Rwy 33, tree 5042' from DER, 1533' right of centerline, 100' AGL/1259' MSL.

WATERTOWN, SD

WATERTOWN RGNL (ATY)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 26MAY16 (16147) (FAA)

TAKEOFF OBSTACLE NOTES:

Rwy 30, light 10' from DER, 30' left of centerline, 1' AGL/1749' MSL.
Light 11' from DER, 30' right of centerline, 1' AGL/1749' MSL.
Tree, 2091' from DER, 34' right of centerline, 100' AGL/1806' MSL.
Tree 2241' from DER, 812' left of centerline, 100' AGL/1805' MSL.
Rwy 35, sign, 102' from DER, 4' left of centerline, 10' AGL/1750' MSL.

WATFORD CITY, ND

WATFORD CITY MUNI (S25)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 03JUN10 (10154) (FAA)

TAKEOFF MINIMUMS:

Rwy 12, 400-1¼ or std. with a min. climb of 462' per NM to 2600.

Rwys 18, 36, NA-Environmental.

TAKEOFF OBSTACLE NOTES:

Rwy 12, tree 5528' from DER, 1819' right of centerline, up to 100' AGL/2439' MSL.
Vehicle on road, trees, and terrain beginning 186' from DER, 62' right of centerline, up to 100' AGL/2258' MSL.
Vehicle on road, fence, and terrain beginning 90' from DER, 43' left of centerline, up to 27' AGL/2167' MSL.

Rwy 30, trees and buildings beginning 672' from DER, 119' right of centerline, up to 41' AGL/2101' MSL.
Vehicle on road, light and trees beginning 199' from DER, 128' left of centerline, up to 59' AGL/2119' MSL.

WESSINGTON SPRINGS, SD

WESSINGTON SPRINGS (4X4)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 07DEC17 (17341) (FAA)

TAKEOFF MINIMUMS:

Rwy 30, std. w/ min. climb of 240' per NM to 2400 or 1400 - 3 for climb in visual conditions.

DEPARTURE PROCEDURE:

Rwy 12, climb on heading 127° to 2000 before turning right.

Rwy 30, climb on heading 313° to 2400 before turning left.

VCOA:

Rwy 30, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Wessington Springs airport at or above 2800 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 12, pole 10' from DER, 10' right of centerline, 2' AGL/1531' MSL.
Fence beginning 127' from DER, 493' right of centerline, up to 9' AGL/1539' MSL.
Tree 1753' from DER, 759' right of centerline, 50' AGL/1575' MSL.
Pole 2003' from DER, 1030' right of centerline, 57' AGL/1580' MSL.

Rwy 30, pole 10' from DER, 9' left of centerline, 1546' MSL.
Fence 12' from DER, 498' left of centerline, 9' AGL/1554' MSL.
Tree 812' from DER, 332' right of centerline, 1565' MSL.
Pole 4998' from DER, 320' left of centerline, 73' AGL/1672' MSL.
Tree 1.2 NM from DER, 1336' left of centerline, 1731' MSL.
Trees beginning 1.3 NM from DER, 2293' left of centerline, up to 1771' MSL.
Trees beginning 1.4 NM from DER, 2587' left of centerline, up to 1794' MSL.
Tree 1.6 NM from DER, 2761' left of centerline, up to 1805' MSL.
Tree 1.8 NM from DER, 3351' left of centerline, 1845' MSL.
Tree, terrain beginning 1.9 NM from DER, 3408' left of centerline, up to 1887' MSL.
Tree beginning 2 NM from DER, 3138' left of centerline, up to 1890' MSL.
Tree and pole beginning 2.1 NM from DER, 2642' left of centerline, up to 40' AGL/1926' MSL.
Trees beginning 2.2 NM from DER, 1876' left of centerline, up to 100' AGL/1932' MSL.

WHEATON, MN
WHEATON MUNI (ETH)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 08NOV18 (18312) (FAA)
TAKEOFF MINIMUMS:
Rwys 6, 24, NA – ATC.
TAKEOFF OBSTACLE NOTES:
Rwy 16, electrical pole beginning 9' from DER, 16' right of centerline, up to 1024' MSL.
Tree 87' from DER, 136' right of centerline, up to 1025' MSL.
Tree 110' from DER, 155' left of centerline, up to 1026' MSL.
Tree 178' from DER, 480' left of centerline, up to 49' AGL/1072' MSL.
Tree 252' from DER, 478' left of centerline, up to 55' AGL/1078' MSL.
Tree 487' from DER, 616' right of centerline, up to 79' AGL/1102' MSL.
Tree, pole beginning 384' from DER, 22' left of centerline, up to 93' AGL/1116' MSL.
Tree, pole, building beginning 540' from DER, 3' right of centerline, up to 102' AGL/1125' MSL.
Trees beginning 2209' from DER, 339' right of centerline, up to 109' AGL/1132' MSL.
Trees beginning 2344' from DER, 342' right of centerline, up to 114' AGL/1137' MSL.
Trees beginning 2418' from DER, 499' right of centerline, up to 115' AGL/1138' MSL.
Trees beginning 2531' from DER, 133' right of centerline, up to 116' AGL/1139' MSL.
Tree 2882' from DER, 728' right of centerline, up to 121' AGL/1144' MSL.
Trees beginning 2901' from DER, 2' right of centerline, up to 125' AGL/1148' MSL.
Trees beginning 3499' from DER, 103' left of centerline, up to 103' AGL/1126' MSL.
Tree 3571' from DER, 80' left of centerline, up to 105' AGL/1128' MSL.
Tree 3664' from DER, 35' left of centerline, up to 108' AGL/1131' MSL.
Trees beginning 3700' from DER, 26' left of centerline, up to 110' AGL/1133' MSL.
Trees beginning 4490' from DER, 67' left of centerline, up to 120' AGL/1143' MSL.
Rwy 34, building 1' from DER, 453' right of centerline, up to 18' AGL/1035' MSL.
Electrical pole beginning 8' from DER, 16' left of centerline, up to 1018' MSL.
Tree, sign beginning 96' from DER, 361' right of centerline, up to 23' AGL/1040' MSL.
Building beginning 236' from DER, 515' right of centerline, up to 29' AGL/1044' MSL.
Tree 870' from DER, 683' right of centerline, up to 31' AGL/1046' MSL.
Tree 964' from DER, 515' right of centerline, up to 63' AGL/1078' MSL.

WILLISTON, ND
WILLISTON BASIN INTL (XWA)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 10OCT19 (19283) (FAA)
TAKEOFF OBSTACLE NOTES:
Rwy 32, vehicle on road beginning 6' from DER, 372' right of centerline, up to 2317' MSL.
Pole and vehicle on road beginning 101' from DER, 206' right of centerline, up to 65' AGL/2368' MSL.

WINDOM, MN
WINDOM MUNI (MWM)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 18NOV10 (10322) (FAA)
TAKEOFF MINIMUMS:
Rwy 35, 200-1½ or std. w/ min. climb of 225' per NM to 1700, or alternatively, with std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1700' prior to DER.
TAKEOFF OBSTACLE NOTES:
Rwy 17, trees beginning 1074' from DER, 461' right of centerline, up to 100' AGL/1409' MSL.
Rwy 35, trees beginning 1.1 NM from DER, 2057' right of centerline, up to 100' AGL/1599' MSL.

WILLMAR, MN
WILLMAR MUNI-JOHN L. RICE FIELD (BDH)
TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES
ORIG-A 06DEC18 (18340) (FAA)
TAKEOFF MINIMUMS:
Rwy 3, 21, NA - Environmental.
TAKEOFF OBSTACLE NOTES:
Rwy 31, tree 1338' from DER, 740' left of centerline, 67' AGL/1193' MSL.

WINNER, SD
WINNER RGNL (ICR)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4 21JUL16 (16203) (FAA)
TAKEOFF MINIMUMS:
Rwy 3, 21, NA - Environmental.

WINONA, MN

WINONA MUNI-MAX CONRAD FIELD (ONA)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5A 22JUN17 (17173) (FAA)

TAKEOFF MINIMUMS:

Rwy 30, 700-2¾ w/min. climb of 318' per NM to 1700 or std. w/min. climb of 454' per NM to 1300 or 1400-2¾ for VCOA.

DEPARTURE PROCEDURE:

Rwy 12, climb heading 110° to 1900 before turning.

Rwy 30, climb heading 300° to 1400 before turning.

VCOA:

Rwy 30, obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Winona Muni-Max Conrad Field at or above 1900 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

Rwy 12, fence beginning 89' from DER, 102' right of centerline, 5' AGL/660' MSL.
Trees beginning 958' from DER, left and right of centerline, up to 87' AGL/737' MSL.
Rwy 30, trees beginning 789' from DER, 28' right of centerline, 104' AGL/758' MSL.
Tree 56' from DER, 431' left of centerline, 12' AGL/666' MSL.

WORTHINGTON, MN

WORTHINGTON MUNI (OTG)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 10JAN13 (13010) (FAA)

TAKEOFF MINIMUMS:

Rwy 18, 300-1½ or std. w/min. climb of 233' per NM to 1900, or alternately, with std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 2100' prior to DER.

DEPARTURE PROCEDURE:

Rwy 29, climb heading 293° to 2100 before turning left.

TAKEOFF OBSTACLE NOTES:

Rwy 18, REIL beginning 34' from DER, 78' left of centerline, 4' AGL/1577' MSL.
VOR/DME 1201' from DER, 432' left of centerline, 35' AGL/1606' MSL.
Pole 7390' from DER, 1989' left of centerline, 195' AGL/1781' MSL.
REIL beginning 34' from DER, 78' right of centerline, 4' AGL/1577' MSL.
Poles beginning 455' from DER, 530' right of centerline, up to 39' AGL/1610' MSL.
Building 703' from DER, 627' right of centerline, 20' AGL/1611' MSL.
Rwy 29, vehicles on road beginning 106' from DER, 258' left of centerline, up to 18' AGL/1587' MSL.
Trees beginning 1083' from DER, 475' left of centerline, up to 56' AGL/1625' MSL.
Terrain beginning 17' from DER, 2' right of centerline, 1574' MSL.
Rwy 36, light support structure 10' from DER, 18' left of centerline, 3' AGL/1574' MSL.
Light support structure 10' from DER. 17' right of centerline, 3' AGL/1574' MSL.

YANKTON, SD

CHAN GURNEY MUNI (YKN)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 03JAN85 (85003) (FAA)

TAKEOFF MINIMUMS:

Rwy 31, 300-1.

DEPARTURE PROCEDURE:

Rwys 1, 13, 19, 31, climb runway heading to 2400 before turning.

INSTRUMENT APPROACH PROCEDURE CHARTS

IFR ALTERNATE AIRPORT MINIMUMS

Standard alternate minimums for non-precision approaches and approaches with vertical guidance [NDB, VOR, LOC, TACAN, LDA, SDF, VOR/DME, ASR, RNAV (GPS) or RNAV (RNP)] are 800-2. Standard alternate minimums for precision approaches (ILS, PAR, or GLS) are 600-2. Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility, absence of weather reporting service, or lack of adequate navigation coverage. Civil pilots see FAR 91. IFR Alternate Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Minimums Notes for alternate airfield suitability.

NAME — ALTERNATE MINIMUMS

ABERDEEN, SD
ABERDEEN
RGNL (ABR)……..……..**ILS or LOC Rwy 31[1]**
RNAV (GPS) Rwy 13[2]
RNAV (GPS) Rwy 17[2]
RNAV (GPS) Rwy 31[2]
RNAV (GPS) Rwy 35[2]
VOR Rwy 13[2]
VOR Rwy 31[2]
[1]LOC, Category D, 900-2¾.
[2]Category D, 900-2¾.

AITKIN, MN
AITKIN MUNI-STEVE KURTZ
FIELD (AIT)……..**RNAV (GPS) Rwy 16**
RNAV (GPS) Rwy 34
NA when local weather not available.

ALBERT LEA, MN
ALBERT LEA
MUNI (AEL)……...……..**RNAV (GPS) Rwy 17**
RNAV (GPS) Rwy 35
VOR RWY 17
NA when local weather not available.

ALEXANDRIA, MN
CHANDLER
FIELD (AXN)……..……...**RNAV (GPS) Rwy 22**
RNAV (GPS) Rwy 31
NA when local weather not available.

APPLETON, MN
APPLETON
MUNI (AQP)……..**RNAV (GPS) Rwy13**
NA when local weather not available.

AUSTIN, MN
AUSTIN
MUNI (AUM)…….....**RNAV (GPS) Rwy 17**
RNAV (GPS) Rwy 35
NA when local weather not available.

BAUDETTE, MN
BAUDETTE
INTL (BDE)…….....…**RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30[1]
NA when local weather not available.
[1]Categories A, B, C, D, 900-4.

BEMIDJI, MN
BEMIDJI
RGNL (BJI)…….....……...**RNAV (GPS) Rwy 13**
RNAV (GPS) Rwy 25
RNAV (GPS) Rwy 31
NA when local weather not available.

BENSON, MN
BENSON
MUNI (BBB)…….....**RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32
NA when local weather not available.

BIGFORK, MN
BIGFORK
MUNI (FOZ)…….....…**RNAV (GPS) Rwy 33**
NA when local weather not available.

BISMARCK, ND
BISMARCK
MUNI (BIS)…….....…**ILS or LOC Rwy 13[12]**
ILS or LOC Rwy 31[12]
RADAR-1[1]
RNAV (GPS) Rwy 3[3]
RNAV (GPS) Rwy 13[3]
RNAV (GPS) Rwy 21[3]
RNAV (GPS) Rwy 31[3]
VOR-A[3]
[1]NA when control tower closed.
[2]LOC, Category C, 800-2¼, Category D, 800-2½.
[3]Category C, 800-2¼, Category D, 800-2½.

BOWMAN, ND
BOWMAN
RGNL (BWW)…….....…**RNAV (GPS) Rwy 13**
RNAV (GPS) Rwy 31
NA when local weather not available.

NAME ALTERNATE MINIMUMS

BRAINERD, MN
BRAINERD LAKES
RGNL (BRD)……..…....**ILS or LOC Rwy 23[1]**
RNAV (GPS) Rwy 5
RNAV (GPS) Rwy 23
RNAV (GPS) Rwy 34
NA when local weather not available.
[1]Category D, 700-2.

BROOKINGS, SD
BROOKINGS
RGNL (BKX)……...……**RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30
NA when local weather not available.
Category D, 800-2¼.

BUFFALO, MN
BUFFALO
MUNI (CFE)…….....**VOR-A**
NA when local weather not available.

CAMBRIDGE, MN
CAMBRIDGE
MUNI (CBG)……..……**RNAV (GPS) Rwy 16**
RNAV (GPS) Rwy 34
NA when local weather not available.

CAMP RIPLEY, MN
RAY S. MILLER (KRYM)....**ILS OR LOC RWY 31**
LOC, CAT D, 1000-3.
NA when control tower closed.

CANBY, MN
MYERS FIELD (CNB)…...……**RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30
NA when local weather not available.

CARRINGTON, ND
CARRINGTON
MUNI (46D)…….....…**RNAV (GPS) Rwy 31**
NA when local weather not available.

CAVALIER, ND
CAVALIER
MUNI (2C8)…….....**RNAV (GPS) Rwy 34**
NA when local weather not available.

CLOQUET, MN
CLOQUET CARLTON
COUNTY (COQ)……....…**RNAV (GPS) Rwy 18**
RNAV (GPS) Rwy 36
NA when local weather not available.

COOK, MN
COOK MUNI (CQM)…...……..**RNAV (GPS) Rwy 13**
RNAV (GPS) Rwy 31
NA when local weather not available.

NAME ALTERNATE MINIMUMS

CROOKSTON, MN
CROOKSTON MUNI-KIRKWOOD
FIELD (CKN)……..……..**RNAV (GPS) Rwy 13**
RNAV (GPS) Rwy 31
VOR/DME Rwy 13
NA when local weather not available.

CROSBY, ND
CROSBY
MUNI (D50)……..…..…..**RNAV (GPS) Rwy 30**
NA when local weather not available.
Category D, 800-2¼.

DETROIT LAKES, MN
DETROIT LAKES-WETHING
FIELD (DTL)……..**RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32
NA when local weather not available.
Category D, 800-2½.

DEVILS LAKE, ND
DEVILS LAKE
RGNL (DVL)……..**RNAV (GPS) Rwy 3[2]**
RNAV (GPS) Rwy 13[2]
RNAV (GPS) Rwy 21[2]
RNAV (GPS) Rwy 31[2]
VOR Rwy 3[1]
VOR Rwy 13[2]
VOR Rwy 31[2]
NA when local weather not available.
[1]Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.
[2]Category C, 800-2¼, Category D, 800-2½.

DICKINSON, ND
DICKINSON-THEODORE ROOSEVELT
RGNL (DIK)……..**RNAV (GPS) Rwy 15**
RNAV (GPS) Rwy 25
RNAV (GPS) Rwy 33
VOR-A
NA when local weather not available.

DODGE CENTER, MN
DODGE CENTER (TOB)……**RNAV (GPS) Rwy 16**
RNAV (GPS) Rwy 34
VOR-A
NA when local weather not available.

DULUTH, MN
DULUTH INTL (DLH)……...**ILS or LOC Rwy 9[1]**
ILS or LOC Rwy 27[1]
RADAR-1[2]
RNAV (GPS) Rwy 3[3]
RNAV (GPS) Rwy 9[2]
RNAV (GPS) Rwy 21[3]
RNAV (GPS) Rwy 27[3]
VOR or TACAN Rwy 3[2]
VOR/DME or TACAN Rwy 21[2]
[1]LOC, Categories D, E, 1000-3.
[2]Categories D, E, 1000-3.
[3]Category D, 1000-3.

NAME ALTERNATE MINIMUMS

ELY, MN
ELY MUNI (ELO)……..**RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30
NA when local weather not available.

EVELETH, MN
EVELETH-VIRGINIA
MUNI (EVM)……..**RNAV (GPS) Rwy 27[1]**
VOR-A[2]
[1]NA when local weather not available.
[2]Category C, 800-2¼; Category D, 800-2½.

FAIRMONT, MN
FAIRMONT
MUNI (FRM)….....**ILS or LOC Rwy 31[1]**
RNAV (GPS) Rwy 13[2]
RNAV (GPS) Rwy 31[2]
[1]LOC, Category C, 900-2¼; Category D, 900-2½.
[2]Category C, 900-2¼; Category D, 900-2½.

FARGO, ND
HECTOR INTL (FAR)……..**ILS or LOC Rwy 18[1]**
ILS or LOC Rwy 36[1]
RNAV (GPS) Rwy 9[3]
RNAV (GPS) Rwy 18[2]
RNAV (GPS) Rwy 27[3]
RNAV (GPS) Rwy 36[2]
VOR Rwy 36[2]
[1]ILS, Category C, 700-2; Category D, 800-2¼; Category E, 800-2½. LOC, Category D, 800-2¼; Category E, 800-2½.
[2]Category D, 800-2¼, Category E, 800-2½.
[3]Category D, 800-2¼.

FARIBAULT, MN
FARIBAULT MUNI-LIZ WALL STROHFUS
FIELD (FBL)….....…..**RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30
NA when local weather not available.

FERGUS FALLS, MN
FERGUS FALLS MUNI-EINAR MICKELSON
FIELD (FFM)……**ILS or LOC Rwy 31[12]**
RNAV (GPS) Rwy 13[13]
RNAV (GPS) Rwy 31[3]
RNAV (GPS) Rwy 35[1]
[1]NA when local weather not available.
[2]ILS, Category D, 700-2¼.
LOC, Category D, 800-2¼.
[3]Category D, 800-2¼.

FOSSTON, MN
FOSSTON MUNI-ANDERSON
FIELD (FSE)….……..…..**RNAV (GPS) Rwy 16**
RNAV (GPS) Rwy 34
NA when local weather not available.

GLENCOE, MN
GLENCOE
MUNI (GYL)……**RNAV (GPS) Rwy 31**
NA when local weather not available.

NAME ALTERNATE MINIMUMS

GLENWOOD, MN
GLENWOOD
MUNI (GHW)……**RNAV (GPS) Rwy 15**
RNAV (GPS) Rwy 33
NA when local weather not available.

GRAND FORKS, ND
GRAND FORKS
INTL (GFK)……...……..**ILS or LOC Rwy 35L[12]**
LOC BC Rwy 17R[1]
RNAV (GPS) Rwy 9L
RNAV (GPS) Rwy 17R
RNAV (GPS) Rwy 27R
VOR Rwy 17R
NA when local weather not available.
[1]NA when control tower closed.
[2]ILS, Category E, 700-2½;
LOC, Category E, 800-2½.

GRAND MARAIS, MN
GRAND MARAIS/ COOK
COUNTY (CKC)…….....**RNAV (GPS) Rwy 10**
RNAV (GPS) Rwy 28[1]
Category D, 900-2¾.
[1]NA when local weather not available.

GRAND RAPIDS, MN
GRAND RAPIDS/ITASCA COUNTY-GORDON
NEWSTROM FIELD (GPZ)…...**ILS or LOC Rwy 34**
RNAV (GPS) Rwy 16
VOR Rwy 34
NA when local weather not available.

GRANITE FALLS, MN
GRANITE FALLS MUNI/LENZEN-ROE-FAGEN
MEMORIAL FIELD (GDB)…..**RNAV (GPS) Rwy 33**
VOR/DME Rwy 33
NA when local weather not available.

GWINNER, ND
GWINNER-ROGER MELROE
FIELD (GWR)……..**RNAV (GPS) Rwy 16**
RNAV (GPS) Rwy 34
NA when local weather not available.
Category D, 800-2½.

HALLOCK, MN
HALLOCK MUNI (HCO)…..…**RNAV (GPS) Rwy 13**
RNAV (GPS) Rwy 31
NA when local weather not available.

HAZEN, ND
MERCER COUNTY
RGNL (HZE)……...……**RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32
NA when local weather not available.

NAME ALTERNATE MINIMUMS

HETTINGER, ND
HETTINGER
MUNI (HEI)……**RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30
Category D, 800-2¼.

HIBBING, MN
RANGE
RGNL (HIB)……... **ILS OR LOC/DME Rwy 13**
ILS, Categories A, B, C, D, 800-2.

HURON, SD
HURON RGNL (HON)……**ILS or LOC Rwy 12[1]**
LOC BC Rwy 30[2]
RNAV (GPS) Rwy 12[2]
RNAV (GPS) Rwy 30[2]
NA when local weather not available.
[1]LOC, Category D, 800-2¼.
[2]Category D, 800-2¼.

HUTCHINSON, MN
HUTCHINSON MUNI-
BUTLER FIELD (HCD)……..**RNAV (GPS) Rwy 15**
NA when local weather not available.

INTERNATIONAL FALLS, MN
FALLS INTL-EINARSON
FIELD (INL)……..**COPTER ILS or LOC Rwy 31[1]**
ILS or LOC/DME Rwy 13,700-2[2]
RNAV (GPS) Rwy 13[2]
RNAV (GPS) Rwy 31[2]
VOR Rwy 13[23]
[1]LOC, NA; ILS, NA when local weather not available.
[2]NA when local weather not available.
[3]Category D, 800-2¼.

JAMESTOWN, ND
JAMESTOWN
RGNL (JMS)……..**RNAV (GPS) Rwy 4**
RNAV (GPS) Rwy 13
RNAV (GPS) Rwy 22
RNAV (GPS) Rwy 31
VOR Rwy 13
VOR Rwy 31
Category D, 800 2½.

LANGDON, ND
ROBERTSON
FIELD (D55)……**RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32
NA when local weather not available.

LONG PRAIRIE, MN
TODD
FIELD (14Y)……..**RNAV (GPS) Rwy 34**
NA when local weather not available.

NAME ALTERNATE MINIMUMS

LONGVILLE, MN
LONGVILLE
MUNI (XVG)……..**RNAV (GPS) Rwy 13**
RNAV (GPS) Rwy 31
NA when local weather not available.

LITCHFIELD, MN
LITCHFIELD
MUNI (LJF)……**RNAV (GPS) Rwy 13**
RNAV (GPS) Rwy 31
VOR-A
Category D, 800-2¼.
NA when local weather not available.

LITTLE FALLS, MN
LITTLE FALLS/MORRISON COUNTY-
LINDBERGH
FIELD (LXL)……..**RNAV (GPS) Rwy 31**
NA when local weather not available.

LINTON, ND
LINTON MUNI (7L2)……...……**RNAV (GPS) Rwy 9**
RNAV (GPS) Rwy 27
NA when local weather not available.

MADISON, MN
LAC QUI PARLE
COUNTY (DXX)……...……**RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32
NA when local weather not available

MADISON, SD
MADISON MUNI (MDS)……..**RNAV (GPS) Rwy 15**
RNAV (GPS) Rwy 33
NA when local weather not available

MAHNOMEN, MN
MAHNOMEN
COUNTY (3N8)……**RNAV (GPS) Rwy 17**
RNAV (GPS) Rwy 35
NA when local weather not available

MANDAN, ND
MANDAN MUNI (Y19)……**RNAV (GPS) Rwy 13**
RNAV (GPS) Rwy 31
VOR-A
NA when local weather not available

MANKATO, MN
MANKATO RGNL
(MKT).....….....…**RNAV (GPS) Rwy 15**
RNAV (GPS) Rwy 22
RNAV (GPS) Rwy 33
VOR Rwy 15
NA when local weather not available.

MAPLE LAKE, MN
MAPLE LAKE MUNI-BILL MAVENCAMP
SR FIELD (MGG).....…....**VOR-A**
NA when local weather not available.

NAME ALTERNATE MINIMUMS

MARSHALL, MN

SOUTHWEST MINNESOTA RGNL MARSHALL/ RYAN FIELD (MML)……..**RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30
NA when local weather not available.

MINNEAPOLIS, MN

AIRLAKE (LVN)……..**RNAV (GPS) Rwy 12[1]**
RNAV (GPS) Rwy 30[2]
VOR Rwy 12[1]
[1]Category D, 800-2¼.
[2]NA when local weather not available.

CRYSTAL (MIC)……....**RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32
NA when local weather not available.

FLYING CLOUD (FCM)……**COPTER ILS or LOC Rwy 10R[1]**
ILS or LOC Rwy 10R[12]
RNAV (GPS) Rwy 10L
RNAV (GPS) Rwy 10R
RNAV (GPS) Rwy 28L
RNAV (GPS) Rwy 28R
RNAV (GPS) Rwy 36
VOR Rwy 10R
VOR/DME Rwy 36
NA when local weather not available.
[1]NA when control tower closed.
[2]Category D, 700-2.

MINNEAPOLIS-ST. PAUL INTL/WOLD-CHAMBERLAIN (MSP)……...**ILS or LOC Rwy 12L[1]**
ILS or LOC Rwy 12R[1]
ILS or LOC Rwy 30L[2]
ILS or LOC Rwy 30R[2]
ILS Z or LOC Rwy 35[2]
LOC Rwy 4[4]
LOC Rwy 17[3]
LOC Rwy 22[4]
RNAV (GPS) Rwy 4[4]
RNAV (GPS) Rwy 22[4]
RNAV (GPS) Z Rwy 12L[4]
RNAV (GPS) Z Rwy 12R[4]
RNAV (GPS) Z Rwy 30L[4]
RNAV (GPS) Z Rwy 30R[4]
RNAV (GPS) Z Rwy 35[4]
[1]ILS, Category C, 700-2; Category D, 900-2¾; Category E, 1000-3; LOC, Category D, 900-2¾; Category E, 1000-3.
[2]ILS, Category C, 700-2; Category D, 900-2¾; Category E, 1000-3; LOC, Category D, 900-2¾; Category E, 1000-3.
[3]Category D, 900-2¾.
[4]Category D, 900-2¾; Category E, 1000-3.

NAME ALTERNATE MINIMUMS

MINOT, ND

MINOT INTL (MOT)……..**ILS or LOC Rwy 31[12]**
LOC BC Rwy 13[1]
RNAV (GPS) Rwy 8
RNAV (GPS) Rwy 13
RNAV (GPS) Rwy 26
RNAV (GPS) Rwy 31
VOR Rwy 8[3]
VOR Rwy 13
VOR Rwy 26[4]
VOR Rwy 31
NA when local weather not available.
[1]NA when tower closed.
[2]Category E, 1100-3.
[3]Categories A, B, 1100-2; Categories C, D, 1100-3.
[4]Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.

MITCHELL, SD

MITCHELL MUNI (MHE)…….**RNAV (GPS) Rwy 13**
RNAV (GPS) Rwy 18
RNAV (GPS) Rwy 31
RNAV (GPS)Rwy 36
VOR Rwy 13
NA when local weather not available.

MOBRIDGE, SD

MOBRIDGE MUNI (MBG)……**RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30
NA when local weather not available
Category D, 900-2¾.

MONTEVIDEO, MN

MONTEVIDEO-CHIPPEWA COUNTY (MVE)……**RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32
NA when local weather not available

MOORHEAD, MN

MOORHEAD MUNI (JKJ)……**RNAV (GPS) Rwy 30[1]**
VOR-A[2]
[1]NA when local weather not available.
[2]Categories A, B, 900-2;

MORA, MN

MORA MUNI (JMR)……...**RNAV (GPS) Rwy 35**
NA when local weather not available.
Category D, 800-2¼.

MORRIS, MN

MORRIS MUNI-CHARLIE SCHMIDT FLD (MOX)……..**RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32
NA when local weather not available.

ORR, MN

ORR RGNL (ORB)……..**RNAV (GPS) Rwy 13**
NA when local weather not available.

NAME ALTERNATE MINIMUMS

ORTONVILLE, MN
ORTONVILLE MUNI-MARTINSON
FIELD (VVV)……**RNAV (GPS) Rwy 34**
NA when local weather not available.

OWATONNA, MN
OWATONNA DEGNER
RGNL (OWA)……..**RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30[1]
NA when local weather not available.
[1]Category D, 800-2¼.

PARK RAPIDS, MN
PARK RAPIDS MUNI-KONSHOK
FIELD (PKD)……...**RNAV (GPS) Rwy 13**
RNAV (GPS) Rwy 31
NA when local weather not available.
Category D, 1100-3.

PAYNESVILLE, MN
PAYNESVILLE
MUNI (PEX)……..**RNAV (GPS) Rwy 11**
RNAV (GPS) Rwy 29
NA when local weather not available.

PHILIP, SD
PHILIP (PHP)……**RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30
VOR-A
NA when local weather not available.

PIERRE, SD
PIERRE RGNL (PIR)……..…**ILS or LOC Rwy 31**[12]
RNAV (GPS) Rwy 7[13]
RNAV (GPS) Rwy 13[13]
RNAV (GPS) Rwy 25[3]
RNAV (GPS) Rwy 31[3]
VOR/DME or TACAN Rwy 7[13]
VOR or TACAN Rwy 25[13]
[1]NA when local weather not available.
[2]LOC, Category D, 800-2¼.
[3]Category D, 800-2¼.

PINE RIDGE, SD
PINE RIDGE (IEN)……...**RNAV (GPS) Rwy 12**[1]
RNAV (GPS) Rwy 30[2]
[1]Category C, 900-2½.
[2]Categories A, B, 900-2.

PINE RIVER, MN
PINE RIVER
RGNL (PWC)…….....…**NDB Rwy 34**
NA when local weather not available.
Categories A, B, 900-2; Category C, 900-2¾.

PIPESTONE, MN
PIPESTONE
MUNI (PQN)……. **RNAV (GPS) Rwy 18**
RNAV (GPS) Rwy 36
NA when local weather not available.

NAME ALTERNATE MINIMUMS

PRESTON, MN
FILLMORE
COUNTY (FKA)……**RNAV (GPS) Rwy 11**
RNAV (GPS) Rwy 29
NA when local weather not available.

PRINCETON, MN
PRINCETON
MUNI (PNM)…….....**RNAV (GPS) Rwy 16**
RNAV (GPS) Rwy 34
NA when local weather not available.

RAPID CITY, SD
RAPID CITY
RGNL (RAP)……..**ILS or LOC Rwy 32**[1]
RNAV (GPS) Rwy 5[2]
RNAV (GPS) Rwy 14[23]
RNAV (GPS) Rwy 23[2]
RNAV (GPS) Rwy 32[4]
VOR or TACAN Rwy 14[24]
VOR or TACAN Rwy 32[24]
[1]ILS, Categories B, C, 700-2; Category D, 800-2¼; Category E, 800-2¾. LOC, Category D, 800-2¼; Category E, 800-2¾.
[2]NA when local weather not available.
[3]Category D, 800-2½; Category E, 800-2¾.
[4]Category D, 800-2¼; Category E, 800-2¾.

RED WING, MN
RED WING
RGNL (RGK)……..**RNAV (GPS) Rwy 9**[1]
RNAV (GPS) Rwy 27[2]
NA when local weather not available.
[1]Category C, 800-2¼, Category D, 800-2½.
[2]Category C, 800-2¼.

REDWOOD FALLS, MN
REDWOOD FALLS
MUNI (RWF)……**RNAV (GPS) Rwy 30**
VOR-A
Category D, 800-2¼.
NA when local weather not available.

ROCHESTER, MN
ROCHESTER
INTL (RST)……**ILS or LOC Rwy 13**
ILS Z or LOC Z Rwy 31
COPTER ILS Y or LOC Y Rwy 31
NA when control tower closed.

ROLLA, ND
ROLLA MUNI (06D)……...**RNAV (GPS) Rwy 32**
NA when local weather not available.
Category D, 900-2¾.

ROSEAU, MN
ROSEAU MUNI/RUDY BILLBERG
FIELD (ROX)……...**RNAV (GPS) Rwy 16**
RNAV (GPS) Rwy 34
NA when local weather not available.

NAME ALTERNATE MINIMUMS

RUGBY, ND
RUGBY MUNI (RUG)……**RNAV (GPS) Rwy 30**
NA when local weather not available.

RUSH CITY, MN
RUSH CITY
RGNL (ROS)……...**RNAV (GPS) Rwy 34**
NA when local weather not available.

ST. CLOUD, MN
ST. CLOUD
RGNL (STC)……..…**ILS or LOC/DME Rwy 13**[123]
RNAV (GPS) Rwy 5[1]
RNAV (GPS) Rwy 13[1]
RNAV (GPS) Rwy 23[1]
RNAV (GPS) Rwy 31[1]
VOR Rwy 31[3]
[1]NA when local weather not available.
[2]ILS, Categories A, B, C, D, 700-2.
[3]NA when control tower closed.

ST. JAMES, MN
ST. JAMES
MUNI (JYG)……..**RNAV (GPS) Rwy 15**
RNAV (GPS) Rwy 33
NA when local weather not available.

ST. PAUL, MN
LAKE ELMO (21D)……..…..**RNAV (GPS) Rwy 32**
NA when local weather not available.

ST. PAUL DOWNTOWN HOLMAN
FIELD (STP)……..**ILS or LOC Rwy 14**[12]
ILS or LOC Rwy 32[12]
RNAV (GPS) Rwy 14[3]
RNAV (GPS) Rwy 32[3]
[1]NA when control tower closed.
[2]LOC, Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.
[3]Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.

SAUK CENTRE, MN
SAUK CENTRE
MUNI (D39)……...**RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32
NA when local weather not available.

NAME ALTERNATE MINIMUMS

SIOUX FALLS, SD
JOE FOSS
FIELD (FSD)……**ILS or LOC Rwy 3**[12]
ILS or LOC Rwy 21[12]
RADAR-1[3]
RNAV (GPS) Rwy 3[4]
RNAV (GPS) Rwy 15[5]
RNAV (GPS) Rwy 21[4]
VOR or TACAN Rwy 15[6]
VOR/DME or TACAN Rwy 33[6]
[1]NA when control tower closed.
[2]LOC, Category D, 800-2½.
[3]Category E, 800-2¾.
[4]Category D, 800-2½.
[5]Category C, 800-2¼; Category D, 800-2½.
[6]Category D, 800-2½; Category E, 900-3.

SLAYTON, MN
SLAYTON MUNI (DVP)……..**RNAV (GPS) Rwy 17**
RNAV (GPS) Rwy 35
NA when local weather not available.

SOUTH ST. PAUL, MN
SOUTH ST. PAUL MUNI-RICHARD E
FLEMING FIELD (SGS) .....**RNAV (GPS) Rwy 34**
Category D, 800-2½.

SPEARFISH, SD
BLACK HILLS-
CLYDE ICE FIELD (SPF)……**RNAV (GPS) Rwy 13**[1]
RNAV (GPS) Rwy 31[2]
[1]Categories A, B, 1000-4, Category C, 1700-4.
[2]Categories A, B, 1000-2, Category C, 1700-3.

STAPLES, MN
STAPLES MUNI (SAZ)……..**RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32
NA when local weather not available.

THIEF RIVER FALLS, MN
THIEF RIVER
FALLS RGNL (TVF)……..…..**ILS or LOC Rwy 31**[1]
RNAV (GPS) Rwy 4[2]
RNAV (GPS) Rwy 13[23]
RNAV (GPS) Rwy 22[2]
RNAV (GPS) Rwy 31[23]
VOR Y Rwy 13[3]
VOR Rwy 31[3]
[1]LOC, Category D, 900-2¾.
[2]NA when local weather not available.
[3]Category D, 900-2¾.

TIOGA, ND
TIOGA
MUNI (D60)……..**RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30[1]
Category D, 800-2¼.
[1]NA when local weather not available.

NAME ALTERNATE MINIMUMS

TRACY, MN
TRACY MUNI (TKC)……**RNAV (GPS) Rwy 11**
NA when local weather not available.

TWO HARBORS, MN
RICHARD B.
HELGESON (TWM)……**RNAV (GPS) Rwy 6**
RNAV (GPS) Rwy 24
NA when local weather not available.

VALLEY CITY, ND
BARNES COUNTY
MUNI (BAC)……**RNAV (GPS) Rwy 13**
RNAV (GPS) Rwy 31
NA when local weather not available.

WADENA, MN
WADENA MUNI (ADC)……..**RNAV (GPS) Rwy 16**
RNAV (GPS) Rwy 34
NA when local weather not available.

WAHPETON, ND
HARRY
STERN (BWP)……**RNAV (GPS) Rwy 33**
NA when local weather not available.

WALKER, MN
WALKER MUNI (Y49)……**RNAV (GPS) Rwy 15**
RNAV (GPS) Rwy 33
NA when local weather not available.
Category C, 800-2¼.

WARROAD, MN
WARROAD INTL
MEMORIAL (RRT)……..……**RNAV (GPS) Rwy 13**
RNAV (GPS) Rwy 31
NA when local weather not available.
Category C, 900-2¾; Category D, 900-3.

WASECA, MN
WASECA MUNI (ACQ)……...**RNAV (GPS) Rwy 15**
RNAV (GPS) RWY 33
NA when local weather not available.

WATERTOWN, SD
WATERTOWN
RGNL (ATY)……..…...**ILS or LOC Rwy 35[12]**
LOC BC Rwy 17[13]
RNAV (GPS) Rwy 12[3]
RNAV (GPS) Rwy 17[13]
RNAV (GPS) Rwy 30[13]
RNAV (GPS) Rwy 35[3]
VOR or TACAN Rwy 17[13]
[1]NA when local weather not available.
[2]LOC, Category C, 800-2¼; Category D, 800-2½.
[3]Category C, 800-2¼; Category D, 800-2½.

NAME ALTERNATE MINIMUMS

WHEATON, MN
WHEATON MUNI (ETH)…….**RNAV (GPS) Rwy 16**
RNAV (GPS) Rwy 34
NA when local weather not available.

WILLISTON, ND
WILLISTON BASIN
INTL (XWA)……..…..…..**RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32
VOR Rwy 14
VOR Rwy 32
NA when local weather not available.

WILLMAR, MN
WILLMAR MUNI-JOHN
L RICE FIELD (BDH)…….. **RNAV (GPS) Rwy 13**
RNAV (GPS) Rwy 31
VOR Rwy 31[1]
NA when local weather not available.
[1]Category D, 800-2¼.

WINDOM, MN
WINDOM MUNI (MWM)..……**RNAV (GPS) Rwy 17**
RNAV (GPS) Rwy 35
NA when local weather not available.

WINNER, SD
WINNER RGNL (ICR)……**RNAV (GPS) Rwy 13**
RNAV (GPS) Rwy 31
NA when local weather not available.

WINONA, MN
WINONA MUNI-MAX CONRAD
FIELD (ONA)…..……..…**ILS Y or LOC Y Rwy 30[12]**
ILS Z or LOC Z Rwy 30[13]
RNAV (GPS) Rwy 12[4]
RNAV (GPS) Rwy 30[1]
[1]NA when local weather not available.
[2]ILS, LOC, Categories A, B, 1000-2; Category C, 1200-3; Category D, 1400-3.
[3]LOC, Category A, B, 1000-2; Category C, 1200-3; Category D, 1400-3.
[4]Categories A, B, 1000-2; Category C, 1200-3; Category D, 1400-3.

WORTHINGTON, MN
WORTHINGTON
MUNI (OTG)……..**RNAV (GPS) Rwy 11[2]**
RNAV (GPS) Rwy 18[2]
RNAV (GPS) Rwy 29[2]
RNAV (GPS) Rwy 36[2]
VOR Rwy 11[1]
VOR Rwy 18[2]
[1]Category D, 800-2½.
[2]NA when local weather not available.

ALTERNATE MINS

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NAME	ALTERNATE MINIMUMS	NAME	ALTERNATE MINIMUMS
YANKTON, SD			
CHAN GURNEY MUNI (YKN)	**RNAV (GPS) Rwy 13** **RNAV (GPS) Rwy 31** **VOR Rwy 13**		

NA when local weather not available.

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ALTERNATE MINS

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M9

BISMARCK, ND

Amdt 3B, 26AUG10 (10238) (FAA) ELEV **1661**

BISMARCK MUNI (BIS)

RADAR-1 126.3 298.9 T A

	RWY	GP/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HAA	CEIL-VIS
ASR	31		AB	**2100**/24	455	(500-½)	C	**2100**/40	455	(500-¾)
			D	**2100**/50	455	(500-1)				
	13		AB	**2100**-1	445	(500-1)	C	**2100**-1¼	445	(500-1¼)
			D	**2100**-1½	445	(500-1½)				
	3		AB	**2120**-1	459	(500-1)	C	**2120**-1¼	459	(500-1¼)
			D	**2120**-1½	459	(500-1½)				
	21		AB	**2120**-1	459	(500-1)	C	**2120**-1¼	459	(500-1¼)
			D	**2120**-1½	459	(500-1½)				
CIR	ALL RWY		A	**2180**-1	519	(600-1)	B	**2220**-1	539	(600-1)
			C	**2220**-1½	559	(600-1½)	D	**2280**-2	619	(700-2)

Inoperative table does not apply to MALS Rwy 13

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DULUTH, MN

Orig-A, 30JAN20 (20030) (FAA) ELEV **1428**

DULUTH INTL (DLH)

RADAR-1 125.45 233.7 T A

	RWY	GP/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HAA	CEIL-VIS
ASR	3		AB	**1820**-1	400	(400-1)	CDE	**1820**-1⅛	400	(400-1⅛)
	9		ABCDE	**1820**/40	392	(400-¾)				
	21		AB	**1840**-1	420	(500-1)	CDE	**1840**-1⅛	420	(500-1⅛)
	27		AB	**1880**/40	459	(500-¾)	CDE	**1880**/45	459	(500-⅞)
C CIR	ALL RWY		A	**1880**-1	452	(500-1)	B	**1900**-1	472	(500-1)
			C	**1940**-1½	512	(600-1½)	DE	**2400**-3	972	(1000-3)

Circling NA for CAT E SE of Rwys 3 and 27.
Rwy 3, 9, 21 helicopter visibility reduction below ¾ SM not authorized.
VGSI and descent angles not coincident.
For inoperative ALS, increase ASR S-09 Cats A/B visibility to RVR 5500, Cats C/D/E to 1⅛ SM.
For inoperative ALS, increase ASR S-27 Cats A/B visibility to RVR 5500, Cats C/D/E to 1⅜ SM.

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MANDAN, ND

Amdt 5A, 18AUG16 (16231) (FAA) ELEV **1994**

MANDAN MUNI (Y19)

RADAR-1 126.3 298.9 T A

	RWY	GP/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HAA	CEIL-VIS
ASR	31		AB	**2440**-1	499	(500-1)	CD	**2440**-1⅜	499	(500-1⅜)
	13		AB	**2460**-1	522	(600-1)	CD	**2460**-1½	522	(600-1½)
CIR	ALL RWY		AB	**2460**-1	516	(600-1)	C	**2460**-1½	516	(600-1½)
			D	**2560**-2	616	(700-2)				

ASR S-13: Helicopter visibility reduction below ¾ SM not authorized.
ASR S-31: Helicopter visibility reduction below ¾ SM not authorized.
When BIS control tower closed, ASR NA.
When local altimeter setting not received, use Bismarck altimeter setting and increase all MDA 60 feet, increase all CAT C/D visibility ¼ mile.
Circling to Rwys 4 and 22 NA.

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ROCHESTER, MN

Amdt 8A, 19JUL18 (18200) (FAA) ELEV **1317**

ROCHESTER INTL (RST)

RADAR-1 119.8 251.125 T

	RWY	GP/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HAA	CEIL-VIS
ASR	13		ABC	**1640**/24	360	(400-½)	D	**1640**/50	360	(400-1)
	31		ABC	**1660**/24	356	(400-½)	D	**1660**/50	356	(400-1)
	2		ABC	**1680**-1	363	(400-1)	D	**1680**-1¼	363	(400-1¼)
	20		ABC	**1680**-1	376	(400-1)	D	**1680**-1¼	376	(400-1¼)
CIR	ALL RWY		A	**1720**-1	403	(500-1)	B	**1780**-1	463	(500-1)
			C	**1780**-1½	463	(500-1½)	D	**1880**-2	563	(600-2)

When control tower closed, procedure NA.
For inoperative MALSR, increase S-13 and S-31 CAT D visibility to RVR 6000.

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SIOUX FALLS, SD

Amdt 10B, 06FEB14 (18144) (FAA)

ELEV **1430**

JOE FOSS FIELD (FSD)

RADAR-1 125.8 284.725 T A

	RWY	GP/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HAA	CEIL-VIS
ASR	33		AB	**1920**-1	498	(500-1)	CDE	**1920**-1⅜	498	(500-1⅜)
	3		AB	**1940**/24	516	(600-½)	CDE	**1940**/55	516	(600-1¼)
	21		AB	**1960**/24	530	(600-½)	CDE	**1960**/55	530	(600-1¼)
	15		AB	**1960**-1	531	(600-1)	CDE	**1960**-1½	531	(600-1½)
CIR	ALL RWY		AB	**1980**-1	550	(600-1)	C	**1980**-1½	550	(600-1½)
			D	**2040**-2	610	(700-2)	E	**2300**-3	870	(900-3)

When control tower closed, ASR NA.
Rwy 15/33 helicopter visibility reduction below ¾ SM not authorized.
For inoperative MALSR, increase S-3 Cat C/D/E visibility to 1⅜ mile.
For inoperative MALSR, increase S-21 Cat C/D/E visibility to 1½ mile.

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RADAR INSTRUMENT APPROACH MINIMUMS

RADAR MINS
20030

N3

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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.

CITY/AIRPORT	LDG RWY	HOLD-SHORT POINT	AVBL LDG DIST
DULUTH, MN			
DULUTH INTL (DLH)	09	03-21	8,950 feet
FARGO, ND			
HECTOR INTL (FAR)	18	13-31	7,900 feet
	36	09-27	6,600 feet
GRAND FORKS, ND			
GRAND FORKS INTL (GFK)	27R	17R-35L	3,000 feet
	35L	09L-27R	4,600 feet
MINNEAPOLIS, MN			
MINNEAPOLIS-ST PAUL INTL/ WOLD-CHAMBERLAIN (MSP)	22	TWY K	8,550 feet
	30L	TWY A9 TWY W9	8,150 feet
ROCHESTER, MN			
ROCHESTER INTL (RST)	02	13-31	5,850 feet
	13	02-20	5,270 feet
	31	02-20	3,200 feet

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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 "HS 1", "HS 2", 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*
DULUTH, MN		
DULUTH INTL (DLH)	HS 1	Rwy 21 via Twy A and Twy C complex int.
FARGO, ND		
HECTOR INTL (FAR)	HS 1	Rwy 09-27 at Twy B.
	HS 2	Rwy 18-36 at Twy C.
GRAND FORKS, ND		
GRAND FORKS INTL (GFK)	HS 1	Rwy 09L and Twy A int.
	HS 2	Rwy 17R and Twy B int.
MINNEAPOLIS, MN		
CRYSTAL (MIC)	HS 1	Int of Rwy 06R (sod) on Twy F.
	HS 2	Int of Rwy 24L (sod) on Twy D.
MINNEAPOLIS, MN		
FLYING CLOUD (FCM)	HS 1	Risk of pilot confusion between Rwy 28L and Rwy 28R on apch.
	HS 2	Direct access to Rwy 28R-10L.
	HS 3	Rwy 18 apch area along Twy A.
	HS 4	Direct access to Rwy 10L-28R.
	HS 5	Short taxi distance from ramp to rwy hold line.
	HS 6	Risk of pilot confusion between Rwy 10L and Rwy 10R on apch.
MINNEAPOLIS, MN		
MINNEAPOLIS-ST PAUL INTL/ WOLD-CHAMBERLAIN (MSP)	HS 1	Twy A, Twy B, Twy C, Twy D, Twy H, Rwy 04-22 and Rwy 12R-30L, complex geometry.
	HS 2	Twy C, Twy D, Twy P, Twy Q, Rwy 04-22 and Rwy 12L-30R, complex geometry.
	HS 3	Twy/rwy geometry and traffic flow.
	HS 4	Complex geometry at Rwy 04 apch end.
MINOT, ND		
MINOT INTL (MOT)	HS 1	Apch end of Rwy 08.
	HS 2	Int of Twy C and Rwy 08-26.
ROCHESTER, MN		
ROCHESTER INTL (RST)	HS 1	Complex twy/rwy/twy int.
ST. PAUL, MN		
ST. PAUL DOWNTOWN HOLMAN FLD (STP)	HS 1	Helicopter landings on Twy A.
	HS 2	Twy D between Rwy 13 and Rwy 32 unusual configuration for rwy holding position markings.
	HS 3	Helicopter operations on Twy B.
SIOUX FALLS, SD		
JOE FOSS FLD (FSD)	HS 1	Complex twy int in close proximity of rwys.

*See appropriate Chart Supplement HOT SPOT table for additional information.

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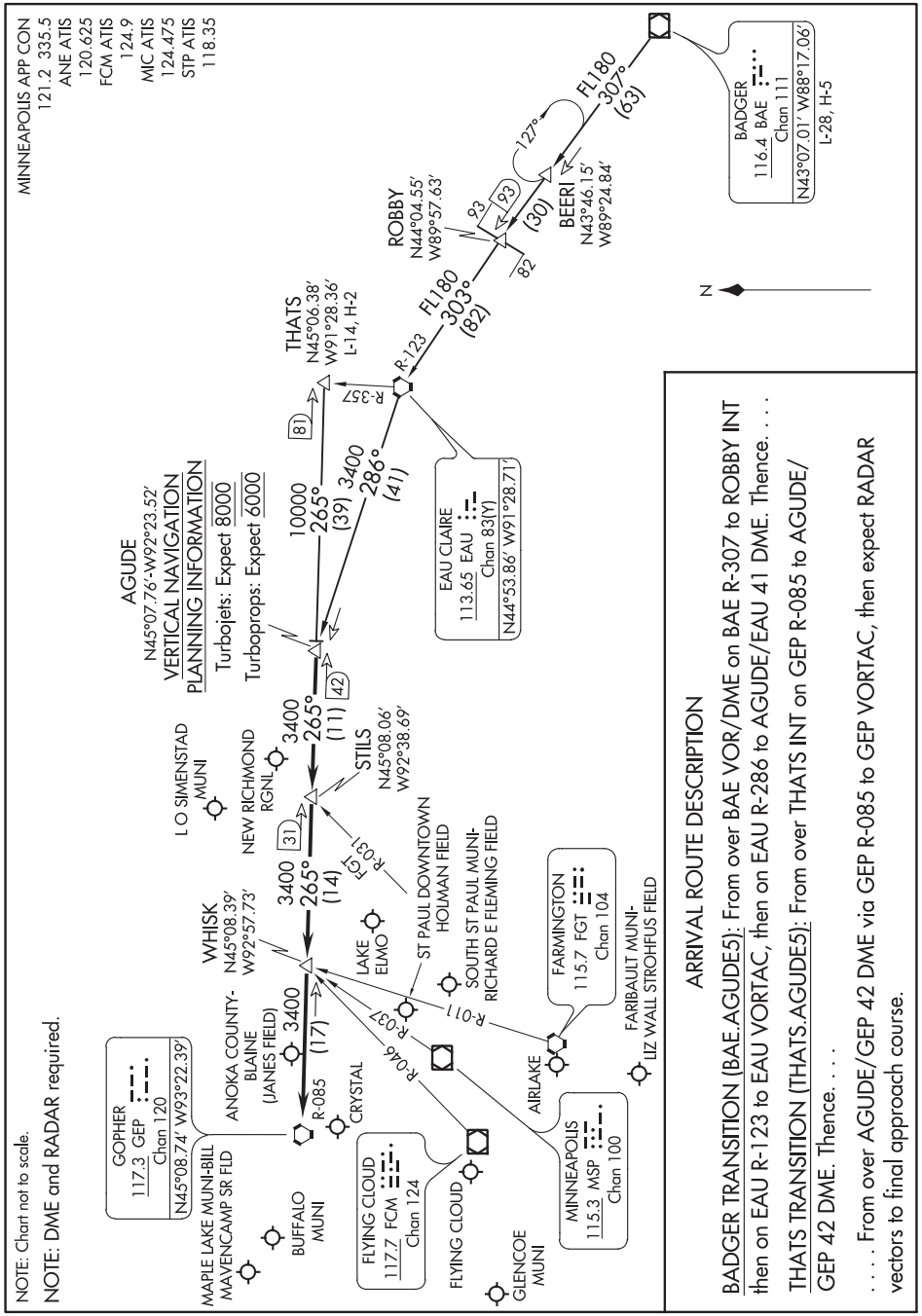
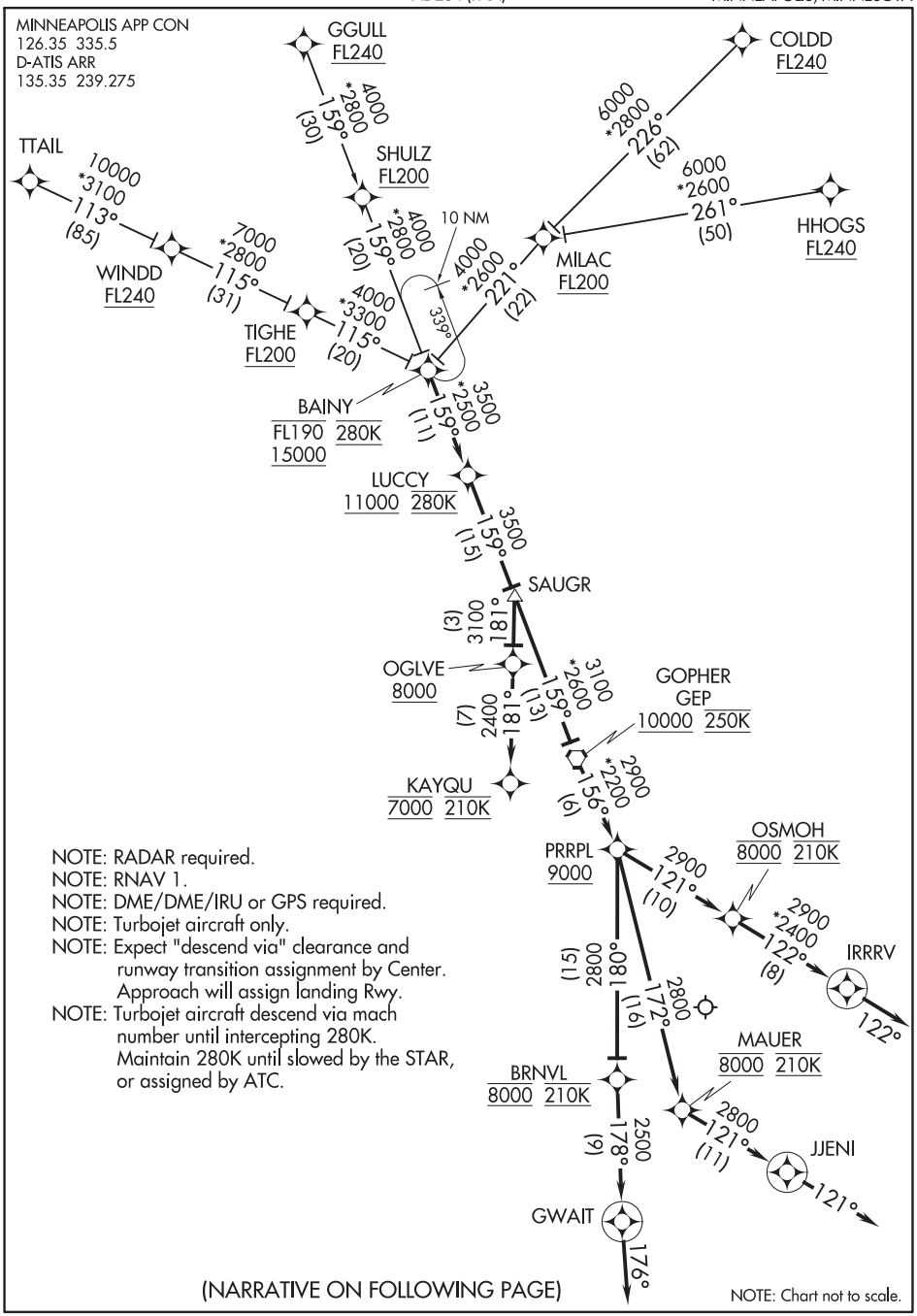

MINNEAPOLIS APP CON
121.2 335.5
ANE ATIS
120.625
FCM ATIS
124.9
MIC ATIS
124.475
STP ATIS
118.35
BADGER
116.4 BAE
Chan 111
N43°07.01' W88°17.06'
L-28, H-5
FL180
307°
(63)
127°
BEERI
N43°46.15'
W89°24.84'
(30)
93
82
ROBBY
N44°04.55'
W89°57.63'
FL180
303°
(82)
R-123
THATS
N45°06.38'
W91°28.36'
L-14, H-2
R-357
81
EAU CLAIRE
113.65 EAU
Chan 83(Y)
N44°53.86' W91°28.71'
10000
265°
(39)
3400
286°
(41)
AGUDE
N45°07.76'-W92°23.52'
VERTICAL NAVIGATION
PLANNING INFORMATION
Turbojets: Expect 8000
Turboprops: Expect 6000
42
3400
265°
(11)
STILS
N45°08.06'
W92°38.69'
NEW RICHMOND
RGNL
L O SIMENSTAD
MUNI
31
R-031
FGT
3400
265°
(14)
WHISK
N45°08.39'
W92°57.73'
ST PAUL DOWNTOWN
HOLMAN FIELD
LAKE
ELMO
SOUTH ST PAUL MUNI-
RICHARD E FLEMING FIELD
R-011
R-037
R-046
FARMINGTON
115.7 FGT
Chan 104
FARIBAULT MUNI-
LIZ WALL STROHFUS FIELD
AIRLAKE
3400
(17)
R-085
ANOKA COUNTY-
BLAINE
(JANES FIELD)
CRYSTAL
GOPHER
117.3 GEP
Chan 120
N45°08.74' W93°22.39'
MAPLE LAKE MUNI-BILL
MAVENCAMP SR FLD
BUFFALO
MUNI
FLYING CLOUD
117.7 FCM
Chan 124
FLYING CLOUD
MINNEAPOLIS
115.3 MSP
Chan 100
GLENCOE
MUNI
N
NOTE: Chart not to scale.
NOTE: DME and RADAR required.
ARRIVAL ROUTE DESCRIPTION
BADGER TRANSITION (BAE.AGUDE5): From over BAE VOR/DME on BAE R-307 to ROBBY INT then on EAU R-123 to EAU VORTAC, then on EAU R-286 to AGUDE/EAU 41 DME. Thence. . . .
THATS TRANSITION (THATS.AGUDE5): From over THATS INT on GEP R-085 to AGUDE/GEP 42 DME. Thence. . . .
. . . . From over AGUDE/GEP 42 DME via GEP R-085 to GEP VORTAC, then expect RADAR vectors to final approach course.

(BAINY.BAINY3) 17173

BAINY THREE ARRIVAL (RNAV)

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)
AL-264 (FAA)
MINNEAPOLIS, MINNESOTA



NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet aircraft only.
NOTE: Expect "descend via" clearance and runway transition assignment by Center. Approach will assign landing Rwy.
NOTE: Turbojet aircraft descend via mach number until intercepting 280K. Maintain 280K until slowed by the STAR, or assigned by ATC.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

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BAINY THREE ARRIVAL (RNAV)

(BAINY.BAINY3) 05JAN17

MINNEAPOLIS, MINNESOTA
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

ARRIVAL ROUTE DESCRIPTION

COLDD TRANSITION (COLDD.BAINY3)
GGULL TRANSITION (GGULL.BAINY3)
HHOGS TRANSITION (HHOGS.BAINY3)
MILAC TRANSITION (MILAC.BAINY3)
SHULZ TRANSITION (SHULZ.BAINY3)
TIGHE TRANSITION (TIGHE.BAINY3)
TTAIL TRANSITION (TTAIL.BAINY3)
WINDD TRANSITION (WINDD.BAINY3)

From BAINY on track 159° to cross LUCCY at or above 11000 and at 280K, then on track 159° to SAUGR.

LANDING RUNWAYS 4, 17, 22, 30R: From SAUGR on track 159° to cross GEP VORTAC at or above 10000 and at 250K, then on track 156° to cross PRRPL at or above 9000, then on track 121° to cross OSMOH at 8000 and at 210K, then on track 122° to IRRRV, then on track 122°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 12L/R: From SAUGR on track 181° to cross OGLVE at or above 8000, then on track 181° to cross KAYQU at 7000 and at 210K. Expect RNAV (RNP), RNAV (GPS), or ILS approach or RADAR vectors to final approach course.

LANDING RUNWAY 30L: From SAUGR on track 159° to cross GEP VORTAC at or above 10000 and at 250K, then on track 156° to cross PRRPL at or above 9000, then on track 172° to cross MAUER at 8000 and at 210K, then on track 121° to JJENI, then on track 121°. Expect RADAR vectors to final approach course.

LANDING RUNWAY 35: From SAUGR on track 159° to cross GEP VORTAC at or above 10000 and at 250K, then on track 156° to cross PRRPL at or above 9000, then on track 180° to cross BRNVL at 8000 and at 210K, then on track 178° to GWAIT, then on track 176°. Expect RADAR vectors to final approach course.

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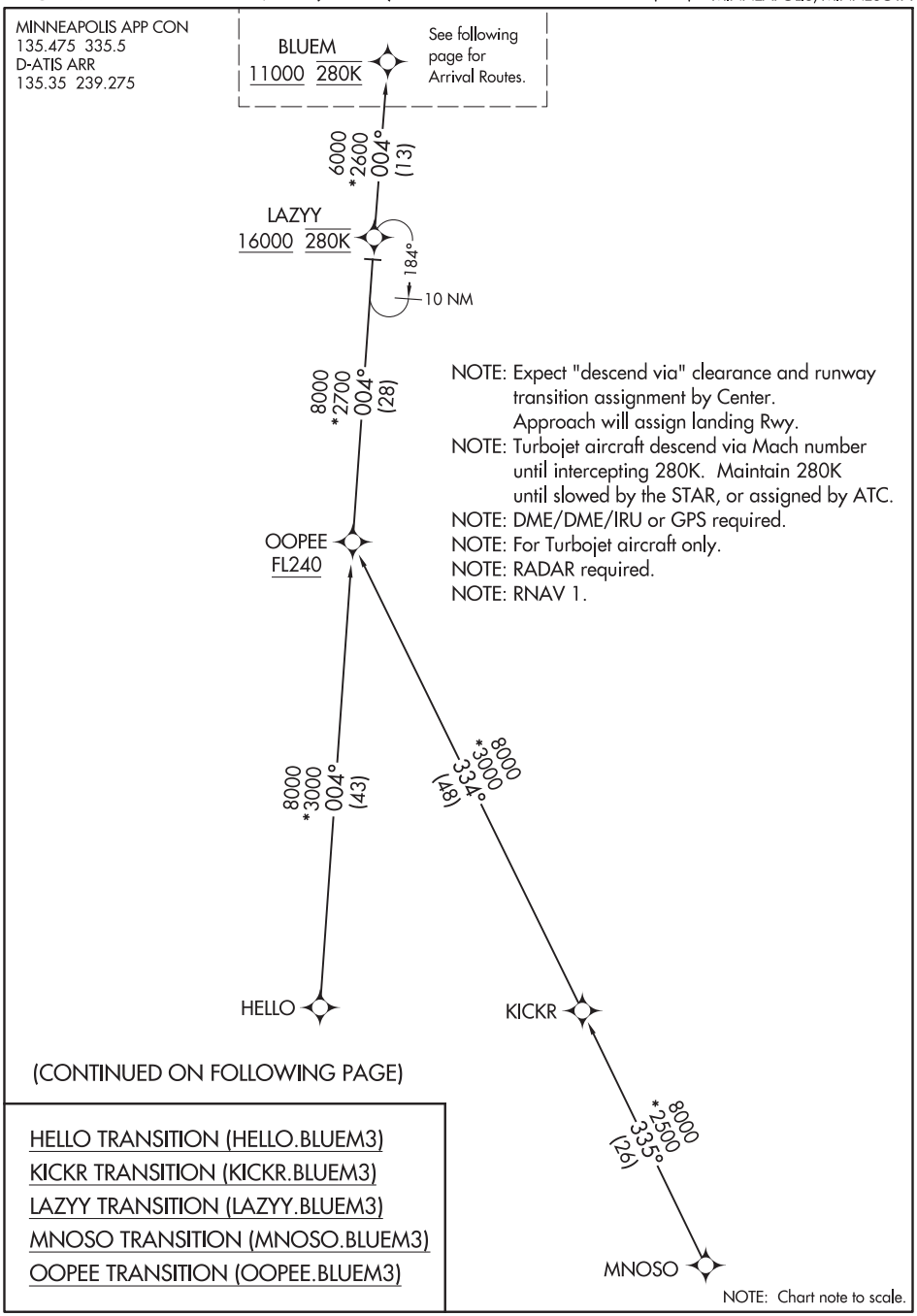
(BLUEM.BLUEM3) 18032

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

BLUEM THREE ARRIVAL (RNAV) Transition Routes

AL-264 (FAA) MINNEAPOLIS, MINNESOTA



(CONTINUED ON FOLLOWING PAGE)

HELLO TRANSITION (HELLO.BLUEM3)
KICKR TRANSITION (KICKR.BLUEM3)
LAZYY TRANSITION (LAZYY.BLUEM3)
MNOSO TRANSITION (MNOSO.BLUEM3)
OOPEE TRANSITION (OOPEE.BLUEM3)

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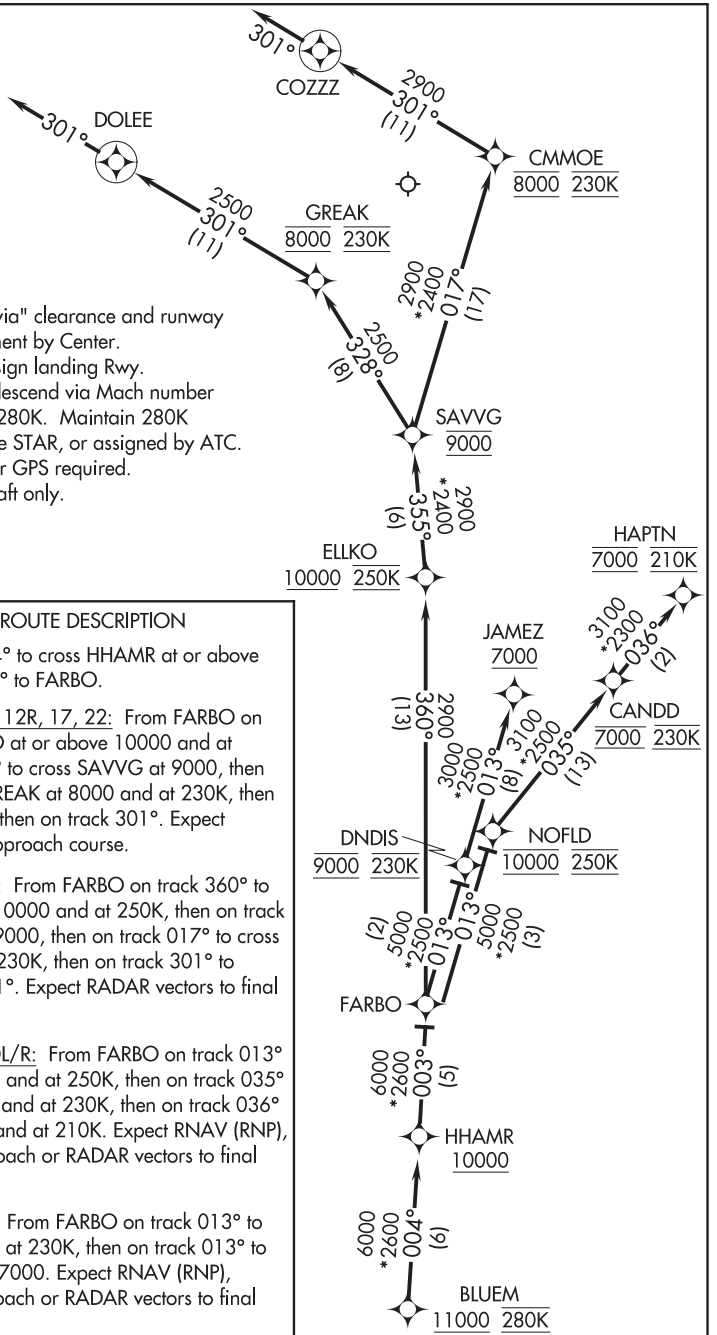
MINNEAPOLIS APP CON
135.475 335.5
D-ATIS ARR
135.35 239.275



NOTE: Expect "descend via" clearance and runway transition assignment by Center. Approach will assign landing Rwy.
NOTE: Turbojet aircraft descend via Mach number until intercepting 280K. Maintain 280K until slowed by the STAR, or assigned by ATC.
NOTE: DME/DME/IRU or GPS required.
NOTE: For Turbojet aircraft only.
NOTE: RADAR required.
NOTE: RNAV 1.

NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

From BLUEM on track 004° to cross HHAMR at or above 10000, then on track 003° to FARBO.

LANDING RUNWAYS 4, 12R, 17, 22: From FARBO on track 360° to cross ELLKO at or above 10000 and at 250K, then on track 355° to cross SAVVG at 9000, then on track 328° to cross GREAK at 8000 and at 230K, then on track 301° to DOLEE, then on track 301°. Expect RADAR vectors to final approach course.

LANDING RUNWAY 12L: From FARBO on track 360° to cross ELLKO at or above 10000 and at 250K, then on track 355° to cross SAVVG at 9000, then on track 017° to cross CMMOE at 8000 and at 230K, then on track 301° to COZZZ, then on track 301°. Expect RADAR vectors to final approach course.

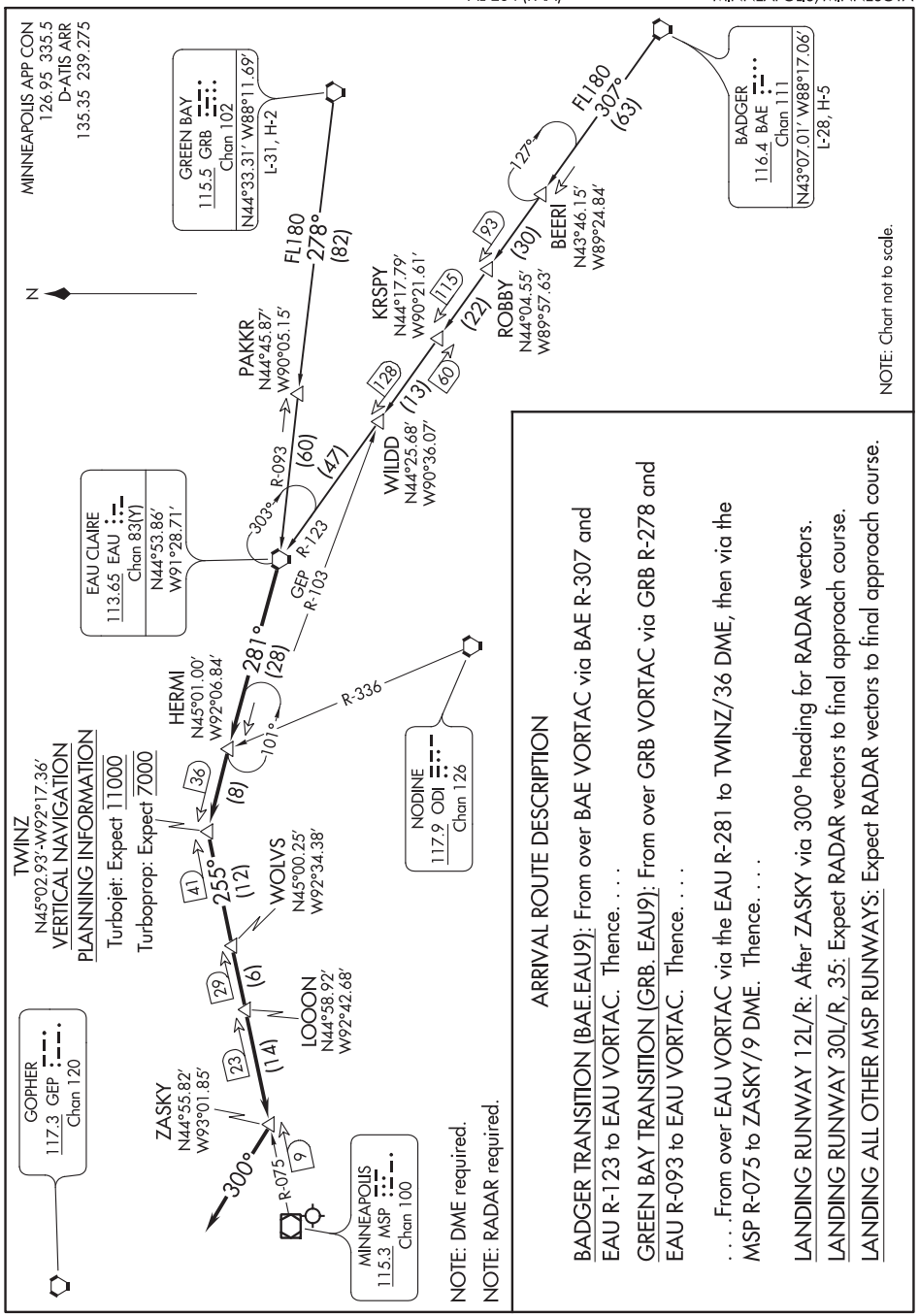
LANDING RUNWAYS 30L/R: From FARBO on track 013° to cross NOFLD at 10000 and at 250K, then on track 035° to cross CANDD at 7000 and at 230K, then on track 036° to cross HAPTN at 7000 and at 210K. Expect RNAV (RNP), RNAV (GPS), or ILS approach or RADAR vectors to final approach course.

LANDING RUNWAY 35: From FARBO on track 013° to cross DNDIS at 9000 and at 230K, then on track 013° to cross JAMEZ at or above 7000. Expect RNAV (RNP), RNAV (GPS), or ILS approach or RADAR vectors to final approach course.

(EAU.EAU9) 20086

EAU CLAIRE NINE ARRIVAL

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)
AL-264 (FAA)
MINNEAPOLIS, MINNESOTA



NC-1, 25 FEB 2021 to 22 APR 2021

EAU CLAIRE NINE ARRIVAL

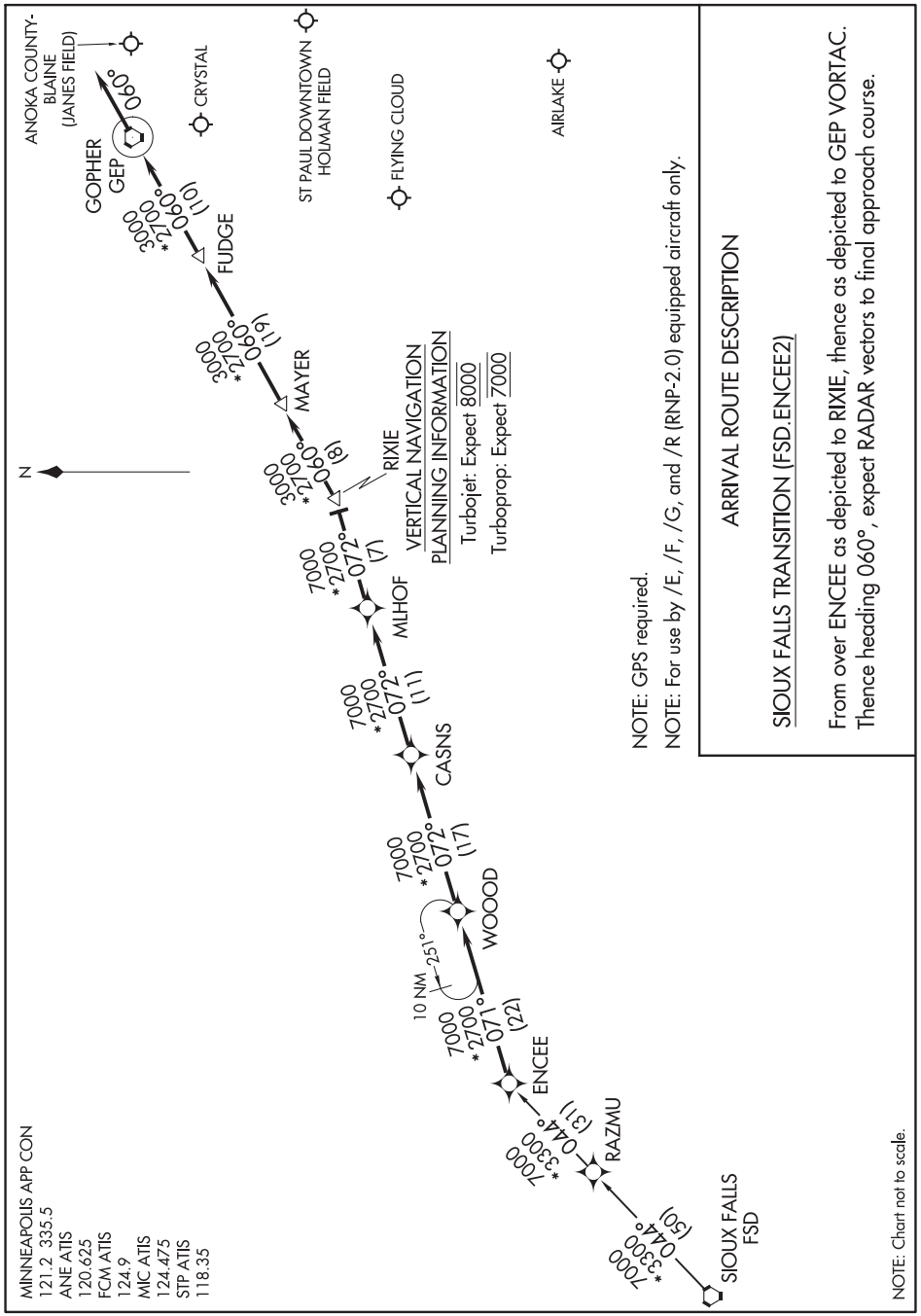
(EAU.EAU9) 10JAN13

MINNEAPOLIS, MINNESOTA
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

ENCEE TWO ARRIVAL (RNAV)

AL-263 (FAA)

MINNEAPOLIS-ST PAUL, MINNESOTA



NC-1, 25 FEB 2021 to 22 APR 2021

ENCEE TWO ARRIVAL (RNAV)

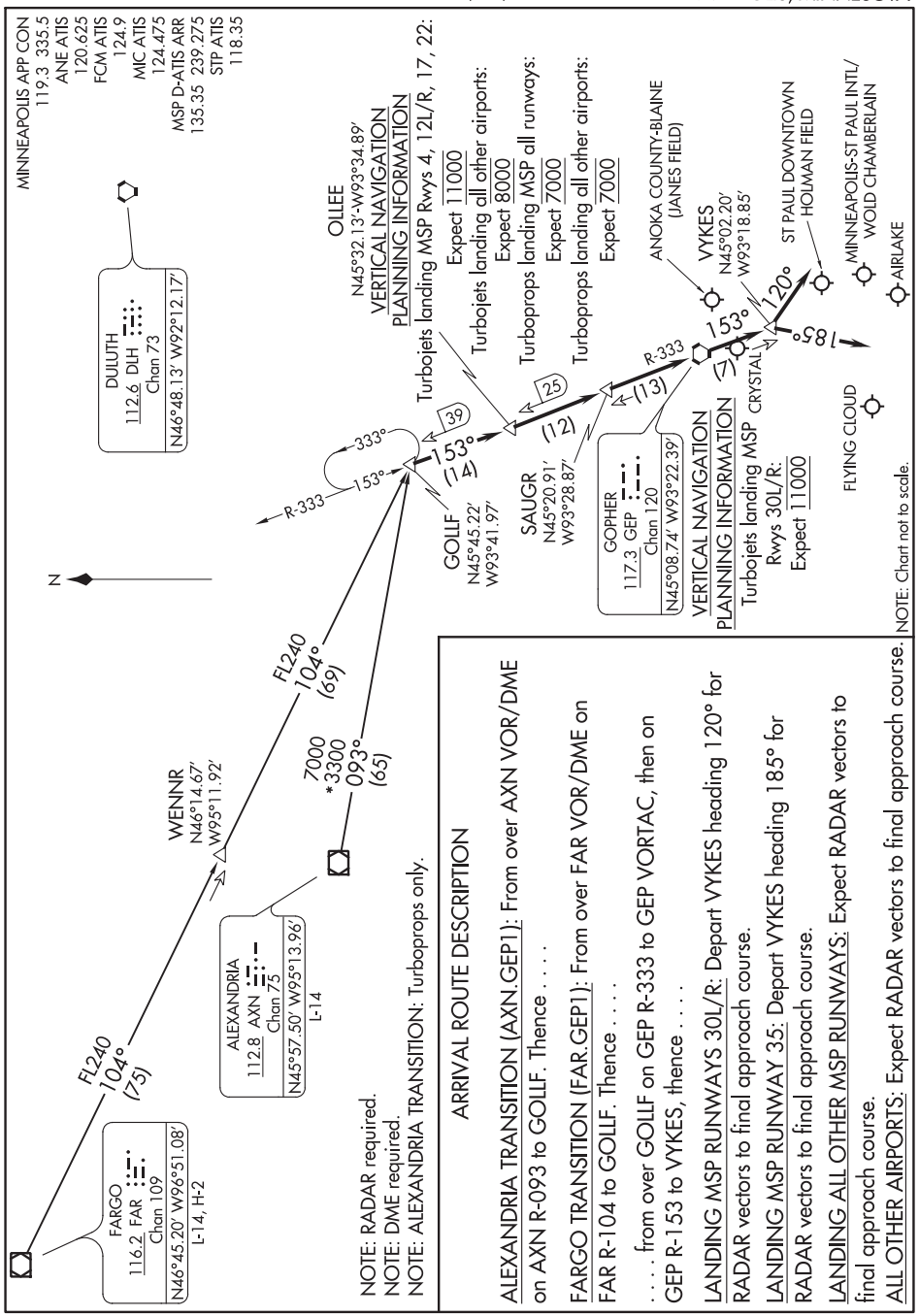
MINNEAPOLIS-ST PAUL, MINNESOTA

(GEP.GEP1) 20198

GOPHER ONE ARRIVAL

AL-264 (FAA)

MINNEAPOLIS, MINNESOTA



NC-1, 25 FEB 2021 to 22 APR 2021

GOPHER ONE ARRIVAL

MINNEAPOLIS, MINNESOTA

(GEP.GEP1) 17AUG17

MINNEAPOLIS APP CON
118.725 335.5 (Rwy 35)
119.3 335.5 (Rwys 12L/30R, 4/22, 17)
126.95 335.5 (Rwy 12R/30L)
D-ATIS ARR
135.35 239.275

MINNEAPOLIS
115.3 MSP
Chan 100
N44°53.79′-W93°14.19′

FLYING CLOUD
117.7 FCM
Chan 124

FARMINGTON
115.7 FGT
Chan 104
N44°37.86′-W93°10.92′

HALWAY
111.2 FOW
Chan 49

ROCHESTER
112.0 RST
Chan 57

WATERLOO
112.2 ALO
Chan 59
N42°33.39′-W92°23.94′
L-28, H-5

MASON CITY
114.9 MCW
Chan 96
N43°05.69′-W93°19.79′
L-12, H-5

SLIKK
N44°47.90′
W93°17.21′

AHMIT
N44°29.88′
W93°11.71′

PEPPR
N44°22.89′
W93°12.40′

DELZY
N44°13.92′-W93°13.27′

ZIBBY
N44°06.93′
W93°13.95′

KASPR
N43°57.93′
W93°14.82′

JAGOW
N43°30.89′
W93°17.41′

300°
R-103
330° (11)
R-178
(8)
15
(7)
24
(9)
R-032
31
(7)
178°
R-310
40
358° (9)
178°
R-286
3000
358° (27)
178°
3000
358° (25)
7000
326° (70)

VERTICAL NAVIGATION PLANNING INFORMATION
Turbojets: Expect 10000
Turboprops: Expect 7000, 8000 or 9000

NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

MASON CITY TRANSITION (MCW.KASPR7):
From over MCW VOR/DME on MCW R-358 to JAGOW INT then on MCW R-358 and FGT R-178 to KASPR INT. Thence. . . .

WATERLOO TRANSITION (ALO.KASPR7):
From over ALO VOR/DME on ALO R-326 to JAGOW INT, then on MCW R-358 and FGT R-178 to KASPR INT. Thence. . . .

. . . .From over KASPR on FGT R-178 to FGT VORTAC.

LANDING RUNWAYS 12L/R:
After FGT VORTAC on FGT R-330 to SLIKK thence on 300° heading for RADAR vectors to final approach course.

LANDING ALL OTHER RUNWAYS:
On RADAR vectors to final approach course.

NOTE: DME and RADAR required.
NOTE: MASON CITY TRANSITION: "TURBOPROPS ONLY".

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

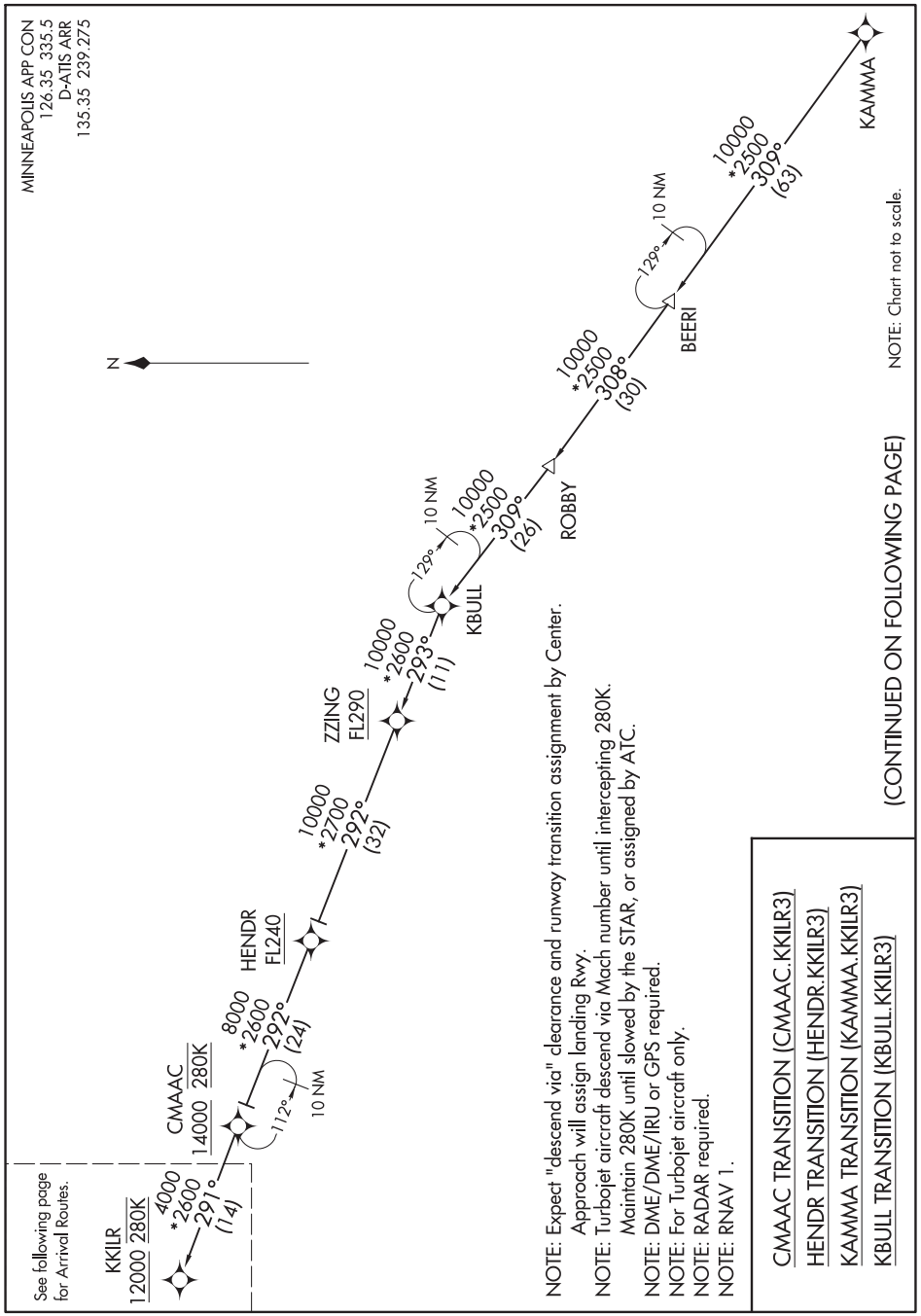
(KKILR.KKILR3) 17173

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

KKILR THREE ARRIVAL (RNAV) Transition Routes

AL-264 (FAA)

MINNEAPOLIS, MINNESOTA



NC-1, 25 FEB 2021 to 22 APR 2021

KKILR THREE ARRIVAL (RNAV) Transition Routes

MINNEAPOLIS, MINNESOTA

(KKILR.KKILR3) 05JAN17

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

MINNEAPOLIS APP CON
126.35 335.5
D-ATIS ARR
135.35 239.275

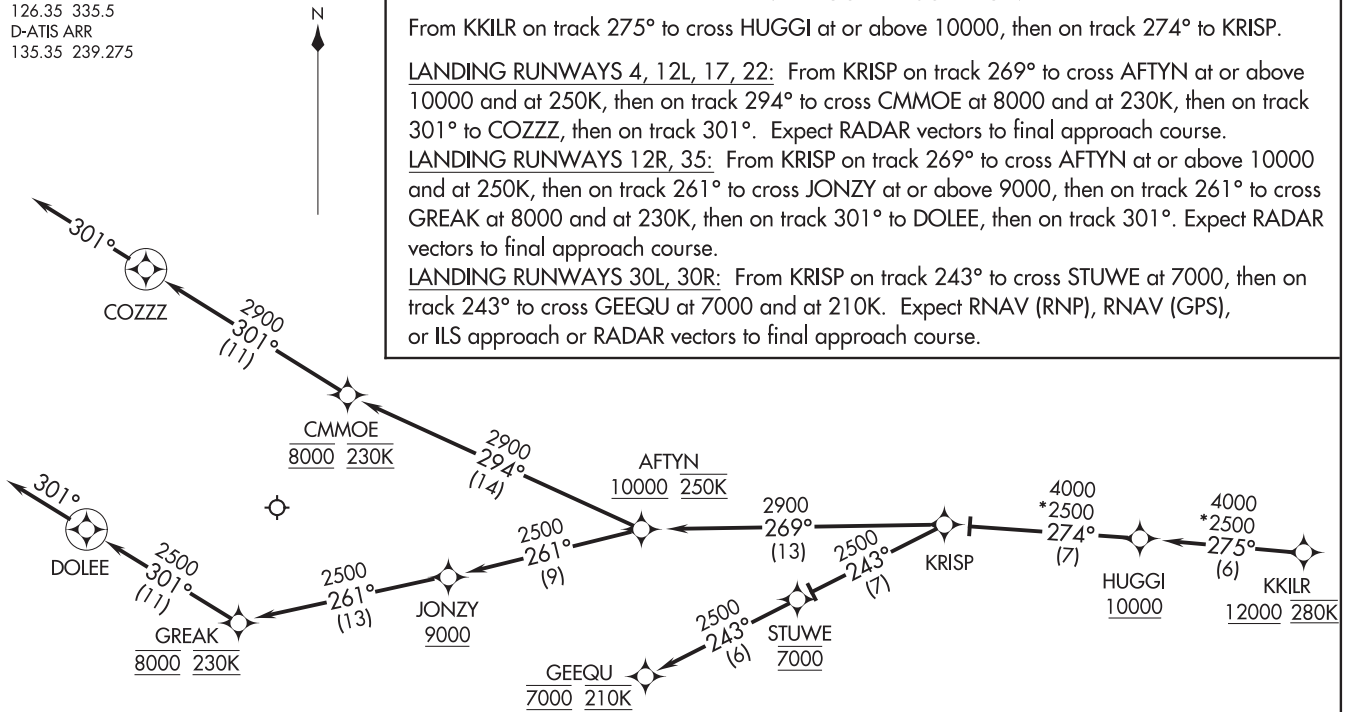
ARRIVAL ROUTE DESCRIPTION

From KKILR on track 275° to cross HUGGI at or above 10000, then on track 274° to KRISP.

LANDING RUNWAYS 4, 12L, 17, 22: From KRISP on track 269° to cross AFTYN at or above 10000 and at 250K, then on track 294° to cross CMMOE at 8000 and at 230K, then on track 301° to COZZZ, then on track 301°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 12R, 35: From KRISP on track 269° to cross AFTYN at or above 10000 and at 250K, then on track 261° to cross JONZY at or above 9000, then on track 261° to cross GREAK at 8000 and at 230K, then on track 301° to DOLEE, then on track 301°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 30L, 30R: From KRISP on track 243° to cross STUWE at 7000, then on track 243° to cross GEEQU at 7000 and at 210K. Expect RNAV (RNP), RNAV (GPS), or ILS approach or RADAR vectors to final approach course.



NOTE: Expect "descend via" clearance and runway transition assignment by Center.
Approach will assign landing Rwy.
NOTE: Turbojet aircraft descend via Mach number until intercepting 280K. Maintain 280K until slowed by the STAR, or assigned by ATC.
NOTE: DME/DME/IRU or GPS required.
NOTE: For Turbojet aircraft only.
NOTE: RADAR required.
NOTE: RNAV 1.

NOTE: Chart not to scale.

MUSCL THREE ARRIVAL (RNAV) Transition Routes

(MUSCL.MUSCL3) 05JAN17

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

MINNEAPOLIS, MINNESOTA

(MUSCL.MUSCL3) 17173

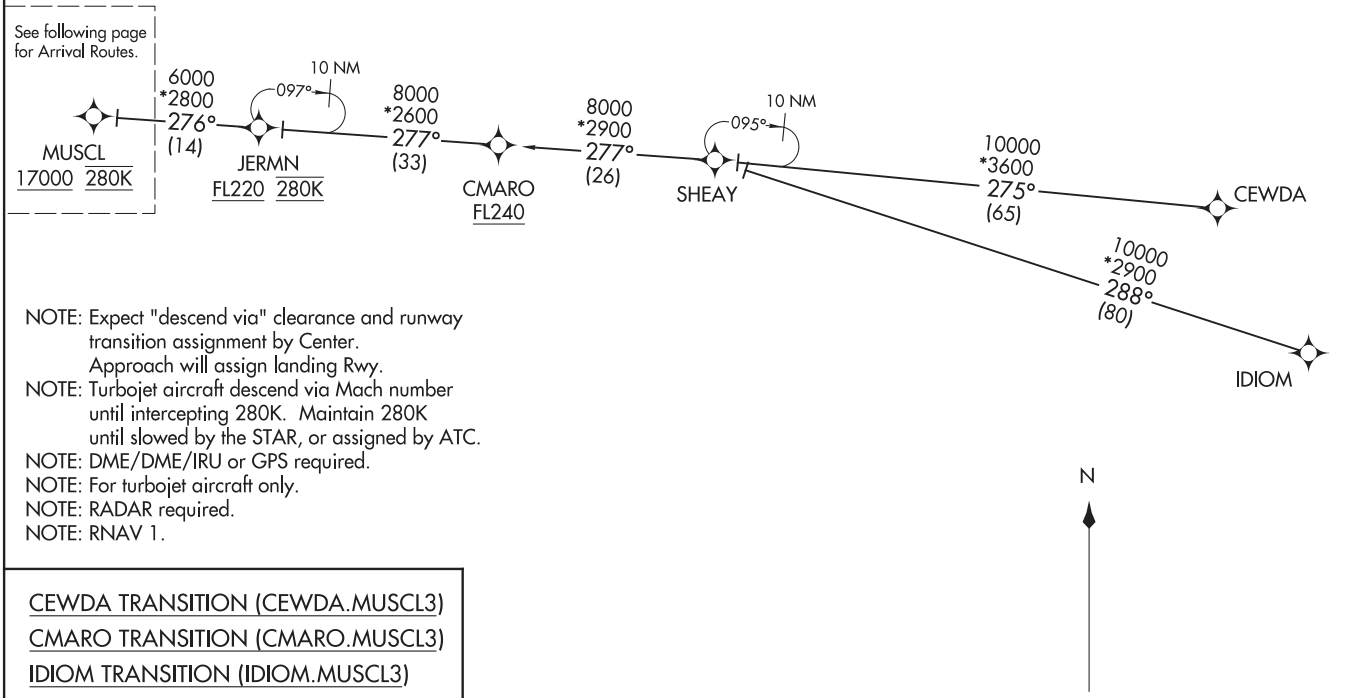
MUSCL THREE ARRIVAL (RNAV) Transition Routes

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

AL-264 (FAA) MINNEAPOLIS, MINNESOTA

Z12

MINNEAPOLIS APP CON
126.35 335.5
D-ATIS ARR
135.35 239.275

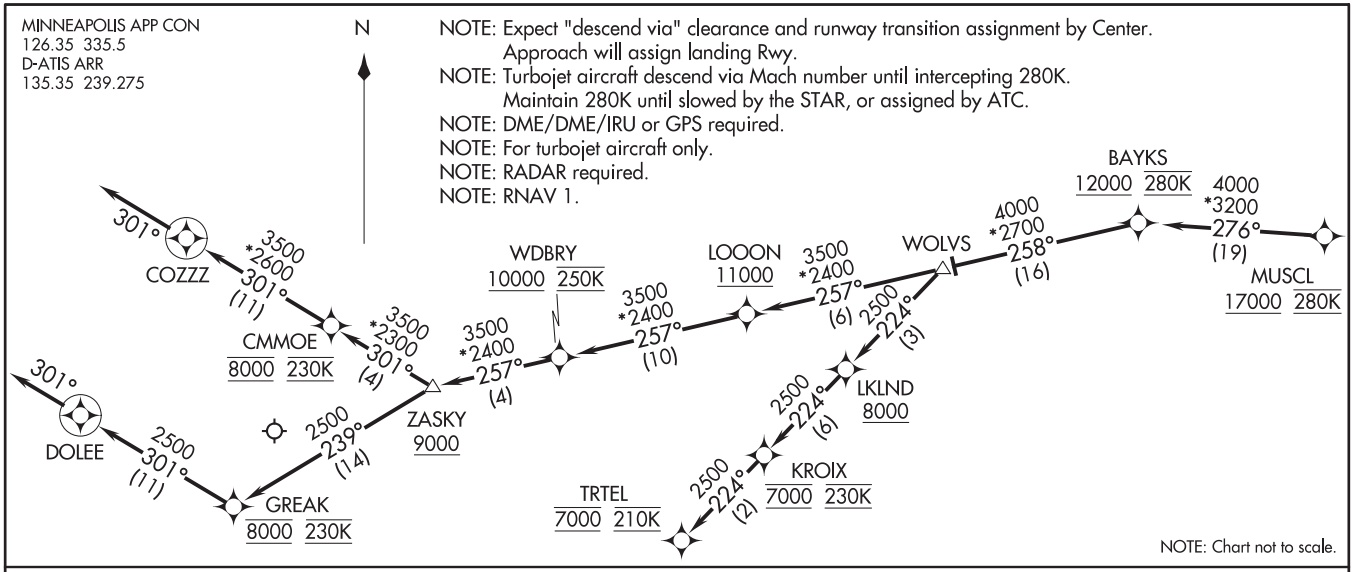


NOTE: Expect "descend via" clearance and runway transition assignment by Center. Approach will assign landing Rwy.
NOTE: Turbojet aircraft descend via Mach number until intercepting 280K. Maintain 280K until slowed by the STAR, or assigned by ATC.
NOTE: DME/DME/IRU or GPS required.
NOTE: For turbojet aircraft only.
NOTE: RADAR required.
NOTE: RNAV 1.

CEWDA TRANSITION (CEWDA.MUSCL3)
CMARO TRANSITION (CMARO.MUSCL3)
IDIOM TRANSITION (IDIOM.MUSCL3)
JERMN TRANSITION (JERMN.MUSCL3)
SHEAY TRANSITION (SHEAY.MUSCL3)

(CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.



ARRIVAL ROUTE DESCRIPTION

From MUSCL on track 276° to cross BAYKS at or above 12000 and at 280K, then on track 258° to WOLVS.

LANDING RUNWAYS 4, 12L, 17, 22: From WOLVS on track 257° to cross LOOON at or above 11000, then on track 257° to cross WDBRY at or above 10000 and at 250K, then on track 257° to cross ZASKY at or above 9000, then on track 301° to cross CMMOE at 8000 and at 230K, then on track 301° to COZZZ, then on track 301°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 12R, 35: From WOLVS on track 257° to cross LOOON at or above 11000, then on track 257° to cross WDBRY at or above 10000 and at 250K, then on track 257° to cross ZASKY at or above 9000, then on track 239° to cross GREAK at 8000 and at 230K, then on track 301° to DOLEE, then on track 301°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 30L/R: From WOLVS on track 224° to cross LKLND at or above 8000, then on track 224° to cross KROIX at 7000 and at 230K, then on track 224° to cross TRTEL at 7000 and at 210K. Expect RNAV (RNP), RNAV (GPS), or ILS approach or RADAR vectors to final approach course.

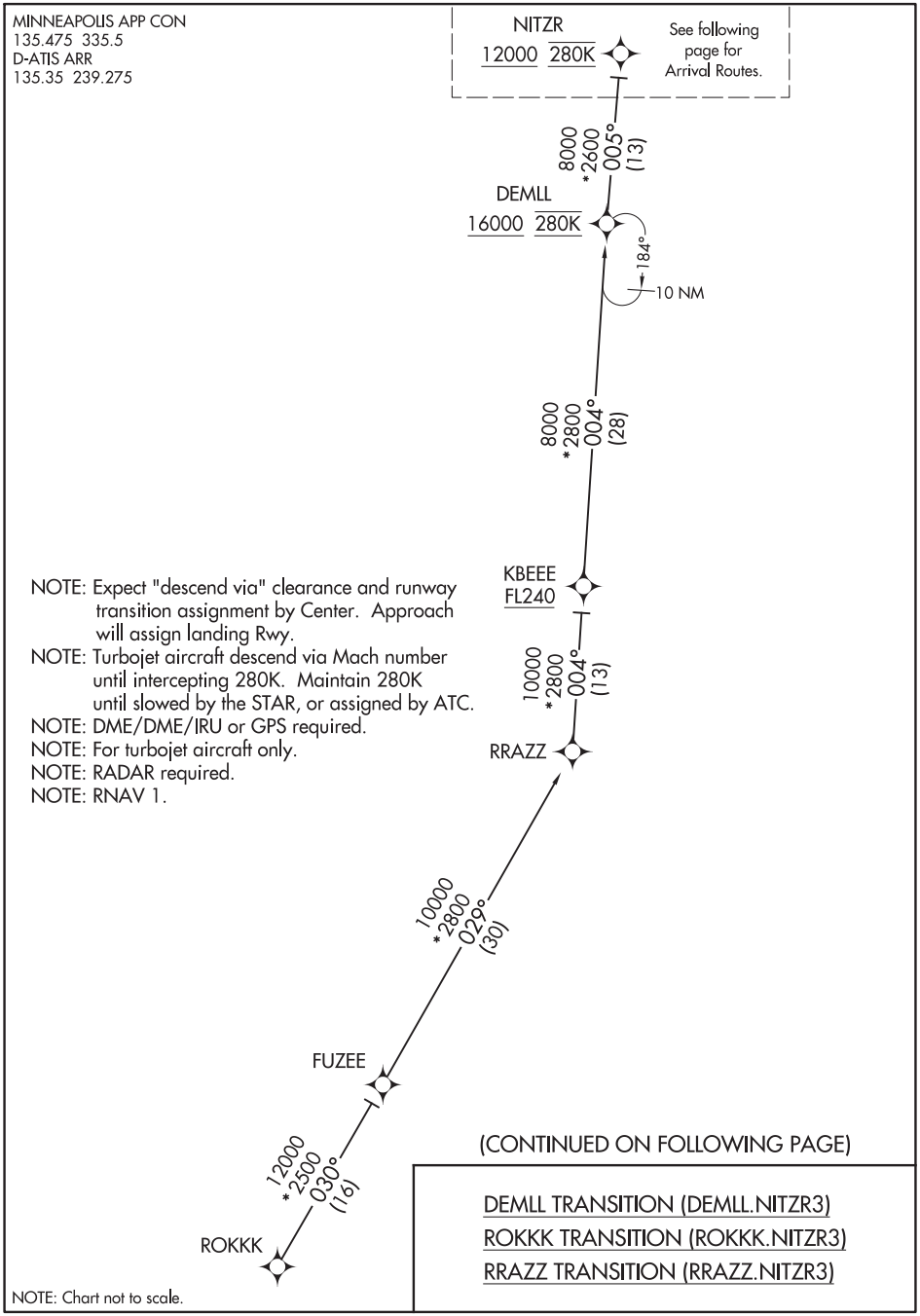
(NITZR.NITZR3) 18032

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

NITZR THREE ARRIVAL (RNAV) Transition Routes

AL-264 (FAA)

MINNEAPOLIS, MINNESOTA



NC-1, 25 FEB 2021 to 22 APR 2021

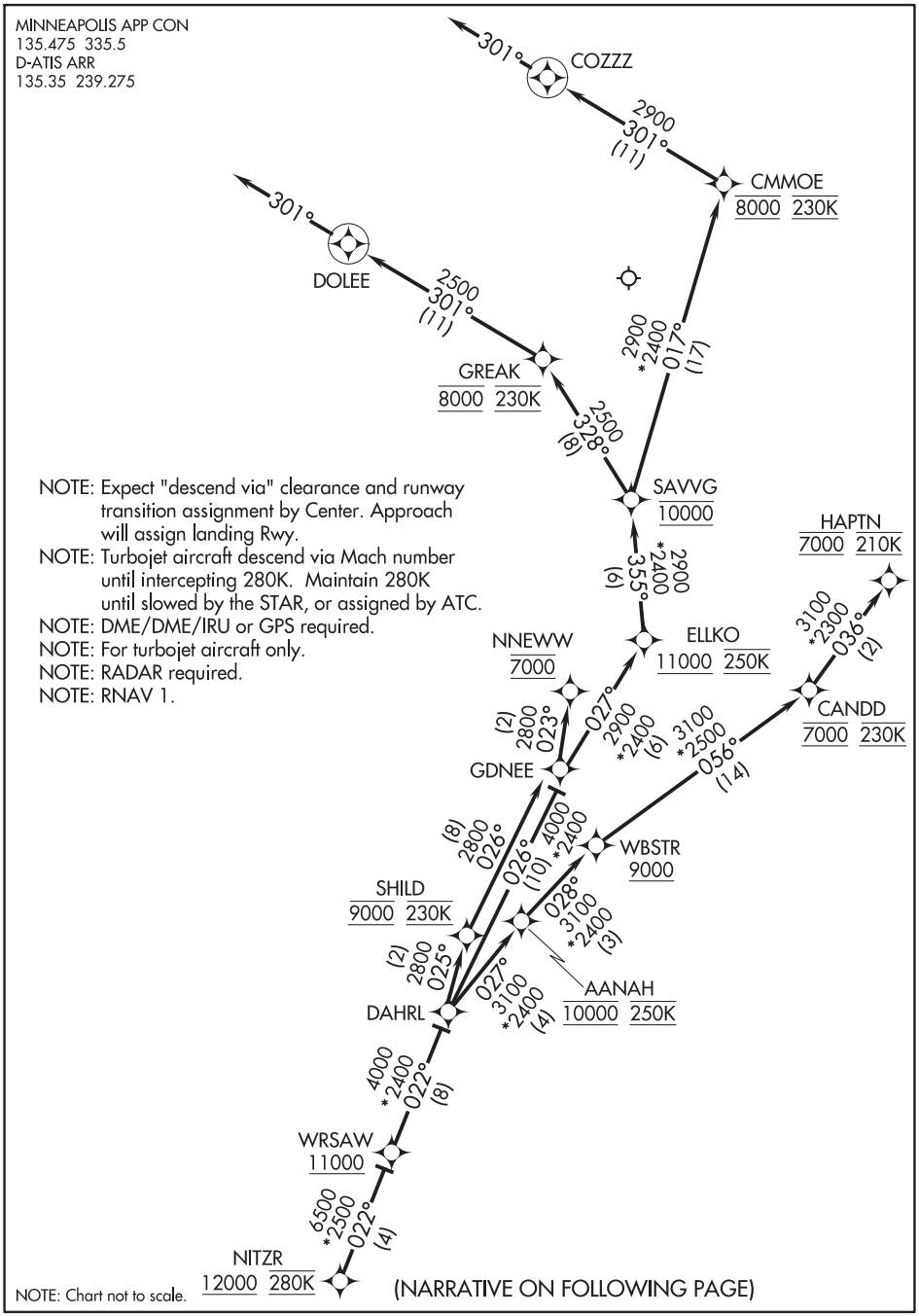
NITZR THREE ARRIVAL (RNAV) Transition Routes

MINNEAPOLIS, MINNESOTA

(NITZR.NITZR3) 05JAN17

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

NITZR THREE ARRIVAL (RNAV) Arrival Routes



NOTE: Expect "descend via" clearance and runway transition assignment by Center. Approach will assign landing Rwy.
NOTE: Turbojet aircraft descend via Mach number until intercepting 280K. Maintain 280K until slowed by the STAR, or assigned by ATC.
NOTE: DME/DME/IRU or GPS required.
NOTE: For turbojet aircraft only.
NOTE: RADAR required.
NOTE: RNAV 1.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

NC-1, 25 FEB 2021 to 22 APR 2021

ARRIVAL ROUTE DESCRIPTION

From NITZR on track 022° to cross WRSAW at or above 11000, then on track 022° to DAHRL.

LANDING RUNWAYS 4, 12R, 17, 22: From DAHRL on track 026° to GDNEE, then on track 027° to cross ELLKO at or above 11000 and at 250K, then on track 355° to cross SAVVG at 10000, then on track 328° to cross GREAK at 8000 and at 230K, then on track 301° to DOLEE, then on track 301°. Expect RADAR vectors to final approach course.

LANDING RUNWAY 12L: From DAHRL on track 026° to GDNEE, then on track 027° to cross ELLKO at or above 11000 and at 250K, then on track 355° to cross SAVVG at 10000, then on track 017° to cross CMMOE at 8000 and at 230K, then on track 301° to COZZZ, then on track 301°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 30L/R: From DAHRL on track 027° to cross AANAH at 10000 and at 250K, then on track 028° to cross WBSTR at or above 9000, then on track 056° to cross CANDD at 7000 and at 230K, then on track 036° to cross HAPTN at 7000 and at 210K. Expect RNAV (RNP), RNAV (GPS), or ILS approach or RADAR vectors to final approach course.

LANDING RUNWAY 35: From DAHRL on track 025° to cross SHILD at 9000 and at 230K, then on track 026° to GDNEE, then on track 023° to cross NNEWW at 7000. Expect RNAV (RNP), RNAV (GPS), or ILS approach or RADAR vectors to final approach course.

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MINNEAPOLIS APP CON
126.95 335.5
D-ATIS ARR
135.35 239.275

ARRIVAL ROUTE DESCRIPTION

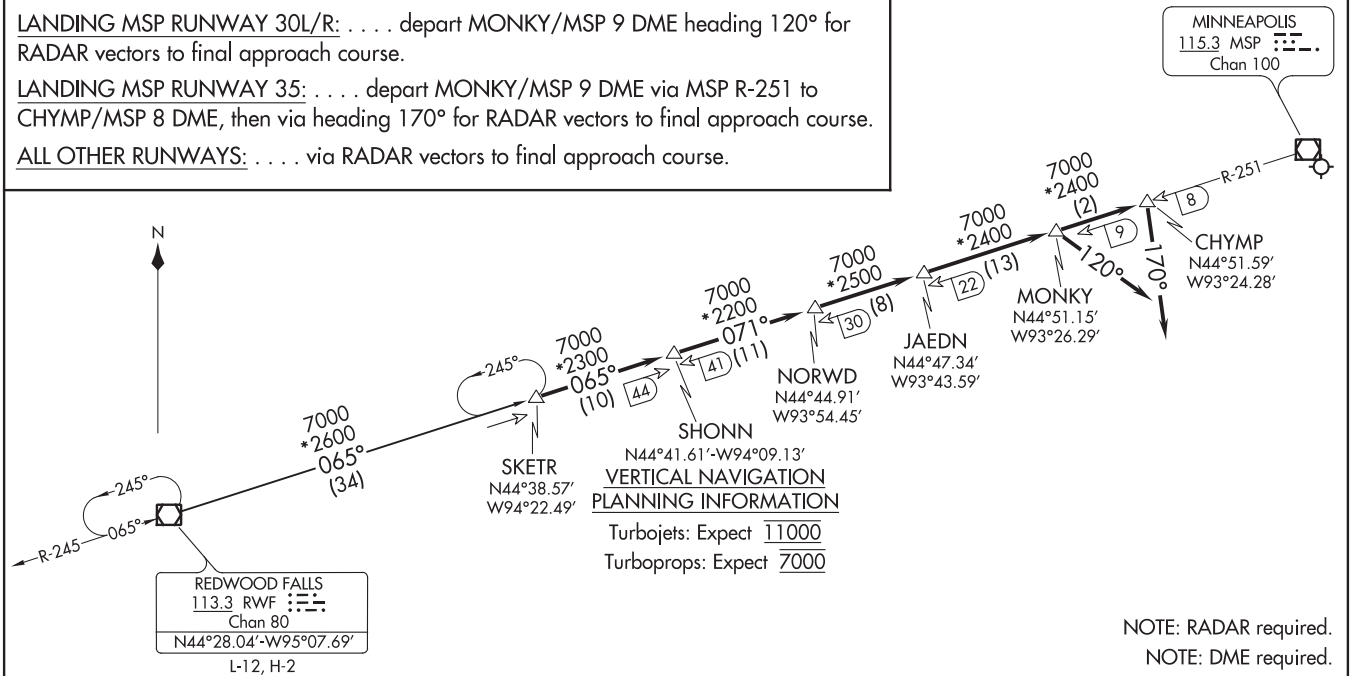
REDWOOD FALLS TRANSITION (RWF.SKETR5): From over RWF VOR/DME on RWF R-065 to SKETR/34 DME. Thence . . . .

. . . . From over SKETR/RWF 34 DME via RWF R-065 to SHONN/RWF 44 DME, then via MSP R-251 to NORWD/MSP 30 DME, then via MSP R-251 to JAEDN/MSP 22 DME, then via MSP R-251 to MONKY/MSP 9 DME, thence . . . .

LANDING MSP RUNWAY 30L/R: . . . . depart MONKY/MSP 9 DME heading 120° for RADAR vectors to final approach course.

LANDING MSP RUNWAY 35: . . . . depart MONKY/MSP 9 DME via MSP R-251 to CHYMP/MSP 8 DME, then via heading 170° for RADAR vectors to final approach course.

ALL OTHER RUNWAYS: . . . . via RADAR vectors to final approach course.



VERTICAL NAVIGATION PLANNING INFORMATION

Turbojets: Expect 11000

Turboprops: Expect 7000

NOTE: RADAR required.

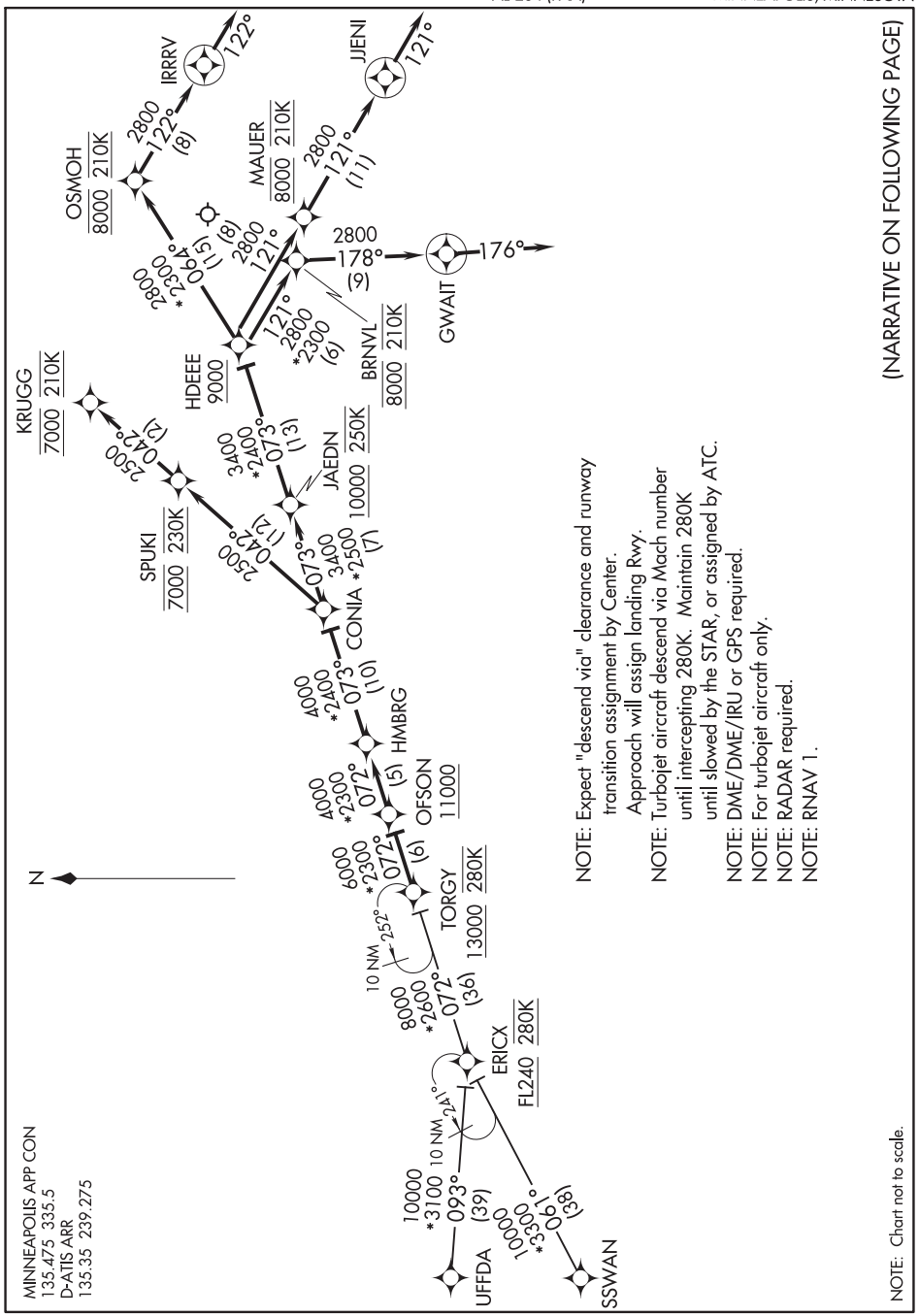
NOTE: DME required.

NOTE: Chart not to scale.

(TORGY.TORGY3) 18032

TORGY THREE ARRIVAL (RNAV)

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)
AL-264 (FAA)
MINNEAPOLIS, MINNESOTA



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TORGY THREE ARRIVAL (RNAV)

MINNEAPOLIS, MINNESOTA
MINNEAPOLIS ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

(TORGY.TORGY3) 05JAN17

ARRIVAL ROUTE DESCRIPTION

ERICX TRANSITION (ERICX.TORGY3)
SSWAN TRANSITION (SSWAN.TORGY3)
UFFDA TRANSITION (UFFDA.TORGY3)

From TORGY on track 072° to cross OFSON at or above 11000, then on track 072° to HMBRG, then on track 073° to CONIA.

LANDING RUNWAYS 4, 17, 22, 30L: From CONIA on track 073° to cross JAEDN at or above 10000 and at 250K, then on track 073° to cross HDEEE at or above 9000, then on track 121° to cross MAUER at 8000 and at 210K, then on track 121° to JJENI, then on track 121°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 12L/R: From CONIA on track 042° to cross SPUKI at 7000 and at 230K, then on track 042° to cross KRUGG at 7000 and at 210K. Expect RNAV (RNP), RNAV (GPS), or ILS approach or RADAR vectors to final approach course.

LANDING RUNWAY 30R: From CONIA on track 073° to cross JAEDN at or above 10000 and at 250K, then on track 073° to cross HDEEE at or above 9000, then on track 064° to cross OSMOH at 8000 and at 210K, then on track 122° to IRRRV, then on track 122°. Expect RADAR vectors to final approach course.

LANDING RUNWAY 35: From CONIA on track 073° to cross JAEDN at or above 10000 and at 250K, then on track 073° to cross HDEEE at or above 9000, then on track 121° to cross BRNVL at 8000 and at 210K, then on track 178° to GWAIT, then on track 176°. Expect RADAR vectors to final approach course.

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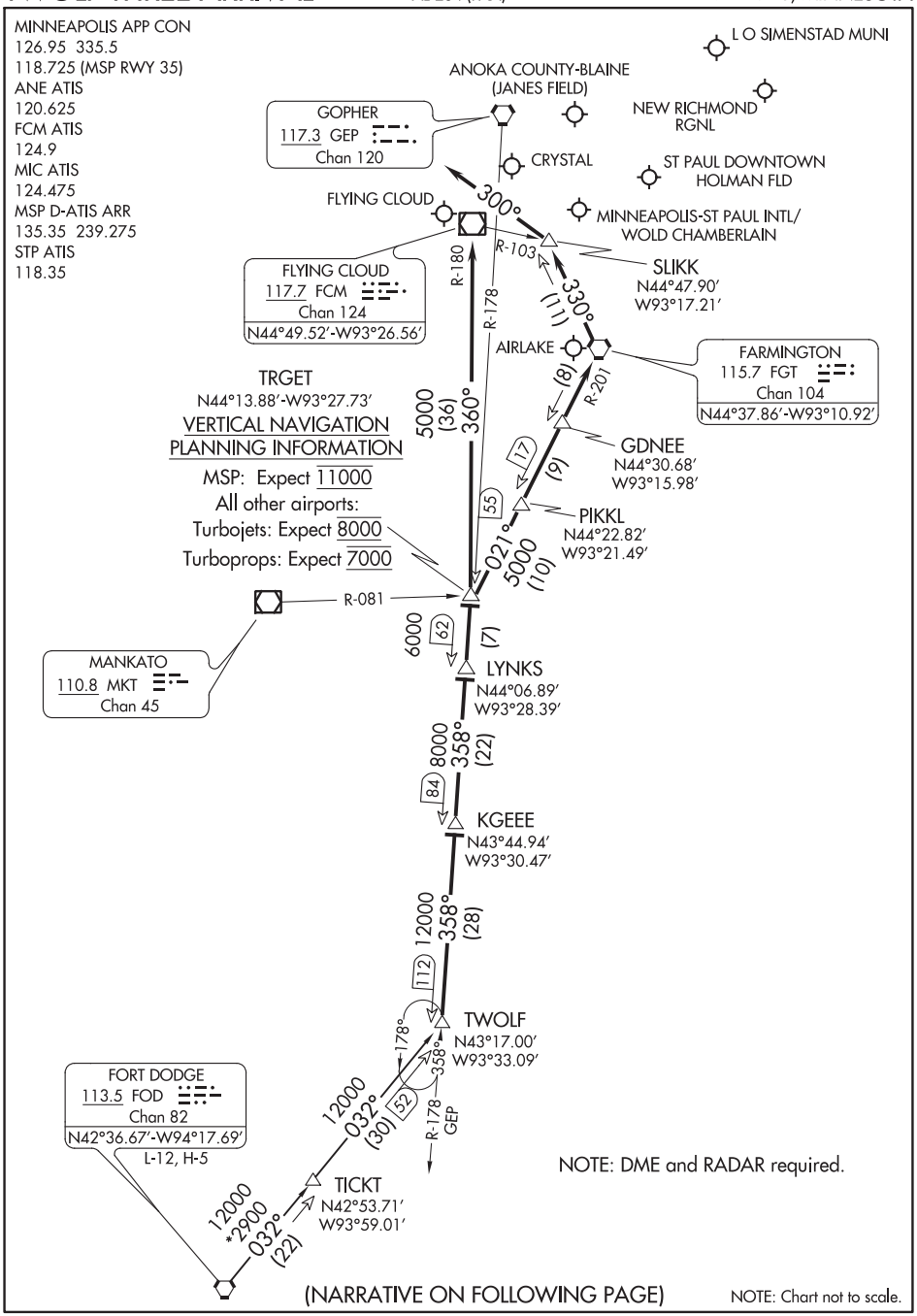
(TWOLF.TWOLF3) 20198

TWOLF THREE ARRIVAL

AL-264 (FAA)

MINNEAPOLIS, MINNESOTA



(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

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ARRIVAL ROUTE DESCRIPTION

FORT DODGE TRANSITION (FOD.TWOLF3): From over FOD VORTAC on FOD R-032 to TWOLF/FOD 52 DME, thence . . . .

. . . .from over TWOLF/GEP 112 DME via GEP R-178 to KGEEE/GEP 84 DME, then as depicted to TRGET INT/GEP 55 DME. Thence. . . .

LANDING MSP RUNWAYS 12L/R: From over TRGET INT via FGT R-201 to FGT VORTAC, then via FGT R-330 to SLIKK INT/FGT 11 DME, then via heading 300° for RADAR vectors to final approach course.

LANDING MSP RUNWAYS 30L/R, 4, 22, 17, 35: From over TRGET INT on FGT R-201 to FGT VORTAC, then via RADAR vectors to final approach course.

LANDING ALL OTHER AIRPORTS: From over TRGET INT via FCM R-180 to FCM VOR/DME, then expect RADAR vectors to final approach course.

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NC-1, 25 FEB 2021 to 22 APR 2021

INTENTIONALLY

LEFT

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ILS or LOC RWY 31
ABERDEEN RGNL (ABR)

LOC/DME I-ABR	APP CRS	Rwy ldg	6901
109.9	308°	TDZE	1301
Chan 36		Apt Elev	1302

ADF required.

For inop ALS, increase S-LOC 31 Cats C/D visibility to 1 SM.

MALSR

MISSED APPROACH: Climb to 3000 then right turn direct RENEY LOM/I-ABR 6.1 DME and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
125.875	120.6 371.9	122.7 (CTAF)

ALTERNATE MISSED APCH FIX

ABERDEEN ABR 113.0 Chan 77 — 124° 304° R-124

Procedure NA for arrival on ABR VOR/DME airway radials 094 CW 171.

MSA AB 25 NM: 150° 4000; 3000 330°

ABERDEEN 113.0 ABR Chan 77

(IAF) OPLOW ABR 9

1636 1460 1801 1329 1802 1618 1404± R-031 3000 NoPT ABR 9 Arc 3000 131° (2.5) 128° 3000 LR-116 308° 16.5 LR-142 083° 263° 128° R-225

LOCALIZER 109.9 I-ABR Chan 36

(IAF) OPNAH ABR 9

LOM/IAF RENEY 203 AB I-ABR 6.1

3000 NoPT ABR 9 Arc

(IF) JUSEN I-ABR 12.6 ABR 9

2211

ELEV 1302 D TDZE 1301

HIRL Rwy 13-31

MIRL Rwy 17-35

REIL Rwys 13, 17 and 35

1412

13 17 6901 X 100 5500 X 100 31 35

308° 4.8 NM from FAF

FAF to MAP 4.8 NM					
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

3000 AB

AB RENEY LOM I-ABR 6.1

Use I-ABR DME when on LOC course.

Remain within 10 NM

* LOC only.

2908 128° 308° 3000 3000 I-ABR 1.4 * I-ABR 2.3

GS 3.00° TCH 64

0.9 NM 3.9 NM

CATEGORY	A	B	C	D
S-ILS 31	1501-½ 200 (200-½)			
S-LOC 31	1660-½ 359 (400-½)		1660-⅝ 359 (400-⅝)	1660-¾ 359 (400-¾)

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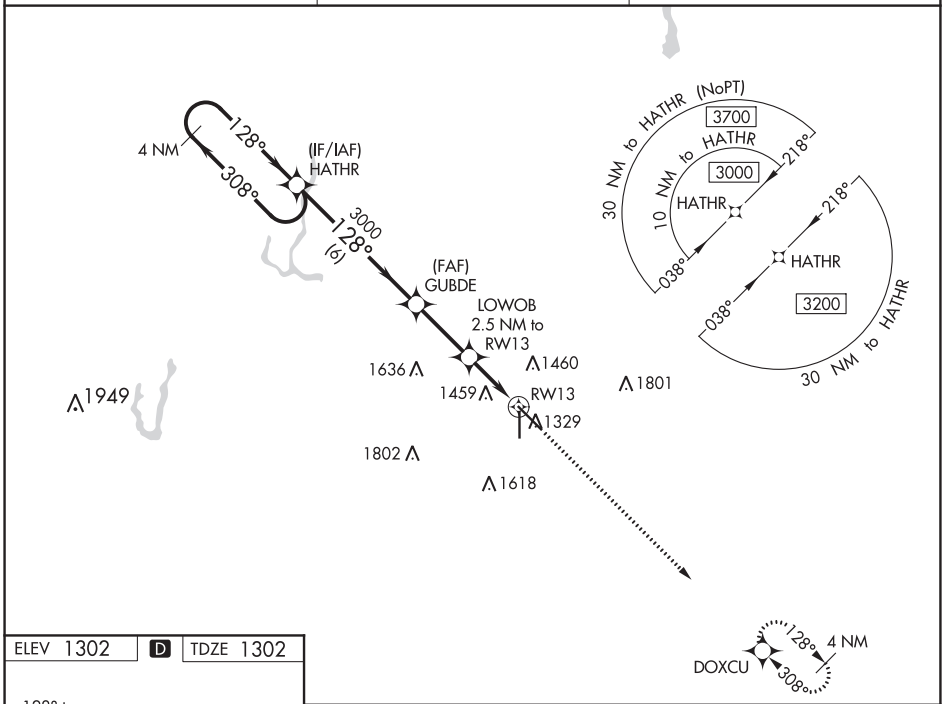
WAAS CH 40341 W13A	APP CRS 128°	Rwy ldg 6901 TDZE 1302 Apt Elev 1302

RNAV (GPS) RWY 13
ABERDEEN RGNL (ABR)

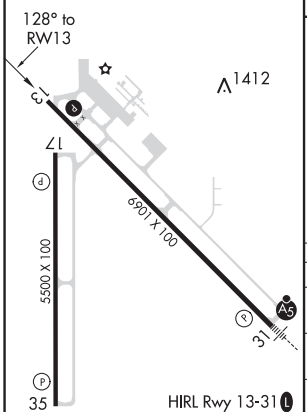
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C (-5°F) or above 54°C (130°F).
DME/DME RNP-0.3 NA.

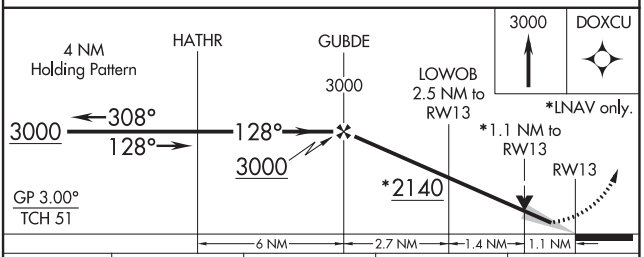
MISSED APPROACH: Climb to 3000 direct DOXCU and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
125.875	120.6 371.9	122.7 (CTAF) L



ELEV 1302 D TDZE 1302





CATEGORY		A	B	C	D
LPV	DA	1502-¾ 200 (200-¾)			
LNAV/VNAV	DA	1752-1⅜ 450 (500-1⅜)			
LNAV	MDA	1700-1 398 (400-1)		1700-1⅛ 398 (400-1⅛)	
C CIRCLING		1760-1 458 (500-1)	1860-1 558 (600-1)	1960-1¾ 658 (700-1¾)	2160-2¾ 858 (900-2¾)

NC-1, 25 FEB 2021 to 22 APR 2021

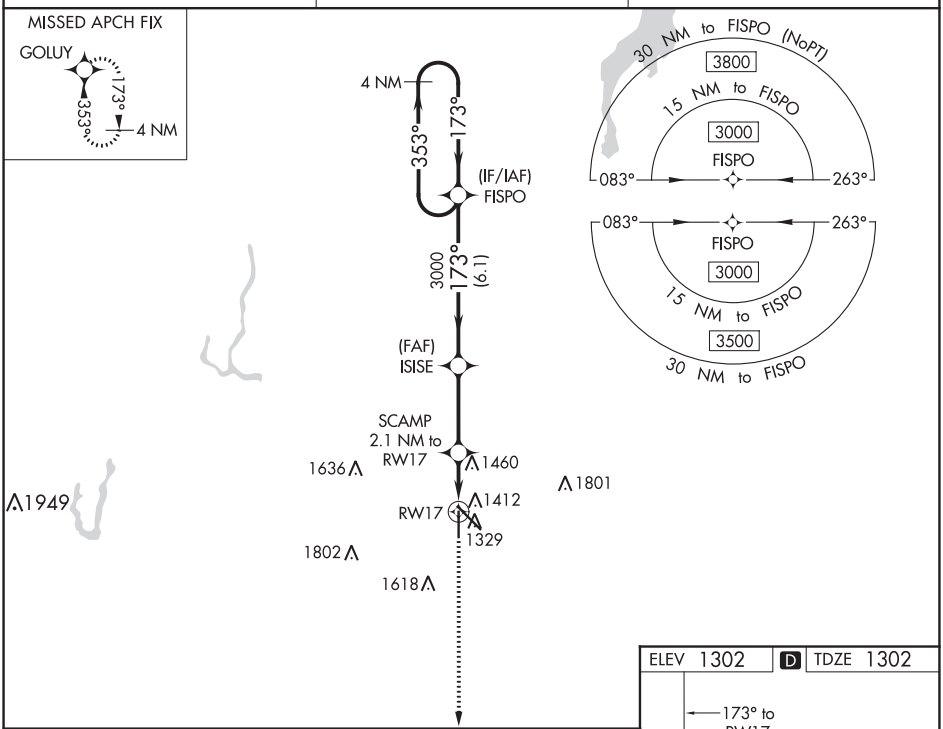
WAAS CH 56340 W17A	APP CRS 173°	Rwy ldg 5500 TDZE 1302 Apt Elev 1302

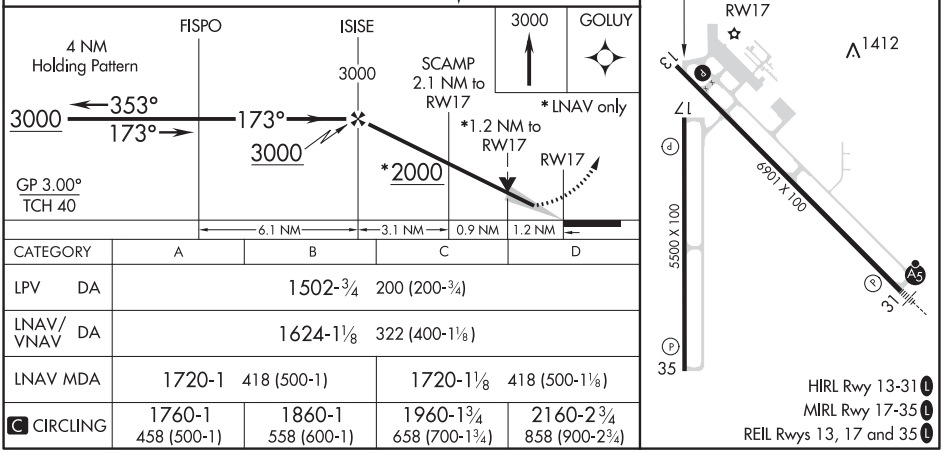
RNAV (GPS) RWY 17
ABERDEEN RGNL (ABR)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C (-7°F) or above 54°C (130°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3000 direct GOLUY and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
125.875	120.6 371.9	122.7 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1502-¾ 200 (200-¾)			
LNAV/VNAV DA	1624-1⅛ 322 (400-1⅛)			
LNAV MDA	1720-1 418 (500-1)		1720-1⅛ 418 (500-1⅛)	
C CIRCLING	1760-1 458 (500-1)	1860-1 558 (600-1)	1960-1¾ 658 (700-1¾)	2160-2¾ 858 (900-2¾)

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 42914 W31A	APP CRS 308°	Rwy ldg 6901 TDZE 1301 Apt Elev 1302

RNAV (GPS) RWY 31
ABERDEEN RGNL (ABR)

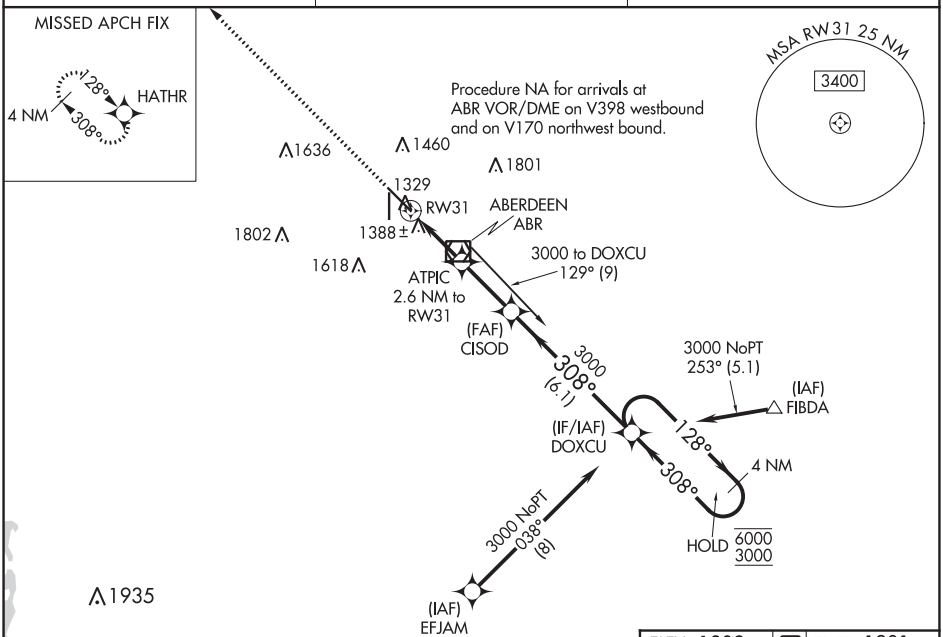
RNP APCH.

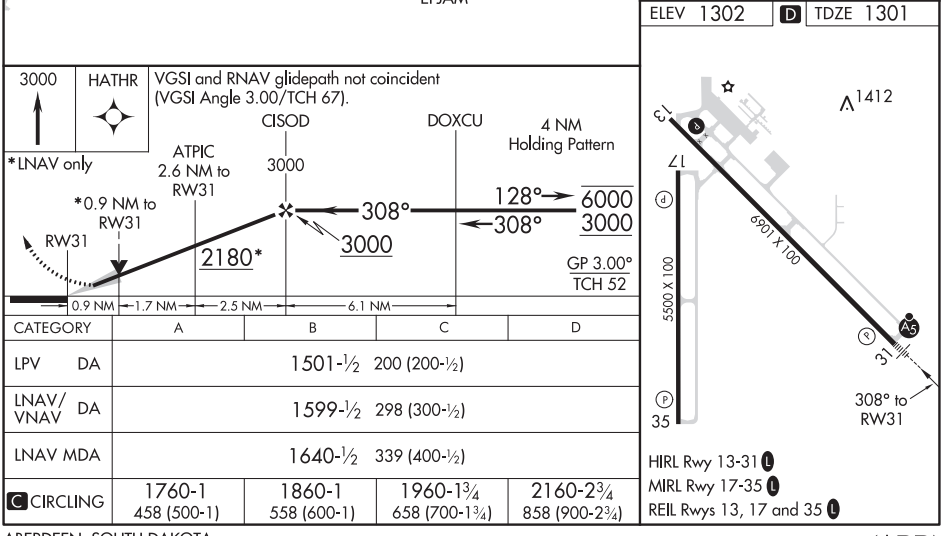
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. For inop ALS, increase LNAV/VNAV visibility all Cats to ⅞ SM.

MALSR

MISSED APPROACH: Climb to 3000 direct HATHR and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
125.875	120.6 371.9	122.7 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1501-½ 200 (200-½)			
LNAV/VNAV DA	1599-½ 298 (300-½)			
LNAV MDA	1640-½ 339 (400-½)			
C CIRCLING	1760-1 458 (500-1)	1860-1 558 (600-1)	1960-1¾ 658 (700-1¾)	2160-2¾ 858 (900-2¾)

NC-1, 25 FEB 2021 to 22 APR 2021

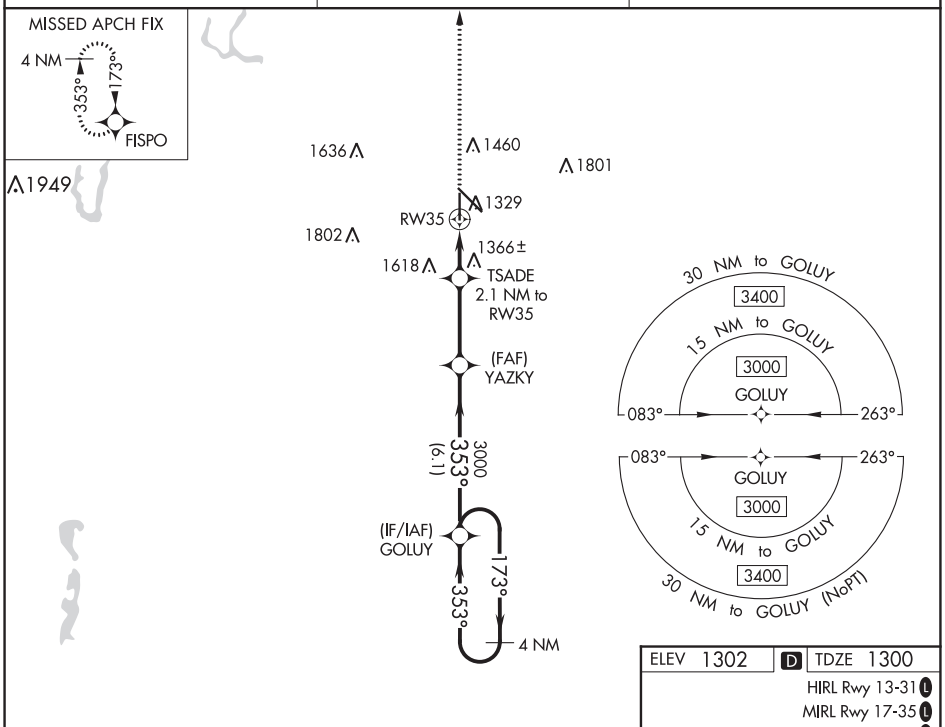
WAAS CH 65800 W35A	APP CRS 353°	Rwy ldg 5500 TDZE 1300 Apt Elev 1302

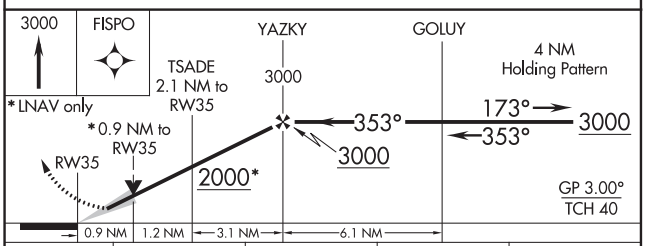
RNAV (GPS) RWY 35
ABERDEEN RGNL (ABR)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C (-7°F) or above 54°C (130°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3000 direct FISPO and hold.

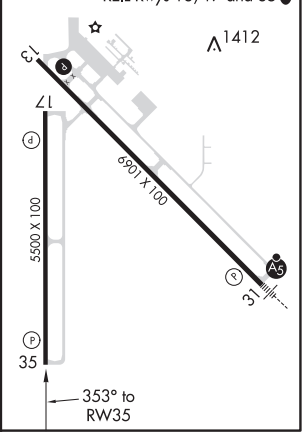
ASOS	MINNEAPOLIS CENTER	UNICOM
125.875	120.6 371.9	122.7 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1500-¾ 200 (200-¾)			
LNAV/VNAV DA	1550-⅞ 250 (300-⅞)			
LNAV MDA	1620-1 320 (400-1)		1620-⅞ 320 (400-⅞)	
C CIRCLING	1760-1 458 (500-1)	1860-1 558 (600-1)	1960-1¾ 658 (700-1¾)	2160-2¾ 858 (900-2¾)

ELEV 1302 D TDZE 1300
HIRL Rwy 13-31 L
MIRL Rwy 17-35 L
REIL Rwys 13, 17 and 35 L



NC-1, 25 FEB 2021 to 22 APR 2021

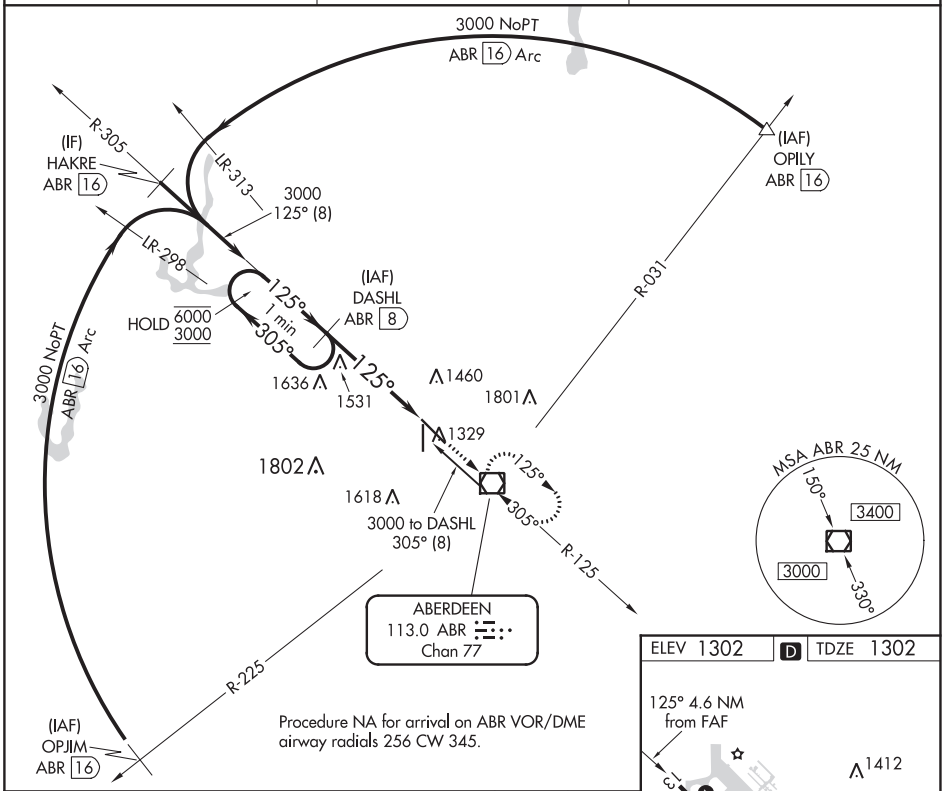
VOR/DME ABR 113.0 Chan 77	APP CRS 125°	Rwy ldg 6901 TDZE 1302 Apt Elev 1302

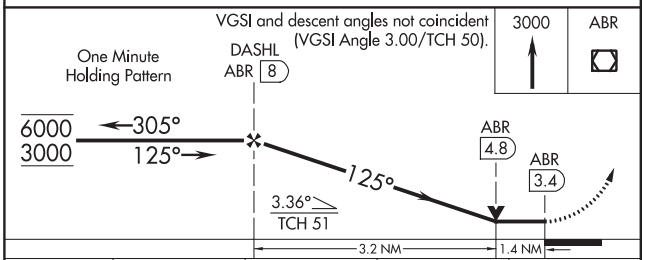
VOR RWY 13
ABERDEEN RGNL (ABR)

DME required.

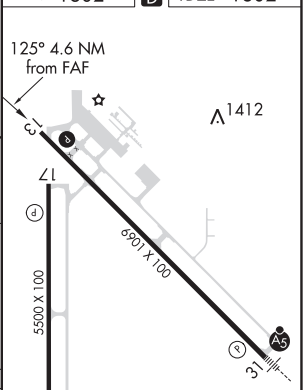
MISSED APPROACH: Climb to 3000 direct ABR VOR/DME and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
125.875	120.6 371.9	122.7 (CTAF) L





CATEGORY	A	B	C	D
S-13	1800-1 498 (500-1)		1800-1⅜ 498 (500-1⅜)	
C CIRCLING	1800-1 498 (500-1)	1860-1 558 (600-1)	1960-1¾ 658 (700-1¾)	2160-2¾ 858 (900-2¾)



NC-1, 25 FEB 2021 to 22 APR 2021

VOR/DME ABR 113.0 Chan 77	APP CRS 304°	Rwy ldg 6901 TDZE 1301 Apt Elev 1302

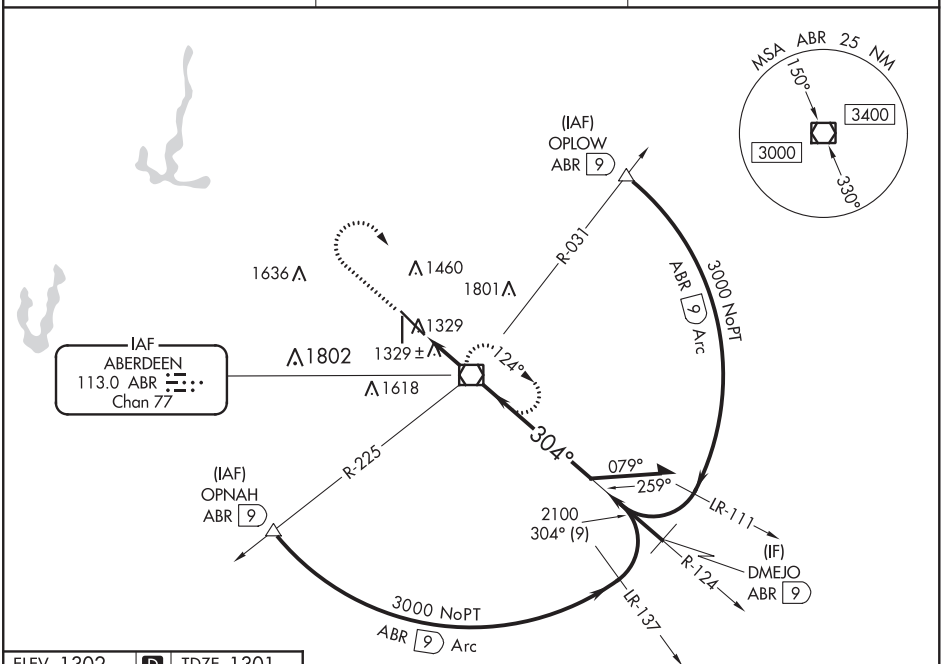
VOR RWY 31
ABERDEEN RGNL (ABR)

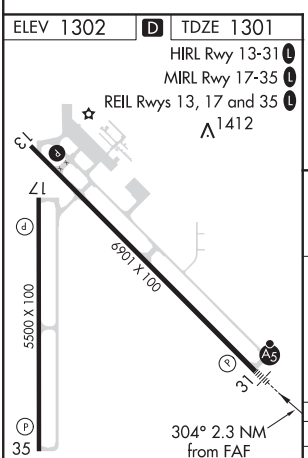
For inop ALS, increase S-31 Cat C visibility to 1 SM.

MALSR

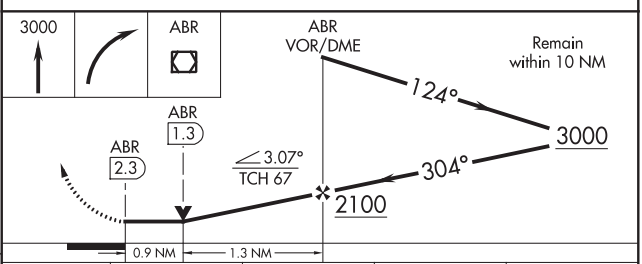
MISSED APPROACH: Climb to 3000 then right turn direct ABR VOR/DME and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
125.875	120.6 371.9	122.7 (CTAF) L





FAF to MAP 2.3 NM					
Knots	60	90	120	150	180
Min:Sec	2:18	1:32	1:09	0:55	0:46



CATEGORY	A	B	C	D
S-31	1660-½ 359 (400-½)		1660-¾ 359 (400-¾)	1660-1 359 (400-1)
C CIRCLING	1760-1 458 (500-1)	1860-1 558 (600-1)	1960-1¾ 658 (700-1¾)	2160-2¾ 858 (900-2¾)

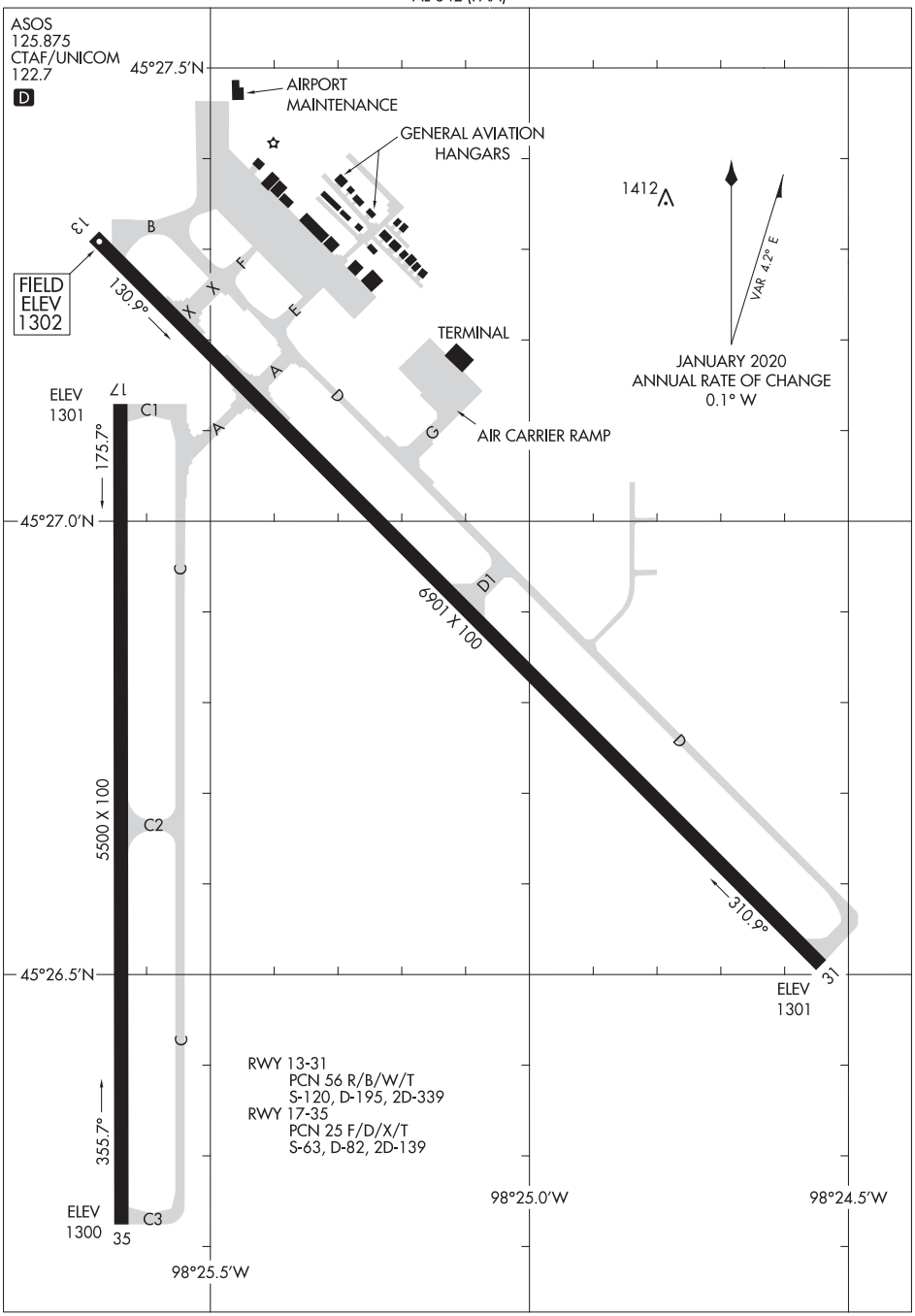
NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

20366

AIRPORT DIAGRAM

ABERDEEN RGNL (ABR)
ABERDEEN, SOUTH DAKOTA

AL-642 (FAA)



NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

AIRPORT DIAGRAM
20366
ABERDEEN, SOUTH DAKOTA
ABERDEEN RGNL (ABR)

APP CRS	Rwy ldg	3103
329°	TDZE	954
	Apt Elev	954

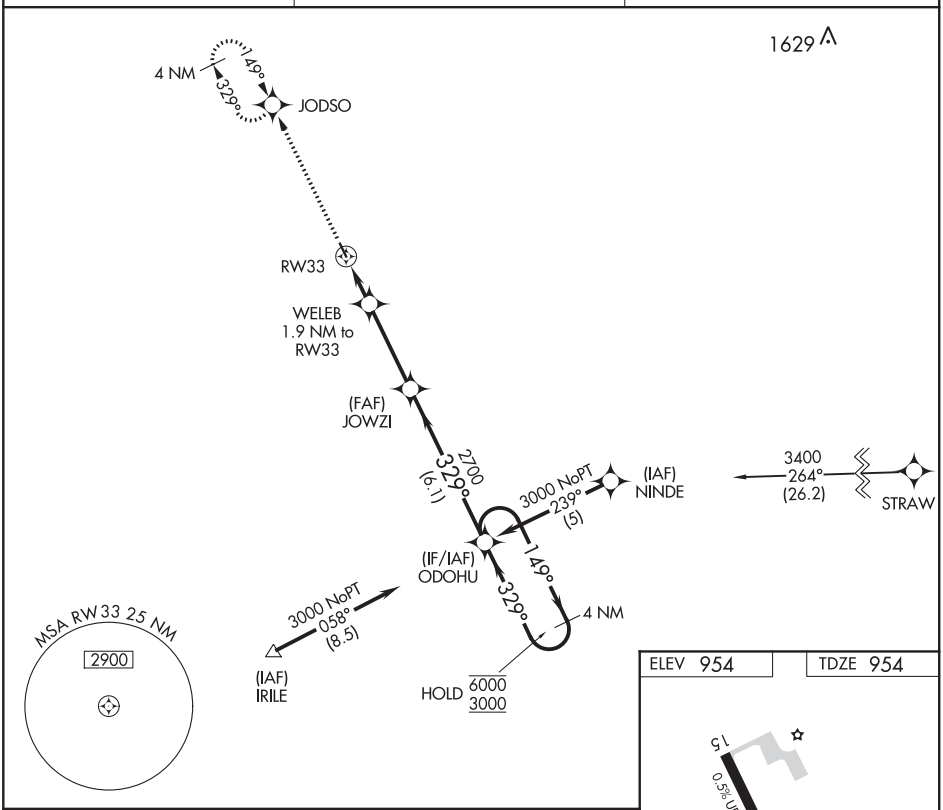
RNAV (GPS) RWY 33
NORMAN COUNTY ADA/TWIN VALLEY (DØØ)

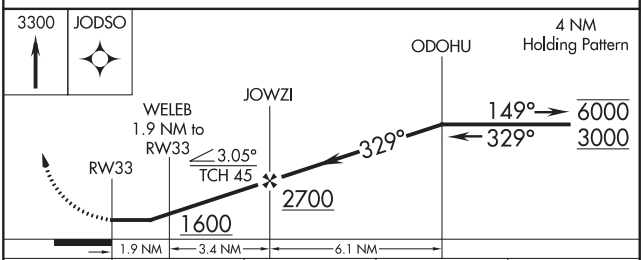
RNP APCH.

NA Procedure NA at night. Rwy 33 helicopter visibility reduction below 1 SM NA. Use Hector Intl altimeter setting.

MISSED APPROACH: Climb to 3300 direct JODSO and hold, continue climb-in-hold to 3300.

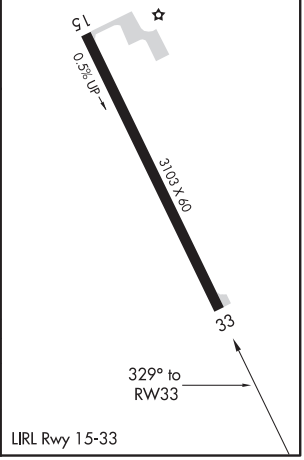
FAR ASOS	FARGO APP CON	CTAF
124.5 379.2	120.4 377.15	122.9





CATEGORY	A	B	C	D
LNAV MDA	1540-1 586 (600-1)		1540-1¾ 586 (600-1¾)	NA
CIRCLING	1540-1 586 (600-1)		1580-1¾ 626 (700-1¾)	NA

ELEV 954 TDZE 954



LIRL Rwy 15-33

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

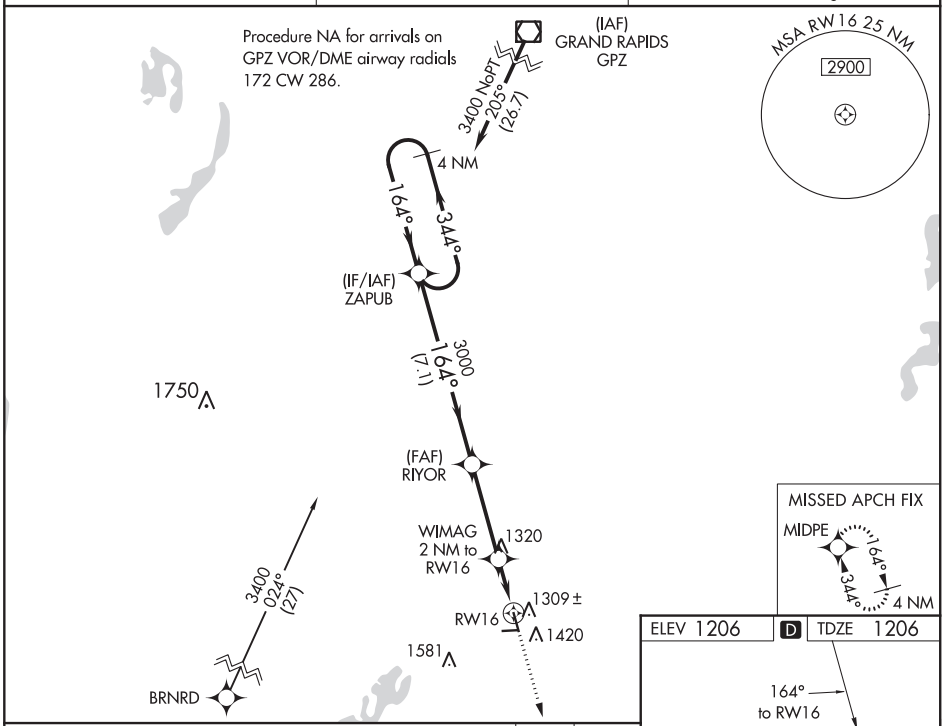
WAAS CH 78131 W16A	APP CRS 164°	Rwy ldg 4000 TDZE 1206 Apt Elev 1206

RNAV (GPS) RWY 16
AITKIN MUNI-STEVE KURTZ FIELD (AIT)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). Baro-VNAV and VDP NA when using Mc Gregor altimeter setting. DME/DME RNP-0.3 NA. When local altimeter setting not received; use Mc Gregor altimeter setting and increase all DA and MDA 40 feet; increase LPV all Cats visibilities ¼ SM, LNAV/VNAV all Cats and LNAV Cat C visibilities ⅛ SM. Circling NA to Rwys 8 and 26. Rwy 16 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3400 direct MIDPE and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.675	118.05 239.0	123.05 (CTAF) L



CATEGORY	A	B	C	D
LPV DA	1518-1 312 (400-1)			NA
LNAV/VNAV DA	1607-1⅜ 401 (500-1⅜)			NA
LNAV MDA	1560-1 354 (400-1)			NA
C CIRCLING	1780-1 574 (600-1)		1900-2 694 (700-2)	NA

NC-1, 25 FEB 2021 to 22 APR 2021

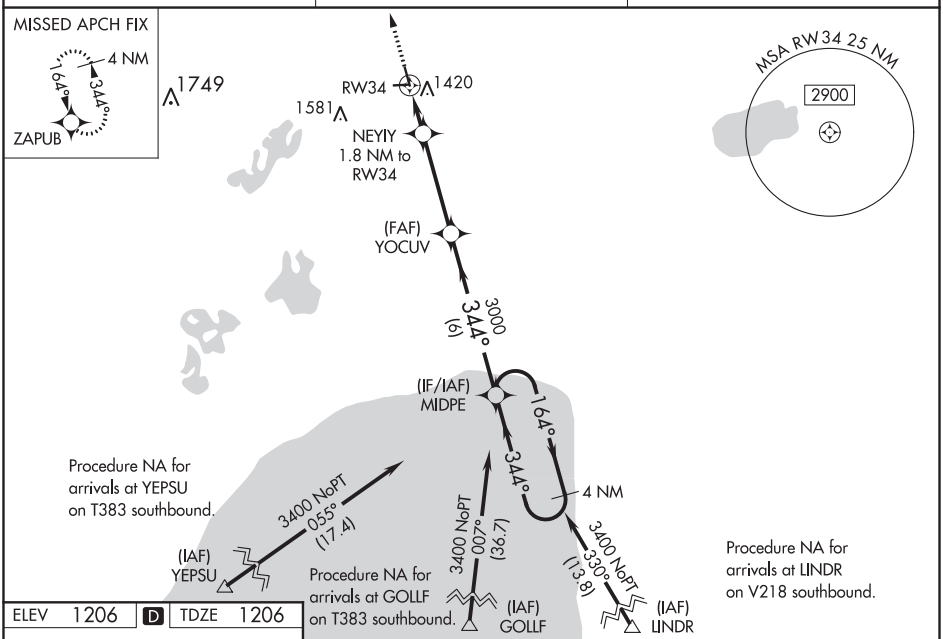
WAAS CH 82431 W34A	APP CRS 344°	Rwy ldg 4000 TDZE 1206 Apt Elev 1206

RNAV (GPS) RWY 34
AITKIN MUNI-STEVE KURTZ FIELD (AIT)

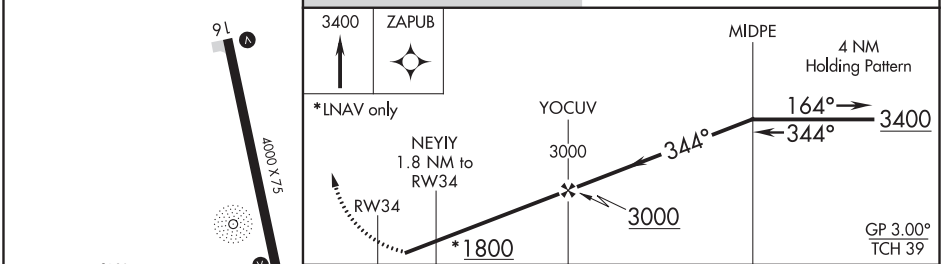
T A Baro-VNAV NA when using Mc Gregor altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received; use Mc Gregor altimeter setting and increase all DA 40 feet and all visibilities ⅛ SM, increase all MDA 40 feet and LNAV Cat C visibility ¼ SM. Circling NA to Rwys 8 and 26. Rwy 34 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3400 direct ZAPUB and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.675	118.05 239.0	123.05 (CTAF) L



ELEV 1206 D TDZE 1206



CATEGORY	A	B	C	D
LPV DA	1548-1⅛ 342 (400-1⅛)			NA
LNAV/VNAV DA	1620-1⅜ 414 (500-1⅜)			NA
LNAV MDA	1720-1 514 (600-1)		1720-1⅜ 514 (600-1⅜)	NA
C CIRCLING	1780-1 574 (600-1)		1900-2 694 (700-2)	NA

REIL Rwys 16 and 34 L
MIRL Rwy 16-34 L

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AITKIN, MINNESOTA | AL-6406 (FAA) | 20310

NDB AIT	APP CRS	Rwy ldg	4000
397	169°	TDZE	1206
		Apt Elev	1206

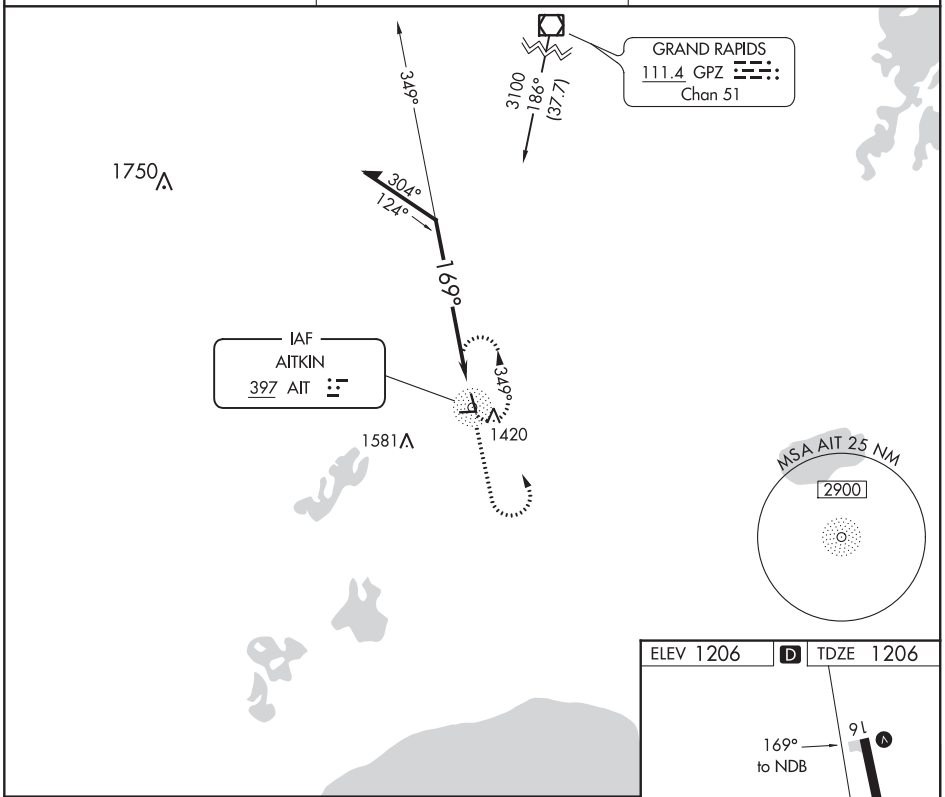
NDB RWY 16

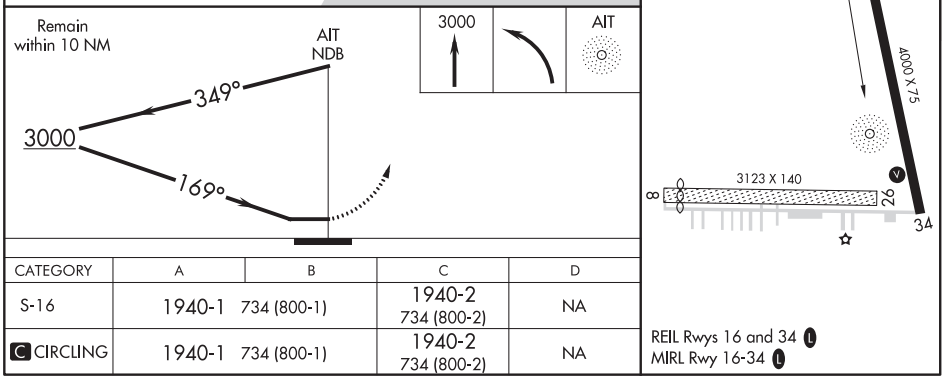
AITKIN MUNI-STEVE KURTZ FIELD (AIT)

T A NA — Rwy 16 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use McGregor altimeter setting and increase all MDA 40 feet, all Cat B visibilities ¼ mile and all Cat C visibilities ½ mile. Circling NA to Rwys 8 and 26.

MISSED APPROACH: Climb to 3000 then left turn direct AIT NDB and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.675	118.05 239.0	123.05 (CTAF) L





CATEGORY	A	B	C	D
S-16	1940-1	734 (800-1)	1940-2 734 (800-2)	NA
C CIRCLING	1940-1	734 (800-1)	1940-2 734 (800-2)	NA

REIL Rwys 16 and 34 L
MIRL Rwy 16-34 L

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WAAS CH 49204 W17A	APP CRS 167°	Rwy ldg 5000 TDZE 1260 Apt Elev 1261

RNAV (GPS) RWY 17
ALBERT LEA MUNI (AEL)

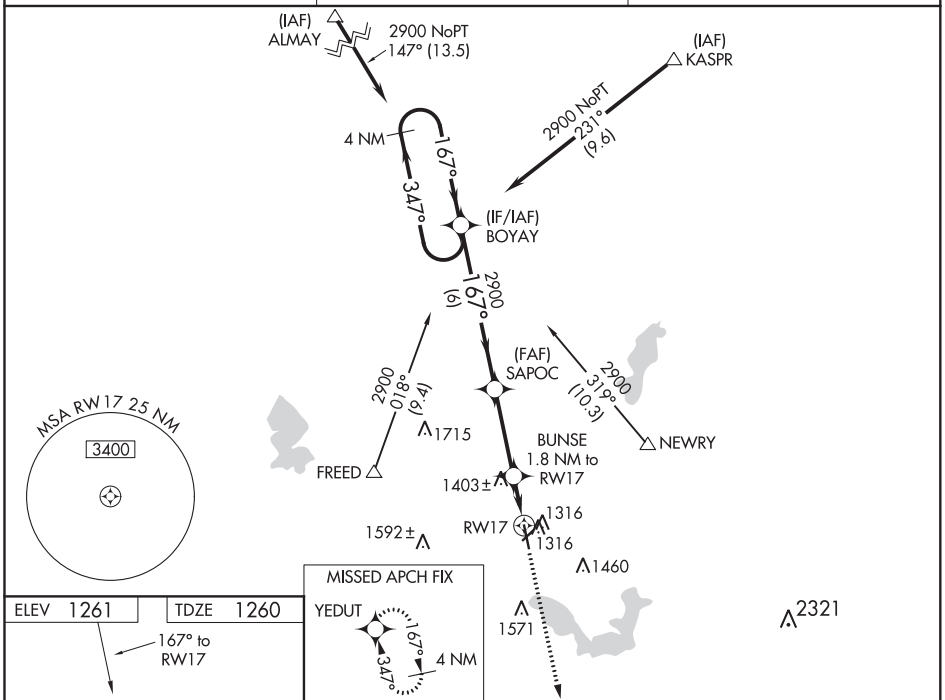
RNP APCH.

Baro-VNAV NA when using Austin altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -28°C or above 36°C. Rwy 17 helicopter visibility reduction below ¾ SM NA. VDP NA with Austin altimeter setting. When local altimeter setting not received, use Austin altimeter setting and increase all DA 48 feet and all MDA 60 feet; increase LPV and LNAV/VNAV visibility ¼ mile all Cats, and LNAV Cat C/D visibility ⅛ mile.

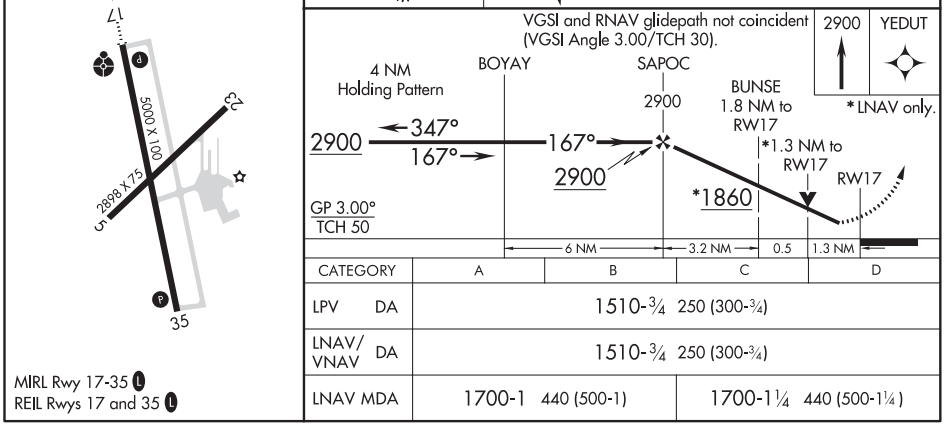
ODALS

MISSED APPROACH: Climb to 2900 direct YEDUT and hold.

AWOS-3	ROCHESTER APP CON ★	UNICOM
109.8	119.8 251.125	123.0 (CTAF) L



ELEV 1261 TDZE 1260



CATEGORY	A	B	C	D
LPV DA	1510-¾ 250 (300-¾)			
LNAV/VNAV DA	1510-¾ 250 (300-¾)			
LNAV MDA	1700-1 440 (500-1)		1700-1¼ 440 (500-1¼)	

MIRL Rwy 17-35 L
REIL Rwys 17 and 35 L

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ALBERT LEA, MINNESOTA — AL-5420 (FAA) — 19199

RNAV (GPS) RWY 35
ALBERT LEA MUNI (AEL)

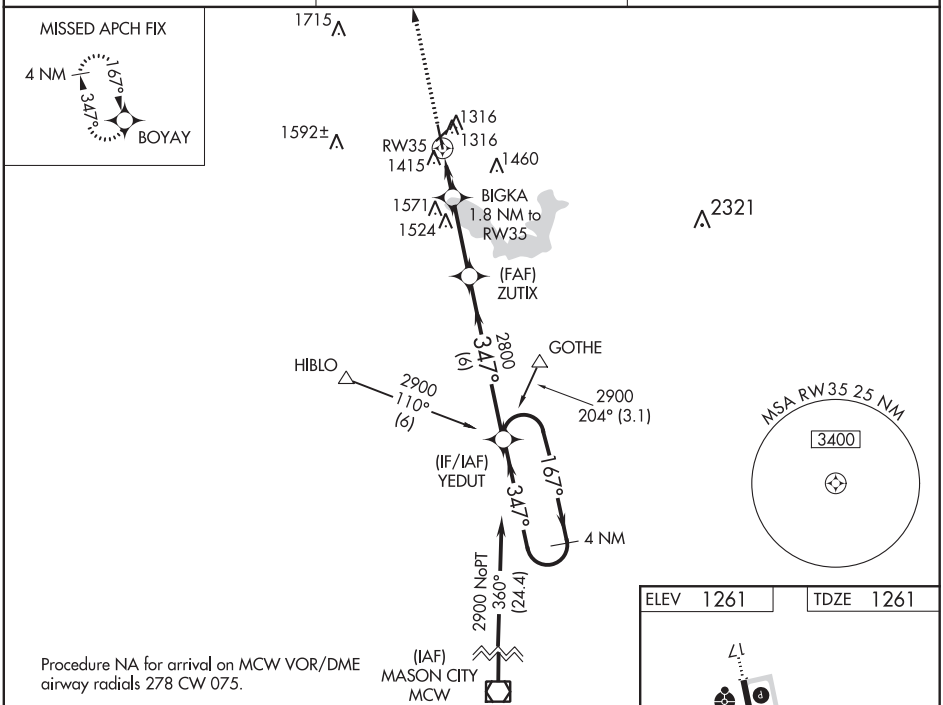
WAAS CH 53625 W35A	APP CRS 347°	Rwy ldg 5000 / TDZE 1261 / Apt Elev 1261

RNP APCH.

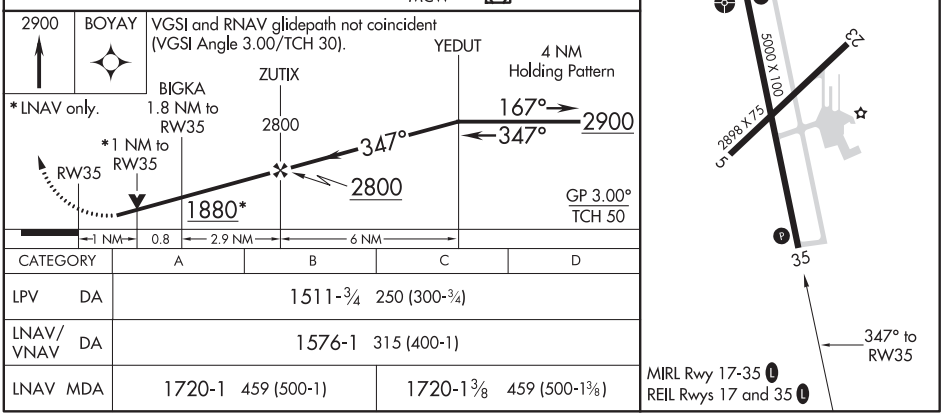
Baro-VNAV NA when using Austin altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -28°C or above 36°C. VDP NA with Austin altimeter setting. Rwy 35 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Austin altimeter setting and increase all DA 48 feet and all MDA 60 feet; increase LPV and LNAV/VNAV visibility ¼ mile all Cats.

MISSED APPROACH: Climb to 2900 direct BOYAY and hold.

AWOS-3	ROCHESTER APP CON *	UNICOM
109.8	119.8 251.125	123.0 (CTAF) L



Procedure NA for arrival on MCW VOR/DME airway radials 278 CW 075.



CATEGORY		A	B	C	D
LPV	DA	1511-¾ 250 (300-¾)			
LNAV/VNAV	DA	1576-1 315 (400-1)			
LNAV	MDA	1720-1 459 (500-1)		1720-1⅜ 459 (500-1⅜)	

ALBERT LEA, MINNESOTA
Amdt 1C 18JUL19

43°41′N-93°22′W

ALBERT LEA MUNI (AEL)
RNAV (GPS) RWY 35

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

VOR/DME AEL 109.8 Chan 35	APP CRS 173°	Rwy ldg 5000 TDZE 1260 Apt Elev 1261

VOR RWY 17
ALBERT LEA MUNI (AEL)

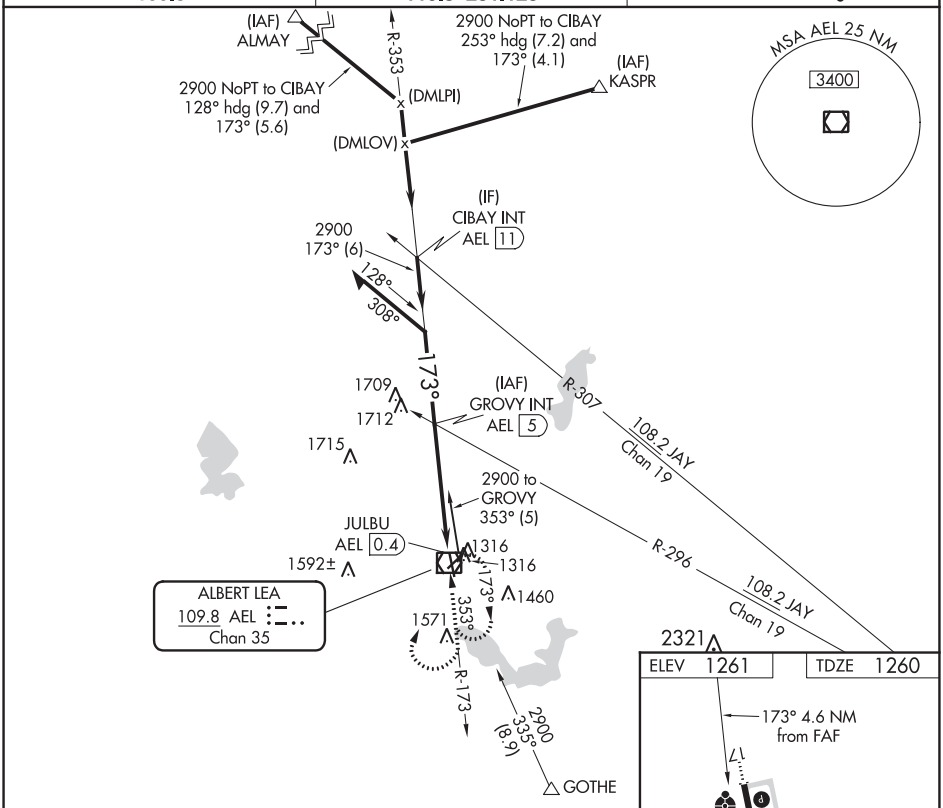
DME required.

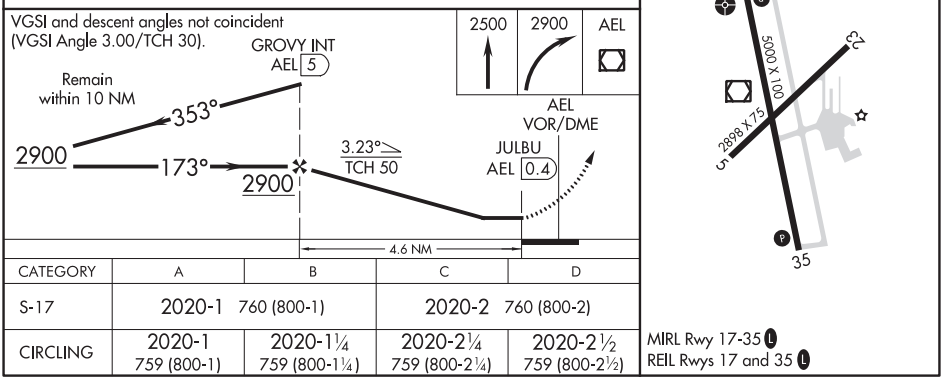
Circling Rwy 5, 23 NA at night. Rwy 17 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Austin altimeter setting and increase all MDA 60 feet; increase S-17 Cat C/D visibility ½ SM.

ODALS

MISSED APPROACH: Climb to 2500 then climbing right turn to 2900 direct AEL VOR/DME and hold.

AWOS-3	ROCHESTER APP CON ★	UNICOM
109.8	119.8 251.125	123.0 (CTAF) L





CATEGORY	A	B	C	D
S-17	2020-1 760 (800-1)		2020-2 760 (800-2)	
CIRCLING	2020-1 759 (800-1)	2020-1¼ 759 (800-1¼)	2020-2¼ 759 (800-2¼)	2020-2½ 759 (800-2½)

MIRL Rwy 17-35 L
REIL Rwys 17 and 35 L

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

VOR/DME AEL 109.8 Chan 35	APP CRS 342°	Rwy ldg 5000 TDZE 1261 Apt Elev 1261

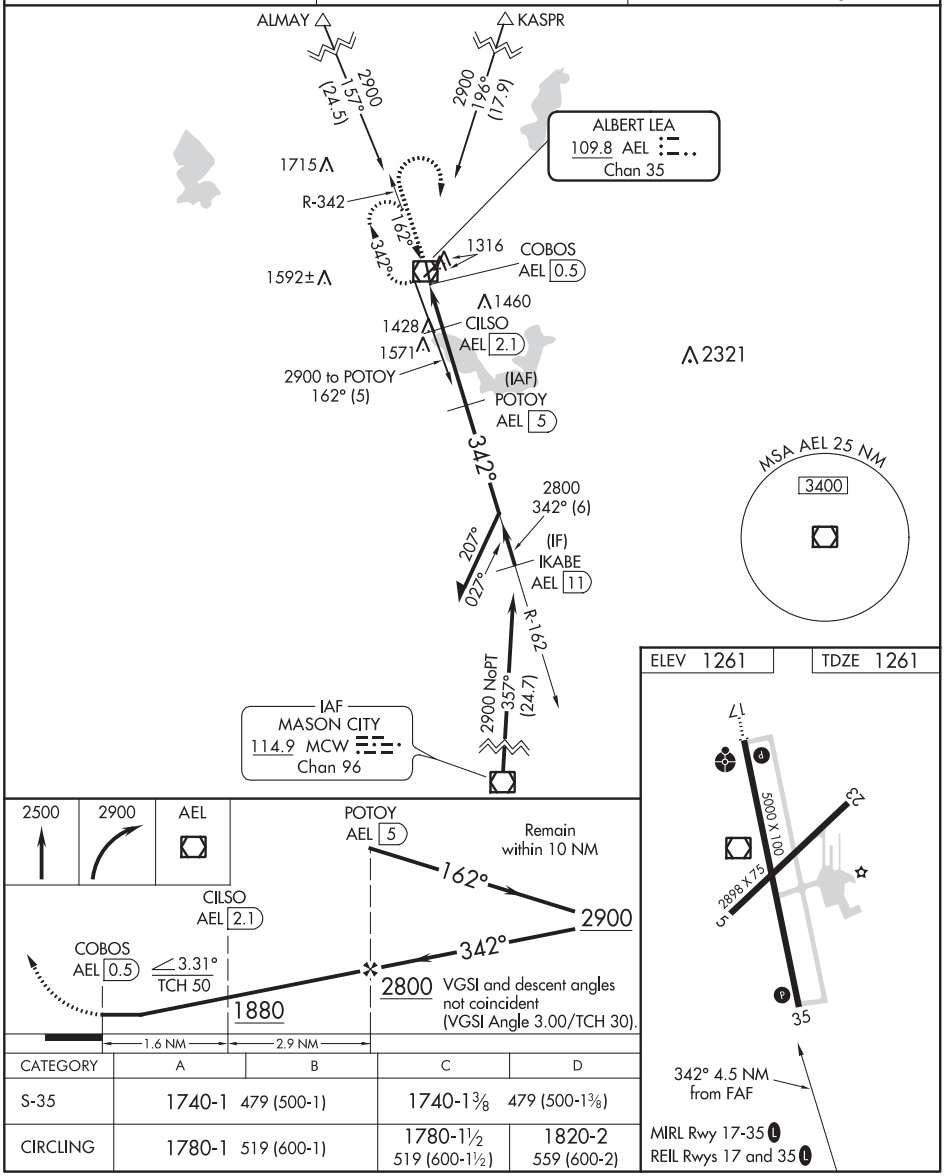
VOR RWY 35
ALBERT LEA MUNI (AEL)

DME required.

Circling Rwy 5, 23 NA at night.
Rwy 35 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 2500 then climbing right turn to 2900 direct AEL VOR/DME and hold.

AWOS-3	ROCHESTER APP CON ★	UNICOM
109.8	119.8 251.125	123.0 (CTAF) L



CATEGORY	A	B	C	D
S-35	1740-1 479 (500-1)		1740-1⅜ 479 (500-1⅜)	
CIRCLING	1780-1 519 (600-1)		1780-1½ 519 (600-1½)	1820-2 559 (600-2)

NC-1, 25 FEB 2021 to 22 APR 2021

LOC I-EEZ	APP CRS	Rwy ldg	5099
110.5	315°	TDZE	1423
		Apt Elev	1425

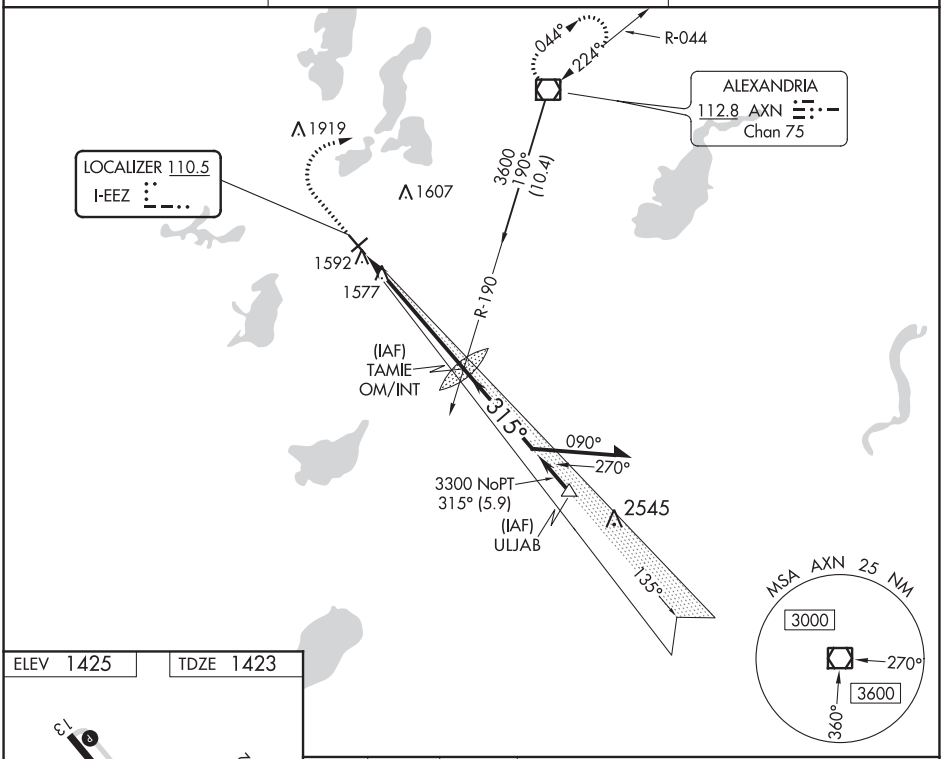
ILS or LOC RWY 31
CHANDLER FIELD (AXN)

T NA — Inoperative table does not apply to S-LOC 31 Category C.

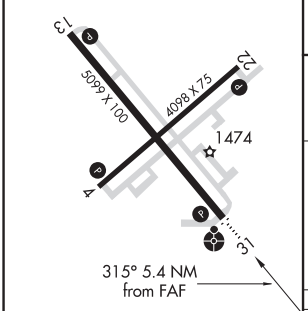
ODALS

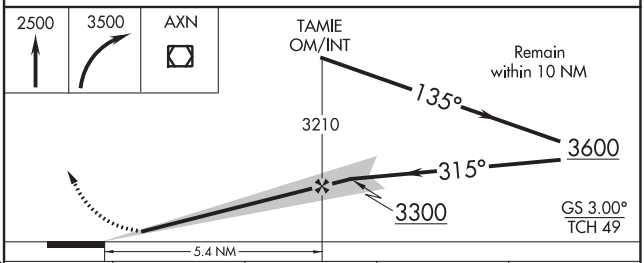
MISSED APPROACH: Climb to 2500 then climbing right turn to 3500 direct AXN VOR/DME and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
118.375	126.1 269.2	123.0 (CTAF) L



ELEV 1425 TDZE 1423





REIL Rwys 4,13 and 22 L
MIRL Rwys 4-22 and 13-31 L

FAF to MAP 5.4 NM					
Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

CATEGORY	A	B	C	D
S-ILS 31	1673-¾ 250 (300-¾)			
S-LOC 31	1840-¾ 417 (500-¾)		1840-1¼ 417 (500-1¼)	
CIRCLING	1920-1 495 (500-1)		1920-1½ 495 (500-1½)	1980-2 555 (600-2)

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 48917 W22A	APP CRS 225°	Rwy ldg 4098 TDZE 1424 Apt Elev 1425

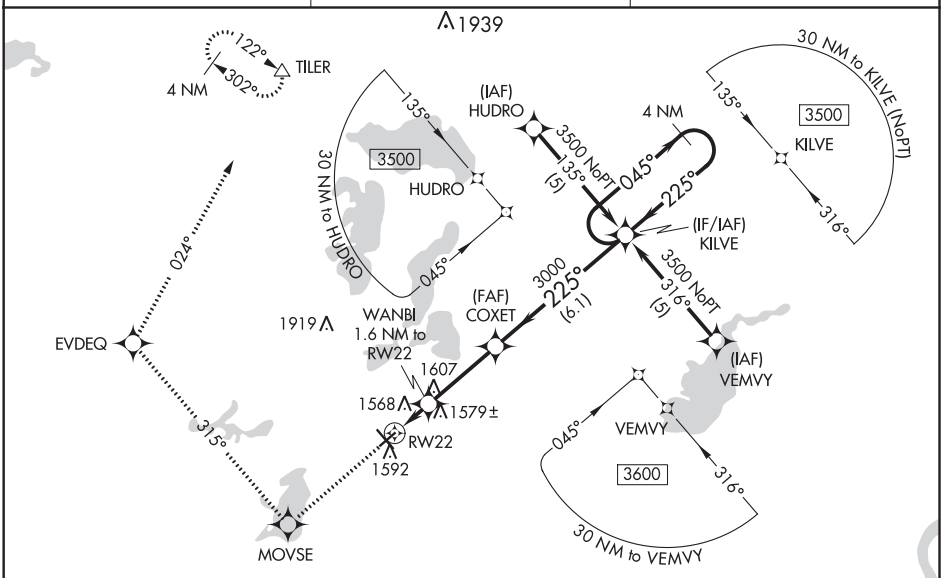
RNAV (GPS) RWY 22
CHANDLER FIELD (AXN)

RNP APCH.

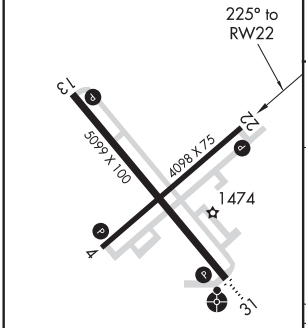
Baro-VNAV NA when using Glenwood altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 46°C. When local altimeter setting not received, use Glenwood altimeter setting and increase all DA 37 feet and all MDA 40 feet, increase LNAV/VNAV all Cats and LNAV Cat D visibility ¼ mile. Rwy 22 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3500 direct MOVSE and right turn on track 315° to EVDEQ and on track 024° to TILER and hold.

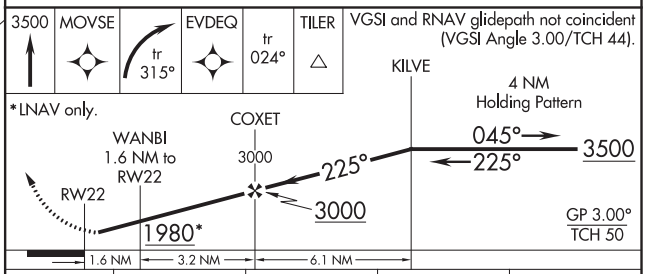
ASOS	MINNEAPOLIS CENTER	UNICOM
118.375	126.1 269.2	123.0 (CTAF) L



ELEV 1425 TDZE 1424



REIL Rwys 4, 13 and 22 L
MIRL Rwys 4-22 and 13-31 L



CATEGORY	A	B	C	D
LPV DA	1677-1 253 (300-1)			
LNAV/VNAV DA	1880-1½ 456 (500-1½)			
LNAV MDA	1840-1 416 (500-1)		1840-1¼ 416 (500-1¼)	

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 61007 W31A	APP CRS 315°	Rwy ldg 5099 TDZE 1423 Apt Elev 1424

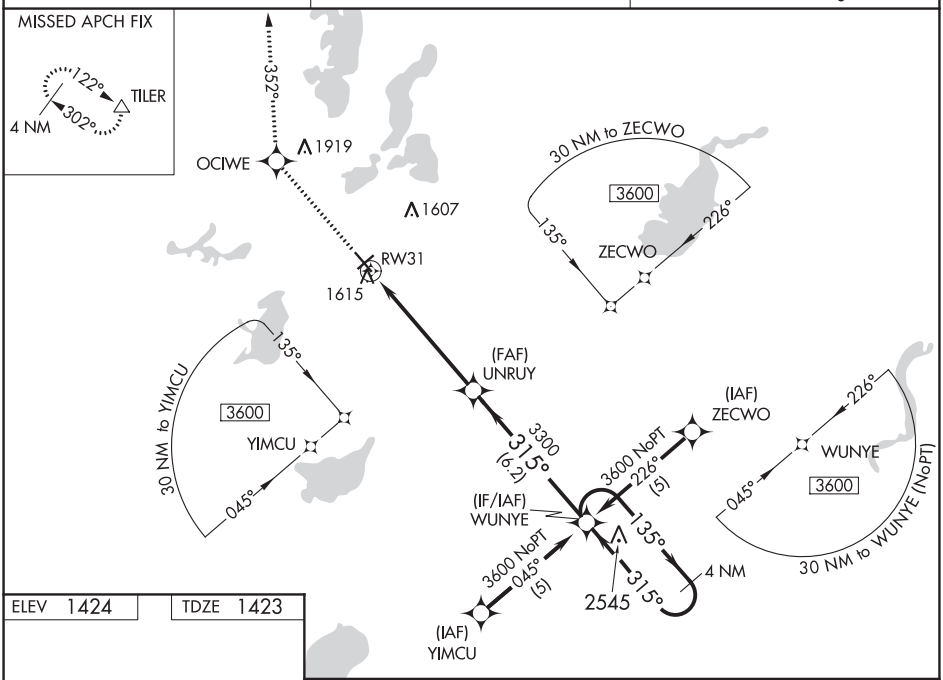
RNAV (GPS) RWY 31
CHANDLER FIELD (AXN)

T A Inoperative table does not apply to LPV & LNAV/VNAV Cats A/B/C and LNAV Cat C. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP -0.3 NA. VDP and Baro-VNAV NA when using Glenwood altimeter setting. When local altimeter setting not received, use Glenwood altimeter setting and increase all DAs/MDAs 40 feet and increase LPV and LNAV/VNAV visibilities ¼ mile all Cats.

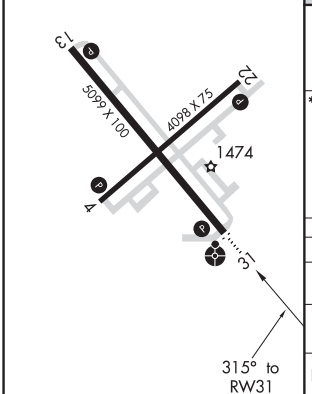
ODALS

MISSED APPROACH: Climb to 3500 direct OCIWE and via 352° track to TILER and hold.

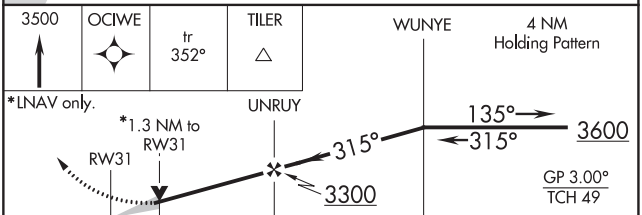
ASOS	MINNEAPOLIS CENTER	UNICOM
118.375	126.1 269.2	123.0 (CTAF) L



ELEV 1424 TDZE 1423



REIL Rwys 4, 13 and 22 L
MIRL Rwys 4-22 and 13-31 L



CATEGORY	A	B	C	D
LPV DA	1815-1¼ 392 (400-1¼)			
LNAV/VNAV DA	1885-1½ 462 (500-1½)			
LNAV MDA	1880-¾ 457 (500-¾)		1880-1¼ 457 (500-1¼)	1880-1½ 457 (500-1½)
CIRCLING	1920-1 496 (500-1)		1920-1½ 496 (500-1½)	1980-2 556 (600-2)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

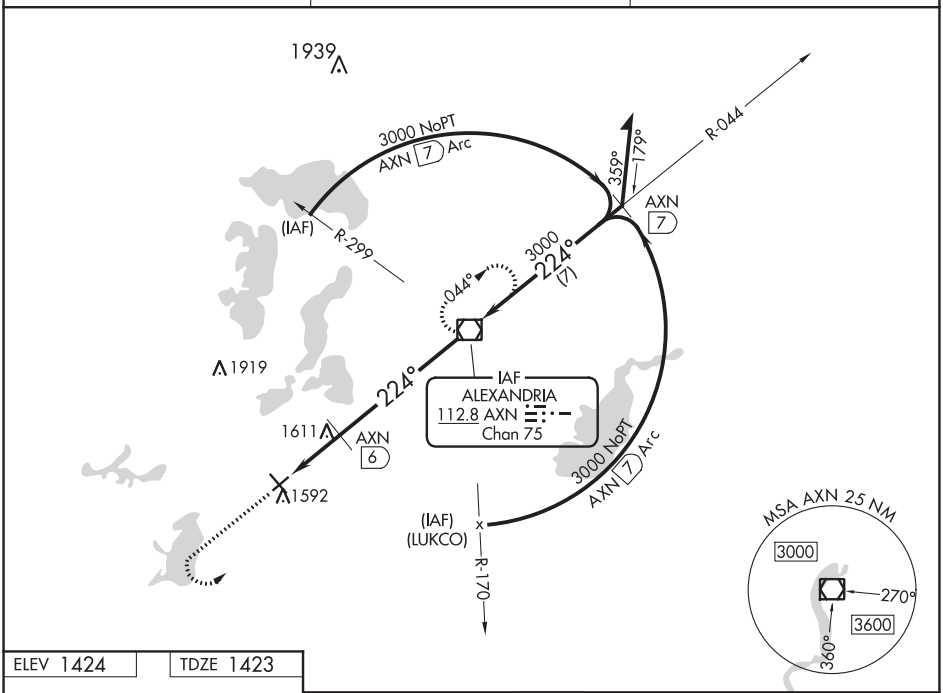
VOR/DME AXN 112.8 Chan 75	APP CRS 224°	Rwy ldg 4098 TDZE 1423 Apt Elev 1424

VOR RWY 22
CHANDLER FIELD (AXN)

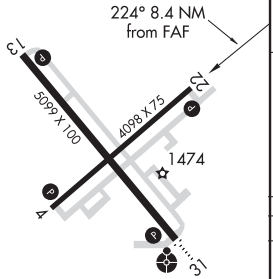
Rwy 22 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 2500 then climbing left turn to 3000 direct to AXN VOR/DME and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
118.375	126.1 269.2	123.0 (CTAF) L

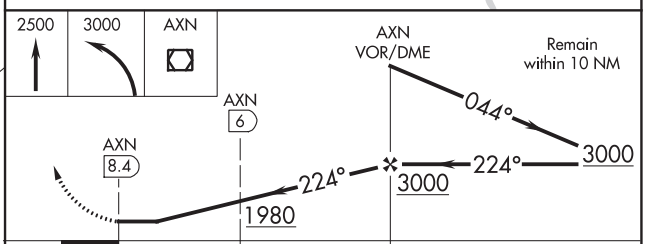


ELEV 1424 TDZE 1423



REIL Rwys 4, 13 and 22 L
MIRL Rwys 4-22 and 13-31 L

FAF to MAP 8.4 NM					
Knots	60	90	120	150	180
Min:Sec	8:24	5:36	4:12	3:22	2:48



CATEGORY	A	B	C	D
S-22	1980-1 557 (600-1)		1980-1½ 557 (600-1½)	1980-1¾ 557 (600-1¾)
CIRCLING	1980-1 556 (600-1)		1980-1½ 556 (600-1½)	1980-2 556 (600-2)
DME MINIMUMS				
S-22	1880-1 457 (500-1)		1880-1¼ 457 (500-1¼)	1880-1½ 457 (500-1½)
CIRCLING	1920-1 496 (500-1)		1920-1½ 496 (500-1½)	1980-2 556 (600-2)

NC-1, 25 FEB 2021 to 22 APR 2021

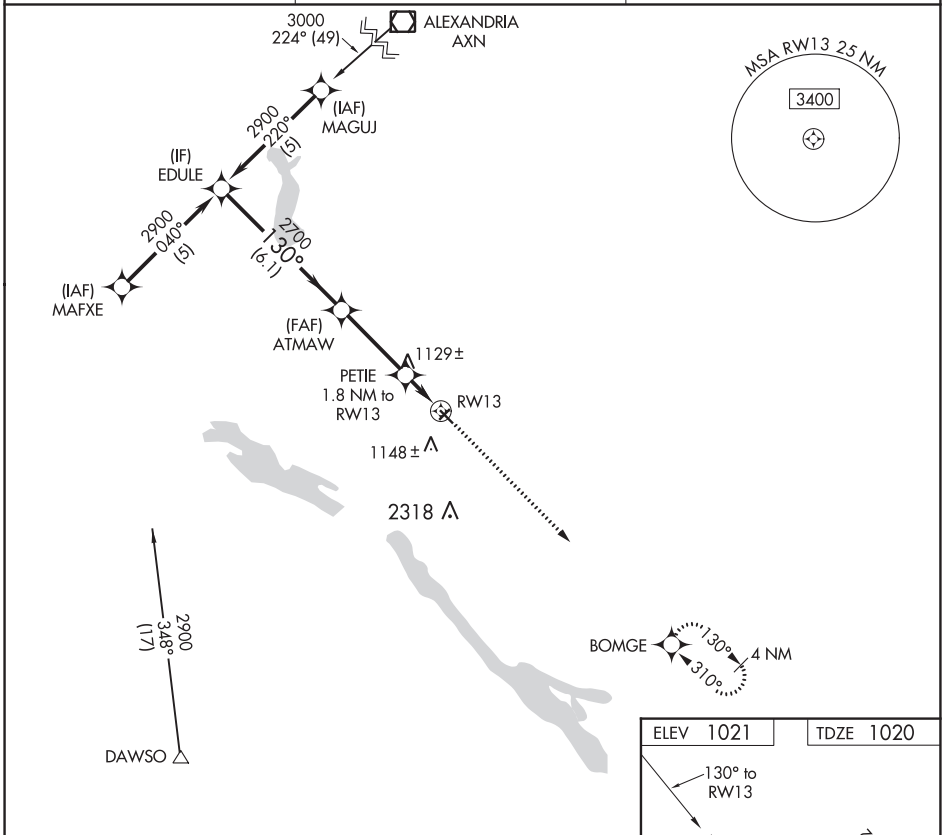
APP CRS	Rwy ldg	3500
130°	TDZE	1020
	Apt Elev	1021

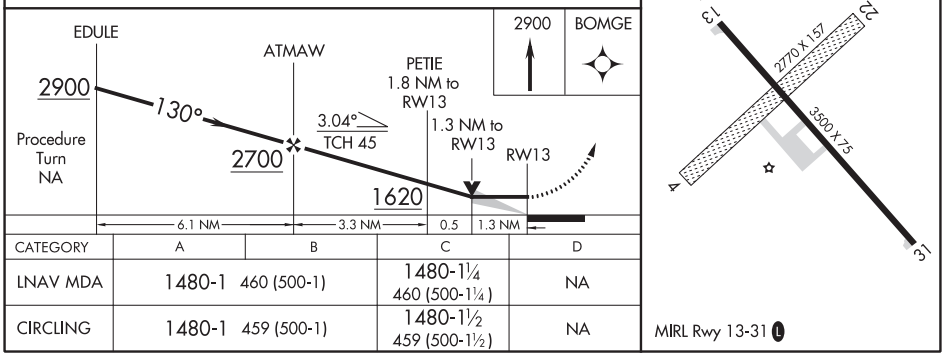
RNAV (GPS) RWY 13
APPLETON MUNI (AQP)

Circling NA at night. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Benson altimeter setting and increase all MDA 40 feet. VDP NA with Benson altimeter setting.

MISSED APPROACH: Climb to 2900 direct BOMGE and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
118.5	127.1 290.2	122.9 L





CATEGORY	A	B	C	D
LNAV MDA	1480-1 460 (500-1)		1480-1¼ 460 (500-1¼)	NA
CIRCLING	1480-1 459 (500-1)		1480-1½ 459 (500-1½)	NA

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

LOC I-AUM	APP CRS	Rwy ldg	5800
110.55	351°	TDZE	1231
		Apt Elev	1234

ILS or LOC RWY 35
AUSTIN MUNI (AUM)

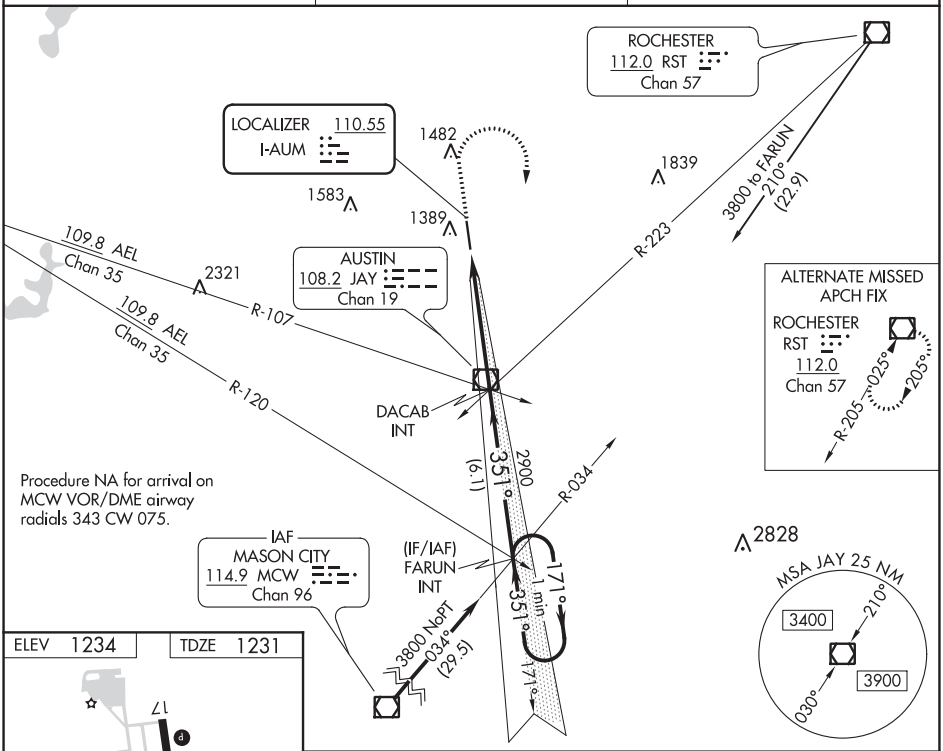
When local altimeter setting not received, use Albert Lea altimeter setting and increase all DA 48 feet and all MDA 60 feet; increase Circling Cat C/D visibility ¼ SM. For inoperative MALSR, increase S-LOC 35 Cats C and D visibility to 1⅜ mile.

NA

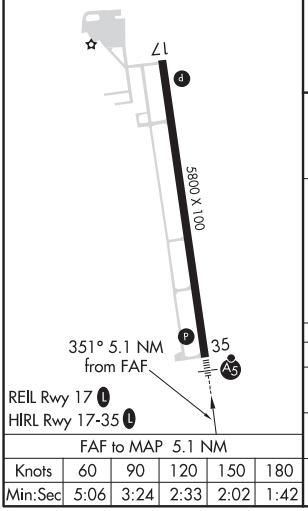
MALSR

MISSED APPROACH: Climb to 1800 then climbing right turn to 3800 on heading 179° and MCW VOR/DME R-034 to FARUN INT and hold.

AWOS-3	ROCHESTER APP CON★	UNICOM
119.025	119.8 251.125	122.7 (CTAF) L



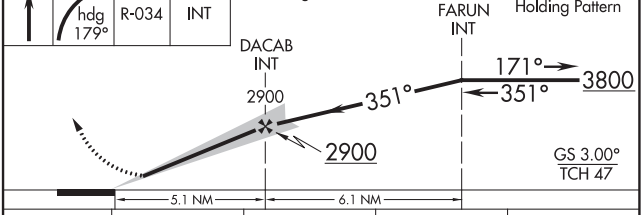
ELEV 1234	TDZE 1231



FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

1800	3800 hdg 179°	MCW R-034	FARUN INT

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 42).



CATEGORY	A	B	C	D
S-ILS 35	1431-½ 200 (200-½)			
S-LOC 35	1700-½ 469 (500-½)		1700-1 469 (500-1)	
C CIRCLING	1740-1 506 (600-1)		1800-1½ 566 (600-1½)	1880-2 646 (700-2)

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 82132 W17A	APP CRS 172°	Rwy ldg 5800 TDZE 1234 Apt Elev 1234

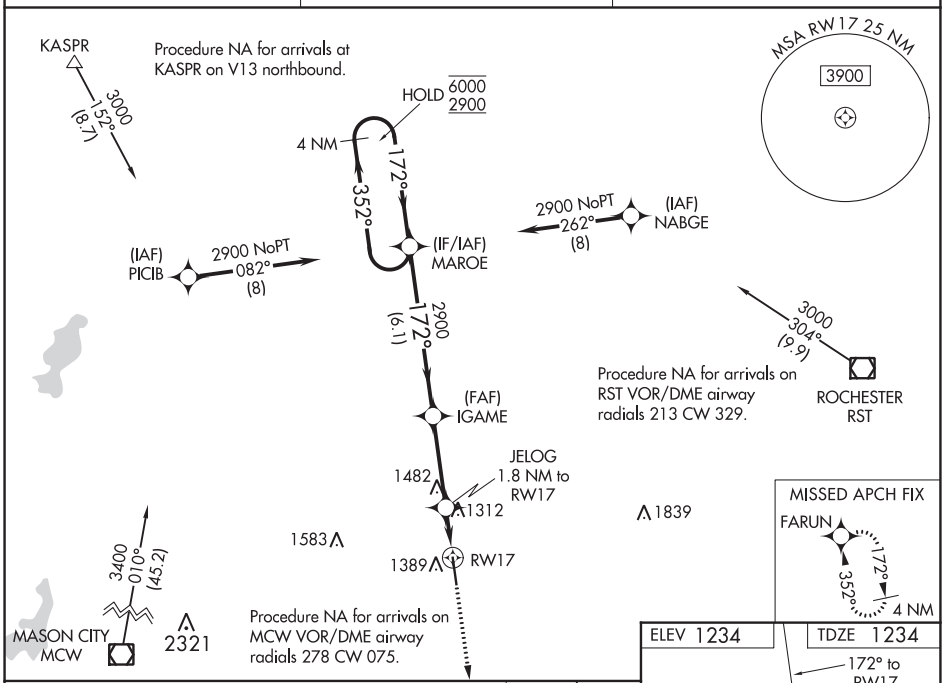
RNAV (GPS) RWY 17
AUSTIN MUNI (AUM)

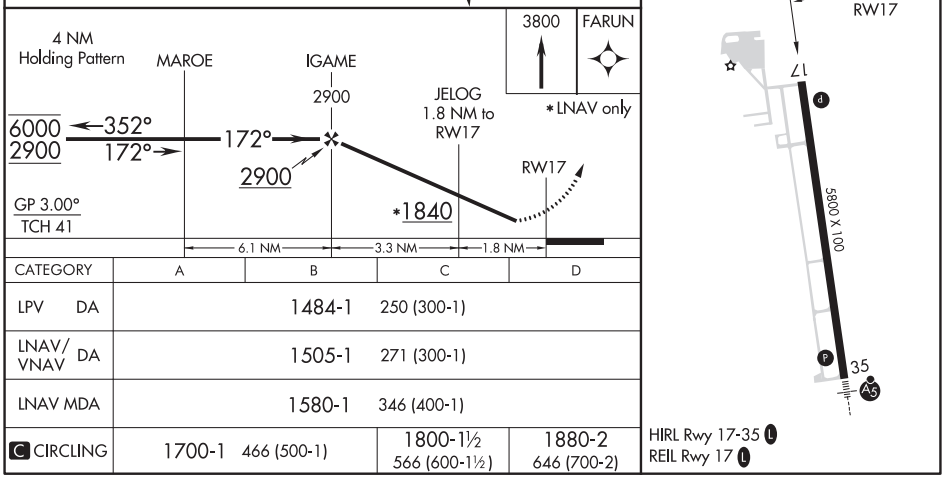
RNP APCH.

Rwy 17 helicopter visibility reduction below ¾ SM NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C.

MISSED APPROACH: Climb to 3800 direct FARUN and hold.

AWOS-3	ROCHESTER APP CON*	UNICOM
119.025	119.8 251.125	122.7 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1484-1 250 (300-1)			
LNAV/VNAV DA	1505-1 271 (300-1)			
LNAV MDA	1580-1 346 (400-1)			
C CIRCLING	1700-1 466 (500-1)		1800-1½ 566 (600-1½)	1880-2 646 (700-2)

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AUSTIN, MINNESOTA | AL-5090 (FAA) | 20142

RNAV (GPS) RWY 35
AUSTIN MUNI (AUM)

WAAS CH 99506 W35A	APP CRS 352°	Rwy ldg 5800 TDZE 1231 Apt Elev 1234

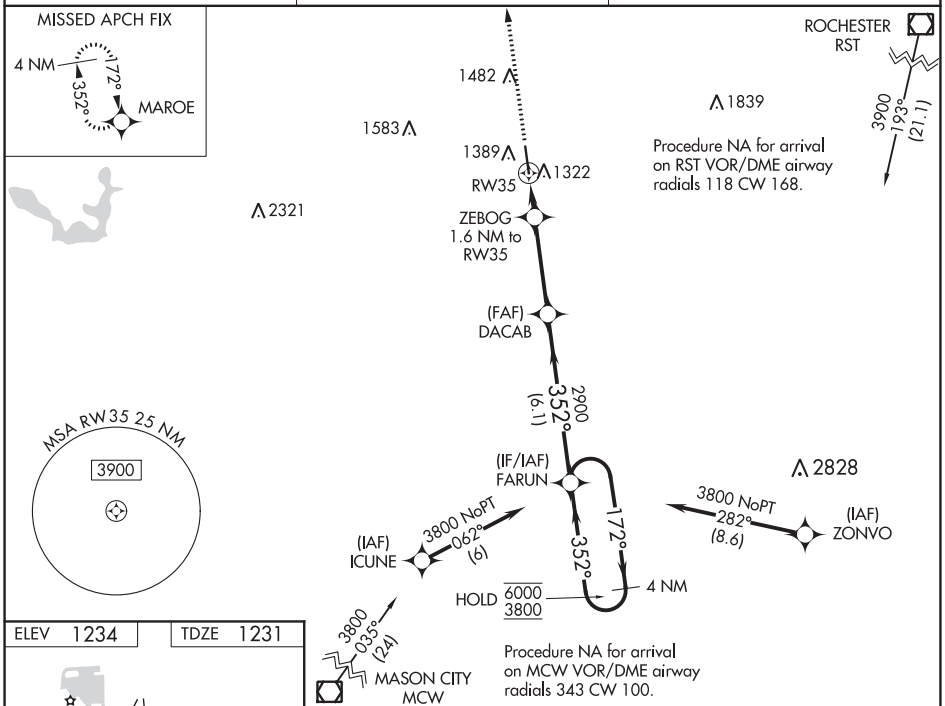
RNP APCH.

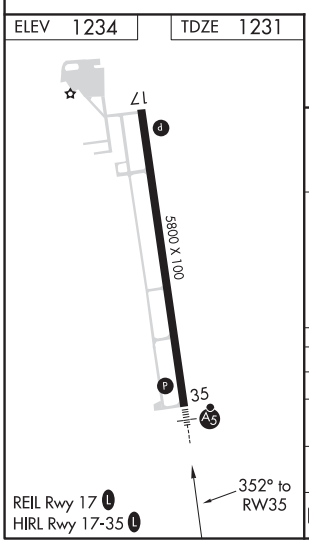
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. For inop ALS increase LNAV/VNAV all Cats visibility to ¾ SM and LNAV Cats C/D visibility to 1 SM.

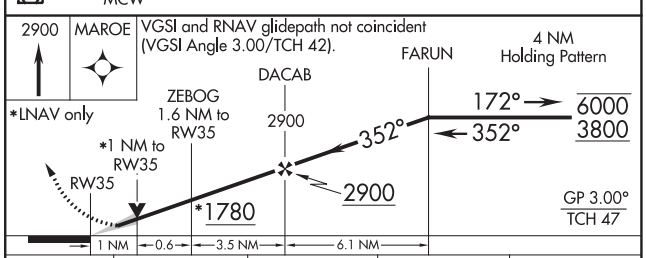
MALSR

MISSED APPROACH: Climb to 2900 direct MAROE and hold.

AWOS-3	ROCHESTER APP CON ★	UNICOM
119.025	119.8 251.125	122.7 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1431-½ 200 (200-½)			
LNAV/VNAV DA	1483-½ 252 (300-½)			
LNAV MDA	1580-½ 349 (400-½)		1580-⅝ 349 (400-⅝)	
C CIRCLING	1700-1 466 (500-1)		1800-1½ 566 (600-1½)	1880-2 646 (700-2)

AUSTIN, MINNESOTA
Amdt 2A 21MAY20

43°40′N-92°56′W

AUSTIN MUNI (AUM)
RNAV (GPS) RWY 35

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

VOR/DME JAY 108.2 Chan 19	APP CRS 173°	Rwy ldg 5800 TDZE 1234 Apt Elev 1234

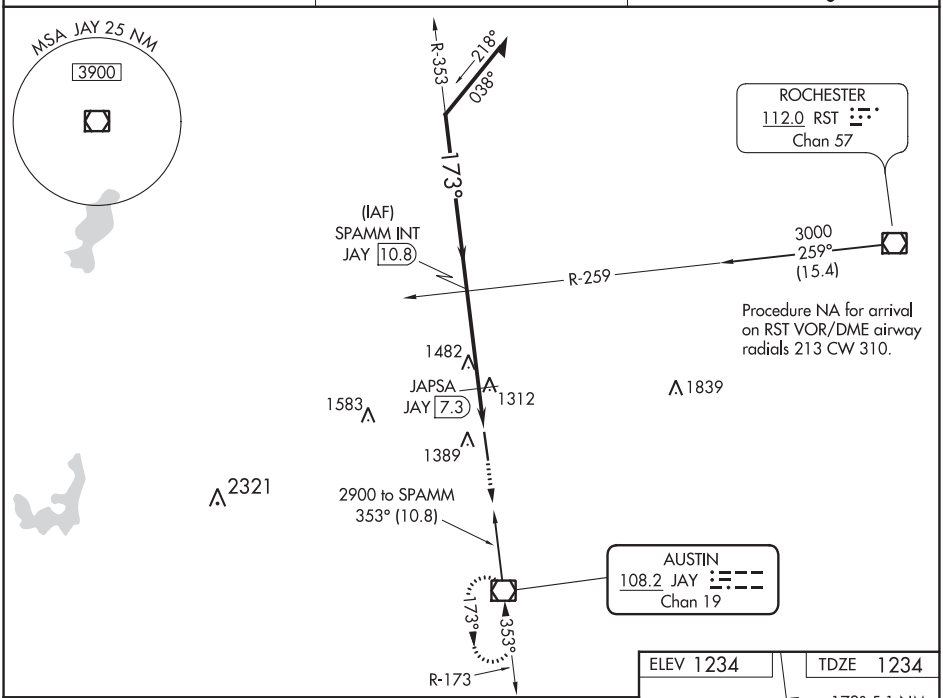
VOR RWY 17
AUSTIN MUNI (AUM)

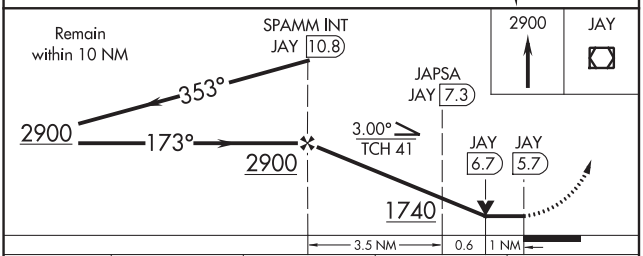
T
A NA

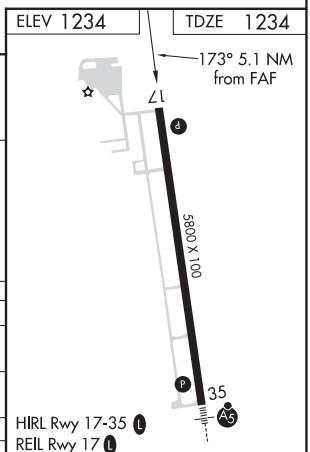
Helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 2900 direct JAY VOR/DME and hold.

AWOS-3	ROCHESTER APP CON ★	UNICOM
119.025	119.8 251.125	122.7 (CTAF) L







CATEGORY	A	B	C	D
S-17	1740-1 506 (600-1)		1740-1⅜ 506 (600-1⅜)	
C CIRCLING	1740-1 506 (600-1)		1800-1½ 566 (600-1½)	1880-2 646 (600-2)
JAPSA DME FIX MINIMUMS				
S-17	1600-1 366 (400-1)			
C CIRCLING	1700-1 466 (500-1)		1800-1½ 566 (600-1½)	1880-2 646 (700-2)

FAF to MAP 5.1 NM

Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

LOC I-BDE	APP CRS	Rwy ldg	5498
108.3	299°	TDZE	1085
		Apt Elev	1085

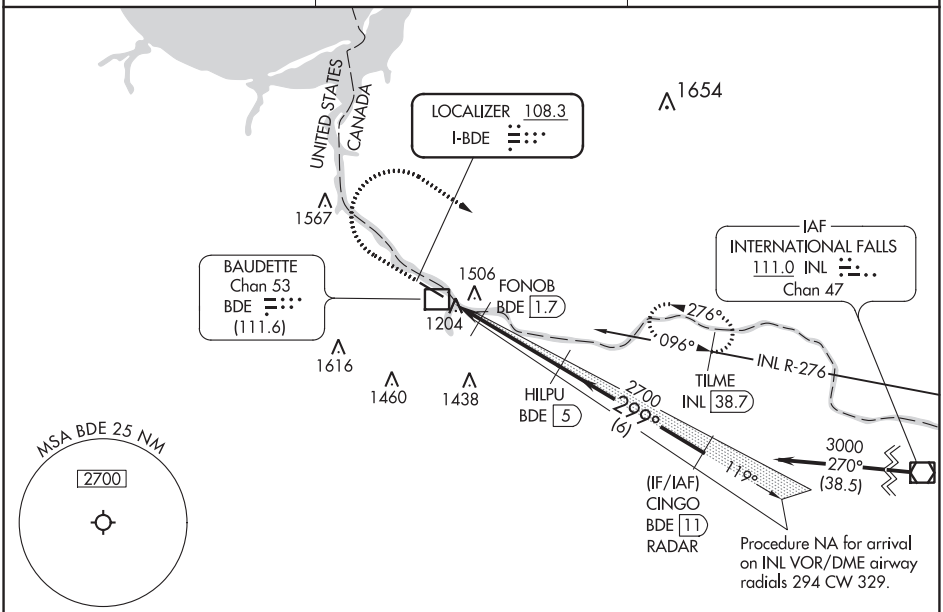
ILS or LOC RWY 30
BAUDETTE INTL (BDE)

DME required.

Circling NA to Rwys 13W and 31W. DME from BDE DME.
NA Simultaneous reception of I-BDE and BDE DME required.
Rwy 30 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 2500 then climbing right turn to 4000 heading 122° and INL VOR/DME R-276 to TILME/INL VOR/DME 38.7 DME and hold.

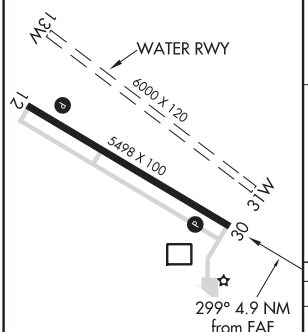
ASOS	MINNEAPOLIS CENTER	UNICOM
126.775	134.75 251.1	122.8 (CTAF) L



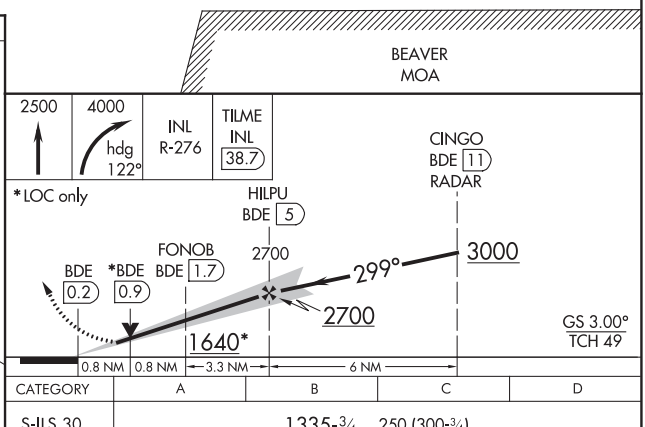
NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

ELEV 1085 TDZE 1085



HIRL Rwy 12-30 L
REIL Rwys 12 and 30 L



CATEGORY	A	B	C	D
S-ILS 30	1335-¾ 250 (300-¾)			
S-LOC 30	1440-1 355 (400-1)			
C CIRCLING	1520-1 435 (500-1)	1820-1 735 (800-1)	1820-2 735 (800-2)	1820-2¼ 735 (800-2¼)

APP CRS	Rwy ldg	5498
117°	TDZE	1085
	Apt Elev	1085

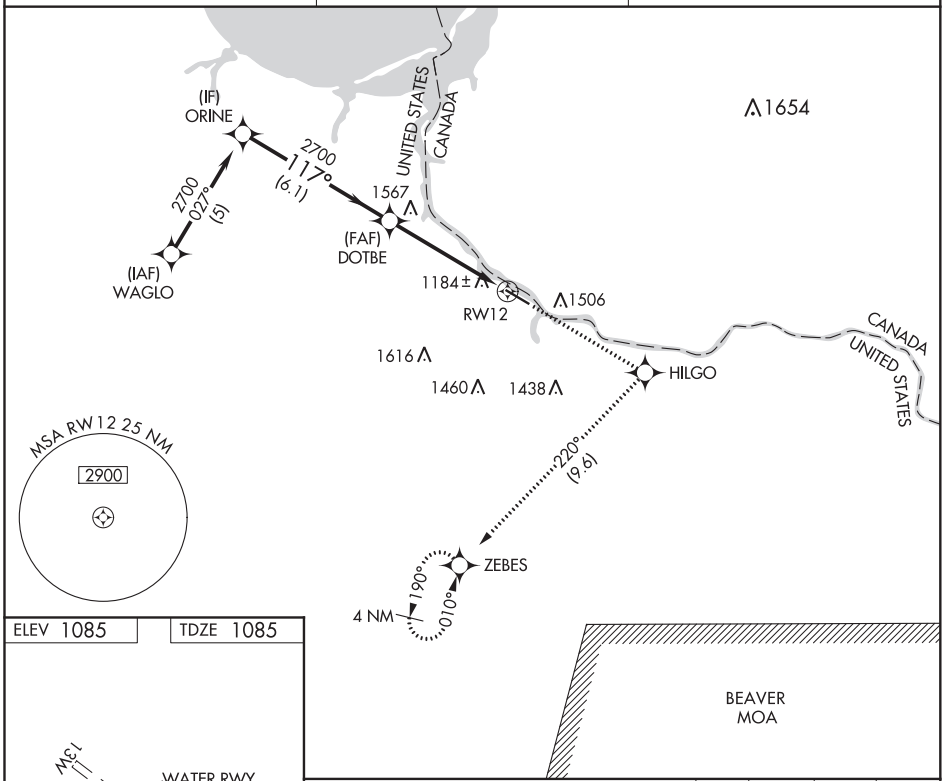
RNAV (GPS) RWY 12
BAUDETTE INTL (BDE)

RNP APCH.

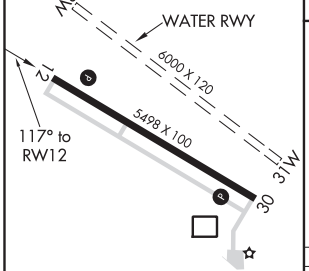
Rwy 12 helicopter visibility reduction below ¾ SM NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C.

MISSED APPROACH: Climb to 3000 direct HILGO and right turn on track 220° to ZEBES and hold.

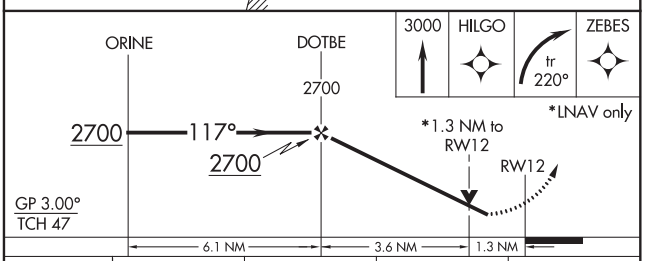
ASOS	MINNEAPOLIS CENTER	UNICOM
126.775	134.75 251.1	122.8 (CTAF) L



ELEV 1085 TDZE 1085



HIRL Rwy 12-30 L
REIL Rwys 12 and 30 L



CATEGORY	A	B	C	D
LNAV/VNAV DA	1481-1½ 396 (400-1½)			
LNAV MDA	1560-1 475 (500-1)		1560-1⅜ 475 (500-1⅜)	1560-1½ 475 (500-1½)

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BAUDETTE, MINNESOTA AL-5297 (FAA) 20254

WAAS CH 81814 W30A	APP CRS 297°	Rwy ldg 5498 TDZE 1085 Apt Elev 1085

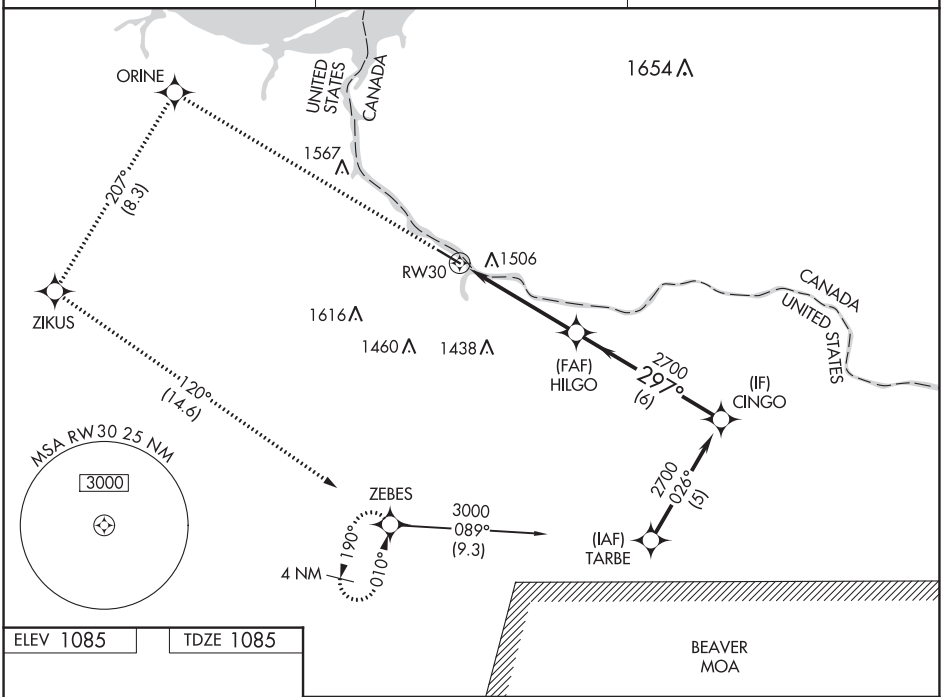
RNAV (GPS) RWY 30
BAUDETTE INTL (BDE)

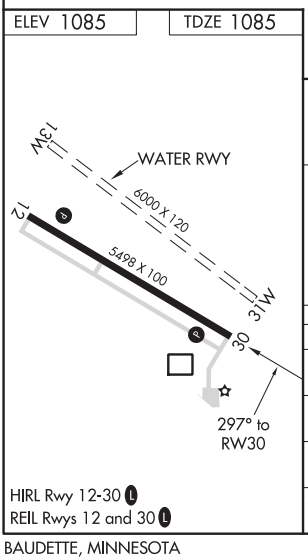
RNP APCH.

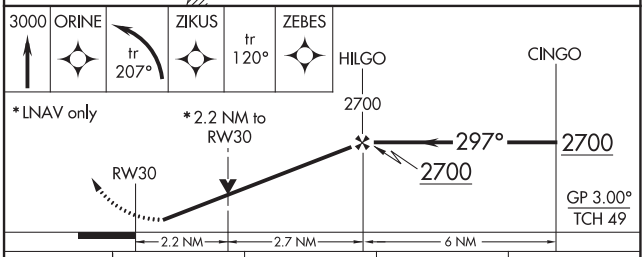
T A Circling NA to Rwys 13W and 31W. Rwy 30 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C.

MISSED APPROACH: Climb to 3000 direct ORINE and left turn on track 207° to ZIKUS and on track 120° to ZEBES and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
126.775	134.75 251.1	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1335-¾ 250 (300-¾)			
LNAV/VNAV DA	1985-4 900 (900-4)			
LNAV MDA	1820-1 735 (800-1)		1820-2 735 (800-2)	1820-2¼ 735 (800-2¼)
C CIRCLING	1860-1 775 (800-1)	1860-1¼ 775 (800-1¼)	1860-2¼ 775 (800-2¼)	1860-2½ 775 (800-2½)

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BAUDETTE, MINNESOTA
Amdt 2A 26MAR20

48°44′N-94°37′W

BAUDETTE INTL (BDE)
RNAV (GPS) RWY 30

WAAS CH 61338 W12A	APP CRS 125°	Rwy ldg 4200 TDZE 2756 Apt Elev 2756

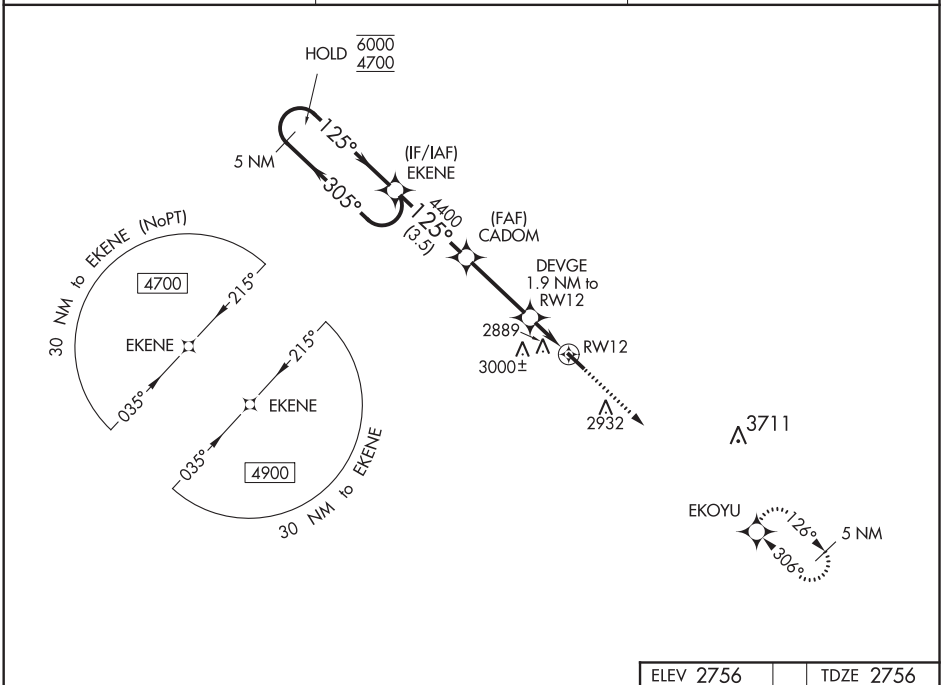
RNAV (GPS) RWY 12
BEACH (2ØU)

RNP APCH.

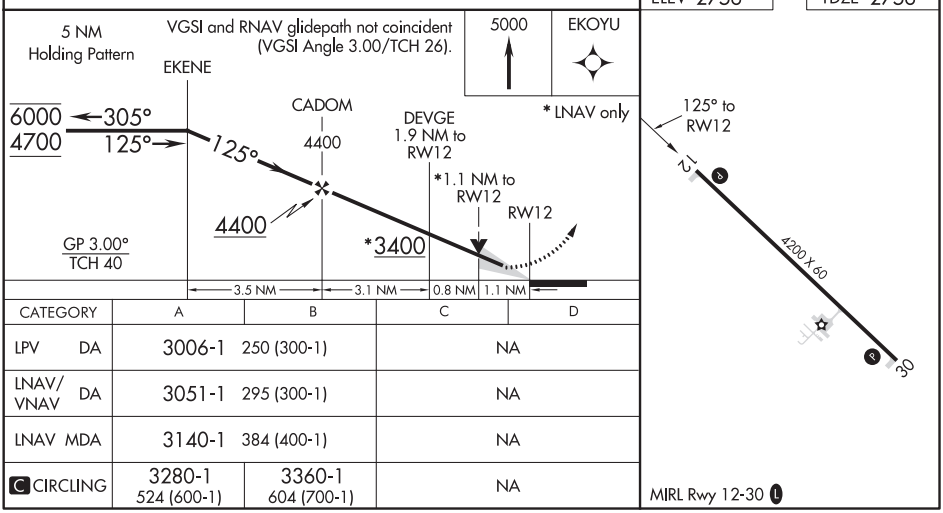
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C or above 54°C.

MISSED APPROACH: Climb to 5000 direct EKOYU and hold.

AWOS-3	SALT LAKE CENTER	UNICOM
118.175	126.85 305.2	122.8 (CTAF) L



ELEV 2756 TDZE 2756



CATEGORY	A	B	C	D
LPV DA	3006-1 250 (300-1)		NA	
LNAV/VNAV DA	3051-1 295 (300-1)		NA	
LNAV MDA	3140-1 384 (400-1)		NA	
C CIRCLING	3280-1 524 (600-1)	3360-1 604 (700-1)	NA	

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BEACH, NORTH DAKOTA | AL-10418 (FAA) | 19227

RNAV (GPS) RWY 30
BEACH (2ØU)

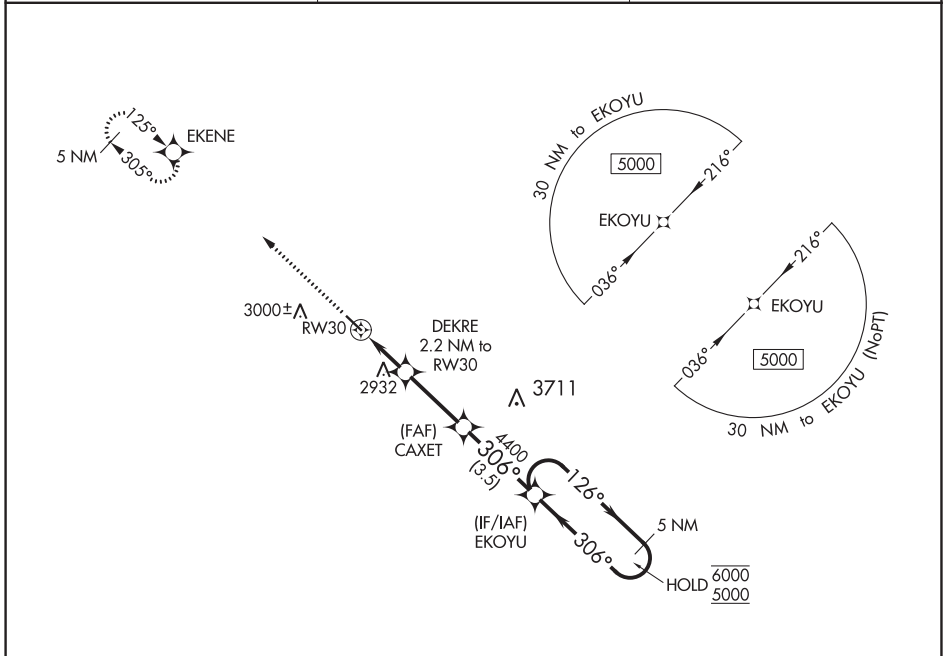
WAAS CH 66038 W30A	APP CRS 306°	Rwy ldg 4200 TDZE 2754 Apt Elev 2756

RNP APCH.

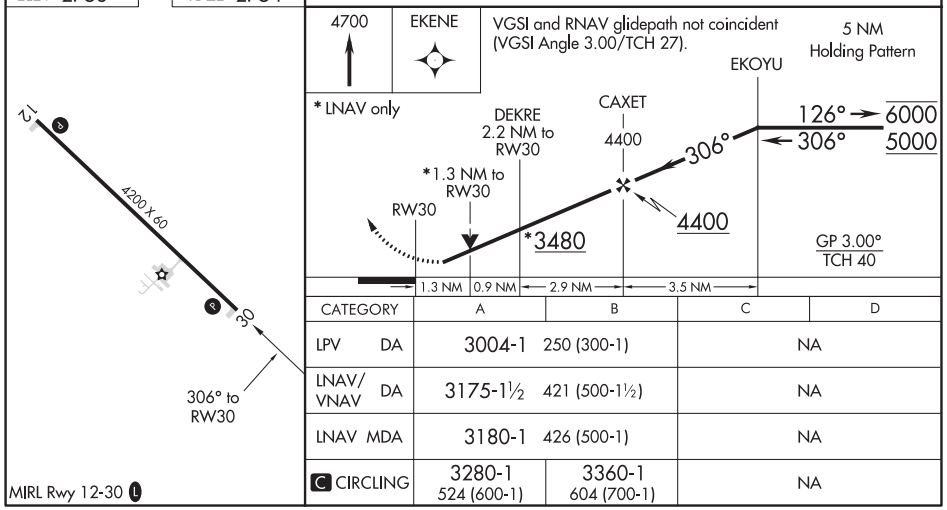
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C or above 54°C. Rwy 30 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 4700 direct EKENE and hold.

AWOS-3	SALT LAKE CENTER	UNICOM
118.175	126.85 305.2	122.8 (CTAF) L



ELEV 2756 | TDZE 2754



CATEGORY		A	B	C	D
LPV	DA	3004-1 250 (300-1)		NA	
LNAV/VNAV	DA	3175-1½ 421 (500-1½)		NA	
LNAV	MDA	3180-1 426 (500-1)		NA	
C CIRCLING		3280-1 524 (600-1)	3360-1 604 (700-1)	NA	

MIRL Rwy 12-30 L

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 82728 W32A	APP CRS 321°	Rwy ldg 4501 TDZE 3180 Apt Elev 3191

RNAV (GPS) RWY 32
BELLE FOURCHE MUNI (EFC)

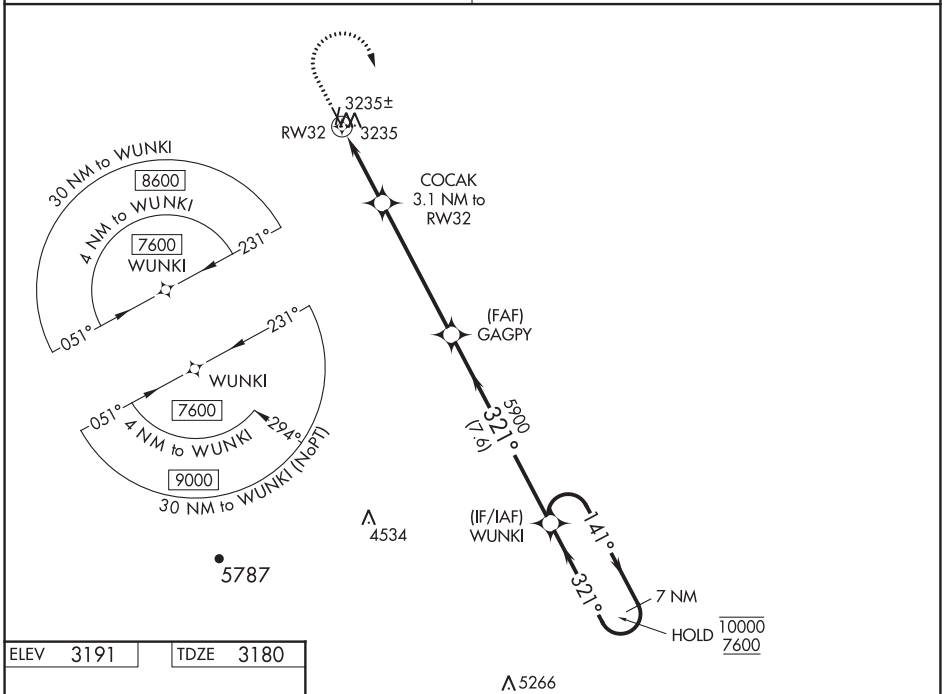
RNP APCH.

T A NA

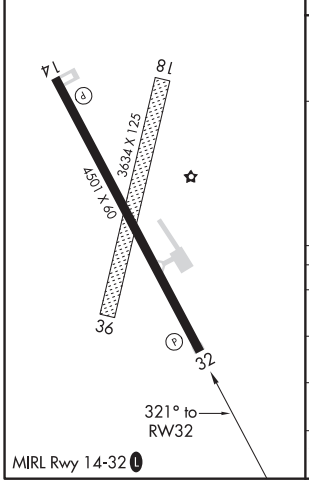
Baro-VNAV NA.
Use Ellsworth altimeter setting.

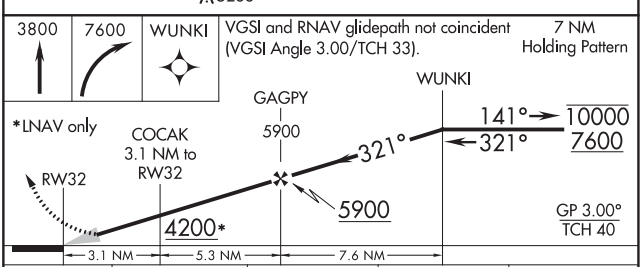
MISSED APPROACH: Climb to 3800 then climbing right turn to 7600 direct WUNKI and hold. Continue climb-in-hold to 7600.

DENVER CENTER	AUNICOM
127.95 338.2	122.8 (CTAF) L



ELEV 3191	TDZE 3180





CATEGORY	A	B	C	D
LPV DA	3553-1 373 (400-1)			NA
LNAV/VNAV DA	3558-1 378 (400-1)			NA
LNAV MDA	3660-1 480 (500-1)		3660-1⅜ 480 (500-1⅜)	NA
C CIRCLING	3780-1 589 (600-1)	3820-1 629 (700-1)	3820-1¾ 629 (700-1¾)	NA

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BEMIDJI, MINNESOTA | AL-5174 (FAA) | 21056

ILS or LOC RWY 25

BEMIDJI RGNL (BJI)

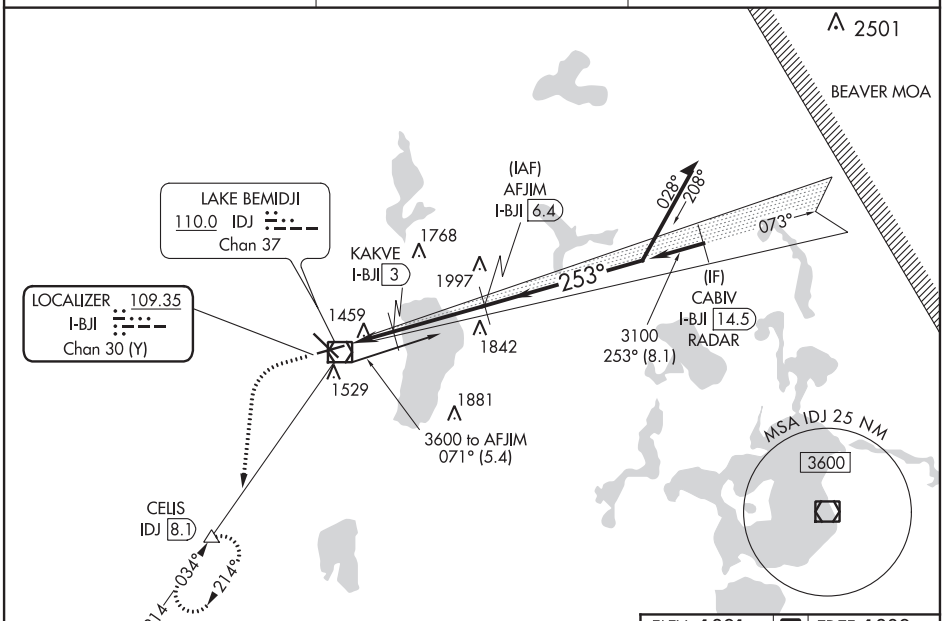
LOC/DME I-BJI	APP CRS	Rwy ldg	5700
109.35	253°	TDZE	1389
Chan 30 (Y)		Apt Elev	1391

DME required. RADAR required for procedure entry.

NA

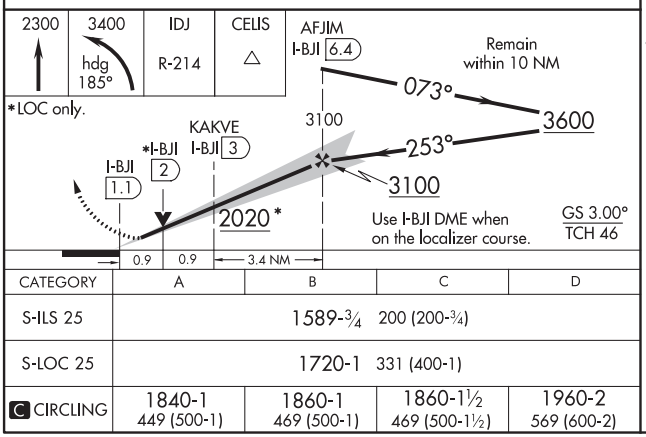
MISSED APPROACH: Climb to 2300 then climbing left turn to 3400 on heading 185° and IDJ VOR/DME R-214 to CELIS/IDJ VOR/DME 8.1 DME and hold, continue climb-in-hold to 3400.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.275	134.75 251.1	122.8 (CTAF) L

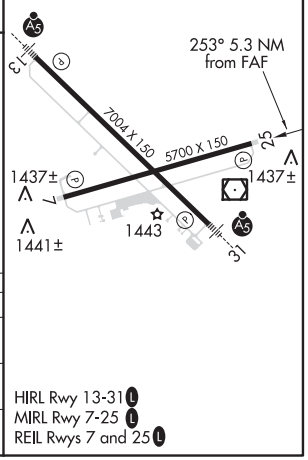


2300	3400	IDJ	CELIS
	hdg 185°	R-214	

*LOC only.



ELEV 1391 | D | TDZE 1389



CATEGORY	A	B	C	D
S-ILS 25	1589-¾ 200 (200-¾)			
S-LOC 25	1720-1 331 (400-1)			
C CIRCLING	1840-1 449 (500-1)	1860-1 469 (500-1)	1860-1½ 469 (500-1½)	1960-2 569 (600-2)

HIRL Rwy 13-31 L
MIRL Rwy 7-25 L
REIL Rwys 7 and 25 L

BEMIDJI, MINNESOTA | 47°31′N-94°56′W | BEMIDJI RGNL (BJI)

Amdt 2 25FEB21

ILS or LOC RWY 25

NC-1, 25 FEB 2021 to 22 APR 2021

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ILS or LOC RWY 31
BEMIDJI RGNL (BJI)

LOC I-MDI	APP CRS	Rwy ldg	7002
111.9	313°	TDZE	1389
		Apt Elev	1391

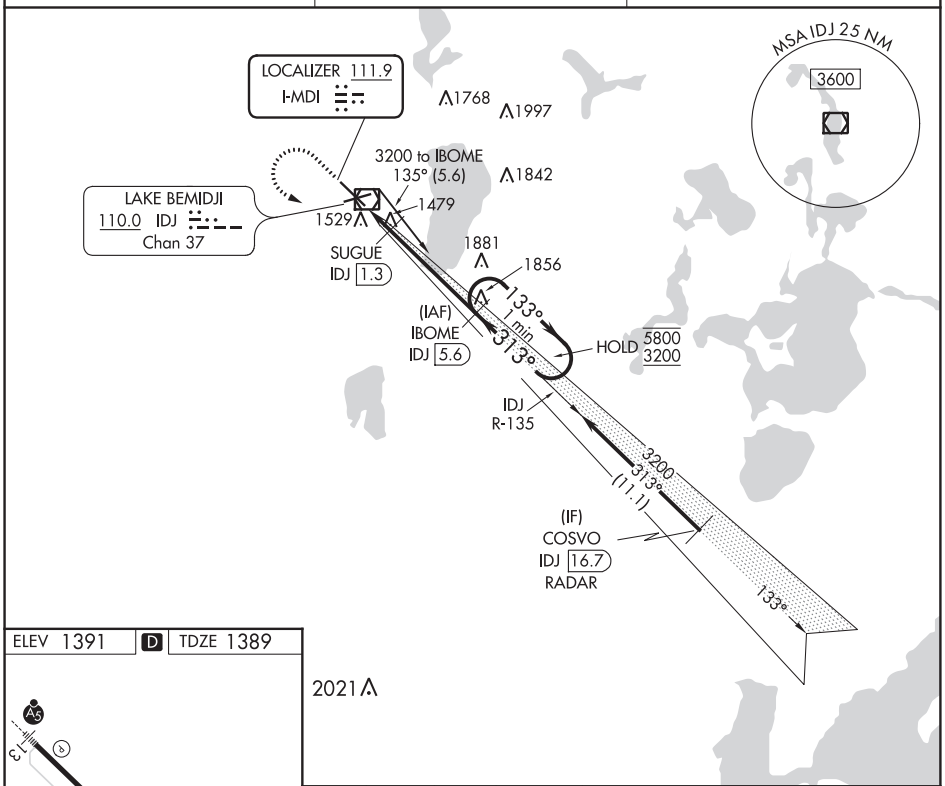
DME required. RADAR required for procedure entry.

T A NA Autopilot coupled approach NA below 2126. DME from IDJ VOR/DME. Simultaneous reception of I-MDI and IDJ DME required. For inop ALS, increase S-LOC 31 Cat C/D visibility to 1 SM.

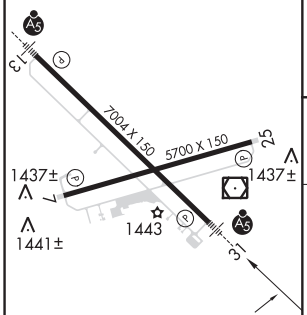
MALSR A5

MISSED APPROACH: Climb to 2400 then climbing left turn to 3200 on heading 100° and IDJ VOR/DME R-135 to IBOME/IDJ 5.6 DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.275	134.75 251.1	122.8 (CTAF) L

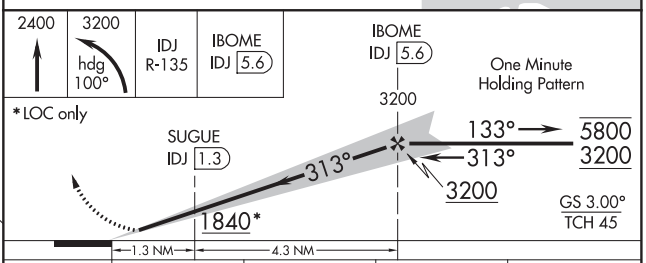


ELEV 1391 D TDZE 1389



HIRL Rwy 13-31 L
MIRL Rwy 7-25 L
REIL Rwys 7 and 25 L

FAF to MAP 5.6 NM					
Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52



CATEGORY	A	B	C	D
S-ILS 31	1589-½ 200 (200-½)			
S-LOC 31	1740-½ 351 (400-½)		1740-⅝ 351 (400-⅝)	

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NC-1, 25 FEB 2021 to 22 APR 2021

BEMIDJI, MINNESOTA

AL-5174 (FAA)

21056

RNAV (GPS) RWY 13

BEMIDJI RGNL (BJI)

WAAS CH 93636 W13A	APP CRS 133°	Rwy ldg 7002 TDZE 1391 Apt Elev 1391

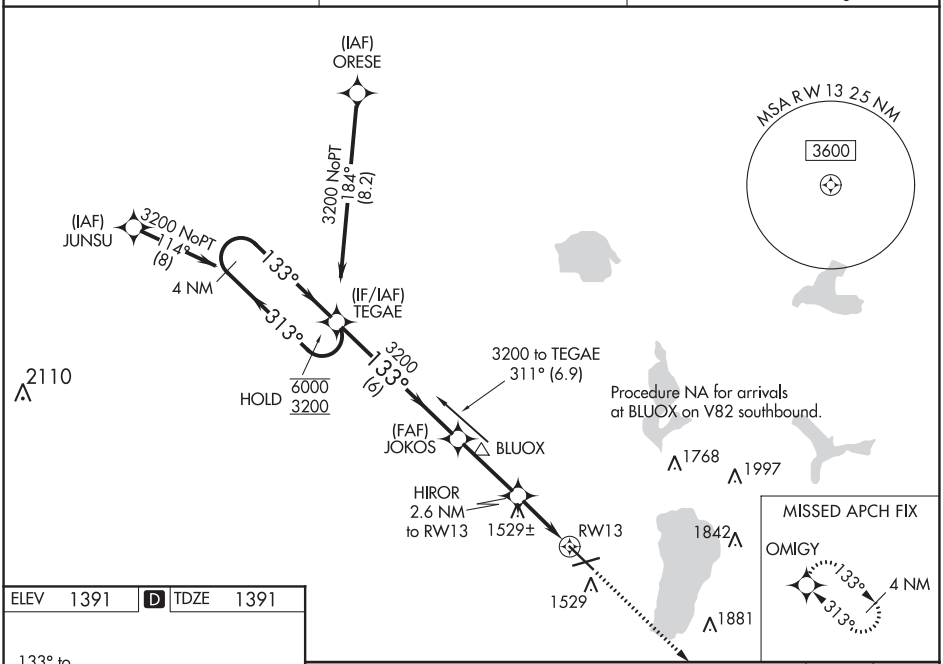
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. For inop ALS increase LNAV/VNAV visibility all Cats to ⅞ SM, increase LNAV Cats A and B visibility to 1 SM and Cats C and D visibility to 1⅛ SM.

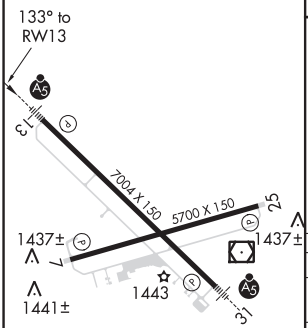
MALSR

MISSED APPROACH: Climb to 3200 direct OMIGY and hold.

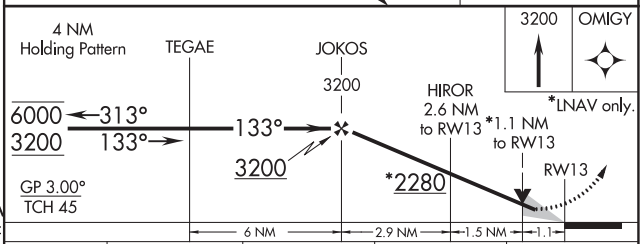
AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.275	134.75 251.1	122.8 (CTAF)



ELEV 1391	D	TDZE 1391



HIRL Rwy 13-31 L
MIRL Rwy 7-25 L
REIL Rwys 7 and 25 L



CATEGORY	A	B	C	D
LPV DA	1648-¾ 257 (300-¾)			
LNAV/VNAV DA	1680-¾ 289 (300-¾)			
LNAV MDA	1780-¾ 389 (400-¾)			
C CIRCLING	1840-1 449 (500-1)	1860-1 469 (500-1)	1860-1½ 469 (500-1½)	1960-2 569 (600-2)

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WAAS CH 65917 W25A	APP CRS 253°	Rwy ldg 5700 TDZE 1389 Apt Elev 1391

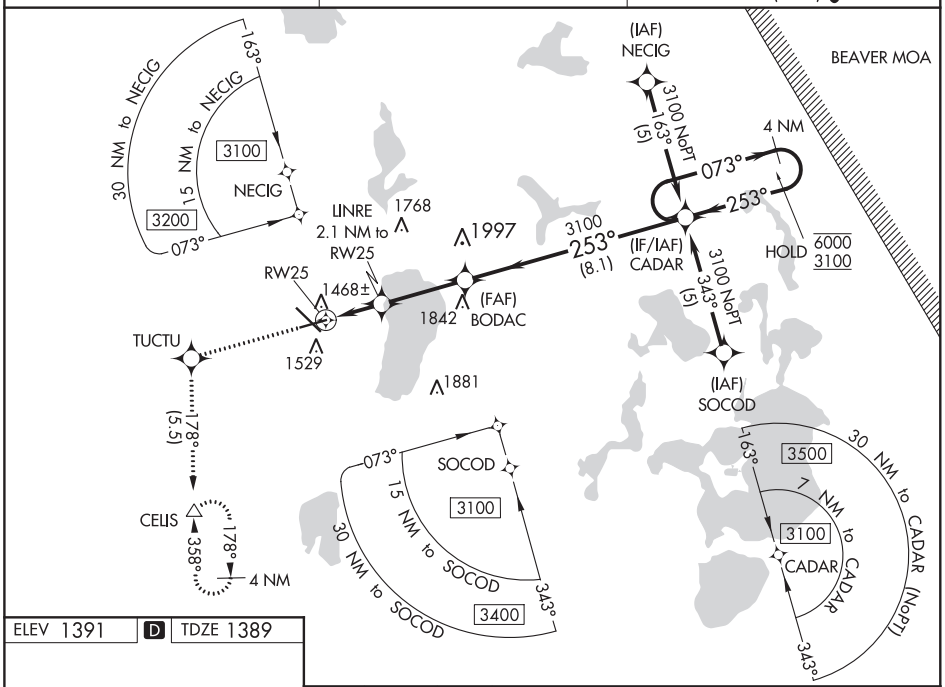
RNAV (GPS) RWY 25
BEMIDJI RGNL (BJI)

RNP APCH.

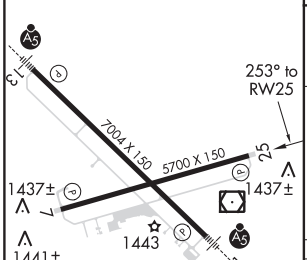
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 46°C.

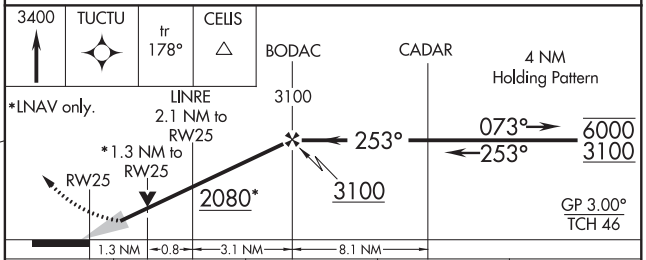
MISSED APPROACH: Climb to 3400 direct TUCTU and on track 178° to CELIS and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.275	134.75 251.1	122.8 (CTAF) L



ELEV 1391 | D | TDZE 1389





CATEGORY	A	B	C	D
LPV DA	1589-¾ 200 (200-¾)			
LNAV/VNAV DA	1752-1¼ 363 (400-1¼)			
LNAV MDA	1840-1 451 (500-1)		1840-1⅜ 451 (500-1⅜)	1840-1½ 451 (500-1½)
C CIRCLING	1840-1 449 (500-1)	1860-1 469 (500-1)	1860-1½ 469 (500-1½)	1960-2 569 (600-2)

HIRL Rwy 13-31 L
MIRL Rwy 7-25 L
REIL Rwys 7 and 25 L

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

BEMIDJI, MINNESOTA | AL-5174 (FAA) | 20030

WAAS CH 99711 W31A	APP CRS 313°	Rwy ldg 7002 TDZE 1389 Apt Elev 1391

RNAV (GPS) RWY 31
BEMIDJI RGNL (BJI)

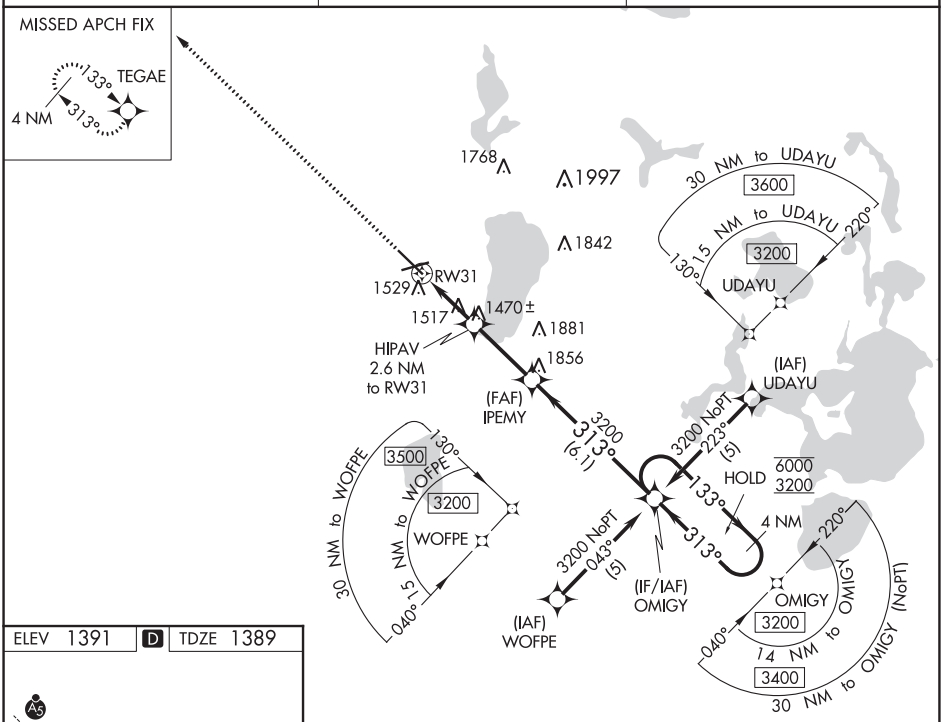
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 46°C. For inop ALS, increase LNAV/VNAV all Cats and LNAV Cats C/D visibility to 1¼ SM.

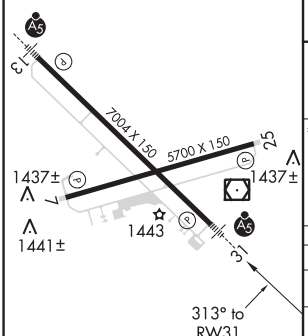
MALSR

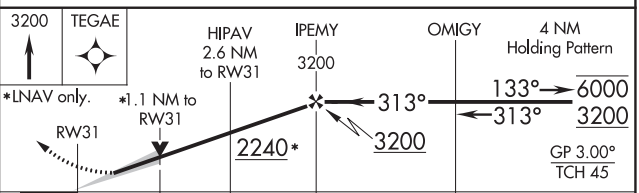
MISSED APPROACH: Climb to 3200 direct TEGAE and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.275	134.75 251.1	122.8 (CTAF) L



ELEV 1391 | D | TDZE 1389





CATEGORY	A	B	C	D
LPV DA	1589-½ 200 (200-½)			
LNAV/VNAV DA	1825-1 436 (500-1)			
LNAV MDA	1780-½ 391 (400-½)		1780-⅝ 391 (400-⅝)	1780-1 391 (400-1)
C CIRCLING	1840-1 449 (500-1)	1860-1 469 (500-1)	1860-1½ 469 (500-1½)	1960-2 569 (600-2)

HIRL Rwy 13-31 L
MIRL Rwy 7-25 L
REIL Rwys 7 and 25 L

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NC-1, 25 FEB 2021 to 22 APR 2021

VOR/DME RWY 13
BEMIDJI RGNL (BJI)

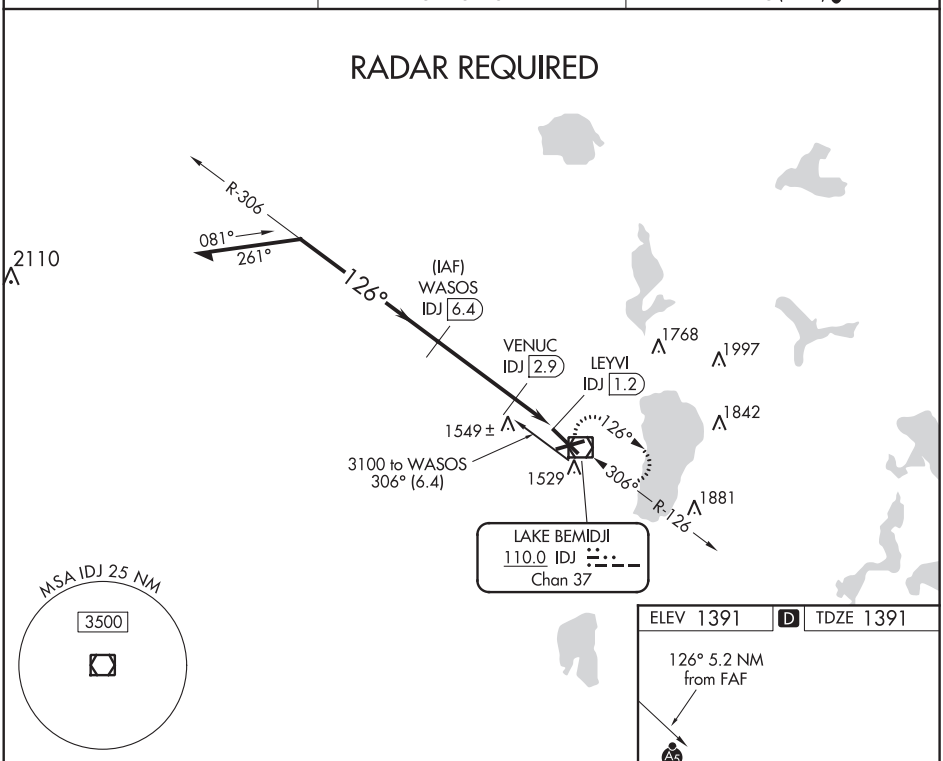
VOR/DME IDJ	APP CRS	Rwy ldg	7002
110.0	126°	TDZE	1391
Chan 37		Apt Elev	1391

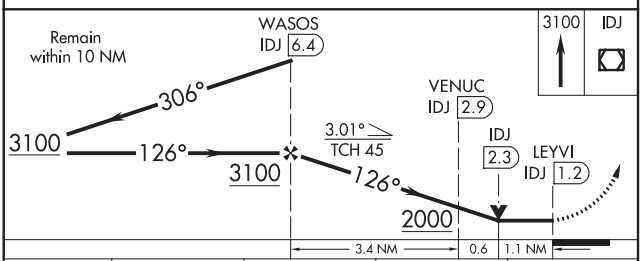
T A NA When local altimeter setting not received, use Park Rapids altimeter setting and increase all MDA 100 feet, increase S-13 Cat C and D visibility ¼ mile. VDP NA with Park Rapids altimeter setting. For inoperative MALSR, increase S-13 Cat A and B visibility to 1 mile and Cat C and D visibility to 1⅛ mile. For inoperative MALSR when using Park Rapids altimeter setting, increase S-13 Cat A and B visibility to 1 mile and Cat C and D visibility to 1⅜ mile. Helicopter visibility reduction below ¾ SM not authorized.

MALSR A5

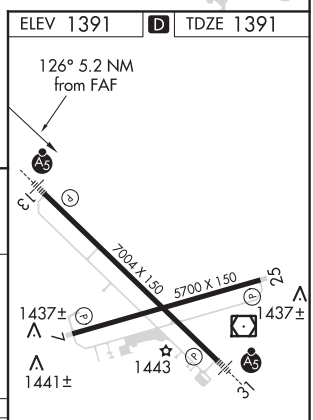
MISSED APPROACH: Climb to 3100 direct IDJ VOR/DME and hold, continue climb-in-hold to 3100.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.275	134.75 251.1	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-13	1800-¾ 409 (500-¾)			
C CIRCLING	1840-1 449 (500-1)	1860-1 469 (500-1)	1860-1½ 469 (500-1½)	1960-2 569 (600-2)



HIRL Rwy 13-31 L
MIRL Rwy 7-25 L
REIL Rwys 7 and 25 L

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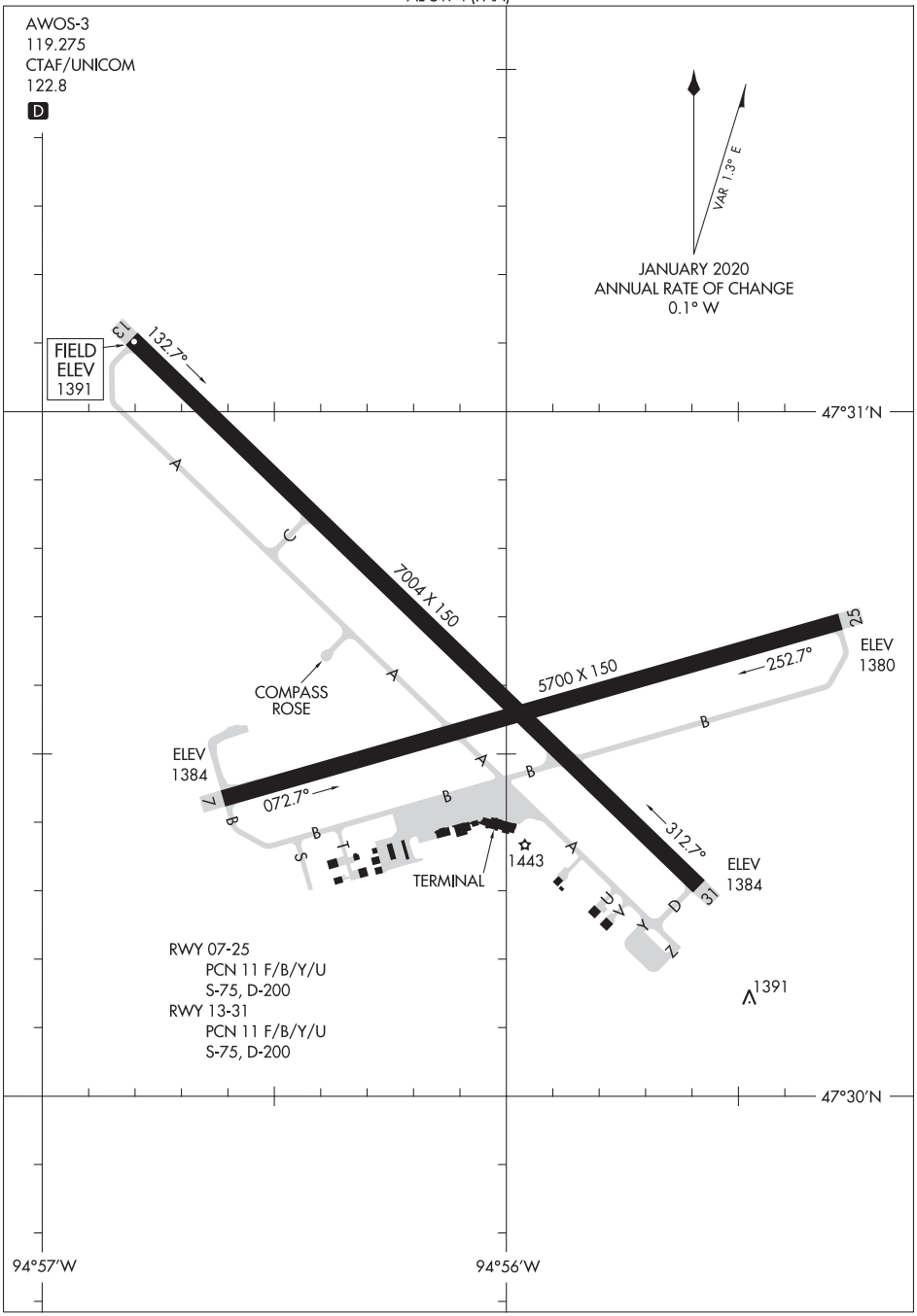
20086

AIRPORT DIAGRAM

BEMIDJI RGNL (BJI)
BEMIDJI, MINNESOTA

AL-5174 (FAA)



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AIRPORT DIAGRAM
20086
BEMIDJI, MINNESOTA
BEMIDJI RGNL (BJI)

WAAS CH 49210 W14A	APP CRS 138°	Rwy ldg 4000 TDZE 1039 Apt Elev 1039

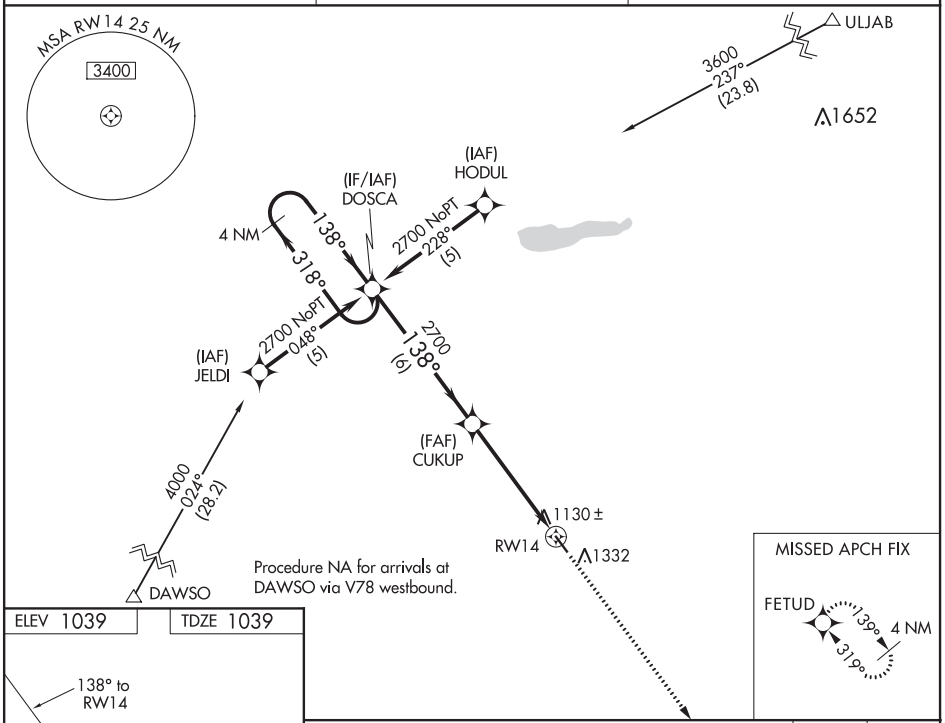
RNAV (GPS) RWY 14
BENSON MUNI (BBB)

RNP APCH.

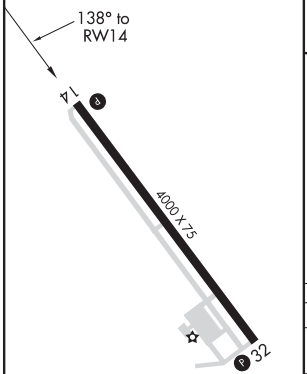
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. Baro-VNAV and VDP NA when using Appleton altimeter setting. When local altimeter setting not received, use Appleton altimeter setting and increase all DA and MDA 40 feet.

MISSED APPROACH: Climb to 2700 direct FETUD and hold.

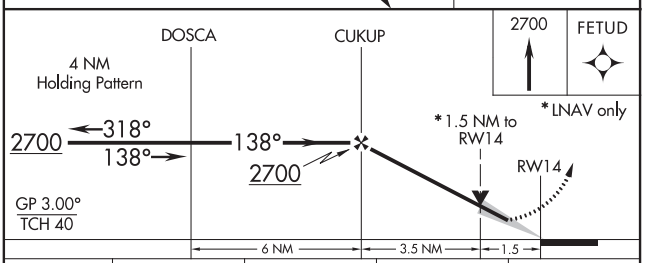
AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.45	125.5 323.1	122.8 (CTAF) L



ELEV 1039 TDZE 1039



MIRL Rwy 14-32 L
REIL Rwys 14 and 32 L



CATEGORY	A	B	C	D
LPV DA	1382-1¼ 343 (400-1¼)		NA	
LNAV/VNAV DA	1426-1½ 387 (400-1½)		NA	
LNAV MDA	1540-1 501 (600-1)		NA	

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BENSON, MINNESOTA AL-5839 (FAA) 19199

WAAS CH 99710 W32A	APP CRS 319°	Rwy ldg 4000 TDZE 1039 Apt Elev 1039

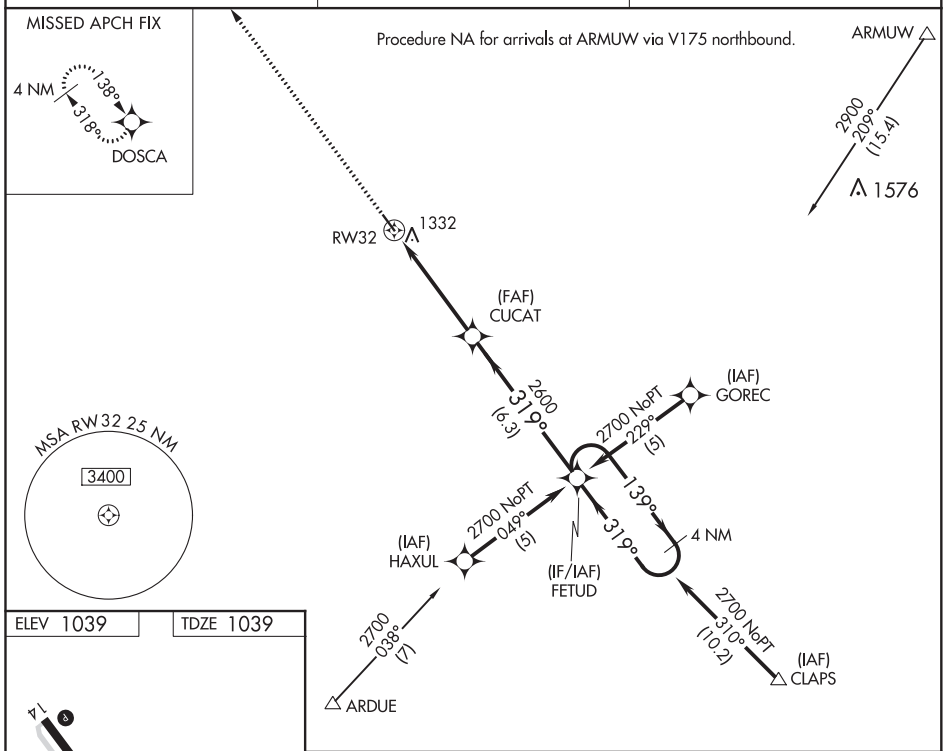
RNAV (GPS) RWY 32
BENSON MUNI (BBB)

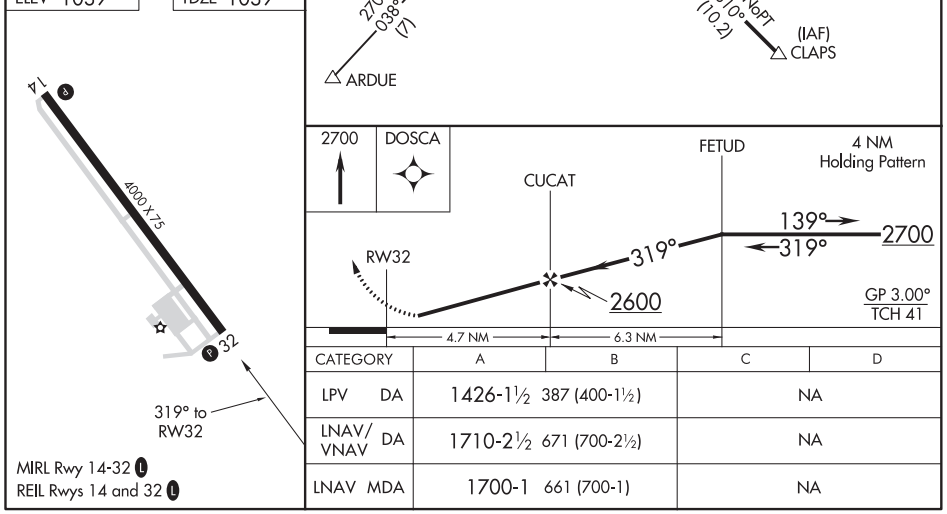
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below-17°C or above 54°C. Rwy 32 helicopter visibility reduction below ¾ SM NA. Baro-VNAV NA when using Appleton altimeter setting. When local altimeter setting not received, use Appleton altimeter setting and increase all DA and MDA 40 feet.

MISSED APPROACH: Climb to 2700 direct DOSCA and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.45	125.5 323.1	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1426-1½ 387 (400-1½)		NA	
LNAV/VNAV DA	1710-2½ 671 (700-2½)		NA	
LNAV MDA	1700-1 661 (700-1)		NA	

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WAAS CH 78126 W15A	APP CRS 149°	Rwy ldg 3998 TDZE 1351 Apt Elev 1351

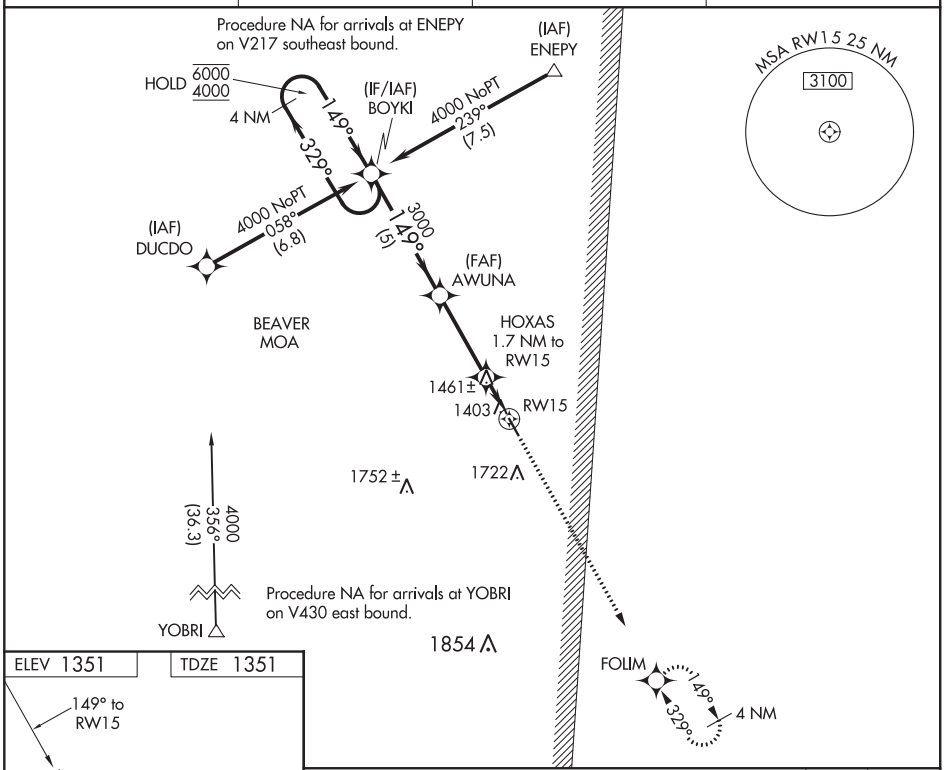
RNAV (GPS) RWY 15
BIGFORK MUNI (FOZ)

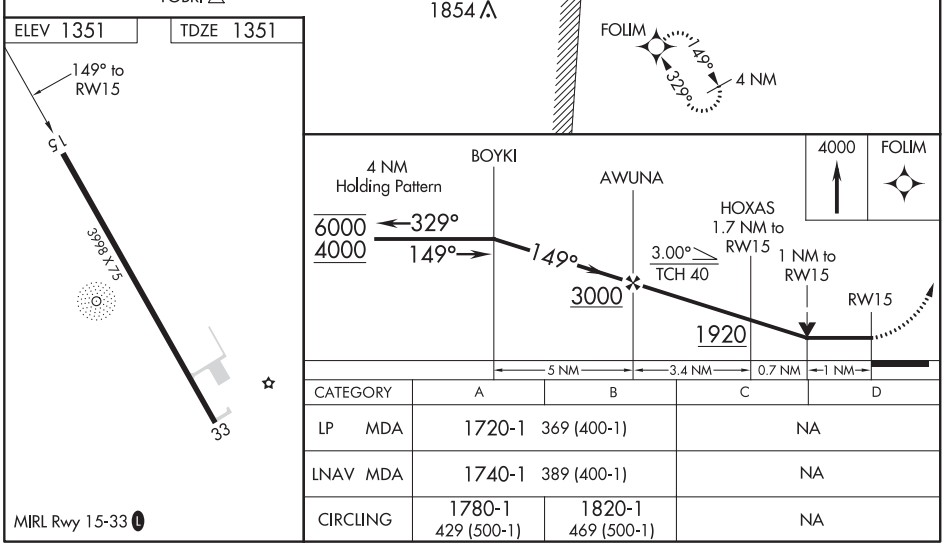
RNP APCH.

Rwy 15 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 4000 direct FOLIM and hold, continue climb-in-hold to 4000.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
345	127.9 281.45	121.725	122.9 L





CATEGORY	A	B	C	D
LP MDA	1720-1	369 (400-1)	NA	
LNAV MDA	1740-1	389 (400-1)	NA	
CIRCLING	1780-1 429 (500-1)	1820-1 469 (500-1)	NA	

MIRL Rwy 15-33 L

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NC-1, 25 FEB 2021 to 22 APR 2021

BIGFORK, MINNESOTA AL-9255 (FAA) 20142

WAAS CH 40226 W33A	APP CRS 329°	Rwy ldg 3998 TDZE 1349 Apt Elev 1351

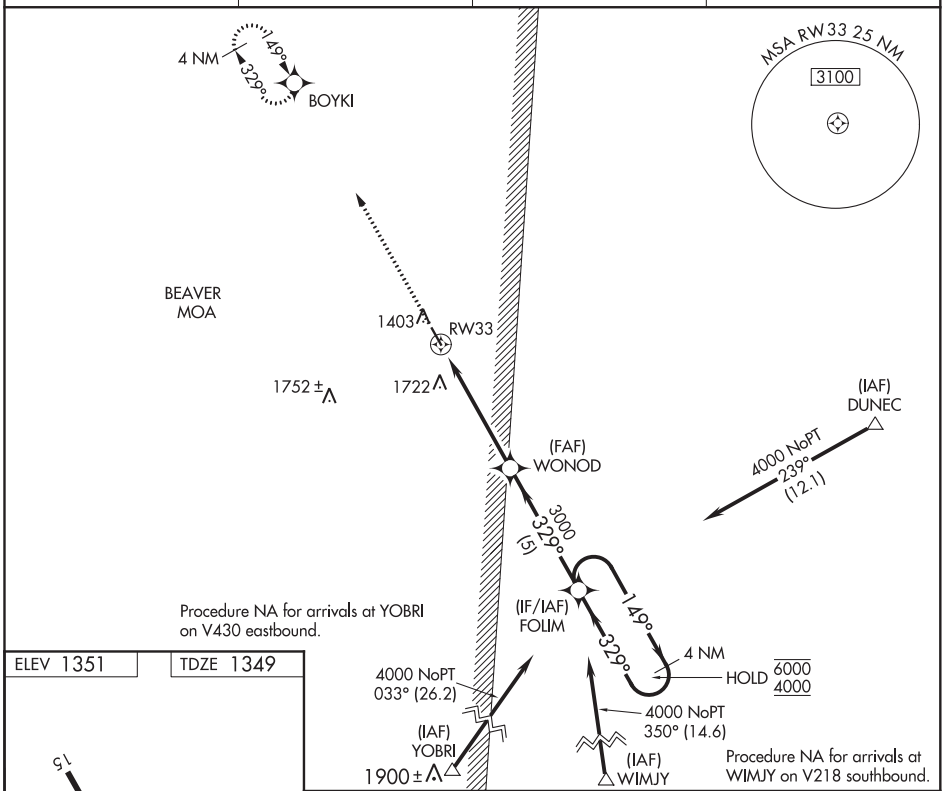
RNAV (GPS) RWY 33
BIGFORK MUNI (FOZ)

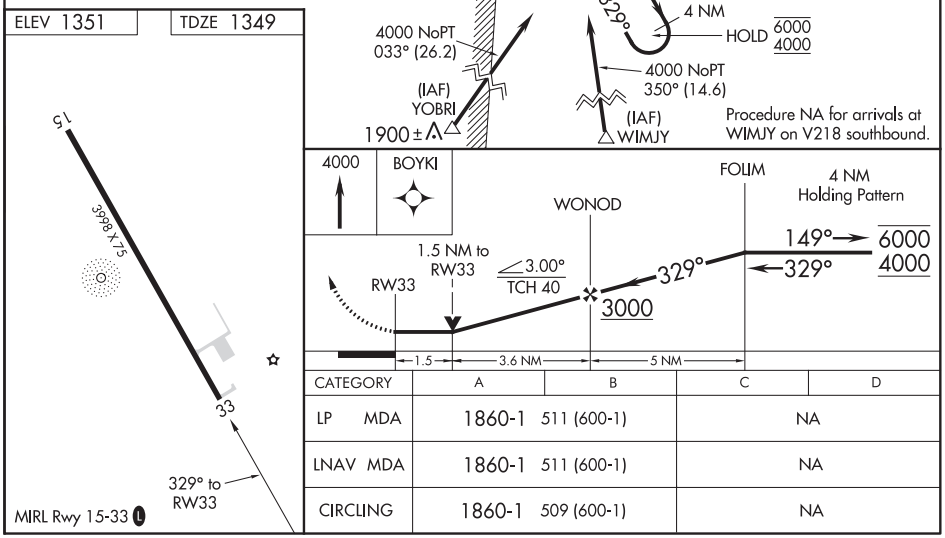
RNP APCH.

Rwy 33 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 4000 direct BOYKI and hold, continue climb-in-hold to 4000.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
345	127.9 281.45	121.725	122.9 L





CATEGORY	A	B	C	D
LP MDA	1860-1 511 (600-1)		NA	
LNAV MDA	1860-1 511 (600-1)		NA	
CIRCLING	1860-1 509 (600-1)		NA	

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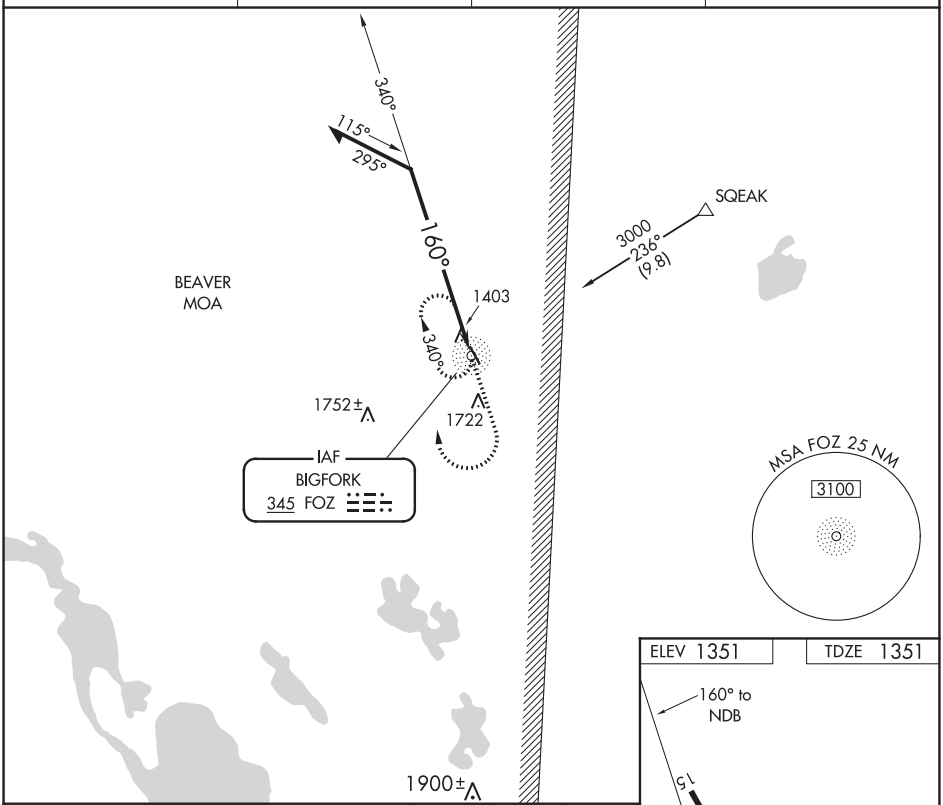
NDB FOZ	APP CRS	Rwy ldg	3998
345	160°	TDZE	1351
		Apt Elev	1351

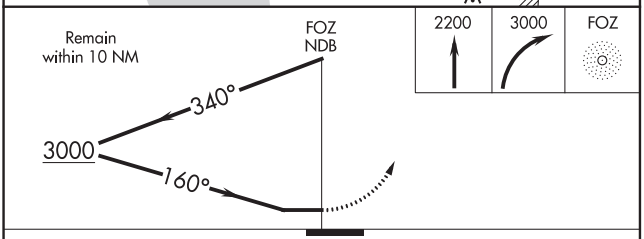
NDB RWY 15
BIGFORK MUNI (FOZ)

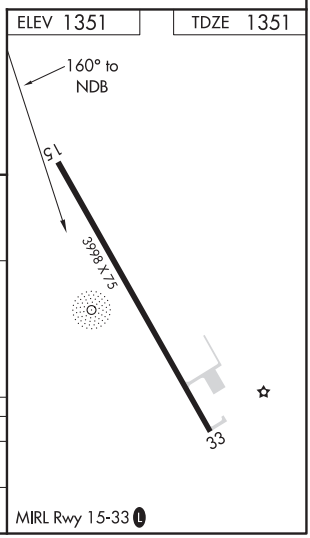
Procedure not authorized when BEAVER MOA is active. Night landing Rwy 33 NA. Helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Grand Rapids altimeter setting and increase all MDA 100 feet.

MISSED APPROACH: Climb to 2200 then climbing right turn to 3000 direct FOZ NDB and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
345	127.9 281.45	121.725	122.9 L







CATEGORY	A	B	C	D
S-15	1840-1	489 (500-1)	NA	
CIRCLING	1840-1	489 (500-1)	NA	

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LOC I-BZX	APP CRS	Rwy ldg	8794
111.5	131°	TDZE	1655
		Apt Elev	1661

ILS or LOC RWY 13
BISMARCK MUNI (BIS)

DME required for procedure entry. DME required.

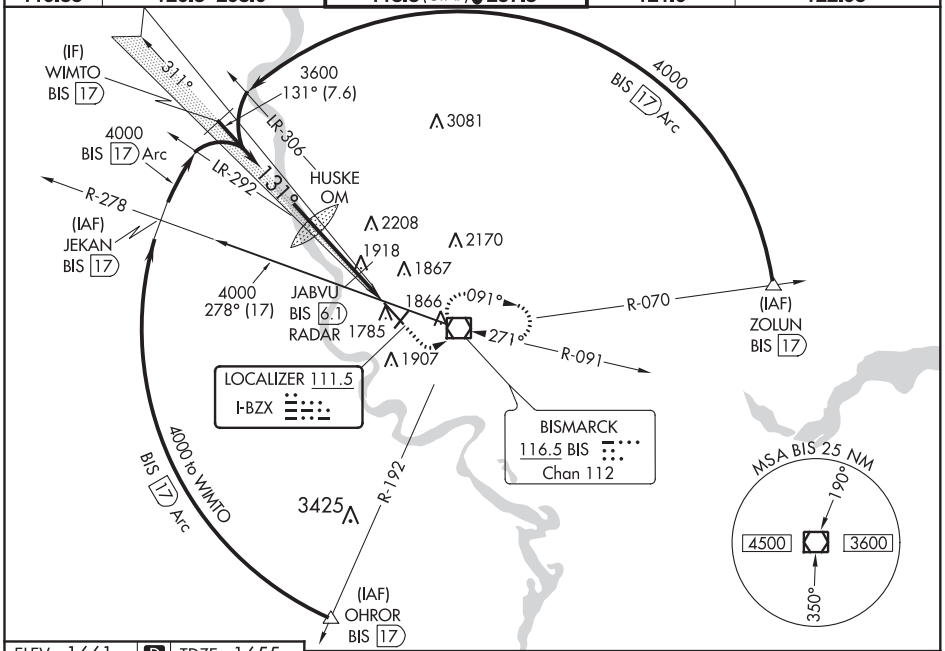
ASR
-35°C

Inop table does not apply to S-ILS 13. DME from BIS VOR/DME. Simultaneous reception of I-BZX and BIS DME required.
DME from BIS VOR/DME.

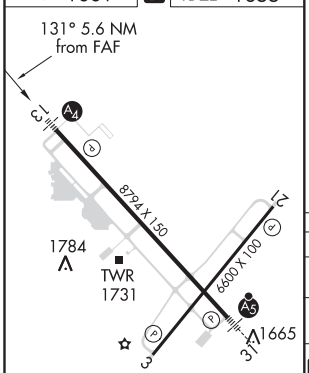
MALS

MISSED APPROACH: Climb to 2200 then climbing left turn to 3600 direct BIS VOR/DME and hold, continue climb-in-hold to 3600.

ATIS	BISMARCK APP CON ★	BISMARCK TOWER ★	GND CON	UNICOM
119.35	126.3 298.9	118.3 (CTAF) L 257.8	121.9	122.95

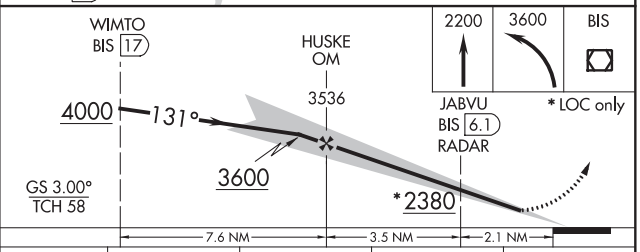


ELEV 1661 D TDZE 1655



REIL Rwys 3 and 21
HIRL Rwys 3-21 and 13-31

FAF to MAP 5.6 NM					
Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52



CATEGORY	A	B	C	D
S-ILS 13	1855-¾ 200 (200-¾)			
S-LOC 13	2380-¾ 725 (800-¾)		2380-1¾ 725 (800-1¾)	
C CIRCLING	2380-1 719 (800-1)		2460-2¼ 799 (800-2¼)	2460-2½ 799 (800-2½)
# JABVU FIX MINIMUMS				
S-LOC 13	2180-¾ 525 (600-¾)		2180-1¼ 525 (600-1¼)	
C CIRCLING	2200-1 539 (600-1)		2460-2¼ 799 (800-2¼)	2460-2½ 799 (800-2½)

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ILS or LOC RWY 31
BISMARCK MUNI (BIS)

LOC/DME I-BIS	APP CRS	Rwy ldg	8794
110.3	311°	TDZE	1645
Chan 40		Apt Elev	1661

DME required for procedure entry.

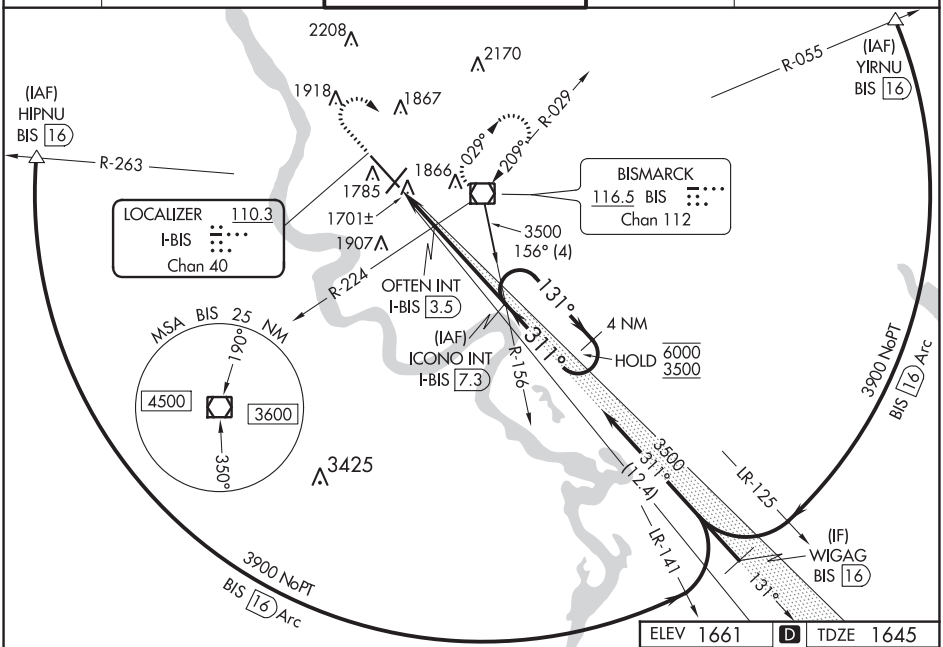
ASR -35°C

Autopilot coupled approach NA below 2680.
For inop ALS, increase S-LOC 31 OFTEN FIX Cat C/D minimums visibility to RVR 5500.

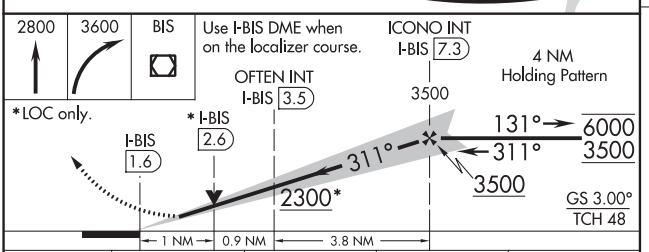
MALSR

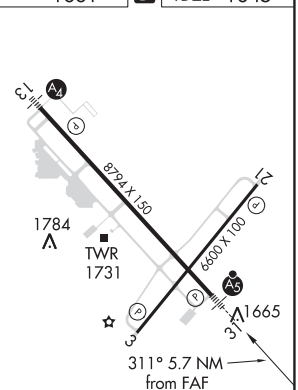
MISSED APPROACH: Climb to 2800 then climbing right turn to 3600 direct BIS VOR/DME and hold.

ATIS	BISMARCK APP CON★	BISMARCK TOWER★	GND CON	UNICOM
119.35	126.3 298.9	118.3 (CTAF) L 257.8	121.9	122.95



ELEV 1661 D TDZE 1645





REIL Rwys 3 and 21
HIRL Rwys 3-21 and 13-31

CATEGORY	A	B	C	D
S-ILS 31	1845/24 200 (200-½)			
S-LOC 31	2300/24 655 (700-½)		2300-1⅜ 655 (700-1⅜)	
C CIRCLING	2300-1 639 (700-1)		2460-2¼ 799 (800-2¼)	2460-2½ 799 (800-2½)
OFTEN FIX MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED)				
S-LOC 31	2020/24 375 (400-½)		2020/35 375 (400-⅝)	
C CIRCLING	2240-1 579 (600-1)		2460-2¼ 799 (800-2¼)	2460-2½ 799 (800-2½)

FAF to MAP 5.7 NM

Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54

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NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 63099 W03A	APP CRS 032°	Rwy ldg 6600 TDZE 1661 Apt Elev 1661

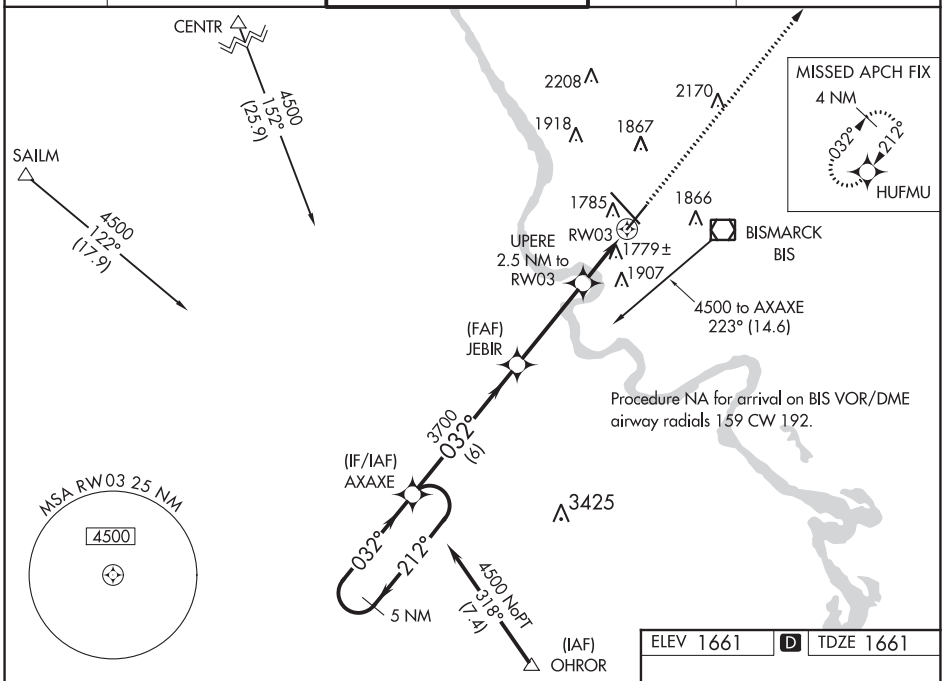
RNAV (GPS) RWY 3
BISMARCK MUNI (BIS)

T
A
ASR
-35°C

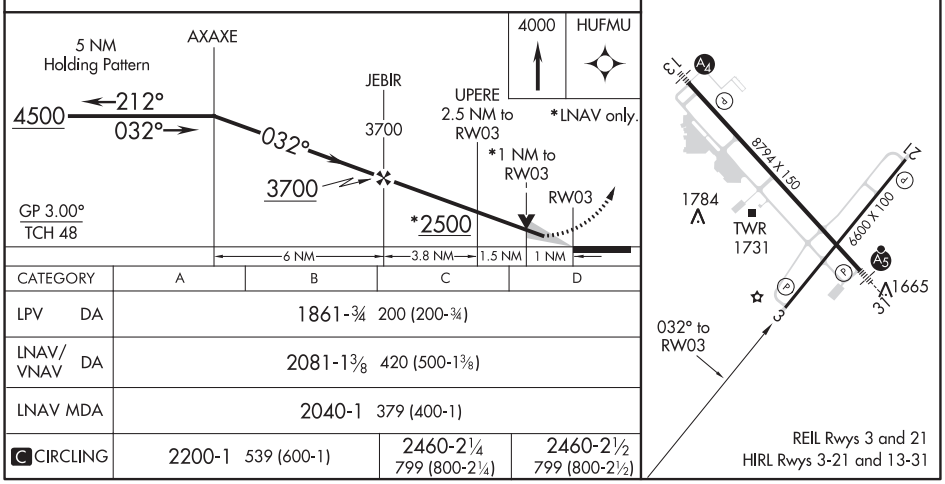
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 33°C (91°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 4000 direct HUFMU and hold.

ATIS	BISMARCK APP CON ★	BISMARCK TOWER ★	GND CON	UNICOM
119.35	126.3 298.9	118.3 (CTAF) L 257.8	121.9	122.95



ELEV 1661 D TDZE 1661



CATEGORY	A	B	C	D
LPV DA	1861-¾ 200 (200-¾)			
LNAV/VNAV DA	2081-1⅜ 420 (500-1⅜)			
LNAV MDA	2040-1 379 (400-1)			
C CIRCLING	2200-1 539 (600-1)		2460-2¼ 799 (800-2¼)	2460-2½ 799 (800-2½)

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WAAS CH 86920 W13A	APP CRS 131°	Rwy ldg 8794 TDZE 1655 Apt Elev 1661

RNAV (GPS) RWY 13
BISMARCK MUNI (BIS)

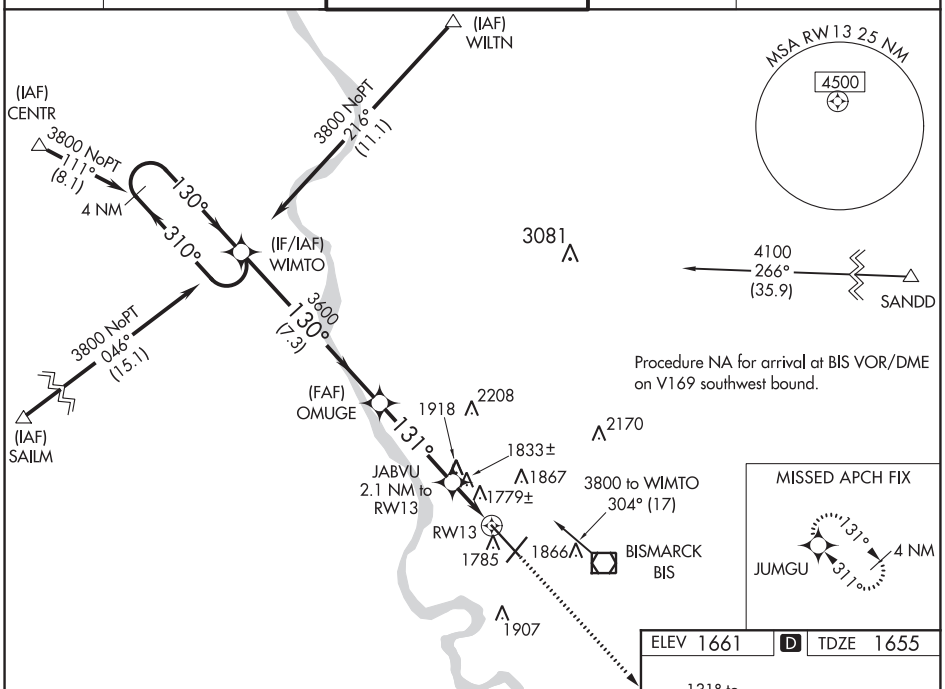
ASR -35°C

Inoperative table does not apply. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 33°C (91°F).DME/DME RNP-0.3 NA.

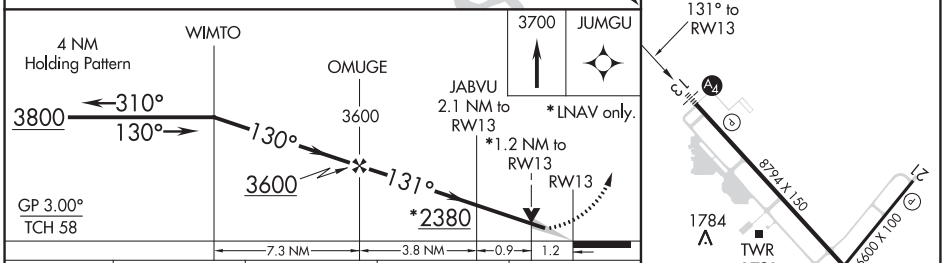
MALS

MISSED APPROACH: Climb to 3700 direct JUMGU and hold.

ATIS	BISMARCK APP CON ★	BISMARCK TOWER ★	GND CON	UNICOM
119.35	126.3 298.9	118.3 (CTAF) L 257.8	121.9	122.95



ELEV 1661 D TDZE 1655



CATEGORY	A	B	C	D
LPV DA	1855-¾ 200 (200-¾)			
LNAV/VNAV DA	2083-1⅜ 428 (500-1⅜)			
LNAV MDA	2100-1 445 (500-1)		2100-1⅜ 445 (500-1⅜)	
C CIRCLING	2200-1 539 (600-1)		2460-2¼ 799 (800-2¼)	2460-2½ 799 (800-2½)

REIL Rwys 3 and 21
HIRL Rwys 3-21 and 13-31

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NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 53520 W21A	APP CRS 212°	Rwy ldg 6600 TDZE 1661 Apt Elev 1661

RNAV (GPS) RWY 21
BISMARCK MUNI (BIS)

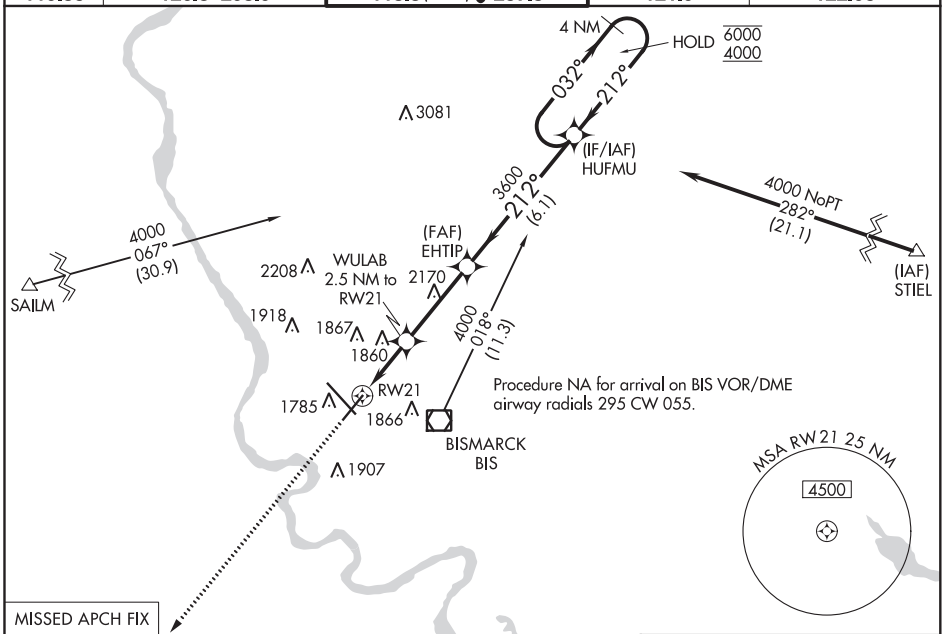
RNP APCH.

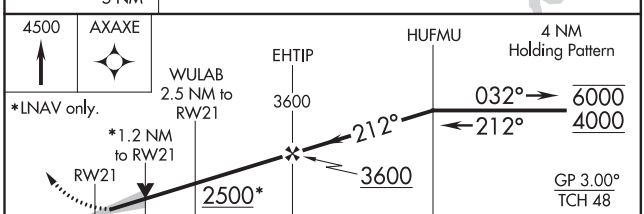
ASR
-35°C

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C or above 54°C.

MISSED APPROACH: Climb to 4500 direct AXAXE and hold.

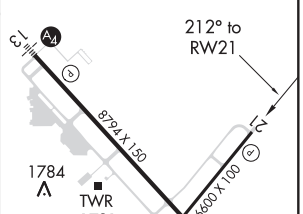
ATIS	BISMARCK APP CON★	BISMARCK TOWER★	GND CON	UNICOM
119.35	126.3 298.9	118.3 (CTAF) L 257.8	121.9	122.95





CATEGORY	A	B	C	D
LPV DA	1861-¾ 200 (200-¾)			
LNAV/VNAV DA	1970-⅞ 309 (400-⅞)			
LNAV MDA	2100-1 439 (500-1)		2100-1¼ 439 (500-1¼)	
C CIRCLING	2200-1 539 (600-1)		2460-2¼ 799 (800-2¼)	2460-2½ 799 (800-2½)

ELEV 1661 D TDZE 1661



REIL Rwys 3 and 21
HIRL Rwys 3-21 and 13-31

NC-1, 25 FEB 2021 to 22 APR 2021
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WAAS CH 56599 W31A	APP CRS 311°	Rwy ldg 8794 TDZE 1645 Apt Elev 1661

RNAV (GPS) RWY 31
BISMARCK MUNI (BIS)

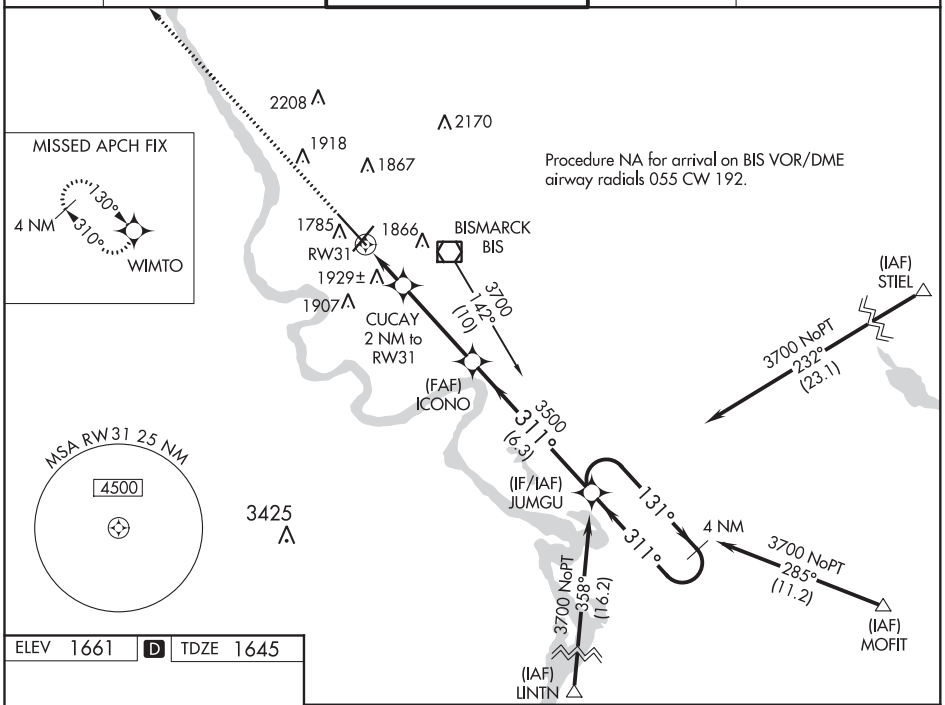
T A ASR -35°C

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 33°C (91°F). DME/DME RNP-0.3 NA.
** RVR 1800 authorized with use of FD or AP or HUD to DA.

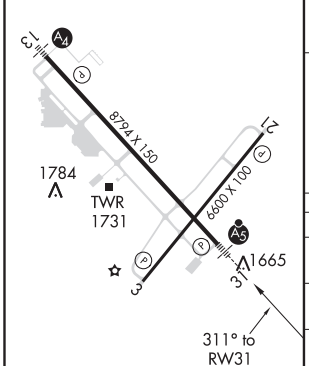
MALSR A5

MISSED APPROACH: Climb to 3800 direct WIMTO and hold.

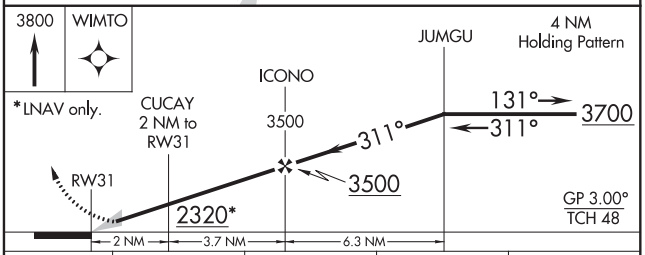
ATIS	BISMARCK APP CON*	BISMARCK TOWER*	GND CON	UNICOM
119.35	126.3 298.9	118.3 (CTAF) L 257.8	121.9	122.95



ELEV 1661 D TDZE 1645



REIL Rwys 3 and 21
HIRL Rwys 3-21 and 13-31



CATEGORY	A	B	C	D
LPV DA	1845/24 200 (200-½)			
LNAV/VNAV DA	2269-1¾ 624 (700-1¾)			
LNAV MDA	2180/24 535 (600-½)		2180/55 535 (600-1)	
C CIRCLING	2200-1 539 (600-1)		2460-2¼ 799 (800-2¼)	2460-2½ 799 (800-2½)

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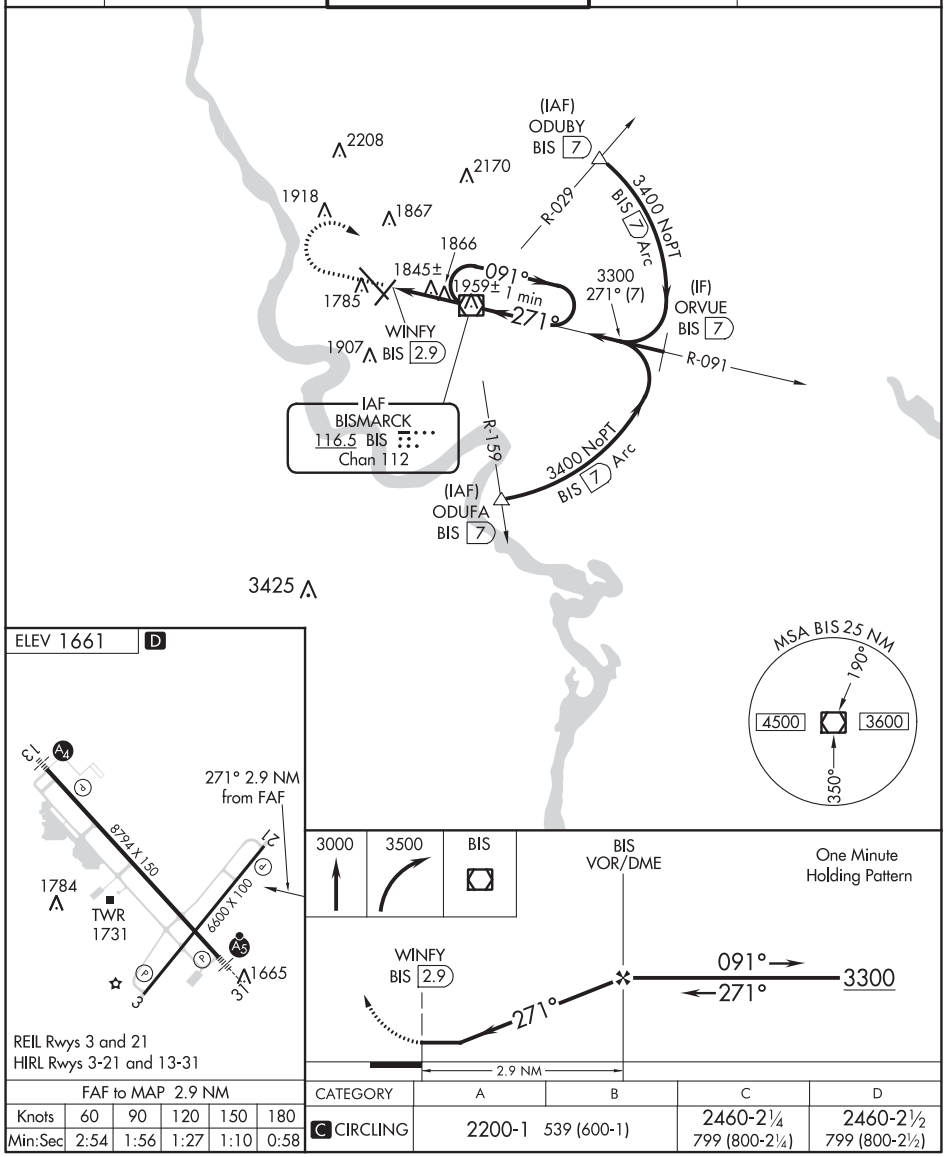
VOR-A
BISMARCK MUNI (BIS)

VOR/DME BIS	APP CRS	Rwy ldg	N/A
116.5	271°	TDZE	N/A
Chan 112		Apt Elev	1661

T
A
ASR
-35°C

MISSED APPROACH: Climb to 3000 then climbing right turn to 3500 direct BIS VOR/DME and hold.

ATIS	BISMARCK APP CON ★	BISMARCK TOWER ★	GND CON	UNICOM
119.35	126.3 298.9	118.3 (CTAF) L 257.8	121.9	122.95



REIL Rwys 3 and 21
HIRL Rwys 3-21 and 13-31

FAF to MAP 2.9 NM					
Knots	60	90	120	150	180
Min:Sec	2:54	1:56	1:27	1:10	0:58

CATEGORY	A	B	C	D
C CIRCLING	2200-1	539 (600-1)	2460-2¼ 799 (800-2¼)	2460-2½ 799 (800-2½)

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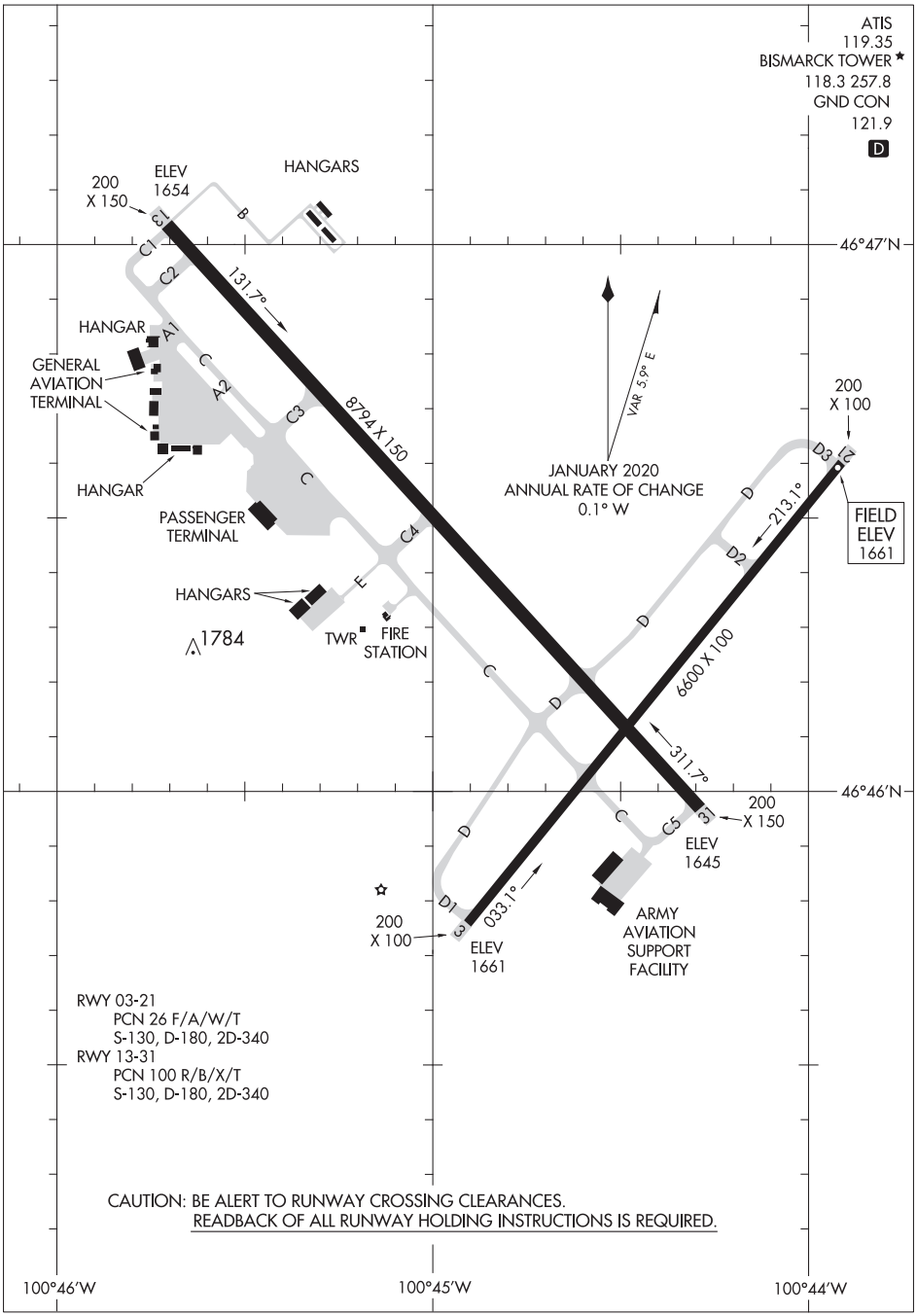

ATIS
119.35
BISMARCK TOWER ★
118.3 257.8
GND CON
121.9
D
200
X 150
ELEV
1654
HANGARS
131.7°
8794 X 150
HANGAR
GENERAL
AVIATION
TERMINAL
HANGAR
PASSENGER
TERMINAL
HANGARS
1784
TWR
FIRE
STATION
JANUARY 2020
ANNUAL RATE OF CHANGE
0.1° W
VAR 5.9° E
200
X 100
FIELD
ELEV
1661
213.1°
6600 X 100
311.7°
200
X 150
ELEV
1645
ARMY
AVIATION
SUPPORT
FACILITY
033.1°
200
X 100
ELEV
1661
46°47'N
46°46'N
100°46'W
100°45'W
100°44'W
RWY 03-21
PCN 26 F/A/W/T
S-130, D-180, 2D-340
RWY 13-31
PCN 100 R/B/X/T
S-130, D-180, 2D-340
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

BLUE EARTH, MINNESOTA AL-6692 (FAA) 19283

RNAV (GPS) RWY 34
BLUE EARTH MUNI (SBU)

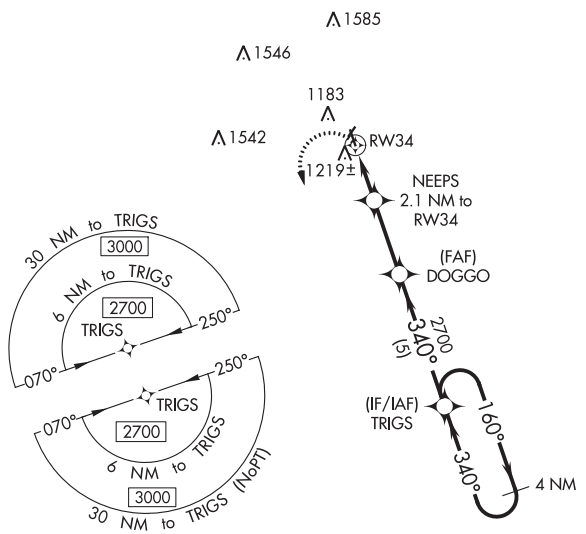
WAAS CH 70339 W34A	APP CRS 340°	Rwy ldg 3400 TDZE 1107 Apt Elev 1107

T A NA

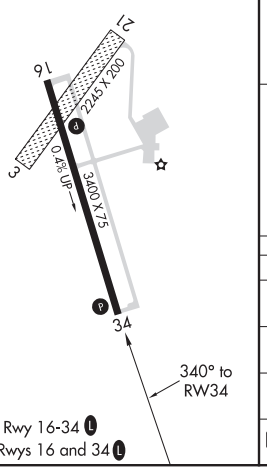
Baro-VNAV NA. Use Fairmont altimeter setting; when not received, use Forest City altimeter setting and increase all DA 45 feet and all MDA 60 feet; increase LPV all Cats visibility ⅛ mile, LNAV/VNAV all Cats, LNAV Cat C and Circling Cat C visibility ¼ mile. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA. Circling NA to Rwys 3 and 21.

MISSED APPROACH: Climbing left turn to 2700 direct TRIGS and hold.

FRM AWOS-3PT	MINNEAPOLIS CENTER	GCO	UNICOM
120.025	127.75 257.7	121.725	122.8 (CTAF) L

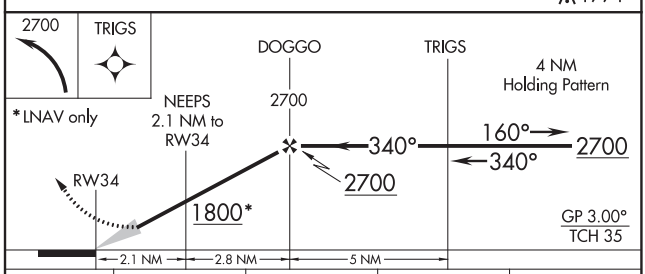


ELEV 1107 TDZE 1107



MIRL Rwy 16-34 L
REIL Rwys 16 and 34 L

1771



CATEGORY	A	B	C	D
LPV DA	1398-1 291 (300-1)			NA
LNAV/VNAV DA	1548-1½ 441 (500-1½)			NA
LNAV MDA	1520-1 413 (500-1)		1520-1⅛ 413 (500-1⅛)	NA
C CIRCLING	1560-1 453 (500-1)		1720-1¾ 613 (700-1¾)	NA

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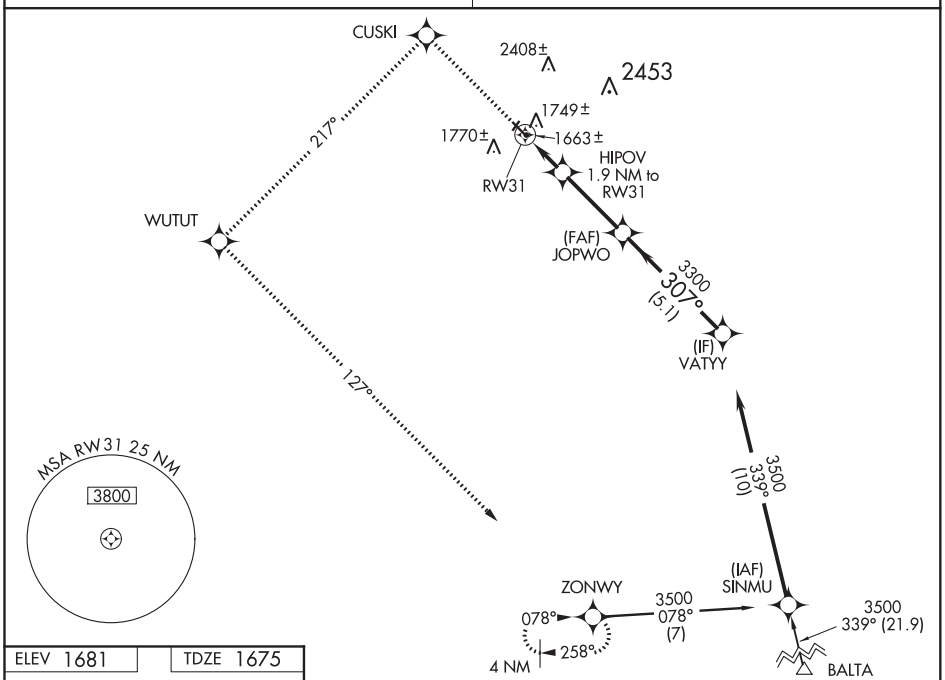
WAAS CH 78217 W31A	APP CRS 307°	Rwy ldg 3700 TDZE 1675 Apt Elev 1681

RNAV (GPS) RWY 31
BOTTINEAU MUNI (D09)

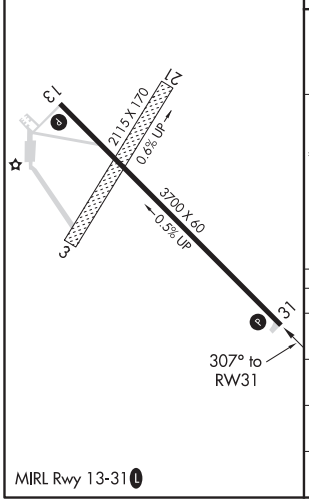
Baro-VNAV NA. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Use Minot Air Force Base altimeter setting, when not received; use Devils Lake altimeter setting and increase all DA/MDA 100 feet. Increase LPV, LNAV/VNAV Cats A/B and Circling Cat B visibility ¼ mile.

MISSED APPROACH: Climb to 3900 direct CUSKI and left turn on track 217° to WUTUT and left turn on track 127° to ZONWY and hold.

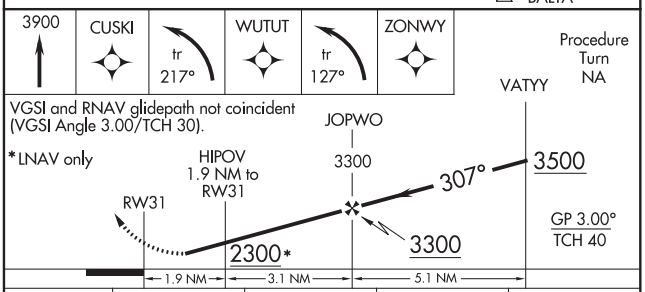
MINOT APP CON ★	UNICOM
119.6 363.8	122.8 (CTAF) L



ELEV 1681	TDZE 1675



MIRL Rwy 13-31 L



CATEGORY	A	B	C	D
LPV DA	2051-1½ 376 (400-1½)		NA	
LNAV/VNAV DA	2125-1¾ 450 (500-1¾)		NA	
LNAV MDA	2120-1 445 (500-1)		NA	
CIRCLING	2320-1 639 (700-1)	2380-1 699 (700-1)	NA	

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BOWMAN, NORTH DAKOTA AL-11025 (FAA) 20198

RNAV (GPS) RWY 13

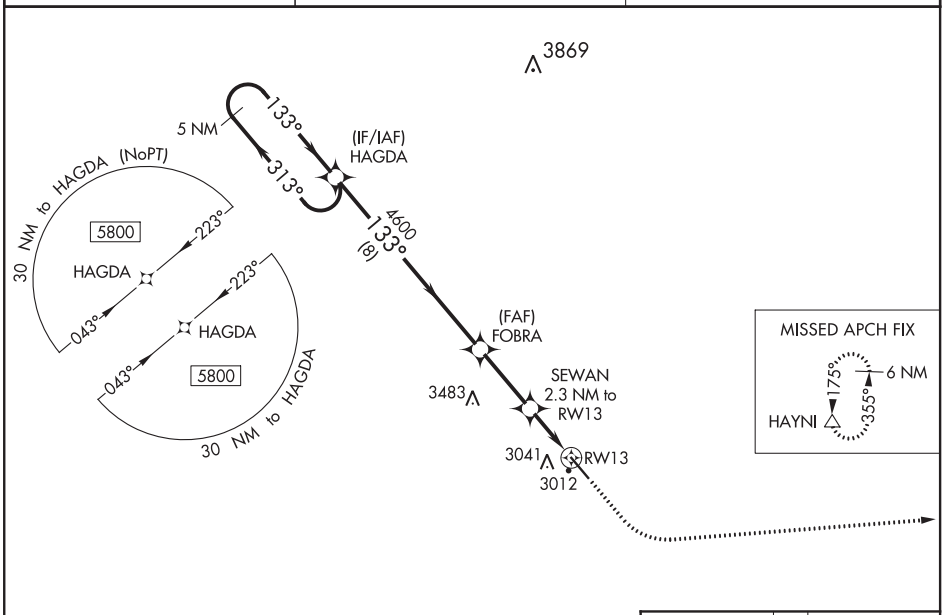
BOWMAN RGNL (BWW)

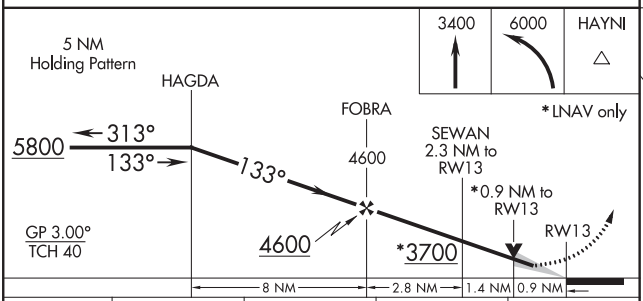
WAAS CH 81839 W13A	APP CRS 133°	Rwy ldg 5701 TDZE 2948 Apt Elev 2965

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Hettinger altimeter setting and increase all DA 102 feet, and all MDA 120 feet; increase LPV and LNAV/VNAV visibility ¼ mile all Cats, and LNAV Cat C visibility ⅜ mile. Baro-VNAV and VDP NA when using Hettinger altimeter setting.

MISSED APPROACH: Climb to 3400 then climbing left turn to 6000 direct HAYNI and hold.

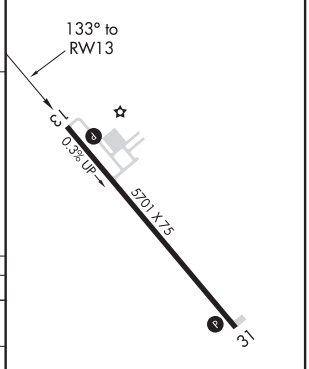
AWOS-3PT	SALT LAKE CITY CENTER	UNICOM
118.075	126.85 305.2	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	3198-1 250 (300-1)			
LNAV/VNAV DA	3198-1 250 (300-1)			
LNAV MDA	3280-1 332 (400-1)			
C CIRCLING	3380-1 415 (500-1)	3420-1 455 (500-1)	3580-1¾ 615 (700-1¾)	3580-2 615 (700-2)

ELEV 2965 TDZE 2948



REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

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NC-1, 25 FEB 2021 to 22 APR 2021

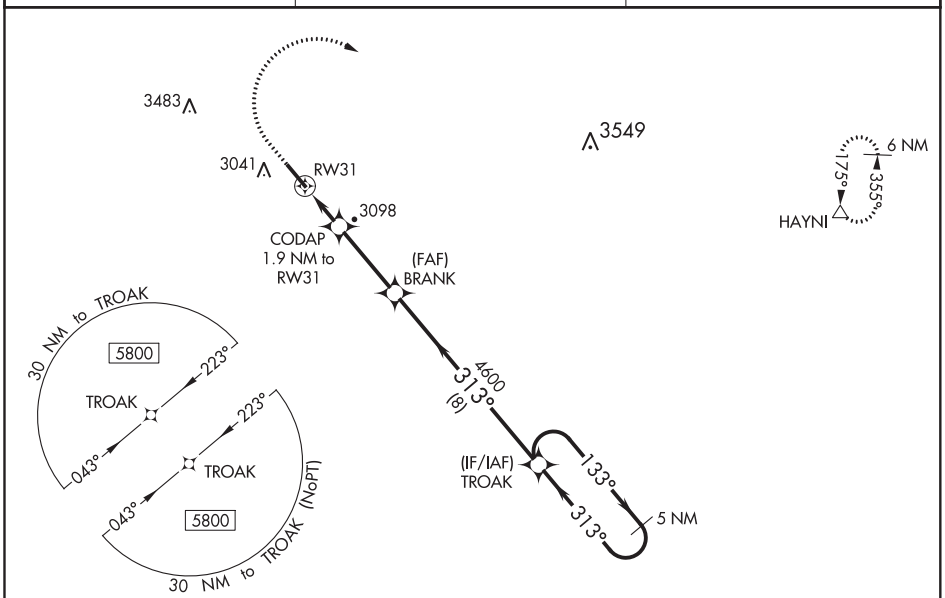
WAAS CH 42538 W31A	APP CRS 313°	Rwy ldg 5701 TDZE 2965 Apt Elev 2965

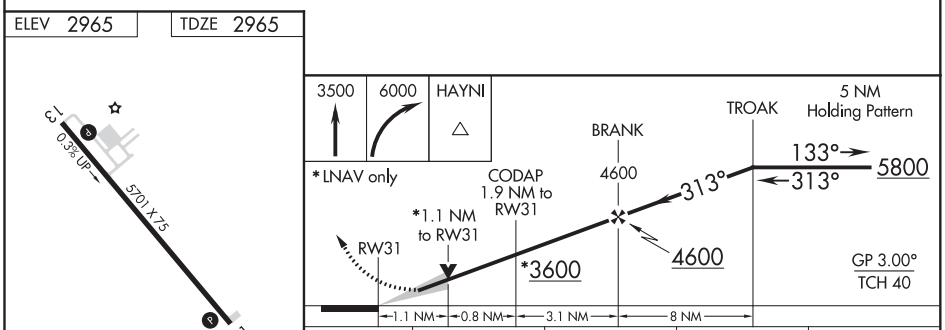
RNAV (GPS) RWY 31
BOWMAN RGNL (BWW)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Hettinger altimeter setting and increase all DA 102 feet, and all MDA 120 feet; increase LPV and LNAV/VNAV visibility ¼ mile all Cats, increase LNAV Cat C visibility ¼ mile. Baro-VNAV and VDP NA when using Hettinger altimeter setting.

MISSED APPROACH: Climb to 3500 then climbing right turn to 6000 direct HAYNI and hold.

AWOS-3PT	SALT LAKE CITY CENTER	UNICOM
118.075	126.85 305.2	122.8 (CTAF) L





CATEGORY		A	B	C	D
LPV	DA	3215-1 250 (300-1)			
LNAV/VNAV	DA	3227-1 262 (300-1)			
LNAV	MDA	3360-1 395 (400-1)		3360-1⅛ 395 (400-1⅛)	
C CIRCLING		3380-1 415 (500-1)	3420-1 455 (500-1)	3580-1¾ 615 (700-1¾)	3580-2 615 (700-2)

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

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LOC I-BRD	APP CRS	Rwy ldg	6512
109.9	231°	TDZE	1224
		Apt Elev	1232

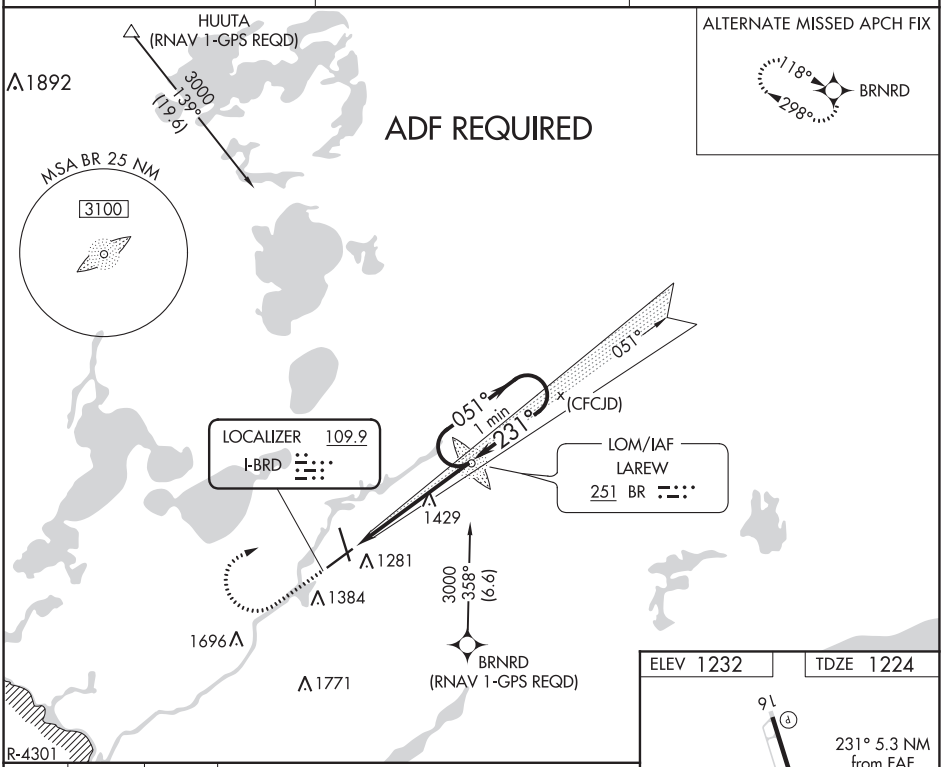
ILS or LOC RWY 23
BRAINERD LAKES RGNL (BRD)

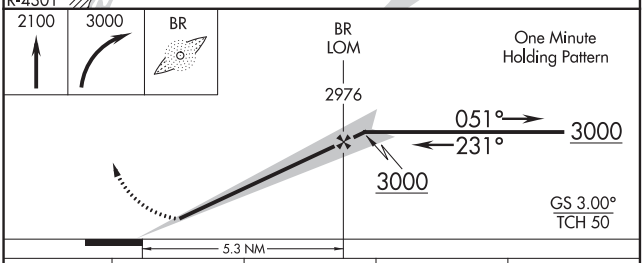
ADF required. When local altimeter setting not received, use Aitkin altimeter setting and increase all DAs 52 feet and all MDAs 60 feet. Increase S-LOC Cat C visibility to 1 SM and Circling Cat D visibility to 2¼ SM.

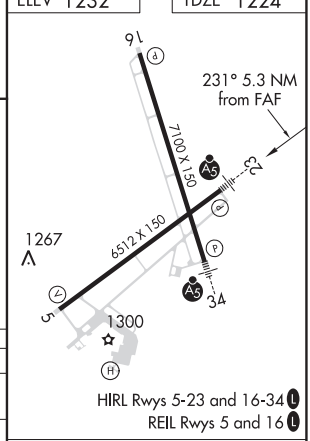
MALSR

MISSED APPROACH: Climb to 2100 then climbing right turn to 3000 direct LAREW LOM and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
126.775	118.05 239.0	122.7 (CTAF) L







CATEGORY	A	B	C	D
S-ILS 23	1424-½ 200 (200-½)			
S-LOC 23	1680-½ 456 (500-½)		1680-⅞ 456 (500-⅞)	1680-1 456 (500-1)
C CIRCLING	1760-1 528 (600-1)		1760-1½ 528 (600-1½)	1860-2 628 (700-2)

FAF to MAP 5.3 NM					
Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46

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LOC/DME I-LER 109.7 Chan 34	APP CRS 340°	Rwy ldg 7100 TDZE 1232 Apt Elev 1232

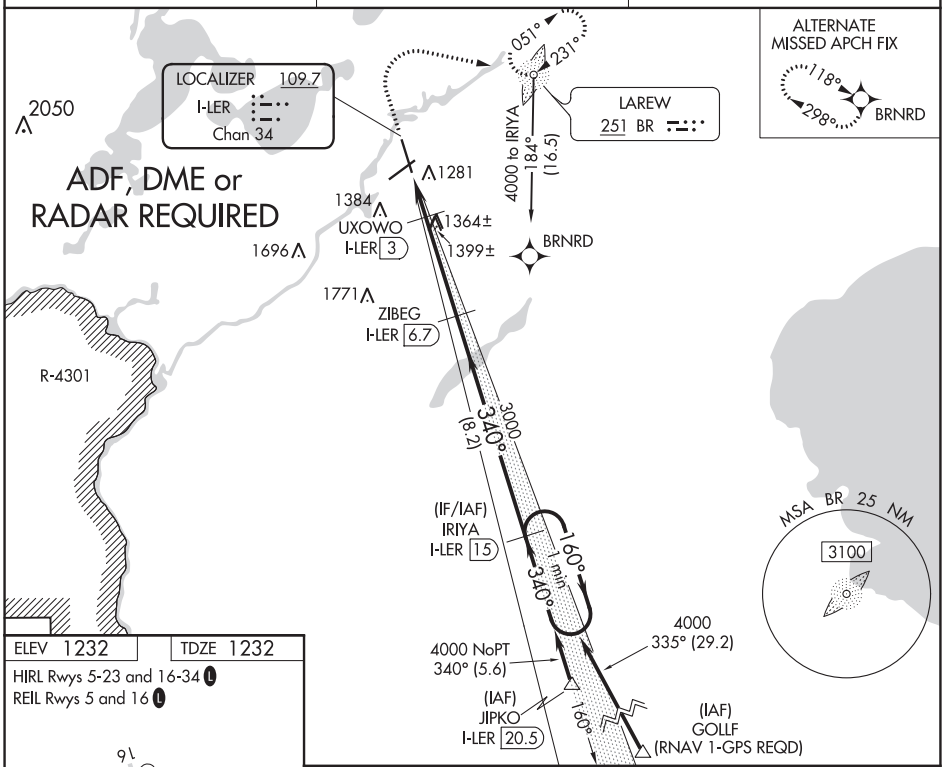
ILS or LOC/DME RWY 34
BRAINERD LAKES RGNL (BRD)

T NA DME and ADF required. VDP NA with Aitkin altimeter setting. When local altimeter setting not received, use Aitkin altimeter setting and increase DA 53 feet and all MDAs 60 feet, increase S-LOC 34 Cats C and D visibility ⅞ SM and Circling Cat D visibility 2½ SM.

MALSR

MISSED APPROACH: Climb to 1700 then climbing right turn to 4000 direct BR LOM, continue climb-in-hold to 4000.

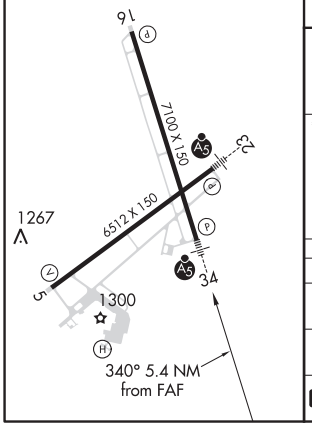
ASOS	MINNEAPOLIS CENTER	UNICOM
126.775	118.05 239.0	122.7 (CTAF) L

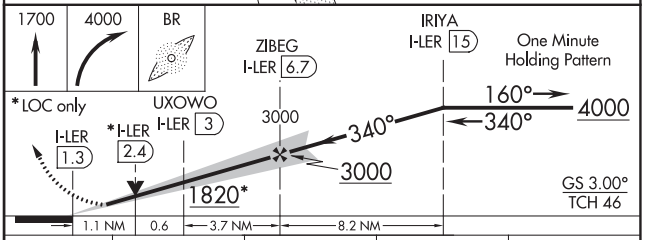


ELEV 1232 TDZE 1232

HIRL Rwys 5-23 and 16-34 L

REIL Rwys 5 and 16 L





CATEGORY	A	B	C	D
S-ILS 34	1432-½ 200 (200-½)			
S-LOC 34	1620-½ 388 (400-½)		1620-⅝ 388 (400-⅝)	
C CIRCLING	1760-1 528 (600-1)		1760-1½ 528 (600-1½)	1860-2 628 (700-2)

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BRAINERD, MINNESOTA AL-5182 (FAA) 19115

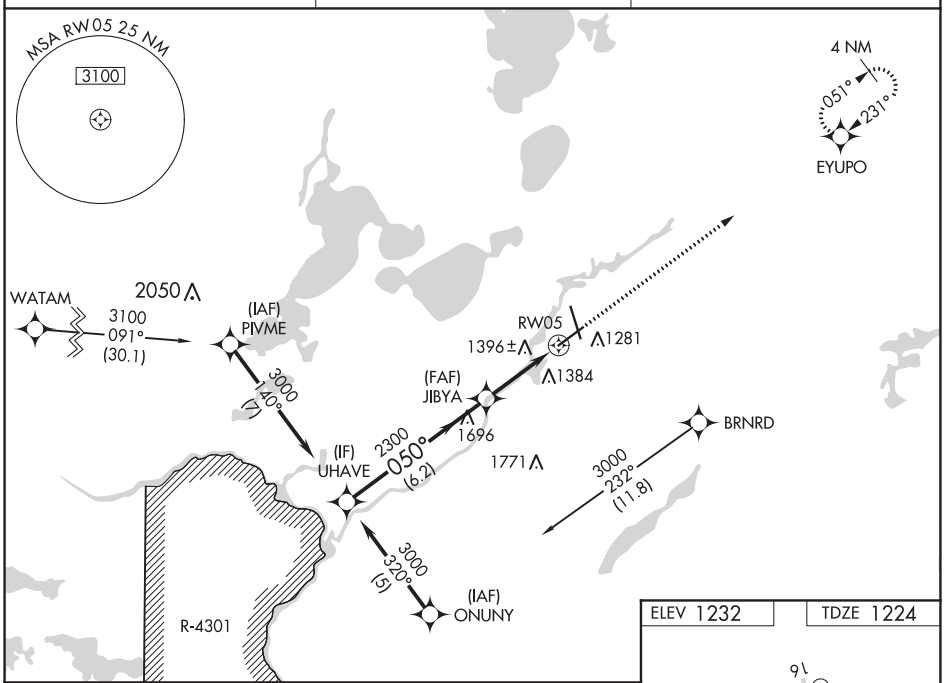
WAAS CH 82018 W05A	APP CRS 050°	Rwy ldg 6512 TDZE 1224 Apt Elev 1232

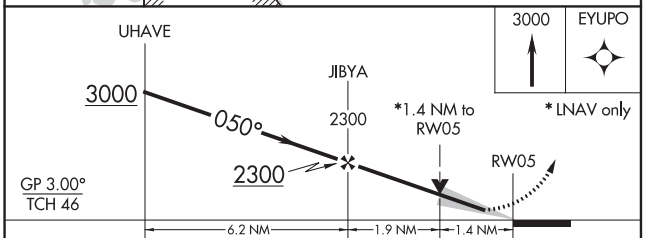
RNAV (GPS) RWY 5
BRAINERD LAKES RGNL (BRD)

Baro-VNAV NA when using Aitkin altimeter setting. DME/DME RNP-0.3 NA. Procedure NA when R-4301 is active. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). When local altimeter setting not received, use Aitkin altimeter setting and increase all DA 52 feet and all MDA 60 feet, increase LPV and LNAV/VNAV visibility ¼ mile all Cats, and LNAV Cats C and D visibility ¼ mile. VDP NA with Aitkin altimeter setting.

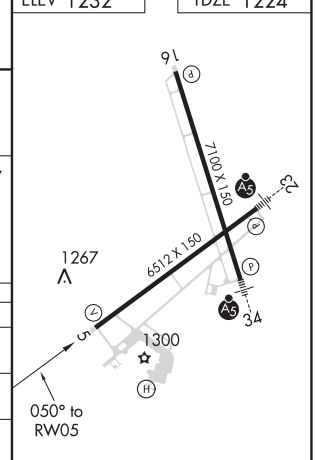
MISSED APPROACH: Climb to 3000 direct EYUPO and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
126.775	118.05 239.0	122.7 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1424-¾ 200 (200-¾)			
LNAV/VNAV DA	1777-2 553 (600-2)			
LNAV MDA	1700-1 476 (500-1)		1700-1¼ 476 (500-1¼)	1700-1½ 476 (500-1½)
C CIRCLING	1760-1 528 (600-1)		1760-1½ 528 (600-1½)	1860-2 628 (700-2)



HIRL Rwys 5-23 and 16-34 L
REIL Rwys 5 and 16 L

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 82502 W23A	APP CRS 231°	Rwy ldg 6512 TDZE 1224 Apt Elev 1232

RNAV (GPS) RWY 23
BRAINERD LAKES RGNL (BRD)

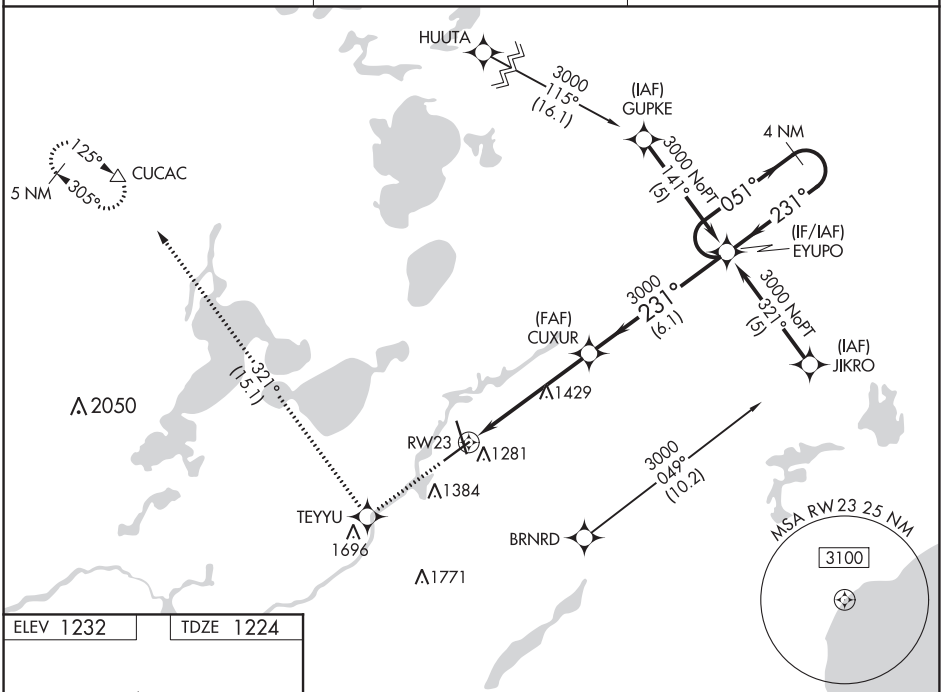
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. Baro-VNAV and VDP NA when using Aitkin altimeter setting. When local altimeter setting not received, use Aitkin altimeter setting and increase all DAs 52 feet and all MDAs 60 feet.

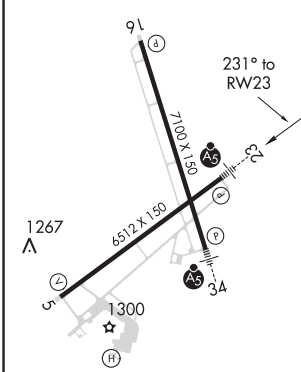
MALSR

MISSED APPROACH: Climb to 3300 direct TEYYU and on track 321° to CUCAC and hold.

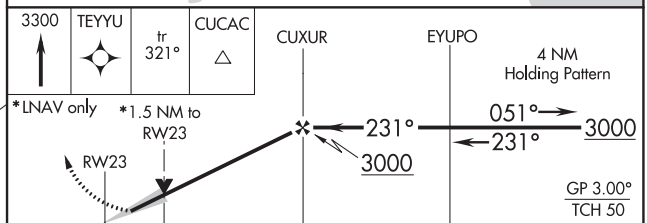
ASOS	MINNEAPOLIS CENTER	UNICOM
126.775	118.05 239.0	122.7 (CTAF) L



ELEV 1232 TDZE 1224



HIRL Rwys 5-23 and 16-34 L
REIL Rwys 5 and 16 L



CATEGORY	A	B	C	D
LPV DA	1501-½ 277 (300-½)			
LNAV/VNAV DA	1573-¾ 349 (400-¾)			
LNAV MDA	1760-½ 536 (600-½)		1760-1 536 (600-1)	1760-1¼ 536 (600-1¼)
C CIRCLING	1760-1 528 (600-1)		1760-1½ 528 (600-1½)	1860-2 628 (700-2)

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NC-1, 25 FEB 2021 to 22 APR 2021

BRAINERD, MINNESOTA | AL-5182 (FAA) | 20366

WAAS CH 70711 W34A	APP CRS 340°	Rwy ldg 7100 TDZE 1232 Apt Elev 1232

RNAV (GPS) RWY 34
BRAINERD LAKES RGNL (BRD)

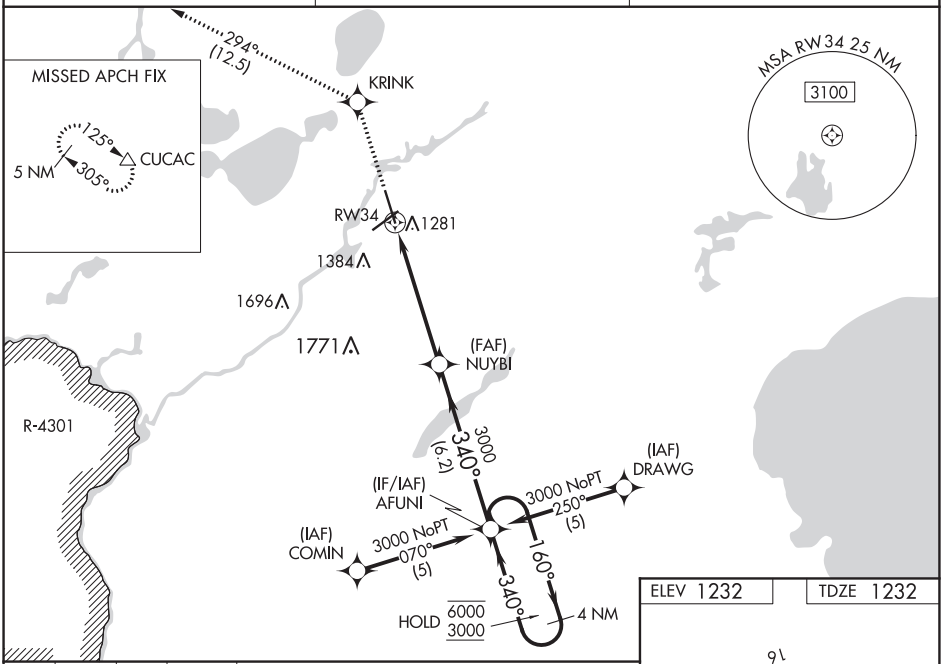
RNP APCH.

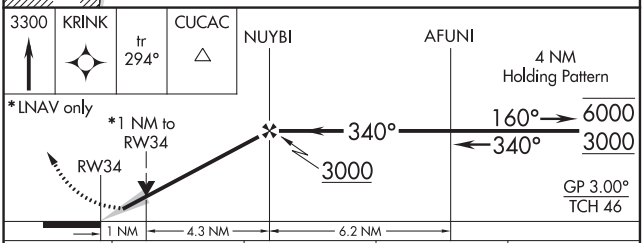
Baro-VNAV and VDP NA when using Aitkin altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. When local altimeter setting not received, use Aitkin altimeter setting; increase LPV DA to 1484, LNAV/VNAV DA to 1636 and LNAV/VNAV visibility ¼ SM: increase all MDAs 60 feet and LNAV Cats C and D visibility ¼ SM. For inop ALS when using Aitkin altimeter setting, increase LNAV Cat D visibility to 1½ SM.

MALSR

MISSED APPROACH: Climb to 3300 direct KRINK and on track 294° to CUCAC and hold.

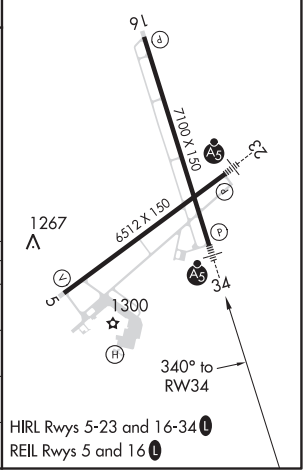
ASOS	MINNEAPOLIS CENTER	UNICOM
126.775	118.05 239.0	122.7 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1432-½ 200 (200-½)			
LNAV/VNAV DA	1584-¾ 352 (400-¾)			
LNAV MDA	1620-½ 388 (400-½)		1620-⅝ 388 (400-⅝)	1620-1 388 (400-1)
C CIRCLING	1760-1 528 (600-1)		1760-1½ 528 (600-1½)	1860-2 628 (700-2)

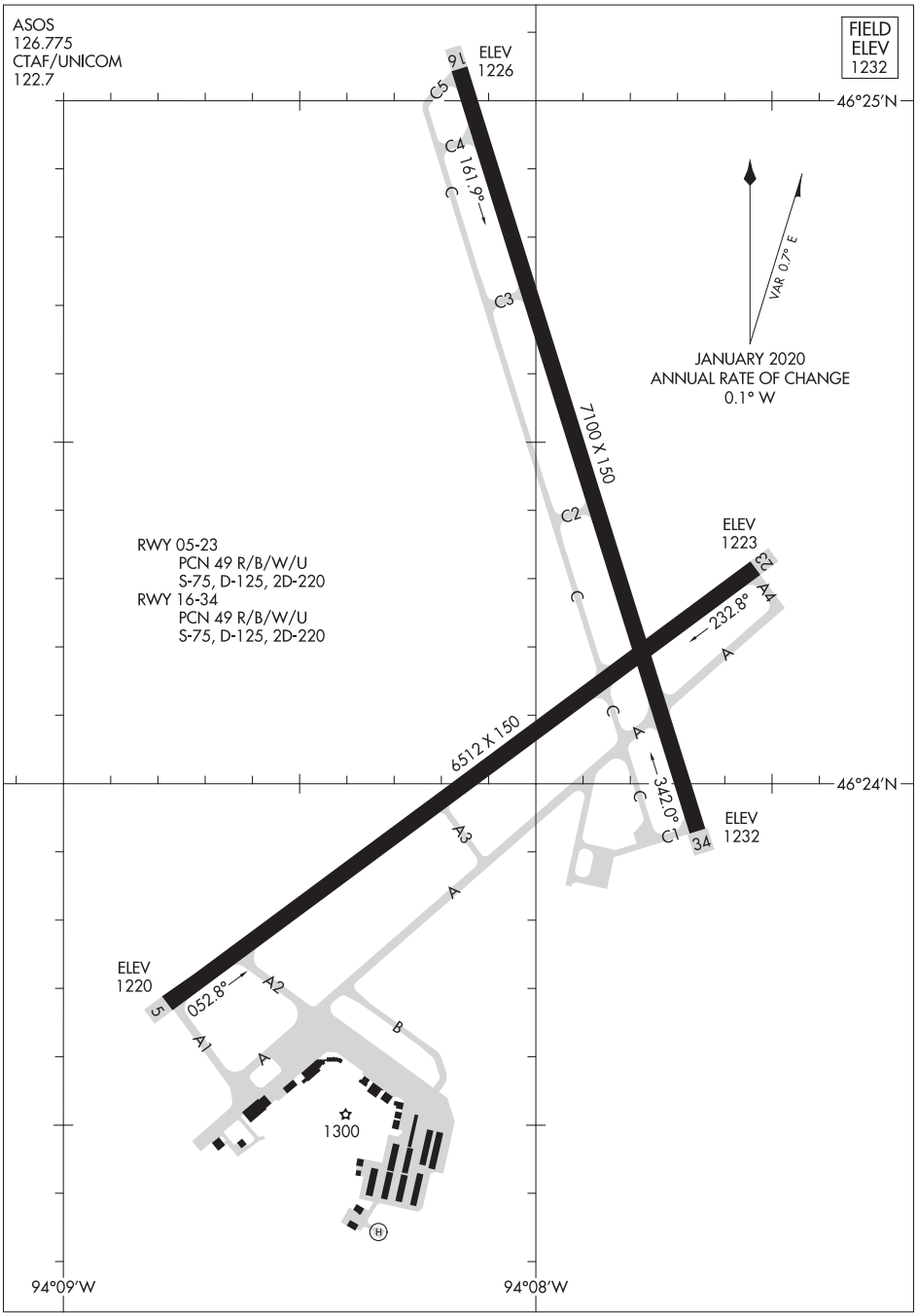
ELEV 1232 | TDZE 1232



HIRL Rwys 5-23 and 16-34 L
REIL Rwys 5 and 16 L

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

AL-5182 (FAA)



NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

BRITTON, SOUTH DAKOTA | AL-6679 (FAA) | 19283

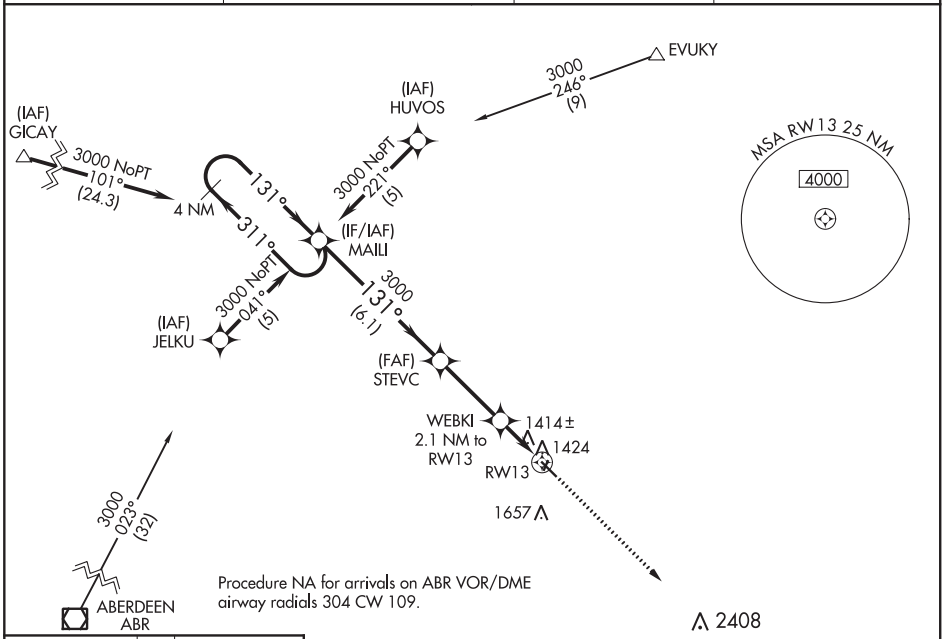
RNAV (GPS) RWY 13
BRITTON MUNI (BTN)

APP CRS	Rwy ldg	4210
131°	TDZE	1316
	Apt Elev	1318

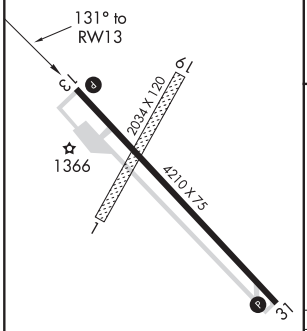
Use Aberdeen altimeter setting; when not received, use Wheaton altimeter setting and increase all MDA 80 feet. DME/DME RNP-0.3 NA. Circling NA to Rwys 1 and 19. Helicopter visibility reduction below ¾ SM NA.

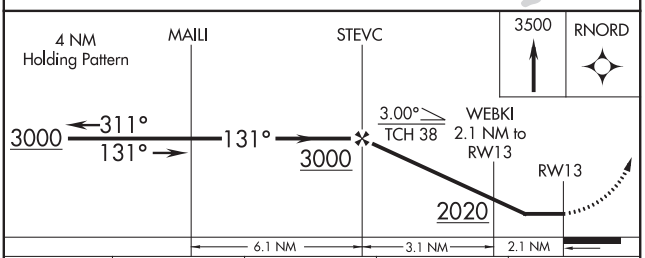
MISSED APPROACH: Climb to 3500 direct RNORD and hold.

ABR ASOS	MINNEAPOLIS CENTER	GCO	AUNICOM
125.875	120.6 371.9	121.725	122.8 (CTAF) L



ELEV 1318 | TDZE 1316





CATEGORY	A	B	C	D
LNAV MDA	1820-1	504 (600-1)	NA	
CIRCLING	2000-1	682 (700-1)	NA	

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

NC-1, 25 FEB 2021 to 22 APR 2021

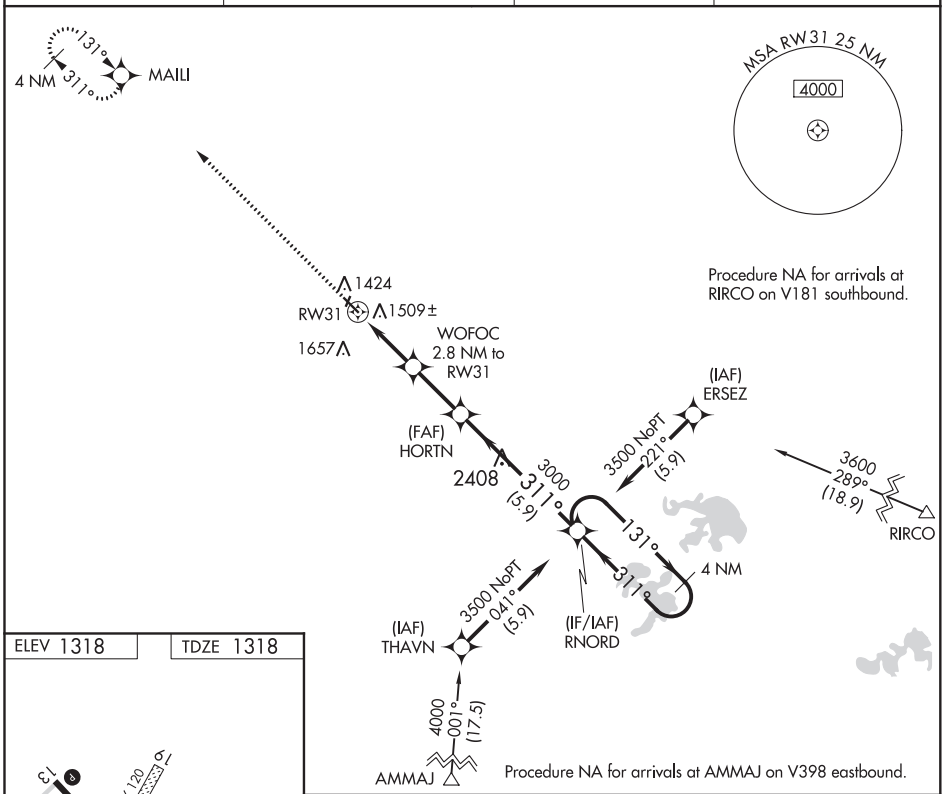
APP CRS	Rwy ldg	4210
311°	TDZE	1318
	Apt Elev	1318

RNAV (GPS) RWY 31
BRITTON MUNI (BTN)

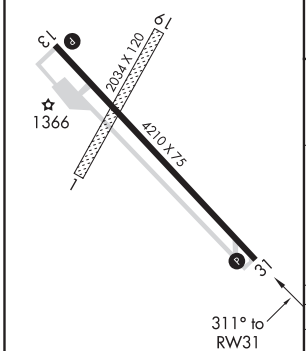
Use Aberdeen altimeter setting; when not received, use Wheaton altimeter setting and increase all MDA 80 feet. DME/DME RNP-0.3 NA. Circling to Rwys 1 and 19 NA. Helicopter visibility reduction below ¾ SM NA.

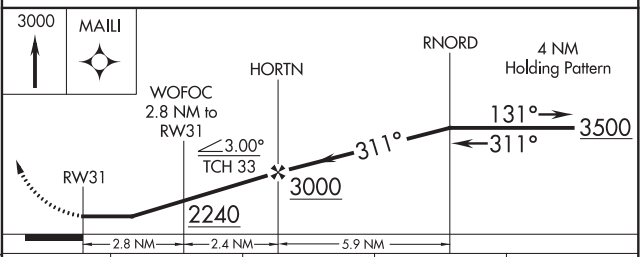
MISSED APPROACH: Climb to 3000 direct MAILI and hold.

ABR ASOS	MINNEAPOLIS CENTER	GCO	AUNICOM
125.875	120.6 371.9	121.725	122.8 (CTAF) L



ELEV 1318 TDZE 1318





CATEGORY	A	B	C	D
LNAV MDA	1860-1 542 (600-1)		NA	
CIRCLING	2000-1 682 (700-1)		NA	

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

BROOKINGS, SOUTH DAKOTA AL-969 (FAA) 21056

LOC/DME I-BKX	APP CRS	Rwy ldg 6000
111.35	116°	TDZE 1621
Chan 50(Y)		Apt Elev 1648

ILS or LOC RWY 12
BROOKINGS RGNL (BKX)

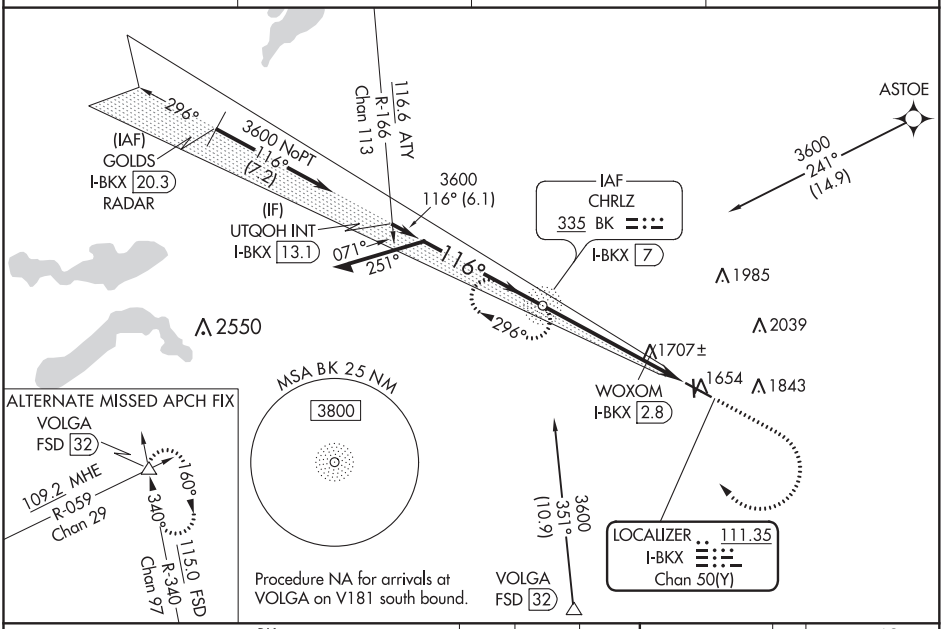
ADF required. From ASTOE: RNAV 1-GPS required.

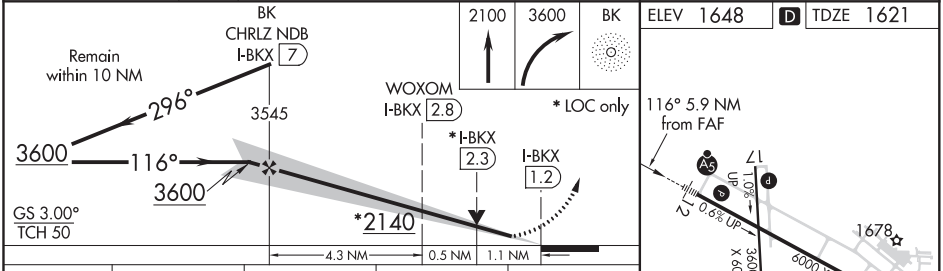
Circling Rwy 17 NA at night. For inop ALS, increase S-LOC 12 Cats C/D visibility to 1⅜ SM. For inop ALS when using WOXOM fix minimums, increase S-LOC 12 Cat C/D visibility to 1 SM.

MALSR

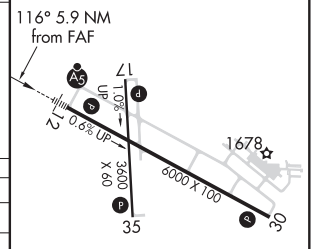
MISSED APPROACH: Climb to 2100 then climbing right turn to 3600 direct BK NDB and hold, continue climb-in hold to 3600.

AWOS-3PT	MINNEAPOLIS CENTER	GCO	UNICOM
119.925	132.05 317.4	121.725	123.0 (CTAF) L





ELEV 1648 D TDZE 1621



CATEGORY	A	B	C	D
S-ILS 12	1821-½ 200 (200-½)			
S-LOC 12	2140-½ 519 (500-½)		2140-1 519 (500-1)	
C CIRCLING	2140-1 492 (500-1)	2160-1 512 (600-1)	2340-2 692 (700-2)	2340-2¼ 692 (700-2¼)
WOXOM FIX MINIMUMS				
S-LOC 12	2000-½ 379 (400-½)		2000-⅝ 379 (400-⅝)	
C CIRCLING	2140-1 492 (500-1)	2160-1 512 (600-1)	2340-2 692 (700-2)	2340-2¼ 692 (700-2¼)

HIRL Rwy 12-30 L
MIRL Rwy 17-35 L
REIL Rwys 17, 30, and 35 L

FAF to MAP 5.9 NM					
Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 73036 W12A	APP CRS 115°	Rwy ldg 6000 TDZE 1621 Apt Elev 1648

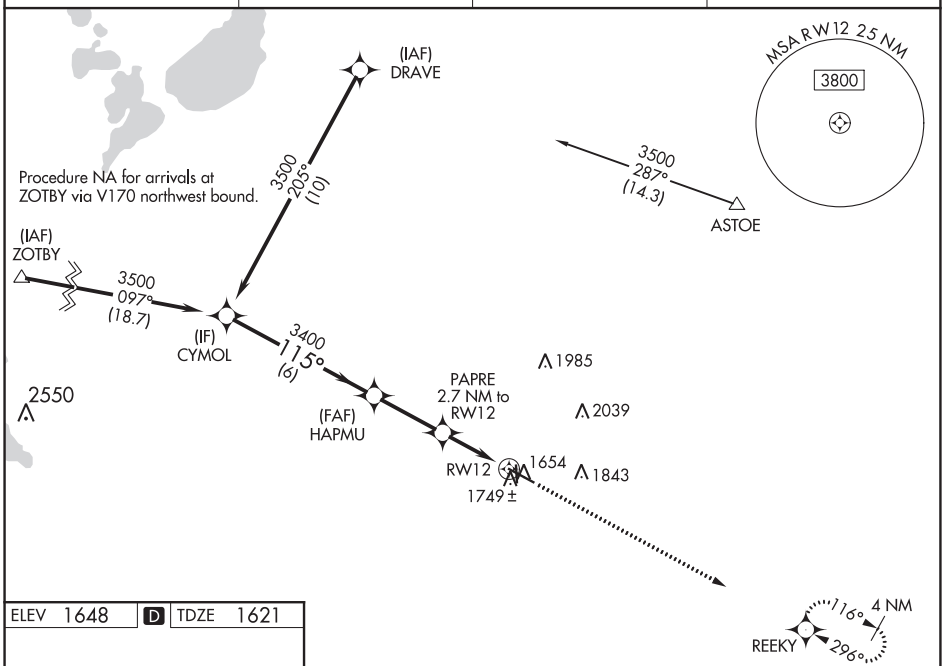
RNAV (GPS) RWY 12
BROOKINGS RGNL (BKX)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Pipestone altimeter setting and increase all DA 81 feet and all MDA 100 feet; increase LNAV/VNAV all Cats visibility ¼ mile; LNAV Cats C and D visibility ⅜ mile; Circling Cats C and D visibility ¼ mile. Baro-VNAV and VDP NA when using Pipestone altimeter setting. Night landing Rwy 17 NA.

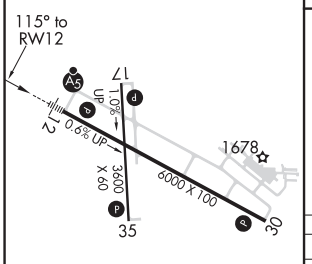
MALSR

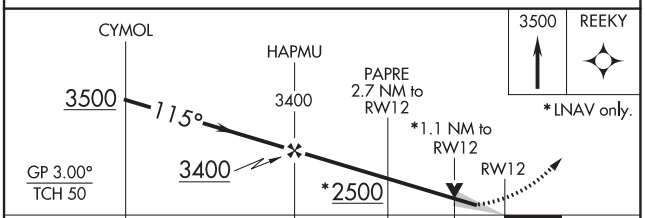
MISSED APPROACH: Climb to 3500 direct REEKY and hold.

AWOS-3PT	MINNEAPOLIS CENTER	GCO	UNICOM
119.925	132.05 317.4	121.725	123.0 (CTAF) L



ELEV 1648 | D | TDZE 1621





CATEGORY	A	B	C	D
LPV DA	1821-½ 200 (200-½)			
LNAV/VNAV DA	1948-⅝ 327 (300-⅝)			
LNAV MDA	2000-½ 379 (400-½)		2000-⅝ 379 (400-⅝)	
C CIRCLING	2140-1 492 (500-1)	2160-1 512 (600-1)	2340-2 692 (700-2)	2340-2¼ 692 (700-2¼)

HIRL Rwy 12-30 L
MIRL Rwy 17-35 L
REIL Rwys 17, 30 and 35 L

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NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 82736 W30A	APP CRS 296°	Rwy ldg 6000 TDZE 1637 Apt Elev 1648

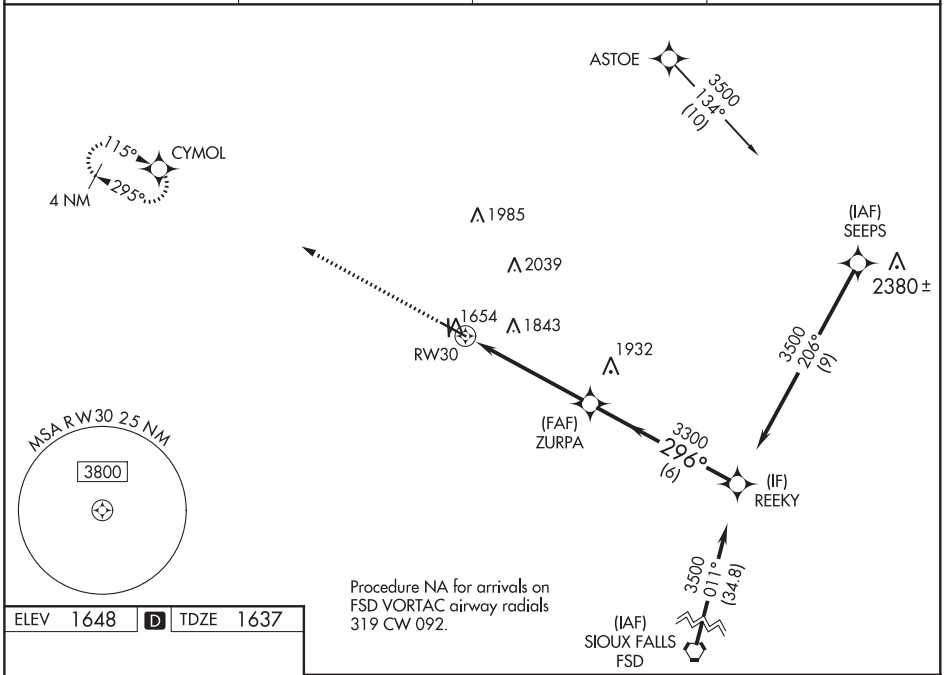
RNAV (GPS) RWY 30
BROOKINGS RGNL (BKX)

RNP APCH.

Circling Rwy 17 NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C or above 54°C. Rwy 30 helicopter visibility reduction below 1 SM NA.

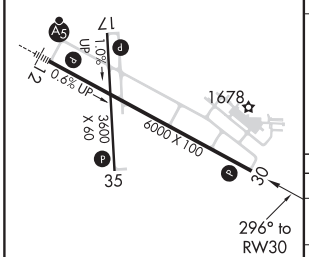
MISSED APPROACH: Climb to 3500 direct CYMOL and hold.

AWOS-3PT	MINNEAPOLIS CENTER	GCO	UNICOM
119.925	132.05 317.4	121.725	123.0 (CTAF) L

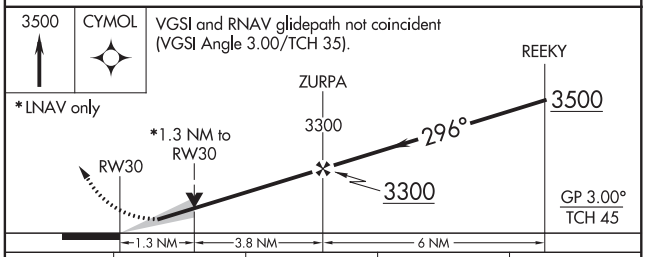


Procedure NA for arrivals on FSD VORTAC airway radials 319 CW 092.

ELEV 1648 D TDZE 1637

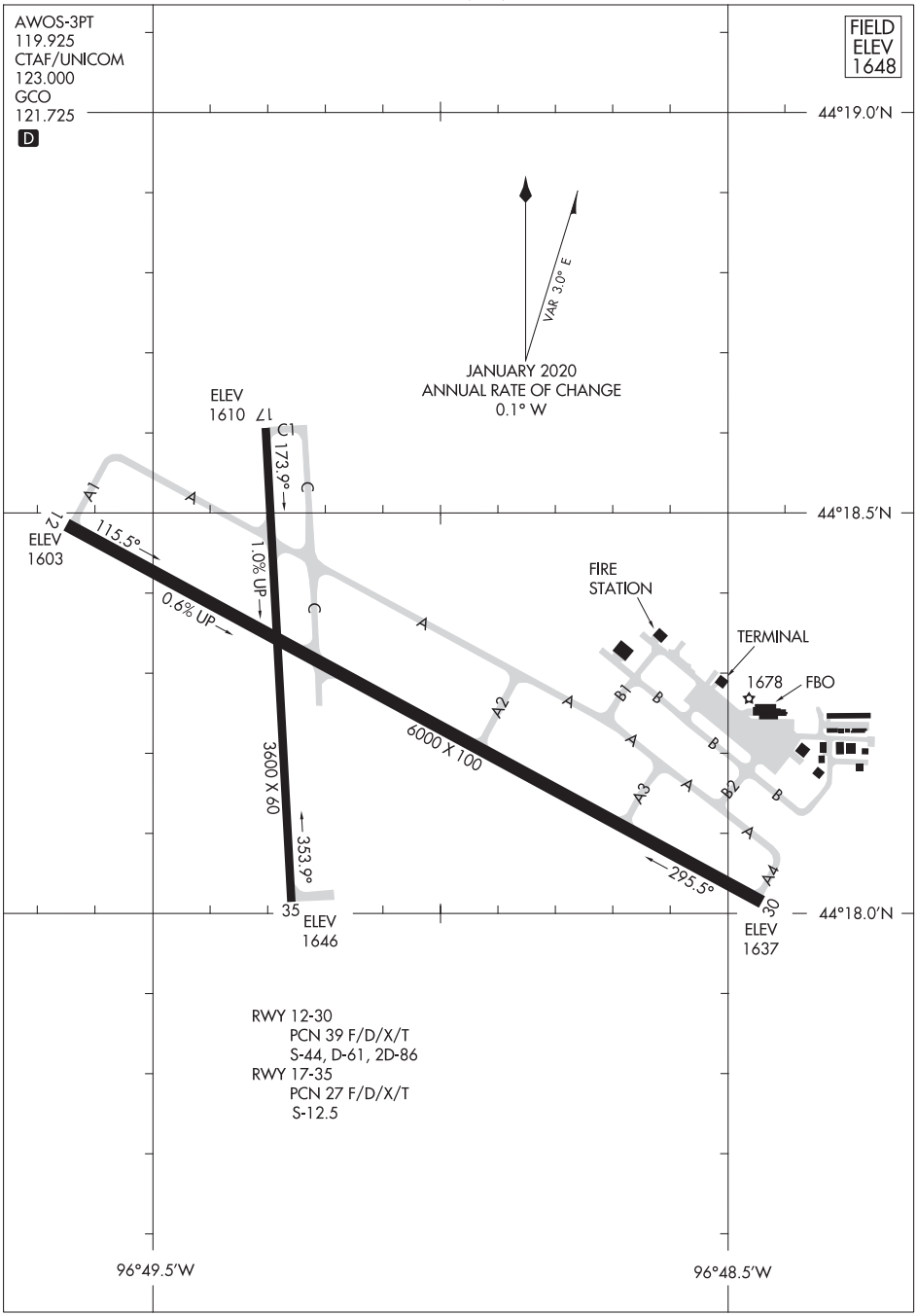


HIRL Rwy 12-30 L
MIRL Rwy 17-35 L
REIL Rwys 17, 30 and 35 L



CATEGORY	A	B	C	D
LPV DA	1887-1 250 (300-1)			
LNAV/VNAV DA	1968-1⅛ 331 (400-1⅛)			
LNAV MDA	2080-1 443 (500-1)		2080-1⅜ 443 (500-1⅜)	
C CIRCLING	2140-1 492 (500-1)	2160-1 512 (600-1)	2340-2 692 (700-2)	2340-2¼ 692 (700-2¼)

NC-1, 25 FEB 2021 to 22 APR 2021


AWOS-3PT
119.925
CTAF/UNICOM
123.000
GCO
121.725
D
FIELD
ELEV
1648
44°19.0'N
VAR 3.0° E
JANUARY 2020
ANNUAL RATE OF CHANGE
0.1° W
ELEV
1610
17
C1
173.9°
C
A1
A
12
ELEV
1603
115.5°
1.0% UP
0.6% UP
44°18.5'N
FIRE
STATION
TERMINAL
1678
FBO
A2
A
B1
B
6000 X 100
A3
B2
A4
3600 X 60
353.9°
295.5°
35
ELEV
1646
30
ELEV
1637
44°18.0'N
RWY 12-30
PCN 39 F/D/X/T
S-44, D-61, 2D-86
RWY 17-35
PCN 27 F/D/X/T
S-12.5
96°49.5'W
96°48.5'W

BUFFALO, MINNESOTA | AL-6583 (FAA) | 20254

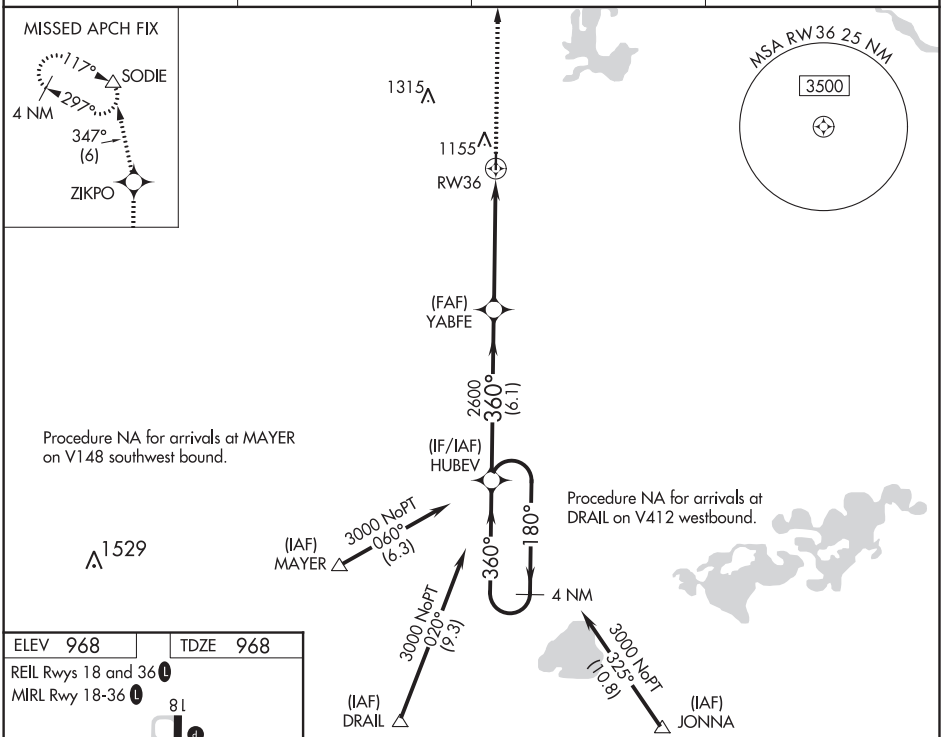
WAAS CH 99540 W36A	APP CRS 360°	Rwy ldg 3200 TDZE 968 Apt Elev 968

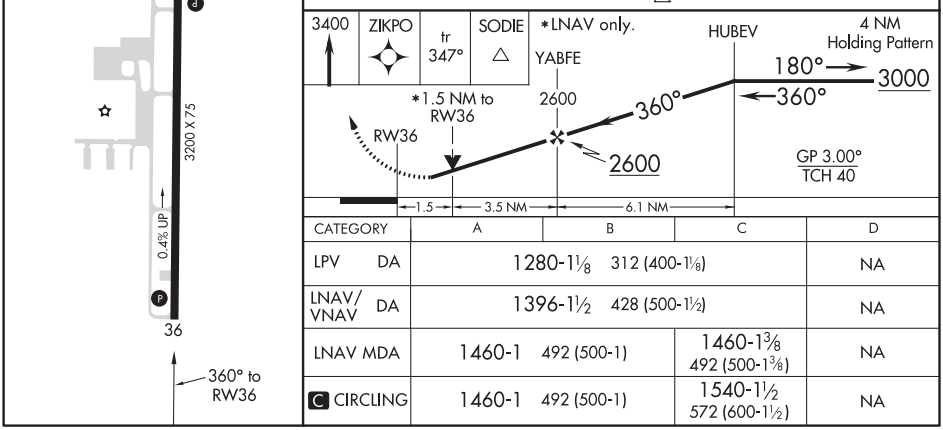
RNAV (GPS) RWY 36
BUFFALO MUNI (CFE)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). Circling Rwy 18 NA at night. Rwy 36 helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3400 direct ZIKPO and track 347° to SODIE and hold.

AWOS-3	MINNEAPOLIS APP CON	GCO	UNICOM
120.45	126.5 335.65	121.725	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1280-1⅛ 312 (400-1⅛)			NA
LNAV/VNAV DA	1396-1½ 428 (500-1½)			NA
LNAV MDA	1460-1 492 (500-1)		1460-1⅜ 492 (500-1⅜)	NA
C CIRCLING	1460-1 492 (500-1)		1540-1½ 572 (600-1½)	NA

BUFFALO, MINNESOTA
Amdt 1 22JUN17

45°10′N-93°51′W

BUFFALO MUNI (CFE)
RNAV (GPS) RWY 36

NC-1, 25 FEB 2021 to 22 APR 2021

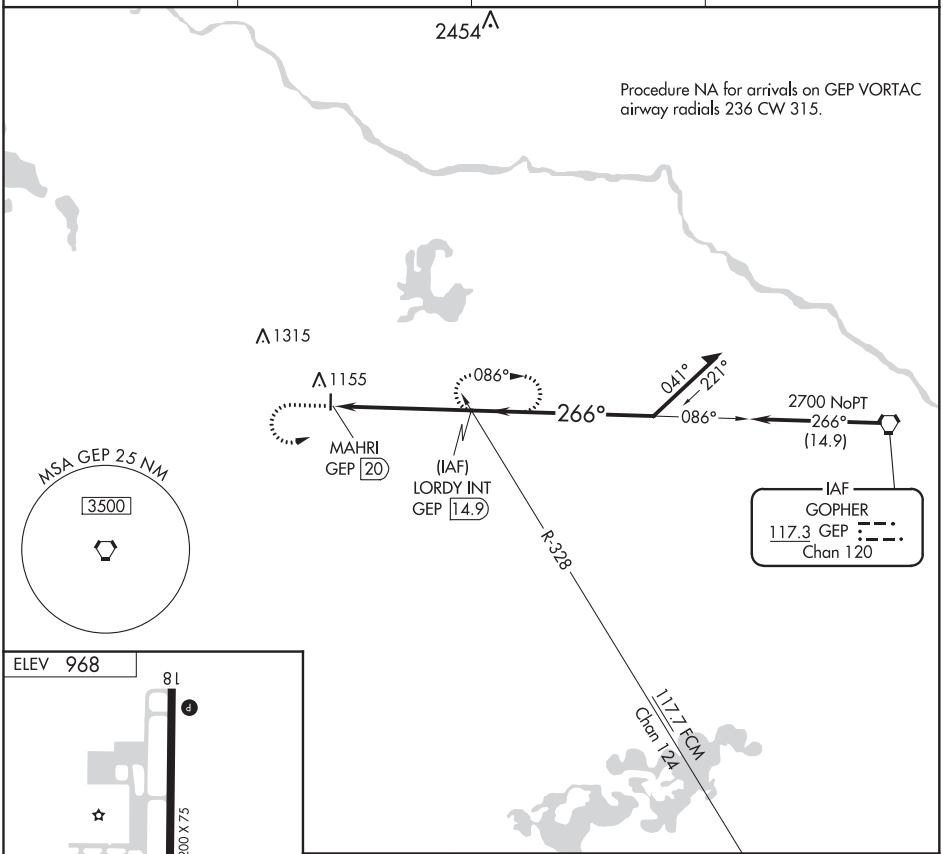
VORTAC GEP 117.3 Chan 120	APP CRS 266°	Rwy ldg N/A TDZE N/A Apt Elev 968

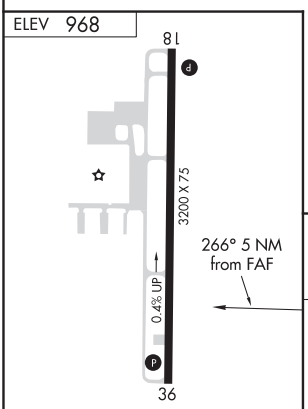
VOR-A
BUFFALO MUNI (CFE)

When local altimeter setting not received, use Maple Lake altimeter setting. When VGSI inoperative, procedure NA at night.

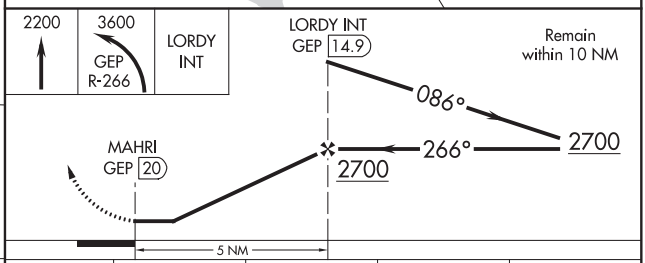
MISSED APPROACH: Climb to 2200 then climbing left turn to 3600 via GEP VORTAC R-266 to LORDY INT/GEP VORTAC 14.9 DME and hold.

AWOS-3	MINNEAPOLIS APP CON	GCO	UNICOM
120.45	126.5 335.65	121.725	122.8 (CTAF) L





REIL Rwys 18 and 36 L
MIRL Rwy 18-36 L



FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

CATEGORY	A	B	C	D
C CIRCLING	1580-1	612 (700-1)	1580-1¾ 612 (700-1¾)	NA

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NC-1, 25 FEB 2021 to 22 APR 2021

CALEDONIA, MINNESOTA AL-6374 (FAA) 20310

VOR/DME or GPS-A
HOUSTON COUNTY (CHU)

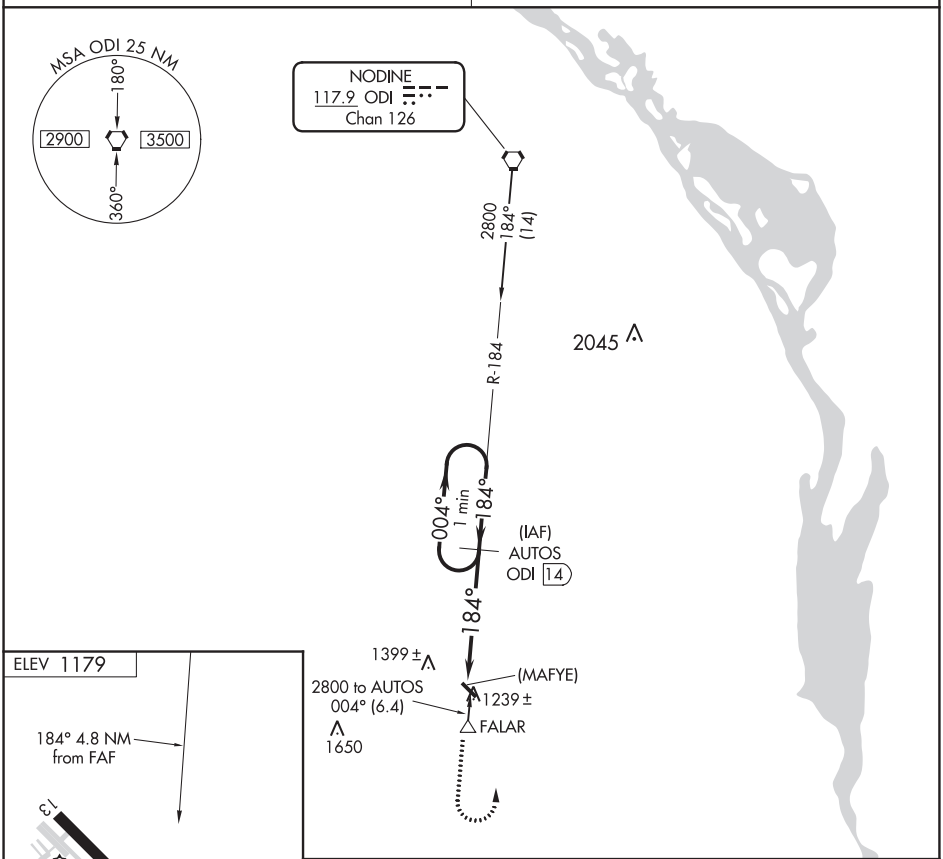
VORTAC ODI 117.9 Chan 126	APP CRS 184°	Rwy ldg N/A TDZE N/A Apt Elev 1179

NA

Use La Crosse, WI altimeter setting.
Procedure NA at night.

MISSED APPROACH: Climb to 2800 then left turn via ODI R-184 to AUTOS/14 DME and hold.

MINNEAPOLIS CENTER	CTAF
128.6 363.0	122.9 L



MIRL Rwy 13-31 L

CATEGORY	A	B	C	D
CIRCLING	1820-1	641 (700-1)	1820-1¾ 641 (700-1¾)	NA

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 97428 W16A	APP CRS 161°	Rwy ldg 4001 TDZE 945 Apt Elev 945

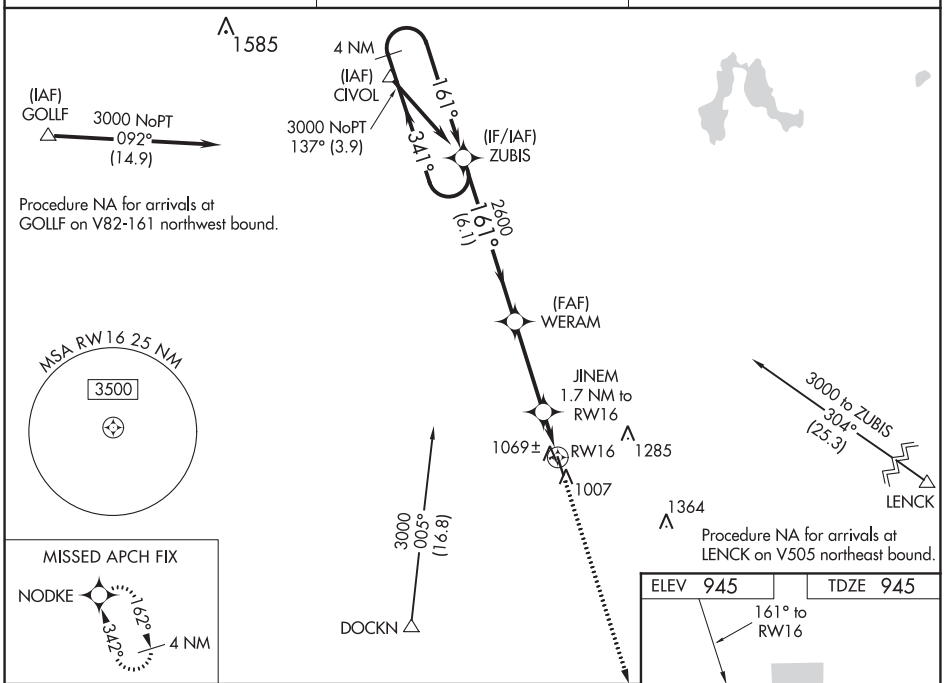
RNAV (GPS) RWY 16
CAMBRIDGE MUNI (CBG)

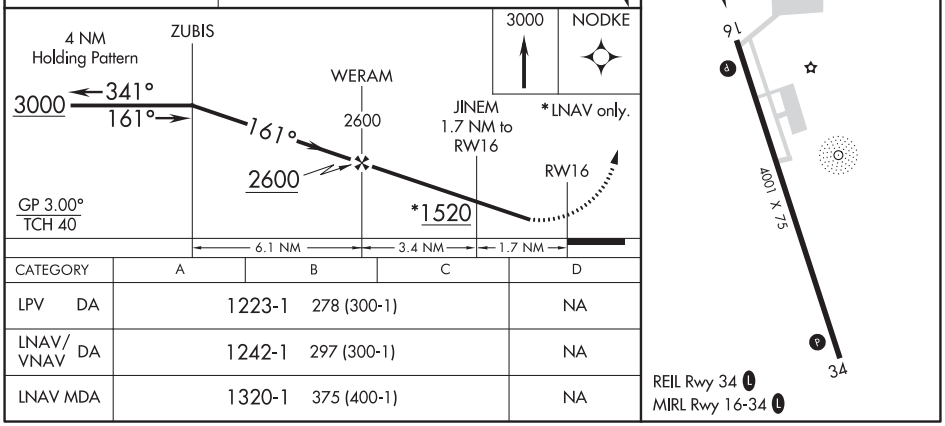
RNP APCH.

Baro-VNAV NA when using Princeton altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 54°C. When local altimeter setting not received, use Princeton altimeter setting and increase all DA/MDA 40 feet, increase LNAV/VNAV all Cats visibility ⅛ mile, LNAV Cat C visibility ⅛ mile. Procedure NA at night. Rwy 16 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3000 direct NODKE and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
121.125	121.05 397.9	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1223-1	278 (300-1)		NA
LNAV/VNAV DA	1242-1	297 (300-1)		NA
LNAV MDA	1320-1	375 (400-1)		NA

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

CAMBRIDGE, MINNESOTA AL-6257 (FAA) 20254

WAAS CH 56328 W34A	APP CRS 342°	Rwy ldg 4001 TDZE 945 Apt Elev 945

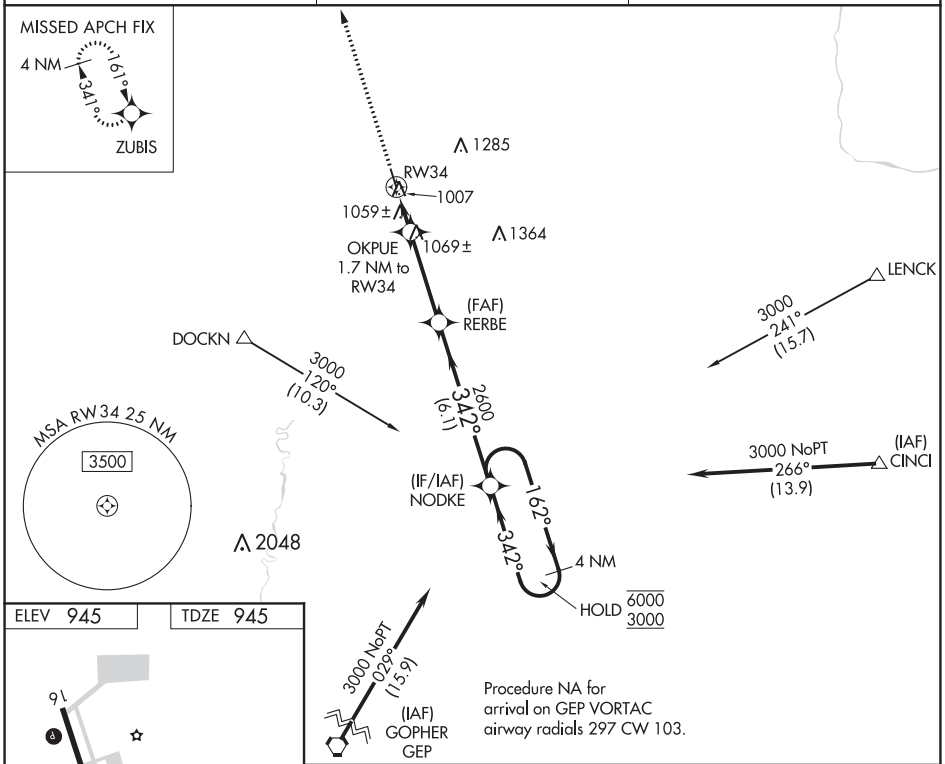
RNAV (GPS) RWY 34
CAMBRIDGE MUNI (CBG)

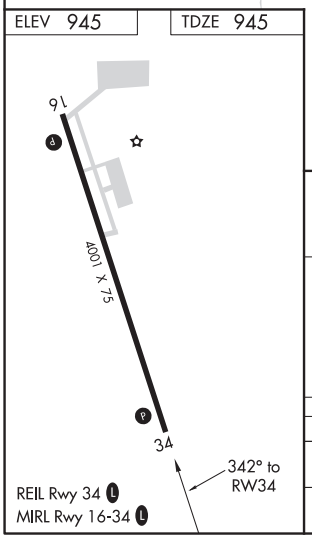
RNP APCH.

Rwy 34 helicopter visibility reduction below 1 SM NA.
Procedure NA at night.

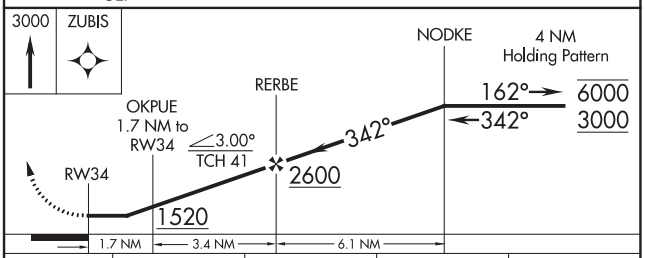
MISSED APPROACH: Climb to 3000 direct ZUBIS and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
121.125	121.05 397.9	122.8 (CTAF) L





REIL Rwy 34 L
MIRL Rwy 16-34 L



CATEGORY	A	B	C	D
LP MDA	1320-1	375 (400-1)	1320-1⅛ 375 (400-1⅛)	NA
LNAV MDA	1340-1	395 (400-1)	1340-1⅛ 395 (400-1⅛)	NA

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WAAS CH 56418 W12A	APP CRS 118°	Rwy ldg 4648 TDZE 1194 Apt Elev 1194

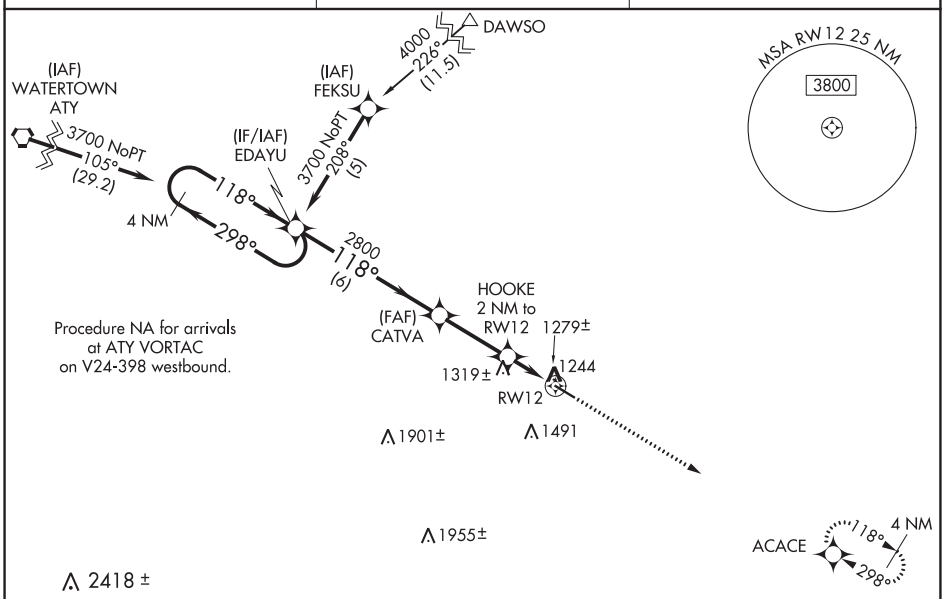
RNAV (GPS) RWY 12

MYERS FIELD (CNB)

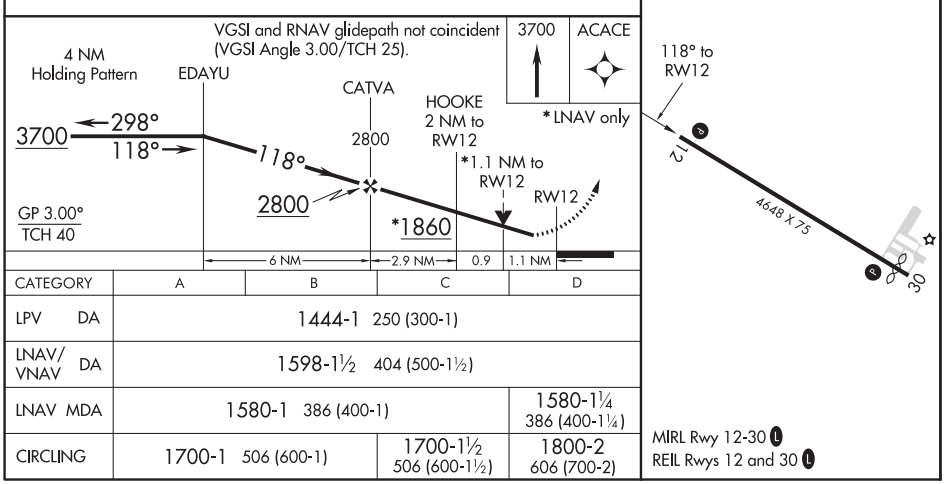
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. VDP NA with Lac Qui Parle County altimeter setting. Baro-VNAV NA when using Lac Qui Parle County altimeter setting. When local altimeter setting not received, use Lac Qui Parle County altimeter setting and increase all DA 53 feet, and all MDA 60 feet, increase LNAV/VNAV all Cats visibility ¼ mile, LNAV Cats C and D visibility ¼ mile.

MISSED APPROACH: Climb to 3700 direct ACACE and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
118.575	128.5 306.2	122.9 L



ELEV 1194	TDZE 1194



CATEGORY	A	B	C	D
LPV DA	1444-1 250 (300-1)			
LNAV/VNAV DA	1598-1½ 404 (500-1½)			
LNAV MDA	1580-1 386 (400-1)			1580-1¼ 386 (400-1¼)
CIRCLING	1700-1 506 (600-1)		1700-1½ 506 (600-1½)	1800-2 606 (700-2)

MIRL Rwy 12-30 L
REIL Rwys 12 and 30 L

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CANBY, MINNESOTA | AL-9526 (FAA) | 21056

WAAS CH 77718 W30A	APP CRS 298°	Rwy ldg 4409 TDZE 1192 Apt Elev 1194

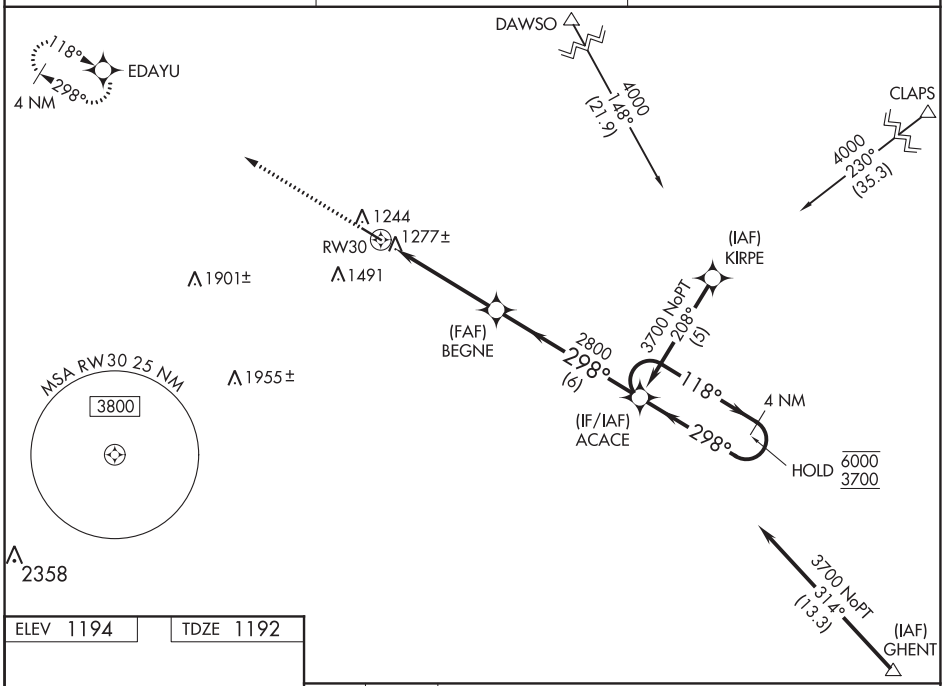
RNAV (GPS) RWY 30
MYERS FIELD (CNB)

RNP APCH.

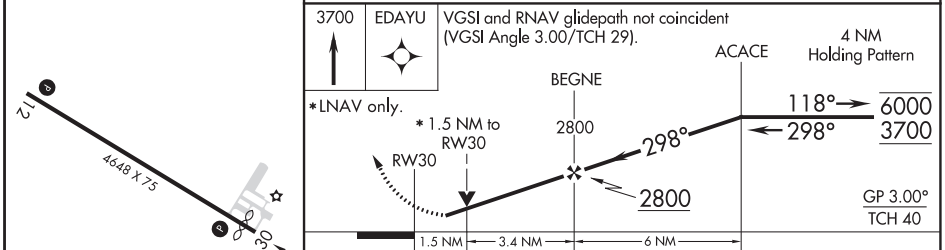
Rwy 30 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 46°C.

MISSED APPROACH: Climb to 3700 direct EDAYU and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
118.575	128.5 306.2	122.9 L



ELEV 1194	TDZE 1192



MIRL Rwy 12-30 L
REIL Rwys 12 and 30 L

CATEGORY	A	B	C	D
LPV DA	1442-1 250 (300-1)			
LNAV/VNAV DA	1573-1½ 381 (400-1½)			
LNAV MDA	1680-1 488 (500-1)		1680-1⅜ 488 (500-1⅜)	1680-1½ 488 (500-1½)
CIRCLING	1700-1 506 (600-1)		1700-1½ 506 (600-1½)	1800-2 606 (700-2)

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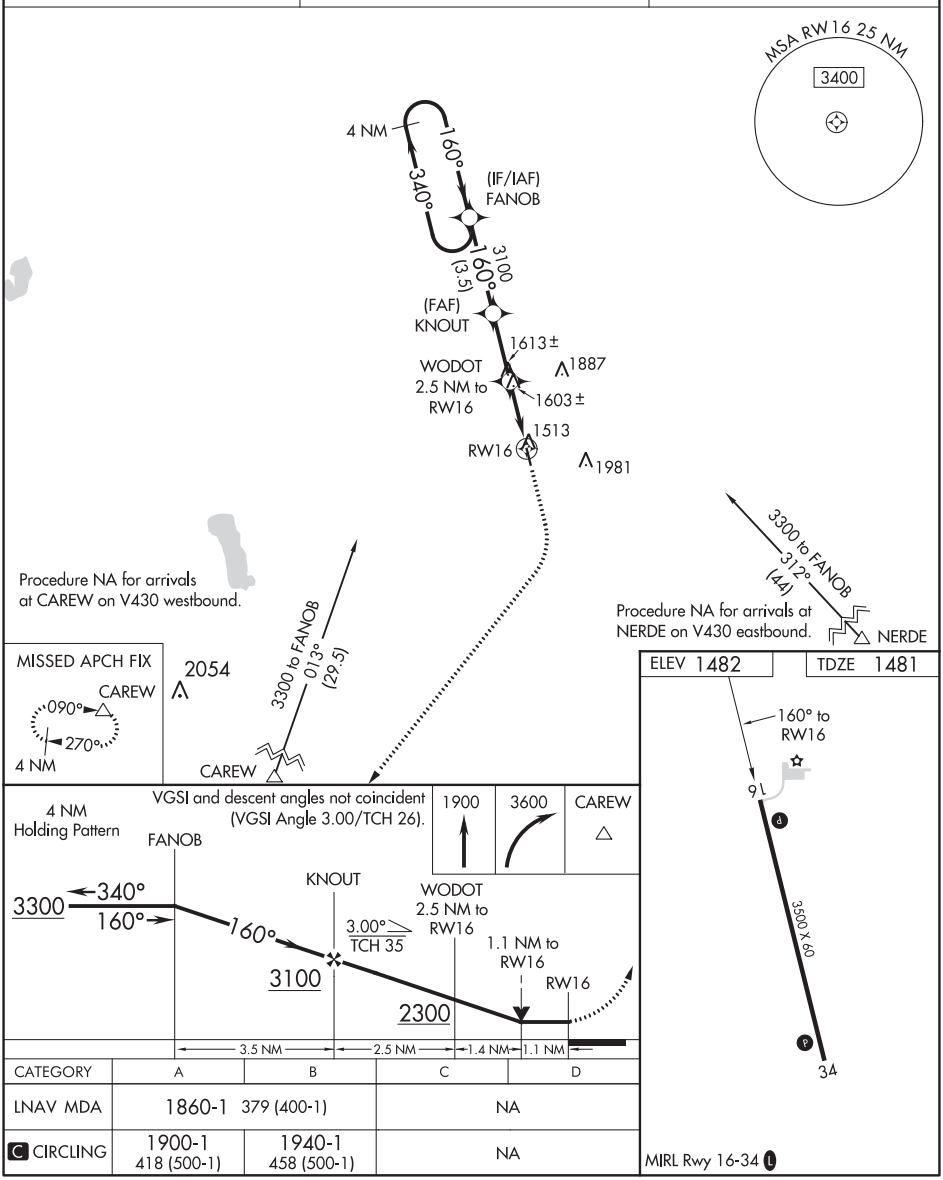
APP CRS	Rwy ldg	3500
160°	TDZE	1481
	Apt Elev	1482

RNAV (GPS) RWY 16
CANDO MUNI (9D7)

When local altimeter setting not received, use Devils Lake altimeter setting and increase all MDAs 80 feet. DME/DME RNP-0.3 NA. VDP NA with Devils Lake altimeter setting. Helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 1900 then climbing right turn to 3600 direct CAREW and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
118.325	124.2 270.3	122.9 L



CATEGORY	A	B	C	D
LNAV MDA	1860-1 379 (400-1)		NA	
C CIRCLING	1900-1 418 (500-1)	1940-1 458 (500-1)	NA	

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CANDO, NORTH DAKOTA | AL-10431 (FAA) | 18144

RNAV (GPS) RWY 34
CANDO MUNI (9D7)

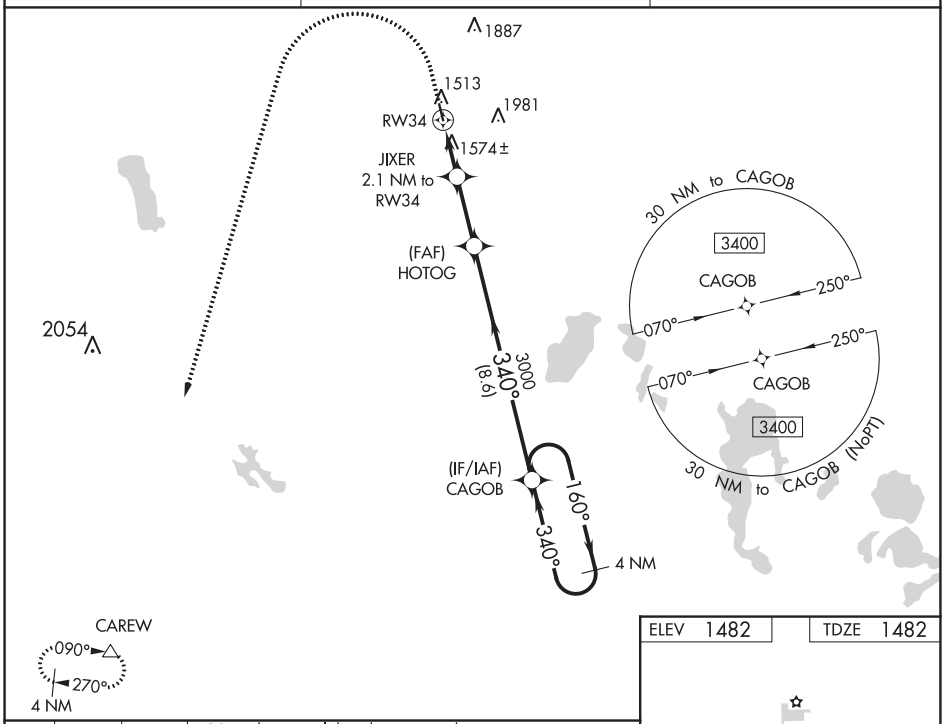
WAAS CH 69537 W34A	APP CRS 340°	Rwy ldg 3500 TDZE 1482 Apt Elev 1482

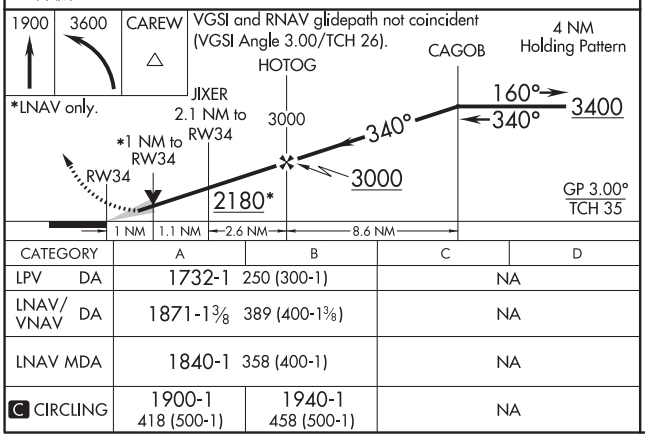
T NA

DME/DME RNP-0.3 NA. When local altimeter not received, use Devils Lake altimeter setting and increase all DA 63 feet and all MDA 80 feet. Increase LPV visibility ⅛ mile all Cats and LNAV/VNAV visibility ¼ mile all Cats. Baro-VNAV and VDP NA when using Devils Lake altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (0°F) or above 54°C (130°F).

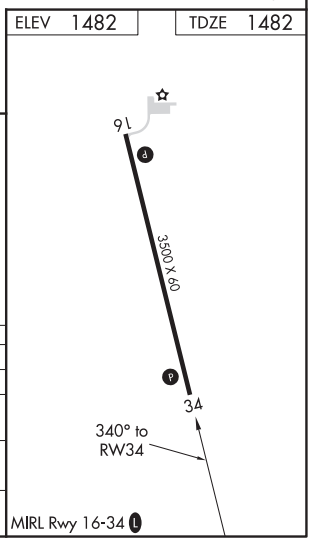
MISSED APPROACH: Climb to 1900 then climbing left turn to 3600 direct CAREW and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
118.325	124.2 270.3	122.9 L





CATEGORY	A	B	C	D
LPV DA	1732-1 250 (300-1)		NA	
LNAV/VNAV DA	1871-1⅜ 389 (400-1⅜)		NA	
LNAV MDA	1840-1 358 (400-1)		NA	
C CIRCLING	1900-1 418 (500-1)	1940-1 458 (500-1)	NA	



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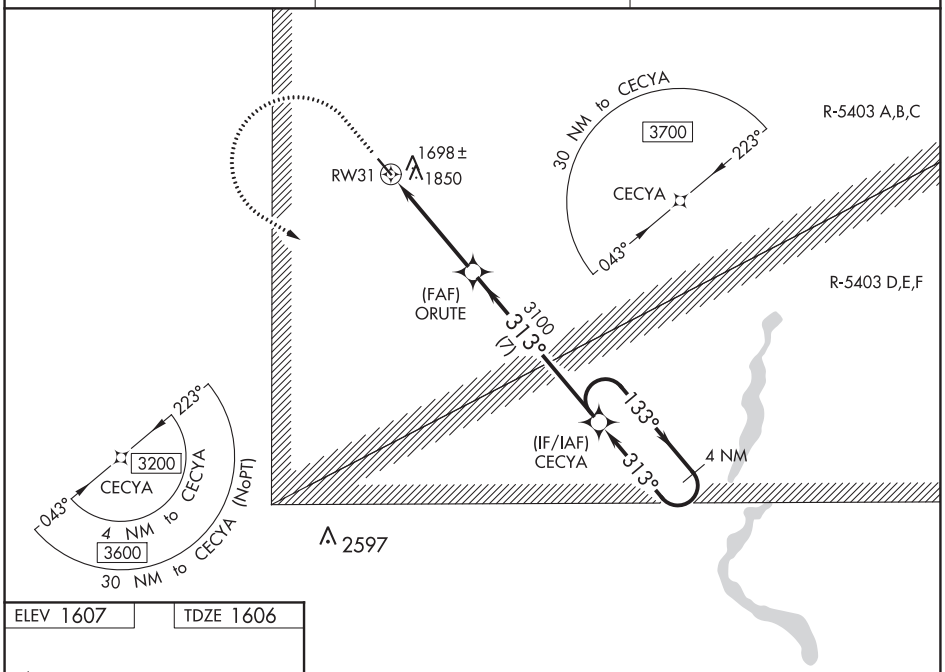
WAAS CH 70631 W31A	APP CRS 313°	Rwy ldg 4198 TDZE 1606 Apt Elev 1607

RNAV (GPS) RWY 31
CARRINGTON MUNI (46D)

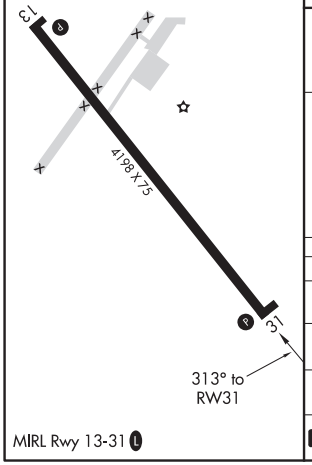
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA. Circling Rwy 13 NA at night. VDP and Baro-VNAV NA with Jamestown altimeter setting. When local altimeter setting not received, use Jamestown altimeter setting and increase all DA and MDA 100 feet, increase LPV all Cats visibility ⅛ mile; LNAV/VNAV all Cats visibility ⅜ mile; LNAV Cat C visibility ¼ mile and Circling Cat C visibility ⅜ mile.

MISSED APPROACH: Climb to 2300 then climbing left turn to 3200 direct CECYA and hold.

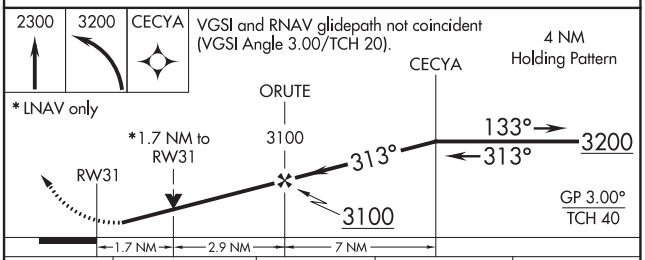
AWOS-3	MINNEAPOLIS CENTER	CTAF
118.575	124.2 270.3	122.9 L



ELEV 1607 TDZE 1606



MIRL Rwy 13-31 L



CATEGORY	A	B	C	D
LPV DA	1856-1 250 (300-1)			NA
LNAV/VNAV DA	2050-1½ 444 (500-1½)			NA
LNAV MDA	2160-1 554 (600-1)		2160-1⅝ 554 (600-1⅝)	NA
C CIRCLING	2200-1 593 (600-1)		2200-1⅝ 593 (600-1⅝)	NA

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CASSELTON, NORTH DAKOTA | AL-6950 (FAA) | 19283

APP CRS	Rwy ldg	3901
128°	TDZE	933
	Apt Elev	933

RNAV (GPS) RWY 13
CASSELTON ROBERT MILLER RGNL (5N8)

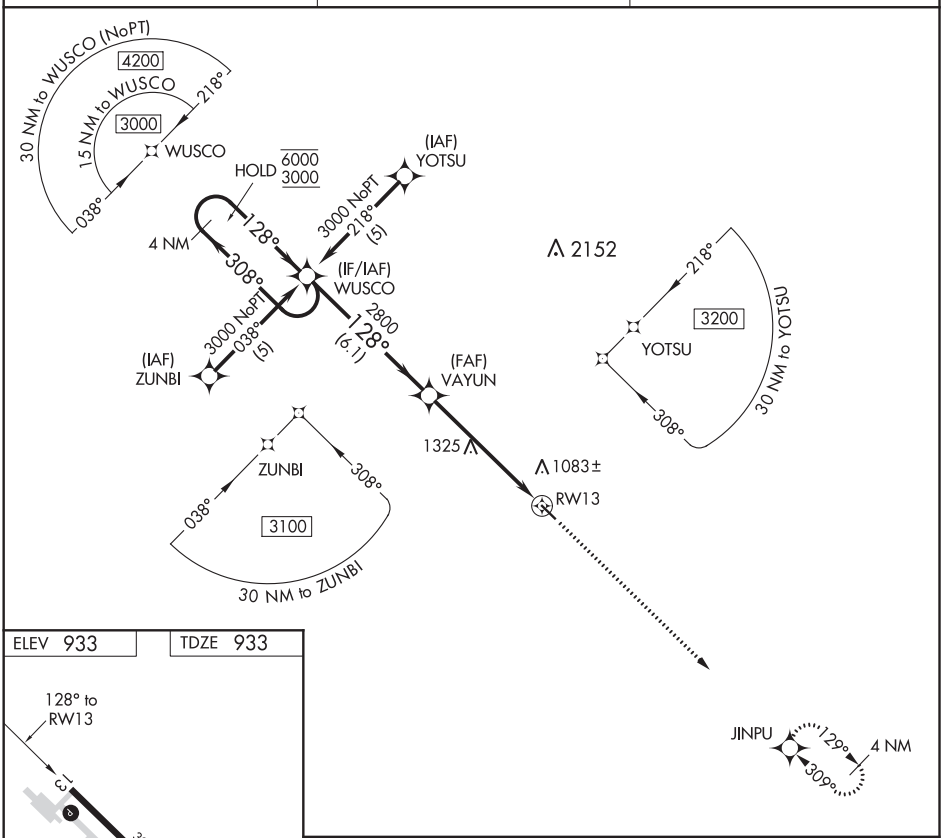
RNP APCH.

NA

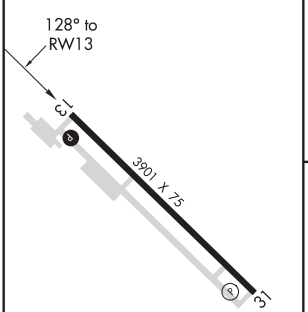
Rwy 13 helicopter visibility reduction below ¾ SM NA. Use Fargo altimeter setting; when not received use Morehead altimeter setting and increase all MDA 20 feet.

MISSED APPROACH: Climb to 3000 direct JINPU and hold.

FAR ASOS	FARGO APP CON	UNICOM
124.5	120.4 377.15	122.8 (CTAF) L

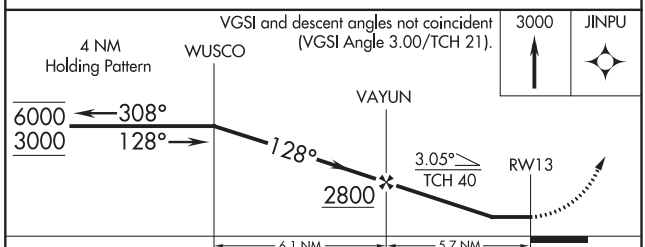


ELEV 933 | TDZE 933



REIL Rwy 31 L

MIRL Rwy 13-31 L



CATEGORY	A	B	C	D
LNAV MDA	1620-1 687 (700-1)		1620-2 687 (700-2)	NA

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WAAS CH 53607 W31A	APP CRS 308°	Rwy ldg 3901 TDZE 933 Apt Elev 933

RNAV (GPS) RWY 31
CASSELTON ROBERT MILLER RGNL (5N8)

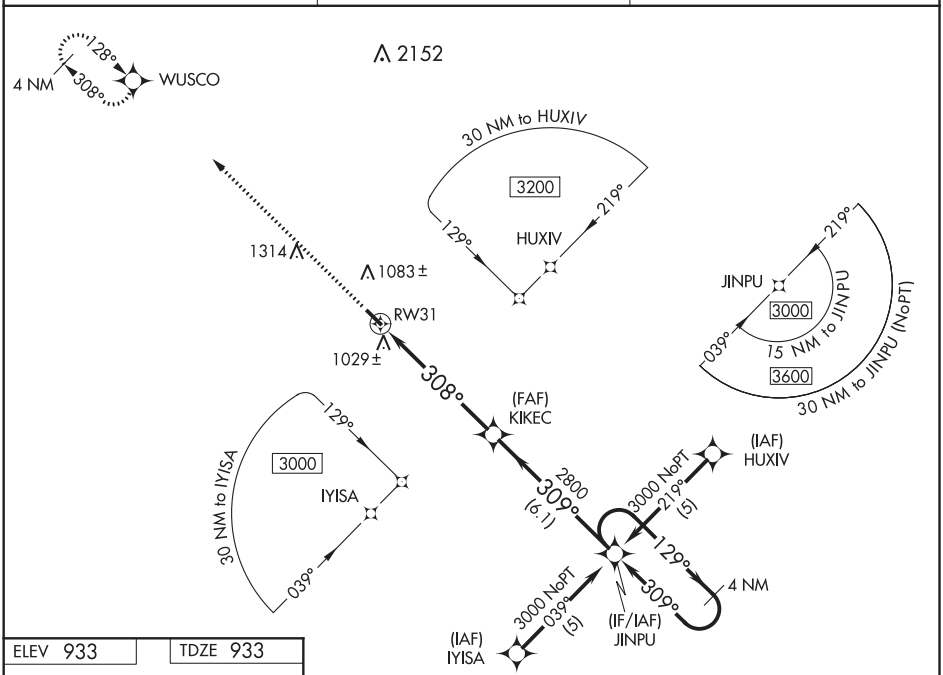
RNP APCH.

T
A NA

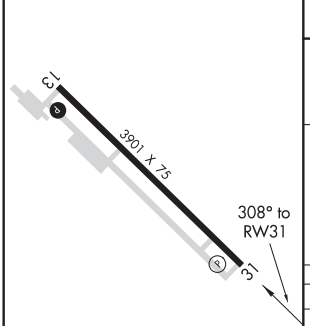
Use Fargo altimeter setting; when not received, use Moorhead altimeter setting and increase all DA 11 feet and all MDA 20 feet, increase LNAV Cat C visibility ¼ SM, increase Circling Cat C visibility¼ SM. Baro-VNAV NA.

MISSED APPROACH: Climb to 3000 direct WUSCO and hold.

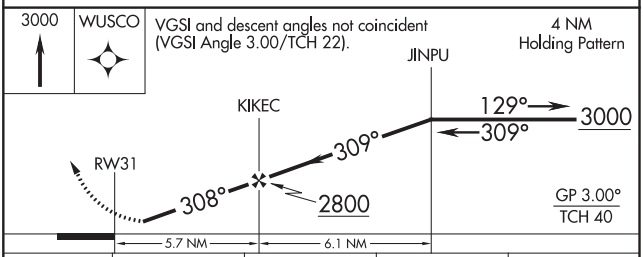
FAR ASOS	FARGO APP CON	UNICOM
124.5	120.4 377.15	122.8 (CTAF) L



ELEV 933 TDZE 933



REIL Rwy 31 L
MIRL Rwy 13-31 L



CATEGORY	A	B	C	D
LPV DA	1226-1 293 (300-1)			NA
LNAV/VNAV DA	1370-1½ 437 (500-1½)			NA
LNAV MDA	1420-1 487 (500-1)		1420-1¼ 487 (500-1¼)	NA
CIRCLING	1480-1 547 (600-1)		1520-1½ 587 (600-1½)	NA

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CASSELTON, NORTH DAKOTA AL-6950 (FAA) 19283

VOR/DME RWY 31
CASSELTON ROBERT MILLER RGNL (5N8)

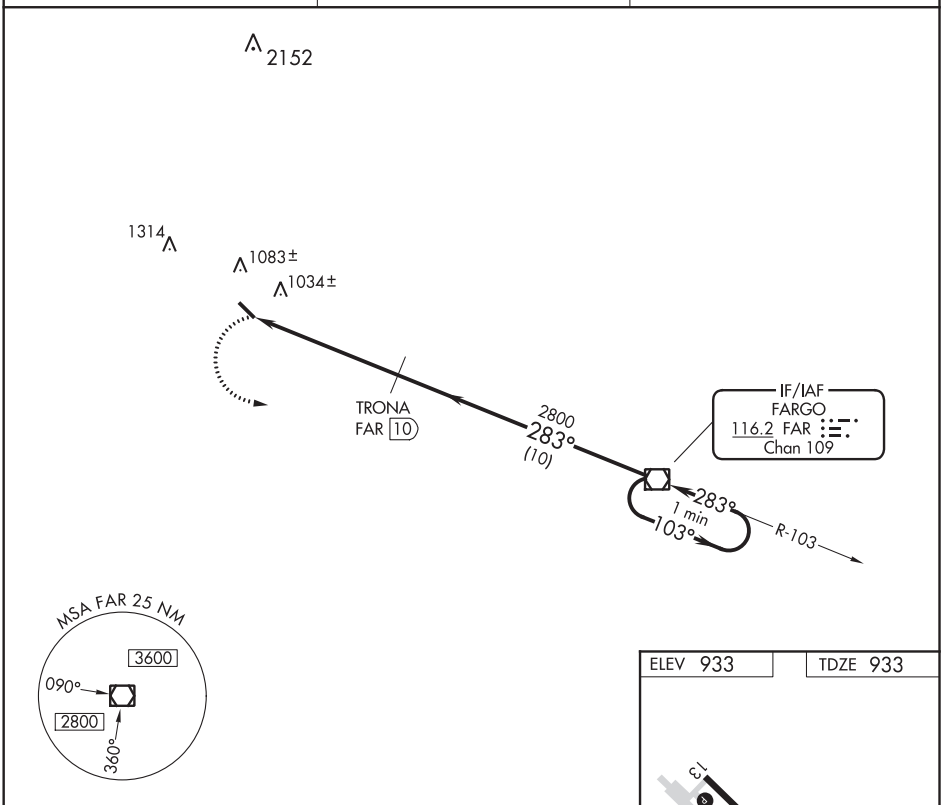
VOR/DME FAR	APP CRS	Rwy ldg	3901
116.2	283°	TDZE	933
Chan 109		Apt Elev	933

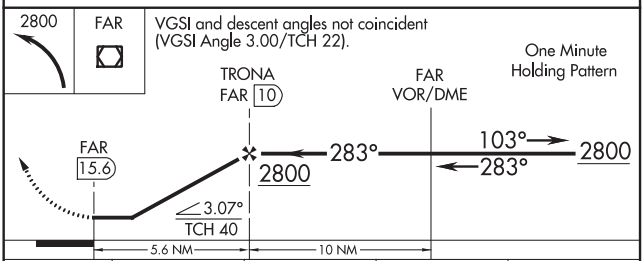
Use Fargo altimeter setting; when not received, use Moorhead altimeter setting and increase all MDA 20 feet, increase Circling Cat C visibility ¼ SM.

NA

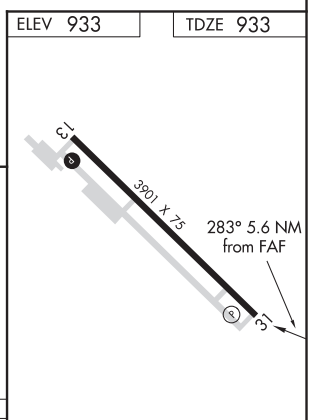
MISSED APPROACH: Climbing left turn to 2800 direct FAR VOR/DME and hold.

FAR ASOS	FARGO APP CON	UNICOM
124.5	120.4 377.15	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-31	1360-1 427 (500-1)		1360-1¼ 427 (500-1¼)	NA
CIRCLING	1480-1 547 (600-1)		1520-1½ 587 (600-1½)	NA



REIL Rwy 31 L

MIRL Rwy 13-31 L

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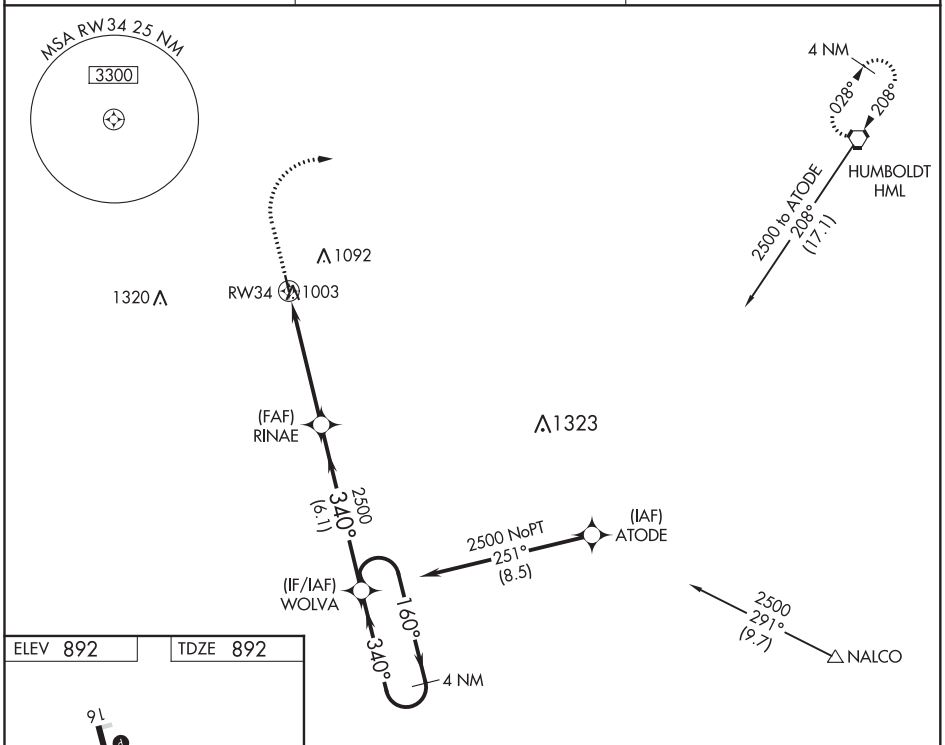
WAAS CH **45630** **W34A**	APP CRS **340°**	Rwy ldg **3299** TDZE **892** Apt Elev **892**

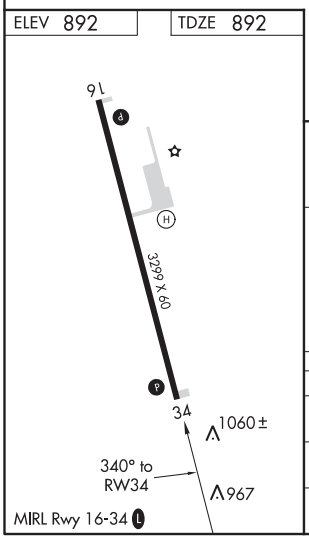
RNAV (GPS) RWY 34
CAVALIER MUNI (2C8)

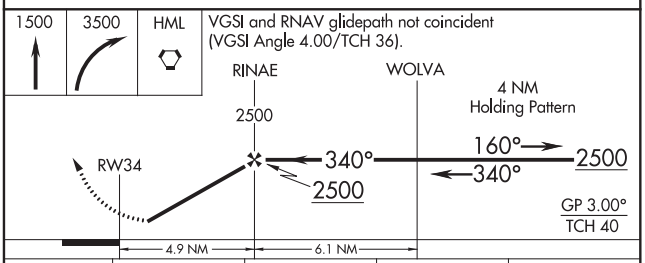
When local altimeter setting not received, Use Hallock altimeter setting and increase all DA to 1230 feet; increase LPV all Cats visibility ⅛ mile; increase all MDA 80 feet and increase Cat C visibility ⅛ mile. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 1500 then climbing right turn to 3500 direct HML VORTAC and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.275	**132.15 269.6**	**122.8** (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1157-1 265 (300-1)			NA
LNAV MDA	1440-1 548 (600-1)		1440-1⅝ 548 (600-1⅝)	NA
CIRCLING	1440-1 548 (600-1)		1440-1⅝ 548 (600-1⅝)	NA

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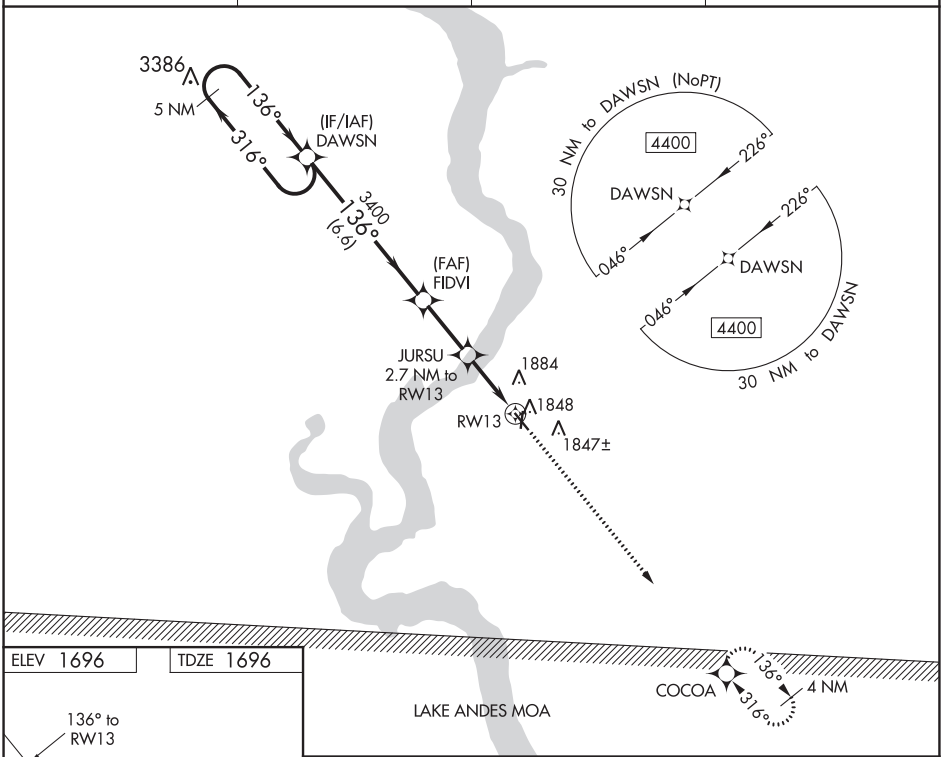
WAAS CH 42841 W13A	APP CRS 136°	Rwy ldg 4299 TDZE 1696 Apt Elev 1696

RNAV (GPS) RWY 13
CHAMBERLAIN MUNI (9V9)

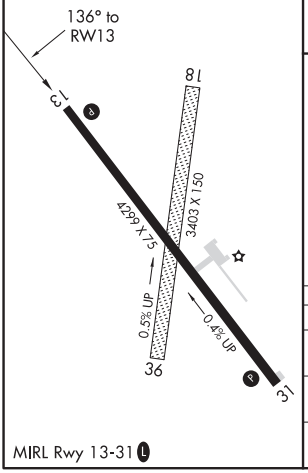
DME/DME RNP-0.3 NA.
Rwy 13 helicopter visibility reduction below ¾ SM NA.
Circling NA to Rwys 18 and 36.

MISSED APPROACH: Climb to 3600 direct COCOA and hold.

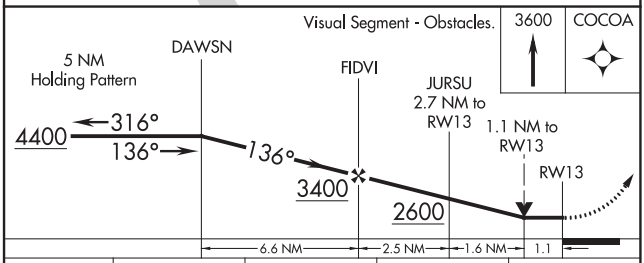
AWOS-3P	MINNEAPOLIS CENTER	GCO	UNICOM
118.025	125.1 269.1	121.725	122.8 (CTAF) L



ELEV 1696 TDZE 1696



MIRL Rwy 13-31 L



CATEGORY	A	B	C	D
LP MDA	2080-1	384 (400-1)	2080-1⅛ 384 (400-1⅛)	NA
LNAV MDA	2100-1	404 (500-1)	2100-1⅛ 404 (500-1⅛)	NA
C CIRCLING	2200-1	504 (600-1)	2200-1½ 504 (600-1½)	NA

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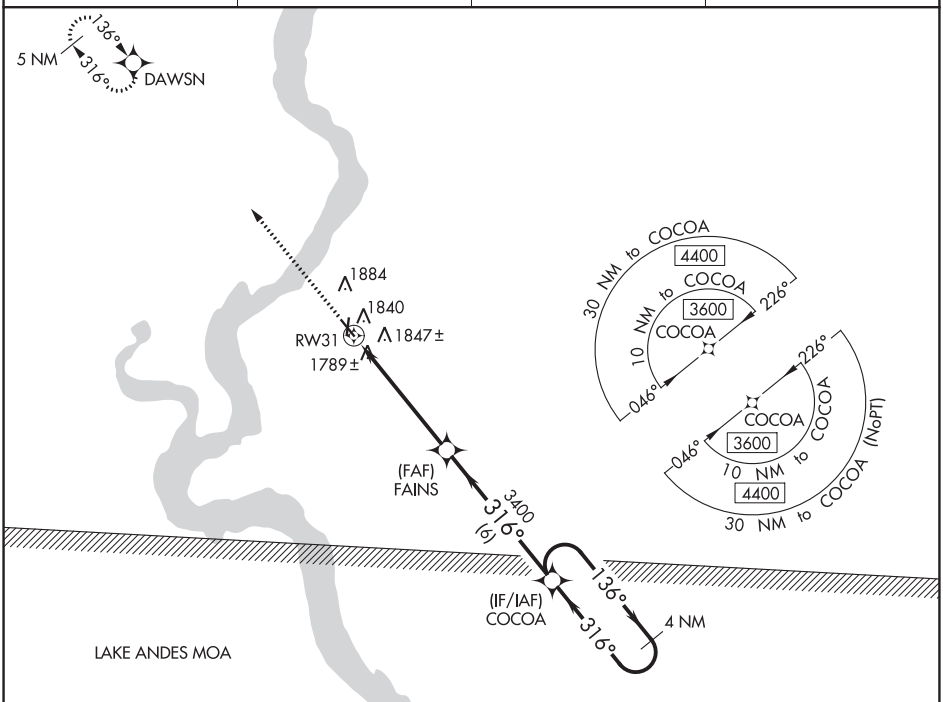
WAAS CH 82141 W31A	APP CRS 316°	Rwy ldg 4299 TDZE 1687 Apt Elev 1696

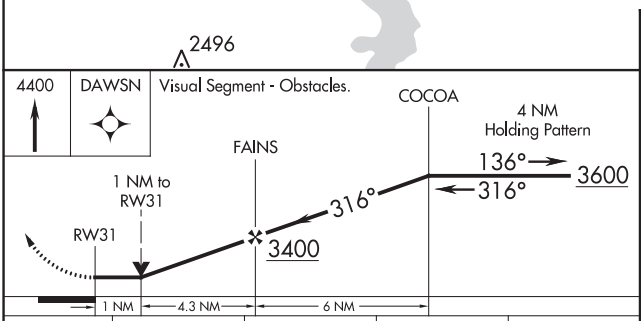
RNAV (GPS) RWY 31
CHAMBERLAIN MUNI (9V9)

DME/DME RNP-0.3 NA.
Rwy 31 helicopter visibility reduction below ¾ SM NA.
Circling NA to Rwys 18 and 36.

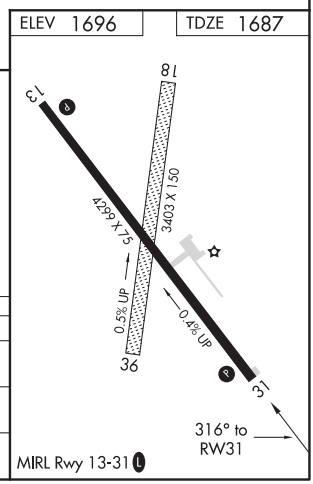
MISSED APPROACH: Climb to 4400 direct DAWSN and hold.

AWOS-3P	MINNEAPOLIS CENTER	GCO	UNICOM
118.025	125.1 269.1	121.725	122.8 (CTAF) L





CATEGORY	A	B	C	D
LP MDA	2040-1 353 (400-1)			NA
LNAV MDA	2100-1 413 (500-1)		2100-1⅛ 413 (500-1⅛)	NA
C CIRCLING	2200-1 504 (600-1)		2200-1½ 504 (600-1½)	NA



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CLARK, SOUTH DAKOTA | AL-9981 (FAA) | 19339

WAAS CH 58340 W13A	APP CRS 131°	Rwy ldg 3697 TDZE 1793 Apt Elev 1793

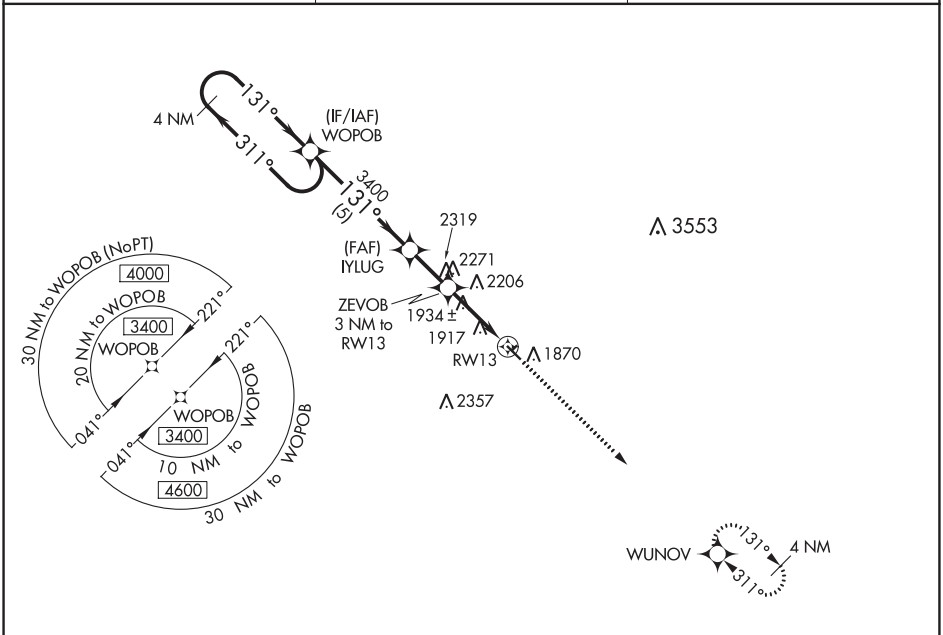
RNAV (GPS) RWY 13
CLARK COUNTY (8D7)

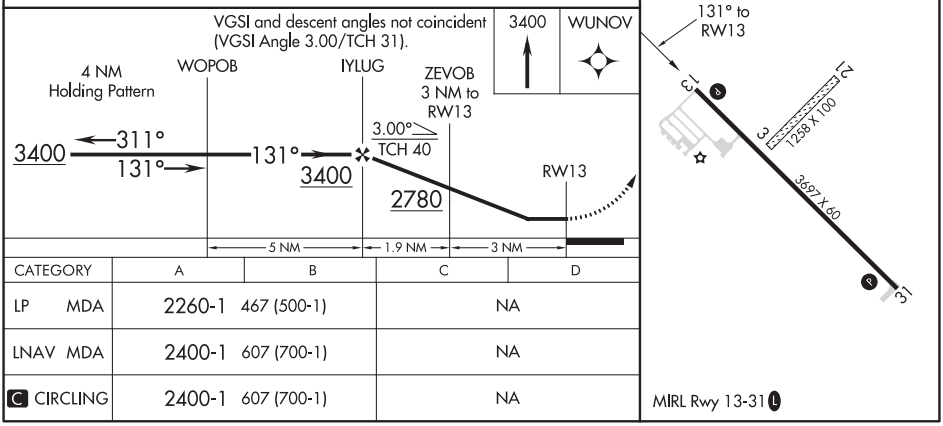
RNP APCH.

NA — Rwy 13 helicopter visibility reduction below ¾ SM NA. Use Watertown altimeter setting. Circling NA to Rwys 3 and 21.

MISSED APPROACH: Climb to 3400 direct WUNOV and hold.

ATY ASOS	MINNEAPOLIS CENTER	UNICOM
126.625	128.5 306.2	122.8 (CTAF) L





CATEGORY	A	B	C	D
LP MDA	2260-1 467 (500-1)		NA	
LNAV MDA	2400-1 607 (700-1)		NA	
C CIRCLING	2400-1 607 (700-1)		NA	

CLARK, SOUTH DAKOTA
Orig-A 15AUG19

44°54′N-97°43′W

CLARK COUNTY (8D7)
RNAV (GPS) RWY 13

NC-1, 25 FEB 2021 to 22 APR 2021

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WAAS CH 63240 W31A	APP CRS 311°	Rwy ldg 3697 TDZE 1791 Apt Elev 1793

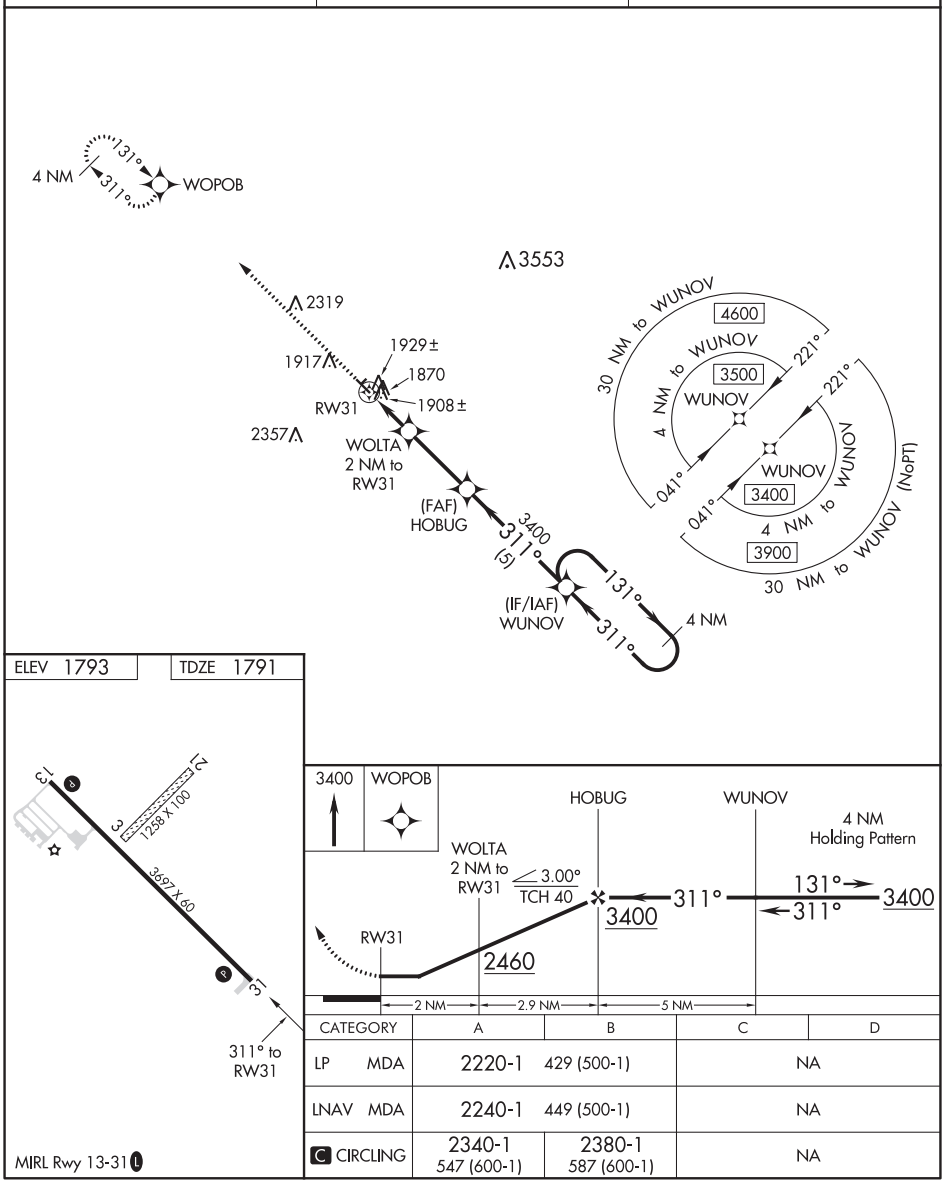
RNAV (GPS) RWY 31
CLARK COUNTY (8D7)

T NA

Rwy 31 helicopter visibility reduction below ¾ SM NA.
DME/DME RNP-0.3 NA. Use Watertown altimeter setting.
Circling Rwys 3, 21 NA.

MISSED APPROACH: Climb to 3400 direct WOPOB and hold.

ATY ASOS	MINNEAPOLIS CENTER	UNICOM
126.625	128.5 306.2	122.8 (CTAF) L



CATEGORY	A	B	C	D
LP MDA	2220-1	429 (500-1)	NA	
LNAV MDA	2240-1	449 (500-1)	NA	
C CIRCLING	2340-1 547 (600-1)	2380-1 587 (600-1)	NA	

MIRL Rwy 13-31 L

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CLOQUET, MINNESOTA | AL-5478 (FAA) | 21056

WAAS CH 97529 W18A	APP CRS 180°	Rwy ldg 4002 TDZE 1279 Apt Elev 1279

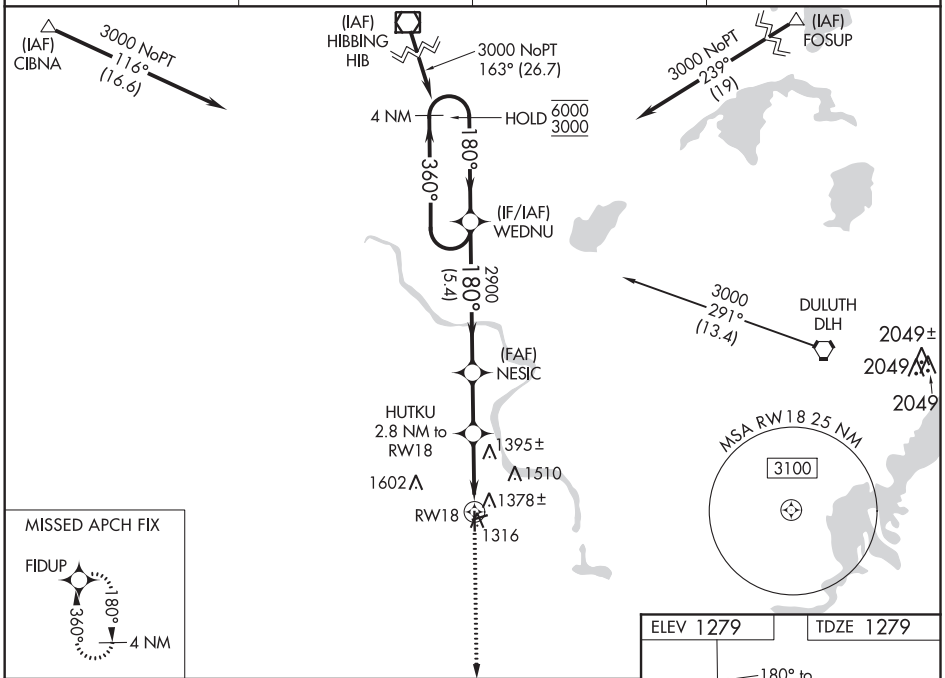
RNAV (GPS) RWY 18
CLOQUET CARLTON COUNTY (COQ)

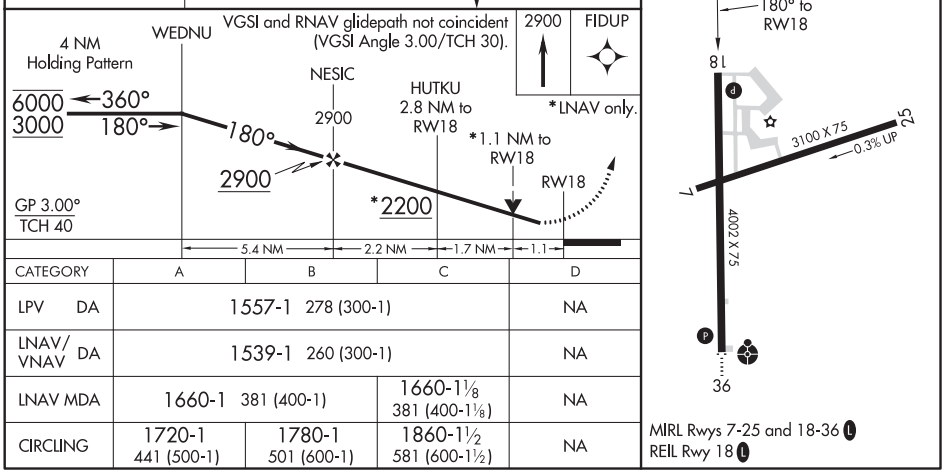
RNP APCH.

Rwy 18 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. Circling Rwy 7, 25 NA at night.

MISSED APPROACH: Climb to 2900 direct FIDUP and hold.

AWOS-3	DULUTH APP CON	CLNC DEL	UNICOM
118.525	125.45 233.7	122.15	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1557-1 278 (300-1)			NA
LNAV/VNAV DA	1539-1 260 (300-1)			NA
LNAV MDA	1660-1 381 (400-1)		1660-1⅛ 381 (400-1⅛)	NA
CIRCLING	1720-1 441 (500-1)	1780-1 501 (600-1)	1860-1½ 581 (600-1½)	NA

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WAAS CH 82429 W36A	APP CRS 360°	Rwy ldg 4002 TDZE 1279 Apt Elev 1279

RNAV (GPS) RWY 36
CLOQUET CARLTON COUNTY (COQ)

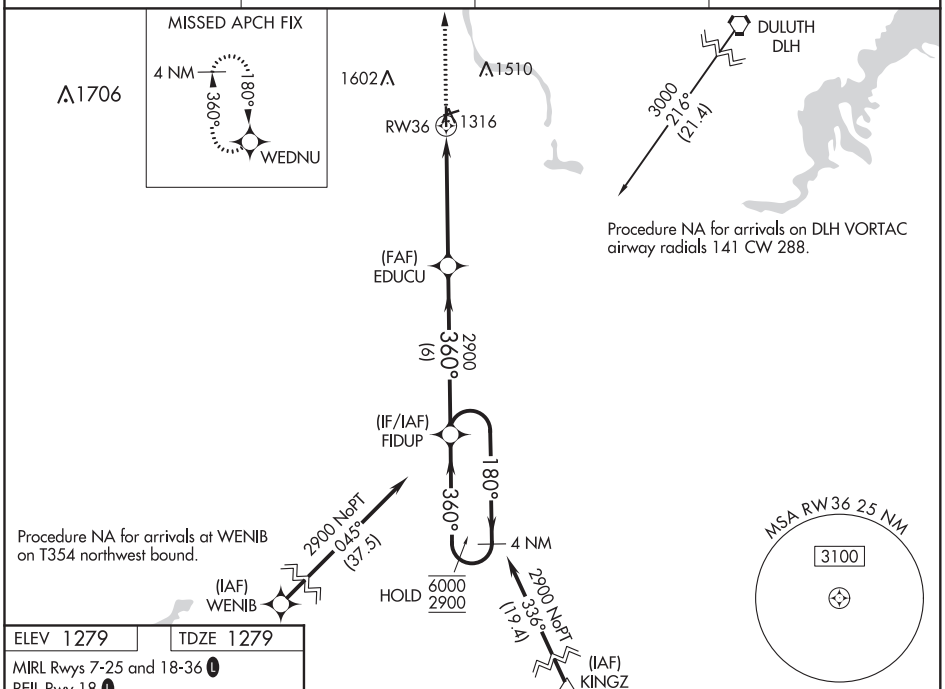
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. Inop table does not apply. Straight-in Rwy 7, 25 NA at night, Circling Rwy 7, 25 NA at night.

ODALS

MISSED APPROACH: Climb to 3000 direct WEDNU and hold.

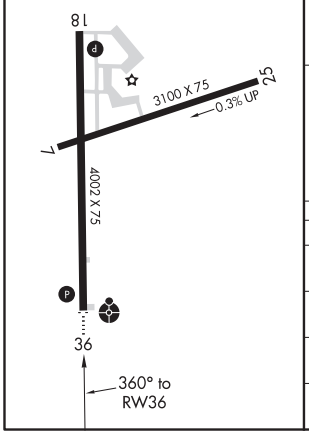
AWOS-3	DULUTH APP CON	CLNC DEL	UNICOM
118.525	125.45 233.7	122.15	122.8 (CTAF) L

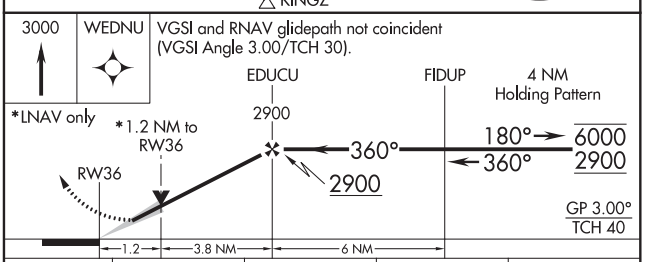


NC-1, 25 FEB 2021 to 22 APR 2021

ELEV 1279	TDZE 1279

MIRL Rwys 7-25 and 18-36 L
REIL Rwy 18 L





CATEGORY	A	B	C	D
LPV DA	1529-1 250 (300-1)			NA
LNAV/VNAV DA	1580-1 301 (400-1)			NA
LNAV MDA	1680-1 401 (500-1)		1680-1⅛ 401 (500-1⅛)	NA
CIRCLING	1720-1 441 (500-1)	1780-1 501 (600-1)	1860-1½ 581 (600-1½)	NA

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COOK, MINNESOTA | AL-9017 (FAA) | 20198

RNAV (GPS) RWY 13
COOK MUNI (CQM)

WAAS CH 58127 W13A	APP CRS 135°	Rwy ldg 4000 TDZE 1329 Apt Elev 1329

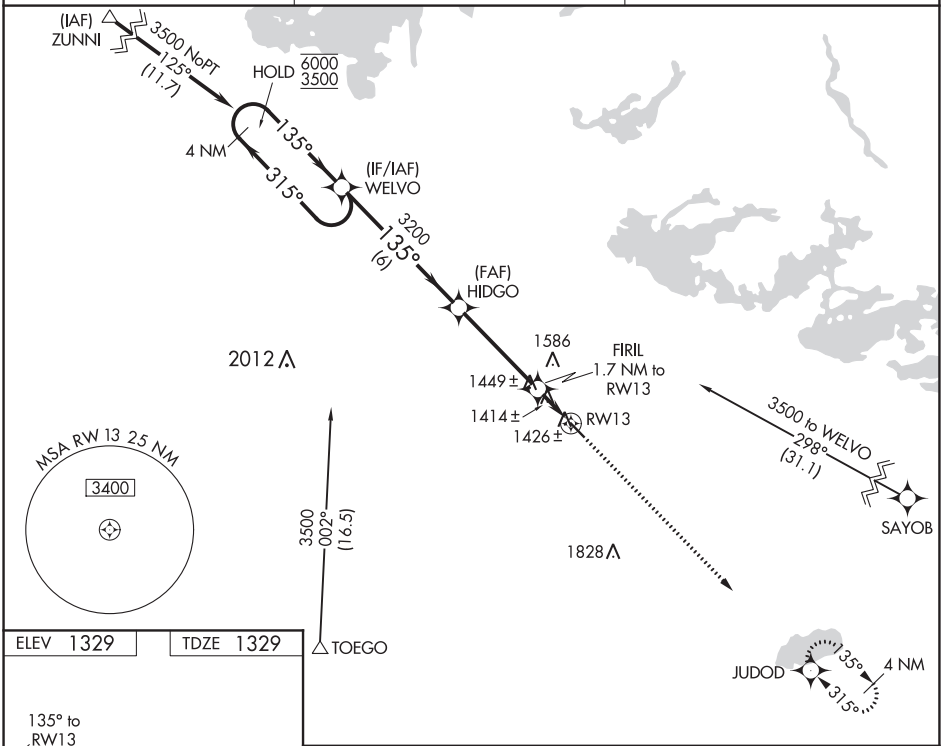
RNP APCH.

Rwy 13 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Orr altimeter setting and increase all MDAs 40 feet.

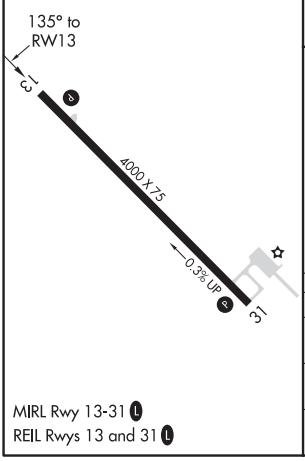
-38°C

MISSED APPROACH: Climb to 3500 direct JUDOD and hold.

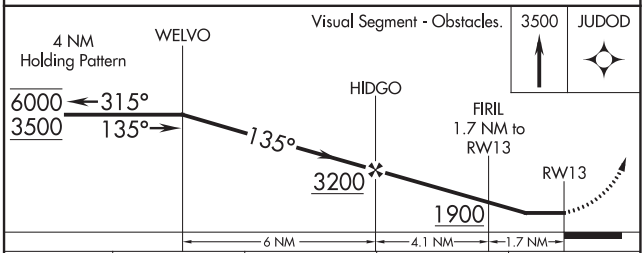
AWOS-3	MINNEAPOLIS CENTER	CTAF
118.175	127.9 281.45	122.9 L



ELEV 1329	TDZE 1329



MIRL Rwy 13-31 L
REIL Rwys 13 and 31 L



CATEGORY	A	B	C	D
LP MDA	1680-1 351 (400-1)		NA	
LNAV MDA	1700-1 371 (400-1)		NA	
CIRCLING	1780-1 451 (500-1)		NA	

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WAAS CH 78426 W31A	APP CRS 315°	Rwy ldg 4000 TDZE 1328 Apt Elev 1329

RNAV (GPS) RWY 31
COOK MUNI (CQM)

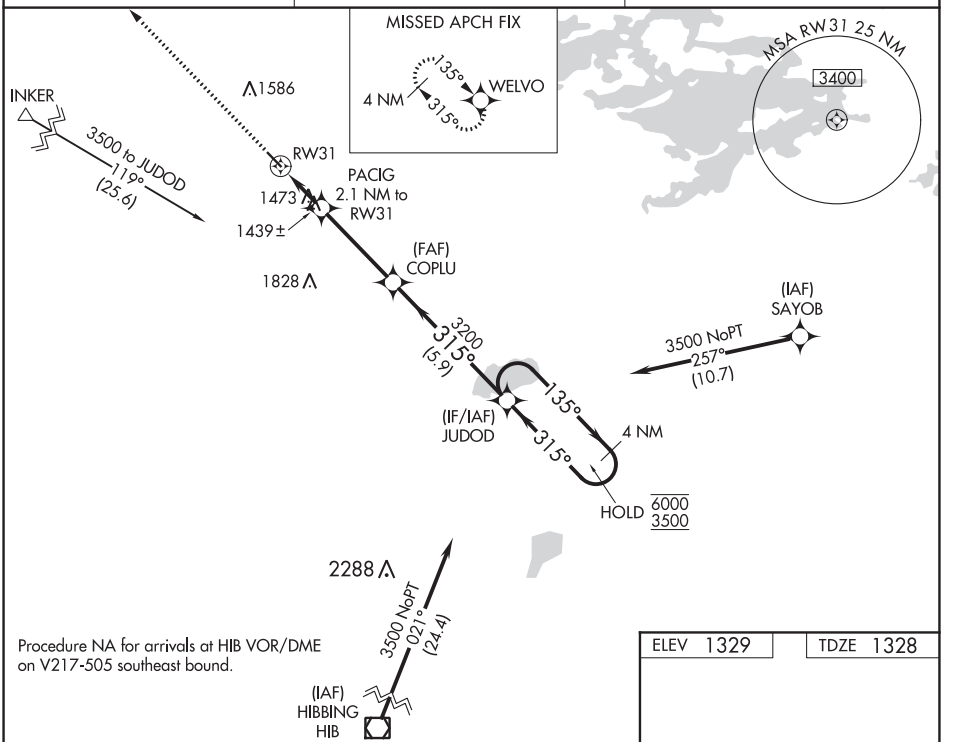
RNP APCH.

Rwy 31 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Orr altimeter setting and increase all MDAs 40 feet.

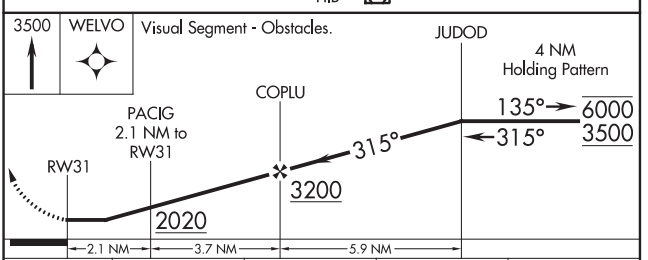
-38°C

MISSED APPROACH: Climb to 3500 direct WELVO and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
118.175	127.9 281.45	122.9 L

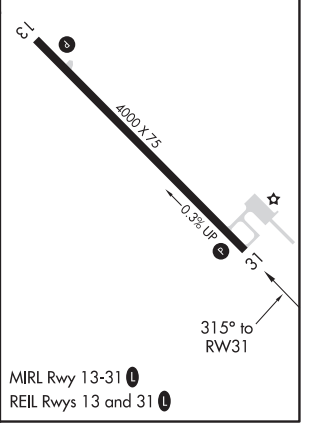


Procedure NA for arrivals at HIB VOR/DME on V217-505 southeast bound.



CATEGORY	A	B	C	D
LP MDA	1740-1 412 (500-1)		NA	
LNAV MDA	1760-1 432 (500-1)		NA	
CIRCLING	1780-1 451 (500-1)		NA	

ELEV 1329 TDZE 1328



MIRL Rwy 13-31 L
REIL Rwys 13 and 31 L

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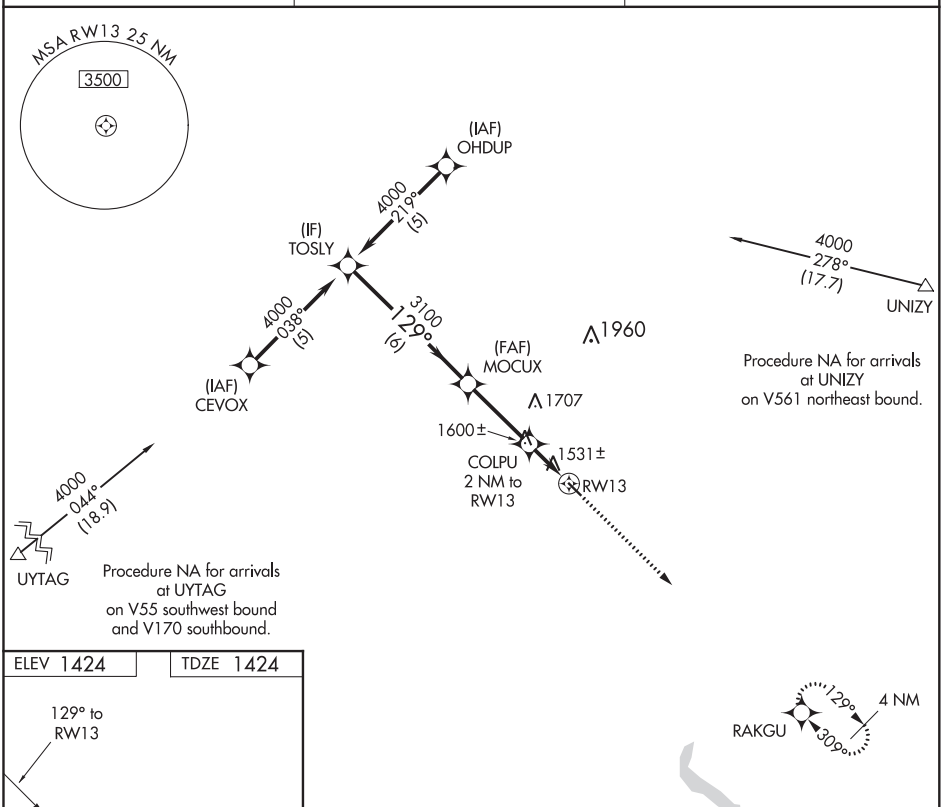
APP CRS	Rwy ldg	3500
129°	TDZE	1424
	Apt Elev	1424

RNAV (GPS) RWY 13
COOPERSTOWN MUNI (S32)

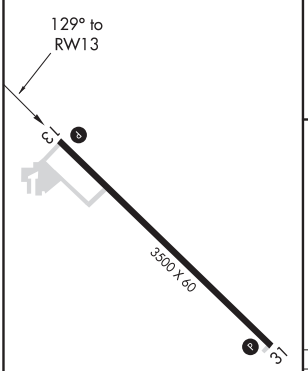
T NA DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Jamestown altimeter setting and increase all MDA 100 feet and increase LNAV Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 3100 direct RAKGU and hold.

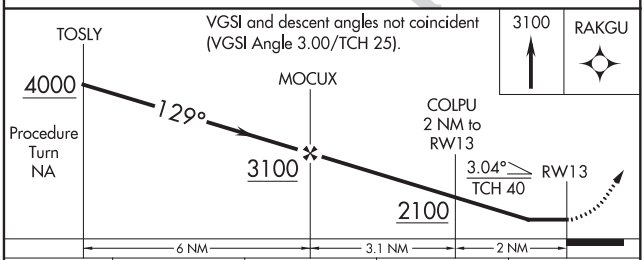
AWOS-3	MINNEAPOLIS CENTER	CTAF
118.75	132.15 269.6	122.9 L



ELEV 1424 TDZE 1424



MIRL Rwy 13-31 L



CATEGORY	A	B	C	D
LNAV MDA	1860-1 436 (500-1)		1860-1¼ 436 (500-1¼)	NA
CIRCLING	1880-1 456 (500-1)		1880-1½ 456 (500-1½)	NA

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APP CRS	Rwy ldg	3500
309°	TDZE	1424
	Apt Elev	1424

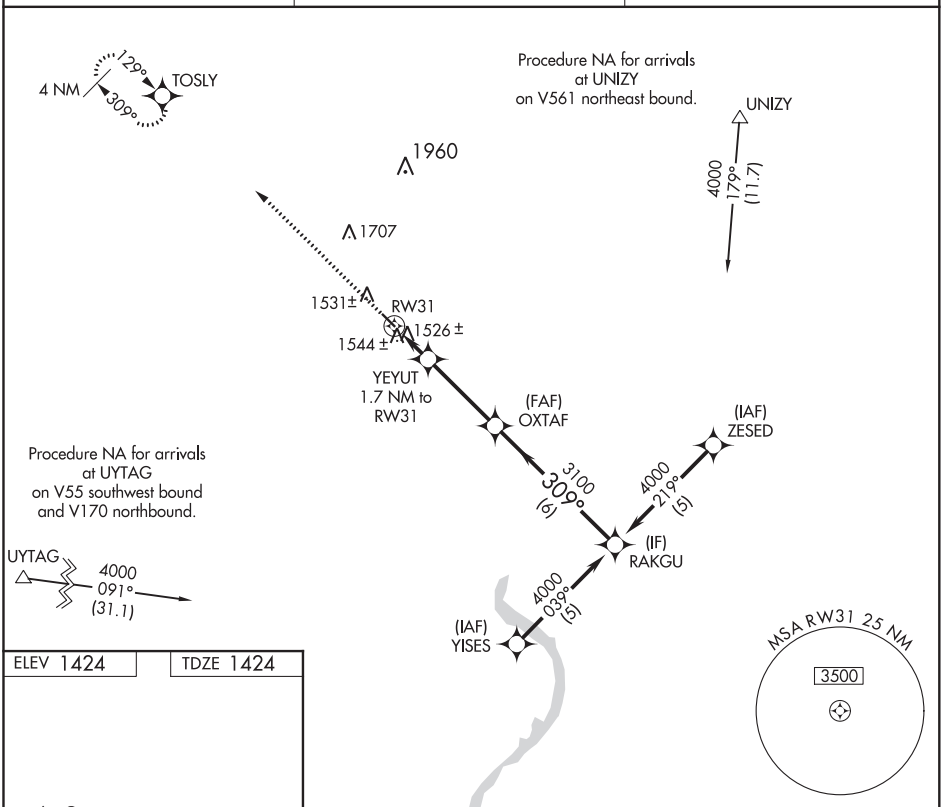
RNAV (GPS) RWY 31
COOPERSTOWN MUNI (S32)

T NA

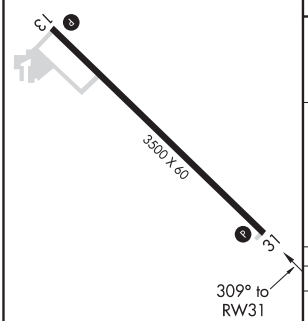
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Jamestown altimeter setting and increase all MDA 100 feet and increase LNAV Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 3200 direct TOSLY and hold.

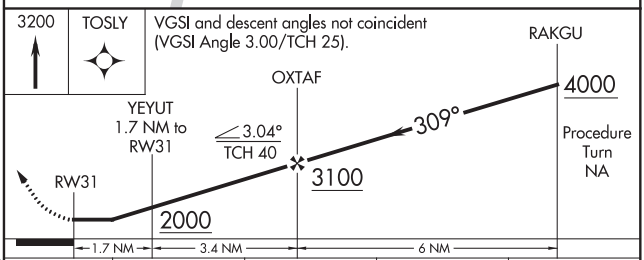
AWOS-3	MINNEAPOLIS CENTER	CTAF
118.75	132.15 269.6	122.9 L



ELEV 1424	TDZE 1424



MIRL Rwy 13-31 L



CATEGORY	A	B	C	D
LNAV MDA	1800-1 376 (400-1)			NA
CIRCLING	1880-1 456 (500-1)		1880-1½ 456 (500-1½)	NA

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WAAS CH **72704** **W13A**	APP CRS **128°**	Rwy ldg **4300** TDZE **896** Apt Elev **900**

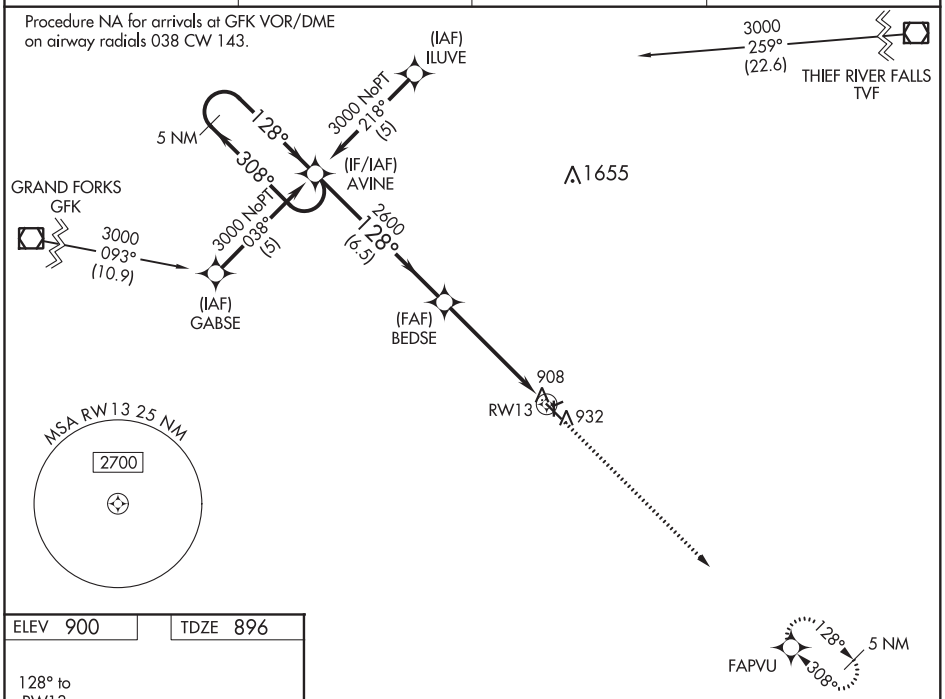
RNAV (GPS) RWY 13
CROOKSTON MUNI-KIRKWOOD FIELD (CKN)

RNP APCH.

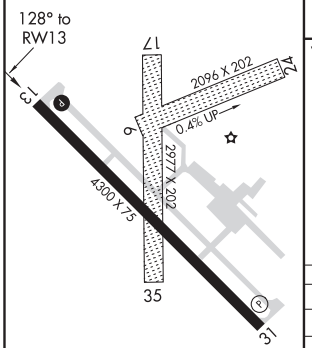
Baro-VNAV NA when using Grand Forks altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). If local altimeter setting not received, use Grand Forks altimeter setting and increase all DAs 62 feet and all MDAs 80 feet. Circling Rwys 6, 24, 17, 35 NA at night.

MISSED APPROACH: Climb to 3000 direct FAPVU and hold.

AWOS-3	GRAND FORKS APP CON	CLNC DEL	UNICOM
126.425	**118.1 318.1**	**118.15**	**122.7** (CTAF) L

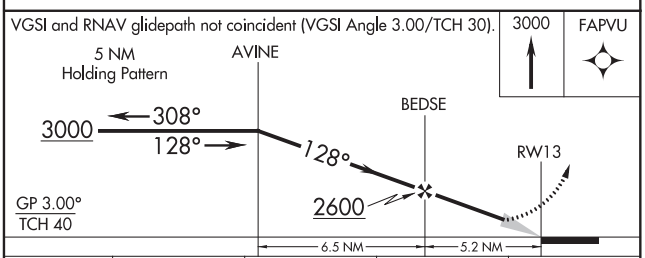


ELEV 900 TDZE 896



REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 30).



CATEGORY	A	B	C	D
LPV DA	1146-1 250 (300-1)			NA
LNAV/VNAV DA	1210-1 314 (400-1)			NA
LNAV MDA	1360-1 464 (500-1)		1360-1¼ 464 (500-1¼)	NA
CIRCLING	1360-1 460 (500-1)		1360-1½ 460 (500-1½)	NA

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WAAS CH 69304 W31A	APP CRS 308°	Rwy ldg 4300 TDZE 897 Apt Elev 900

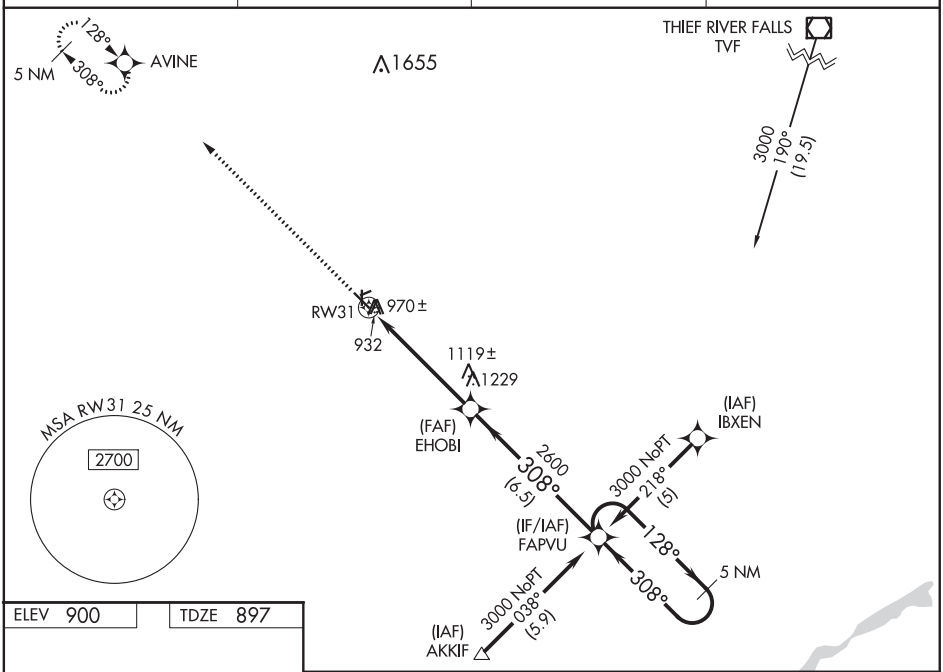
RNAV (GPS) RWY 31
CROOKSTON MUNI-KIRKWOOD FIELD (CKN)

RNP APCH.

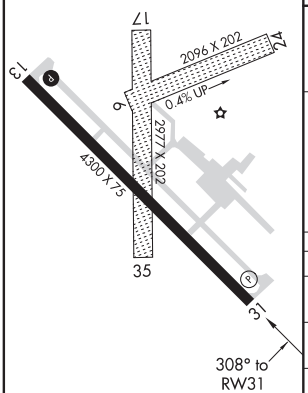
Baro-VNAV NA when using Grand Forks altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). If local altimeter setting not received, use Grand Forks altimeter setting and increase all DAs 62 feet and all MDAs 80 feet. Visibility reduction by helicopters NA. Circling Rwys 6, 24, 17, 35 NA at night.

MISSED APPROACH: Climb to 3000 direct AVINE and hold.

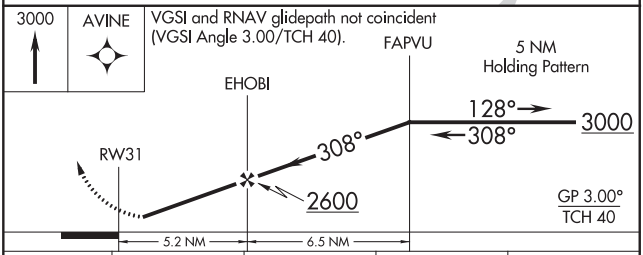
AWOS-3	GRAND FORKS APP CON	CLNC DEL	UNICOM
126.425	118.1 318.1	118.15	122.7 (CTAF) L



ELEV 900 TDZE 897



REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L



CATEGORY	A	B	C	D
LPV DA	1157-1 260 (300-1)			NA
LNAV/VNAV DA	1320-1½ 423 (500-1½)			NA
LNAV MDA	1380-1 483 (500-1)		1380-1¼ 483 (500-1¼)	NA
CIRCLING	1380-1 480 (500-1)		1380-1½ 480 (500-1½)	NA

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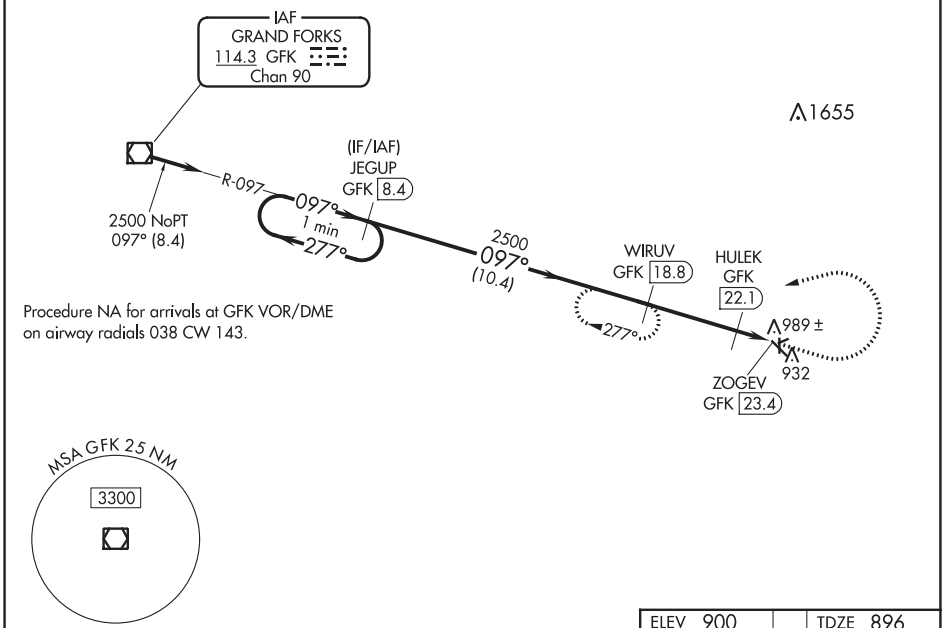
VOR/DME GFK 114.3 Chan 90	APP CRS 097°	Rwy ldg 4300 TDZE 896 Apt Elev 900

VOR/DME RWY 13
CROOKSTON MUNI-KIRKWOOD FIELD (CKN)

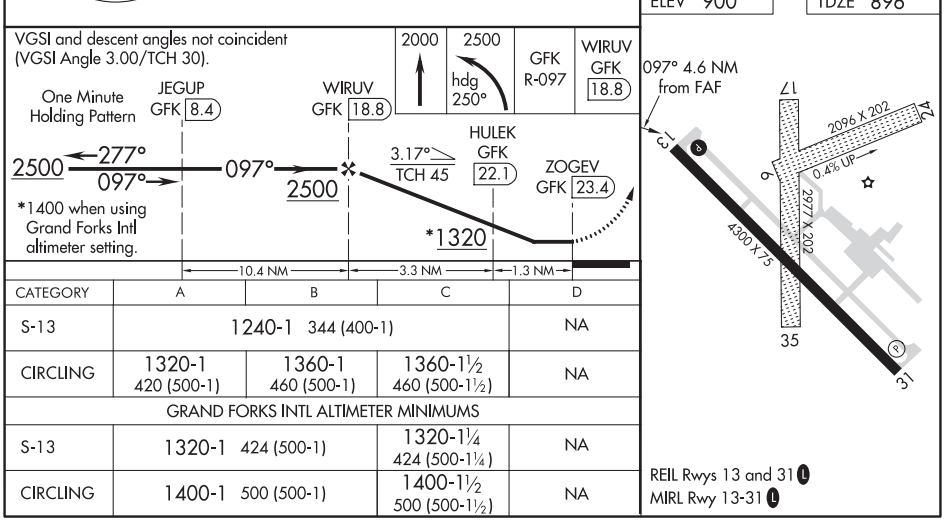
When local altimeter setting not received, use Grand Forks Intl altimeter setting. Circling Rwys 6, 24, 17, 35 NA at night.

MISSED APPROACH: Climb to 2000 then climbing left turn to 2500 heading 250° and GFK VOR/DME R-097 to WIRUV/GFK 18.8 DME and hold.

AWOS-3	GRAND FORKS APP CON	CLNC DEL	UNICOM
126.425	118.1 318.1	118.15	122.7 (CTAF) L



Procedure NA for arrivals at GFK VOR/DME on airway radials 038 CW 143.



CATEGORY	A	B	C	D
S-13	1240-1 344 (400-1)			NA
CIRCLING	1320-1 420 (500-1)	1360-1 460 (500-1)	1360-1½ 460 (500-1½)	NA
GRAND FORKS INTL ALTIMETER MINIMUMS				
S-13	1320-1 424 (500-1)		1320-1¼ 424 (500-1¼)	NA
CIRCLING	1400-1 500 (500-1)		1400-1½ 500 (500-1½)	NA

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

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NC-1, 25 FEB 2021 to 22 APR 2021

APP CRS	Rwy ldg	3800
304°	TDZE	1948
	Apt Elev	1950

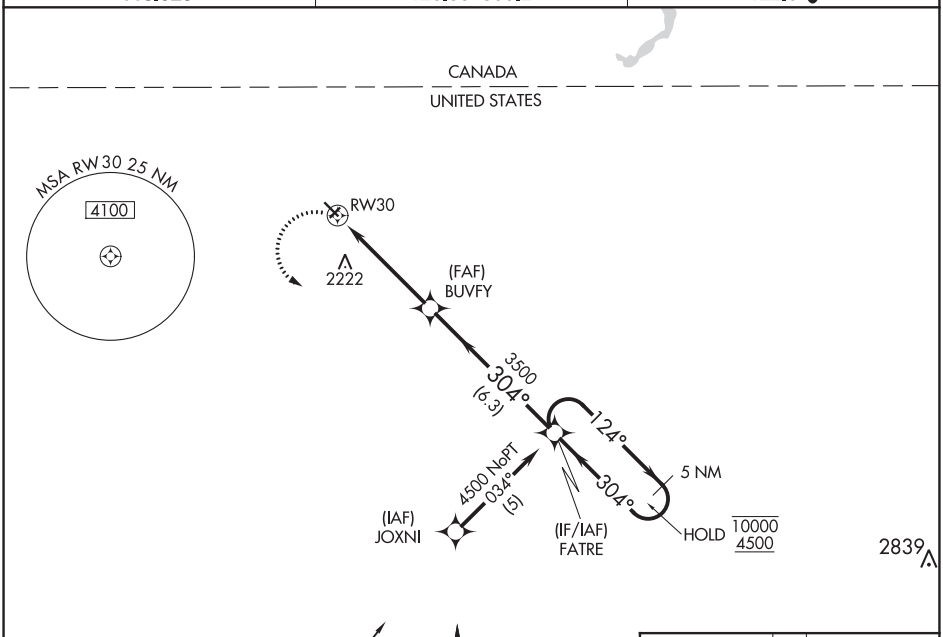
RNAV (GPS) RWY 30
CROSBY MUNI (D50)

RNP APCH

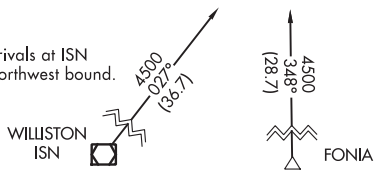
Circling NA to Rwys 3 and 21. Circling Rwy 12 NA at night. Rwy 30 helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climbing left turn to 4500 direct FATRE and hold.

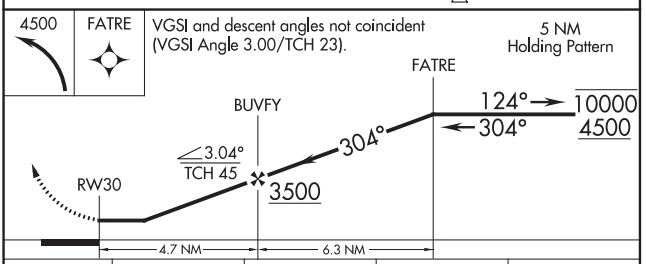
AWOS-3	SALT LAKE CITY CENTER	CTAF
118.025	126.85 305.2	122.9 L

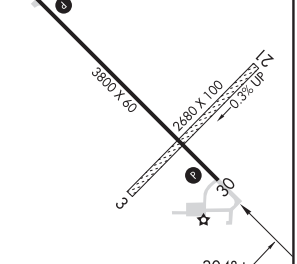


Procedure NA for arrivals at ISN
VOR/DME on V71 northwest bound.



ELEV 1950	TDZE 1948





MIRL Rwy 12-30 L

CATEGORY	A	B	C	D
LNAV MDA	2560-1 612 (700-1)		2560-1¾ 612 (700-1¾)	2560-2 612 (700-2)
C CIRCLING	2560-1 610 (700-1)		2560-1¾ 610 (700-1¾)	2640-2¼ 690 (700-2¼)

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DETROIT LAKES, MINNESOTA AL-5634 (FAA) 21056

WAAS CH 82643 W14A	APP CRS 138°	Rwy ldg 5201 TDZE 1393 Apt Elev 1396

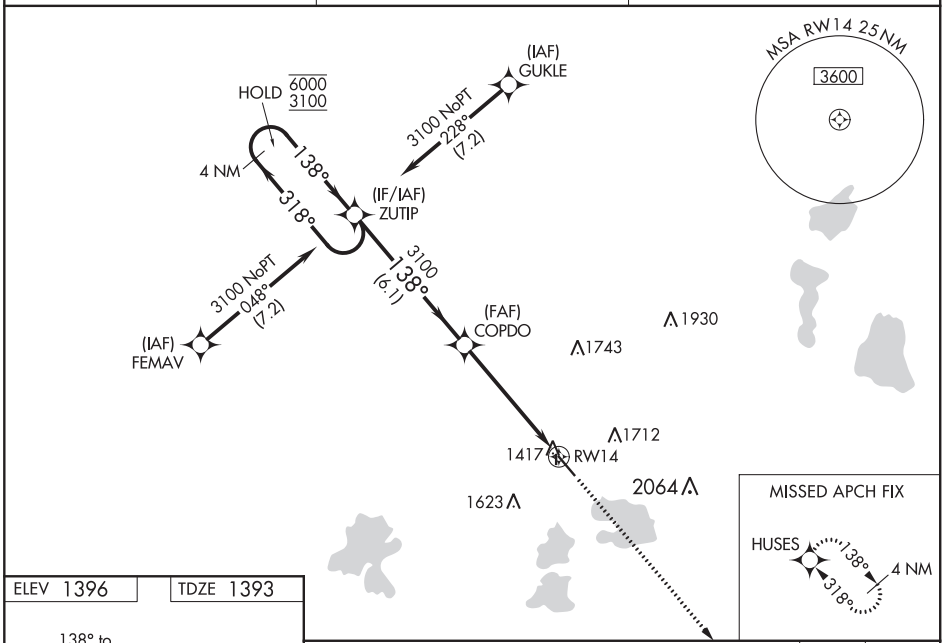
RNAV (GPS) RWY 14
DETROIT LAKES-WETHING FIELD (DTL)

RNP APCH.

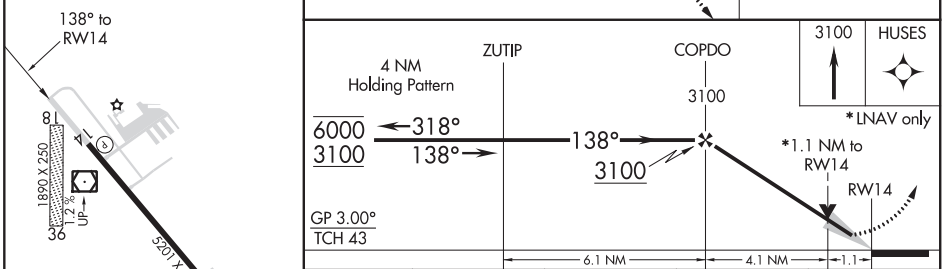
T A Circling NA to Rwys 18 and 36. Baro-VNAV and VDP NA when using Park Rapids altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. When local altimeter setting not received, use Park Rapids altimeter setting: increase DA to 1728 feet and all visibilities ¼ SM, increase all MDA 100 feet and visibility Cats C and D ¼ SM.

MISSED APPROACH: Climb to 3100 direct HUSES and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.075	126.1 269.2	122.8 (CTAF) L



ELEV 1396 TDZE 1393



CATEGORY	A	B	C	D
LPV DA	1643-¾ 250 (300-¾)			
LNAV/VNAV DA	1643-¾ 250 (300-¾)			
LNAV MDA	1780-1 387 (400-1)		1780-1⅛ 387 (400-1⅛)	
C CIRCLING	1820-1 424 (500-1)	1860-1 464 (500-1)	2080-2 684 (700-2)	2140-2½ 744 (800-2½)

HIRL Rwy 14-32 L
REIL Rwys 14 and 32 L

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH **86704** **W32A**	APP CRS **318°**	Rwy ldg **5201** TDZE **1372** Apt Elev **1396**

RNAV (GPS) RWY 32
DETROIT LAKES-WETHING FIELD (DTL)

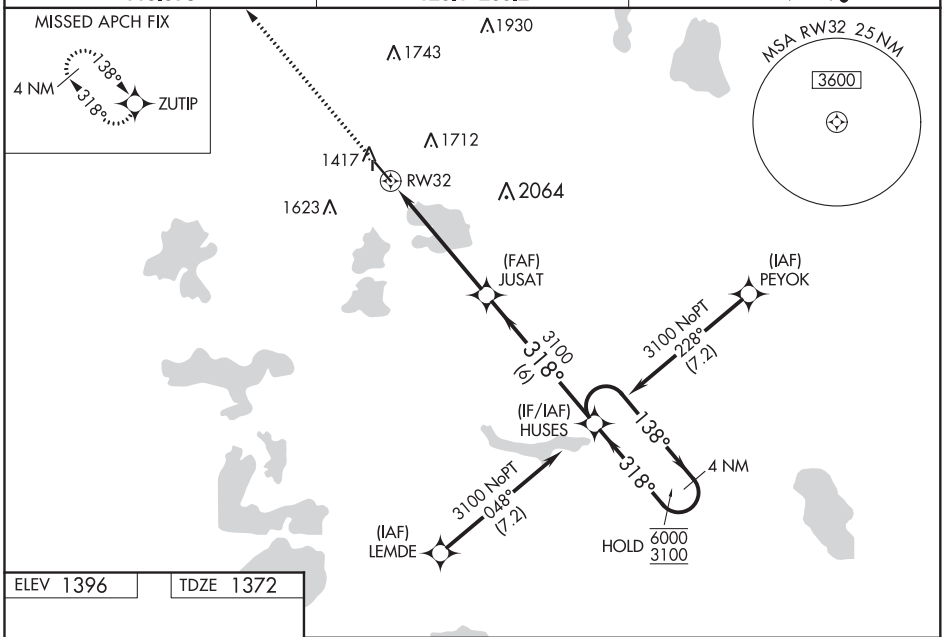
RNP APCH.

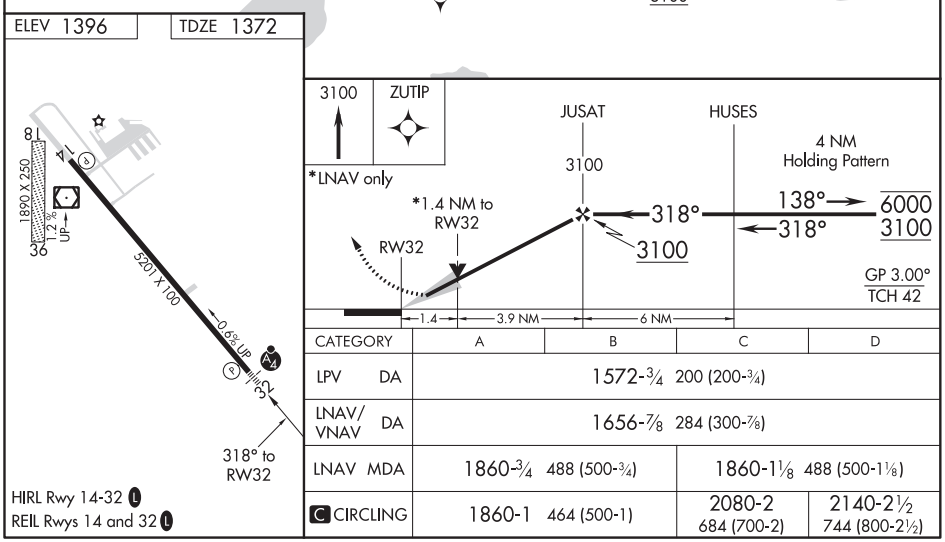
Circling NA to Rwys 18 and 36. Baro-VNAV and VDP NA when using Park Rapids altimeter setting. Inop table does not apply to LPV. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. When local altimeter setting not received, use Park Rapids altimeter setting: increase LPV DA to 1657 feet; increase LNAV/VNAV DA to 1741 feet; increase all MDA 100 feet and visibility CATs C and D ¼ SM. For inop ALS, increase LNAV/VNAV all Cats visibility to ⅞ SM. For inop ALS, when using Park Rapids altimeter setting, increase LPV all Cats visibility to ⅞ SM and LNAV Cats C and D to 1¾ SM.

MALSF

MISSED APPROACH: Climb to 3100 direct ZUTIP and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.075	**126.1 269.2**	**122.8** (CTAF) L





HIRL Rwy 14-32 L
REIL Rwys 14 and 32 L

CATEGORY	A	B	C	D
LPV DA	1572-¾ 200 (200-¾)			
LNAV/VNAV DA	1656-⅞ 284 (300-⅞)			
LNAV MDA	1860-¾ 488 (500-¾)		1860-1⅛ 488 (500-1⅛)	
C CIRCLING	1860-1 464 (500-1)		2080-2 684 (700-2)	2140-2½ 744 (800-2½)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

DETROIT LAKES, MINNESOTA | AL-5634 (FAA) | 21056

VOR RWY 14

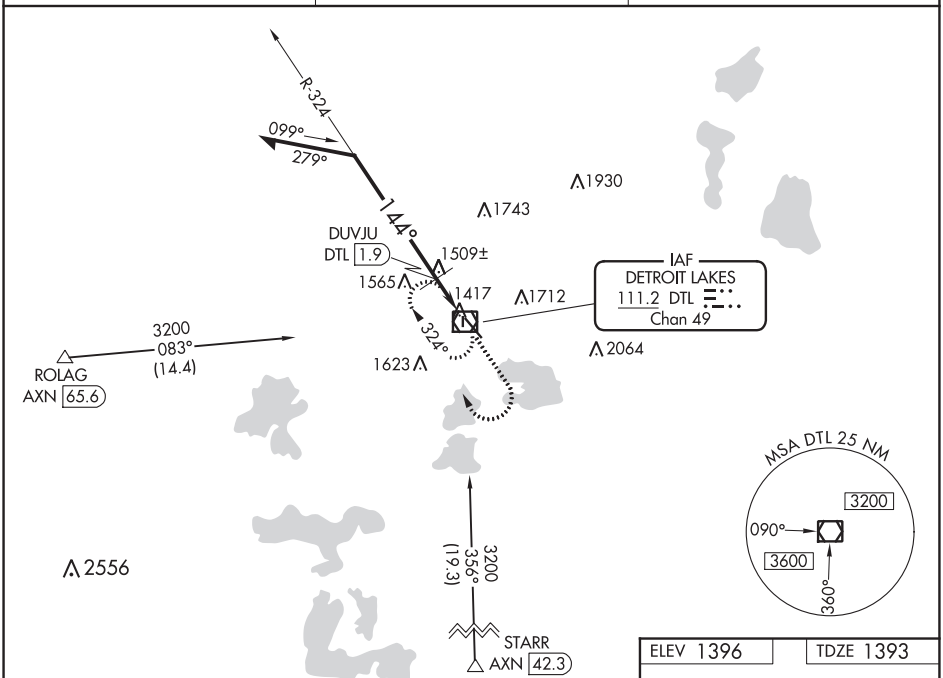
DETROIT LAKES-WETHING FIELD (DTL)

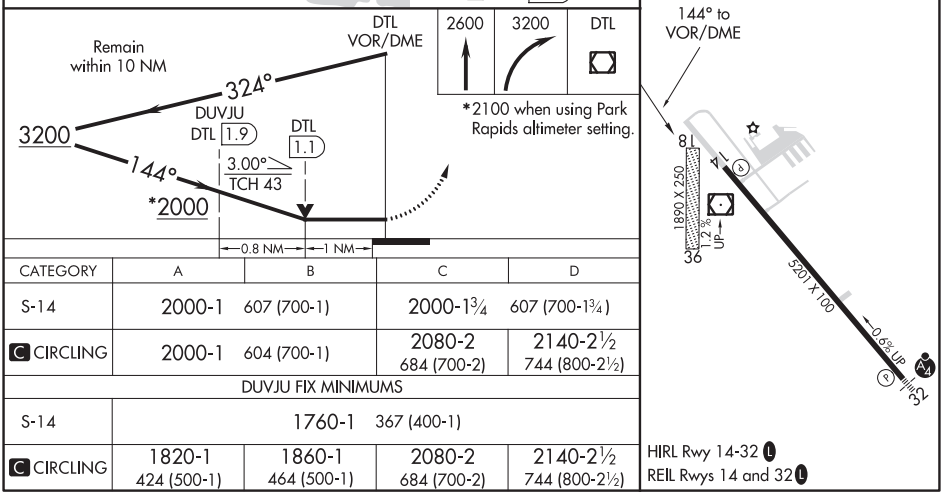
VOR/DME DTL 111.2 Chan 49	APP CRS 144°	Rwy ldg 5201 TDZE 1393 Apt Elev 1396

T A NA — Circling NA to Rwys 18 and 36. VDP NA with Park Rapids altimeter setting. When local altimeter setting not received, use Park Rapids altimeter setting and increase all MDA 100 feet and visibility Cats C and D ¼ SM. DUVJU fix minumums: increase visibility Cats C and D ⅜ SM.

MISSED APPROACH: Climb to 2600 then climbing right turn to 3200 direct DTL VOR/DME and hold, continue climb-in-hold to 3200.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.075	126.1 269.2	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-14	2000-1 607 (700-1)		2000-1¾ 607 (700-1¾)	
C CIRCLING	2000-1 604 (700-1)		2080-2 684 (700-2)	2140-2½ 744 (800-2½)
DUVJU FIX MINIMUMS				
S-14	1760-1 367 (400-1)			
C CIRCLING	1820-1 424 (500-1)	1860-1 464 (500-1)	2080-2 684 (700-2)	2140-2½ 744 (800-2½)

VOR/DME DTL	APP CRS	Rwy ldg	5201
111.2	314°	TDZE	1372
Chan 49		Apt Elev	1396

VOR RWY 32

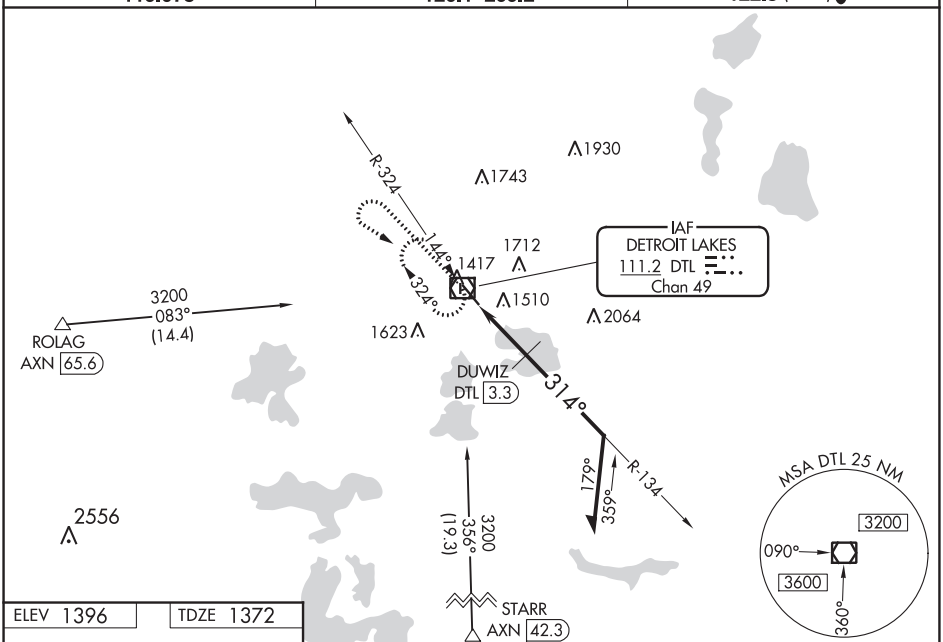
DETROIT LAKES-WETHING FIELD (DTL)

T A NA — Circling NA to Rwys 18 and 36. VDP NA with Park Rapids altimeter setting. When local altimeter setting not received, use Park Rapids altimeter setting and increase all MDA 100 feet and visibility Cat A ¼ SM, Cats C and D ½ SM and Circling Cats A and C ¼ SM, Cat D ½ SM. DUWIZ fix minimums: increase visibility Cats C and D ¼ SM. For inop ALS, increase S-32 Cats C and D visibility to 2½ SM. Inop table does not apply to S-32 Cats C and D when using Park Rapids altimeter setting.

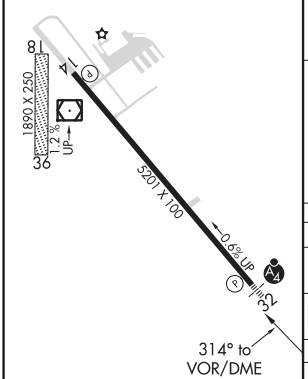
MALSF

MISSED APPROACH: Climb to 2500 then climbing left turn to 3200 direct DTL VOR/DME and hold, continue climb-in-hold 3200.

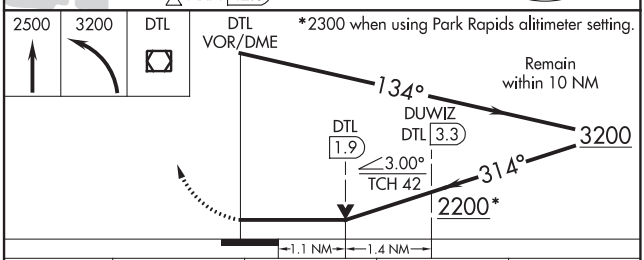
AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.075	126.1 269.2	122.8 (CTAF) L



ELEV 1396 TDZE 1372



HIRL Rwy 14-32 L
REIL Rwys 14 and 32 L



CATEGORY	A	B	C	D
S-32	2200-¾ 828 (900-¾)	2200-1 828 (900-1)	2200-2 828 (900-2)	
C CIRCLING	2200-1 804 (900-1)	2200-1¼ 804 (900-1¼)	2200-2½ 804 (900-2½)	
DUWIZ FIX MINIMUMS				
S-32	1760-¾ 388 (400-¾)		1760-⅞ 388 (400-⅞)	
C CIRCLING	1820-1 424 (500-1)	1860-1 464 (500-1)	2080-2 684 (700-2)	2140-2½ 744 (800-2½)

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DEVILS LAKE, NORTH DAKOTA | AL-5305 (FAA) | 21056

LOC I-VKE	APP CRS	Rwy ldg	6401
108.7	311°	TDZE	1450
		Apt Elev	1470

ILS or LOC/DME RWY 31

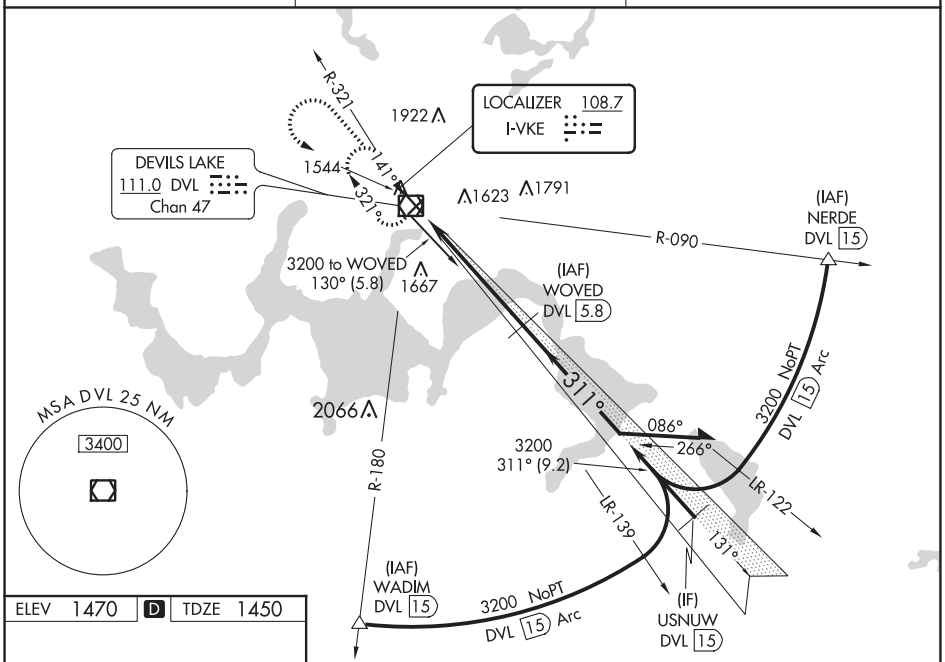
DEVILS LAKE RGNL (DVL)

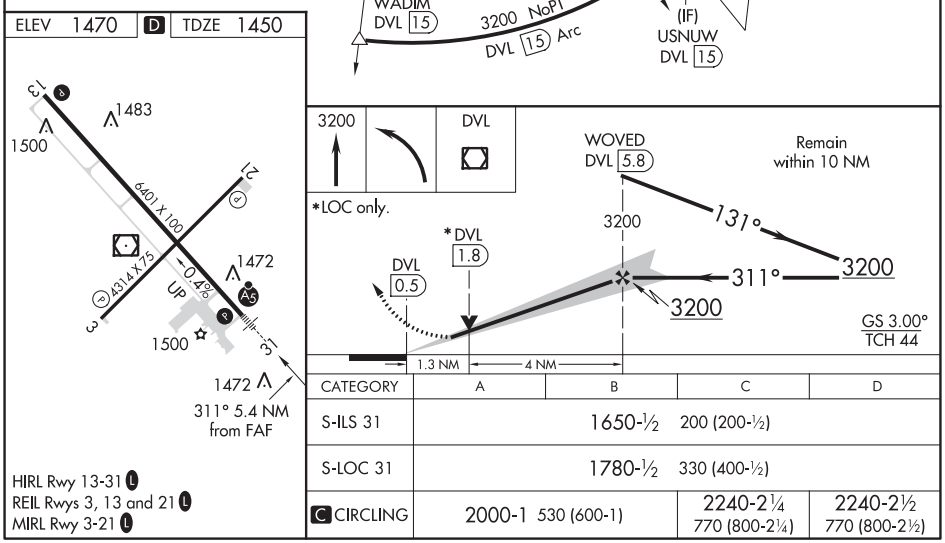
T A NA — When local altimeter setting not received, use Cando altimeter setting and increase all DA 63 feet and all MDA 80 feet and increase S-LOC 31 Cat C/D and Circling Cat C/D visibility ¼ mile. For inop MALSR when using Cando altimeter setting, increase S-ILS 31 all Cats visibility to ⅞ mile and S-LOC 31 Cat C/D to 1⅛ mile. DME from DVL VOR/DME. Simultaneous reception of I-VKE and DVL DME required.

MALSR A5

MISSED APPROACH: Climb to 3200 then left turn direct DVL VOR/DME and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
125.875	124.2 270.3	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-ILS 31	1650-½ 200 (200-½)			
S-LOC 31	1780-½ 330 (400-½)			
C CIRCLING	2000-1 530 (600-1)		2240-2¼ 770 (800-2¼)	2240-2½ 770 (800-2½)

HIRL Rwy 13-31 L
REIL Rwys 3, 13 and 21 L
MIRL Rwy 3-21 L

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NC-1, 25 FEB 2021 to 22 APR 2021

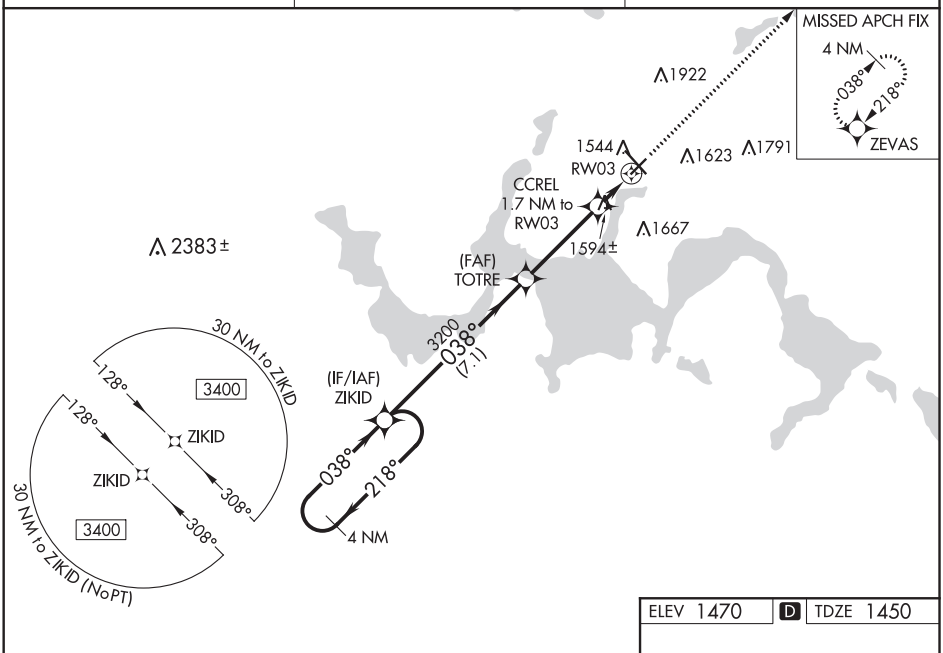
WAAS CH 93608 W03A	APP CRS 038°	Rwy ldg 4314 TDZE 1450 Apt Elev 1470

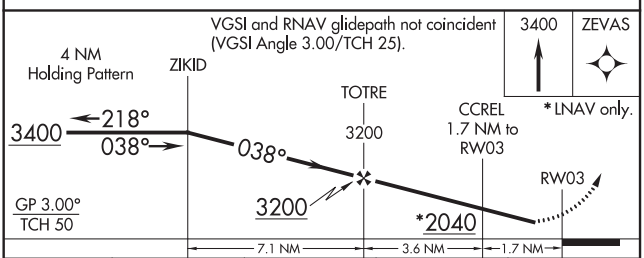
RNAV (GPS) RWY 3
DEVILS LAKE RGNL (DVL)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Cando altimeter setting and increase all DA 63 feet, and all MDA 80 feet, increase LNAV/VNAV all Cats visibility ⅛ mile, LNAV and Circling Cat C and D visibility ¼ mile. Helicopter visibility reduction below ¾ SM NA. Baro-VNAV NA when using Cando altimeter setting.

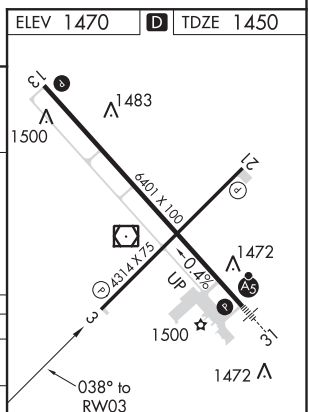
MISSED APPROACH: Climb to 3400 direct ZEVAS and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
125.875	124.2 270.3	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1700-1 250 (300-1)			
LNAV/VNAV DA	1714-1 264 (300-1)			
LNAV MDA	1860-1 410 (400-1)		1860-1⅛ 410 (400-1⅛)	
C CIRCLING	2000-1 530 (600-1)		2240-2¼ 770 (800-2¼)	2240-2½ 770 (800-2½)



HIRL Rwy 13-31 L
REIL Rwys 3, 13 and 21 L
MIRL Rwy 3-21 L

NC-1, 25 FEB 2021 to 22 APR 2021

DEVILS LAKE, NORTH DAKOTA — AL-5305 (FAA) — 20086

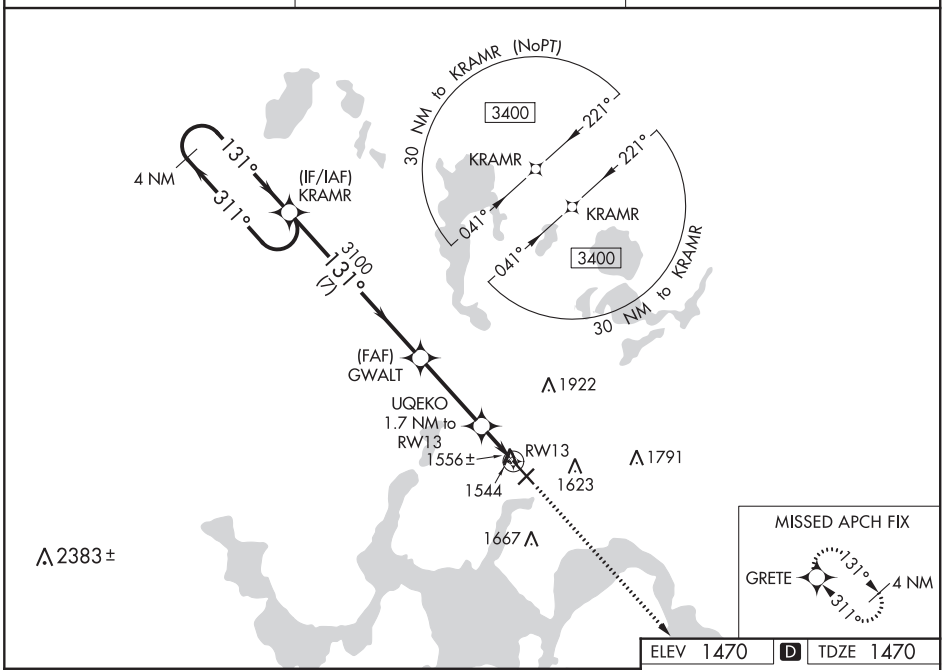
WAAS CH 78314 W13A	APP CRS 131°	Rwy ldg 6401 TDZE 1470 Apt Elev 1470

RNAV (GPS) RWY 13
DEVILS LAKE RGNL (DVL)

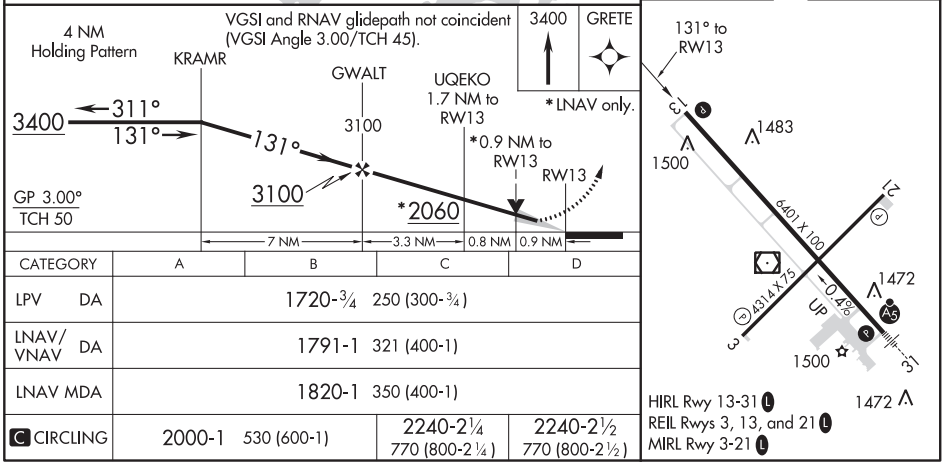
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Baro-VNAV and VDP NA when using Cando altimeter setting. When local altimeter setting not received, use Cando altimeter setting and increase all DA 63 feet and all MDA 80 feet, increase LPV and LNAV/VNAV all Cats visibility ¼ mile, LNAV and Circling Cats C and D visibility ¼ mile.

MISSED APPROACH: Climb to 3400 direct GRETE and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
125.875	124.2 270.3	122.8 (CTAF) L



ELEV 1470 | D | TDZE 1470



CATEGORY	A	B	C	D
LPV DA	1720-¾ 250 (300-¾)			
LNAV/VNAV DA	1791-1 321 (400-1)			
LNAV MDA	1820-1 350 (400-1)			
C CIRCLING	2000-1 530 (600-1)		2240-2¼ 770 (800-2¼)	2240-2½ 770 (800-2½)

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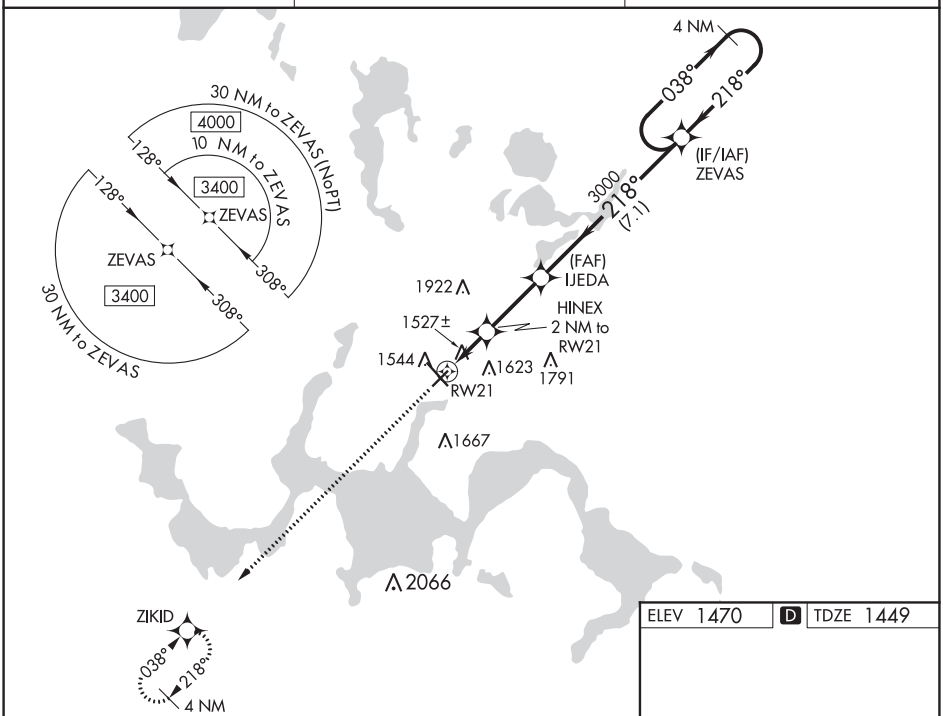
WAAS CH 78417 W21A	APP CRS 218°	Rwy ldg 4314 TDZE 1449 Apt Elev 1470

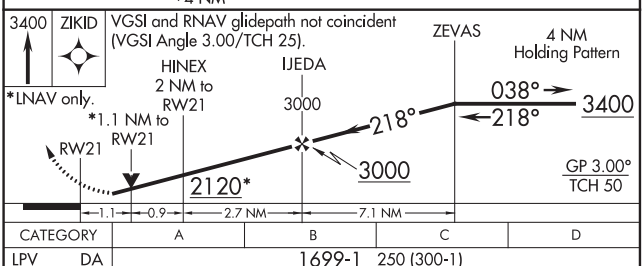
RNAV (GPS) RWY 21
DEVILS LAKE RGNL (DVL)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA. Baro-VNAV NA when using Cando altimeter setting. VDP NA with Cando altimeter setting. When local altimeter setting not received, use Cando altimeter setting and increase all DA 63 feet, and all MDA 80 feet, increase LNAV and Circling Cats C and D visibility ¼ mile.

MISSED APPROACH: Climb to 3400 direct ZIKID and hold.

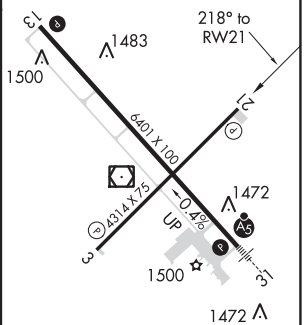
AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
125.875	124.2 270.3	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1699-1 250 (300-1)			
LNAV/VNAV DA	1699-1 250 (300-1)			
LNAV MDA	1800-1 351 (400-1)			
C CIRCLING	2000-1 530 (600-1)		2240-2¼ 770 (800-2¼)	2240-2½ 770 (800-2½)

ELEV 1470 D TDZE 1449



HIRL Rwy 13-31 L
REIL Rwys 3, 13 and 21 L
MIRL Rwy 3-21 L

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 58314 W31A	APP CRS 311°	Rwy ldg 6401 TDZE 1450 Apt Elev 1470

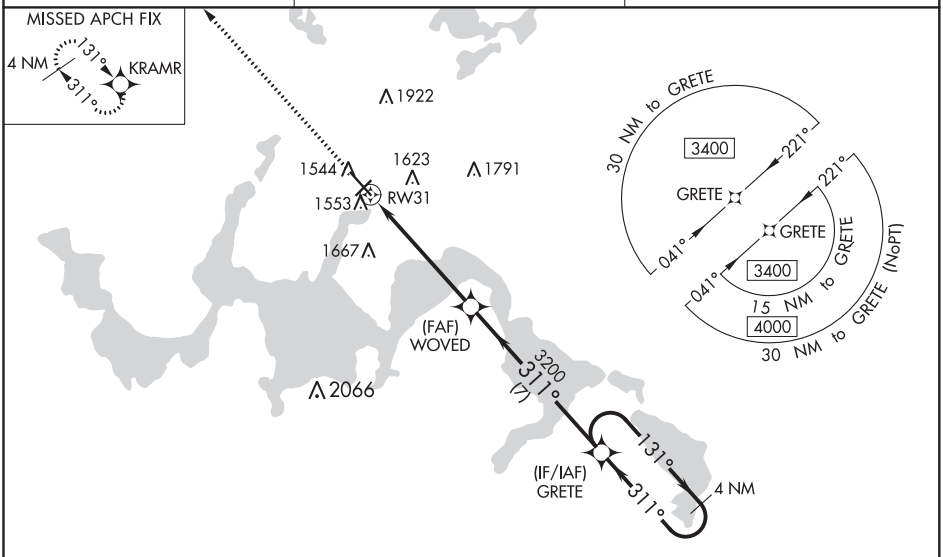
RNAV (GPS) RWY 31
DEVILS LAKE RGNL (DVL)

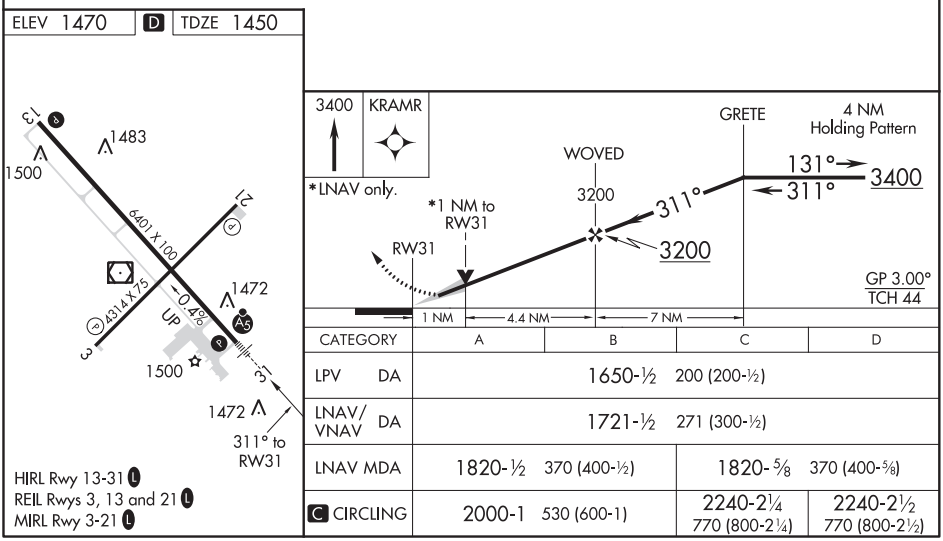
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Baro-VNAV and VDP NA when using Cando altimeter setting. For inop MALSR, increase LNAV/VNAV all Cats visibility to ⅞, LNAV Cats C and D visibility to 1 mile. When local altimeter setting not received, use Cando altimeter setting and increase all DA 63 feet, and all MDA 80 feet, increase LNAV/VNAV all Cats visibility ⅛ mile, LNAV and Circling Cats C and D visibility ¼ mile. For inop MALSR when using Cando altimeter setting, increase LPV all Cats visibility to ⅞ mile.

MALSR

MISSED APPROACH: Climb to 3400 direct KRAMR and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
125.875	124.2 270.3	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1650-½ 200 (200-½)			
LNAV/VNAV DA	1721-½ 271 (300-½)			
LNAV MDA	1820-½ 370 (400-½)		1820-⅝ 370 (400-⅝)	
C CIRCLING	2000-1 530 (600-1)		2240-2¼ 770 (800-2¼)	2240-2½ 770 (800-2½)

HIRL Rwy 13-31 L
REIL Rwys 3, 13 and 21 L
MIRL Rwy 3-21 L

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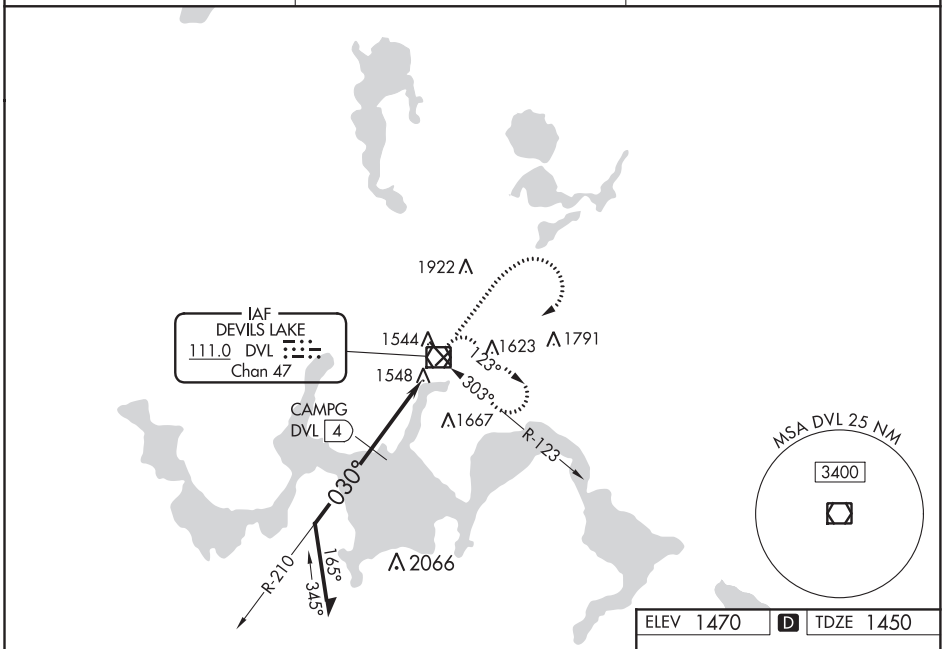
VOR/DME DVL	APP CRS	Rwy ldg	4314
111.0	030°	TDZE	1450
Chan 47		Apt Elev	1470

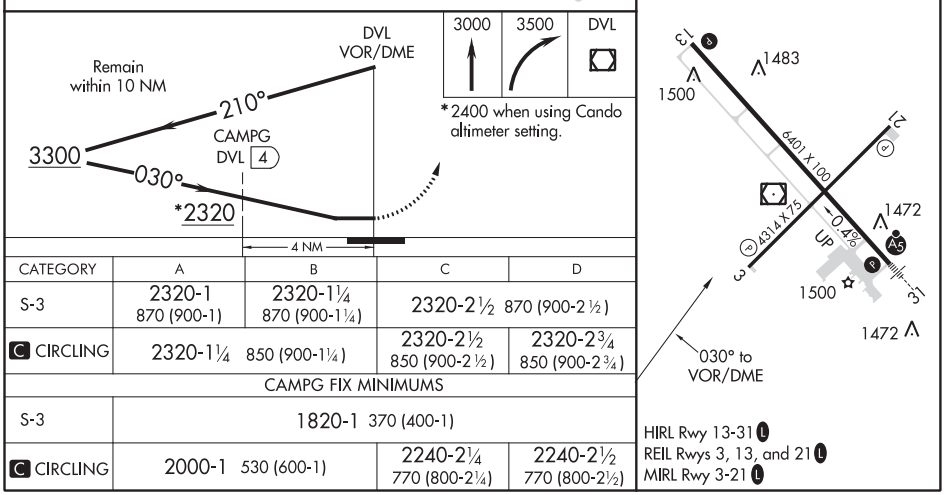
VOR RWY 3
DEVILS LAKE RGNL (DVL)

When local altimeter setting not received, use Cando altimeter setting and increase all MDA 80 feet, increase S-3 Cat A and Circling Cats C/D visibility ¼ SM, CAMPG fix minimums S-3 Cats C/D visibility ⅜ SM and Circling Cats C/D visibility ¼ SM. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 3000 then climbing right turn to 3500 direct DVL VOR/DME and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
125.875	124.2 270.3	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-3	2320-1 870 (900-1)	2320-1¼ 870 (900-1¼)	2320-2½ 870 (900-2½)	
C CIRCLING	2320-1¼ 850 (900-1¼)		2320-2½ 850 (900-2½)	2320-2¾ 850 (900-2¾)
CAMPG FIX MINIMUMS				
S-3	1820-1 370 (400-1)			
C CIRCLING	2000-1 530 (600-1)		2240-2¼ 770 (800-2¼)	2240-2½ 770 (800-2½)

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NC-1, 25 FEB 2021 to 22 APR 2021

DEVILS LAKE, NORTH DAKOTA | AL-5305 (FAA) | 21056

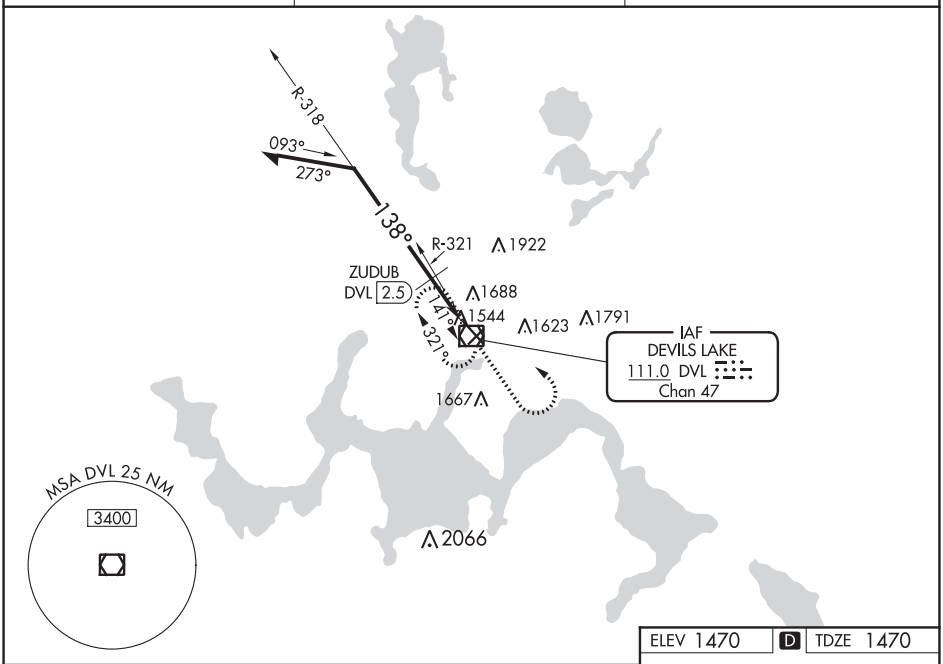
VOR RWY 13
DEVILS LAKE RGNL (DVL)

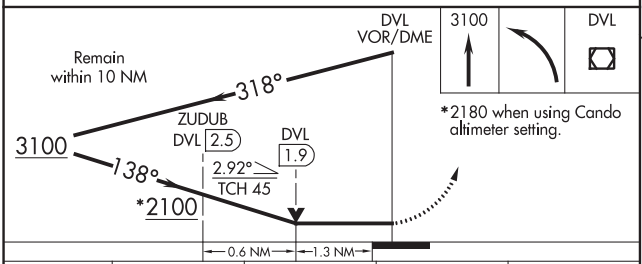
VOR/DME DVL	APP CRS	Rwy ldg	6401
111.0	138°	TDZE	1470
Chan 47		Apt Elev	1470

T A VDP NA with Cando altimeter setting. When local altimeter setting not received, use Cando altimeter setting and increase all MDA 80 feet, and increase S-13 and Circling Cats C and D visibility ¼ mile, increase ZUDUB fix minimums S-13 and Circling Cats C and D visibility ¼ mile.

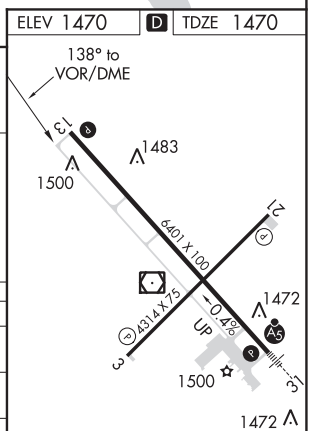
MISSED APPROACH: Climb to 3100 then left turn direct DVL VOR/DME and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
125.875	124.2 270.3	122.8 (CTAF) L





*2180 when using Cando altimeter setting.



HIRL Rwy 13-31 L
REIL Rwys 3, 13 and 21 L
MIRL Rwy 3-21 L

CATEGORY	A	B	C	D
S-13	2100-1 630 (700-1)		2100-1¾ 630 (700-1¾)	
C CIRCLING	2100-1 630 (700-1)		2240-2¼ 770 (800-2¼)	2240-2½ 770 (800-2½)
ZUDUB FIX MINIMUMS (DME REQUIRED)				
S-13	1940-1 470 (500-1)		1940-1⅜ 470 (500-1⅜)	
C CIRCLING	2000-1 530 (600-1)		2240-2¼ 770 (800-2¼)	2240-2½ 770 (800-2½)

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VOR/DME DVL	APP CRS	Rwy ldg	6401
111.0	303°	TDZE	1450
Chan 47		Apt Elev	1470

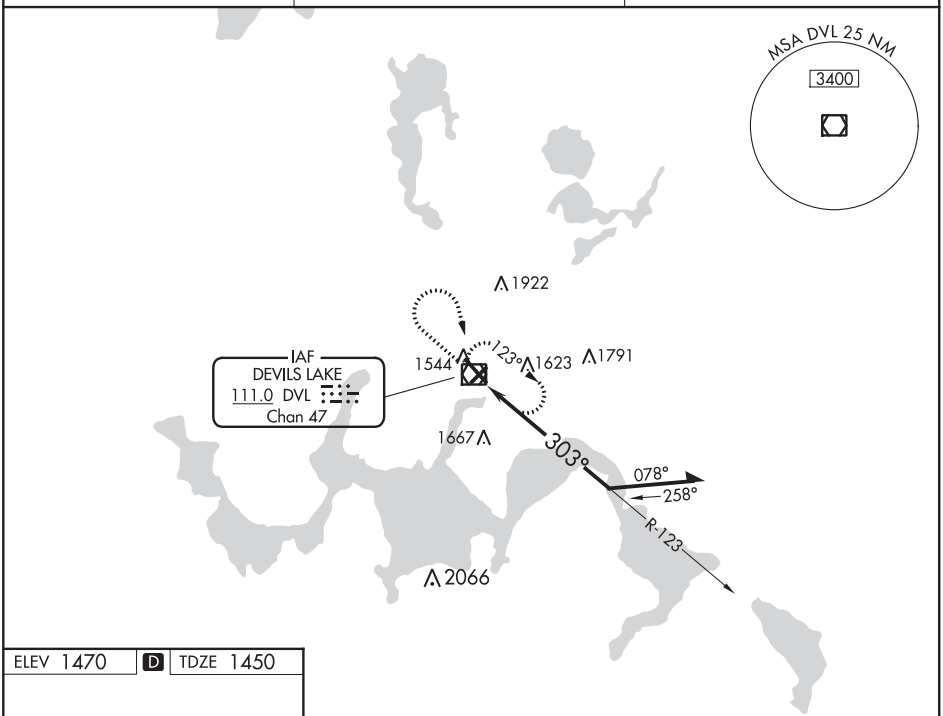
VOR RWY 31
DEVILS LAKE RGNL (DVL)

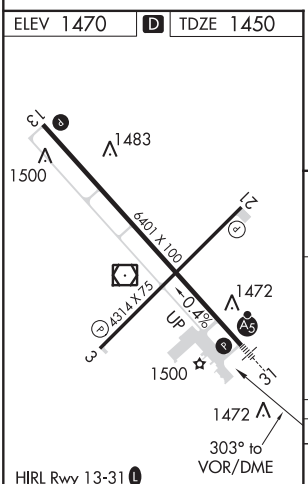
When local altimeter setting not received, use Cando altimeter setting and increase all MDA 80 feet, increase S-31 Cats C and D visibility ⅛ mile, and Circling Cats C and D visibility ¼ mile.

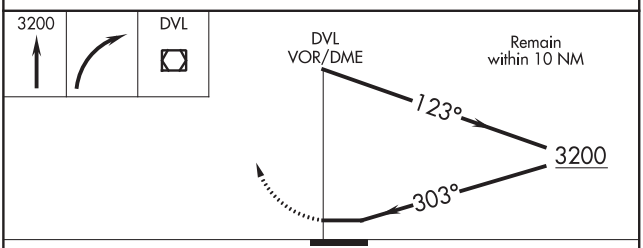
MALSR

MISSED APPROACH: Climb to 3200 then right turn direct DVL VOR/DME and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
125.875	124.2 270.3	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-31	2020-½ 570 (600-½)		2020-1¼ 570 (600-1¼)	
C CIRCLING	2020-1 550 (600-1)		2240-2¼ 770 (800-2¼)	2240-2½ 770 (800-2½)

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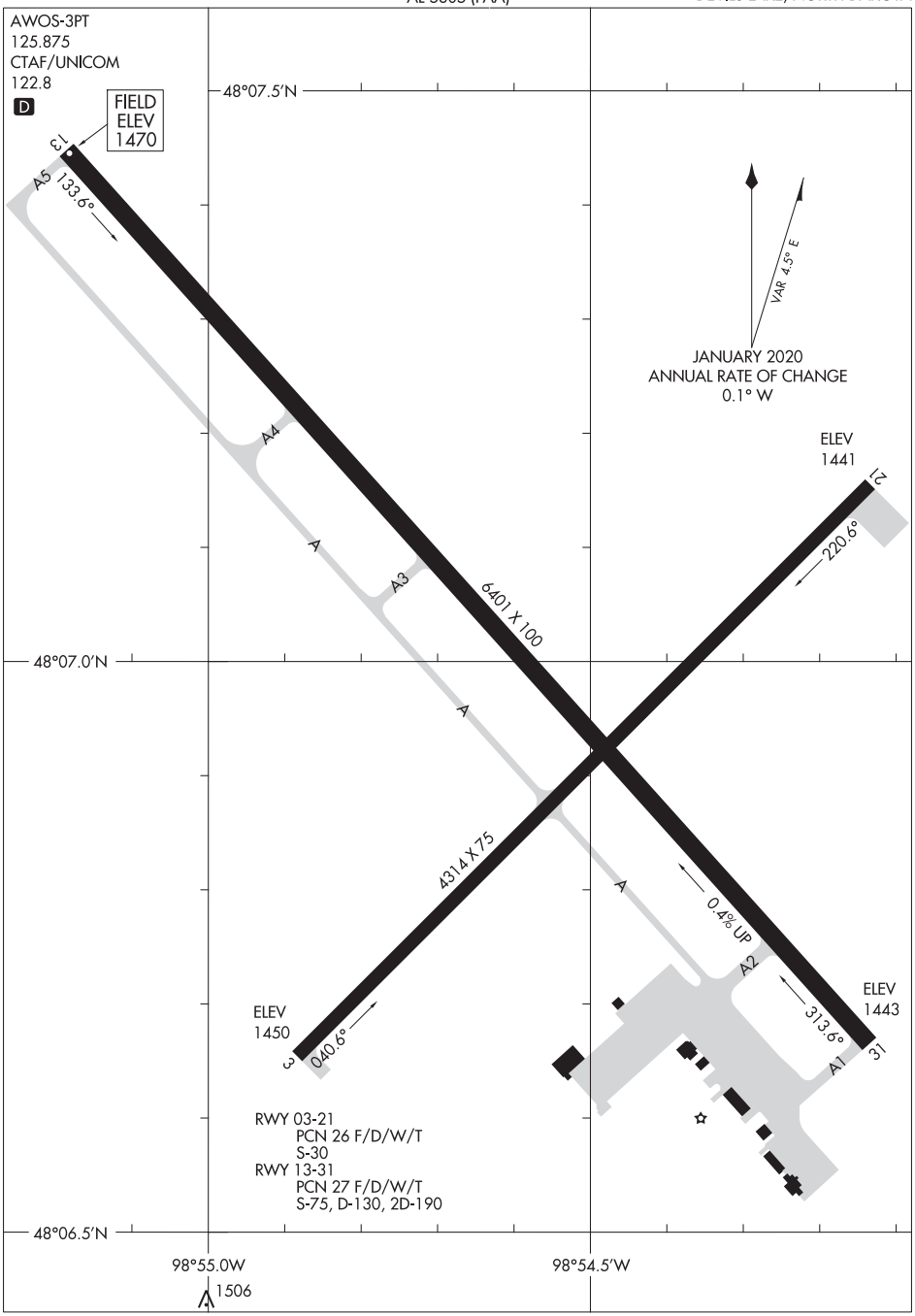
20198

AIRPORT DIAGRAM

DEVILS LAKE RGNL (DVL)
DEVILS LAKE, NORTH DAKOTA

AL-5305 (FAA)



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AIRPORT DIAGRAM
20198
DEVILS LAKE, NORTH DAKOTA
DEVILS LAKE RGNL (DVL)

WAAS CH 99643 W15A	APP CRS 140°	Rwy ldg 7301 TDZE 2586 Apt Elev 2592

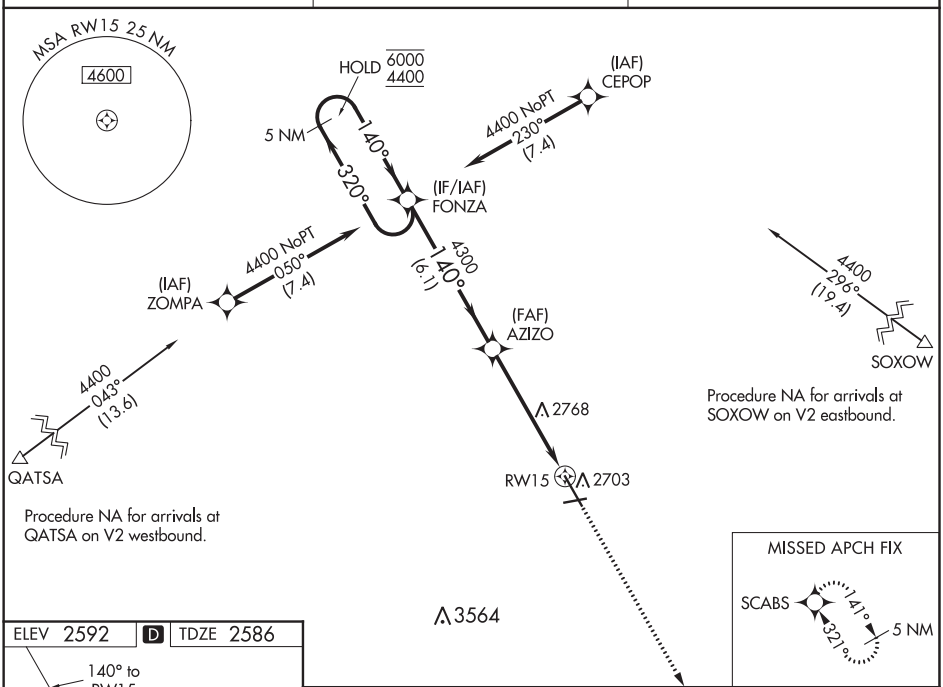
RNAV (GPS) RWY 15
DICKINSON-THEODORE ROOSEVELT RGNL (DIK)

RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C or above 54°C. -30°C

MISSED APPROACH: Climb to 5000 direct SCABS and hold.

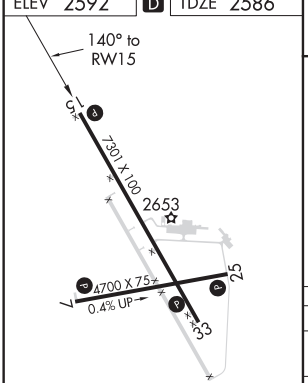
ASOS	MINNEAPOLIS CENTER	UNICOM
118.375	124.25 236.825	123.0 (CTAF)



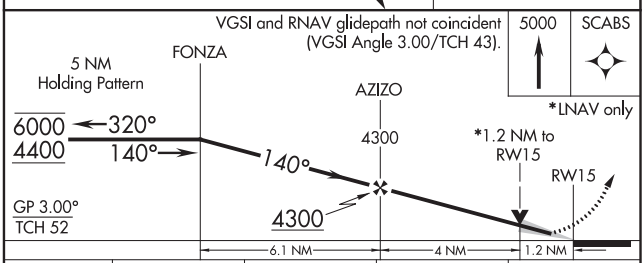
Procedure NA for arrivals at SOXOW on V2 eastbound.

Procedure NA for arrivals at QATSA on V2 westbound.

ELEV 2592 D TDZE 2586



REIL Rwys 7, 15, 25, and 33
MIRL Rwys 7-25 and 15-33



CATEGORY	A	B	C	D
LPV DA	2786-1 200 (200-1)			
LNAV/VNAV DA	2836-1 250 (300-1)			
LNAV MDA	3020-1 434 (500-1)		3020-1¼ 434 (500-1¼)	
C CIRCLING	3060-1 468 (500-1)		3120-1½ 528 (600-1½)	3200-2 608 (700-2)

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DICKINSON, NORTH DAKOTA — AL-120 (FAA) — 21056

RNAV (GPS) RWY 25
DICKINSON-THEODORE ROOSEVELT RGNL (DIK)

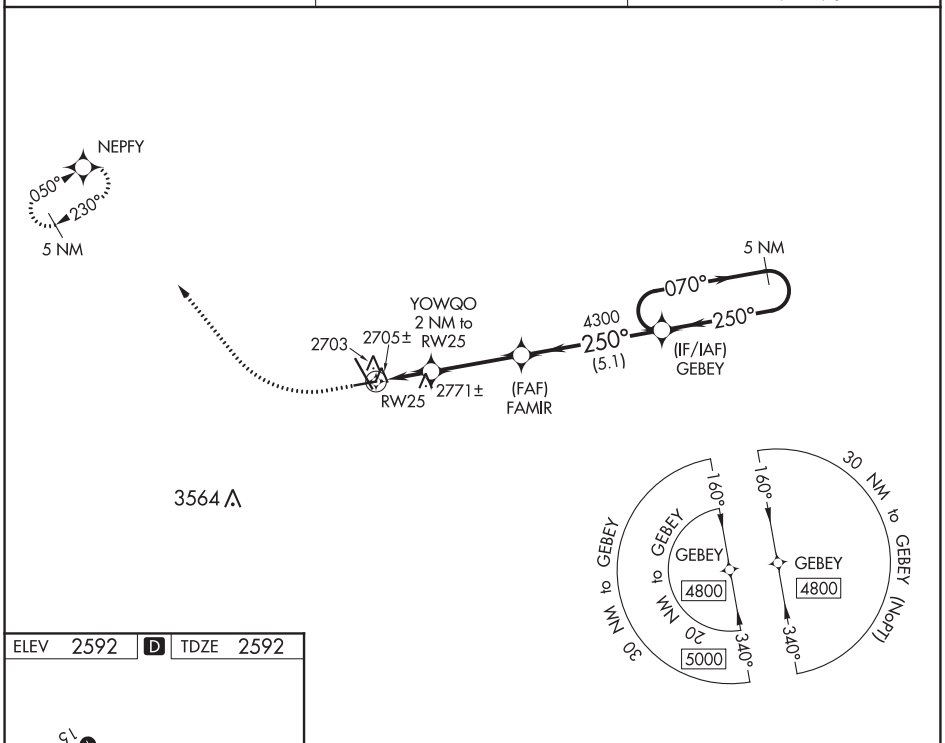
WAAS CH 82534 W25A	APP CRS 250°	Rwy ldg 4700 / TDZE 2592 / Apt Elev 2592

RNP APCH.

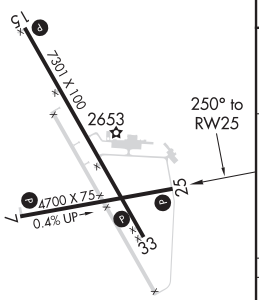
Rwy 25 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Bowman altimeter setting and increase all MDA 160 feet and visibility Cats C and D ½ SM. -30°C

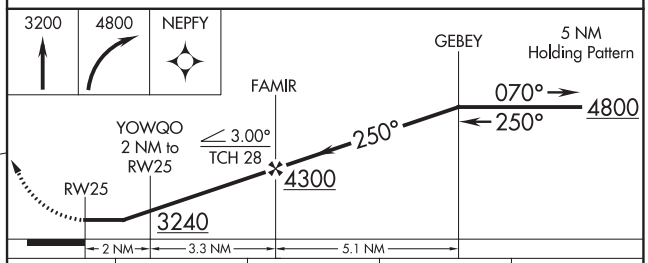
MISSED APPROACH: Climb to 3200 then climbing right turn to 4800 direct NEPFY and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
118.375	124.25 236.825	123.0 (CTAF) L



ELEV 2592 D TDZE 2592





CATEGORY	A	B	C	D
LP MDA	2980-1 388 (400-1)		2980-1⅛ 388 (400-1⅛)	
LNAV MDA	3060-1 468 (500-1)		3060-1⅜ 468 (500-1⅜)	
C CIRCLING	3080-1 488 (500-1)	3100-1 508 (600-1)	3120-1½ 528 (600-1½)	3220-2 628 (700-2)

REIL Rwys 7, 15, 25, and 33 L
MIRL Rwys 7-25 and 15-33 L

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 69543 W33A	APP CRS 320°	Rwy ldg 7301 TDZE 2586 Apt Elev 2592

RNAV (GPS) RWY 33
DICKINSON-THEODORE ROOSEVELT RGNL (DIK)

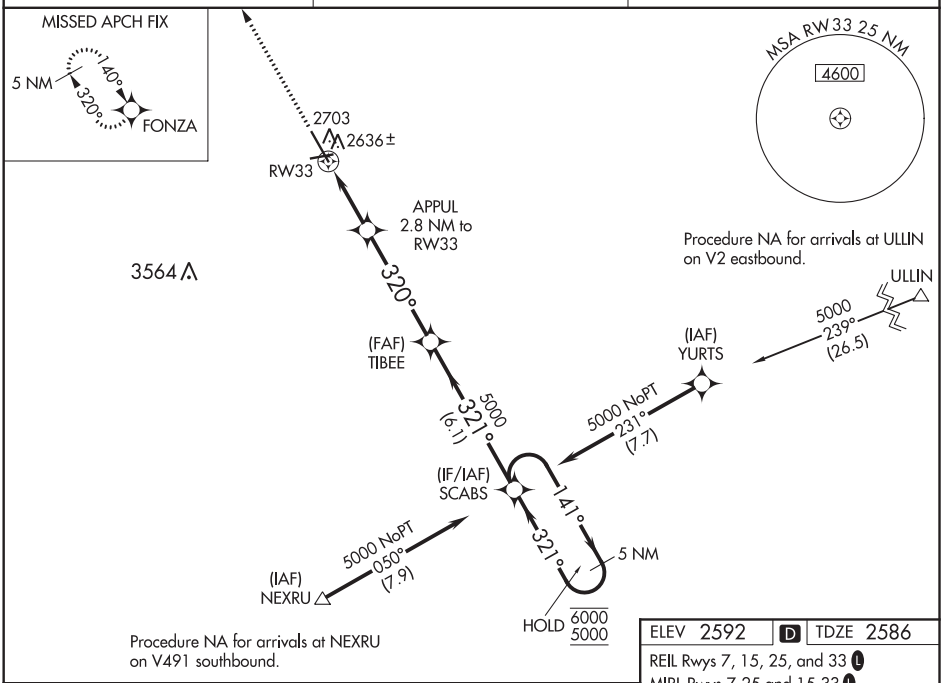
RNP APCH.

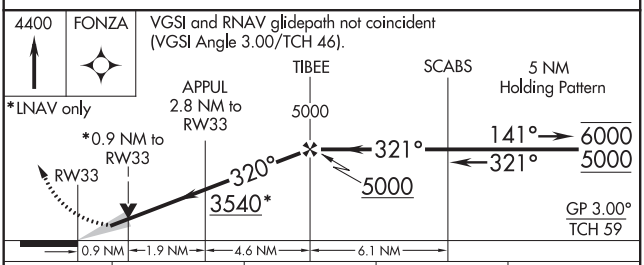
T A ❄ -30°C

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C or above 54°C.

MISSED APPROACH: Climb to 4400 direct FONZA and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
118.375	124.25 236.825	123.0 (CTAF) L

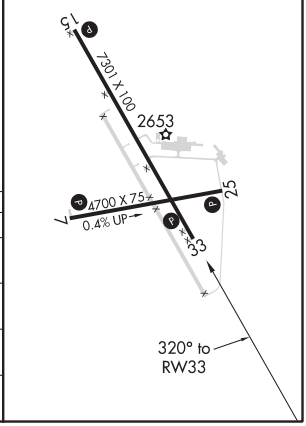




ELEV 2592 D TDZE 2586

REIL Rwys 7, 15, 25, and 33 L

MIRL Rwys 7-25 and 15-33 L



CATEGORY	A	B	C	D
LPV DA	2836-1 250 (300-1)			
LNAV/VNAV DA	2836-1 250 (300-1)			
LNAV MDA	2900-1 314 (400-1)			
C CIRCLING	3060-1 468 (500-1)		3120-1½ 528 (600-1½)	3200-2 608 (700-2)

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VORTAC DIK 112.9 Chan 76	APP CRS 183°	Rwy ldg N/A TDZE N/A Apt Elev 2592

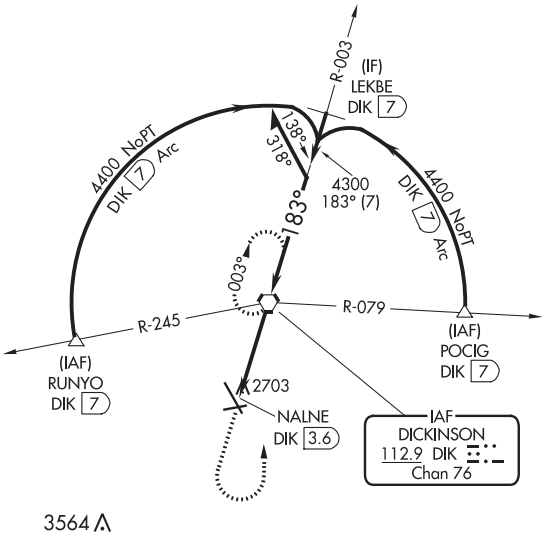
VOR-A
DICKINSON-THEODORE ROOSEVELT RGNL (DIK)

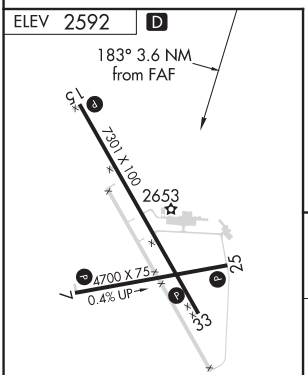
When local altimeter setting not received, use Bowman altimeter setting and increase all MDAs 280 feet, increase Circling Cat C visibility ¾ SM, Cat D visibility 1 SM.

-30°C

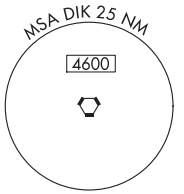
MISSED APPROACH: Climb to 4600 then turn left direct DIK VORTAC and hold.

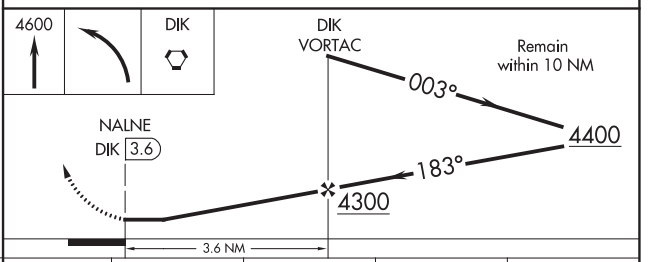
ASOS	MINNEAPOLIS CENTER	UNICOM
118.375	124.25 236.825	123.0 (CTAF)





REIL Rwys 7, 15, 25, and 33
MIRL Rwys 7-25 and 15-33





FAF to MAP 3.6 NM					
Knots	60	90	120	150	180
Min:Sec	3:36	2:24	1:48	1:26	1:12

CATEGORY	A	B	C	D
C CIRCLING	3080-1 488 (500-1)	3100-1 508 (600-1)	3120-1½ 528 (600-1½)	3220-2 628 (700-2)

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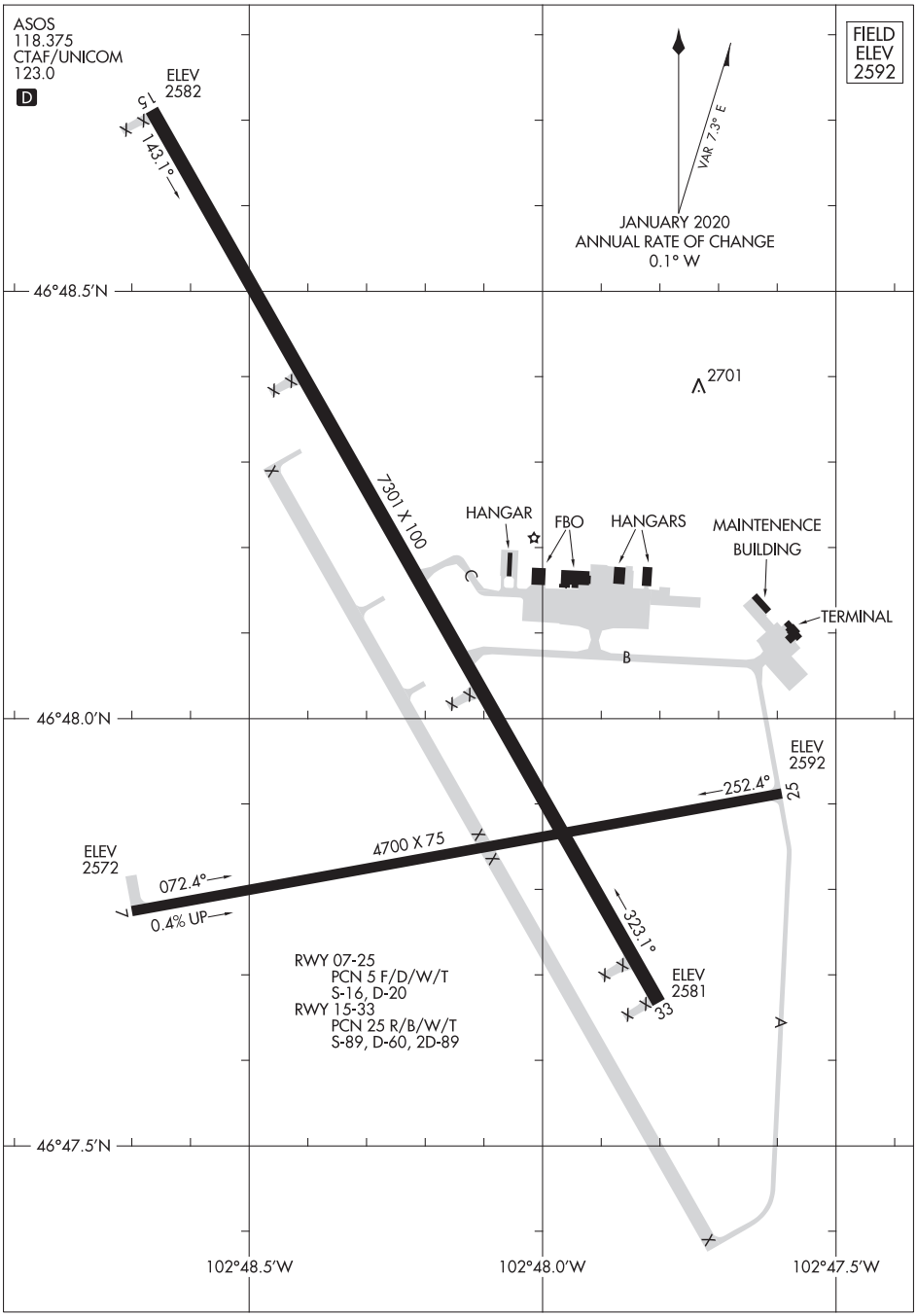

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DODGE CENTER, MINNESOTA — AL-6579 (FAA) — 19115

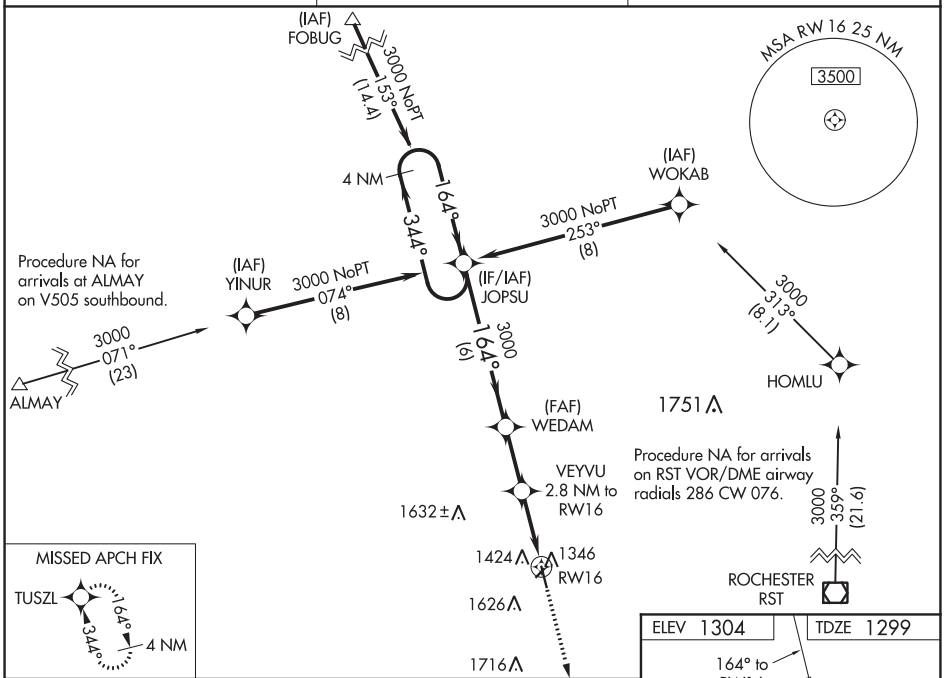
WAAS CH 97532 W16A	APP CRS 164°	Rwy ldg 4500 TDZE 1299 Apt Elev 1304

RNAV (GPS) RWY 16
DODGE CENTER (TOB)

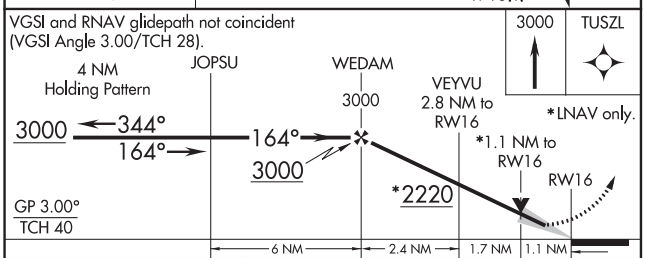
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Baro-VNAV and VDP NA with Rochester Intl altimeter setting. When local altimeter setting not received, use Rochester Intl altimeter setting and increase all DA 39 feet and all MDA 40 feet, and increase LNAV/VNAV all Cats, LNAV Cat C visibility ⅛ mile, and Circling Cat C visibility ¼ mile.

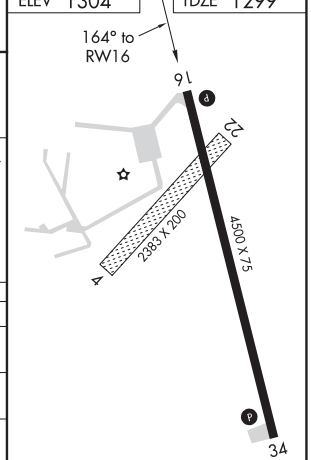
MISSED APPROACH: Climb to 3000 direct TUSZL and hold.

AWOS-3	ROCHESTER APP CON*	CTAF
119.075	119.8 251.125	122.9 L



VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 28).





REIL Rwys 16 and 34 L
MIRL Rwy 16-34 L

CATEGORY	A	B	C	D
LPV DA	1549-1 250 (300-1)			NA
LNAV/VNAV DA	1586-1 287 (300-1)			NA
LNAV MDA	1680-1 381 (400-1)		1680-1⅛ 381 (400-1⅛)	NA
C CIRCLING	1960-1 656 (700-1)		1960-1¾ 656 (700-1¾)	NA

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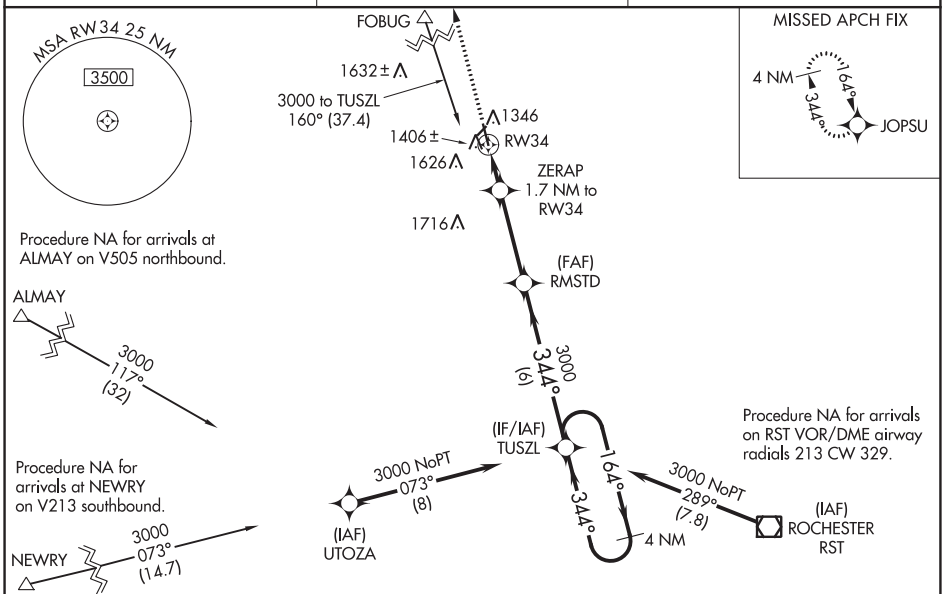
WAAS CH 45633 W34A	APP CRS 344°	Rwy ldg 4500 TDZE 1304 Apt Elev 1304

RNAV (GPS) RWY 34
DODGE CENTER (TOB)

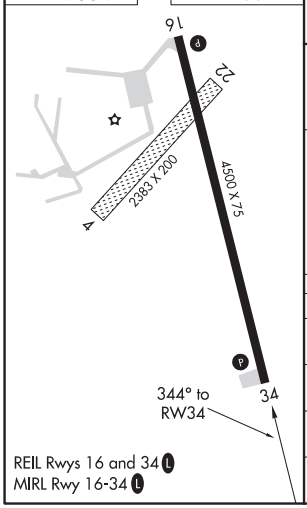
Baro-VNAV NA when using Rochester Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Rochester Intl altimeter setting and increase all DA 39 feet and all MDA 40 feet, and increase LNAV Cat C visibility ⅛ mile and Circling Cat C visibility ¼ mile. Rwy 34 Straight-in and Circling minimums NA at night.

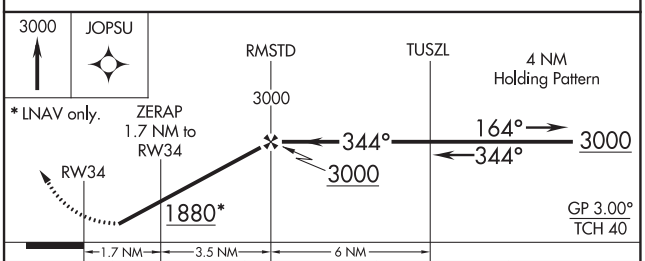
MISSED APPROACH: Climb to 3000 direct JOPSU and hold.

AWOS-3	ROCHESTER APP CON ★	CTAF
119.075	119.8 251.125	122.9 L



ELEV 1304 TDZE 1304





CATEGORY	A	B	C	D
LPV DA	1554-1 250 (300-1)			NA
LNAV/VNAV DA	1556-1 252 (300-1)			NA
LNAV MDA	1660-1 356 (400-1)			NA
C CIRCLING	1960-1 656 (700-1)		1960-1¾ 656 (700-1¾)	NA

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DODGE CENTER, MINNESOTA

AL-6579 (FAA)

20310

VOR-A

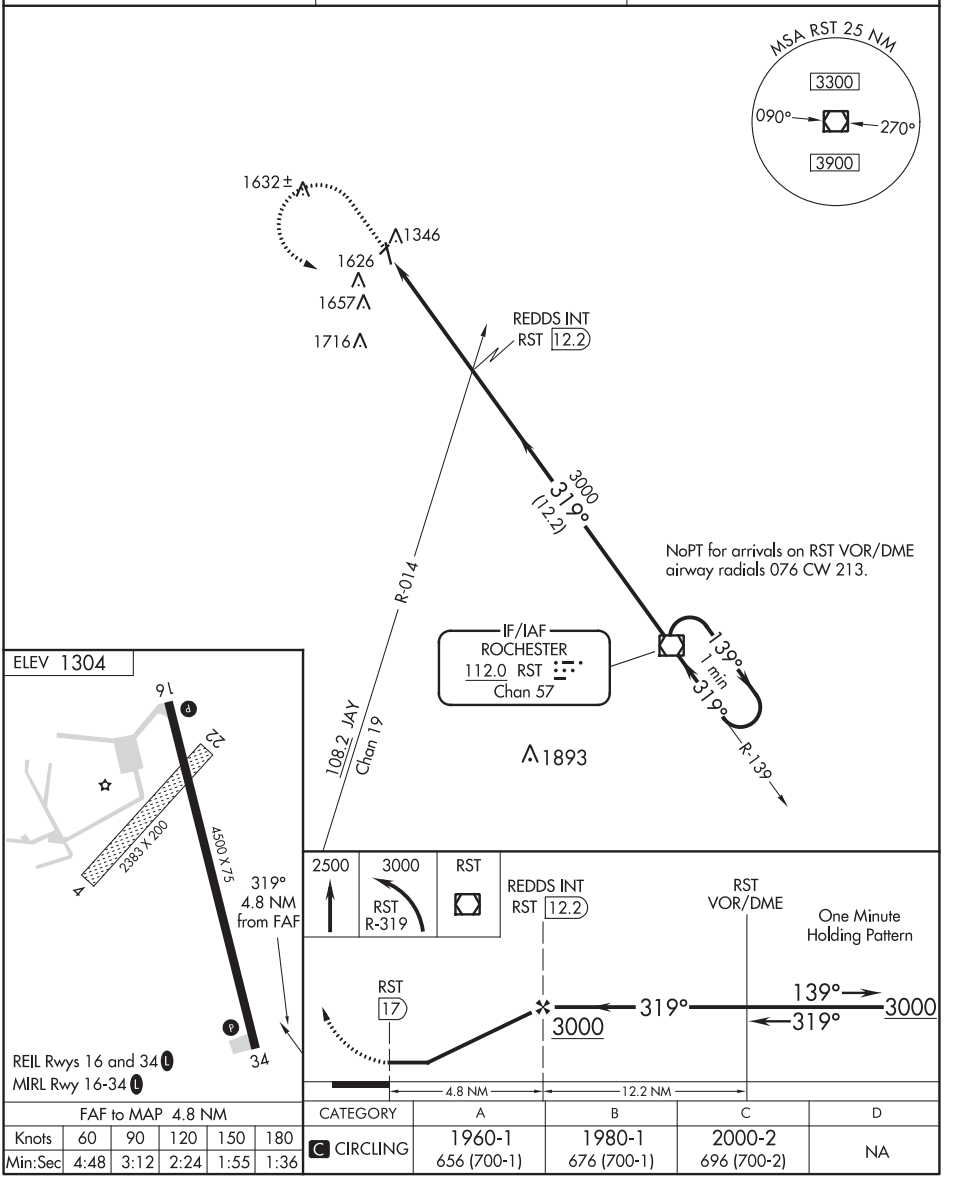
DODGE CENTER (TOB)

VOR/DME RST	APP CRS	Rwy ldg	N/A
112.0	319°	TDZE	N/A
Chan 57		Apt Elev	1304

When local altimeter setting not received, use Rochester Intl altimeter setting and increase all MDA 40 feet. Circling Rwy 34 NA at night.

MISSED APPROACH: Climb to 2500 then climbing left turn to 3000 via RST VOR/DME R-319 to RST VOR/DME and hold.

AWOS-3	ROCHESTER APP CON ★	CTAF
119.075	119.8 251.125	122.9 L



FAF to MAP 4.8 NM					
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

CATEGORY	A	B	C	D
C CIRCLING	1960-1 656 (700-1)	1980-1 676 (700-1)	2000-2 696 (700-2)	NA

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NC-1, 25 FEB 2021 to 22 APR 2021

LOC I-DLH	APP CRS	Rwy ldg	10062
110.3	093°	TDZE	1428
		Apt Elev	1428

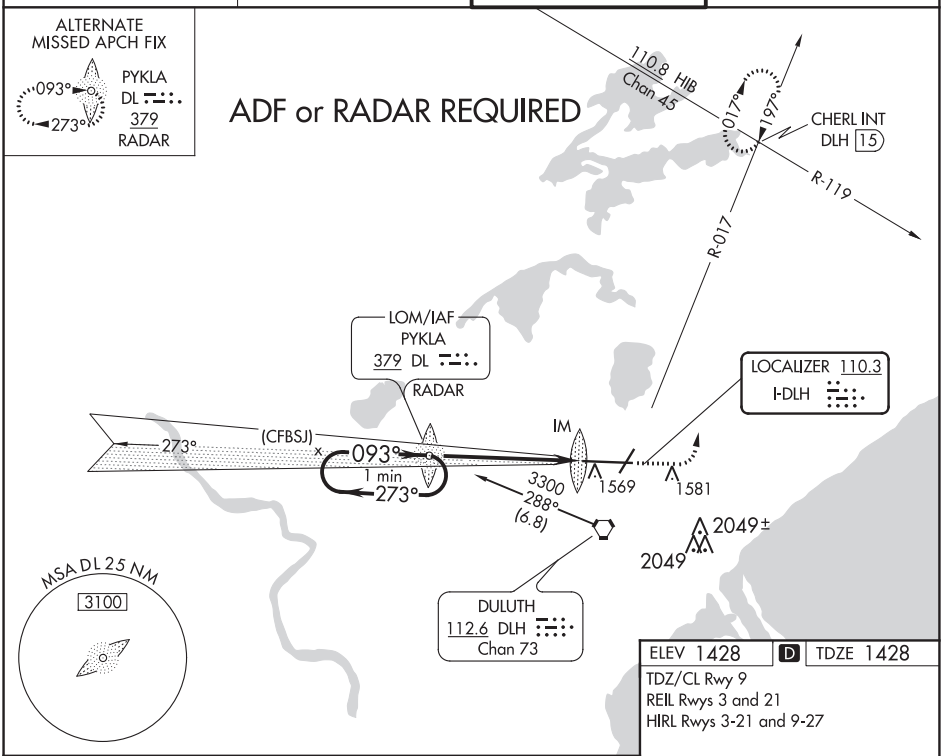
ILS or LOC RWY 9
DULUTH INTL (DLH)

T A ASR — Circling NA for Cat E southeast of Rwy 3-27. ADF or RADAR required. For inop ALS, increase S-ILS 9 Cat E visibility to RVR 4000 and S-LOC 9 Cat C/D/E visibility to 1½ SM.

ALSF-2

MISSED APPROACH: Climb to 3000 then climbing left turn to 4500 on heading 320° and on DLH VORTAC R-017 to CHERL INT/DLH 15 DME and hold.

ATIS	DULUTH APP CON	DULUTH TOWER	GND CON
124.1 270.1	125.45 233.7	118.3 257.8	121.9 348.6

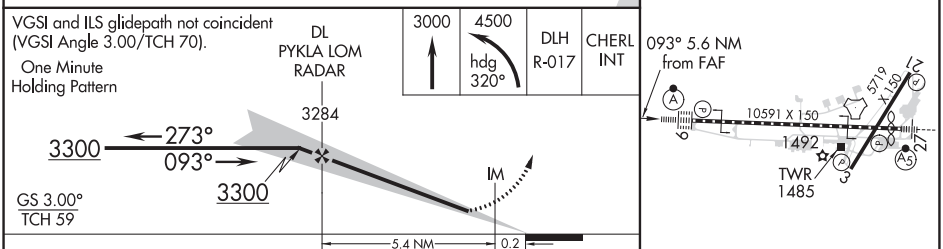


ELEV 1428 | D | TDZE 1428

TDZ/CL Rwy 9
REIL Rwys 3 and 21
HIRL Rwys 3-21 and 9-27

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 70).

One Minute Holding Pattern



CATEGORY	A	B	C	D	E
S-ILS 9	1628/18 200 (200-½)				
S-LOC 9	1960/24 532 (600-½)		1960/55 532 (600-1)		
C CIRCLING	1960-1 532 (600-1)		1960-1½ 532 (600-1½)	2400-3 972 (1000-3)	

FAF to MAP 5.6 NM					
Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

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NC-1, 25 FEB 2021 to 22 APR 2021

DULUTH, MINNESOTA — AL-125 (FAA) — 20086

ILS or LOC RWY 27
DULUTH INTL (DLH)

LOC I-JUD	APP CRS	Rwy ldg	10062
108.7	273°	TDZE	1421
		Apt Elev	1428

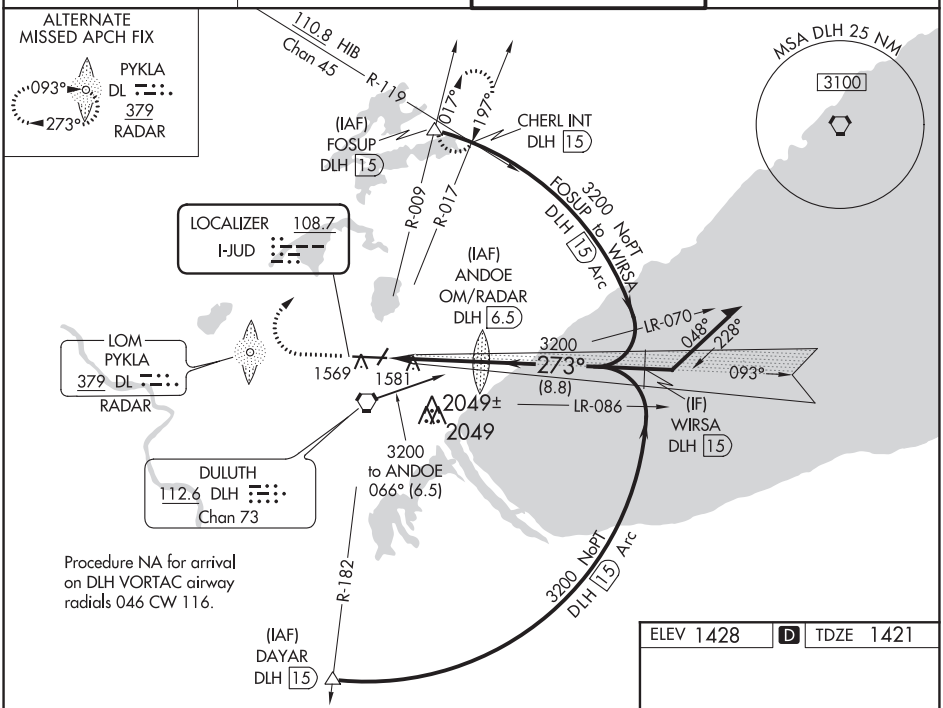
DME or RADAR required for procedure entry.

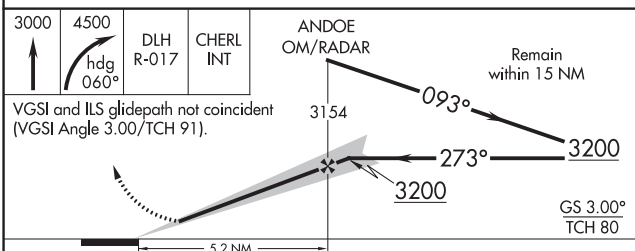
T A ASR — Circling NA for Cat E southeast of Rwys 3 and 27. Inop table does not apply to S-ILS 27. For inop ALS, increase S-LOC 27 Cat E visibility to 1¼ SM.

MALSR A5

MISSED APPROACH: Climb to 3000 then climbing right turn to 4500 on heading 060° and DLH VORTAC R-017 to CHERL INT/ DLH 15 DME and hold.

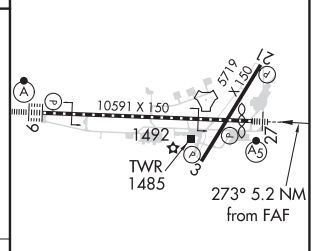
ATIS	DULUTH APP CON	DULUTH TOWER	GND CON
124.1 270.1	125.45 233.7	118.3 257.8	121.9 348.6





VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 91).

ELEV 1428 — D — TDZE 1421



TDZ/CL Rwy 9
REIL Rwys 3 and 21
HIRL Rwys 3-21 and 9-27

CATEGORY	A	B	C	D	E
S-ILS 27	1621/40 200 (200-¾)		1651/40 230 (300-¾)		
S-LOC 27	1860/24 439 (500-½)		1860/40 439 (500-¾)		
C CIRCLING	1880-1 452 (500-1)	1900-1 472 (500-1)	1940-1½ 512 (600-1½)	2400-3 972 (1000-3)	

FAF to MAP 5.2 NM

Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

NC-1, 25 FEB 2021 to 22 APR 2021

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LOC I-DLH	APP CRS	Rwy ldg	10062
110.3	093°	TDZE	1428
		Apt Elev	1428

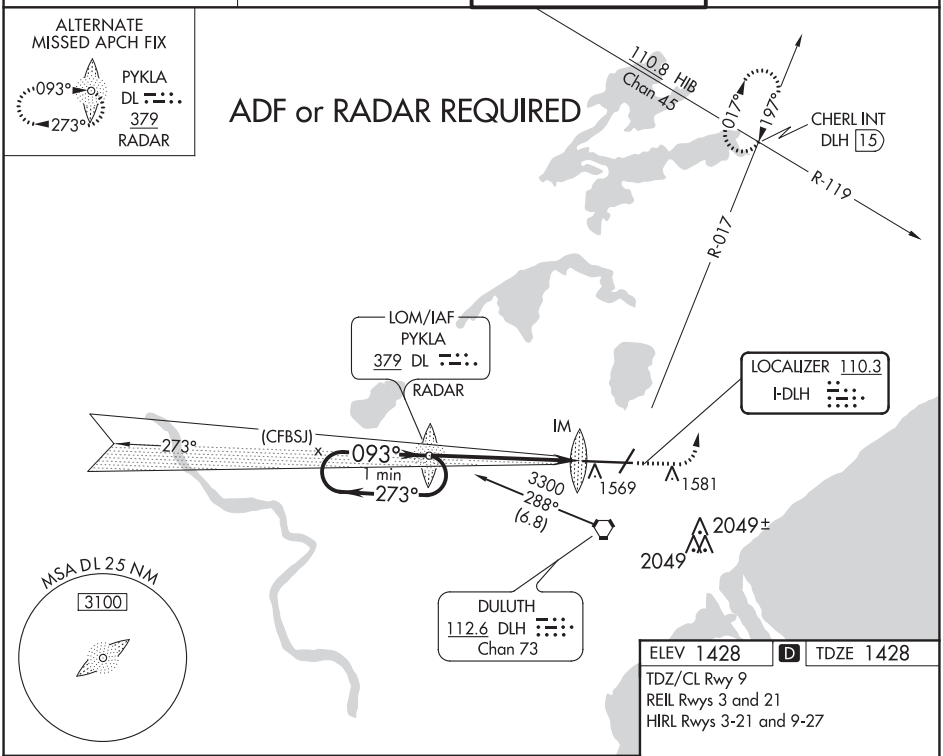
ILS RWY 9 (SA CAT I)
DULUTH INTL (DLH)

ASR — Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH. ADF or RADAR required.

ALSF-2

MISSED APPROACH: Climb to 3000 then climbing left turn to 4500 on heading 320° and on DLH VORTAC R-017 to CHERL INT/DLH 15 DME and hold.

ATIS	DULUTH APP CON	DULUTH TOWER	GND CON
124.1 270.1	125.45 233.7	118.3 257.8	121.9 348.6



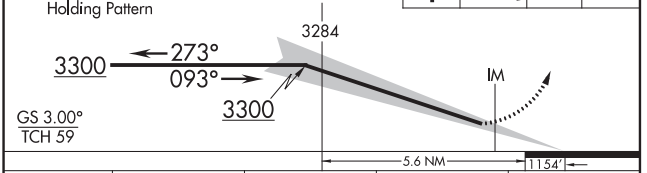
ELEV 1428 | D | TDZE 1428

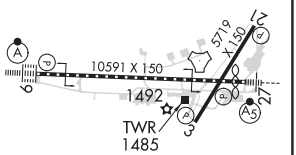
TDZ/CL Rwy 9
REIL Rwys 3 and 21
HIRL Rwys 3-21 and 9-27

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 70).

One Minute Holding Pattern

3000	4500	DLH	CHERL
	hdg 320°	R-017	INT





CATEGORY	A	B	C	D
S-ILS 9	RA 144/14 150 DA 1578			

SA CATEGORY I ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NC-1, 25 FEB 2021 to 22 APR 2021

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LOC I-DLH	APP CRS	Rwy ldg	10062
110.3	093°	TDZE	1428
		Apt Elev	1428

ILS RWY 9 (CAT II)
DULUTH INTL (DLH)

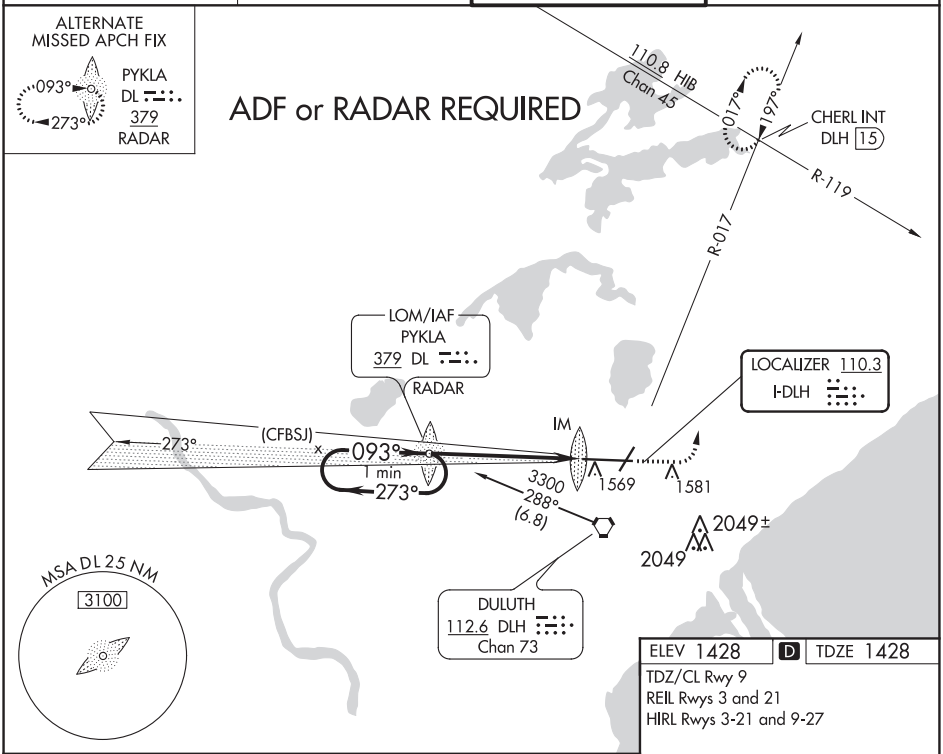
T A ASR

ADF or RADAR required.

ALSF-2

MISSED APPROACH: Climb to 3000 then climbing left turn to 4500 on heading 320° and on DLH VORTAC R-017 to CHERL INT/DLH 15 DME and hold.

ATIS	DULUTH APP CON	DULUTH TOWER	GND CON
124.1 270.1	125.45 233.7	118.3 257.8	121.9 348.6



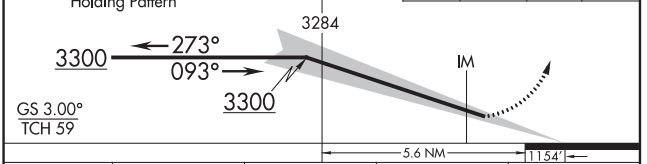
ELEV 1428 D TDZE 1428

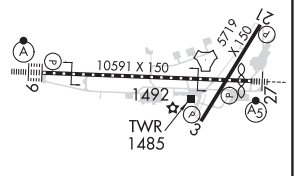
TDZ/CL Rwy 9
REIL Rwys 3 and 21
HIRL Rwys 3-21 and 9-27

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 70).

One Minute Holding Pattern

3000	4500 hdg 320°	DLH R-017	CHERL INT





CATEGORY	A	B	C	D
S-ILS 9	RA 101/12 100 DA 1528			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NC-1, 25 FEB 2021 to 22 APR 2021

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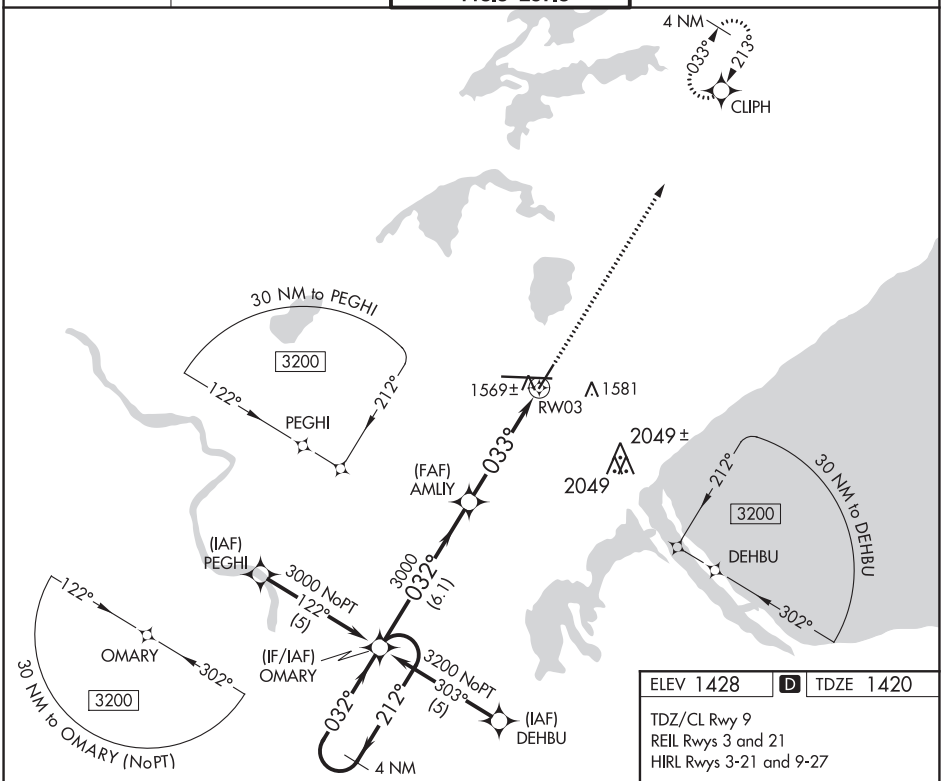
WAAS CH 82314 W03A	APP CRS 033°	Rwy ldg 5719 TDZE 1420 Apt Elev 1428

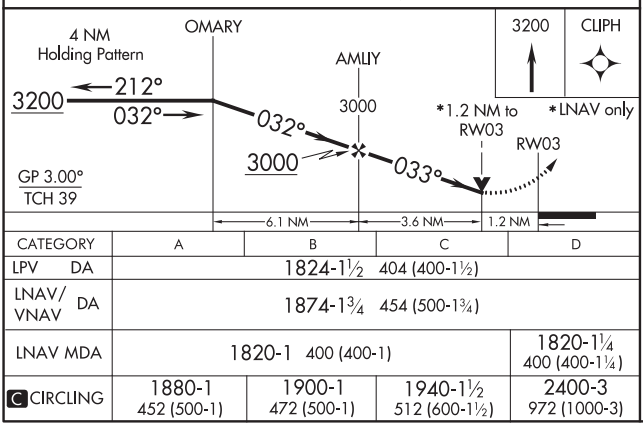
RNAV (GPS) RWY 3
DULUTH INTL (DLH)

T A ASR For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (115°F). DME/DME RNP-0.3 NA. Rwy 3 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3200 direct CLIPH and hold.

ATIS	DULUTH APP CON	DULUTH TOWER	GND CON
124.1 270.1	125.45 233.7	118.3 257.8	121.9 348.6

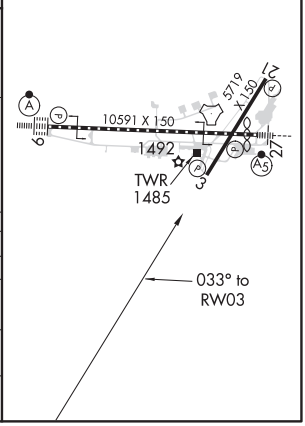




CATEGORY	A	B	C	D
LPV DA	1824-1½ 404 (400-1½)			
LNAV/VNAV DA	1874-1¾ 454 (500-1¾)			
LNAV MDA	1820-1 400 (400-1)			1820-1¼ 400 (400-1¼)
C CIRCLING	1880-1 452 (500-1)	1900-1 472 (500-1)	1940-1½ 512 (600-1½)	2400-3 972 (1000-3)

ELEV 1428 | D | TDZE 1420

TDZ/CL Rwy 9
REIL Rwys 3 and 21
HIRL Rwys 3-21 and 9-27



NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 90502 W09A	APP CRS 093°	Rwy ldg 10062 TDZE 1428 Apt Elev 1428

RNAV (GPS) RWY 9
DULUTH INTL (DLH)

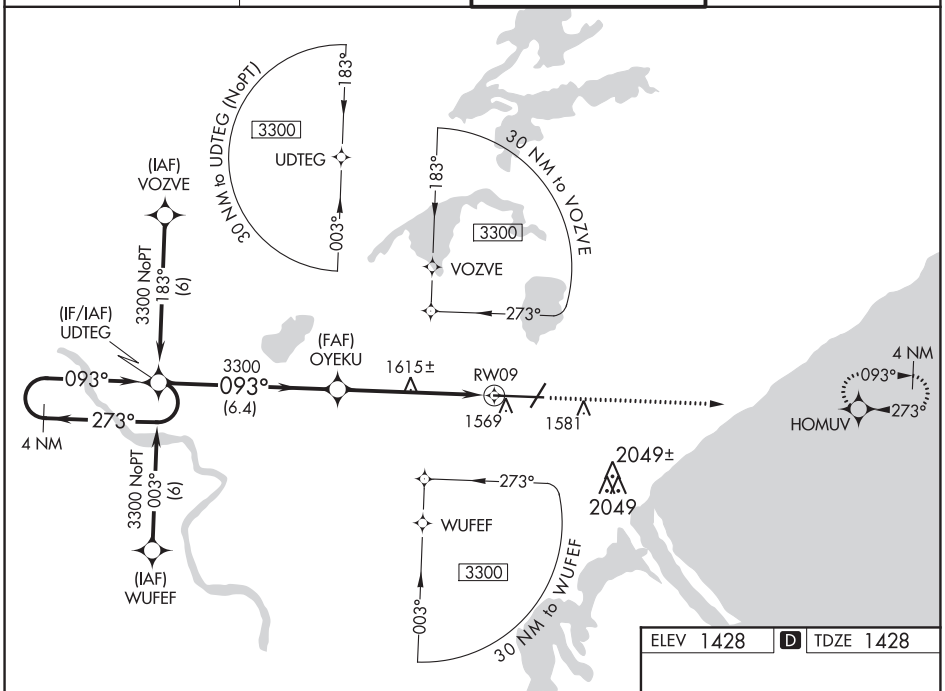
T A ASR

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (115°F). DME/DME RNP-0.3 NA. Circling NA for Cat E southeast of Rwys 3/27. For inop ALS, increase LPV Cat E visibility to ¾ SM, LNAV/VNAV all Cats visibility to 1½ SM and LNAV Cat E visibility to 1½ SM.

ALSF-2

MISSED APPROACH: Climb to 4000 direct HOMUV and hold.

ATIS	DULUTH APP CON	DULUTH TOWER	GND CON
124.1 270.1	125.45 233.7	118.3 257.8	121.9 348.6

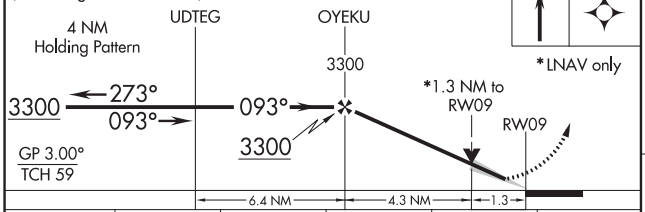


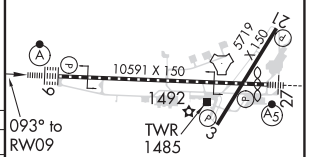
ELEV 1428 D TDZE 1428

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 70).

4000 HOMUV

*LNAV only





CATEGORY	A	B	C	D	E
LPV DA	1628/18 200 (200-½)				
LNAV/VNAV DA	1860/50 432 (500-1)				
LNAV MDA	1880/24 452 (500-½)		1880/40 452 (500-¾)	1880/50 452 (500-1)	
C CIRCLING	1880-1 452 (500-1)	1900-1 472 (500-1)	1940-1½ 512 (600-1½)	2400-3 972 (1000-3)	

TDZ/CL Rwy 9
REIL Rwys 3 and 21
HIRL Rwys 3-21 and 9-27

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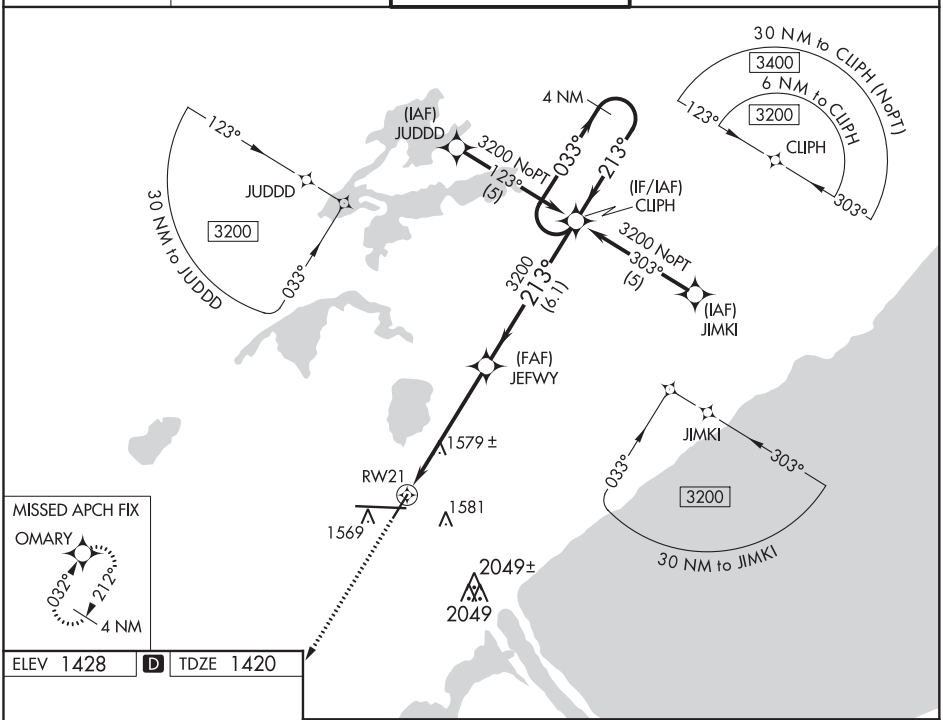
WAAS CH 40114 W21A	APP CRS 213°	Rwy ldg 5719 TDZE 1420 Apt Elev 1428

RNAV (GPS) RWY 21
DULUTH INTL (DLH)

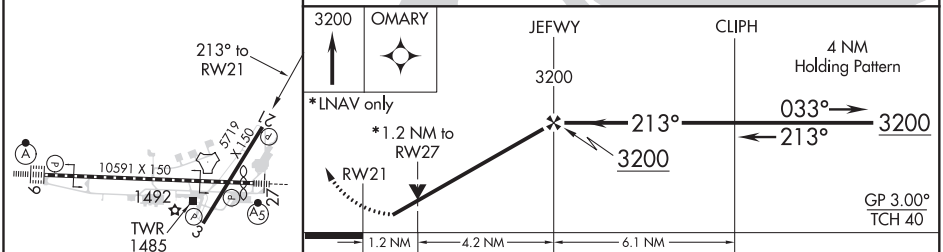
T A ASR — For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (115°F). DME/DME RNP- 0.3 NA. Rwy 21 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3200 direct OMARY and hold.

ATIS	DULUTH APP CON	DULUTH TOWER	GND CON
124.1 270.1	125.45 233.7	118.3 257.8	121.9 348.6



ELEV 1428 | D | TDZE 1420



CATEGORY	A	B	C	D
LPV DA	1708-1 288 (300-1)			
LNAV/VNAV DA	1927-1¾ 507 (500-1¾)			
LNAV MDA	1840-1 420 (500-1)		1840-1¼ 420 (500-1¼)	
C CIRCLING	1880-1 452 (500-1)	1900-1 472 (500-1)	1940-1½ 512 (600-1½)	2400-3 972 (1000-3)

TDZ/CL Rwy 9
REIL Rwys 3 and 21
HIRL Rwys 3-21 and 9-27

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DULUTH, MINNESOTA | AL-125 (FAA) | 20086

WAAS CH 50502 W27A	APP CRS 273°	Rwy ldg 10062 TDZE 1421 Apt Elev 1428

RNAV (GPS) RWY 27
DULUTH INTL (DLH)

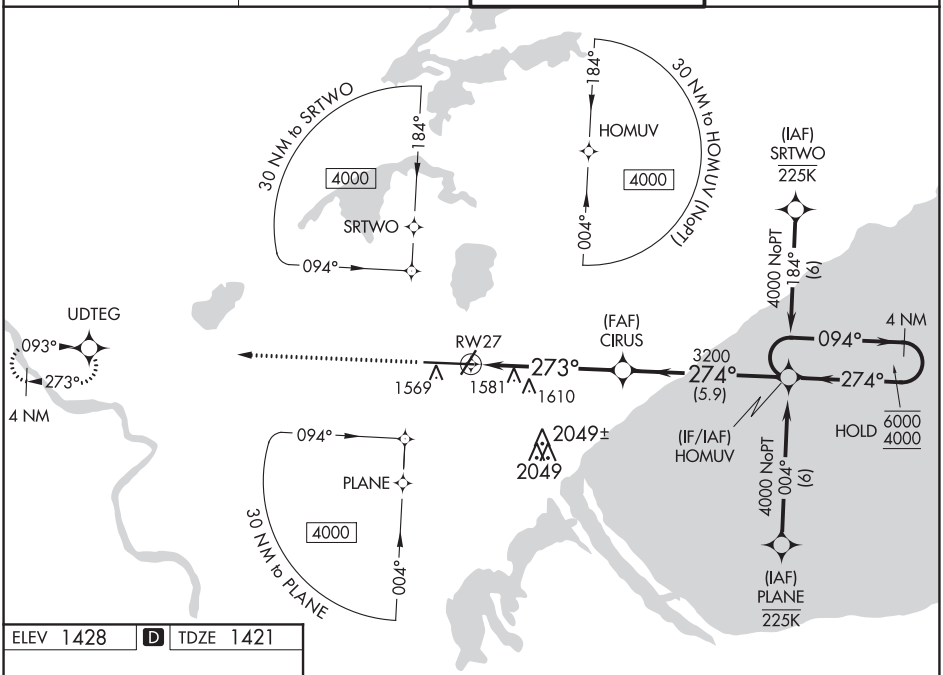
RNP APCH.

ASR: For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C or above 54°C.
#RVR 1800 authorized with use of FD or AP or HUD to DA.

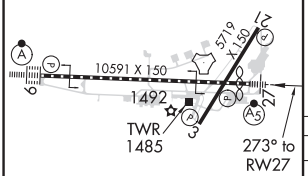
MALSR

MISSED APPROACH: Climb to 3300 direct UDTEG and hold.

ATIS	DULUTH APP CON	DULUTH TOWER	GND CON
124.1 270.1	125.45 233.7	118.3 257.8	121.9 348.6



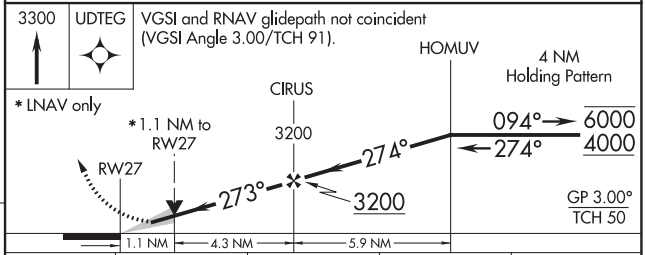
ELEV 1428 | D | TDZE 1421



TDZ/CL Rwy 9
REIL Rwys 3 and 21
HIRL Rwys 3-21 and 9-27

3300 | UDTEG

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 91).



CATEGORY	A	B	C	D
LPV DA#	1621/24 200 (200-½)			
LNAV/VNAV DA	1871/45 450 (500-⅞)			
LNAV MDA	1860/24 439 (500-½)		1860/40 439 (500-¾)	
C CIRCLING	1880-1 452 (500-1)	1900-1 472 (500-1)	1940-1½ 512 (600-1½)	2400-3 972 (1000-3)

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VORTAC DLH	APP CRS	Rwy ldg	5719
112.6	197°	TDZE	1420
Chan 73		Apt Elev	1428

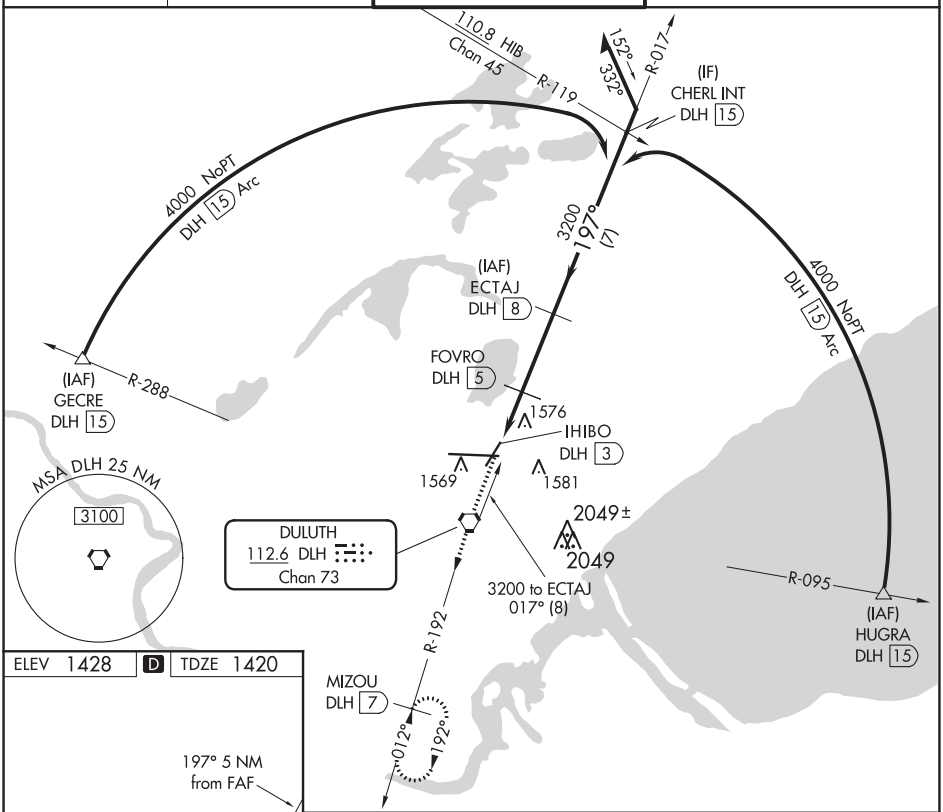
VOR/DME or TACAN RWY 21

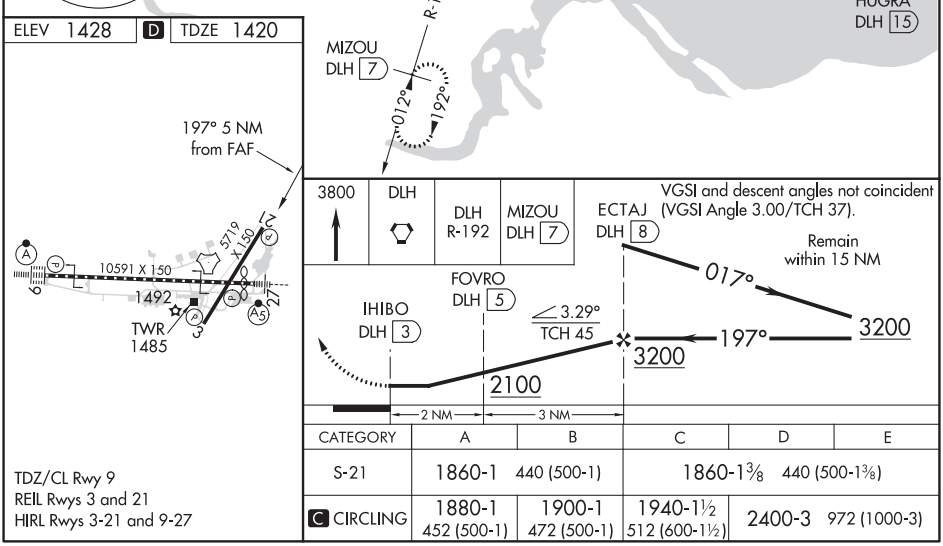
DULUTH INTL (DLH)

Circling NA for Cat E southeast of Rwy 3-27.
Visibility reduction by helicopters NA.
ASR Rwy 21 Straight-in and Circling minimums NA at night.

MISSED APPROACH: Climb to 3800 direct DLH VORTAC then on DLH VORTAC R-192 to MIZOU/DLH 7 DME and hold.

ATIS	DULUTH APP CON	DULUTH TOWER	GND CON
124.1 270.1	125.45 233.7	118.3 257.8	121.9 348.6





CATEGORY	A	B	C	D	E
S-21	1860-1 440 (500-1)		1860-1⅜ 440 (500-1⅜)		
C CIRCLING	1880-1 452 (500-1)	1900-1 472 (500-1)	1940-1½ 512 (600-1½)	2400-3 972 (1000-3)	

TDZ/CL Rwy 9
REIL Rwys 3 and 21
HIRL Rwys 3-21 and 9-27

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DULUTH, MINNESOTA AL-125 (FAA) 20086

VOR or TACAN RWY 3

DULUTH INTL (DLH)

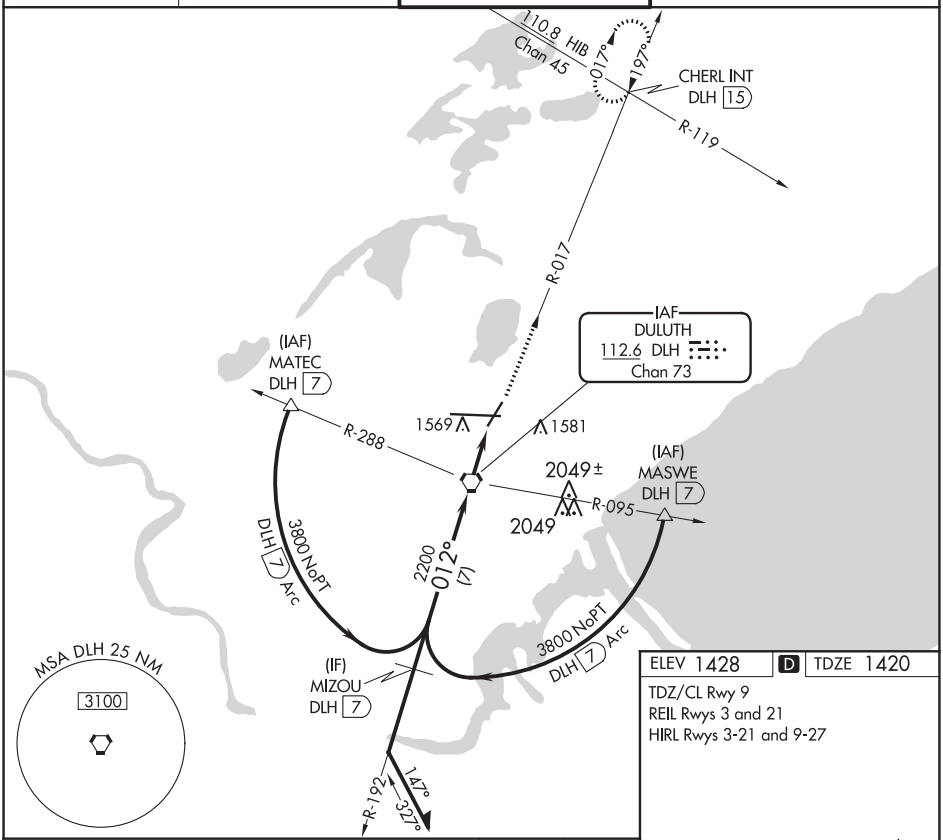
VORTAC DLH	APP CRS	Rwy ldg	5719
112.6	012°	TDZE	1420
Chan 73		Apt Elev	1428

ASR

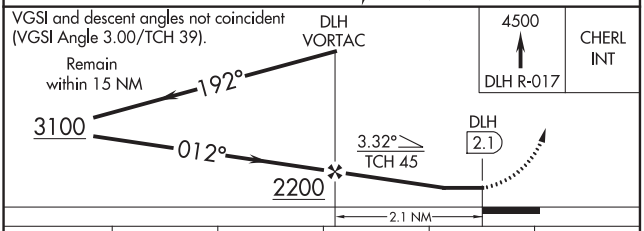
Rwy 3 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 4500 on DLH VORTAC R-017 to CHERL INT/DLH 15 DME and hold.

ATIS	DULUTH APP CON	DULUTH TOWER	GND CON
124.1 270.1	125.45 233.7	118.3 257.8	121.9 348.6

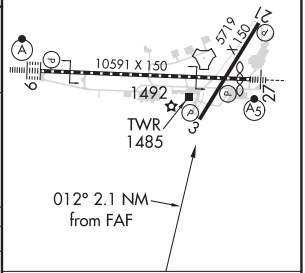


VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 39).



ELEV 1428 D TDZE 1420

TDZ/CL Rwy 9
REIL Rwys 3 and 21
HIRL Rwys 3-21 and 9-27



CATEGORY	A	B	C	D	E
S-3	1820-1 400 (400-1)		1820-1⅛ 400 (400-1⅛)		
C CIRCLING	1880-1 452 (500-1)	1900-1 472 (500-1)	1940-1½ 512 (600-1½)	NA	

FAF to MAP 2.1 NM					
Knots	60	90	120	150	180
Min:Sec	2:06	1:24	1:03	0:50	0:42

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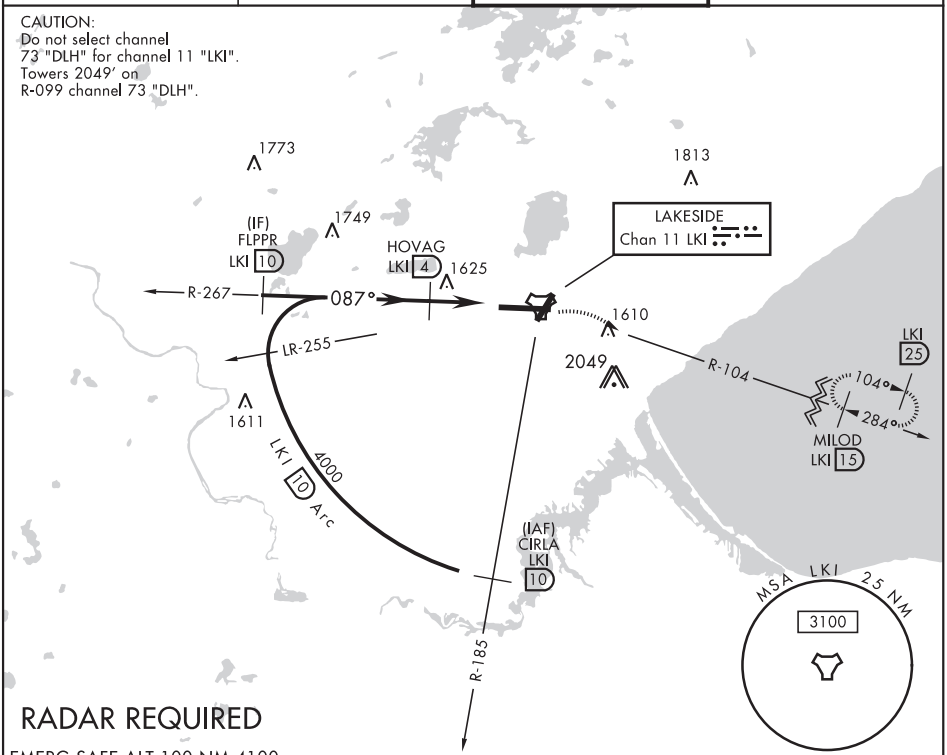
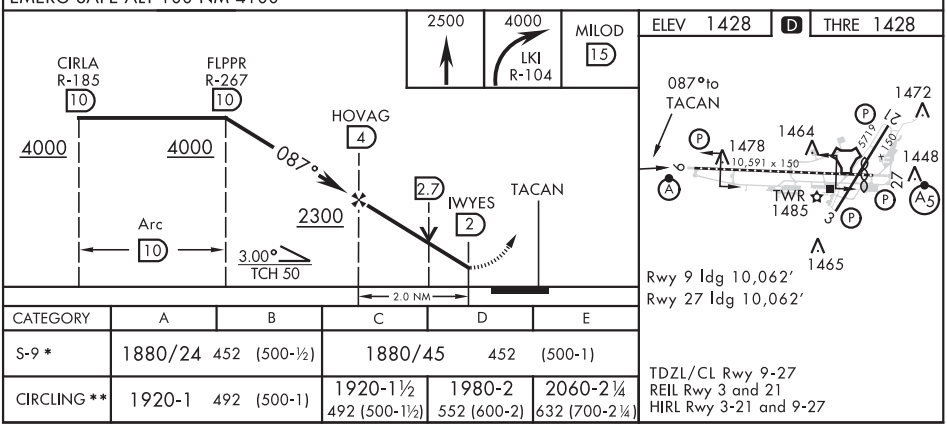
TACAN RWY 9

TACAN LKI Chan 11	APCH CRS 087°	Rwy ldg 10,062 THRE 1428 Arpt Elev 1428	AL-125 [USAF]	DULUTH INTL (KDLH)

* When ALS inop, increase CAT E vis to 1⅜ miles. ** Circling NA for CAT E SE of Rwy 3 and 27.	ALSF-2	MISSED APPROACH: Climb to 2500 then climbing right turn to 4000 via LKI R-104 to MILOD (15 DME) and hold.	

ATIS	DULUTH APP CON	DULUTH TOWER	GND CON
124.1 270.1	125.45 233.7	118.3 257.8	121.9 348.6





CATEGORY	A	B	C	D	E
S-9 *	1880/24 452 (500-½)		1880/45 452 (500-1)		
CIRCLING **	1920-1 492 (500-1)		1920-1½ 492 (500-1½)	1980-2 552 (600-2)	2060-2¼ 632 (700-2¼)

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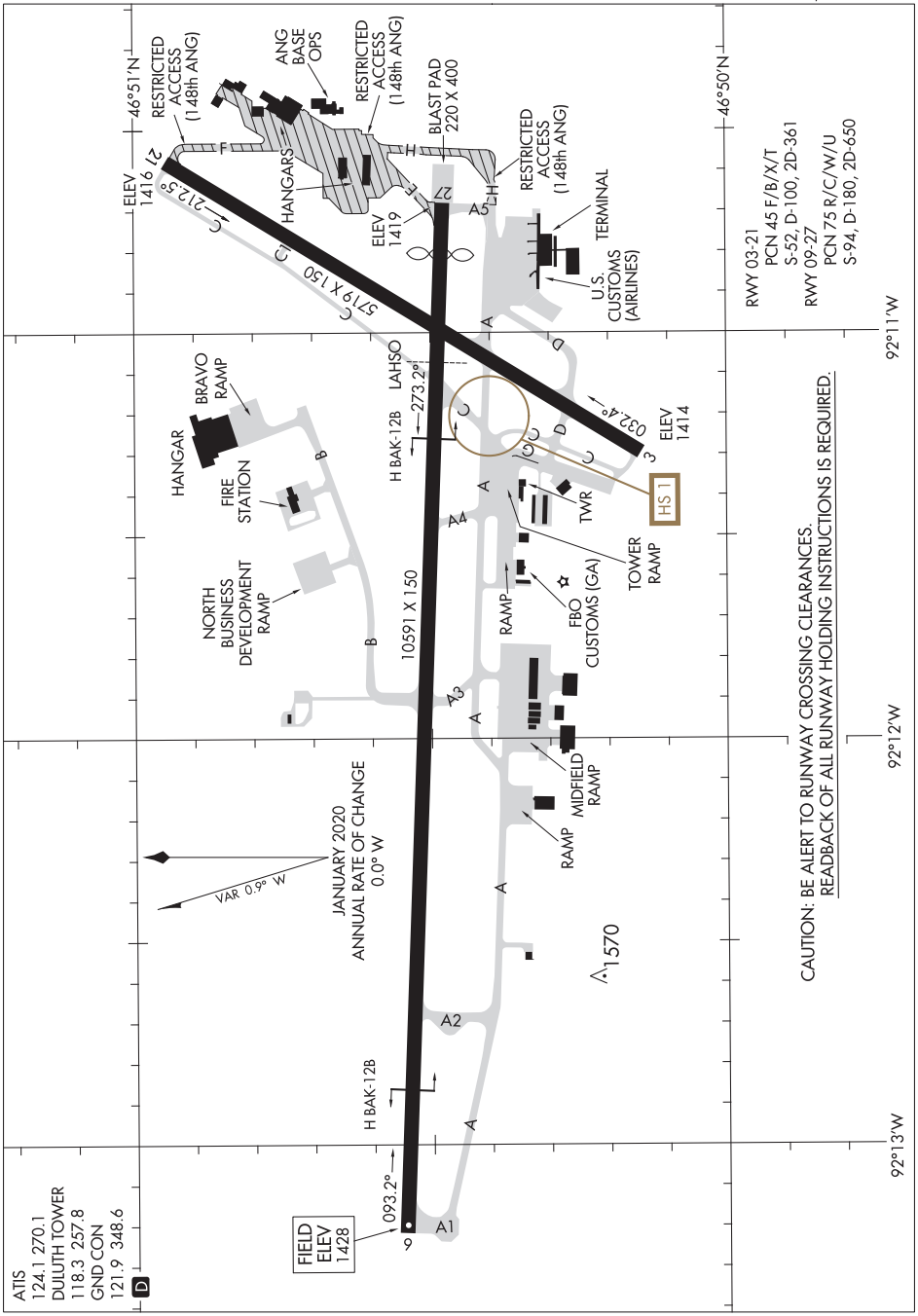
NC-1, 25 FEB 2021 to 22 APR 2021

20086

AIRPORT DIAGRAM

AL-125 (FAA)

DULUTH INTL (DLH)
DULUTH, MINNESOTA



NC-1, 25 FEB 2021 to 22 APR 2021

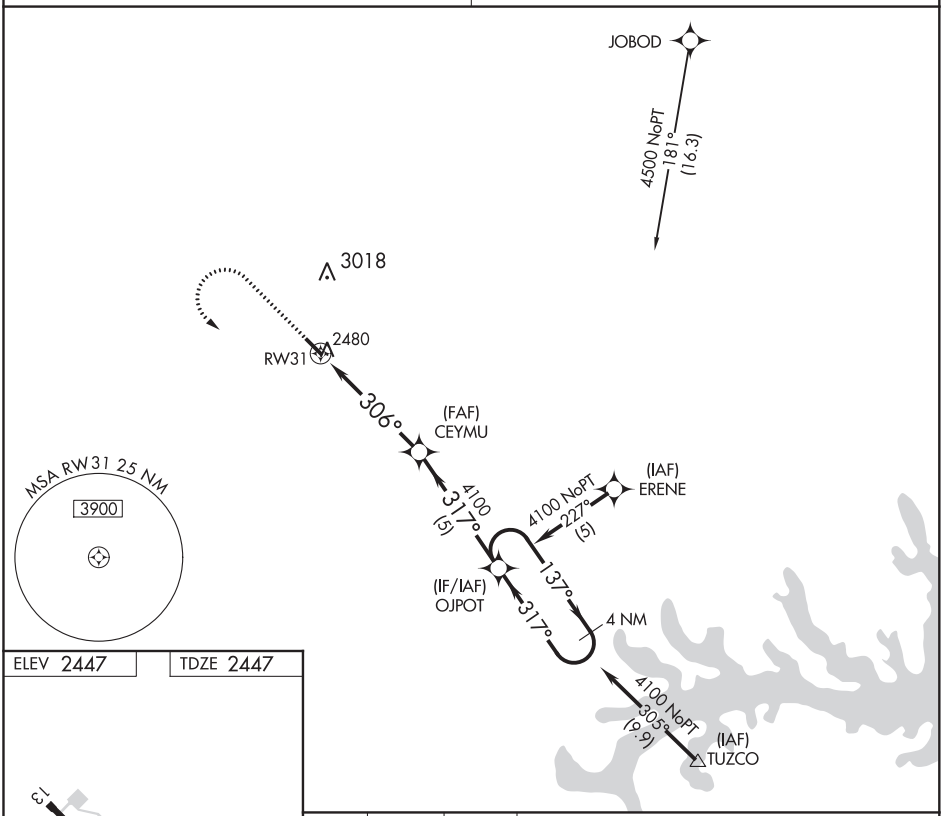
NC-1, 25 FEB 2021 to 22 APR 2021

AIRPORT DIAGRAM
20086
DULUTH, MINNESOTA
DULUTH INTL (DLH)

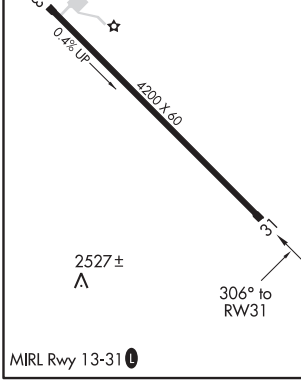
APP CRS	Rwy ldg	4200
306°	TDZE	2447
	Apt Elev	2447

RNAV (GPS) RWY 31
CHEYENNE EAGLE BUTTE (84D)

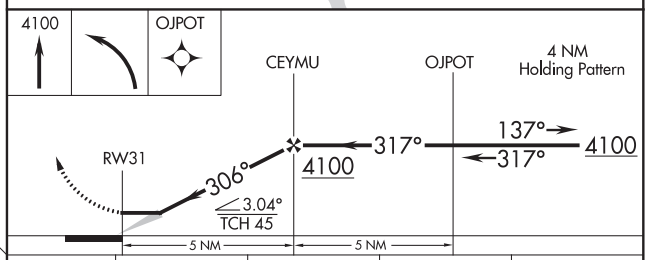
T A NA GPS or RNP-0.3 required. DME/DME RNP- 0.3 NA. Use Pierre altimeter setting.	MISSED APPROACH: Climb to 4100 then turn left direct OJPOT WP and hold.
MINNEAPOLIS CENTER **135.25 256.7**	AUNICOM **122.8** (CTAF) L



ELEV 2447 TDZE 2447



MIRL Rwy 13-31 L



CATEGORY	A	B	C	D
LNAV MDA	3020-1 573 (600-1)		NA	
CIRCLING	3240-1 793 (800-1)	3240-1¼ 793 (800-1¼)	NA	

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

EDGELEY, NORTH DAKOTA AL-10637 (FAA) 20366

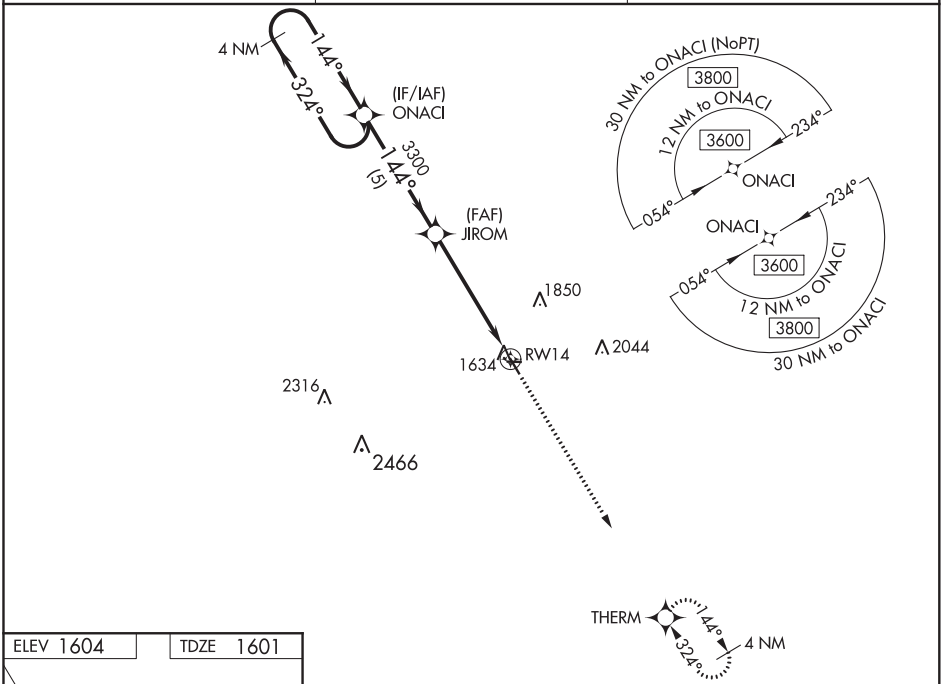
RNAV (GPS) RWY 14
EDGELEY MUNI (51D)

WAAS CH 86636 W14A	APP CRS 144°	Rwy ldg 3600 TDZE 1601 Apt Elev 1604

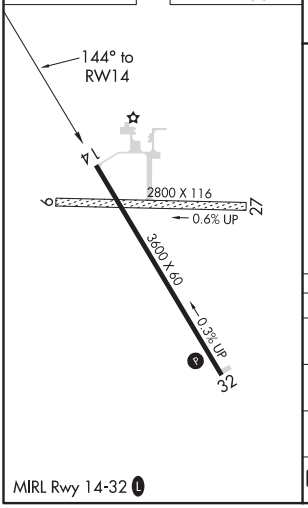
Baro-VNAV NA. Use Jamestown altimeter setting; when not received, use Oakes altimeter setting and increase all DA 10 feet and all MDA 20 feet; increase LPV and LNAV/VNAV all Cats visibility ⅛ mile. DME/DME RNP-0.3 NA. Procedure NA at night. Circling NA to Rwys 9 and 27.

MISSED APPROACH: Climb to 3600 direct THERM and hold.

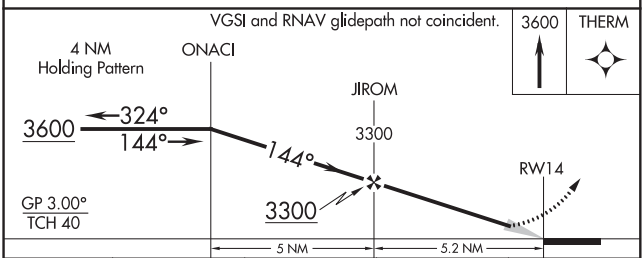
JMS ASOS	MINNEAPOLIS CENTER	UNICOM
118.425	124.2 270.3	122.8 (CTAF) L



ELEV 1604 TDZE 1601



MIRL Rwy 14-32 L



CATEGORY	A	B	C	D
LPV DA	1946-1⅛	345 (400-1⅛)	NA	
LNAV/VNAV DA	1946-1⅛	345 (400-1⅛)	NA	
LNAV MDA	2200-1	599 (600-1)	NA	
C CIRCLING	2200-1	596 (600-1)	NA	

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 45936 W32A	APP CRS 324°	Rwy ldg 3600 TDZE 1600 Apt Elev 1604

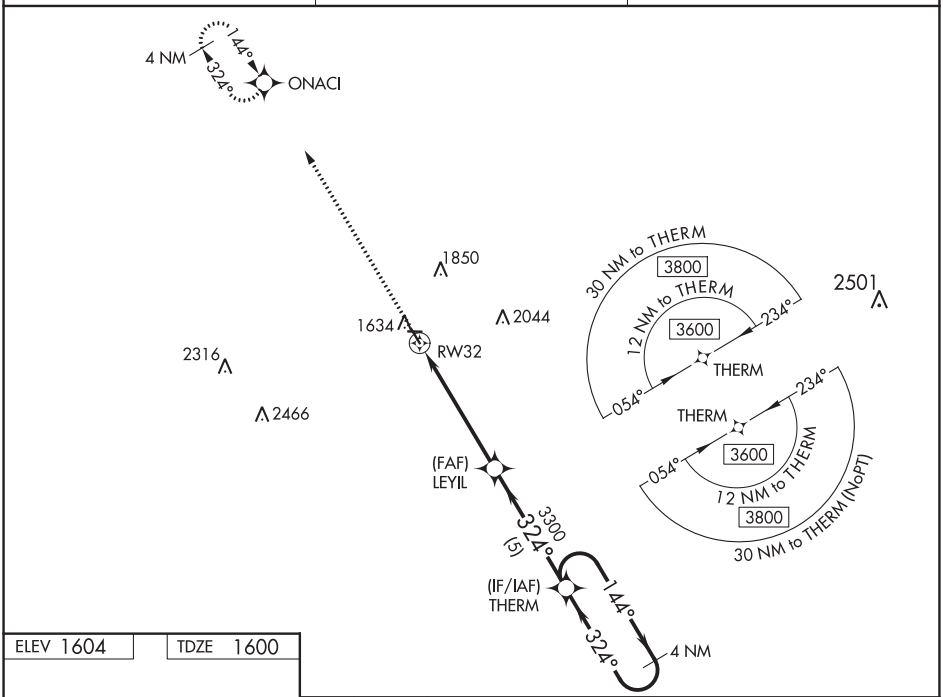
RNAV (GPS) RWY 32
EDGELEY MUNI (51D)

T A NA

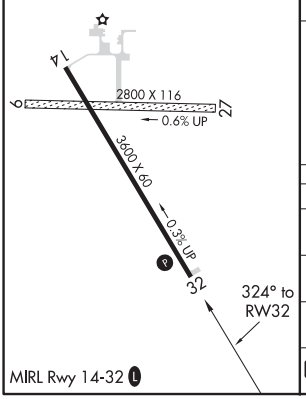
Baro-VNAV NA. Use Jamestown altimeter setting; when not received, use Oakes altimeter setting and increase all DA 10 feet and all MDA 20 feet; increase LNAV/VNAV all Cats visibility ⅛ mile. DME/DME RNP-0.3 NA. Procedure NA at night. Circling NA to Rwys 9 and 27.

MISSED APPROACH: Climb to 3600 direct ONACI and hold.

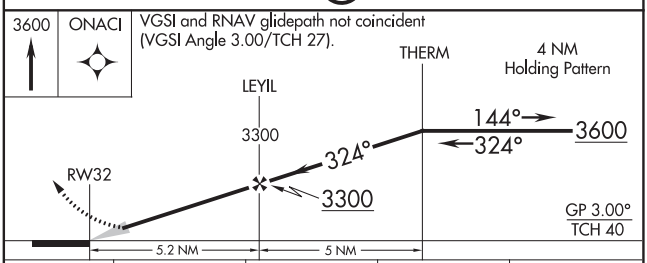
JMS ASOS	MINNEAPOLIS CENTER	UNICOM
118.425	124.2 270.3	122.8 (CTAF) L



ELEV 1604 TDZE 1600



MIRL Rwy 14-32 L



CATEGORY	A	B	C	D
LPV DA	1895-1 295 (300-1)		NA	
LNAV/VNAV DA	1945-1⅛ 345 (400-1⅛)		NA	
LNAV MDA	2140-1 540 (600-1)		NA	
C CIRCLING	2140-1 536 (600-1)	2160-1 556 (600-1)	NA	

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

ELBOW LAKE, MINNESOTA AL-10404 (FAA) 19283

WAAS CH 49231 W14A	APP CRS 138°	Rwy ldg 3401 TDZE 1206 Apt Elev 1206

RNAV (GPS) RWY 14
ELBOW LAKE MUNI - PRIDE OF THE PRAIRIE (Y63)

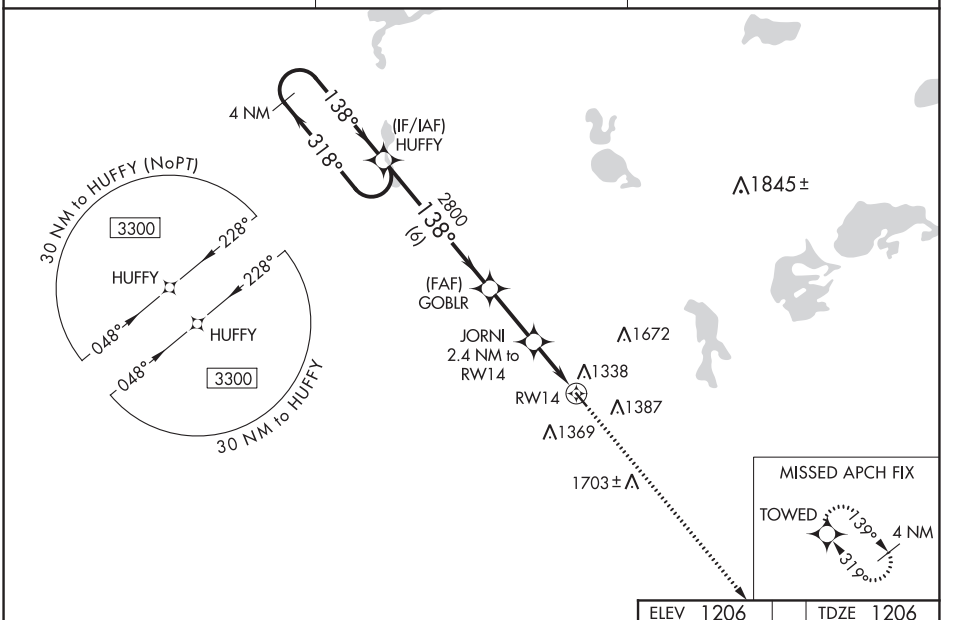
RNP APCH.

NA

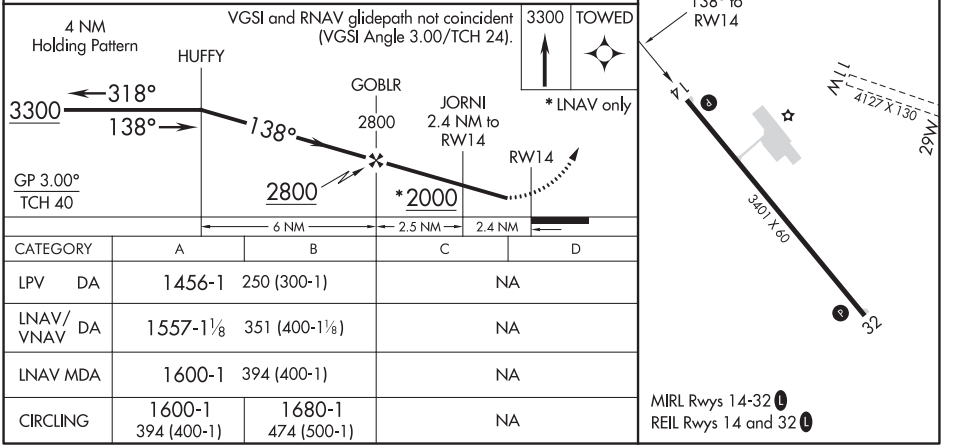
Baro-VNAV NA when using Fergus Falls altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. Circling NA northeast of Rwy 14-32. Procedure NA at night. Rwy 14 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Fergus Falls altimeter setting and increase all DA 48 feet and all MDA 60 feet. Increase LNAV/VNAV all Cats visibility to 1⅜ mile.

MISSED APPROACH: Climb to 3300 direct TOWED and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
118.075	126.1 269.2	122.9 L



ELEV 1206 TDZE 1206



CATEGORY	A	B	C	D
LPV DA	1456-1	250 (300-1)	NA	
LNAV/VNAV DA	1557-1⅛	351 (400-1⅛)	NA	
LNAV MDA	1600-1	394 (400-1)	NA	
CIRCLING	1600-1 394 (400-1)	1680-1 474 (500-1)	NA	

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 53731 W32A	APP CRS 319°	Rwy ldg 3401 TDZE 1206 Apt Elev 1206

RNAV (GPS) RWY 32
ELBOW LAKE MUNI - PRIDE OF THE PRAIRIE (Y63)

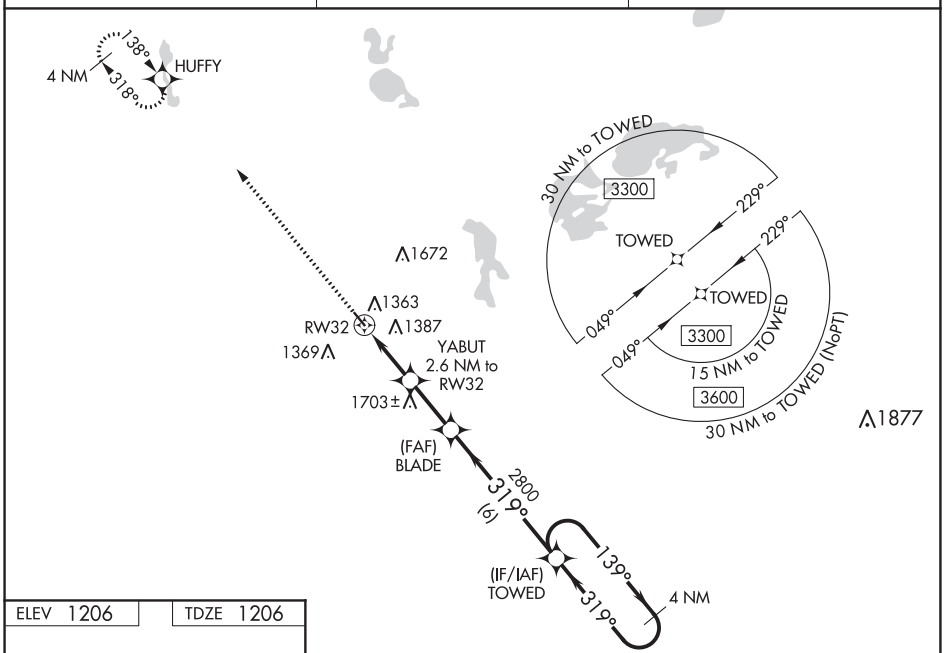
RNP APCH.

NA

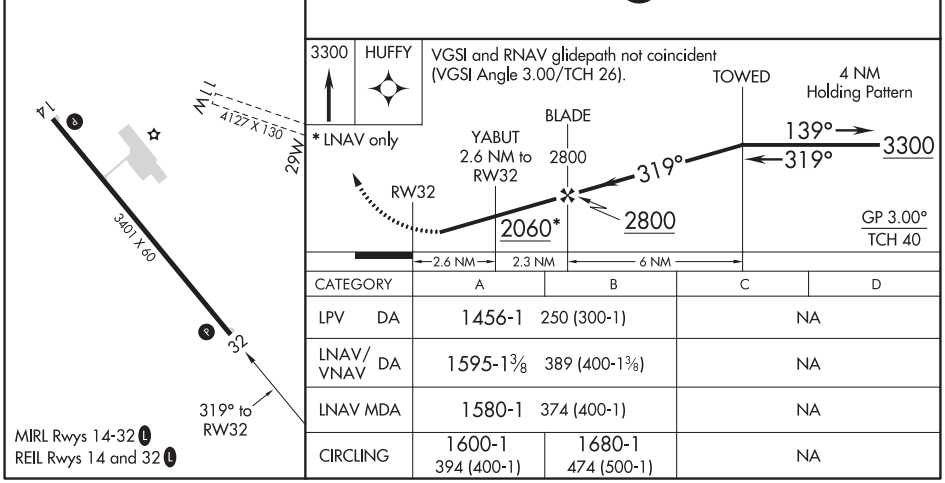
Baro-VNAV NA when using Fergus Falls altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. Circling NA northeast of Rwy 14-32. Procedure NA at night. When local altimeter setting not received, use Fergus Falls altimeter setting and increase all DA 48 feet and all MDA 60 feet. Increase LNAV/VNAV all Cats visibility to 1½ mile.

MISSED APPROACH: Climb to 3300 direct HUFFY and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
118.075	126.1 269.2	122.9 L



ELEV 1206 TDZE 1206



CATEGORY	A	B	C	D
LPV DA	1456-1 250 (300-1)		NA	
LNAV/VNAV DA	1595-1⅜ 389 (400-1⅜)		NA	
LNAV MDA	1580-1 374 (400-1)		NA	
CIRCLING	1600-1 394 (400-1)	1680-1 474 (500-1)	NA	

MIRL Rwys 14-32 L
REIL Rwys 14 and 32 L

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

ELLENDALE, NORTH DAKOTA | AL-9790 (FAA) | 20310

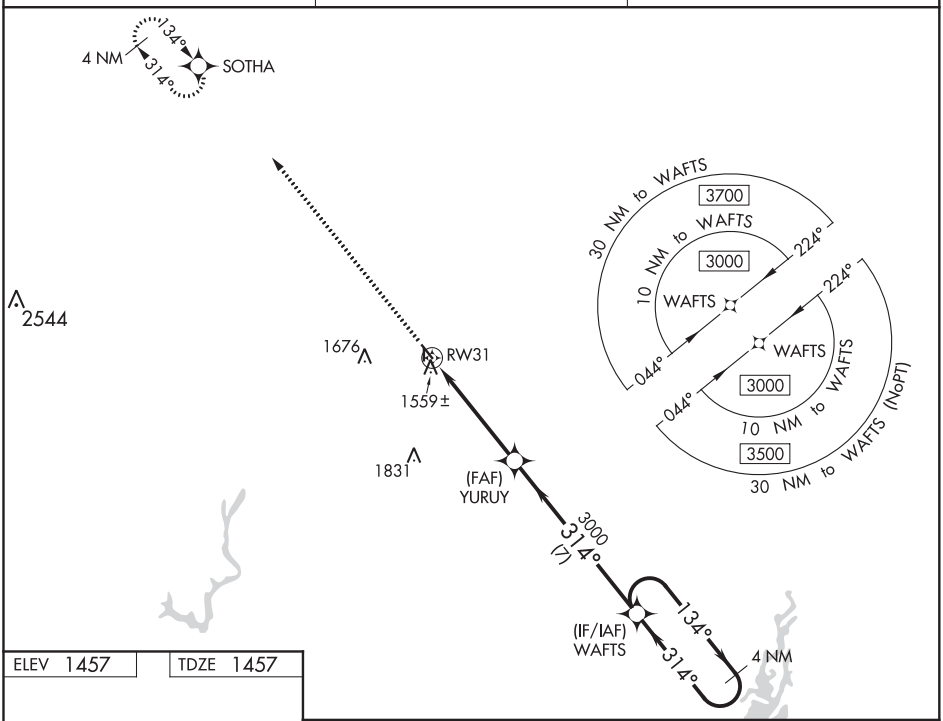
WAAS CH 50341 W31A	APP CRS 314°	Rwy ldg 3499 TDZE 1457 Apt Elev 1457

RNAV (GPS) RWY 31
ELLENDALE MUNI (4E7)

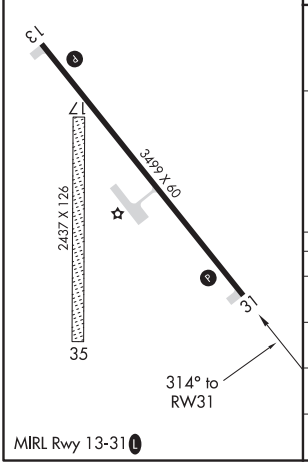
T NA
Circling NA to Rwys 17 and 35. Baro-VNAV NA.
Rwy 31 helicopter visibility reduction below ¾ SM NA.
DME/DME RNP-0.3 NA. Use Aberdeen altimeter setting.

MISSED APPROACH: Climb to 4000 direct SOTHA and hold.

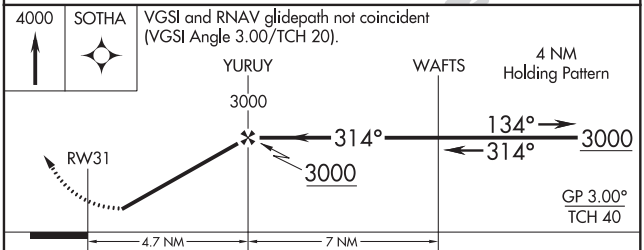
ABR ASOS	MINNEAPOLIS CENTER	CTAF
125.875	124.2 270.3	122.9 L



ELEV 1457 | TDZE 1457



MIRL Rwy 13-31 L



CATEGORY	A	B	C	D
LPV DA	1808-1 351 (400-1)			NA
LNAV/VNAV DA	1830-1 373 (400-1)			NA
LNAV MDA	1920-1 463 (500-1)		1920-1⅜ 463 (500-1⅜)	NA
C CIRCLING	2060-1 603 (700-1)		2060-1¾ 603 (700-1¾)	NA

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

RAPID CITY, SOUTH DAKOTA

ILS or LOC Y RWY 13

ELLSWORTH AFB (KRCA)

LOC I-ELR	APCH CRS	Rwy ldg / TDZE / Arpt Elev
111.5	130°	13,497 / 3276 / 3276

AL-343 [USAF]

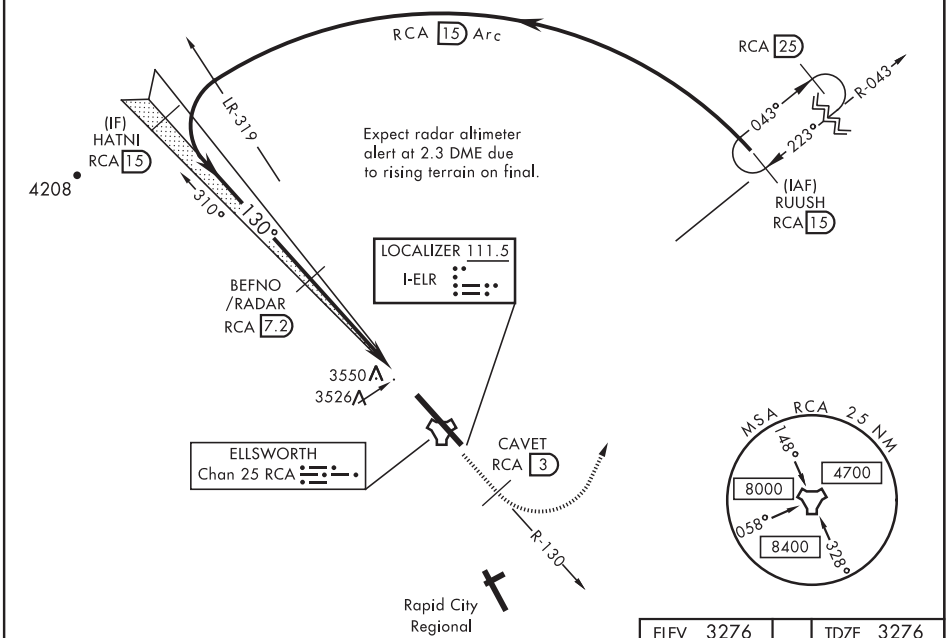
*When ALS inop, increase RVR to 40 and vis to ¾ mile.
**When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile, CAT CDE vis to 1⅜ miles.

ALSF-1

MISSED APPROACH: Track outbound RCA R-130 to 3 DME (CAVET), then turn left to join RCA R-043 to 15 DME (RUUSH) and hold. Maintain 6000.

ATIS ★	ELLSWORTH APP CON	ELLSWORTH TOWER ★	GND CON
120.625 269.9	119.5 259.1	126.05 253.5	121.8 275.8

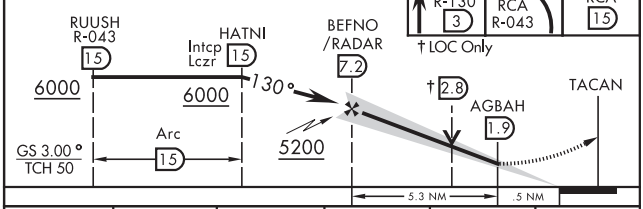
*** CAT E circling restricted to 28th BW aircraft only; 28th BW aircraft will remain within Class D airspace.



RADAR or DME REQUIRED

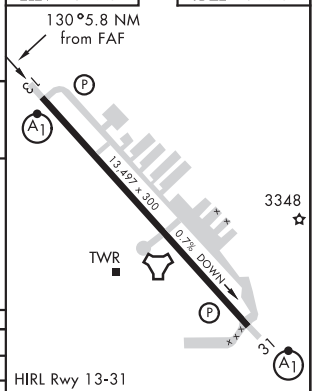
EMERG SAFE ALT 100 NM 9800

VGSI and ILS glidepath not coincident (VGSI Angle 3.00 TCH 62).



CATEGORY	A	B	C	D	E
S-ILS 13 *	3476/24		200	(200-½)	
S-LOC 13 **	3780/24 504 (600-½)		3780/55 504 (600-1)		
*** CIRCLING	3860-1 584 (600-1)	3880-1 604 (700-1)	3880-1¾ 604 (700-1¾)	3980-2¼ 704 (800-2¼)	4040-2¾ 764 (800-2¾)

ELEV 3276 TDZE 3276



FAF to MAP 5.3 NM					
Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46

RAPID CITY, SOUTH DAKOTA 44°09'N-103°06'W ELLSWORTH AFB (KRCA)

Amdt 1 15SEP16

ILS or LOC Y RWY 13

NC-1, 25 FEB 2021 to 22 APR 2021

16259

RAPID CITY, SOUTH DAKOTA

ILS or LOC Y RWY 31

LOC I-RCA	APCH CRS	Rwy ldg 13,497 TDZE 3192 Arpt Elev 3276	AL-343 [USAF]	ELLSWORTH AFB (KRCA)
110.3	310°			

* When ALS inop, increase RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile, CAT CDE vis to 1¾ miles.

ALSF-1

MISSED APPROACH: Track outbound RCA R-310 to 3 DME (APOGE), then turn right to join RCA R-043 outbound to RCA 15 DME (RUUSH) and hold. Maintain 6000.

ATIS ★	ELLSWORTH APP CON	ELLSWORTH TOWER ★	GND CON
120.625 269.9	119.5 259.1	126.05 253.5	121.8 275.8

*** CAT E circling restricted to 28th BW aircraft only; 28th BW aircraft will remain within Class D airspace.

RCA 25
043°
R-043
223°
(IAF) RUUSH RCA 15
RCA 15 Arc
R-310
LOCALIZER 110.3 I-RCA
APOGE RCA 3
3729
3550
ELLSWORTH Chan 25 RCA
3539
CURPI /RADAR RCA 6.3
Rapid City Regional
310°
LR-121
130°
(IF) MEXIE RCA 15
MSA RCA 25 NM
148°
4700
8000
058°
8400
328°

RADAR or DME REQUIRED

EMERG SAFE ALT 100 NM 9800

APOGE RCA R-310 3	6000 RCA R-043	RUUSH RCA 15

† LOC Only

VGSI and ILS glidepath not coincident (VGSI Angle 3.00 TCH 70).

TACAN
OPOGE 1.3
†2.5
CURPI /RADAR 6.3
310°
5000
MEXIE Intcp Lczr 15
6000
Arc 15
RUUSH R-043 15
6000
GS 3.00° TCH 54
.5 NM
5 NM

ELEV 3276 | TDZE 3192

HIRL Rwy 13-31

13
13,497 x 300
0.7% UP
3348
TWR
31
310° 5.5 NM from FAF

CATEGORY	A	B	C	D	E
S-ILS 31 *	3392/24		200 (200-½)		
S-LOC 31 **	3800/24 608 (600-½)		3800-1⅜ 608 (600-1⅜)		
*** C CIRCLING	3860-1 584 (600-1)	3880-1 604 (700-1)	3880-1¾ 604 (700-1¾)	3980-2¼ 704 (800-2¼)	4040-2¾ 764 (800-2¾)

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

RAPID CITY, SOUTH DAKOTA 44°09'N-103°06'W ELLSWORTH AFB (KRCA)

Amdt 1 15SEP16

ILS or LOC Y RWY 31

NC-1, 25 FEB 2021 to 22 APR 2021

RAPID CITY, SOUTH DAKOTA

TACAN Y RWY 13

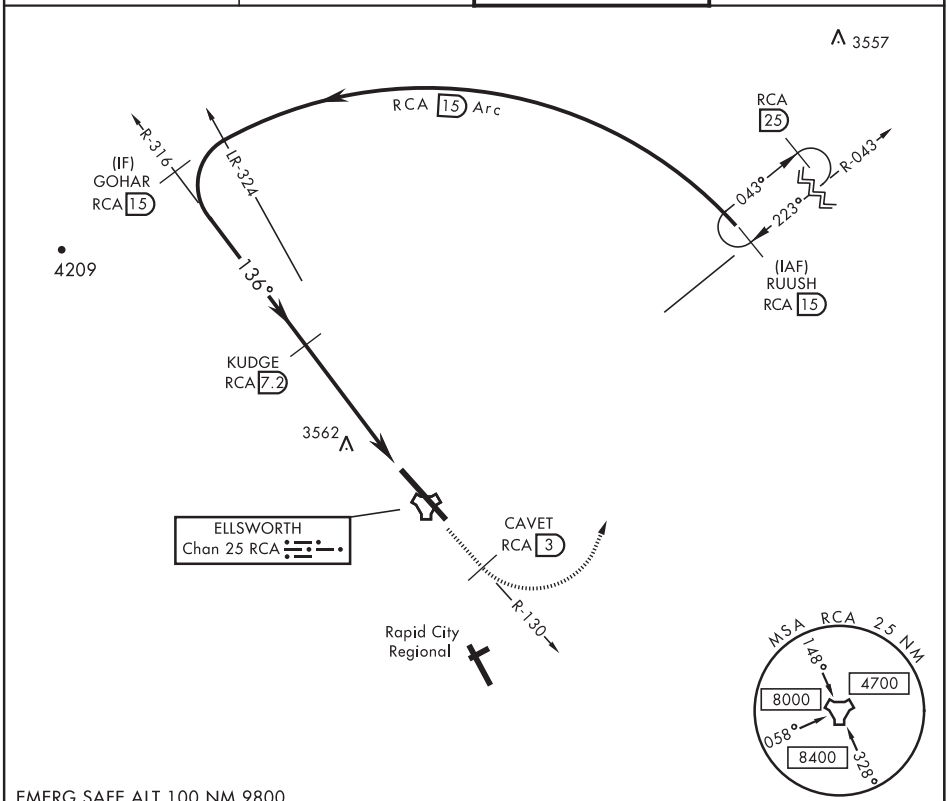
TACAN RCA Chan 25	APCH CRS 136°	Rwy ldg 13,497 TDZE 3276 Arpt Elev 3276	AL-343 [USAF]	ELLSWORTH AFB (KRCA)

*When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile, CAT CDE vis to 1⅝ miles.
**CAT E circling restricted to 28th BW aircraft only; 28th BW aircraft will remain within Class D airspace.

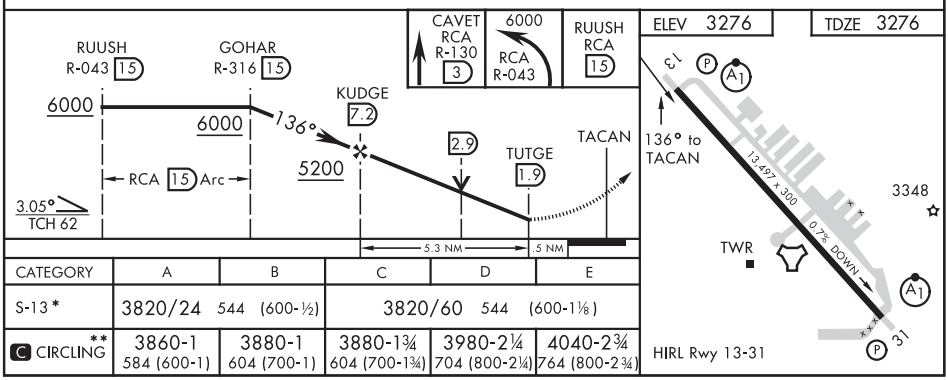
ALSF-1

MISSED APPROACH: Track outbound RCA R-130 to 3 DME (CAVET), then turn left to join RCA R-043 to RCA 15 DME (RUUSH) and hold. Maintain 6000.

ATIS ★	ELLSWORTH APP CON	ELLSWORTH TOWER ★	GND CON
120.625 269.9	119.5 259.1	126.05 253.5	121.8 275.8



EMERG SAFE ALT 100 NM 9800



CATEGORY	A	B	C	D	E
S-13*	3820/24 544 (600-½)		3820/60 544 (600-1⅛)		
C CIRCLING**	3860-1 584 (600-1)	3880-1 604 (700-1)	3880-1¾ 604 (700-1¾)	3980-2¼ 704 (800-2¼)	4040-2¾ 764 (800-2¾)

RAPID CITY, SOUTH DAKOTA 44°09′N-103°06′W ELLSWORTH AFB (KRCA)

Amdt 1 15SEP16

TACAN Y RWY 13

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

16259

RAPID CITY, SOUTH DAKOTA

TACAN Y RWY 31

ELLSWORTH AFB (KRCA)

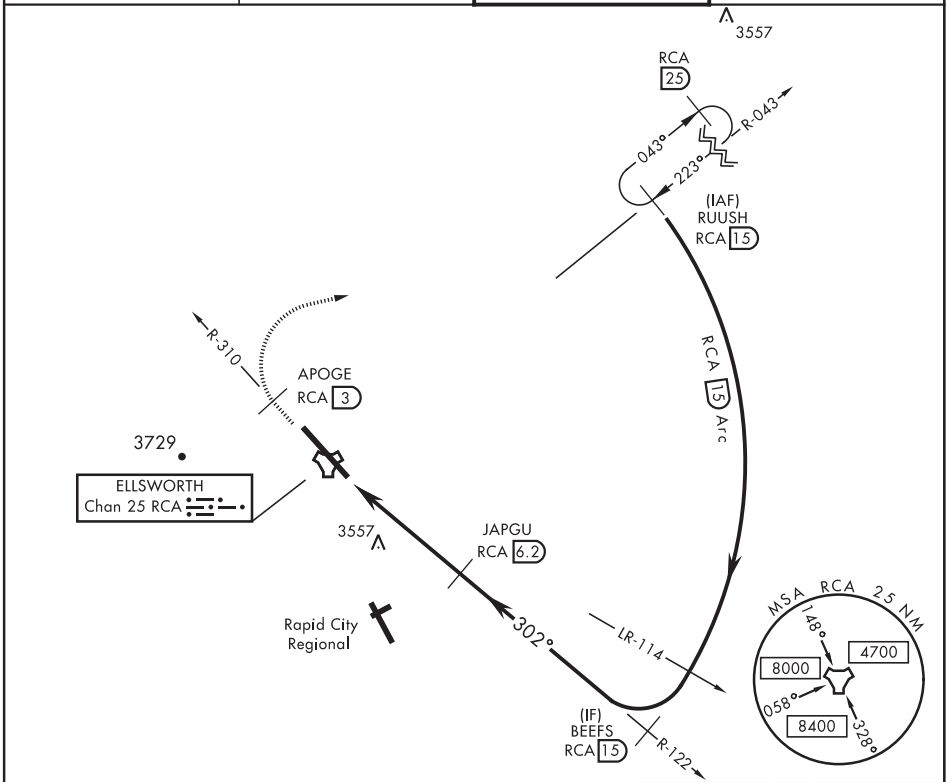
TACAN RCA Chan 25	APCH CRS 302°	Rwy ldg 13,497 TDZE 3192 Arpt Elev 3276	AL-343 [USAF]

T * When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile, increase CAT CDE vis to 1¾ mile.
** CAT E circling restricted to 28th BW aircraft only; 28th BW aircraft will remain within Class D airspace.

ALSF-1

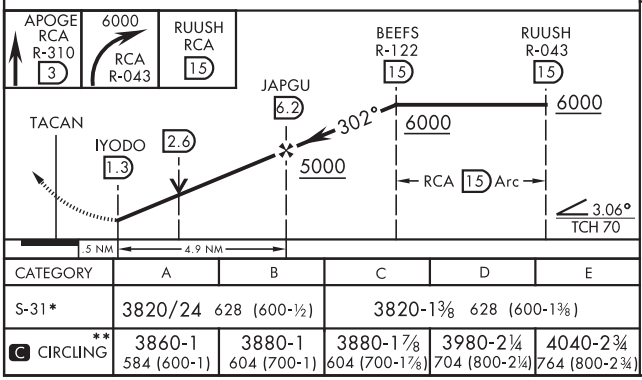
MISSED APPROACH: Track outbound RCA R-310 to 3 DME (APOGE), then turn right to join RCA R-043 to 15 DME (RUUSH) and hold. Maintain 6000.

ATIS ★	ELLSWORTH APP CON	ELLSWORTH TOWER ★	GND CON
120.625 269.9	119.5 259.1	126.05 253.5	121.8 275.8

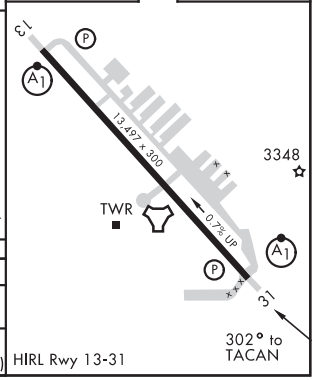


EMERG SAFE ALT 100 NM 9800

ELEV 3276 TDZE 3192



CATEGORY	A	B	C	D	E
S-31*	3820/24 628 (600-½)		3820-1⅜ 628 (600-1⅜)		
C ** CIRCLING	3860-1 584 (600-1)	3880-1 604 (700-1)	3880-1⅞ 604 (700-1⅞)	3980-2¼ 704 (800-2¼)	4040-2¾ 764 (800-2¾)



HIRL Rwy 13-31

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

RAPID CITY, SOUTH DAKOTA

TACAN-A

VORTAC RAP 112.3 Chan 70	APCH CRS 146°	Rwy ldg N/A TDZE N/A Arpt Elev 3276

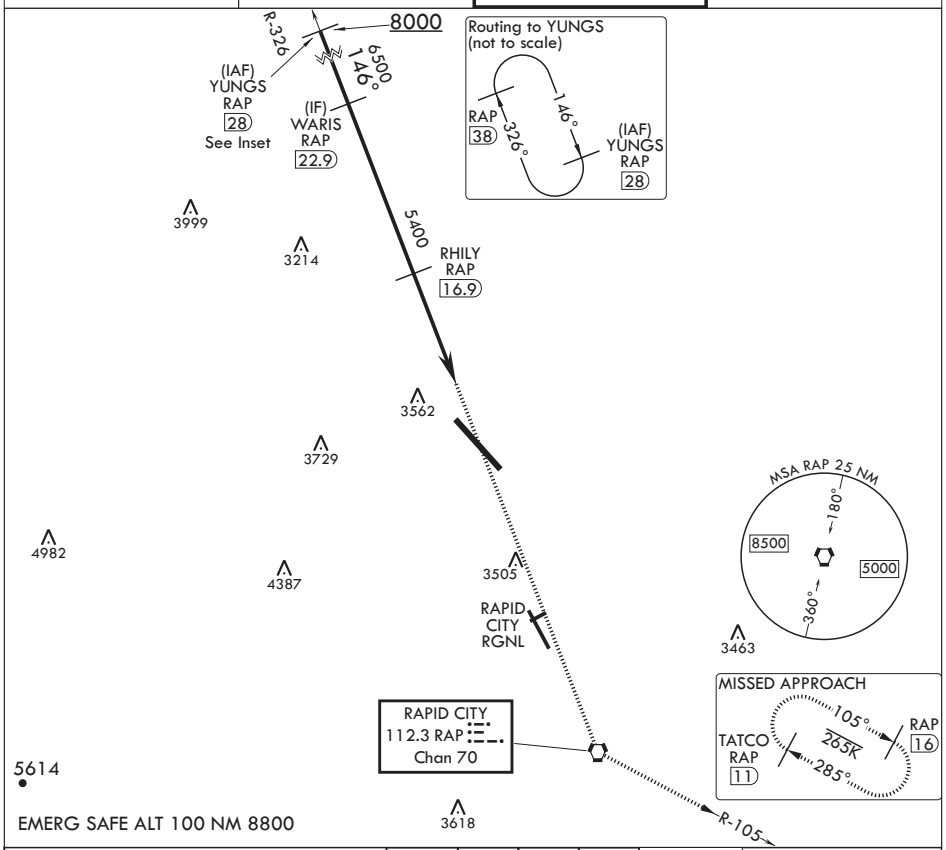
AL-343 (USAF)

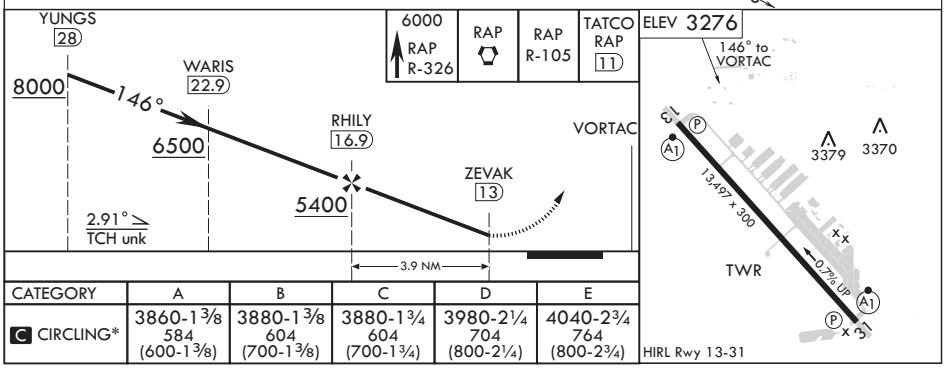
ELLSWORTH AFB (KRCA)

* CAT E circling restricted to 28th BW aircraft only; 28th BW aircraft will remain within Class D airspace.

MISSED APPROACH: Track inbound RAP R-326 to RAP VORTAC then turn left to join RAP R-105 outbound to 11 DME and hold. Maintain 6000.

ATIS★	APP CON	TOWER★	GND CON
120.625 269.9	119.5 259.1	126.05 253.5	121.8 275.8





CATEGORY	A	B	C	D	E
C CIRCLING*	3860-1 3/8 584 (600-1 3/8)	3880-1 3/8 604 (700-1 3/8)	3880-1 3/4 604 (700-1 3/4)	3980-2 1/4 704 (800-2 1/4)	4040-2 3/4 764 (800-2 3/4)

RAPID CITY, SOUTH DAKOTA

44°09'N - 103°06'W

ELLSWORTH AFB (KRCA)

Amdt 2 22JUN17

TACAN-A

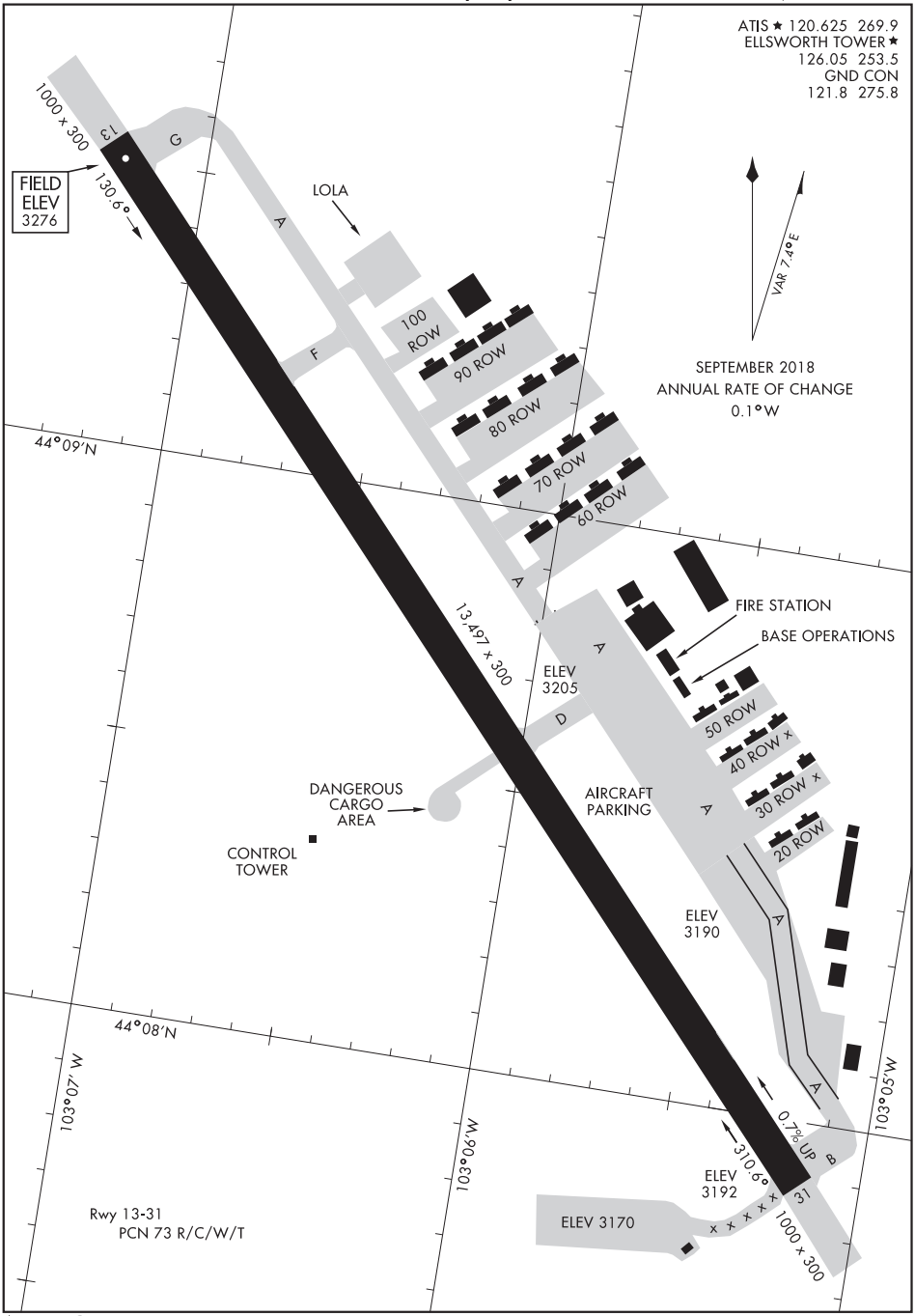
NC-1, 25 FEB 2021 to 22 APR 2021

18256

AIRPORT DIAGRAM

AFD-343 [USAF]

ELLSWORTH AFB (KRCA)
RAPID CITY, SOUTH DAKOTA



NC-1, 25 FEB 2021 to 22 APR 2021

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AIRPORT DIAGRAM

RAPID CITY, SOUTH DAKOTA
ELLSWORTH AFB (KRCA)

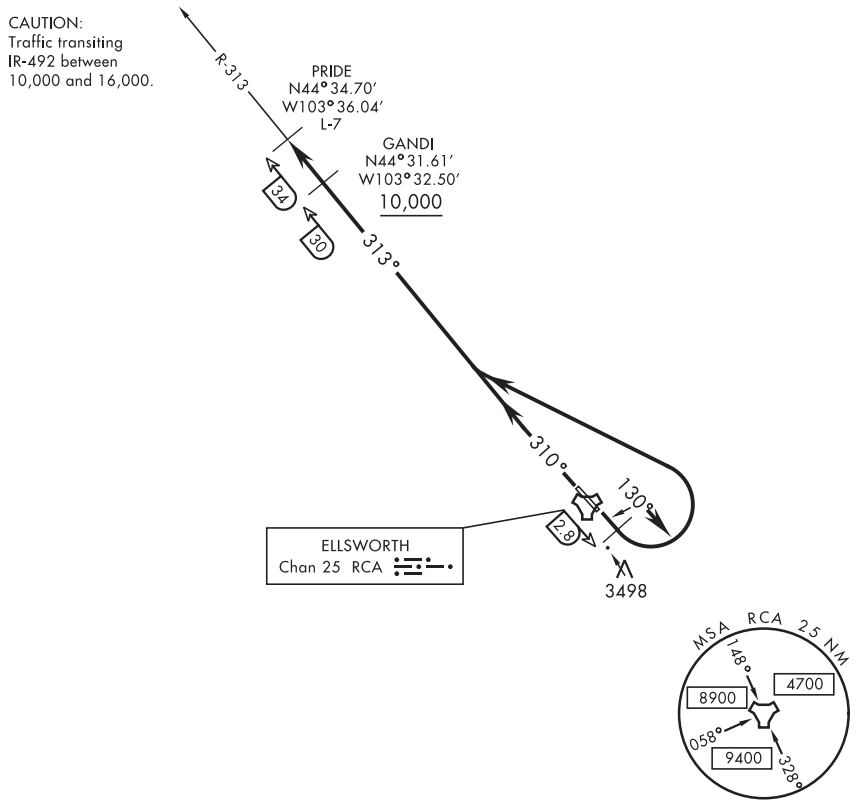
ELLSWORTH-THREE DEPARTURE (RCA3•RCA)

ATIS★120.625 269.9
GND CON
121.8 275.8
ELLSWORTH TOWER ★
126.05 253.5
ELLSWORTH DEP CON
119.5 289.4
DENVER CENTER
127.95 338.2
ELLSWORTH APP CON
119.5 259.1

SHL-343 [USAF]

Rwy	Knots	60	120	180	240	300	360
13	V/V(fpm)	221	442	663	884	1105	1326
31	V/V(fpm)	236	472	708	944	1180	1416

ATC Climb Rate to 10,000



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 13: Track 130° until RCA TACAN 2.8 DME. Turn left to intercept RCA R-313 outbound to PRIDE. Cross GANDI at or above 10,000.

TAKE-OFF RWY 31: Track 310° to intercept RCA TACAN R-313 outbound to PRIDE. Cross GANDI at or above 10,000.

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ELY, MINNESOTA | AL-5974 (FAA) | 20086

RNAV (GPS) RWY 12
ELY MUNI (ELO)

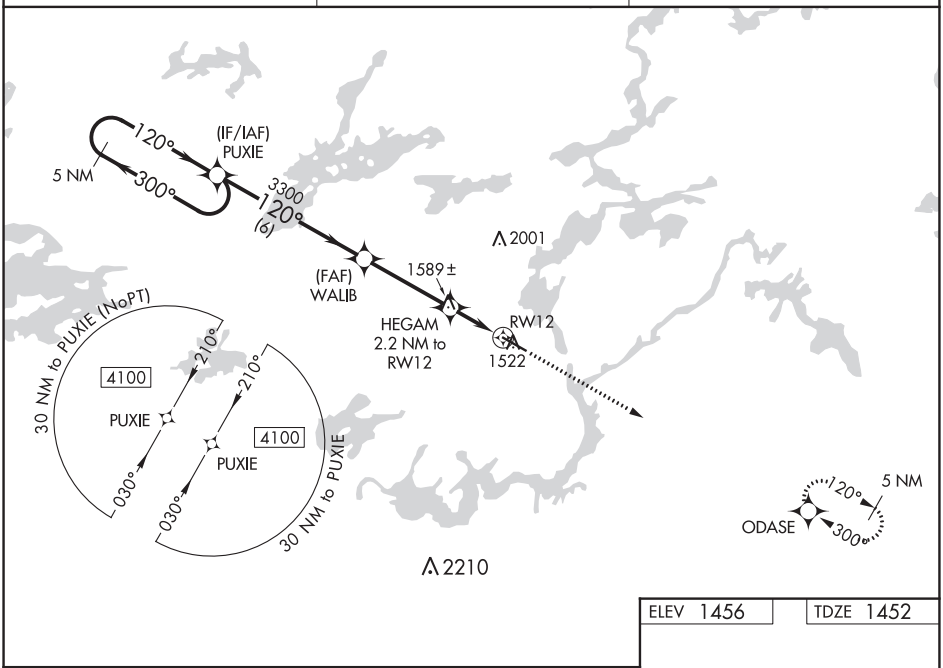
WAAS CH 86827 W12A	APP CRS 120°	Rwy ldg 5596 TDZE 1452 Apt Elev 1456

-39°C

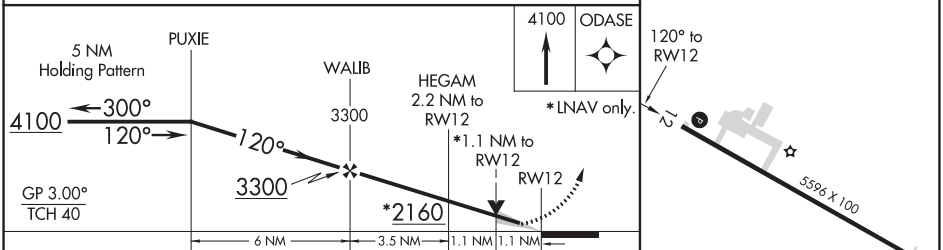
Baro-VNAV NA when using Cook altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 34°C (93°F). DME/DME RNP-0.3 NA. VDP NA when using Cook altimeter setting. When local altimeter setting not received, use Cook altimeter setting and increase all DA/MDA 100 feet; increase LPV visibility ¼ mile all Cats, LNAV/VNAV visibility ⅜ mile all Cats, and LNAV Cat C and D visibility ¼ mile.

MISSED APPROACH: Climb to 4100 direct ODASE and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
132.025	127.9 281.45	122.8 (CTAF) L



ELEV 1456 | TDZE 1452



CATEGORY	A	B	C	D
LPV DA	1652-1 200 (200-1)			
LNAV/VNAV DA	1726-1 274 (300-1)			
LNAV MDA	1840-1 388 (400-1)		1840-1⅛ 388 (400-1⅛)	
CIRCLING	1920-1 464 (500-1)		1940-1½ 484 (500-1½)	2020-2 564 (600-2)

MIRL Rwy 12-30 L
REIL Rwys 12 and 30 L

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WAAS CH 93627 W30A	APP CRS 300°	Rwy ldg 5596 TDZE 1456 Apt Elev 1456

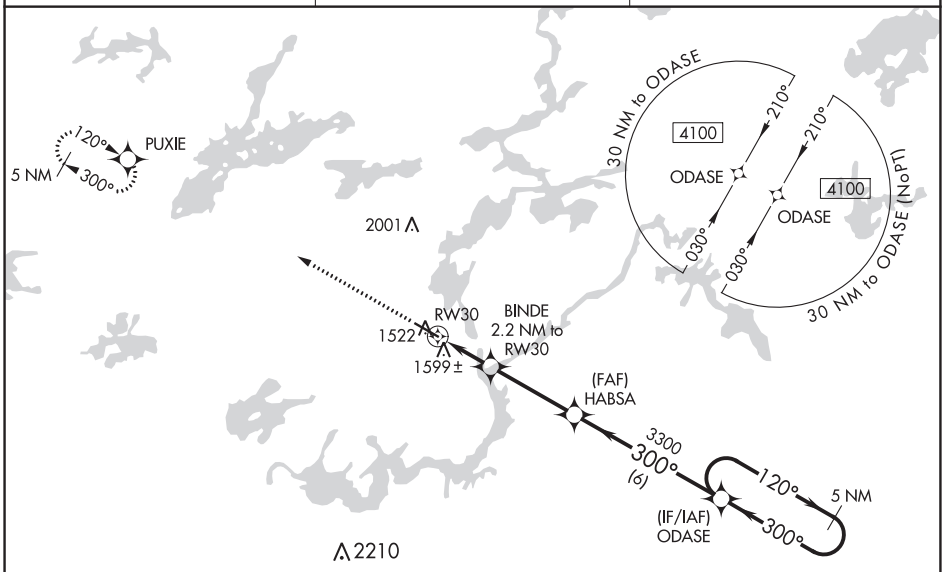
RNAV (GPS) RWY 30
ELY MUNI (ELO)

T
A
-39°C

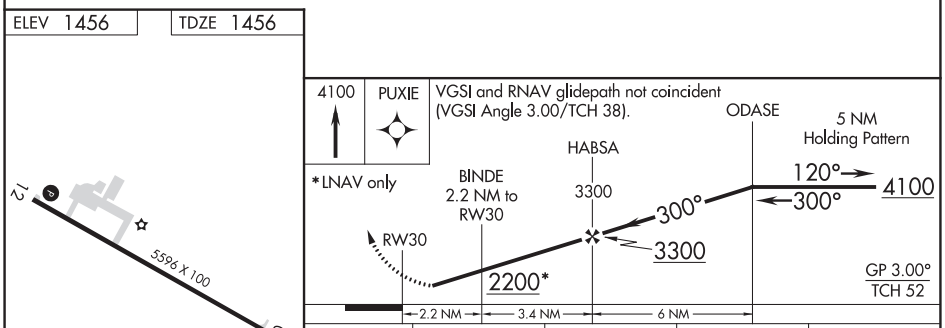
Baro-VNAV NA when using Cook altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 34°C (93°F). DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Cook altimeter setting and increase all DA/MDA 100 feet; increase LPV visibility ⅛ mile all Cats, LNAV/VNAV visibility ⅜ mile all Cats, and LNAV Cat C/D visibility ¼ mile.

MISSED APPROACH: Climb to 4100 direct PUXIE and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
132.025	127.9 281.45	122.8 (CTAF) L



ELEV 1456 TDZE 1456



CATEGORY	A	B	C	D
LPV DA	1706-1 250 (300-1)			
LNAV/VNAV DA	1780-1 324 (400-1)			
LNAV MDA	1860-1 404 (500-1)		1860-1⅛ 404 (500-1⅛)	
CIRCLING	1920-1 464 (500-1)		1940-1½ 484 (500-1½)	2020-2 564 (600-2)

MIRL Rwy 12-30 L
REIL Rwys 12 and 30 L

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EVELETH, MINNESOTA | AL-5236 (FAA) | 19171

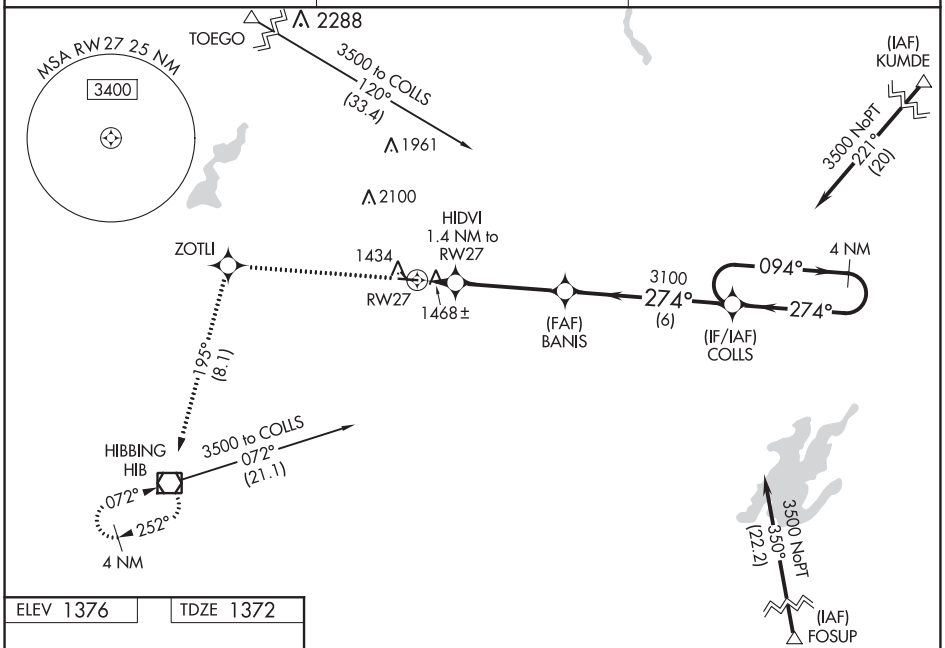
WAAS CH 57931 W27A	APP CRS 274°	Rwy ldg 4000 TDZE 1372 Apt Elev 1376

RNAV (GPS) RWY 27
EVELETH-VIRGINIA MUNI (EVM)

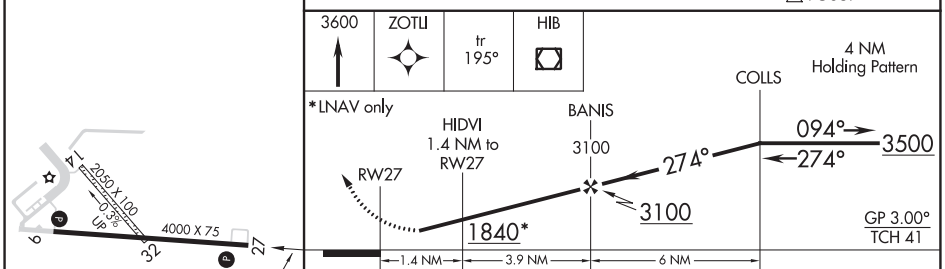
Baro-VNAV NA when using Hibbing altimeter setting. For uncompensated Baro-VNAV systems, procedure NA below -17°C (2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Hibbing altimeter setting and increase all DA 36 feet and all MDA 40 feet; increase LNAV Cat C/D visibility ⅛ and Circling Cat C/D visibility ¼ mile. Circling to Rwys 14 and 32 NA. Rwy 27 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3600 direct ZOTLI and on track 195° to HIB VOR/DME and hold.

AWOS-3	DULUTH APP CON	UNICOM
108.2	125.45 233.7	122.7 (CTAF) L



ELEV 1376 | TDZE 1372



CATEGORY		A	B	C	D
LPV	DA	1634-1⅛ 262 (300-1⅛)			
LNAV/VNAV	DA	1651-1 279 (300-1)			
LNAV MDA		1720-1 348 (400-1)			
CIRCLING		1880-1 504 (600-1)	1940-1 564 (600-1)	1940-1½ 564 (600-1½)	2040-2 664 (700-2)

MIRL Rwys 9-27 and 14-32 L
REIL Rwy 27 L

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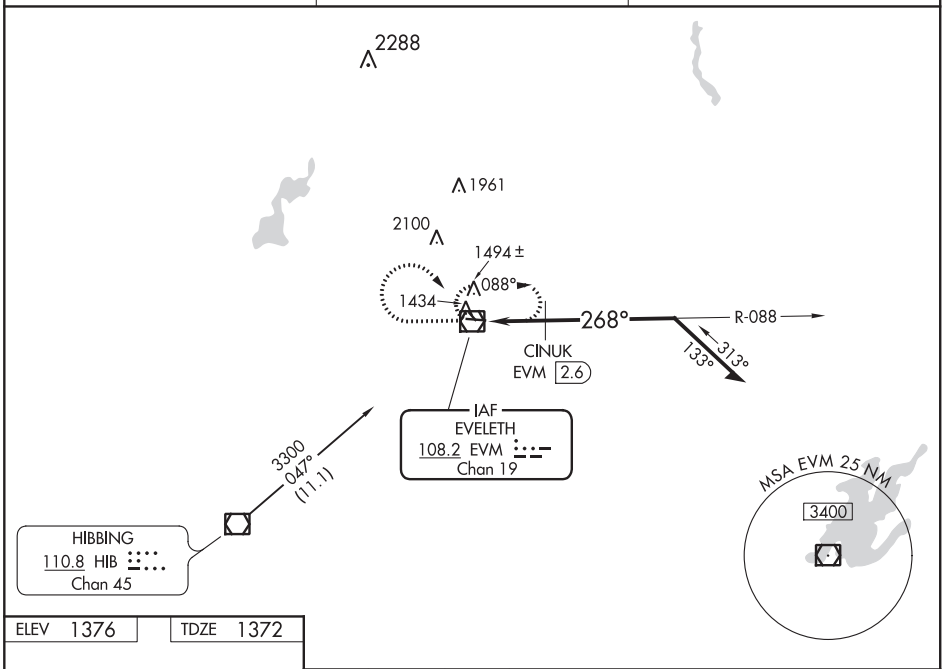
VOR/DME EVM	APP CRS	Rwy ldg	4000
108.2	268°	TDZE	1372
Chan 19		Apt Elev	1376

VOR RWY 27
EVELETH-VIRGINIA MUNI (EVM)

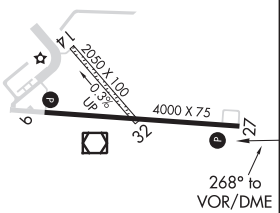
T A NA — When local altimeter setting not received, use Hibbing altimeter setting and increase all MDA 40 feet; increase S-27 and Circling Cat B/C/D visibility ½ mile. Increase CINUK FIX minimums S-27 and Circling Cat C/D visibility ¼ mile. Rwy 27 helicopter visibility reduction below ¾ SM NA. Circling to Rwys 14 and 32 NA.

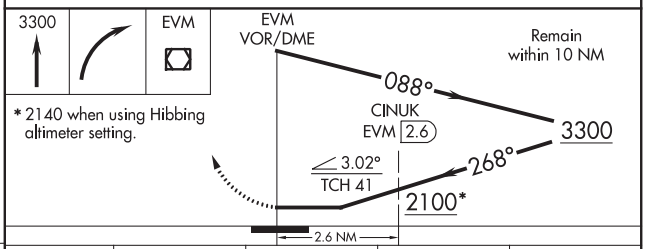
MISSED APPROACH: Climb to 3300 then right turn direct EVM VOR/DME and hold.

AWOS-3	DULUTH APP CON	UNICOM
108.2	125.45 233.7	122.7 (CTAF) L



ELEV 1376 | TDZE 1372





* 2140 when using Hibbing altimeter setting.

CATEGORY	A	B	C	D
S-27	2100-1 728 (800-1)		2100-2 728 (800-2)	
CIRCLING	2100-1 724 (800-1)		2100-2 724 (800-2)	2100-2¼ 724 (800-2¼)
CINUK FIX MINIMUMS (DME REQUIRED)				
S-27	1760-1 388 (400-1)		1760-1¼ 388 (400-1¼)	
CIRCLING	1880-1 504 (600-1)	1940-1 564 (600-1)	1940-1½ 564 (600-1½)	2040-2 664 (700-2)

REIL Rwy 27 L
MIRL Rwys 9-27 and 14-32 L

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EVELETH, MINNESOTA | AL-5236 (FAA) | 20310

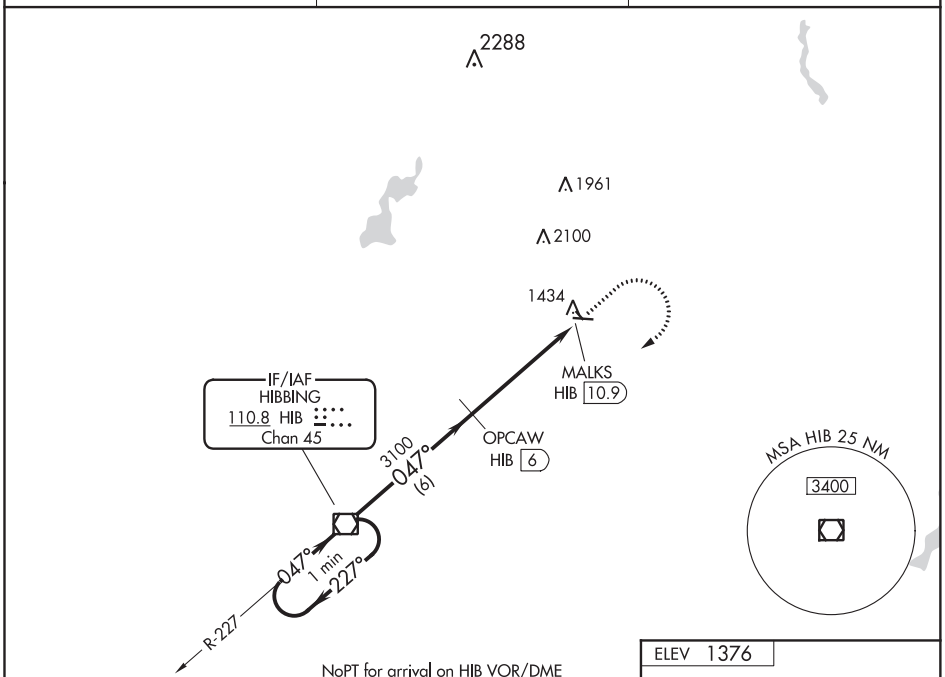
VOR/DME HIB	APP CRS	Rwy ldg	N/A
110.8	047°	TDZE	N/A
Chan 45		Apt Elev	1376

VOR-A
EVELETH-VIRGINIA MUNI (EVM)

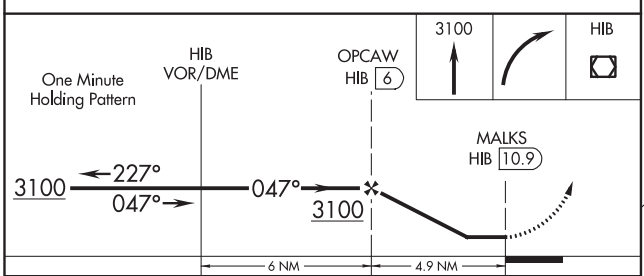
When local altimeter setting not received, use Hibbing altimeter setting and increase all MDA 40 feet. Rwy 27 helicopter visibility reduction below ¾ SM NA. Circling to Rwys 14 and 32 NA. DME required.

MISSED APPROACH: Climb to 3100 then right turn direct HIB VOR/DME and hold.

AWOS-3	DULUTH APP CON	UNICOM
108.2	125.45 233.7	122.7 (CTAF) L

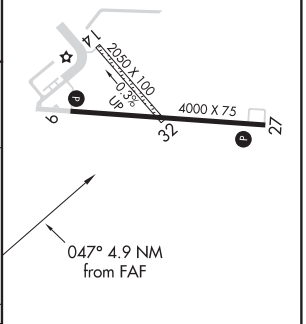


NoPT for arrival on HIB VOR/DME airway radials 128 CW 338.



CATEGORY	A	B	C	D
CIRCLING	2120-1 744 (800-1)		2120-2¼ 744 (800-2¼)	2120-2½ 744 (800-2½)

ELEV 1376



REIL Rwy 27 L
MIRL Rwys 9-27 and 14-32 L

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LOC I-FQJ	APP CRS	Rwy ldg	5503
111.1	310°	TDZE	1162
		Apt Elev	1162

ILS or LOC RWY 31
FAIRMONT MUNI (FRM)

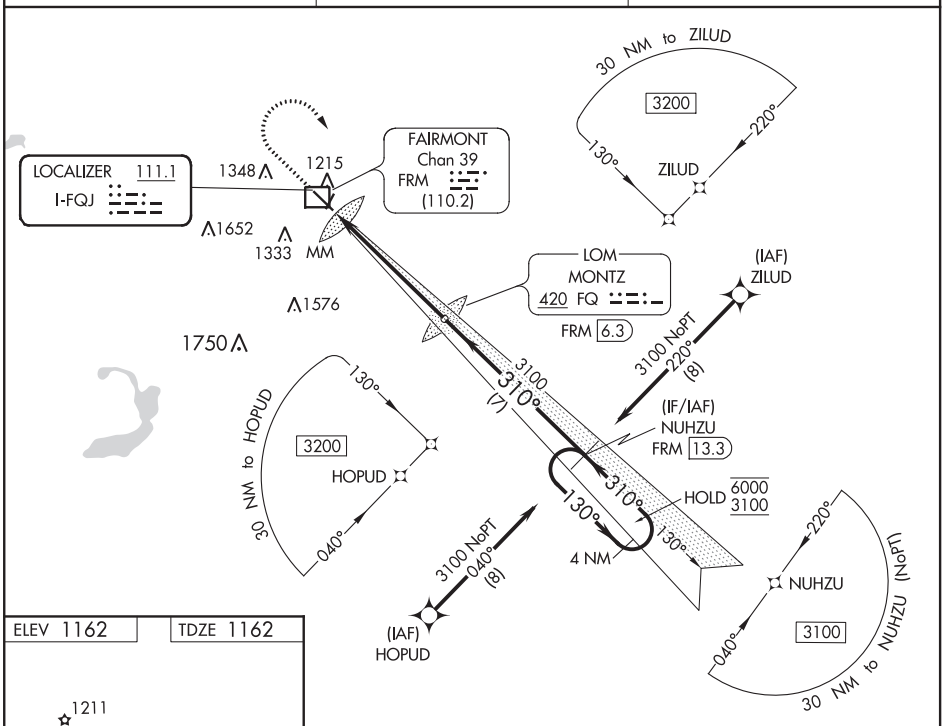
RNAV 1-GPS required.
ADF or DME required, LOC only.

Autopilot coupled approach NA below 1480 MSL. For inop ALS, increase S-ILS-31 all Cats visibility to ⅞ SM. DME from FRM DME.

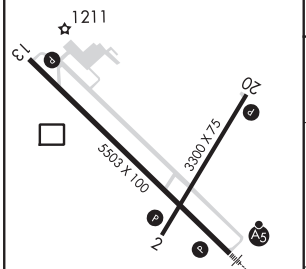
MALSR

MISSED APPROACH: Climb to 1800 then climbing right turn to 3100 direct NUHZU and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
120.025	127.75 257.7	122.8 (CTAF) L



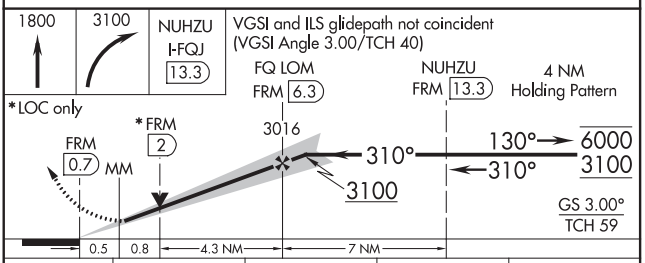
ELEV 1162 TDZE 1162



HIRL Rwy 13-31 L
MIRL Rwy 2-20 L
REIL Rwys 2, 13 and 20 L

310° 5.6 NM from FAF

FAF to MAP 5.6 NM					
Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52



CATEGORY	A	B	C	D
S-ILS 31	1480-½ 318 (400-½)			
S-LOC 31	1620-½ 458 (500-½)		1620-⅞ 458 (500-⅞)	
C CIRCLING	1640-1 478 (500-1)	1660-1 498 (500-1)	1980-2¼ 818 (900-2¼)	1980-2½ 818 (900-2½)

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FAIRMONT, MINNESOTA | AL-5353 (FAA) | 19171

WAAS CH 45812 W13A	APP CRS 130°	Rwy ldg 5503 TDZE 1162 Apt Elev 1162

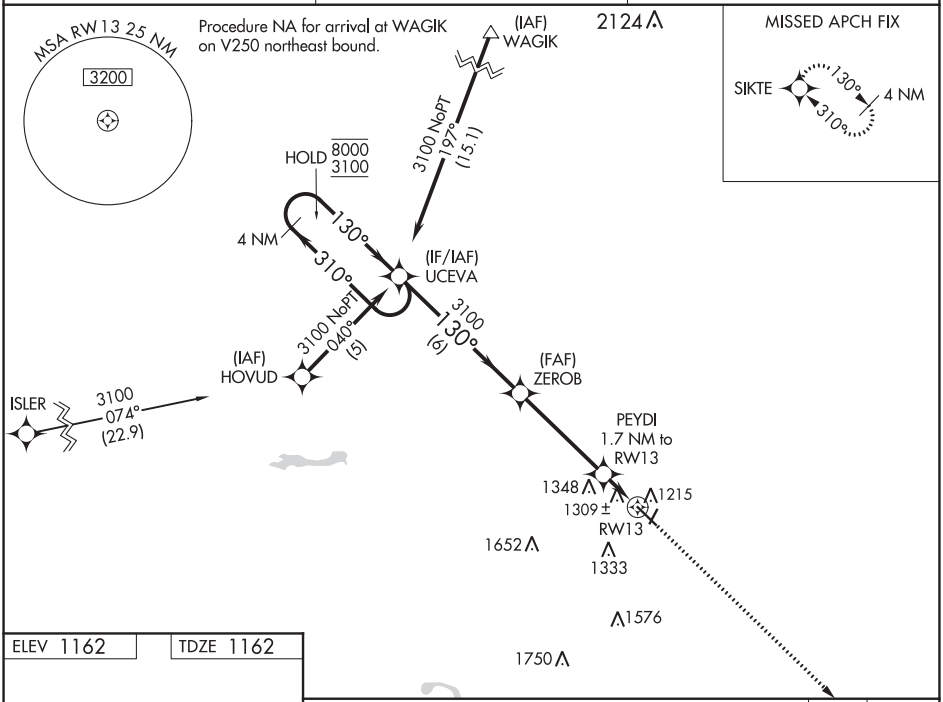
RNAV (GPS) RWY 13
FAIRMONT MUNI (FRM)

RNP APCH.

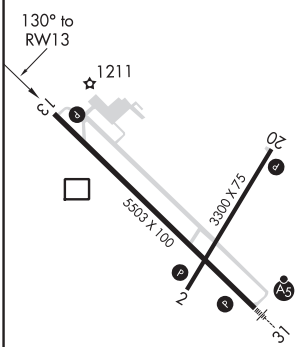
For uncompensated Baro-VNAV systems, procedure NA below -17°C or above 54°C. Rwy 13 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3100 direct SIKTE and hold.

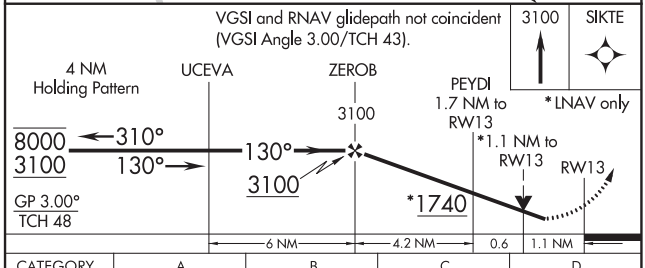
AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
120.025	127.75 257.7	122.8 (CTAF) L



ELEV 1162 | TDZE 1162



HIRL Rwy 13-31 L
MIRL Rwy 2-20 L
REIL Rwys 2, 13 and 20 L



CATEGORY	A	B	C	D
LPV DA	1460-1 298 (300-1)			
LNAV/VNAV DA	1695-2 533 (600-2)			
LNAV MDA	1560-1 398 (400-1)			1560-1¼ 398 (400-1¼)
C CIRCLING	1640-1 478 (500-1)	1660-1 498 (500-1)	1980-2¼ 818 (900-2¼)	1980-2½ 818 (900-2½)

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WAAS CH **90412** **W31A**	APP CRS **310°**	Rwy ldg **5503** TDZE **1162** Apt Elev **1162**

RNAV (GPS) RWY 31
FAIRMONT MUNI (FRM)

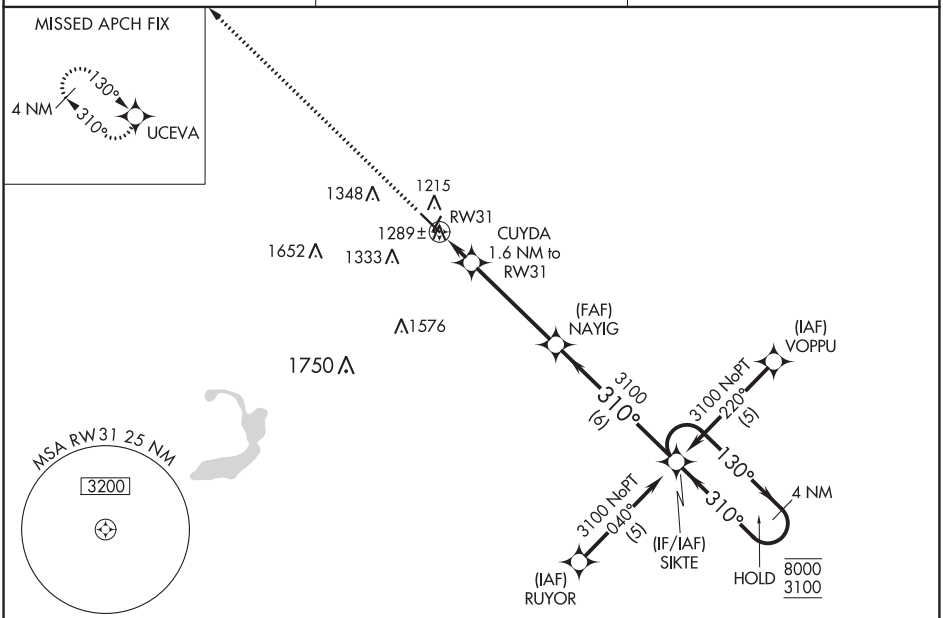
RNP APCH.

For uncompensated Baro-VNAV systems, procedure NA below -17° C or above 54°C. For inop ALS , increase LPV all Cats visibility to ⅞ SM and LNAV/VNAV all Cats visibility to 1⅛ SM and LNAV Cat C/D visibility to 1⅛ SM.

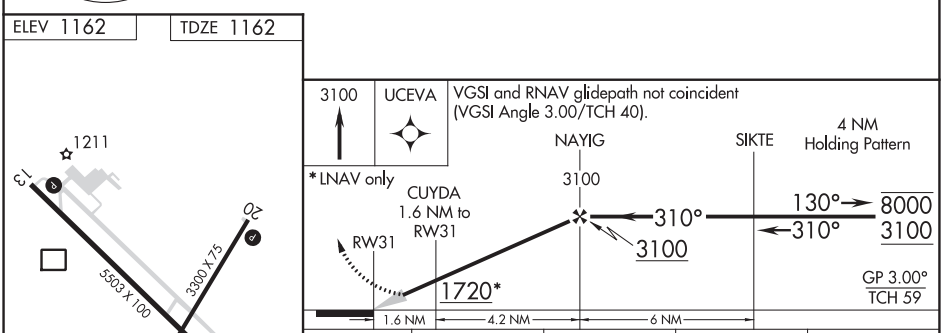
MALSR

MISSED APPROACH: Climb to 3100 direct UCEVA and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
120.025	**127.75 257.7**	**122.8** (CTAF) L



ELEV 1162	TDZE 1162



CATEGORY	A	B	C	D
LPV DA	1467-½ 305 (400-½)			
LNAV/VNAV DA	1581-1 419 (500-1)			
LNAV MDA	1560-½ 398 (400-½)		1560-⅝ 398 (400-⅝)	1560-1 398 (400-1)
C CIRCLING	1640-1 478 (500-1)	1660-1 498 (500-1)	1980-2¼ 818 (900-2¼)	1980-2½ 818 (900-2½)

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FARGO, NORTH DAKOTA

AL-144 (FAA)

20030

ILS or LOC RWY 18
HECTOR INTL (FAR)

LOC I-AAM	APP CRS	Rwy ldg 9001
108.9	176°	TDZE 900
		Apt Elev 901

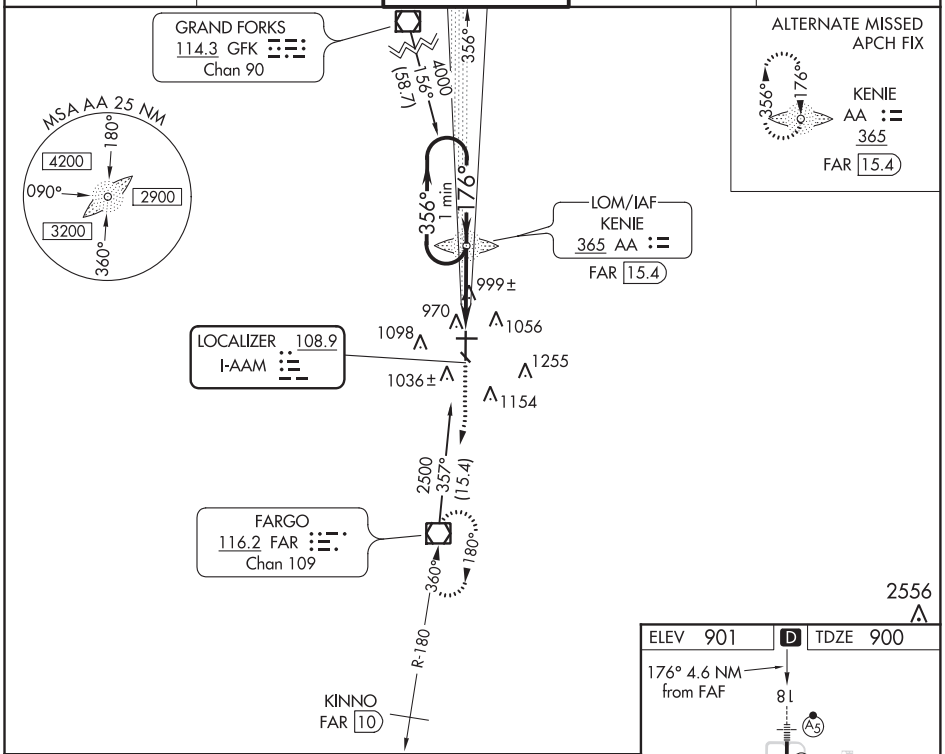
ADF or DME required for procedure entry.

For inop MALSR, increase S-ILS 18 Cat E visibility to RVR 4000, and S-LOC 18 Cat E visibility to RVR 5000.
* Visibility Cat A/B/C/D RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALSR

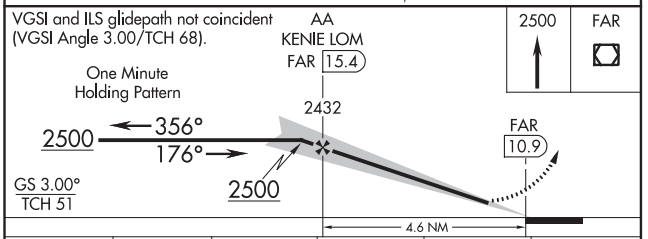
MISSED APPROACH: Climb to 2500 direct FAR VOR/DME and hold.

ATIS	FARGO APP CON	FARGO TOWER	GND CON	CLNC DEL
124.5 379.2	120.4 377.15	133.8 290.4	121.9 348.6	121.9 348.6



VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 68).

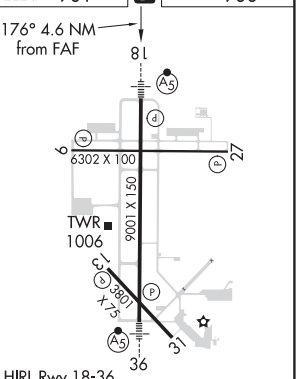
One Minute Holding Pattern



CATEGORY	A	B	C	D	E
S-ILS 18*	1100/24 200 (200-½)				
S-LOC 18	1260/24 360 (400-½)			1260/40 360 (400-¾)	
C CIRCLING	1380-1 479 (500-1)		1520-1¾ 619 (700-1¾)	1620-2¼ 719 (800-2¼)	1620-2½ 719 (800-2½)

ELEV 901 | D | TDZE 900

176° 4.6 NM from FAF



HIRL Rwy 18-36
REIL Rwys 9 and 27
MIRL Rwys 9-27 and 13-31

FAF to MAP 4.6 NM					
Knots	60	90	120	150	180
Min:Sec	4:36	3:04	2:18	1:50	1:32

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ILS or LOC RWY 36
HECTOR INTL (FAR)

LOC/DME I-FAR	APP CRS	Rwy ldg	9001
110.3	356°	TDZE	899
Chan 40		Apt Elev	901

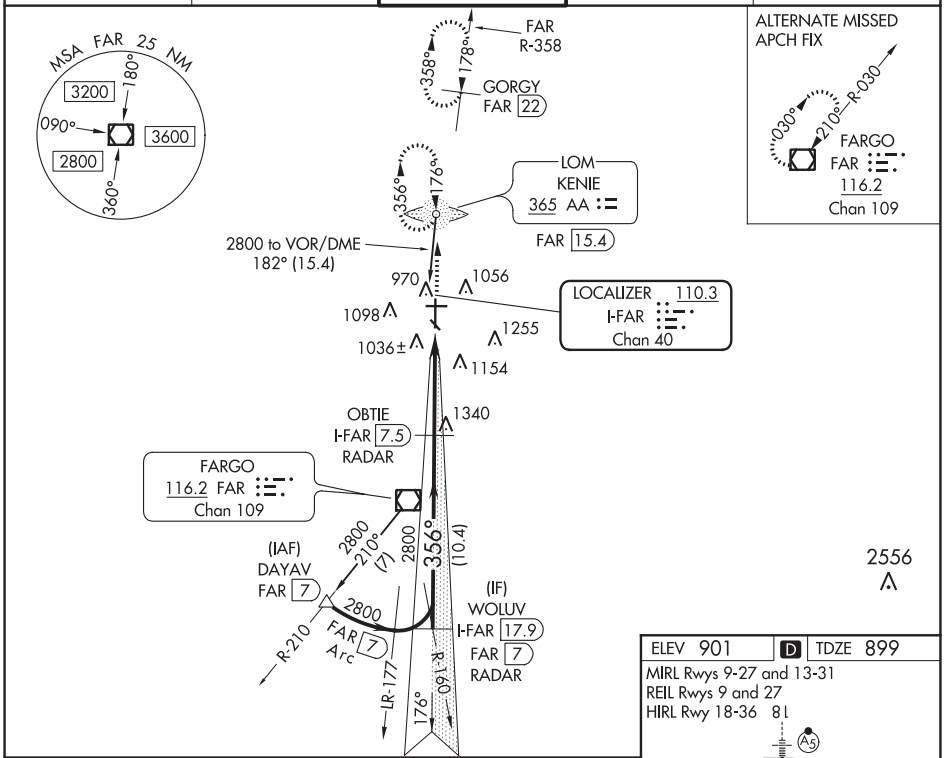
ADF or DME required for procedure entry. ADF or DME required.

For inop ALS increase S-ILS 36 Cat E visibility to RVR 4000 and S-LOC 36 Cat C/D/E visibility to 1⅜ SM.
#RVR 1800 authorized with use of FD or AP or HUD to DA.

MALSR

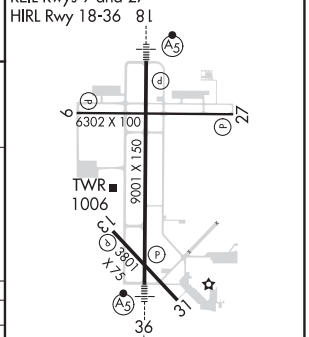
MISSED APPROACH: Climb to 2500 direct KENIE LOM and hold (DME aircraft climb to 4000 on FAR VOR/DME R-358 to GORGY/22 DME and hold N, RT, 178° inbound, continue climb-in-hold to 4000).

ATIS	FARGO APP CON	FARGO TOWER	GND CON	CLNC DEL
124.5 379.2	120.4 377.15	133.8 290.4	121.9 348.6	121.9 348.6



ELEV 901 | D | TDZE 899

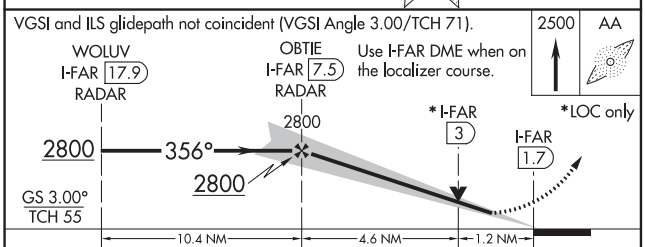
MIRL Rwys 9-27 and 13-31
REIL Rwys 9 and 27
HIRL Rwy 18-36 8L



VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 71).

Use I-FAR DME when on the localizer course.

2500 AA



CATEGORY	A	B	C	D	E
S-ILS 36#	1099/24 200 (200-½)				
S-LOC 36	1360/24 461 (500-½)		1360/50 461 (500-1)		
C CIRCLING	1380-1 479 (500-1)		1520-1¾ 619 (700-1¾)	1620-2¼ 719 (800-2¼)	1620-2½ 719 (800-2½)

FAF to MAP 5.8 NM

Knots	60	90	120	150	180
Min:Sec	5:48	3:52	2:54	2:19	1:56

NC-1, 25 FEB 2021 to 22 APR 2021

FARGO, NORTH DAKOTA — AL-144 (FAA) — 19283

RNAV (GPS) RWY 9
HECTOR INTL (FAR)

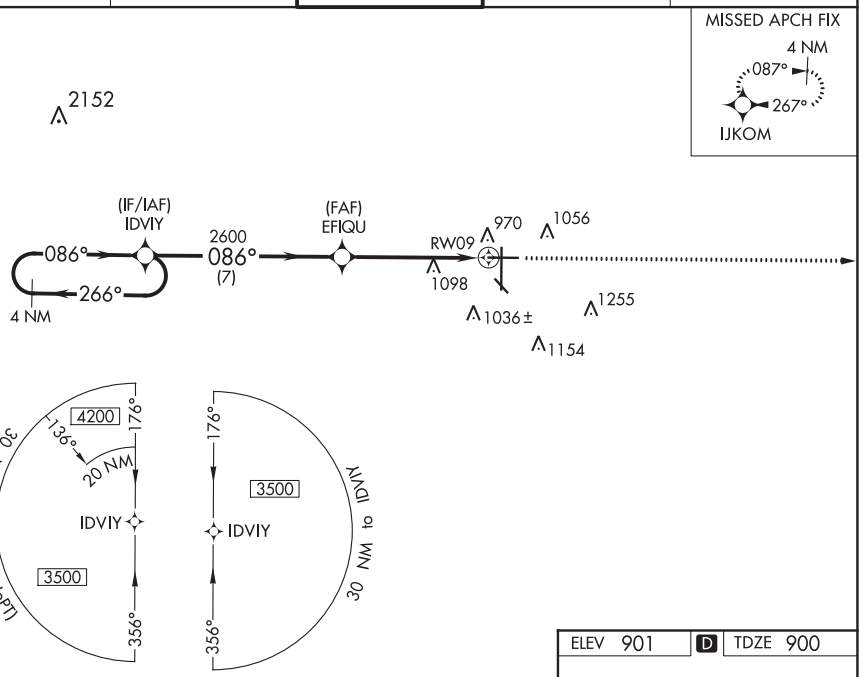
WAAS CH 97433 W09A	APP CRS 086°	Rwy ldg 6302 TDZE 900 Apt Elev 901

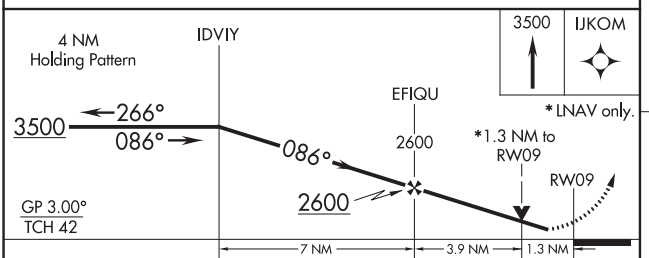
RNP APCH.

Baro-VNAV NA.
Rwy 9 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3500 direct IJKOM and hold.

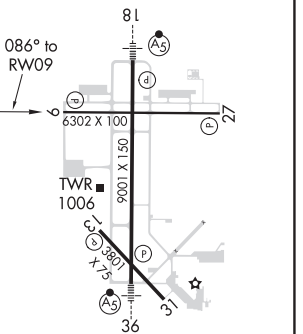
ATIS	FARGO APP CON	FARGO TOWER	GND CON	CLNC DEL
124.5 379.2	120.4 377.15	133.8 290.4	121.9 348.6	121.9 348.6





CATEGORY	A	B	C	D
LPV DA	1150-¾ 250 (300-¾)			
LNAV/VNAV DA	1171-⅞ 271 (300-⅞)			
LNAV MDA	1360-1 460 (500-1)		1360-1⅜ 460 (500-1⅜)	
C CIRCLING	1380-1 479 (500-1)		1520-1¾ 619 (700-1¾)	1620-2¼ 719 (800-2¼)

ELEV 901 — D — TDZE 900



HIRL Rwy 18-36
REIL Rwys 9 and 27
MIRL Rwys 9-27 and 13-31

FARGO, NORTH DAKOTA
Amdt 1C 03JAN19

46°55′N-96°49′W

HECTOR INTL (FAR)
RNAV (GPS) RWY 9

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 40006 W18A	APP CRS 176°	Rwy ldg 9001 TDZE 900 Apt Elev 901

RNAV (GPS) RWY 18
HECTOR INTL (FAR)

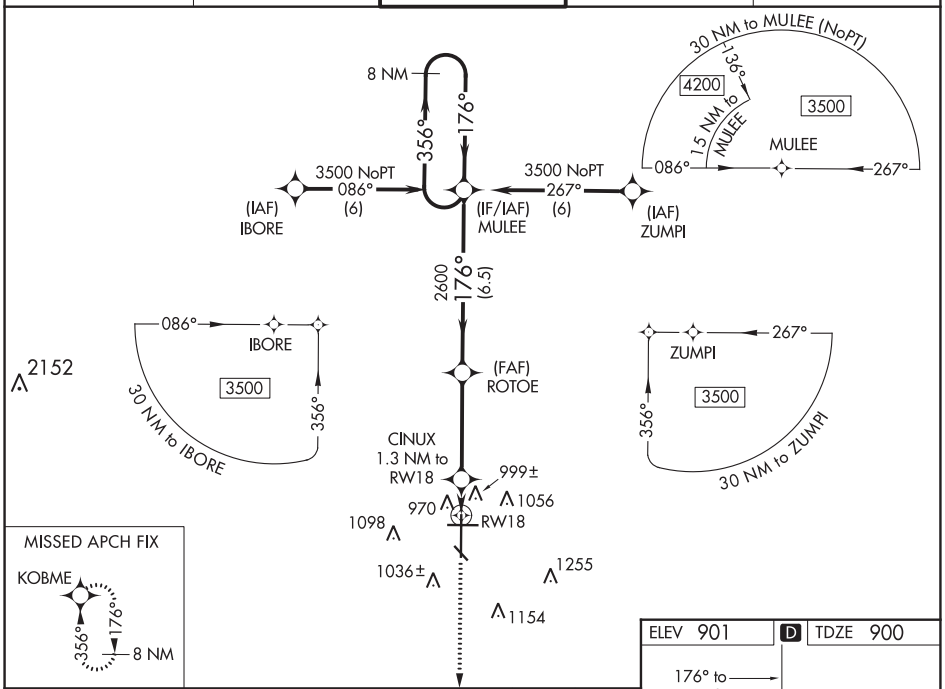
RNP APCH.

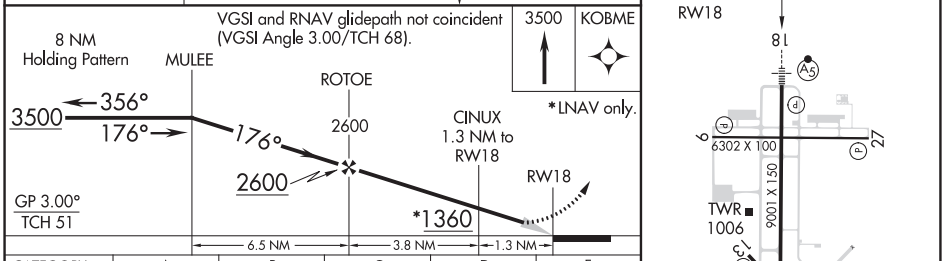
For inoperative MALSR, increase LPV Cat E visibility to RVR 4000 and LNAV/VNAV Cat E and LNAV Cat D and E to RVR 6000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).
#RVR 1800 authorized with use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 3500 direct KOBME and hold.

ATIS	FARGO APP CON	FARGO TOWER	GND CON	CLNC DEL
124.5 379.2	120.4 377.15	133.8 290.4	121.9 348.6	121.9 348.6





CATEGORY	A	B	C	D	E
LPV DA#	1100/24 200 (200-½)				
LNAV/VNAV DA	1272/40 372 (400-¾)				
LNAV MDA	1260/24 360 (400-½)			1260/50 360 (400-1)	
C CIRCLING	1380-1 479 (500-1)		1520-1¾ 619 (700-1¾)	1620-2¼ 719 (800-2¼)	1620-2½ 719 (700-2½)

HIRL Rwy 18-36
REIL Rwys 9 and 27
MIRL Rwys 9-27 and 13-31

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

FARGO, NORTH DAKOTA — AL-144 (FAA) — 19283

RNAV (GPS) RWY 27
HECTOR INTL (FAR)

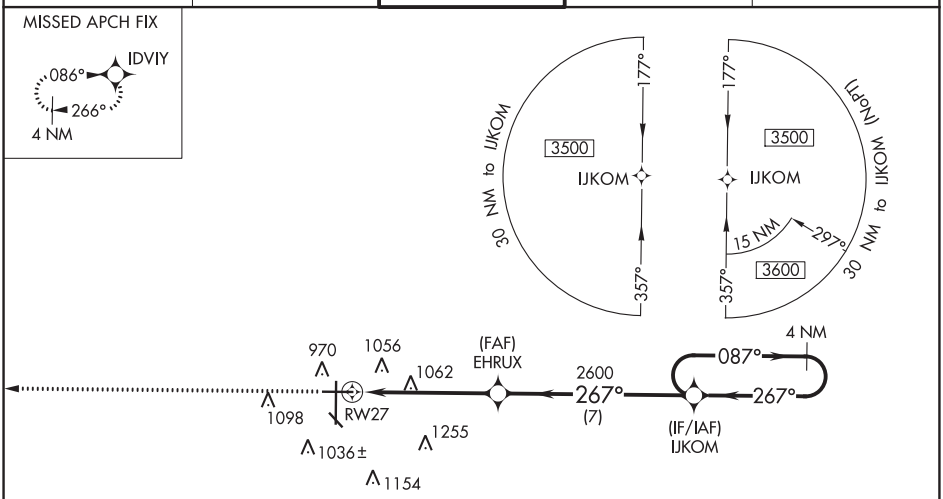
WAAS CH 65733 W27A	APP CRS 267°	Rwy ldg 6302 TDZE 899 Apt Elev 901

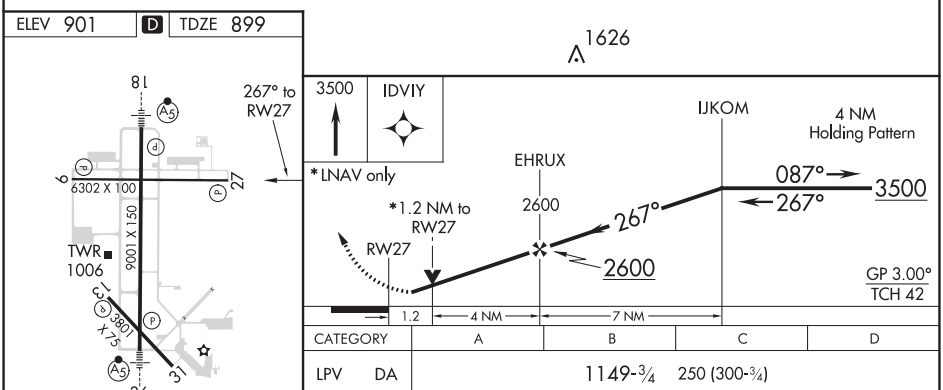
RNP APCH.

Baro-VNAV NA.
Rwy 27 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3500 direct IDVIY and hold.

ATIS	FARGO APP CON	FARGO TOWER	GND CON	CLNC DEL
124.5 379.2	120.4 377.15	133.8 290.4	121.9 348.6	121.9 348.6





CATEGORY	A	B	C	D
LPV DA	1149-¾ 250 (300-¾)			
LNAV/VNAV DA	1231-1⅛ 332 (400-1⅛)			
LNAV MDA	1320-1 421 (500-1)		1320-1¼ 421 (500-1¼)	
C CIRCLING	1380-1 479 (500-1)		1520-1¾ 619 (700-1¾)	1620-2¼ 719 (800-2¼)

HIRL Rwy 18-36
REIL Rwys 9 and 27
MIRL Rwys 9-27 and 13-31

FARGO, NORTH DAKOTA
Amdt 1C 03JAN19

46°55′N-96°49′W

HECTOR INTL (FAR)
RNAV (GPS) RWY 27

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 50106 W36A	APP CRS 356°	Rwy ldg 9001 TDZE 899 Apt Elev 901

RNAV (GPS) RWY 36
HECTOR INTL (FAR)

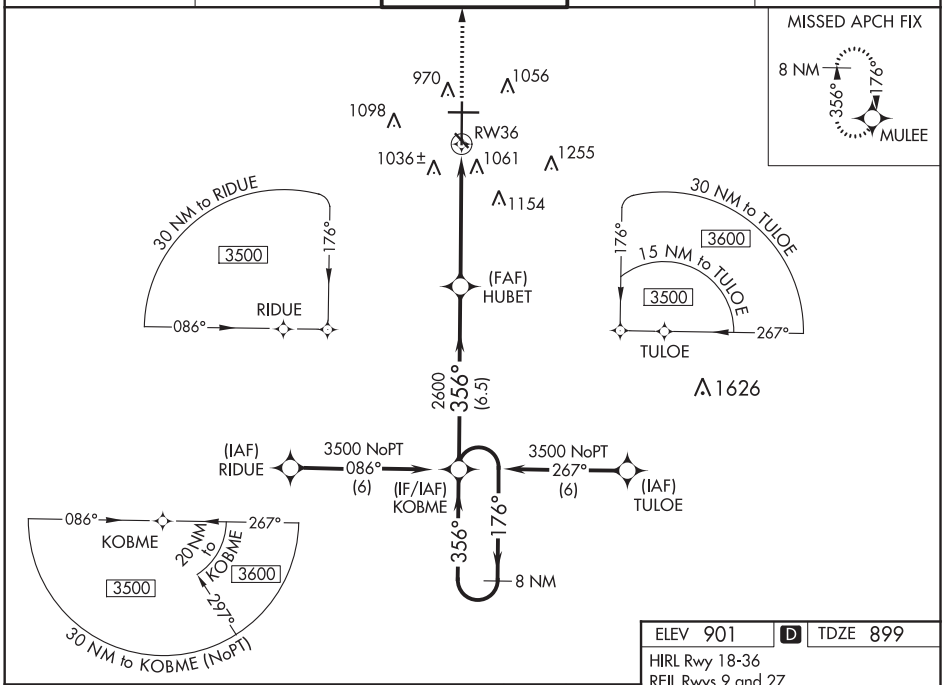
RNP APCH.

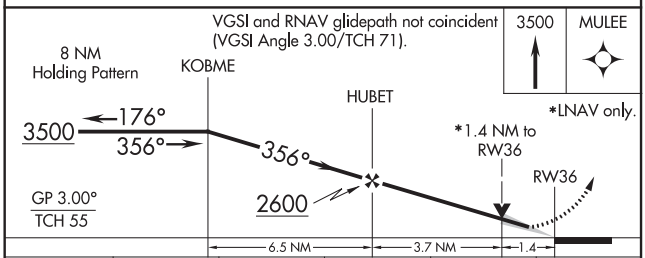
Baro-VNAV NA below -16°C (4°F). For inop MALSR, increase LPV Cat E visibility to RVR 4000, and increase LNAV/VNAV and LNAV Cat E visibility to 1¾ mile.

MALSR

MISSED APPROACH: Climb to 3500 direct MULEE and hold.

ATIS	FARGO APP CON	FARGO TOWER	GND CON	CLNC DEL
124.5 379.2	120.4 377.15	133.8 290.4	121.9 348.6	121.9 348.6

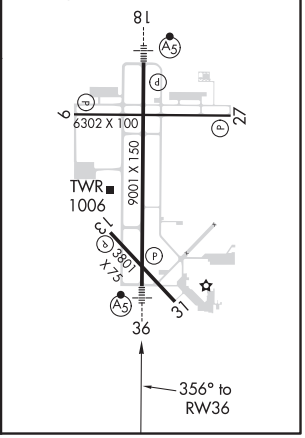




CATEGORY	A	B	C	D	E
LPV DA	1150/24 251 (300-½)				
LNAV/VNAV DA	1360/50 461 (500-1)				1360/60 461 (500-1¼)
LNAV MDA	1420/24 521 (600-½)		1420/50 521 (600-1)	1420/60 521 (600-1¼)	
C CIRCLING	1420-1 519 (600-1)		1520-1¾ 619 (700-1¾)	1620-2¼ 719 (800-2¼)	1620-2½ 719 (800-2½)

ELEV 901 D TDZE 899

HIRL Rwy 18-36
REIL Rwys 9 and 27
MIRL Rwys 9-27 and 13-31



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FARGO, NORTH DAKOTA

AL-144 (FAA)

19283

VOR RWY 36
HECTOR INTL (FAR)

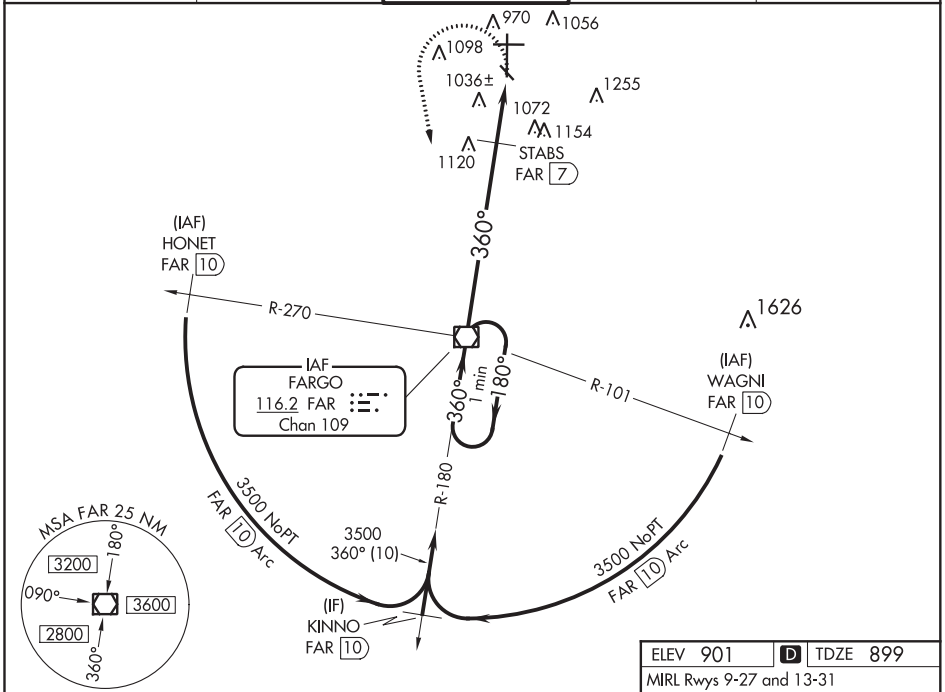
VOR/DME FAR	APP CRS	Rwy ldg	9001
116.2	360°	TDZE	899
Chan 109		Apt Elev	901

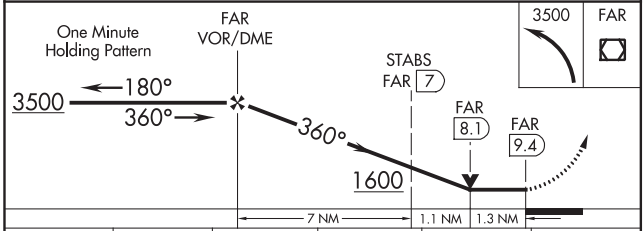
For inop MALSR, increase S-36 Cat E visibility to 2½ miles. STABS Fix Minimums: For inop MALSR, increase S-36 Cat E visibility to 1¾ mile.

MALSR

MISSED APPROACH: Climbing left turn to 3500 direct FAR VOR/DME and hold.

ATIS	FARGO APP CON	FARGO TOWER	GND CON	CLNC DEL
124.5 379.2	120.4 377.15	133.8 290.4	121.9 348.6	121.9 348.6

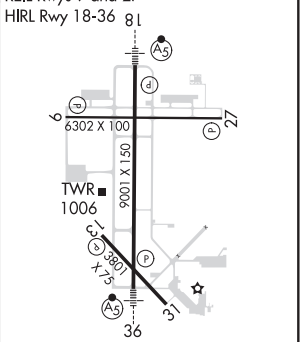




CATEGORY	A	B	C	D	E
S-36	1600/24	701 (700-½)	1600-1½ 701 (700-1½)	1600-1¾ 701 (700-1¾)	1600-2 701 (700-2)
C CIRCLING	1600-1	699 (700-1)	1600-2 699 (700-2)	1620-2¼ 719 (700-2¼)	1620-2½ 719 (700-2½)
STABS FIX MINIMUMS					
S-36	1380/24	481 (500-½)	1380/40 481 (500-¾)	1380/50 481 (500-1)	1380/60 481 (500-1¼)
C CIRCLING	1380-1	479 (500-1)	1520-1¾ 619 (700-1¾)	1620-2¼ 719 (800-2¼)	1620-2½ 719 (800-2½)

ELEV 901 | D | TDZE 899

MIRL Rwys 9-27 and 13-31
REIL Rwys 9 and 27
HIRL Rwy 18-36



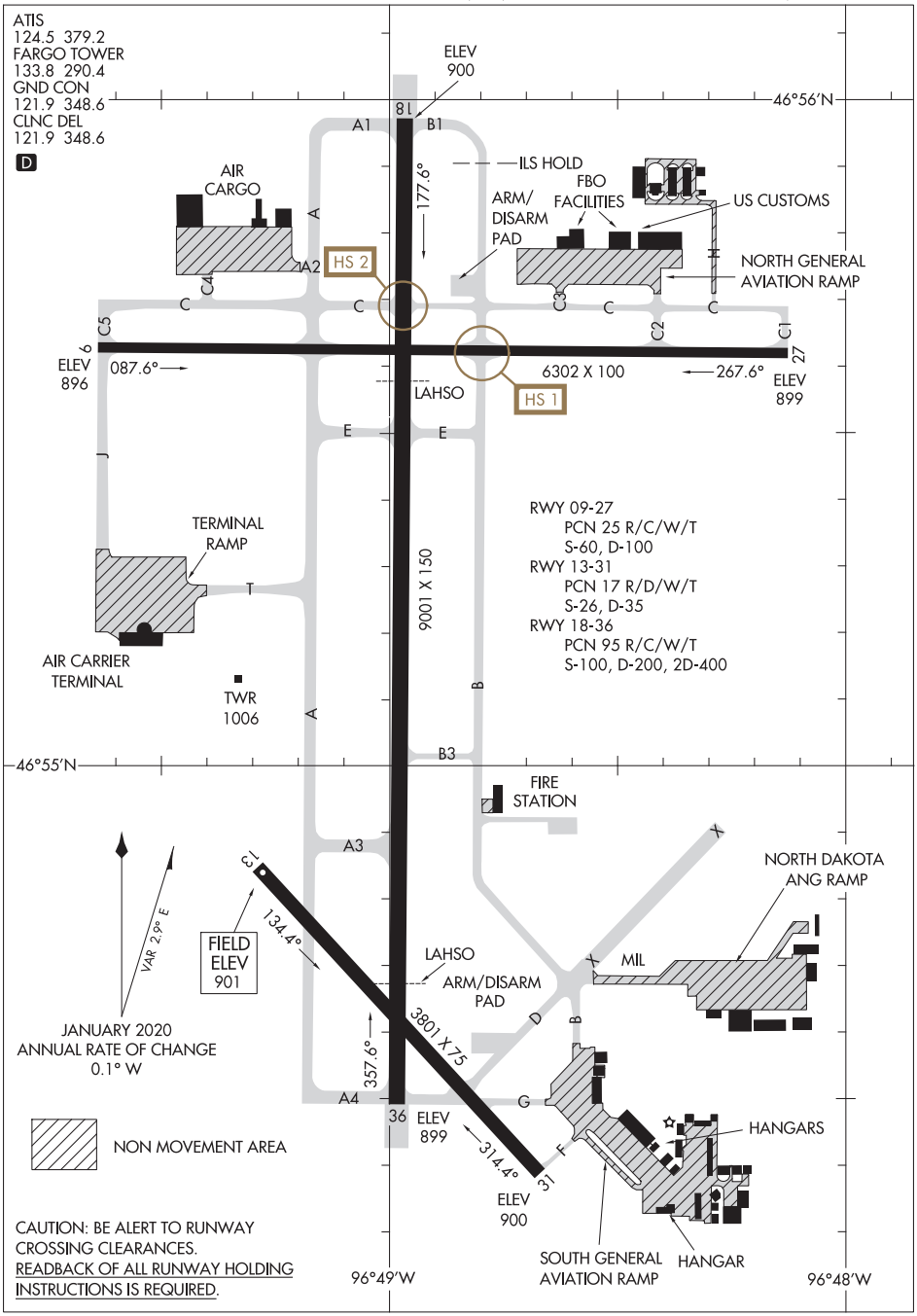
FAF to MAP 9.4 NM					
Knots	60	90	120	150	180
Min:Sec	9:24	6:16	4:42	3:46	3:08

FARGO, NORTH DAKOTA
Orig-E 03JAN19

46°55'N-96°49'W

HECTOR INTL (FAR)
VOR RWY 36

NC-1, 25 FEB 2021 to 22 APR 2021



NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

FARIBAULT, MINNESOTA

AL-5425 (FAA)

19115

RNAV (GPS) RWY 12

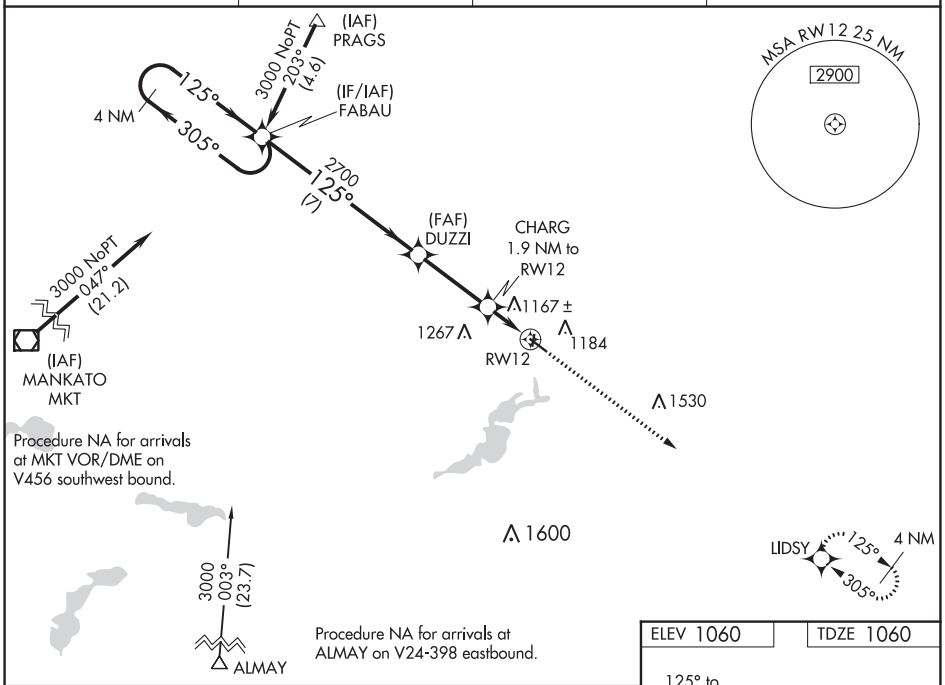
FARIBAULT MUNI-LIZ WALL STROHFUS FIELD (FBL)

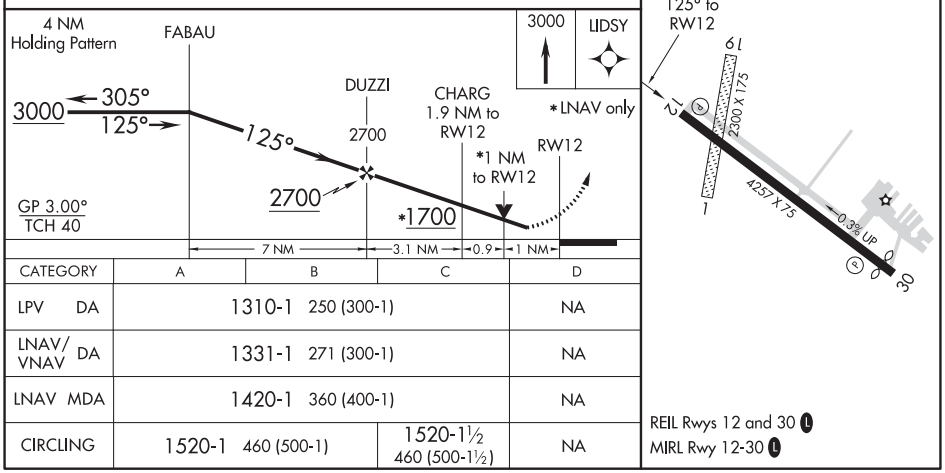
WAAS CH 81932 W12A	APP CRS 125°	Rwy ldg 4257 TDZE 1060 Apt Elev 1060

Baro-VNAV and VDP NA when using Owatonna altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Owatonna altimeter setting and increase all DA 41 feet and all MDA 60 feet; increase LNAV Cat C visibility ⅛ mile. Rwy 12 helicopter visibility reduction below ¾ SM NA. Circling to Rwy 1, 19 NA.

MISSED APPROACH: Climb to 3000 direct LIDSY and hold.

AWOS-3	MINNEAPOLIS APP CON	GCO	UNICOM
111.2	134.7 284.7	121.725	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1310-1 250 (300-1)			NA
LNAV/VNAV DA	1331-1 271 (300-1)			NA
LNAV MDA	1420-1 360 (400-1)			NA
CIRCLING	1520-1 460 (500-1)		1520-1½ 460 (500-1½)	NA

REIL Rwys 12 and 30 L

MIRL Rwy 12-30 L

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 61032 W30A	APP CRS 305°	Rwy ldg 4027 TDZE 1056 Apt Elev 1060

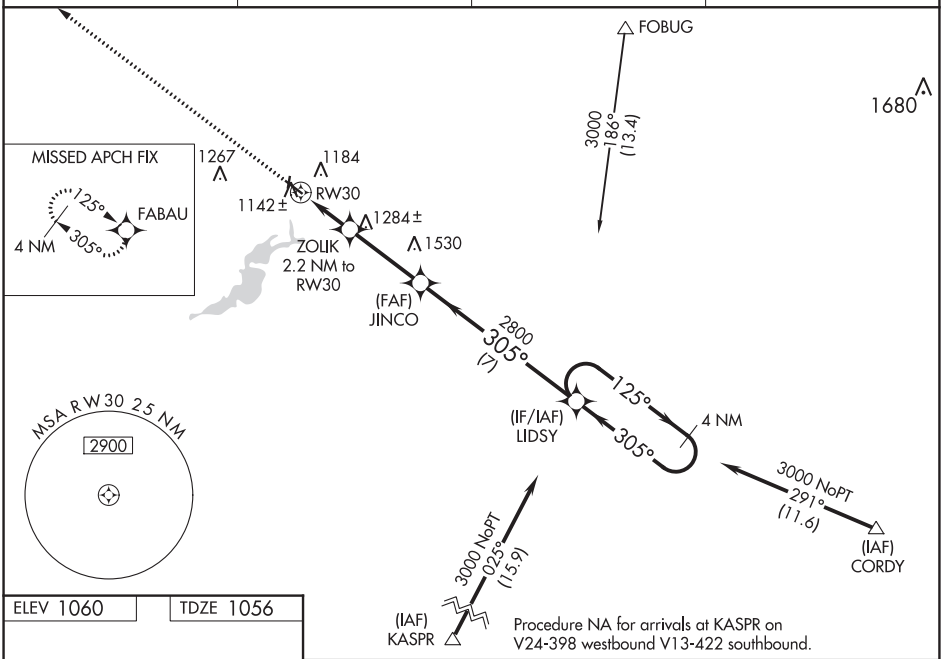
RNAV (GPS) RWY 30

FARIBAULT MUNI-LIZ WALL STROHFUS FIELD (FBL)

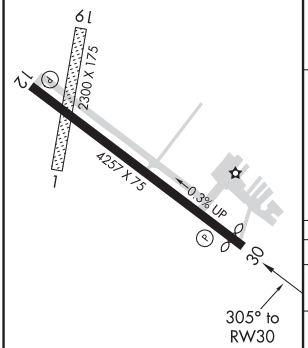
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Owatonna altimeter setting and increase all DA 41 feet and all MDA 60 feet; increase LNAV Cat C visibility ⅛ mile. Baro-VNAV and VDP NA when using Owatonna altimeter setting. Circling NA to Rwys 1and 19.

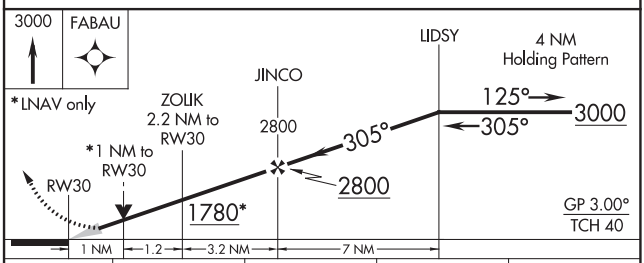
MISSED APPROACH: Climb to 3000 direct FABAU and hold.

AWOS-3	MINNEAPOLIS APP CON	GCO	UNICOM
111.2	134.7 284.7	121.725	122.8 (CTAF) L



ELEV 1060 TDZE 1056





CATEGORY	A	B	C	D
LPV DA	1306-1 250 (300-1)			NA
LNAV/VNAV DA	1306-1 250 (300-1)			NA
LNAV MDA	1400-1 344 (400-1)			NA
CIRCLING	1520-1 460 (500-1)		1520-1½ 460 (500-1½)	NA

REIL Rwys 12 and 30 L
MIRL Rwy 12-30 L

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NC-1, 25 FEB 2021 to 22 APR 2021

FARIBAULT, MINNESOTA AL-5425 (FAA) 20310

VOR/DME FOW 111.2 Chan 49	APP CRS 017°	Rwy ldg N/A TDZE N/A Apt Elev 1060

VOR-A

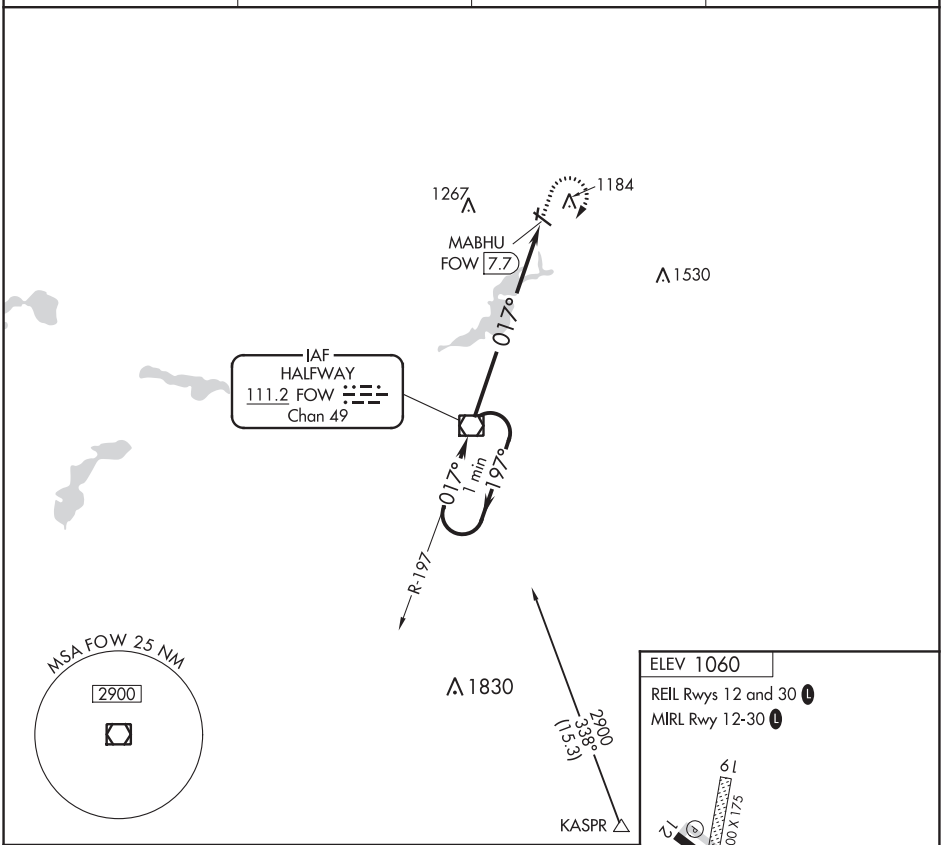
FARIBAULT MUNI-LIZ WALL STROHFUS FIELD (FBL)

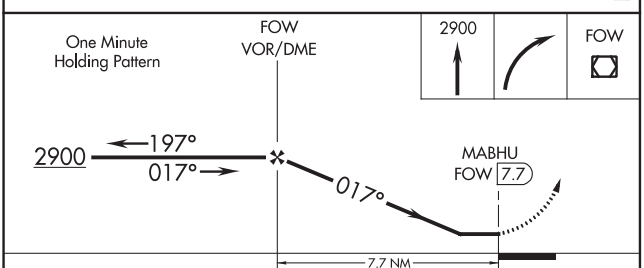
NA

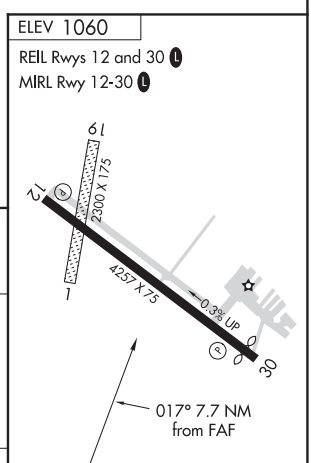
When local altimeter setting not received, use Owatonna altimeter setting and increase all MDA 60 feet, and Cat C visibility ¼ mile. Circling to Rwy 1, 19 NA.

MISSED APPROACH: Climb to 2900 then right turn direct FOW VOR/DME and hold.

AWOS-3	MINNEAPOLIS APP CON	GCO	UNICOM
111.2	134.7 284.7	121.725	122.8 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	1680-1 620 (700-1)		1680-1¾ 620 (700-1¾)	NA

FAF to MAP 7.7 NM					
Knots	60	90	120	150	180
Min:Sec	7:42	5:08	3:51	3:05	2:34

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NC-1, 25 FEB 2021 to 22 APR 2021

LOC I-FFM	APP CRS	Rwy ldg	5639
111.5	308°	TDZE	1182
		Apt Elev	1183

ILS or LOC RWY 31

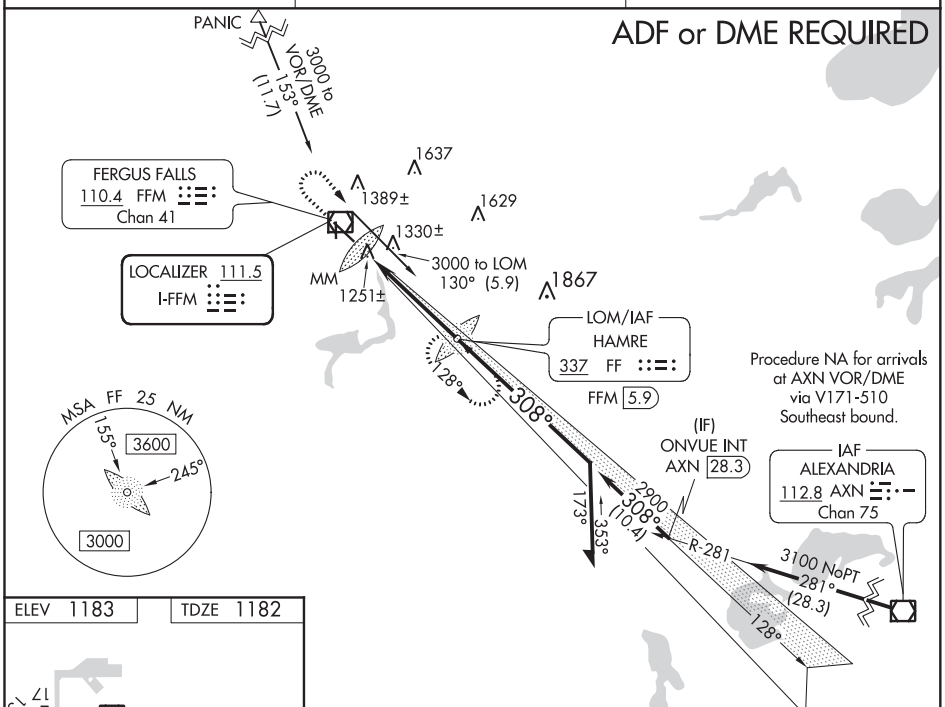
FERGUS FALLS MUNI-EINAR MICKELSON FIELD (FFM)

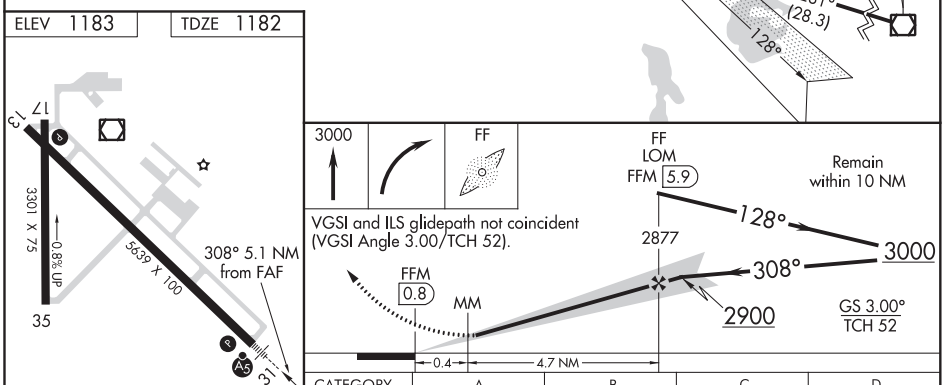
When local altimeter setting not received, use Wheaton altimeter setting and increase all DA 102 feet and all MDA 120 feet, increase S-LOC 31 and Circling Cat C and D visibility ½ mile. For inoperative MALSR, increase S-LOC 31 Cat D visibility ¼ mile. For inoperative MALSR when using Wheaton altimeter setting, increase S-ILS 31 all Cats visibility ½ mile. GS unusable for coupled approaches below 1400.

MALSR

MISSED APPROACH: Climb to 3000 then right turn direct HAMRE LOM/FFM 5.9 DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
110.4	126.1 269.2	122.8 (CTAF) L





REIL Rwys 13 and 35 L
MIRL Rwys 13-31 and 17-35 L

FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

CATEGORY	A	B	C	D
S-ILS 31	1382-½ 200 (200-½)			
S-LOC 31	1520-½ 338 (400-½)			1520-¾ 338 (400-¾)
CIRCLING	1640-1 457 (500-1)	1740-1 557 (600-1)	1740-1½ 557 (600-1½)	1880-2¼ 697 (700-2¼)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

FERGUS FALLS, MINNESOTA | AL-5380 (FAA) | 20086

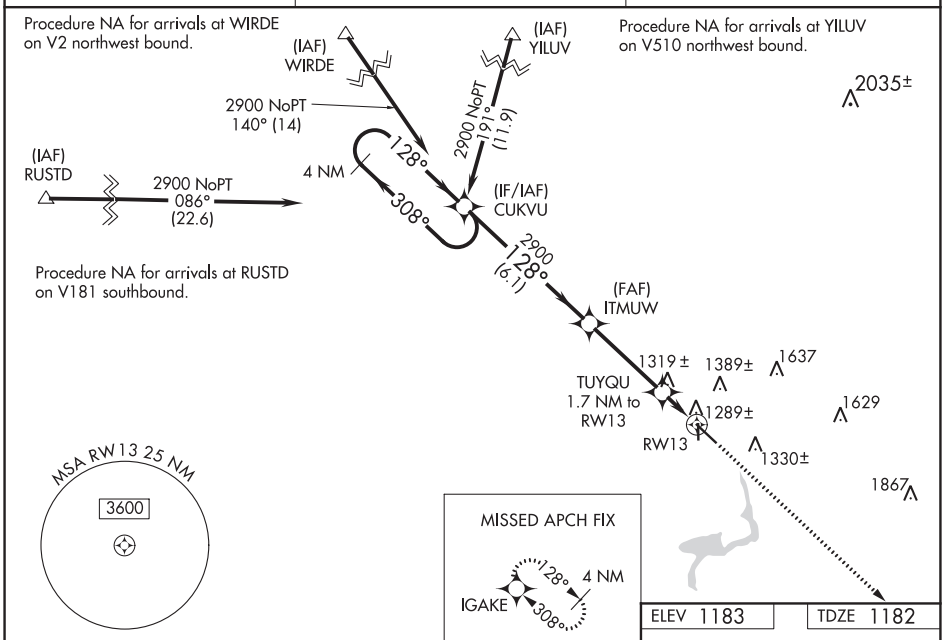
WAAS CH 65920 W13A	APP CRS 128°	Rwy ldg 5639 TDZE 1182 Apt Elev 1183

RNAV (GPS) RWY 13
FERGUS FALLS MUNI-EINAR MICKELSON FIELD (FFM)

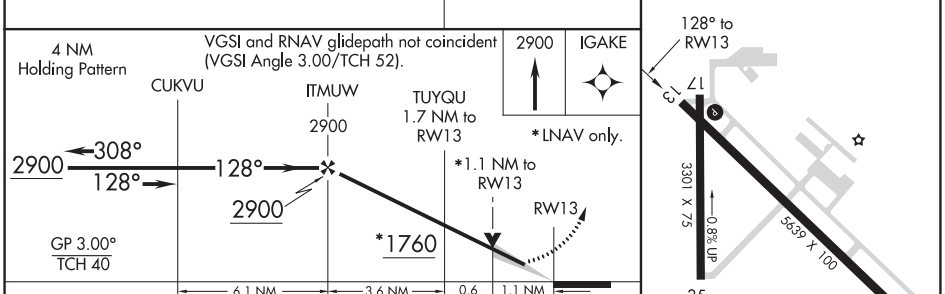
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 36°C (96°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Wahpeton altimeter setting, and increase all DA 74 feet, increase all MDA 80 feet. Increase LPV ⅛ all Cats, and LNAV/VNAV visibility ¼ mile all Cats; increase LNAV Cat C and D and Circling Cat C and D visibility ¼ mile. Baro-VNAV and VDP NA when using Wahpeton altimeter setting.

MISSED APPROACH: Climb to 2900 direct IGAKE and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
110.4	126.1 269.2	122.8 (CTAF) L



ELEV 1183 | TDZE 1182



CATEGORY	A	B	C	D
LPV DA	1382-¾ 200 (200-¾)			
LNAV/VNAV DA	1470-⅞ 288 (300-⅞)			
LNAV MDA	1580-1 398 (400-1)		1580-1⅛ 398 (400-1⅛)	
CIRCLING	1640-1 457 (500-1)	1740-1 557 (600-1)	1740-1½ 557 (600-1½)	1880-2¼ 697 (700-2¼)

REIL Rwys 13 and 35 L
MIRL Rwys 13-31 and 17-35 L

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 42614 W31A	APP CRS 308°	Rwy ldg 5639 TDZE 1182 Apt Elev 1183

RNAV (GPS) RWY 31
FERGUS FALLS MUNI-EINAR MICKELSON FIELD (FFM)

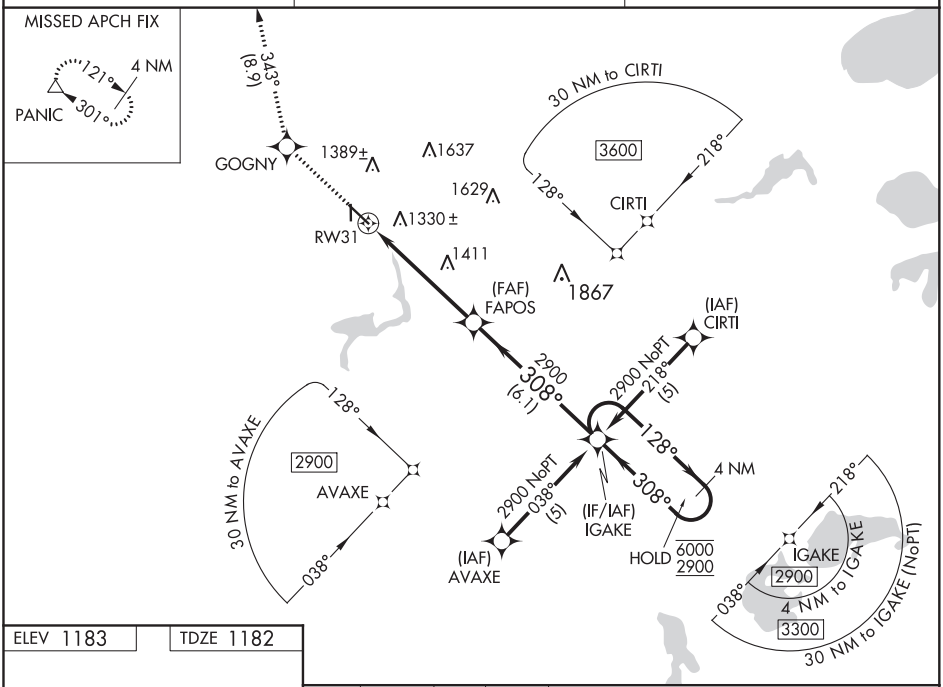
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. For inop ALS, increase LNAV/VNAV all Cats visibility to 1 SM and LNAV Cat D visibility to 1⅜ SM.

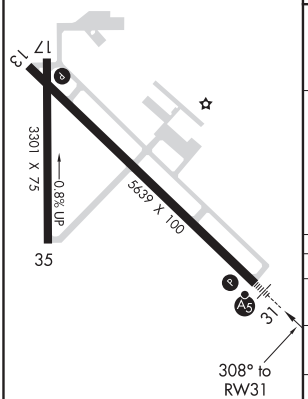
MALSR

MISSED APPROACH: Climb to 3000 direct GOGNY and on track 343° to PANIC and hold.

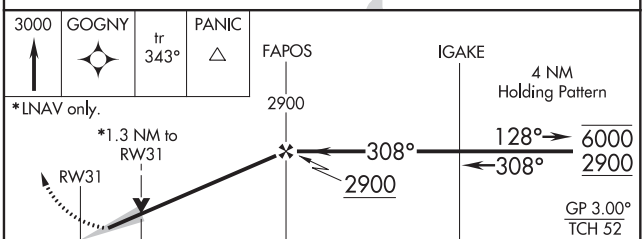
AWOS-3	MINNEAPOLIS CENTER	UNICOM
110.4	126.1 269.2	122.8 (CTAF) L



ELEV 1183 TDZE 1182



REIL Rwys 13 and 35 L
MIRL Rwys 13-31 and 17-35 L



CATEGORY	A	B	C	D
LPV DA	1382-½ 200 (200-½)			
LNAV/VNAV DA	1545-¾ 363 (400-¾)			
LNAV MDA	1640-½ 458 (500-½)		1640-⅞ 458 (500-⅞)	1640-1 458 (500-1)
CIRCLING	1640-1 457 (500-1)	1740-1 557 (600-1)	1740-1½ 557 (600-1½)	1880-2¼ 697 (700-2¼)

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

APP CRS	Rwy ldg	3301
354°	TDZE	1182
	Apt Elev	1183

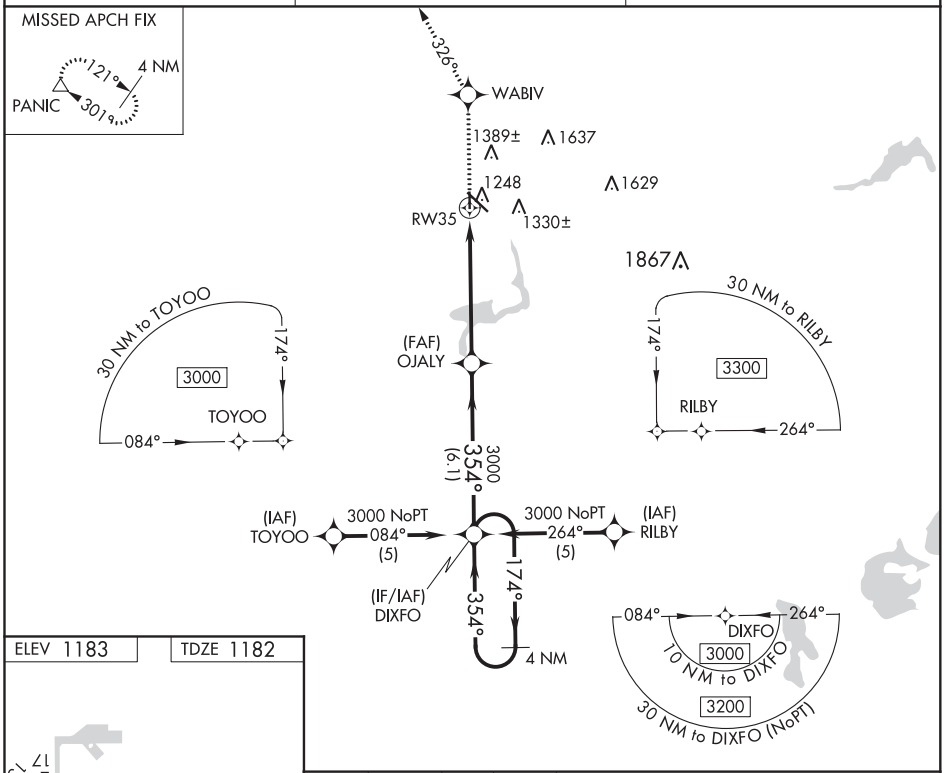
RNAV (GPS) RWY 35

FERGUS FALLS MUNI-EINAR MICKELSON FIELD (FFM)

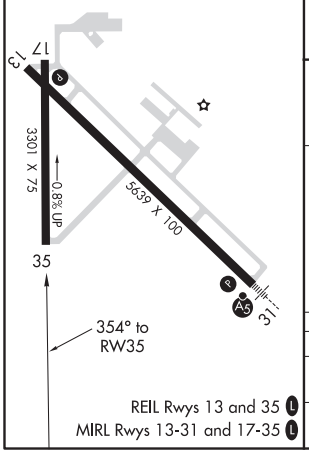
DME/DME RNP-0.3 NA. When local altimeter setting not received, use Wheaton altimeter setting and increase all MDA 120 feet and LNAV Cat C visibility ¼ mile, Circling Cat C ½ mile. VDP NA when using Wheaton altimeter setting.

MISSED APPROACH: Climb to 3000 direct WABIV and via track 326° to PANIC and hold.

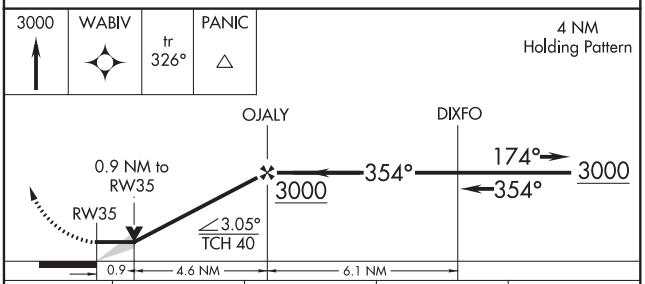
AWOS-3	MINNEAPOLIS CENTER	UNICOM
110.4	126.1 269.2	122.8 (CTAF) L



ELEV 1183 TDZE 1182



REIL Rwys 13 and 35 L
MIRL Rwys 13-31 and 17-35 L



CATEGORY	A	B	C	D
LNAV MDA	1500-1 318 (400-1)			NA
CIRCLING	1640-1 457 (500-1)	1740-1 557 (600-1)	1740-1½ 557 (600-1½)	NA

NC-1, 25 FEB 2021 to 22 APR 2021

VOR/DME FFM	APP CRS	Rwy ldg	5639
110.4	115°	TDZE	1182
Chan 41		Apt Elev	1183

VOR RWY 13

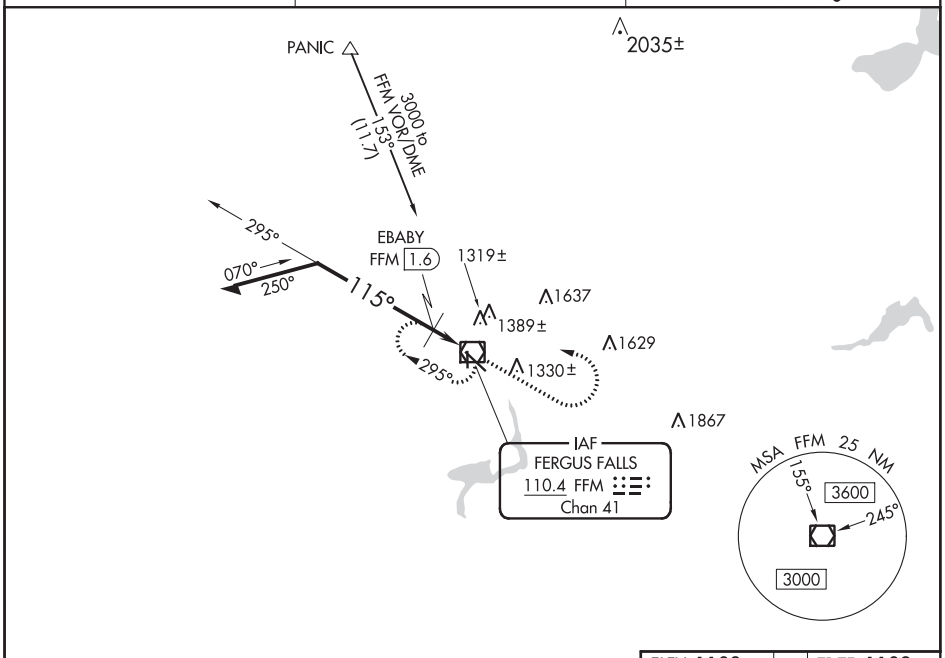
FERGUS FALLS MUNI-EINAR MICKELSON FIELD (FFM)

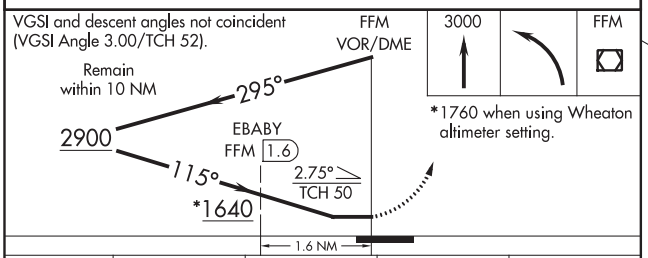
T NA

Cat D straight-in minima NA when using Wheaton altimeter setting. When local altimeter setting not received, use Wheaton altimeter setting and increase all MDA 120 feet, and S-13 Cat C and D visibility ¼ mile, Circling Cat C and D visibility ½ mile, increase EBABY fix minimums S-13 and Circling Cat C and D visibility ½ mile.

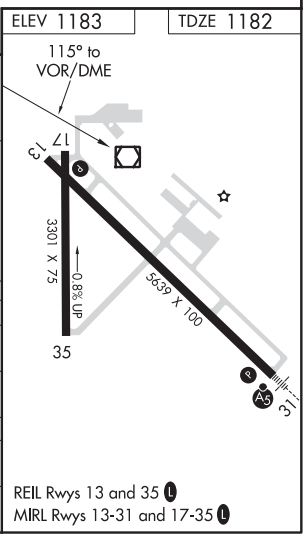
MISSED APPROACH: Climb to 3000 then left turn direct FFM VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
110.4	126.1 269.2	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-13	1640-1 458 (500-1)		1640-1¼ 458 (500-1¼)	1640-1½ 458 (500-1½)
CIRCLING	1640-1 457 (500-1)	1740-1 557 (600-1)	1740-1½ 557 (600-1½)	1880-2¼ 697 (700-2¼)
EBABY FIX MINIMUMS				
S-13	1580-1 398 (400-1)			1580-1¼ 398 (400-1¼)
CIRCLING	1640-1 457 (500-1)	1740-1 557 (600-1)	1740-1½ 557 (600-1½)	1880-2¼ 697 (700-2¼)



REIL Rwys 13 and 35 L
MIRL Rwys 13-31 and 17-35 L

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

FOSSTON, MINNESOTA

AL-6645 (FAA)

21056

WAAS CH 82226 W16A	APP CRS 164°	Rwy ldg 3502 TDZE 1277 Apt Elev 1279

RNAV (GPS) RWY 16

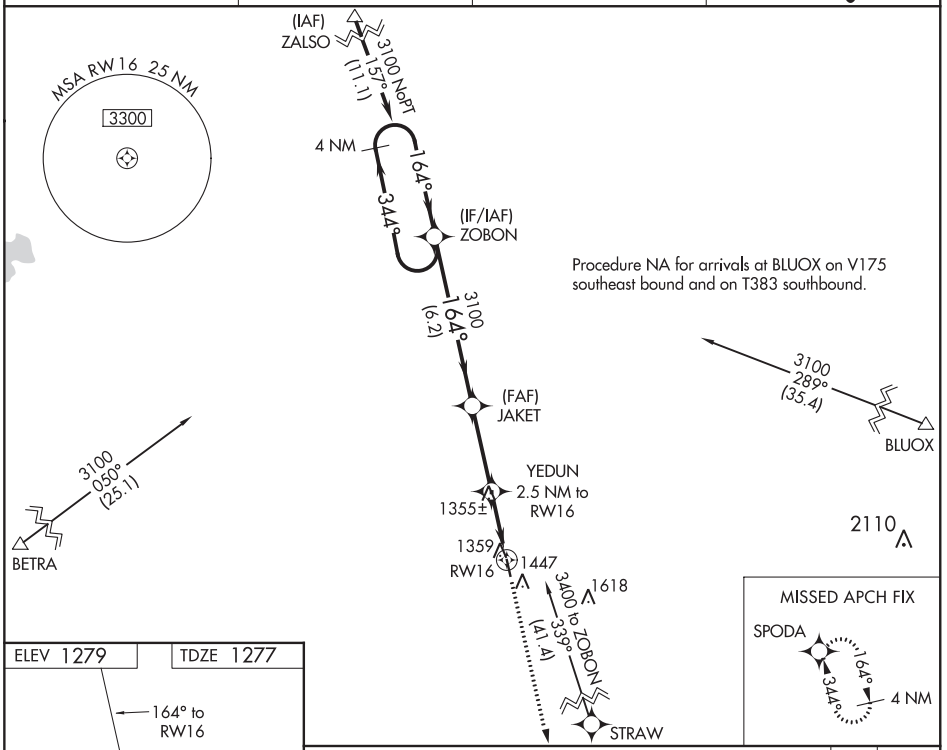
FOSSTON MUNI-ANDERSON FIELD (FSE)

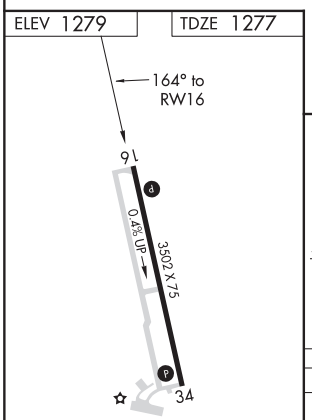
RNP APCH.

VDP NA with Thief River Falls altimeter setting. When local altimeter setting not received, use Thief River Falls altimeter setting and increase all MDA 100 feet and increase LP and LNAV Cat C visibility ⅜ SM, Circling Cat C visibility ½ SM .

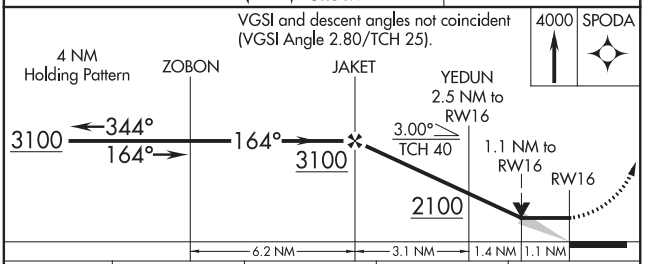
MISSED APPROACH: Climb to 4000 direct SPODA and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
118.35	134.75 251.1	121.725	122.9 L





MIRL Rwy 16-34 L
REIL Rwys 16 and 34 L



CATEGORY	A	B	C	D
LP MDA	1620-1 343 (400-1)			NA
LNAV MDA	1640-1 363 (400-1)			NA
CIRCLING	1860-1 581 (600-1)		1860-1½ 581 (600-1½)	NA

FOSSTON, MINNESOTA
Orig-D 08NOV18

47°36'N-95°46'W

FOSSTON MUNI-ANDERSON FIELD (FSE)
RNAV (GPS) RWY 16

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 90326 W34A	APP CRS 344°	Rwy ldg 3502 TDZE 1279 Apt Elev 1279

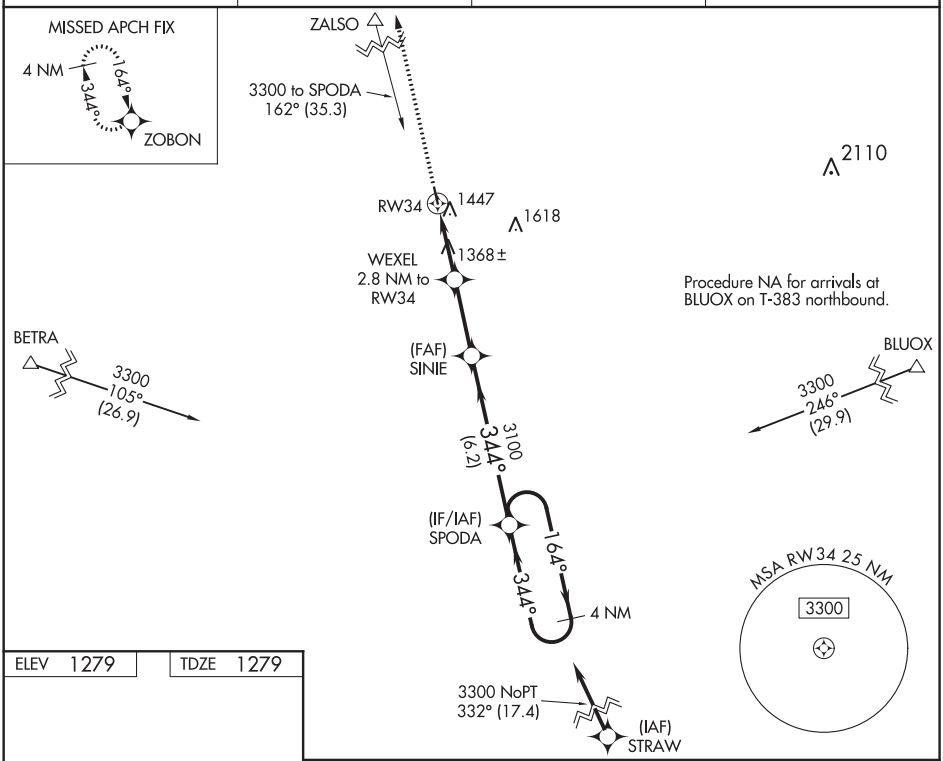
RNAV (GPS) RWY 34
FOSSTON MUNI-ANDERSON FIELD (FSE)

RNP APCH.

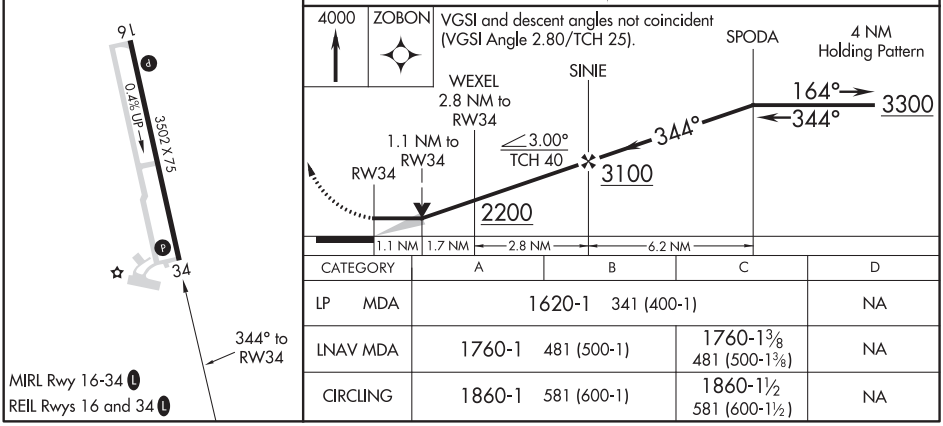
VDP NA when using Thief River Falls altimeter setting. When local altimeter setting not received, use Thief River Falls altimeter setting and increase all MDA 100 feet and increase LP and LNAV Cat C visibility ⅜ SM, and increase Circling Cat C visibility ½ SM.

MISSED APPROACH: Climb to 4000 direct ZOBON and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
118.35	134.75 251.1	121.725	122.9 L



ELEV 1279	TDZE 1279



CATEGORY	A	B	C	D
LP MDA	1620-1 341 (400-1)			NA
LNAV MDA	1760-1 481 (500-1)		1760-1⅜ 481 (500-1⅜)	NA
CIRCLING	1860-1 581 (600-1)		1860-1½ 581 (600-1½)	NA

MIRL Rwy 16-34 L
REIL Rwys 16 and 34 L

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GARRISON, NORTH DAKOTA | AL-9383 (FAA) | 19339

WAAS CH 66040 W13A	APP CRS 131°	Rwy ldg 3699 TDZE 1937 Apt Elev 1937

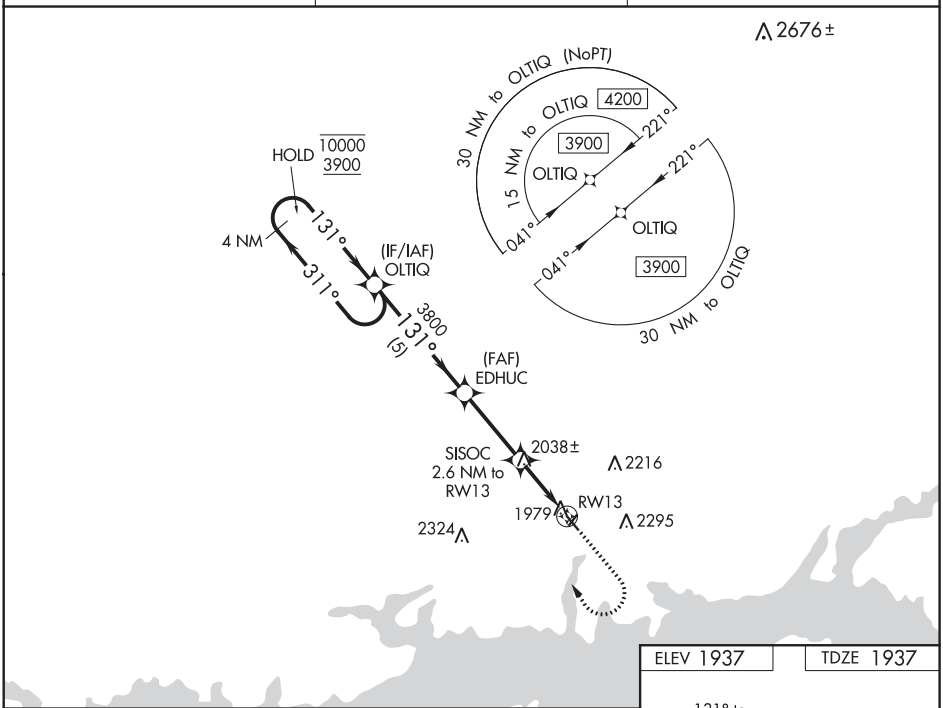
RNAV (GPS) RWY 13
GARRISON MUNI (DØ5)

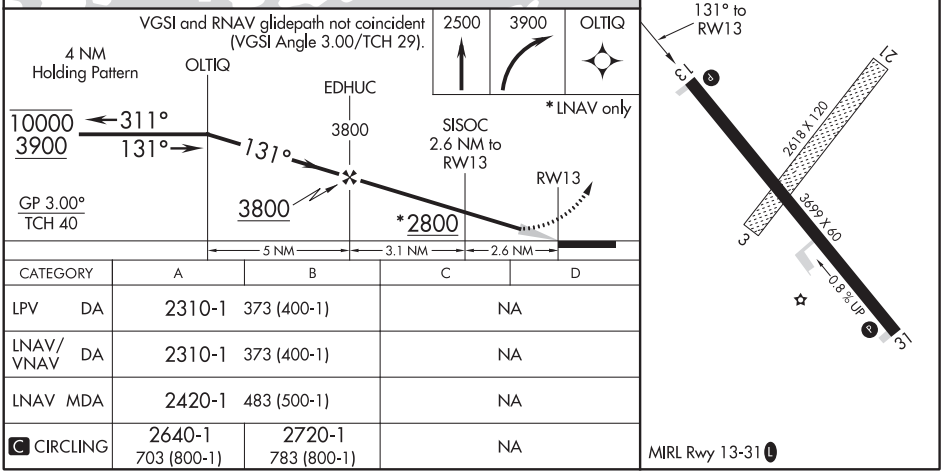
RNP APCH

T A NA — Circling NA to Rwys 3 and 21. Baro-VNAV NA. Use Minot Intl altimeter setting.

MISSED APPROACH: Climb to 2500 then climbing right turn to 3900 direct OLTIQ and hold.

MOT ASOS	MINNEAPOLIS CENTER	CTAF
118.725	127.6 279.6	122.9 L





CATEGORY	A	B	C	D
LPV DA	2310-1 373 (400-1)		NA	
LNAV/VNAV DA	2310-1 373 (400-1)		NA	
LNAV MDA	2420-1 483 (500-1)		NA	
C CIRCLING	2640-1 703 (800-1)	2720-1 783 (800-1)	NA	

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 97740 W31A	APP CRS 311°	Rwy ldg 3699 TDZE 1927 Apt Elev 1937

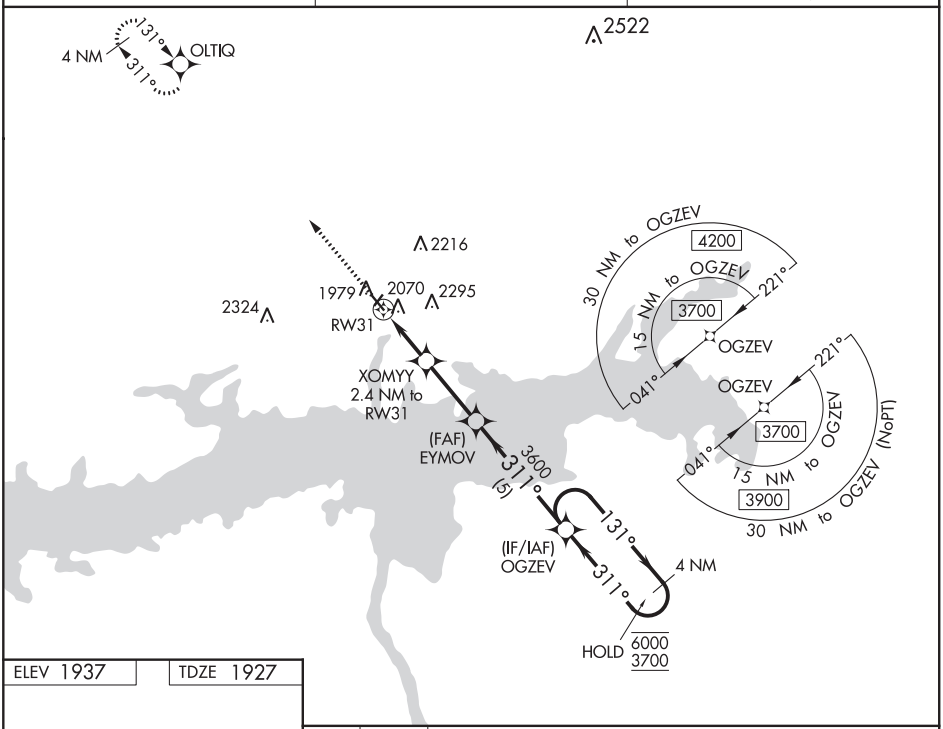
RNAV (GPS) RWY 31
GARRISON MUNI (DØ5)

RNP APCH

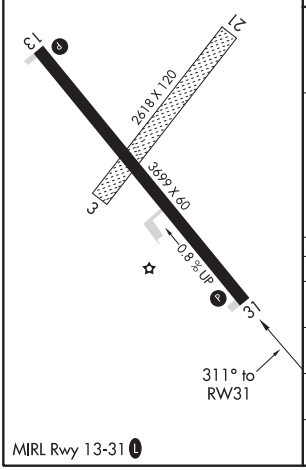
Circling NA to Rwys 3 and 21. Baro-VNAV NA. Use Minot Intl altimeter setting.

MISSED APPROACH: Climb to 3900 direct OLTIQ and hold.

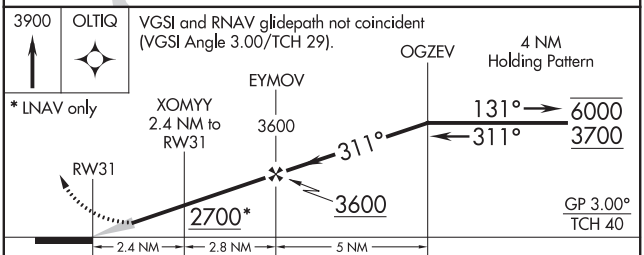
MOT ASOS	MINNEAPOLIS CENTER	CTAF
118.725	127.6 279.6	122.9 L



ELEV 1937 TDZE 1927



MIRL Rwy 13-31 L



CATEGORY		A	B	C	D
LPV	DA	2250-1	323 (400-1)	NA	
LNAV/VNAV	DA	2335-1¼	408 (400-1¼)	NA	
LNAV	MDA	2460-1	533 (600-1)	NA	
C CIRCLING		2640-1 703 (800-1)	2720-1 783 (800-1)	NA	

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WAAS CH 93921 W13A	APP CRS 135°	Rwy ldg 4400 TDZE 2061 Apt Elev 2062

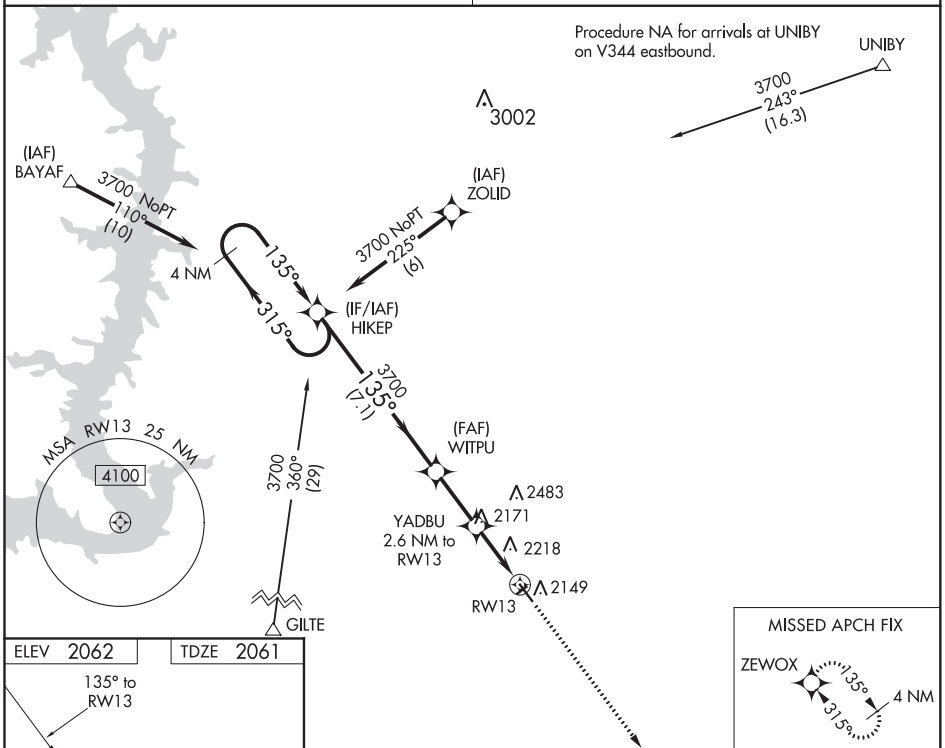
RNAV (GPS) RWY 13
GETTYSBURG MUNI (ØD8)

T
A NA

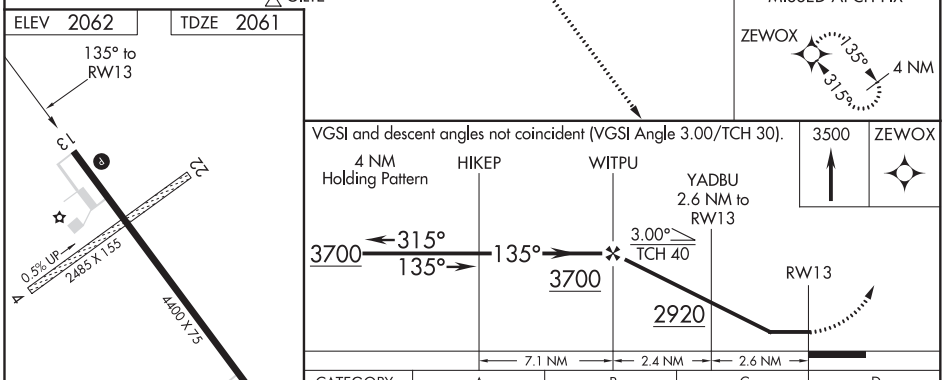
DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA. Procedure NA at night. Use Pierre altimeter setting; when not received, use Mobridge altimeter setting and increase all MDA 20 feet. Increase LP, LNAV and Circling Cat C visibility ⅛ mile.

MISSED APPROACH: Climb to 3500 direct ZEWOX and hold.

MINNEAPOLIS CENTER	UNICOM
125.1 269.1	122.8 (CTAF) L



NC-1, 25 FEB 2021 to 22 APR 2021



CATEGORY	A	B	C	D
LP MDA	2560-1 499 (500-1)		2560-1⅜ 499 (500-1⅜)	NA
LNAV MDA	2620-1 559 (600-1)		2620-1⅝ 559 (600-1⅝)	NA
C CIRCLING	2660-1 598 (600-1)		2660-1⅝ 598 (600-1⅝)	NA

MIRL Rwy 13-31 L

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 56422 W31A	APP CRS 315°	Rwy ldg 4400 TDZE 2061 Apt Elev 2062

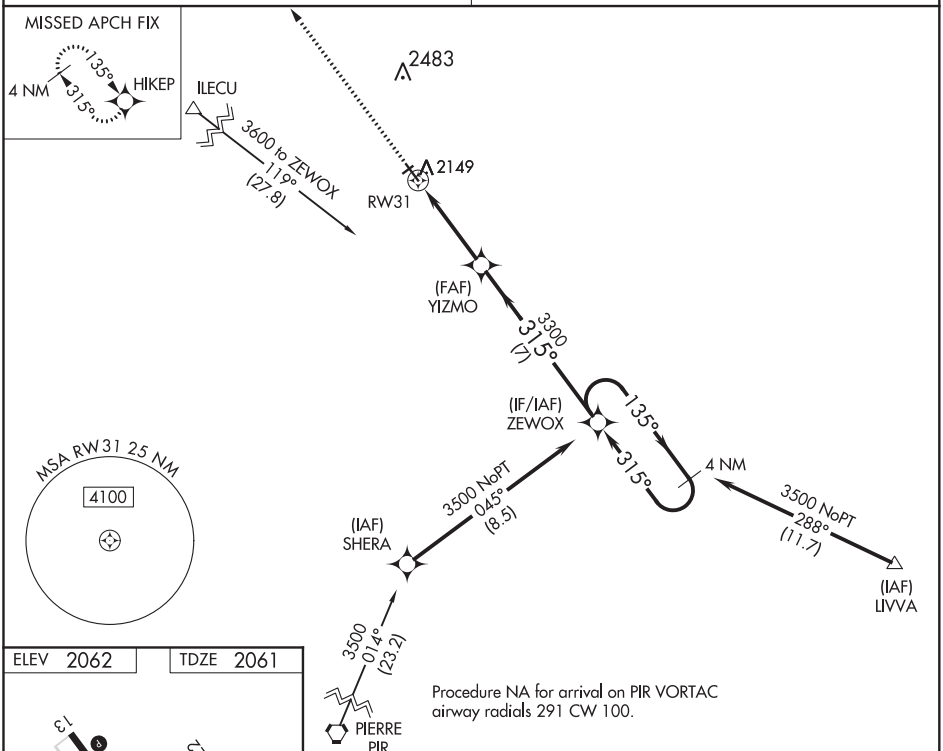
RNAV (GPS) RWY 31
GETTYSBURG MUNI (ØD8)

T A NA

DME/DME RNP-0.3 NA. Procedure NA at night. Use Pierre altimeter setting; when not received, use Mobridge altimeter setting and increase all MDA 20 feet. Increase LP Cat C visibility ⅛ mile and Circling Cat C visibility ¼ mile.

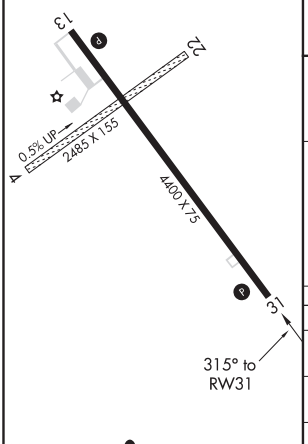
MISSED APPROACH: Climb to 3700 direct HIKEP and hold.

MINNEAPOLIS CENTER	UNICOM
125.1 269.1	122.8 (CTAF) L

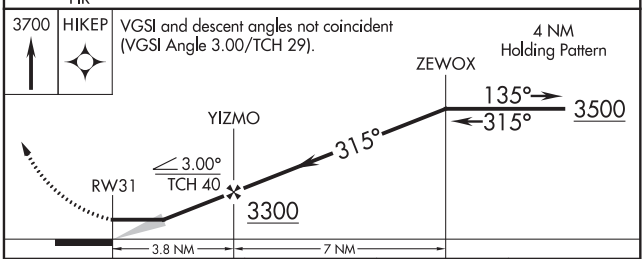


Procedure NA for arrival on PIR VORTAC airway radials 291 CW 100.

ELEV 2062	TDZE 2061



MIRL Rwy 13-31 L



CATEGORY	A	B	C	D
LP MDA	2460-1 399 (400-1)		2460-1⅛ 399 (400-1⅛)	NA
LNAV MDA	2540-1 479 (500-1)		2540-1⅜ 479 (500-1⅜)	NA
C CIRCLING	2660-1 598 (600-1)		2660-1½ 598 (600-1½)	NA

NC-1, 25 FEB 2021 to 22 APR 2021
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GLEN ULLIN, NORTH DAKOTA AL-11438 (FAA) 18312

RNAV (GPS) RWY 29
GLEN ULLIN RGNL (D57)

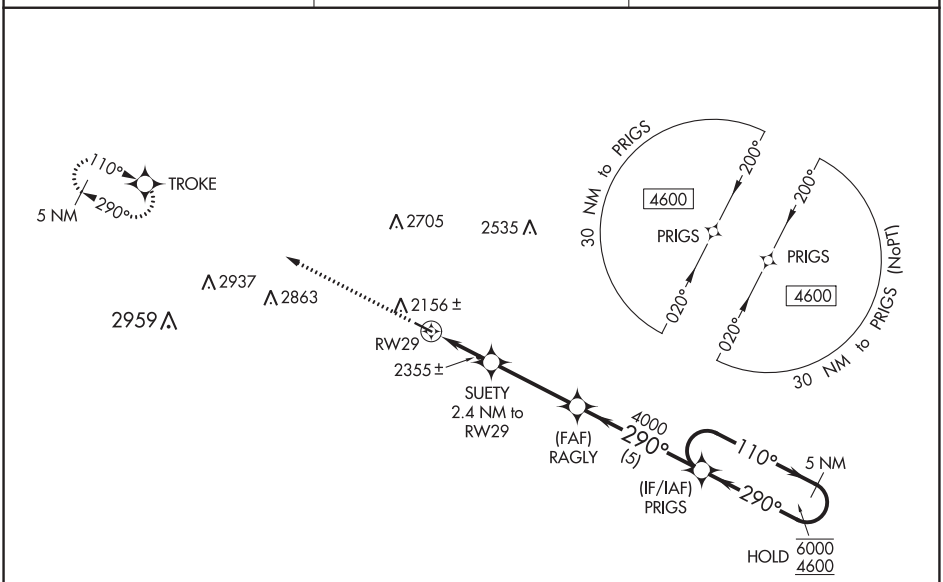
WAAS CH 45642 W29A	APP CRS 290°	Rwy ldg 3799 TDZE 2091 Apt Elev 2091

RNP APCH.

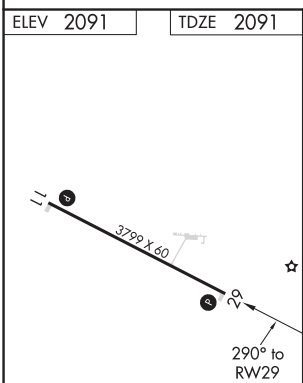
T Rwy 29 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C or above 54°C.

MISSED APPROACH: Climb to 4600 direct TROKE and hold.

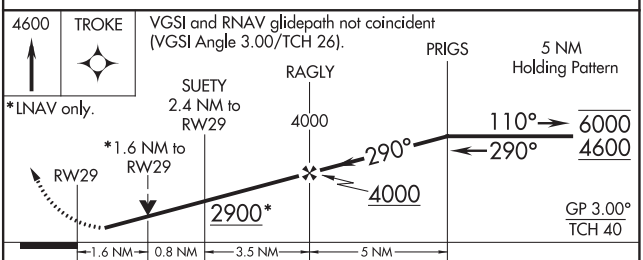
AWOS-3P	MINNEAPOLIS CENTER	CTAF
118.75	124.25 236.825	122.9 L



ELEV 2091 TDZE 2091



MIRL Rwy 11-29 L



CATEGORY	A	B	C	D
LPV DA	2341-1 250 (300-1)			NA
LNAV/VNAV DA	2561-1⅜ 470 (500-1⅜)			NA
LNAV MDA	2620-1 529 (600-1)		2620-1½ 529 (600-1½)	NA
C CIRCLING	2640-1 549 (600-1)	2680-1 589 (600-1)	2800-2 709 (800-2)	NA

NC-1, 25 FEB 2021 to 22 APR 2021

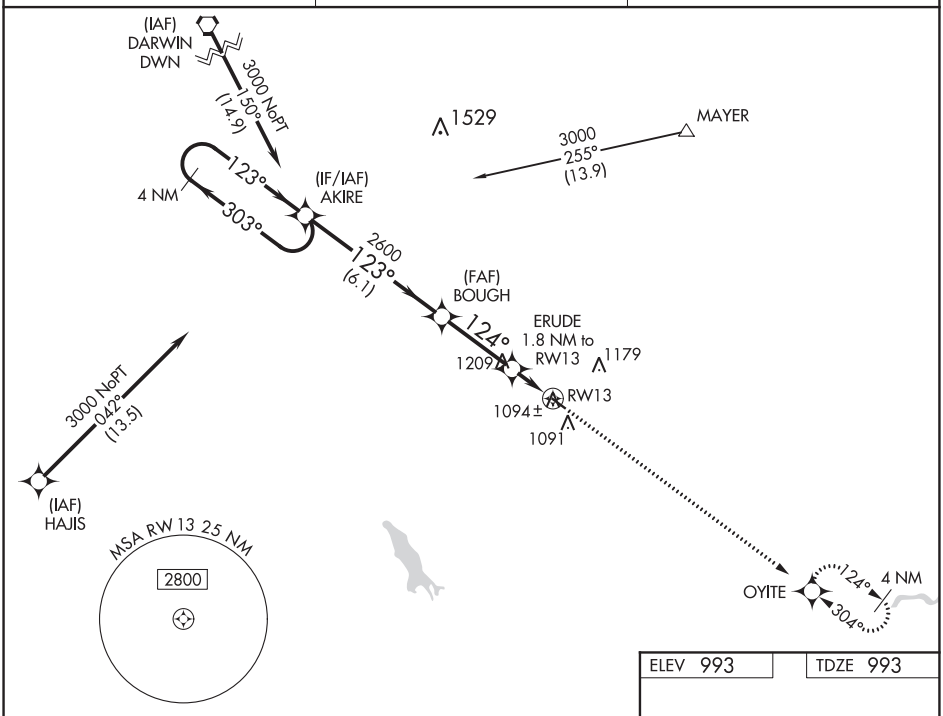
WAAS CH 99437 W13A	APP CRS 124°	Rwy ldg 3300 TDZE 993 Apt Elev 993

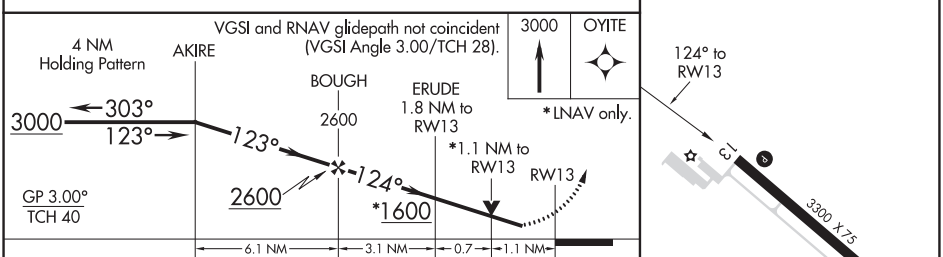
RNAV (GPS) RWY 13
GLENCOE MUNI (GYL)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Rwy 13 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3000 direct OYITE and hold.

AWOS-3	MINNEAPOLIS APP CON	UNICOM
119.625	134.7 284.7	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1270-1 277 (300-1)		NA	
LNAV/VNAV DA	1246-1 253 (300-1)		NA	
LNAV MDA	1360-1 367 (400-1)		NA	
C CIRCLING	1420-1 427 (500-1)	1480-1 487 (500-1)	NA	

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

NC-1, 25 FEB 2021 to 22 APR 2021

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GLENCOE, MINNESOTA | AL-9354 (FAA) | 21056

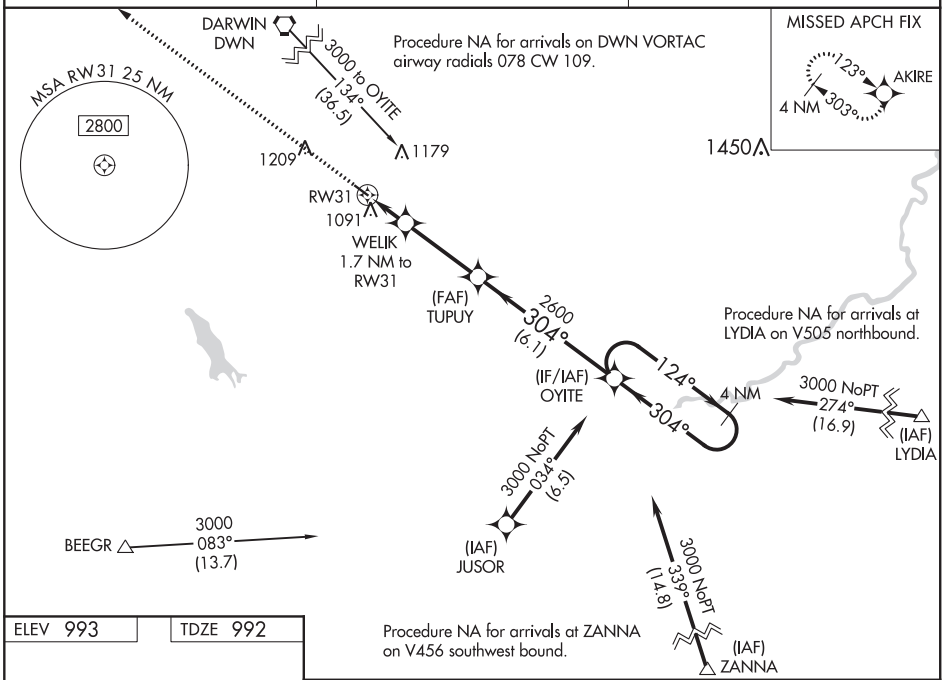
RNAV (GPS) RWY 31
GLENCOE MUNI (GYL)

WAAS CH 48937 W31A	APP CRS 304°	Rwy ldg 3300 / TDZE 992 / Apt Elev 993

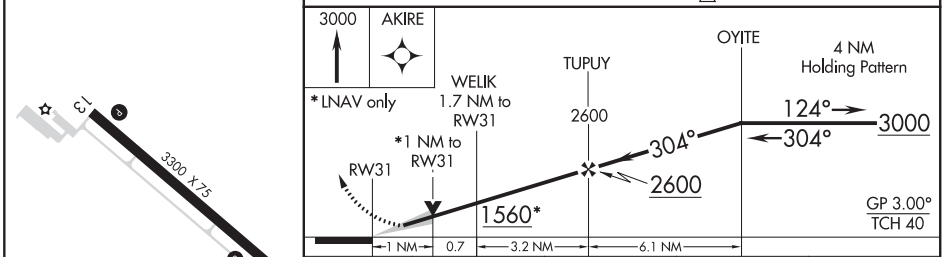
Baro-VNAV NA when using Hutchinson altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). DME DME/RNP-0.3 NA. VDP NA with Hutchinson altimeter setting. When local altimeter setting not received, use Hutchinson altimeter setting and increase all DA 43 feet and all MDA 60 feet, increase LPV and LNAV/VNAV Cat A/B visibility ⅛ mile.

MISSED APPROACH: Climb to 3000 direct AKIRE and hold.

AWOS-3	MINNEAPOLIS APP CON	UNICOM
119.625	134.7 284.7	122.8 (CTAF) L



ELEV 993 | TDZE 992



CATEGORY		A	B	C	D
LPV	DA	1242-⅞ 250 (300-⅞)		NA	
LNAV/VNAV	DA	1253-⅞ 261 (300-⅞)		NA	
LNAV	MDA	1360-1 368 (400-1)		NA	
C CIRCLING		1420-1 427 (500-1)	1480-1 487 (500-1)	NA	

REIL Rwys 13 and 31 L

MIRL Rwy 13-31 L

NC-1, 25 FEB 2021 to 22 APR 2021
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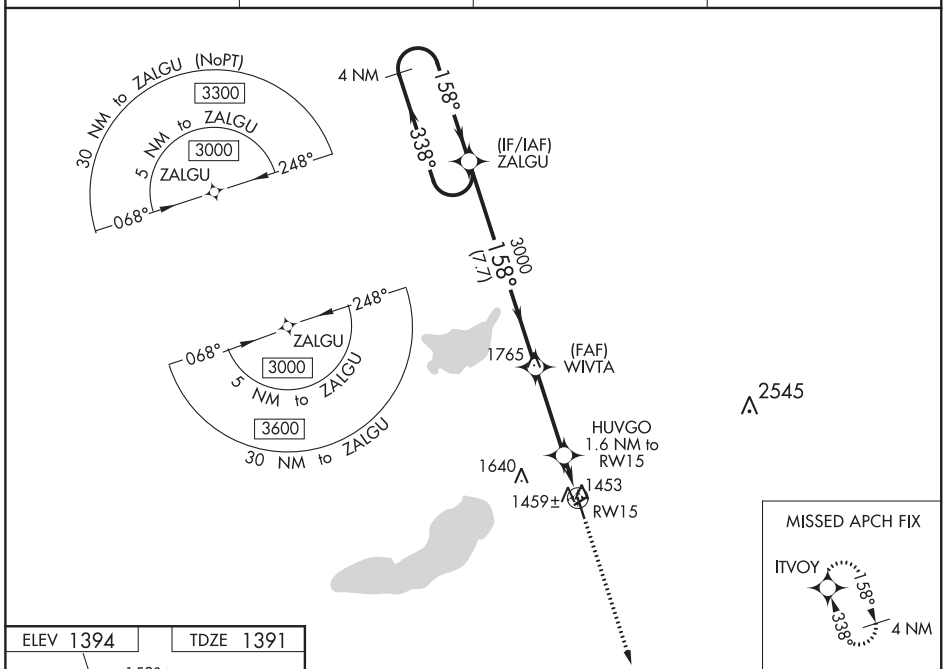
WAAS CH 70333 W15A	APP CRS 158°	Rwy ldg 4500 TDZE 1391 Apt Elev 1394

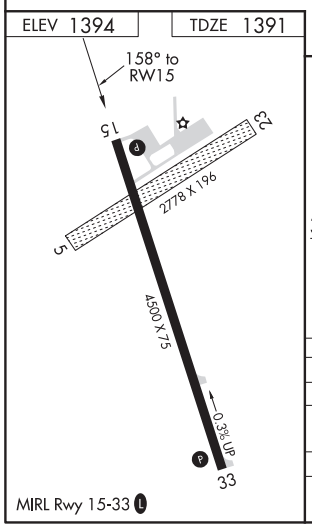
RNAV (GPS) RWY 15
GLENWOOD MUNI (GHW)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (-2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use Alexandria altimeter setting and increase DA 36 feet and all MDA 40 feet. Baro-VNAV and VDP NA when using Alexandria altimeter setting. Circling NA to Rwys 5/23.

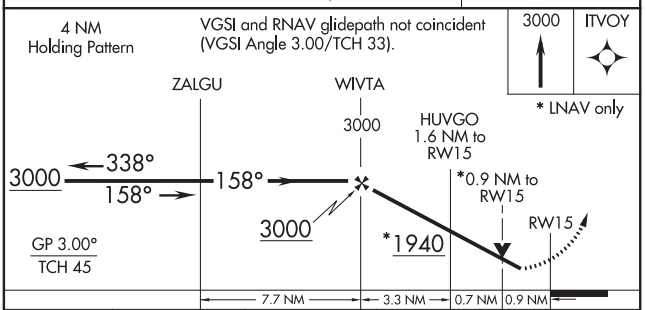
MISSED APPROACH: Climb to 3000 direct ITVOY and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
118.925	126.1 269.2	121.725	122.9 L





MIRL Rwy 15-33 L



CATEGORY	A	B	C	D
LPV DA	1641-1 250 (300-1)			NA
LNAV/VNAV DA	1641-1 250 (300-1)			NA
LNAV MDA	1720-1 329 (400-1)			NA
CIRCLING	1840-1 446 (500-1)	1860-1 466 (500-1)	1860-1½ 466 (500-1½)	NA

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GLENWOOD, MINNESOTA

AL-6556 (FAA)

19171

RNAV (GPS) RWY 33

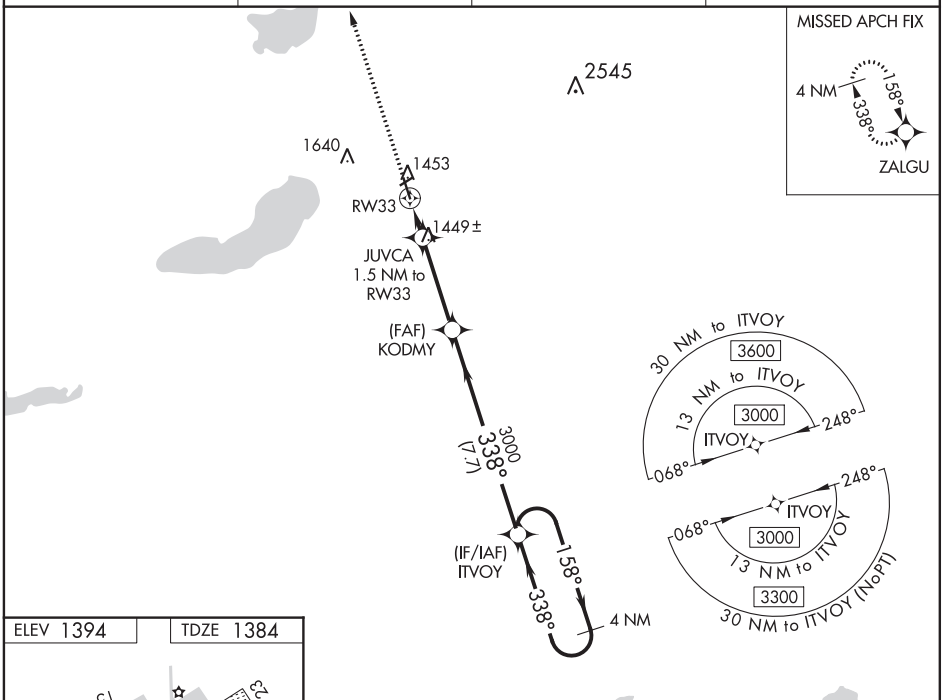
GLENWOOD MUNI (GHW)

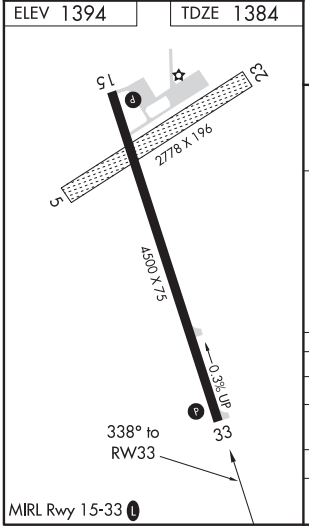
WAAS CH 77931 W33A	APP CRS 338°	Rwy ldg 4500 TDZE 1384 Apt Elev 1394

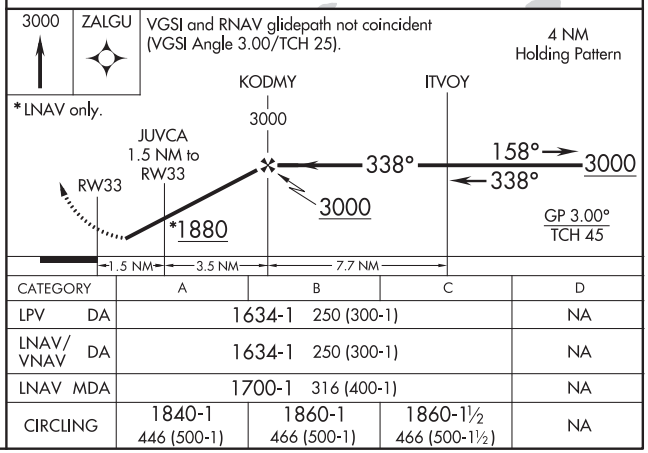
Baro-VNAV NA when using Alexandria altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use Alexandria altimeter setting and increase all DA 36 feet and all MDA 40 feet. Circling NA to Rwy 5/23.

MISSED APPROACH: Climb to 3000 direct ZALGU and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
118.925	126.1 269.2	121.725	122.9 L







CATEGORY		A	B	C	D
LPV	DA	1634-1 250 (300-1)			NA
LNAV/VNAV	DA	1634-1 250 (300-1)			NA
LNAV	MDA	1700-1 316 (400-1)			NA
CIRCLING		1840-1 446 (500-1)	1860-1 466 (500-1)	1860-1½ 466 (500-1½)	NA

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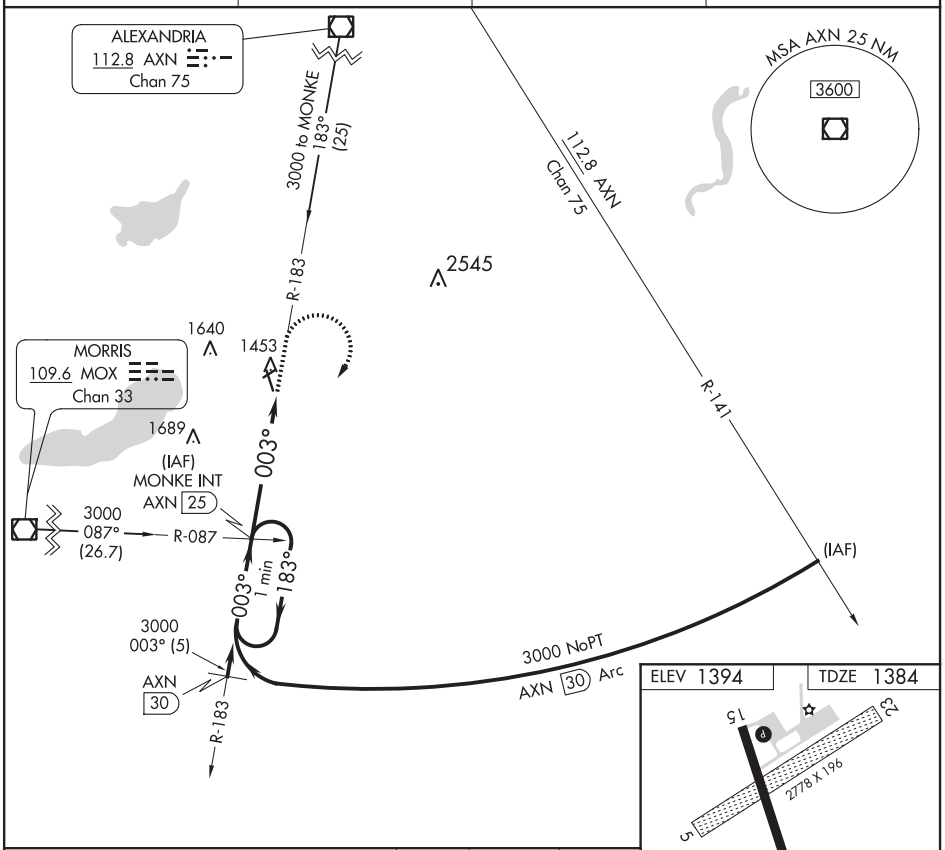
VOR/DME AXN 112.8 Chan 75	APP CRS 003°	Rwy ldg 4500 TDZE 1384 Apt Elev 1394

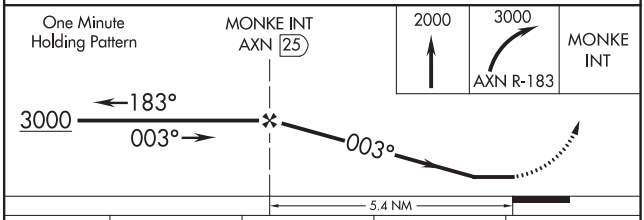
VOR RWY 33
GLENWOOD MUNI (GHW)

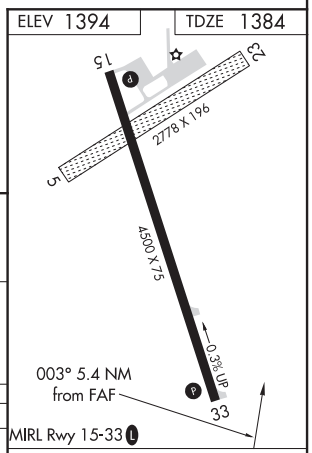
Circling to Rwy 5/23 NA. When local altimeter setting not received, use Alexandria altimeter setting and increase all MDA 40 feet and S-33 Cat C visibility ¼ mile. Rwy 33 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 2000, then climbing right turn to 3000 via AXN R-183 to MONKE INT/25 DME and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
118.925	126.1 269.2	121.725	122.9 L







CATEGORY	A	B	C	D
S-33	1880-1	496 (500-1)	1880-1¼ 496 (500-1¼)	NA
CIRCLING	1880-1	486 (500-1)	1880-1½ 486 (500-1½)	NA

FAF to MAP 5.4 NM					
Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

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GRAFTON, NORTH DAKOTA — AL-9022 (FAA) — 19171

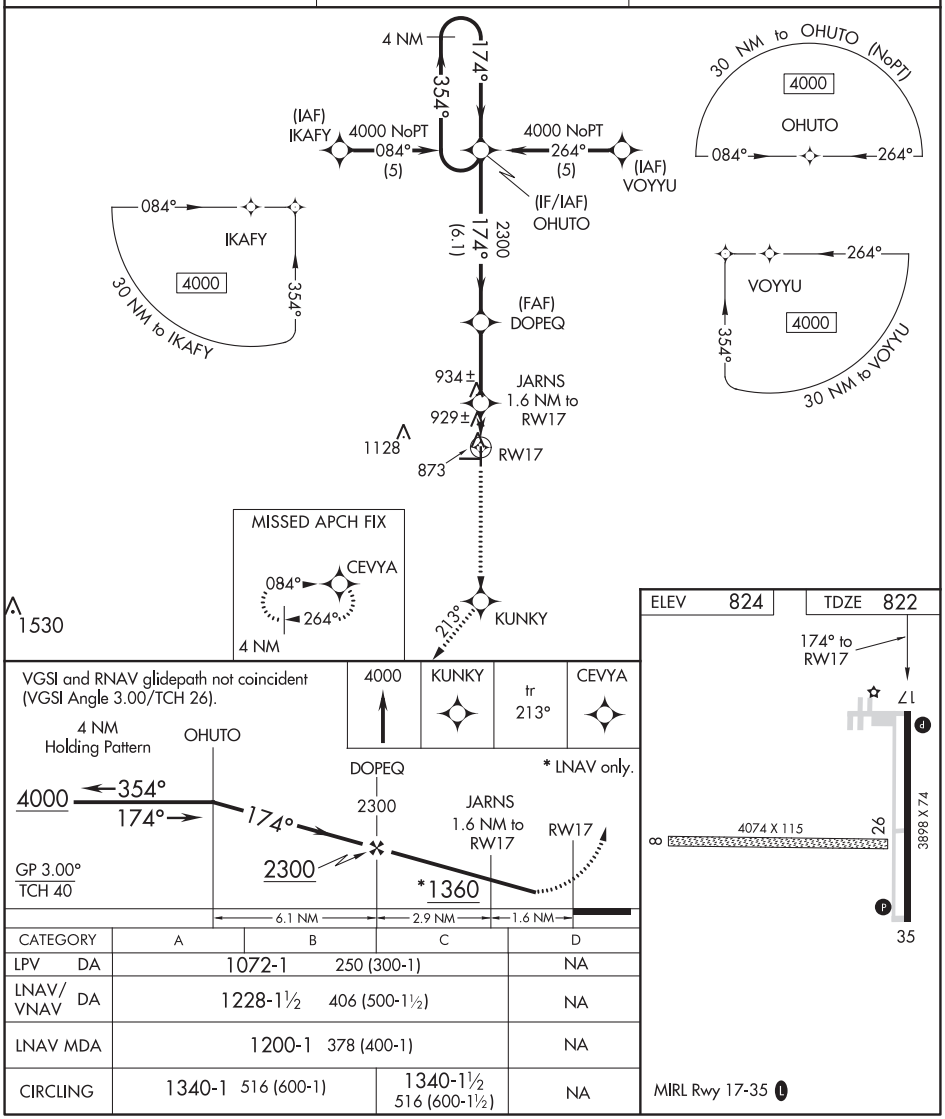
WAAS CH 53518 W17A	APP CRS 174°	Rwy ldg 3898 TDZE 822 Apt Elev 824

RNAV (GPS) RWY 17
HUTSON FIELD (GAF)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Grand Forks Intl altimeter setting and increase all DA 69 feet and all MDA 80 feet. Increase LPV and LNAV/VNAV all Cats and LNAV Cat C visibility ¼ mile. Baro-VNAV NA when using Grand Forks Intl altimeter setting.

MISSED APPROACH: Climb to 4000 direct KUNKY and on track 213° to CEVYA and hold, continue climb-in-hold to 4000.

AWOS-3	GRAND FORKS APP CON	UNICOM
118.625	118.1 318.1	122.8 (CTAF) L



CATEGORY	A	B	C	D
LPV DA	1072-1 250 (300-1)			NA
LNAV/VNAV DA	1228-1½ 406 (500-1½)			NA
LNAV MDA	1200-1 378 (400-1)			NA
CIRCLING	1340-1 516 (600-1)		1340-1½ 516 (600-1½)	NA

MIRL Rwy 17-35 L

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GRAFTON, NORTH DAKOTA — HUTSON FIELD (GAF)

Orig 29JUL10 — 48° 24′N-97° 22′W

RNAV (GPS) RWY 17

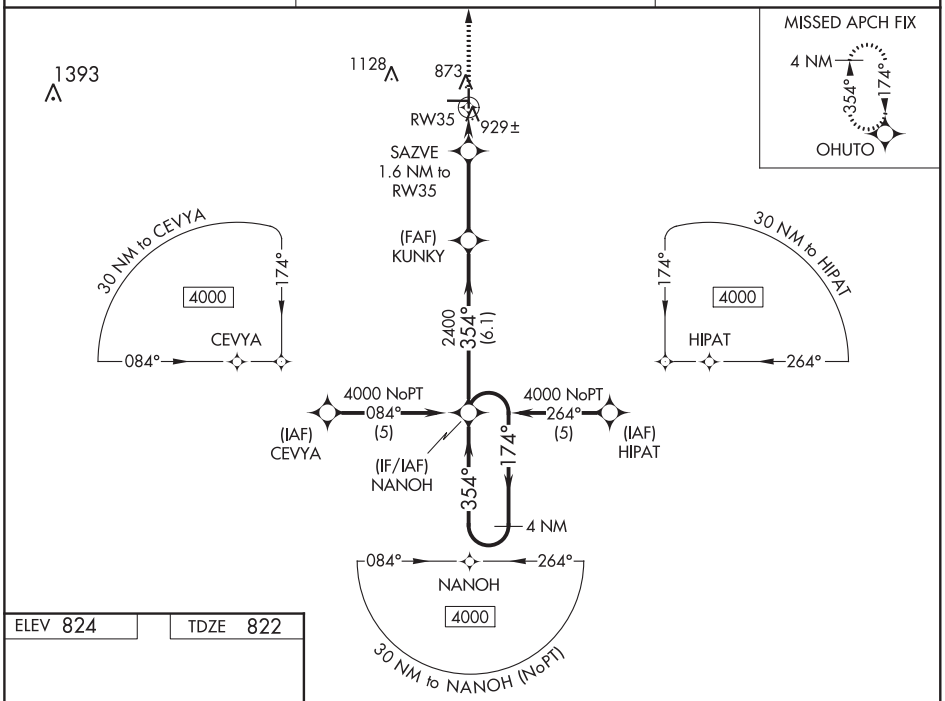
RNAV (GPS) RWY 35
HUTSON FIELD (GAF)

WAAS CH 82518 W35A	APP CRS 354°	Rwy ldg 3898	TDZE 822	Apt Elev 824

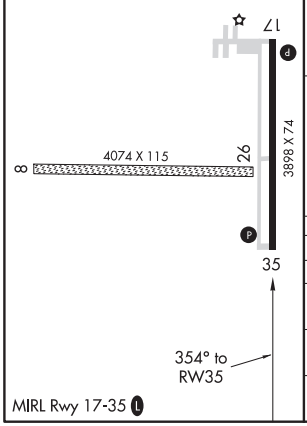
T A NA For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Grand Forks Intl altimeter setting and increase all DA 69 feet and all MDA 80 feet. Increase LPV and LNAV/VNAV all Cats and LNAV Cat C visibility ¼ mile. Baro-VNAV NA when using Grand Forks Intl altimeter setting.

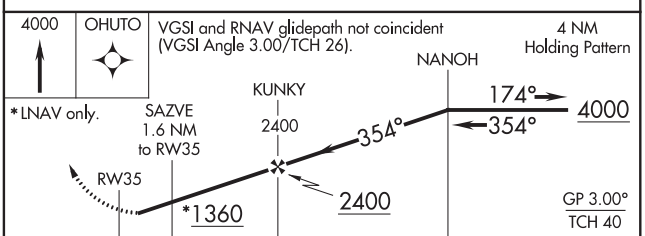
MISSED APPROACH: Climb to 4000 direct OHUTO and hold, continue climb-in-hold to 4000.

AWOS-3	GRAND FORKS APP CON	UNICOM
118.625	118.1 318.1	122.8 (CTAF) L



ELEV 824 TDZE 822





CATEGORY	A	B	C	D
LPV DA	1072-1 250 (300-1)			NA
LNAV/VNAV DA	1199-1¼ 377 (400-1¼)			NA
LNAV MDA	1180-1 358 (400-1)			NA
CIRCLING	1340-1 516 (600-1)		1340-1½ 516 (600-1½)	NA

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GRAND FORKS, NORTH DAKOTA AL-5187 (FAA) 20086

LOC/DME I-GFK	APP CRS	Rwy ldg	7351
109.1	354°	TDZE	845
Chan 28		Apt Elev	845

ILS or LOC RWY 35L
GRAND FORKS INTL (GFK)

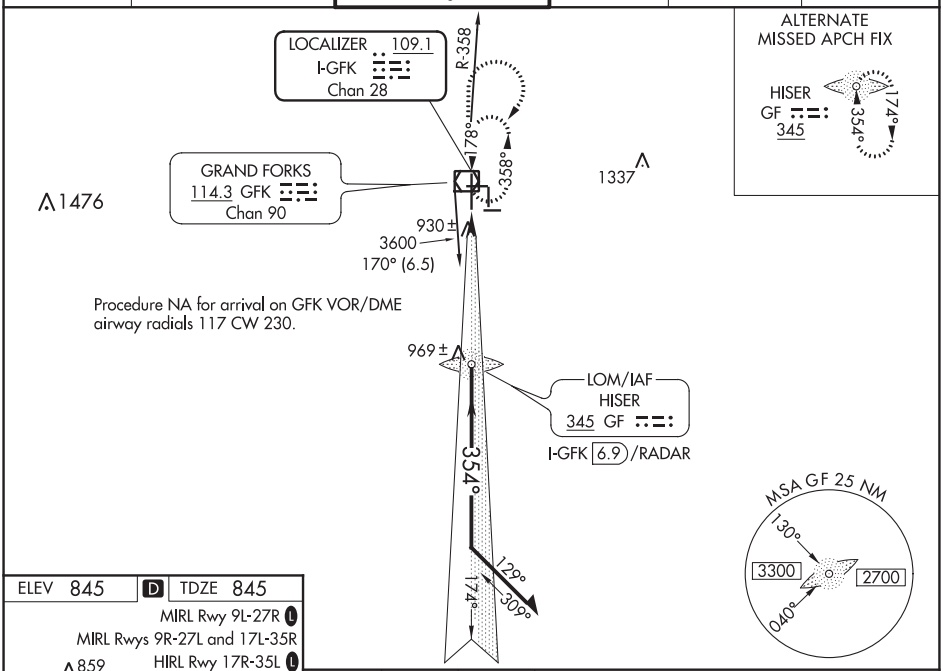
ADF or DME or RADAR REQUIRED.

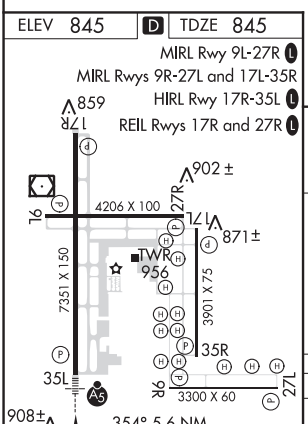
VDP NA with Crookston altimeter setting. When local altimeter setting not received, use Crookston altimeter setting and increase DA to 1107 feet and all MDA 80 feet; increase S-LOC 35L Cats C/D/E visibility to RVR 4000 and Circling Cats C and E visibility ¼ SM. For inop ALS, increase S-ILS 35L Cat E visibility to RVR 4000 and S-LOC 35L Cat E visibility to RVR 5000. For inop ALS when using Crookston altimeter setting, increase S-ILS 35L all Cats visibility to RVR 4500 and S-LOC 35L Cat C/D/E visibility to RVR 6000. Procedure turn NA for Cat E aircraft, Radar required.

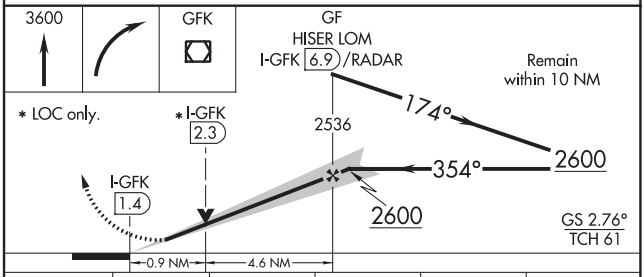
MALSR

MISSED APPROACH: Climb to 3600 then right turn direct GFK VOR/DME and hold.

ATIS	GRAND FORKS APP CON ★	GRAND FORKS TOWER★	GND CON	CLNC DEL	UNICOM
119.4	118.1 318.1	118.4(CTAF)(L) 350.35	124.575	135.725	122.95







FAF to MAP 5.6 NM					
Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

CATEGORY	A	B	C	D	E
S-ILS 35L	1045/24 200 (200-½)				
S-LOC 35L	1180/24 335 (400-½)		1180/26 335 (400-½)		
C CIRCLING	1260-1 415 (500-1)	1300-1 455 (500-1)	1400-1½ 555 (600-1½)	1400-2 555 (600-2)	1520-2½ 675 (700-2½)

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WAAS CH 58104 W09A	APP CRS 084°	Rwy ldg 4206 TDZE 843 Apt Elev 845

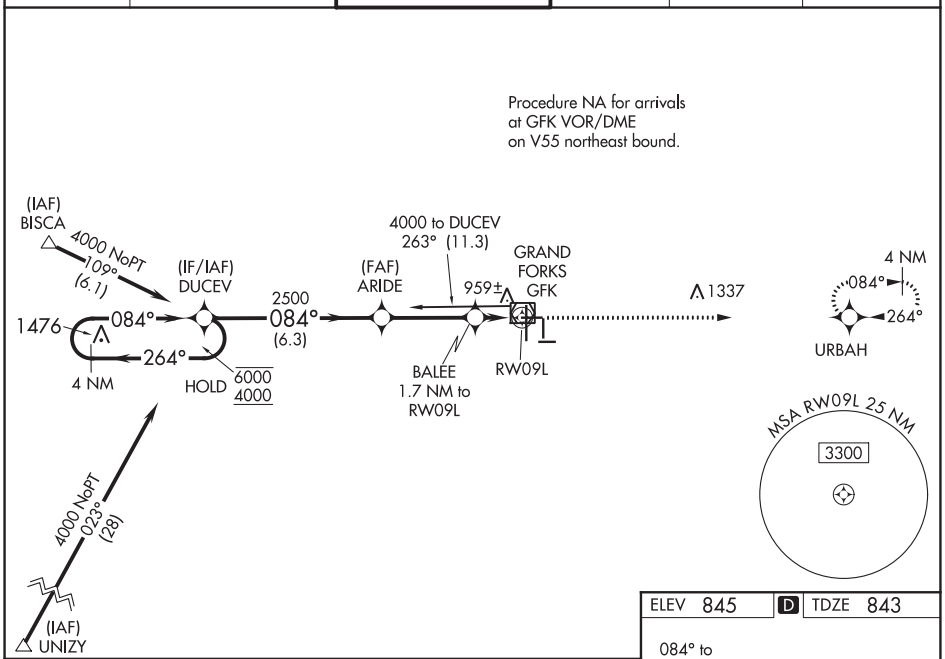
RNAV (GPS) RWY 9L
GRAND FORKS INTL (GFK)

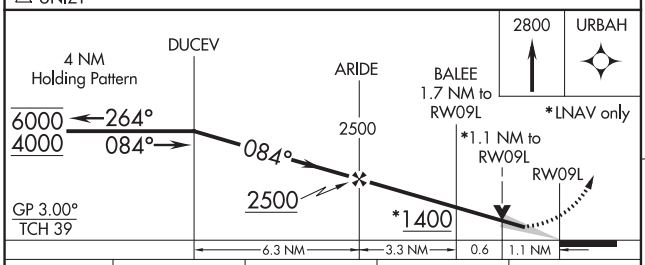
RNP APCH.

Baro-VNAV and VDP NA when using Crookston altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 54°C. When local altimeter setting not received, use Crookston altimeter setting and increase all DA 62 feet and all MDA 80 feet, increase LNAV Cat C visibility ⅜ SM, Cat D visibility ⅛ SM and Circling Cat C ¼ SM.

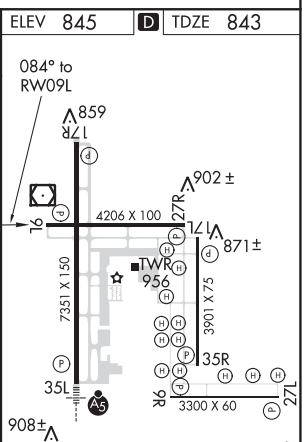
MISSED APPROACH: Climb to 2800 direct URBAH and hold.

ATIS	GRAND FORKS APP CON ★	GRAND FORKS TOWER ★	GND CON	CLNC DEL	UNICOM
119.4	118.1 318.1	118.4 (CTAF) L 350.35	124.575	135.725	122.95





CATEGORY	A	B	C	D
LPV DA	1093-1 250 (300-1)			
LNAV/VNAV DA	1238-1½ 395 (400-1½)			
LNAV MDA	1220-1 377 (400-1)			1220-1¼ 377 (400-1¼)
C CIRCLING	1260-1 415 (500-1)	1300-1 455 (500-1)	1400-1½ 555 (600-1½)	1400-2 555 (600-2)



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GRAND FORKS, NORTH DAKOTA AL-5187 (FAA) 20086

WAAS CH 63199 W17A	APP CRS 174°	Rwy ldg 7351 TDZE 843 Apt Elev 845

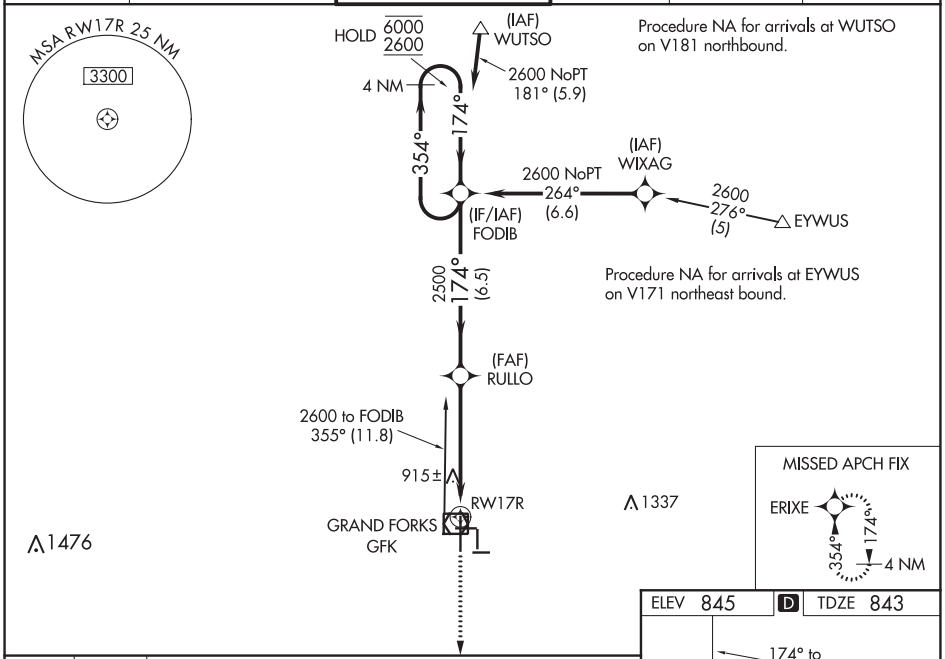
RNAV (GPS) RWY 17R
GRAND FORKS INTL (GFK)

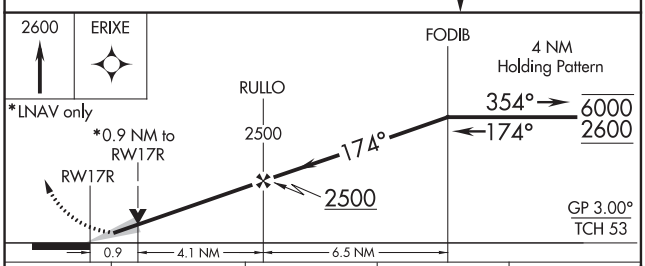
RNP APCH.

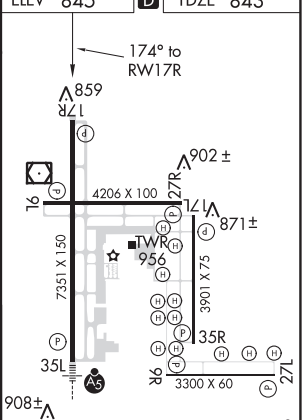
Baro-VNAV NA when using Crookston altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C or above 54°C. VDP NA with Crookston altimeter setting. When local altimeter setting not received, use Crookston altimeter setting and increase all DA 62 feet and all MDA 80 feet and increase LPV and LNAV/VNAV all Cats visibility ⅛ SM, LNAV Cats C/D visibility ⅛ SM, and Circling Cat C visibility ¼ SM.

MISSED APPROACH: Climb to 2600 direct ERIXE and hold.

ATIS	GRAND FORKS APP CON★	GRAND FORKS TOWER★	GND CON	CLNC DEL	UNICOM
119.4	118.1 318.1	118.4 (CTAF) L 350.35	124.575	135.725	122.95







CATEGORY	A	B	C	D
LPV DA	1043-¾ 200 (200-¾)			
LNAV/VNAV DA	1093-¾ 250 (300-¾)			
LNAV MDA	1180-1 337 (400-1)			
C CIRCLING	1260-1 415 (500-1)	1300-1 455 (500-1)	1400-1½ 555 (600-1½)	1400-2 555 (600-2)

GRAND FORKS, NORTH DAKOTA
Amdt 1 03JAN19

47°57′N-97°10′W

GRAND FORKS INTL (GFK)
RNAV (GPS) RWY 17R

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WAAS CH 78104 W27A	APP CRS 264°	Rwy ldg 4206 TDZE 843 Apt Elev 845

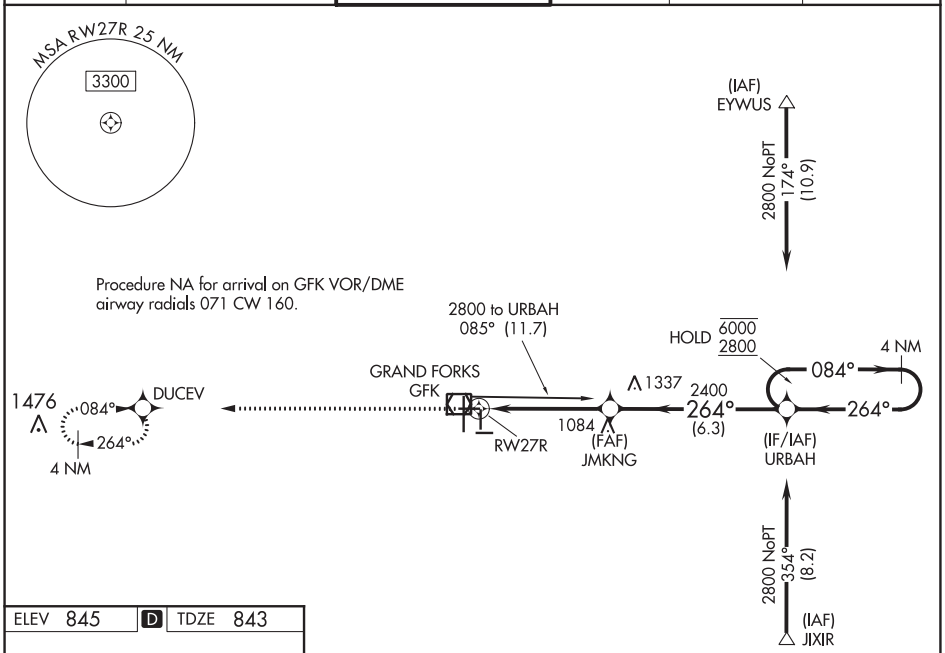
RNAV (GPS) RWY 27R
GRAND FORKS INTL (GFK)

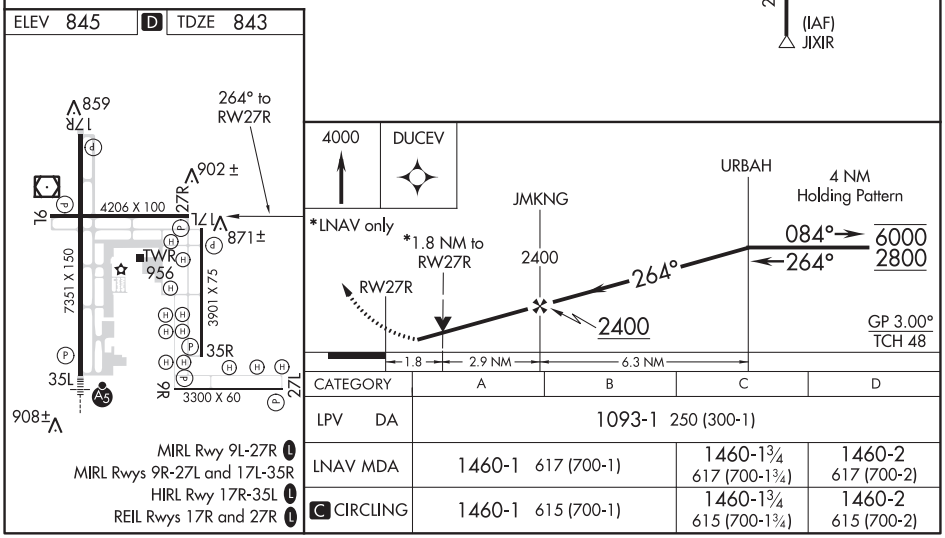
RNP APCH.

VDP NA when using Crookston altimeter setting.
When local altimeter setting not received, use Crookston altimeter setting and increase all DA 62 feet and all MDA 80 feet.
Increase LNAV and Circling Cat C and D visibility ¼ SM.

MISSED APPROACH: Climb to 4000 direct DUCEV and hold, continue climb-in-hold to 4000.

ATIS	GRAND FORKS APP CON ★	GRAND FORKS TOWER★	GND CON	CLNC DEL	UNICOM
119.4	118.1 318.1	118.4(CTAF)L 350.35	124.575	135.725	122.95





CATEGORY	A	B	C	D
LPV DA	1093-1 250 (300-1)			
LNAV MDA	1460-1 617 (700-1)		1460-1¾ 617 (700-1¾)	1460-2 617 (700-2)
C CIRCLING	1460-1 615 (700-1)		1460-1¾ 615 (700-1¾)	1460-2 615 (700-2)

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GRAND FORKS, NORTH DAKOTA AL-5187 (FAA) 20086

RNAV (GPS) RWY 35L
GRAND FORKS INTL (GFK)

WAAS CH 70313 W35A	APP CRS 354°	Rwy ldg 7351 TDZE 845 Apt Elev 845

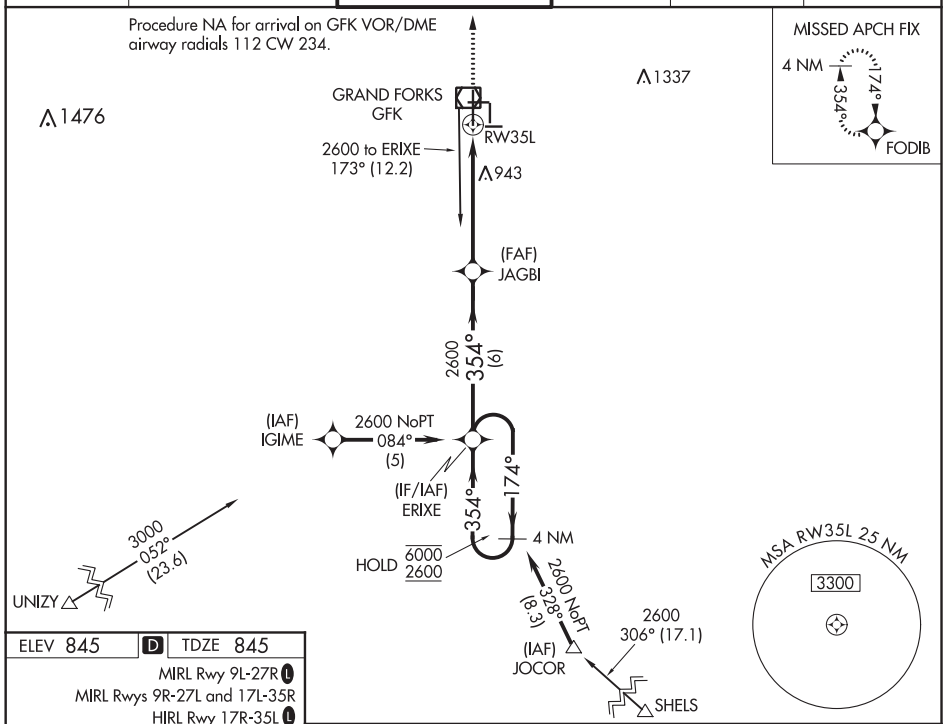
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 54°C. For Inop ALS, increase LNAV/VNAV Cat D visibility to RVR 5000 and LNAV Cat C/D visibility to RVR 5500.

MALSR

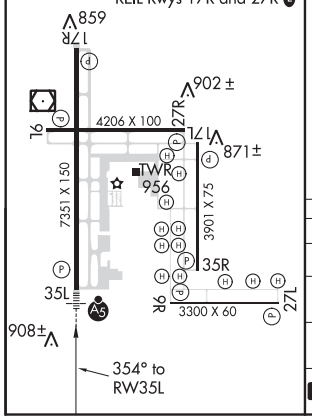
MISSED APPROACH: Climb to 2600 direct FODIB and hold.

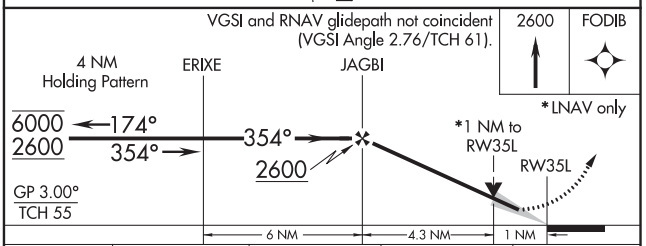
ATIS	GRAND FORKS APP CON ★	GRAND FORKS TOWER ★	GND CON	CLNC DEL	UNICOM
119.4	118.1 318.1	118.4 (CTAF) L 350.35	124.575	135.725	122.95



ELEV 845 D TDZE 845

MIRL Rwy 9L-27R L
MIRL Rwys 9R-27L and 17L-35R
HIRL Rwy 17R-35L L
REIL Rwys 17R and 27R L





CATEGORY	A	B	C	D
LPV DA	1095/24 250 (300-½)			
LNAV/VNAV DA	1174/26 329 (400-½)			1174/40 329 (400-¾)
LNAV MDA	1200/24 355 (400-½)		1200/30 355 (400-⅝)	1200/50 355 (400-1)
C CIRCLING	1280-1 435 (500-1)	1300-1 455 (500-1)	1400-1½ 555 (600-1½)	1400-2 555 (600-2)

NC-1, 25 FEB 2021 to 22 APR 2021

LOC BC RWY 17R
GRAND FORKS INTL (GFK)

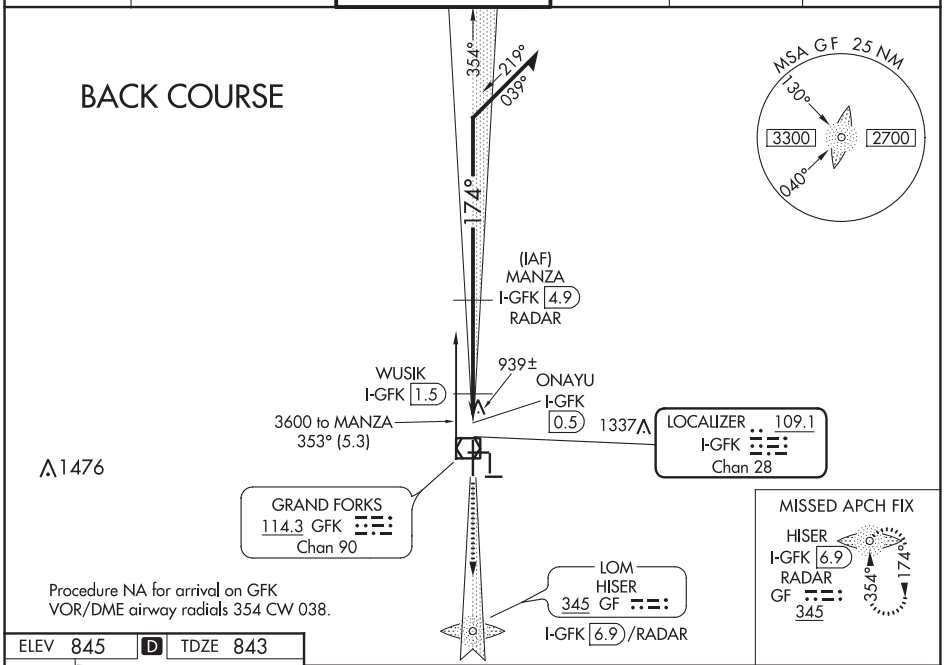
LOC/DME I-GFK	APP CRS	Rwy ldg	7351
109.1	174°	TDZE	843
Chan 28		Apt Elev	845

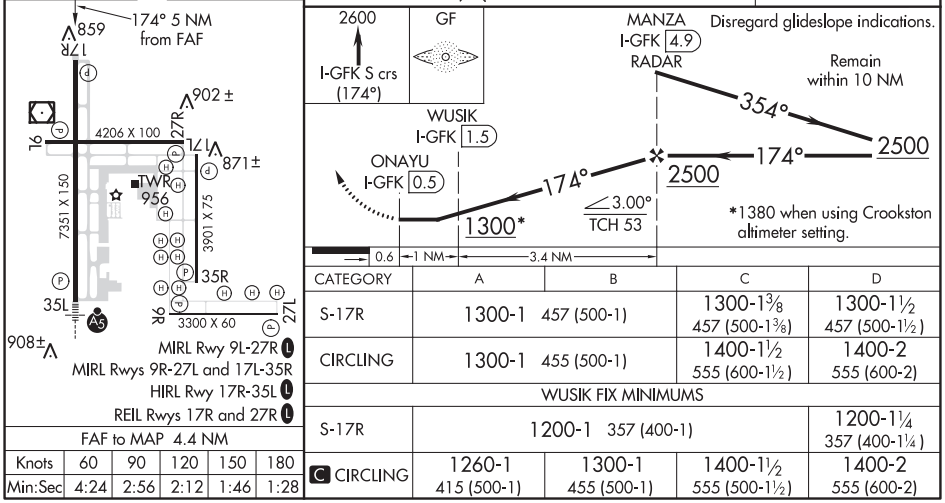
DME or ADF or RADAR required.

When local altimeter setting not received, use Crookston altimeter setting and increase all MDA 80 feet; increase S-17R Cat C visibility ⅛ SM and Circling Cat C visiblity ¼ SM. Increase WUSIK fix minimums S-17R Cat C visibility and Circling Cat C visibility ¼ SM.

MISSED APPROACH: Climb to 2600 on I-GFK south course (174°) to HISER LOM/I-GFK 6.9 DME/RADAR and hold.

ATIS	GRAND FORKS APP CON ★	GRAND FORKS TOWER★	GND CON	CLNC DEL	UNICOM
119.4	118.1 318.1	118.4(CTAF)L 350.35	124.575	135.725	122.95





FAF to MAP 4.4 NM					
Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

CATEGORY	A	B	C	D
S-17R	1300-1 457 (500-1)		1300-1⅜ 457 (500-1⅜)	1300-1½ 457 (500-1½)
CIRCLING	1300-1 455 (500-1)		1400-1½ 555 (600-1½)	1400-2 555 (600-2)
WUSIK FIX MINIMUMS				
S-17R	1200-1 357 (400-1)			1200-1¼ 357 (400-1¼)
C CIRCLING	1260-1 415 (500-1)	1300-1 455 (500-1)	1400-1½ 555 (500-1½)	1400-2 555 (600-2)

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GRAND FORKS, NORTH DAKOTA — AL-5187 (FAA) — 20086

VOR RWY 17R
GRAND FORKS INTL (GFK)

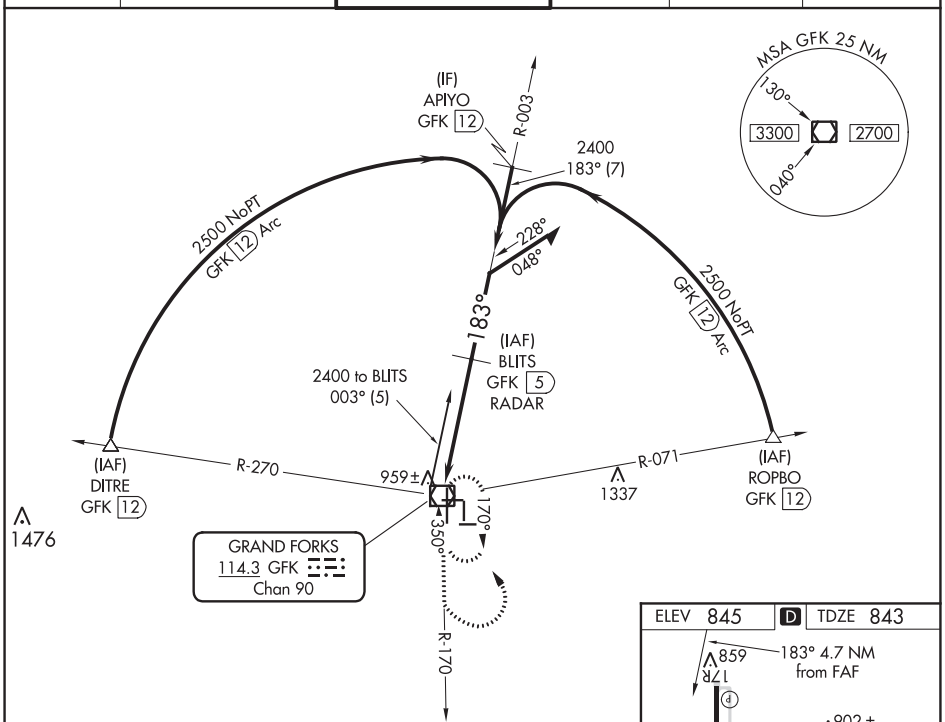
VOR/DME GFK	APP CRS	Rwy ldg	7351
114.3	183°	TDZE	843
Chan 90		Apt Elev	845

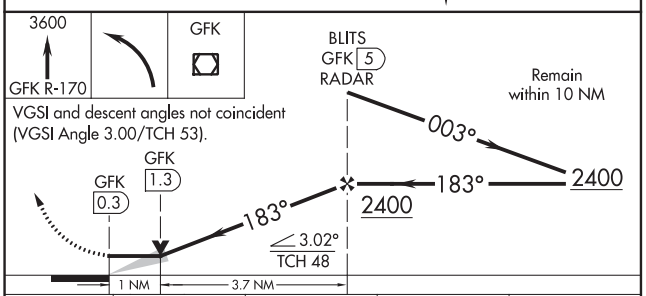
DME or RADAR required.

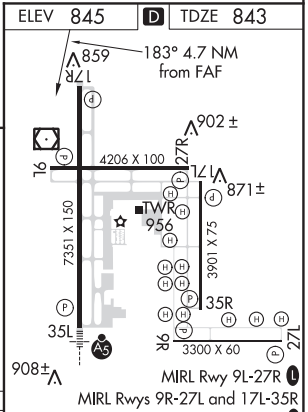
When local altimeter setting not received, use Crookston altimeter setting and increase all MDAs 80 feet; Increase Cat C/D visibility to 1⅜ SM and Circling Cat C visibility ¼ SM.
VDP NA with Crookston altimeter setting.

MISSED APPROACH: Climb to 3600 on GFK VOR/DME R-170 then left turn direct GFK VOR/DME and hold.

ATIS	GRAND FORKS APP CON ★	GRAND FORKS TOWER★	GND CON	CLNC DEL	UNICOM
119.4	118.1 318.1	118.4 (CTAF) L 350.35	124.575	135.725	122.95







CATEGORY	A	B	C	D
S-17R	1220-1 377 (400-1)			1220-1¼ 377 (400-1¼)
C CIRCLING	1280-1 435 (500-1)	1300-1 455 (500-1)	1400-1½ 555 (600-1½)	1400-2 555 (600-2)

FAF to MAP 4.7 NM					
Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

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VOR/DME GFK	APP CRS	Rwy ldg	7351
114.3	344°	TDZE	845
Chan 90		Apt Elev	845

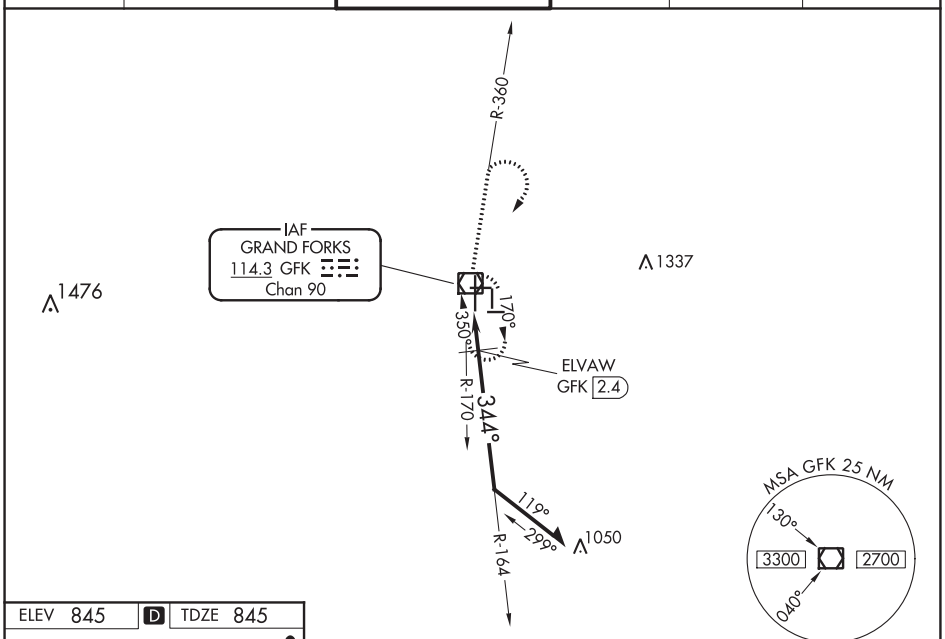
VOR RWY 35L
GRAND FORKS INTL (GFK)

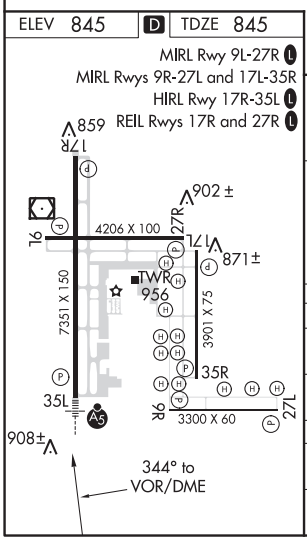
When local altimeter setting not received, use Crookston altimeter setting and increase all MDA 80 feet; increase Cat C/D visibility to 1¼ SM and Circling Cat C visibility ¼ SM. Increase ELVAW fix minimums Cat C/D visibility to RVR 4500 and Circling Cat C visibility ¼ SM. For inop ALS, increase S-35L Cat C/D visibility to 1⅜ SM. ELVAW fix minimums: For inop ALS, increase S-35L Cat C/D visibility to RVR 5500.

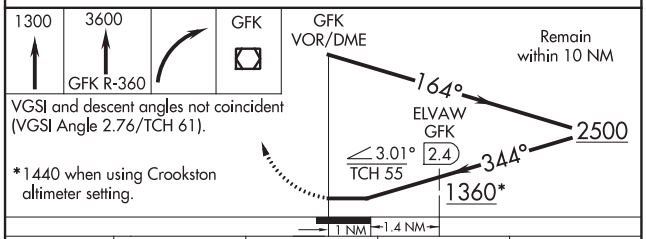
MALSR

MISSED APPROACH: Climb to 1300 then climb to 3600 on GFK R-360 then right turn direct GFK VOR/DME and hold.

ATIS	GRAND FORKS APP CON ★	GRAND FORKS TOWER★	GND CON	CLNC DEL	UNICOM
119.4	118.1 318.1	118.4 (CTAF) L 350.35	124.575	135.725	122.95







VGSI and descent angles not coincident (VGSI Angle 2.76/TCH 61).

*1440 when using Crookston altimeter setting.

CATEGORY	A	B	C	D
S-35L	1360/24 515 (600-½)		1360/55 515 (600-1)	
CIRCLING	1360-1 515 (600-1)		1400-1½ 555 (600-1½)	1400-2 555 (600-2)
ELVAW FIX MINIMUMS				
S-35L	1220/24 375 (400-½)		1220/40 375 (400-¾)	
C CIRCLING	1260-1 415 (500-1)	1300-1 455 (500-1)	1400-1½ 555 (600-1½)	1400-2 555 (600-2)

NC-1, 25 FEB 2021 to 22 APR 2021
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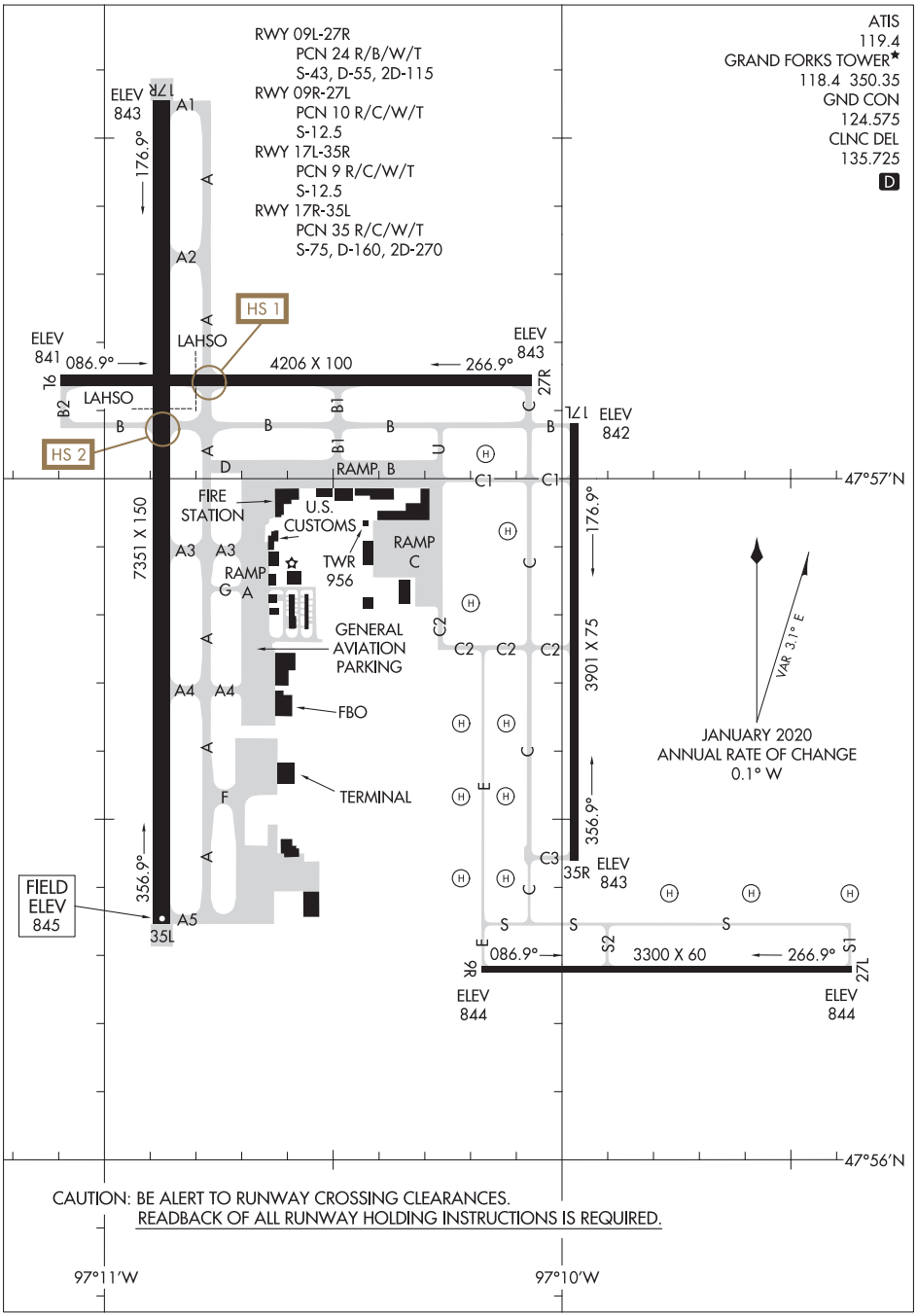
20086

AIRPORT DIAGRAM

AL-5187 (FAA)

GRAND FORKS INTL (GFK)
GRAND FORKS, NORTH DAKOTA



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

AIRPORT DIAGRAM
20086
GRAND FORKS, NORTH DAKOTA
GRAND FORKS INTL (GFK)

GRAND FORKS, NORTH DAKOTA

ILS or LOC RWY 17

GRAND FORKS AFB (KRDR)

LOC I-AVA	APCH CRS	Rwy ldg 12,351 TDZE 900 Arpt Elev 911
111.3	174°	

AL-5010 [USAF]

* When ALS inop, increase RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile; CAT CDE RVR to 50, vis to 1 mile.

ALSF-1

MISSED APPROACH: Climb to 3000 on RDR TACAN R-179 to DUMBE and hold.

ATIS	GRAND FORKS APP CON	RED RIVER TOWER	GND CON	CLNC DEL
273.45	118.1 318.1	124.9 349.0	119.15 275.8	119.15 360.7

***Circling E of Rwy 17-35 not authorized.

CAUTION: ILS Rwy 17; B-747/767/777, L-1011, DC-10, A-300, B-1, KC-10, E-4, C-5 and VC-25 Wheel Crossing Height 18 ft.

1122 R-355 265K 175° 355° (IAF) GLIIB R-355 RDR 12 1022 LR-345 2700 NoPT RDR 12 Arc 174° 354° CIGNA RDR 5.8 RADAR 2700 316° (14.9) GRAND FORKS 114.3 GFK Chan 90 972 956 1056 999 1474 1169 1106 (IAF) PARCR RDR 12 2700 R-279 RED RIVER Chan 111 RDR LOCALIZER 111.3 I-AVA R-179 DUMBE RDR 15 359° 179° RDR 22 891

MSA RDR 25 NM 180° 4100 090° 2400 3300 360°

RADAR or DME REQUIRED

EMERG SAFE ALT 100 NM 4100

VGSI and ILS glidepath not coincident

GLIIB RDR R-355 12 355° 175° 2700 174° CIGNA RDR 5.8 RADAR 2.3 WAMGA RDR 1.8 TACAN 2200 GS 2.60° TCH 43 4.1 NM .5

3000 RDR R-179 | DUMBE RDR 15

ELEV 911 | TDZE 900

174° 4.5 NM from FAF 956 901 17 909 12,351 x 150 TWR 1056 1021 1053 1049 973 35

HIRL Rwy 17-35

CATEGORY	A	B	C	D	E
S-ILS 17 *	1100/24 200 (200-½)				
S-LOC 17 **	1240/24 340 (400-½)		1240/26 340 (400-½)		
C CIRCLING***	1340-1 429 (500-1)	1380-1 469 (500-1)	1380-1½ 469 (500-1½)	1480-2 569 (600-2)	2040-3 1129 (1200-3)

FAF to MAP 4.1 NM					
Knots	60	90	120	150	180
Min:Sec	4:06	2:44	2:03	1:36	1:20

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18312

GRAND FORKS, NORTH DAKOTA

ILS or LOC RWY 35

GRAND FORKS AFB (KRDR)

LOC I-RDR	APCH CRS	Rwy ldg 12,351 TDZE 911 Arpt Elev 911
109.9	354°	

AL-5010 [USAF]

* When ALS inop, increase RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile, CAT CDE vis to 1¼ miles.

ALSF-1

MISSED APPROACH: Climb to 3000 on RDR TACAN R-353 to FRISK and hold.

ATIS	GRAND FORKS APP CON	RED RIVER TOWER	GND CON	CLNC DEL
273.45	118.1 318.1	124.9 349.0	119.15 275.8	119.15 360.7

*** Circling E of Rwy 17-35 not authorized.

Radar required for FRISK holding

CAUTION: ILS RWY 35; B-747/767/777, L-1011, DC-10, A-300, B-1, KC-10, E-4, C-5 and VC-25 Wheel Crossing Height 17 ft.

RDR 22 173° 353°

FRISK RDR 15

R-353

(IAF) PARCR RDR 12 2700

R-279

LOCALIZER 109.9 I-RDR

GRAND FORKS 114.3 GFK Chan 90

982 905 1474 978 1055

RED RIVER Chan 111 RDR

2700 207° (14.7)

1065

CANLI /RADAR RDR 6

2700 NoPT RDR 12 Arc

1219

1239 LR-183 354° 174°

(IAF) HONNE RDR R-173 12

1320 173° 265K 353°

R-173

RADAR or DME REQUIRED

EMERG SAFE ALT 100 NM 4100

MSA RDR 25 NM 180° 4100 090° 2400 3300 360°

3000 RDR R-353

FRISK RDR 15

HONNE RDR R-173 12 173° 353° 2700

CANLI 6 /RADAR 354°

TACAN

KIDSE 2.1 1.3

2400

VGSI and ILS Glidepath not coincident

GS 2.60° TCH 42

.5 4.7 NM

ELEV 911 TDZE 911

17 12,351 x 150 P A1 982 TWR 1029 1021 1053 978 P 1049 973 921 35 A1 905

354° 5.2 NM from FAF

HIRL Rwy 17-35

CATEGORY	A	B	C	D	E
S-ILS 35 *	1111/24 200 (200-½)				
S-LOC 35 **	1340/24 429 (500-½)		1340/40 429 (500-¾)		
C CIRCLING ***	1340-1 429 (500-1)	1380-1 469 (500-1)	1380-1½ 469 (500-1½)	1480-2 569 (600-2)	2040-3 1129 (1200-3)

FAF to MAP 4.7 NM

Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

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GRAND FORKS, NORTH DAKOTA

RNAV (GPS) RWY 17

APCH CRS	Rwy ldg	12,351
174°	TDZE	900
	Arpt Elev	911

AL-5010 (USAF)

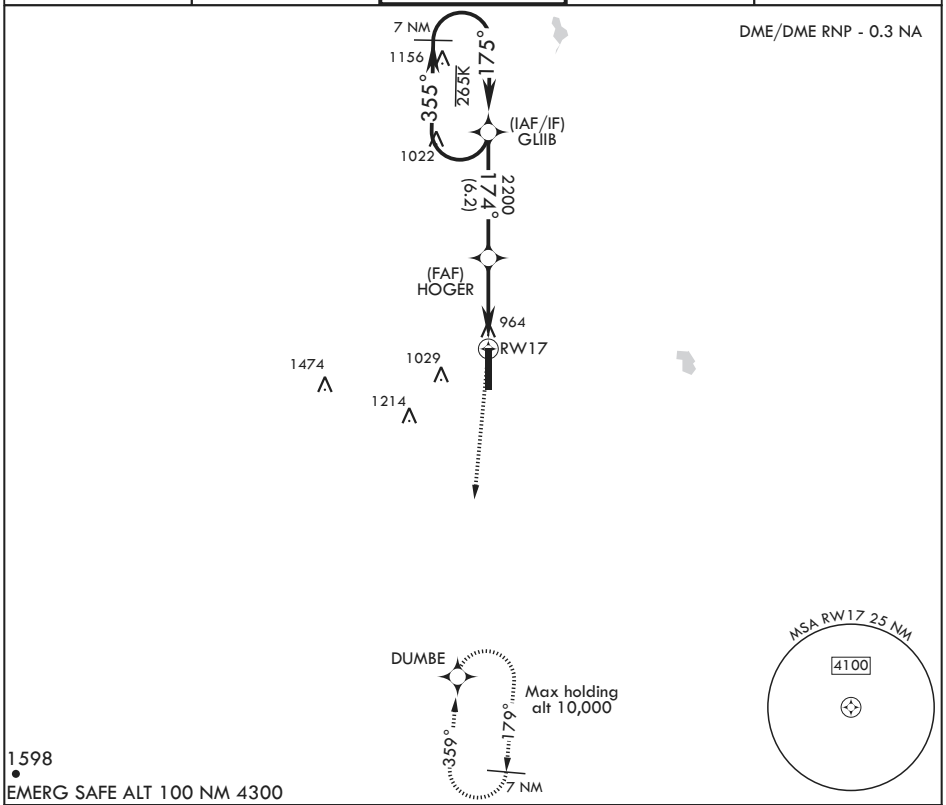
GRAND FORKS AFB (KRDR)

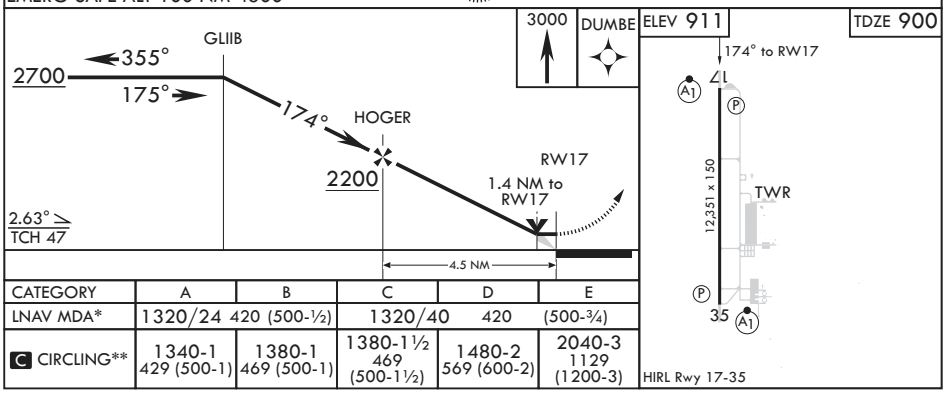
* When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile, CAT CDE vis to 1 1/4 miles.
** Circling E of Rwy 17-35 not authorized.

ALSF-1

MISSED APPROACH: Climb to 3000 direct DUMBE and hold.

ATIS	APP CON	RED RIVER TOWER	GND CON	CLNC DEL
273.45	118.1 318.1	124.9 349.0	119.15 275.8	119.15 360.7





CATEGORY	A	B	C	D	E
LNAV MDA*	1320/24 420 (500-½)		1320/40 420 (500-¾)		
C CIRCLING**	1340-1 429 (500-1)	1380-1 469 (500-1)	1380-1½ 469 (500-1½)	1480-2 569 (600-2)	2040-3 1129 (1200-3)

GRAND FORKS, NORTH DAKOTA

Orig 20JUL17

47°58'N - 97°24'W

GRAND FORKS AFB (KRDR)

RNAV (GPS) RWY 17

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19115

GRAND FORKS, NORTH DAKOTA

RNAV (GPS) RWY 35

APCH CRS	Rwy ldg	12,351
354°	TDZE	911
	Arpt Elev	911

AL-5010 (USAF)

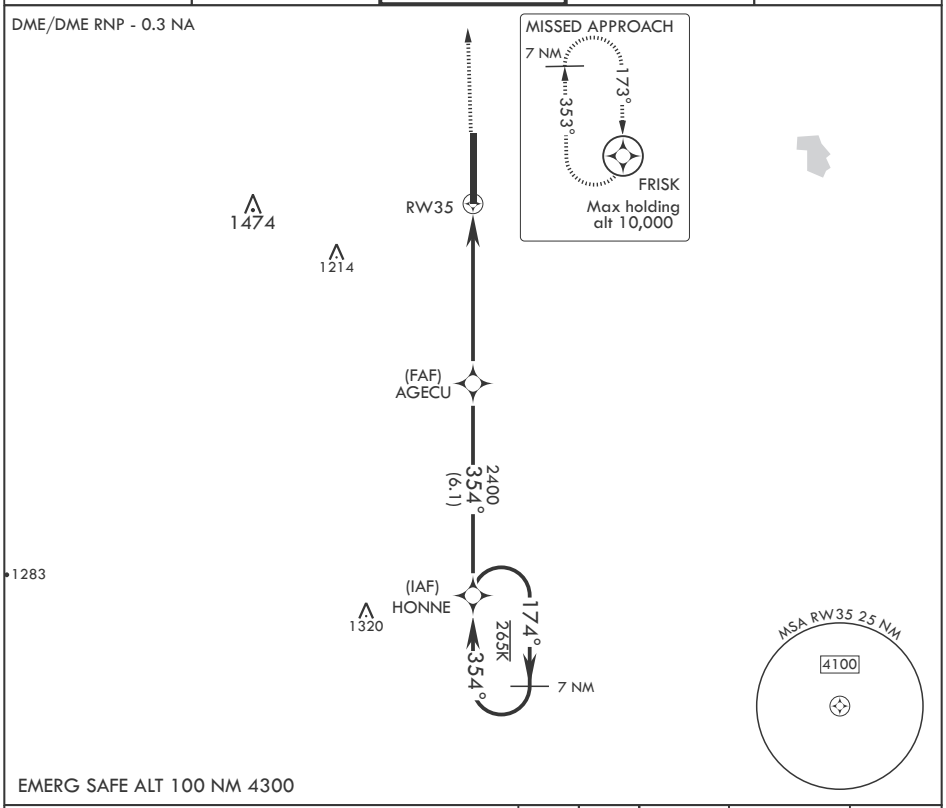
GRAND FORKS AFB (KRDR)

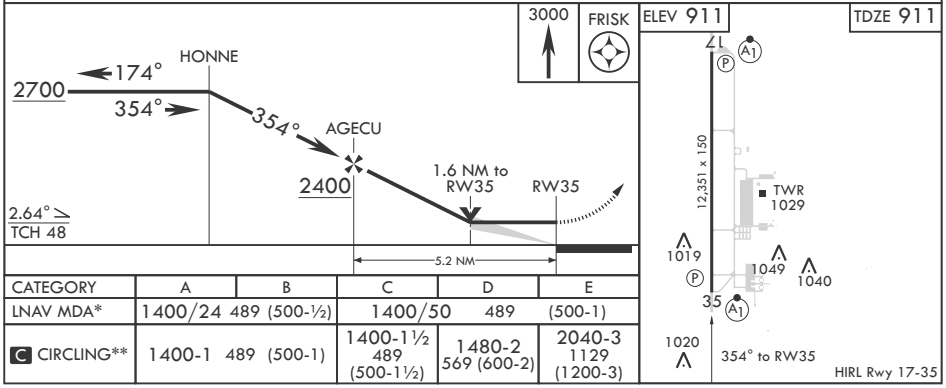
* When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile, CAT CDE vis to 1 3/8 miles.
** Circling E of Rwy 17-35 not authorized.

ALSF-1

MISSED APPROACH: Climb to 3000 direct FRISK and hold.

ATIS	APP CON	RED RIVER TOWER	GND CON	CLNC DEL
273.45	118.1 318.1	124.9 349.0	119.15 275.8	119.15 360.7





CATEGORY	A	B	C	D	E
LNAV MDA*	1400/24 489 (500-½)		1400/50 489 (500-1)		
C CIRCLING**	1400-1 489 (500-1)		1400-1½ 489 (500-1½)	1480-2 569 (600-2)	2040-3 1129 (1200-3)

GRAND FORKS, NORTH DAKOTA

Orig 25MAY17

47°58'N - 97°24'W

GRAND FORKS AFB (KRDR)

RNAV (GPS) RWY 35

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GRAND FORKS, NORTH DAKOTA

TACAN RWY 17

TACAN RDR Chan **111**	APCH CRS **179°**	Rwy ldg **12,351** TDZE **900** Arpt Elev **911**

AL-5010 (USAF)

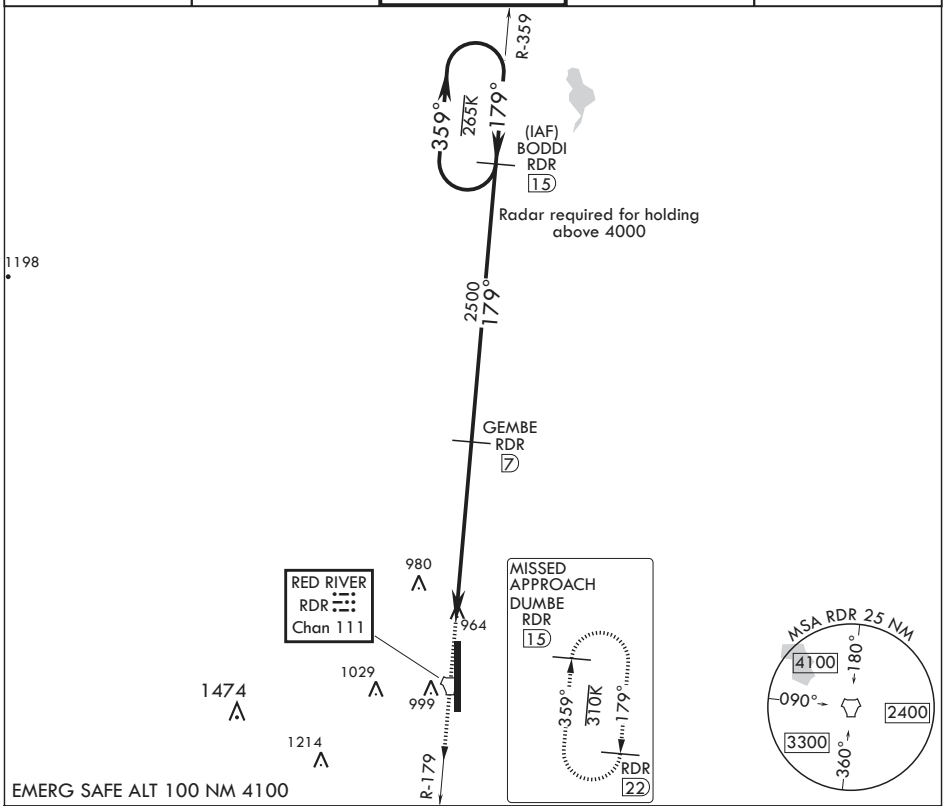
GRAND FORKS AFB (KRDR)

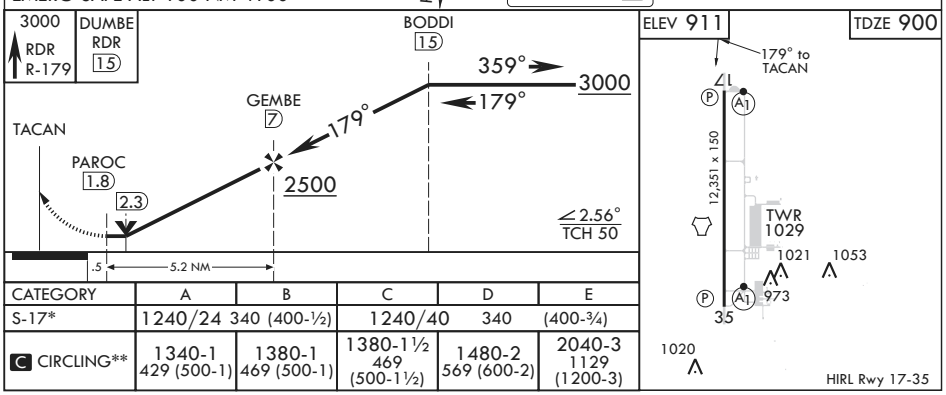
* When ALS inop, increase CAT AB RVR to 55, vis to 1 mile; CAT CDE RVR to 50, vis to 1 mile.
** Circling E of Rwy 17-35 not authorized.

ALSF-1

MISSED APPROACH: Climb to 3000 on RDR TACAN R-179 to DUMBE and hold.

ATIS	APP CON	RED RIVER TOWER	GND CON	CLNC DEL
273.45	**118.1 318.1**	**124.9 349.0**	**119.15 275.8**	**119.15 360.7**





CATEGORY	A	B	C	D	E
S-17*	1240/24	340 (400-½)	1240/40	340	(400-¾)
C CIRCLING**	1340-1 429 (500-1)	1380-1 469 (500-1)	1380-1½ 469 (500-1½)	1480-2 569 (600-2)	2040-3 1129 (1200-3)

GRAND FORKS, NORTH DAKOTA

47°58'N - 97°24'W

GRAND FORKS AFB (KRDR)

Amdt 3 26APR18

TACAN RWY 17

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18116

GRAND FORKS, NORTH DAKOTA

TACAN RWY 35

TACAN RDR Chan **111**	APCH CRS **348°**	Rwy ldg **12,351** TDZE **911** Arpt Elev **911**

AL-5010 (USAF)

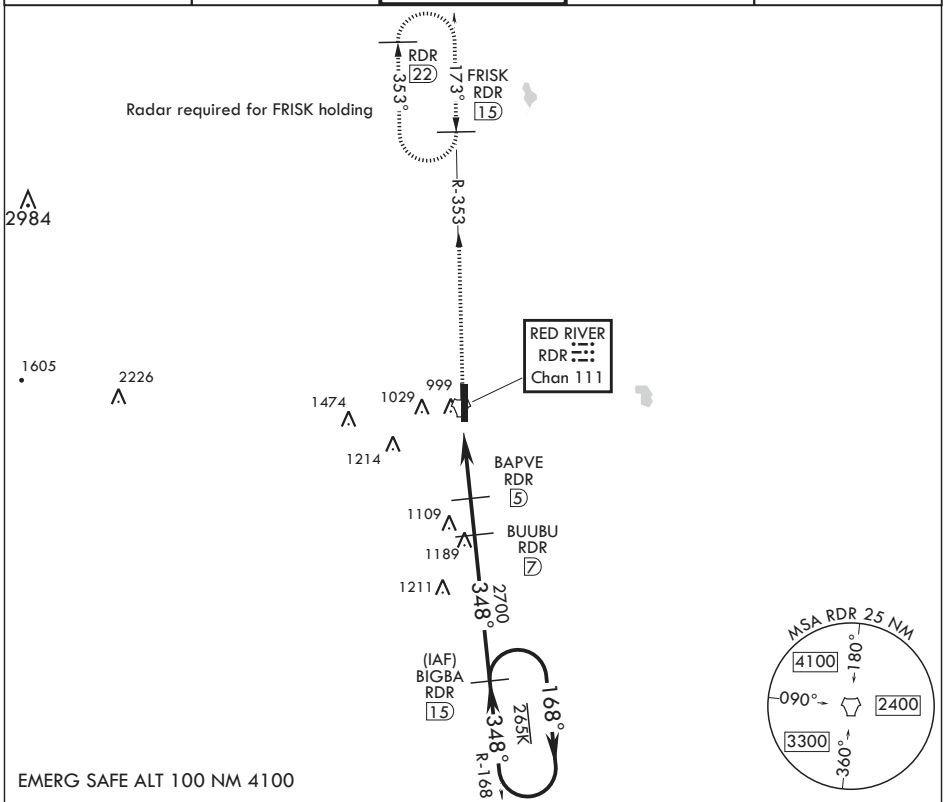
GRAND FORKS AFB (KRDR)

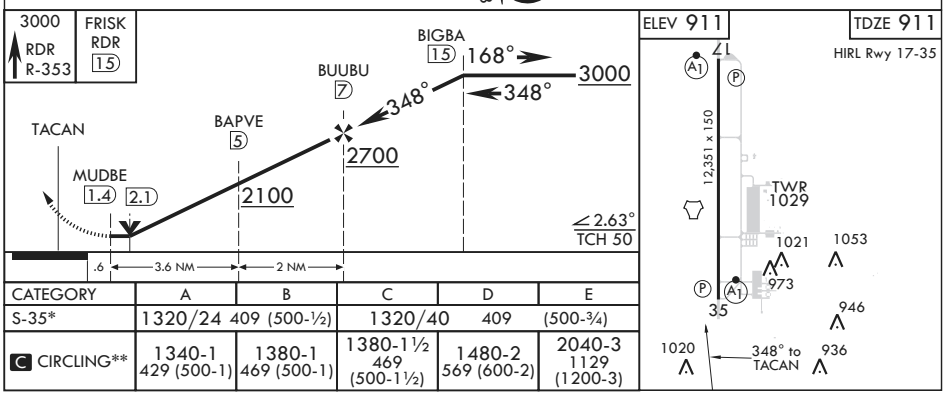
* When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile, CAT CDE RVR to 60 and vis to 1 1/8 miles.
** Circling E of Rwy 17-35 not authorized.

ALSF-1

MISSED APPROACH: Climb to 3000 on RDR TACAN R-353 to FRISK and hold.

ATIS	APP CON	RED RIVER TOWER	GND CON	CLNC DEL
273.45	**118.1 318.1**	**124.9 349.0**	**119.15 275.8**	**119.15 360.7**





CATEGORY	A	B	C	D	E
S-35*	1320/24	409 (500-½)	1320/40	409	(500-¾)
C CIRCLING**	1340-1 429 (500-1)	1380-1 469 (500-1)	1380-1½ 469 (500-1½)	1480-2 569 (600-2)	2040-3 1129 (1200-3)

NC-1, 25 FEB 2021 to 22 APR 2021

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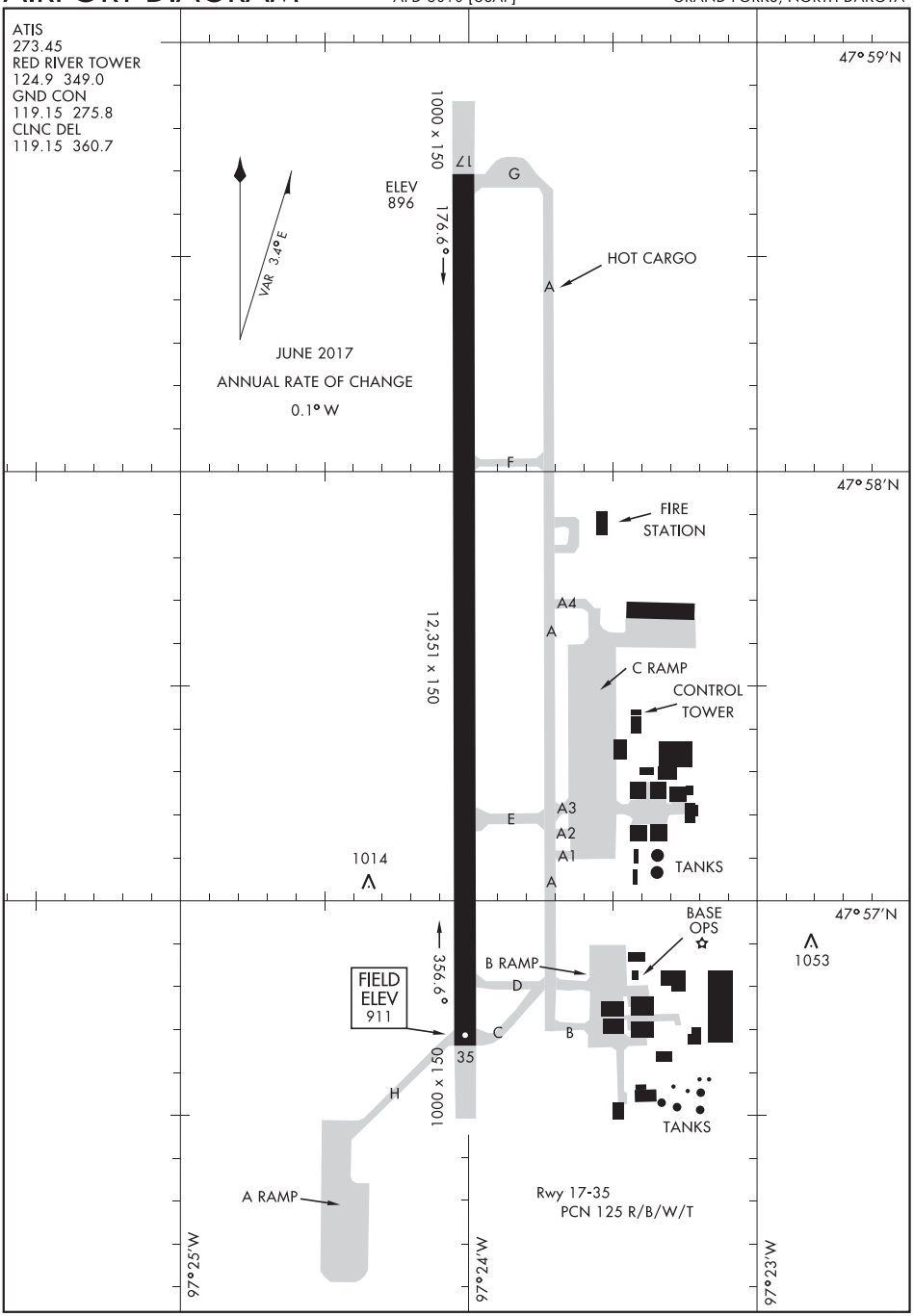

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NC-1, 25 FEB 2021 to 22 APR 2021

GRAND MARAIS, MINNESOTA AL-5643 (FAA) 20366

WAAS CH 45920 W10A	APP CRS 096°	Rwy ldg 5002 TDZE 1803 Apt Elev 1803

RNAV (GPS) RWY 10
GRAND MARAIS/COOK COUNTY (CKC)

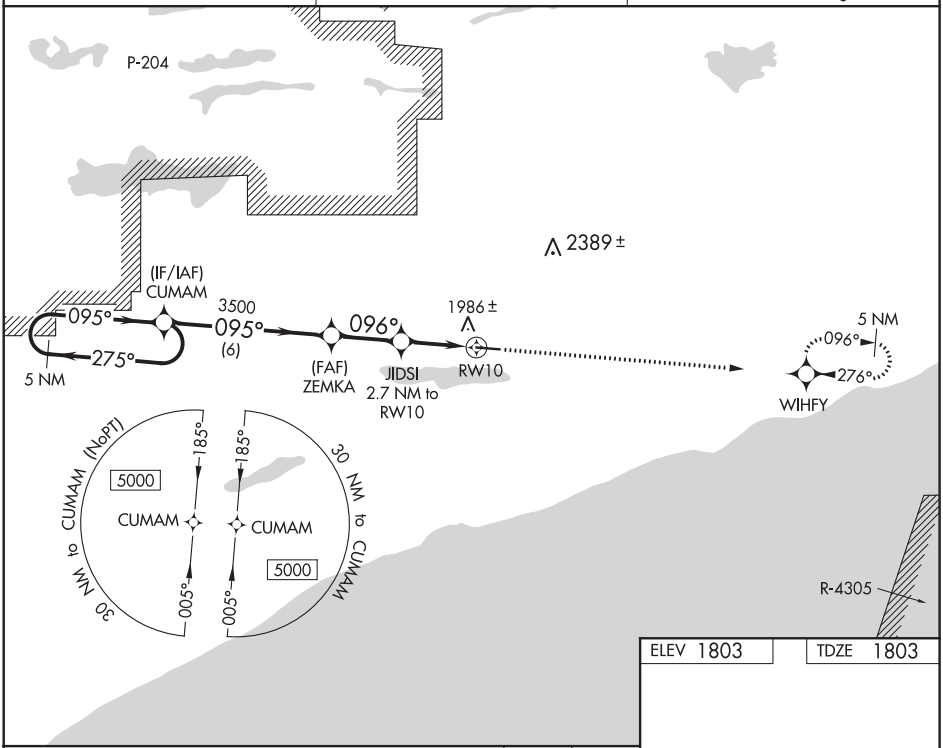
RNP APCH.

Rwy 10 helicopter visibility reduction below 1 SM NA. Procedure NA at night.

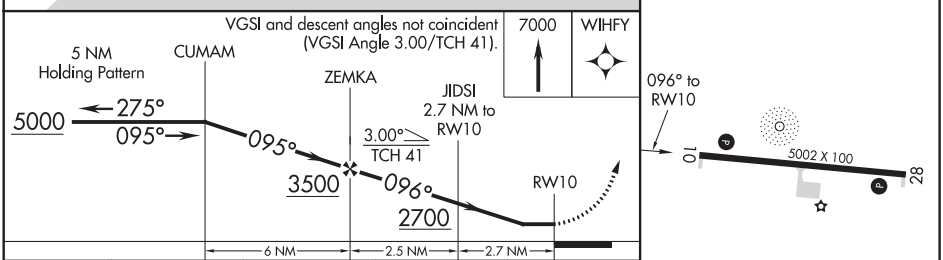
-30°C

MISSED APPROACH: Climb to 7000 direct WIHFY and hold, continue climb-in-hold to 7000.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.925	127.9 281.45	122.8 (CTAF) L



ELEV 1803 TDZE 1803



CATEGORY	A	B	C	D
LP MDA	2200-1	397 (400-1)	2200-1⅛	397 (400-1⅛)
LNAV MDA	2240-1	437 (500-1)	2240-1¼	437 (500-1¼)
C CIRCLING	2300-1	497 (500-1)	2380-1½ 577 (600-1½)	2640-2¾ 837 (900-2¾)

MIRL Rwy 10-28 L
REIL Rwys 10 and 28 L

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 69520 W28A	APP CRS 276°	Rwy ldg 5002 TDZE 1797 Apt Elev 1803

RNAV (GPS) RWY 28
GRAND MARAIS/COOK COUNTY (CKC)

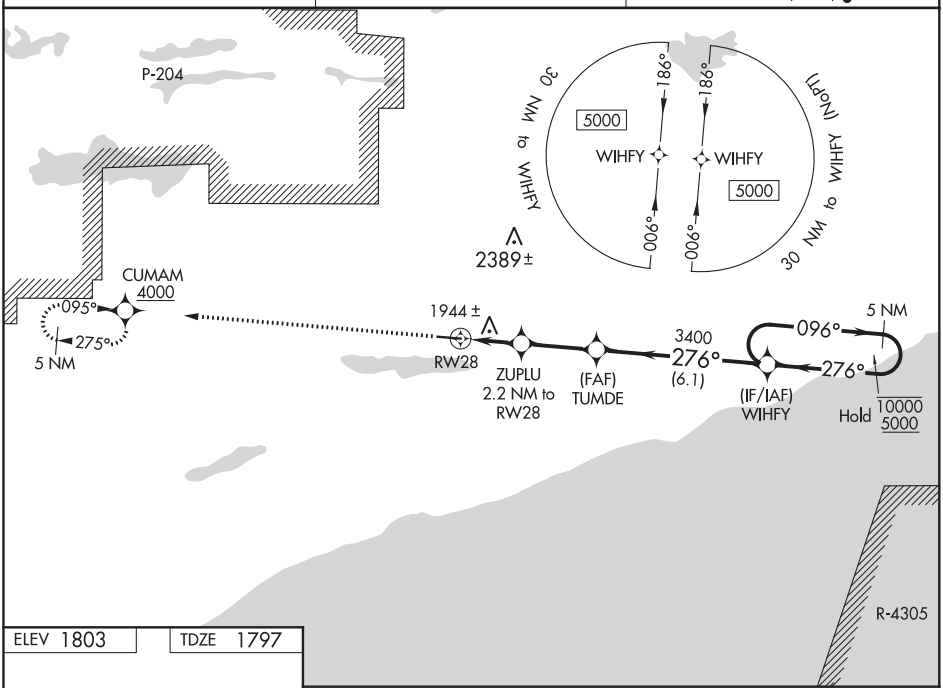
RNP APCH.

Circling Rwy 10 NA at night. Rwy 28 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C or above 54°C.

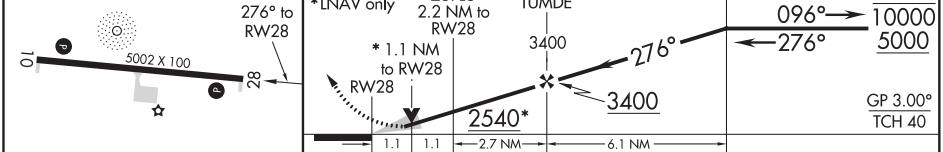
-30°C

MISSED APPROACH: Climb to 7000 direct CUMAM, cross CUMAM at or above 4000 and hold, continue climb-in-hold to 7000.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.925	127.9 281.45	122.8 (CTAF) L



ELEV 1803 TDZE 1797



CATEGORY	A	B	C	D
LPV DA	2047-1 250 (300-1)			
LNAV/VNAV DA	2219-1¼ 422 (500-1¼)			
LNAV MDA	2200-1 403 (400-1)		2200-1⅛ 403 (400-1⅛)	
C CIRCLING	2300-1 497 (500-1)		2380-1½ 577 (600-1½)	2640-2¾ 837 (900-2¾)

MIRL Rwy 10-28 L
REIL Rwys 10 and 28 L

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GRAND MARAIS, MINNESOTA AL-5643 (FAA) 20310

NDB RWY 28
GRAND MARAIS/COOK COUNTY (CKC)

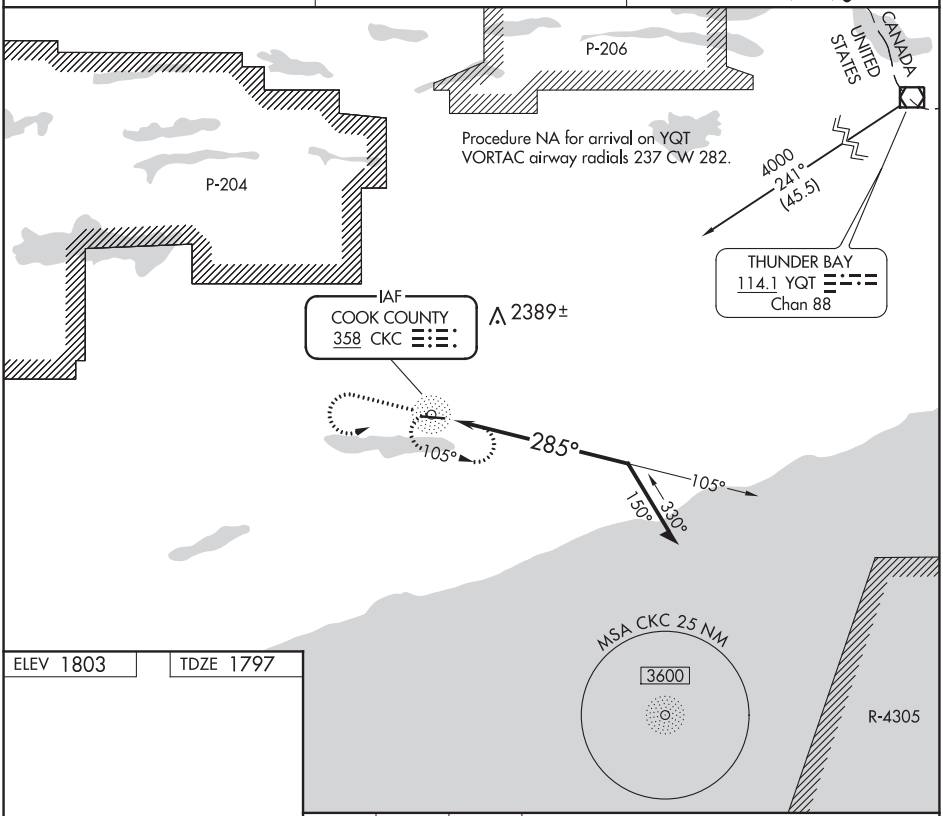
NDB CKC	APP CRS	Rwy ldg	5002
358	285°	TDZE	1797
		Apt Elev	1803

NA
-30°C

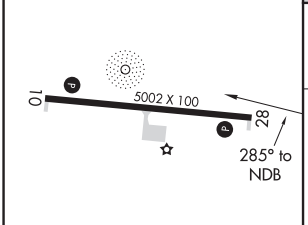
Circling Rwy 10 NA at night. Rwy 28 helicopter visibility reduction below ¾ SM NA.

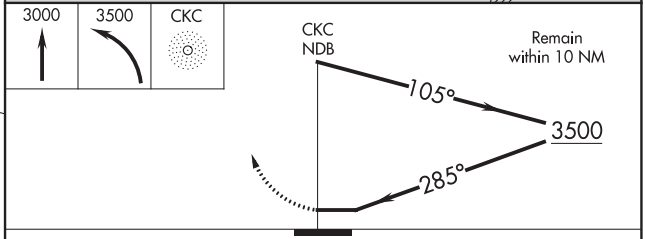
MISSED APPROACH: Climb to 3000 then climbing left turn to 3500 direct CKC NDB and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.925	127.9 281.45	122.8 (CTAF) L



ELEV 1803 TDZE 1797





CATEGORY	A	B	C	D
S-28	2420-1	623 (700-1)	2420-1¾	623 (700-1¾)
C CIRCLING	2420-1	617 (700-1)	2420-1¾ 617 (700-1¾)	2620-2¾ 817 (900-2¾)

MIRL Rwy 10-28 L
REIL Rwys 10 and 28 L

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LOC I-GPZ	APP CRS	Rwy ldg	5756
110.1	344°	TDZE	1356
		Apt Elev	1356

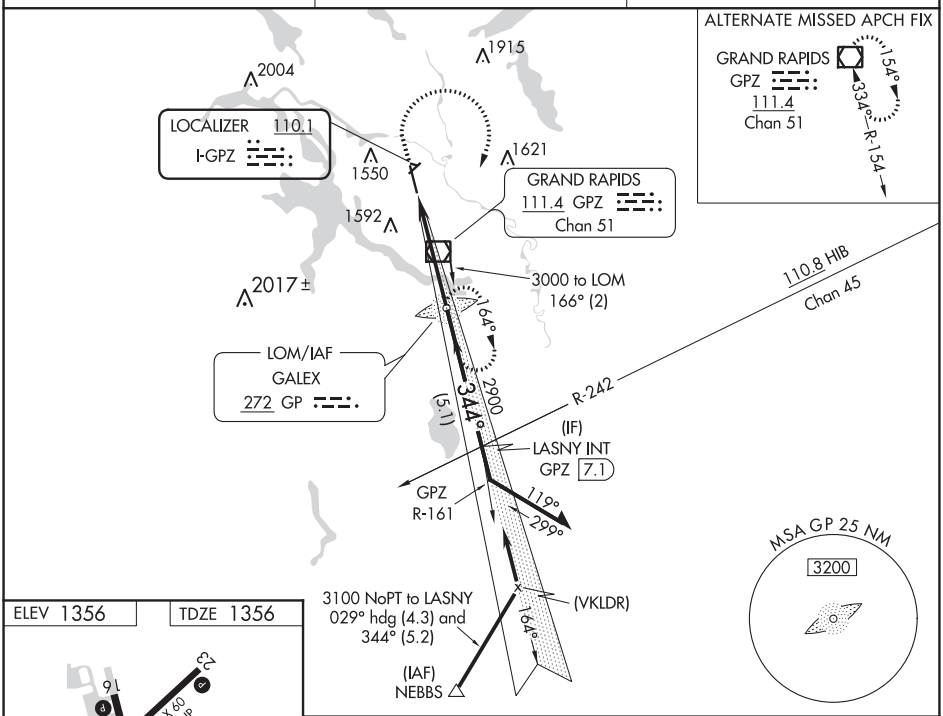
GRAND RAPIDS/ ITASCA COUNTY-GORDON NEWSTROM FIELD (GPZ) ILS or LOC RWY 34

T A Circling Rwy 5 NA at night. When local altimeter setting not received, use Hibbing altimeter setting: increase DA to 1624 feet, increase all MDAs 80 feet and visibility S-LOC 34 Cats C/D ⅛ SM and Circling Cat C/D visibility ¼ SM. For inoperative ALS, when using Hibbing altimeter setting, increase S-ILS 34 visibility to ¾ SM. For inoperative ALS, increase S-LOC 34 Cats C/D visibility to 1⅝ SM. Circling NA for Cat D east of Rwy 16-34.

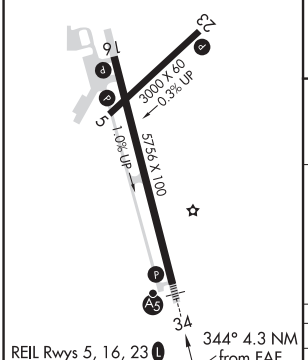
MALSR A5

MISSED APPROACH: Climb to 3100 then right turn direct GALEX LOM and hold (ADF required).

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
118.425	127.9 281.45	122.8 (CTAF) L

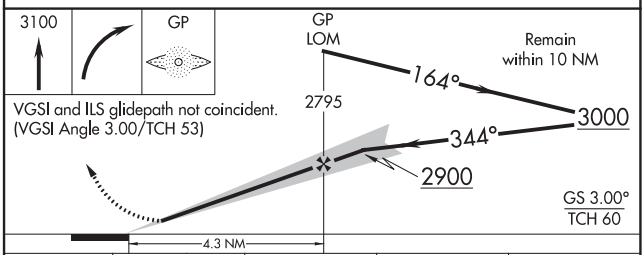


ELEV 1356 TDZE 1356



REIL Rwys 5, 16, 23 L
HIRL Rwy 16-34 L
MIRL Rwy 5-23 L

FAF to MAP 4.3 NM					
Knots	60	90	120	150	180
Min:Sec	4:18	2:52	2:09	1:43	1:26



VGSI and ILS glidepath not coincident.
(VGSI Angle 3.00/TCH 53)

CATEGORY	A	B	C	D
S-ILS 34	1556-½ 200 (200-½)			
S-LOC 34	1820-½ 464 (500-½)		1820-1 464 (500-1)	
C CIRCLING	1900-1 544 (600-1)		1900-1½ 544 (600-1½)	2000-2 644 (700-2)

GRAND RAPIDS, MINNESOTA | AL-5258 (FAA) | 20142

APP CRS	Rwy ldg	5756
164°	TDZE	1327
	Apt Elev	1356

RNAV (GPS) RWY 16

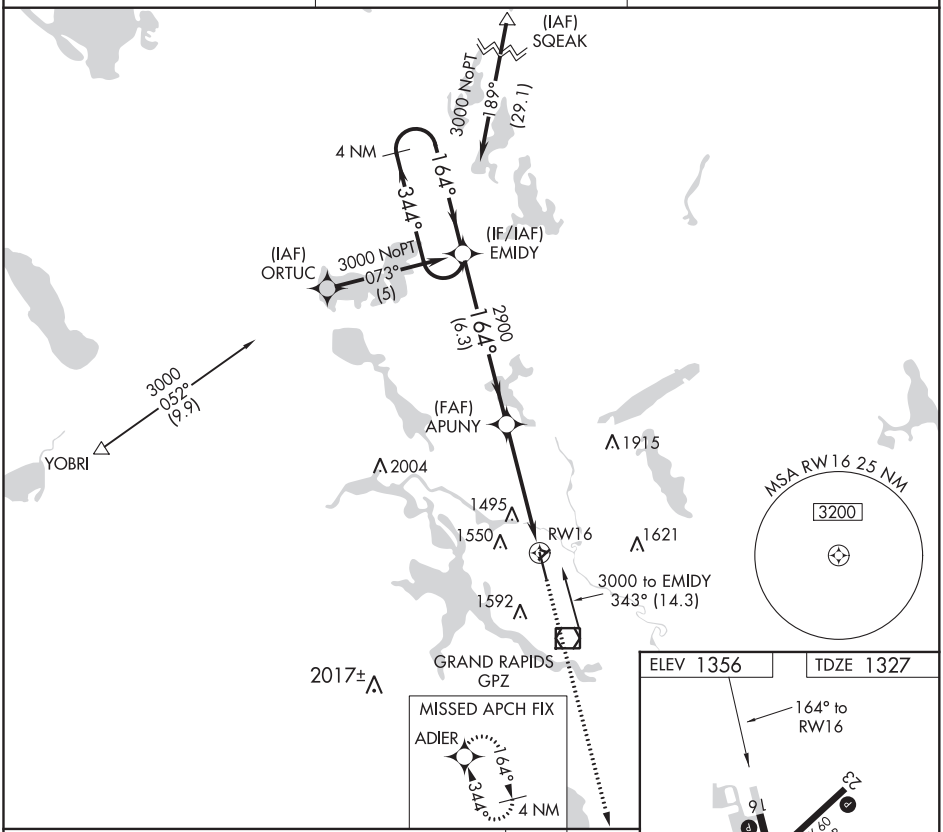
GRAND RAPIDS/ITASCA COUNTY-GORDON NEWSTROM FIELD (GPZ)

RNP APCH.

T Circling Rwy 5 NA at night. Circling NA for Cat D east of Rwy 16-34. When local altimeter setting not received, use Hibbing altimeter setting and increase all MDAs 80 feet, increase LNAV Cat C visibility ⅛ SM and Circling Cats C/D visibility ¼ SM.

MISSED APPROACH: Climb to 2900 direct ADIER and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
118.425	127.9 281.45	122.8 (CTAF) L



CATEGORY	A	B	C	D
LNAV MDA	1760-1 433 (500-1)		1760-1¼ 433 (500-1¼)	1760-1½ 433 (500-1½)
C CIRCLING	1900-1 544 (600-1)		1900-1½ 544 (600-1½)	2000-2 644 (700-2)

MIRL Rwy 5-23 L
HIRL Rwy 16-34 L
REIL Rwys 5, 16, 23 L

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WAAS CH 86412 W34A	APP CRS 344°	Rwy ldg 5756 TDZE 1356 Apt Elev 1356

GRAND RAPIDS/ ITASCA COUNTY-GORDON NEWSTROM FIELD (GPZ) RNAV (GPS) RWY 34

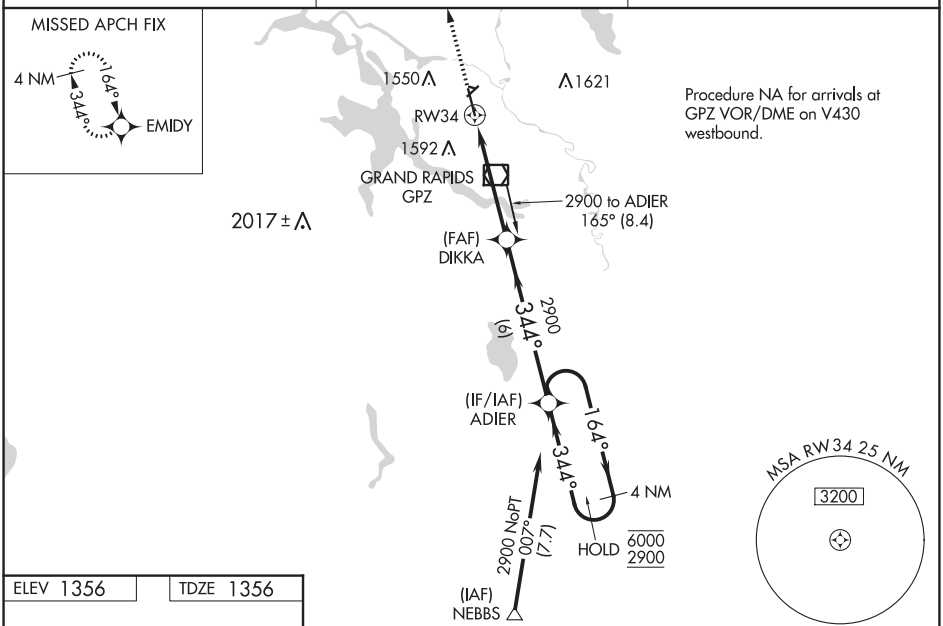
RNP APCH.

Circling NA to Rwys 10 and 28. Circling NA for Cat D east of Rwy 16-34. Circling Rwy 5 NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 49°C. For inop ALS, increase LPV all Cats visibility to 1 SM, increase LNAV/VNAV all Cats visibility to 1⅝ SM, increase LNAV Cats C and D visibility to 1⅜ SM.

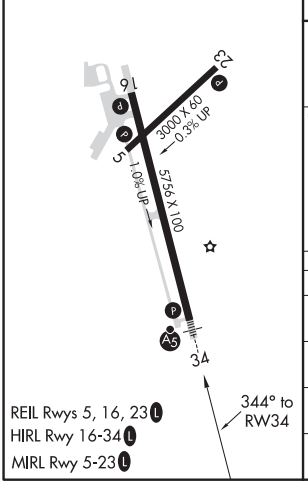
MALSR

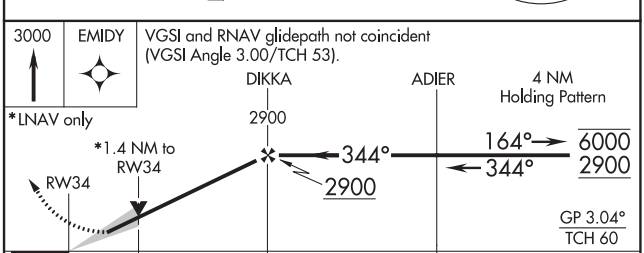
MISSED APPROACH: Climb to 3000 direct EMIDY and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
118.425	127.9 281.45	122.8 (CTAF) L



ELEV 1356	TDZE 1356





CATEGORY	A	B	C	D
LPV DA	1683-½ 327 (400-½)			
LNAV/VNAV DA	1928-1½ 572 (600-1½)			
LNAV MDA	1860-½ 504 (600-½)		1860-1 504 (600-1)	
C CIRCLING	1900-1 544 (600-1)		1900-1½ 544 (600-1½)	2000-2 644 (700-2)

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GRAND RAPIDS, MINNESOTA | AL-5258 (FAA) | 19199

VOR/DME GPZ	APP CRS	Rwy ldg	5756
111.4	334°	TDZE	1356
Chan 51		Apt Elev	1356

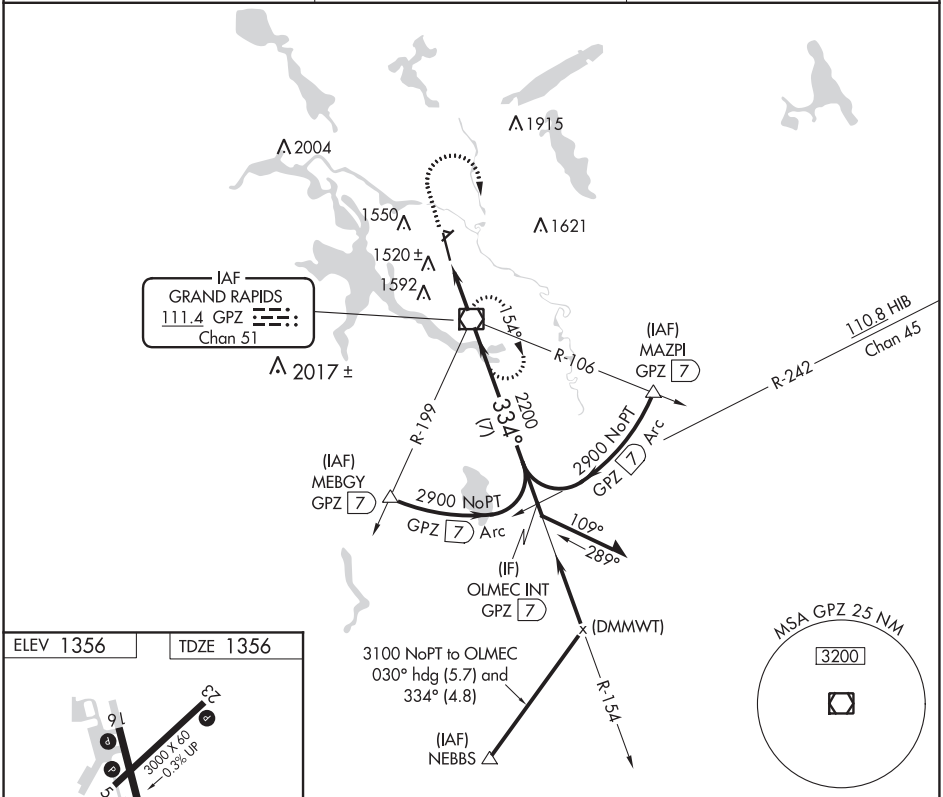
GRAND RAPIDS/ ITASCA COUNTY-GORDON NEWSTROM FIELD (GPZ)
VOR RWY 34

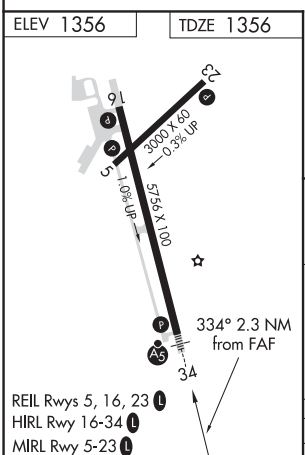
VDP NA when using Hibbings altimeter setting. Circling Rwy 5 NA at night. Circling NA for Cat D east of Rwy 16-34. When local altimeter setting not received, use Hibbing altimeter setting and increase all MDAs 80 feet, increase S-34 Cat C visibility ⅛ SM and Circling Cats C/D visibility ¼ SM.

MALSR

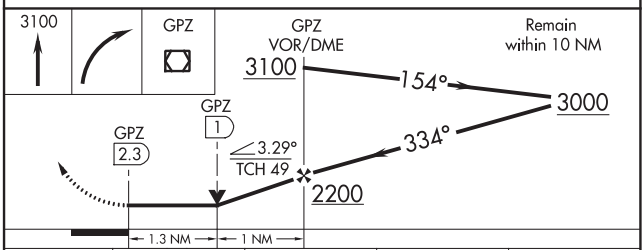
MISSED APPROACH: Climb to 3100 then right turn direct GPZ VOR/DME and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
118.425	127.9 281.45	122.8 (CTAF) L





FAF to MAP 2.3 NM					
Knots	60	90	120	150	180
Min:Sec	2:18	1:32	1:09	0:55	0:46



CATEGORY	A	B	C	D
S-34	1800-½ 444 (500-½)		1800-⅞ 444 (500-⅞)	1800-1 444 (500-1)
C CIRCLING	1900-1 544 (600-1)		1900-1½ 544 (600-1½)	2000-2 644 (700-2)

APP CRS	Rwy ldg	3715
333°	TDZE	1046
	Apt Elev	1048

RNAV (GPS) RWY 33

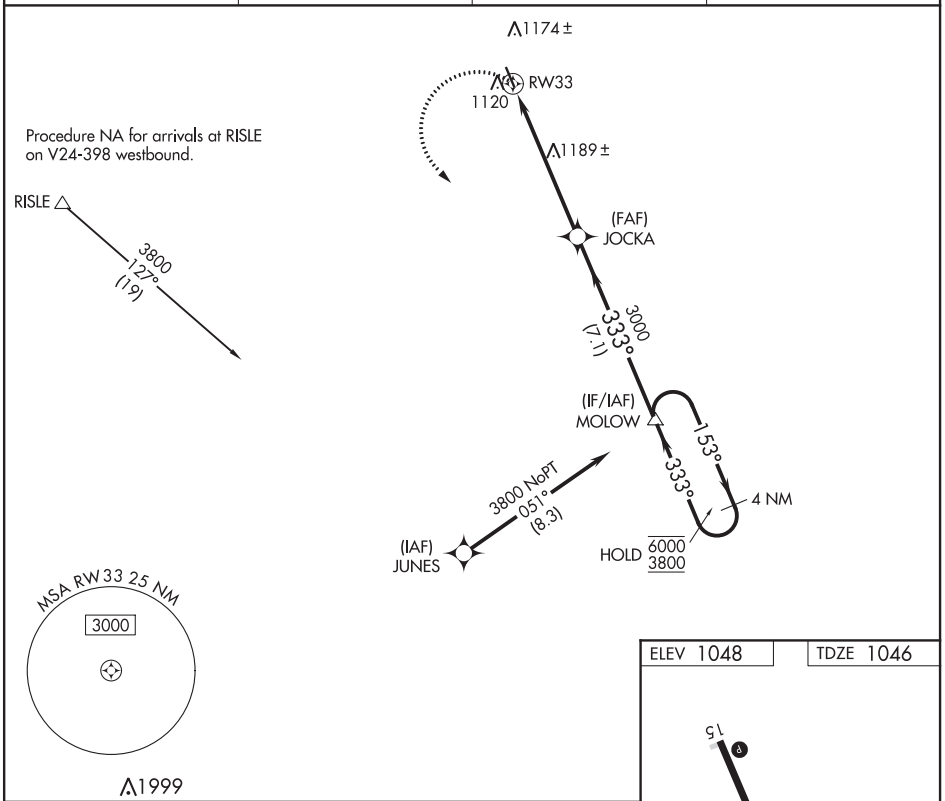
GRANITE FALLS MUNI/LENZEN-ROE-FAGEN MEMORIAL FIELD (GDB)

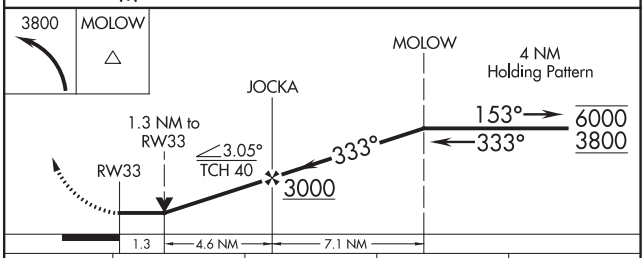
RNP APCH.

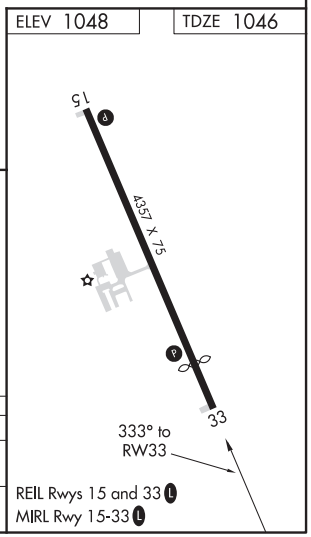
Rwy 33 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climbing left turn to 3800 direct to MOLOW and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
120.1	127.1 290.2	121.725	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	1480-1 434 (500-1)		1480-1¼ 434 (500-1¼)	1480-1½ 434 (500-1½)
CIRCLING	1480-1 432 (500-1)	1540-1 492 (500-1)	1540-1½ 492 (500-1½)	1600-2 552 (600-2)

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VOR/DME MVE	APP CRS	Rwy ldg 3715
111.6	328°	TDZE 1045
Chan 53		Apt Elev 1047

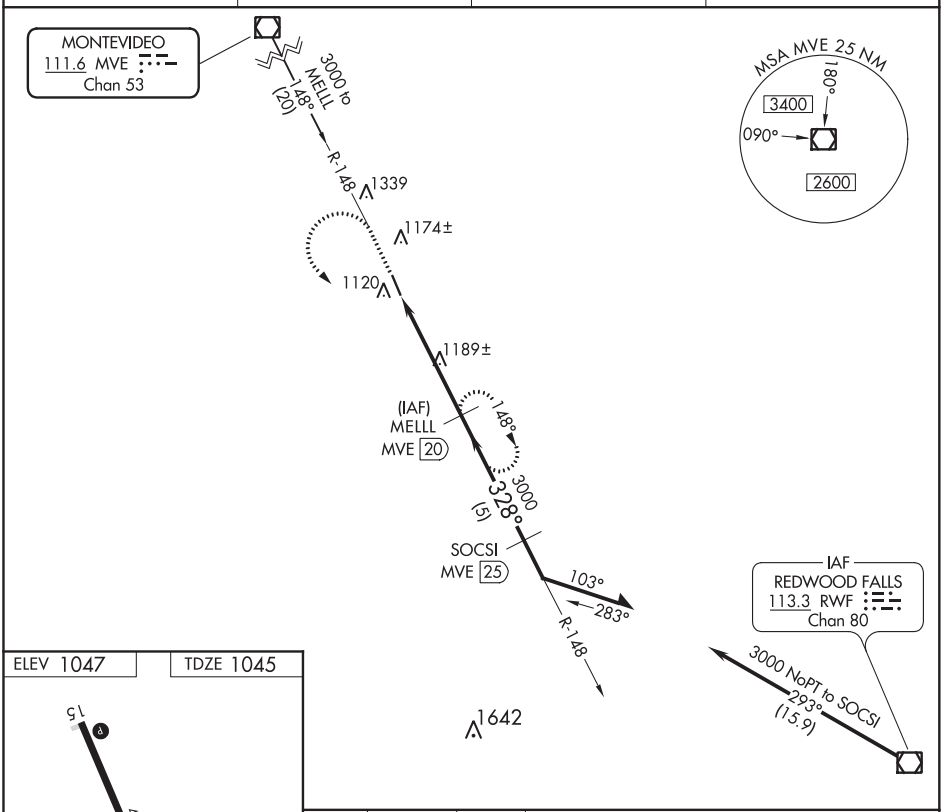
VOR/DME RWY 33

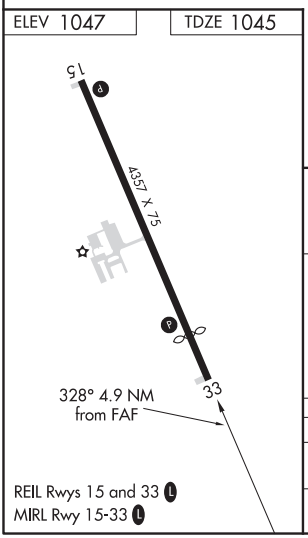
GRANITE FALLS MUNI/LENZEN-ROE-FAGEN MEMORIAL FIELD (GDB)

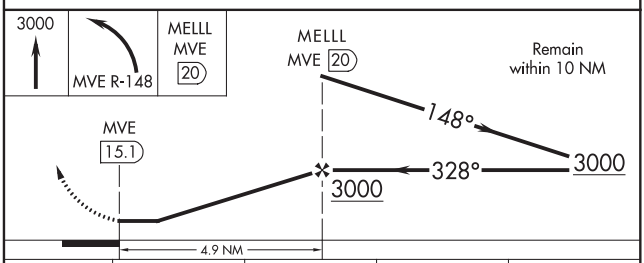
When local altimeter setting not received, use Montevideo altimeter setting and increase all MDAs 40 feet, increase S-33 visibility Cat C ⅛ SM. Rwy 33 helicopter visibility below ¾ SM NA.

MISSED APPROACH: Climb to 3000, then left turn via R-148 to MELLL/MVE 20 DME and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
120.1	127.1 290.2	121.725	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-33	1480-1	435 (500-1)	1480-1¼ 435 (500-1¼)	1480-1½ 435 (500-1½)
CIRCLING	1520-1	473 (500-1)	1520-1½ 473 (500-1½)	1600-2 553 (600-2)

NC-1, 25 FEB 2021 to 22 APR 2021

APP CRS	Rwy ldg	3799
127°	TDZE	2170
	Apt Elev	2175

RNAV (GPS) RWY 13
GREGORY MUNI-FLYNN FIELD (9D1)

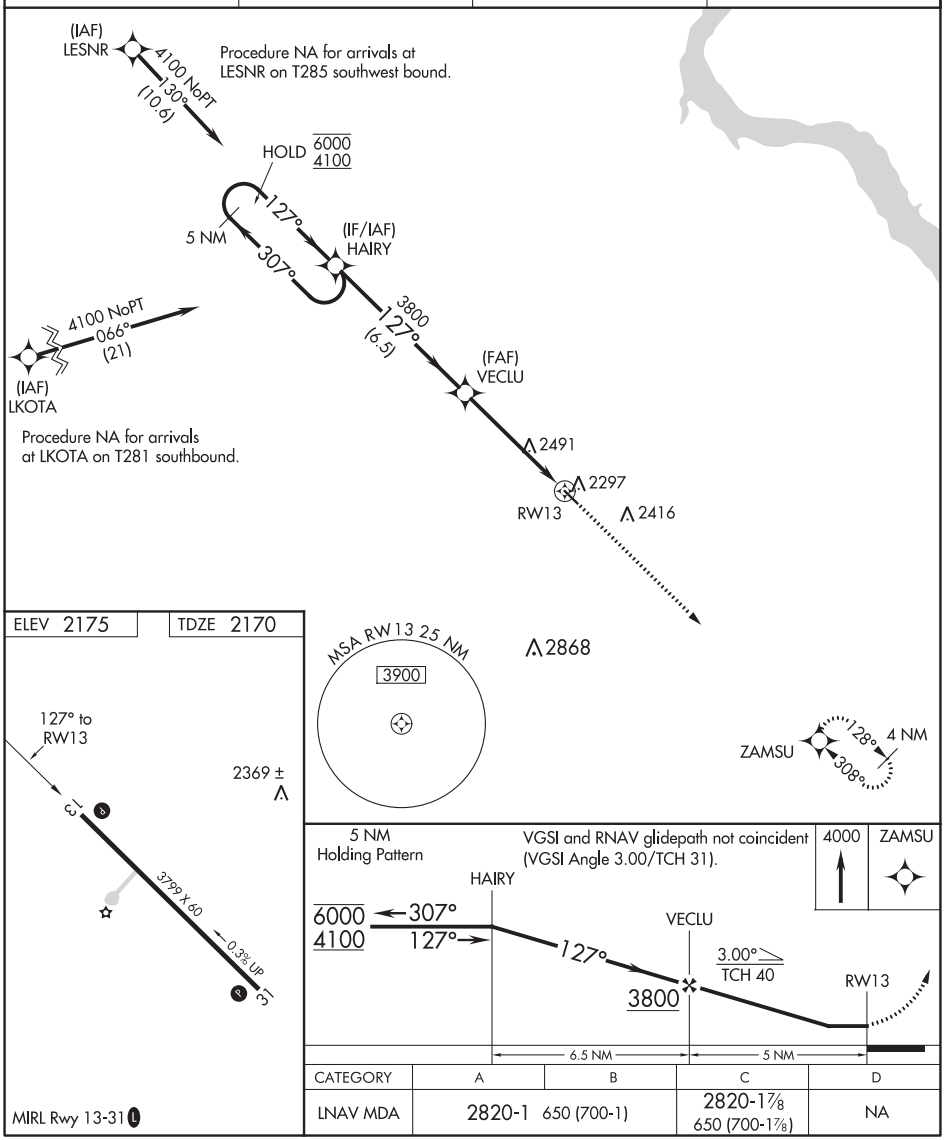
RNP APCH.

NA

Rwy 13 helicopter visibility reduction below ¾ SM NA. Use Winner altimeter setting; when not received, use Ainsworth altimeter setting and increase all MDA 100 feet; increase LNAV Cat B visibility ¼ SM and Cat C visibility ⅛ SM.

MISSED APPROACH: Climb to 4000 direct ZAMSU and hold.

ICR ASOS	MINNEAPOLIS CENTER	GCO	AUNICOM
126.775	125.1 269.1	121.725	122.8 (CTAF) L



CATEGORY	A	B	C	D
LNAV MDA	2820-1 650 (700-1)		2820-1⅞ 650 (700-1⅞)	NA

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

GREGORY, SOUTH DAKOTA | AL-9034 (FAA) | 20086

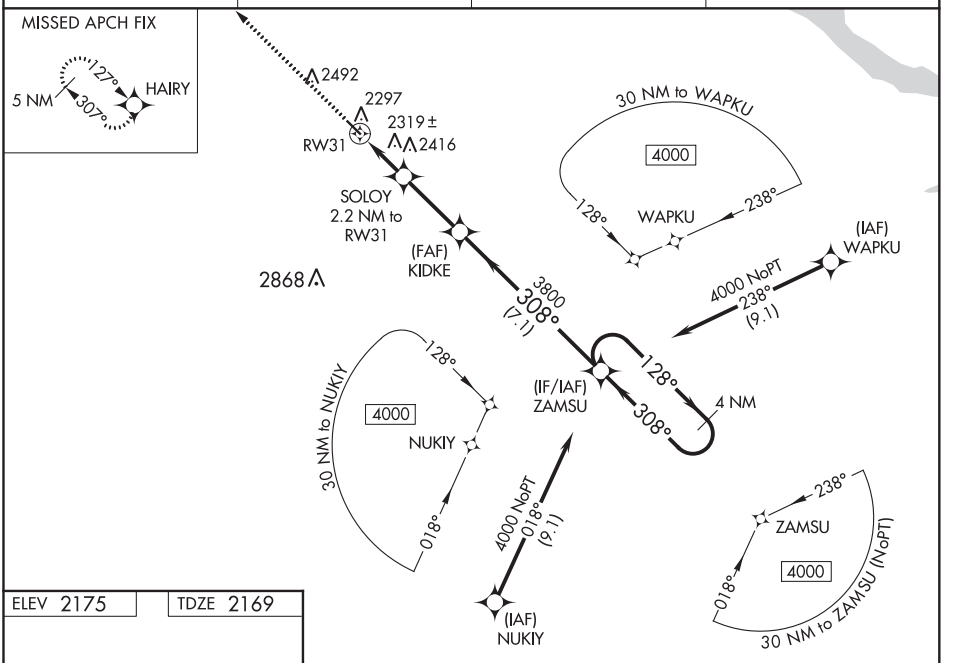
WAAS CH 77630 W31A	APP CRS 308°	Rwy ldg 3799 TDZE 2169 Apt Elev 2175

RNAV (GPS) RWY 31
GREGORY MUNI-FLYNN FIELD (9D1)

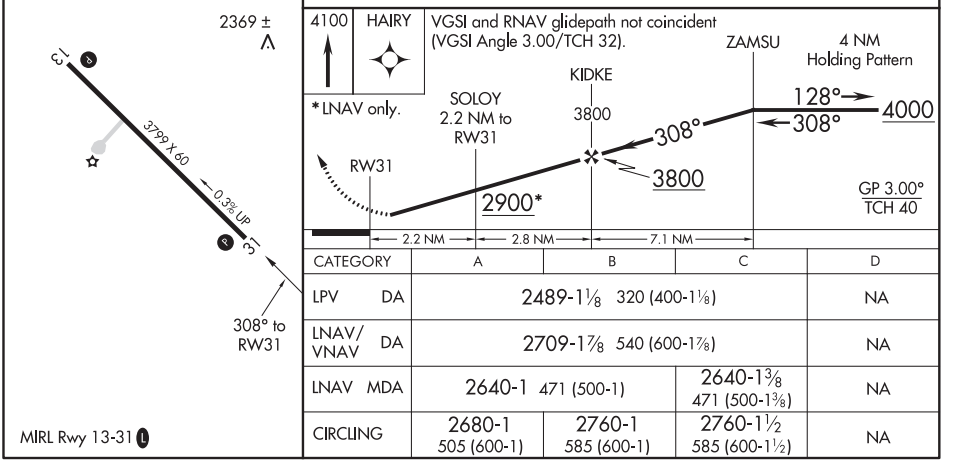
T A NA Helicopter visibility reduction below 1 SM NA. When VGSI inoperative, Circling Rwy 13 NA at night. Baro-VNAV NA. When VGSI inoperative, Straight-in/Circling Rwy 31 procedure NA at night. DME/DME RNP-0.3 NA. Use Winner altimeter setting; when not received use Ainsworth altimeter setting and increase all DA 95 feet and all MDA 100 feet and increase LPV all Cats visibility ¼ mile, LNAV/VNAV all Cats visibility ⅜ mile, LNAV Cat C visibility ¼ mile and Circling Cat C visibility ½ mile.

MISSED APPROACH: Climb to 4100 direct HAIRY and hold.

ICR ASOS	MINNEAPOLIS CENTER	GCO	AUNICOM
126.775	125.1 269.1	121.725	122.8 (CTAF) L



ELEV 2175 | TDZE 2169



CATEGORY		A	B	C	D
LPV	DA	2489-1⅛ 320 (400-1⅛)			NA
LNAV/VNAV	DA	2709-1⅞ 540 (600-1⅞)			NA
LNAV	MDA	2640-1 471 (500-1)		2640-1⅜ 471 (500-1⅜)	NA
CIRCLING		2680-1 505 (600-1)	2760-1 585 (600-1)	2760-1½ 585 (600-1½)	NA

MIRL Rwy 13-31 L

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

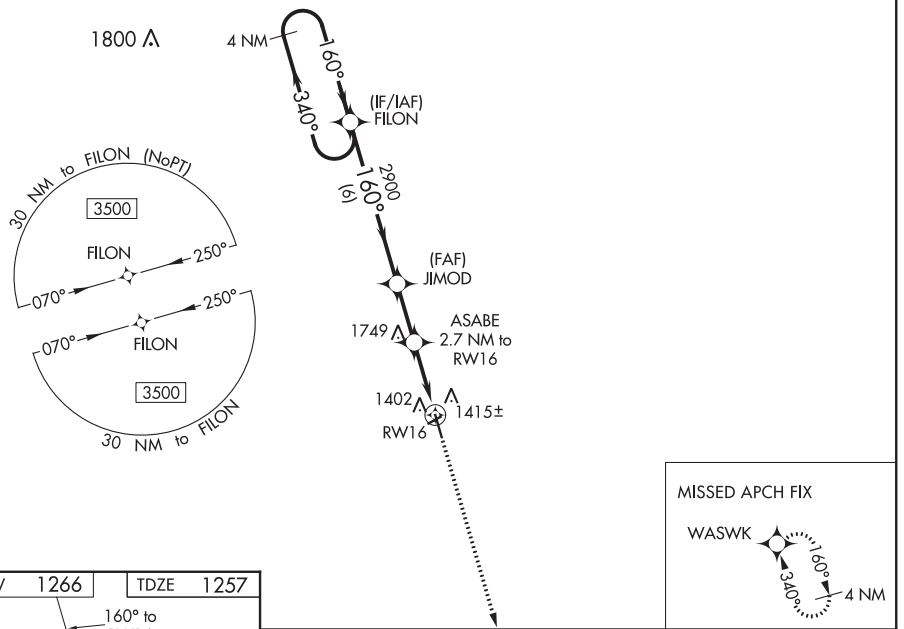
WAAS CH 93936 W16A	APP CRS 160°	Rwy ldg 5000 TDZE 1257 Apt Elev 1266

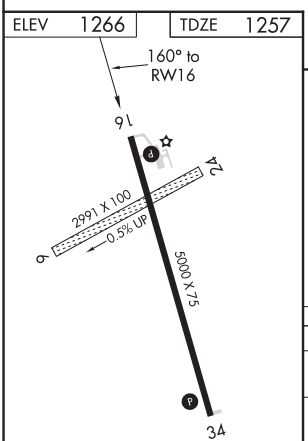
RNAV (GPS) RWY 16
GWINNER-ROGER MELROE FIELD (GWR)

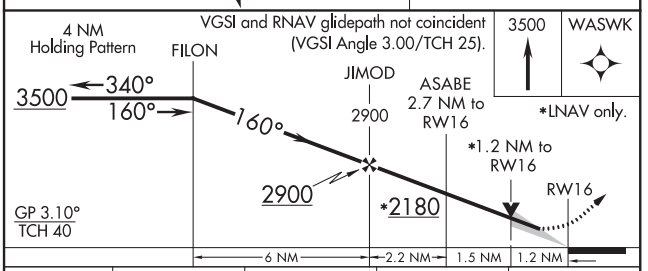
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 47°C (117°F). DME/DME RNP-0.3 NA. Circling NA to Rwys 6 and 24. Baro-VNAV and VDP NA when using Fargo altimeter setting. When local altimeter setting not received, use Fargo altimeter setting: increase LPV DA to 1683 feet and visibility ⅜ SM, and LNAV/VNAV DA to 1803 feet and visibility ⅝ SM; increase all MDAs 180 feet and visibility LNAV Cat C/D ⅝ SM, and Circling Cat C ¾ SM, and Circling Cat D ½ SM.

MISSED APPROACH: Climb to 3500 direct WASWK and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.325	127.35 278.3	122.7 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1507-1 250 (300-1)			
LNAV/VNAV DA	1627-1¼ 370 (400-1¼)			
LNAV MDA	1660-1 403 (400-1)		1660-1⅛ 403 (400-1⅛)	
C CIRCLING	1780-1 514 (600-1)		1840-1½ 574 (600-1½)	2060-2½ 794 (800-2½)

MIRL Rwy 16-34 L
REIL Rwys 16 and 34 L

GWINNER, NORTH DAKOTA — AL-6233 (FAA) — 19171

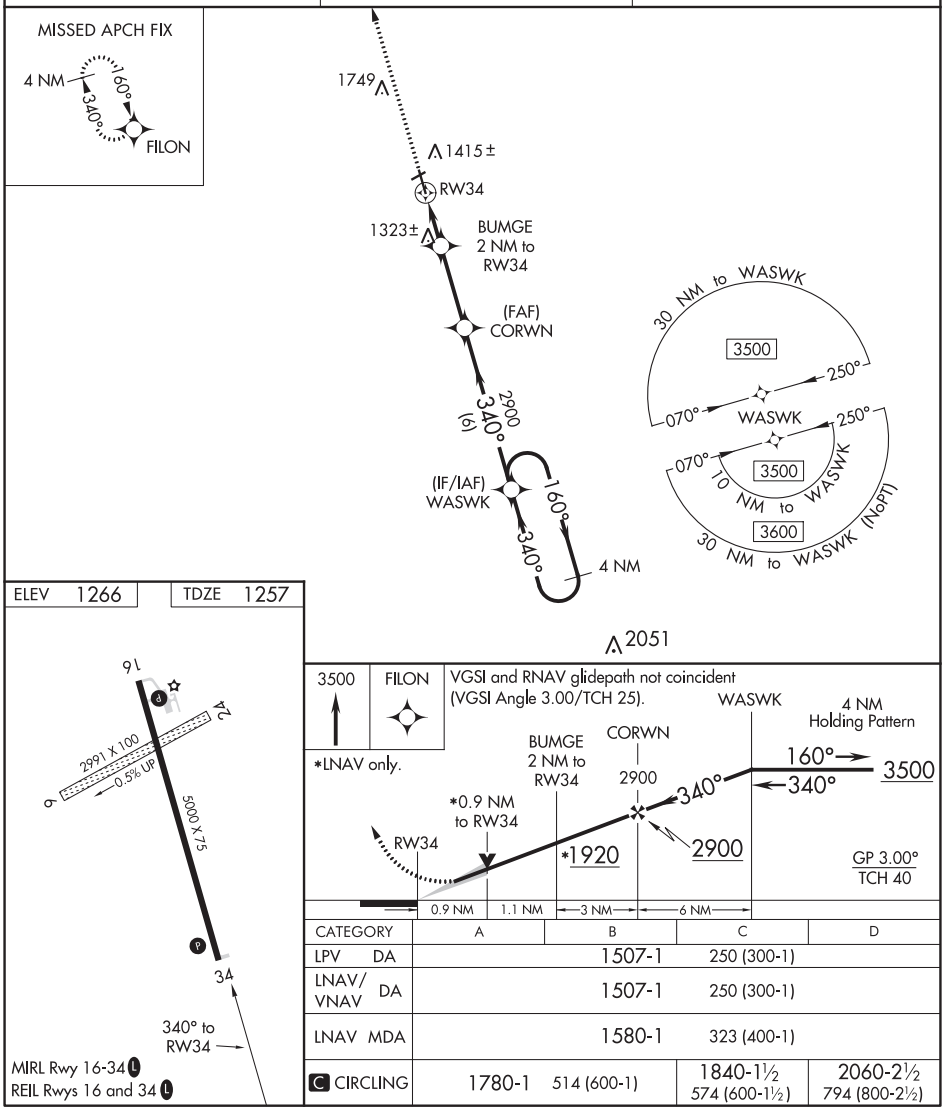
WAAS CH 99317 W34A	APP CRS 340°	Rwy ldg 5000 TDZE 1257 Apt Elev 1266

RNAV (GPS) RWY 34
GWINNER-ROGER MELROE FIELD (GWR)

T A Circling NA to Rwys 6 and 24. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received use Fargo altimeter setting: increase all DA to1683 feet and all visibilities ½ SM; increase all MDAs 180 feet and visibility LNAV Cat C/D ⅝ SM, and Circling Cat C ¾ SM, and Circling Cat D ½ SM. Baro-VNAV and VDP NA when using Fargo altimeter setting.

MISSED APPROACH: Climb to 3500 direct FILON and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.325	127.35 278.3	122.7 (CTAF) L



CATEGORY	A	B	C	D
LPV DA	1507-1	250 (300-1)		
LNAV/VNAV DA	1507-1	250 (300-1)		
LNAV MDA	1580-1	323 (400-1)		
C CIRCLING	1780-1 514 (600-1)		1840-1½ 574 (600-1½)	2060-2½ 794 (800-2½)

GWINNER, NORTH DAKOTA
Amdt 4A 29MAR18

46°13′N-97°39′W

GWINNER-ROGER MELROE FIELD (GWR)
RNAV (GPS) RWY 34

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 40333 W13A	APP CRS 135°	Rwy ldg 4007 TDZE 820 Apt Elev 820

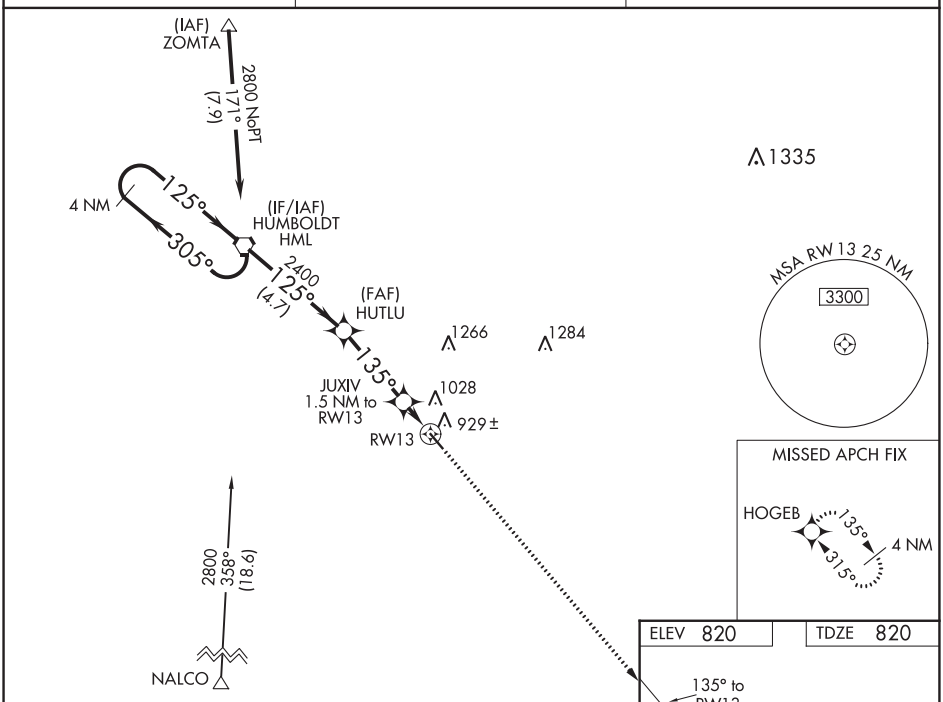
RNAV (GPS) RWY 13
HALLOCK MUNI (HCO)

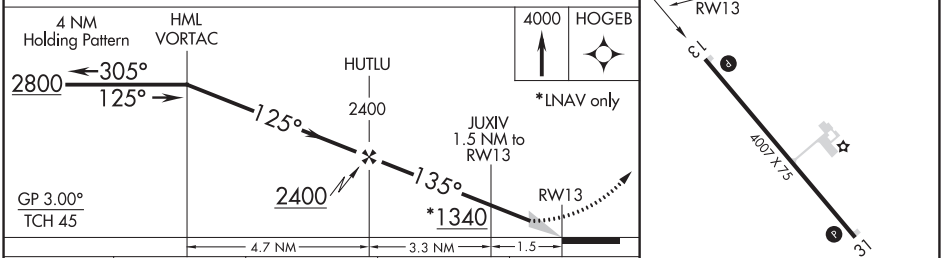
RNP APCH.

Baro-VNAV NA. When local altimeter setting not received, use Grafton, ND altimeter setting and increase all DA 63 feet and all MDA 80 feet; increase LNAV/VNAV all Cats visibility ⅛ mile, LNAV Cat C visibility ⅜ mile; Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 4000 direct HOGEB and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
126.475	132.15 269.6	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1070-1 250 (300-1)			NA
LNAV/VNAV DA	1213-1⅜ 393 (400-1⅜)			NA
LNAV MDA	1180-1 360 (400-1)			NA
C CIRCLING	1380-1 560 (600-1)		1380-1½ 560 (600-1½)	NA

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

HALLOCK, MINNESOTA AL-6275 (FAA) 20254

WAAS CH 45933 W31A	APP CRS 315°	Rwy ldg 4007 TDZE 820 Apt Elev 820

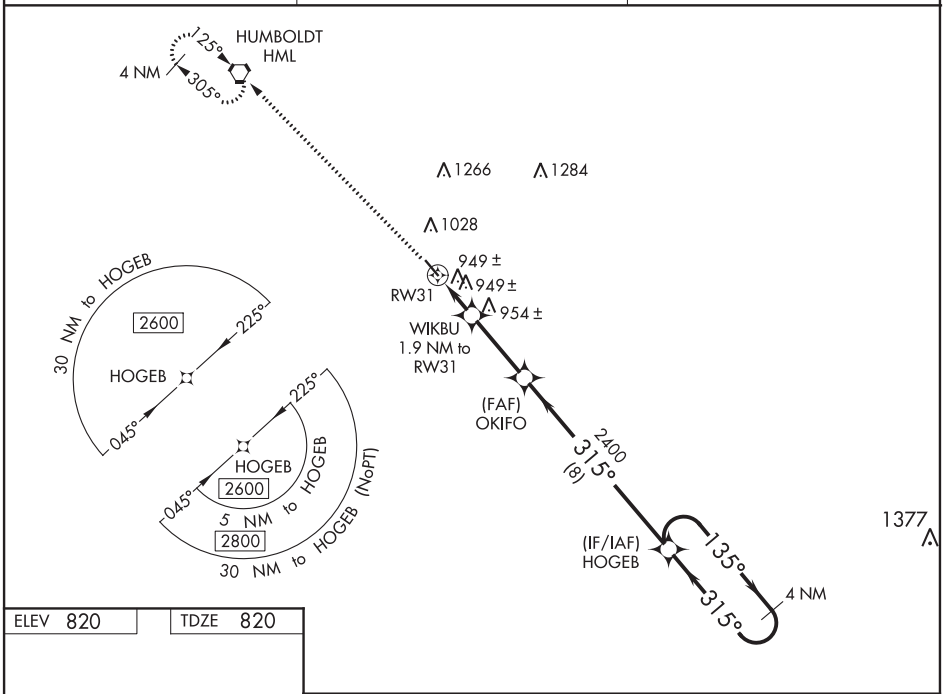
RNAV (GPS) RWY 31
HALLOCK MUNI (HCO)

RNP APCH.

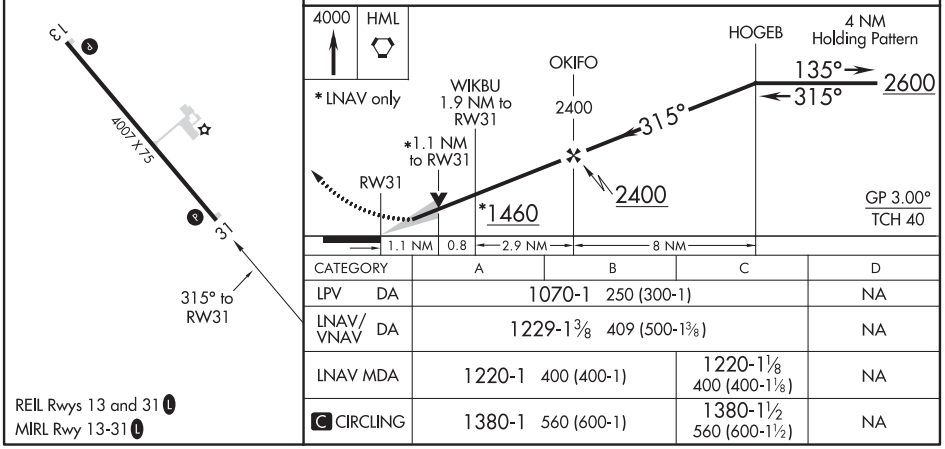
Baro-VNAV NA. VDP NA with Grafton, ND altimeter setting. When local altimeter setting not received, use Grafton, ND altimeter setting and increase all DA 63 feet and all MDA 80 feet; increase LNAV/VNAV all Cats, LNAV Cat C and Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 4000 direct HML VORTAC and hold, continue climb-in-hold to 4000.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
126.475	132.15 269.6	122.8 (CTAF) L



ELEV 820 TDZE 820



CATEGORY	A	B	C	D
LPV DA	1070-1 250 (300-1)			NA
LNAV/VNAV DA	1229-1⅜ 409 (500-1⅜)			NA
LNAV MDA	1220-1 400 (400-1)		1220-1⅛ 400 (400-1⅛)	NA
C CIRCLING	1380-1 560 (600-1)		1380-1½ 560 (600-1½)	NA

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

NC-1, 25 FEB 2021 to 22 APR 2021

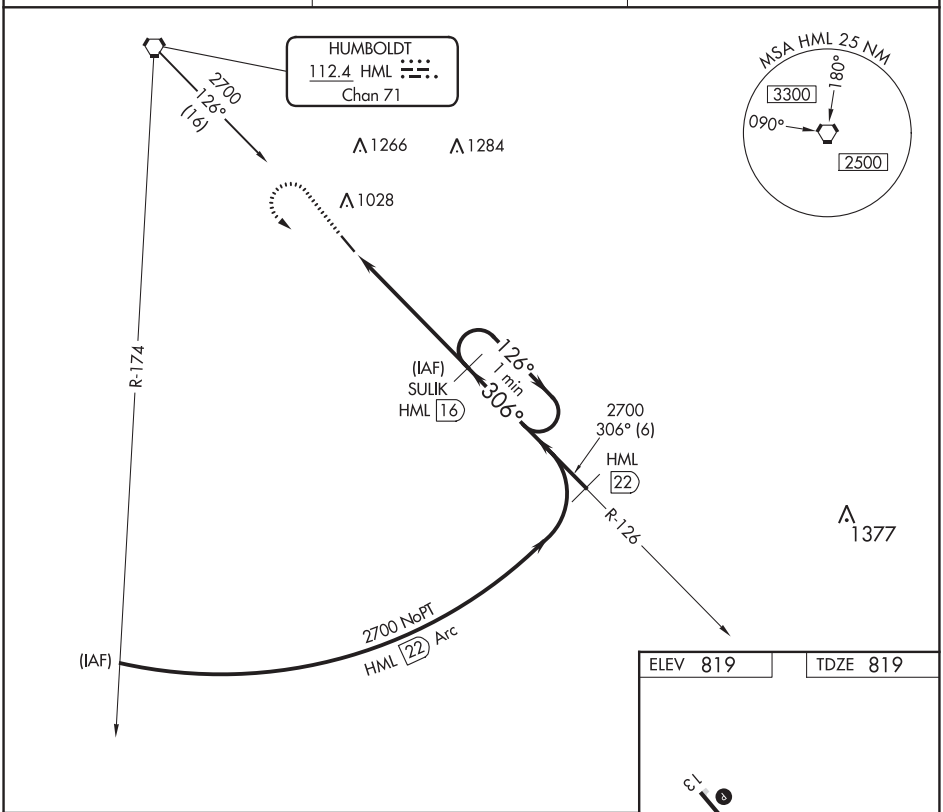
VORTAC HML 112.4 Chan 71	APP CRS 306°	Rwy ldg 4007 TDZE 819 Apt Elev 819

VOR/DME RWY 31
HALLOCK MUNI (HCO)

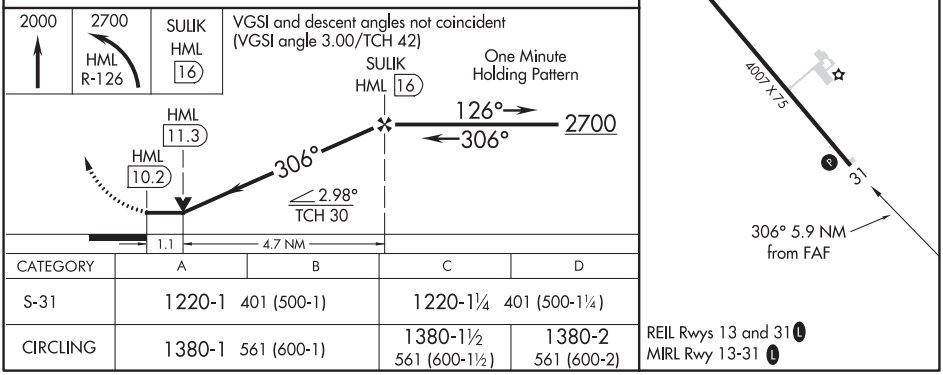
T
A NA

MISSED APPROACH: Climb to 2000 then climbing left turn to 2700 via HML R-126 to SULIK and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
126.475	132.15 269.6	122.8 (CTAF) L



ELEV 819 TDZE 819



CATEGORY	A	B	C	D
S-31	1220-1 401 (500-1)		1220-1¼ 401 (500-1¼)	
CIRCLING	1380-1 561 (600-1)		1380-1½ 561 (600-1½)	1380-2 561 (600-2)

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

HARVEY, NORTH DAKOTA | AL-9023 (FAA) | 19227

APP CRS	Rwy ldg	3600
112°	TDZE	1607
	Apt Elev	1607

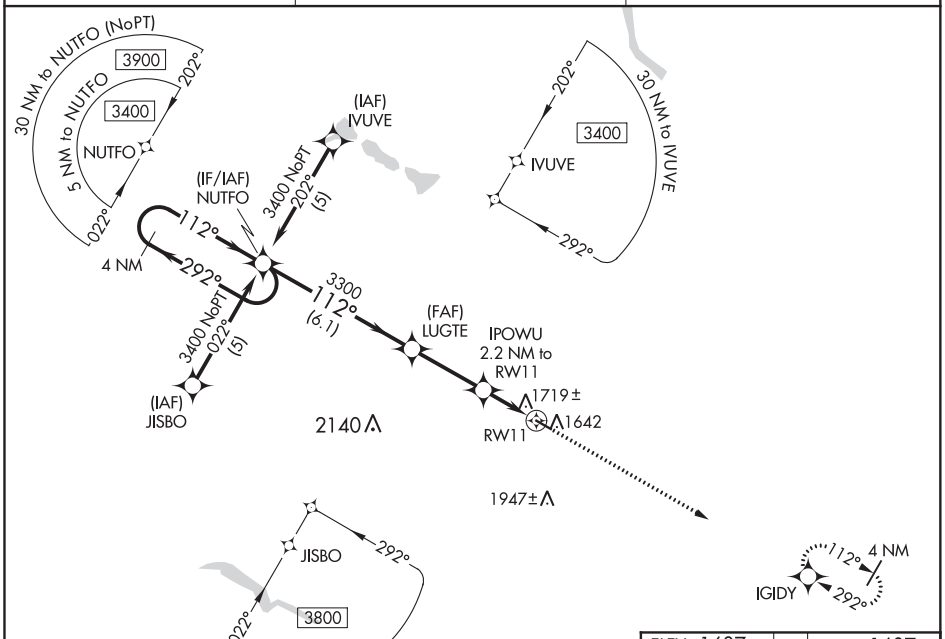
RNAV (GPS) RWY 11
HARVEY MUNI (5H4)

RNP APCH.

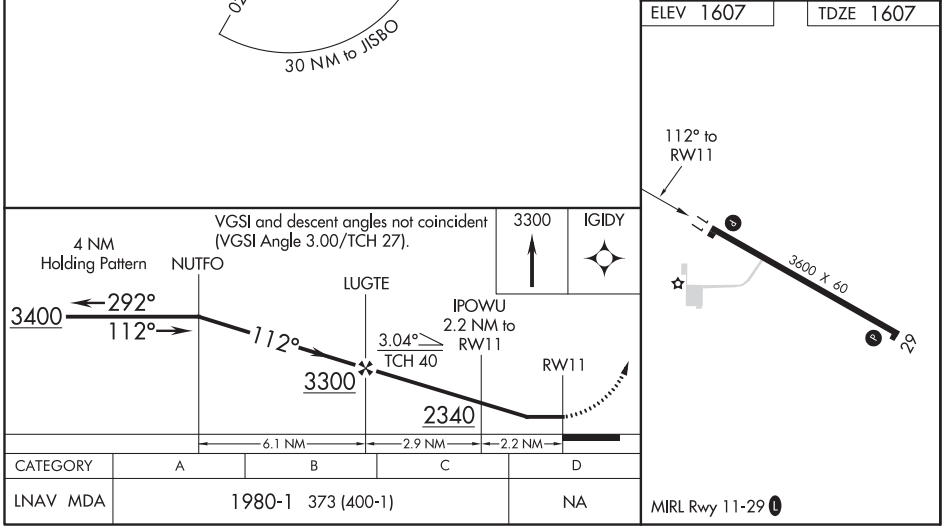
T A NA — Procedure NA at night. Rwy 11 helicopter visibility reduction below 1 SM NA. When local altimeter setting not received; use Devil's Lake altimeter setting and increase all MDA 140 feet and LNAV Cat C visibility ½ SM.

MISSED APPROACH: Climb to 3300 direct IGIDY and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.825	135.25 256.7	122.8 (CTAF) L



ELEV 1607	TDZE 1607



CATEGORY	A	B	C	D
LNAV MDA	1980-1 373 (400-1)			NA

MIRL Rwy 11-29 L

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

APP CRS	Rwy ldg	3600
292°	TDZE	1607
	Apt Elev	1607

RNAV (GPS) RWY 29
HARVEY MUNI (5H4)

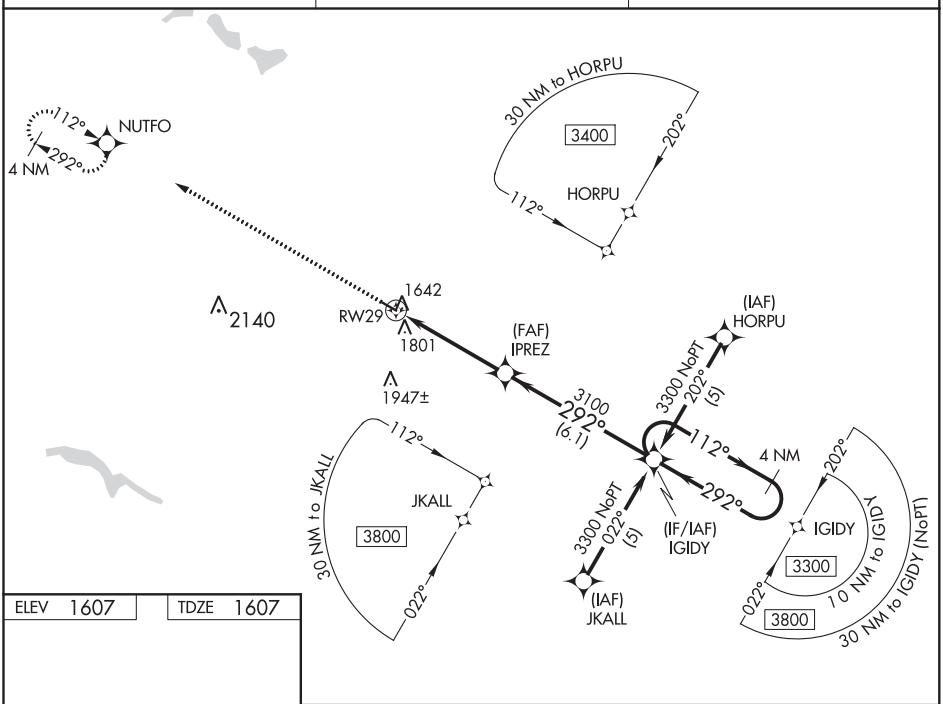
RNP APCH.

NA

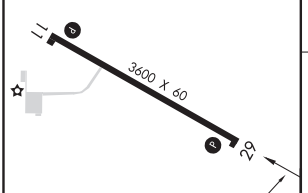
Circling Rwy 11 NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 54°C (130°F). Baro-VNAV NA when using Devil's Lake altimeter setting. When local altimeter setting not received, use Devil's Lake altimeter setting and increase all DA 127 feet, and all MDA 140 feet; increase LNAV/VNAV visibility Cats A, B, C, and LNAV Cat C visibility ½ mile and Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 3400 direct NUTFO and hold.

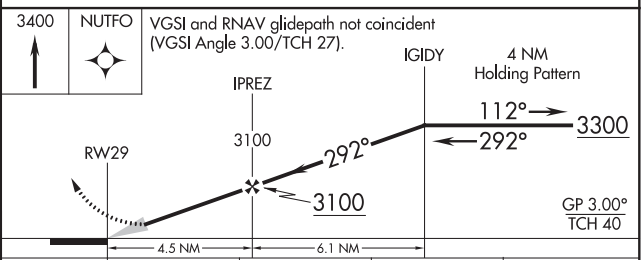
AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.825	135.25 256.7	122.8 (CTAF) L



ELEV 1607	TDZE 1607



MIRL Rwy 11-29 L



CATEGORY	A	B	C	D
LNAV/VNAV DA	2119-1¾ 512 (600-1¾)			NA
LNAV MDA	2100-1 493 (500-1)		2100-1¼ 493 (500-1¼)	NA
CIRCLING	2120-1 513 (600-1)		2120½ 513 (600-1½)	NA

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

HAWLEY, MINNESOTA AL-6923 (FAA) 19171

RNAV (GPS) RWY 34
HAWLEY MUNI (Ø4Y)

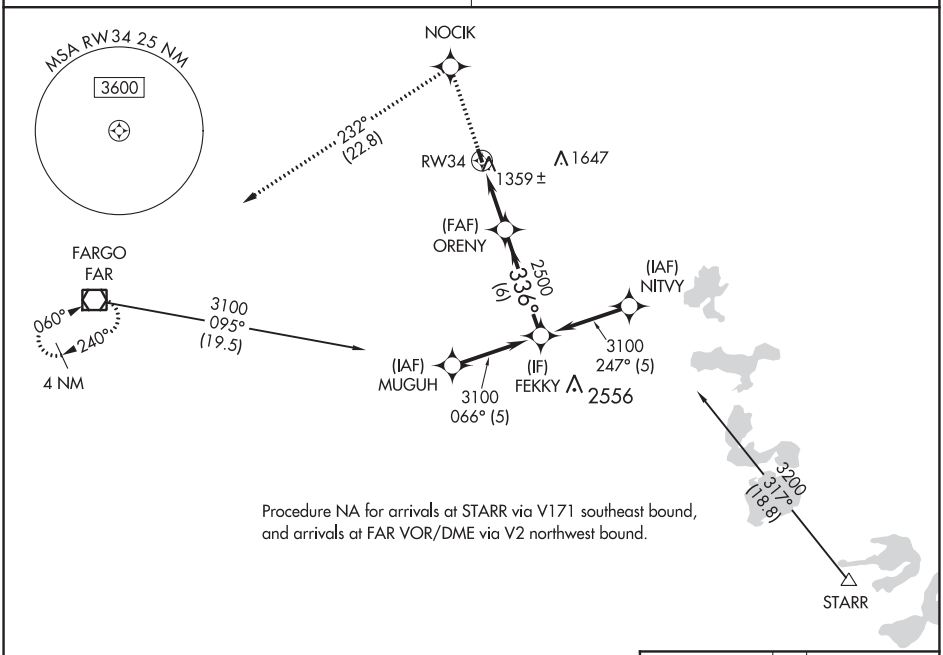
APP CRS	Rwy ldg	3398
336°	TDZE	1207
	Apt Elev	1210

T NA

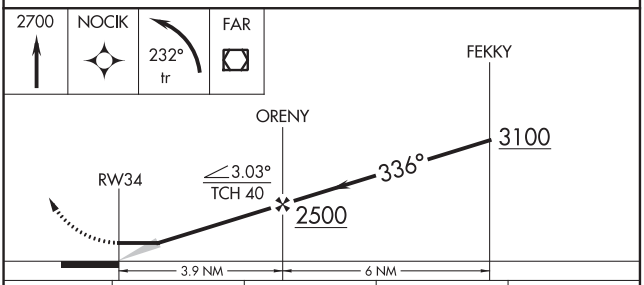
DME/DME RNP-0.3 NA.
Use Fargo, ND altimeter setting.

MISSED APPROACH: Climb to 2700 direct NOCIK and left turn via 232° track to FAR VOR/DME and hold.

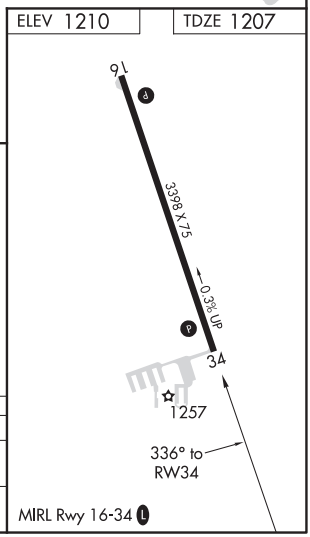
FARGO APP CON	UNICOM
120.4 377.15	122.8 (CTAF) L



Procedure NA for arrivals at STARR via V171 southeast bound, and arrivals at FAR VOR/DME via V2 northwest bound.



CATEGORY	A	B	C	D
LNAV MDA	1700-1 493 (500-1)		1700-1¼ 493 (500-1¼)	NA
CIRCLING	1760-1 550 (600-1)		1760-1½ 550 (600-1½)	NA



NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

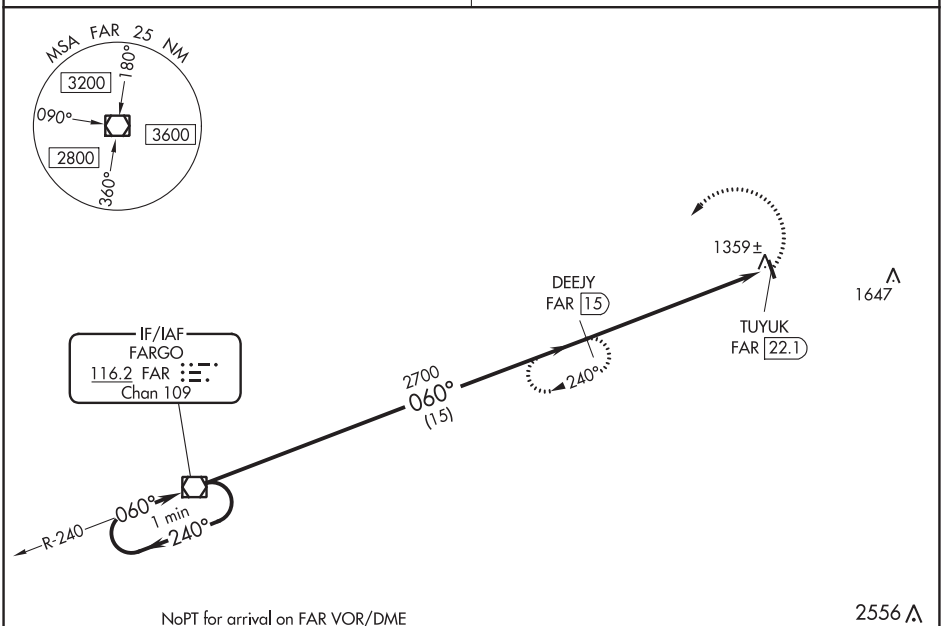
VOR/DME FAR 116.2 Chan 109	APP CRS 060°	Rwy ldg N/A TDZE N/A Apt Elev 1210

VOR/DME-A
HAWLEY MUNI (Ø4Y)

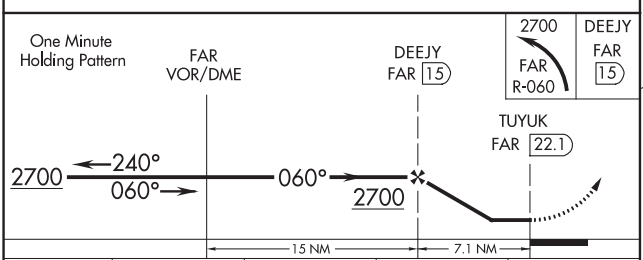
NA Use Fargo, ND altimeter setting.

MISSED APPROACH: Climbing left turn to 2700 via FAR VOR/DME R-060 to DEEJY/15 DME and hold.

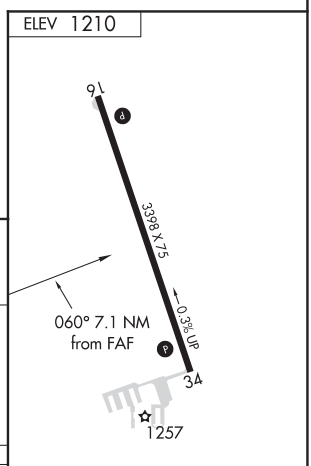
FARGO APP CON	UNICOM
120.4 377.15	122.8 (CTAF)



NoPT for arrival on FAR VOR/DME airway radials 178 CW 340.



CATEGORY	A	B	C	D
CIRCLING	1760-1 550 (600-1)	1760-1¼ 550 (600-1¼)	1760-1½ 550 (600-1½)	NA



MIRL Rwy 16-34

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

HAZEN, NORTH DAKOTA | AL-9085 (FAA) | 20086

WAAS CH 48818 W14A	APP CRS 144°	Rwy ldg 4999 TDZE 1787 Apt Elev 1814

RNAV (GPS) RWY 14
MERCER COUNTY RGNL (HZE)

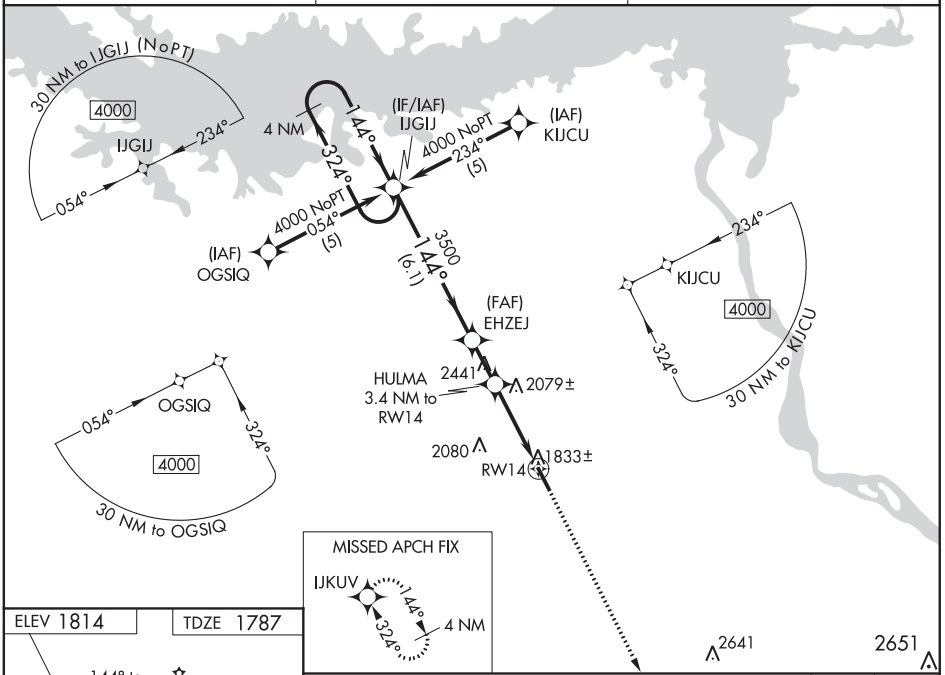
RNP APCH.

-41°C/-42°F

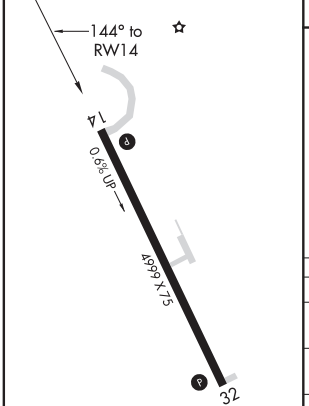
When local altimeter setting not received, use Bismarck altimeter setting. Rwy 14 helicopter visibility reduction below 1 SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C or above 54°C. Baro-VNAV NA when using Bismarck altimeter setting. When VGSI inoperative, procedure NA at night.

MISSED APPROACH: Climb to 4000 direct IJKUV and hold.

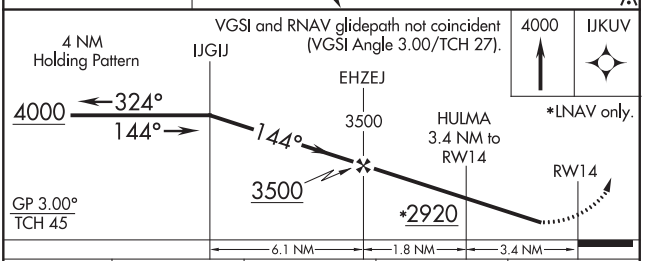
AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
118.675	124.25 236.825	122.8 (CTAF) L



ELEV 1814 | TDZE 1787



MIRL Rwy 14-32 L
REIL Rwy 32 L



CATEGORY	A	B	C	D
LPV DA	2165-1¼ 378 (400-1¼)			NA
LNAV/VNAV DA	2231-1½ 444 (500-1½)			NA
LNAV MDA	2460-1 673 (700-1)		2460-2 673 (700-2)	NA
CIRCLING	2460-1 646 (700-1)		2460-2 646 (700-2)	NA

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 53318 W32A	APP CRS 324°	Rwy ldg 4999 TDZE 1814 Apt Elev 1814

RNAV (GPS) RWY 32
MERCER COUNTY RGNL (HZE)

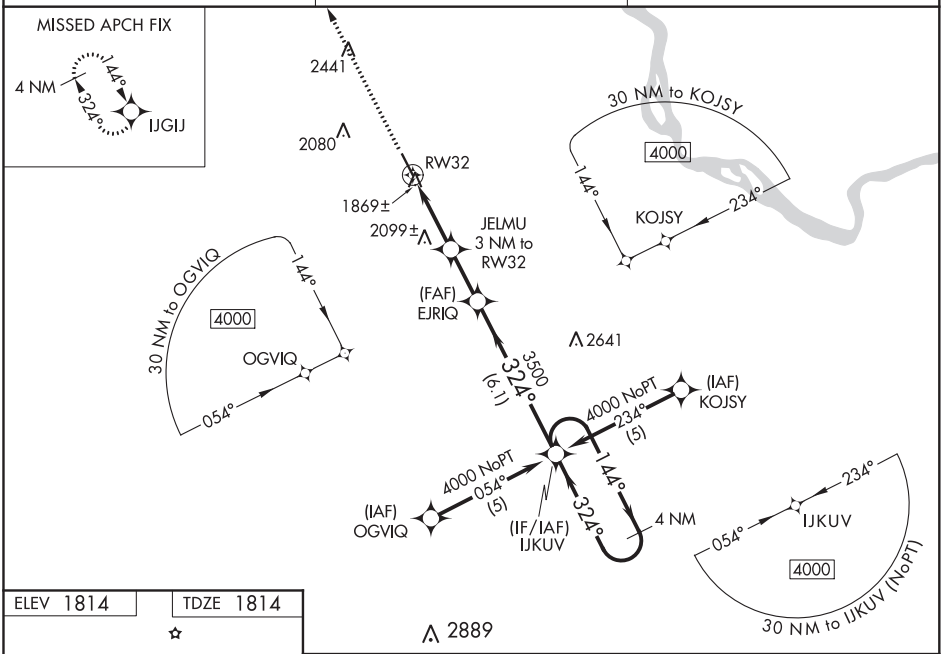
RNP APCH.

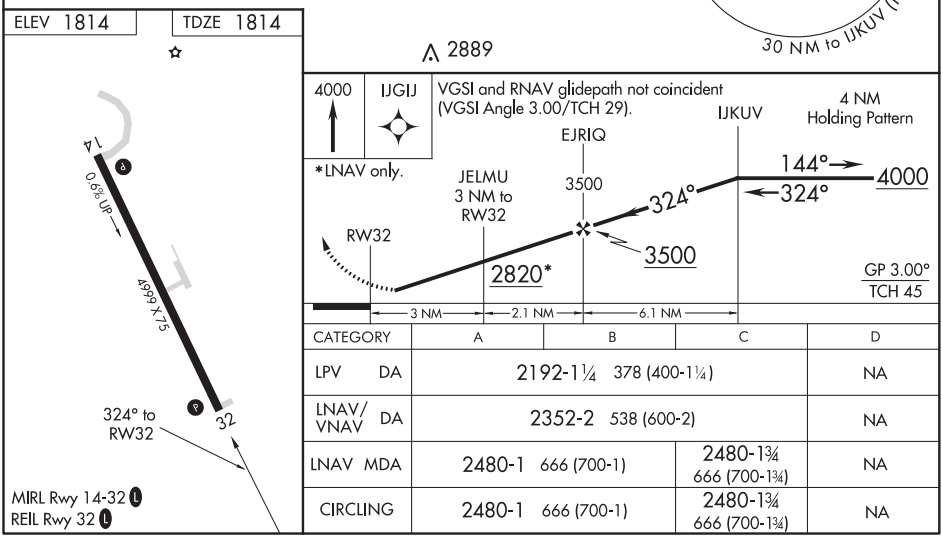
-41°C/-42°F

When VGSI inoperative, procedure NA at night. Rwy 14 helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use Bismarck altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C or above 54°C. Baro-VNAV NA when using Bismarck altimeter setting.

MISSED APPROACH: Climb to 4000 direct IJGIJ and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
118.675	124.25 236.825	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	2192-1¼ 378 (400-1¼)			NA
LNAV/VNAV DA	2352-2 538 (600-2)			NA
LNAV MDA	2480-1 666 (700-1)		2480-1¾ 666 (700-1¾)	NA
CIRCLING	2480-1 666 (700-1)		2480-1¾ 666 (700-1¾)	NA

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

HETTINGER, NORTH DAKOTA — AL-6517 (FAA) — 18032

RNAV (GPS) RWY 12

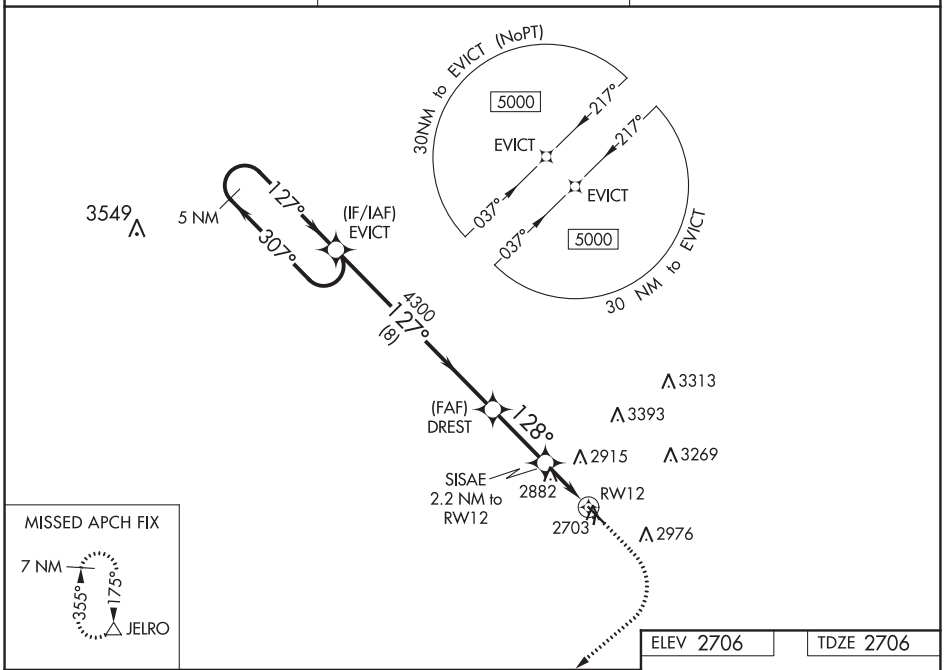
HETTINGER MUNI (HEI)

WAAS CH 90140 W12A	APP CRS 128°	Rwy ldg 4652 / TDZE 2706 / Apt Elev 2706

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Circling NA northeast of Rwy 12-30. Circling NA to Rwys 17 and 35.

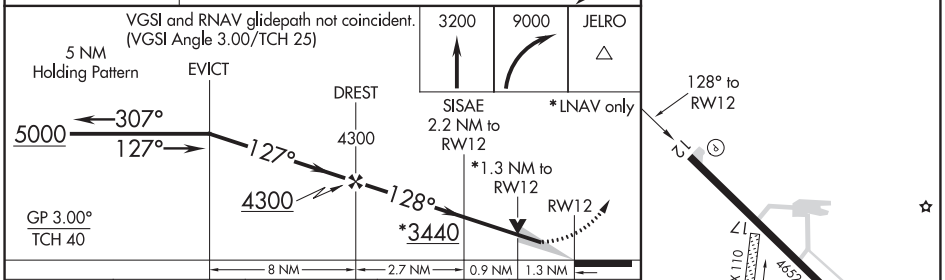
MISSED APPROACH: Climb to 3200, then climbing right turn to 9000 direct JELRO and hold, continue climb-in-hold to 9000.

ASOS	MINNEAPOLIS CENTER	UNICOM
119.925	124.25 236.825	122.8 (CTAF)



ELEV 2706 | TDZE 2706

VGSI and RNAV glidepath not coincident.
(VGSI Angle 3.00/TCH 25)



CATEGORY	A	B	C	D
LPV DA	2956-1 250 (300-1)			
LNAV/VNAV DA	3168-1⅝ 462 (500-1⅝)			
LNAV MDA	3140-1 434 (500-1)		3140-1¼ 434 (500-1¼)	
C CIRCLING	3180-1 474 (500-1)	3240-1 534 (600-1)	3240-1½ 534 (600-1½)	3460-2½ 754 (800-2½)

MIRL Rwy 12-30

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

RNAV (GPS) RWY 30

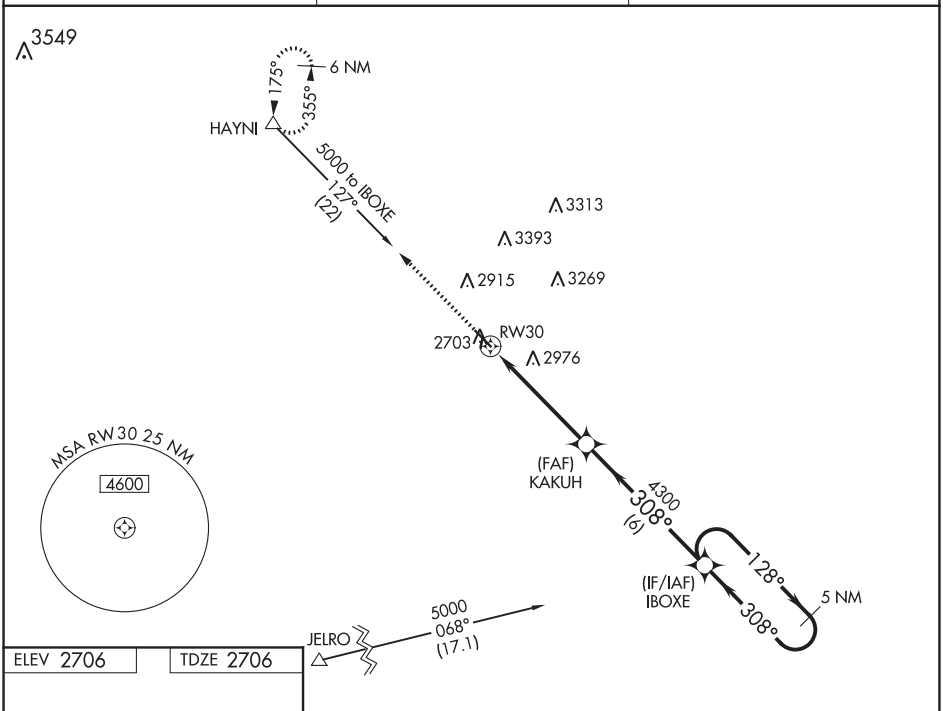
HETTINGER MUNI (HEI)

WAAS CH 82738 W30A	APP CRS 308°	Rwy ldg 4652 TDZE 2706 Apt Elev 2706

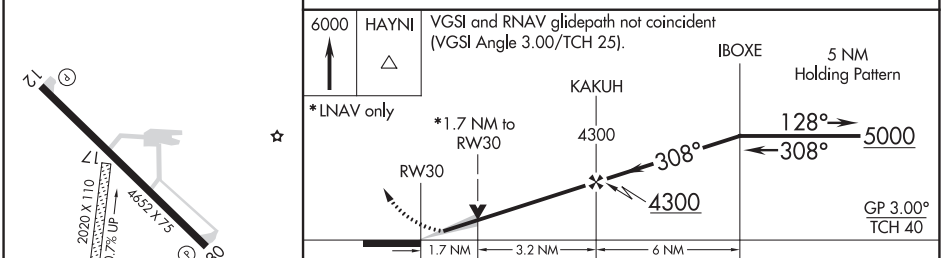
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Circling NA northeast of Rwy 12-30. Circling NA to Rwys 17 and 35.

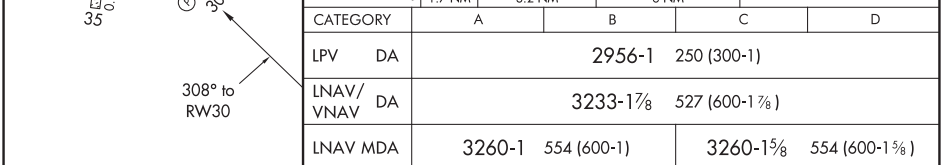
MISSED APPROACH: Climb to 6000 direct HAYNI and hold, continue climb-in-hold to 6000.

ASOS	MINNEAPOLIS CENTER	UNICOM
119.925	124.25 236.825	122.8 (CTAF)



ELEV 2706 TDZE 2706





CATEGORY	A	B	C	D
LPV DA	2956-1 250 (300-1)			
LNAV/VNAV DA	3233-1⅞ 527 (600-1⅞)			
LNAV MDA	3260-1 554 (600-1)		3260-1⅝ 554 (600-1⅝)	
C CIRCLING	3260-1 554 (600-1)		3260-1⅝ 554 (600-1⅝)	3460-2½ 754 (800-2½)

MIRL Rwy 12-30

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

HIBBING, MINNESOTA | AL-5159 (FAA) | 19339

ILS or LOC RWY 31
RANGE RGNL (HIB)

LOC I-HIB	APP CRS	Rwy ldg	6758
109.5	310°	TDZE	1343
		Apt Elev	1353

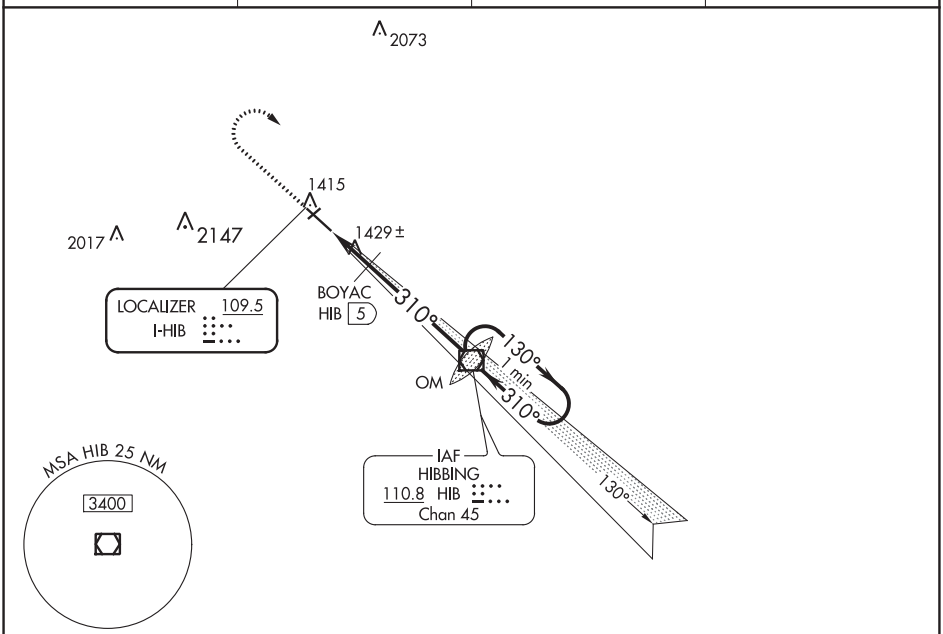
For inop MALSR, increase BOYAC FIX minimums S-LOC 31 Cat D visibility to 1.
DME from HIB VOR/DME.

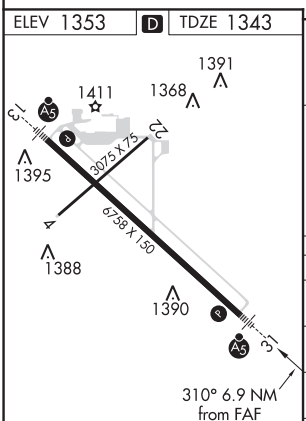
-31°C

MALSR

MISSED APPROACH: Climb to 2500 then climbing right turn to 3600 direct HIB VOR/DME and hold.

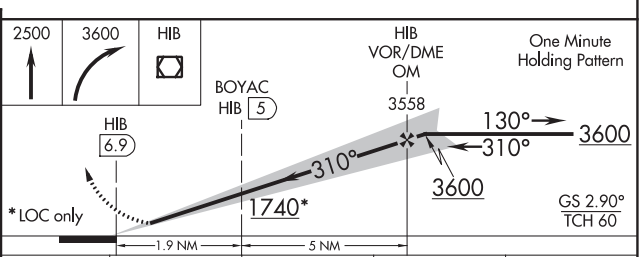
ASOS	DULUTH APP CON	CLNC DEL	UNICOM
126.425	125.45 233.7	127.4	123.0 (CTAF)





HIRL Rwy 13-31

FAF to MAP 6.9 NM					
Knots	60	90	120	150	180
Min:Sec	6:54	4:36	3:27	2:46	2:18



CATEGORY	A	B	C	D
S-ILS 31	1543-½ 200 (200-½)			
S-LOC 31	1740-½ 397 (400-½)			1740-¾ 397 (400-¾)
CIRCLING	1820-1 467 (500-1)	1840-1 487 (500-1)	1840-1½ 487 (500-1½)	1920-2 567 (600-2)
# BOYAC FIX MINIMUMS				
S-LOC 31	1680-½ 337 (400-½)			1680-¾ 337 (400-¾)
CIRCLING	1820-1 467 (500-1)	1840-1 487 (500-1)	1840-1½ 487 (500-1½)	1920-2 567 (600-2)

HIBBING, MINNESOTA
Amdt 13 27OCT05

47°23′N-92°50′W

RANGE RGNL (HIB)
ILS or LOC RWY 31

NC-1, 25 FEB 2021 to 22 APR 2021

LOC I-JAE	APP CRS	Rwy ldg	6758
110.5	130°	TDZE	1354
		Apt Elev	1354

ILS or LOC/DME RWY 13
RANGE RGNL (HIB)

Autopilot couple approach NA below 2388.

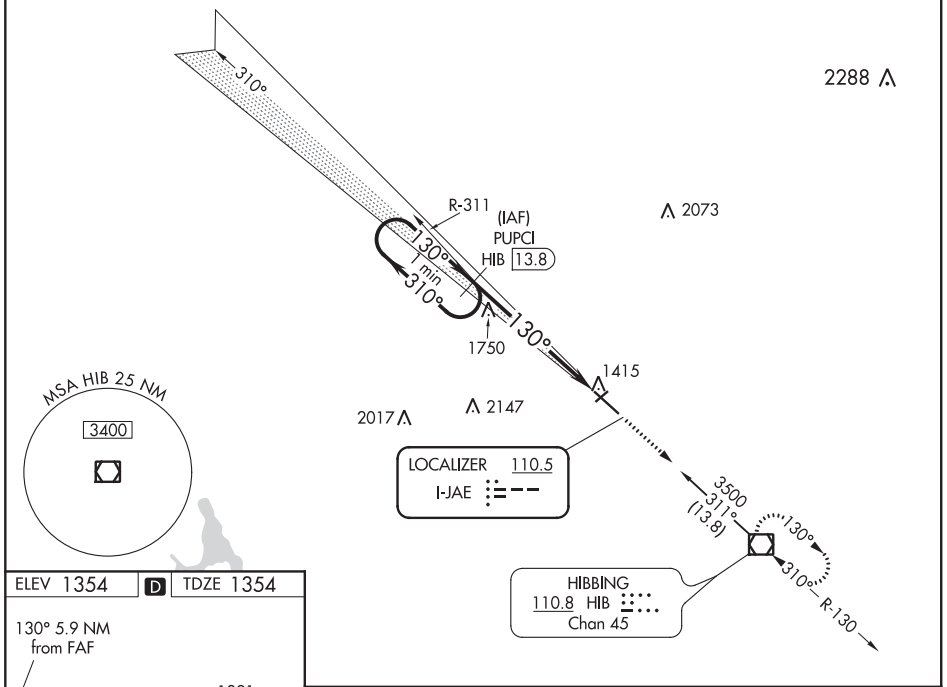
-31°C

MALSR

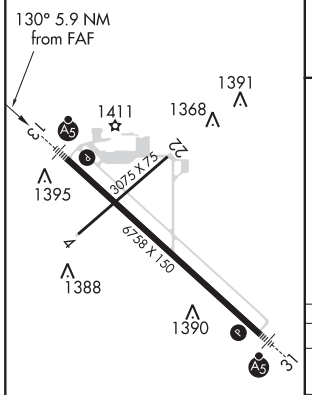
MISSED APPROACH: Climb to 3600 direct HIB VOR/DME and hold.

ASOS	DULUTH APP CON	CLNC DEL	UNICOM
126.425	125.45 233.7	127.4	123.0 (CTAF) L

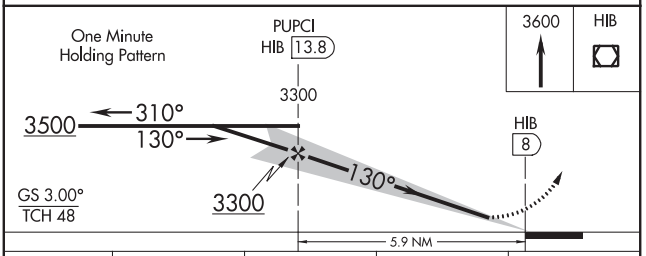
DME REQUIRED



ELEV 1354 D TDZE 1354



HIRL Rwy 13-31 L



CATEGORY	A	B	C	D
S-ILS 13	1554-½ 200 (200-½)			
S-LOC 13	2060-½ 706 (800-½)		2060-1½ 706 (800-1½)	2060-1¾ 706 (800-1¾)
CIRCLING	2060-1 706 (800-1)		2060-1½ 706 (800-1½)	2060-2 706 (800-2)

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HIBBING, MINNESOTA | AL-5159 (FAA) | 19339

APP CRS	Rwy ldg	3075
047°	TDZE	1352
	Apt Elev	1354

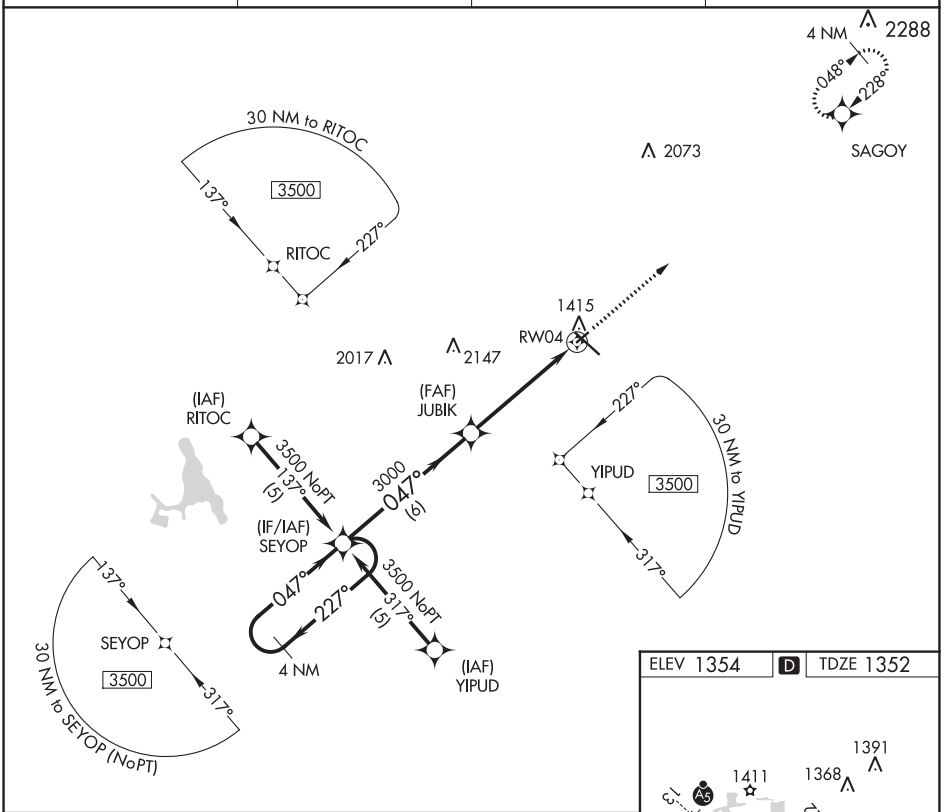
RNAV (GPS) RWY 4
RANGE RGNL (HIB)

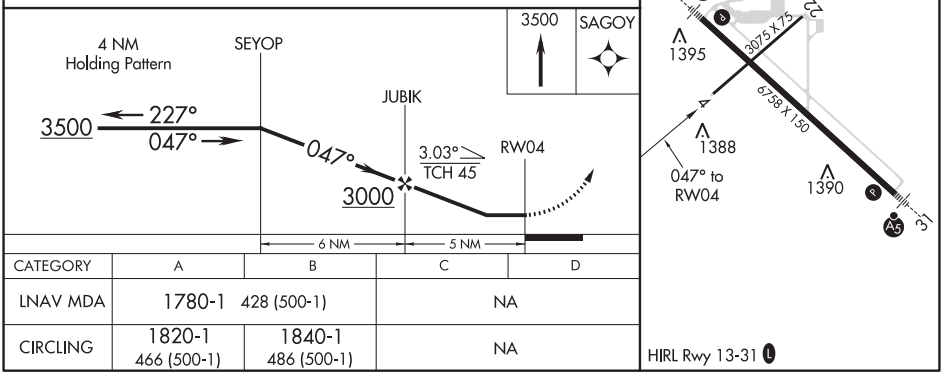
RNP APCH.

Procedure not authorized at night.
-31°C Rwy 4 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3500 direct SAGOY WP and hold.

ASOS	DULUTH APP CON	CLNC DEL	UNICOM
126.425	125.45 233.7	127.4	123.0 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	1780-1 428 (500-1)		NA	
CIRCLING	1820-1 466 (500-1)	1840-1 486 (500-1)	NA	

HIBBING, MINNESOTA
Orig-A 08NOV18

47°23′N-92°50′W

RANGE RGNL (HIB)
RNAV (GPS) RWY 4

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WAAS CH 69222 W13A	APP CRS 130°	Rwy ldg 6758 TDZE 1354 Apt Elev 1354

RNAV (GPS) RWY 13
RANGE RGNL (HIB)

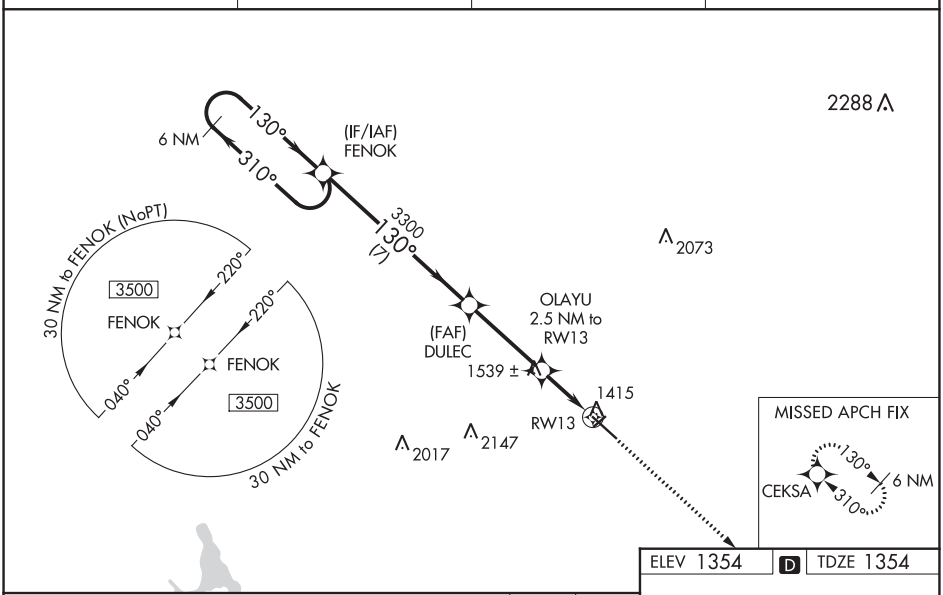
T
-31°C

Circling to Rwy 4 NA at night. DME/DME RNP-0.3 NA. VDP and Baro-VNAV NA when using Eveleth altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 35°C (95°F). Helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Eveleth altimeter setting and increase all DA 36 feet, and all MDA 40 feet, and increase LNAV Cat C/D visibility to 1 mile. Inop table does not apply to LPV and LNAV/VNAV all Cats. For inop MALSR, increase LNAV Cat A/B visibility to 1 mile. For inop MALSR when using Eveleth altimeter setting, increase LPV and LNAV/VNAV all Cats visibility to ⅞.

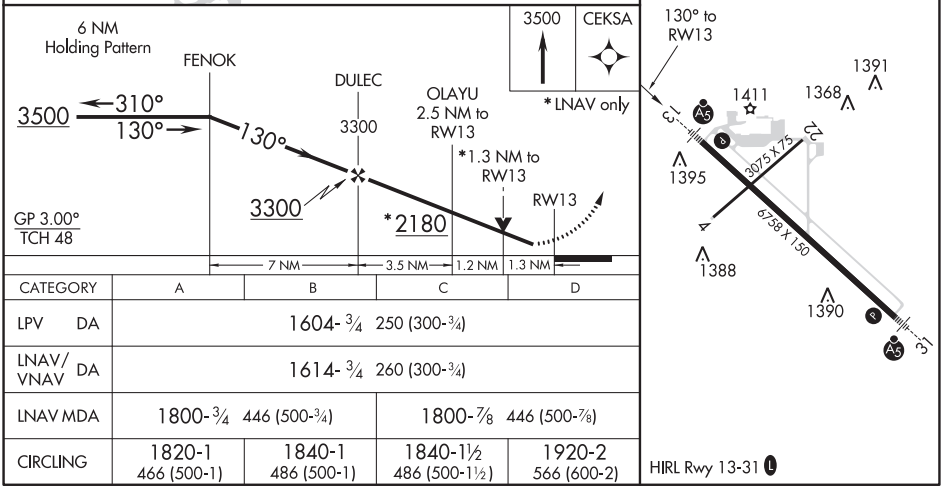
MALSR A5

MISSED APPROACH: Climb to 3500 direct CEKSA and hold.

ASOS	DULUTH APP CON	CLNC DEL	UNICOM
126.425	125.45 233.7	127.4	123.0 (CTAF) L



ELEV 1354 D TDZE 1354



CATEGORY	A	B	C	D
LPV DA	1604- ¾ 250 (300-¾)			
LNAV/VNAV DA	1614- ¾ 260 (300-¾)			
LNAV MDA	1800- ¾ 446 (500-¾)		1800- ⅞ 446 (500-⅞)	
CIRCLING	1820-1 466 (500-1)	1840-1 486 (500-1)	1840-1½ 486 (500-1½)	1920-2 566 (600-2)

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HIBBING, MINNESOTA | AL-5159 (FAA) | 19339

RNAV (GPS) RWY 22
RANGE RGNL (HIB)

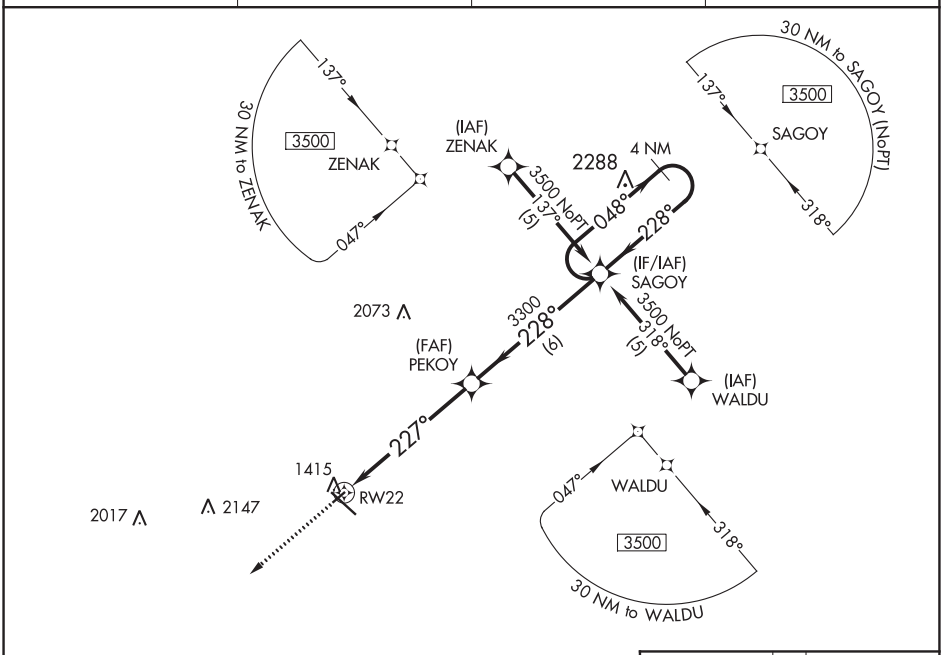
APP CRS	Rwy ldg	3075
227°	TDZE	1350
	Apt Elev	1353

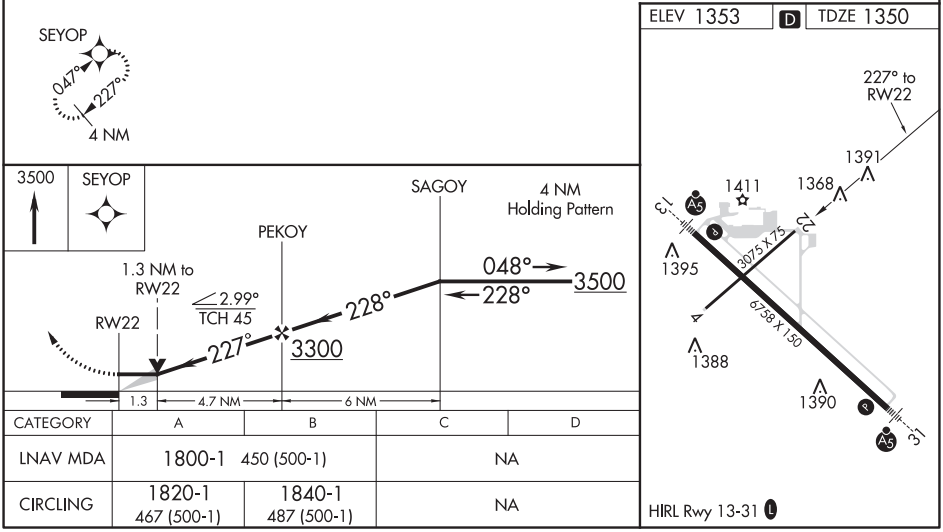
NA
-31°C

Procedure not authorized at night.
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3500 direct SEYOP WP and hold.

ASOS	DULUTH APP CON		CLNC DEL	UNICOM
126.425	125.45	233.7	127.4	123.0 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	1800-1 450 (500-1)		NA	
CIRCLING	1820-1 467 (500-1)	1840-1 487 (500-1)	NA	

HIBBING, MINNESOTA
Orig-A 28OCT04

47°23′N-92°50′W

RANGE RGNL (HIB)
RNAV (GPS) RWY 22

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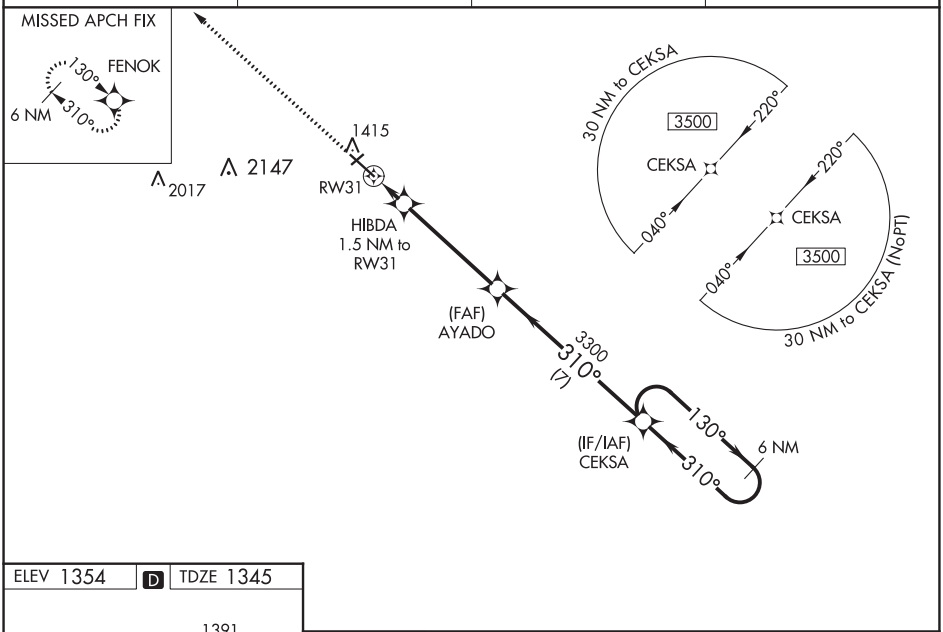
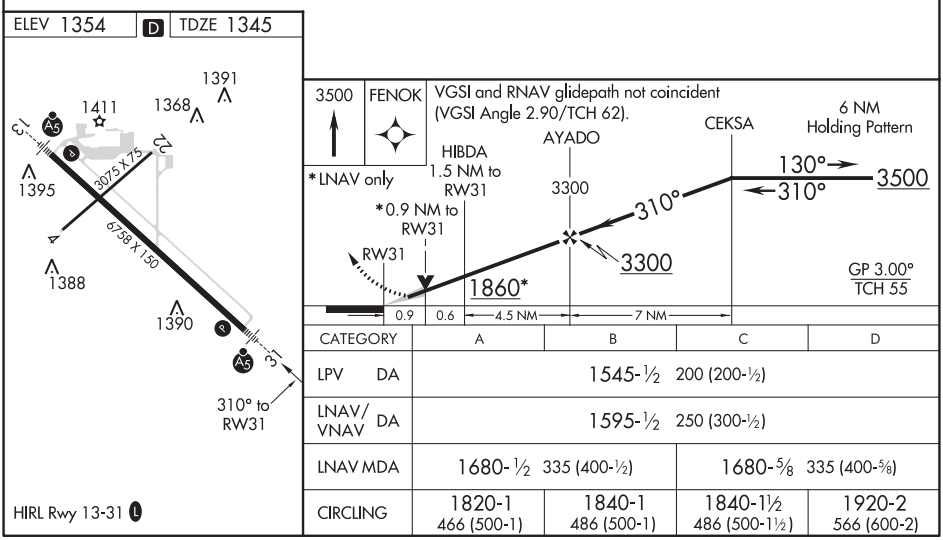
WAAS CH 65722 W31A	APP CRS 310°	Rwy ldg 6758 TDZE 1345 Apt Elev 1354

RNAV (GPS) RWY 31
RANGE RGNL (HIB)

T -31°C	Circling to Rwy 4 NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 35°C (95°F). DME/DME RNP-0.3 NA. VDP and Baro-VNAV NA when using Eveleth altimeter setting. When local altimeter setting not received, use Eveleth altimeter setting and increase all DA 36 feet and all MDA 40 feet. For inop MALSRs increase LNAV/VNAV all Cats visibility to ¾ mile, LNAV Cat C/D to 1 mile. For inop MALSRs when using Eveleth altimeter setting, increase LNAV/VNAV all Cats visibility to ⅞ mile.	MALSR A5	MISSED APPROACH: Climb to 3500 direct FENOK and hold.

ASOS	DULUTH APP CON	CLNC DEL	UNICOM
126.425	125.45 233.7	127.4	123.0 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1545-½ 200 (200-½)			
LNAV/VNAV DA	1595-½ 250 (300-½)			
LNAV MDA	1680-½ 335 (400-½)		1680-⅝ 335 (400-⅝)	
CIRCLING	1820-1 466 (500-1)	1840-1 486 (500-1)	1840-1½ 486 (500-1½)	1920-2 566 (600-2)

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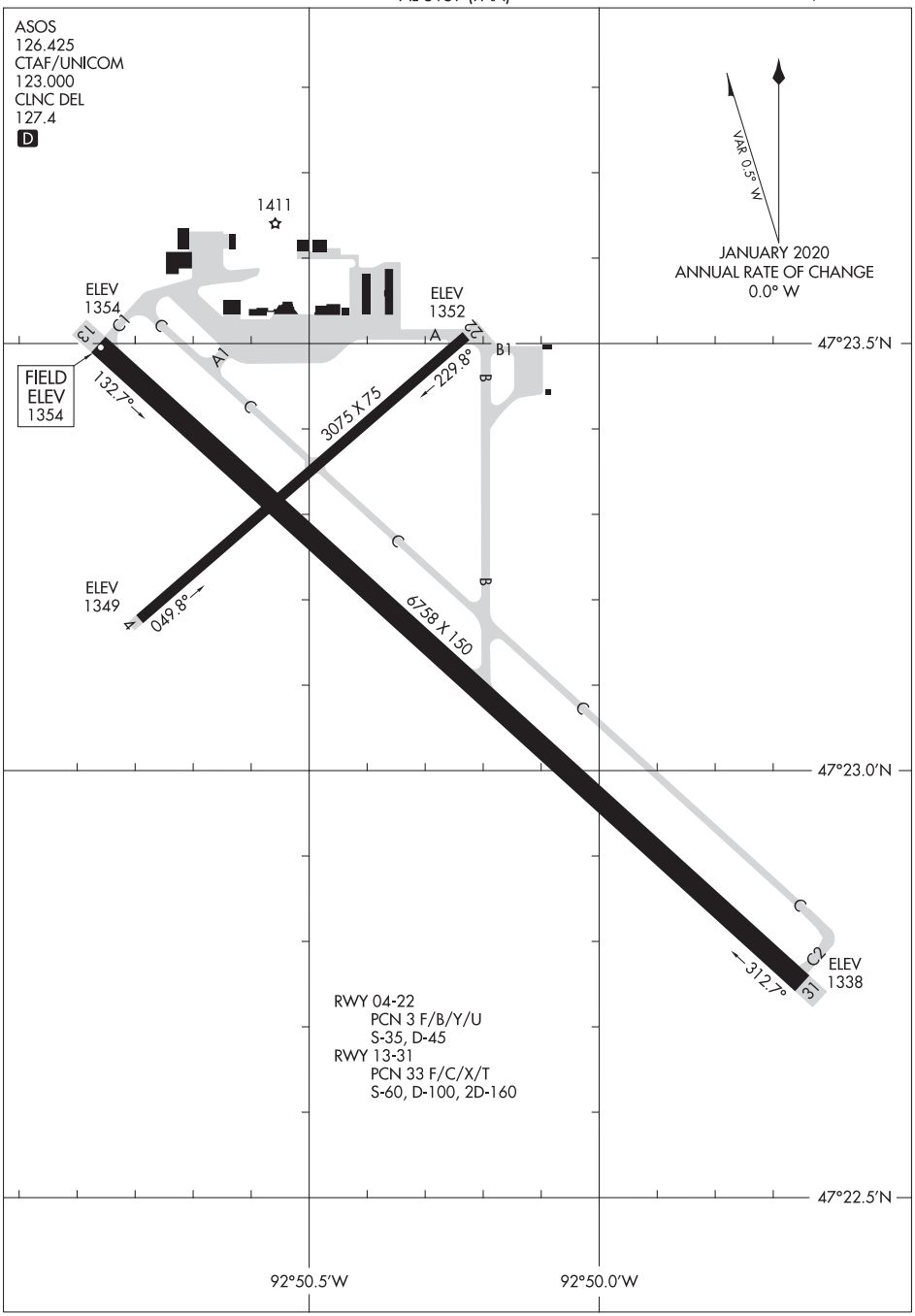
20086

AIRPORT DIAGRAM

AL-5159 (FAA)

RANGE RGNL (HIB)
HIBBING, MINNESOTA



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AIRPORT DIAGRAM
20086
HIBBING, MINNESOTA
RANGE RGNL (HIB)

WAAS CH 72839 W13A	APP CRS 130°	Rwy ldg 3701 TDZE 1852 Apt Elev 1854

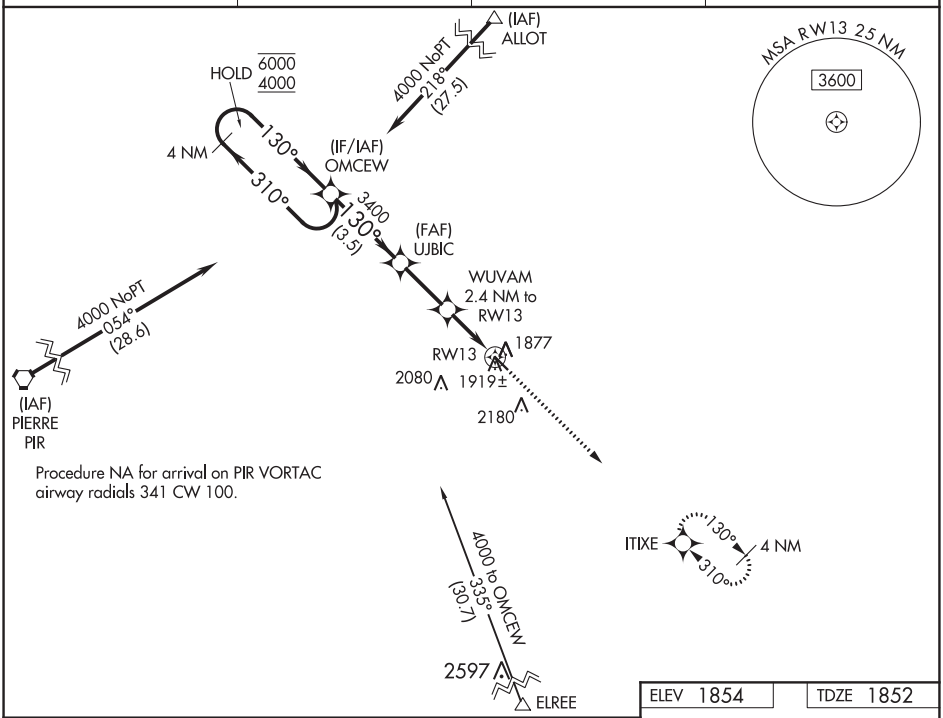
RNAV (GPS) RWY 13
HIGHMORE MUNI (9DØ)

RNP APCH.

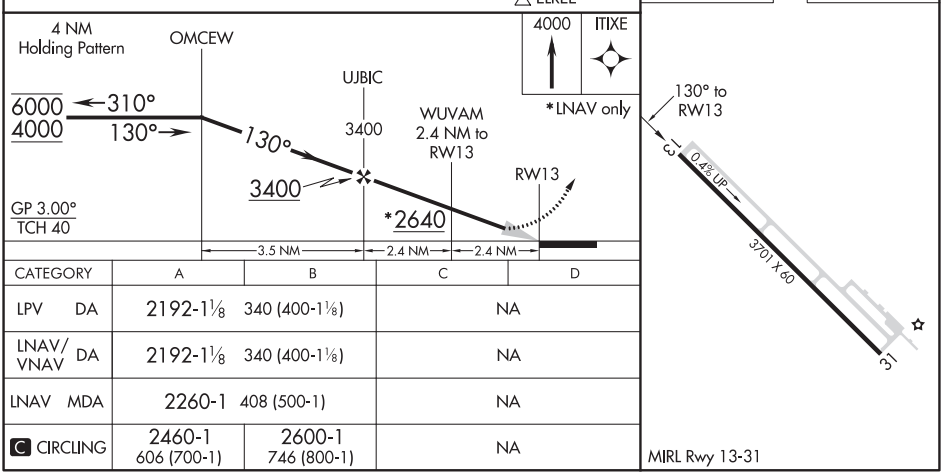
Baro-VNAV NA. Use Onida altimeter setting; when not received, use Pierre altimeter setting and increase LPV and LNAV/VNAV DA to 2226 and all MDAs 40 feet.

MISSED APPROACH: Climb to 4000 direct ITIXE and hold.

PIR ASOS	98D AWOS-2	MINNEAPOLIS CENTER	CTAF
119.025	122.9	125.1 269.1	122.9



ELEV 1854	TDZE 1852



CATEGORY	A	B	C	D
LPV DA	2192-1⅛ 340 (400-1⅛)		NA	
LNAV/VNAV DA	2192-1⅛ 340 (400-1⅛)		NA	
LNAV MDA	2260-1 408 (500-1)		NA	
C CIRCLING	2460-1 606 (700-1)	2600-1 746 (800-1)	NA	

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HIGHMORE, SOUTH DAKOTA

AL-10432 (FAA)

19283

RNAV (GPS) RWY 31
HIGHMORE MUNI (9DØ)

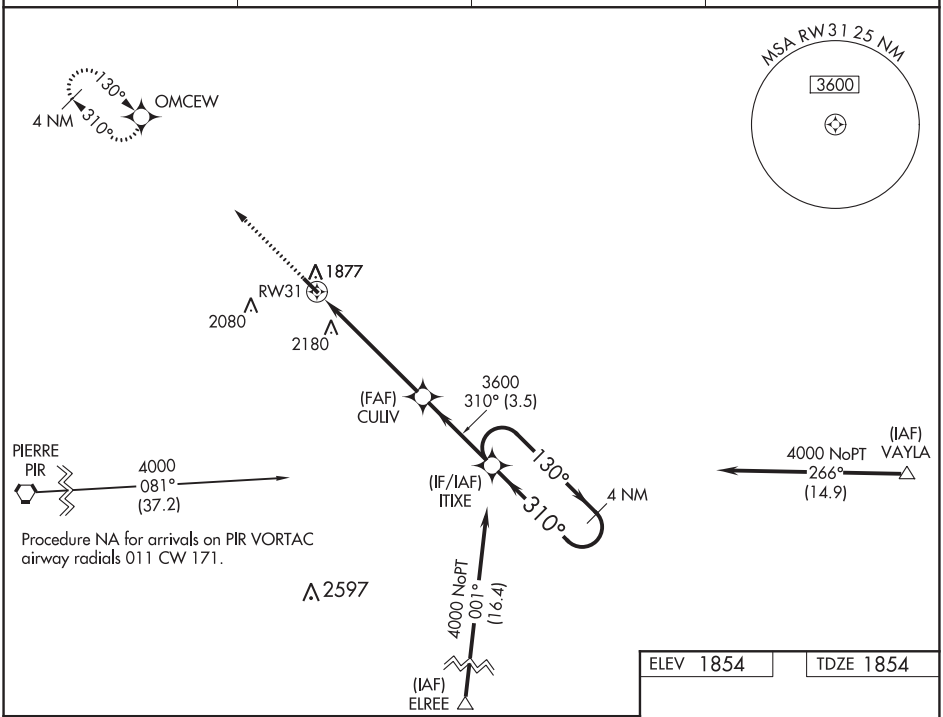
WAAS CH 40437 W31A	APP CRS 310°	Rwy ldg 3701 TDZE 1854 Apt Elev 1854

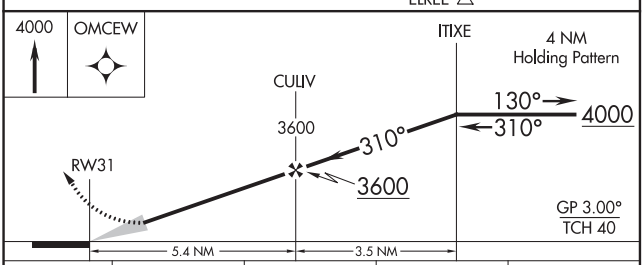
T A NA

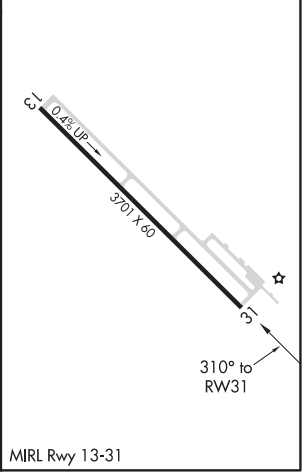
Baro-VNAV NA. DME/DME RNP-0.3 NA.
Use Pierre altimeter setting; when not received, procedure NA.

MISSED APPROACH: Climb to 4000 direct OMCEW and hold.

PIR ASOS	98D AWOS-2	MINNEAPOLIS CENTER	CTAF
119.025	122.9	125.1 269.1	122.9







CATEGORY	A	B	C	D
LPV DA	2205-1⅛ 351 (400-1⅛)		NA	
LNAV/VNAV DA	2519-2½ 665 (700-2½)		NA	
LNAV MDA	2540-1 686 (700-1)		NA	
C CIRCLING	2540-1 686 (700-1)	2600-1 746 (800-1)	NA	

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RNAV (GPS) RWY 16
HILLSBORO MUNI (3H4)

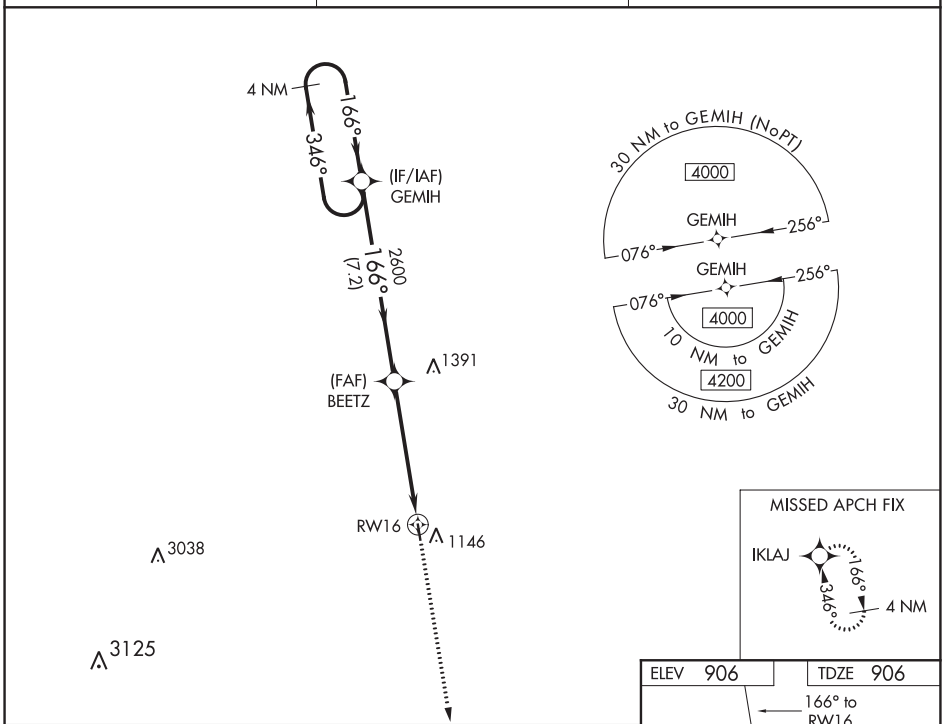
WAAS CH 86837 W16A	APP CRS 166°	Rwy ldg 3301 TDZE 906 Apt Elev 906

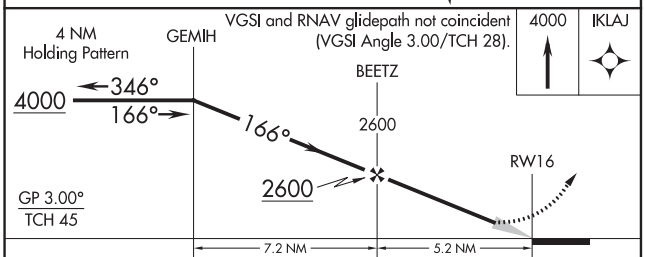
T
A NA

Baro-VNAV NA. Use Fargo altimeter setting.
DME/DME RNP-0.3 NA.

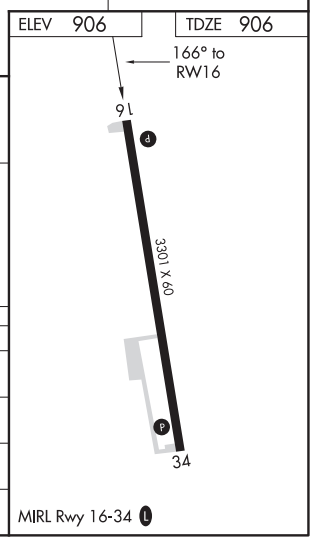
MISSED APPROACH: Climb to 4000 direct IKLAJ and hold.

FAR ASOS	FARGO APP CON	CTAF
124.5	120.4 377.15	122.9 L





CATEGORY	A	B	C	D
LPV DA	1222-1 316 (400-1)			NA
LNAV/VNAV DA	1255-1⅛ 349 (400-1⅛)			NA
LNAV MDA	1460-1 554 (600-1)		1460-1⅝ 554 (600-1⅝)	NA
C CIRCLING	1520-1 614 (700-1)		1520-1¾ 614 (700-1¾)	NA



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NC-1, 25 FEB 2021 to 22 APR 2021

HILLSBORO, NORTH DAKOTA AL-9021 (FAA) 19339

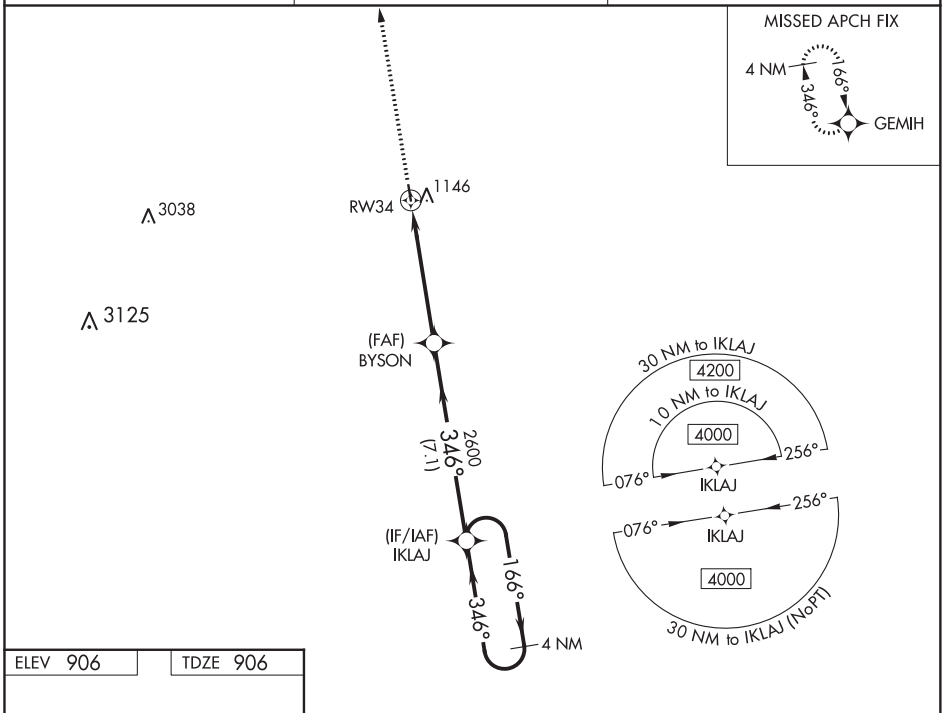
WAAS CH 81937 W34A	APP CRS 346°	Rwy ldg 3301 TDZE 906 Apt Elev 906

RNAV (GPS) RWY 34
HILLSBORO MUNI (3H4)

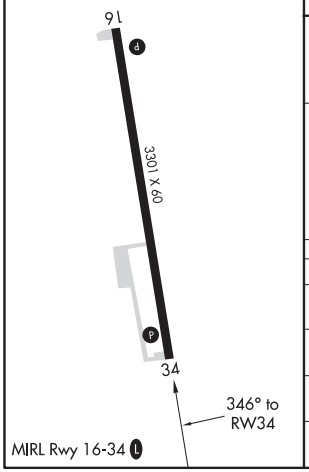
T A NA Use Fargo altimeter setting. DME/DME RNP-0.3 NA. Night Landing: Rwy 34 NA. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 4000 direct GEMIH and hold.

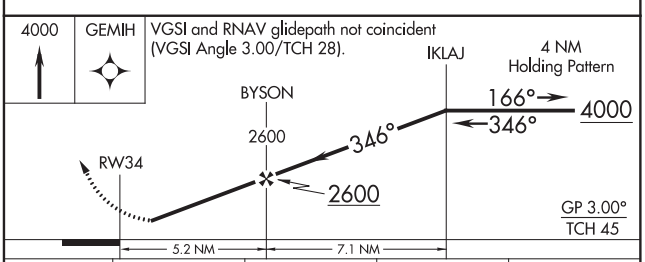
FAR ASOS	FARGO APP CON	CTAF
124.5	120.4 377.15	122.9 L



ELEV 906 TDZE 906



MIRL Rwy 16-34 L



CATEGORY	A	B	C	D
LPV DA	1222-1 316 (400-1)			NA
LNAV/VNAV DA	1362-1½ 456 (500-1½)			NA
LNAV MDA	1480-1 574 (600-1)		1480-1⅝ 574 (600-1⅝)	NA
C CIRCLING	1520-1 614 (700-1)		1520-1¾ 614 (700-1¾)	NA

NC-1, 25 FEB 2021 to 22 APR 2021

RNAV (GPS) RWY 6
FIELD OF DREAMS (Ø4W)

APP CRS	Rwy ldg	2561
065°	TDZE	1021
	Apt Elev	1021

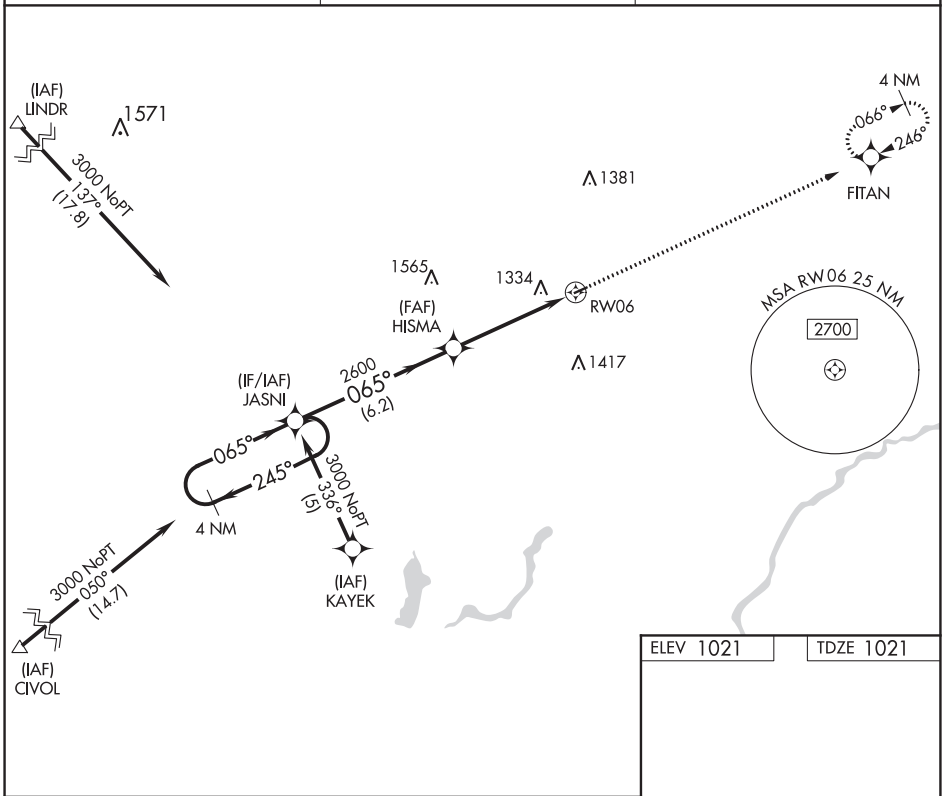
RNP APCH.

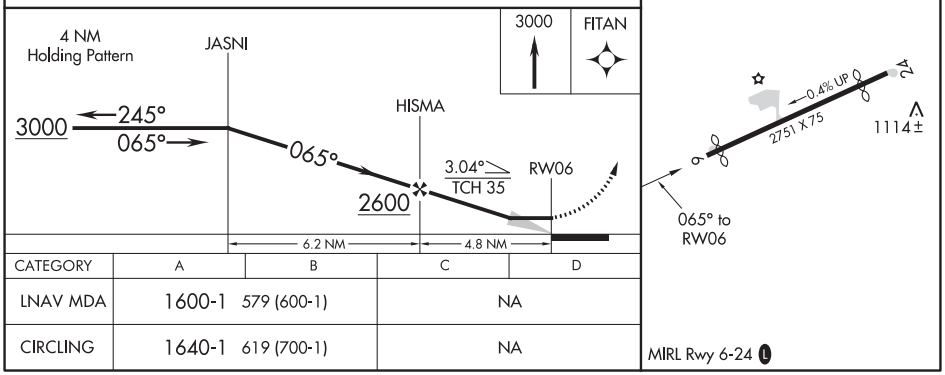
When local altimeter setting not received, use Mora altimeter setting and increase all MDAs 60 feet. Procedure NA at night. Rwy 6 helicopter visibility reduction below 1 SM NA.

NA

MISSED APPROACH: Climb to 3000 direct FITAN and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
118.225	121.05 397.9	122.9 L





CATEGORY	A	B	C	D
LNAV MDA	1600-1 579 (600-1)		NA	
CIRCLING	1640-1 619 (700-1)		NA	

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HOT SPRINGS, SOUTH DAKOTA — AL-904 (FAA) — 21056

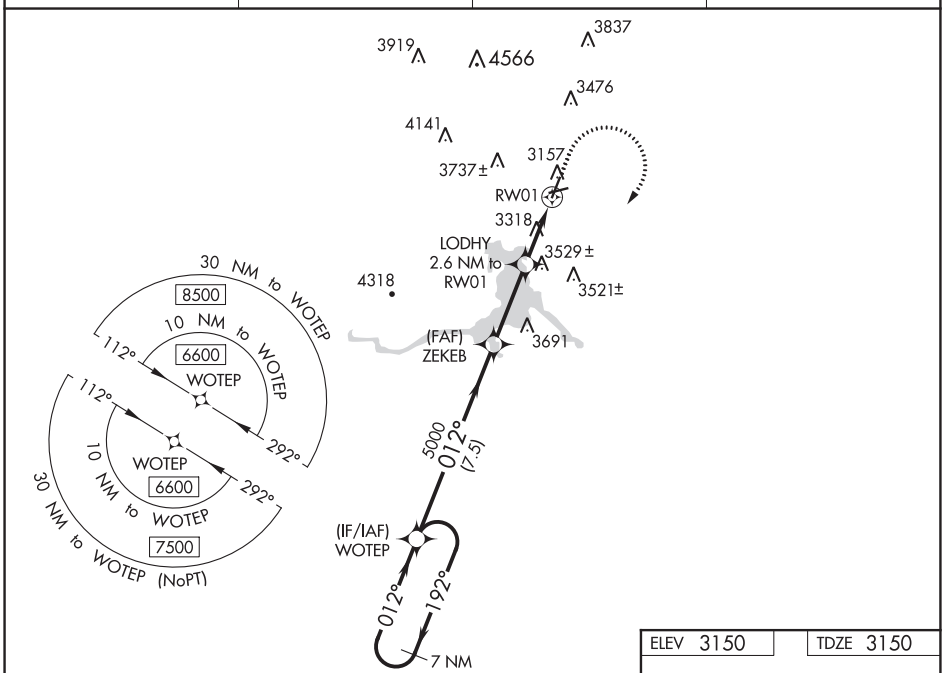
RNAV (GPS) RWY 1
HOT SPRINGS MUNI (HSR)

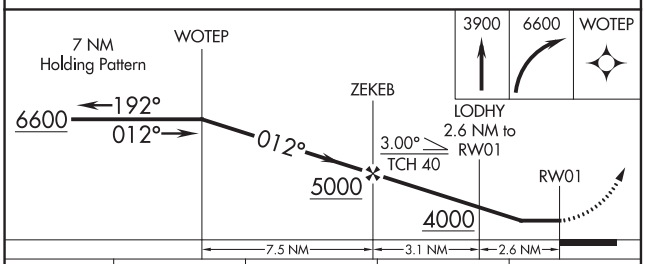
WAAS CH 99628 W01A	APP CRS 012°	Rwy ldg 4506 TDZE 3150 Apt Elev 3150

Rwy 1 helicopter visibility reduction below ¾ NA. DME/DME RNP-0.3 NA. Circling NA west of Rwy 1-19. Use Chadron, NE altimeter setting, when not received use Rapid City Rgnl altimeter setting and increase all MDA 20 feet, increase LNAV Cat B visibility ¼ mile. Circling NA to Rwy 6 and 24.

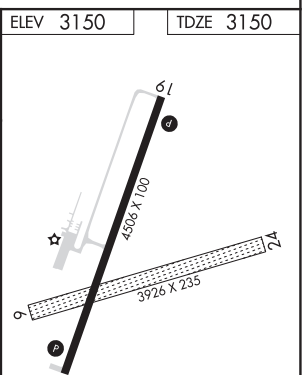
MISSED APPROACH: Climb to 3900, then climbing right turn to 6600 direct WOTEP and hold.

CDR ASOS	DENVER CENTER	GCO	AUNICOM
118.05	127.95 338.2	121.725	122.8 (CTAF) L





CATEGORY	A	B	C	D
LP MDA	3840-1 690 (700-1)		3840-2 690 (700-2)	
LNAV MDA	3880-1 730 (800-1)		3880-2 730 (800-2)	
C CIRCLING	3880-1 730 (800-1)	3900-1 750 (800-1)	3980-2½ 830 (900-2½)	4100-3 950 (1000-3)



HOT SPRINGS, SOUTH DAKOTA
Orig-B 29MAR18

43°22′N-103°23′W

HOT SPRINGS MUNI (HSR)
RNAV (GPS) RWY 1

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WAAS CH 56628 W19A	APP CRS 192°	Rwy ldg 4506 TDZE 3146 Apt Elev 3150

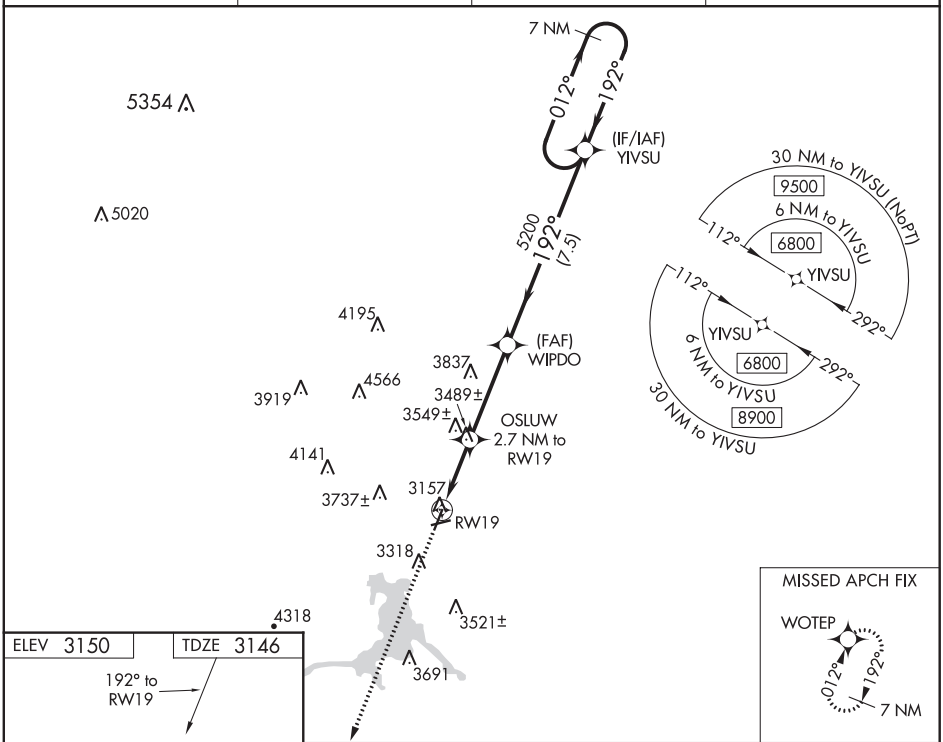
RNAV (GPS) RWY 19
HOT SPRINGS MUNI (HSR)

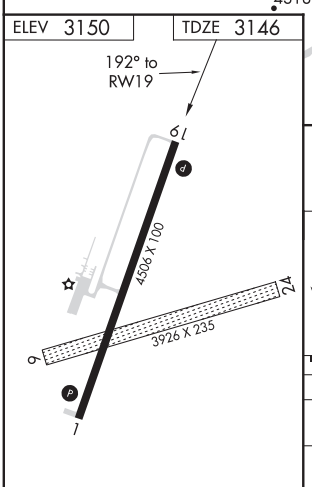
T NA

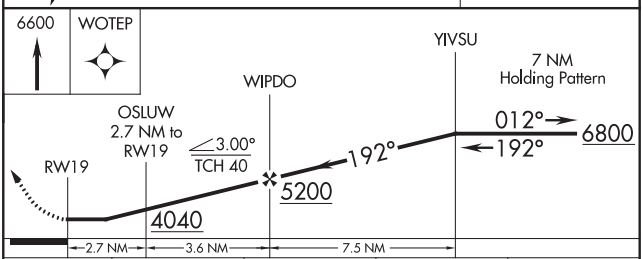
Rwy 19 helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA. Circling NA to Rwy 6 and 24. Circling NA west of Rwy 1-19. Use Chadron, NE altimeter setting, when not received use Rapid City Rgnl altimeter setting and increase all MDA 20 feet, increase LNAV Cat C and D visibility ½ SM.

MISSED APPROACH: Climb to 6600 direct WOTEP and hold.

CDR ASOS	DENVER CENTER	GCO	AUNICOM
118.05	127.95 338.2	121.725	122.8 (CTAF) L







CATEGORY	A	B	C	D
LP MDA	3840-1 694 (700-1)		3840-2 694 (700-2)	
LNAV MDA	3900-1 754 (800-1)	3900-1¼ 754 (800-1¼)	3900-2 754 (800-2)	
C CIRCLING	3900-1 750 (800-1)		3980-2½ 830 (900-2½)	4100-3 950 (1000-3)

MIRL Rwy 1-19 L

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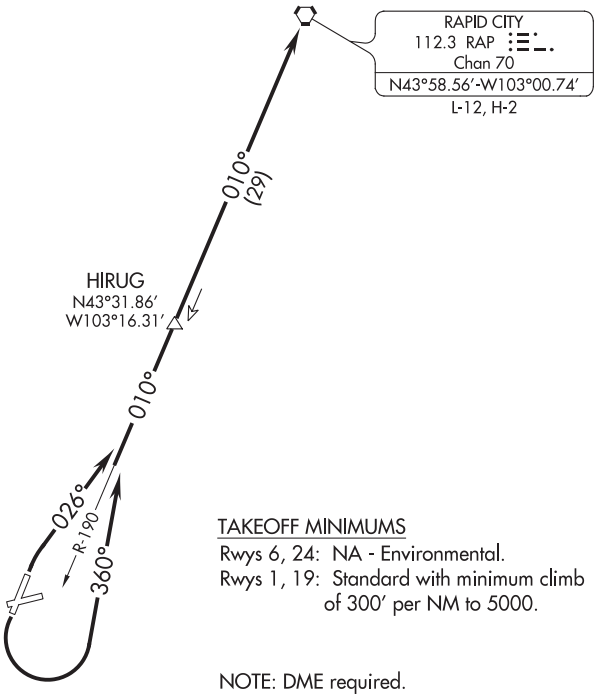
(HSR2.HSR) 17341

HOT SPRINGS TWO DEPARTURE

AL-904 (FAA)

HOT SPRINGS MUNI (HSR)
HOT SPRINGS, SOUTH DAKOTA

TOP ALTITUDE: 7000



TAKEOFF MINIMUMS
Rwys 6, 24: NA - Environmental.
Rwys 1, 19: Standard with minimum climb of 300′ per NM to 5000.

NOTE: DME required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 1: Climb heading 026° to intercept RAP VORTAC R-190 to RAP VORTAC, thence. . . .

TAKEOFF RUNWAY 19: Climbing left turn heading 360° to intercept RAP VORTAC R-190 to RAP VORTAC, thence. . . .

. . . .maintain 7000, expect filed altitude 10 minutes after departure.

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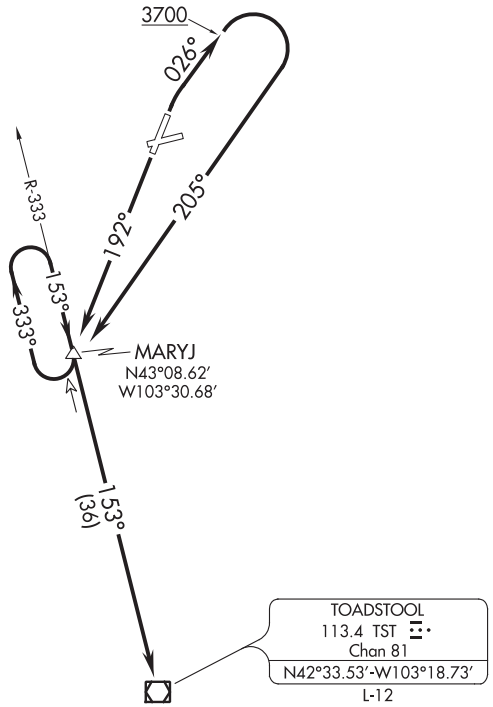
TOP ALTITUDE: 7000



NOTE: DME required.

TAKEOFF MINIMUMS

Rwys 6, 24: NA - Environmental.
Rwys 1, 19: Standard with minimum climb of 300′ per NM to 7000.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 1: Climb heading 026° to 3700, then climbing right turn heading 205° to intercept TST VOR/DME R-333 to TST VOR/DME, thence. . . .

TAKEOFF RUNWAY 19: Climb heading 192° to intercept TST VOR/DME R-333 to TST VOR/DME, thence. . . .

. . . .maintain 7000, expect filed altitude 10 minutes after departure.

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HURON, SOUTH DAKOTA | AL-202 (FAA) | 21056

ILS or LOC RWY 12
HURON RGNL (HON)

LOC/DME I-HON 110.3 Chan 40	APP CRS 121°	Rwy ldg 7201 TDZE 1289 Apt Elev 1289

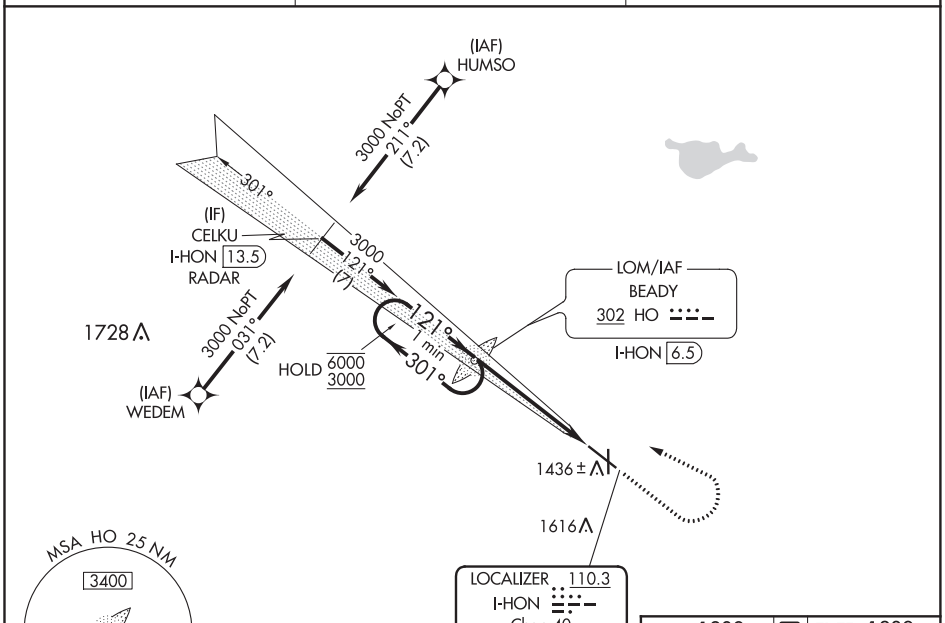
RNAV 1-GPS or RADAR required for procedure entry. ADF required. From HUMSO and WEDEM: RNAV-1 GPS required.

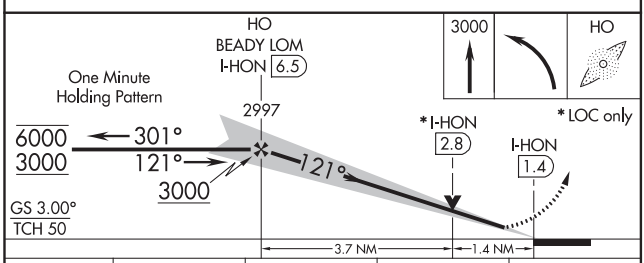
T A Circling Rwy 18, 36 NA at night. For inop ALS, increase S-LOC 12 Cat C/D to 1⅜ SM.

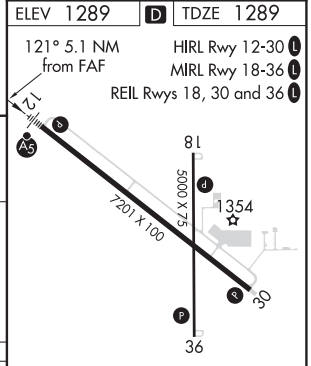
MALSR A5

MISSED APPROACH: Climb to 3000 then left turn direct BEADY LOM and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
118.125	126.25 339.8	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-ILS 12	1489-½ 200 (200-½)			
S-LOC 12	1780-½ 491 (500-½)		1780-1 491 (500-1)	
C CIRCLING	1820-1 531 (600-1)		1920-1¾ 631 (700-1¾)	1980-2¼ 691 (700-2¼)

FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

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WAAS CH 70314 W12A	APP CRS 121°	Rwy ldg 7201 TDZE 1289 Apt Elev 1289

RNAV (GPS) RWY 12
HURON RGNL (HON)

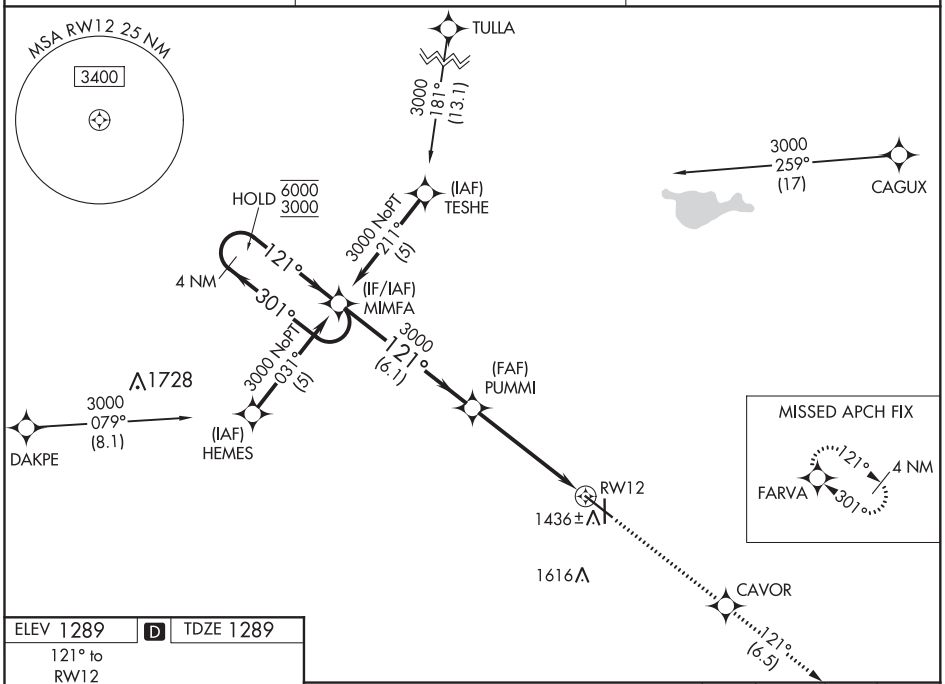
RNP APCH.

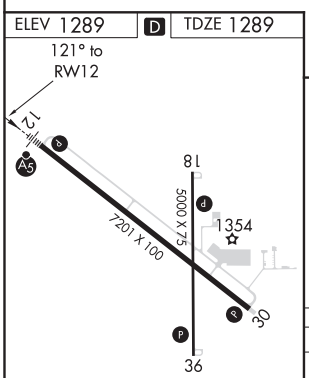
Circling Rwy 18, 36 NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C . For inop ALS, increase LNAV/VNAV all CATs visibility to 1⅛ SM and LNAV Cat C/D to 1⅜ SM.

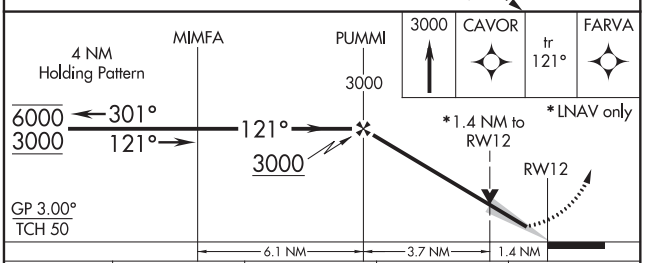
MALSR

MISSED APPROACH: Climb to 3000 direct CAVOR and on track 121° to FARVA and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
118.125	126.25 339.8	123.0 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1489-½ 200 (200-½)			
LNAV/VNAV DA	1699-¾ 410 (500-¾)			
LNAV MDA	1780-½ 491 (500-½)		1780-1 491 (500-1)	
C CIRCLING	1820-1 531 (600-1)		1920-1¾ 631 (700-1¾)	1980-2¼ 691 (700-2¼)

HIRL Rwy 12-30 L
MIRL Rwy 18-36 L
REIL Rwys 18, 30 and 36 L

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WAAS CH 77514 W30A	APP CRS 301°	Rwy ldg 7201 TDZE 1286 Apt Elev 1289

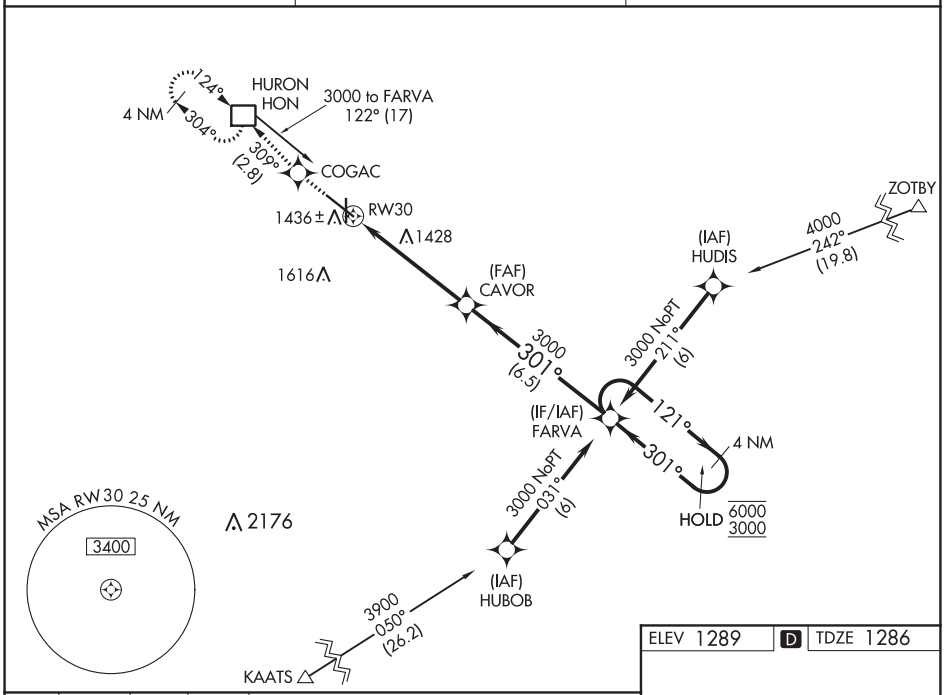
RNAV (GPS) RWY 30
HURON RGNL (HON)

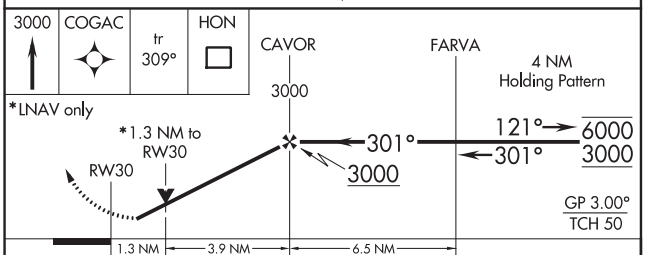
RNP APCH.

Circling Rwy 18, 36 NA at night. Rwy 30 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C.

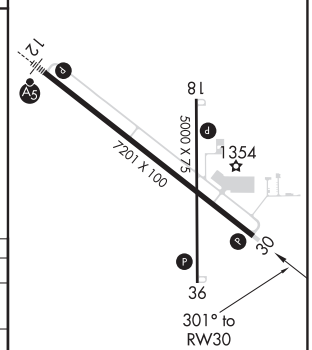
MISSED APPROACH: Climb to 3000 direct COGAC and on track 309° to HON DME and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
118.125	126.25 339.8	123.0 (CTAF) L





ELEV 1289 D TDZE 1286



CATEGORY	A	B	C	D
LPV DA	1559-1 273 (300-1)			
LNAV/VNAV DA	1721-1½ 435 (500-1½)			
LNAV MDA	1760-1 474 (500-1)		1760-1⅜ 474 (500-1⅜)	1760-1½ 474 (500-1½)
C CIRCLING	1820-1 531 (600-1)		1920-1¾ 631 (700-1¾)	1980-2¼ 691 (700-2¼)

HIRL Rwy 12-30 L
MIRL Rwy 18-36 L
REIL Rwys 18, 30 and 36 L

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LOC/DME I-HON	APP CRS	Rwy ldg	7201
110.3	301°	TDZE	1286
Chan 40		Apt Elev	1289

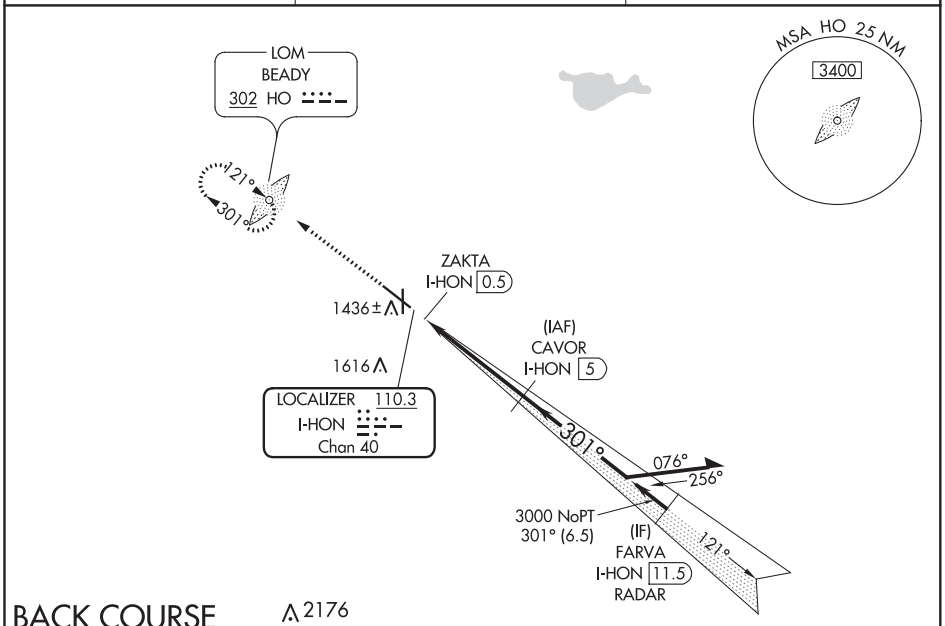
LOC BC RWY 30
HURON RGNL (HON)

RADAR required for procedure entry. DME and ADF required.

Circling Rwy 18, 36 NA at night.
Rwy 30 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3000 direct BEADY LOM and hold.

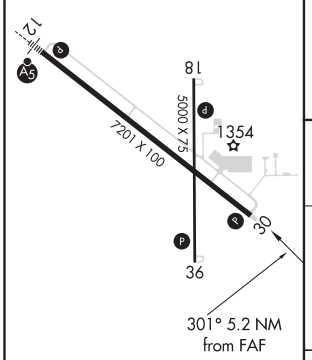
ASOS	MINNEAPOLIS CENTER	UNICOM
118.125	126.25 339.8	123.0 (CTAF) L

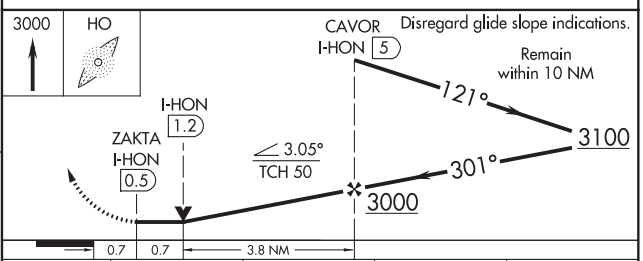


BACK COURSE

2176

ELEV 1289 D TDZE 1286





CATEGORY	A	B	C	D
S-30	1760-1 474 (500-1)		1760-1⅜ 474 (500-1⅜)	
C CIRCLING	1820-1 531 (600-1)		1920-1¾ 631 (700-1¾)	1980-2¼ 691 (700-2¼)

HIRL Rwy 12-30 L
MIRL Rwy 18-36 L
REIL Rwys 18, 30 and 36 L

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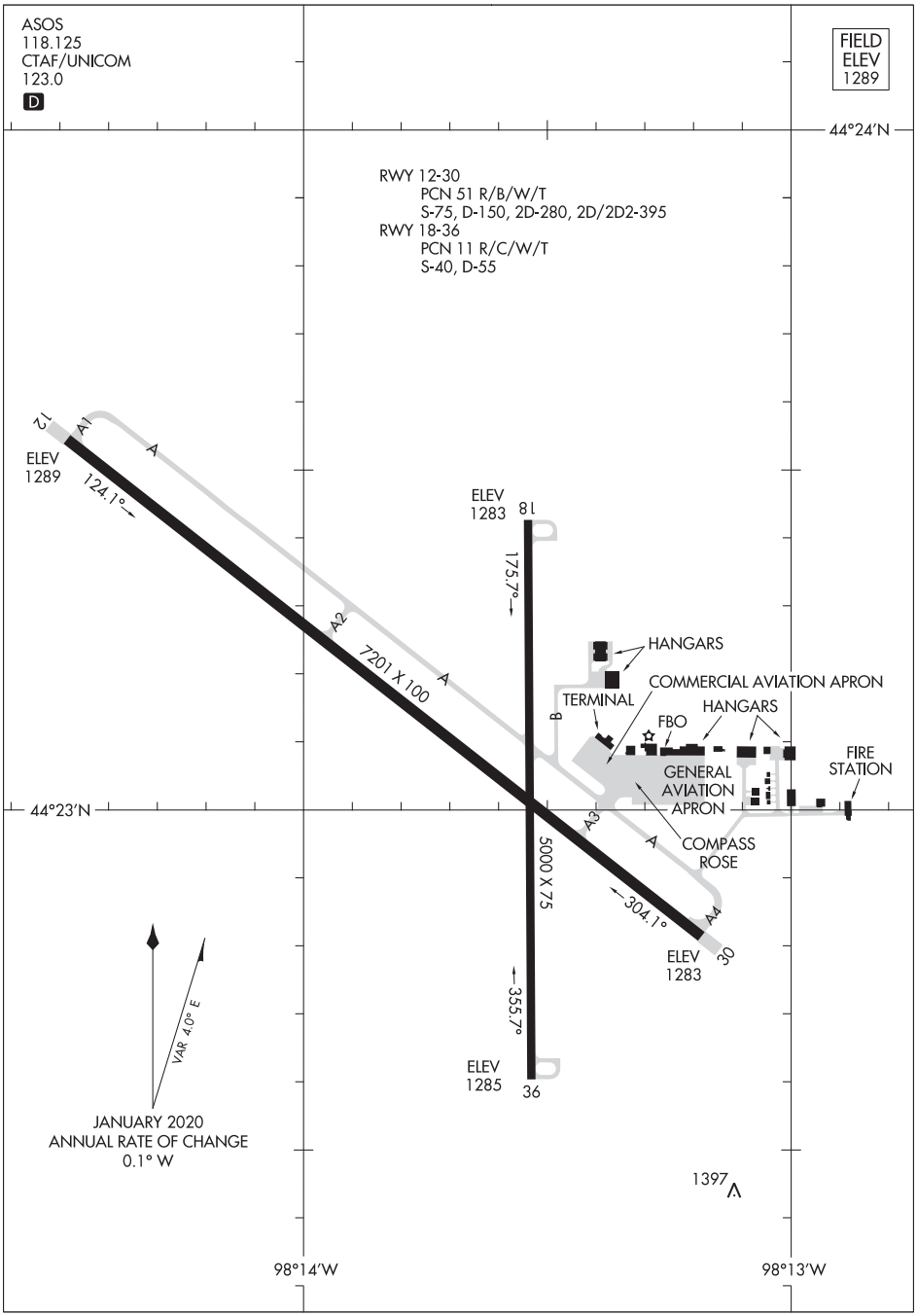
21056

AIRPORT DIAGRAM

AL-202 (FAA)

HURON RGNL (HON)
HURON, SOUTH DAKOTA



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NC-1, 25 FEB 2021 to 22 APR 2021

AIRPORT DIAGRAM

21056

HURON, SOUTH DAKOTA
HURON RGNL (HON)

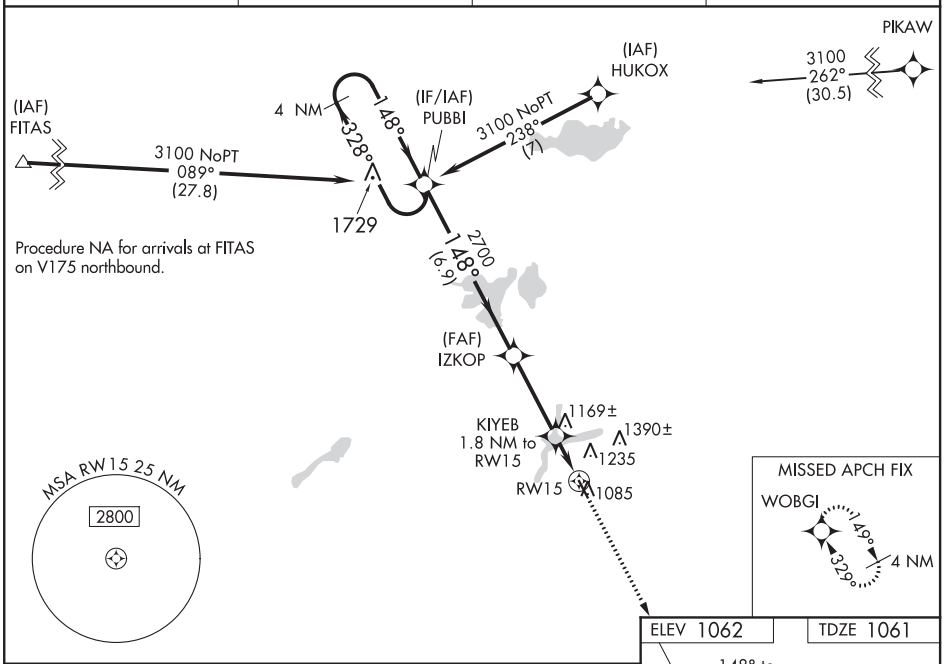
WAAS CH 77622 W15A	APP CRS 148°	Rwy ldg 4000 TDZE 1061 Apt Elev 1062

RNAV (GPS) RWY 15
HUTCHINSON MUNI-BUTLER FIELD (HCD)

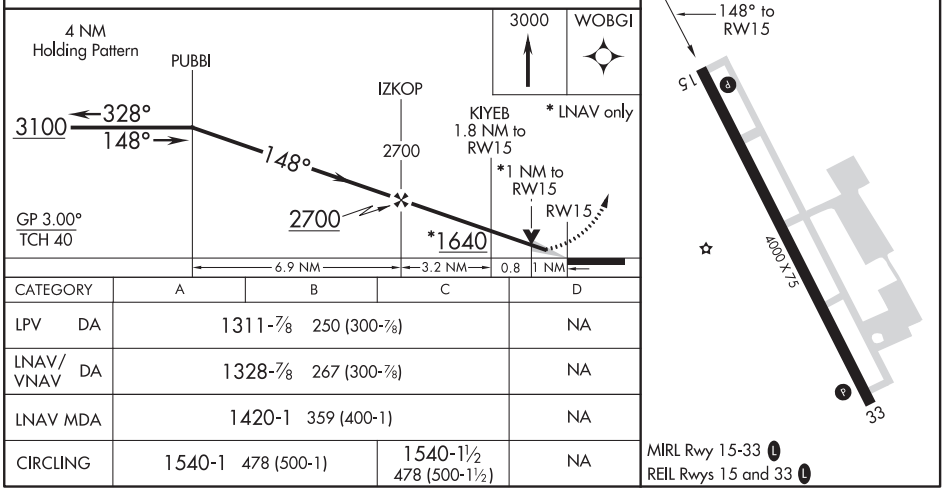
Baro-VNAV NA when using Glencoe altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. VDP NA with Glencoe altimeter setting. When local altimeter setting not received, use Glencoe altimeter setting and increase all DA 43 feet and LPV and LNAV/VNAV all Cats visibility ⅛ mile; increase all MDA 60 feet and LNAV Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 3000 direct WOBGI and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
118.525	127.1 290.2	121.725	122.8 (CTAF) L



ELEV 1062 TDZE 1061



CATEGORY	A	B	C	D
LPV DA	1311-⅞ 250 (300-⅞)			NA
LNAV/VNAV DA	1328-⅞ 267 (300-⅞)			NA
LNAV MDA	1420-1 359 (400-1)			NA
CIRCLING	1540-1 478 (500-1)		1540-1½ 478 (500-1½)	NA

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HUTCHINSON, MINNESOTA | AL-6554 (FAA) | 18032

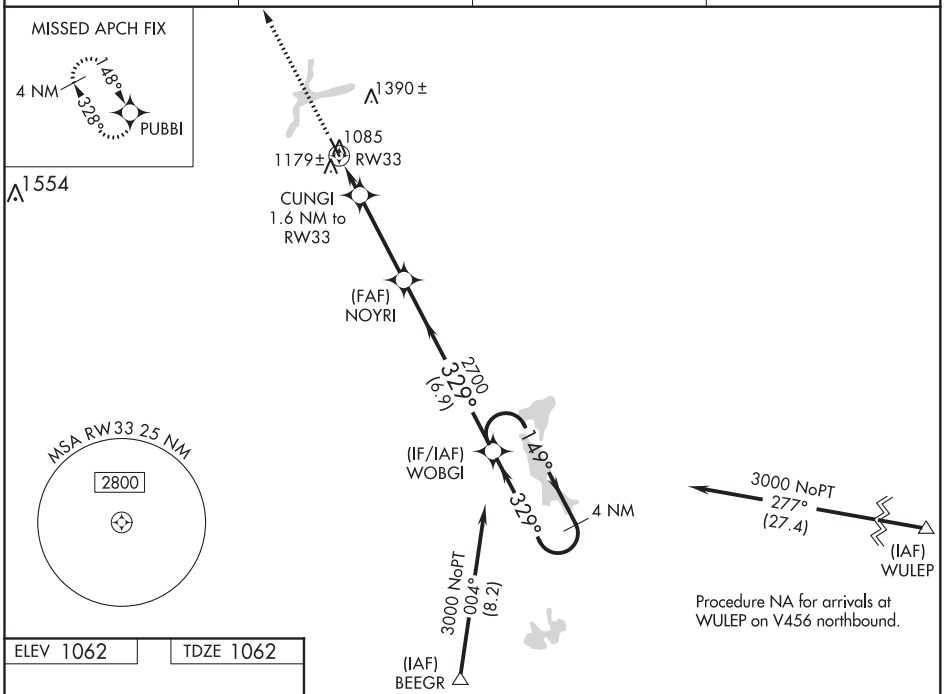
WAAS CH 86322 W33A	APP CRS 329°	Rwy ldg 4000 TDZE 1062 Apt Elev 1062

RNAV (GPS) RWY 33
HUTCHINSON MUNI-BUTLER FIELD (HCD)

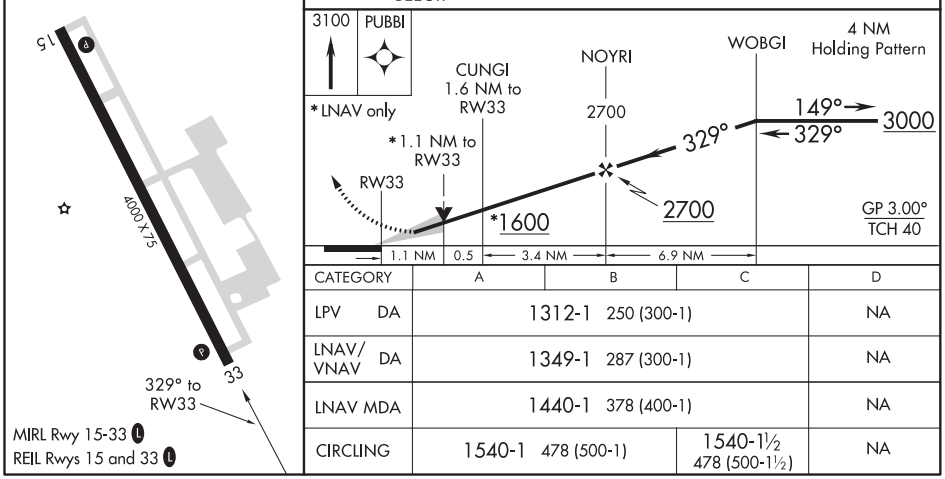
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3100 direct PUBBI and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
118.525	127.1 290.2	121.725	122.8 (CTAF) L



ELEV 1062	TDZE 1062



CATEGORY	A	B	C	D
LPV DA	1312-1 250 (300-1)			NA
LNAV/VNAV DA	1349-1 287 (300-1)			NA
LNAV MDA	1440-1 378 (400-1)			NA
CIRCLING	1540-1 478 (500-1)		1540-1½ 478 (500-1½)	NA

MIRL Rwy 15-33 L
REIL Rwys 15 and 33 L

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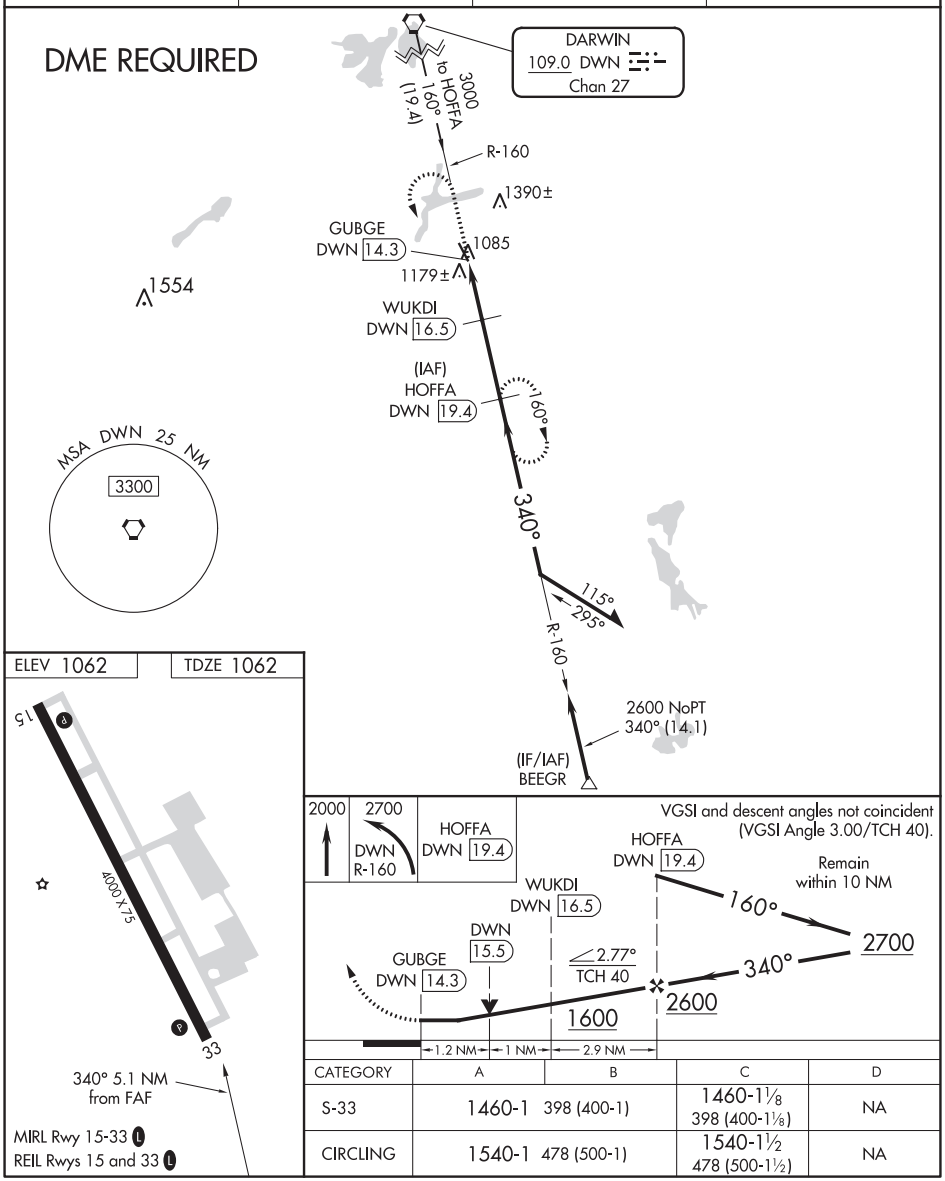
VORTAC DWN	APP CRS	Rwy ldg	4000
109.0	340°	TDZE	1062
Chan 27		Apt Elev	1062

VOR RWY 33
HUTCHINSON MUNI-BUTLER FIELD (HCD)

DME required.

MISSED APPROACH: Climb to 2000 then climbing left turn to 2700 on DWN VORTAC R-160 to HOFFA/19.4 DME and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
118.525	127.1 290.2	121.725	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-33	1460-1	398 (400-1)	1460-1⅛ 398 (400-1⅛)	NA
CIRCLING	1540-1	478 (500-1)	1540-1½ 478 (500-1½)	NA

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NC-1, 25 FEB 2021 to 22 APR 2021

LOC I-INL 111.95	APP CRS 313°	Rwy ldg 7400 TDZE 1166 Apt Elev 1185

ILS or LOC RWY 31
FALLS INTL-EINARSON FIELD (INL)

ADF required.

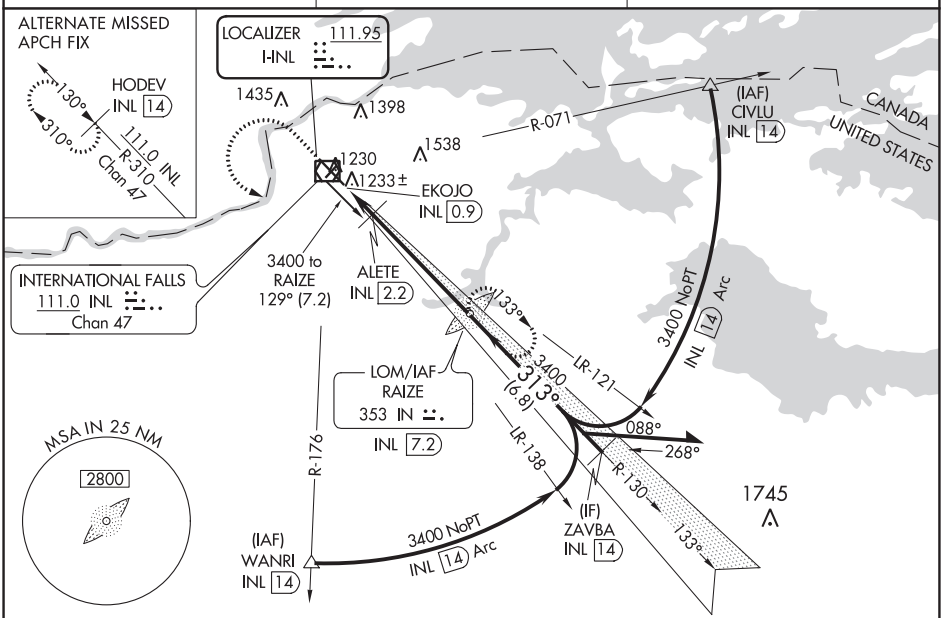
-31°C

Autopilot coupled approach NA below 1731 feet.
Circling Rwy 4, 22 NA at night.
Caution opposing ILS continuously on.

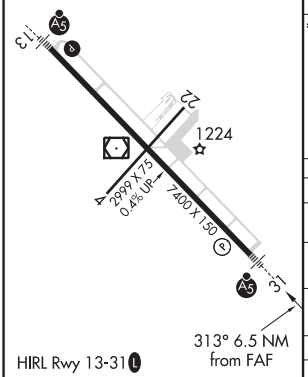
MALSR

MISSED APPROACH: Climb to 2500 then climbing left turn to 3400 direct RAIZE LOM/INL 7.2 DME and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
120.0	120.9 377.1	122.8 (CTAF)

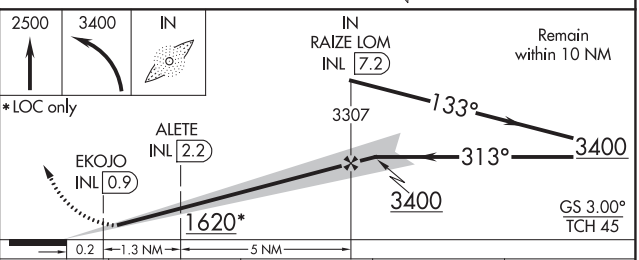


ELEV 1185 D TDZE 1166



HIRL Rwy 13-31

FAF to MAP 6.3 NM					
Knots	60	90	120	150	180
Min:Sec	6:18	4:12	3:09	2:31	2:06



CATEGORY	A	B	C	D
S-ILS 31	1366-½ 200 (200-½)			
S-LOC 31	1620-½ 454 (500-½)		1620-¾ 454 (500-¾)	1620-1 454 (500-1)
CIRCLING	1620-1 435 (500-1)	1680-1 495 (500-1)	1680-1½ 495 (500-1½)	1780-2 595 (600-2)
ALETE FIX MINIMUMS (DME from INL VOR/DME)				
S-LOC 31	1520-½ 354 (400-½)			1520-¾ 354 (400-¾)
CIRCLING	1620-1 435 (500-1)	1680-1 495 (500-1)	1680-1½ 495 (500-1½)	1780-2 595 (600-2)

NC-1, 25 FEB 2021 to 22 APR 2021

LOC I-ABK	APP CRS	Rwy ldg	7400
109.1	133°	TDZE	1184
		Apt Elev	1185

ILS or LOC/DME RWY 13

FALLS INTL-EINARSON FIELD (INL)

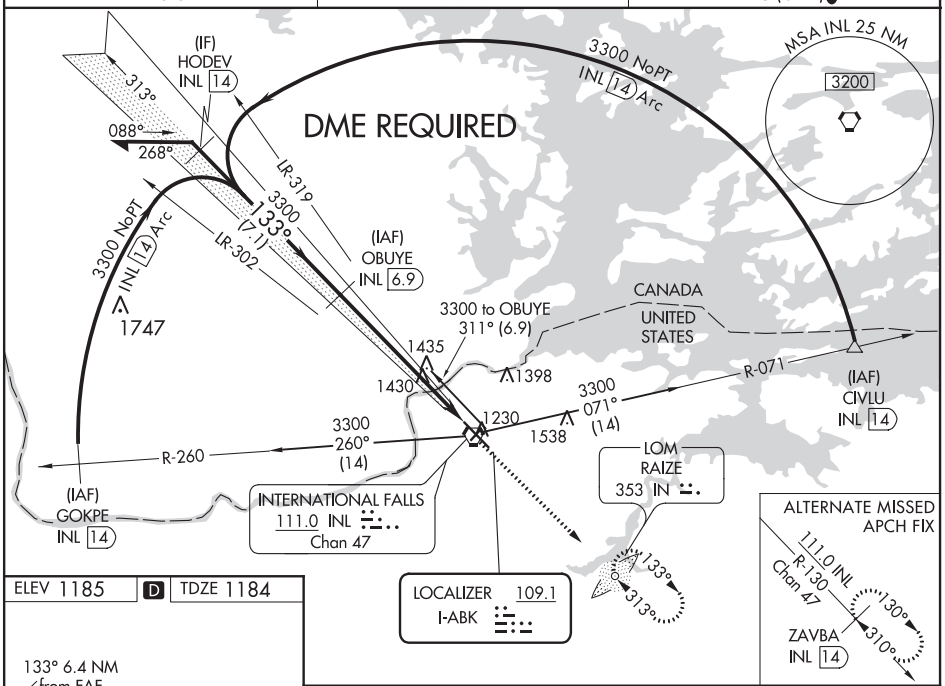
When local altimeter setting not received, use Baudette altimeter setting and increase DAs 127 feet and S-ILS 13 visibility ¼ mile all Cats, increase all MDAs 140 feet and S-LOC 13 Cat B visibility ¼ mile, Cat C and D ½ mile, increase Circling Cat B visibility ¼ mile, Cat C and D ½ mile. For inoperative MALSR when using Baudette altimeter setting, increase S-ILS 13 visibility ½ mile all Cats. ADF required. Circling to Rwy 4-22 NA at night. DME from INL VORTAC. Simultaneous reception of I-ABK and INL DME required. Caution opposing ILS continously on.

-31°C

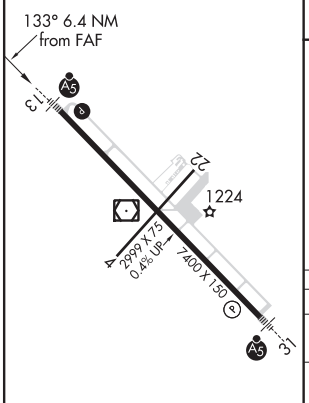
MALSR

MISSED APPROACH: Climb to 3400 direct IN LOM and hold.

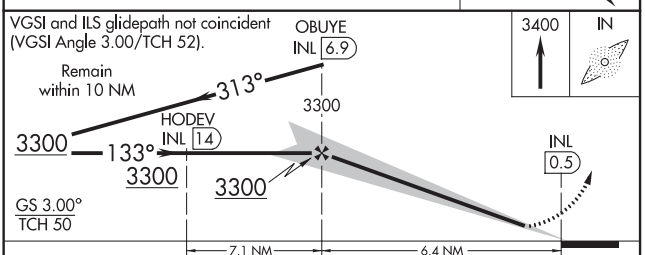
ASOS	MINNEAPOLIS CENTER	UNICOM
120.0	120.9 377.1	122.8 (CTAF) L



ELEV 1185 D TDZE 1184



HIRL Rwy 13-31 L



CATEGORY	A	B	C	D
S-ILS 13	1384-½ 200 (200-½)			
S-LOC 13	1820-½ 636 (700-½)		1820-1¼ 636 (700-1¼)	1820-1½ 636 (700-1½)
CIRCLING	1820-1 635 (700-1)		1820-1¾ 635 (700-1¾)	1820-2 635 (700-2)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 53706 W13A	APP CRS 133°	Rwy ldg 7400 TDZE 1184 Apt Elev 1185

RNAV (GPS) RWY 13
FALLS INTL-EINARSON FIELD (INL)

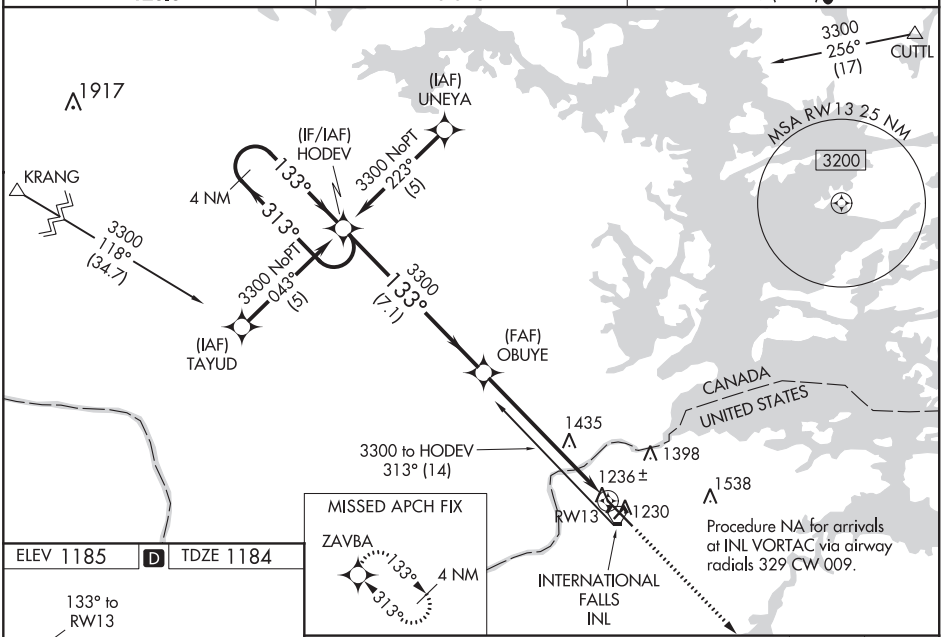
T A W -31°C

When local altimeter setting not received, use Baudette altimeter setting and increase all DAs 127 feet, increase LPV visibility ¼ mile all Cats, and LNAV/VNAV visibility ¾ mile all Cats, increase all MDAs 140 feet, increase LNAV Cat C and D visibility ½ mile, Circling Cat C visibility ½ mile and Cat D visibility ¼ mile. For inoperative MALSR when using Baudette altimeter setting, increase LPV visibility ½ mile all Cats, inoperative table does not apply to LNAV/VNAV. VDP NA when using Baudette altimeter setting. Baro-VNAV NA when using Baudette altimeter setting. Circling to Rwy 4-22 NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 47°C (116°F). DME/DME RNP- 0.3 NA.

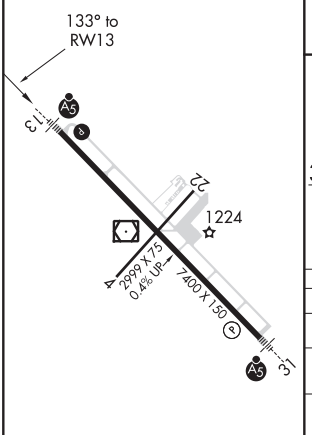
MALSR A5

MISSED APPROACH: Climb to 3400 direct ZAVBA and hold.

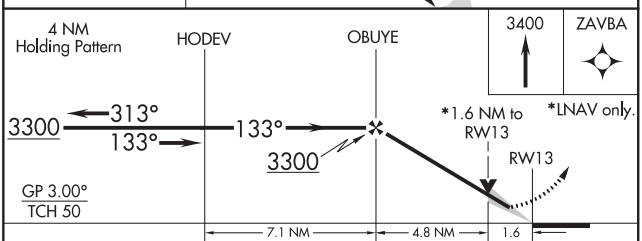
ASOS	MINNEAPOLIS CENTER	UNICOM
120.0	120.9 377.1	122.8 (CTAF) L



ELEV 1185 D TDZE 1184



HIRL Rwy 13-31 L



CATEGORY	A	B	C	D
LPV DA	1434-½ 250 (300-½)			
LNAV/VNAV DA	1669-1¼ 485 (500-1¼)			
LNAV MDA	1760-½ 576 (600-½)		1760-1 576 (600-1)	1760-1¼ 576 (600-1¼)
CIRCLING	1760-1 575 (600-1)		1760-1½ 575 (600-1½)	1780-2 595 (600-2)

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 78406 W31A	APP CRS 313°	Rwy ldg 7400 TDZE 1166 Apt Elev 1185

RNAV (GPS) RWY 31
FALLS INTL-EINARSON FIELD (INL)

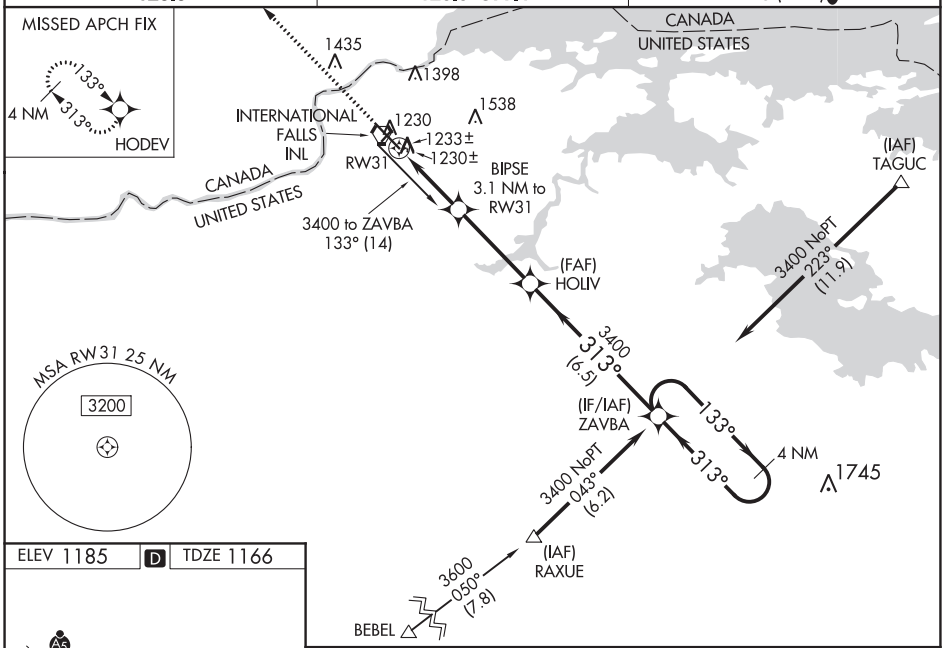
T A W -31°C

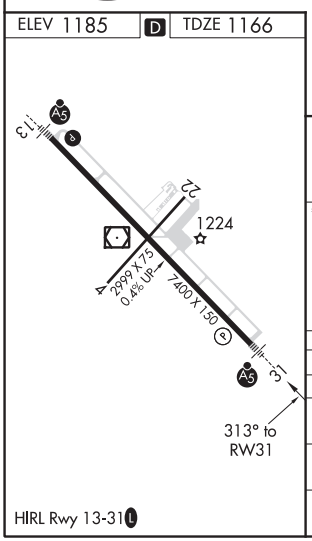
When local altimeter setting not received, use Baudette altimeter setting and increase all DAs 127 feet, and LPV and LNAV/VNAV visibility ½ mile all Cats, increase all MDAs 140 feet and LNAV Cat C visibility ¼ mile and Circling Cat C and D visibility ¼ mile. For inoperative MALSR when using Baudette altimeter setting, increase LPV visibility ½ mile all Cats. For inoperative MALSR, increase LPV visibility ½ mile all Cats, inoperative table does not apply to LNAV Cat D. VDP NA when using Baudette altimeter setting. Baro-VNAV NA when using Baudette altimeter setting. Circling to Rwy 4-22 NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.

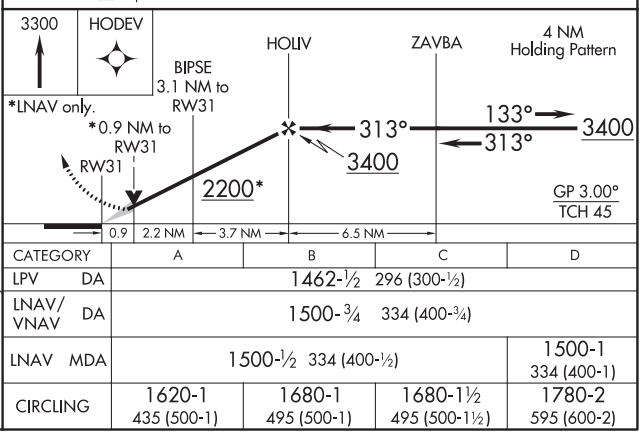
MALSR

MISSED APPROACH: Climb to 3300 direct HODEV and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
120.0	120.9 377.1	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1462-½ 296 (300-½)			
LNAV/VNAV DA	1500-¾ 334 (400-¾)			
LNAV MDA	1500-½ 334 (400-½)			1500-1 334 (400-1)
CIRCLING	1620-1 435 (500-1)	1680-1 495 (500-1)	1680-1½ 495 (500-1½)	1780-2 595 (600-2)

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

VORTAC INL	APP CRS	Rwy ldg	7400
111.0	134°	TDZE	1184
Chan 47		Apt Elev	1185

VOR RWY 13

FALLS INTL-EINARSON FIELD (INL)

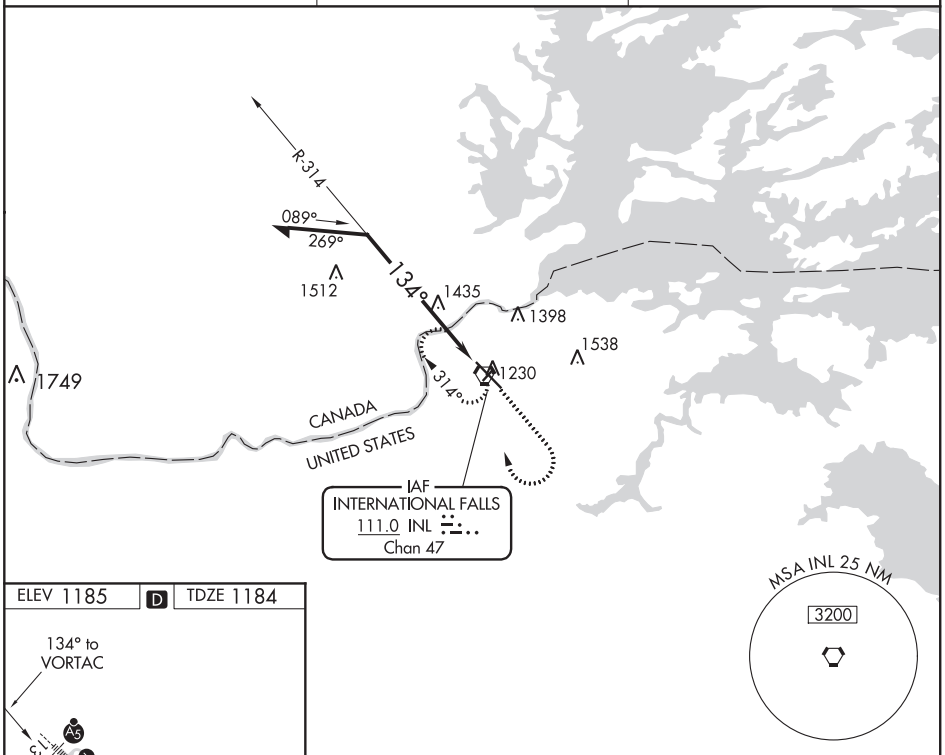
T
A
-31°C

Circling to Rwy 4-22 NA at night. VDP NA when using Baudette altimeter setting. When local altimeter setting not received, use Baudette altimeter setting and increase all MDAs 140 feet, and S-13 Cats A/B visibility ¼ mile, Cats C/D visibility ½ mile. Increase Circling Cat B visibility ¼ mile, Cat C and D ½ mile. For inoperative MALSR when using Baudette altimeter setting, increase S-13 Cat A visibility ¼ mile.

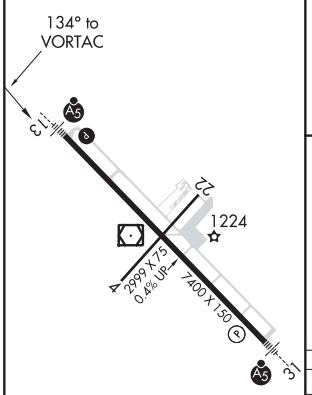
MALSR

MISSED APPROACH: Climb to 2900 then right turn direct INL VORTAC and hold.

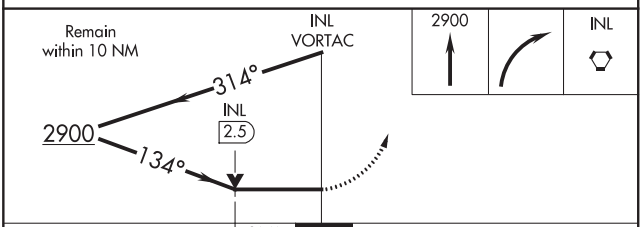
ASOS	MINNEAPOLIS CENTER	UNICOM
120.0	120.9 377.1	122.8 (CTAF) L



ELEV 1185 D TDZE 1184



HIRL Rwy 13-31 L



CATEGORY	A	B	C	D
S-13	1880-½ 696 (700-½)		1880-1½ 696 (700-1½)	1880-1¾ 696 (700-1¾)
CIRCLING	1880-1 695 (700-1)		1880-2 695 (700-2)	1880-2¼ 695 (700-2¼)

NC-1, 25 FEB 2021 to 22 APR 2021

VORTAC INL	APP CRS	Rwy ldg	7400
111.0	303°	TDZE	1174
Chan 47		Apt Elev	1185

VOR RWY 31
FALLS INTL-EINARSON FIELD (INL)

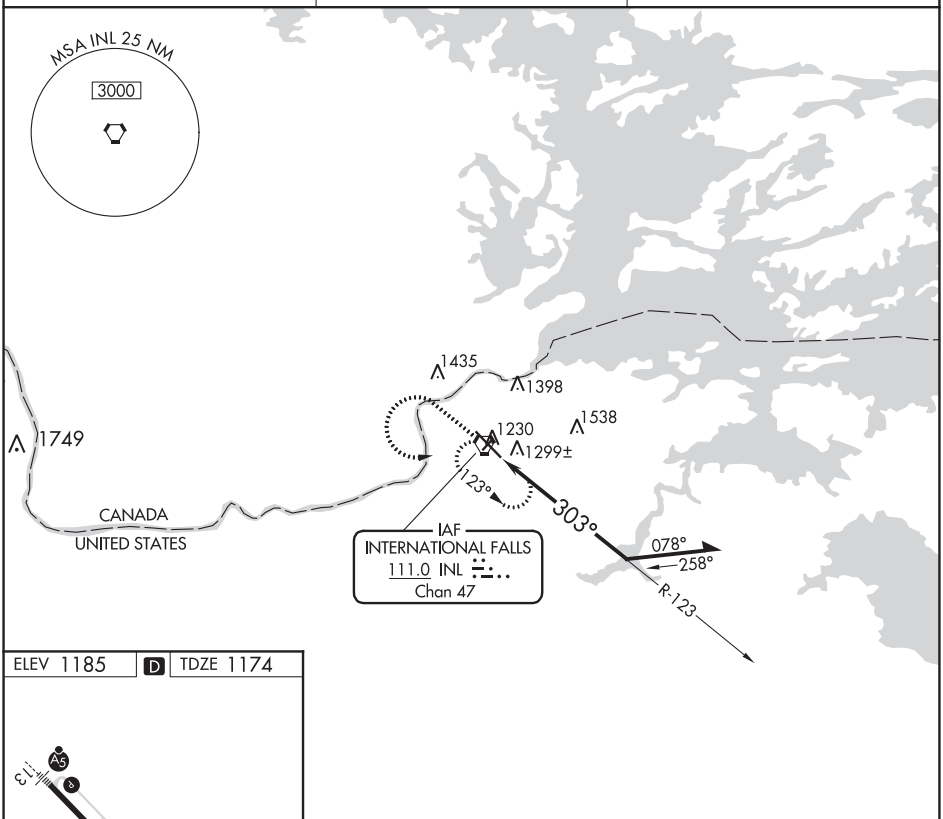
T -31°C

For inoperative MALSR, increase S-31 Cat D visibility to 1¼. Circling to Rwy 4-22 NA at night.

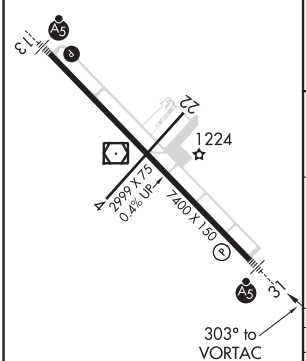
MALSR A5

MISSED APPROACH: Climb to 2900 then left turn direct INL VORTAC and hold.

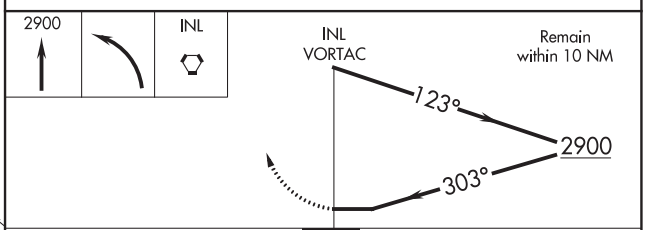
ASOS	MINNEAPOLIS CENTER	UNICOM
120.0	120.9 377.1	122.8 (CTAF) L



ELEV 1185 D TDZE 1174



HIRL Rwy 13-31 L



CATEGORY	A	B	C	D
S-31	1600-½ 426 (500-½)		1600-¾ 426 (500-¾)	1600-1 426 (500-1)
CIRCLING	1620-1 435 (500-1)	1680-1 495 (500-1)	1680-1½ 495 (500-1½)	1840-2 655 (700-2)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

LOC I-INL	APP CRS	Rwy ldg	7400
111.95	313°	TDZE	1166
		Apt Elev	1185

COPTER ILS or LOC RWY 31

FALLS INTL-EINARSON FIELD (INL)

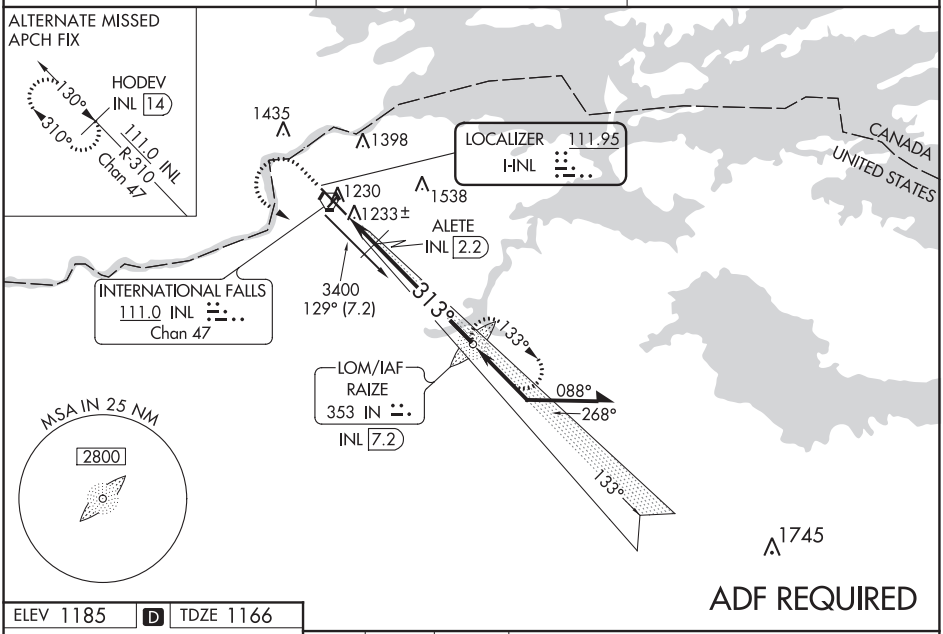
-31°C

When local altimeter setting not received, use Baudette altimeter setting and increase DA 127 feet and ILS visibility ⅜ mile, increase all MDA 140 feet and LOC visibility ⅜ mile, increase ALETE fix minimums visibility ¼ mile. For inoperative MALSR, increase H-ILS 31 visibility to ½ mile. For inoperative MALSR when using Baudette altimeter setting, increase H-ILS 31 visibility to 1⅛ and H-LOC 31 visibility to 1 mile.

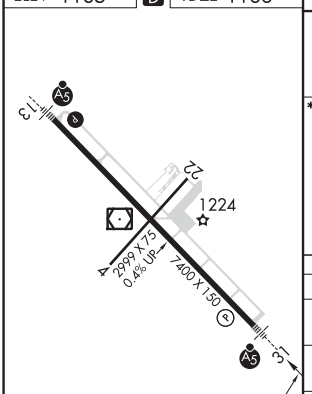
MALSR

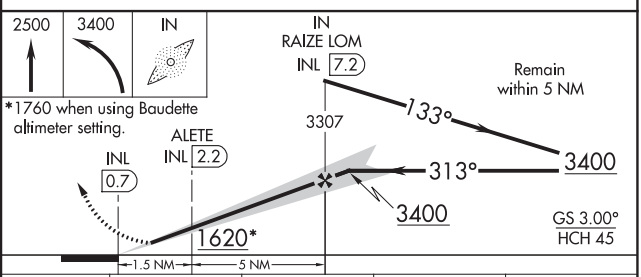
MISSED APPROACH: Climb to 2500 then climbing left turn to 3400 direct RAIZE LOM and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
120.0	120.9 377.1	122.8 (CTAF) L



ELEV 1185 D TDZE 1166



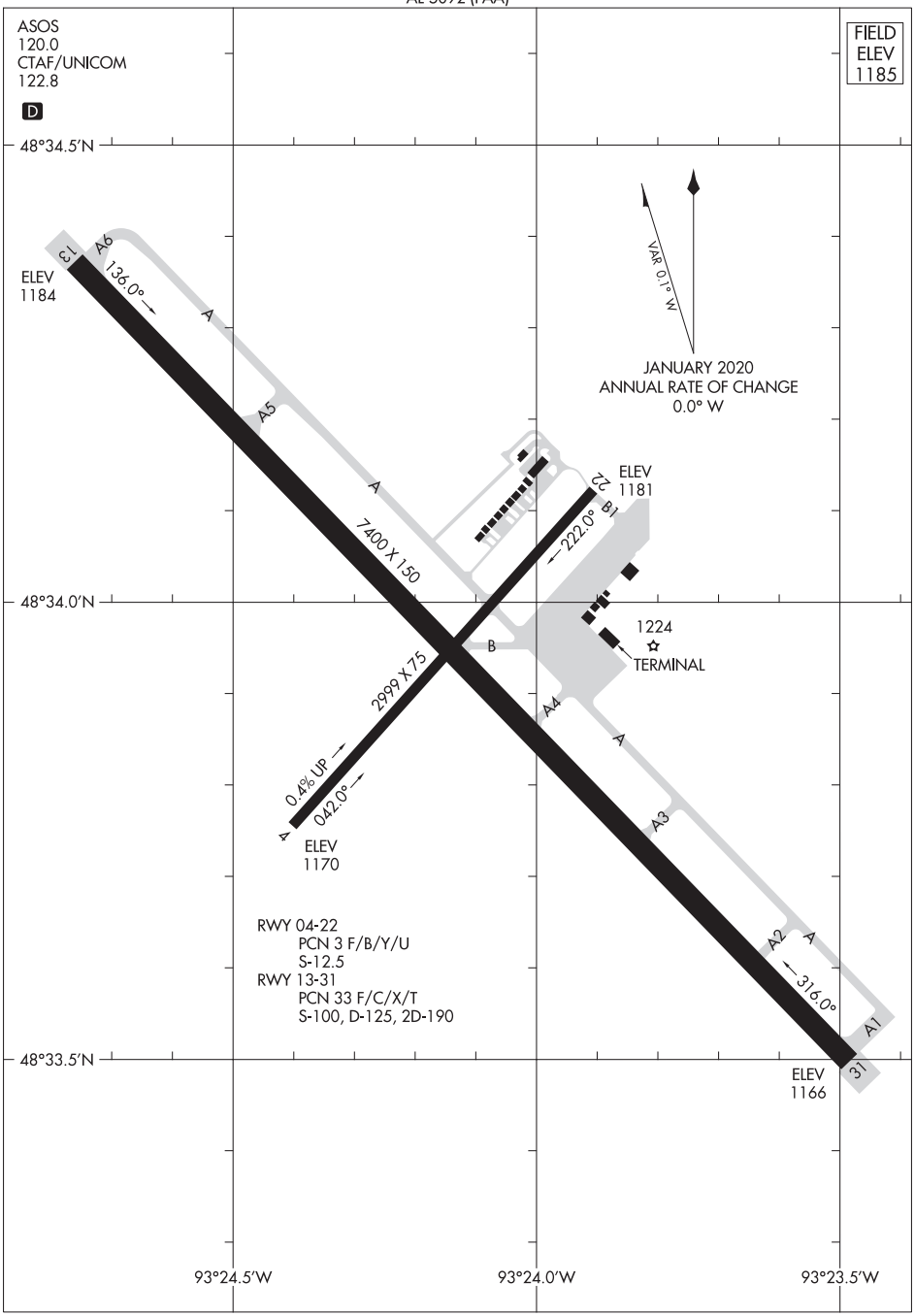


CATEGORY	COPTER	B	C	D
H-ILS 31	1366-¼ 200 (200-¼)	NA		
H-LOC 31	1620-⅜ 454 (500-⅜)	NA		
CIRCLING	NA			
ALETE FIX MINIMUMS				
H-LOC 31	1520-¼ 354 (400-¼)	NA		
CIRCLING	NA			

FAF to MAP 6.5 NM					
Knots	45	60	75	90	105
Min:Sec	8:40	6:30	5:12	4:20	3:43

NC-1, 25 FEB 2021 to 22 APR 2021

AL-5092 (FAA)



NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

JACKSON, MINNESOTA

AL-5568 (FAA)

19171

RNAV (GPS) RWY 13
JACKSON MUNI (MJQ)

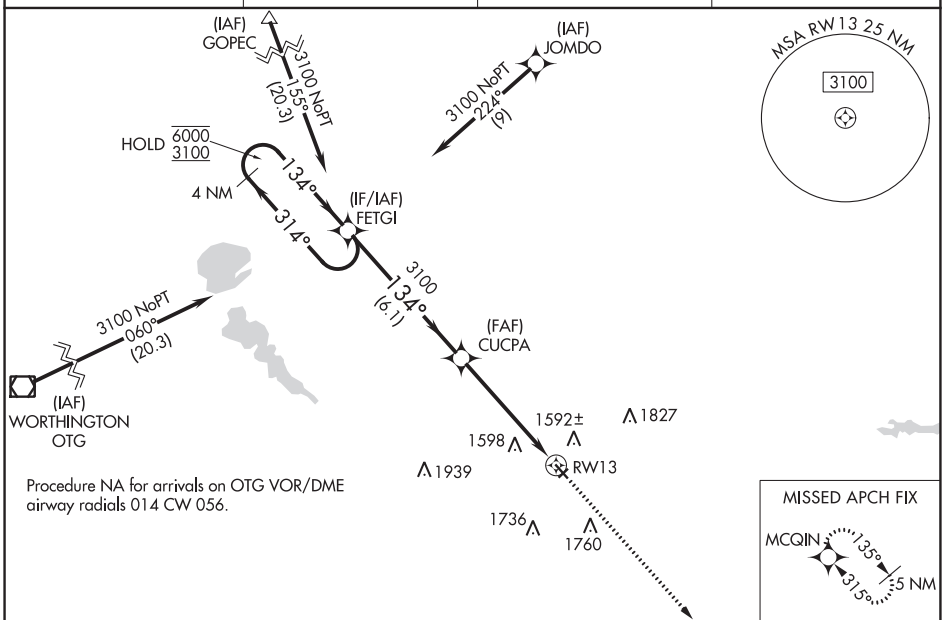
WAAS CH 97632 W13A	APP CRS 134°	Rwy ldg 3591 TDZE 1446 Apt Elev 1447

RNP APCH.

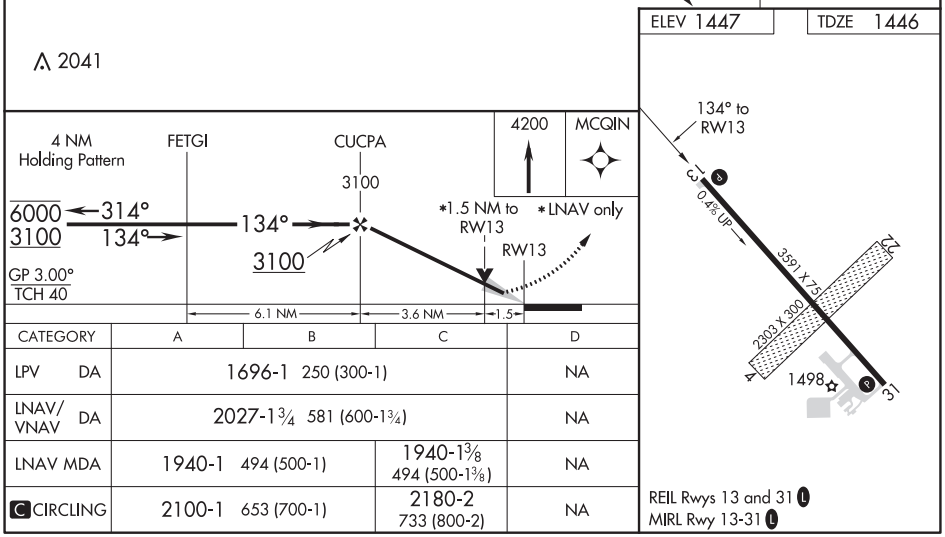
Circling NA to Rwys 4, 22 .
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C.

MISSED APPROACH: Climb to 4200 direct MCQIN and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
118.1	127.75 257.7	121.725	122.8 (CTAF) L



ELEV 1447 TDZE 1446



CATEGORY	A	B	C	D
LPV DA	1696-1 250 (300-1)			NA
LNAV/VNAV DA	2027-1¾ 581 (600-1¾)			NA
LNAV MDA	1940-1 494 (500-1)		1940-1⅜ 494 (500-1⅜)	NA
C CIRCLING	2100-1 653 (700-1)		2180-2 733 (800-2)	NA

JACKSON, MINNESOTA
Amdt 1B 20JUN19

43°39′N-94°59′W

JACKSON MUNI (MJQ)
RNAV (GPS) RWY 13

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 65932 W31A	APP CRS 315°	Rwy ldg 3591 TDZE 1447 Apt Elev 1447

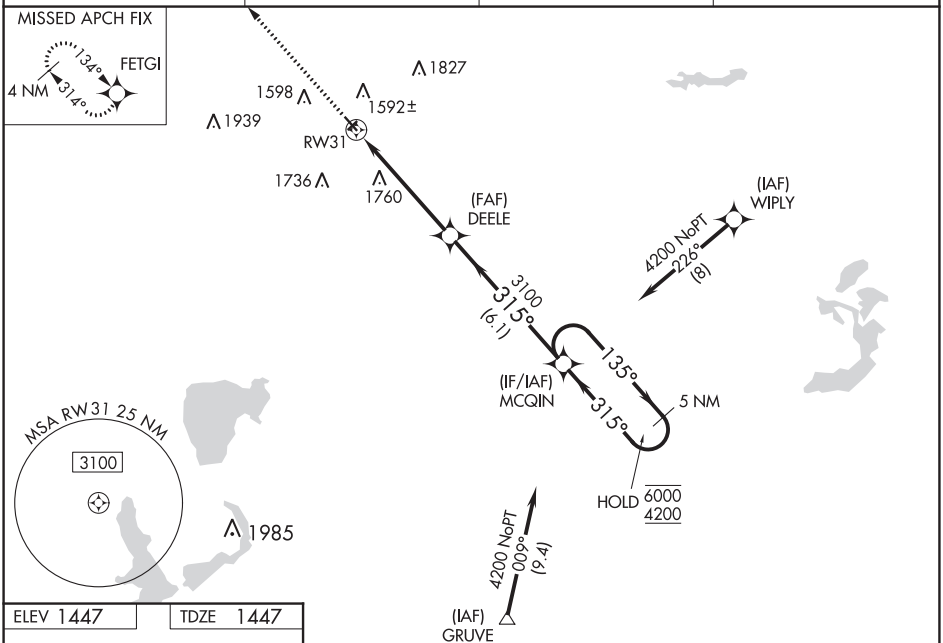
RNAV (GPS) RWY 31
JACKSON MUNI (MJQ)

RNP APCH.

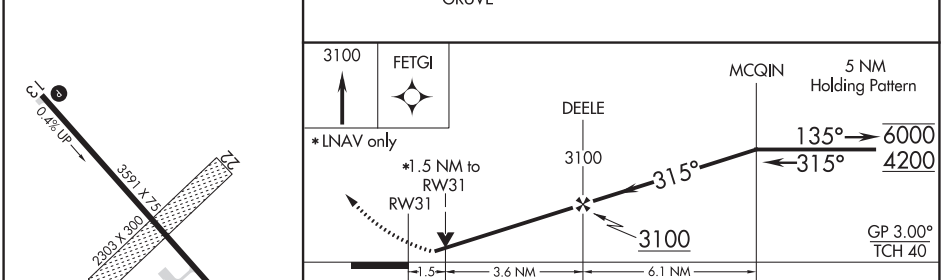
Rwy 31 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. Circling NA to Rwys 4 and 22.

MISSED APPROACH: Climb to 3100 direct FETGI and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
118.1	127.75 257.7	121.725	122.8 (CTAF) L



ELEV 1447 TDZE 1447



CATEGORY	A	B	C	D
LPV DA	1697-1 250 (300-1)			NA
LNAV/VNAV DA	1891-1½ 444 (500-1½)			NA
LNAV MDA	1980-1 533 (600-1)		1980-1½ 533 (600-1½)	NA
C CIRCLING	2100-1 653 (700-1)		2180-2 733 (800-2)	NA

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

NC-1, 25 FEB 2021 to 22 APR 2021

LOC I-JMS	APP CRS	Rwy ldg	6502
109.3	311°	TDZE	1498
		Apt Elev	1500

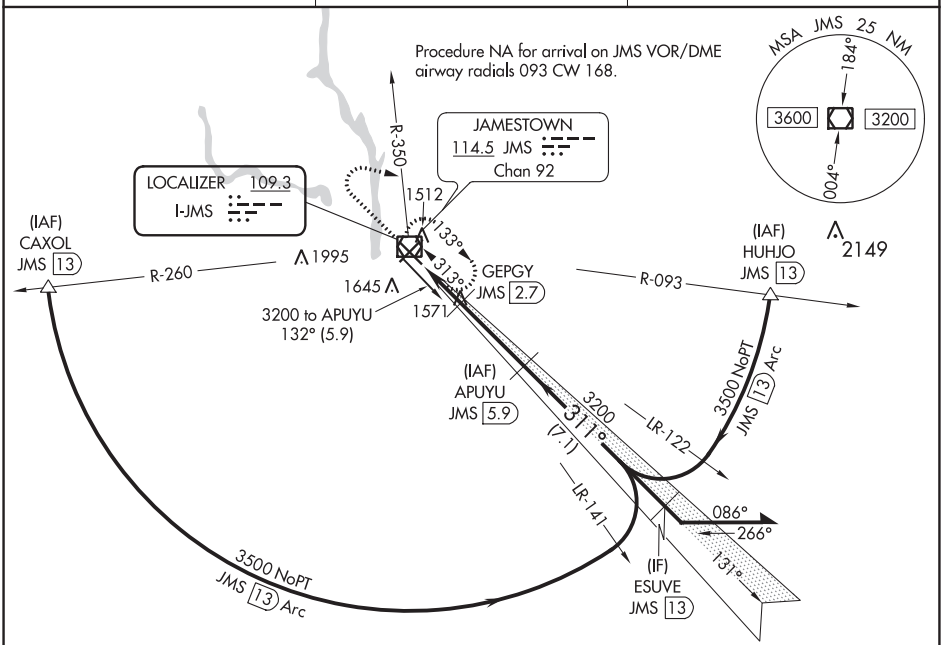
ILS or LOC RWY 31
JAMESTOWN RGNL (JMS)

T NA Autopilot coupled approach NA below 1900. DME required. DME from JMS VOR/DME. Simultaneous reception of I-JMS and JMS VOR/DME required.

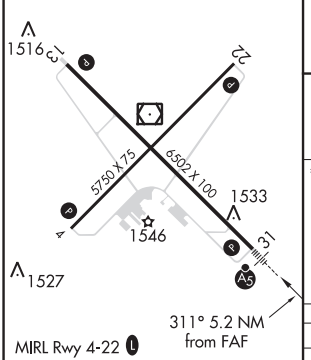
MALSR

MISSED APPROACH: Climb to 3200 then right turn heading 100° and on JMS VOR/DME R-350 to JMS VOR/DME and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
118.425	124.2 270.3	123.0 (CTAF) L



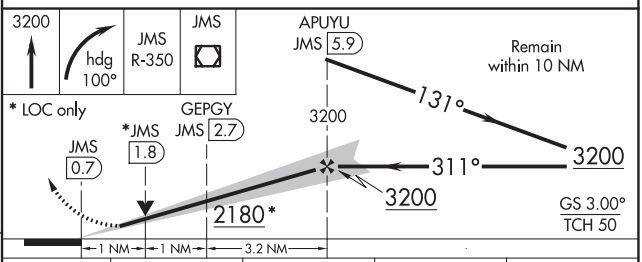
ELEV 1500 | D | TDZE 1498



MIRL Rwy 4-22 L
HIRL Rwy 13-31 L
REIL Rwys 4, 13, and 22 L

FAF to MAP 5.2 NM					
Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

DME REQUIRED



CATEGORY	A	B	C	D
S-ILS 31	1698-½ 200 (200-½)			
S-LOC 31	1880-½ 382 (400-½)		1880-⅝ 382 (400-⅝)	
C CIRCLING	1960-1 460 (500-1)		2000-1½ 500 (500-1½)	2300-2½ 800 (800-2½)

NC-1, 25 FEB 2021 to 22 APR 2021

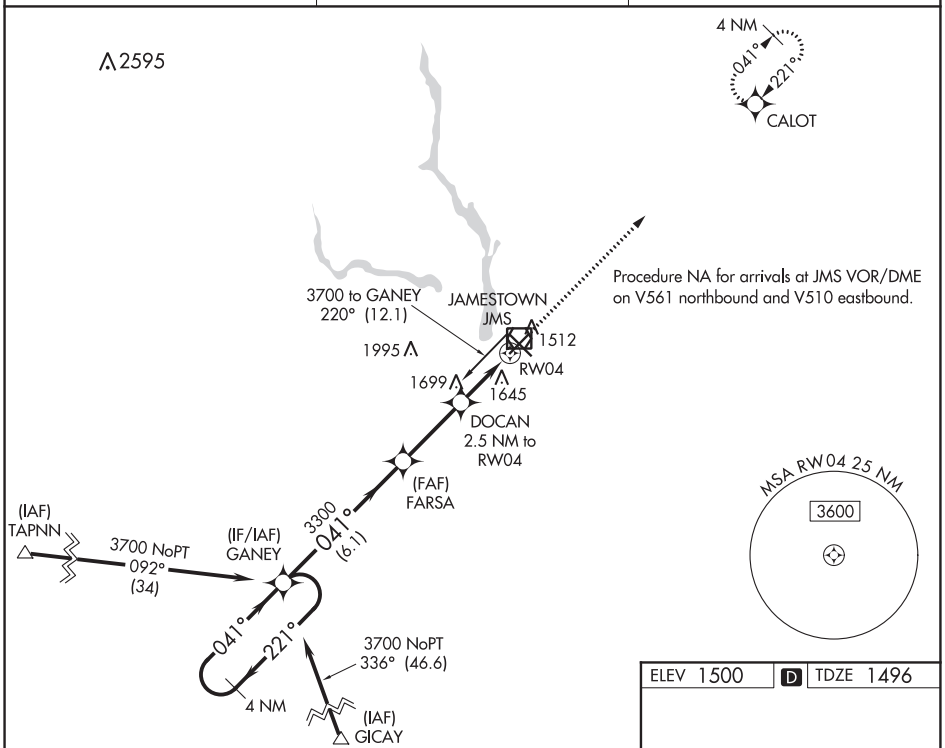
WAAS CH 97505 W04A	APP CRS 041°	Rwy ldg 5750 TDZE 1496 Apt Elev 1500

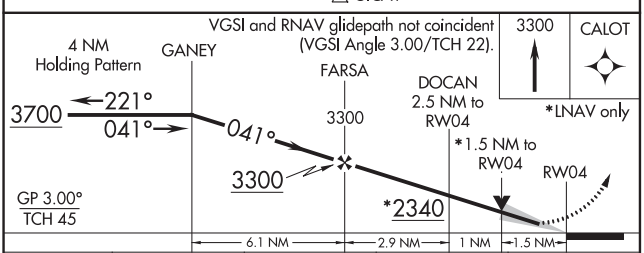
RNAV (GPS) RWY 4
JAMESTOWN RGNL (JMS)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C (-5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3300 direct CALOT and hold.

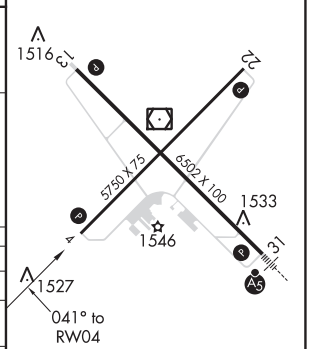
ASOS	MINNEAPOLIS CENTER	UNICOM
118.425	124.2 270.3	123.0 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1746-1 250 (300-1)			
LNAV/VNAV DA	1930-1½ 434 (500-1½)			
LNAV MDA	2000-1 504 (500-1)		2000-1½ 504 (500-1½)	
C CIRCLING	2000-1 500 (500-1)		2000-1½ 500 (500-1½)	2300-2½ 800 (800-2½)

ELEV 1500 D TDZE 1496



MIRL Rwy 4-22 L
HIRL Rwy 13-31 L
REIL Rwys 4, 13, and 22 L

JAMESTOWN, NORTH DAKOTA
Orig-B 07DEC17
46°56′N-98°41′W
JAMESTOWN RGNL (JMS)
RNAV (GPS) RWY 4
255

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

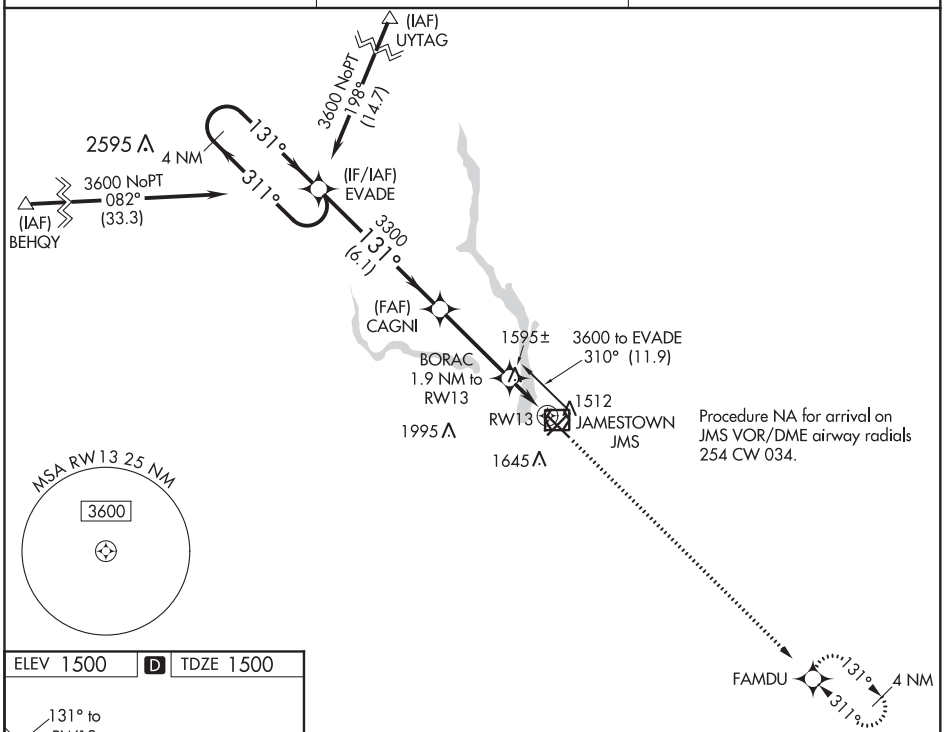
WAAS CH 65805 W13A	APP CRS 131°	Rwy ldg 6502 TDZE 1500 Apt Elev 1500

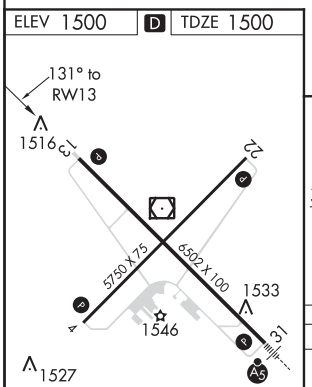
RNAV (GPS) RWY 13
JAMESTOWN RGNL (JMS)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C (-5°F) or above 54°C (130°F). Rwy 13 helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA.

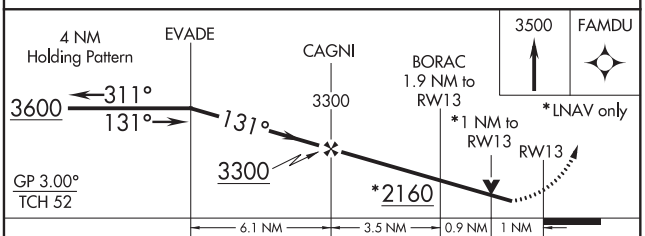
MISSED APPROACH: Climb to 3500 direct FAMDU and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
118.425	124.2 270.3	123.0 (CTAF) L





MIRL Rwy 4-22 L
HIRL Rwy 13-31 L
REIL Rwys 4, 13, and 22 L



CATEGORY	A	B	C	D
LPV DA	1787-1 287 (300-1)			
LNAV/VNAV DA	1820-1 320 (400-1)			
LNAV MDA	1860-1 360 (400-1)			1860-1¼ 360 (400-1¼)
C CIRCLING	1960-1 460 (500-1)		2000-1½ 500 (500-1½)	2300-2½ 800 (800-2½)

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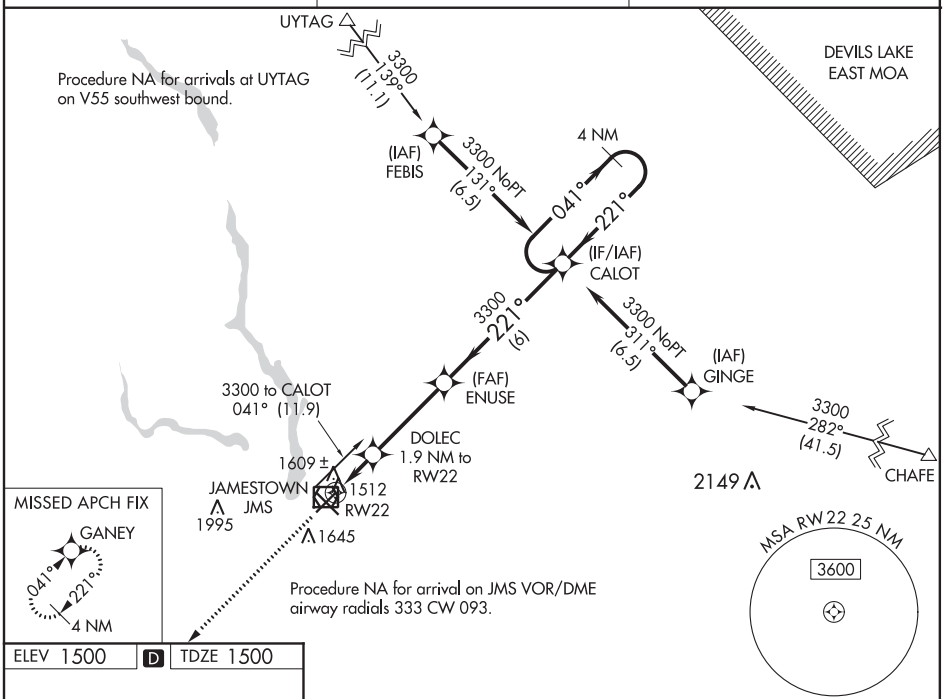
WAAS CH 70505 W22A	APP CRS 221°	Rwy ldg 5750 TDZE 1500 Apt Elev 1500

RNAV (GPS) RWY 22
JAMESTOWN RGNL (JMS)

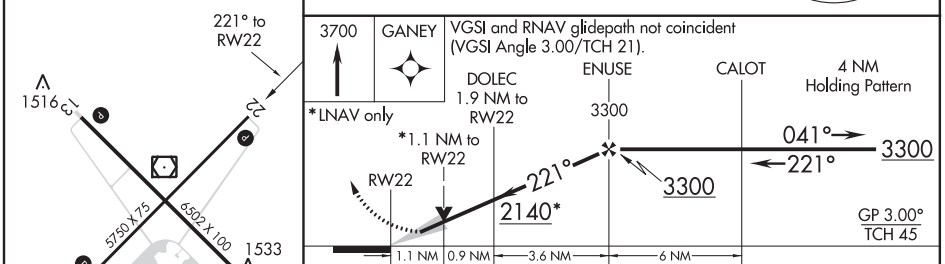
T A For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C (5°F) or above 54°C (130°F). DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 3700 direct GANEY and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
118.425	124.2 270.3	123.0 (CTAF) L



ELEV 1500 D TDZE 1500



CATEGORY	A	B	C	D
LPV DA	1750-¾ 250 (300-¾)			
LNAV/VNAV DA	1790-1 290 (300-1)			
LNAV MDA	1860-1 360 (400-1)			
C CIRCLING	1960-1 460 (500-1)		2000-1½ 500 (500-1½)	2300-2½ 800 (800-2½)

MIRL Rwy 4-22 L
HIRL Rwy 13-31 L
REIL Rwys 4, 13, and 22 L

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WAAS CH 66014 W31A	APP CRS 311°	Rwy ldg 6502 TDZE 1498 Apt Elev 1500

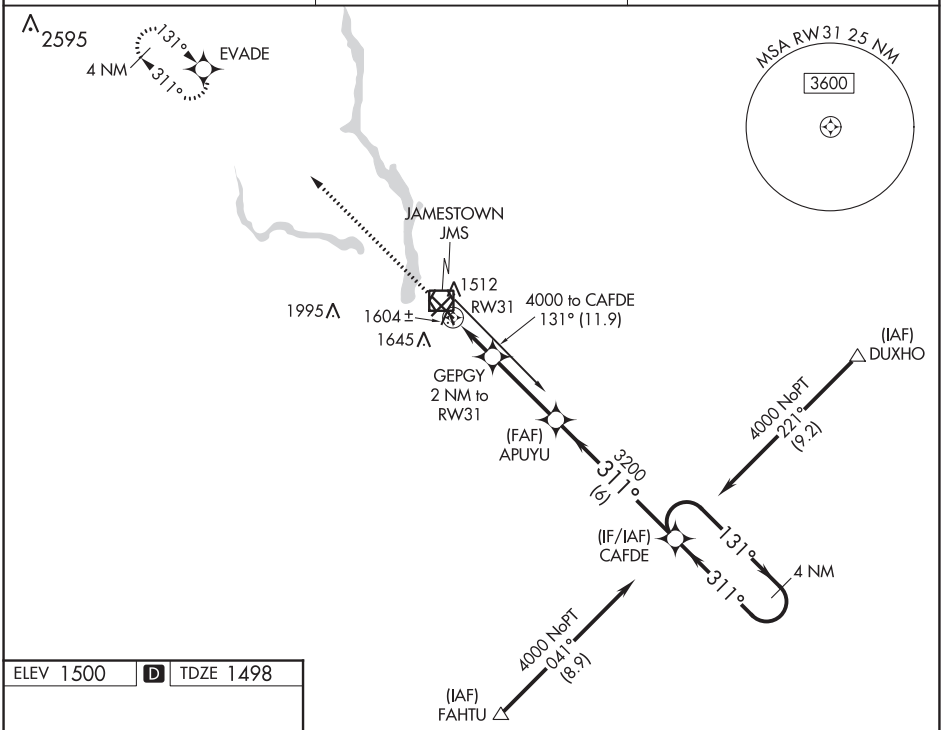
RNAV (GPS) RWY 31
JAMESTOWN RGNL (JMS)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C (-5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA.

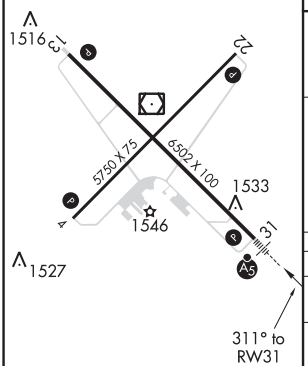
MALSR

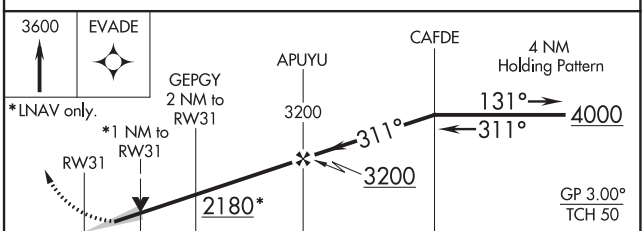
MISSED APPROACH: Climb to 3600 direct EVADE and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
118.425	124.2 270.3	123.0 (CTAF) L



ELEV 1500 | D | TDZE 1498





CATEGORY	A	B	C	D
LPV DA	1698-½ 200 (200-½)			
LNAV/VNAV DA	1786-½ 288 (300-½)			
LNAV MDA	1880-½ 382 (400-½)		1880-⅝ 382 (400-⅝)	
C CIRCLING	1960-1 460 (500-1)		2000-1½ 500 (500-1½)	2300-2½ 800 (800-2½)

MIRL Rwy 4-22 L
HIRL Rwy 13-31 L
REIL Rwys 4, 13, and 22 L

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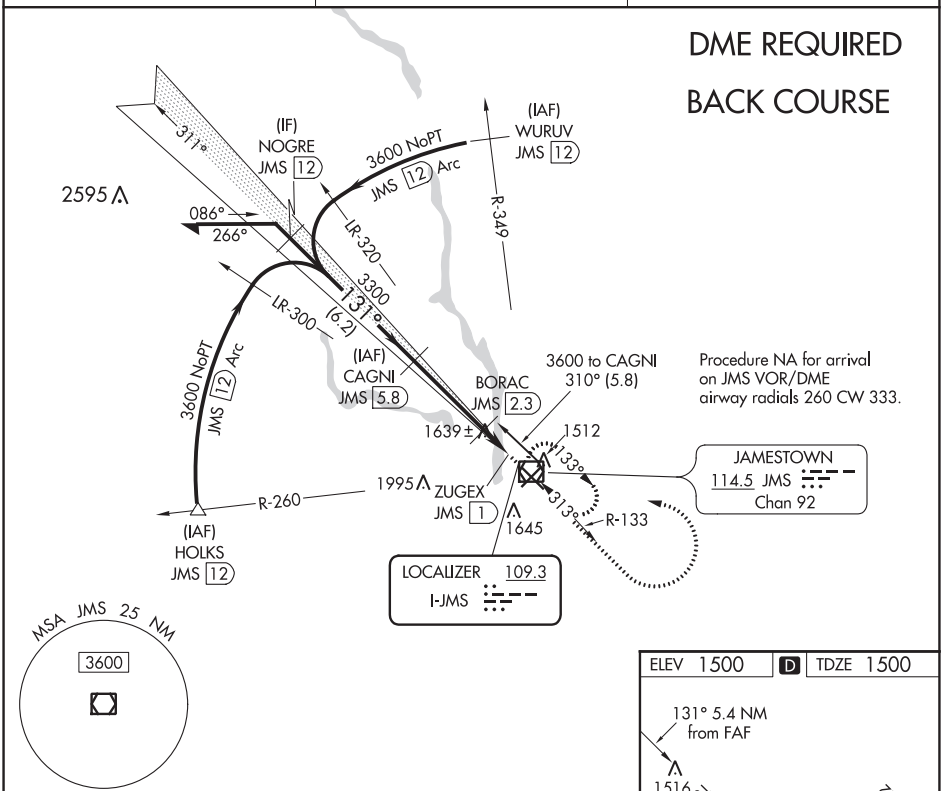
LOC I-JMS	APP CRS	Rwy ldg	6502
109.3	131°	TDZE	1500
		Apt Elev	1500

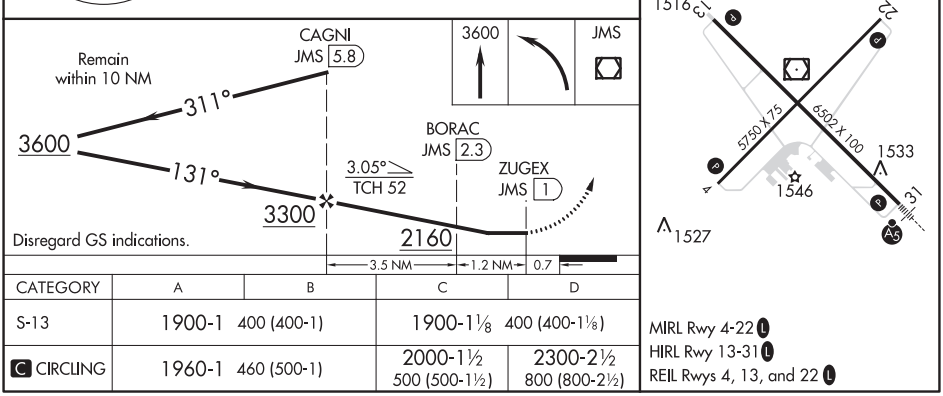
LOC BC RWY 13
JAMESTOWN RGNL (JMS)

Rwy 13 helicopter visibility reduction below ¾ SM NA.
NA
DME required. DME from JMS VOR/DME. Simultaneous reception of I-JMS and JMS VOR/DME required.

MISSED APPROACH: Climb to 3600 then left turn direct JMS VOR/DME and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
118.425	124.2 270.3	123.0 (CTAF) L





CATEGORY	A	B	C	D
S-13	1900-1 400 (400-1)		1900-1⅛ 400 (400-1⅛)	
C CIRCLING	1960-1 460 (500-1)		2000-1½ 500 (500-1½)	2300-2½ 800 (800-2½)

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JAMESTOWN, NORTH DAKOTA

AL-685 (FAA)

19003

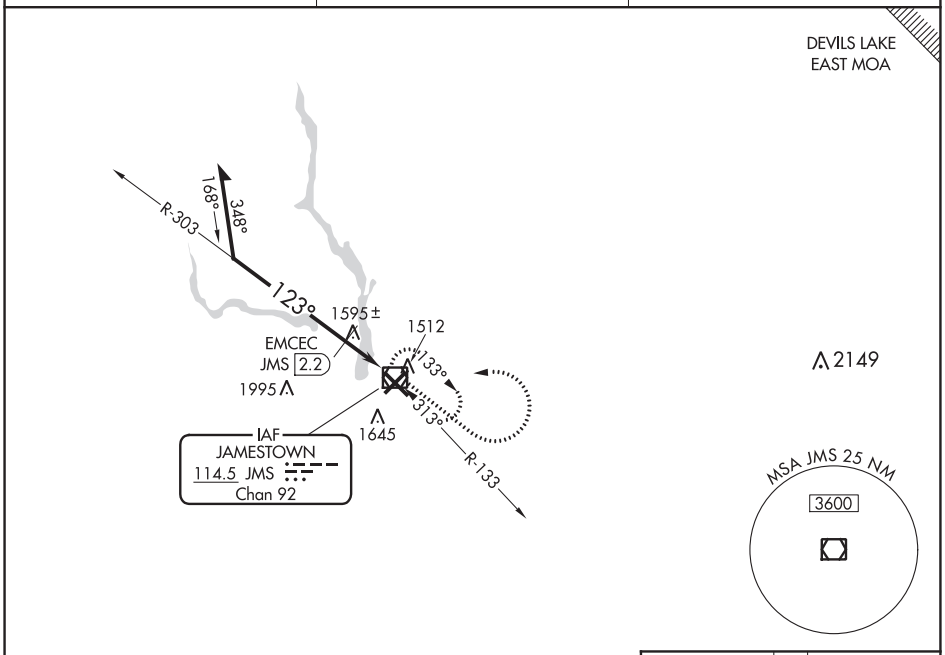
VOR RWY 13
JAMESTOWN RGNL (JMS)

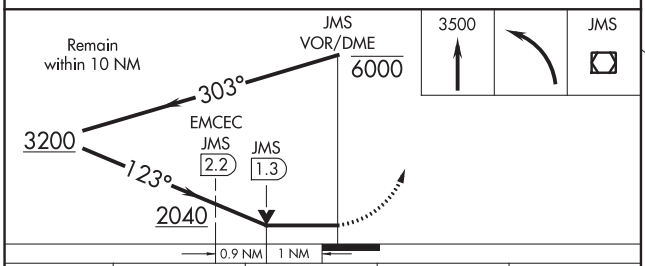
VOR/DME JMS	APP CRS	Rwy ldg	6502
114.5	123°	TDZE	1500
Chan 92		Apt Elev	1500

Rwy 13 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3500 then left turn direct JMS VOR/DME and hold.

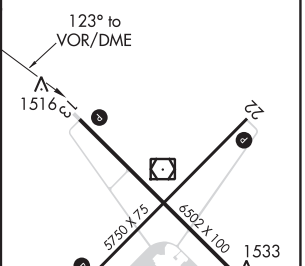
ASOS	MINNEAPOLIS CENTER	UNICOM
118.425	124.2 270.3	123.0 (CTAF) L





CATEGORY	A	B	C	D
S-13	2040-1 540 (600-1)		2040-1½ 540 (600-1½)	2040-1¾ 540 (600-1¾)
C CIRCLING	2040-1 540 (600-1)		2040-1½ 540 (600-1½)	2300-2½ 800 (800-2½)
EMCEC FIX MINIMUMS				
S-13	1860-1 360 (400-1)			1860-1¼ 360 (400-1¼)
C CIRCLING	1960-1 460 (500-1)		2000-1½ 500 (500-1½)	2300-2½ 800 (800-2½)

ELEV 1500 | D | TDZE 1500



MIRL Rwy 4-22 L
HIRL Rwy 13-31 L
REIL Rwys 4, 13, and 22 L

NC-1, 25 FEB 2021 to 22 APR 2021

VOR/DME JMS	APP CRS	Rwy ldg	6502
114.5	317°	TDZE	1498
Chan 92		Apt Elev	1500

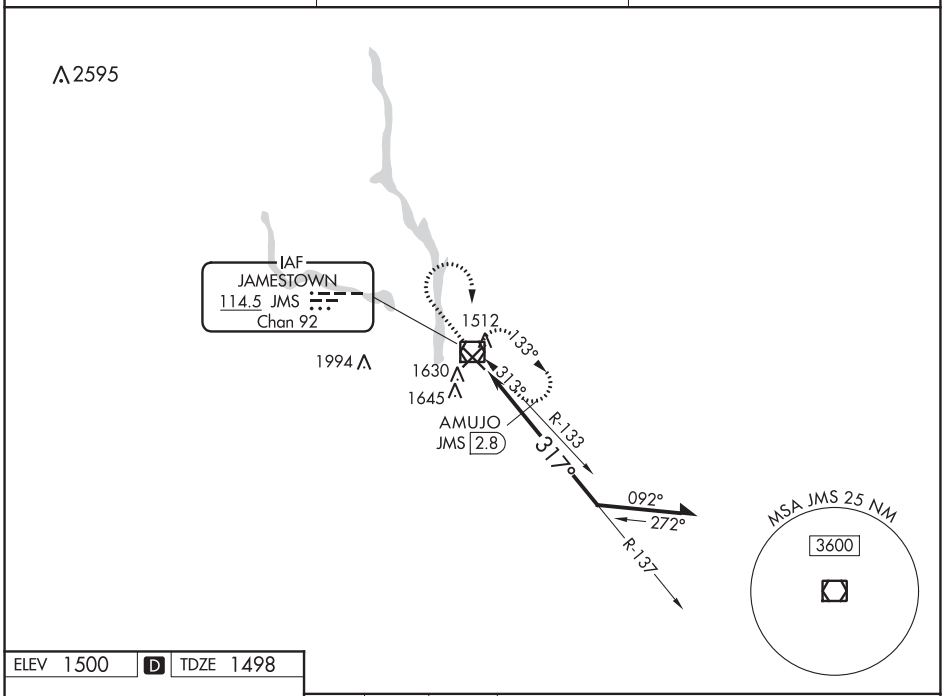
VOR RWY 31
JAMESTOWN RGNL (JMS)

T
A

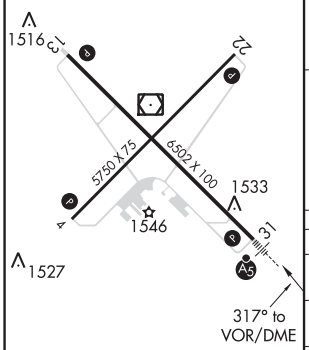
MALSR A5

MISSED APPROACH: Climb to 3100 then right turn direct JMS VOR/DME and hold.

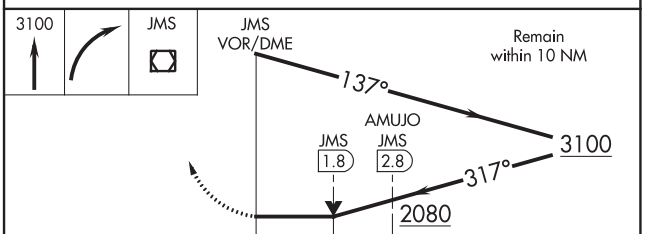
ASOS	MINNEAPOLIS CENTER	UNICOM
118.425	124.2 270.3	123.0 (CTAF) L



ELEV 1500 D TDZE 1498



MIRL Rwy 4-22 L
HIRL Rwy 13-31 L
REIL Rwys 4, 13, and 22 L



CATEGORY	A	B	C	D
S-31	2080-½ 582 (600-½)		2080-1 582 (600-1)	2080-1¼ 582 (600-1¼)
C CIRCLING	2080-1 580 (600-1)		2080-1¾ 580 (600-1¾)	2300-2½ 800 (800-2½)
AMUJO FIX MINIMUMS				
S-31	1900-½ 402 (400-½)		1900-¾ 402 (400-¾)	1900-1 402 (400-1)
C CIRCLING	1960-1 460 (500-1)		2000-1½ 500 (500-1½)	2300-2½ 800 (800-2½)

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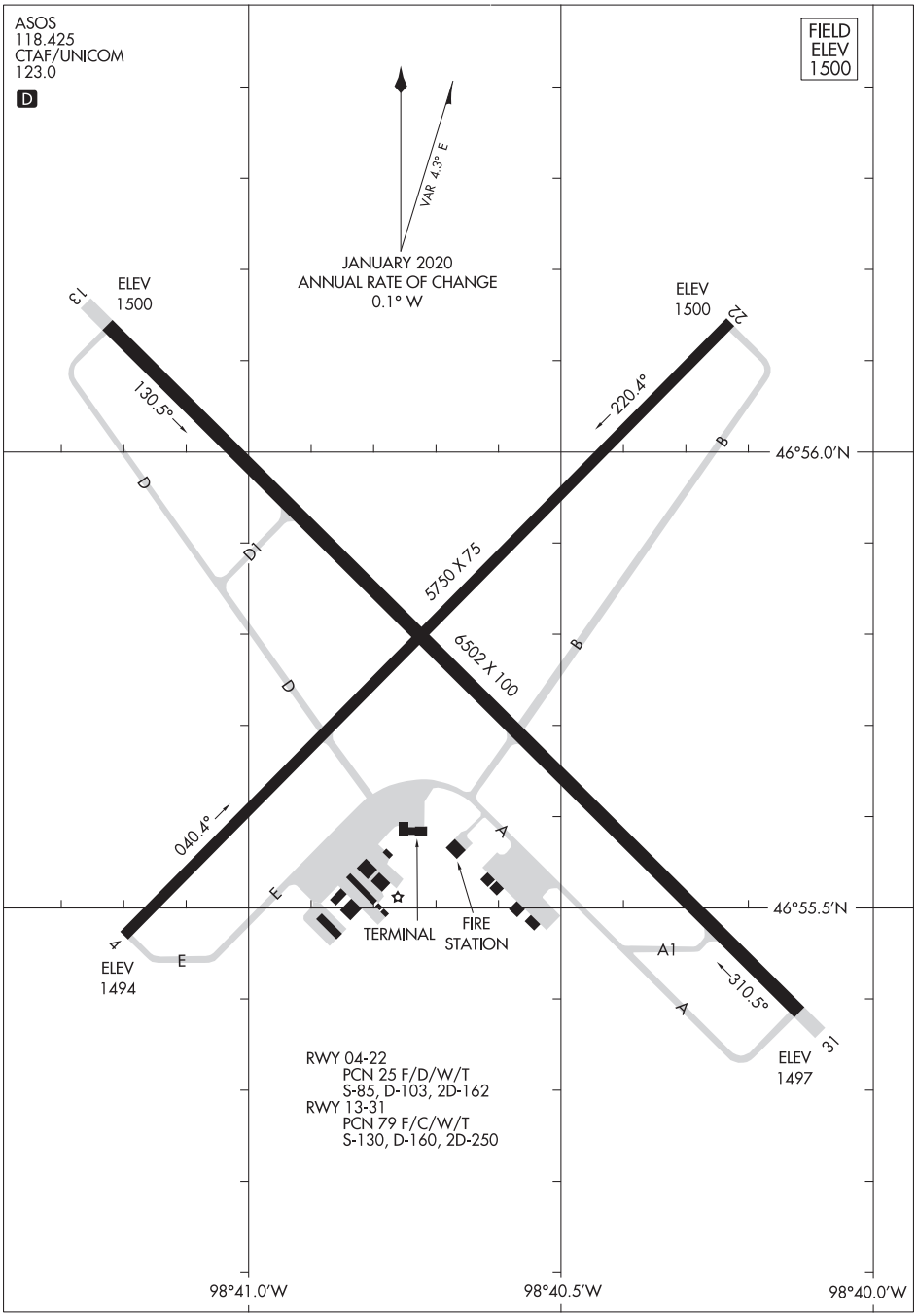
20086

AIRPORT DIAGRAM

AL-685 (FAA)

JAMESTOWN RGNL (JMS)
JAMESTOWN, NORTH DAKOTA



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AIRPORT DIAGRAM
20086
JAMESTOWN, NORTH DAKOTA
JAMESTOWN RGNL (JMS)

APP CRS	Rwy ldg	3700
260°	TDZE	1960
	Apt Elev	1962

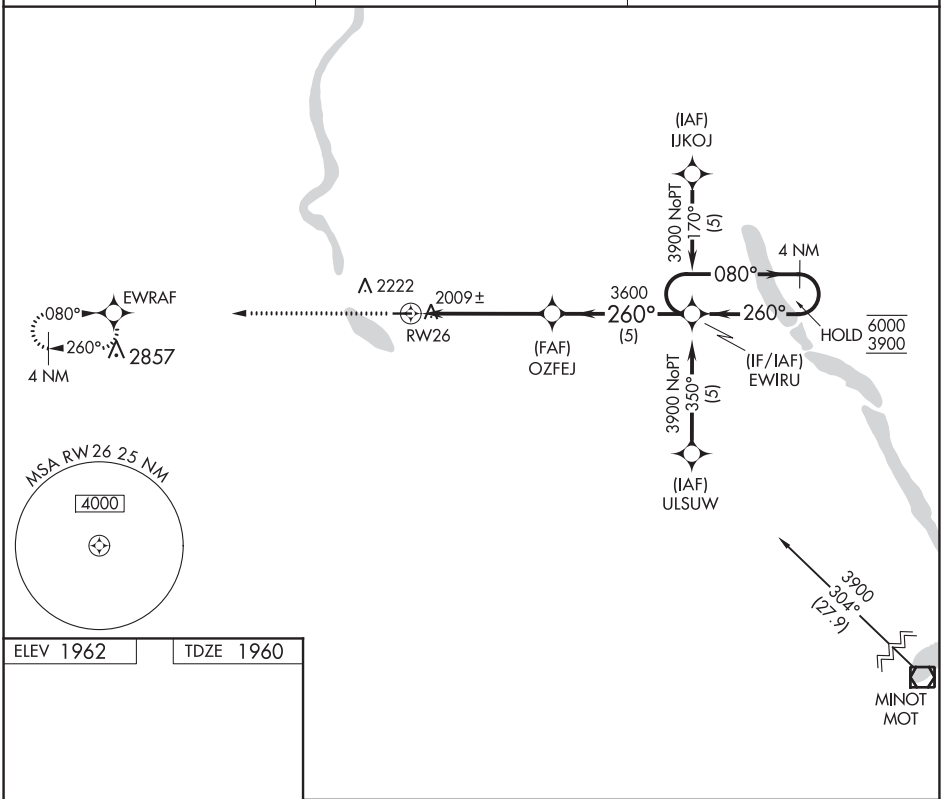
RNAV (GPS) RWY 26
KENMARE MUNI (7K5)

RNP APCH.

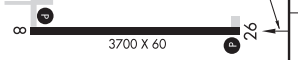
NA — Procedure NA at night. Use Minot Intl altimeter setting.

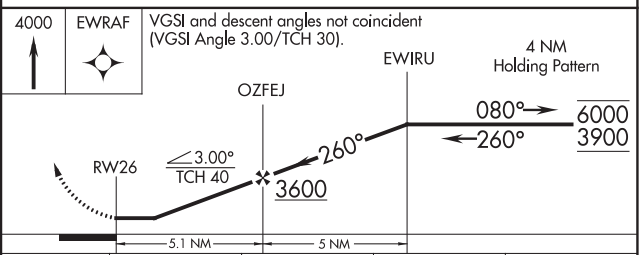
MISSED APPROACH: Climb to 4000 direct EWRAF and hold.

MOT ASOS	MINOT APP CON ★	UNICOM
118.725	119.6 363.8	122.8 (CTAF) L



ELEV 1962 TDZE 1960





CATEGORY	A	B	C	D
LNAV MDA	2420-1 460 (500-1)		NA	
C CIRCLING	2660-1¼ 698 (700-1¼)	2660-1½ 698 (700-1½)	NA	

REIL Rwys 8 and 26
MIRL Rwy 8-26 L

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KILLDEER, NORTH DAKOTA AL-10791 (FAA-O) 21028

APP CRS	Rwy ldg	4200
126°	TDZE	2249
	Apt Elev	2249

RNAV (GPS) RWY 13
DUNN COUNTY WEYDAHL FIELD (9Y1)

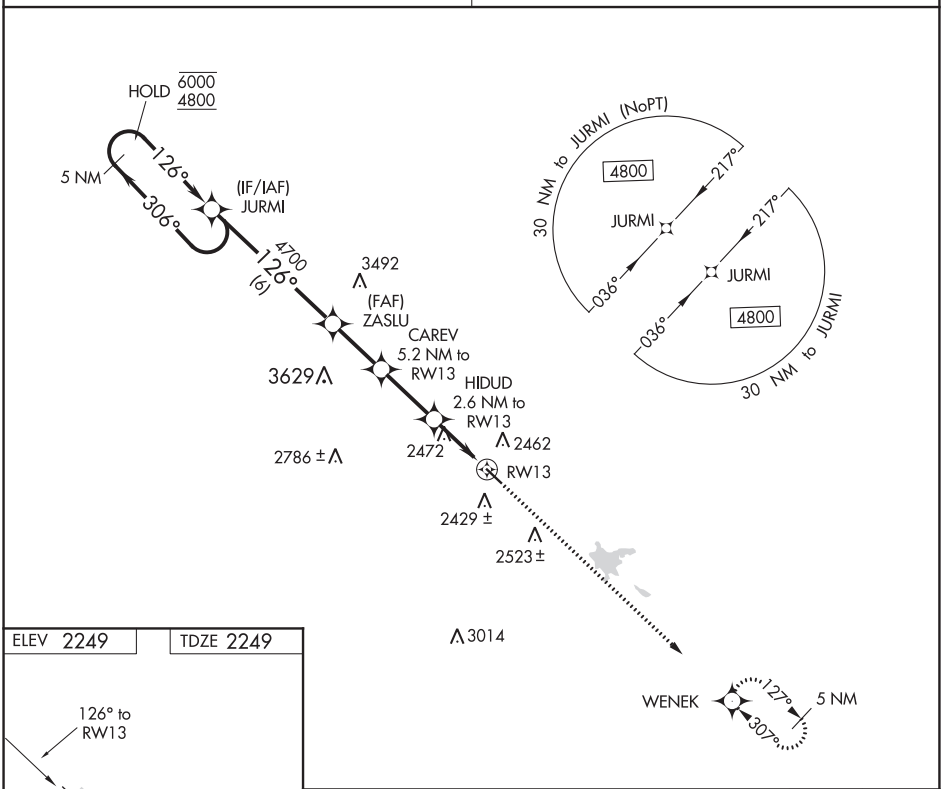
RNP APCH.

T
A NA

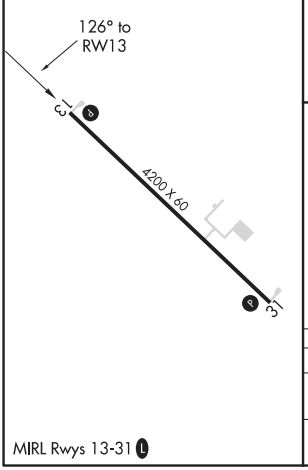
Use Watford City altimeter setting, when not received, use Dickinson altimeter setting: increase all MDA's 40 feet and Cat C visibility ⅛ SM. Increase Circling visibility Cat C ¼ SM.

MISSED APPROACH: Climb to 4800 direct WENEK and hold.

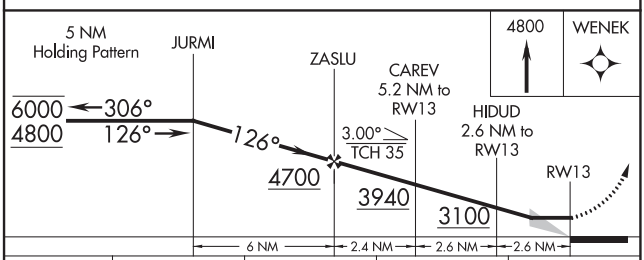
MINNEAPOLIS CENTER	CTAF
124.25 236.825	122.9 L



ELEV 2249 TDZE 2249



MIRL Rwys 13-31 L



CATEGORY	A	B	C	D
LNAV MDA	2820-1 571 (600-1)		2820-1⅝ 571 (600-1⅝)	NA
C CIRCLING	2880-1 631 (700-1)	2900-1 651 (700-1)	2960-2 711 (800-1)	NA

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APP CRS	Rwy ldg	4200
307°	TDZE	2249
	Apt Elev	2249

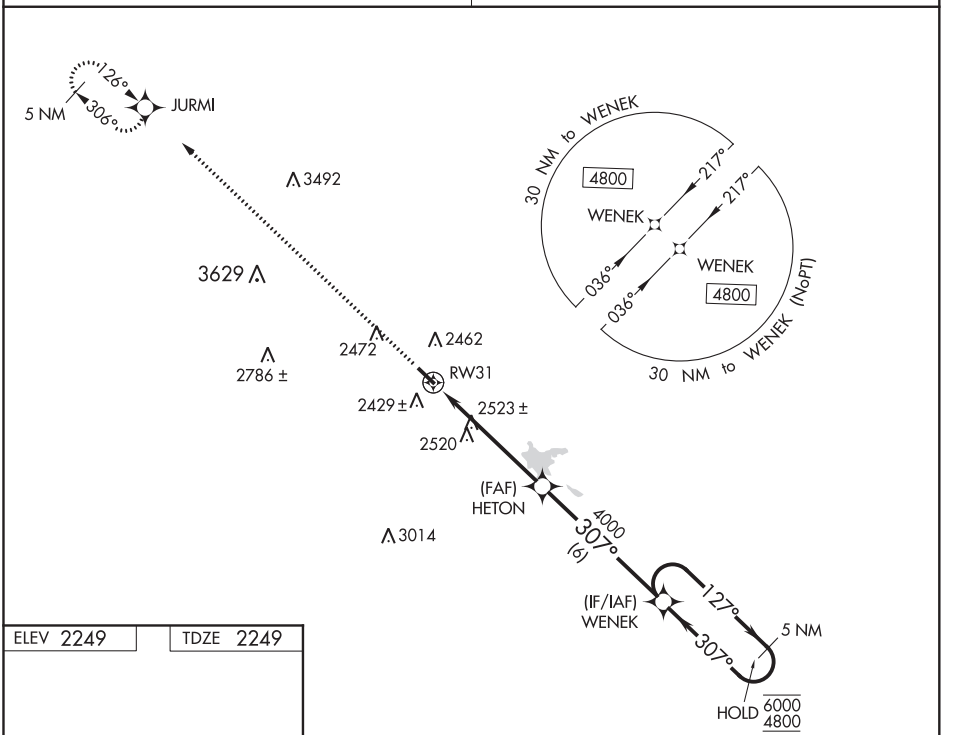
RNAV (GPS) RWY 31
DUNN COUNTY WEYDAHL FIELD (9Y1)

RNP APCH.

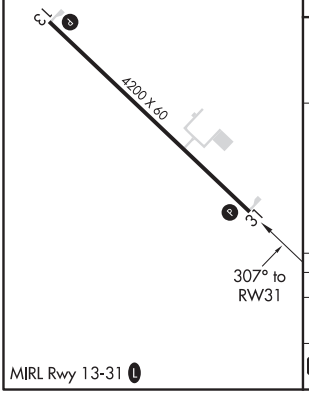
NA Use Watford City altimeter setting, when not received, use Dickinson altimeter setting: increase all MDA's 40 feet and visibility Cat B ¼ SM; increase Circling visibility Cat C ¼ SM.

MISSED APPROACH: Climb to 4800 direct JURMI and hold.

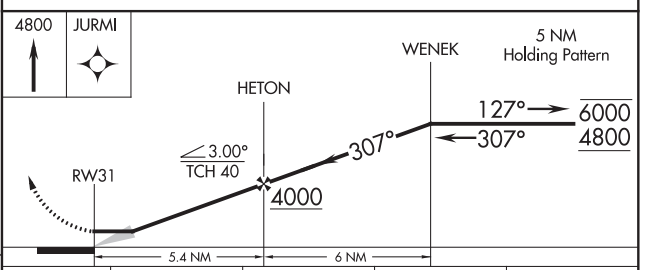
MINNEAPOLIS CENTER	CTAF
124.25 236.825	122.9 L



ELEV 2249 TDZE 2249



MIRL Rwy 13-31 L



CATEGORY	A	B	C	D
LNAV MDA	2960-1 711 (800-1)		2960-2 711 (800-2)	NA
C CIRCLING	2960-1 711 (800-1)		2960-2 711 (800-2)	NA

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KINDRED, NORTH DAKOTA

AL-10406 (FAA)

20198

RNAV (GPS) RWY 11
ROBERT ODEGAARD FIELD (K74)

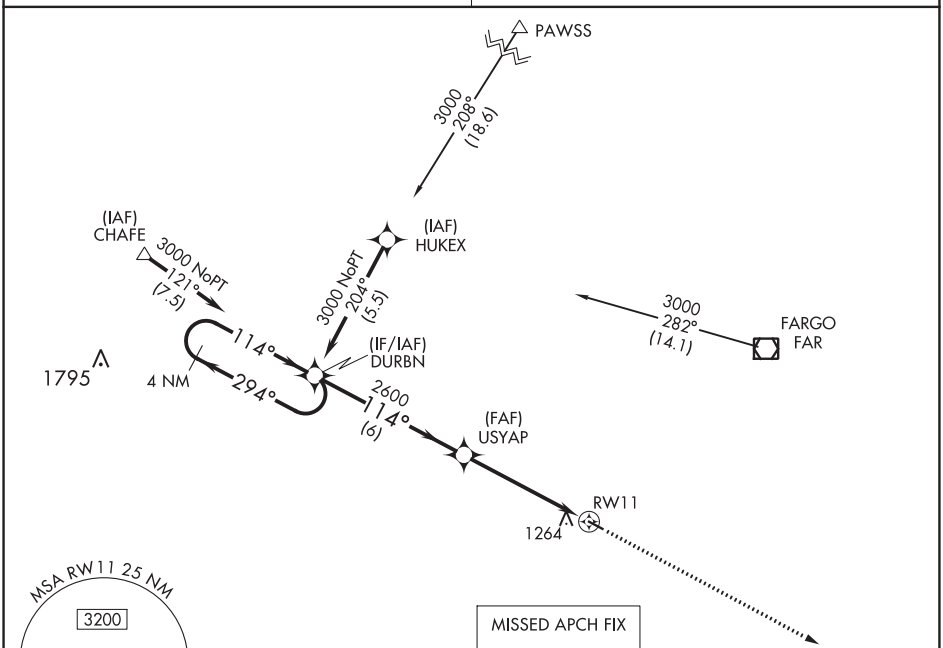
WAAS CH 97733 W11A	APP CRS 114°	Rwy ldg 3300 TDZE 947 Apt Elev 947

T
A NA

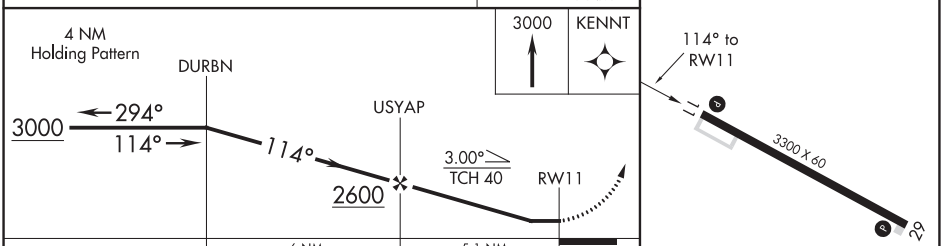
DME/DME RNP-0.3 NA.
Helicopter visibility reduction below ¾ SM NA.
Use Hector Intl altimeter setting.

MISSED APPROACH: Climb to 3000 direct KENNT and hold.

FARGO APP CON	CTAF
120.4 377.15	122.9 L



ELEV 947	TDZE 947



CATEGORY	A	B	C	D
LP MDA	1440-1 493 (500-1)		NA	
LNAV MDA	1620-1 673 (700-1)		NA	
C CIRCLING	1680-1 733 (800-1)		NA	

MIRL Rwy 11-29 L

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KINDRED, NORTH DAKOTA
Amdt 1D 10NOV16

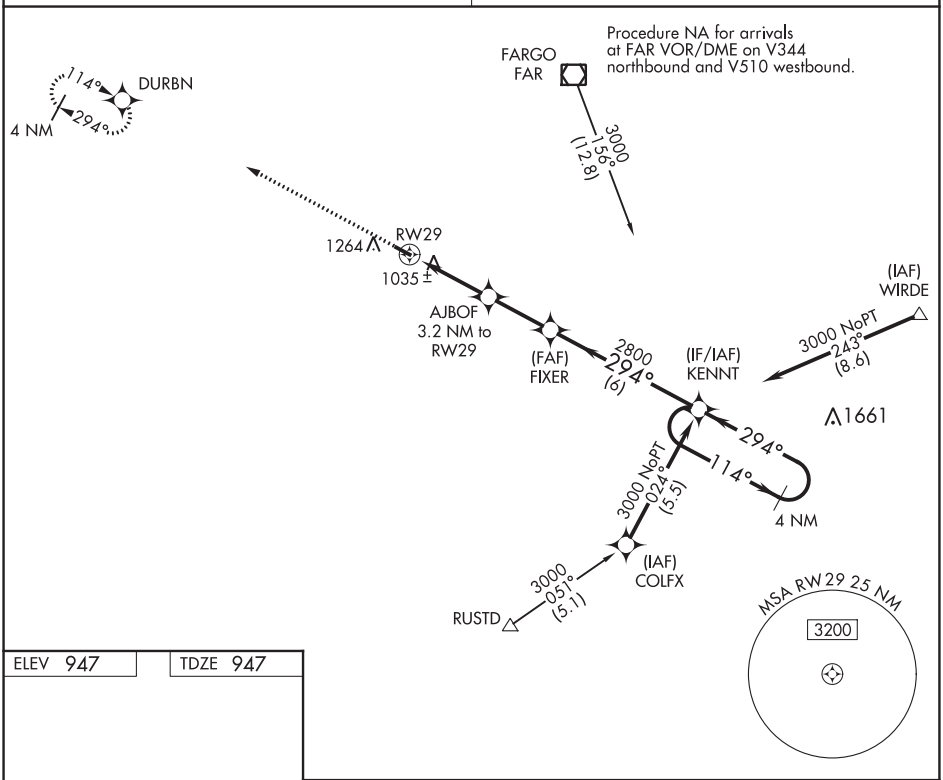
46°39′N-97°00′W

ROBERT ODEGAARD FIELD (K74)
RNAV (GPS) RWY 11

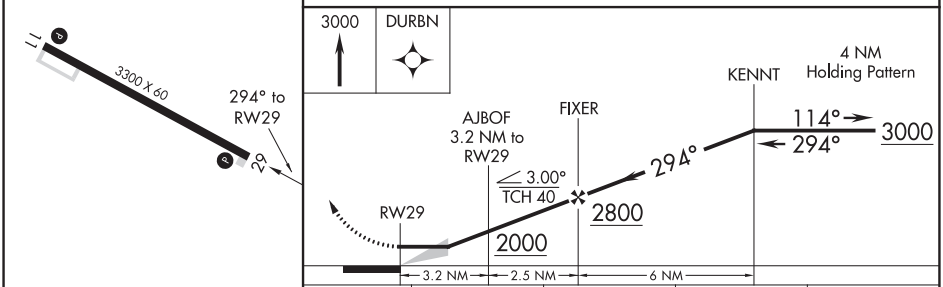
APP CRS	Rwy ldg	3300
294°	TDZE	947
	Apt Elev	947

RNAV (GPS) RWY 29
ROBERT ODEGAARD FIELD (K74)

NA DME/DME RNP-0.3 NA. Use Hector Intl altimeter setting.	MISSED APPROACH: Climb to 3000 direct DURBN and hold.
FARGO APP CON **120.4 377.15**	CTAF **122.9** L



ELEV 947	TDZE 947



CATEGORY	A	B	C	D
LNAV MDA	1400-1 453 (500-1)		NA	
C CIRCLING	1680-1 733 (800-1)		NA	

MIRL Rwy 11-29 L

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LAKOTA, NORTH DAKOTA | AL-10639 (FAA) | 19339

RNAV (GPS) RWY 33
LAKOTA MUNI (5LØ)

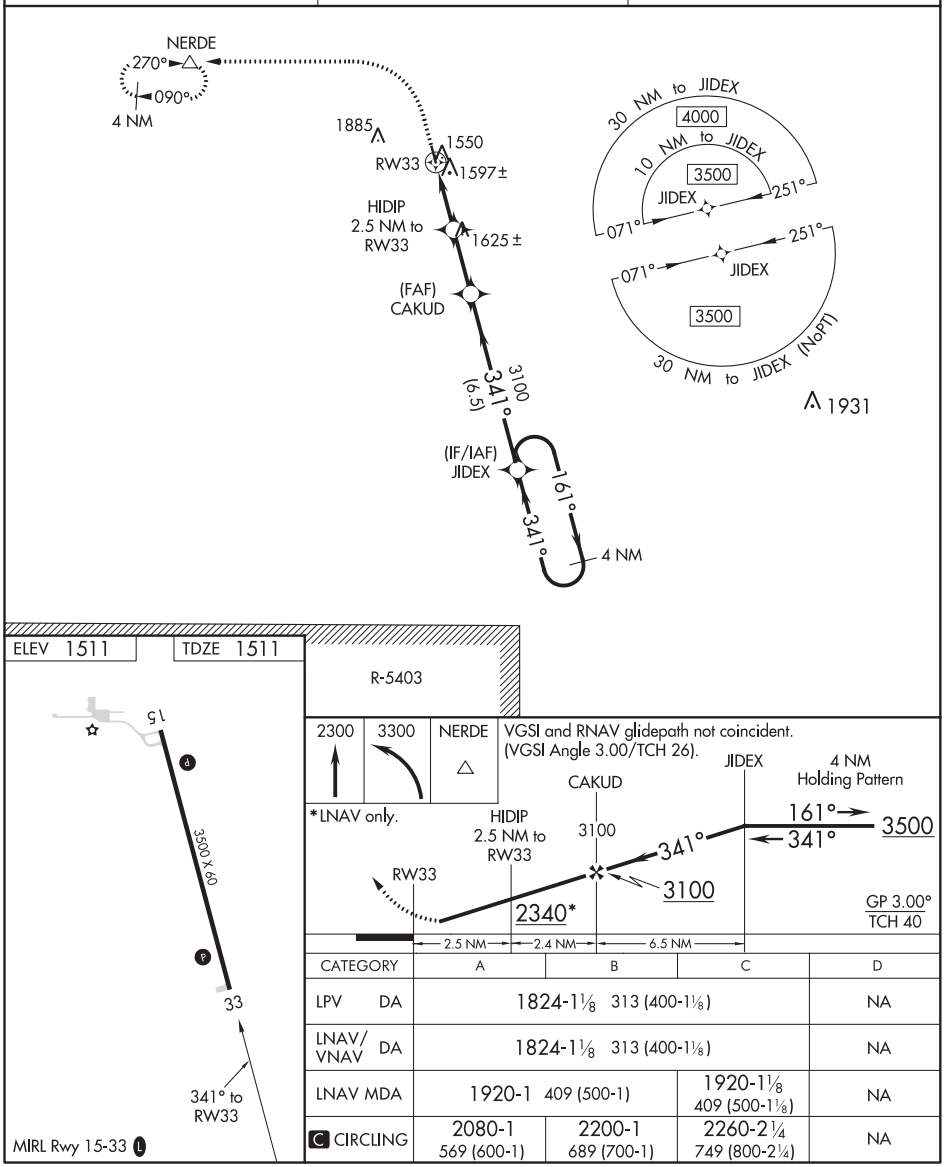
WAAS CH 53540 W33A	APP CRS 341°	Rwy ldg 3500 TDZE 1511 Apt Elev 1511

RNP APCH.

T A NA Baro-VNAV NA. Rwy 33 helicopter visibility reduction below ¾ SM NA. Circling Rwy 15 NA at night. Use Devils Lake altimeter setting.

MISSED APPROACH: Climb to 2300 then climbing left turn to 3300 direct NERDE and hold.

DVL AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
125.875	132.15 269.6	122.8 (CTAF) L



CATEGORY	A	B	C	D
LPV DA	1824-1⅛ 313 (400-1⅛)			NA
LNAV/VNAV DA	1824-1⅛ 313 (400-1⅛)			NA
LNAV MDA	1920-1 409 (500-1)		1920-1⅛ 409 (500-1⅛)	NA
C CIRCLING	2080-1 569 (600-1)	2200-1 689 (700-1)	2260-2¼ 749 (800-2¼)	NA

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APP CRS	Rwy ldg	3600
133°	TDZE	1606
	Apt Elev	1608

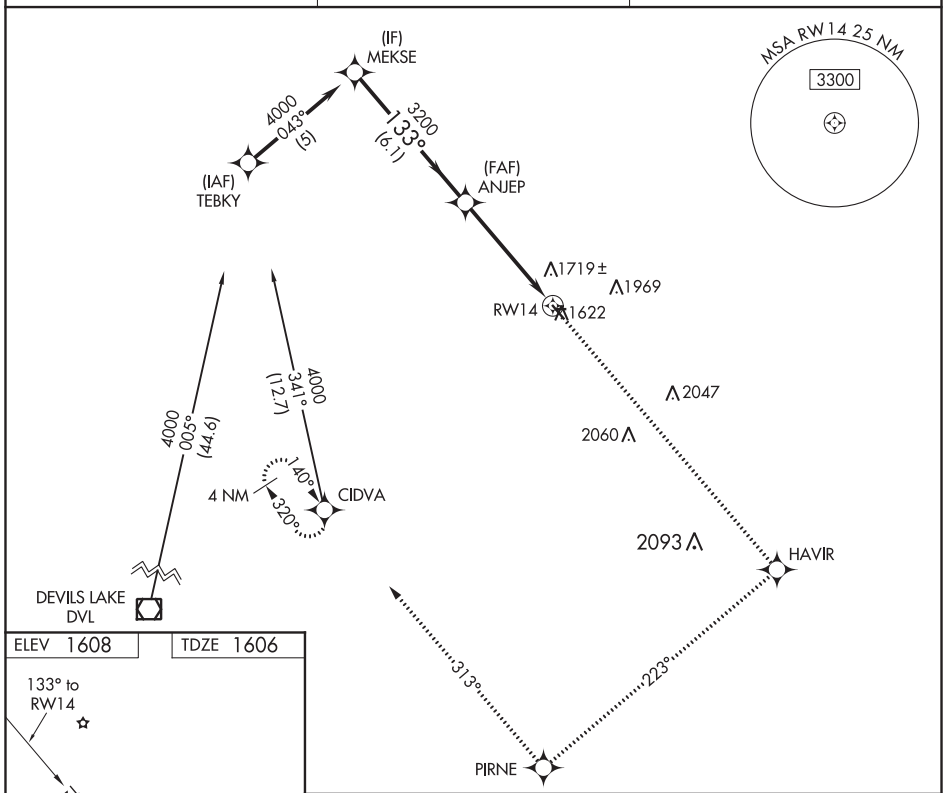
RNAV (GPS) RWY 14
ROBERTSON FIELD (D55)

-35°C

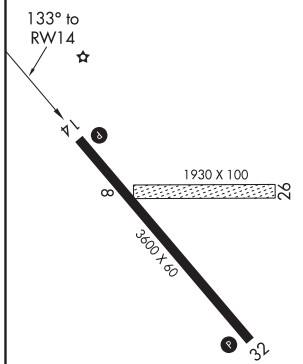
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received use Devils Lake altimeter setting and increase all MDA 140 feet, increase LNAV and Circling Cat C visibility ½ mile, and Circling Cat B visibility ¼ mile.

MISSED APPROACH: Climb to 4000 direct HAVIR and via track 223° to PIRNE and via track 313° to CIDVA and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.225	132.15 269.6	122.8 (CTAF) L

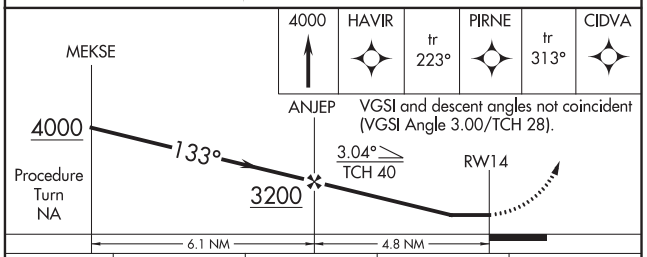


ELEV 1608	TDZE 1606



MIRL Rwy 14-32 L

4000	HAVIR	tr 223°	PIRNE	tr 313°	CIDVA



VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 28).

CATEGORY	A	B	C	D
LNAV MDA	2100-1 494 (500-1)		2100-1¼ 494 (500-1¼)	NA
CIRCLING	2240-1 632 (700-1)		2240-1¾ 632 (700-1¾)	NA

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LANGDON, NORTH DAKOTA | AL-9432 (FAA) | 20198

RNAV (GPS) RWY 32
ROBERTSON FIELD (D55)

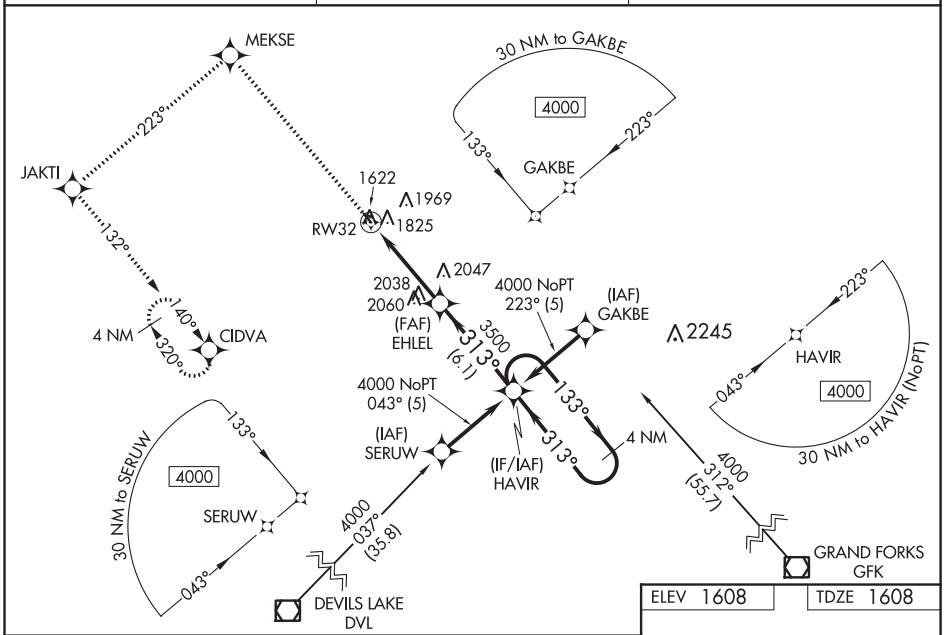
WAAS CH 50515 W32A	APP CRS 313°	Rwy ldg 3600 TDZE 1608 Apt Elev 1608

Baro-VNAV NA when using Devils Lake altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received use Devils Lake altimeter setting and increase all DA 122 feet and all MDA 140 feet, increase LPV all Cats, LNAV and Circling Cat B visibility ¼ mile and LNAV/VNAV all Cats, LNAV and Circling Cat C visibility ½ mile.

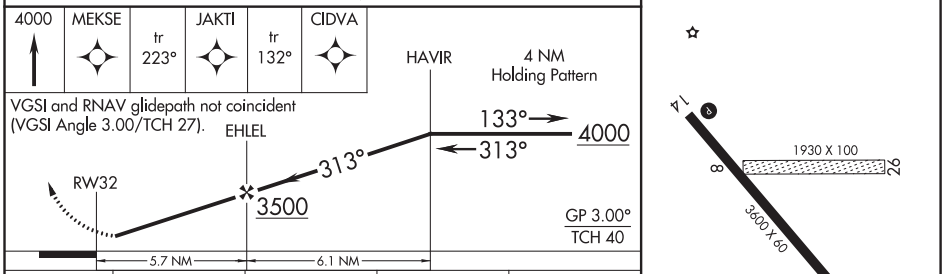
-35°C

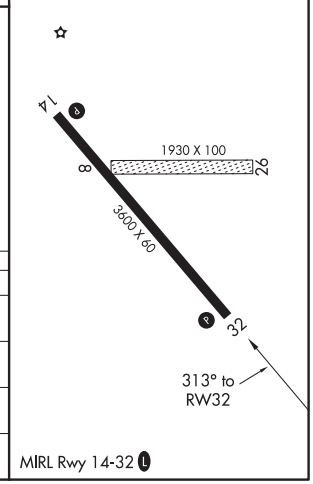
MISSED APPROACH: Climb to 4000 direct MEKSE and via track 223° to JAKTI and via track 132° to CIDVA and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.225	132.15 269.6	122.8 (CTAF) L



ELEV 1608	TDZE 1608





CATEGORY	A	B	C	D
LPV DA	1858-1 250 (300-1)			NA
LNAV/VNAV DA	2159-2 551 (600-2)			NA
LNAV MDA	2340-1 732 (800-1)		2340-2 732 (800-2)	NA
CIRCLING	2340-1 732 (800-1)		2340-2 732 (800-2)	NA

NC-1, 25 FEB 2021 to 22 APR 2021

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LANGDON, NORTH DAKOTA
Orig 03JUN10

48°45'N-98°24'W

ROBERTSON FIELD (D55)
RNAV (GPS) RWY 32

RNAV (GPS) RWY 29

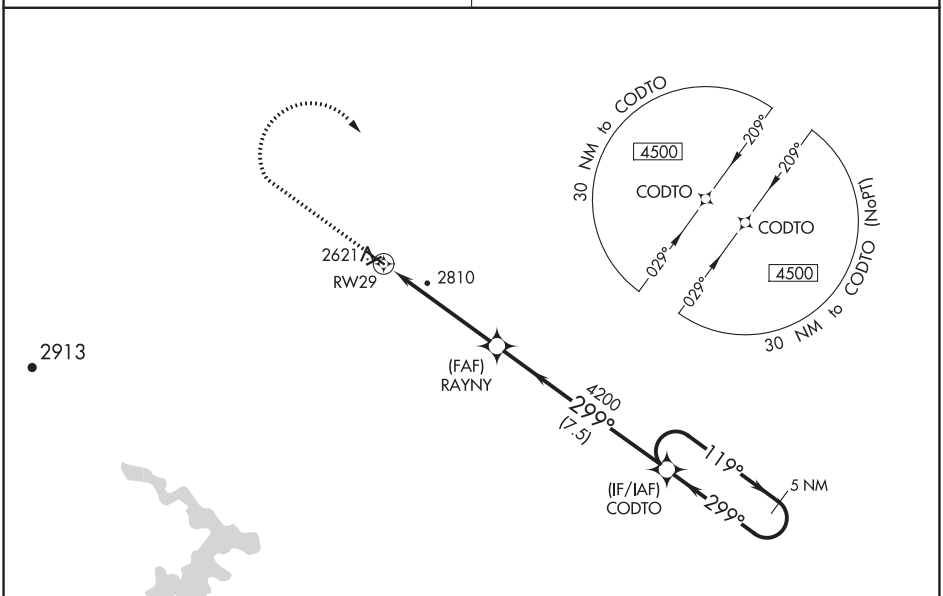
LEMMON MUNI (LEM)

WAAS CH 78431 W29A	APP CRS 299°	Rwy ldg 4499 TDZE 2573 Apt Elev 2573

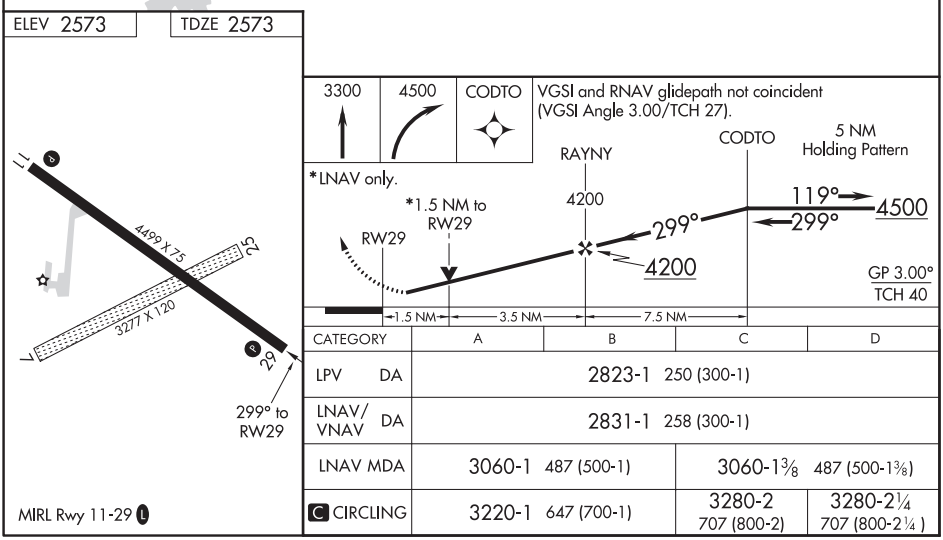
T NA For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Baro-VNAV and VDP NA when using Hettinger altimeter setting. Helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Hettinger altimeter setting and increase all DA 74 feet and all MDA 80 feet and increase LPV and LNAV/VNAV all Cats visibility ⅛ mile and LNAV Cats C/D and Circling Cats C/D visibility ¼ mile.

MISSED APPROACH: Climb to 3300 then climbing right turn to 4500 direct CODTO and hold.

MINNEAPOLIS CENTER	AUNICOM
124.25 236.825	122.8 (CTAF) L



ELEV 2573 TDZE 2573



CATEGORY	A	B	C	D
LPV DA	2823-1 250 (300-1)			
LNAV/VNAV DA	2831-1 258 (300-1)			
LNAV MDA	3060-1 487 (500-1)		3060-1⅜ 487 (500-1⅜)	
C CIRCLING	3220-1 647 (700-1)		3280-2 707 (800-2)	3280-2¼ 707 (800-2¼)

MIRL Rwy 11-29 L

NC-1, 25 FEB 2021 to 22 APR 2021

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LINTON, NORTH DAKOTA AL-9454 (FAA) 20310

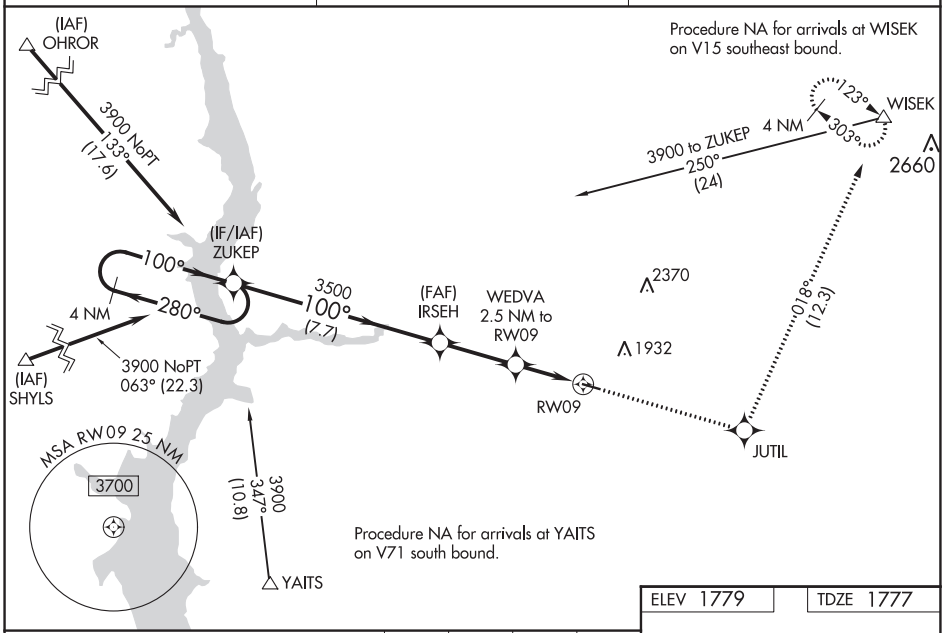
WAAS CH 99630 W09A	APP CRS 100°	Rwy ldg 3700 TDZE 1777 Apt Elev 1779

RNAV (GPS) RWY 9
LINTON MUNI (7L2)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Bismarck Muni altimeter setting and increase all DA 107 feet and visibility LPV ¼ mile all Cats, LNAV/VNAV ½ mile all Cats; increase all MDA 120 feet and visibility LNAV Cat C and Circling Cat C ¼ mile. Baro-VNAV and VDP NA when using Bismarck Muni altimeter setting.

MISSED APPROACH: Climb to 4700 direct JUTIL and on track 018° to WISEK and hold.

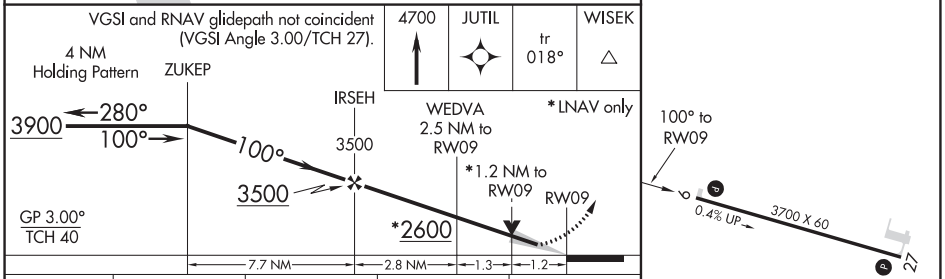
ASOS-3	MINNEAPOLIS CENTER	CTAF
118.175	135.25 256.7	122.9 L



ELEV 1779	TDZE 1777

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 27).

4700	JUTIL	tr 018°	WISEK



CATEGORY	A	B	C	D
LPV DA	2027-1 250 (300-1)			NA
LNAV/VNAV DA	2091-1 314 (400-1)			NA
LNAV MDA	2160-1 383 (400-1)		2160-1⅛ 383 (400-1⅛)	NA
CIRCLING	2220-1 441 (500-1)	2360-1 581 (600-1)	2380-1¾ 601 (700-1¾)	NA

MIRL Rwy 9-27 L

NC-1, 25 FEB 2021 to 22 APR 2021

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WAAS CH 86630 W27A	APP CRS 280°	Rwy ldg 3700 TDZE 1779 Apt Elev 1779

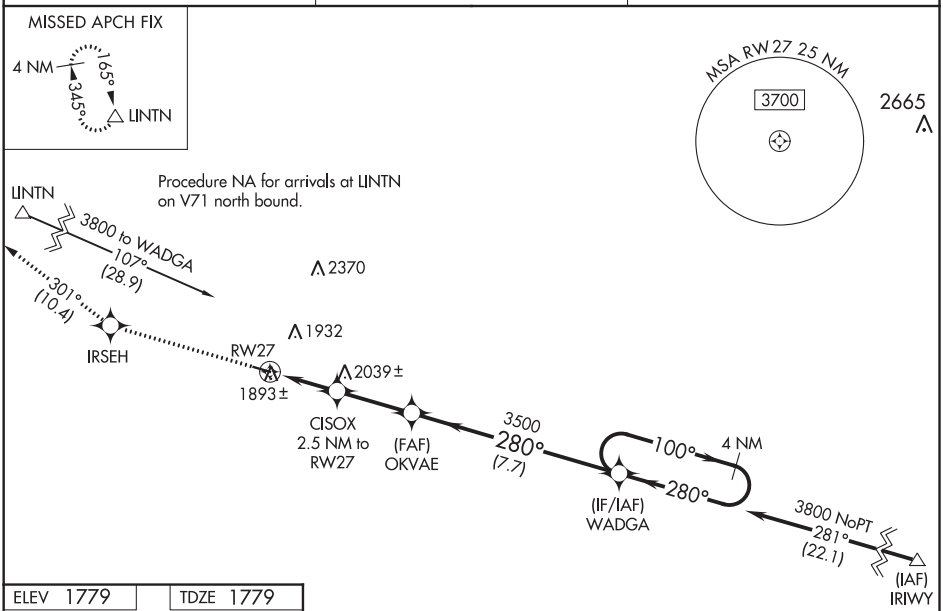
RNAV (GPS) RWY 27
LINTON MUNI (7L2)

RNP APCH.

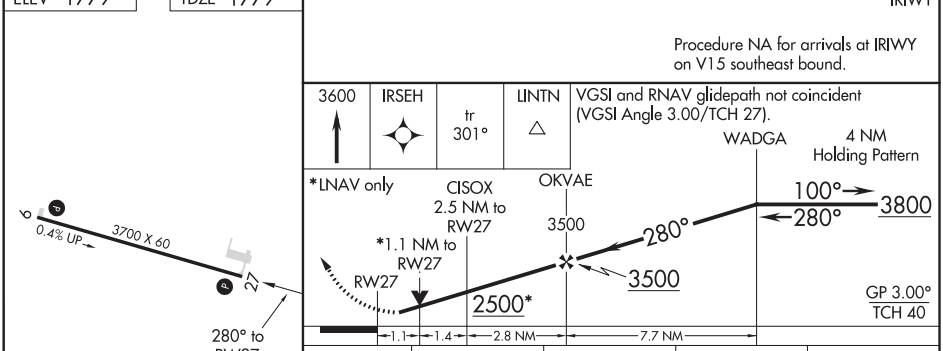
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C or above 54°C. Rwy 27 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Bismarck Muni altimeter setting and increase all DA 107 feet and visibility LPV and LNAV/VNAV all Cats ¼ SM; increase all MDA 120 feet and visibility LNAV Cat C ¼ SM. Baro-VNAV and VDP NA when using Bismark Muni altimeter setting.

MISSED APPROACH: Climb to 3600 direct IRSEH and on track 301° to LINTN and hold.

ASOS-3	MINNEAPOLIS CENTER	CTAF
118.175	135.25 256.7	122.9 L



ELEV 1779 TDZE 1779



MIRL Rwy 9-27 L

CATEGORY	A	B	C	D
LPV DA	2029-1 250 (300-1)			NA
LNAV/VNAV DA	2043-1 264 (300-1)			NA
LNAV MDA	2160-1 381 (400-1)		2160-1⅛ 381 (400-1⅛)	NA

NC-1, 25 FEB 2021 to 22 APR 2021
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LISBON, NORTH DAKOTA AL-10400 (FAA) 19339

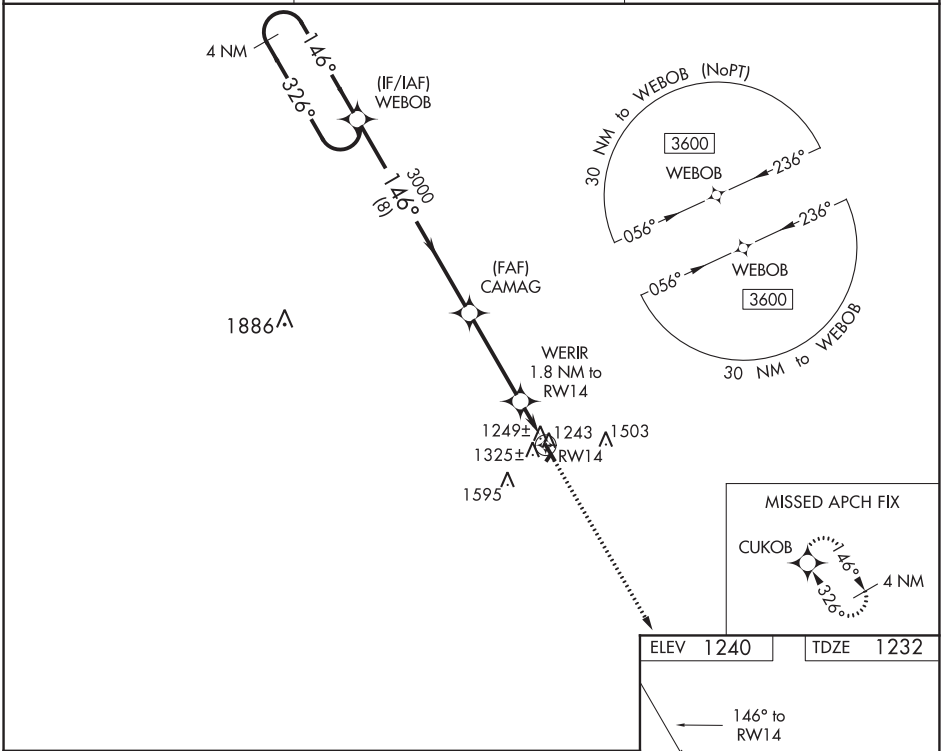
WAAS CH 70739 W14A	APP CRS 146°	Rwy ldg 3397 TDZE 1232 Apt Elev 1240

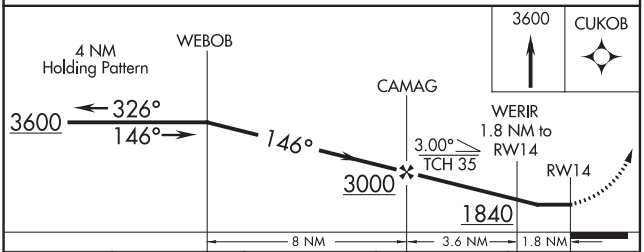
RNAV (GPS) RWY 14
LISBON MUNI (6L3)

Circling NA to Rwys 3 and 21. DME/DME RNP-0.3 NA. Rwy 14 helicopter visibility reduction below 1 SM NA. Use Gwinner altimeter setting; when not received, use Valley City altimeter setting and increase all MDA 60 feet. Straight-In Rwy 14 NA at night. Circling Rwy 14 NA at night.

MISSED APPROACH: Climb to 3600 direct CUKOB and hold.

GWR AWOS-3	MINNEAPOLIS CENTER	CTAF
118.325	127.35 278.3	122.9 L





CATEGORY	A	B	C	D
LP MDA	1540-1 308 (300-1)		NA	
LNAV MDA	1620-1 388 (400-1)		NA	
C CIRCLING	1680-1 440 (500-1)	1940-1 700 (700-1)	NA	

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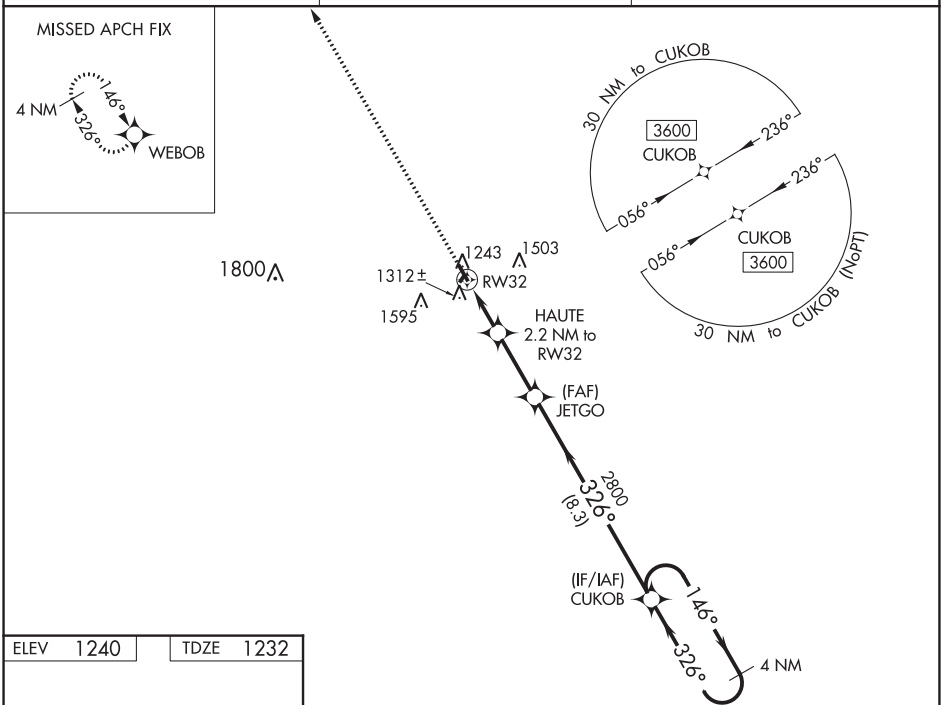
WAAS CH 93939 W32A	APP CRS 326°	Rwy ldg 3397 TDZE 1232 Apt Elev 1240

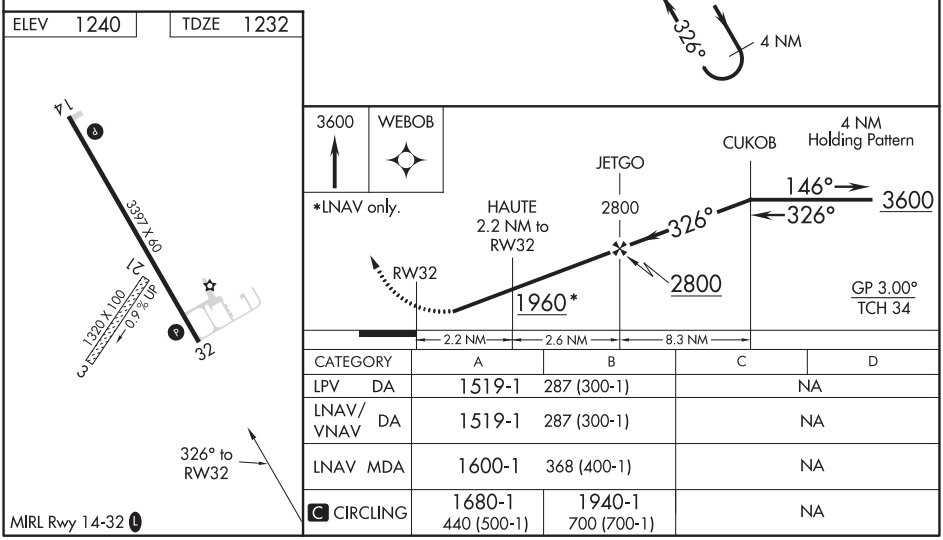
RNAV (GPS) RWY 32
LISBON MUNI (6L3)

T A NA — Circling NA to Rwys 3 and 21. Baro-VNAV NA. Circling Rwy 14 NA at night. DME/DME RNP-0.3 NA. Rwy 32 helicopter visibility reduction below ¾ SM NA. Use Gwinner altimeter setting; when not received, use Valley City altimeter setting and increase all MDA 60 feet.

MISSED APPROACH: Climb to 3600 direct WEBOB and hold.

GWR AWOS-3	MINNEAPOLIS CENTER	CTAF
118.325	127.35 278.3	122.9 L





CATEGORY	A	B	C	D
LPV DA	1519-1	287 (300-1)	NA	
LNAV/VNAV DA	1519-1	287 (300-1)	NA	
LNAV MDA	1600-1	368 (400-1)	NA	
C CIRCLING	1680-1 440 (500-1)	1940-1 700 (700-1)	NA	

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NC-1, 25 FEB 2021 to 22 APR 2021

LITCHFIELD, MINNESOTA AL-6940 (FAA) 19227

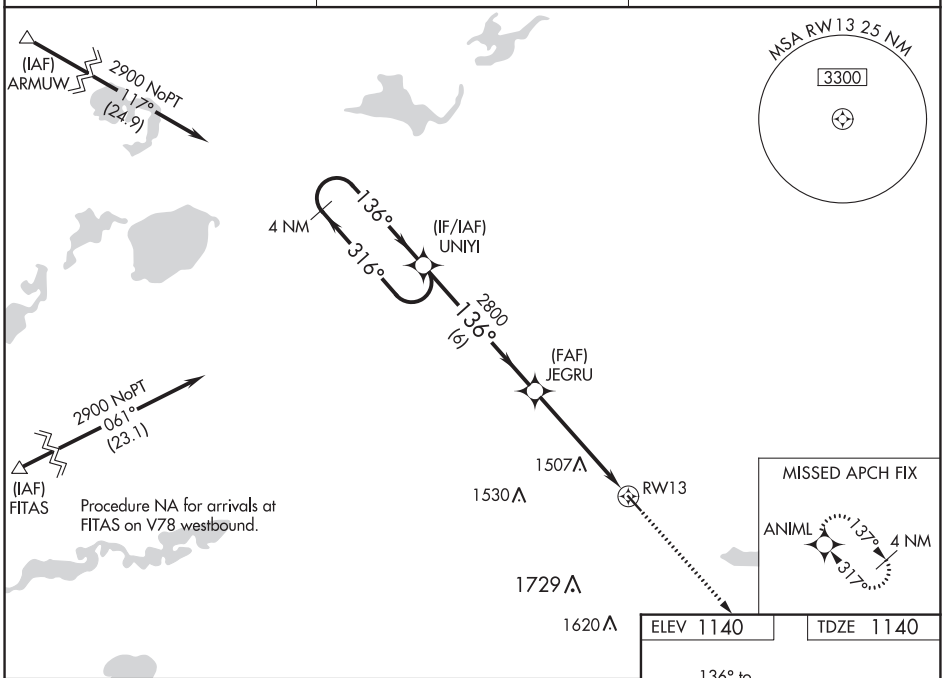
WAAS CH 69419 W13A	APP CRS 136°	Rwy ldg 4002 TDZE 1140 Apt Elev 1140

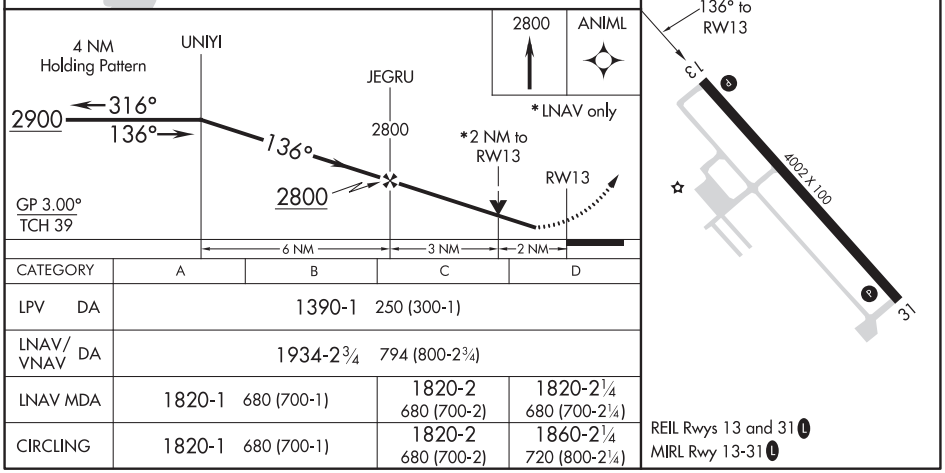
RNAV (GPS) RWY 13
LITCHFIELD MUNI (LJF)

Baro-VNAV NA when using Hutchinson altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Hutchinson altimeter setting and increase all DA 46 feet and all MDA 60 feet, and increase LNAV/VNAV all Cats and Circling visibility Cat D ¼ mile. VDP NA with Hutchinson altimeter setting.

MISSED APPROACH: Climb to 2800 direct ANIML and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
109.0	125.5 323.1	122.9 L





CATEGORY	A	B	C	D
LPV DA	1390-1 250 (300-1)			
LNAV/VNAV DA	1934-2¾ 794 (800-2¾)			
LNAV MDA	1820-1 680 (700-1)		1820-2 680 (700-2)	1820-2¼ 680 (700-2¼)
CIRCLING	1820-1 680 (700-1)		1820-2 680 (700-2)	1860-2¼ 720 (800-2¼)

NC-1, 25 FEB 2021 to 22 APR 2021
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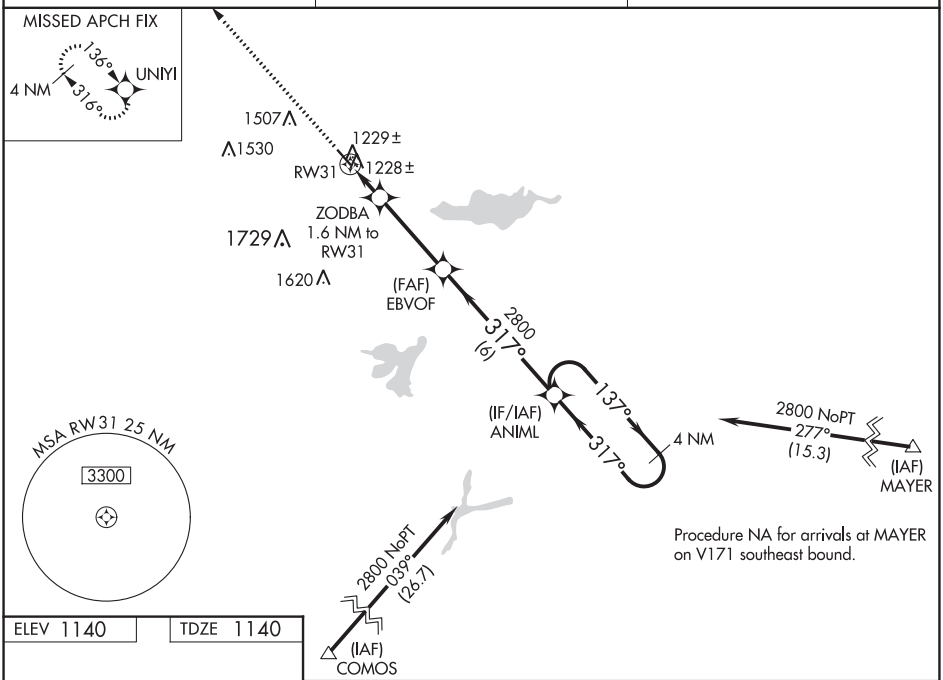
WAAS CH 40319 W31A	APP CRS 317°	Rwy ldg 4002 TDZE 1140 Apt Elev 1140

RNAV (GPS) RWY 31
LITCHFIELD MUNI (LJF)

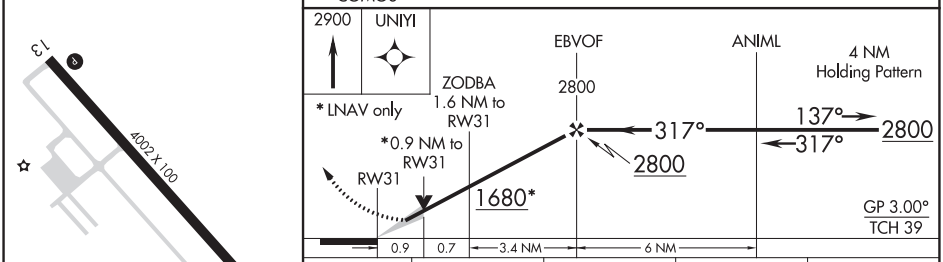
Baro-VNAV NA when using Hutchinson altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Hutchinson altimeter setting and increase all DA 46 feet and all MDA 60 feet, and increase LNAV and Circling visibility Cat D ¼ mile. VDP NA when using Hutchinson altimeter setting.

MISSED APPROACH: Climb to 2900 direct UNIYI and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
109.0	125.5 323.1	122.9 L



ELEV 1140 TDZE 1140



CATEGORY	A	B	C	D
LPV DA	1389-1 249 (300-1)			
LNAV/VNAV DA	1548-1½ 408 (500-1½)			
LNAV MDA	1480-1 340 (400-1)			
CIRCLING	1600-1 460 (500-1)		1600-1½ 460 (500-1½)	1860-2¼ 720 (800-2¼)

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

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LITCHFIELD, MINNESOTA | AL-6940 (FAA) | 20310

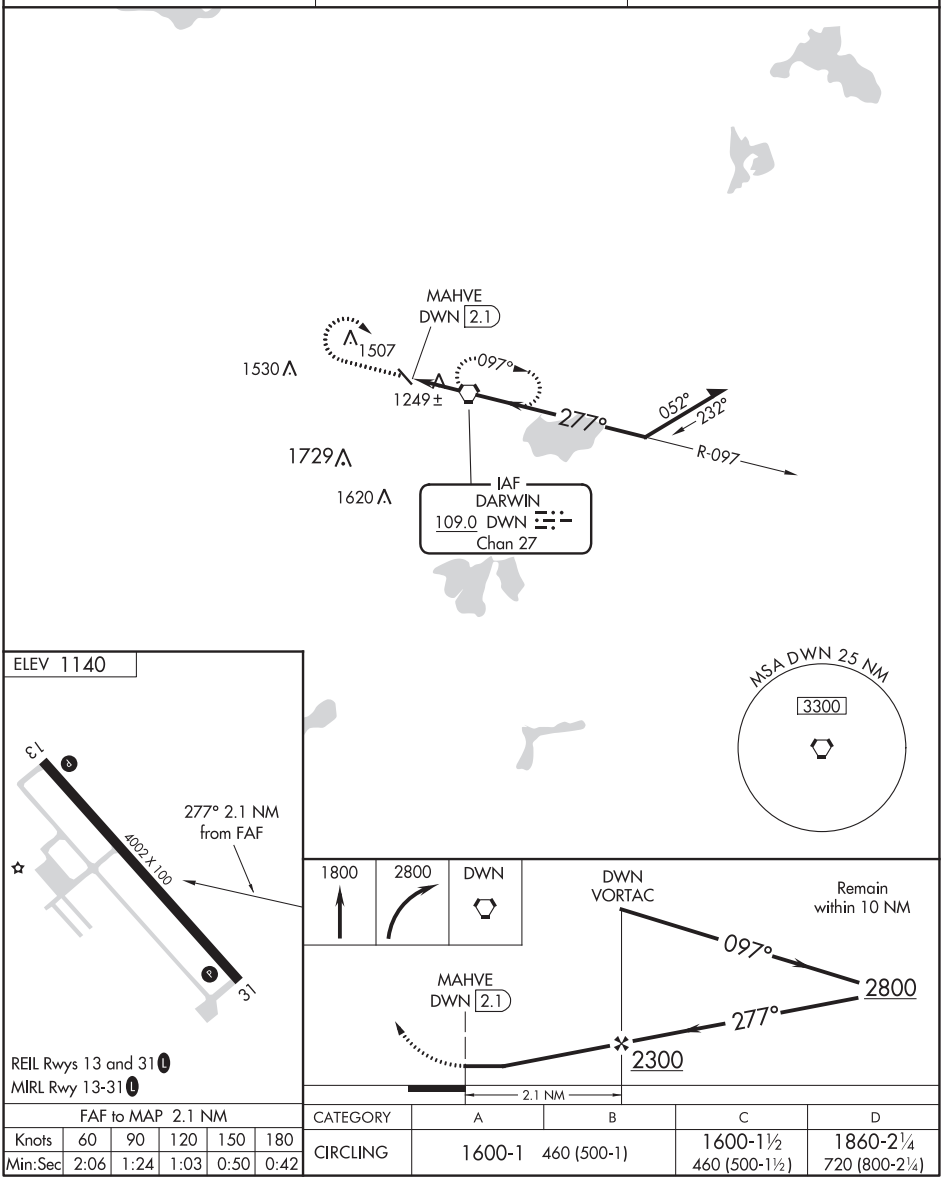
VOR-A
LITCHFIELD MUNI (LJF)

VORTAC DWN	APP CRS	Rwy ldg	N/A
109.0	277°	TDZE	N/A
Chan 27		Apt Elev	1140

When local altimeter setting not received, use Hutchinson altimeter setting and increase all MDA 60 feet, and increase visibility Circling Cat D ¼ mile.

MISSED APPROACH: Climb to 1800 then climbing right turn to 2800 direct DWN VORTAC and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
109.0	125.5 323.1	122.9 L



FAF to MAP 2.1 NM					
Knots	60	90	120	150	180
Min:Sec	2:06	1:24	1:03	0:50	0:42

CATEGORY	A	B	C	D
CIRCLING	1600-1	460 (500-1)	1600-1½ 460 (500-1½)	1860-2¼ 720 (800-2¼)

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WAAS CH 93920 W31A	APP CRS 308°	Rwy ldg 4010 TDZE 1123 Apt Elev 1123

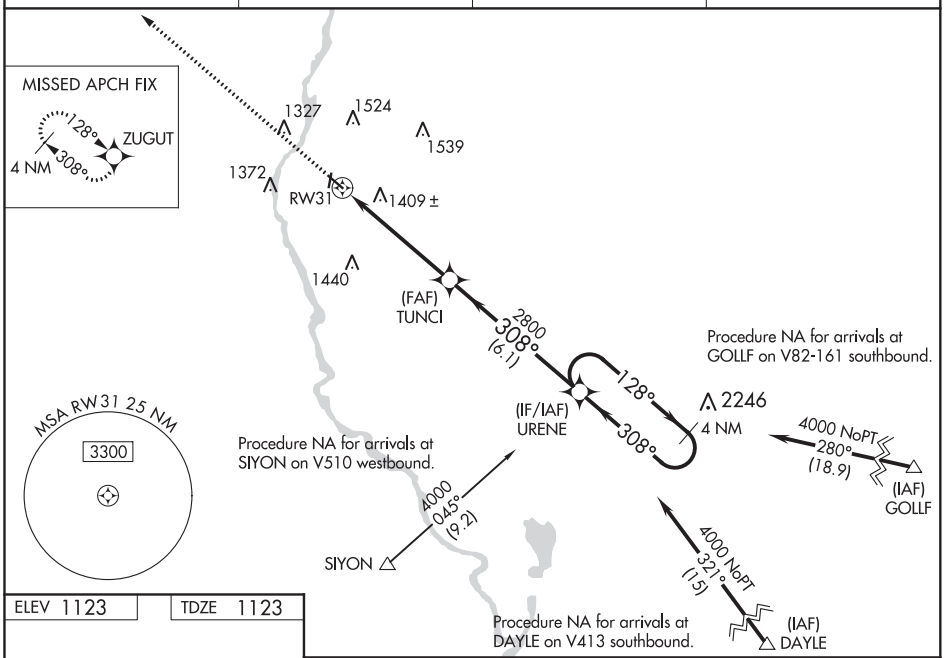
RNAV (GPS) RWY 31
LITTLE FALLS/MORRISON COUNTY-LINDBERGH FIELD (LXL)

RNP APCH.

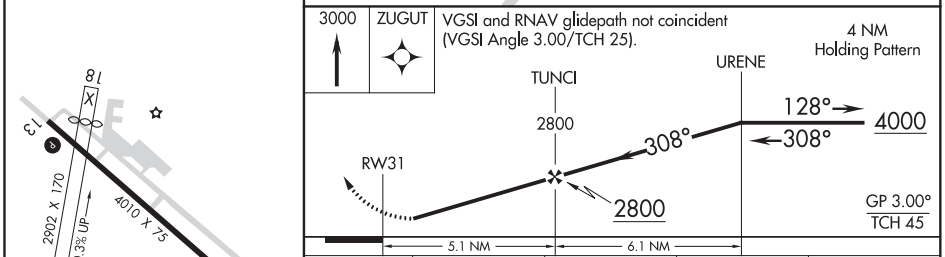
Baro-VNAV NA when using St Cloud altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 32°C. Rwy 31 visibility reduction below ¾ SM by helicopters NA. When local altimeter setting not received use St Cloud altimeter setting and increase all DA 76 feet and all MDA 80 feet, increase LPV all Cats and Circling Cat C visibility ½ mile and LNAV/VNAV all Cats, LNAV Cats C/D, and Circling Cat D ¼ mile. Circling Rwy 18, 36 NA.

MISSED APPROACH: Climb to 3000 direct ZUGUT and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
119.45	118.05 239.0	121.725	122.8 (CTAF) L



ELEV 1123 TDZE 1123



CATEGORY	A	B	C	D
LPV DA	1517-1⅜ 394 (400-1⅜)			
LNAV/VNAV DA	1749-2¼ 626 (700-2¼)			
LNAV MDA	1660-1 537 (600-1)		1660-1½ 537 (600-1½)	
CIRCLING	1700-1 577 (600-1)	1720-1 597 (600-1)	1720-1½ 597 (600-1½)	2000-2¾ 877 (900-2¾)

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

LONG PRAIRIE, MINNESOTA | AL-10350 (FAA) | 20254

RNAV (GPS) RWY 34
TODD FIELD (14Y)

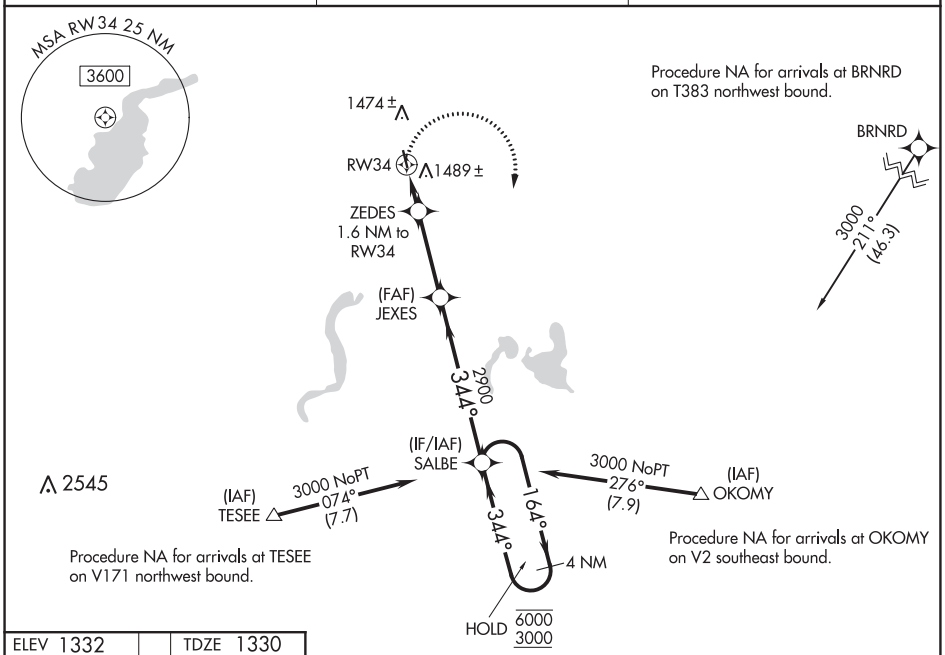
APP CRS	Rwy ldg	3501
344°	TDZE	1330
	Apt Elev	1332

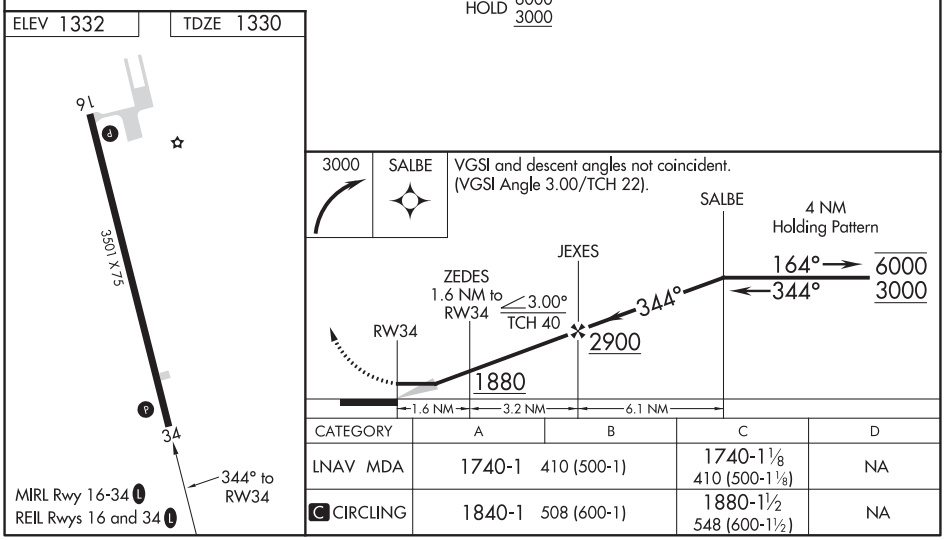
RNP APCH.

T A Circling Rwy 16 NA at night.

MISSED APPROACH: Climbing right turn to 3000 direct SALBE and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
118.65	126.1 269.2	122.9 L





CATEGORY	A	B	C	D
LNAV MDA	1740-1 410 (500-1)		1740-1⅛ 410 (500-1⅛)	NA
C CIRCLING	1840-1 508 (600-1)		1880-1½ 548 (600-1½)	NA

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NC-1, 25 FEB 2021 to 22 APR 2021

APP CRS	Rwy ldg	3109
135°	TDZE	1337
	Apt Elev	1337

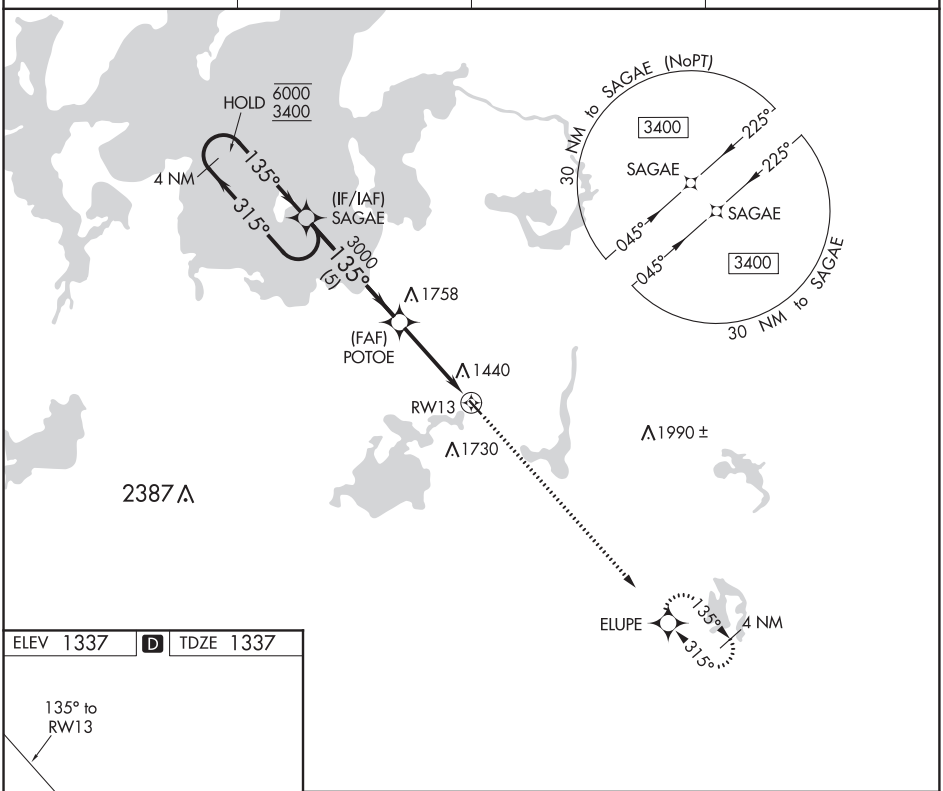
RNAV (GPS) RWY 13
LONGVILLE MUNI (XVG)

RNP APCH.

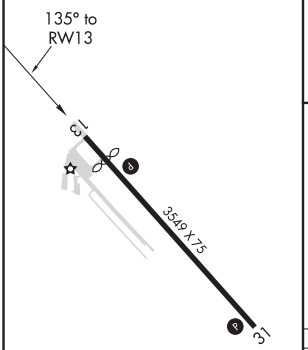
Procedure NA at night.
Rwy 13 helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 3100 direct ELUPE and hold.

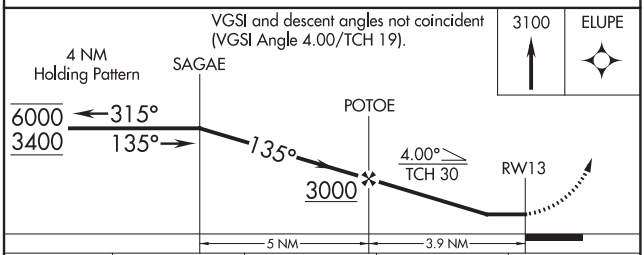
AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
118.275	118.05 239.0	121.725	122.9 L



ELEV 1337 | D | TDZE 1337



MIRL Rwy 13-31 L



CATEGORY	A	B	C	D
LNAV MDA	1820-1 483 (500-1)		NA	
C CIRCLING	1860-1 523 (600-1)	2080-1 743 (800-1)	NA	

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NC-1, 25 FEB 2021 to 22 APR 2021

LONGVILLE, MINNESOTA AL-9381 (FAA) 21056

APP CRS	Rwy ldg	3549
315°	TDZE	1337
	Apt Elev	1337

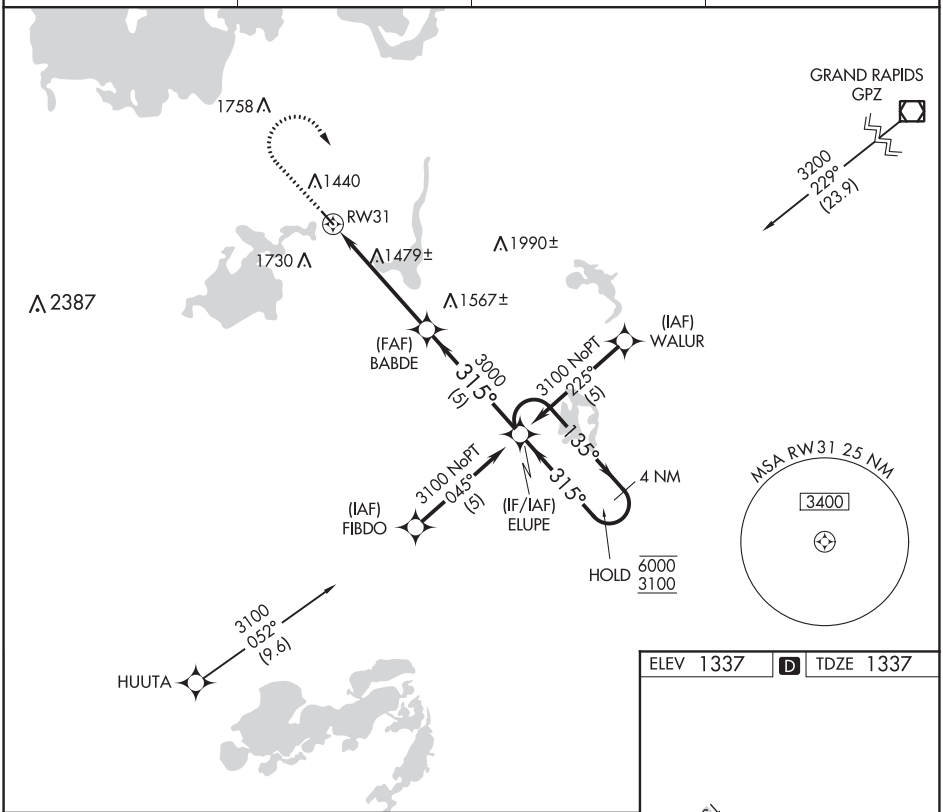
RNAV (GPS) RWY 31
LONGVILLE MUNI (XVG)

RNP APCH.

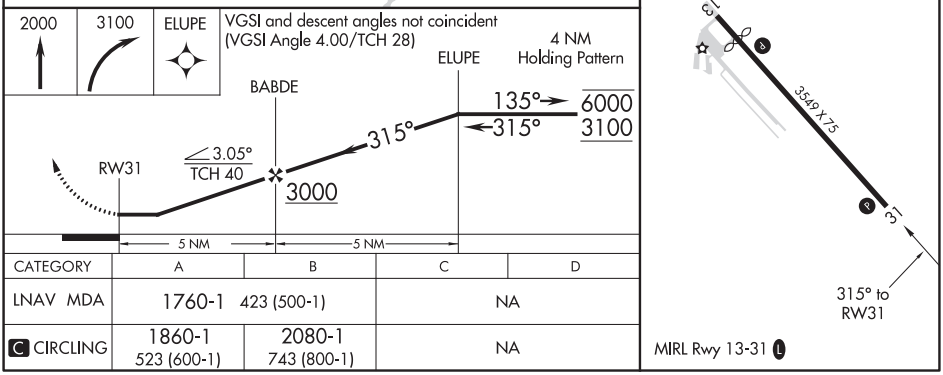
Procedure NA at night.
Rwy 31 helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 2000 then climbing right turn to 3100 direct ELUPE and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
118.275	118.05 239.0	121.725	122.9 L



ELEV 1337	D	TDZE 1337



CATEGORY	A	B	C	D
LNAV MDA	1760-1 423 (500-1)		NA	
C CIRCLING	1860-1 523 (600-1)	2080-1 743 (800-1)	NA	

NC-1, 25 FEB 2021 to 22 APR 2021

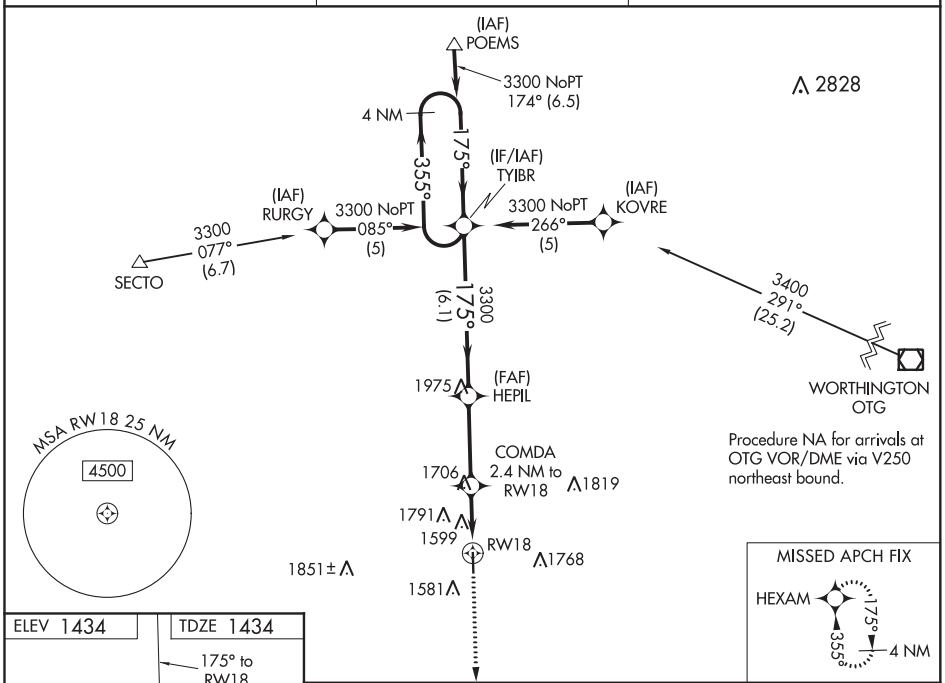
WAAS CH 86317 W18A	APP CRS 175°	Rwy ldg 4200 TDZE 1434 Apt Elev 1434

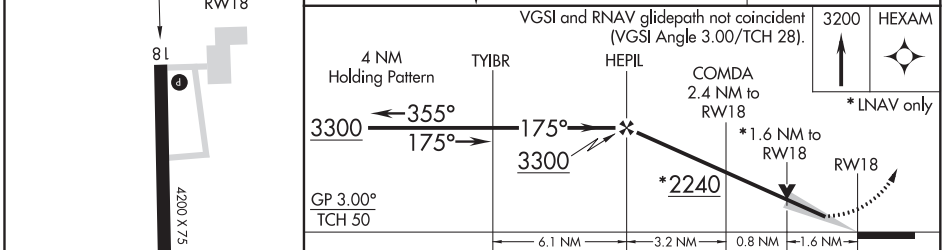
RNAV (GPS) RWY 18
QUENTIN AANENSON FIELD (LYV)

T A NA For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Pipestone altimeter setting and increase all DA 94 feet and all MDA 100 feet. Increase LNAV/VNAV all Cats, LNAV and Circling Cat C/D visibility ¼ mile. Baro-VNAV and VDP NA when using Pipestone altimeter setting.

MISSED APPROACH: Climb to 3200 direct HEXAM and hold.

AWOS-3	SIOUX FALLS APP CON *	UNICOM
119.825	125.8 284.725	122.7 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1634-1 200 (200-1)			
LNAV/VNAV DA	2131-2½ 697 (700-2½)			
LNAV MDA	1960-1 526 (600-1)		1960-1½ 526 (600-1½)	1960-1¾ 526 (600-1¾)
CIRCLING	1960-1 526 (600-1)		2140-2 706 (800-2)	2140-2¼ 706 (800-2¼)

MIRL Rwy 18-36 L
REIL Rwys 18 and 36 L

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

LUVERNE, MINNESOTA | AL-9419 (FAA) | 20030

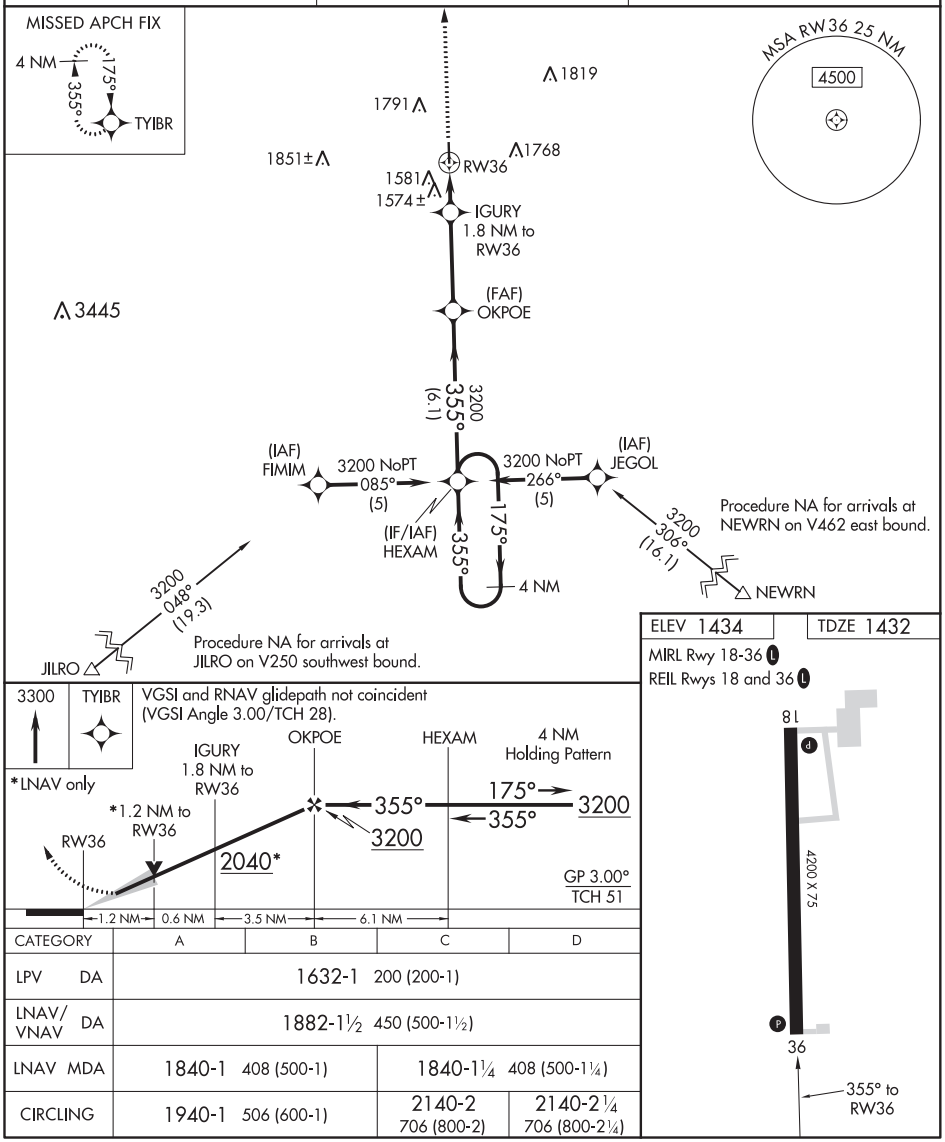
WAAS CH 40117 W36A	APP CRS 355°	Rwy ldg 4200 TDZE 1432 Apt Elev 1434

RNAV (GPS) RWY 36
QUENTIN AANENSON FIELD (LYV)

T NA For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Pipestone altimeter setting and increase all DA 94 feet and all MDA 100 feet, increase LNAV/VNAV all Cats visibility ½ mile and LNAV and Circling Cats C/D visibility ¼ mile. Baro-VNAV and VDP NA when using Pipestone altimeter setting.

MISSED APPROACH: Climb to 3300 direct TYIBR and hold.

AWOS-3	SIOUX FALLS APP CON *	UNICOM
119.825	125.8 284.725	122.7 (CTAF) L



CATEGORY	A	B	C	D
LPV DA	1632-1 200 (200-1)			
LNAV/VNAV DA	1882-1½ 450 (500-1½)			
LNAV MDA	1840-1 408 (500-1)		1840-1¼ 408 (500-1¼)	
CIRCLING	1940-1 506 (600-1)		2140-2 706 (800-2)	2140-2¼ 706 (800-2¼)

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NC-1, 25 FEB 2021 to 22 APR 2021

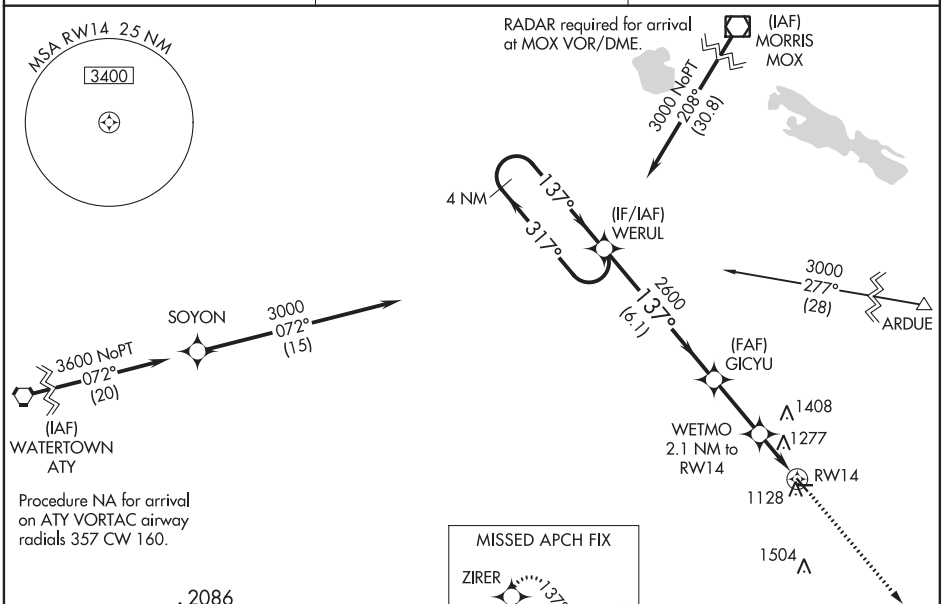
WAAS CH 63030 W14A	APP CRS 137°	Rwy ldg 3300 TDZE 1083 Apt Elev 1083

RNAV (GPS) RWY 14
LAC QUI PARLE COUNTY (DXX)

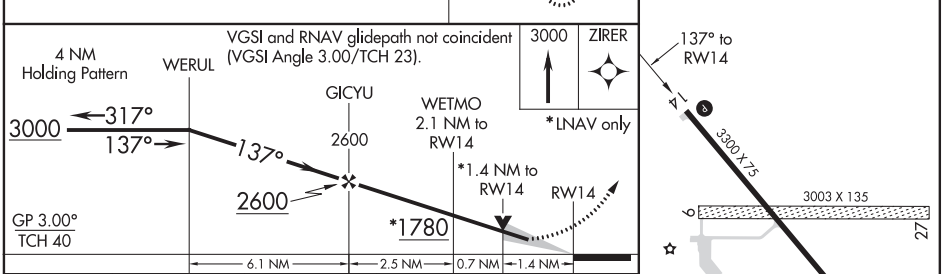
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). When local altimeter setting not received, use Appleton Muni altimeter setting and increase all DA 46 feet, increase all MDA 60 feet, and visibility LNAV/VNAV all Cats to 1⅞ mile, Circling Cat C to 1¾ mile. DME/DME RNP-0.3 NA. Baro-VNAV and VDP NA when using Appleton Muni altimeter setting. Circling NA to Rwys 9 and 27.

MISSED APPROACH: Climb to 3000 direct ZIRER and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.975	128.5 306.2	122.8 (CTAF) L



ELEV 1083	TDZE 1083



CATEGORY	A	B	C	D
LPV DA	1283-1 200 (200-1)			NA
LNAV/VNAV DA	1572-1⅝ 489 (500-1⅝)			NA
LNAV MDA	1540-1 457 (500-1)		1540-1⅜ 457 (500-1⅜)	NA
CIRCLING	1640-1 557 (600-1)		1640-1½ 557 (600-1½)	NA

REIL Rwys 14 and 32 L
MIRL Rwy 14-32 L

NC-1, 25 FEB 2021 to 22 APR 2021

MADISON, MINNESOTA | AL-6591 (FAA) | 18312

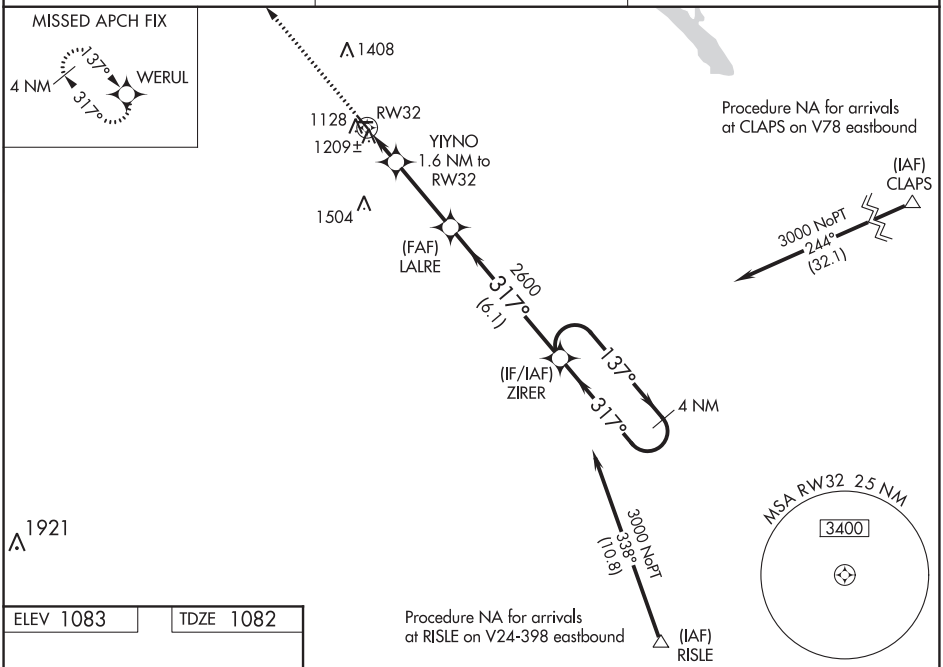
WAAS CH 53530 W32A	APP CRS 317°	Rwy ldg 3300 TDZE 1082 Apt Elev 1083

RNAV (GPS) RWY 32
LAC QUI PARLE COUNTY (DXX)

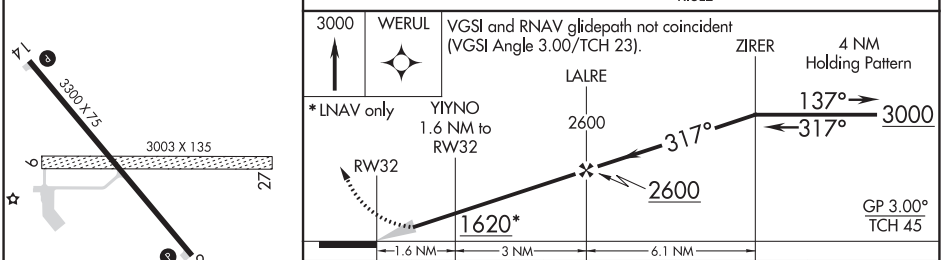
Baro-VNAV NA when using Appleton Muni altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). When local altimeter setting not received, use Appleton Muni altimeter setting and increase all DA 46 feet, increase all MDA 60 feet, and visibility LNAV/VNAV all Cats to 1⅛ mile, LNAV Cat C to 1⅜ mile, Circling Cat C to 1¾ mile. DME/DME RNP-0.3 NA. Circling NA to Rwys 9 and 27.

MISSED APPROACH: Climb to 3000 direct WERUL and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.975	128.5 306.2	122.8 (CTAF) L



ELEV 1083 | TDZE 1082



CATEGORY		A	B	C	D
LPV	DA	1282-1 200 (200-1)			NA
LNAV/VNAV	DA	1363-1 281 (300-1)			NA
LNAV	MDA	1460-1 378 (400-1)		1460-1⅛ 378 (400-1⅛)	NA
CIRCLING		1640-1 557 (600-1)		1640-1½ 557 (600-1½)	NA

REIL Rwy 14 and 32 L
MIRL Rwy 14-32 L

NC-1, 25 FEB 2021 to 22 APR 2021

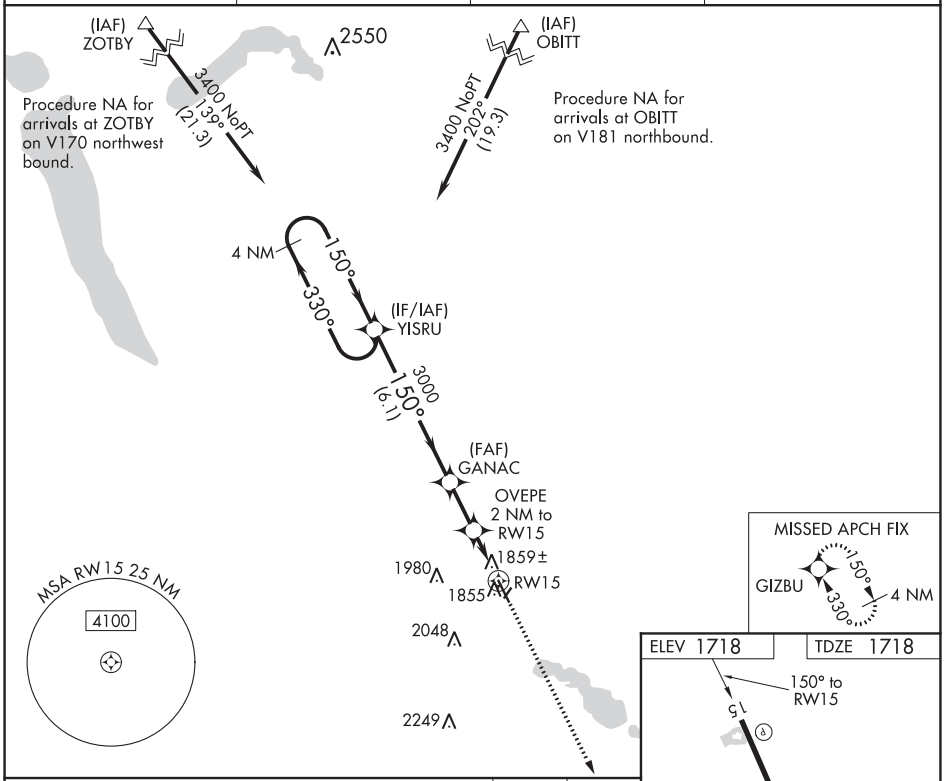
APP CRS	Rwy ldg	5000
150°	TDZE	1718
	Apt Elev	1718

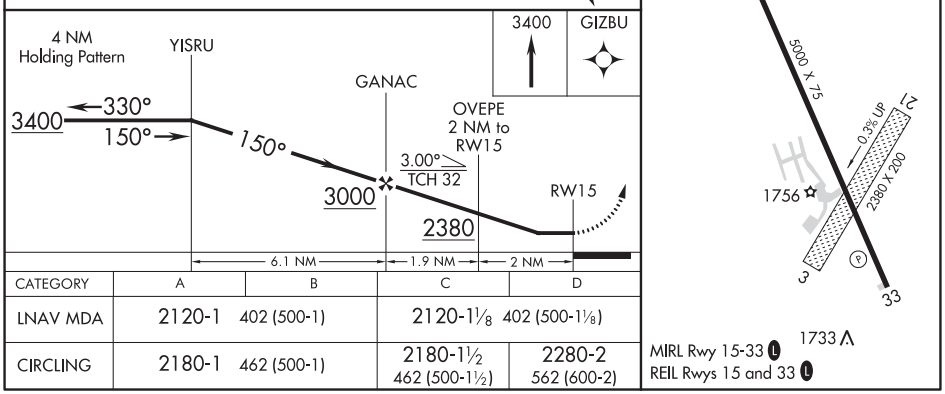
RNAV (GPS) RWY 15
MADISON MUNI (MDS)

Circling NA to Rwys 3 and 21. Rwy 15 helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Brookings altimeter setting and increase all MDAs 60 feet and LNAV Cat C/D visibility ¼ SM.

MISSED APPROACH: Climb to 3400 direct GIZBU and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
118.35	132.05 317.4	121.725	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	2120-1 402 (500-1)		2120-1⅛ 402 (500-1⅛)	
CIRCLING	2180-1 462 (500-1)		2180-1½ 462 (500-1½)	2280-2 562 (600-2)

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MADISON, SOUTH DAKOTA AL-6067 (FAA) 17229

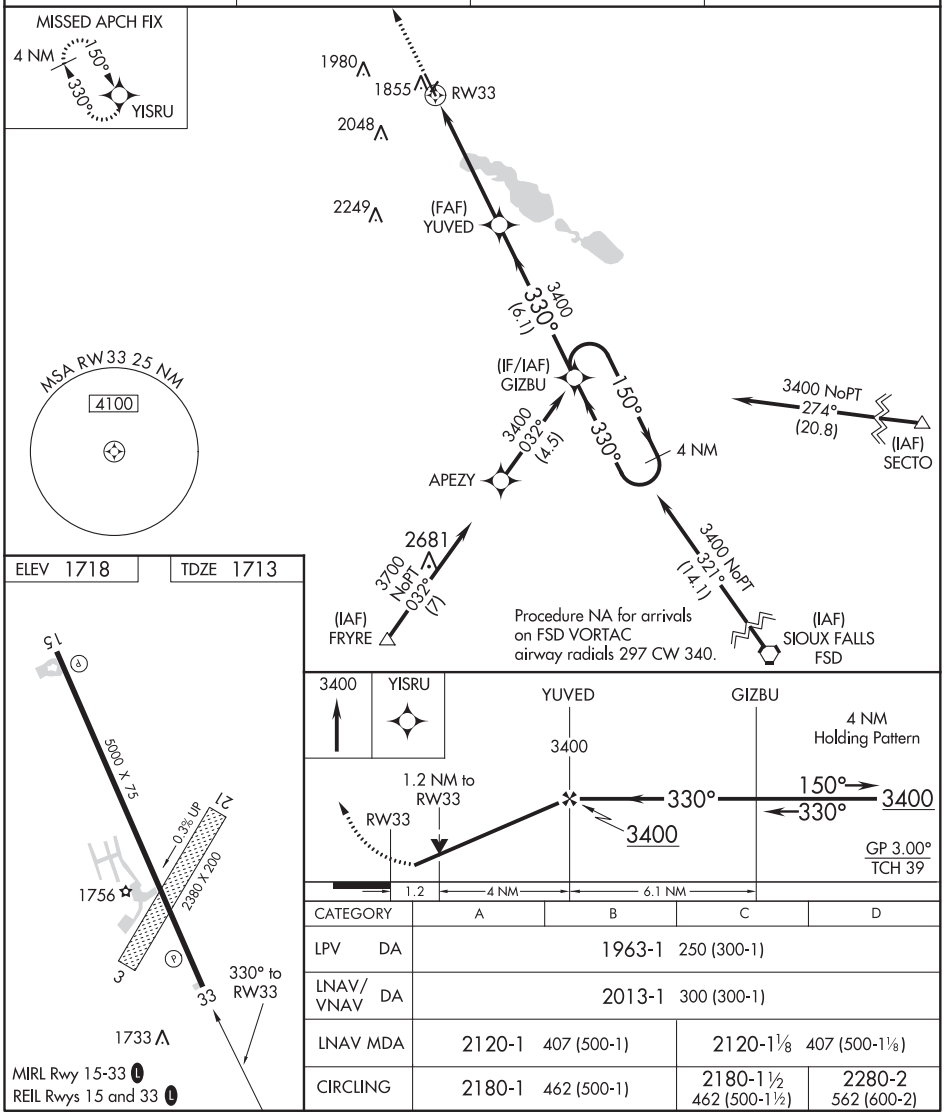
RNAV (GPS) RWY 33
MADISON MUNI (MDS)

WAAS CH 58321 W33A	APP CRS 330°	Rwy ldg 5000 TDZE 1713 Apt Elev 1718

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 33°C (91°F). DME/DME RNP-0.3 NA. Rwy 33 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Brookings altimeter setting and increase all DA 58 feet and all MDA 60 feet. Increase LNAV/VNAV all Cats visibilities to 1¼ and LNAV Cat C/D visibilities to 1⅜ mile. Circling NA to Rwys 3 and 21. Baro-VNAV NA when using Brookings altimeter setting.

MISSED APPROACH: Climb to 3400 direct YISRU and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
118.35	132.05 317.4	121.725	122.8 (CTAF) L



CATEGORY	A	B	C	D
LPV DA	1963-1 250 (300-1)			
LNAV/VNAV DA	2013-1 300 (300-1)			
LNAV MDA	2120-1 407 (500-1)		2120-1⅛ 407 (500-1⅛)	
CIRCLING	2180-1 462 (500-1)		2180-1½ 462 (500-1½)	2280-2 562 (600-2)

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NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 45832 W17A	APP CRS 166°	Rwy ldg 3400 TDZE 1246 Apt Elev 1246

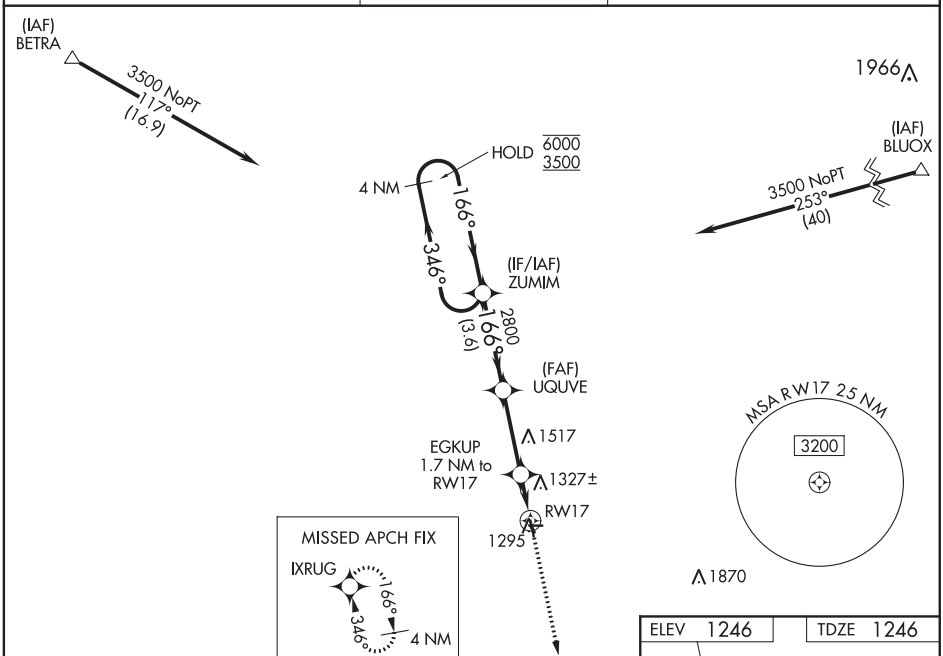
RNAV (GPS) RWY 17
MAHNOMEN COUNTY (3N8)

RNP APCH.

Circling NA to Rwys 9 and 27. Baro-VNAV and VDP NA when using Fosston altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. When local altimeter setting not received, use Fosston altimeter setting and increase all DA to 1549 feet; increase all MDA 60 feet.

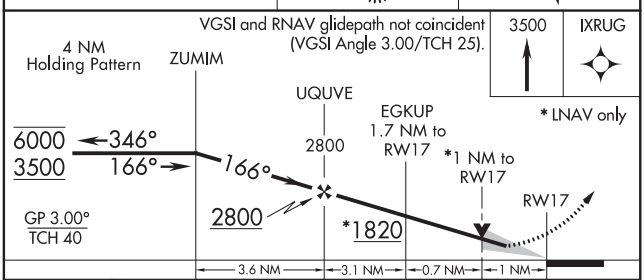
MISSED APPROACH: Climb to 3500 direct IXRUG and hold.

AWOS-3PT	MINNEAPOLIS CENTER	CTAF
121.125	127.35 278.3	122.9 L



VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 25).

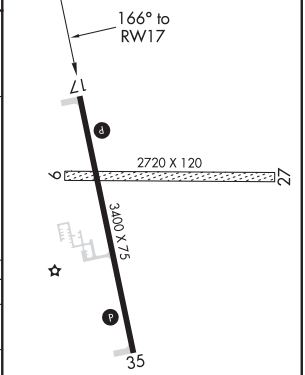
3500	IXRUG



* LNAV only

CATEGORY	A	B	C	D
LPV DA	1496-1	250 (300-1)	NA	
LNAV/VNAV DA	1496-1	250 (300-1)	NA	
LNAV MDA	1580-1	334 (400-1)	NA	
C CIRCLING	1640-1 394 (400-1)	1700-1 454 (500-1)	NA	

ELEV 1246 TDZE 1246



REIL Rwys 17 and 35 L

MIRL Rwy 17-35 L

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MAHNOMEN, MINNESOTA AL-10420 (FAA) 20142

RNAV (GPS) RWY 35
MAHNOMEN COUNTY (3N8)

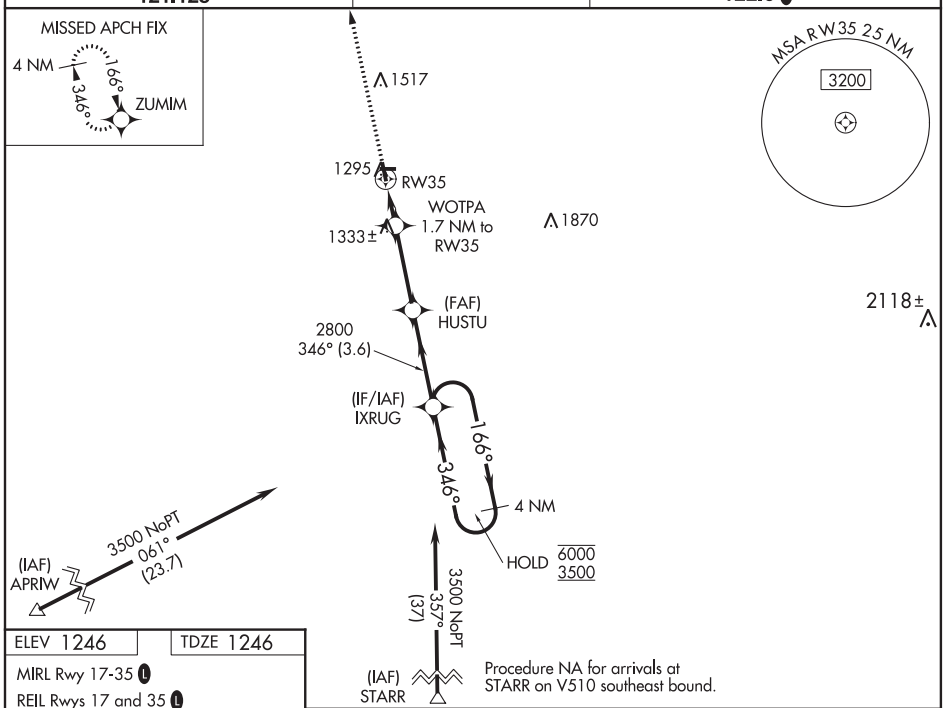
WAAS CH 56532 W35A	APP CRS 346°	Rwy ldg 3400 TDZE 1246 Apt Elev 1246

RNP APCH.

Circling NA to Rwys 9 and 27. Baro-VNAV and VDP NA when using Fosston altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. When local altimeter setting not received, use Fosston altimeter setting and increase all DA to 1549 feet; increase all MDA 60 feet.

MISSED APPROACH: Climb to 3500 direct ZUMIM and hold.

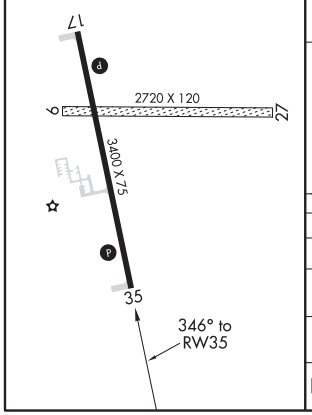
AWOS-3PT	MINNEAPOLIS CENTER	CTAF
121.125	127.35 278.3	122.9 L

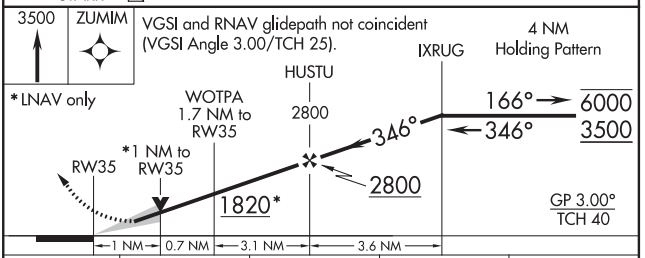


ELEV 1246	TDZE 1246

MIRL Rwy 17-35 L

REIL Rwys 17 and 35 L





CATEGORY		A	B	C	D
LPV	DA	1496-1	250 (300-1)	NA	
LNAV/VNAV	DA	1496-1	250 (300-1)	NA	
LNAV MDA		1600-1	354 (400-1)	NA	
C CIRCLING		1640-1 394 (400-1)	1700-1 454 (500-1)	NA	

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NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 49031 W13A	APP CRS 139°	Rwy ldg 4399 TDZE 1942 Apt Elev 1944

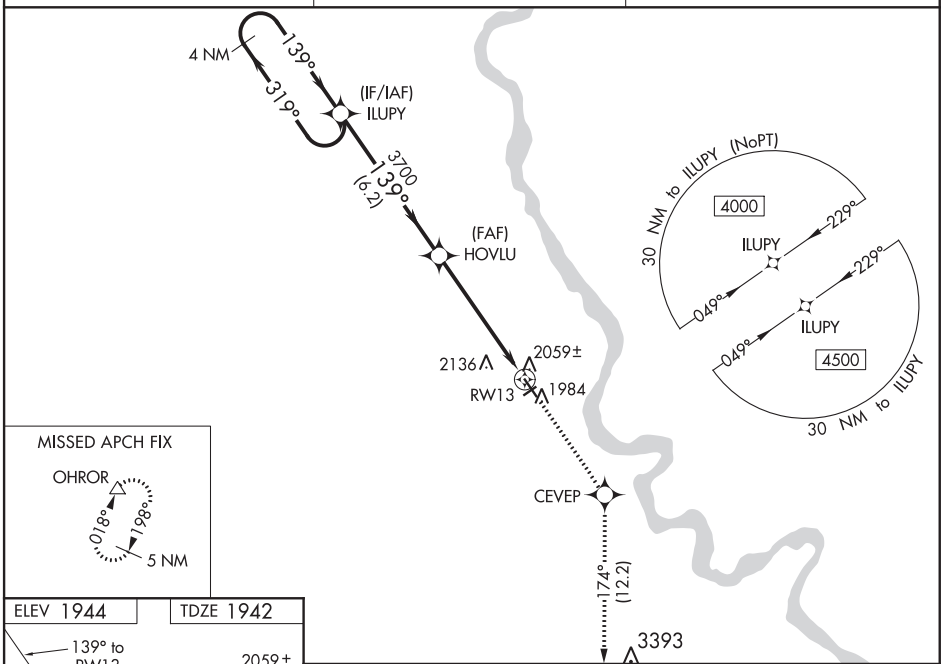
RNAV (GPS) RWY 13
MANDAN MUNI (Y19)

T A ASR

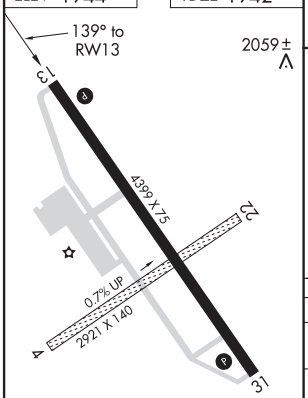
Baro-VNAV NA when using Bismarck altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM not authorized. VDP NA when using Bismarck altimeter setting. When local altimeter setting not received, use Bismarck altimeter setting and increase all DA 54 feet and LPV all Cats visibility ¼ mile, LNAV/VNAV all Cats visibility ⅛ mile, increase all MDA 60 feet and LNAV Cat C/D and Circling Cat D visibility ¼ mile. Circling to Rwys 4 and 22 NA.

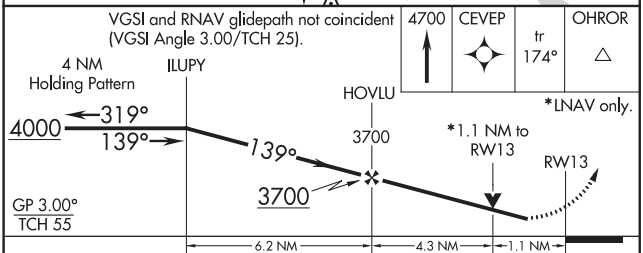
MISSED APPROACH: Climb to 4700 direct CEVEP and on track 174° to OHROR and hold.

AWOS-3	BISMARCK APP CON ★	UNICOM
118.225	126.3 298.9	122.8 (CTAF) L



ELEV 1944 TDZE 1942





CATEGORY	A	B	C	D
LPV DA	2192-¾ 250 (300-¾)			
LNAV/VNAV DA	2244-1 302 (300-1)			
LNAV MDA	2320-1 378 (400-1)			
C CIRCLING	2360-1 416 (500-1)	2460-1 516 (600-1)	2460-1½ 516 (600-1½)	2560-2 616 (700-2)

REIL Rwys 13 and 31 L
MIRL Rwys 13-31 and 4-22 L

NC-1, 25 FEB 2021 to 22 APR 2021

MANDAN, NORTH DAKOTA AL-6759 (FAA) 20198

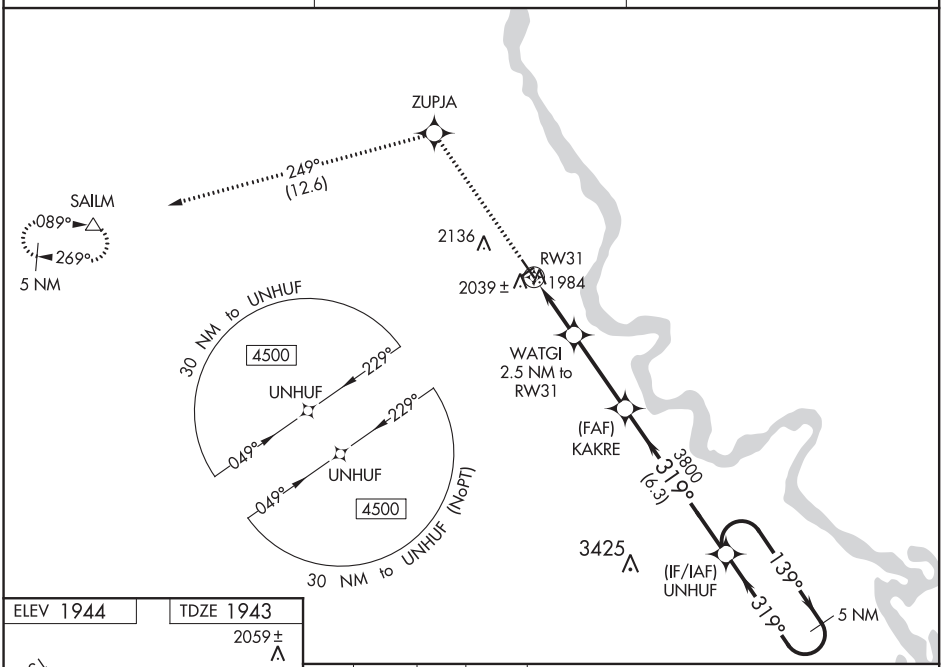
RNAV (GPS) RWY 31
MANDAN MUNI (Y19)

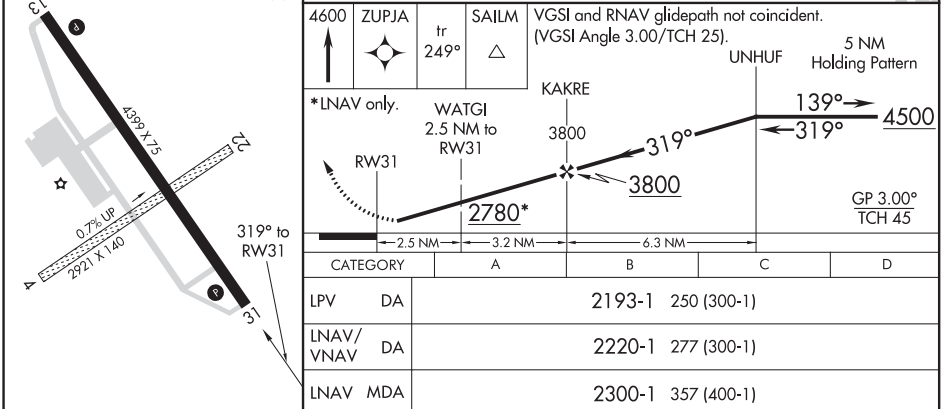
WAAS CH 93731 W31A	APP CRS 319°	Rwy ldg 4399 TDZE 1943 Apt Elev 1944

T A ASR Baro-VNAV NA when using Bismarck altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Bismarck altimeter setting and increase all DA 54 feet and LNAV/VNAV all Cats visibility ⅛ mile, increase all MDA 60 feet and LNAV Cat C/D visibility ⅛ mile and Circling Cat D ¼ mile. Helicopter visibility reduction below ¾ SM NA. Circling to Rwys 4 and 22 NA.

MISSED APPROACH: Climb to 4600 direct ZUPJA and on track 249° to SAILM and hold.

AWOS-3	BISMARCK APP CON ★	UNICOM
118.225	126.3 298.9	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	2193-1 250 (300-1)			
LNAV/VNAV DA	2220-1 277 (300-1)			
LNAV MDA	2300-1 357 (400-1)			
C CIRCLING	2360-1 416 (500-1)	2460-1 516 (600-1)	2460-1½ 516 (600-1½)	2560-2 616 (700-2)

REIL Rwys 13 and 31 L
MIRL Rwys 13-31 and 4-22 L

NC-1, 25 FEB 2021 to 22 APR 2021

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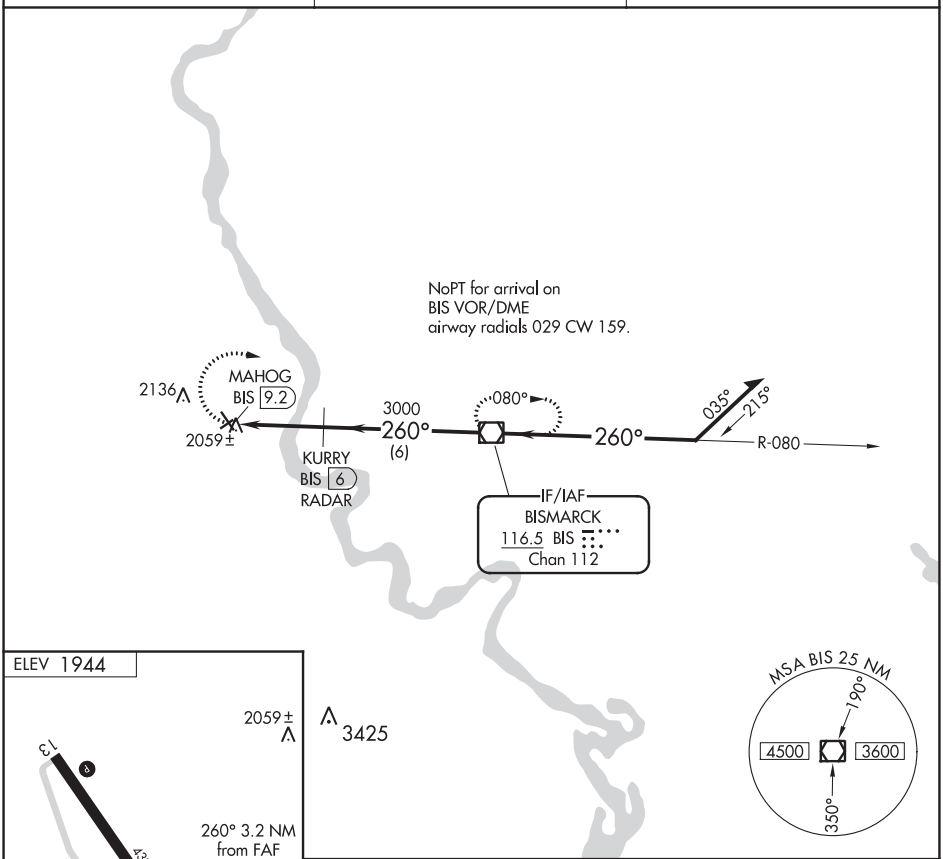
VOR/DME BIS 116.5 Chan 112	APP CRS 260°	Rwy ldg N/A TDZE N/A Apt Elev 1944

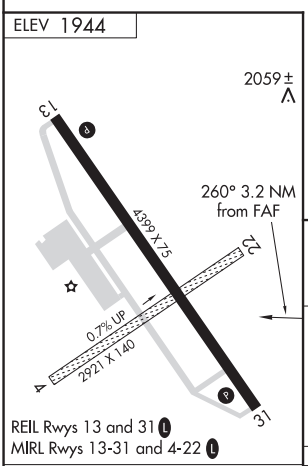
VOR-A
MANDAN MUNI (Y19)

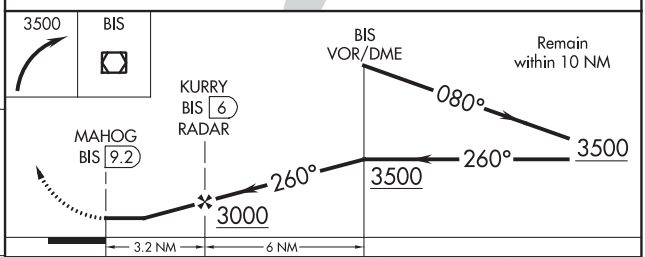
T A ASR — DME or RADAR required. When local altimeter setting not received, use Bismarck altimeter setting and increase all MDA 60 feet, and Cat D visibility ¼ mile. Circling to Rwys 4 and 22 NA.

MISSED APPROACH: Climbing right turn to 3500 direct BIS VOR/DME and hold.

AWOS-3	BISMARCK APP CON ★	UNICOM
118.225	126.3 298.9	122.8 (CTAF) L







FAF to MAP 3.2 NM					
Knots	60	90	120	150	180
Min:Sec	3:12	2:08	1:36	1:17	1:04

CATEGORY	A	B	C	D
C CIRCLING	2360-1 416 (500-1)	2460-1 516 (600-1)	2460-1½ 516 (600-1½)	2560-2 616 (700-2)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

ILS or LOC RWY 33
MANKATO RGNL (MKT)

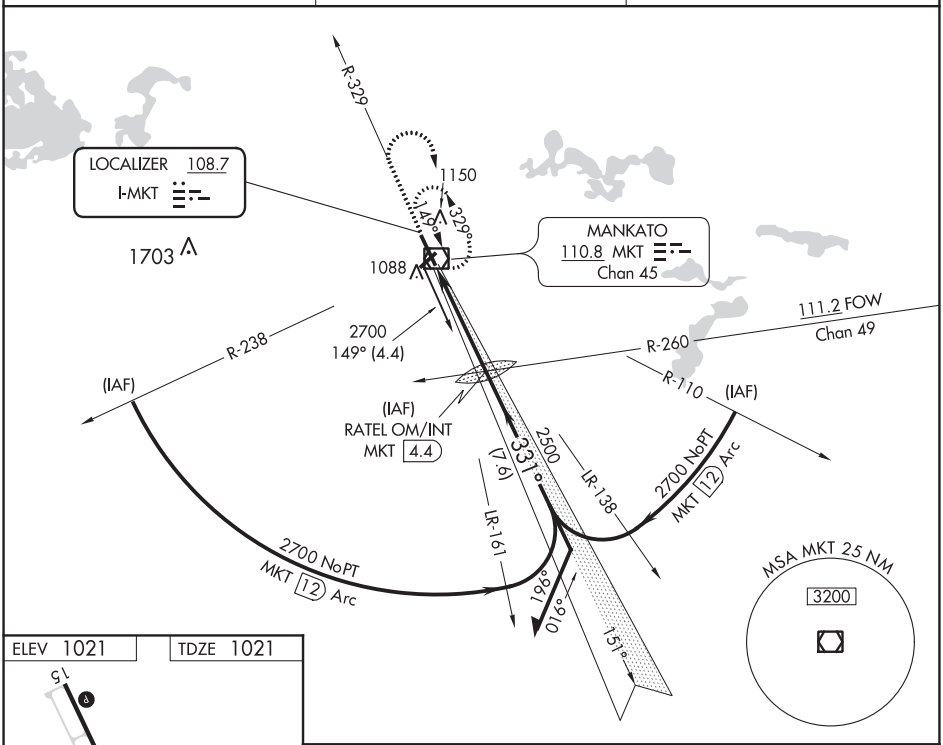
LOC I-MKT	APP CRS	Rwy ldg / TDZE / Apt Elev
108.7	331°	6600 / 1021 / 1021

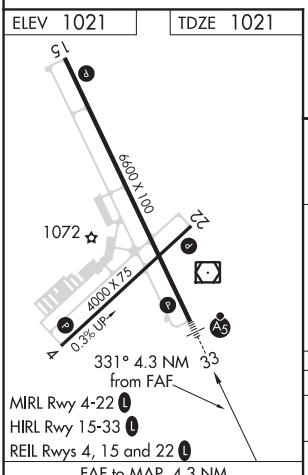
T A NA For inop MALSR when using Waseca altimeter setting, increase S-ILS 33 all Cats visibility to ⅞ mile. When local altimeter setting not received, use Waseca altimeter setting: increase DA to 1278 feet; increase all MDA 60 feet and visibility Cats C and D ¼ mile.

MALSR A5

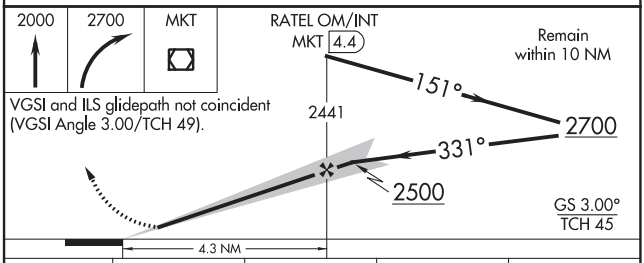
MISSED APPROACH: Climb to 2000 then climbing right turn to 2700 direct MKT VOR/DME and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
118.175	135.0 306.9	122.725 (CTAF) L





FAF to MAP 4.3 NM					
Knots	60	90	120	150	180
Min:Sec	4:18	2:52	2:09	1:43	1:26



CATEGORY	A	B	C	D
S-ILS 33	1221-½ 200 (200-½)			
S-LOC 33	1420-½ 399 (400-½)		1420-⅝ 399 (400-⅝)	
CIRCLING	1460-1 439 (500-1)	1480-1 459 (500-1)	1480-1½ 459 (500-1½)	1580-2 559 (600-2)

NC-1, 25 FEB 2021 to 22 APR 2021

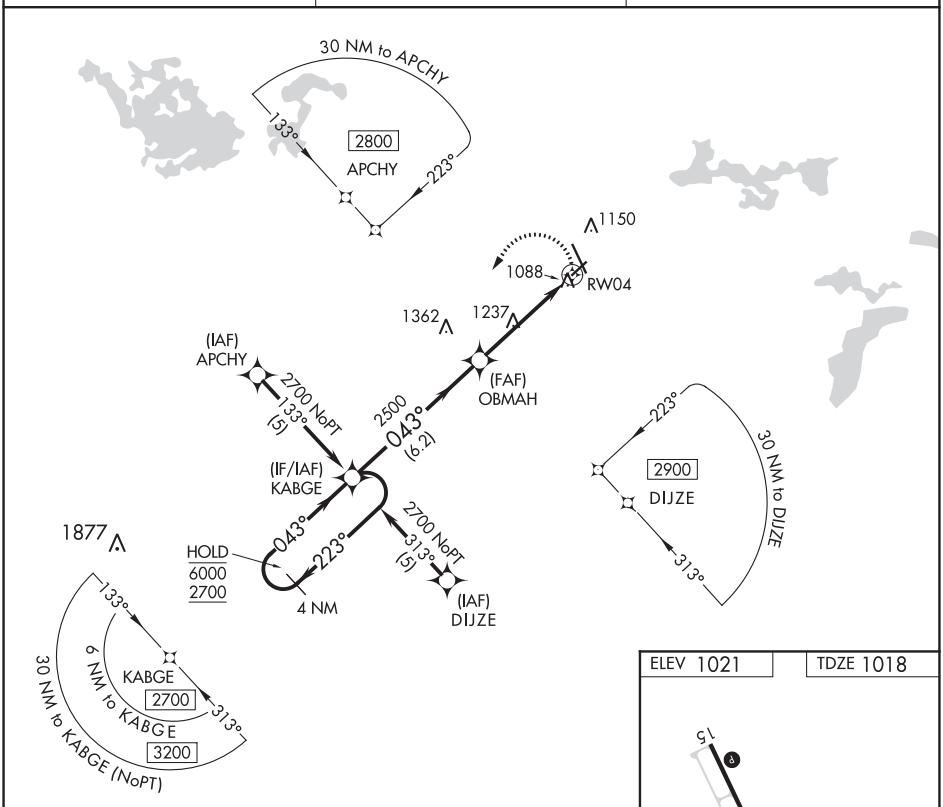
APP CRS	Rwy ldg	4000
043°	TDZE	1018
	Apt Elev	1021

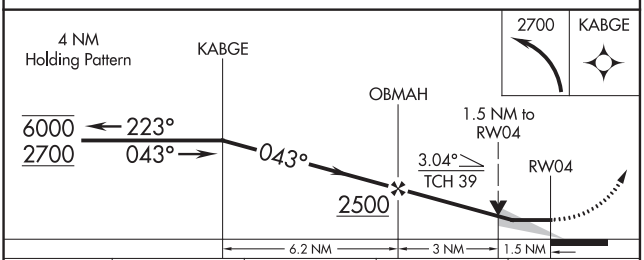
RNAV (GPS) RWY 4
MANKATO RGNL (MKT)

RNP APCH.

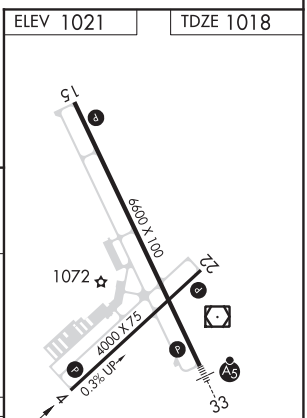
MISSED APPROACH: Climbing left turn to 2700 direct KABGE and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
118.175	135.0 306.9	122.725 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	1540-1	522 (600-1)	1540-1½ 522 (600-1½)	NA
CIRCLING	1540-1	519 (600-1)	1540-1½ 519 (600-1½)	NA



NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

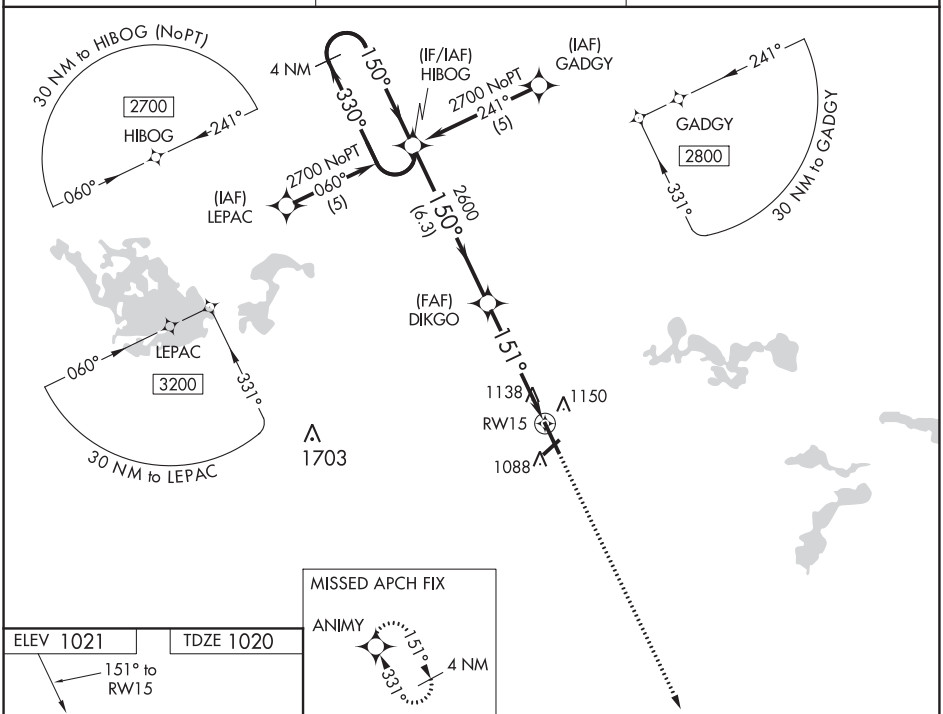
WAAS CH 45615 W15A	APP CRS 151°	Rwy ldg 6600 TDZE 1020 Apt Elev 1021

RNAV (GPS) RWY 15
MANKATO RGNL (MKT)

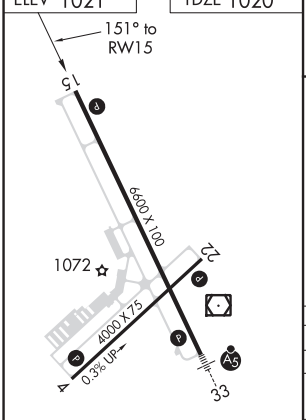
Baro-VNAV NA when using Waseca altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA.
When local altimeter setting not received, use Waseca altimeter setting; increase LPV DA to 1430 feet, LNAV/VNAV DA to 1473 feet and visibility LPV ¼ mile and LNAV/VNAV ⅛ mile all Cats; increase all MDA 60 feet and visibility LNAV Cat C and D ¼ mile.

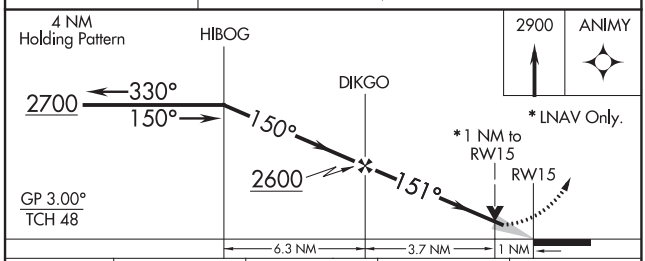
MISSED APPROACH: Climb to 2900 direct ANIMY and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
118.175	135.0 306.9	122.725 (CTAF) L



ELEV 1021 | TDZE 1020





CATEGORY	A	B	C	D
LPV DA	1373-1⅛ 353 (400-1⅛)			
LNAV/VNAV DA	1416-1⅜ 396 (400-1⅜)			
LNAV MDA	1400-1 380 (400-1)			
CIRCLING	1460-1 439 (500-1)	1480-1 459 (500-1)	1480-1½ 459 (500-1½)	1580-2 559 (600-2)

MIRL Rwy 4-22 L
HIRL Rwy 15-33 L
REIL Rwys 4, 15 and 22 L

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RNAV (GPS) RWY 22

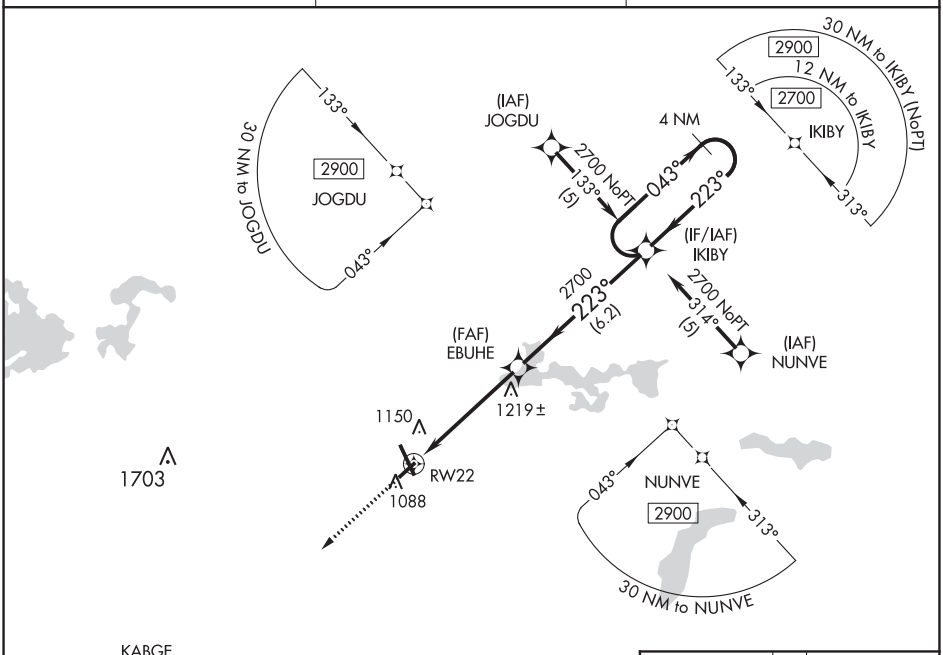
MANKATO RGNL (MKT)

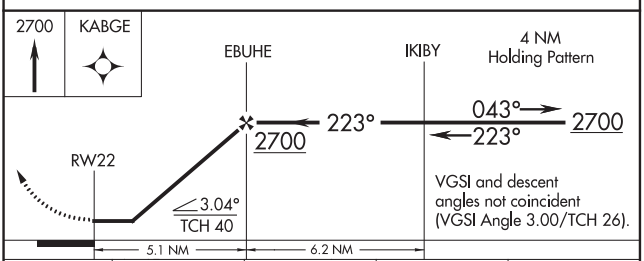
APP CRS	Rwy ldg	4000
223°	TDZE	1021
	Apt Elev	1021

DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Waseca altimeter setting and increase all MDA 60 feet.

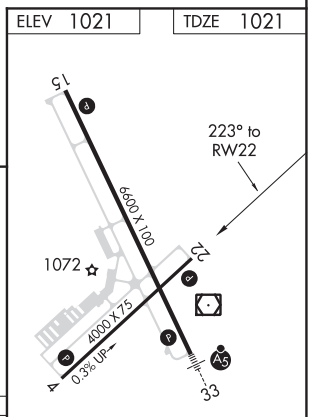
MISSED APPROACH: Climb to 2700 direct KABGE and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
118.175	135.0 306.9	122.725 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	1540-1	519 (600-1)	1540-1½ 519 (600-1½)	NA
CIRCLING	1540-1	519 (600-1)	1540-1½ 519 (600-1½)	NA



MIRL Rwy 4-22 L
HIRL Rwy 15-33 L
REIL Rwys 4, 15 and 22 L

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

MANKATO, MINNESOTA

AL-5755 (FAA)

19283

RNAV (GPS) RWY 33
MANKATO RGNL (MKT)

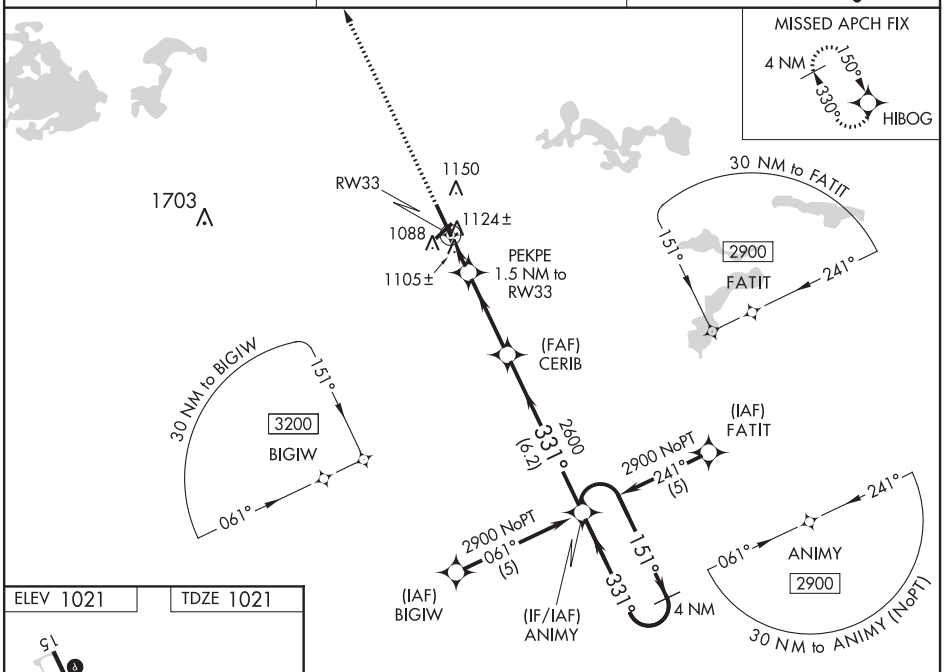
WAAS CH 86315 W33A	APP CRS 331°	Rwy ldg 6600 TDZE 1021 Apt Elev 1021

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Waseca altimeter setting: increase LPV DA to 1278 feet , LNAV/VNAV DA to 1432 feet and LNAV/VNAV visibility ⅛ mile all Cats; increase all MDA 60 feet and LNAV Cats C and D visibility ⅛ mile. For inoperative MALSR when using Waseca altimeter setting, increase LPV all Cats visibility to ⅞ mile and LNAV Cat C and D visibility to 1⅛ mile. Baro-VNAV and VDP NA when using Waseca altimeter setting. For inoperative MALSR, increase LNAV/VNAV all Cats visibility to 1⅛ mile and LNAV Cats C and D visibility to 1 mile.

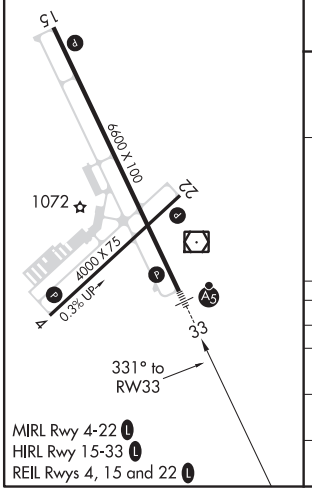
MALSR

MISSED APPROACH: Climb to 2700 direct HIBOG and hold.

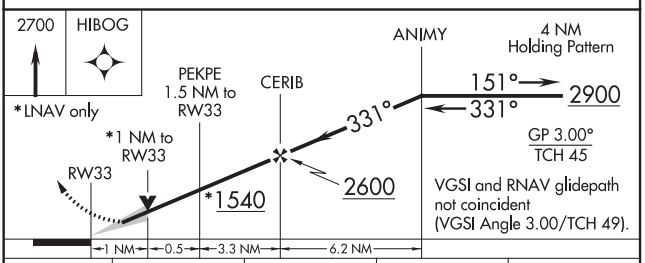
AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
118.175	135.0 306.9	122.725 (CTAF) L



ELEV 1021 TDZE 1021



MIRL Rwy 4-22 L
HIRL Rwy 15-33 L
REIL Rwys 4, 15 and 22 L



CATEGORY	A	B	C	D
LPV DA	1221-½ 200 (200-½)			
LNAV/VNAV DA	1375-¾ 354 (400-¾)			
LNAV MDA	1380-½ 359 (400-½)		1380-⅝ 359 (400-⅝)	
CIRCLING	1460-1 439 (500-1)	1480-1 459 (500-1)	1480-1½ 459 (500-1½)	1580-2 559 (600-2)

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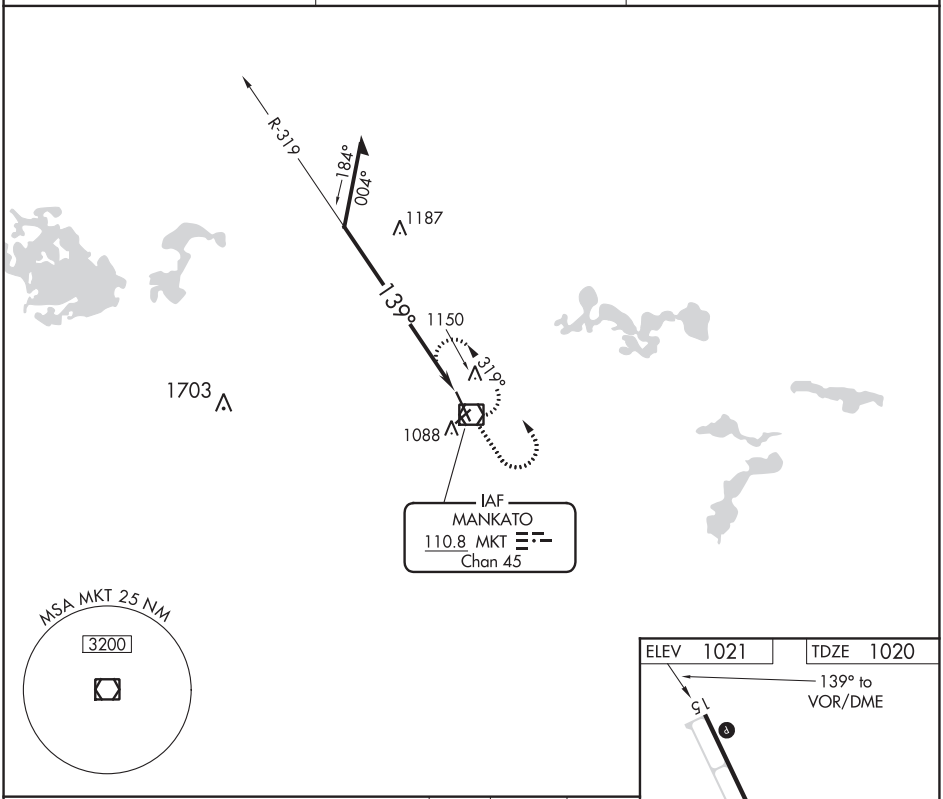
VOR/DME MKT	APP CRS	Rwy ldg	6600
110.8	139°	TDZE	1020
Chan 45		Apt Elev	1021

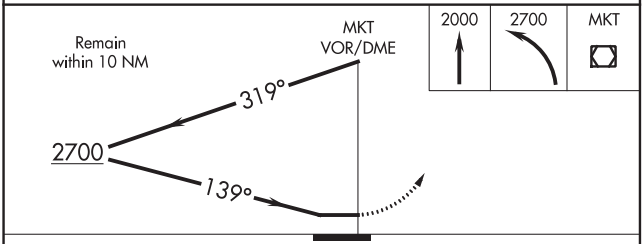
VOR RWY 15
MANKATO RGNL (MKT)

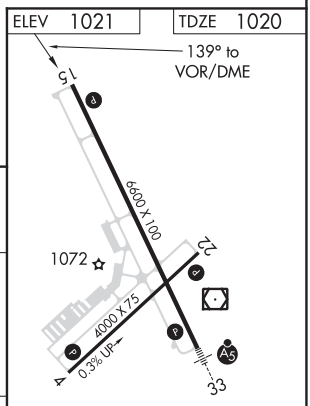
When local altimeter setting not received use Waseca altimeter setting and increase all MDAs 60 feet, increase S-15 Cat C and Circling Cat C visibility ⅛ SM.

MISSED APPROACH: Climb to 2000 then climbing left turn to 2700 direct MKT VOR/DME and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
118.175	135.0 306.9	122.725 (CTAF) L







MIRL Rwy 4-22 L
HIRL Rwy 15-33 L
REIL Rwys 4, 15 and 22 L

CATEGORY	A	B	C	D
S-15	1600-1 580 (600-1)		1600-1⅝ 580 (600-1⅝)	1600-1¾ 580 (600-1¾)
CIRCLING	1600-1 579 (600-1)		1600-1⅝ 579 (600-1⅝)	1600-2 579 (600-2)

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MANKATO, MINNESOTA | AL-5755 (FAA) | 20338

COPTER ILS or LOC RWY 33

MANKATO RGNL (MKT)

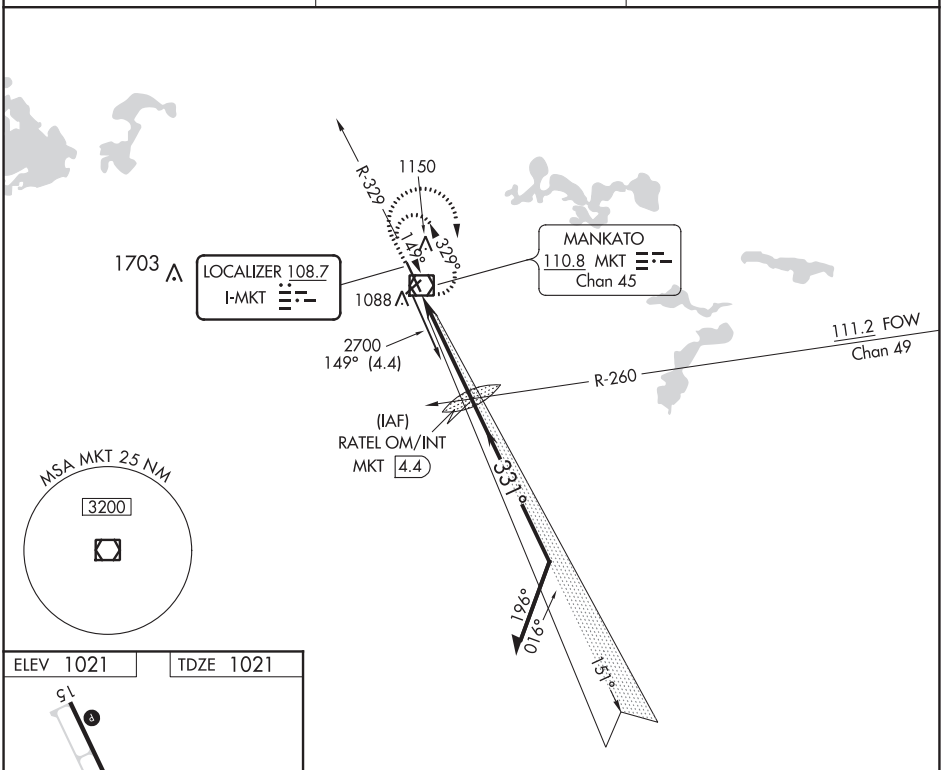
LOC I-MKT	APP CRS	Rwy ldg / TDZE / Apt Elev
108.7	331°	6600 / 1021 / 1021

For inoperative MALSR increase visibility to ½ mile. When local altimeter setting not received, use Waseca altimeter setting: increase DA to 1278 feet; increase MDA 60 feet.

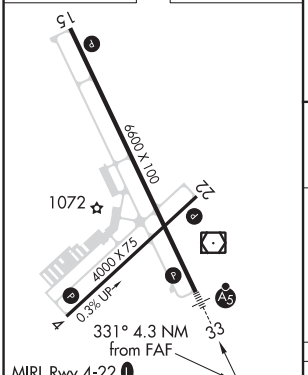
MALSR

MISSED APPROACH: Climb to 2000 then climbing right turn to 2700 direct MKT VOR/DME and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
118.175	135.0 306.9	122.725 (CTAF) L

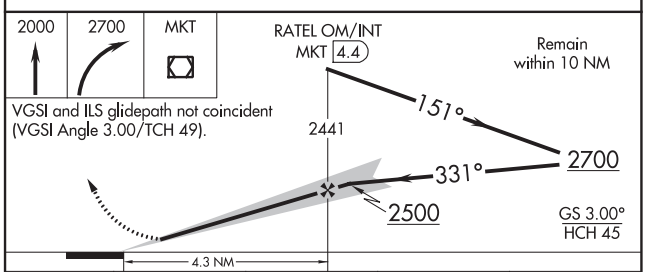


ELEV 1021 | TDZE 1021



MIRL Rwy 4-22 L
HIRL Rwy 15-33 L
REIL Rwys 4, 15 and 22 L

FAF to MAP 4.3 NM					
Knots	45	60	75	90	105
Min:Sec	5:44	4:18	3:26	2:52	2:27



VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 49).

CATEGORY	COPTER	B	C	D
S-ILS 33	1221-¼ 200 (200-¼)	NA		
S-LOC 33	1420-¼ 399 (400-¼)	NA		
CIRCLING	NA			

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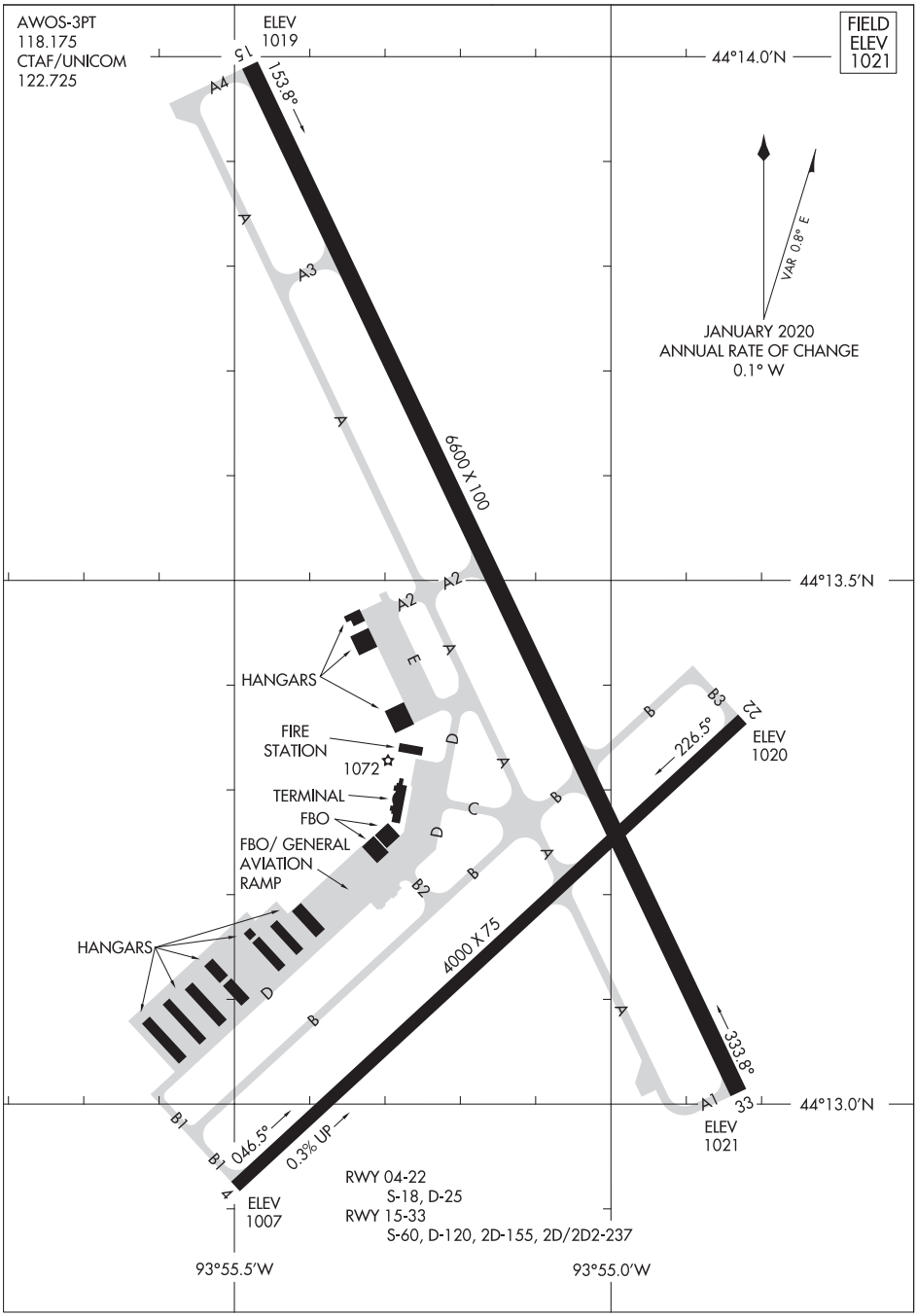
NC-1, 25 FEB 2021 to 22 APR 2021


AWOS-3PT
118.175
CTAF/UNICOM
122.725
ELEV
1019
15
153.8°
44°14.0'N
FIELD
ELEV
1021
VAR 0.8° E
JANUARY 2020
ANNUAL RATE OF CHANGE
0.1° W
6600 X 100
44°13.5'N
HANGARS
FIRE
STATION
1072
TERMINAL
FBO
FBO/ GENERAL
AVIATION
RAMP
226.5°
22
ELEV
1020
HANGARS
4000 X 75
333.8°
33
44°13.0'N
ELEV
1021
046.5°
0.3% UP
4
ELEV
1007
RWY 04-22
S-18, D-25
RWY 15-33
S-60, D-120, 2D-155, 2D/2D2-237
93°55.5'W
93°55.0'W

MAPLE LAKE, MINNESOTA AL-6585 (FAA) 20310

VORTAC DWN	APP CRS	Rwy ldg	N/A
109.0	239°	TDZE	N/A
Chan 27		Apt Elev	1028

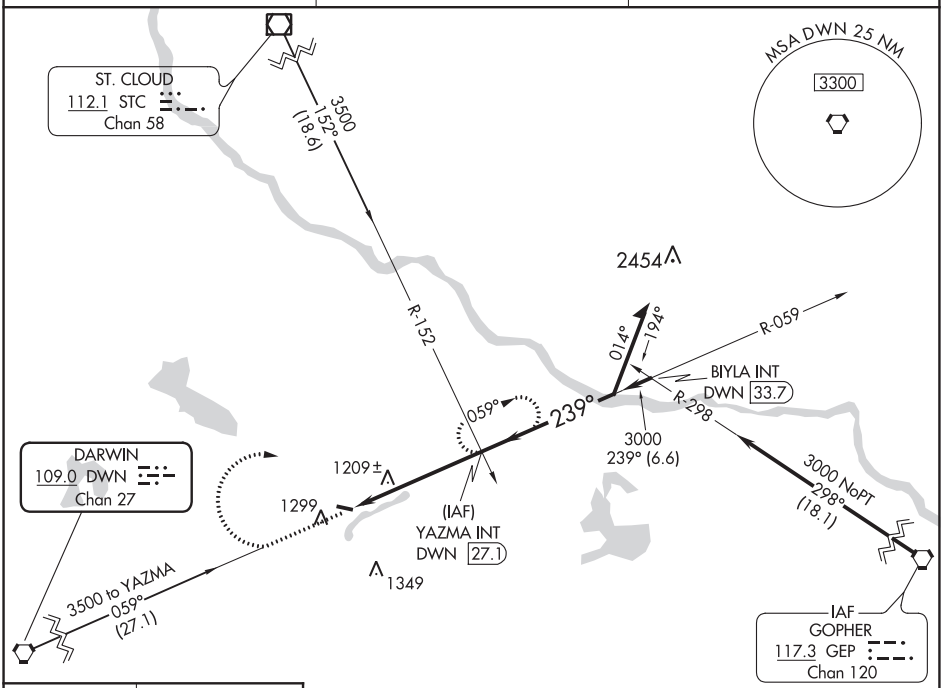
VOR-A

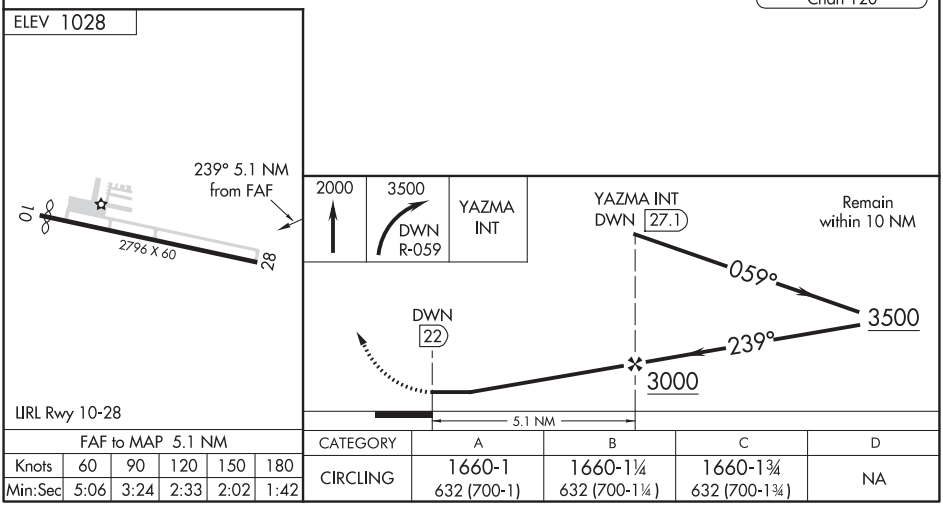
MAPLE LAKE MUNI-BILL MAVENCAMP SR FIELD (MGG)

When local altimeter setting not received, use Buffalo altimeter setting and increase all MDA 40 feet and increase Circling Cat C visibility ¼ mile. Night Landing: Rwy 28 NA. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 2000 then climbing right turn to 3500 via DWN R-059 to YAZMA INT/27.1 DME and hold.

AWOS-3	MINNEAPOLIS APP CON	UNICOM
128.325	126.5 335.65	122.8 (CTAF)



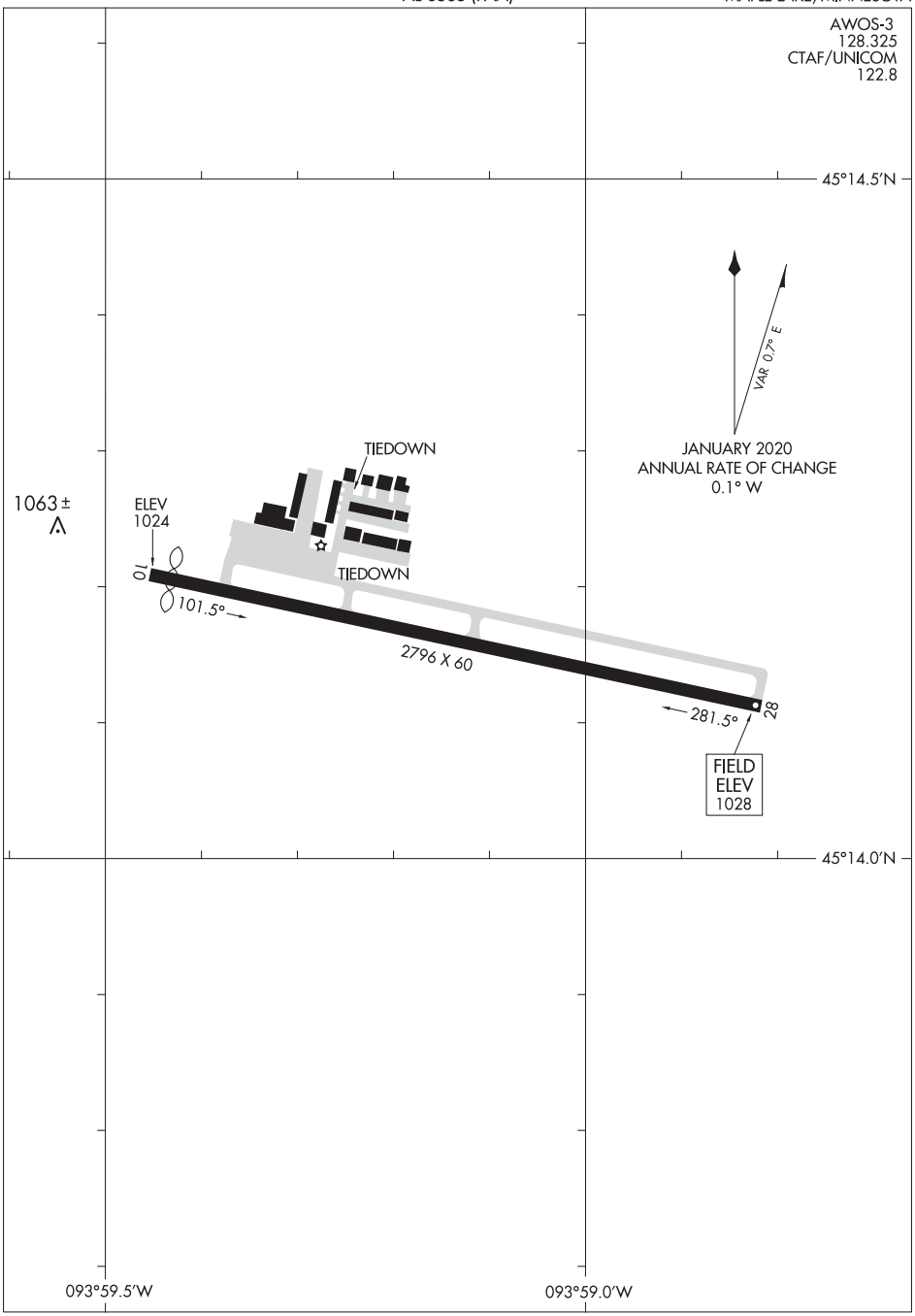


FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

CATEGORY	A	B	C	D
CIRCLING	1660-1 632 (700-1)	1660-1¼ 632 (700-1¼)	1660-1¾ 632 (700-1¾)	NA

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021



NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

LOC I-GBY	APP CRS	Rwy ldg	7221
109.7	125°	TDZE	1182
		Apt Elev	1182

ILS or LOC RWY 12

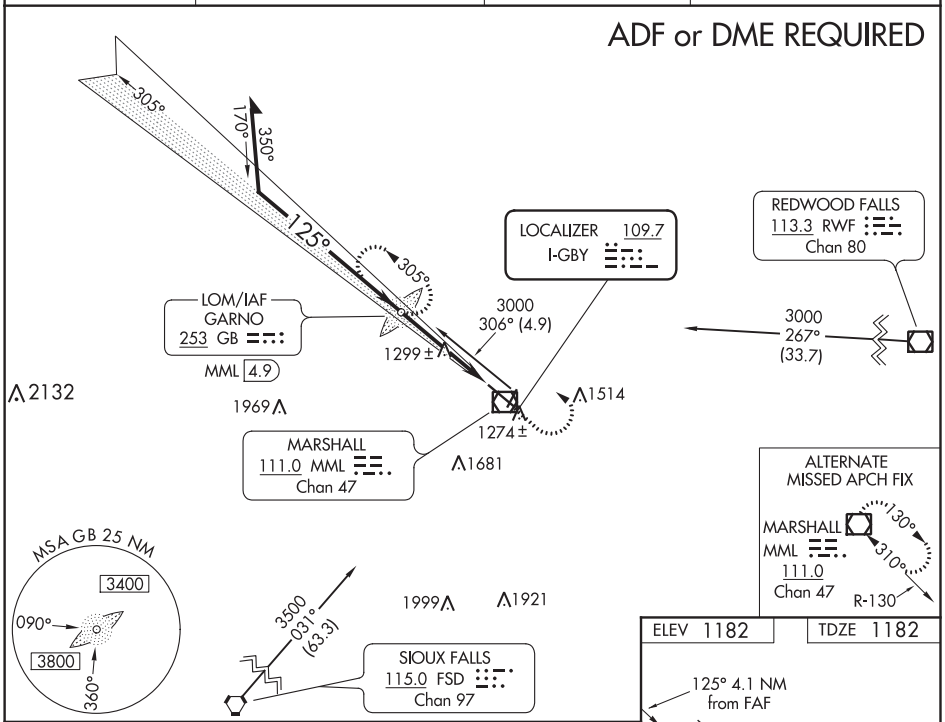
SOUTHWEST MINNESOTA RGNL MARSHALL/RYAN FIELD (MML)

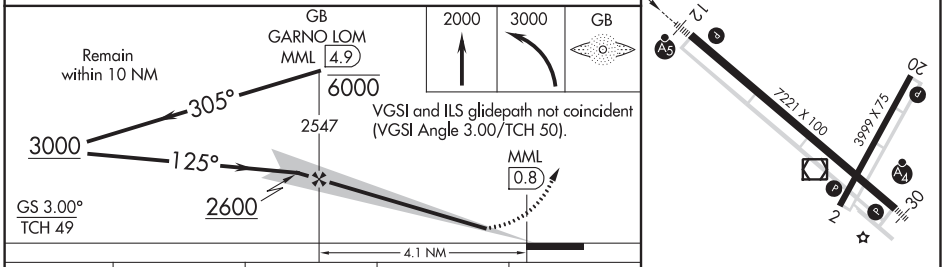
T A NA ADF required.
When local altimeter setting not received, use Tracy Muni altimeter setting and increase all DAs/MDAs 60 feet and S-LOC 12 Cats C/D visibility ¼ mile.
For inoperative MALSR when using Tracy Muni altimeter setting, increase S-ILS 12 visibility to 1 mile all Cats.

MALSR A5

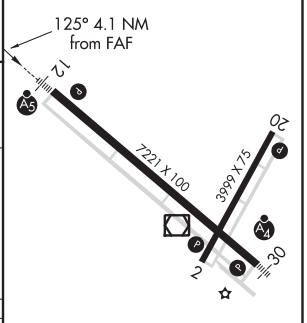
MISSED APPROACH: Climb to 2000 then climbing left turn to 3000 direct GARNO LOM/MML 4.9 DME and hold.

AWOS-3PT	MINNEAPOLIS CENTER	GCO	UNICOM
120.150	127.1 290.2	121.725	122.8 (CTAF) L





ELEV 1182	TDZE 1182



HIRL Rwy 12-30 L
REIL Rwys 2 and 20 L
MIRL Rwy 2-20 L

CATEGORY	A	B	C	D
S-ILS 12	1382-½ 200 (200-½)			
S-LOC 12	1560-½ 378 (400-½)			1560-¾ 378 (400-¾)
CIRCLING	1640-1 458 (500-1)		1640-1½ 458 (500-1½)	1740-2 558 (600-2)

FAF to MAP 4.1 NM					
Knots	60	90	120	150	180
Min:Sec	4:06	2:44	2:03	1:38	1:22

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 82106 W12A	APP CRS 125°	Rwy ldg 7221 TDZE 1183 Apt Elev 1183

RNAV (GPS) RWY 12
SOUTHWEST MINNESOTA RGNL MARSHALL/RYAN FIELD (MML)

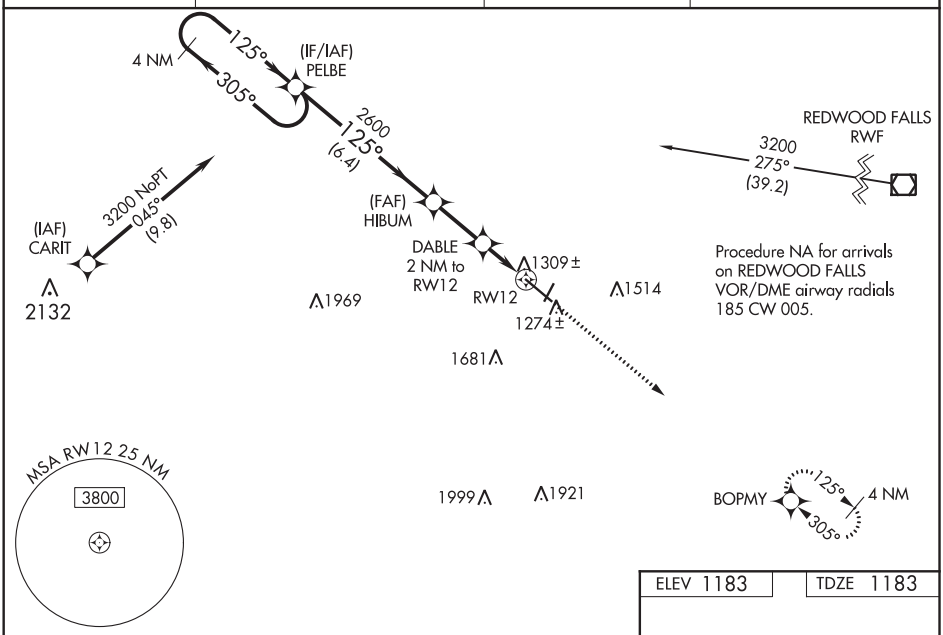
RNP APCH.

Baro-VNAV and VDP NA when using Tracy Muni altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 36°C. When local altimeter setting not received, use Tracy Muni altimeter setting and increase LPV DA to 1441, LNAV/VNAV DA to 1548, and LNAV/VNAV all Cats visibility ⅛ SM; increase all MDAs 60 feet and LNAV Cat C/D visibility ⅛ SM. For inoperative ALS, increase LNAV/VNAV all Cats visibility to ⅞ SM, and LNAV Cat C/D visibility to 1 SM. For inoperative ALS when using Tracy Muni altimeter setting, increase LNAV/VNAV all Cats visibility to 1 SM.

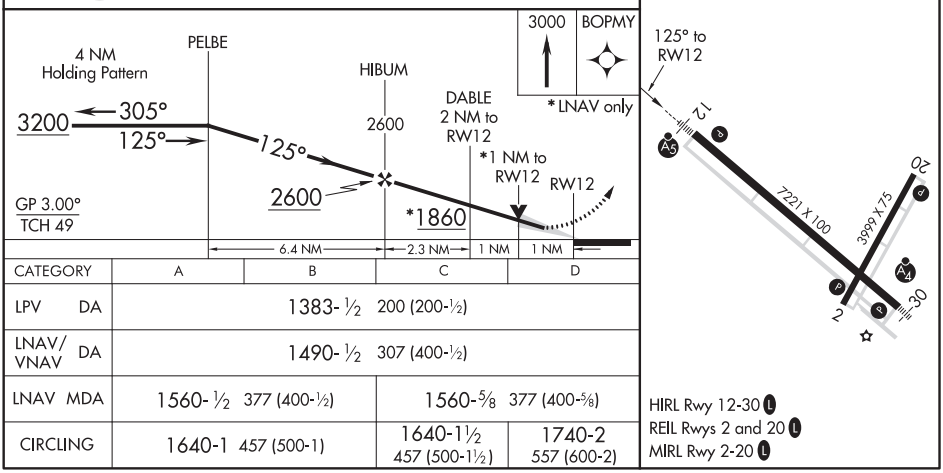
MALSR

MISSED APPROACH: Climb to 3000 direct BOPMY and hold.

AWOS-3PT	MINNEAPOLIS CENTER	GCO	UNICOM
120.150	127.1 290.2	121.725	122.8 (CTAF) L



ELEV 1183 TDZE 1183



CATEGORY	A	B	C	D
LPV DA	1383-½ 200 (200-½)			
LNAV/VNAV DA	1490-½ 307 (400-½)			
LNAV MDA	1560-½ 377 (400-½)		1560-⅝ 377 (400-⅝)	
CIRCLING	1640-1 457 (500-1)		1640-1½ 457 (500-1½)	1740-2 557 (600-2)

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 86321 W30A	APP CRS 305°	Rwy ldg 7221 TDZE 1180 Apt Elev 1183

RNAV (GPS) RWY 30

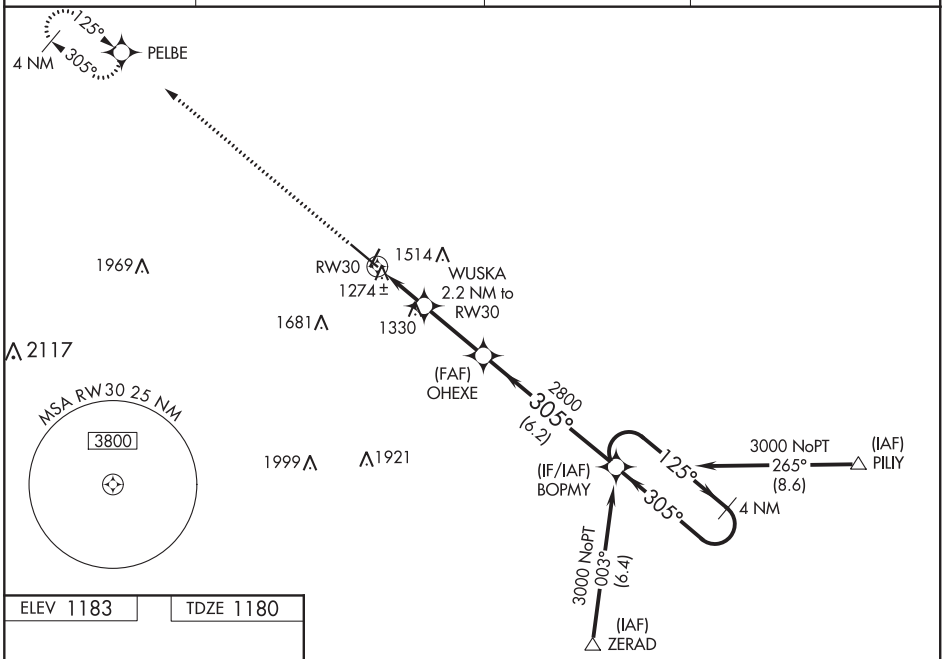
SOUTHWEST MINNESOTA RGNL MARSHALL/RYAN FIELD (MML)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 36°C (96°F). DME/DME RNP-0.3 NA. VDP NA with Tracy altimeter setting. When local altimeter setting not received, use Tracy altimeter setting and increase all DA 58 feet and all MDA 60 feet, and LPV visibility all Cats ⅛ mile, LNAV/VNAV visibility all Cats ¼ mile, and LNAV Cat C and D visibility ¼ mile. Visibility reduction by helicopters NA. Baro-VNAV NA when using Tracy altimeter setting.

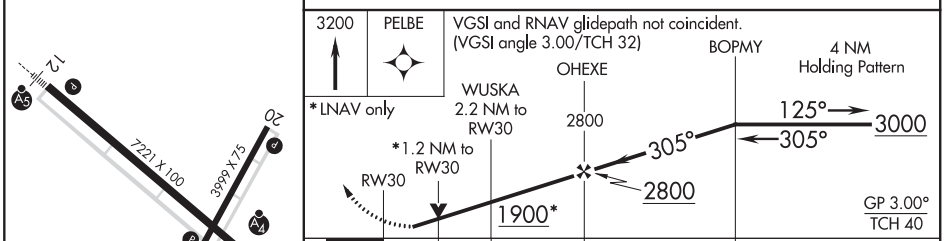
MALSF

MISSED APPROACH: Climb to 3200 direct PELBE and hold.

AWOS-3PT	MINNEAPOLIS CENTER	GCO	UNICOM
120.150	127.1 290.2	121.725	122.8 (CTAF) L



ELEV 1183 TDZE 1180



CATEGORY	A	B	C	D
LPV DA	1430-⅞ 250 (300-⅞)			
LNAV/VNAV DA	1464-1 284 (300-1)			
LNAV MDA	1580-1 400 (400-1)		1580-1⅛ 400 (400-1⅛)	
CIRCLING	1640-1 457 (500-1)		1640-1½ 457 (500-1½)	1740-2 557 (600-2)

HIRL Rwy 12-30 L
REIL Rwys 2 and 20 L
MIRL Rwy 2-20 L

NC-1, 25 FEB 2021 to 22 APR 2021

VOR/DME MML	APP CRS	Rwy ldg	7221
111.0	130°	TDZE	1182
Chan 47		Apt Elev	1182

VOR RWY 12

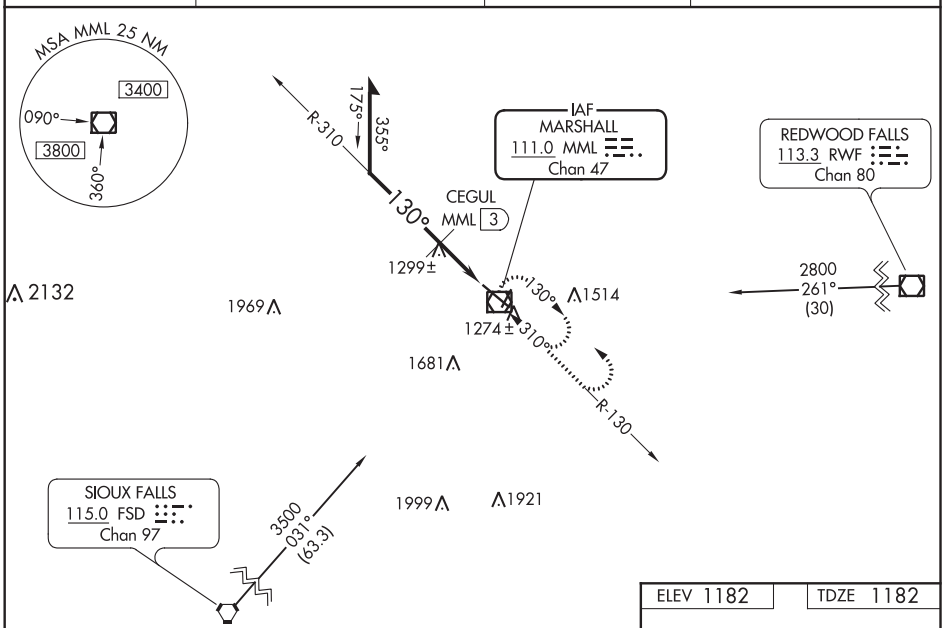
SOUTHWEST MINNESOTA RGNL MARSHALL/RYAN FIELD (MML)

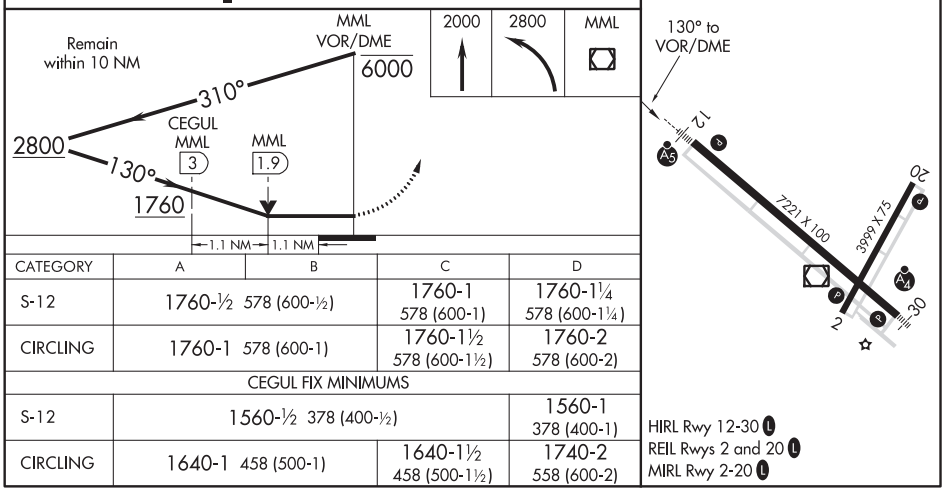
T NA For inoperative MALSR, increase CEGUL fix minimums S-12 Cat D visibility to 1¼ mile. When local altimeter setting not received, use Tracy Muni altimeter setting and increase all MDAs 60 feet and S-12 Cat C/D visibility ¼ mile; increase Circling Cat C visibility ¼ mile. Increase CEGUL fix minimums S-12 Cat C visibility to ¾ mile. VDP NA when using Tracy Muni altimeter setting.

MALSR A5

MISSED APPROACH: Climb to 2000, then climbing left turn to 2800 direct MML VOR/DME and hold.

AWOS-3PT	MINNEAPOLIS CENTER	GCO	UNICOM
120.150	127.1 290.2	121.725	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-12	1760-½ 578 (600-½)		1760-1 578 (600-1)	1760-1¼ 578 (600-1¼)
CIRCLING	1760-1 578 (600-1)		1760-1½ 578 (600-1½)	1760-2 578 (600-2)
CEGUL FIX MINIMUMS				
S-12	1560-½ 378 (400-½)			1560-1 378 (400-1)
CIRCLING	1640-1 458 (500-1)		1640-1½ 458 (500-1½)	1740-2 558 (600-2)

HIRL Rwy 12-30 L
REIL Rwys 2 and 20 L
MIRL Rwy 2-20 L

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

MARTIN, SOUTH DAKOTA | AL-9035 (FAA) | 19199

RNAV (GPS) RWY 32
MARTIN MUNI (9V6)

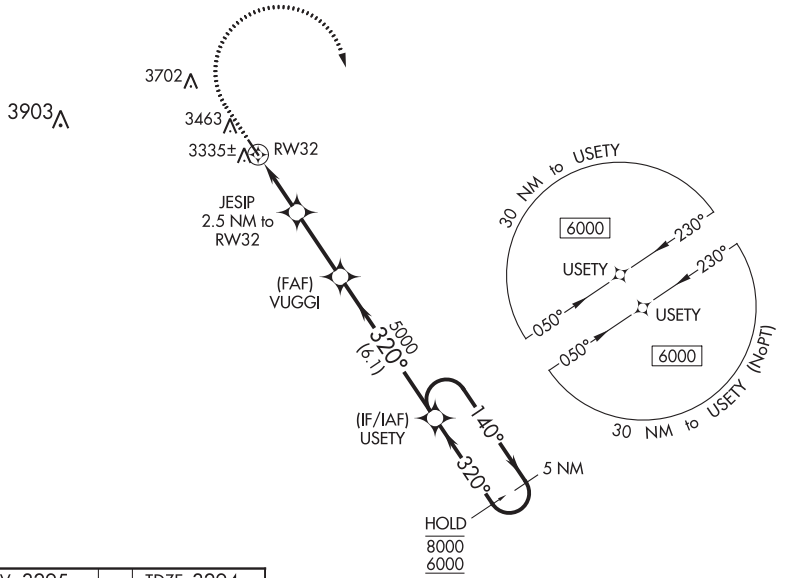
WAAS CH 77540 W32A	APP CRS 320°	Rwy ldg 3699 TDZE 3294 Apt Elev 3295

RNP APCH.

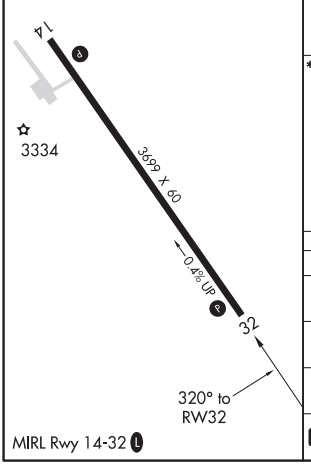
NA

MISSED APPROACH: Climb to 3800 then climbing right turn to 6000 direct USETY and hold.

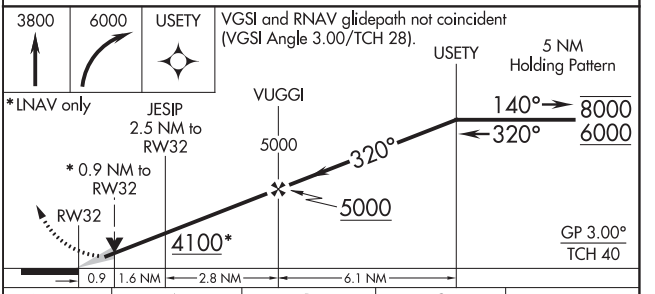
AWOS-2	DENVER CENTER	CTAF
123.0	127.95 338.2	122.9 L



ELEV 3295 | TDZE 3294



MIRL Rwy 14-32 L



CATEGORY	A	B	C	D
LPV DA	3544-1 250 (300-1)			NA
LNAV/VNAV DA	3544-1 250 (300-1)			NA
LNAV MDA	3600-1 306 (400-1)			NA
C CIRCLING	3780-1 485 (500-1)	3820-1 525 (600-1)	4060-2½ 765 (800-2½)	NA

NC-1, 25 FEB 2021 to 22 APR 2021

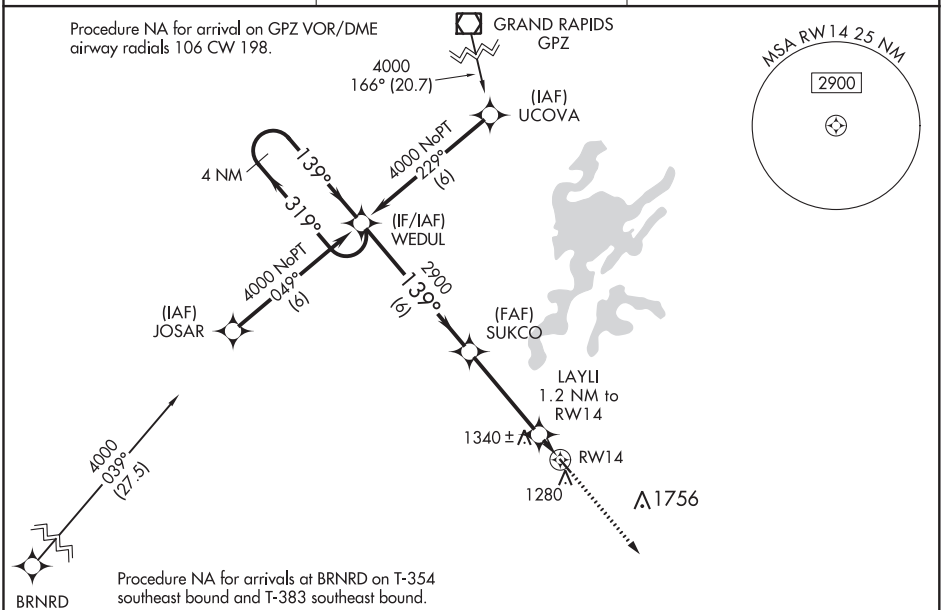
APP CRS	Rwy ldg	3400
139°	TDZE	1228
	Apt Elev	1228

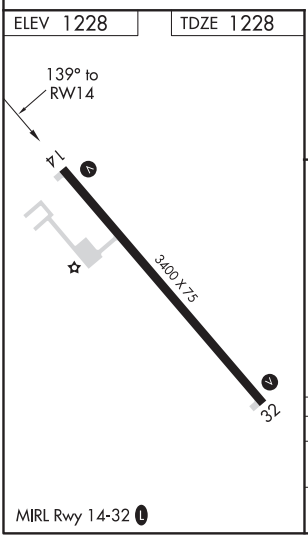
RNAV (GPS) RWY 14
ISEDOR IVERSON (HZX)

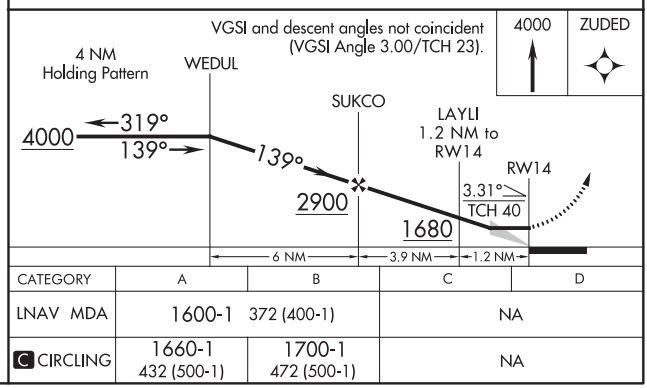
DME/DME RNP-0.3 NA. When local altimeter setting not received, use Aitkin altimeter setting and increase all MDA 40 feet.

MISSED APPROACH: Climb to 4000 direct ZUDED and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
119.575	127.9 281.45	122.9 L







CATEGORY	A	B	C	D
LNAV MDA	1600-1	372 (400-1)	NA	
C CIRCLING	1660-1 432 (500-1)	1700-1 472 (500-1)	NA	

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

MC GREGOR, MINNESOTA

AL-9495 (FAA)

21056

RNAV (GPS) RWY 32

ISEDOR IVERSON (HZX)

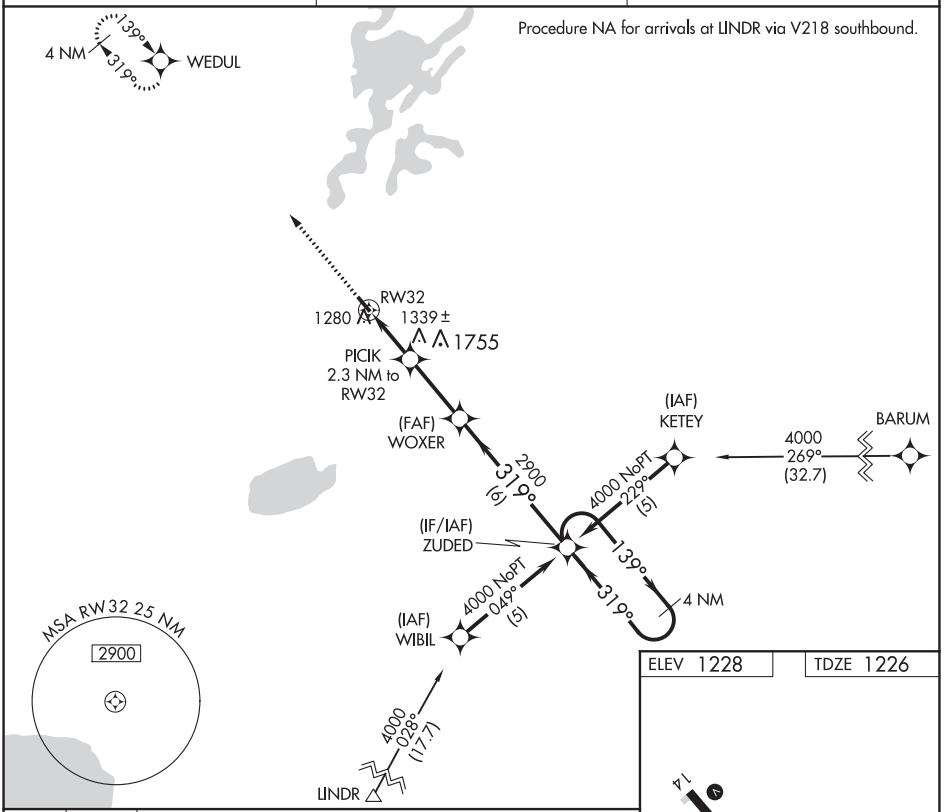
APP CRS	Rwy ldg	3400
319°	TDZE	1226
	Apt Elev	1228

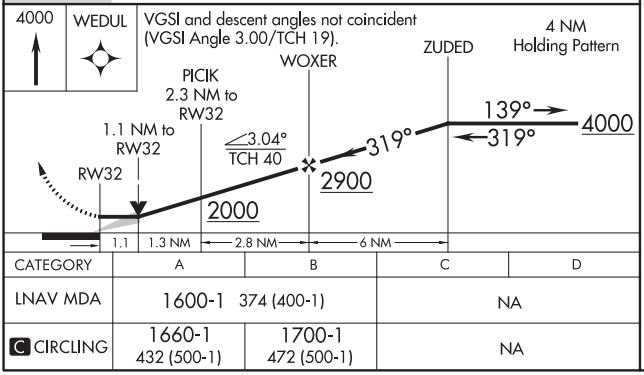
DME/DME RNP-0.3 NA.
When local altimeter setting not received, use Aitkin altimeter setting and increase all MDAs 40 feet.
VDP NA when using Aitkin altimeter setting.

MISSED APPROACH: Climb to 4000 direct WEDUL and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
119.575	127.9 281.45	122.9 L

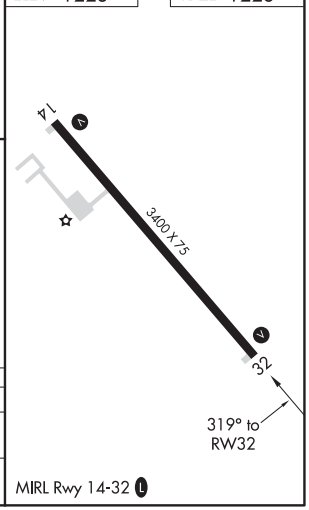
Procedure NA for arrivals at LINDR via V218 southbound.





CATEGORY	A	B	C	D
LNAV MDA	1600-1 374 (400-1)		NA	
C CIRCLING	1660-1 432 (500-1)	1700-1 472 (500-1)	NA	

ELEV 1228 | TDZE 1226



MC GREGOR, MINNESOTA
Orig-A 01MAR18

46°37′N-93°19′W

ISEDOR IVERSON (HZX)
RNAV (GPS) RWY 32

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

APP CRS	Rwy ldg	4000
312°	TDZE	1117
	Apt Elev	1118

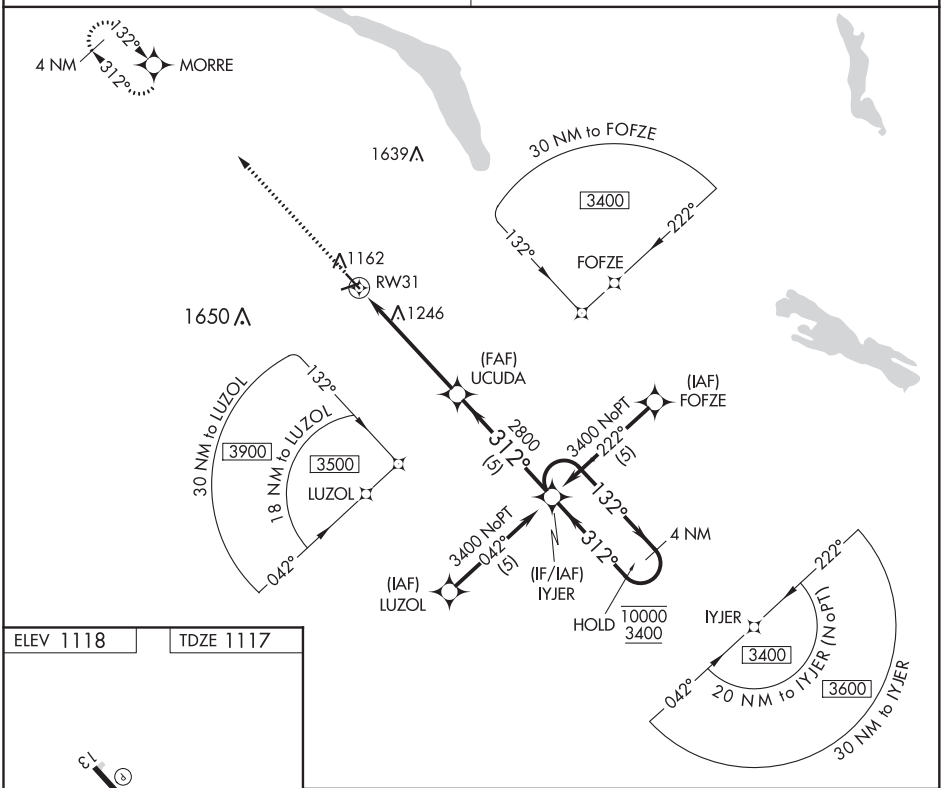
RNAV (GPS) RWY 31
MILBANK MUNI (1D1)

RNP APCH.

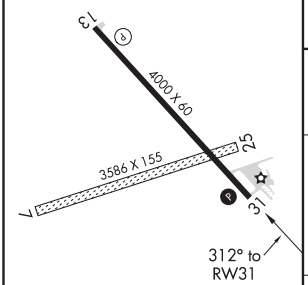
NA Rwy 31 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Ortonville Muni-Martinson Field altimeter setting and increase MDAs 20 feet.

MISSED APPROACH: Climb to 3400 direct MORRE and hold.

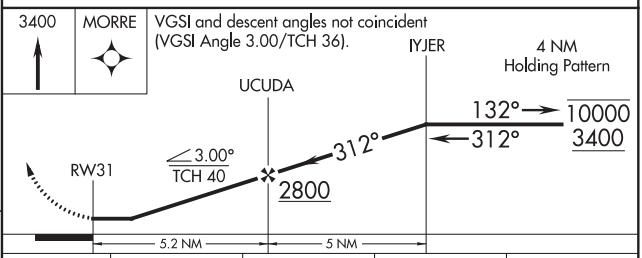
MINNEAPOLIS CENTER	AUNICOM
128.5 306.2	122.8 (CTAF) L



ELEV 1118 TDZE 1117



MIRL Rwy 13-31 L



CATEGORY	A	B	C	D
LNAV MDA	1720-1 603 (700-1)		NA	
C CIRCLING	1720-1 602 (700-1)		NA	

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

MILLER, SOUTH DAKOTA | AL-6698 (FAA) | 21056

WAAS CH 50322 W15A	APP CRS 151°	Rwy ldg 3600 TDZE 1569 Apt Elev 1570

RNAV (GPS) RWY 15
MILLER MUNI (MKA)

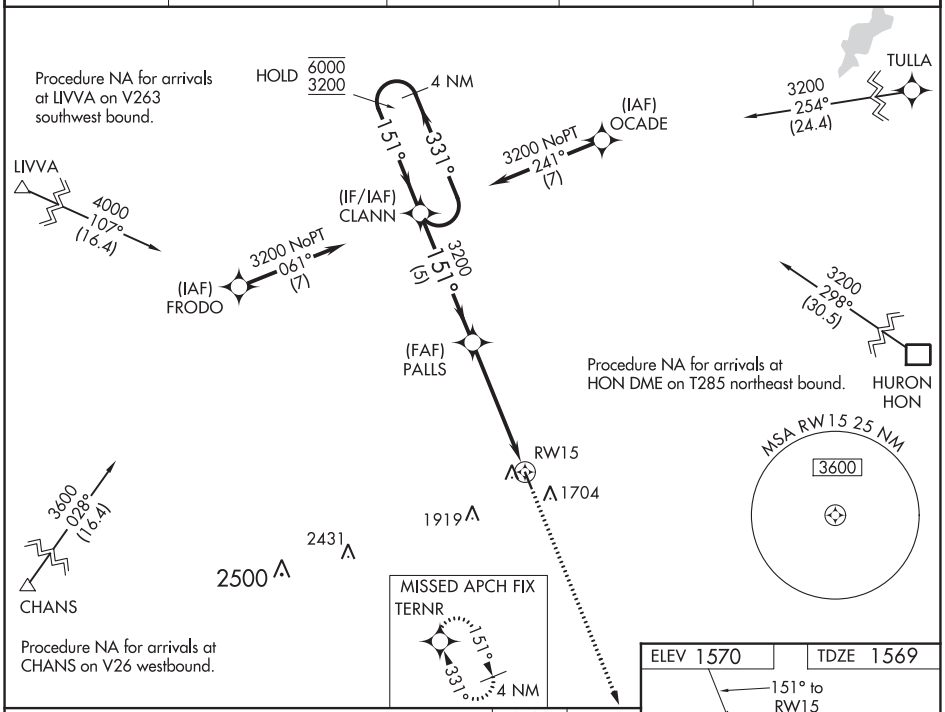
RNP APCH.

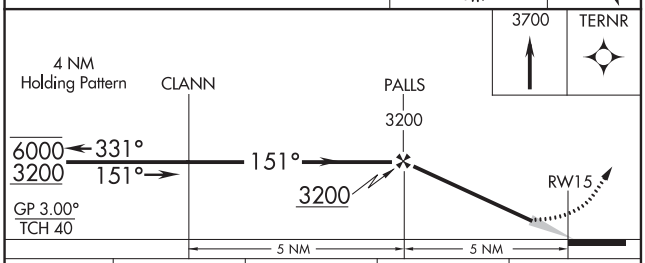
Baro-VNAV NA. Use Huron altimeter setting.

NA

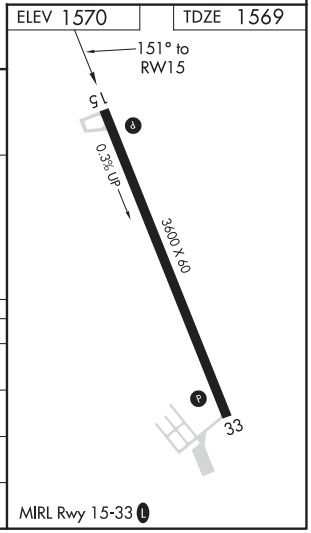
MISSED APPROACH: Climb to 3700 direct TERNR and hold.

HON ASOS	MINNEAPOLIS CENTER	CTAF	GCO	
118.125	125.1 269.1	122.9	121.725	122.8 L





CATEGORY	A	B	C	D
LPV DA	1883-1	314 (400-1)	NA	
LNAV/VNAV DA	1964-1⅜	395 (400-1⅜)	NA	
LNAV MDA	2100-1	531 (600-1)	NA	
CIRCLING	2180-1 610 (700-1)	2220-1 650 (700-1)	NA	



NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 97522 W33A	APP CRS 331°	Rwy ldg 3600 TDZE 1570 Apt Elev 1570

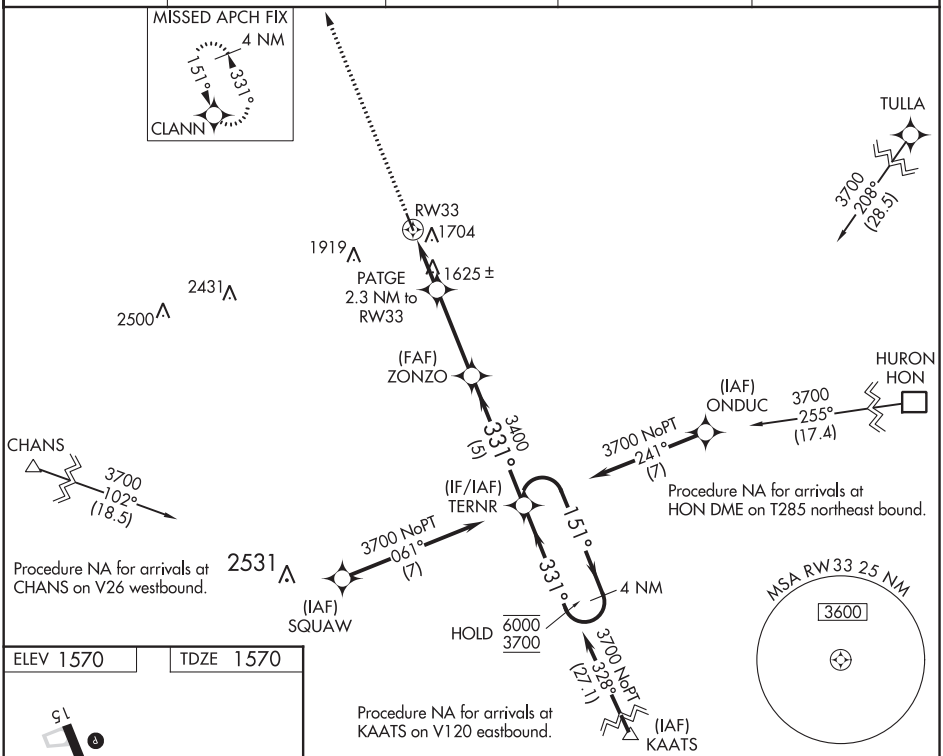
RNAV (GPS) RWY 33
MILLER MUNI (MKA)

RNP APCH.

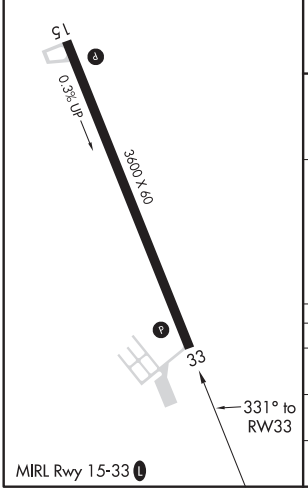
Rwy 33 helicopter visibility reduction below ¾ SM NA.
NA Use Huron altimeter setting.

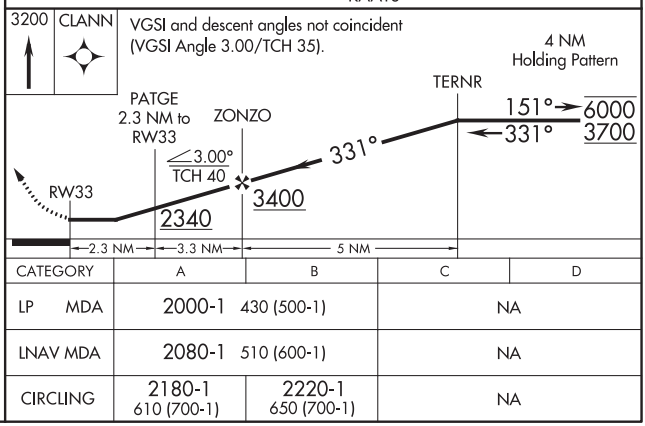
MISSED APPROACH: Climb to 3200 direct CLANN and hold.

HON ASOS	MINNEAPOLIS CENTER	CTAF	GCO	
118.125	125.1 269.1	122.9	121.725	122.8 (L)



ELEV 1570	TDZE 1570





CATEGORY	A	B	C	D
LP MDA	2000-1 430 (500-1)		NA	
LNAV MDA	2080-1 510 (600-1)		NA	
CIRCLING	2180-1 610 (700-1)	2220-1 650 (700-1)	NA	

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

MINNEAPOLIS, MINNESOTA AL-6652 (FAA) 20254

ILS or LOC RWY 30
AIRLAKE (LVN)

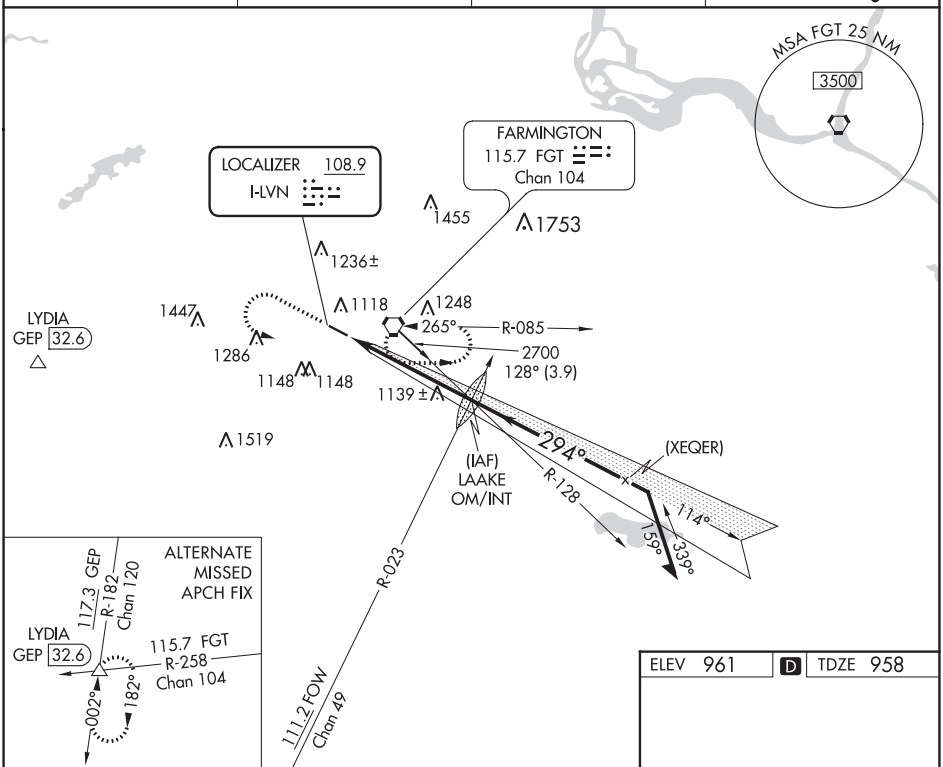
LOC I-LVN	APP CRS	Rwy ldg	3707
108.9	294°	TDZE	958
		Apt Elev	961

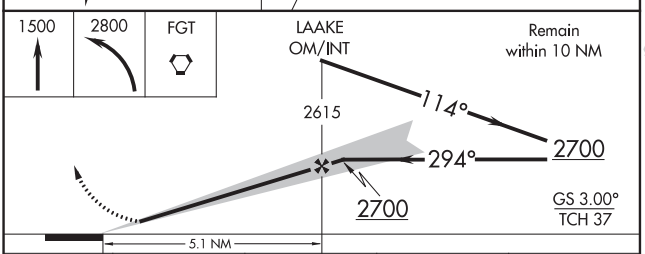
When Circling to Rwy 12 at night, operational VGSI required, remain on or above VGSI glidepath until threshold. Rwy 30 helicopter visibility reduction below ¾ SM NA. For inop ALS, increase S-LOC Cats A/B visibility to 1 SM.

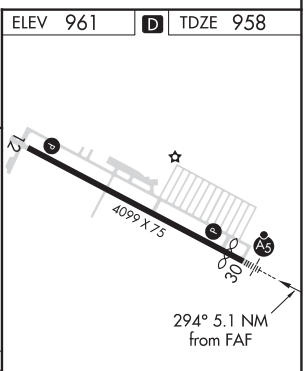
MALSR

MISSED APPROACH: Climb to 1500 then climbing left turn to 2800 direct FGT VORTAC and hold.

AWOS-3	MINNEAPOLIS APP CON	CLNC DEL	UNICOM
118.0	134.7 284.7	118.95	123.0 (CTAF)







CATEGORY	A	B	C	D
S-ILS 30	1208-¾ 250 (300-¾)			
S-LOC 30	1400-¾ 442 (500-¾)		1400-⅞ 442 (500-⅞)	
C CIRCLING	1460-1 499 (500-1)		1660-2 699 (700-2)	1700-2¼ 739 (800-2¼)

REIL Rwy 12
HIRL Rwy 12-30

FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 57920 W12A	APP CRS 114°	Rwy ldg 4099 TDZE 961 Apt Elev 961

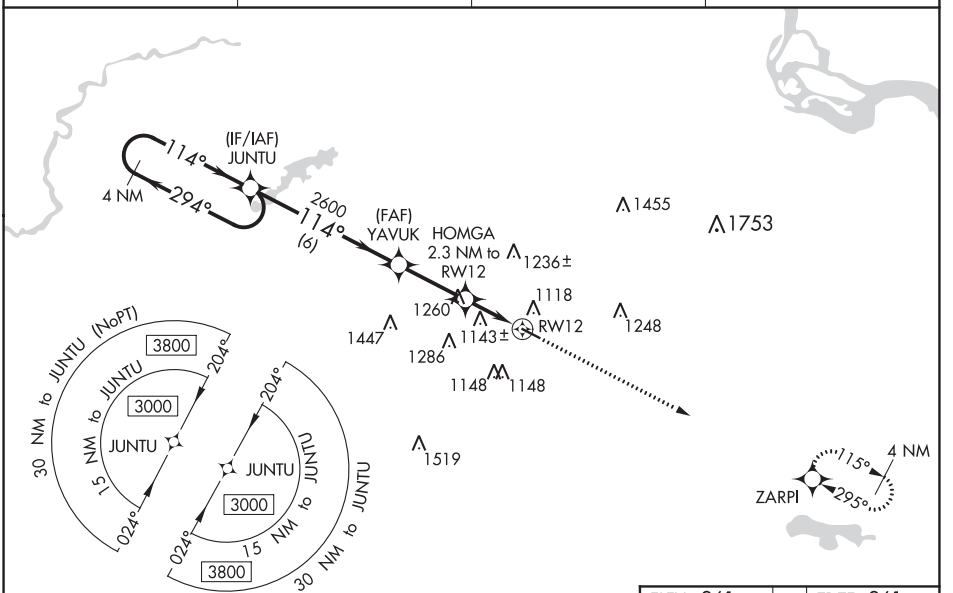
RNAV (GPS) RWY 12
AIRLAKE (LVN)

RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). Rwy 12 helicopter visibility reduction below 1 SM NA. Straight-in Rwy 12, Circling Rwy 12 at night, operational VGSI required, remain on or above VGSI glidepath until threshold.

MISSED APPROACH: Climb to 3600 direct ZARPI and hold.

AWOS-3	MINNEAPOLIS APP CON	CLNC DEL	UNICOM
118.0	134.7 284.7	118.95	123.0 (CTAF) L

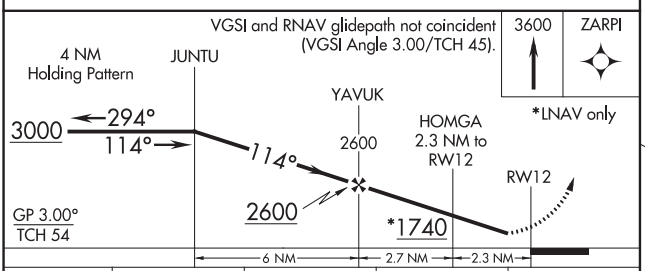


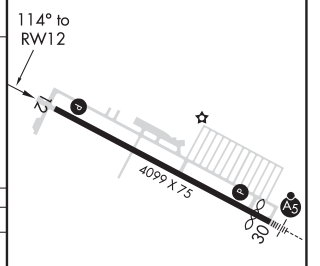
ELEV 961 D TDZE 961

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 45).

3600 ZARPI

*LNAV only





CATEGORY	A	B	C	D
LPV DA	1211-1 250 (300-1)			
LNAV/VNAV DA	1270-1 309 (400-1)			
LNAV MDA	1400-1 439 (500-1)		1400-1¼ 439 (500-1¼)	
C CIRCLING	1460-1 499 (500-1)		1660-2 699 (700-2)	1700-2¼ 739 (800-2¼)

REIL Rwy 12 L
HIRL Rwy 12-30 L

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

MINNEAPOLIS, MINNESOTA AL-6652 (FAA) 20254

RNAV (GPS) RWY 30
AIRLAKE (LVN)

WAAS CH 99328 W30A	APP CRS 295°	Rwy ldg 3707 TDZE 958 Apt Elev 961

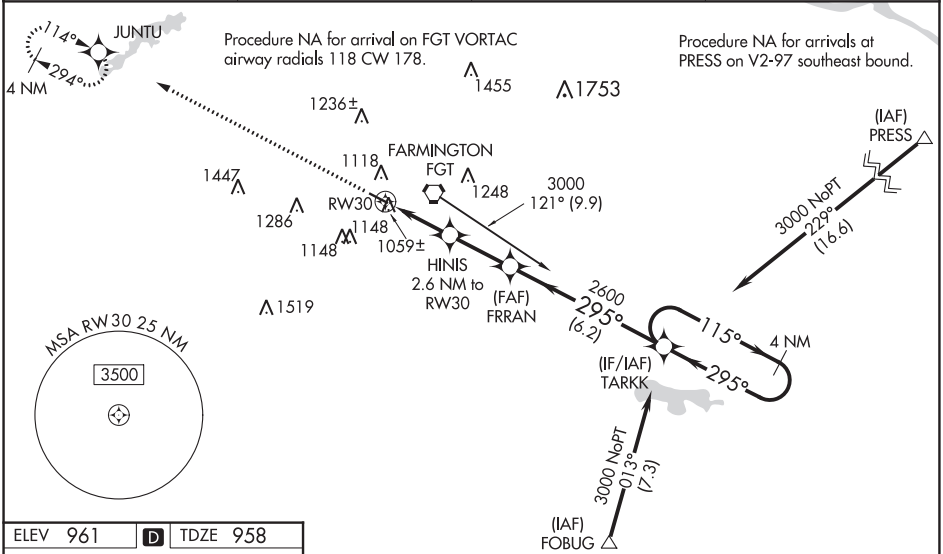
RNP APCH.

Baro-VNAV and VDP NA when using Minneapolis-St Paul Intl/Wold-Chamberlain altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 37°C. When local altimeter setting not received, use Minneapolis-St Paul Intl/Wold-Chamberlain altimeter setting; increase LPV DA to 1210 feet; increase LNAV/VNAV DA to 1298; increase all MDAs 60 feet. For inop ALS, increase LNAV/VNAV all Cats visibility to ⅞ SM and LNAV all Cats visibility to 1 SM. For inop ALS when using Minneapolis-St Paul Intl/Wold-Chamberlain altimeter setting, increase LNAV/VNAV all Cats visibility to 1, and LNAV Cat A/B to 1. Inoperative table does not apply to LPV. Rwy 30 helicopter visibility reduction below ¾ SM NA. When Circling to Rwy 12 at night, operational VGSI required, remain on or above VGSI glidepath until threshold.

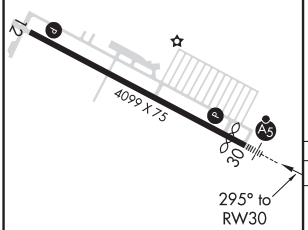
MALSR

MISSED APPROACH: Climb to 3000 direct JUNTU and hold.

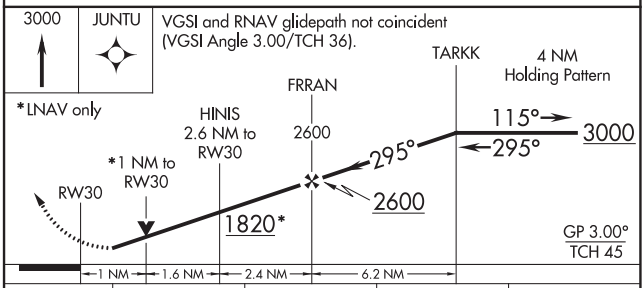
AWOS-3	MINNEAPOLIS APP CON	CLNC DEL	UNICOM
118.0	134.7 284.7	118.95	123.0 (CTAF)



ELEV 961 D TDZE 958



REIL Rwy 12
HIRL Rwy 12-30



CATEGORY	A	B	C	D
LPV DA	1158-¾ 200 (200-¾)			
LNAV/VNAV DA	1246-¾ 288 (300-¾)			
LNAV MDA	1320-¾ 362 (400-¾)			
C CIRCLING	1460-1 499 (500-1)		1660-2 699 (700-2)	1700-2¼ 739 (800-2¼)

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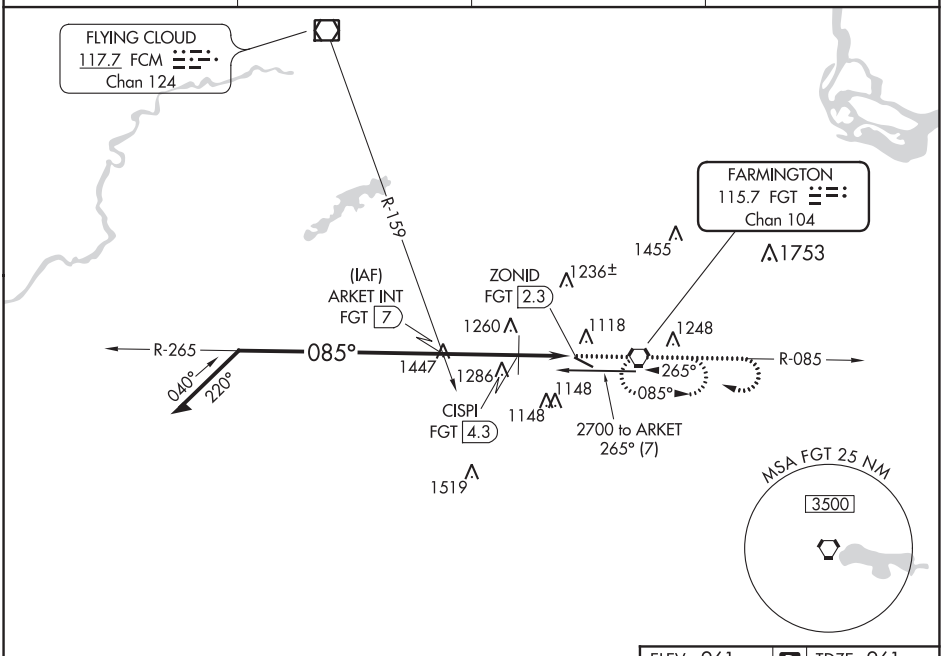
VORTAC FGT	APP CRS	Rwy ldg	4099
115.7	085°	TDZE	961
Chan 104		Apt Elev	961

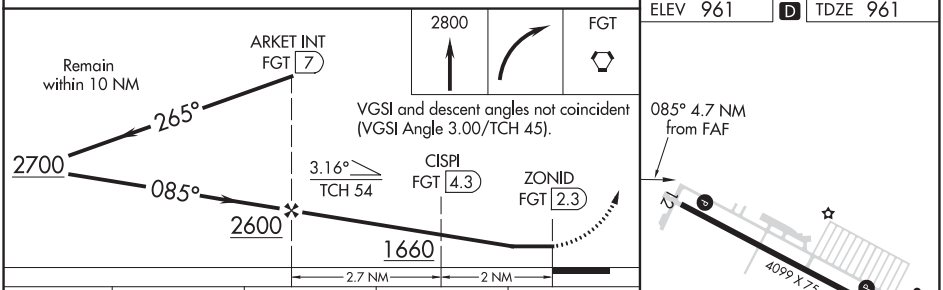
VOR RWY 12
AIRLAKE (LVN)

Rwy 12 helicopter visibility reduction below 1 SM NA.
Straight-in Rwy 12, Circling Rwy 12 at night, operational VGSI required, remain on or above VGSI glidepath until threshold.

MISSED APPROACH: Climb to 2800 then right turn direct FGT VORTAC and hold.

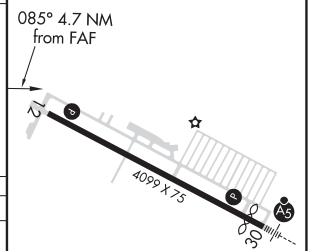
AWOS-3	MINNEAPOLIS APP CON	CLNC DEL	UNICOM
118.0	134.7 284.7	118.95	123.0 (CTAF) L





ELEV 961 D TDZE 961

085° 4.7 NM from FAF



REIL Rwy 12 L
HIRL Rwy 12-30 L

CATEGORY	A	B	C	D
S-12	1660-1 699 (700-1)		1660-2 699 (700-2)	
C CIRCLING	1660-1 699 (700-1)		1660-2 699 (700-2)	1700-2¼ 739 (800-2¼)
CISPI FIX MINIMUMS				
S-12	1520-1 559 (600-1)		1520-1⅝ 559 (600-1⅝)	
C CIRCLING	1520-1 559 (600-1)		1660-2 699 (700-2)	1700-2¼ 739 (800-2¼)

FAF to MAP 4.7 NM

Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

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MINNEAPOLIS, MINNESOTA AL-5202 (FAA) 20310

ILS or LOC RWY 27
ANOKA COUNTY-BLAINE (JANES FIELD) (ANE)

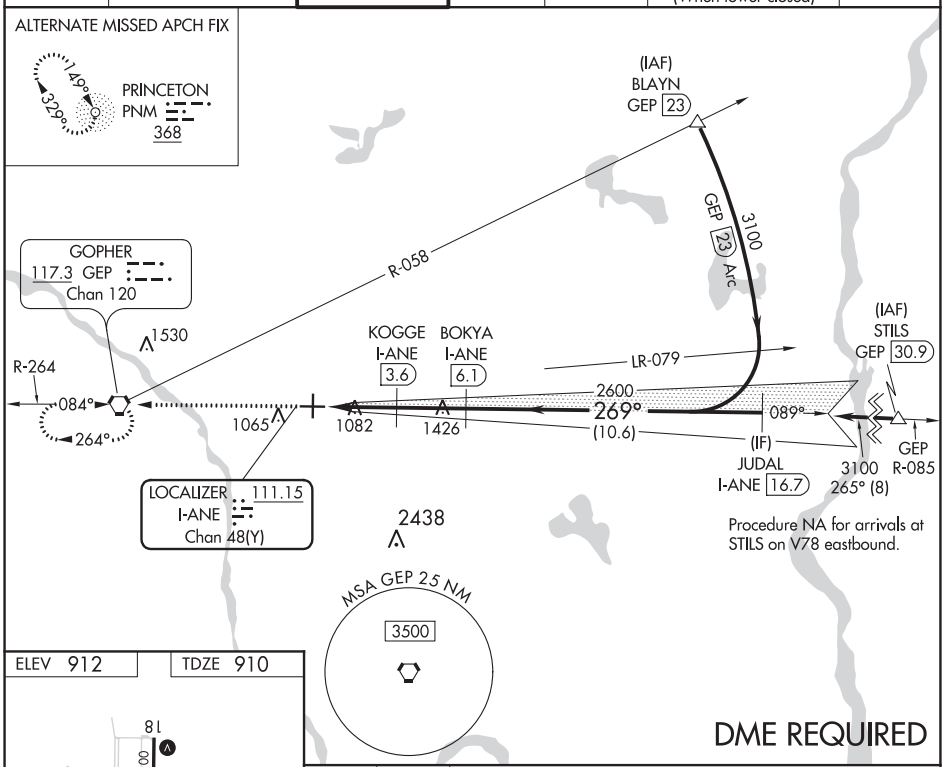
LOC/DME I-ANE	APP CRS	Rwy ldg	5000
111.15	269°	TDZE	910
Chan 48 (Y)		Apt Elev	912

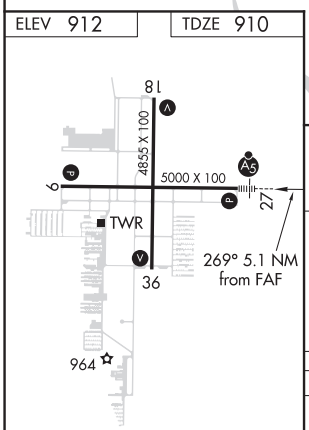
DME required.

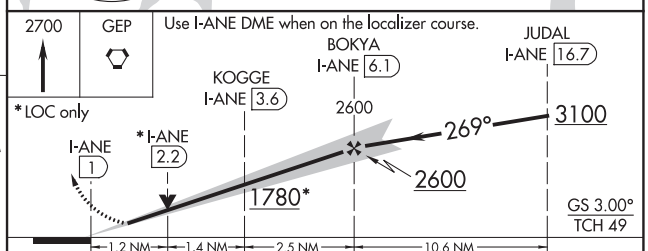
MALSR

MISSED APPROACH: Climb to 2700 direct GEP VORTAC and hold.

ATIS	MINNEAPOLIS APP CON	ANOKA TOWER*	GND CON	CLNC DEL	MINNEAPOLIS CLNC DEL	UNICOM
120.625	126.5 335.65	132.4 (CTAF) L	121.85	121.3	121.85 (When tower closed)	122.95







CATEGORY	A	B	C	D
S-ILS 27	1110-½ 200 (200-½)			
S-LOC 27	1340-½ 430 (500-½)		1340-¾ 430 (500-¾)	1340-1 430 (500-1)
C CIRCLING	1400-1 488 (500-1)		1460-1½ 548 (600-1½)	1580-2 668 (700-2)

HIRL Rwy 9-27 L
MIRL Rwy 18-36 L
REIL Rwys 9, 18, and 36 L

NC-1, 25 FEB 2021 to 22 APR 2021
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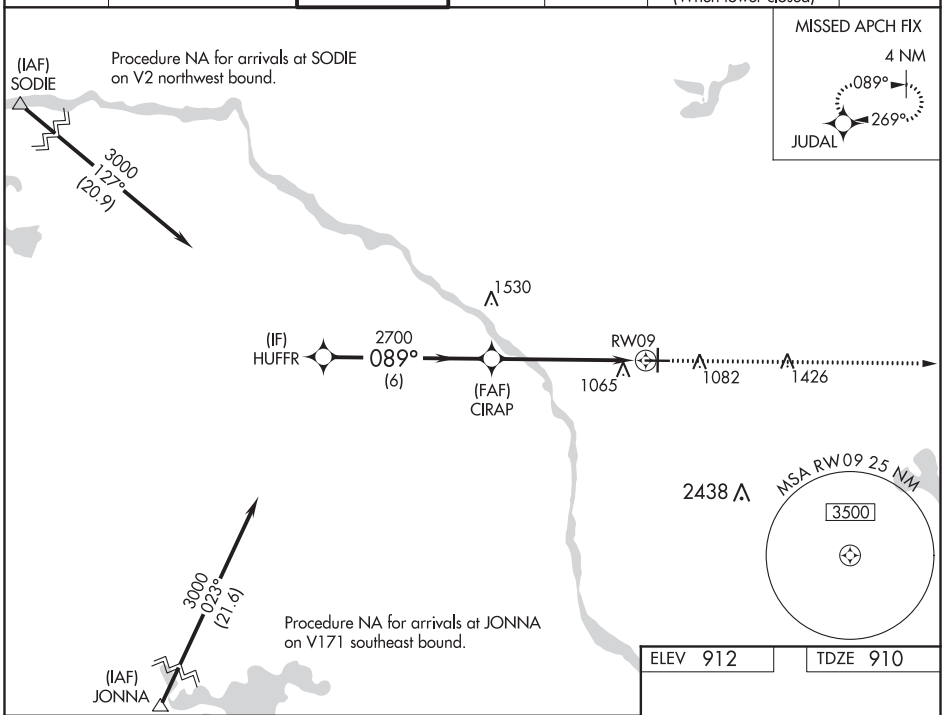
WAAS CH 82312 W09A	APP CRS 089°	Rwy ldg 5000 TDZE 910 Apt Elev 912

RNAV (GPS) RWY 9
ANOKA COUNTY-BLAINE (JANES FIELD) (ANE)

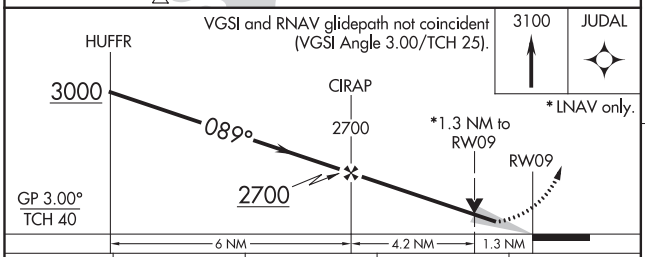
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA.

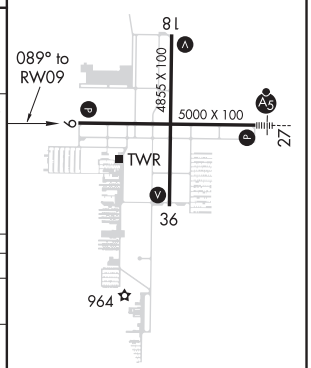
MISSED APPROACH: Climb to 3100 direct JUDAL and hold.

ATIS	MINNEAPOLIS APP CON	ANOKA TOWER★	GND CON	CLNC DEL	MINNEAPOLIS CLNC DEL	UNICOM
120.625	126.5 335.65	132.4 (CTAF) L	121.85	121.3	121.85 (When tower closed)	122.95



ELEV 912	TDZE 910





CATEGORY	A	B	C	D
LPV DA	1225-1 315 (400-1)			
LNAV/VNAV DA	1352-1⅜ 442 (500-1⅜)			
LNAV MDA	1340-1 430 (500-1)		1340-1¼ 430 (500-1¼)	
C CIRCLING	1400-1 488 (500-1)		1460-1½ 548 (600-1½)	1580-2 668 (700-2)

HIRL Rwy 9-27 L
MIRL Rwy 18-36 L
REIL Rwys 9, 18 and 36 L

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MINNEAPOLIS, MINNESOTA | AL-5202 (FAA) | 20254

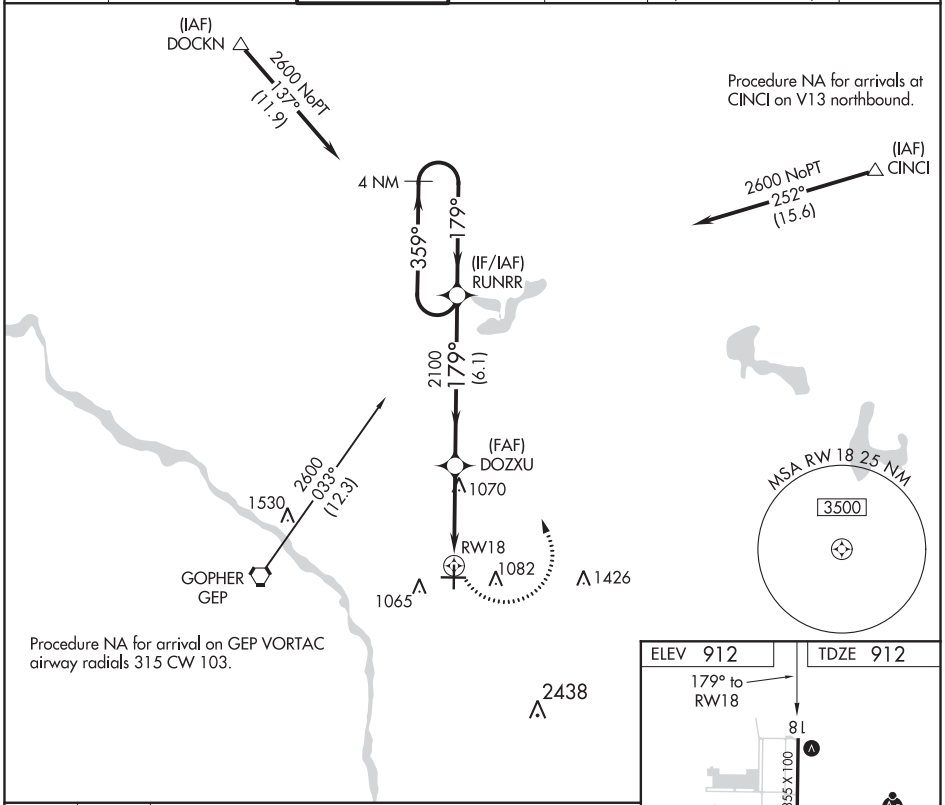
APP CRS	Rwy ldg	4855
179°	TDZE	912
	Apt Elev	912

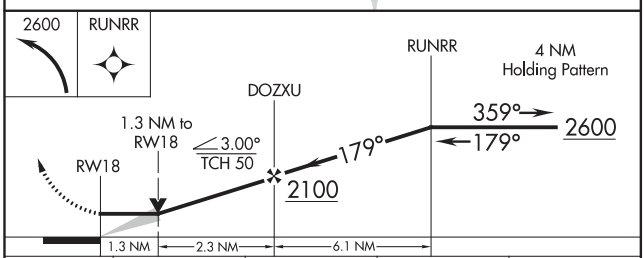
RNAV (GPS) RWY 18
ANOKA COUNTY-BLAINE (JANES FIELD) (ANE)

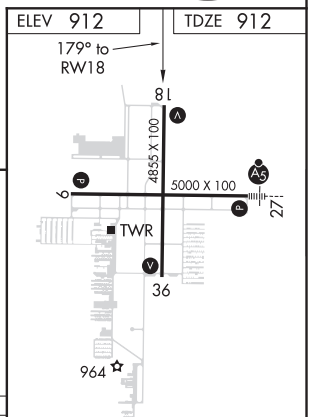
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing left turn to 2600 direct RUNRR and hold.

ATIS	MINNEAPOLIS APP CON	ANOKA TOWER★	GND CON	CLNC DEL	MINNEAPOLIS CLNC DEL	UNICOM
120.625	126.5 335.65	132.4 (CTAF) L	121.85	121.3	121.85 (When tower closed)	122.95







CATEGORY	A	B	C	D
LNAV MDA	1380-1 468 (500-1)		1380-1⅜ 468 (500-1⅜)	1380-1½ 468 (500-1½)
C CIRCLING	1400-1 488 (500-1)		1460-1½ 548 (600-1½)	1580-2 668 (700-2)

HIRL Rwy 9-27 L
MIRL Rwy 18-36 L
REIL Rwys 9, 18 and 36 L

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WAAS CH 78300 W27A	APP CRS 269°	Rwy ldg 5000 TDZE 910 Apt Elev 912

RNAV (GPS) RWY 27
ANOKA COUNTY-BLAINE (JANES FIELD) (ANE)

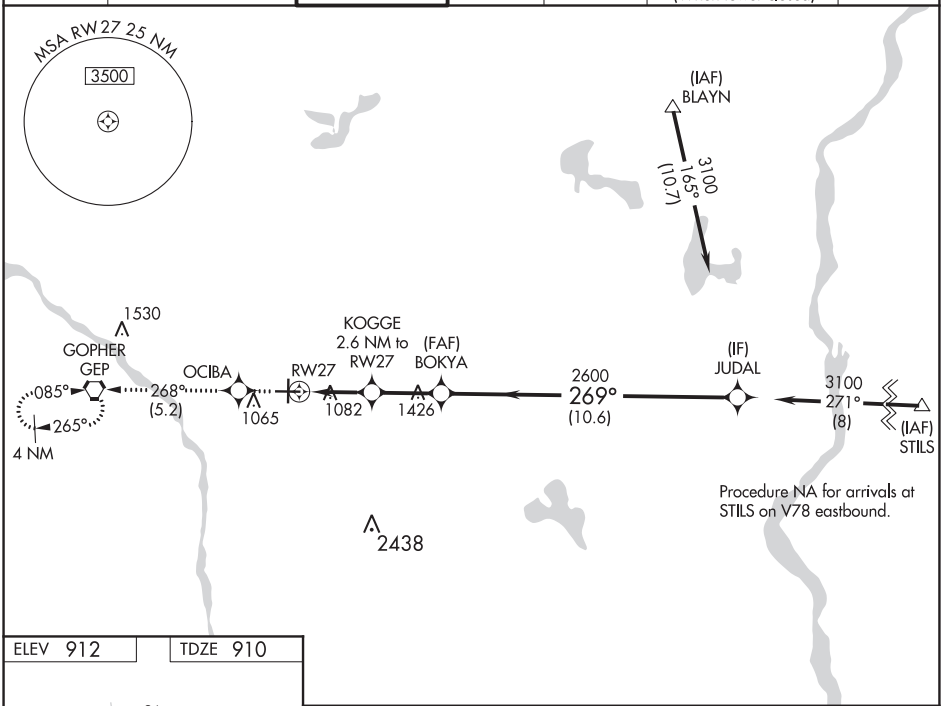
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 54°C. For inop ALS, increase LNAV/VNAV all Cats visibility to 1⅜ SM.

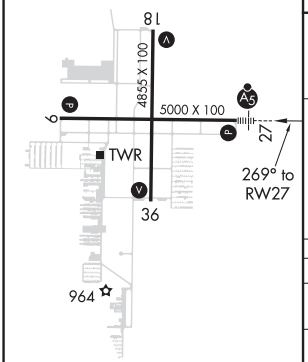
MALSR

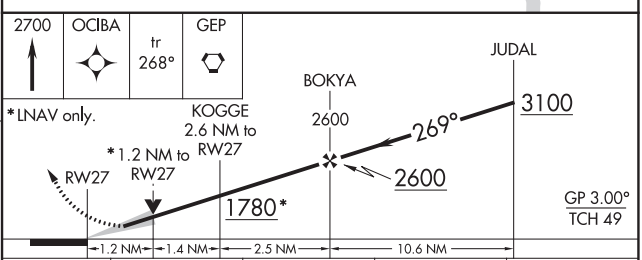
MISSED APPROACH: Climb to 2700 direct OCIBA and track 268° to GEP VORTAC and hold.

ATIS	MINNEAPOLIS APP CON	ANOKA TOWER*	GND CON	CLNC DEL	MINNEAPOLIS CLNC DEL	UNICOM
120.625	126.5 335.65	132.4 (CTAF) L	121.85	121.3	121.85 (When tower closed)	122.95



ELEV 912	TDZE 910





CATEGORY	A	B	C	D
LPV DA	1160-½ 250 (300-½)			
LNAV/VNAV DA	1371-1 461 (500-1)			
LNAV MDA	1340-½ 430 (500-½)		1340-¾ 430 (500-¾)	1340-1 430 (500-1)
C CIRCLING	1400-1 488 (500-1)		1460-1½ 548 (600-1½)	1580-2 668 (700-2)

HIRL Rwy 9-27 L
MIRL Rwy 18-36 L
REIL Rwys 9, 18, and 36 L

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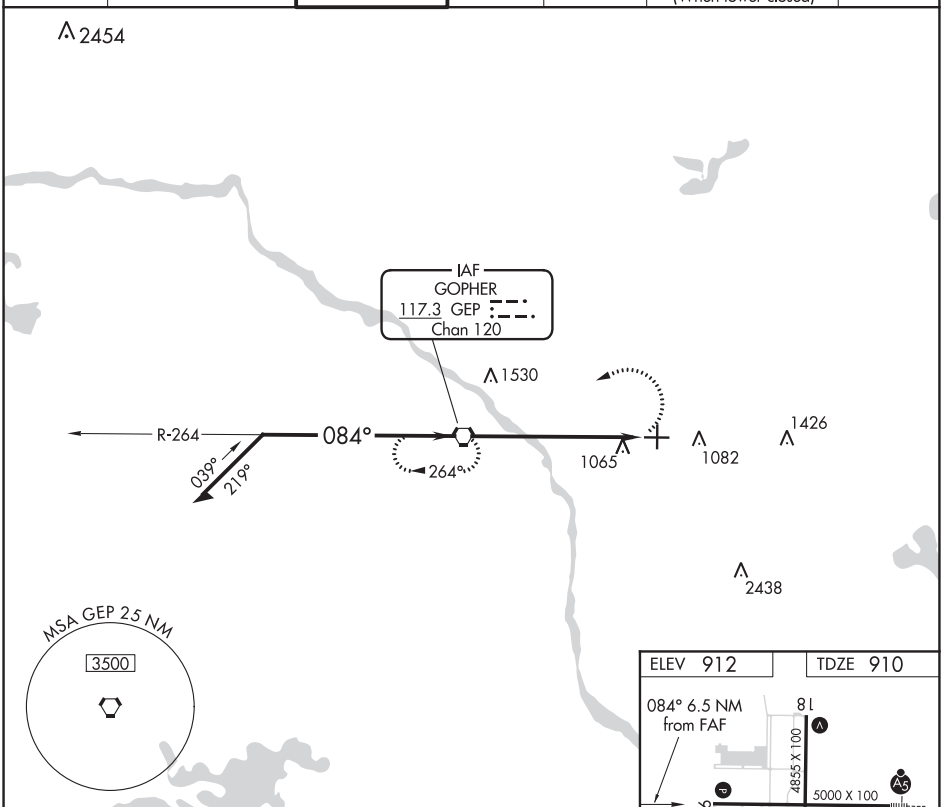
VOR RWY 9

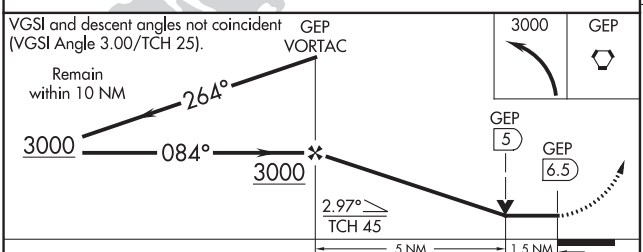
ANOKA COUNTY-BLAINE (JANES FIELD) (ANE)

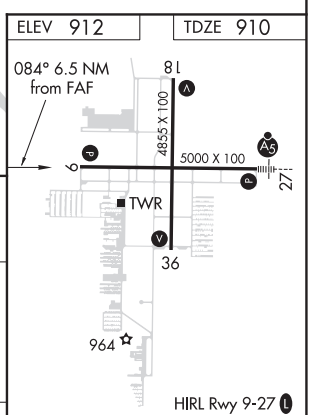
VORTAC GEP	APP CRS	Rwy ldg	5000
117.3	084°	TDZE	910
Chan 120		Apt Elev	912

MISSED APPROACH: Climbing left turn to 3000 direct GEP VORTAC and hold.

ATIS	MINNEAPOLIS APP CON	ANOKA TOWER*	GND CON	CLNC DEL	MINNEAPOLIS CLNC DEL	UNICOM
120.625	126.5 335.65	132.4 (CTAF) L	121.85	121.3	121.85 (When tower closed)	122.95







CATEGORY	A	B	C	D
S-9	1400-1	490 (500-1)	1400-1⅜ 490 (500-1⅜)	1400-1½ 490 (500-1½)
C CIRCLING	1400-1	488 (500-1)	1460-1½ 548 (600-1½)	1580-2 668 (700-2)

FAF to MAP 6.5 NM					
Knots	60	90	120	150	180
Min:Sec	6:30	4:20	3:15	2:36	2:10

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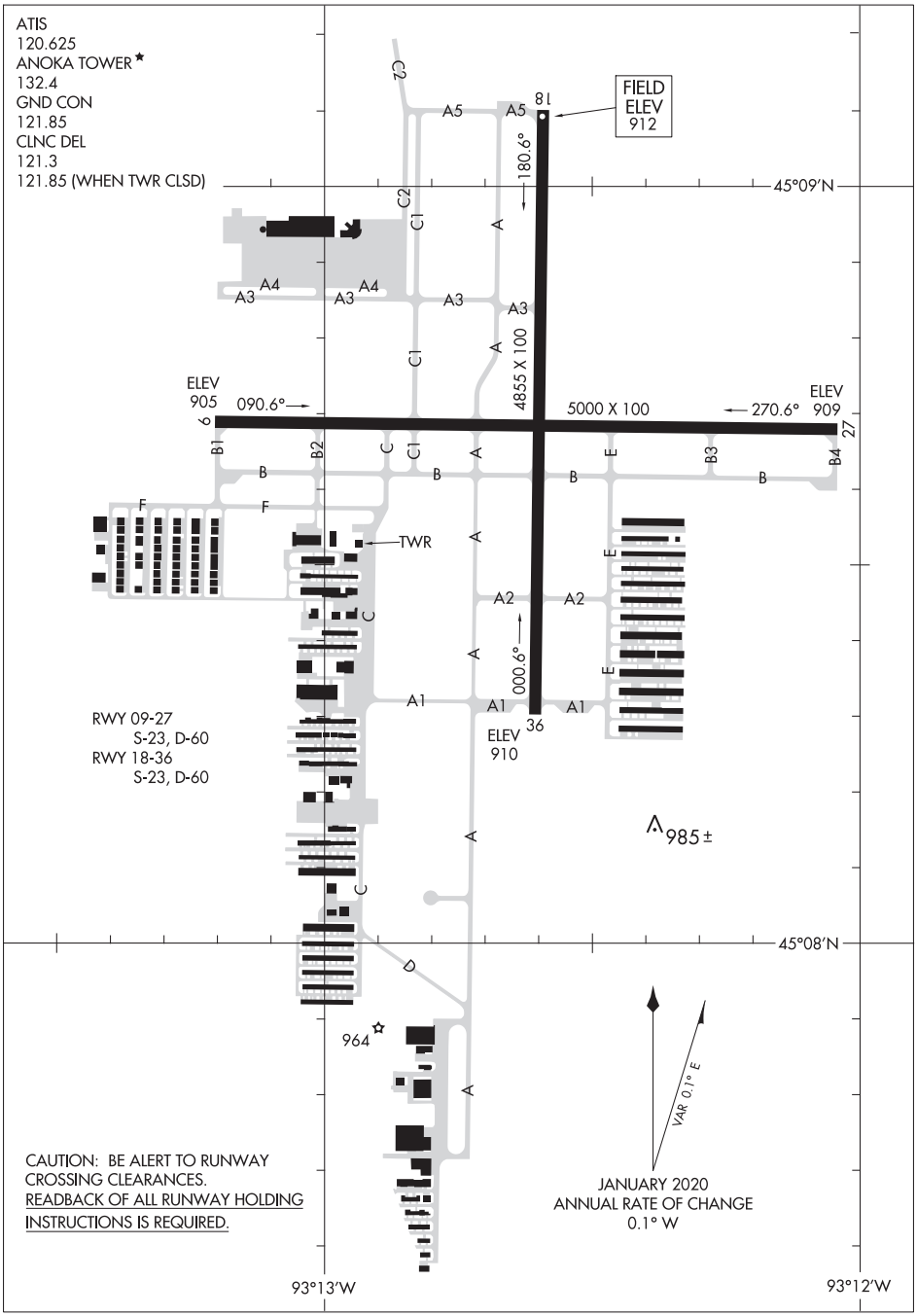
NC-1, 25 FEB 2021 to 22 APR 2021



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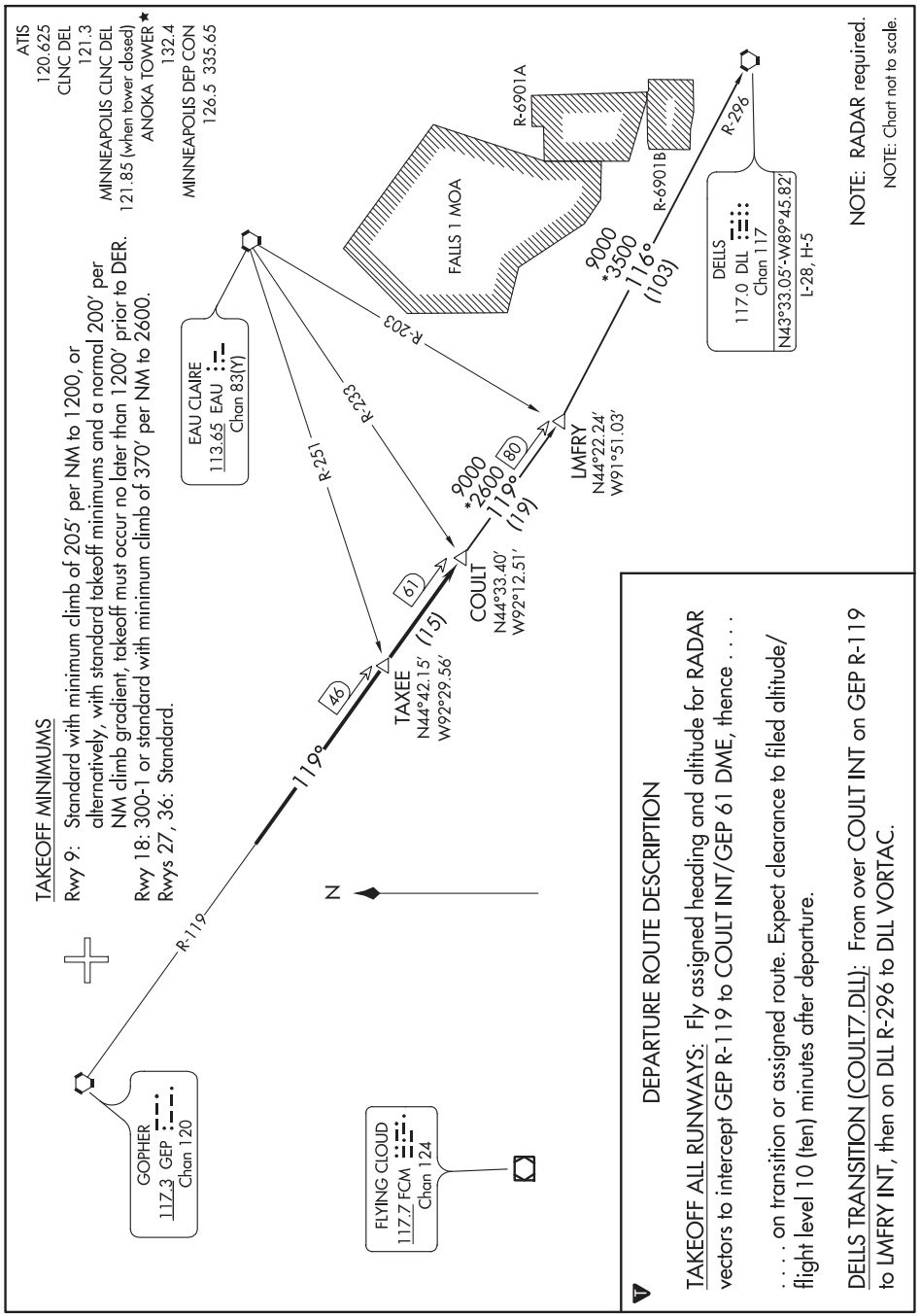
(COULT7.COULT) 19339

COULT SEVEN DEPARTURE

ANOKA COUNTY-BLAINE (JANES FIELD) (ANE)
AL-5202 (FAA)
MINNEAPOLIS, MINNESOTA



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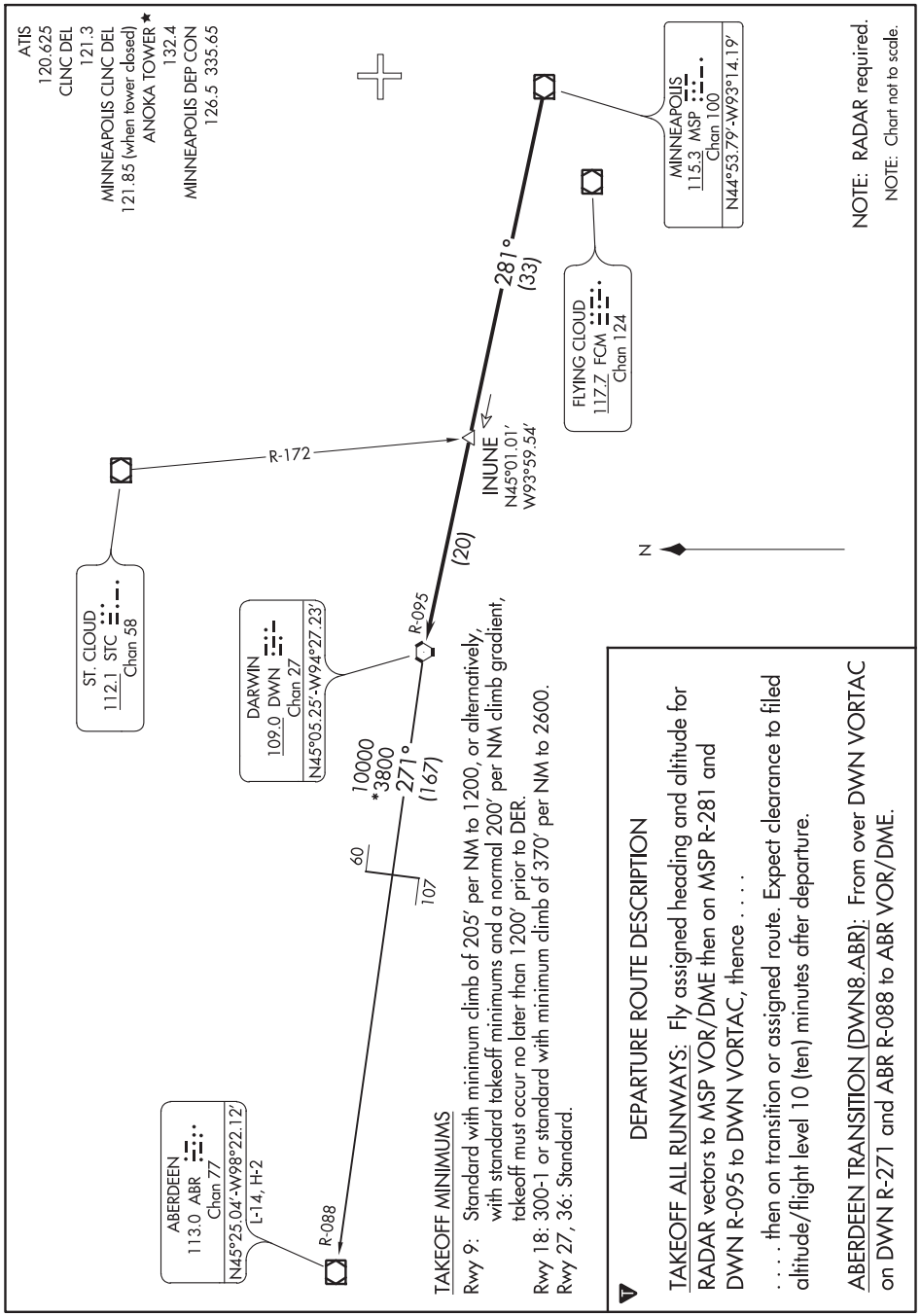
COULT SEVEN DEPARTURE

MINNEAPOLIS, MINNESOTA
ANOKA COUNTY-BLAINE (JANES FIELD) (ANE)

(COULT7.COULT) 29MAR18

DARWIN EIGHT DEPARTURE



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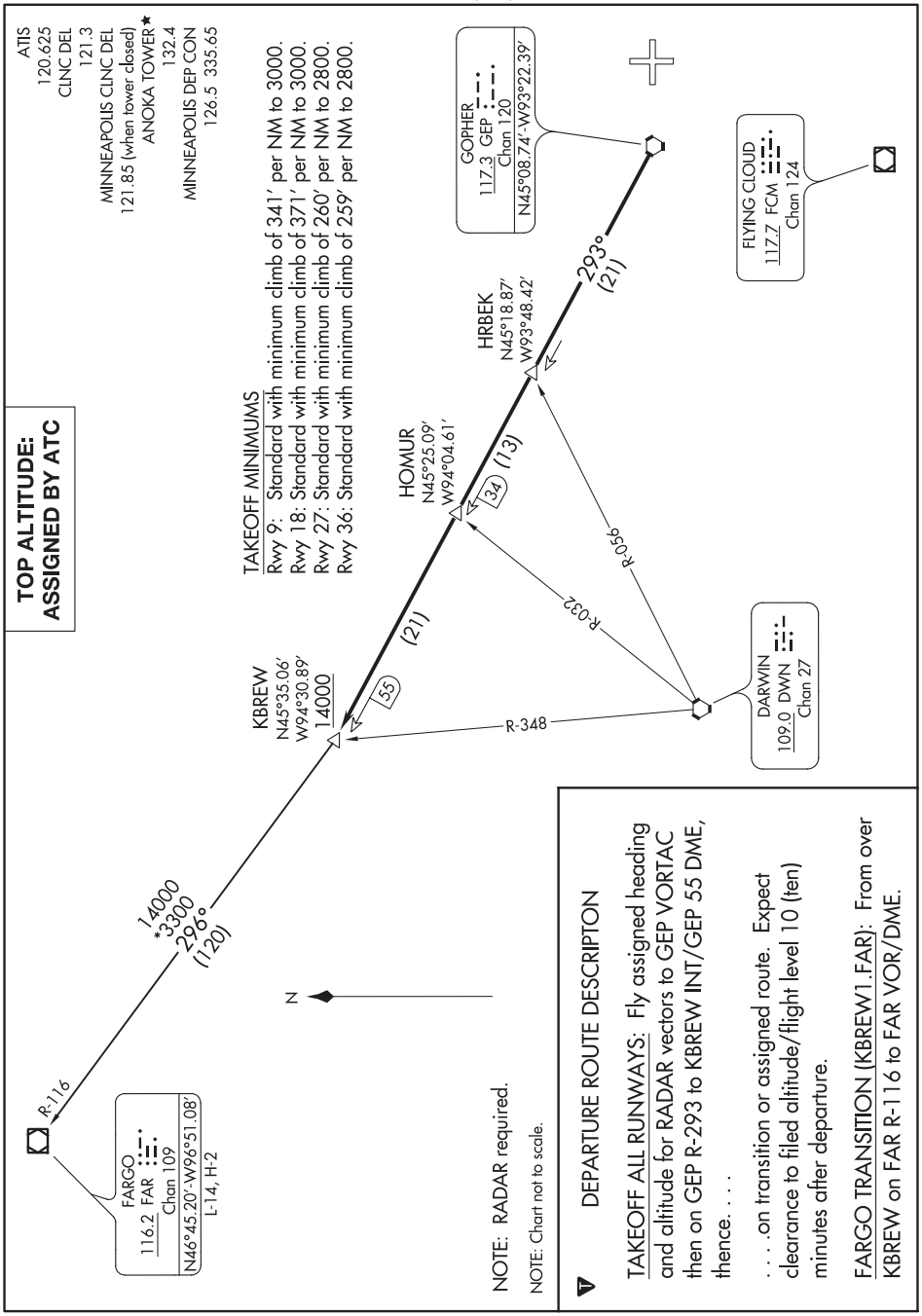
(KBREW1.KBREW) 20086

KBREW ONE DEPARTURE

ANOKA COUNTY-BLAINE (JANES FIELD) (ANE)
MINNEAPOLIS, MINNESOTA

AL-5202 (FAA)



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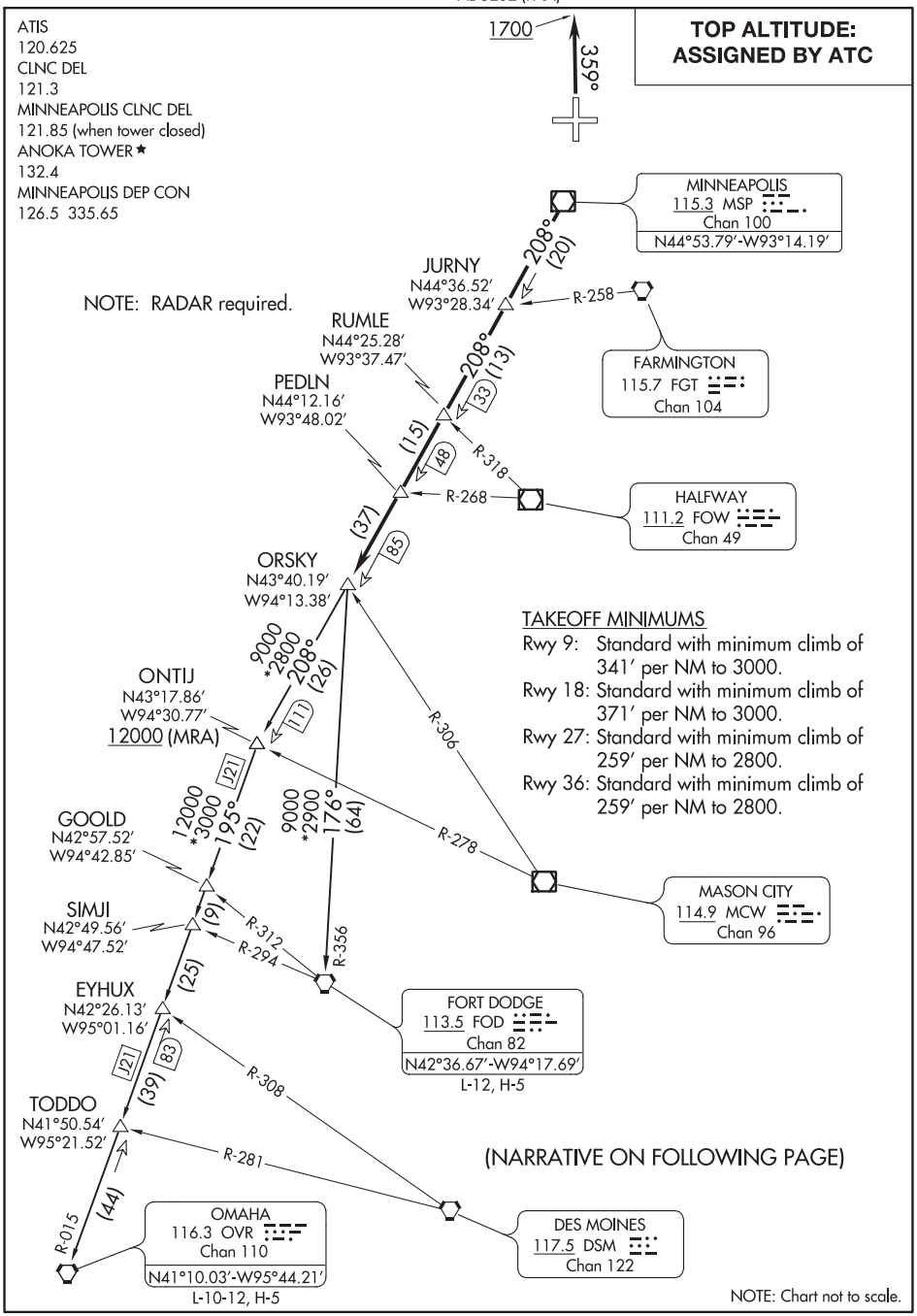
KBREW ONE DEPARTURE

MINNEAPOLIS, MINNESOTA

(KBREW1.KBREW) 01FEB18

ANOKA COUNTY-BLAINE (JANES FIELD) (ANE)

ORSKY TWO DEPARTURE



ORSKY TWO DEPARTURE
MINNEAPOLIS, MINNESOTA

DEPARTURE ROUTE DESCRIPTON

TAKEOFF RUNWAYS 9, 18, 27: Fly assigned heading and altitude for RADAR vectors to MSP VOR/DME then on MSP R-208 to ORSKY INT/MSP 85 DME. Thence . . . .
TAKEOFF RUNWAY 36: Climb heading 359° to 1700 before proceeding southeast bound for RADAR vectors to MSP VOR/DME then on MSP R-208 to ORSKY INT/MSP 85 DME, thence. . . .

. . . .on transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

FORT DODGE TRANSITION (ORSKY2.FOD): From over ORSKY INT on FOD R-356 to FOD VORTAC.
OMAHA TRANSITION (ORSKY2.OVR): From over ORSKY INT on MSP R-208 to ONTIJ INT, then on OVR R-015 to OVR VORTAC.

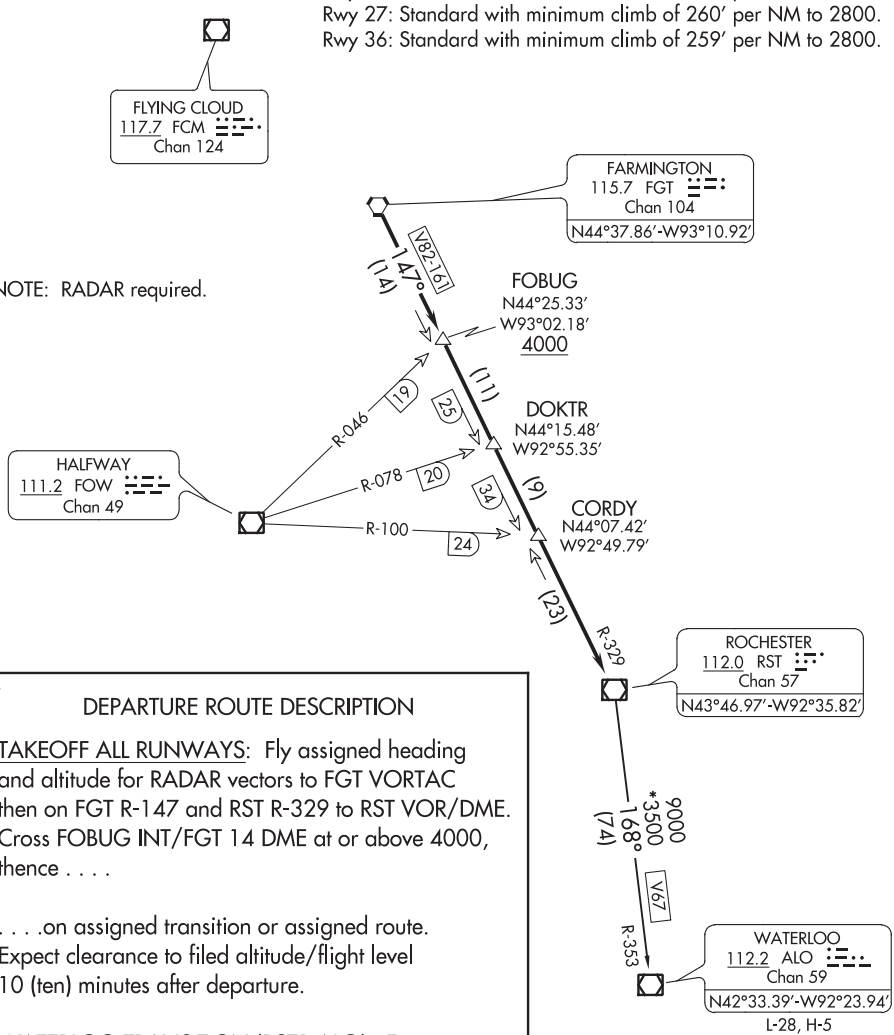
NC-1, 25 FEB 2021 to 22 APR 2021

ATIS
120.625
CLNC DEL
121.3
MINNEAPOLIS CLNC DEL
121.85 (when tower closed)
MINNEAPOLIS DEP CON
126.5 335.65
ANOKA TOWER★
132.4

TOP ALTITUDE:
(JETS) 7000/
(PROPS) 5000

TAKEOFF MINIMUMS
Rwy 9: Standard with minimum climb of 341′ per NM to 3000.
Rwy 18: Standard with minimum climb of 371′ per NM to 3000.
Rwy 27: Standard with minimum climb of 260′ per NM to 2800.
Rwy 36: Standard with minimum climb of 259′ per NM to 2800.

NOTE: RADAR required.



DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: Fly assigned heading and altitude for RADAR vectors to FGT VORTAC then on FGT R-147 and RST R-329 to RST VOR/DME. Cross FOBUG INT/FGT 14 DME at or above 4000, thence . . . .

. . . .on assigned transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

WATERLOO TRANSITION (RST1.ALO): From over RST VOR/DME on RST R-168 and ALO R-353 to ALO VOR/DME.

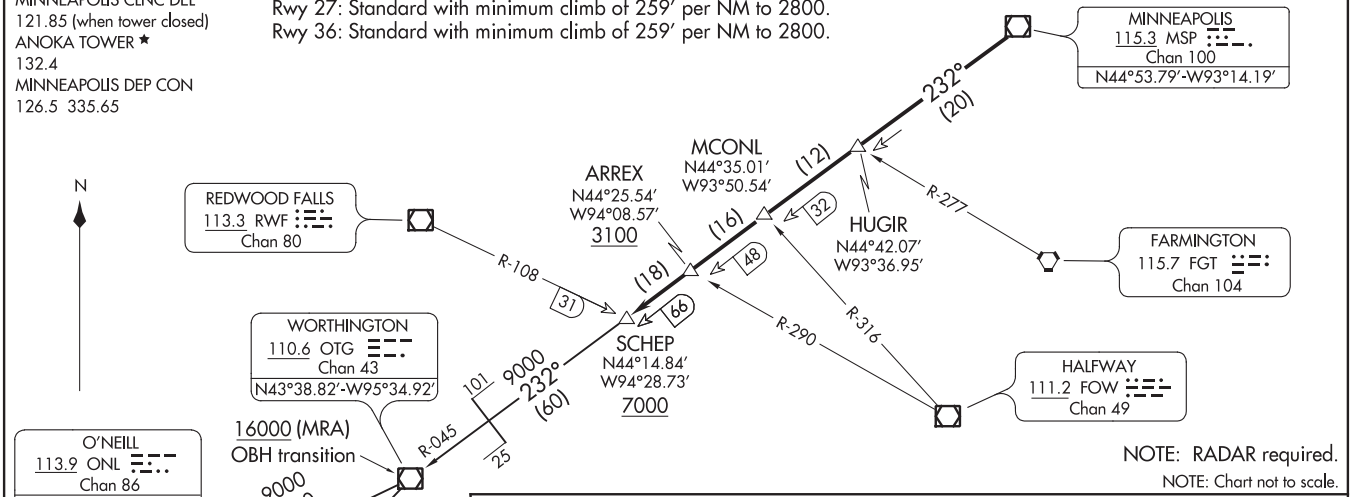
NOTE: Chart not to scale.

ATIS
120.625
CLNC DEL
121.3
MINNEAPOLIS CLNC DEL
121.85 (when tower closed)
ANOKA TOWER ★
132.4
MINNEAPOLIS DEP CON
126.5 335.65

TAKEOFF MINIMUMS

Rwy 9: Standard with minimum climb of 341′ per NM to 3000.
Rwy 18: Standard with minimum climb of 371′ per NM to 3000.
Rwy 27: Standard with minimum climb of 259′ per NM to 2800.
Rwy 36: Standard with minimum climb of 259′ per NM to 2800.

TOP ALTITUDE: ASSIGNED BY ATC



NOTE: RADAR required.
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTON

TAKEOFF ALL RUNWAYS: Fly assigned heading and altitude for RADAR vectors to MSP VOR/DME then on MSP R-232 to SCHEP INT/MSP 66 DME, thence . . . .

. . . .on transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

O'NEILL TRANSITION (SCHEP9.ONL): From over SCHEP INT on MSP R-232 and OTG R-045 to OTG VOR/DME, then on OTG R-236 and ONL R-052 to ONL VORTAC.

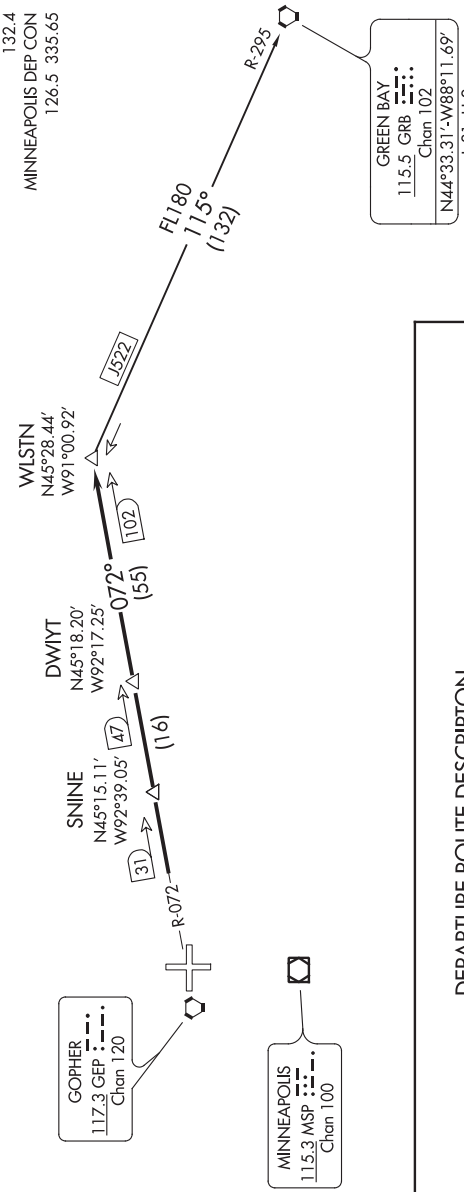
WOLBACH TRANSITION (SCHEP9.OBH): From over SCHEP INT on MSP R-232 and OTG R-045 to OTG VOR/DME, then on OTG R-215 and OBH R-034 to OBH VORTAC.

WLSTN SEVEN DEPARTURE

ATIS
120.625
CLNC DEL
121.3
MINNEAPOLIS CLNC DEL
121.85 (when tower closed)
ANOKA TOWER ★
132.4
MINNEAPOLIS DEP CON
126.5 335.65

TOP ALTITUDE:
(JETS) 7000/
(PROPS) 5000

TAKEOFF MINIMUMS
Rwy 9: Standard with minimum climb of 341′ per NM to 3000.
Rwy 18: Standard with minimum climb of 371′ per NM to 3000.
Rwy 27: Standard with minimum climb of 259′ per NM to 2800.
Rwy 36: Standard with minimum climb of 259′ per NM to 2800.



NOTE: RADAR required.
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTON

TAKEOFF ALL RUNWAYS: Fly assigned heading and altitude for RADAR vectors to GEP R-072 to WLSTN/GEP 102 DME. Thence . . . .

. . . .on assigned transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

GREEN BAY TRANSITION (WLSTN7.GRB): From over WLSTN on GRB R-295 to GRB VORTAC.

(ZMBRO7.ZMBRO) 20086

ZMBRO SEVEN DEPARTURE

ANOKA COUNTY-BLAINE (JANES FIELD) (ANE)
AL-5202 (FAA)
MINNEAPOLIS, MINNESOTA

DEPARTURE ROUTE DESCRIPTON

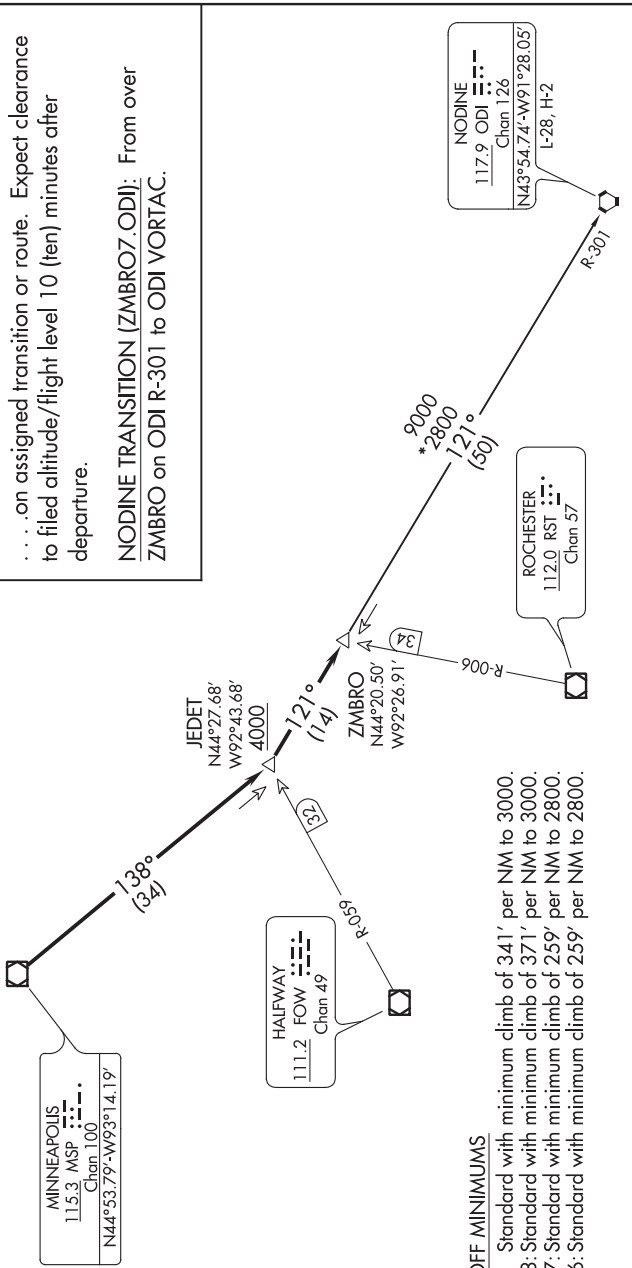
TAKEOFF ALL RUNWAYS: Fly assigned heading and altitude for RADAR vectors to MSP VOR/DME then on MSP R-138 to cross JEDET INT/MSP 34 DME, at or above 4000; then on ODI R-301 to ZMBRO INT/ ODI 50 DME, thence . . . .

. . . .on assigned transition or route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

NODINE TRANSITION (ZMBRO7.ODI): From over ZMBRO on ODI R-301 to ODI VORTAC.

TOP ALTITUDE: (JETS) 7000/ (PROPS) 5000

ATIS
120.625
CLNC DEL
121.3
MINNEAPOLIS CLNC DEL
121.85 (when tower closed)
ANOKA TOWER ★
132.4
MINNEAPOLIS DEP CON
126.5 335.65



TAKEOFF MINIMUMS
Rwy 9: Standard with minimum climb of 341' per NM to 3000.
Rwy 18: Standard with minimum climb of 371' per NM to 3000.
Rwy 27: Standard with minimum climb of 259' per NM to 2800.
Rwy 36: Standard with minimum climb of 259' per NM to 2800.

NOTE: RADAR required.

NOTE: Chart not to scale.

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ZMBRO SEVEN DEPARTURE

MINNEAPOLIS, MINNESOTA
ANOKA COUNTY-BLAINE (JANES FIELD) (ANE)

(ZMBRO7.ZMBRO) 17AUG17

APP CRS	Rwy ldg	3508
139°	TDZE	869
	Apt Elev	869

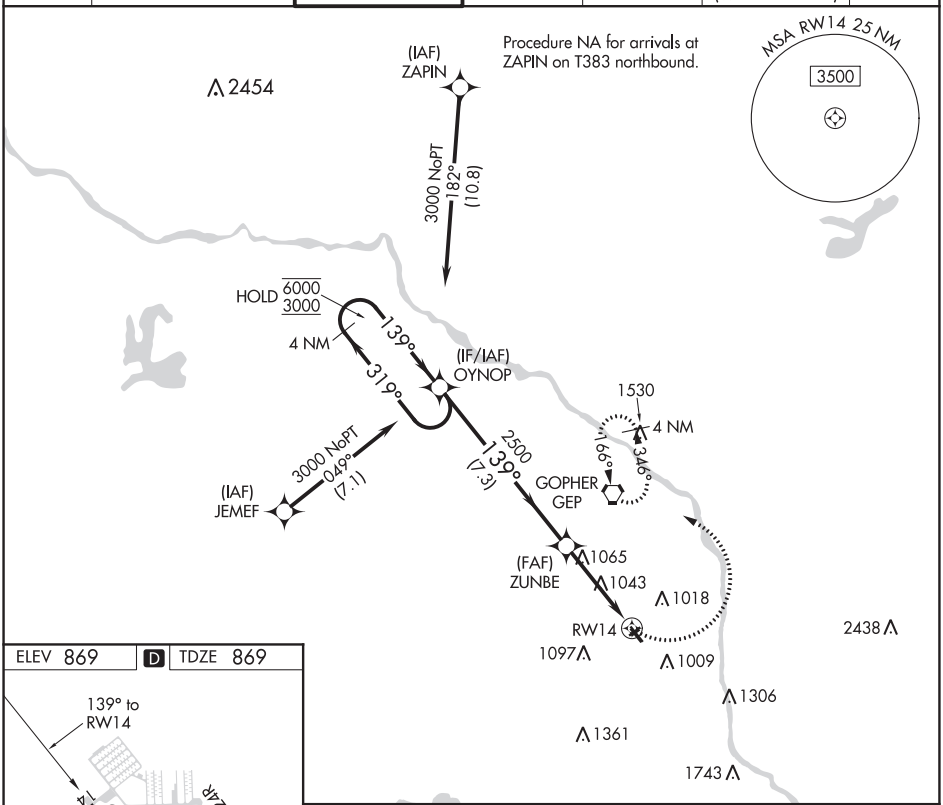
RNAV (GPS) RWY 14
CRYSTAL (MIC)

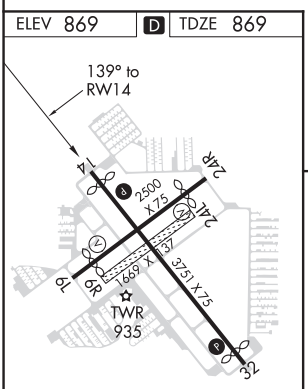
RNP APCH.

Circling NA to Rwys 6R and 24L.
Rwy 14 helicopter visibility reduction below ¾ SM NA.

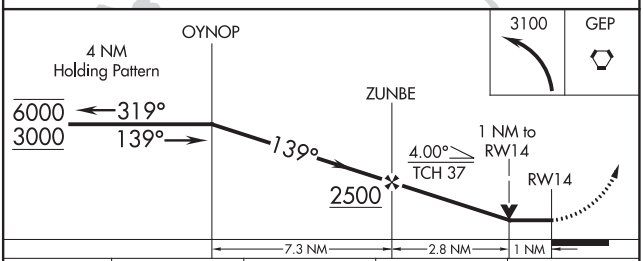
MISSED APPROACH: Climbing left turn to 3100 direct GEP VORTAC and hold, continue climb-in-hold to 3100.

ATIS	MINNEAPOLIS APP CON	CRYSTAL TOWER★	GND CON	CLNC DEL	CLNC DEL (When twr closed)	UNICOM
124.475	126.5 335.65	120.7 (CTAF) L	121.6	121.6	121.6	122.95





REIL Rwys 14 and 32 L
MIRL Rwys 6L-24R and 14-32 L



CATEGORY	A	B	C	D
LNAV MDA	1320-1 451 (500-1)		NA	
C CIRCLING	1340-1 471 (500-1)	1360-1 491 (500-1)	NA	

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MINNEAPOLIS, MINNESOTA AL-5158 (FAA) 21056

RNAV (GPS) RWY 32
CRYSTAL (MIC)

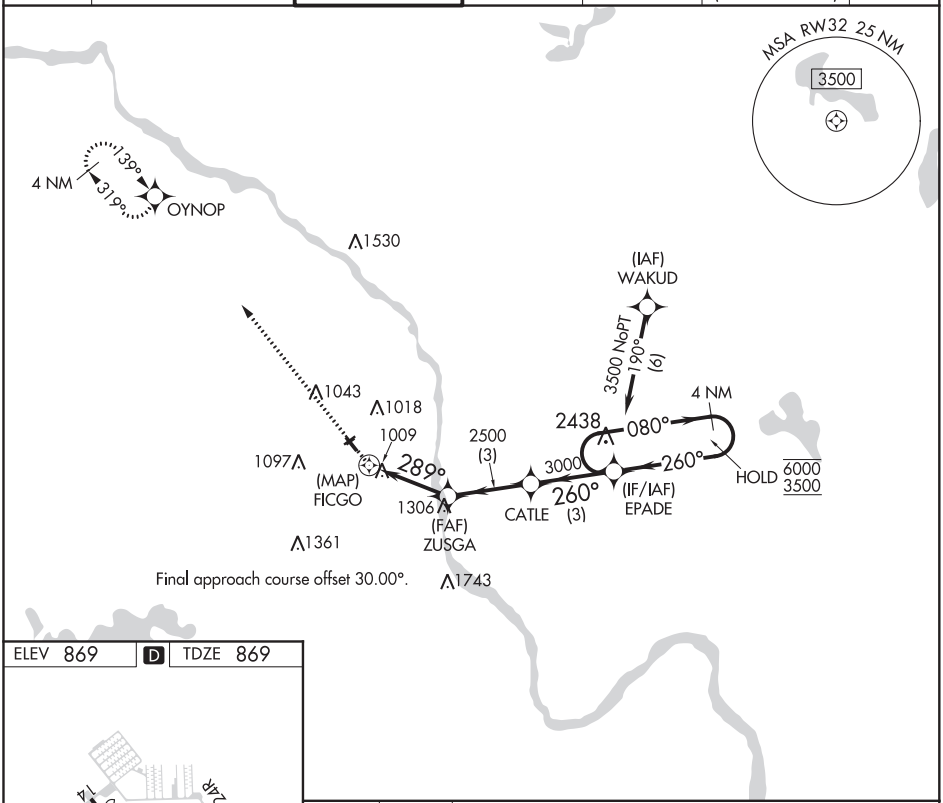
APP CRS	Rwy ldg	3509
289°	TDZE	869
	Apt Elev	869

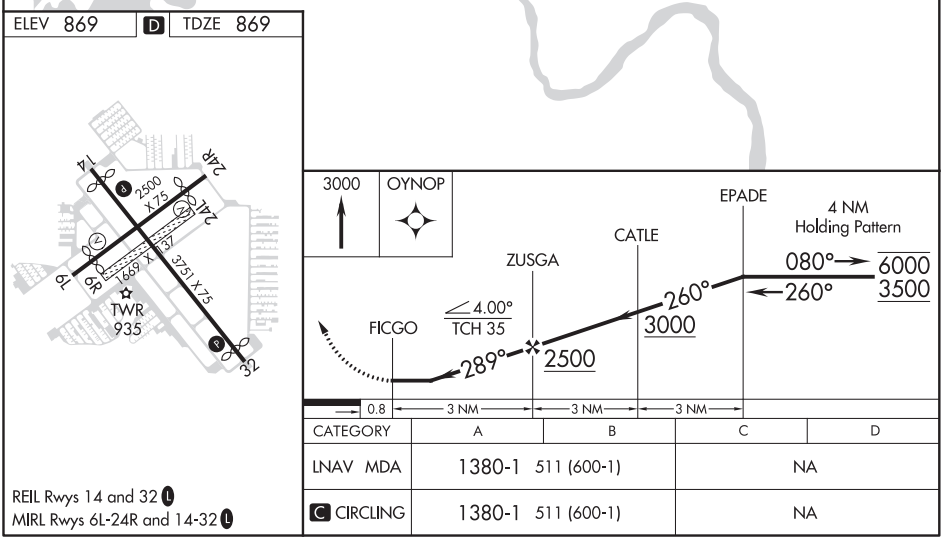
RNP APCH.

Circling NA to Rwys 6R and 24L.
Rwy 32 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3000 direct OYNOP and hold.

ATIS	MINNEAPOLIS APP CON	CRYSTAL TOWER★	GND CON	CLNC DEL	CLNC DEL (When twr closed)	UNICOM
124.475	126.5 335.65	120.7 (CTAF) L	121.6	121.6	121.6	122.95





CATEGORY	A	B	C	D
LNAV MDA	1380-1 511 (600-1)		NA	
C CIRCLING	1380-1 511 (600-1)		NA	

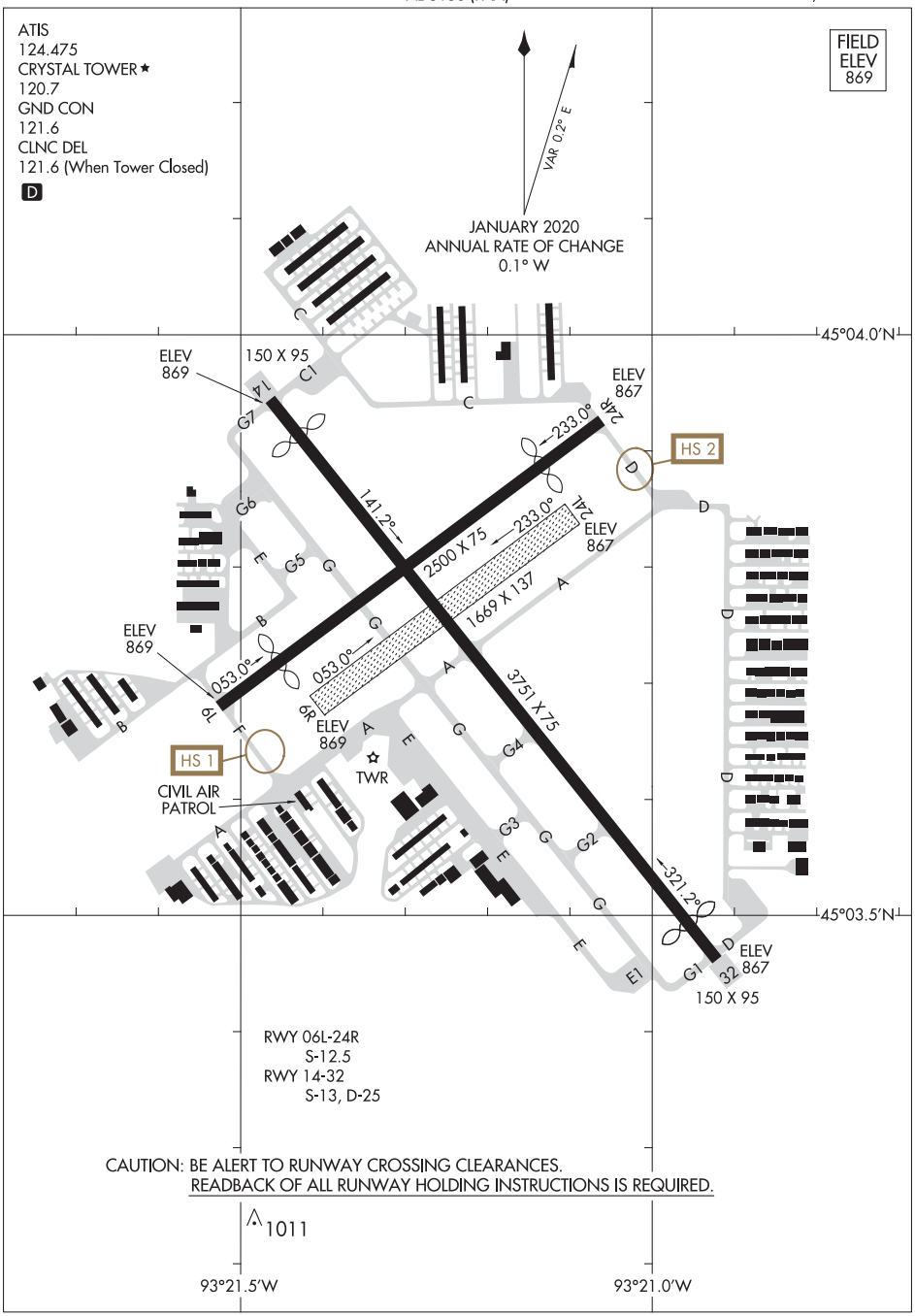
REIL Rwys 14 and 32 L
MIRL Rwys 6L-24R and 14-32 L

MINNEAPOLIS, MINNESOTA
Orig 31DEC20

45°04′N-93°21′W

CRYSTAL (MIC)
RNAV (GPS) RWY 32

NC-1, 25 FEB 2021 to 22 APR 2021



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LOC I-FCM	APP CRS	Rwy ldg / TDZE / Apt Elev
109.7	098°	5000 / 905 / 906

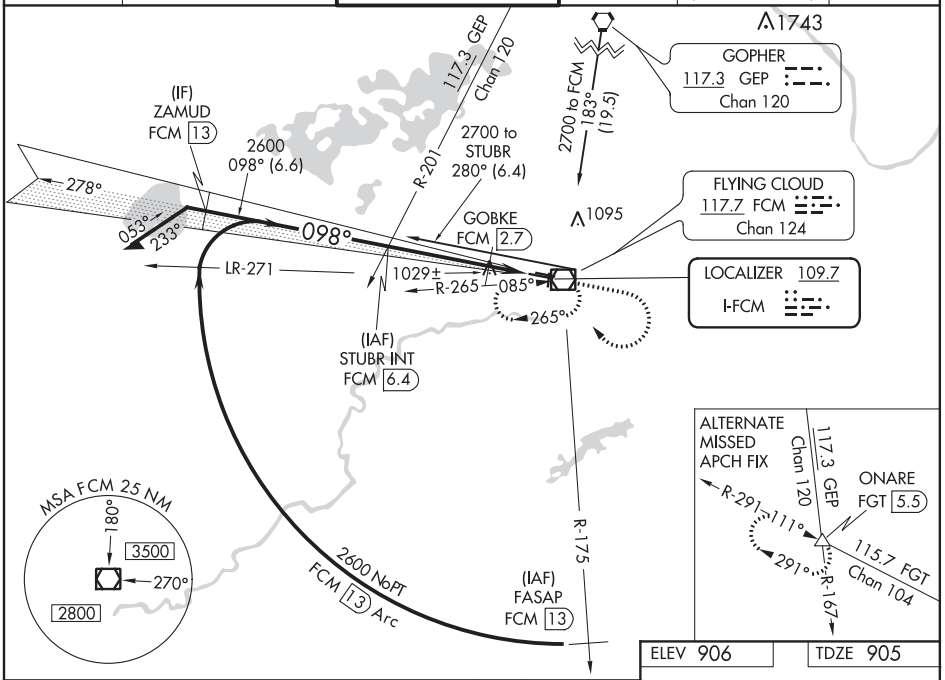
ILS or LOC RWY 10R
FLYING CLOUD (FCM)

When local altimeter setting not received, use Minneapolis-St Paul Intl/Wold Chamberlain altimeter setting and increase all DA 34 feet and all MDA 40 feet, increase S-LOC Cat C and D visibility ¼ mile, GOBKE fix minimums: Increase S-LOC Cat C visibility ¼ mile. Night Landing: Rwy 18/36 NA.

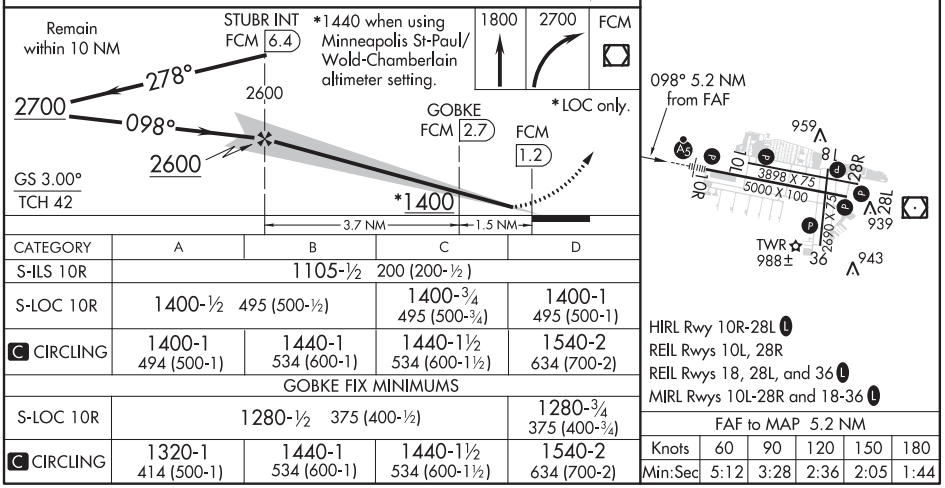
MALSR

MISSED APPROACH: Climb to 1800 then climbing right turn to 2700 direct FCM VOR/DME and hold, continue climb-in-hold to 2700.

ATIS	MINNEAPOLIS APP CON	FLYING CLOUD TOWER ★	GND CON	CLNC DEL	UNICOM
124.9	134.7 284.7	119.15 (CTAF) L	121.7	121.7 (When twr closed)	122.95



ELEV 906 TDZE 905



CATEGORY	A	B	C	D
S-ILS 10R	1105-½ 200 (200-½)			
S-LOC 10R	1400-½ 495 (500-½)		1400-¾ 495 (500-¾)	1400-1 495 (500-1)
C CIRCLING	1400-1 494 (500-1)	1440-1 534 (600-1)	1440-1½ 534 (600-1½)	1540-2 634 (700-2)
GOBKE FIX MINIMUMS				
S-LOC 10R	1280-½ 375 (400-½)			1280-¾ 375 (400-¾)
C CIRCLING	1320-1 414 (500-1)	1440-1 534 (600-1)	1440-1½ 534 (600-1½)	1540-2 634 (700-2)

HIRL Rwy 10R-28L L
REIL Rwys 10L, 28R
REIL Rwys 18, 28L, and 36 L
MIRL Rwys 10L-28R and 18-36 L

FAF to MAP 5.2 NM					
Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

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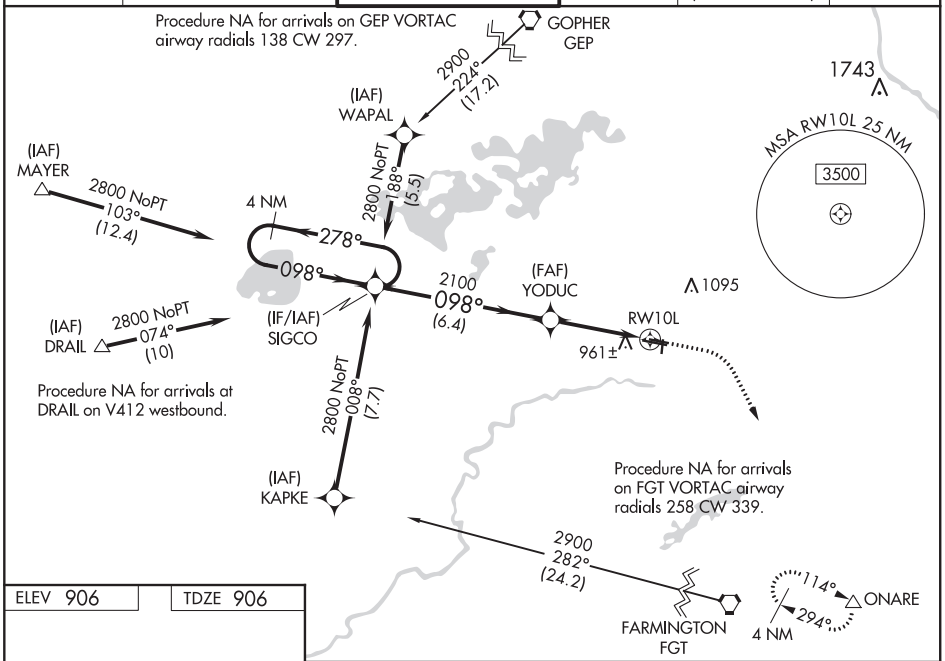
WAAS CH 42510 W10A	APP CRS 098°	Rwy ldg 3898 TDZE 906 Apt Elev 906

RNAV (GPS) RWY 10L
FLYING CLOUD (FCM)

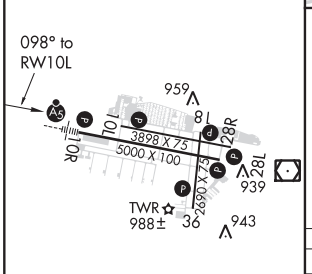
Baro-VNAV NA when using Minneapolis-St Paul Intl/Wold Chamberlain altimeter setting. For uncompensated Baro-VNAV systems, LNAV-VNAV NA below -22°C (-7°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Night Landing: Rwy 18/36 NA. When local altimeter setting not received, use Minneapolis-St Paul Intl/Wold Chamberlain altimeter setting and increase all DA 34 feet and all MDA 40 feet; increase LNAV/VNAV visibility ⅛ mile all Cats, and Circling Cat D ¼ mile.

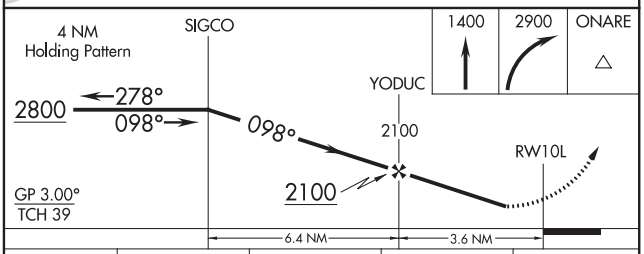
MISSED APPROACH: Climb to 1400 then climbing right turn to 2900 direct ONARE and hold.

ATIS	MINNEAPOLIS APP CON	FLYING CLOUD TOWER ★	GND CON	CLNC DEL	UNICOM
124.9	134.7 284.7	119.15 (CTAF) L	121.7	121.7 (When twr closed)	122.95



ELEV 906 | TDZE 906





CATEGORY	A	B	C	D
LPV DA	1187-1 281 (300-1)			
LNAV/VNAV DA	1230-1⅛ 324 (400-1⅛)			
LNAV MDA	1240-1 334 (400-1)			
C CIRCLING	1320-1 414 (500-1)	1440-1 534 (600-1)	1440-1½ 534 (600-1½)	1540-2 634 (700-2)

HIRL Rwy 10R-28L L
REIL Rwys 10L, 28R
REIL Rwys 18, 28L, and 36 L
MIRL Rwys 10L-28R and 18-36 L

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WAAS CH 42519 W10B	APP CRS 098°	Rwy ldg 5000 TDZE 905 Apt Elev 906

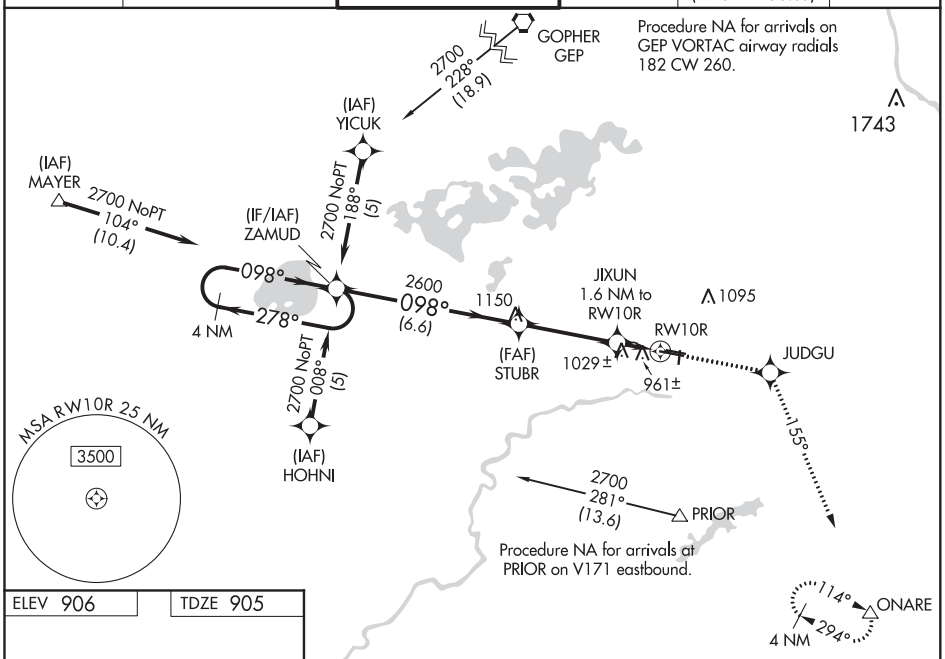
RNAV (GPS) RWY 10R
FLYING CLOUD (FCM)

Baro-VNAV NA when using Minneapolis-St Paul Intl/Wold Chamberlain altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Minneapolis-St Paul Intl/Wold Chamberlain altimeter setting and increase all DA 34 feet and all MDA 40 feet and increase LNAV Cat C visibility ¼ mile. For inoperative MALSR increase LNAV Cat D visibility to 1¼. Night Landing: Rwy 18/36 NA.

MALSR

MISSED APPROACH: Climb to 3000 direct JUDGU and on track 155° to ONARE and hold.

ATIS	MINNEAPOLIS APP CON	FLYING CLOUD TOWER ★	GND CON	CLNC DEL	UNICOM
124.9	134.7 284.7	119.15 (CTAF) L	121.7	121.7 (When twr closed)	122.95



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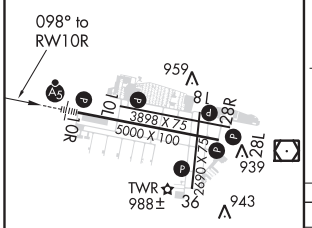
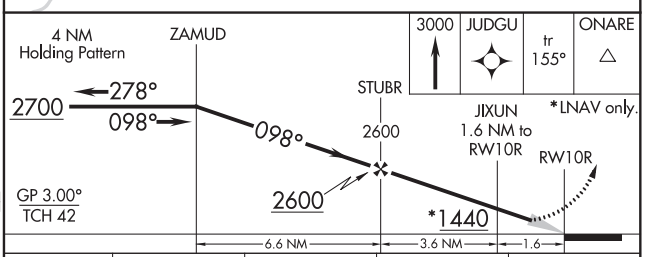
ELEV 906	TDZE 905





CATEGORY	A	B	C	D
LPV DA	1105-½ 200 (200-½)			
LNAV/VNAV DA	1237-¾ 332 (400-¾)			
LNAV MDA	1280-½ 375 (400-½)			1280-1 375 (400-1)
C CIRCLING	1320-1 414 (500-1)	1440-1 534 (600-1)	1440-1½ 534 (600-1½)	1540-2 634 (700-2)

HIRL Rwy 10R-28L L
REIL Rwys 10L, 28R
REIL Rwys 18, 28L, and 36 L
MIRL Rwys 10L-28R and 18-36 L

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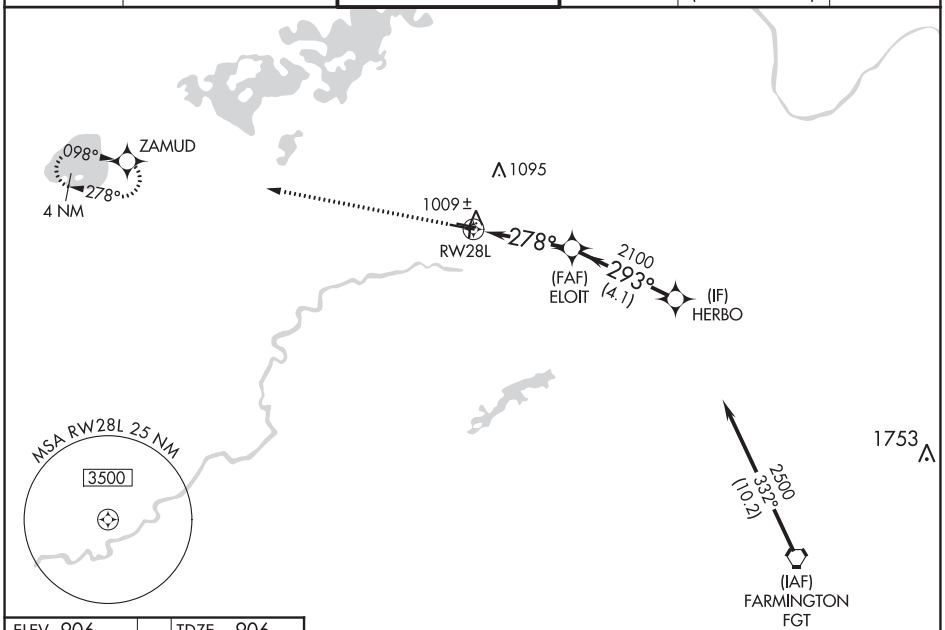
WAAS CH 90218 W28B	APP CRS 278°	Rwy ldg 5000 TDZE 906 Apt Elev 906

RNAV (GPS) RWY 28L
FLYING CLOUD (FCM)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (2°F) or above 54°C (130°F). When local altimeter setting not received, use Minneapolis-St Paul Intl/Wold-Chamberlain altimeter setting and increase all DA 34 feet and all MDA 40 feet, increase LNAV Cats C and D visibility ⅛ mile. DME/DME RNP-0.3 NA. Night Landing: Rwy 18/36 NA. Helicopters visibility reduction below ¾ SM NA.

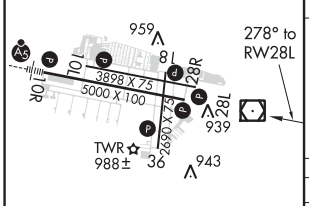
MISSED APPROACH: Climb to 2700 direct ZAMUD and hold.

ATIS	MINNEAPOLIS APP CON	FLYING CLOUD TOWER ★	GND CON	CLNC DEL	UNICOM
124.9	134.7 284.7	119.15 (CTAF) L	121.7	121.7 (When twr closed)	122.95



Procedure NA for arrivals on FGT VORTAC airway radials 258 CW 011.

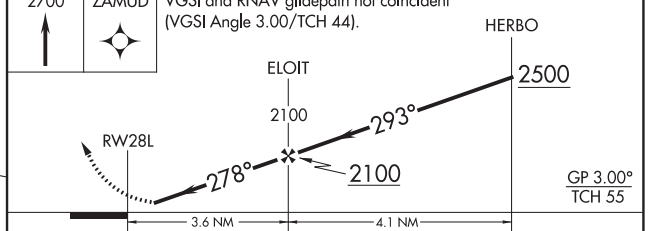
ELEV 906 | TDZE 906



HIRL Rwy 10R-28L L
REIL Rwys 10L, 28R
REIL Rwys 18, 28L, and 36 L
MIRL Rwys 10L-28R and 18-36 L

2700 | ZAMUD

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 44).



CATEGORY	A	B	C	D
LPV DA	1156-1 250 (300-1)			
LNAV/VNAV DA	1198-1 292 (300-1)			
LNAV MDA	1280-1 374 (400-1)		1280-1⅛ 374 (400-1⅛)	
C CIRCLING	1320-1 414 (500-1)	1440-1 534 (600-1)	1440-1½ 534 (600-1½)	1540-2 634 (700-2)

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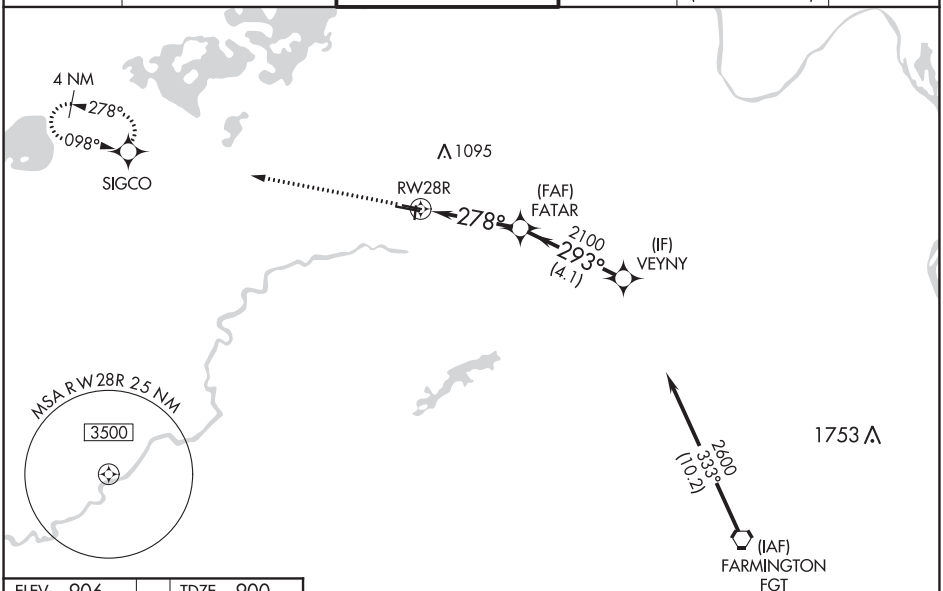
WAAS CH 99709 W28A	APP CRS 278°	Rwy ldg 3898 TDZE 900 Apt Elev 906

RNAV (GPS) RWY 28R
FLYING CLOUD (FCM)

Baro-VNAV NA when using Minneapolis-St Paul Intl/Wold Chamberlain altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C (-5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA. Night Landing: Rwy 18/36 NA. When local altimeter setting not received, use Minneapolis-St Paul Intl/Wold Chamberlain altimeter setting and increase all DA 34 feet and all MDA 40 feet; increase Circling Cat D visibility ¼ mile.

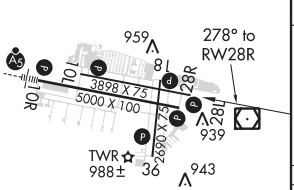
MISSED APPROACH: Climb to 2800 direct SIGCO and hold.

ATIS	MINNEAPOLIS APP CON	FLYING CLOUD TOWER ★	GND CON	CLNC DEL	UNICOM
124.9	134.7 284.7	119.15 (CTAF) L	121.7	121.7 (When twr closed)	122.95

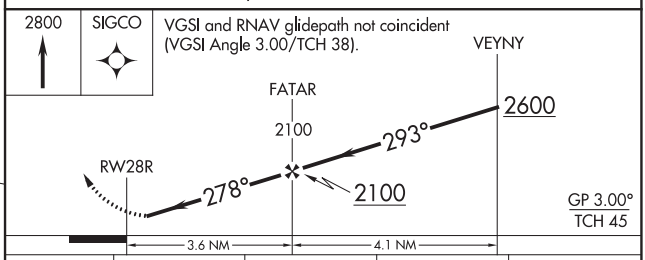


Procedure NA for arrivals on FGT VORTAC airway radials 258 CW 011.

ELEV 906 | TDZE 900



HIRL Rwy 10R-28L L
REIL Rwys 10L, 28R
REIL Rwys 18, 28L, and 36 L
MIRL Rwys 10L-28R and 18-36 L



CATEGORY	A	B	C	D
LPV DA	1150-1		250 (300-1)	
LNAV/VNAV DA	1150-1		250 (300-1)	
LNAV MDA	1240-1		340 (400-1)	
C CIRCLING	1320-1 414 (500-1)	1440-1 534 (600-1)	1440-1½ 534 (600-1½)	1540-2 634 (700-2)

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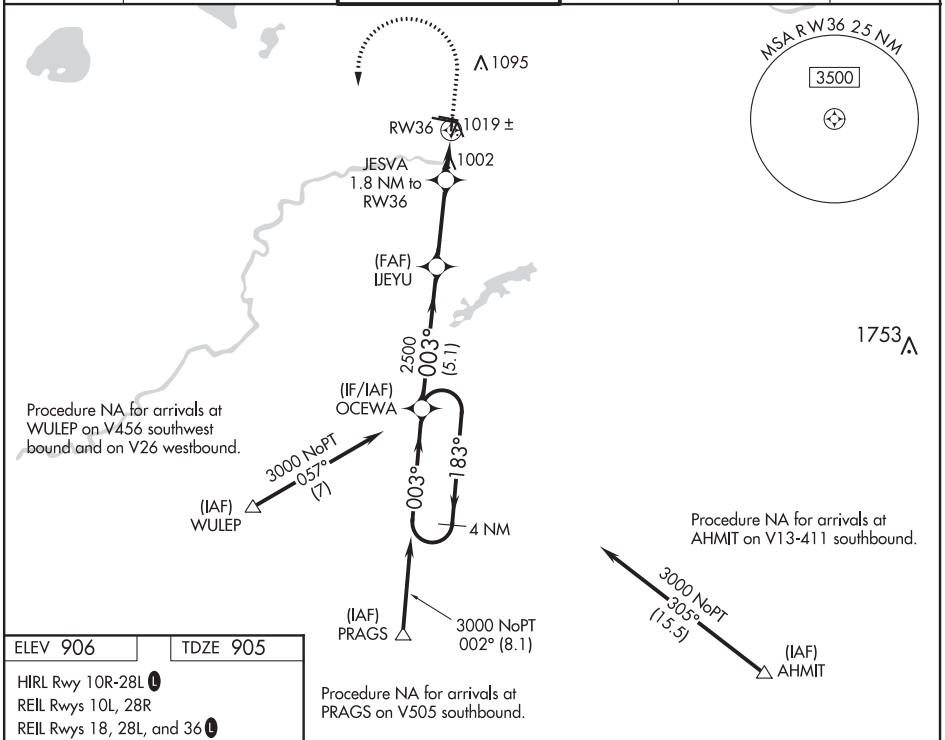
WAAS CH 82635 W36A	APP CRS 003°	Rwy ldg 2690 TDZE 905 Apt Elev 906

RNAV (GPS) RWY 36
FLYING CLOUD (FCM)

DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA.
Night Landing: Rwy 18/36 NA. When local altimeter setting not received, use Minneapolis St Paul Intl/Wold-Chamberlain altimeter setting and increase all MDA 40 feet and increase LP and LNAV Cat C visibility ⅛ mile.

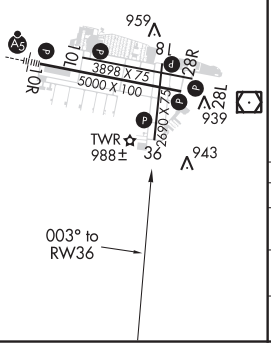
MISSED APPROACH: Climb to 2000 then climbing left turn to 3000 direct OCEWA and hold.

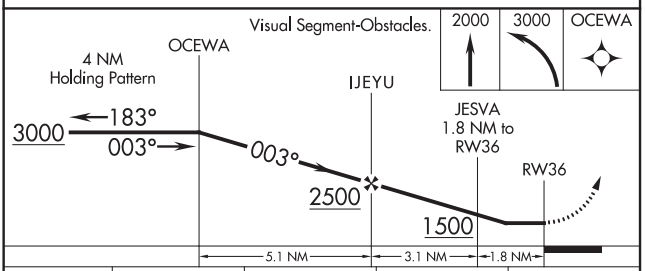
ATIS	MINNEAPOLIS APP CON	FLYING CLOUD TOWER ★	GND CON	CLNC DEL	UNICOM
124.9	134.7 284.7	119.15 (CTAF) L	121.7	121.7 (When twr closed)	122.95



ELEV 906 TDZE 905

HIRL Rwy 10R-28L L
REIL Rwys 10L, 28R
REIL Rwys 18, 28L, and 36 L
MIRL Rwys 10L-28R and 18-36 L





CATEGORY	A	B	C	D
LP MDA	1260-1 355 (400-1)			NA
LNAV MDA	1280-1 375 (400-1)			NA
C CIRCLING	1320-1 414 (500-1)	1440-1 534 (600-1)	1440-1½ 534 (600-1½)	NA

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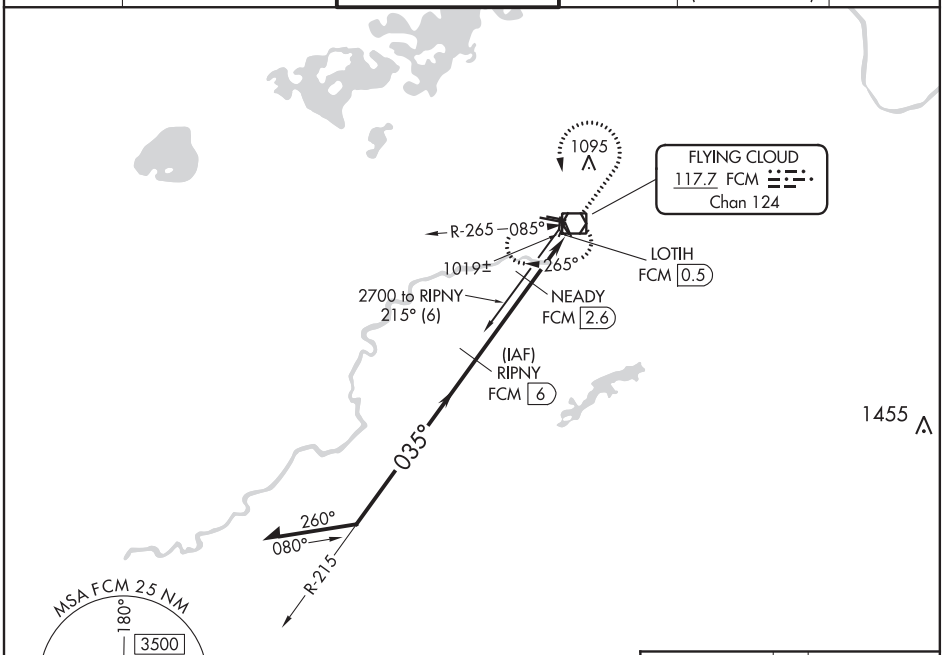
VOR/DME FCM 117.7 Chan 124	APP CRS 035°	Rwy ldg 2690 TDZE 905 Apt Elev 906

VOR/DME RWY 36
FLYING CLOUD (FCM)

When local altimeter setting not received, use Minneapolis St Paul Intl/Wold Chamberlain altimeter setting and increase all MDA 40 feet and S-36 Cat C visibility ⅛ mile. Helicopter visibility reduction below 1 SM NA. Night Landing: Rwy 18/36 NA.

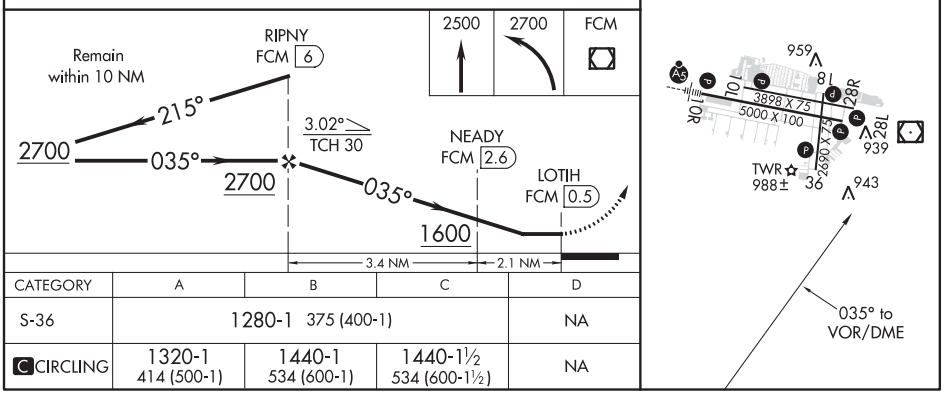
MISSED APPROACH: Climb to 2500 then climbing left turn to 2700 direct FCM VOR/DME and hold.

ATIS	MINNEAPOLIS APP CON	FLYING CLOUD TOWER ★	GND CON	CLNC DEL	UNICOM
124.9	134.7 284.7	119.15 (CTAF) L	121.7	121.7 (When twr closed)	122.95



ELEV 906	TDZE 905

HIRL Rwy 10R-28L L
REIL Rwys 10L, 28R
REIL Rwys 18, 28L, and 36 L
MIRL Rwys 10L-28R and 18-36 L



CATEGORY	A	B	C	D
S-36	1280-1 375 (400-1)			NA
C CIRCLING	1320-1 414 (500-1)	1440-1 534 (600-1)	1440-1½ 534 (600-1½)	NA

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VOR RWY 10R
FLYING CLOUD (FCM)

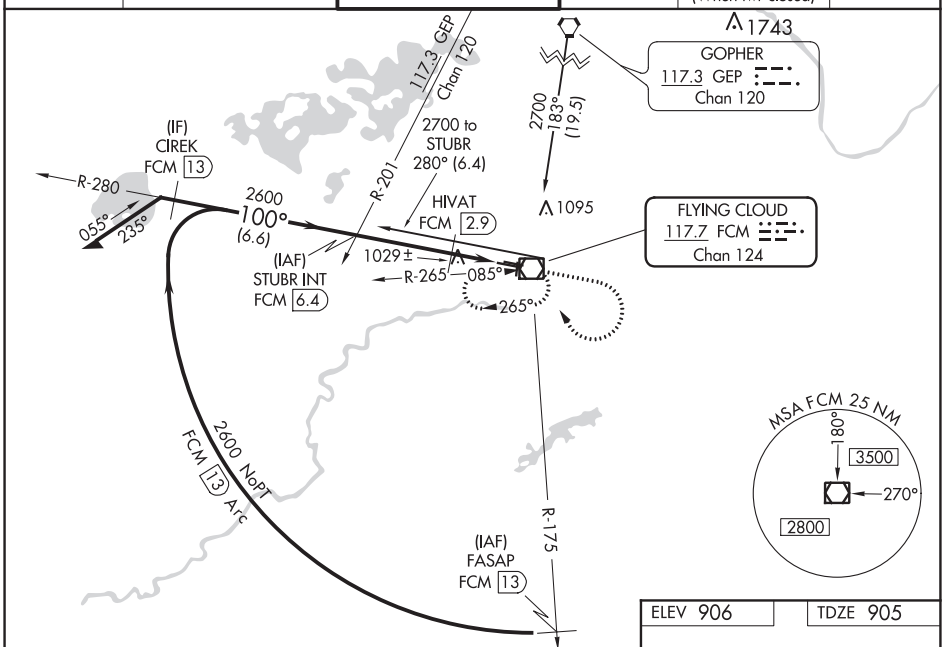
VOR/DME FCM 117.7 Chan 124	APP CRS 100°	Rwy ldg 5000 TDZE 905 Apt Elev 906

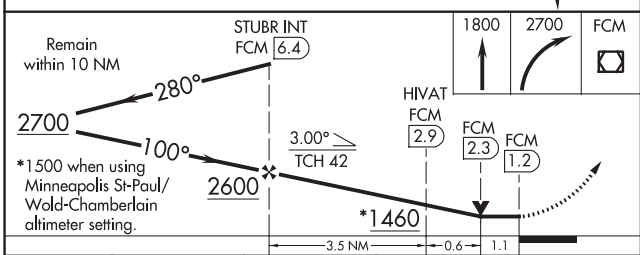
When local altimeter setting not received, use Minneapolis St-Paul/Wold-Chamberlain altimeter setting and increase all MDA 40 feet, HIVAT fix minimums: Increase S-10R Cat C visibility ¼ mile. For inoperative MALSR, HIVAT fix minimums: Increase S-10R Cat D visibility to 1¼ mile. VDP NA when using Minneapolis St-Paul/Wold-Chamberlain altimeter setting. Night Landing: Rwy 18/36 NA.

MALSR

MISSED APPROACH: Climb to 1800 then climbing right turn to 2700 direct FCM VOR/DME and hold, continue climb-in-hold to 2700.

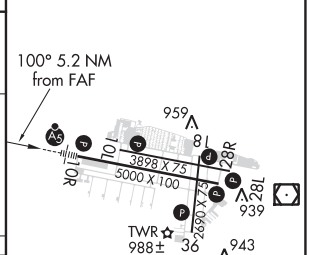
ATIS	MINNEAPOLIS APP CON	FLYING CLOUD TOWER ★	GND CON	CLNC DEL	UNICOM
124.9	134.7 284.7	119.15 (CTAF) L	121.7	121.7 (When twr closed)	122.95





CATEGORY	A	B	C	D
S-10R	1460-½ 555 (600-½)		1460-1 555 (600-1)	1460-1¼ 555 (600-1¼)
C CIRCLING	1460-1 554 (600-1)		1460-1½ 554 (600-1½)	1540-2 634 (700-2)
HIVAT FIX MINIMUMS				
S-10R	1280-½ 375 (400-½)			1280-1 375 (400-1)
C CIRCLING	1320-1 414 (500-1)	1440-1 534 (600-1)	1440-1½ 534 (600-1½)	1540-2 634 (700-2)

ELEV 906 TDZE 905



HIRL Rwy 10R-28L L
REIL Rwys 10L, 28R
REIL Rwys 18, 28L, and 36 L
MIRL Rwys 10L-28R and 18-36 L

FAF to MAP 5.2 NM					
Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

MINNEAPOLIS, MINNESOTA | AL-5094 (FAA) | 20366

COPTER ILS or LOC RWY 10R

FLYING CLOUD (FCM)

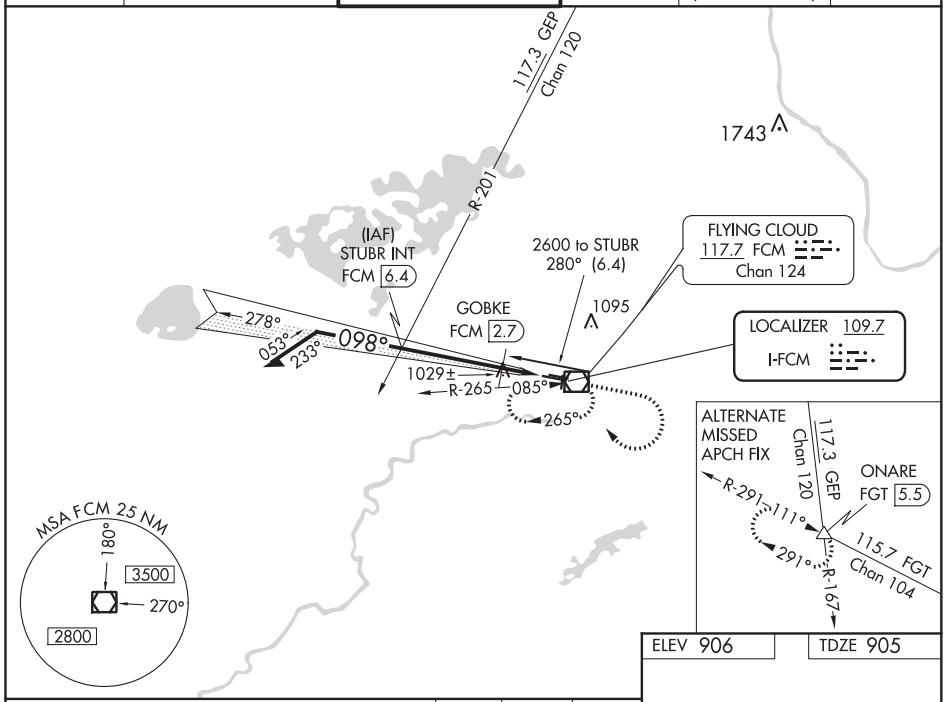
LOC I-FCM	APP CRS	Rwy ldg / TDZE / Apt Elev
109.7	098°	5000 / 905 / 906

For inoperative MALSR, increase visibility to ½ mile. When local altimeter setting not received, use Minneapolis-St Paul Intl-Wold Chamberlain altimeter setting and increase DA 34 feet and all MDA 40 feet. Night Landing: Rwy 18/36 NA.

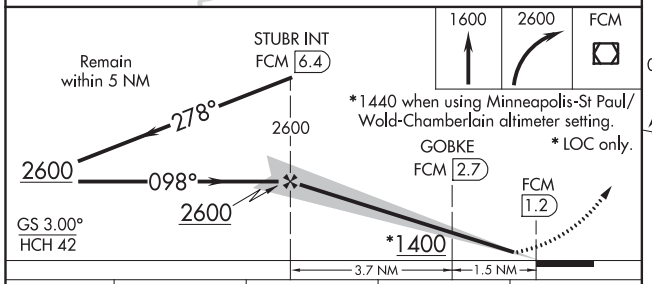
MALSR

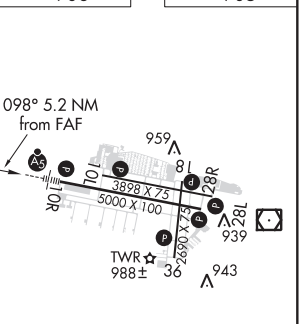
MISSED APPROACH: Climb to 1600 then climbing right turn to 2600 direct FCM VOR/DME and hold, continue climb-in-hold to 2600.

ATIS	MINNEAPOLIS APP CON	FLYING CLOUD TOWER ★	GND CON	CLNC DEL	UNICOM
124.9	134.7 284.7	119.15 (CTAF) L	121.7	121.7 (When twr closed)	122.95



ELEV 906	TDZE 905





CATEGORY	COPTER	B	C	D
H-ILS 10R	1105-¼ 200 (200-¼)	NA		
H-LOC 10R	1400-¼ 495 (500-¼)	NA		
GOBKE FIX MINIMUMS				
H-LOC 10R	1280-¼ 375 (400-¼)	NA		

HIRL Rwy 10R-28L L
REIL Rwys 10L, 28R
REIL Rwys 18, 28L, and 36 L
MIRL Rwys 10L-28R and 18-36 L

FAF to MAP 5.2 NM

Knots	45	60	75	90	105
Min:Sec	6:56	5:12	4:10	3:28	2:58

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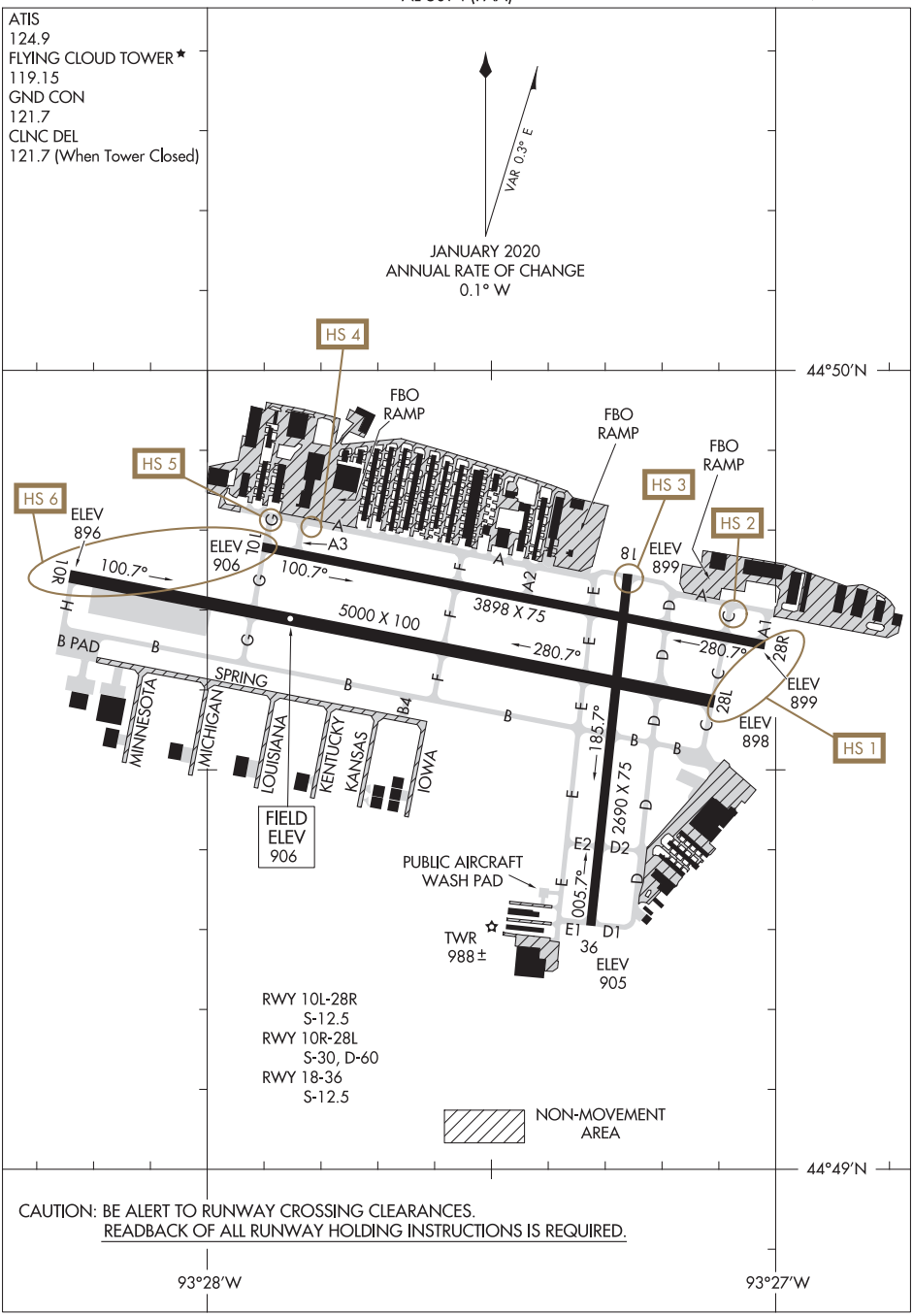
AL-5094 (FAA)

ATIS
124.9
FLYING CLOUD TOWER ★
119.15
GND CON
121.7
CLNC DEL
121.7 (When Tower Closed)



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

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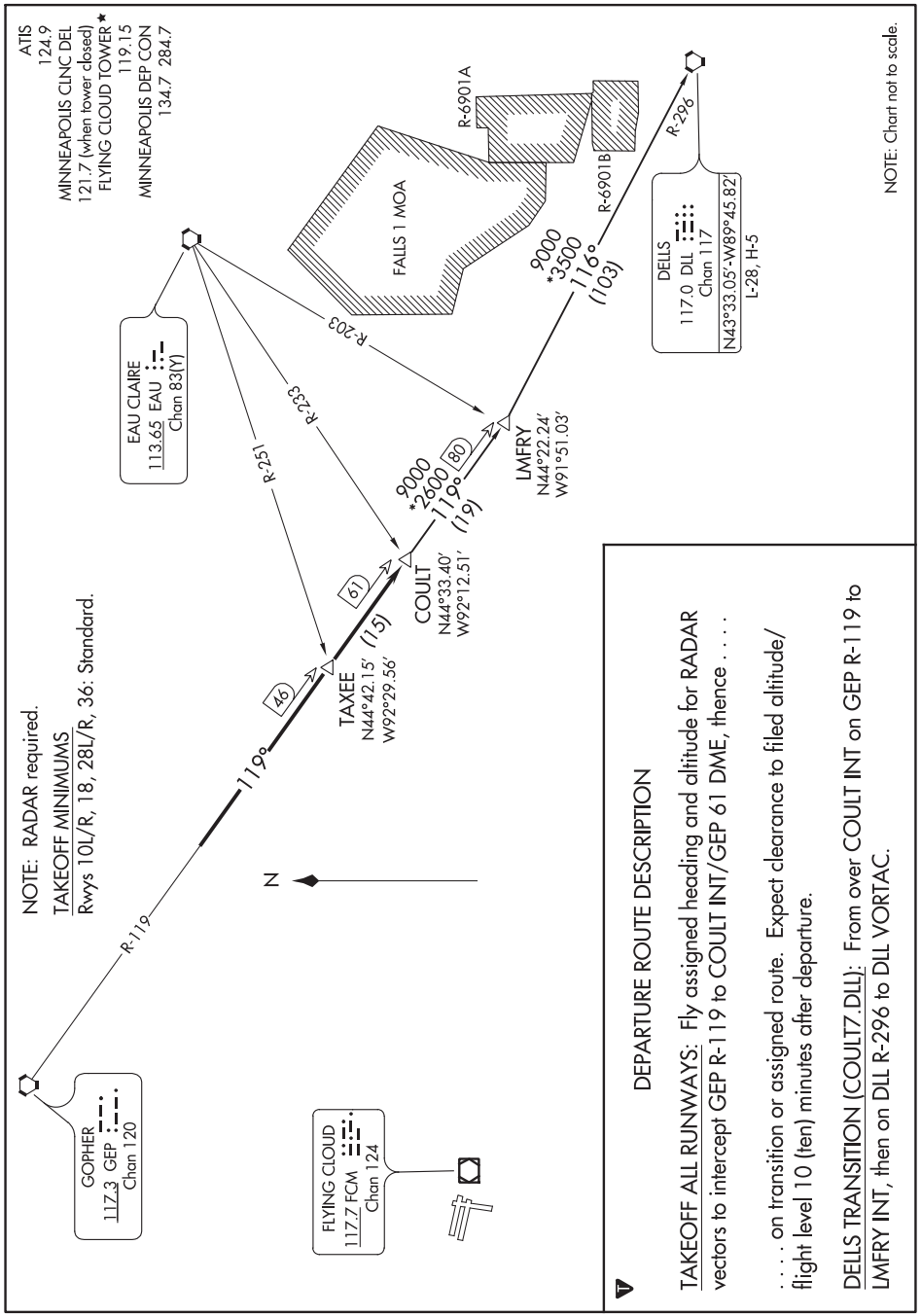
(COULT7.COULT) 19339

COULT SEVEN DEPARTURE

AL-5094 (FAA)

FLYING CLOUD (FCM)
MINNEAPOLIS, MINNESOTA



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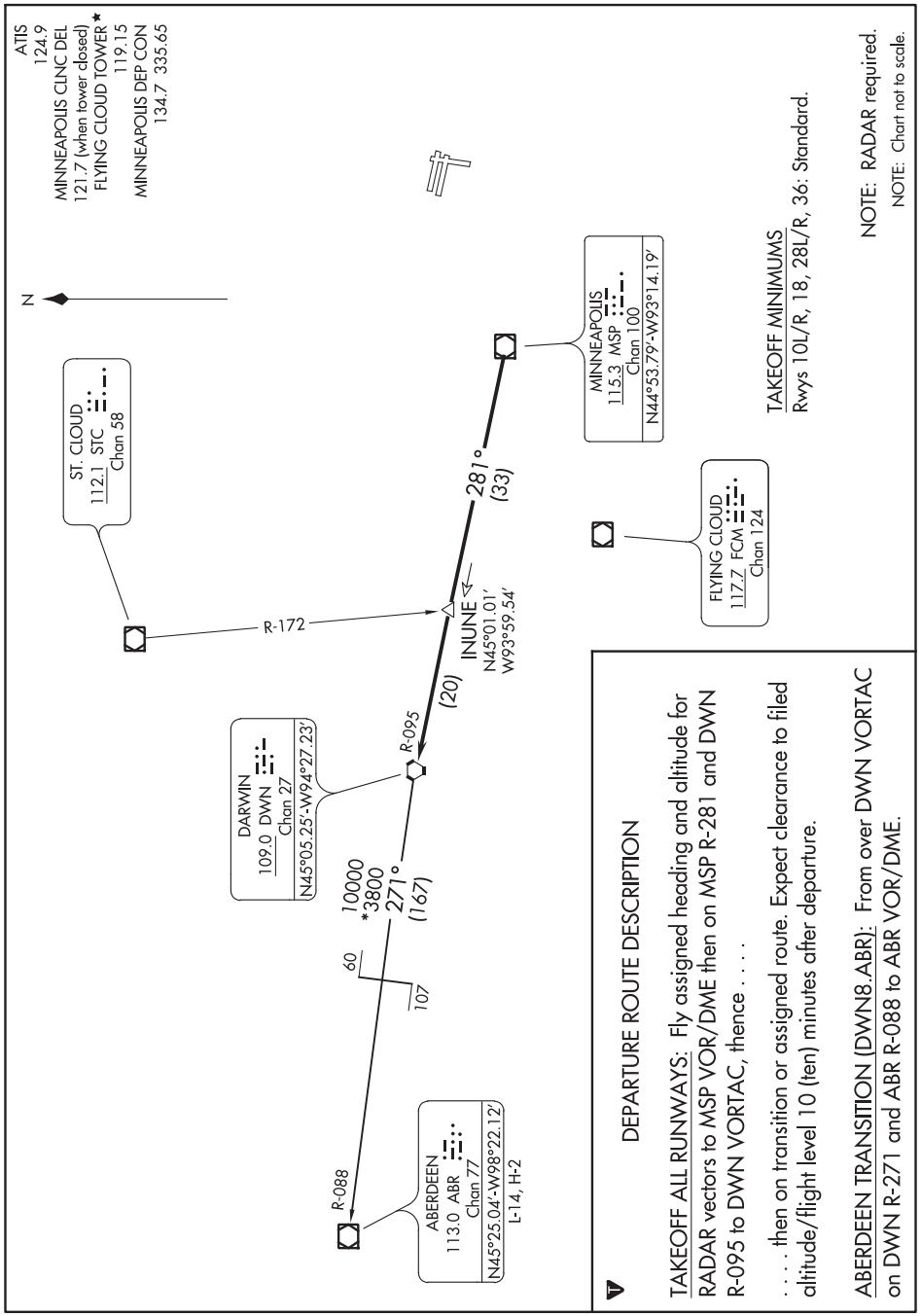
NC-1, 25 FEB 2021 to 22 APR 2021

COULT SEVEN DEPARTURE

(COULT7.COULT) 29MAR18

MINNEAPOLIS, MINNESOTA
FLYING CLOUD (FCM)



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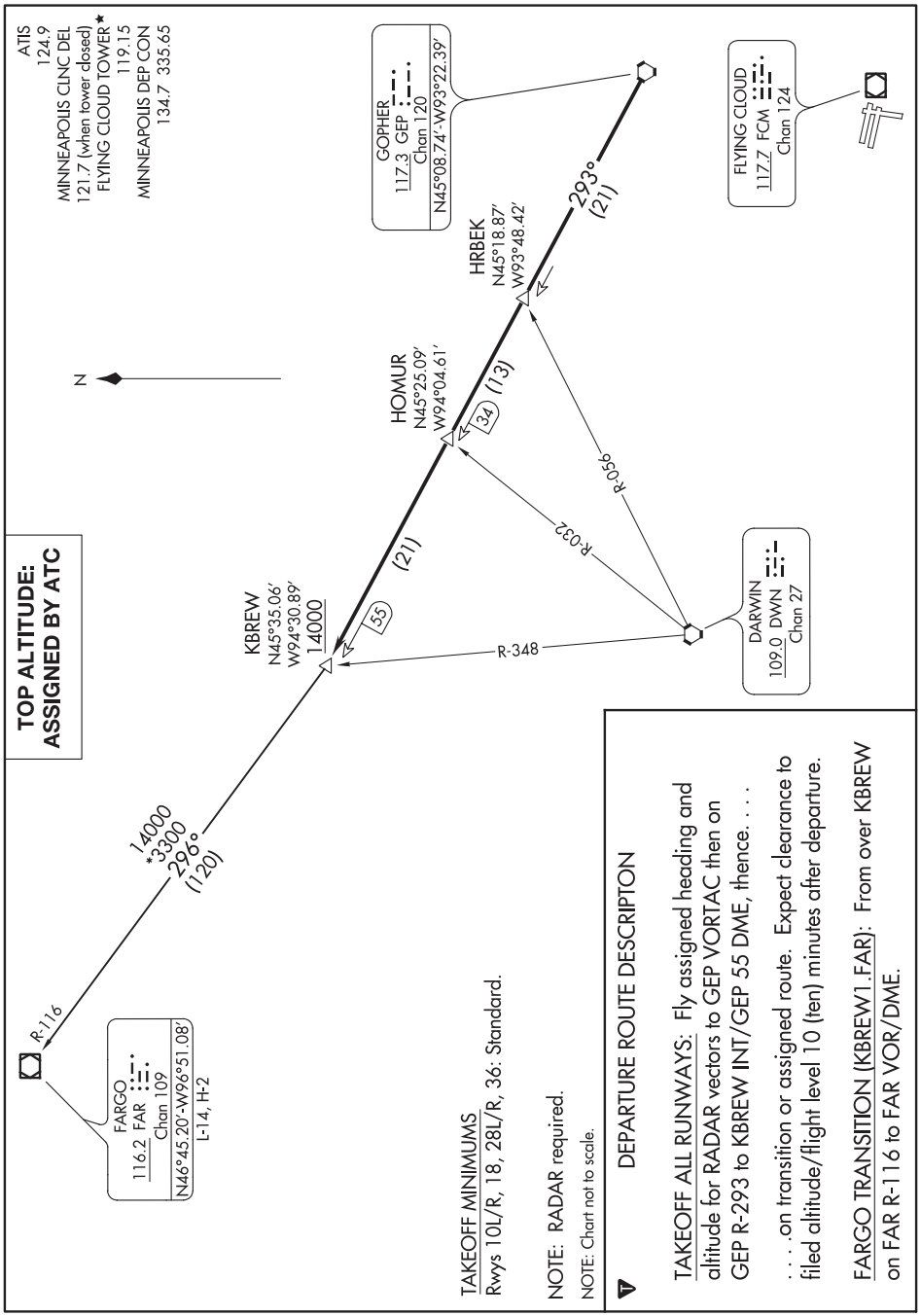
NC-1, 25 FEB 2021 to 22 APR 2021

(KBREW1.KBREW) 20086

KBREW ONE DEPARTURE

AL-5094 (FAA)

FLYING CLOUD (FCM)
MINNEAPOLIS, MINNESOTA

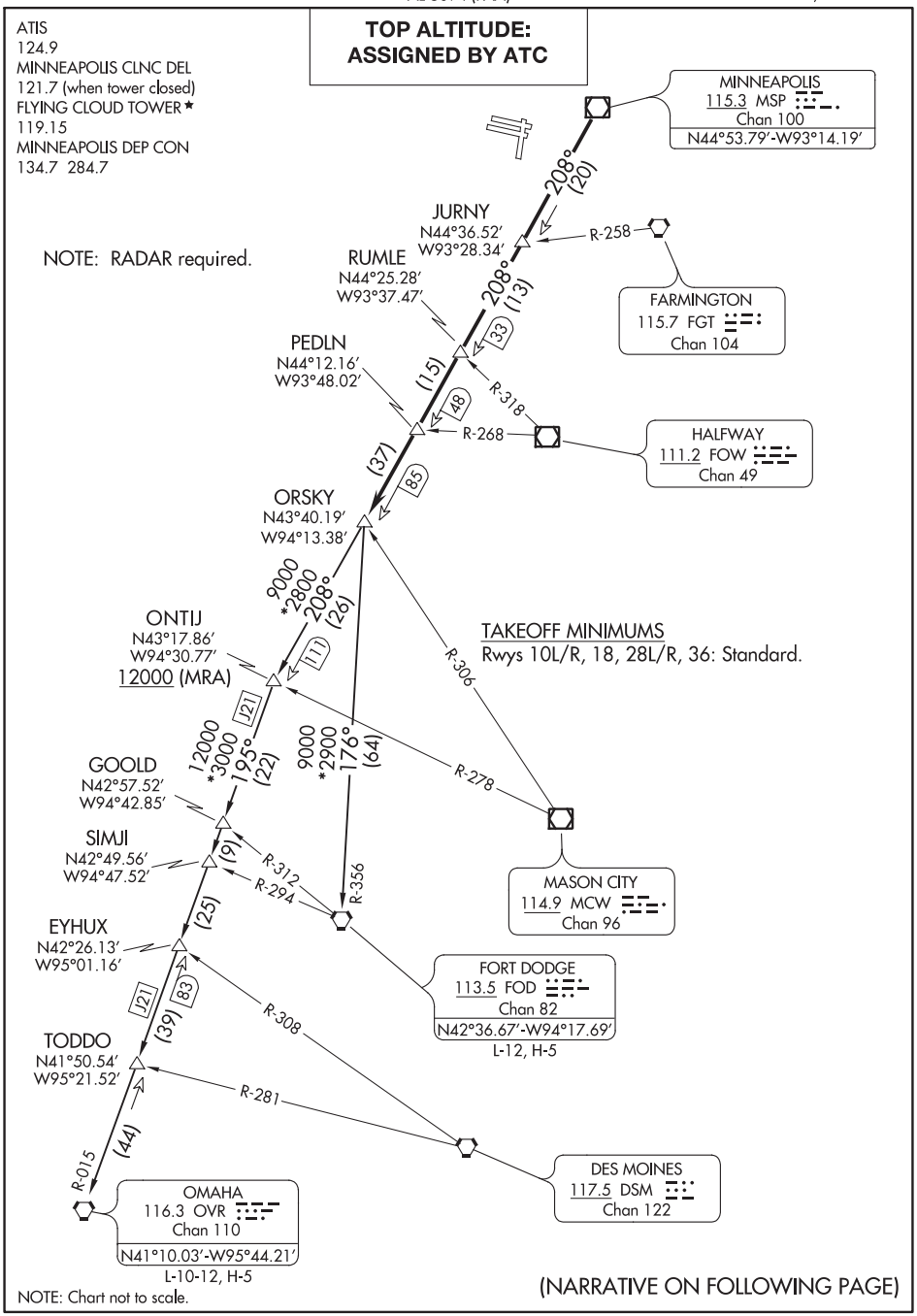


NC-1, 25 FEB 2021 to 22 APR 2021

KBREW ONE DEPARTURE

(KBREW1.KBREW) 01FEB18

MINNEAPOLIS, MINNESOTA
FLYING CLOUD (FCM)



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DEPARTURE ROUTE DESCRIPTON

TAKEOFF ALL RUNWAYS: Fly assigned heading and altitude for RADAR vectors to MSP VOR/DME then on MSP R-208 to ORSKY INT/MSP 85 DME. Thence . . . .

. . . .on transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

FORT DODGE TRANSITION (ORSKY2.FOD): From over ORSKY INT on FOD R-356 to FOD VORTAC.
OMAHA TRANSITION (ORSKY2.OVR): From over ORSKY INT on MSP R-208 to ONTIJ INT, then on OVR R-015 to OVR VORTAC.

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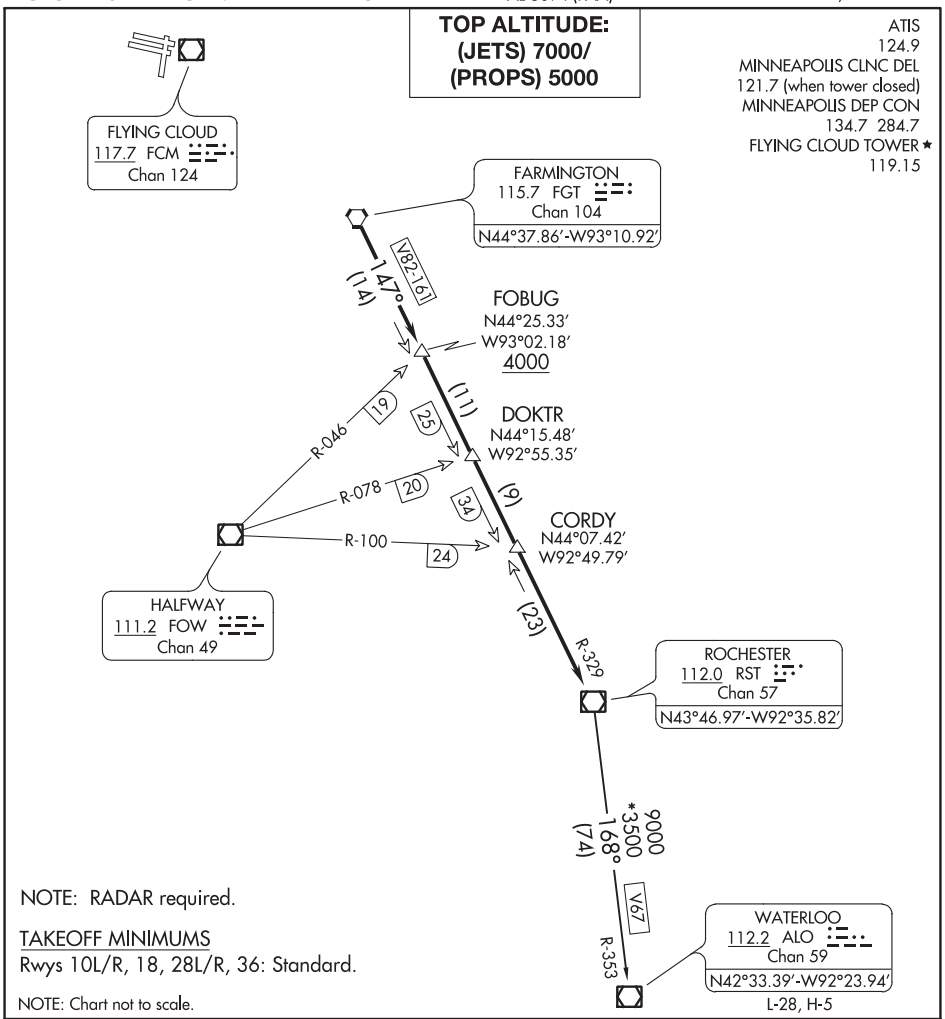

DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: Fly assigned heading and altitude for RADAR vectors to FGT VORTAC then on FGT R-147 and RST R-329 to RST VOR/DME. Cross FOBUG INT/ FGT 14 DME at or above 4000, thence . . . .

. . . .on assigned transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

WATERLOO TRANSITION (RST1.ALO): From over RST VOR/DME on RST R-168 and ALO R-353 to ALO VOR/DME.

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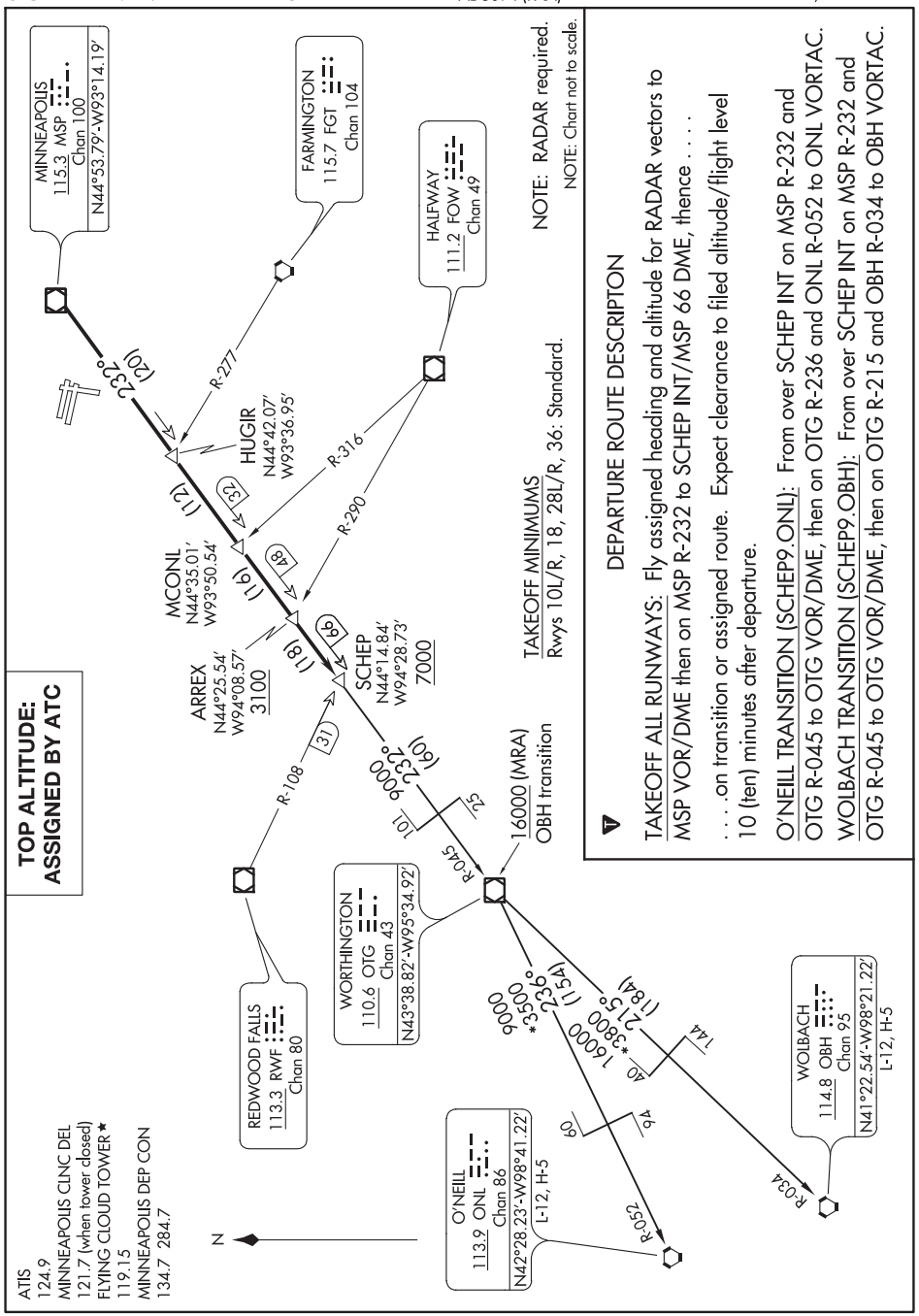
(SCHEP9.SCHEP) 20086

SCHEP NINE DEPARTURE

AL-5094 (FAA)

FLYING CLOUD (FCM)
MINNEAPOLIS, MINNESOTA



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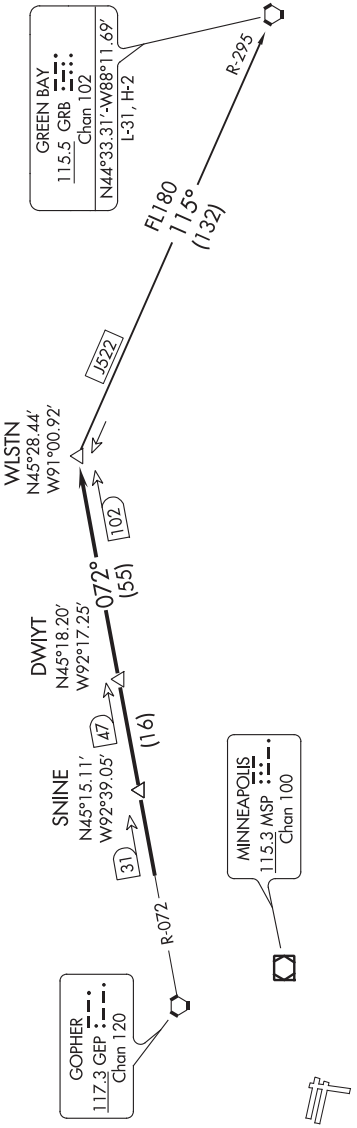
SCHEP NINE DEPARTURE

(SCHEP9.SCHEP) 17AUG17

MINNEAPOLIS, MINNESOTA
FLYING CLOUD (FCM)

TOP ALTITUDE: (JETS) 7000/ (PROPS) 5000



ATIS
124.9
MINNEAPOLIS CLNC DEL
121.7 (when tower closed)
FLYING CLOUD TOWER★
119.15
MINNEAPOLIS DEP CON
134.7 335.65

TAKEOFF MINIMUMS
Rwys 10L/R, 18, 28L/R, 36: Standard.

NOTE: RADAR required.
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTON

TAKEOFF ALL RUNWAYS: Fly assigned heading and altitude for RADAR vectors to GEP R-072 to WLSTN/GEP 102 DME. Thence . . . .

. . . .on assigned transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

GREEN BAY TRANSITION (WLSTN7.GRB): From over WLSTN on GRB R-295 to GRB VORTAC.

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NC-1, 25 FEB 2021 to 22 APR 2021

(ZMBRO7.ZMBRO) 20086

ZMBRO SEVEN DEPARTURE

AL-5094 (FAA)

FLYING CLOUD (FCM)
MINNEAPOLIS, MINNESOTA

DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: Fly assigned heading and altitude for RADAR vectors to MSP VOR/DME then on MSP R-138 to cross JEDET INT/MSP 34 DME, at or above 4000; then on ODI R-301 to ZMBRO INT/ODI 50 DME, thence . . . .

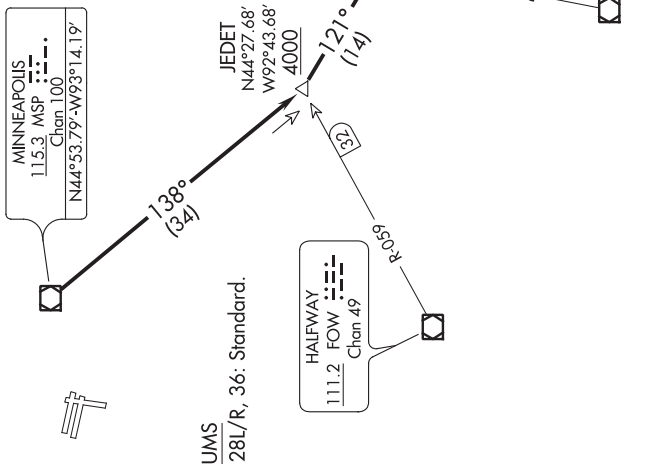
. . . .on assigned transition or route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

NODINE TRANSITION (ZMBRO7.ODI): From over ZMBRO on ODI R-301 to ODI VORTAC.

TOP ALTITUDE: (JETS) 7000/ (PROPS) 5000

ATIS
124.9
MINNEAPOLIS CLNC DEL
121.7 (when tower closed)
FLYING CLOUD TOWER★
119.15
MINNEAPOLIS DEP CON
134.7 284.7

TAKEOFF MINIMUMS
Rwys 10L/R, 18, 28L/R, 36: Standard.



NOTE: RADAR required.
NOTE: Chart not to scale.

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ZMBRO SEVEN DEPARTURE

MINNEAPOLIS, MINNESOTA
FLYING CLOUD (FCM)

(ZMBRO7.ZMBRO) 17AUG17

LOC/DME I-PJL	APP CRS	Rwy ldg	7620
110.7	121°	TDZE	841
Chan 44		Apt Elev	842

ILS or LOC RWY 12L

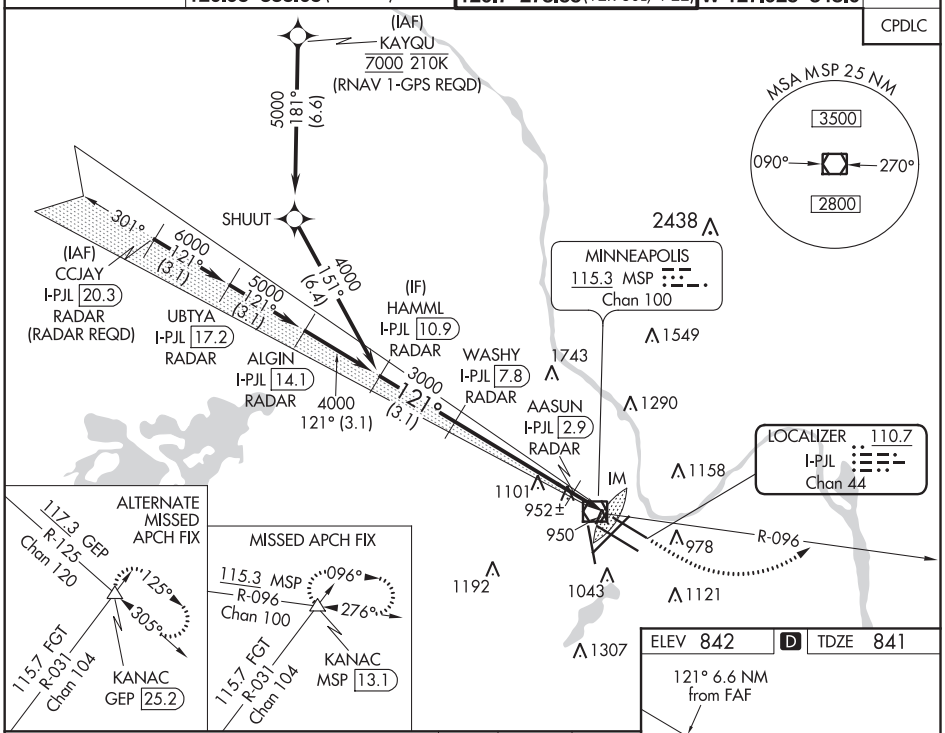
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

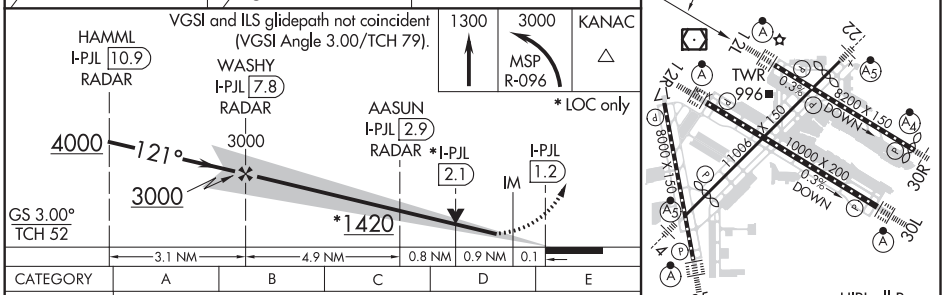
T A Simultaneous approach authorized with Rwy 12R. For inop ALS, increase S-ILS 12L Cat E visibility to RVR 4000, S-LOC 12L Cat C/D/E visibility to RVR 5500. DME or RADAR required.

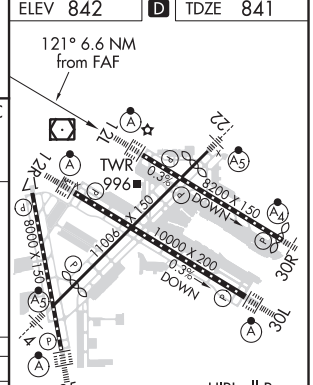
ALSF-2

MISSED APPROACH: Climb to 1300, then climbing left turn to 3000 on MSP VOR/DME R-096 to KANAC INT/MSP 13.1 DME and hold.

D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	118.725 335.65 (Rwy 35)	123.675 273.55 (17-35)	N 121.8 348.6	133.2
DEP 120.8	119.3 335.65 (12L-30R, 4-22, 17)	123.95 273.55 (12L-30R)	S 121.9 348.6	CPDLC
	126.95 335.65 (12R-30L)	126.7 273.55 (12R-30L, 4-22)	W 127.925 348.6	







CATEGORY	A	B	C	D	E
S-ILS 12L	1041/18 200 (200-½)				
S-LOC 12L	1220/24 379 (400-½)		1220/35 379 (400-⅝)		
C CIRCLING	1360-1 518 (600-1)		1460-1¾ 618 (700-1¾)	1660-2¾ 818 (900-2¾)	1800-3 958 (1000-3)

FAF to MAP 6.6 NM					
Knots	60	90	120	150	180
Min:Sec	6:36	4:24	3:18	2:38	2:12

MINNEAPOLIS, MINNESOTA AL-264 (FAA) 20254

ILS or LOC RWY 12R

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

LOC/DME I-HKZ	APP CRS	Rwy ldg	10000
110.3	121°	TDZE	842
Chan 40		Apt Elev	842

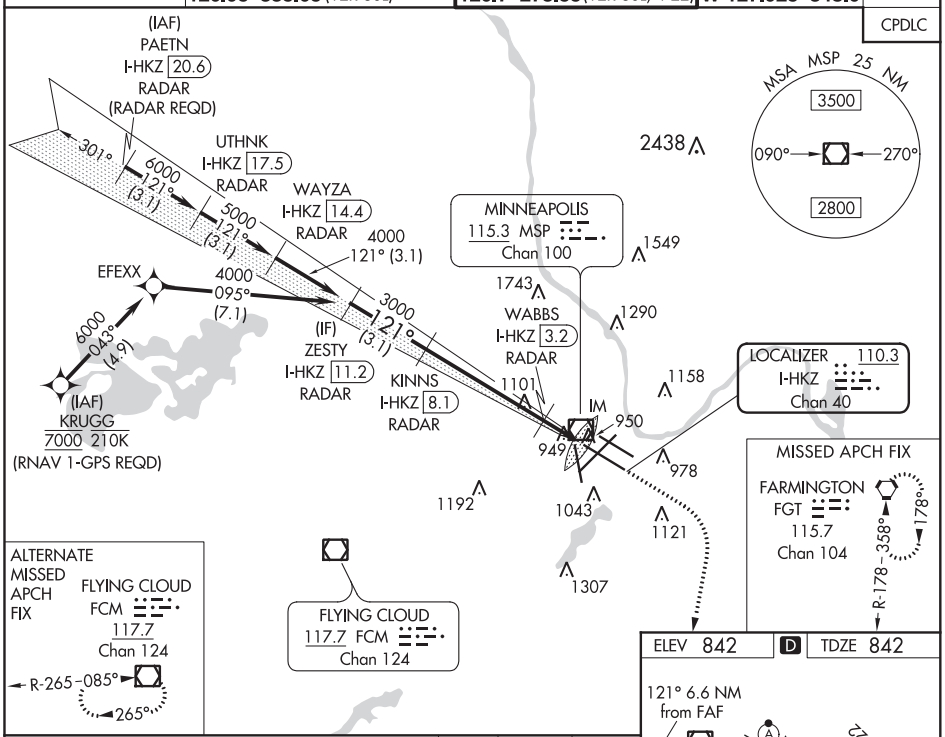
T A DME or RADAR required. For inop ALS, increase S-ILS 12R Cat E visibility to RVR 4000, and S-LOC 12R Cat E visibility to RVR 6000. Simultaneous approach authorized with Rwy 12L.

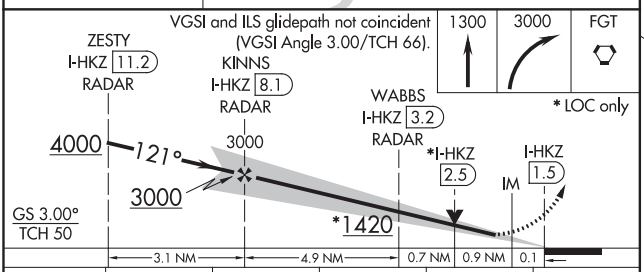
ALSF-2 (A)

MISSED APPROACH: Climb to 1300 then climbing right turn to 3000 direct FGT VORTAC and hold.

D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	118.725 335.65 (Rwy 35)	123.675 273.55 (17-35)	N 121.8 348.6	133.2
DEP 120.8	119.3 335.65 (12L-30R, 4-22, 17)	123.95 273.55 (12L-30R)	S 121.9 348.6	
	126.95 335.65 (12R-30L)	126.7 273.55 (12R-30L, 4-22)	W 127.925 348.6	

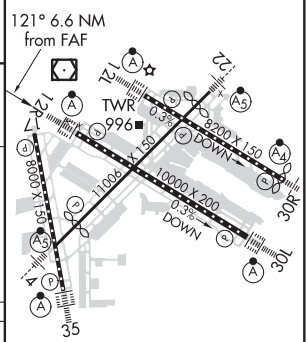
CPDLC





CATEGORY	A	B	C	D	E
S-ILS 12R	1042/18 200 (200-½)				
S-LOC 12R	1240/24 398 (400-½)		1240/35 398 (400-⅝)		
C CIRCLING	1360-1 518 (600-1)		1460-1¾ 618 (700-1¾)	1660-2¾ 818 (900-2¾)	1800-3 958 (1000-3)

ELEV 842 D TDZE 842



HIRL all Rwys
REIL Rwy 17
TDZ/CL Rwys 12L, 12R, 30L, and 35

FAF to MAP 6.6 NM

Knots	60	90	120	150	180
Min:Sec	6:36	4:24	3:18	2:38	2:12

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

MINNEAPOLIS, MINNESOTA
Amdt 12 05JAN17

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)
44°53′N-93°13′W

ILS or LOC RWY 12R

ILS or LOC RWY 30L

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

LOC/DME I-MSP	APP CRS	Rwy ldg	10000
110.3	301°	TDZE	823
Chan 40		Apt Elev	842

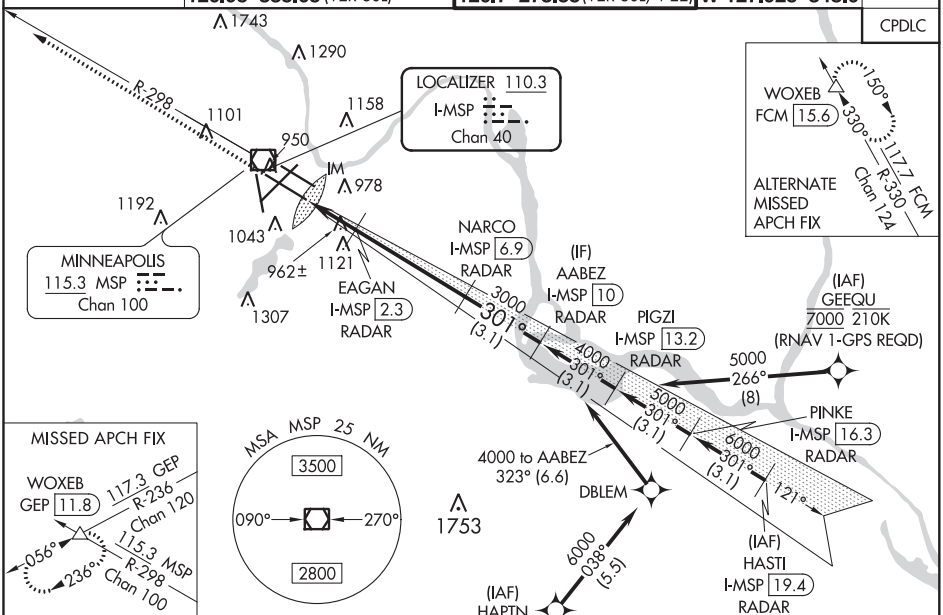
DME or RADAR required. Simultaneous approaches authorized with Rwy 30R and ILS V RWY 35 (CONVERGING). For inop ALS, increase S-ILS 30L Cat E visibility to RVR 4000, and increase S-LOC 30L Cat E visibility to RVR 6000.

ALSF-2

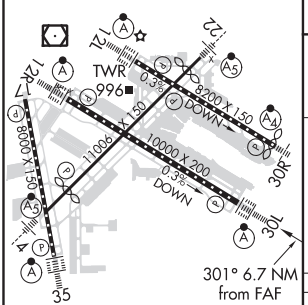
MISSED APPROACH: Climb to 1300 then climb to 3000 on heading 301° and MSP VOR/DME R-298 to WOXEB INT/ GEP VORTAC 11.8 DME and hold.

D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	118.725 335.65 (Rwy 35)	123.675 273.55 (17-35)	N 121.8 348.6	133.2
DEP 120.8	119.3 335.65 (12L-30R, 4-22, 17)	123.95 273.55 (12L-30R)	S 121.9 348.6	
	126.95 335.65 (12R-30L)	126.7 273.55 (12R-30L, 4-22)	W 127.925 348.6	

CPDLC

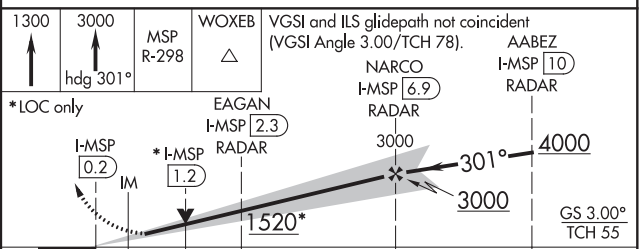


ELEV 842 | D | TDZE 823



HIRL all Rwys
REIL Rwy 17
TDZ/CL Rwys 12L, 12R, 30L, and 35

FAF to MAP 6.7 NM					
Knots	60	90	120	150	180
Min:Sec	6:42	4:28	3:21	2:41	2:14



CATEGORY	A	B	C	D	E
S-ILS 30L	1023/18 200 (200-½)				
S-LOC 30L	1220/24 397 (400-½)		1220/35 397 (400-⅝)		
C CIRCLING	1360-1 518 (600-1)		1460-1¾ 618 (700-1¾)	1660-2¾ 818 (900-2¾)	1800-3 958 (1000-3)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

LOC/DME I-INN 110.7 Chan 44	APP CRS 301°	Rwy ldg 8000 TDZE 822 Apt Elev 842

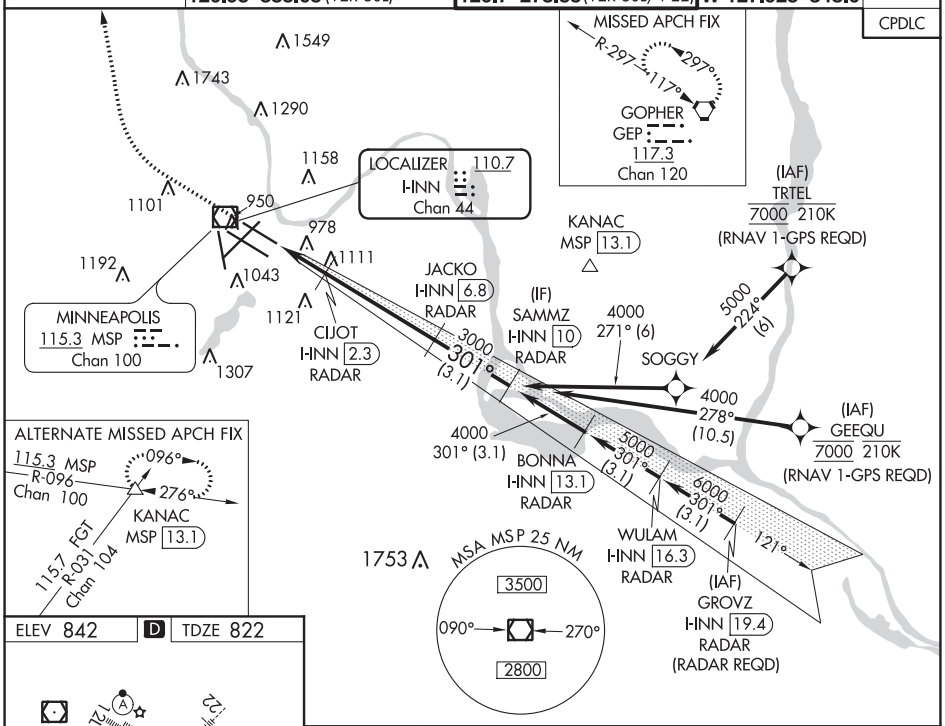
ILS or LOC RWY 30R
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

T A Simultaneous approaches authorized with Rwy 30L and ILS V RWY 35 (CONVERGING). For inop ALS, increase S-LOC 30R Cat D/E visibility to 1⅜ SM. Inop table does not apply to S-ILS 30R all Cats. DME or RADAR required.

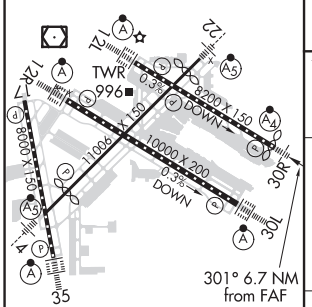
MALSF

MISSED APPROACH: Climb to 1300, then climbing right turn to 3000 direct GEP VORTAC and hold.

D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275 DEP 120.8	118.725 335.65 (Rwy 35) 119.3 335.65 (12L-30R, 4-22, 17) 126.95 335.65 (12R-30L)	123.675 273.55 (17-35) 123.95 273.55 (12L-30R) 126.7 273.55 (12R-30L, 4-22)	N 121.8 348.6 S 121.9 348.6 W 127.925 348.6	133.2 CPDLC

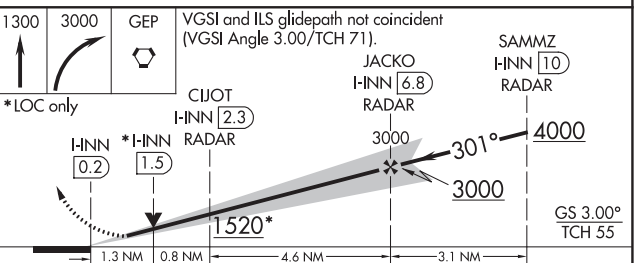


ELEV 842 | D | TDZE 822



HIRL all Rwys
REIL Rwy 17
TDZ/CL Rwys 12L, 12R, 30L, and 35

FAF to MAP 6.7 NM					
Knots	60	90	120	150	180
Min:Sec	6:42	4:28	3:21	2:41	2:14



CATEGORY	A	B	C	D	E
S-ILS 30R	1072/40 250 (300-¾)				
S-LOC 30R	1320/40 498 (500-¾)		1320/60 498 (500-1¼)		
C CIRCLING	1360-1 518 (600-1)		1460-1¾ 618 (700-1¾)	1660-2¾ 818 (900-2¾)	1800-3 958 (1000-3)

NC-1, 25 FEB 2021 to 22 APR 2021

LOC/DME I-BMA	APP CRS	Rwy ldg	8000
110.95	350°	TDZE	834
Chan 46 (Y)		Apt Elev	842

ILS Z or LOC RWY 35

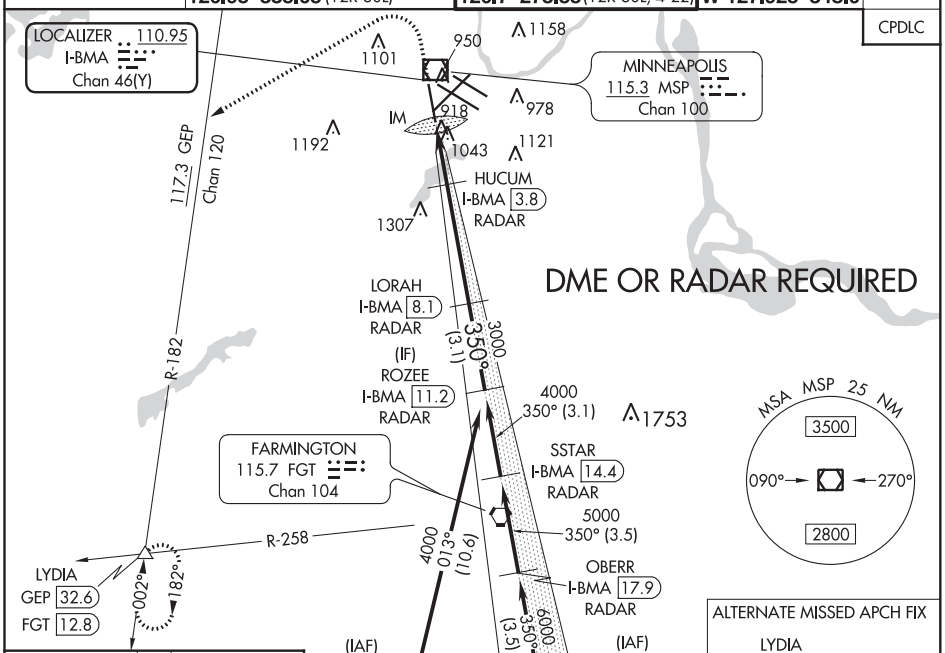
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

DME or RADAR required. For inop ALS, increase S-ILS 35 Cat E visibility to RVR 4000 and S-LOC 35 Cats C/D/E visibility to RVR 5500.

ALSF-2

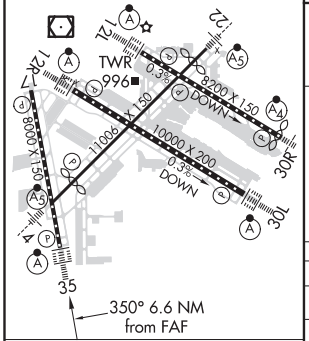
MISSED APPROACH: Climb to 1600 then climbing left turn to 3000 on heading 240° and on GEP VORTAC R-182 to LYDIA INT/GEP 32.6 DME and hold.

D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	118.725 335.65 (Rwy 35)	123.675 273.55 (17-35)	N 121.8 348.6	133.2
DEP 120.8	119.3 335.65 (12L-30R, 4-22, 17)	123.95 273.55 (12L-30R)	S 121.9 348.6	CPDLC
	126.95 335.65 (12R-30L)	126.7 273.55 (12R-30L, 4-22)	W 127.925 348.6	

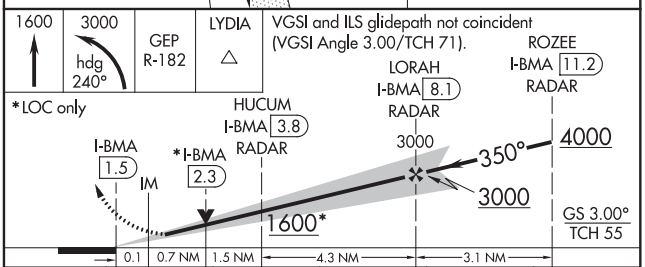


ELEV 842 D TDZE 834

HIRL all Rwys
REIL Rwy 17
TDZ/CL Rwys 12L, 12R, 30L, and 35



FAF to MAP 6.6 NM					
Knots	60	90	120	150	180
Min:Sec	6:36	4:24	3:18	2:38	2:12



CATEGORY	A	B	C	D	E
S-ILS 35	1034/18 200 (200-½)				
S-LOC 35	1180/24 346 (400-½)		1180/30 346 (400-⅝)		
C CIRCLING	1360-1 518 (600-1)		1460-1¾ 618 (700-1¾)	1660-2¾ 818 (900-2¾)	1800-3 958 (1000-3)

ILS RWY 12L (SA CAT I)
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

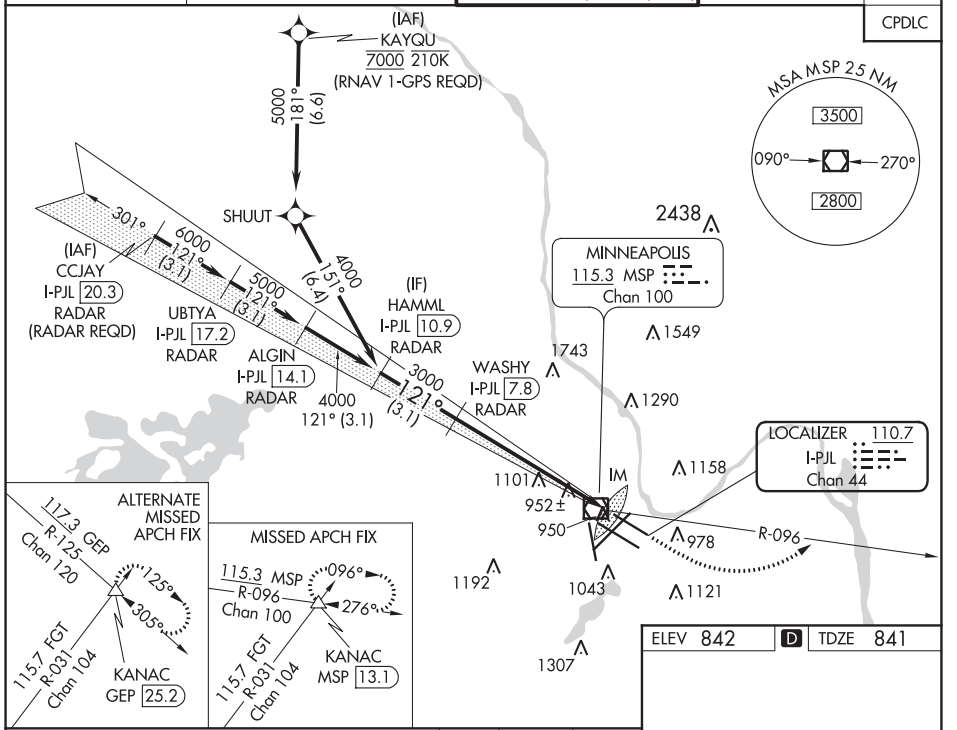
LOC/DME I-PJL	APP CRS	Rwy ldg	7620
110.7	121°	TDZE	841
Chan 44		Apt Elev	842

Simultaneous approach authorized with Rwy 12R. Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH. DME or RADAR required.

ALSF-2

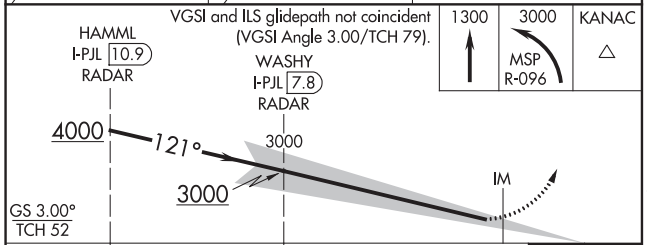
MISSED APPROACH: Climb to 1300, then climbing left turn to 3000 on MSP VOR/DME R-096 to KANAC INT/MSP 13.1 DME and hold.

D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	118.725 335.65 (Rwy 35)	123.675 273.55 (17-35)	N 121.8 348.6	133.2
DEP 120.8	119.3 335.65 (12L-30R, 4-22, 17)	123.95 273.55 (12L-30R)	S 121.9 348.6	CPDLC
	126.95 335.65 (12R-30L)	126.7 273.55 (12R-30L, 4-22)	W 127.925 348.6	



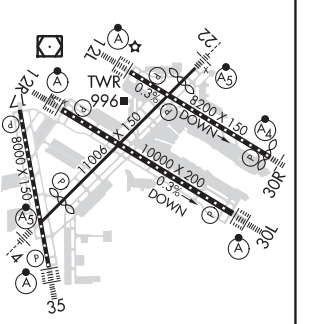
VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 79).

1300	3000	KANAC
	MSP R-096	



CATEGORY	A	B	C	D
S-ILS 12L	RA 147/14 150 DA 991			

ELEV 842 D TDZE 841



HIRL all Rwys
REIL Rwy 17
TDZ/CL Rwys 12L, 12R, 30L, and 35

SA CATEGORY I ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NC-1, 25 FEB 2021 to 22 APR 2021

ILS RWY 12R (SA CAT I)

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

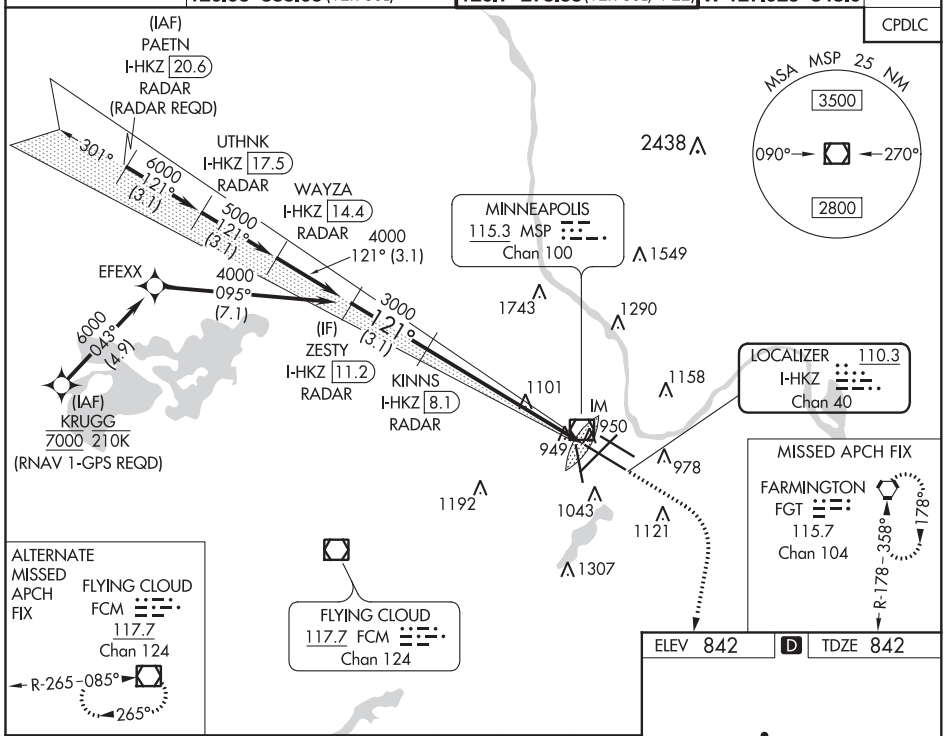
LOC/DME I-HKZ	APP CRS	Rwy ldg	10000
110.3	121°	TDZE	842
Chan 40		Apt Elev	842

T A DME or RADAR required. Simultaneous approach authorized with Rwy 12L. Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH.

ALSF-2

MISSED APPROACH: Climb to 1300 then climbing right turn to 3000 direct FGT VORTAC and hold.

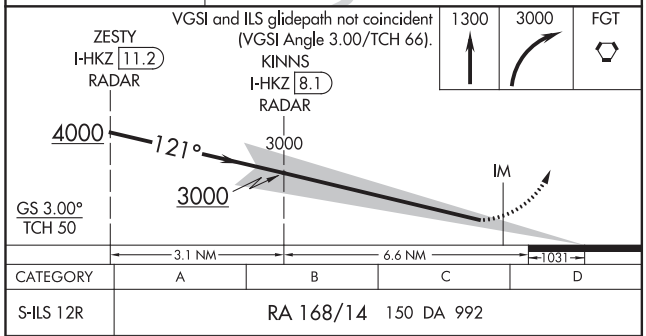
D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	118.725 335.65 (Rwy 35)	123.675 273.55 (17-35)	N 121.8 348.6	133.2
DEP 120.8	119.3 335.65 (12L-30R, 4-22, 17)	123.95 273.55 (12L-30R)	S 121.9 348.6	CPDLC
	126.95 335.65 (12R-30L)	126.7 273.55 (12R-30L, 4-22)	W 127.925 348.6	



ELEV 842 D TDZE 842

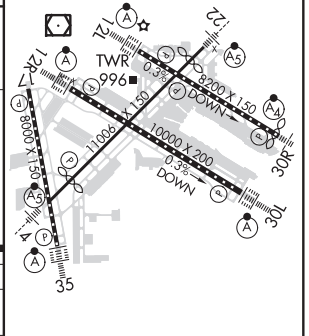
VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 66).

1300	3000	FGT



CATEGORY	A	B	C	D
S-ILS 12R	RA 168/14 150 DA 992			

SA CATEGORY I ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED



HIRL all Rwys
REIL Rwy 17
TDZ/CL Rwys 12L, 12R, 30L, and 35

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

LOC/DME I-BMA	APP CRS	Rwy ldg	8000
110.95	350°	TDZE	834
Chan 46 (Y)		Apt Elev	842

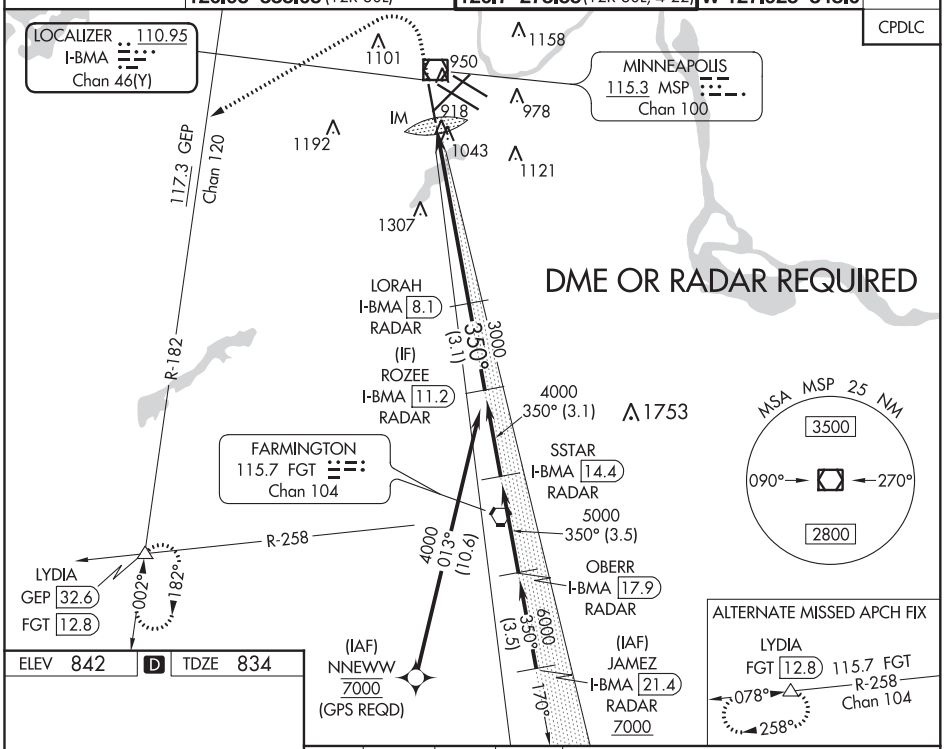
ILS RWY 35 (SA CAT I)
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

T A DME or RADAR required. Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH.

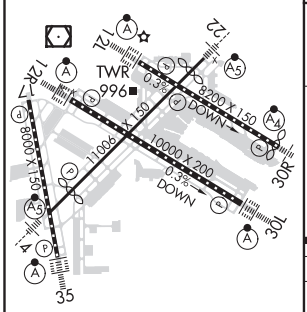
ALSF-2

MISSED APPROACH: Climb to 1600 then climbing left turn to 3000 on heading 240° and on GEP VORTAC R-182 to LYDIA INT/GEP 32.6 DME and hold.

D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	118.725 335.65 (Rwy 35)	123.675 273.55 (17-35)	N 121.8 348.6	133.2
DEP 120.8	119.3 335.65 (12L-30R, 4-22, 17)	123.95 273.55 (12L-30R)	S 121.9 348.6	CPDLC
	126.95 335.65 (12R-30L)	126.7 273.55 (12R-30L, 4-22)	W 127.925 348.6	



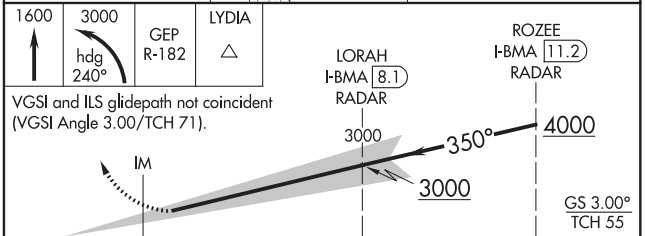
ELEV 842	D	TDZE 834



HIRL all Rwys
REIL Rwy 17
TDZ/CL Rwys 12L, 12R, 30L, and 35

1600	3000	GEP R-182	LYDIA
	hdg 240°		

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 71).



CATEGORY	A	B	C	D
S-ILS 35	RA 157/14 150 DA 984			

SA CATEGORY I ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NC-1, 25 FEB 2021 to 22 APR 2021

ILS RWY 30L (CAT II)

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

LOC/DME I-MSP	APP CRS	Rwy ldg 10000
110.3	301°	TDZE 823
Chan 40		Apt Elev 842

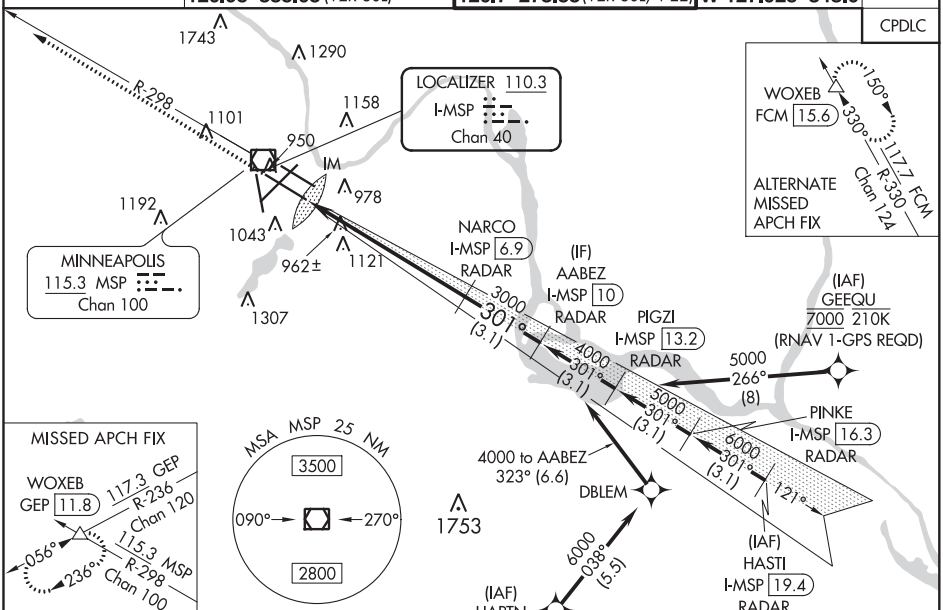
DME or RADAR required. Simultaneous approaches authorized with Rwy 30R and ILS V RWY 35 (CONVERGING). RVR 1000 authorized with specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown.

ALSF-2

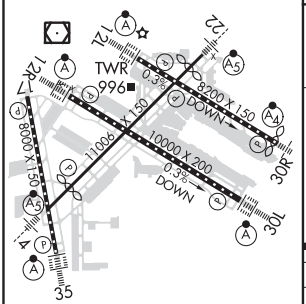
MISSED APPROACH: Climb to 1300 then climb to 3000 on heading 301° and MSP VOR/DME R-298 to WOXEB INT/ GEP VORTAC 11.8 DME and hold.

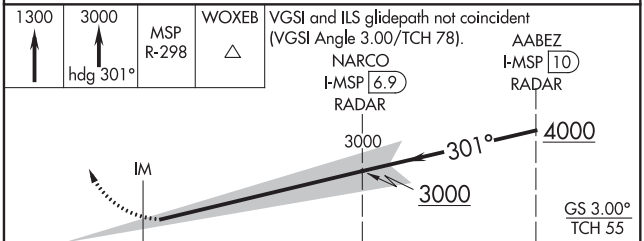
D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	118.725 335.65 (Rwy 35)	123.675 273.55 (17-35)	N 121.8 348.6	133.2
DEP 120.8	119.3 335.65 (12L-30R, 4-22, 17)	123.95 273.55 (12L-30R)	S 121.9 348.6	
	126.95 335.65 (12R-30L)	126.7 273.55 (12R-30L, 4-22)	W 127.925 348.6	

CPDLC



ELEV 842 | D | TDZE 823





CATEGORY	A	B	C	D
S-ILS 30L	RA NA/12 100 DA 923			

HIRL all Rwys
REIL Rwy 17
TDZ/CL Rwys 12L, 12R, 30L, and 35

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

LOC/DME I-PJL	APP CRS	Rwy ldg	7620
110.7	121°	TDZE	841
Chan 44		Apt Elev	842

ILS RWY 12L (CAT II & III)

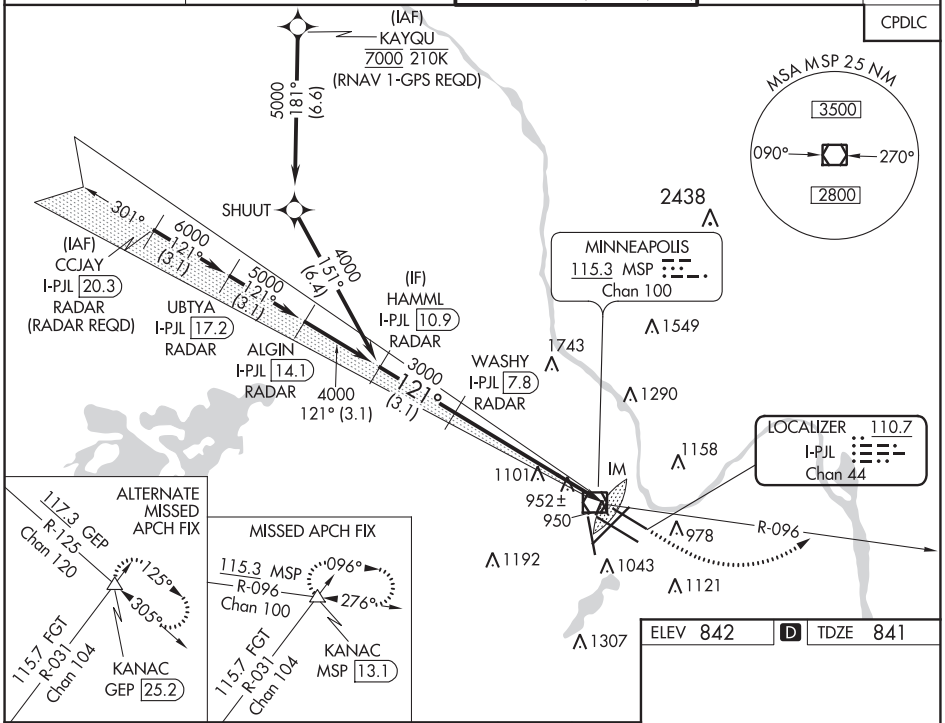
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

Simultaneous approach authorized with Rwy 12R.
CAT II: RVR 1000 authorized with specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown. DME or RADAR required.

ALSF-2

MISSED APPROACH: Climb to 1300, then climbing left turn to 3000 on MSP VOR/DME R-096 to KANAC INT/MSP 13.1 DME and hold.

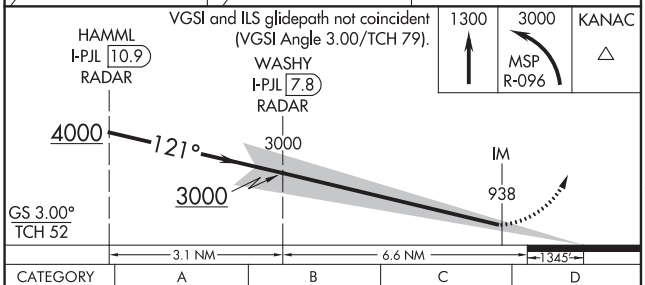
D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	118.725 335.65 (Rwy 35)	123.675 273.55 (17-35)	N 121.8 348.6	133.2
DEP 120.8	119.3 335.65 (12L-30R, 4-22, 17)	123.95 273.55 (12L-30R)	S 121.9 348.6	CPDLC
	126.95 335.65 (12R-30L)	126.7 273.55 (12R-30L, 4-22)	W 127.925 348.6	

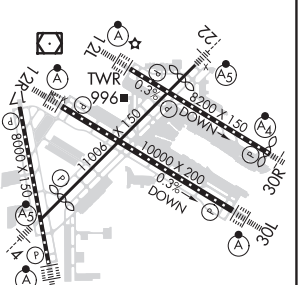


ELEV 842 D TDZE 841

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 79).

1300	3000	KANAC
	MSP R-096	△





CATEGORY	A	B	C	D
S-ILS 12L	CAT II RA 91/12 100 DA 941			
S-ILS 12L	CAT III RVR 07			

CATEGORY II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

HIRL all Rwys
REIL Rwy 17
TDZ/CL Rwys 12L, 12R, 30L, and 35

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

ILS RWY 12R (CAT II & III)

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

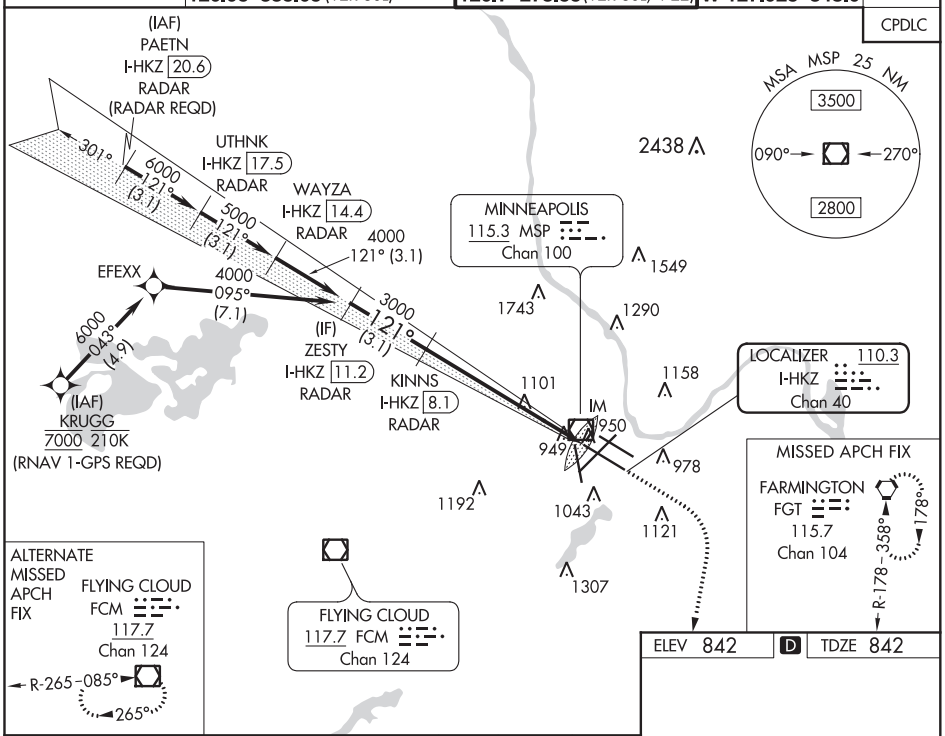
LOC/DME I-HKZ	APP CRS	Rwy ldg	10000
110.3	121°	TDZE	842
Chan 40		Apt Elev	842

DME or RADAR required. Simultaneous approach authorized with Rwy 12L.
CAT II: RVR 1000 authorized with specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown.

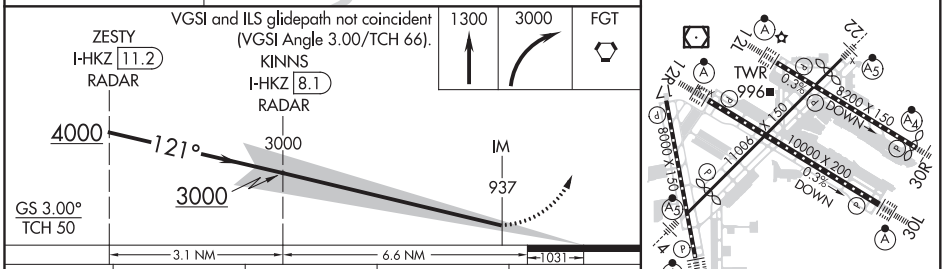
ALSF-2

MISSED APPROACH: Climb to 1300 then climbing right turn to 3000 direct FGT VORTAC and hold.

D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	118.725 335.65 (Rwy 35)	123.675 273.55 (17-35)	N 121.8 348.6	133.2
DEP 120.8	119.3 335.65 (12L-30R, 4-22, 17)	123.95 273.55 (12L-30R)	S 121.9 348.6	CPDLC
	126.95 335.65 (12R-30L)	126.7 273.55 (12R-30L, 4-22)	W 127.925 348.6	



ELEV 842 D TDZE 842



CATEGORY	A	B	C	D
S-ILS 12R	CAT II RA 102/12 100 DA 942			
S-ILS 12R	CAT III RVR 06			

CATEGORY II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

HIRL all Rwys
REIL Rwy 17
TDZ/CL Rwys 12L, 12R, 30L, and 35

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

LOC/DME I-BMA	APP CRS	Rwy ldg	8000
110.95	350°	TDZE	834
Chan 46 (Y)		Apt Elev	842

ILS RWY 35 (CAT II & III)

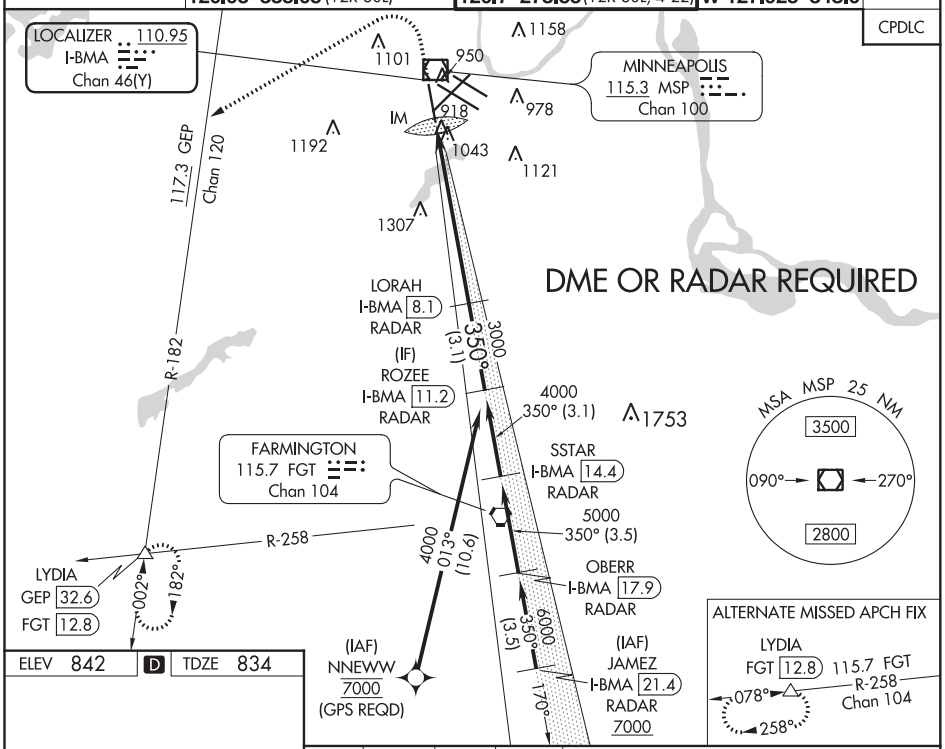
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

DME or RADAR required.

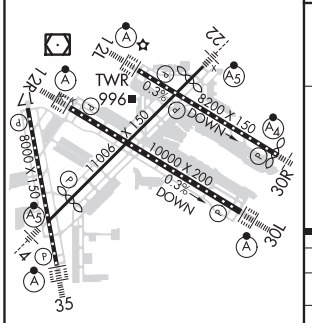
ALSF-2

MISSED APPROACH: Climb to 1600 then climbing left turn to 3000 on heading 240° and on GEP VORTAC R-182 to LYDIA INT/GEP 32.6 DME and hold.

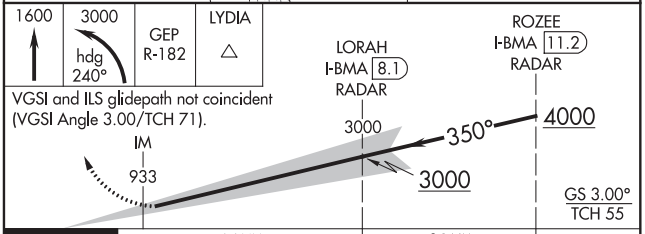
D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	118.725 335.65 (Rwy 35)	123.675 273.55 (17-35)	N 121.8 348.6	133.2
DEP 120.8	119.3 335.65 (12L-30R, 4-22, 17)	123.95 273.55 (12L-30R)	S 121.9 348.6	CPDLC
	126.95 335.65 (12R-30L)	126.7 273.55 (12R-30L, 4-22)	W 127.925 348.6	



ELEV 842 D TDZE 834



HIRL all Rwys
REIL Rwy 17
TDZ/CL Rwys 12L, 12R, 30L, and 35



VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 71).

CATEGORY	A	B	C	D
S-ILS 35	CAT II RA 106/12 110 DA 944			
S-ILS 35	CAT III RVR 06			

CATEGORY II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

LOC/DME I-BMA	APP CRS	Rwy ldg	8000
110.95	350°	TDZE	834
Chan 46 (Y)		Apt Elev	842

ILS V RWY 35 (CONVERGING)

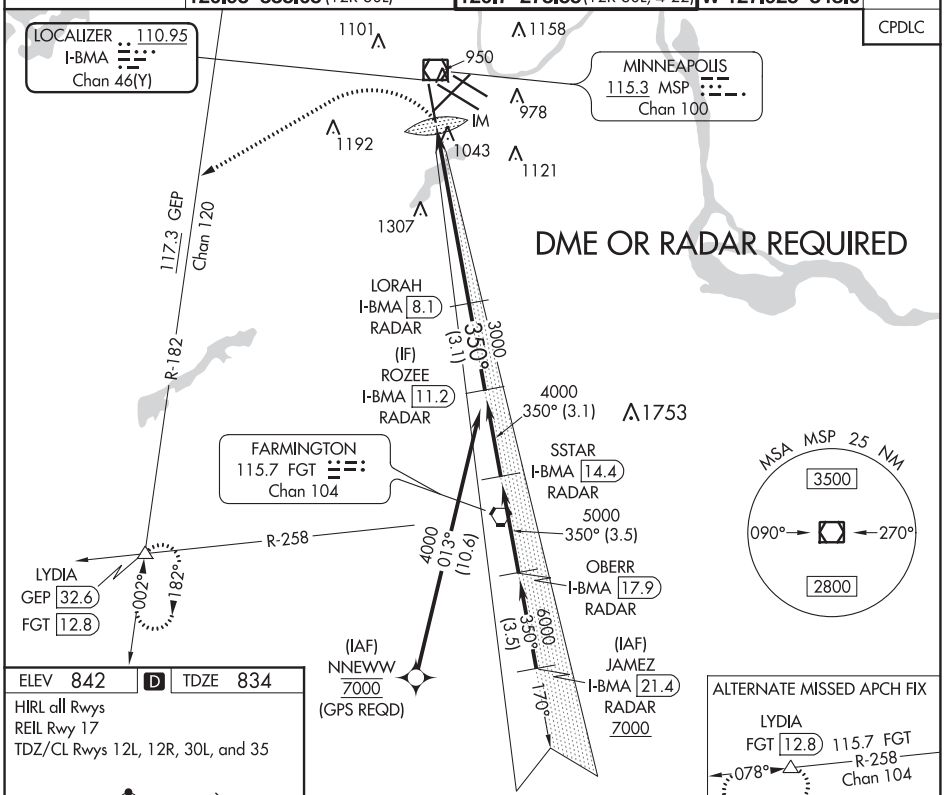
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

T NA — Inop table does not apply. No autoland on ILS V RWY 35 (CONVERGING). Simultaneous approach authorized.

ALSF-2

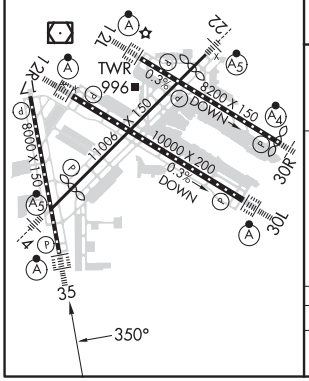
MISSED APPROACH: Climbing left turn to 3000 on heading 240° and on GEP VORTAC R-182 to LYDIA INT/GEP 32.6 DME and hold.

D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	118.725 335.65 (Rwy 35)	123.675 273.55 (17-35)	N 121.8 348.6	133.2
DEP 120.8	119.3 335.65 (12L-30R, 4-22, 17)	123.95 273.55 (12L-30R)	S 121.9 348.6	CPDLC
	126.95 335.65 (12R-30L)	126.7 273.55 (12R-30L, 4-22)	W 127.925 348.6	



ELEV 842	D	TDZE 834

HIRL all Rwys
REIL Rwy 17
TDZ/CL Rwys 12L, 12R, 30L, and 35

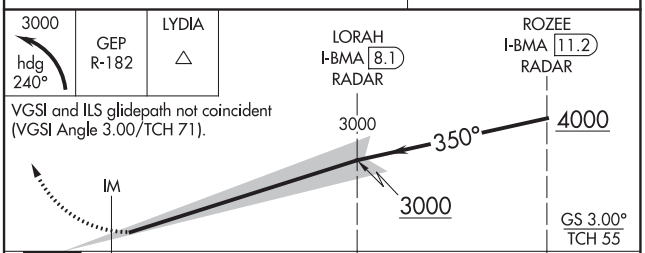


ALTERNATE MISSED APCH FIX

LYDIA
FGT 12.8 115.7 FGT
R-258
Chan 104
078°
258°

3000	GEP	LYDIA
hdg 240°	R-182	△

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 71).



CATEGORY	A	B	C	D	E
S-ILS 35	1684-3 850 (900-3)				

NC-1, 25 FEB 2021 to 22 APR 2021

MINNEAPOLIS, MINNESOTA AL-264 (FAA) 20254

APP CRS	Rwy ldg	7620
121°	TDZE	839
	Apt Elev	842

RNAV (RNP) Y RWY 12L

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

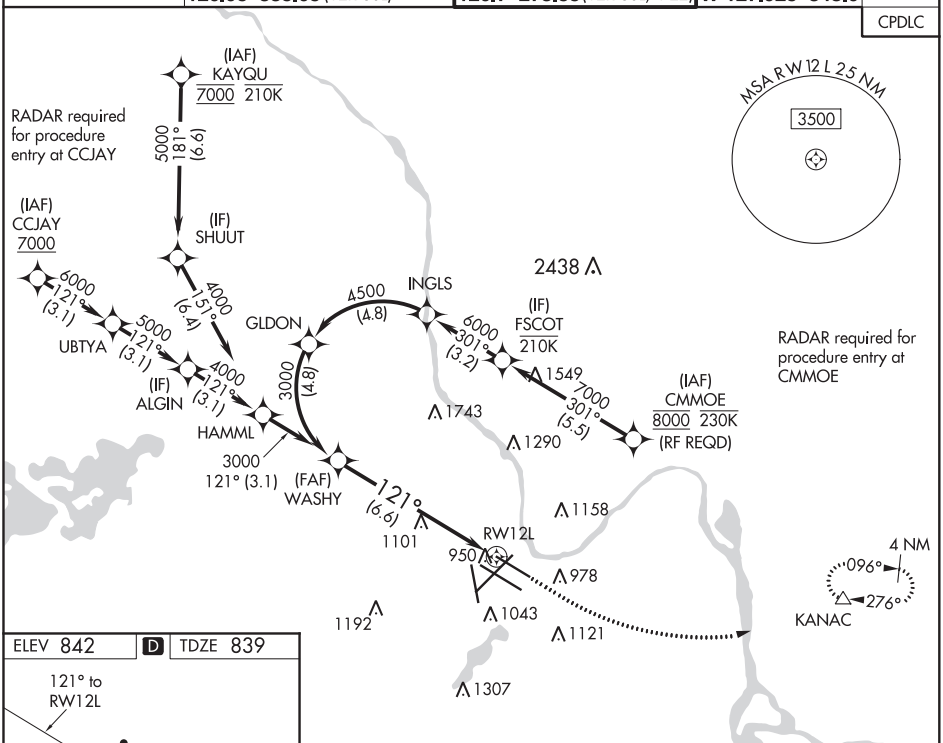
T For uncompensated Baro-VNAV systems, procedure NA below -20°C (-4°F) or above 54°C (130°F). GPS required.

ALSF-2

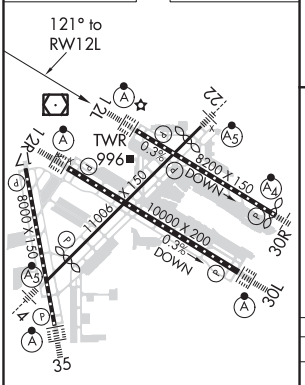
MISSED APPROACH: Climb to 1300 then climbing left turn to 3000 direct KANAC and hold.

D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275 DEP 120.8	118.725 335.65 (Rwy 35) 119.3 335.65 (12L-30R, 4-22, 17) 126.95 335.65 (12R-30L)	123.675 273.55 (17-35) 123.95 273.55 (12L-30R) 126.7 273.55 (12R-30L, 4-22)	N 121.8 348.6 S 121.9 348.6 W 127.925 348.6	133.2

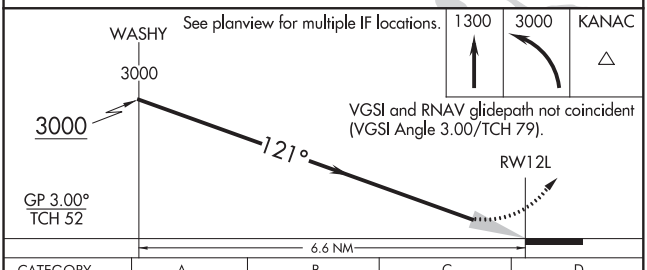
CPDLC



ELEV 842 D TDZE 839



HIRL all Rwys
REIL Rwy 17
TDZ/CL Rwys 12L, 12R, 30L, and 35



VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 79).

CATEGORY	A	B	C	D
RNP 0.15 DA	1150/24 311 (400-½)			
RNP 0.30 DA	1241/45 402 (400-⅞)			

AUTHORIZATION REQUIRED

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

MINNEAPOLIS, MINNESOTA
Orig 30APR15

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)
44°53'N-93°13'W
RNAV (RNP) Y RWY 12L

APP CRS	Rwy ldg	10000
121°	TDZE	842
	Apt Elev	842

RNAV (RNP) Y RWY 12R

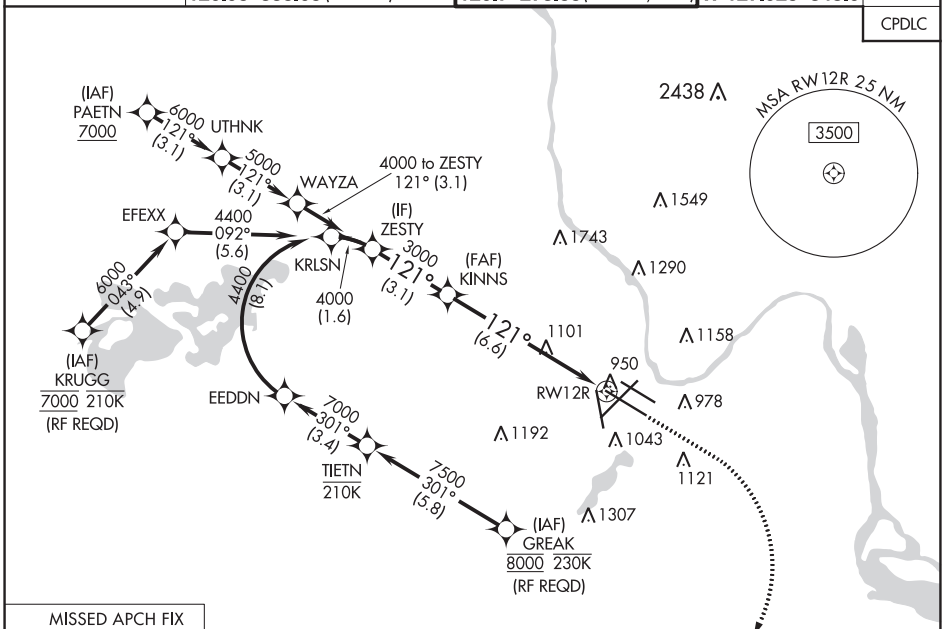
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

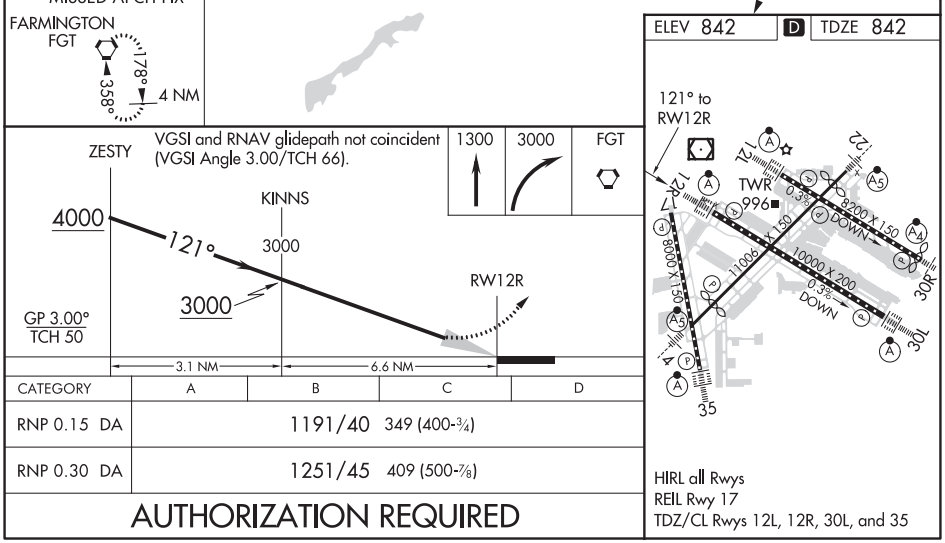
For uncompensated Baro-VNAV systems, procedure NA below -20°C (-4°F) or above 54°C (130°F). Simultaneous approach authorized with Rwy 12L. GPS required. For inop ALS, increase RNP 0.15 all Cats visibility to RVR 6000.

ALSF-2

MISSED APPROACH: Climb to 1300 then climbing right turn to 3000 direct FGT VORTAC and hold.

D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	118.725 335.65 (Rwy 35)	123.675 273.55 (17-35)	N 121.8 348.6	133.2
DEP 120.8	119.3 335.65 (12L-30R, 4-22, 17)	123.95 273.55 (12L-30R)	S 121.9 348.6	
	126.95 335.65 (12R-30L)	126.7 273.55 (12R-30L, 4-22)	W 127.925 348.6	
				CPDLC





CATEGORY	A	B	C	D
RNP 0.15 DA	1191/40 349 (400-¾)			
RNP 0.30 DA	1251/45 409 (500-⅞)			

AUTHORIZATION REQUIRED

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

MINNEAPOLIS, MINNESOTA | AL-264 (FAA) | 20254

APP CRS	Rwy ldg	10000
301°	TDZE	823
	Apt Elev	842

RNAV (RNP) Y RWY 30L

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

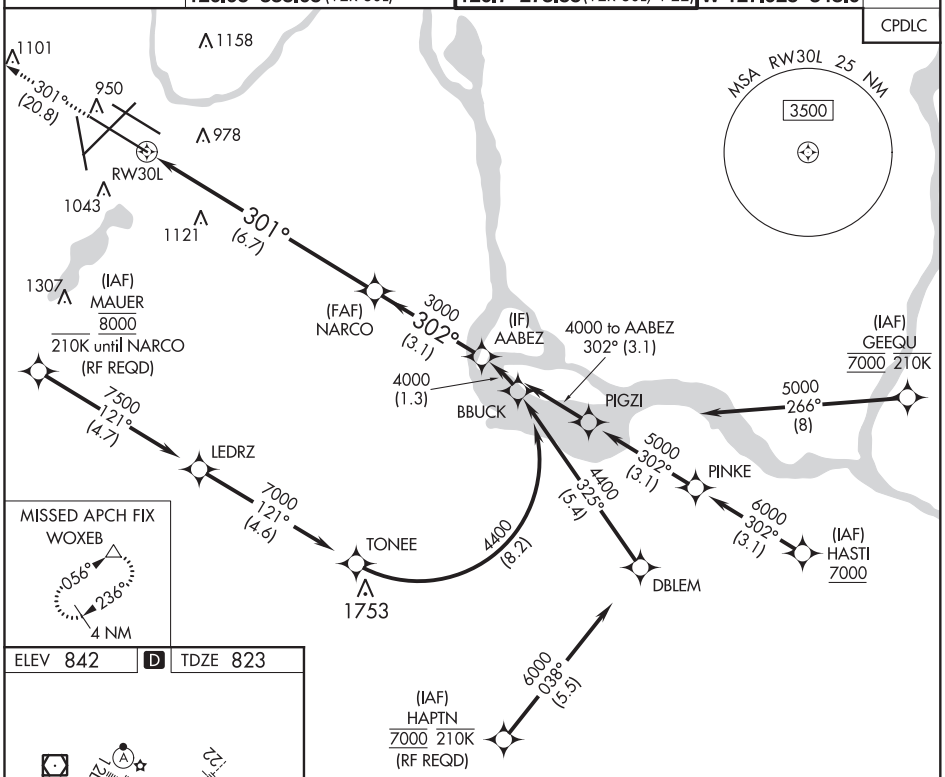
For uncompensated Baro-VNAV systems, procedure NA below -19°C (-2°F) or above 54°C (130°F). GPS required. Simultaneous approaches authorized with Rwy 30R and ILS V RWY 35 (CONVERGING).

ALSF-2

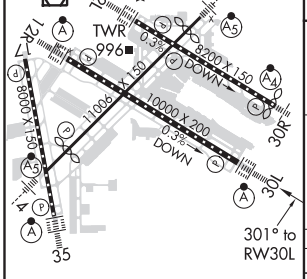
MISSED APPROACH: Climb to 3000 on track 301° to WOXEB and hold.

D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275 DEP 120.8	118.725 335.65 (Rwy 35) 119.3 335.65 (12L-30R, 4-22, 17) 126.95 335.65 (12R-30L)	123.675 273.55 (17-35) 123.95 273.55 (12L-30R) 126.7 273.55 (12R-30L, 4-22)	N 121.8 348.6 S 121.9 348.6 W 127.925 348.6	133.2

CPDLC



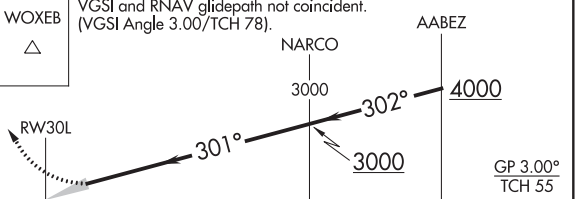
ELEV 842 | D | TDZE 823



HIRL all Rwys
REIL Rwy 17
TDZ/CL Rwys 12L, 12R, 30L, and 35

3000 tr 301° | WOXEB

VGSI and RNAV glidepath not coincident. (VGSI Angle 3.00/TCH 78).



CATEGORY	A	B	C	D
RNP 0.30 DA	1150/30 327 (400-⅝)			

AUTHORIZATION REQUIRED

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

APP CRS	Rwy ldg	8000
301°	TDZE	822
	Apt Elev	842

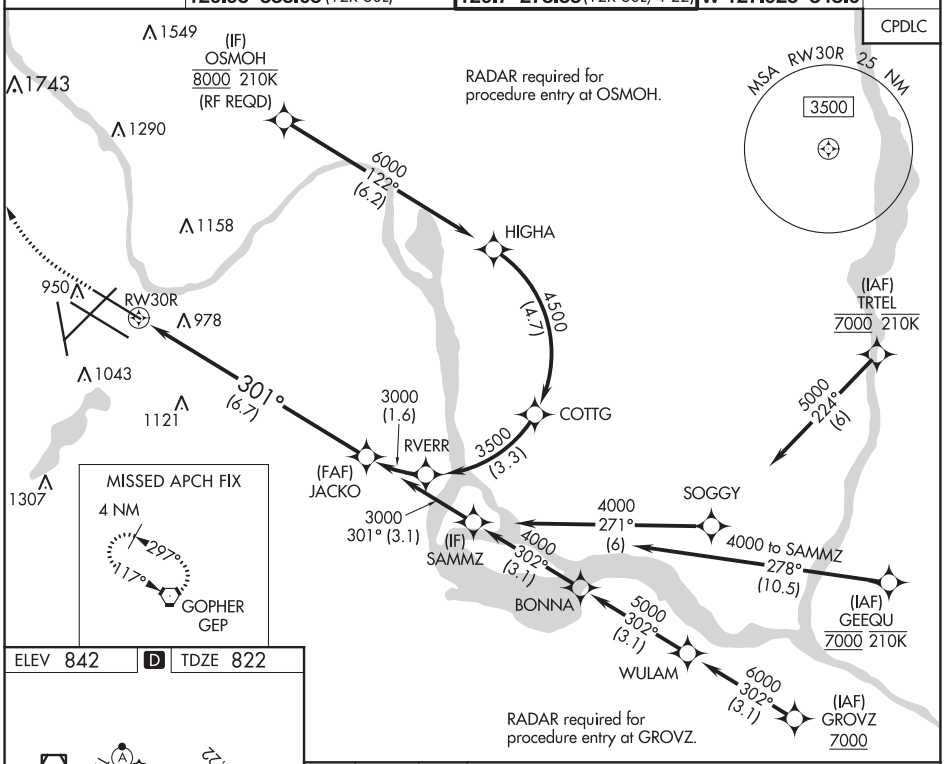
RNAV (RNP) Y RWY 30R
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

For uncompensated Baro-VNAV systems, procedure NA below -19°C (-2°F) or above 54°C (130°F). Simultaneous approach authorized with Rwy 30L and ILS V RWY 35 (CONVERGING). GPS required. For inop ALS, increase RNP 0.15 all Cats visibility to RVR 4500 and RNP 0.30 Cat D visibility to 1⅝ SM.

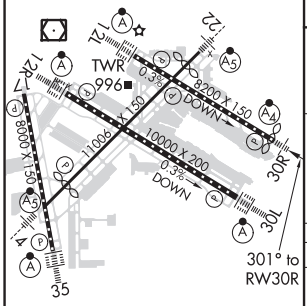
MALSF

MISSED APPROACH: Climb to 1300 then climbing right turn to 3000 direct GEP VORTAC and hold.

D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	118.725 335.65 (Rwy 35)	123.675 273.55 (17-35)	N 121.8 348.6	133.2
DEP 120.8	119.3 335.65 (12L-30R, 4-22, 17)	123.95 273.55 (12L-30R)	S 121.9 348.6	CPDLC
	126.95 335.65 (12R-30L)	126.7 273.55 (12R-30L, 4-22)	W 127.925 348.6	



ELEV 842 | D | TDZE 822

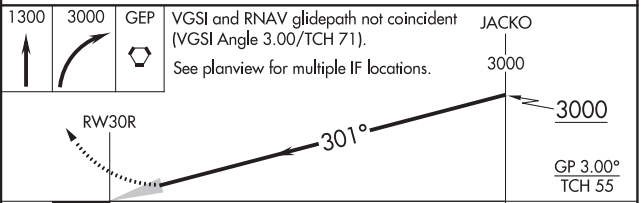


HIRL all Rwys
REIL Rwy 17
TDZ/CL Rwys 12L, 12R, 30L, and 35

1300 | 3000 | GEP

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 71).

See planview for multiple IF locations.



CATEGORY	A	B	C	D
RNP 0.15 DA	1097/40 275 (300-¾)			
RNP 0.30 DA	1298-1⅜ 476 (500-1⅜)			

AUTHORIZATION REQUIRED

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

APP CRS	Rwy ldg	8000
350°	TDZE	834
	Apt Elev	842

RNAV (RNP) Y RWY 35

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

For uncompensated Baro-VNAV systems, procedure NA below -19°C (-2°F) or above 54°C (130°F). For inop ALSF, increase RNP 0.30 all Cats visibility to 1½ miles. GPS required.

ALSF-2

MISSED APPROACH: Climb to 1300 then climbing left turn to 3000 direct LYDIA and hold.

D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	118.725 335.65 (Rwy 35)	123.675 273.55 (17-35)	N 121.8 348.6	133.2
DEP 120.8	119.3 335.65 (12L-30R, 4-22, 17)	123.95 273.55 (12L-30R)	S 121.9 348.6	CPDLC
	126.95 335.65 (12R-30L)	126.7 273.55 (12R-30L, 4-22)	W 127.925 348.6	

RADAR required for procedure entry at BRNVL.

(IAF) BRNVL 8000 210K (RF REQD)

7000 179° (3.3)

(IF) HRBIE 210K

6000 178° (3.1)

HANRA

1101 950 1158 978 1192 RW35 1043 1121 1307

350° (6.6)

(FAF) LORAH

3000 350° (3.1)

4000 (1.1) ROZEE

CHRMR 1753

4000 to ROZEE 350° (3.1)

4300 (7.2)

4300 015° (4.8)

(IF) SSTAR

5000 350° (3.5)

(IF) BUHZZ 210K

OBERR

6000 350° (3.5)

5500 015° (4.8)

(IAF) NNEWW 7000 (RF REQD)

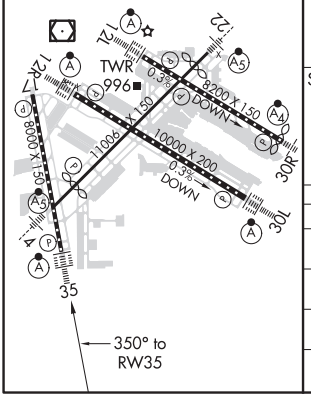
(IAF) JAMEZ 7000

LYDIA 078° 258° 4 NM

MSA RW35 25 NM 3500

ELEV 842 D TDZE 834

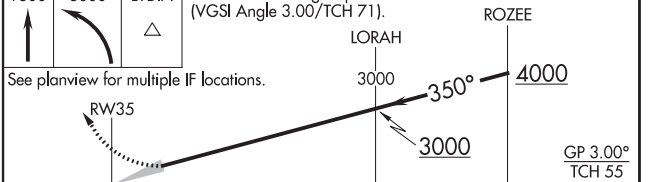
HIRL all Rwys
REIL Rwy 17
TDZ/CL Rwys 12L, 12R, 30L, and 35



1300	3000	LYDIA

VGSI and RNAV glidepath not coincident. (VGSI Angle 3.00/TCH 71).

See planview for multiple IF locations.



CATEGORY	A	B	C	D
RNP 0.11 DA	1213/40 379 (400-¾)			
RNP 0.16 DA	1291/60 457 (500-1¼)			
RNP 0.30 DA	1345-1¼ 511 (600-1¼)			

AUTHORIZATION REQUIRED

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 72931 W04A	APP CRS 045°	Rwy ldg 9456 TDZE 832 Apt Elev 842

RNAV (GPS) RWY 4
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

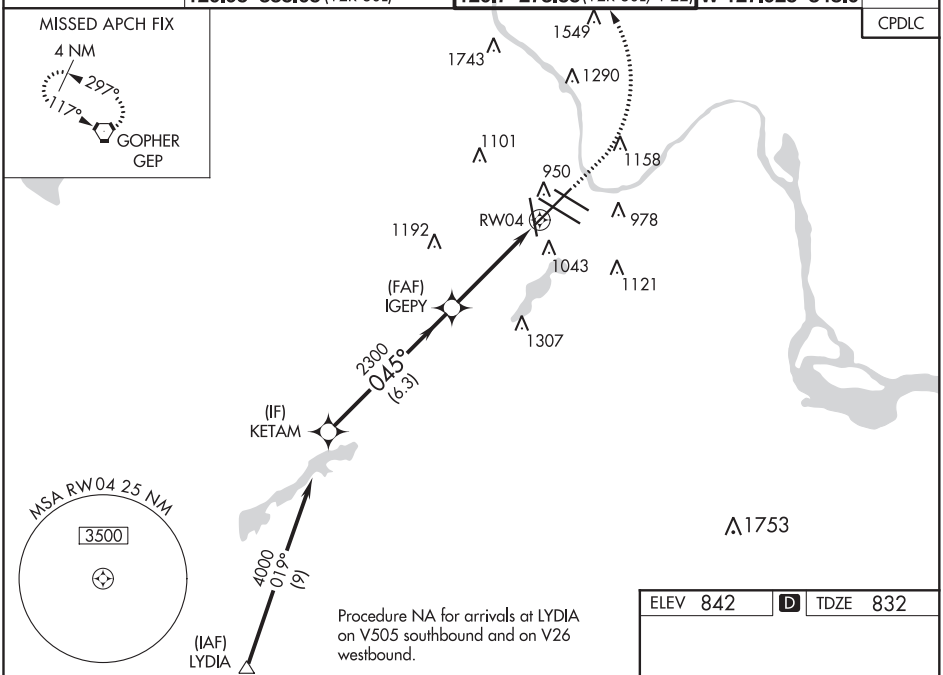
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C or above 54°C. For inop ALS, increase LPV Cat E visibility to RVR 4000, LNAV/VNAV Cat E visibility to 1⅜ SM, LNAV Cat C/D/E visibility to 1⅜ SM. #RVR 1800 authorized with use of FD or AP or HUD to DA.

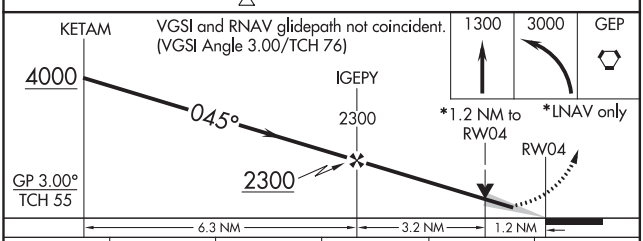
MALSR

MISSED APPROACH: Climb to 1300 then climbing left turn to 3000 direct GEP VORTAC and hold.

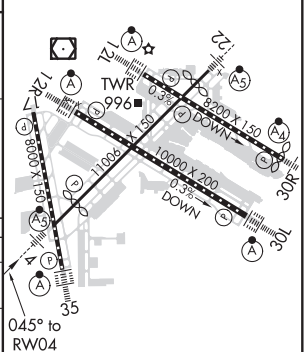
D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275 DEP 120.8	118.725 335.65 (Rwy 35) 119.3 335.65 (12L-30R, 4-22, 17) 126.95 335.65 (12R-30L)	123.675 273.55 (17-35) 123.95 273.55 (12L-30R) 126.7 273.55 (12R-30L, 4-22)	N 121.8 348.6 S 121.9 348.6 W 127.925 348.6	133.2 CPDLC



Procedure NA for arrivals at LYDIA on V505 southbound and on V26 westbound.



ELEV 842 | D | TDZE 832



CATEGORY	A	B	C	D	E
LPV DA#	1032/24 200 (200-½)				
LNAV/VNAV DA	1281/45 449 (500-⅞)				
LNAV MDA	1300/24 468 (500-½)		1300/50 468 (500-1)		
C CIRCLING	1360-1 518 (600-1)		1460-1¾ 618 (700-1¾)	1660-2¾ 818 (900-2¾)	1800-3 958 (1000-3)

HIRL all Rwys
REIL Rwy 17
TDZ/CL Rwys 12L, 12R, 30L, and 35

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 60927 W22A	APP CRS 225°	Rwy ldg 10006 TDZE 828 Apt Elev 842

RNAV (GPS) RWY 22
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

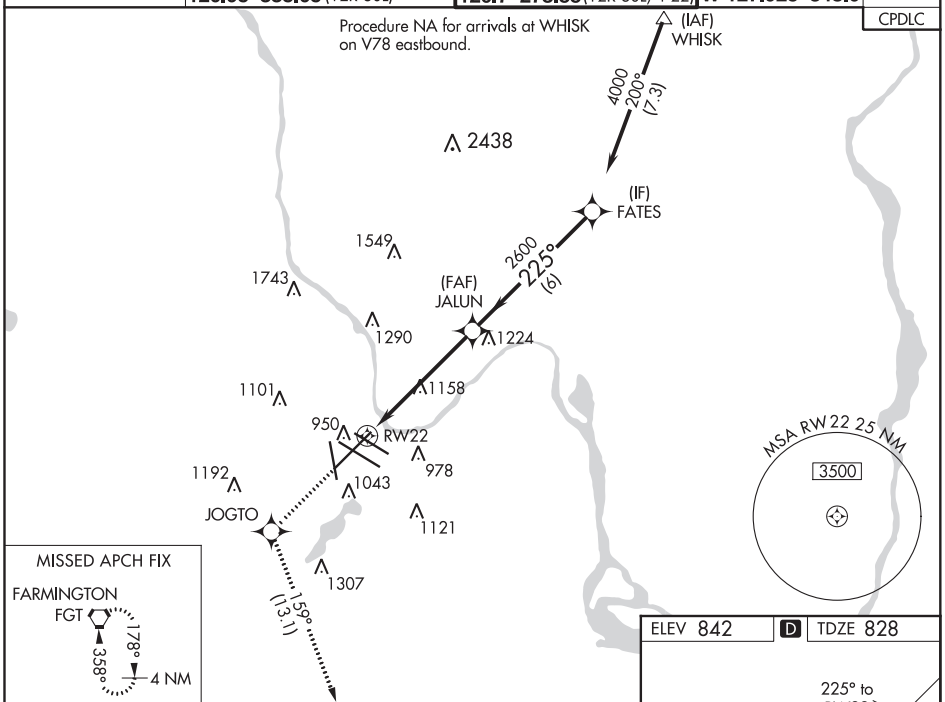
RNP APCH.

Rwy 22 helicopter visibility reduction below RVR 4000 NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -27°C or above 54°C. For inop ALS, increase LPV Cat E visibility to RVR 5500, LNAV/VNAV all Cats visibility to RVR 6000 and LNAV Cat A/B visibility to RVR 5500, and Cat E to 1¾ SM.

MALSR

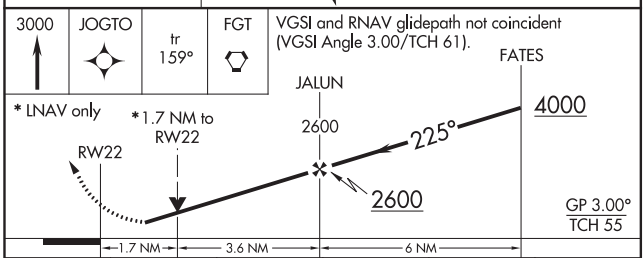
MISSED APPROACH: Climb to 3000 direct JOGTO and on track 159° to FGT VORTAC and hold.

D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275 DEP 120.8	118.725 335.65 (Rwy 35) 119.3 335.65 (12L-30R, 4-22, 17) 126.95 335.65 (12R-30L)	123.675 273.55 (17-35) 123.95 273.55 (12L-30R) 126.7 273.55 (12R-30L, 4-22)	N 121.8 348.6 S 121.9 348.6 W 127.925 348.6	133.2 CPDLC



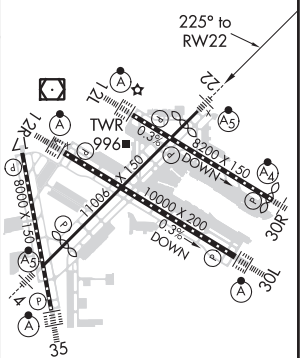
3000	JOGTO	tr 159°	FGT

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 61).



CATEGORY	A	B	C	D	E
LPV DA	1190/40 362 (400-¾)				
LNAV/VNAV DA	1227/45 399 (400-⅞)				
LNAV MDA	1420/40 592 (600-¾)		1420-1¼ 592 (600-1¼)		
C CIRCLING	1420-1 578 (600-1)		1460-1¾ 618 (700-1¾)	1660-2¾ 818 (900-2¾)	1800-3 958 (1000-3)

ELEV 842 D TDZE 828



HIRL all Rwys
REIL Rwy 17
TDZ/CL Rwys 12L, 12R, 30L, and 35

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 45525 W12B	APP CRS 121°	Rwy ldg 7620 TDZE 841 Apt Elev 842

RNAV (GPS) Z RWY 12L

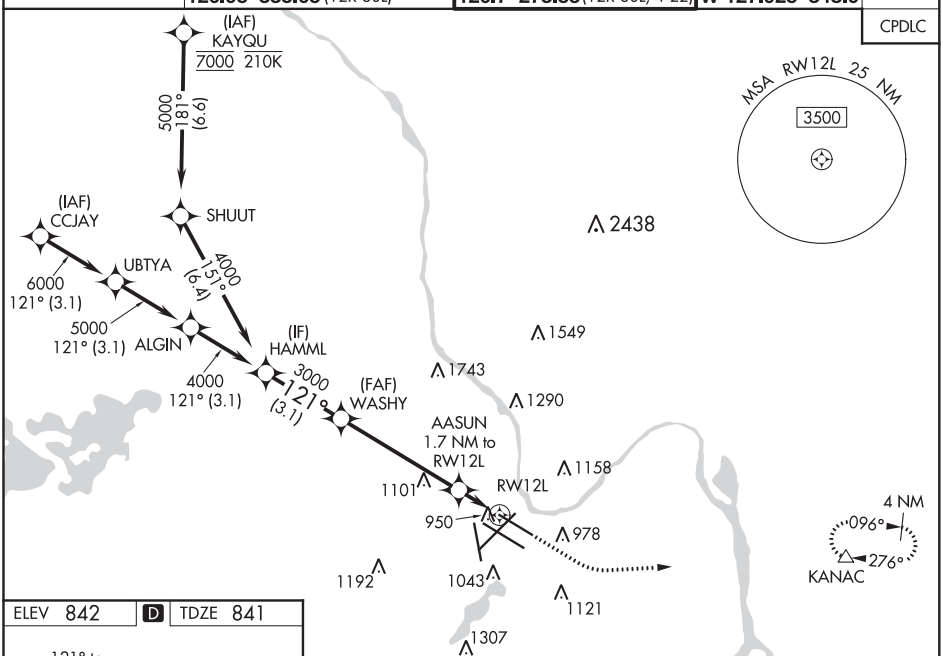
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

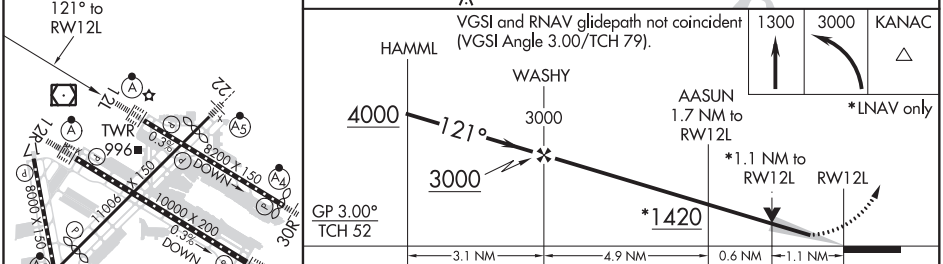
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 54°C (130°F). Simultaneous approach authorized with Rwy 12R. Use of FD or AP providing RNAV track guidance required during simultaneous operations. LNAV procedure NA during simultaneous operations. DME/DME RNP-0.3 NA. For inop ALS, increase LPV Cat E visibility to RVR 4000, LNAV/VNAV Cat E visibility to 1¼ SM, LNAV Cats C/D/E visibility to RVR 6000.

ALSF-2

MISSED APPROACH: Climb to 1300, then climbing left turn to 3000 direct KANAC and hold.

D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275 DEP 120.8	118.725 335.65 (Rwy 35) 119.3 335.65 (12L-30R, 4-22, 17) 126.95 335.65 (12R-30L)	123.675 273.55 (17-35) 123.95 273.55 (12L-30R) 126.7 273.55 (12R-30L, 4-22)	N 121.8 348.6 S 121.9 348.6 W 127.925 348.6	133.2 CPDLC





ELEV 842 | D | TDZE 841

HIRL all Rwys
REIL Rwy 17
TDZ/CL Rwys 12L, 12R, 30L, and 35

CATEGORY	A	B	C	D	E
LPV DA	1041/18 200 (200-½)				
LNAV/VNAV DA	1211/40 370 (400-¾)				
LNAV MDA	1260/24 419 (500-½)		1260/40 419 (500-¾)		
C CIRCLING	1360-1 518 (600-1)		1460-1¾ 618 (700-1¾)	1660-2¾ 818 (900-2¾)	1800-3 958 (1000-3)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 50125 W12A	APP CRS 121°	Rwy ldg 10000 TDZE 842 Apt Elev 842

RNAV (GPS) Z RWY 12R

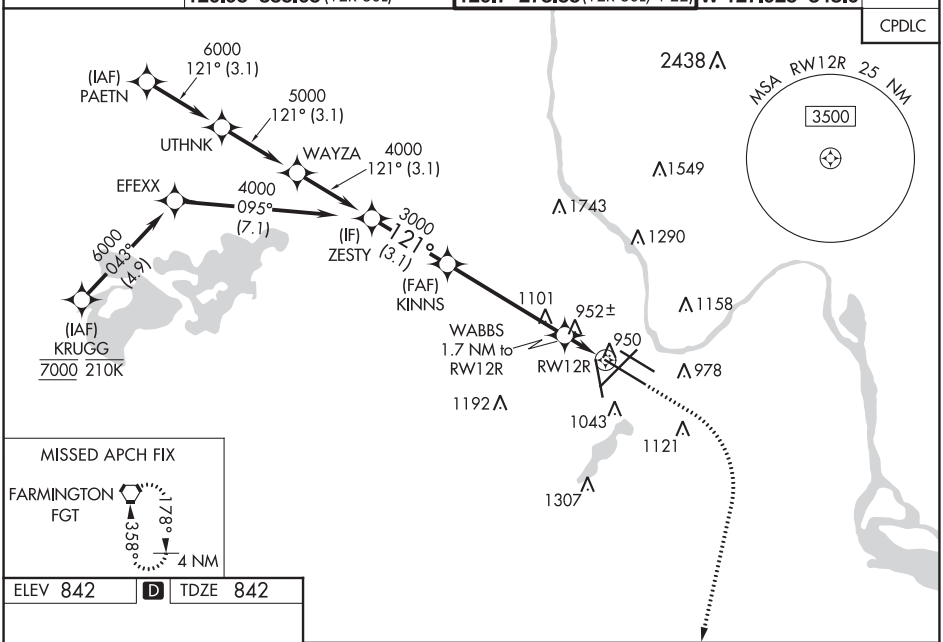
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 54°C (130°F). Simultaneous approach authorized with Rwy 12L. DME/DME RNP-0.3 NA. Use of FD or AP providing RNAV track guidance required during simultaneous operations. For inop ALS, increase LPV Cat E visibility to RVR 4000, increase LNAV/VNAV Cat E visibility to 1¼ SM, and increase LNAV Cat C/D/E visibility to RVR 5500. LNAV procedure NA during simultaneous operations.

ALSF-2

MISSED APPROACH: Climb to 1300 then climbing right turn to 3000 direct FGT VORTAC and hold.

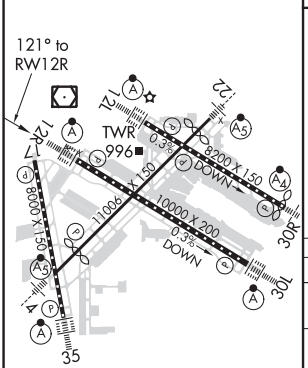
D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275 DEP 120.8	118.725 335.65 (Rwy 35) 119.3 335.65 (12L-30R, 4-22, 17) 126.95 335.65 (12R-30L)	123.675 273.55 (17-35) 123.95 273.55 (12L-30R) 126.7 273.55 (12R-30L, 4-22)	N 121.8 348.6 S 121.9 348.6 W 127.925 348.6	133.2 CPDLC



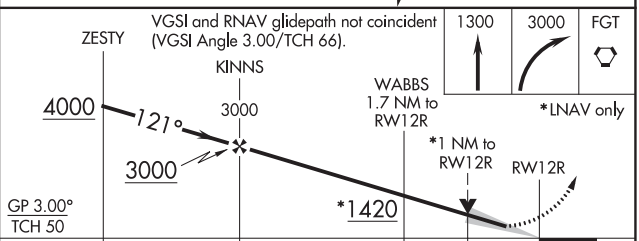
MISSED APCH FIX

FARMINGTON FGT 178° 358° 4 NM

ELEV 842	D	TDZE 842



HIRL all Rwys
REIL Rwy 17
TDZ/CL Rwys 12L, 12R, 30L, and 35



CATEGORY	A	B	C	D	E
LPV DA	1042/18 200 (200-½)				
LNAV/VNAV DA	1211/40 369 (400-¾)				
LNAV MDA	1220/24 378 (400-½)	1220/35 378 (400-⅝)			
C CIRCLING	1360-1 518 (600-1)	1460-1¾ 618 (700-1¾)	1660-2¾ 818 (900-2¾)	1800-3 958 (1000-3)	

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 56225 W30A	APP CRS 301°	Rwy ldg 10000 TDZE 823 Apt Elev 842

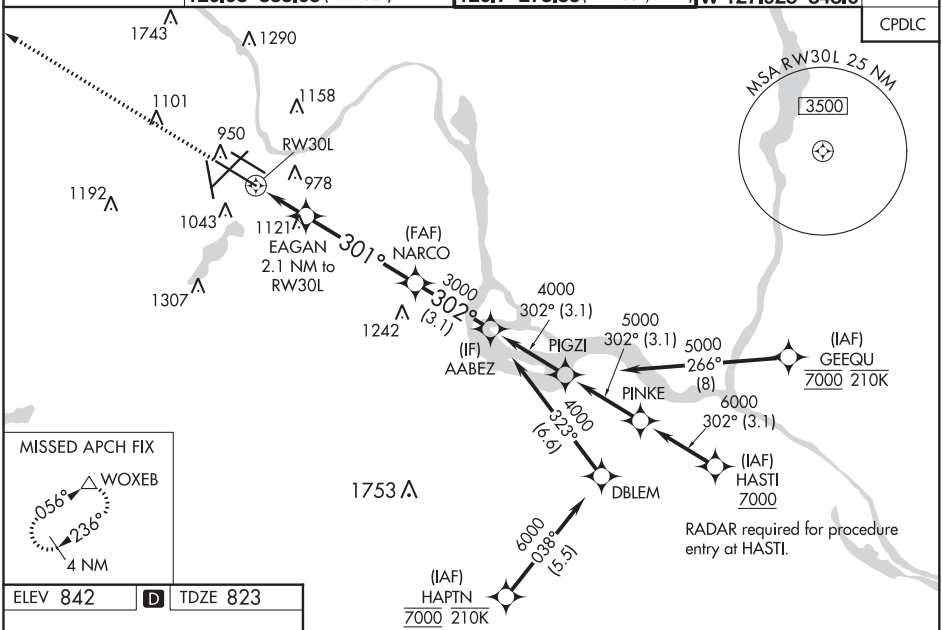
RNAV (GPS) Z RWY 30L
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C (-2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Simultaneous approaches authorized with Rwy 30R and ILS V RWY 35 (CONVERGING). Use of FD or AP providing RNAV track guidance required during simultaneous operations. LNAV procedure NA during simultaneous operations. For inop ALS, increase LPV Cat E visibility to RVR 4000, increase LNAV/VNAV Cat E visibility to RVR 5000, and LNAV Cat E visibility to 1⅜ SM.

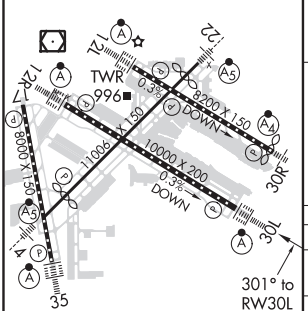
ALSF-2

MISSED APPROACH: Climb to 3000 direct WOXEB and hold.

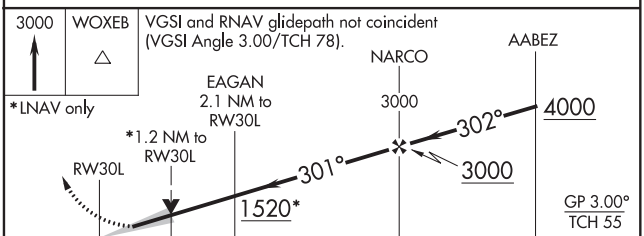
D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275 DEP 120.8	118.725 335.65 (Rwy 35) 119.3 335.65 (12L-30R, 4-22, 17) 126.95 335.65 (12R-30L)	123.675 273.55 (17-35) 123.95 273.55 (12L-30R) 126.7 273.55 (12R-30L, 4-22)	N 121.8 348.6 S 121.9 348.6 W 127.925 348.6	133.2 CPDLC



ELEV 842 | D | TDZE 823



HIRL all Rwys
REIL Rwy 17
TDZ/CL Rwys 12L, 12R, 30L, and 35



CATEGORY	A	B	C	D	E
LPV DA	1023/18 200 (200-½)				
LNAV/VNAV DA	1130/24 307 (300-½)				
LNAV MDA	1280/24 457 (500-½)	1280/45 457 (500-⅞)			
C CIRCLING	1360-1 518 (600-1)	1460-1¾ 618 (700-1¾)	1660-2¾ 818 (900-2¾)	1800-3 958 (1000-3)	

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 60925 W30B	APP CRS 301°	Rwy ldg 8000 TDZE 822 Apt Elev 842

RNAV (GPS) Z RWY 30R

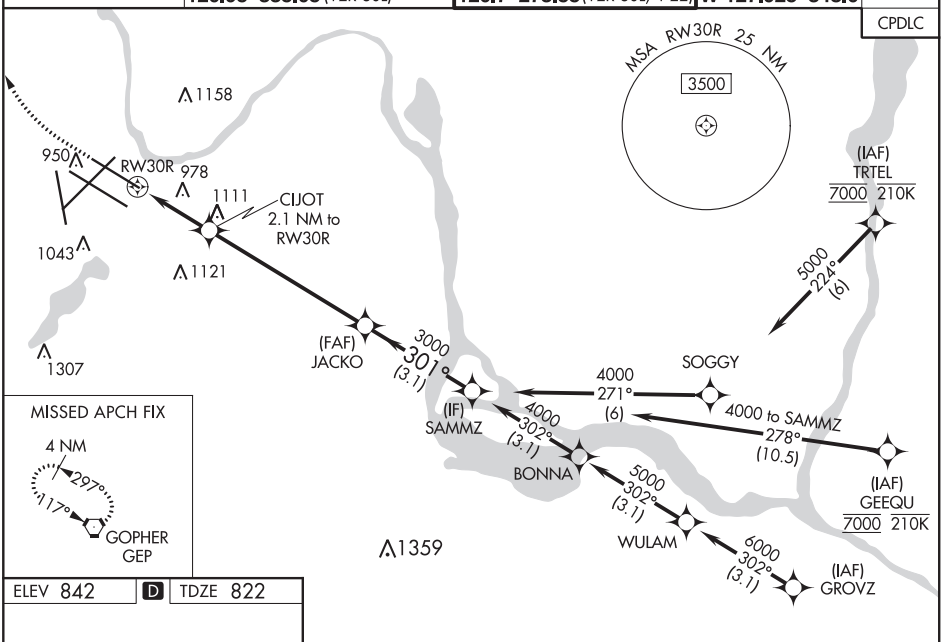
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C (-2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Simultaneous approaches authorized with Rwy 30L and ILS V Rwy 35 (CONVERGING). LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations. For inop ALS, increase LNAV/VNAV Cat E and LNAV Cat E visibility to 1⅝ SM. Inop table does not apply to LPV all Cats.

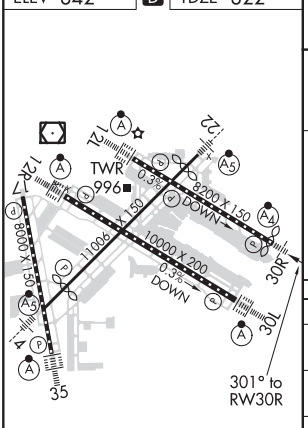
MALSF

MISSED APPROACH: Climb to 1300, then climbing right turn to 3000 direct GEP VORTAC and hold.

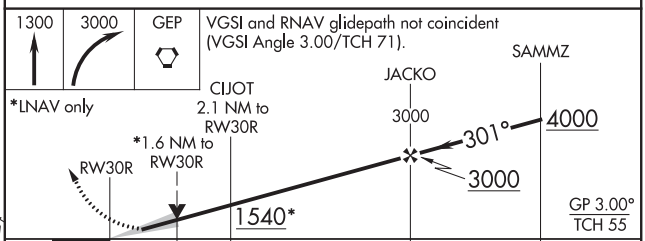
D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275 DEP 120.8	118.725 335.65 (Rwy 35) 119.3 335.65 (12L-30R, 4-22, 17) 126.95 335.65 (12R-30L)	123.675 273.55 (17-35) 123.95 273.55 (12L-30R) 126.7 273.55 (12R-30L, 4-22)	N 121.8 348.6 S 121.9 348.6 W 127.925 348.6	133.2 CPDLC



ELEV 842 | D | TDZE 822



HIRL all Rwys
REIL Rwy 17
TDZ/CL Rwys 12L, 12R, 30L, and 35



CATEGORY	A	B	C	D	E
LPV DA	1072/40 250 (300-¾)				
LNAV/VNAV DA	1316-1⅜ 494 (500-1⅜)				
LNAV MDA	1400/40 578 (600-¾)	1400-1⅜ 578 (600-1⅜)			
C CIRCLING	1400-1 558 (600-1)		1460-1¾ 618 (700-1¾)	1660-2¾ 818 (900-2¾)	1800-3 958 (1000-3)

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 90128 W35A	APP CRS 350°	Rwy ldg 8000 TDZE 834 Apt Elev 842

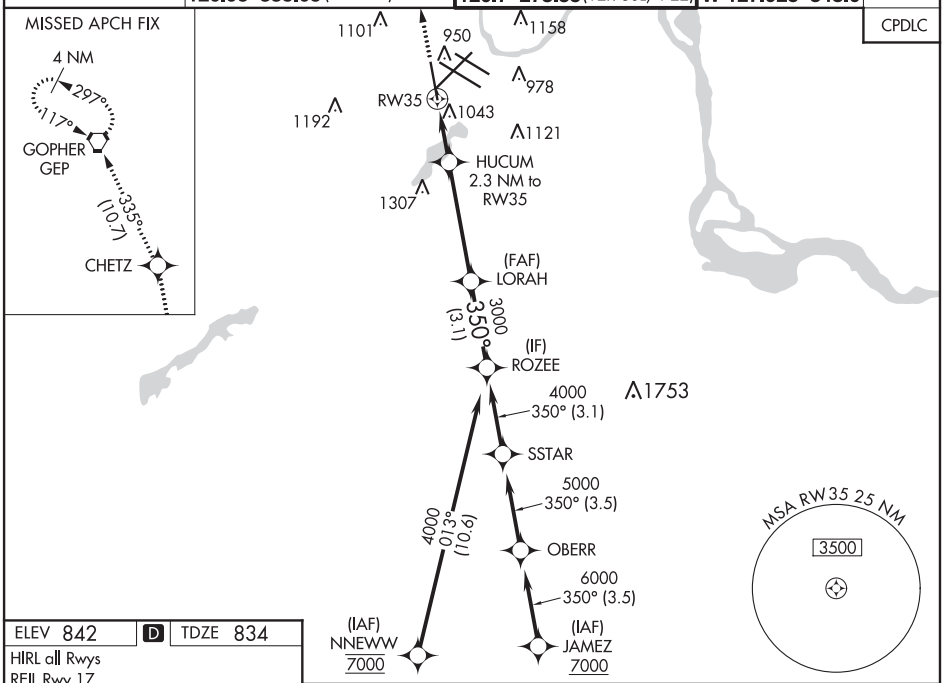
RNAV (GPS) Z RWY 35
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C (-2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. For inop ALS, increase LPV Cat E visibility to RVR 4000, LNAV/VNAV Cat E visibility to 1¼ SM and LNAV Cats C/D/E visibility to 1⅜ SM.

ALSF-2

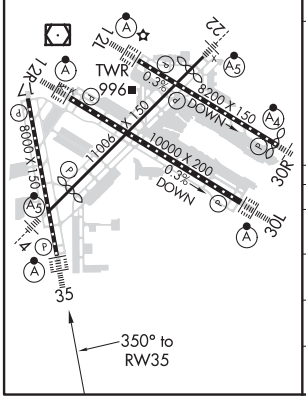
MISSED APPROACH: Climb to 3000 direct CHETZ and on track 335° to GEP VORTAC and hold.

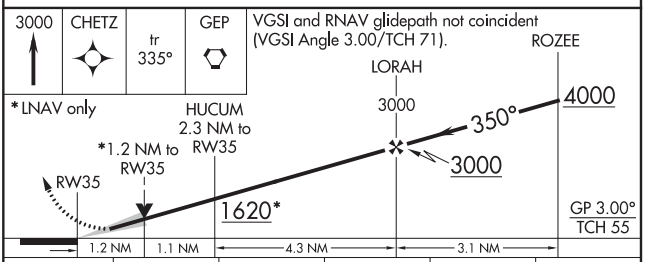
D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275 DEP 120.8	118.725 335.65 (Rwy 35) 119.3 335.65 (12L-30R, 4-22, 17) 126.95 335.65 (12R-30L)	123.675 273.55 (17-35) 123.95 273.55 (12L-30R) 126.7 273.55 (12R-30L, 4-22)	N 121.8 348.6 S 121.9 348.6 W 127.925 348.6	133.2 CPDLC



ELEV 842 | D | TDZE 834

HIRL all Rwys
REIL Rwy 17
TDZ/CL Rwys 12L, 12R, 30L, and 35





CATEGORY	A	B	C	D	E
LPV DA	1034/18 200 (200-½)				
LNAV/VNAV DA	1204/40 370 (400-¾)				
LNAV MDA	1300/24 466 (500-½)		1300/50 466 (500-1)		
C CIRCLING	1360-1 518 (600-1)		1460-1¾ 618 (700-1¾)	1660-2¾ 818 (900-2¾)	1800-3 958 (1000-3)

NC-1, 25 FEB 2021 to 22 APR 2021
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LOC I-APL	APP CRS	Rwy ldg	9456
109.3	045°	TDZE	832
		Apt Elev	842

LOC RWY 4

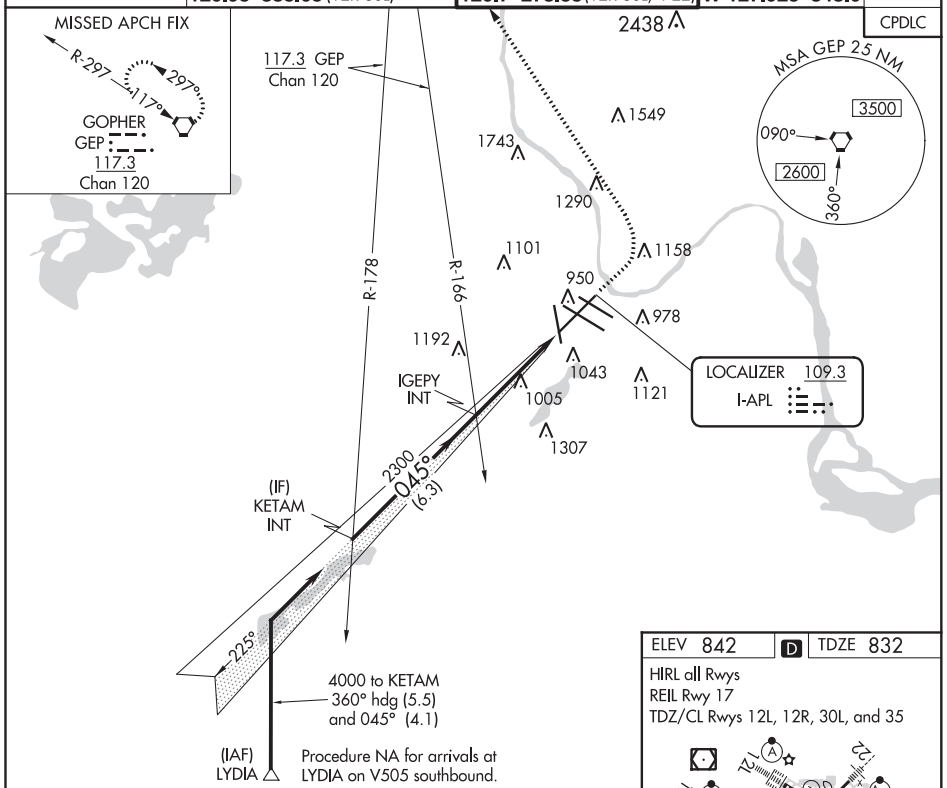
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

For inop ALS, increase S-4 Cat C/D/E visibility to 1⅜ SM.

MALSR

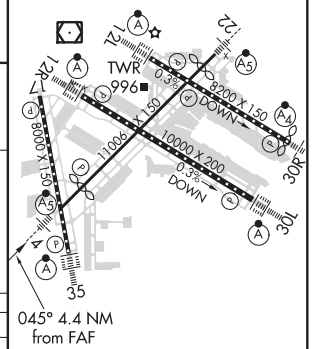
MISSED APPROACH: Climb to 1500 then climbing left turn to 3000 direct GEP VORTAC and hold.

D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	118.725 335.65 (Rwy 35)	123.675 273.55 (17-35)	N 121.8 348.6	133.2
DEP 120.8	119.3 335.65 (12L-30R, 4-22, 17)	123.95 273.55 (12L-30R)	S 121.9 348.6	CPDLC
	126.95 335.65 (12R-30L)	126.7 273.55 (12R-30L, 4-22)	W 127.925 348.6	

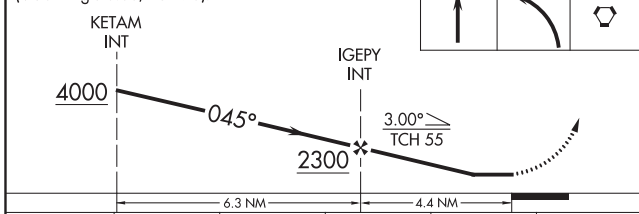


ELEV 842 | D | TDZE 832

HIRL all Rwys
REIL Rwy 17
TDZ/CL Rwys 12L, 12R, 30L, and 35



VGSI and descent angles not coincident
(VGSI Angle 3.00/TCH 76).



CATEGORY	A	B	C	D	E
S-4	1340/24 508 (500-½)		1340/55 508 (500-1)		
C CIRCLING	1360-1 518 (600-1)		1460-1¾ 618 (700-1¾)	1660-2¾ 818 (900-2¾)	1800-3 958 (1000-3)

FAF to MAP 4.4 NM					
Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

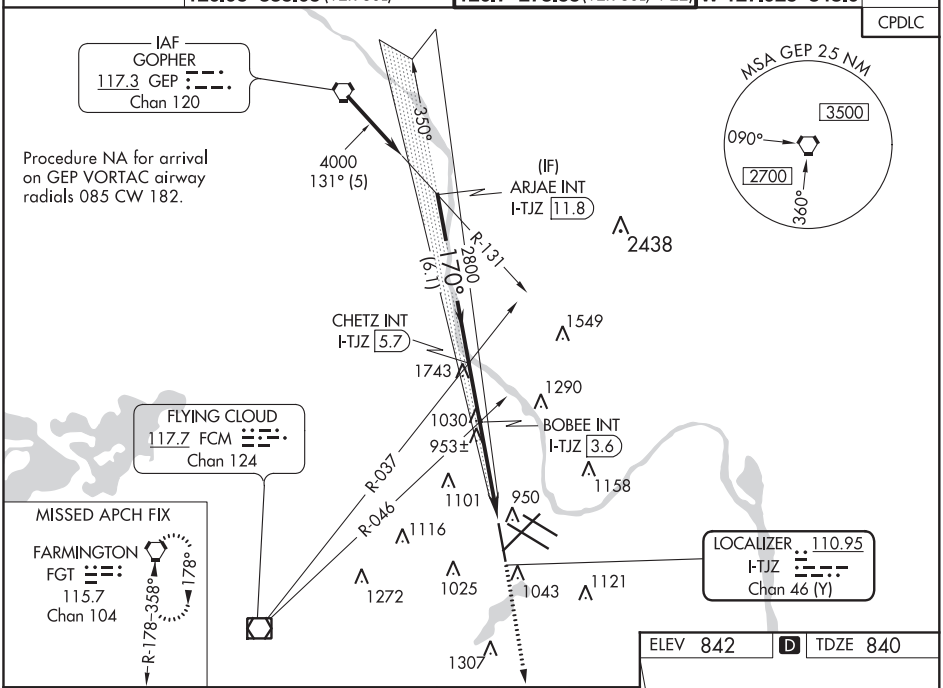
LOC RWY 17
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

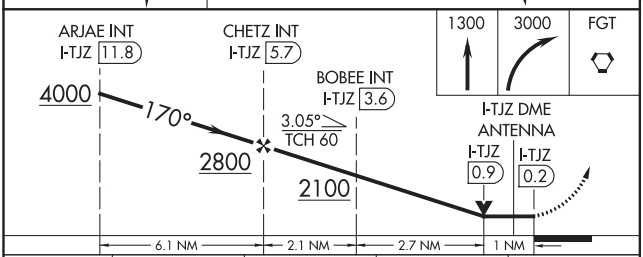
LOC/DME I-TJZ	APP CRS	Rwy ldg	8000
110.95	170°	TDZE	840
Chan 46 (Y)		Apt Elev	842

Helicopter visibility reduction below RVR 4000 NA.

MISSED APPROACH: Climb to 1300 then climbing right turn to 3000 direct FGT VORTAC and hold.

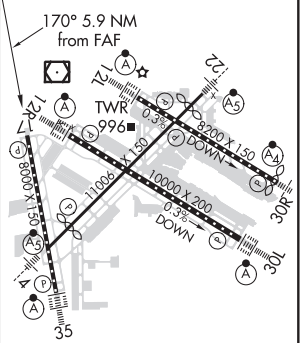
D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	118.725 335.65 (Rwy 35)	123.675 273.55 (17-35)	N 121.8 348.6	133.2
DEP 120.8	119.3 335.65 (12L-30R, 4-22, 17)	123.95 273.55 (12L-30R)	S 121.9 348.6	CPDLC
	126.95 335.65 (12R-30L)	126.7 273.55 (12R-30L, 4-22)	W 127.925 348.6	





CATEGORY	A	B	C	D
S-17	2100/60 1260 (1300-1¼)	2100-1½ 1260 (1300-1½)	2100-3 1260 (1300-3)	
C CIRCLING	2100-1¼ 1258 (1300-1¼)	2100-1½ 1258 (1300-1½)	2100-3 1258 (1300-3)	
BOBEE FIX MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED)				
S-17	1220/55 380 (400-1)			
C CIRCLING	1360-1 518 (600-1)		1460-1¾ 618 (700-1¾)	1660-2¾ 818 (900-2¾)

ELEV 842 D TDZE 840



HIRL all Rwys
REIL Rwy 17
TDZ/CL Rwys 12L, 12R, 30L, and 35

FAF to MAP 5.9 NM					
Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

LOC I-SIJ 110.5	APP CRS 225°	Rwy ldg 10006 TDZE 828 Apt Elev 842

LOC RWY 22

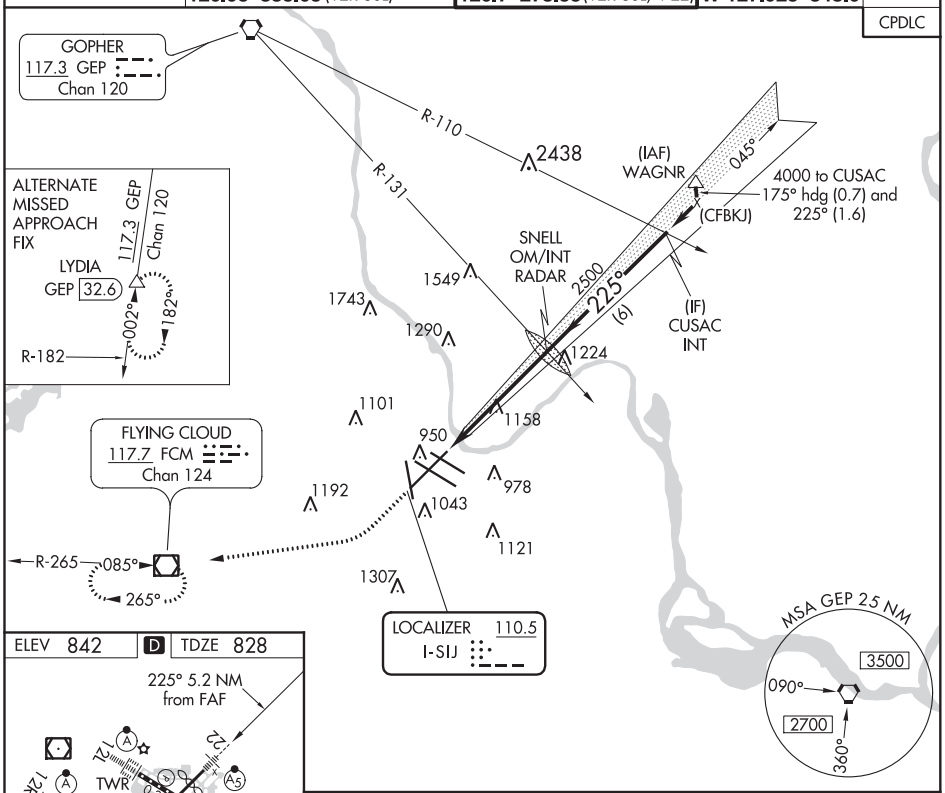
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

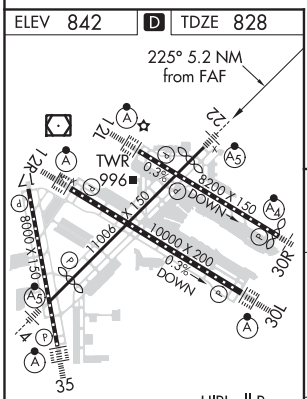
Rwy 22 helicopter visibility reduction below RVR 4000 NA. For inop ALS, increase S-22 Cat A and B visibility to RVR 5500, and Cat E visibility to 1¾ SM.

MALSR

MISSED APPROACH: Climb to 2000 then climbing right turn to 3000 direct FCM VOR/DME and hold.

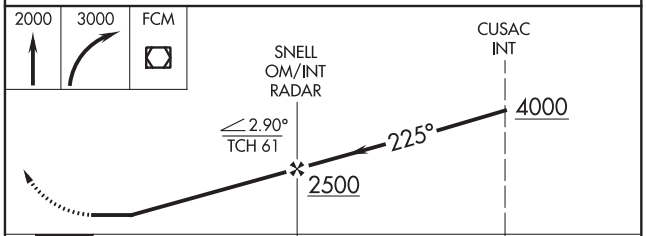
D-ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275 DEP 120.8	118.725 335.65 (Rwy 35) 119.3 335.65 (12L-30R, 4-22, 17) 126.95 335.65 (12R-30L)	123.675 273.55 (17-35) 123.95 273.55 (12L-30R) 126.7 273.55 (12R-30L, 4-22)	N 121.8 348.6 S 121.9 348.6 W 127.925 348.6	133.2 CPDLC





HIRL all Rwys
REIL Rwy 17
TDZ/CL Rwys 12L, 12R, 30L, and 35

FAF to MAP 5.2 NM					
Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44



CATEGORY	A	B	C	D	E
S-22	1420/40 592 (600-¾)		1420-1¼ 592 (600-1¼)		
C CIRCLING	1420-1 578 (600-1)		1460-1¾ 618 (700-1¾)	1660-2¾ 818 (900-2¾)	1800-3 958 (1000-3)

NC-1, 25 FEB 2021 to 22 APR 2021

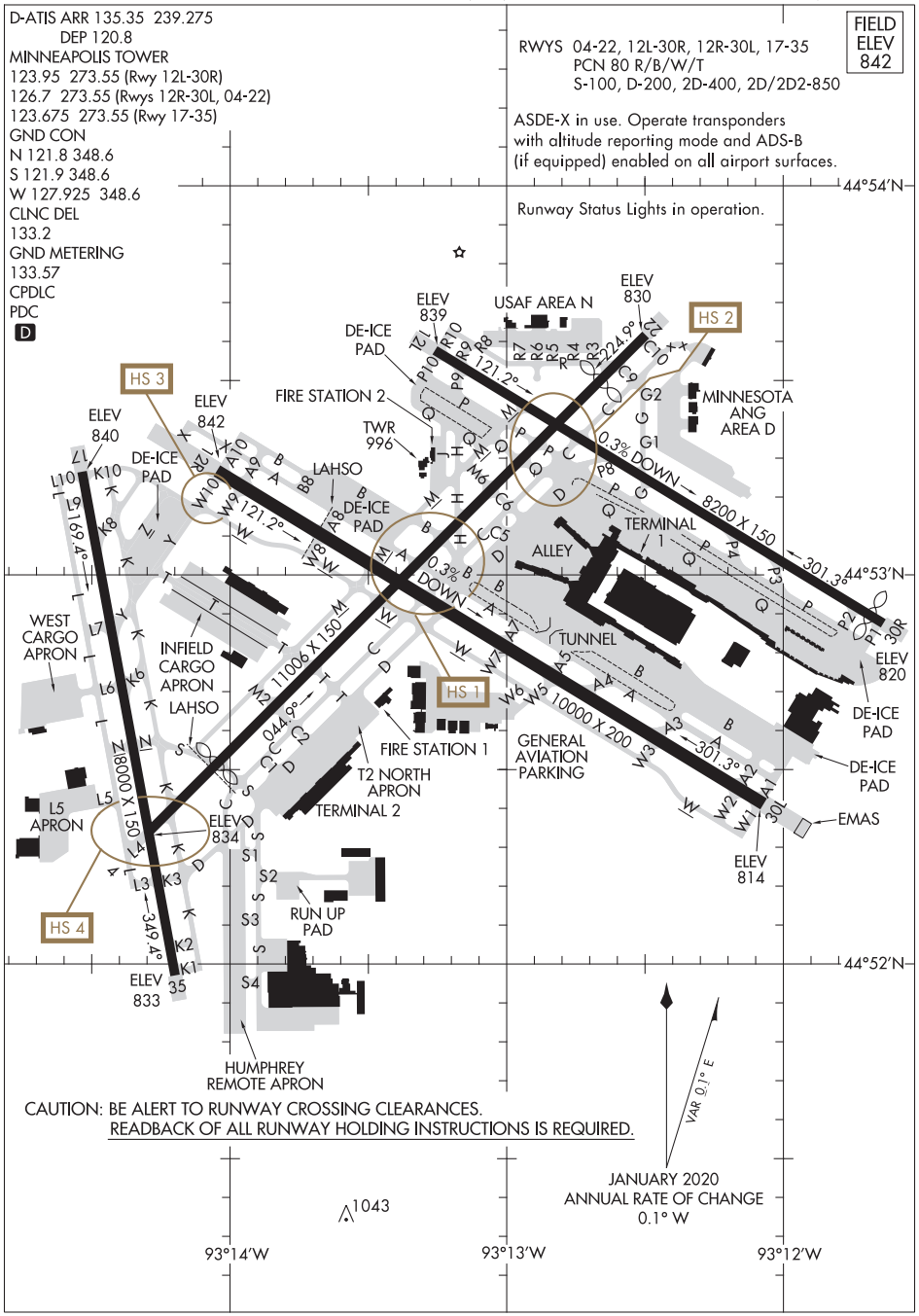
D-ATIS ARR 135.35 239.275
DEP 120.8
MINNEAPOLIS TOWER
123.95 273.55 (Rwy 12L-30R)
126.7 273.55 (Rwys 12R-30L, 04-22)
123.675 273.55 (Rwy 17-35)
GND CON
N 121.8 348.6
S 121.9 348.6
W 127.925 348.6
CLNC DEL
133.2
GND METERING
133.57
CPDLC
PDC
D

RWYS 04-22, 12L-30R, 12R-30L, 17-35
PCN 80 R/B/W/T
S-100, D-200, 2D-400, 2D/2D2-850

FIELD ELEV 842

ASDE-X in use. Operate transponders with altitude reporting mode and ADS-B (if equipped) enabled on all airport surfaces.

Runway Status Lights in operation.



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

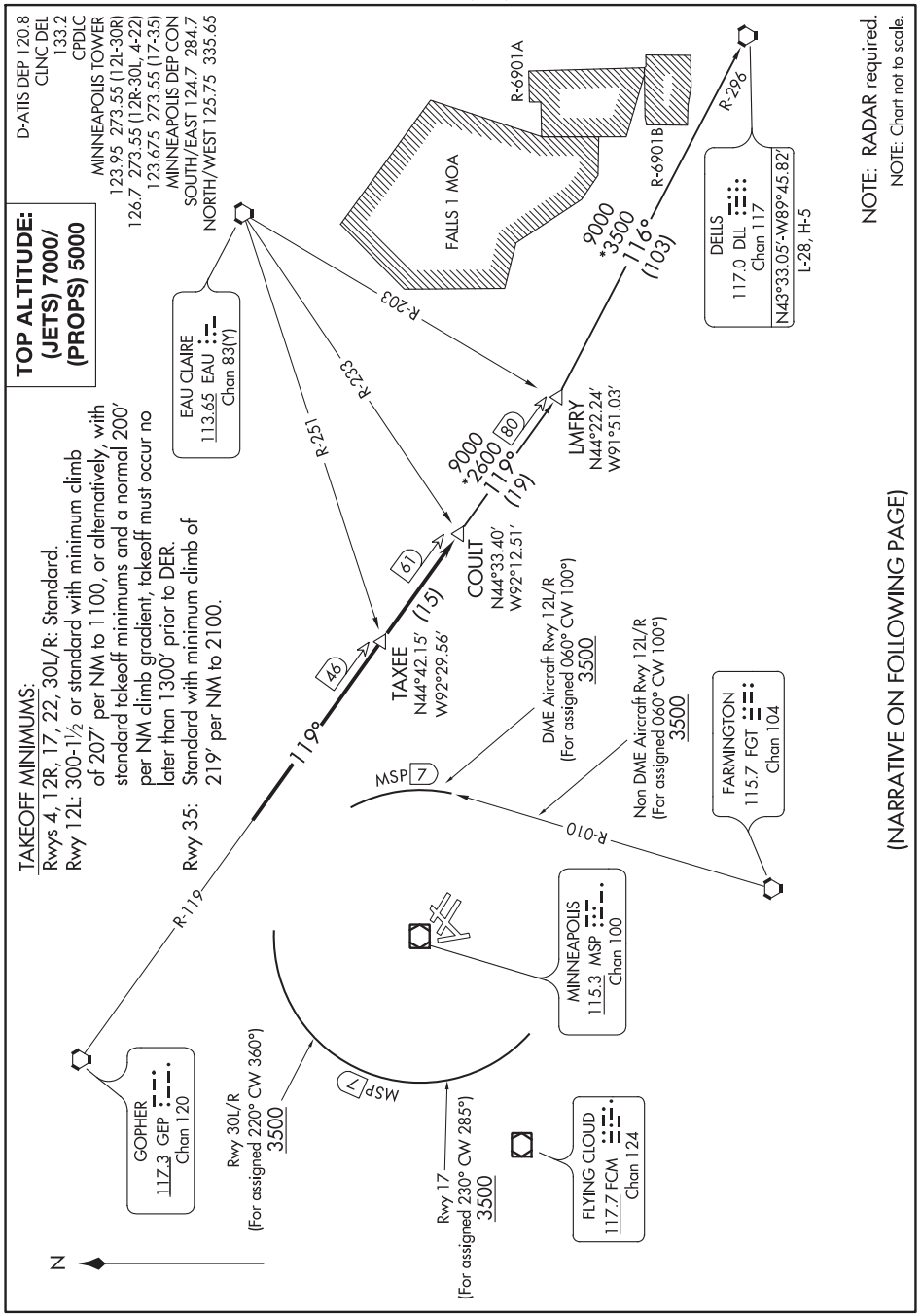
NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

(COULT7.COULT) 19339

COULT SEVEN DEPARTURE

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)
AL-264 (FAA)
ST. PAUL, MINNESOTA



NC-1, 25 FEB 2021 to 22 APR 2021

COULT SEVEN DEPARTURE

(COULT7.COULT) 29MAR18

ST. PAUL, MINNESOTA
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: Fly assigned heading for RADAR vectors to intercept GEP R-119 to COULT INT/GEP 61 DME. Turbojet aircraft maintain 7000 or lower assigned altitude, all other aircraft maintain 5000 or lower assigned altitude.

DME EQUIPPED AIRCRAFT RUNWAYS 12L/R DEPARTURES: For assigned headings from 060° clockwise to 100°. Cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

NON-DME EQUIPPED AIRCRAFT RUNWAYS 12L/R DEPARTURES: For assigned headings from 060° clockwise to 100°, cross FGT R-010 at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKEOFF RUNWAY 17: For assigned headings from 230° clockwise to 285°. Cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKEOFF RUNWAYS 30L/R: For assigned headings from 220° clockwise to 360°, cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKEOFF RUNWAYS 4, 22, 35: Initially assigned heading, thence . . . .

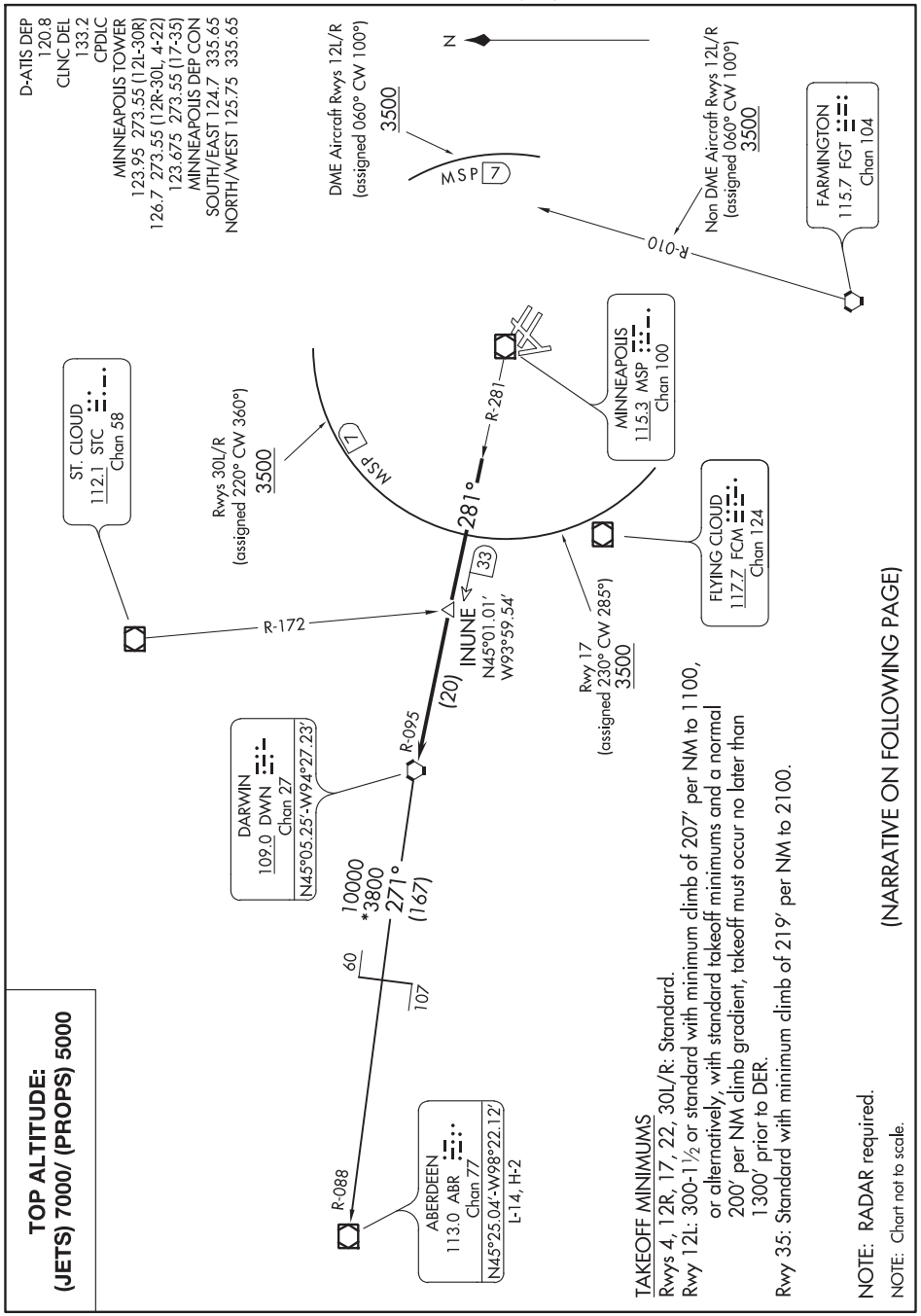
. . . . on transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

DELLS TRANSITION (COULT7.DLL): From over COULT INT on GEP R-119 to LMFRY INT then on DLL R-296 to DLL VORTAC.

(DWN8.DWN) 20086

DARWIN EIGHT DEPARTURE

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)
AL-264 (FAA)
MINNEAPOLIS, MINNESOTA



NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

DARWIN EIGHT DEPARTURE

(DWN8.DWN) 05DEC19

MINNEAPOLIS, MINNESOTA
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: Fly assigned heading for RADAR vectors to intercept MSP R-281 and DWN R-095 to DWN VORTAC. Turbojet aircraft maintain 7000 or lower assigned altitude. All other aircraft maintain 5000 or lower assigned altitude.

DME EQUIPPED AIRCRAFT RUNWAYS 12L/R DEPARTURES: For assigned headings from 060° clockwise to 100°. Cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

NON-DME EQUIPPED AIRCRAFT RUNWAYS 12L/R DEPARTURES: For assigned headings from 060° clockwise to 100°, cross FGT R-010 at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKEOFF RUNWAY 17: For assigned headings from 230° clockwise to 285°. Cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKEOFF RUNWAYS 30L/R: For assigned headings from 220° clockwise to 360°, cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKEOFF RUNWAYS 4, 22, 35: Initially assigned heading, thence . . . .

. . . . then on transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

ABERDEEN TRANSITION (DWN8.ABR): From over DWN VORTAC on DWN R-271 and ABR R-088 to ABR VOR/DME.

NC-1, 25 FEB 2021 to 22 APR 2021

(HSTIN4.HSTIN) 17229

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

HESTIN FOUR DEPARTURE (RNAV)

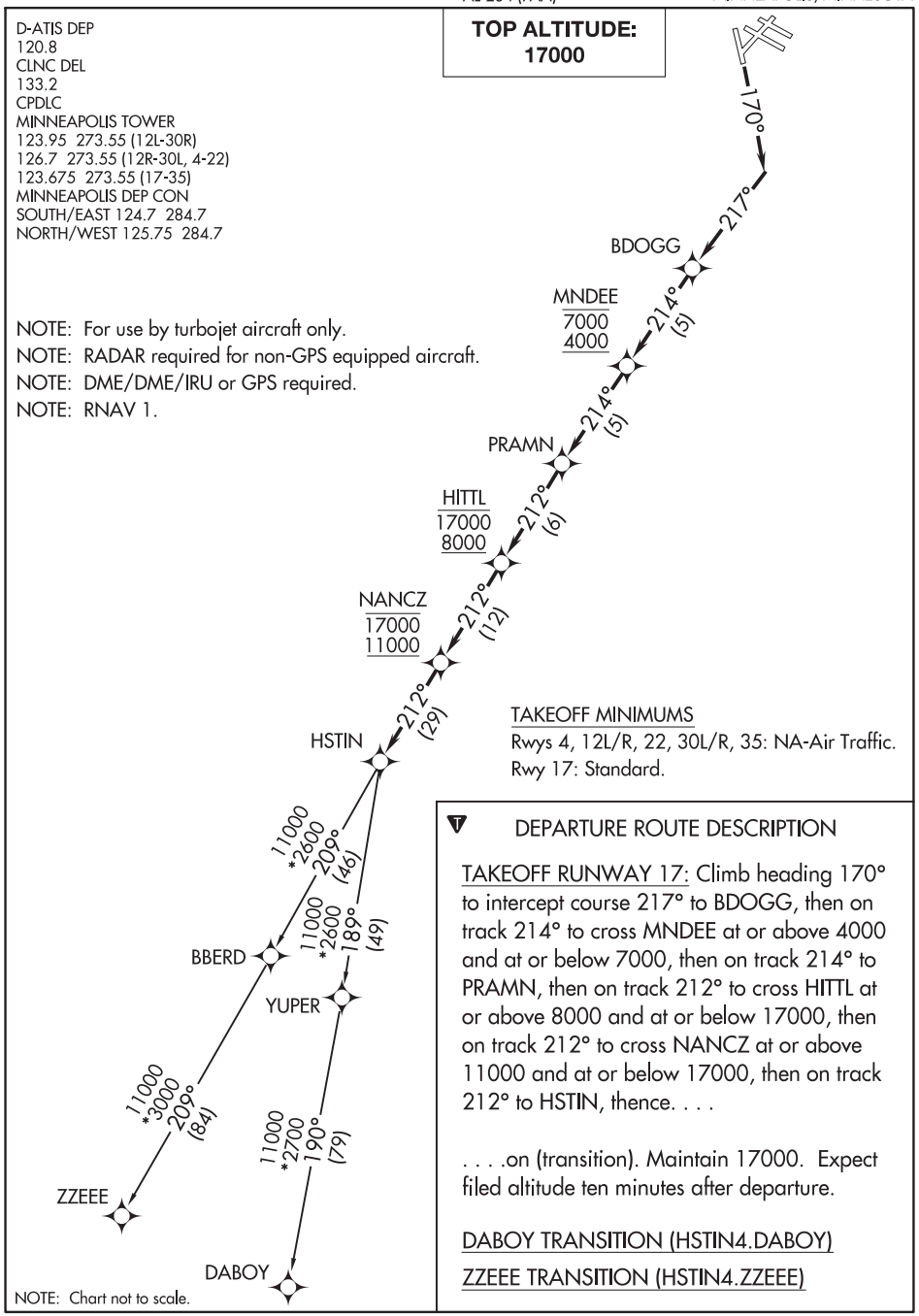
AL-264 (FAA)

MINNEAPOLIS, MINNESOTA

D-ATIS DEP
120.8
CLNC DEL
133.2
CPDLC
MINNEAPOLIS TOWER
123.95 273.55 (12L-30R)
126.7 273.55 (12R-30L, 4-22)
123.675 273.55 (17-35)
MINNEAPOLIS DEP CON
SOUTH/EAST 124.7 284.7
NORTH/WEST 125.75 284.7

TOP ALTITUDE: 17000

NOTE: For use by turbojet aircraft only.
NOTE: RADAR required for non-GPS equipped aircraft.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.



TAKEOFF MINIMUMS
Rwys 4, 12L/R, 22, 30L/R, 35: NA-Air Traffic.
Rwy 17: Standard.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb heading 170° to intercept course 217° to BDOGG, then on track 214° to cross MNDEE at or above 4000 and at or below 7000, then on track 214° to PRAMN, then on track 212° to cross HITTL at or above 8000 and at or below 17000, then on track 212° to cross NANCZ at or above 11000 and at or below 17000, then on track 212° to HSTIN, thence. . . .

. . . .on (transition). Maintain 17000. Expect filed altitude ten minutes after departure.

DABOY TRANSITION (HSTIN4.DABOY)

ZZEEE TRANSITION (HSTIN4.ZZEEE)

NOTE: Chart not to scale.

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HESTIN FOUR DEPARTURE (RNAV)

MINNEAPOLIS, MINNESOTA

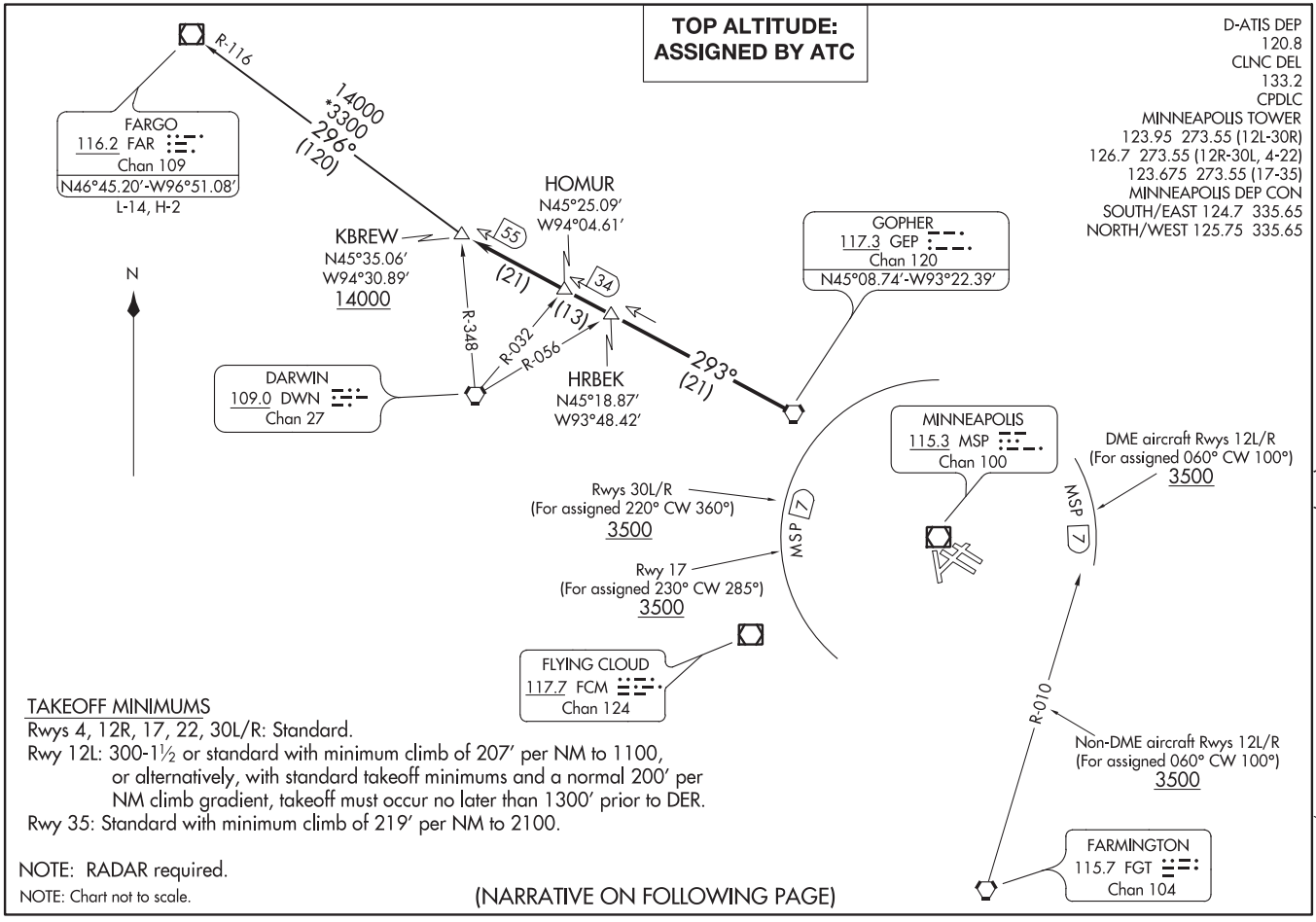
(HSTIN4.HSTIN) 17AUG17

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

(KBREW1.KBREW) 20086

KBREW ONE DEPARTURE

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)
AL-264 (FAA)
MINNEAPOLIS, MINNESOTA



TAKEOFF MINIMUMS

Rwys 4, 12R, 17, 22, 30L/R: Standard.

Rwy 12L: 300-1½ or standard with minimum climb of 207′ per NM to 1100, or alternatively, with standard takeoff minimums and a normal 200′ per NM climb gradient, takeoff must occur no later than 1300′ prior to DER.

Rwy 35: Standard with minimum climb of 219′ per NM to 2100.

NOTE: RADAR required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

KBREW ONE DEPARTURE
(KBREW1.KBREW) 01FEB18
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)
MINNEAPOLIS, MINNESOTA

DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: Fly assigned heading for RADAR vectors to GEP VORTAC then on GEP R-293 to KBREW INT/GEP 55 DME. Maintain ATC assigned altitude.

DME EQUIPPED AIRCRAFT RUNWAYS 12L/R DEPARTURES: For assigned headings from 060° clockwise to 100°, cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence. . . .

NON-DME EQUIPPED AIRCRAFT RUNWAYS 12L/R DEPARTURES: For assigned headings from 060° clockwise to 100°, cross FGT R-010 at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence. . . .

TAKEOFF RUNWAY 17: For assigned headings from 230° clockwise to 285°, cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence. . . .

TAKEOFF RUNWAYS 30L/R: For assigned headings from 220° clockwise to 360°, cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence. . . .

TAKEOFF RUNWAYS 4, 22, 35: Initially assigned heading, thence. . . .

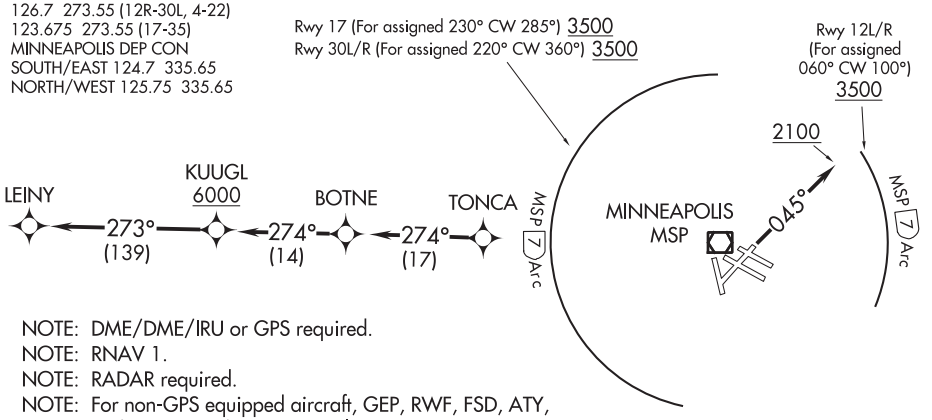
. . . .on transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

FARGO TRANSITION (KBREW1.FAR): From over KBREW on FAR R-116 to FAR VOR/DME.

NC-1, 25 FEB 2021 to 22 APR 2021

TOP ALTITUDE: (JETS) 7000/ (PROPS) 5000

D-ATIS DEP
120.8
CLNC DEL
133.2
CPDLC
MINNEAPOLIS TOWER
123.95 273.55 (12L-30R)
126.7 273.55 (12R-30L, 4-22)
123.675 273.55 (17-35)
MINNEAPOLIS DEP CON
SOUTH/EAST 124.7 335.65
NORTH/WEST 125.75 335.65



NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: For non-GPS equipped aircraft, GEP, RWF, FSD, ATY, and HON must be operational.

TAKEOFF MINIMUMS
Rwys 4, 12R, 17, 22, 30L/R: Standard.
Rwy 12L: 300-1½ or standard with minimum climb of 207′ per NM to 1100, or alternatively, with standard takeoff minimums and a normal 200′ per NM climb gradient, takeoff must occur no later than 1300′ prior to DER.
Rwy 35: Standard with minimum climb of 219′ per NM to 2100.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 4: Climb heading 045° to 2100. Thence . . . .

TAKEOFF RUNWAYS 12L/R: For assigned headings from 060° clockwise to 100°, cross MSP VOR/DME 7 DME Arc at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKEOFF RUNWAY 17: For assigned headings from 230° clockwise to 285°, cross MSP VOR/DME 7 DME Arc at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKEOFF RUNWAYS 22, 35: Climb on assigned heading for RADAR vectors. Thence . . . .

TAKEOFF RUNWAYS 30L/R: For assigned headings from 220° clockwise to 360°, cross MSP VOR/DME 7 DME Arc at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

. . . . expect RADAR vectors to TONCA, then on track 274° to BOTNE, then on track 274° to cross KUUGL at or above 6000, then on track 273° to LEINY. Turbojet aircraft maintain 7000 or lower assigned altitude, all other aircraft maintain 5000 or lower assigned altitude until BOTNE. Expect filed altitude/flight level ten minutes after departure.

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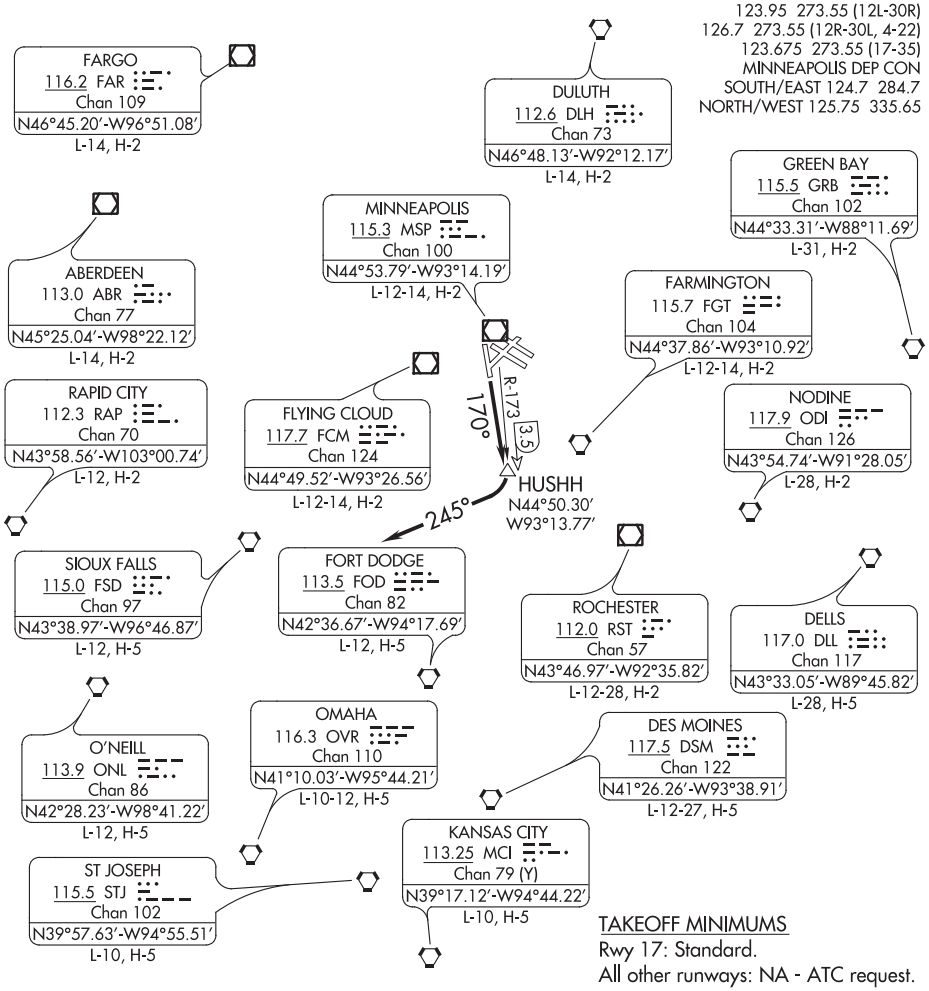
(MEDOW4.MSP) 20086 MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

MEADOW LAKE FOUR DEPARTURE

AL-264 (FAA) MINNEAPOLIS, MINNESOTA

TOP ALTITUDE: (JETS) 7000/ (PROPS) 5000

D-ATIS DEP 120.8
CLNC DEL 133.2
CPDLC
MINNEAPOLIS TOWER
123.95 273.55 (12L-30R)
126.7 273.55 (12R-30L, 4-22)
123.675 273.55 (17-35)
MINNEAPOLIS DEP CON
SOUTH/EAST 124.7 284.7
NORTH/WEST 125.75 335.65



TAKEOFF MINIMUMS
Rwy 17: Standard.
All other runways: NA - ATC request.

NOTE: Chart not to scale.

NOTE: RADAR and DME required.

DEPARTURE ROUTE DESCRIPTION

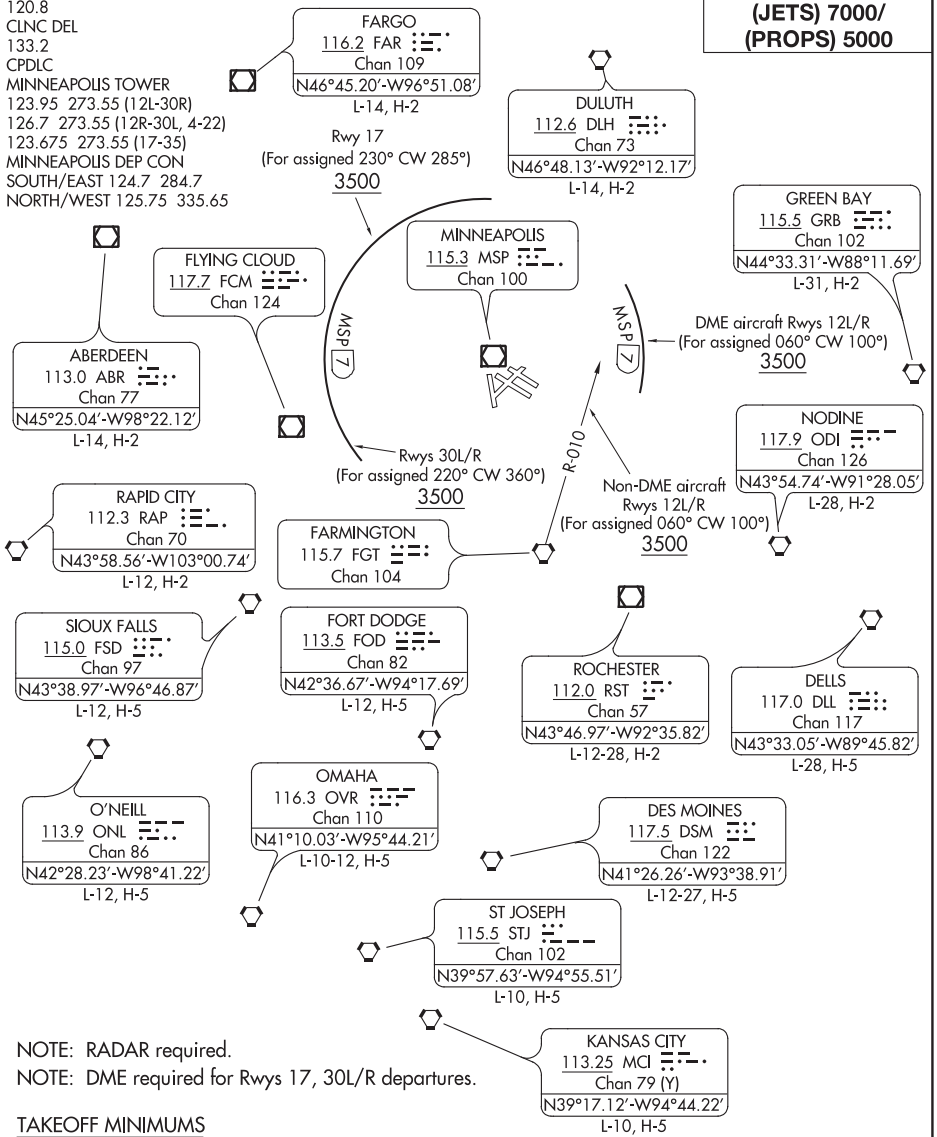
TAKEOFF RUNWAY 17: Climb on heading 170° to HUSHH/MSP VOR/DME 3.5 DME then right turn heading 245° and continue climb (turbojet aircraft maintain 7000 or lower as assigned, all other aircraft maintain 5000 (or lower as assigned). Then on vectors to assigned route/fix. Expect clearance to assigned altitude/flight level ten minutes after departure.

MINNEAPOLIS EIGHT DEPARTURE

AL-264 (FAA) MINNEAPOLIS, MINNESOTA

TOP ALTITUDE: (JETS) 7000/ (PROPS) 5000

D-ATIS DEP
120.8
CLNC DEL
133.2
CPDLC
MINNEAPOLIS TOWER
123.95 273.55 (12L-30R)
126.7 273.55 (12R-30L, 4-22)
123.675 273.55 (17-35)
MINNEAPOLIS DEP CON
SOUTH/EAST 124.7 284.7
NORTH/WEST 125.75 335.65



NOTE: RADAR required.
NOTE: DME required for Rwys 17, 30L/R departures.

TAKEOFF MINIMUMS
Rwys 4, 12R, 17, 22, 30L/R: Standard.
Rwy 12L: 300-1½ or standard with minimum climb of 207′ per NM to 1100, or alternatively, with standard takeoff minimums and a normal 200′ per NM climb gradient, takeoff must occur no later than 1300′ prior to DER.
Rwy 35: Standard with minimum climb of 219′ per NM to 2100.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

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DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: Fly assigned heading for RADAR vectors to join filed/assigned route. Turbojet aircraft maintain 7000 or lower assigned altitude, all other aircraft maintain 5000 or lower assigned altitude. Expect clearance to assigned altitude/flight level ten minutes after departure.

DME EQUIPPED AIRCRAFT RUNWAYS 12L/R DEPARTURES: For assigned heading from 060°clockwise to 100°, cross MSP 7 DME at or above 3500. Maintain assigned altitude, if unable to comply advise ATC as soon as possible prior to departure.

NON-DME EQUIPPED AIRCRAFT RUNWAYS 12L/R DEPARTURES: For assigned headings from 060° clockwise to 100°, cross FGT R-010 at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure.

TAKEOFF RUNWAY 17 DEPARTURES: For assigned headings from 230° clockwise to 285° cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure.

TAKEOFF RUNWAYS 30L/R DEPARTURES: For assigned headings from 220° clockwise to 360° cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure.

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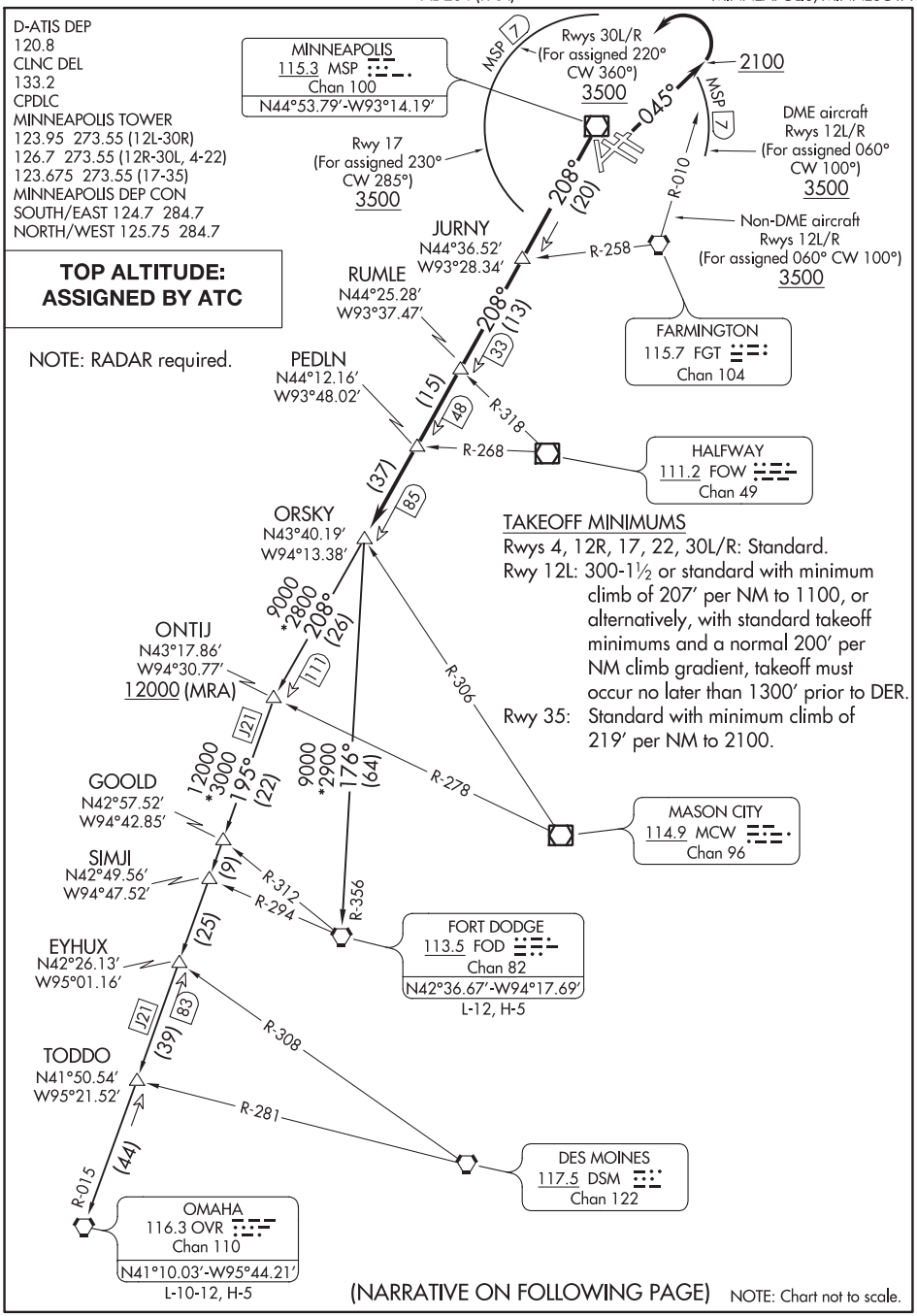
ORSKY TWO DEPARTURE



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NC-1, 25 FEB 2021 to 22 APR 2021

DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: Fly assigned heading for RADAR vectors to MSP R-208 to ORSKY INT/MSP 85 DME. Maintain ATC assigned altitude.

TAKEOFF RUNWAY 4: Climb heading 045° to 2100 before turning left.

DME EQUIPPED AIRCRAFT RUNWAYS 12L/R DEPARTURES: For assigned headings from 060° clockwise to 100°, cross MSP 7 DME at or above 3500. Maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

NON-DME EQUIPPED AIRCRAFT RUNWAYS 12L/R DEPARTURES: For assigned headings from 060° clockwise to 100°, cross FGT R-010 at or above 3500. Maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKEOFF RUNWAY 17: For assigned headings from 230° clockwise to 285°, cross MSP 7 DME at or above 3500. Maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKEOFF RUNWAYS 22, 35: Initially assigned heading. Thence . . . .

TAKEOFF RUNWAYS 30L/R: For assigned headings from 220° clockwise to 360°, cross MSP 7 DME at or above 3500. Maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

. . . .on transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

FORT DODGE TRANSITION (ORSKY2.FOD): From over ORSKY INT on FOD R-356 to FOD VORTAC.

OMAHA TRANSITION (ORSKY2.OVR): From over ORSKY INT on MSP R-208 to ONTIJ INT, then on OVR R-015 to OVR VORTAC.

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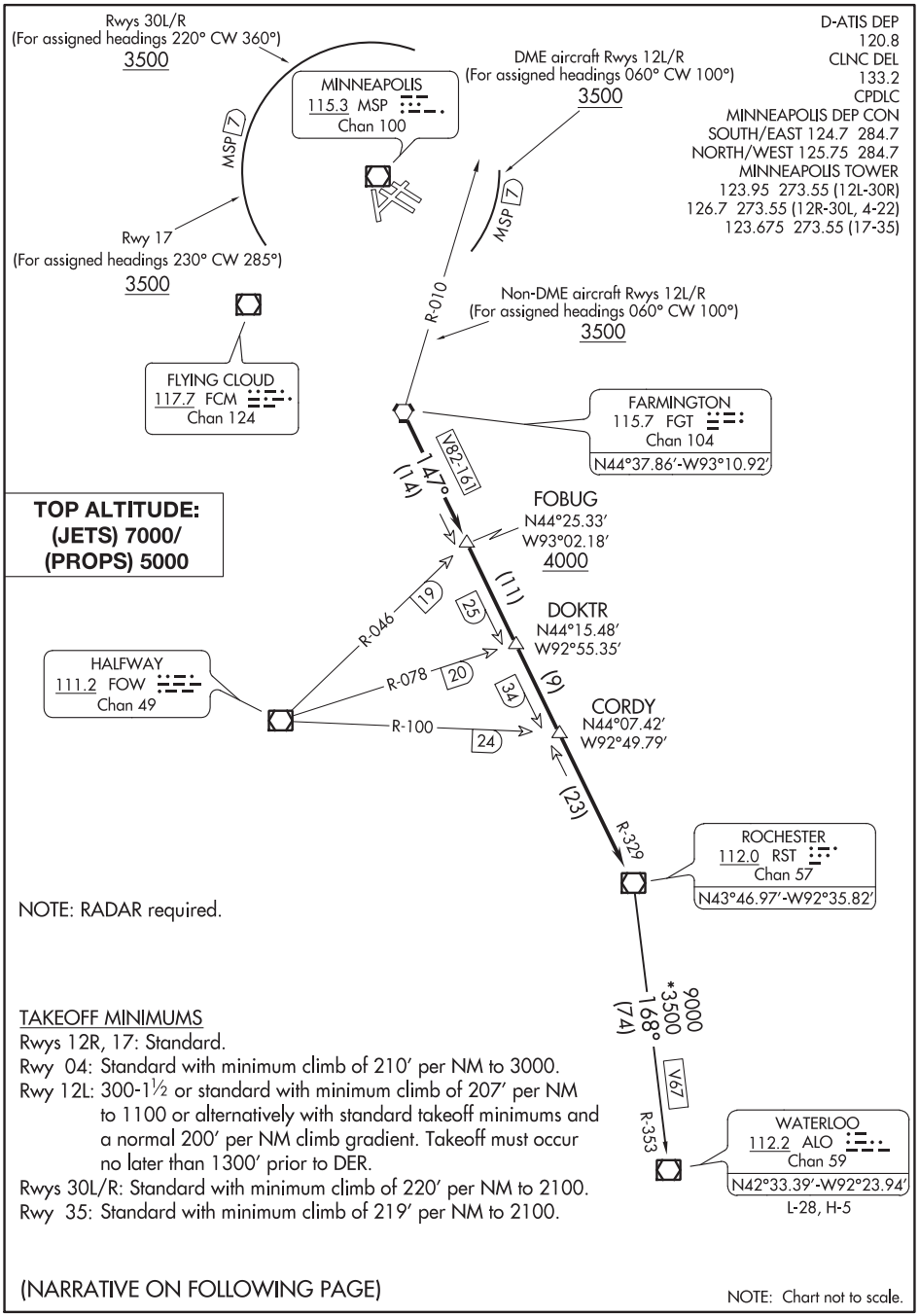
ROCHESTER ONE DEPARTURE

AL-264 (FAA)

MINNEAPOLIS, MINNESOTA



TAKEOFF MINIMUMS

Rwys 12R, 17: Standard.

Rwy 04: Standard with minimum climb of 210′ per NM to 3000.

Rwy 12L: 300-1½ or standard with minimum climb of 207′ per NM to 1100 or alternatively with standard takeoff minimums and a normal 200′ per NM climb gradient. Takeoff must occur no later than 1300′ prior to DER.

Rwys 30L/R: Standard with minimum climb of 220′ per NM to 2100.

Rwy 35: Standard with minimum climb of 219′ per NM to 2100.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

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DEPARTURE ROUTE DESCRIPTON

TAKEOFF ALL RUNWAYS: Fly assigned heading for RADAR vectors to FGT VORTAC and then on FGT R-147 and RST R-329 to RST VOR/DME. Cross FOBUG INT/FGT 14 DME at or above 4000. Turbojet aircraft maintain 7000 or lower assigned altitude. All other aircraft maintain 5000 or lower assigned altitude.

DME EQUIPPED AIRCRAFT RUNWAYS 12L/R DEPARTURES: For assigned headings from 060° clockwise to 100°, cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure, thence . . . .

NON-DME EQUIPPED AIRCRAFT RUNWAYS 12L/R DEPARTURES: For assigned headings from 060° clockwise to 100°, cross FGT R-010 at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure, thence. . . .

TAKEOFF RUNWAYS 4, 22, 35: Initially assigned heading, thence . . . .

TAKEOFF RUNWAY 17: For assigned headings from 230° clockwise to 285° cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure, thence . . . .

TAKEOFF RUNWAYS 30L/R: For assigned headings from 220° clockwise to 360° cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure, thence . . . .

. . . .on assigned transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

WATERLOO TRANSITION (RST1.ALO): From over RST VOR/DME on RST R-168 and ALO R-353 to ALO VOR/DME.

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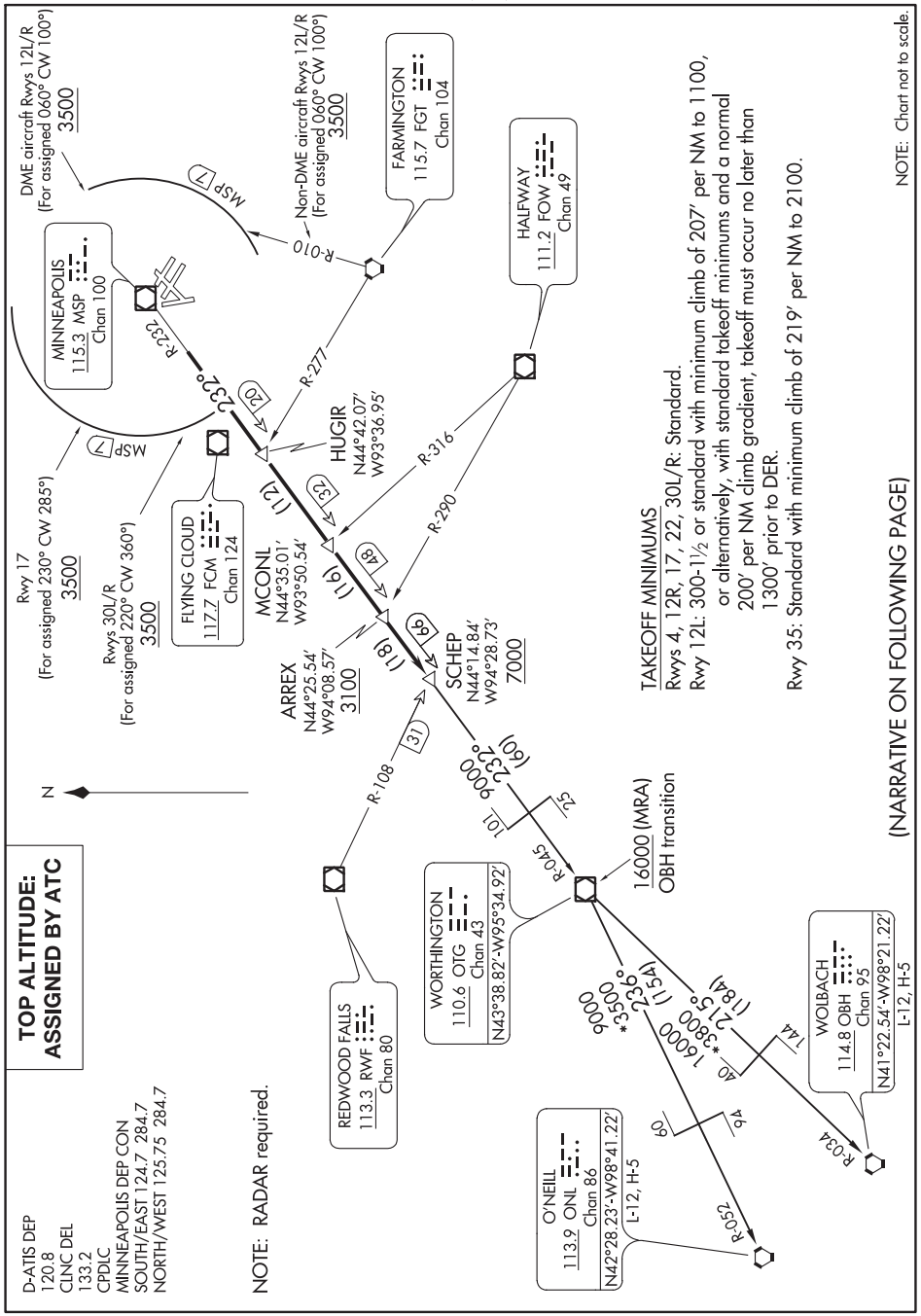
TOP ALTITUDE: ASSIGNED BY ATC
D-ATIS DEP
120.8
CLNC DEL
133.2
CPDLC
MINNEAPOLIS DEP CON
SOUTH/EAST 124.7 284.7
NORTH/WEST 125.75 284.7
NOTE: RADAR required.
N
Rwy 17
(For assigned 230° CW 285°)
3500
Rwys 30L/R
(For assigned 220° CW 360°)
3500
DME aircraft Rwys 12L/R
(For assigned 060° CW 100°)
3500
Non-DME aircraft Rwys 12L/R
(For assigned 060° CW 100°)
3500
MSP 7
MSP 7
MINNEAPOLIS
115.3 MSP
Chan 100
FLYING CLOUD
117.7 FCM
Chan 124
FARMINGTON
115.7 FGT
Chan 104
HALFWAY
111.2 FOW
Chan 49
R-232
232°
R-010
R-277
R-316
R-290
R-108
R-045
R-052
R-034
HUGIR
N44°42.07'
W93°36.95'
MCONL
N44°35.01'
W93°50.54'
ARREX
N44°25.54'
W94°08.57'
3100
SCHEP
N44°14.84'
W94°28.73'
7000
(12)
(9)
(8)
(16)
(31)
(20)
(32)
(48)
(68)
(60)
101
25
232°
9000
16000 (MRA)
OBH transition
WORTHINGTON
110.6 OTG
Chan 43
N43°38.82'-W95°34.92'
REDWOOD FALLS
113.3 RWF
Chan 80
O'NEILL
113.9 ONL
Chan 86
N42°28.23'-W98°41.22'
L-12, H-5
WOLBACH
114.8 OBH
Chan 95
N41°22.54'-W98°21.22'
L-12, H-5
9000
*3500
236°
(154)
16000
*3800
215°
(184)
40
60
94
144
TAKEOFF MINIMUMS
Rwys 4, 12R, 17, 22, 30L/R: Standard.
Rwy 12L: 300-1½ or standard with minimum climb of 207' per NM to 1100, or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1300' prior to DER.
Rwy 35: Standard with minimum climb of 219' per NM to 2100.
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)
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DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: Fly assigned heading for RADAR vectors to MSP R-232 to SCHEP INT/MSP 66 DME. Maintain ATC assigned altitude.

DME EQUIPPED AIRCRAFT RUNWAYS 12L/R DEPARTURES: For assigned headings from 060° clockwise to 100°, cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply advise ATC as soon as possible prior to departure, thence . . . .
NON-DME EQUIPPED AIRCRAFT RUNWAYS 12L/R DEPARTURES: For assigned headings from 060° clockwise to 100°, cross FGT R-010 at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure, thence . . . .
TAKEOFF RUNWAY 17 DEPARTURES: For assigned headings from 230° clockwise to 285° cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure, thence . . . .
TAKEOFF RUNWAYS 30L/R DEPARTURES: For assigned headings from 220° clockwise to 360° cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure, thence . . . .
TAKEOFF RUNWAYS 4, 22, 35: Initially assigned heading, thence . . . .

. . . .on transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

O'NEILL TRANSITION (SCHEP9.ONL): From over SCHEP INT on MSP R-232 and OTG R-045 to OTG VOR/DME, then on OTG R-236 and ONL R-052 to ONL VORTAC.

WOLBACH TRANSITION (SCHEP9.OBH): From over SCHEP INT on MSP R-232 and OTG R-045 to OTG VOR/DME, then on OTG R-215 and OBH R-034 to OBH VORTAC.

SLAYER FOUR DEPARTURE (RNAV)

AL-264 (FAA)

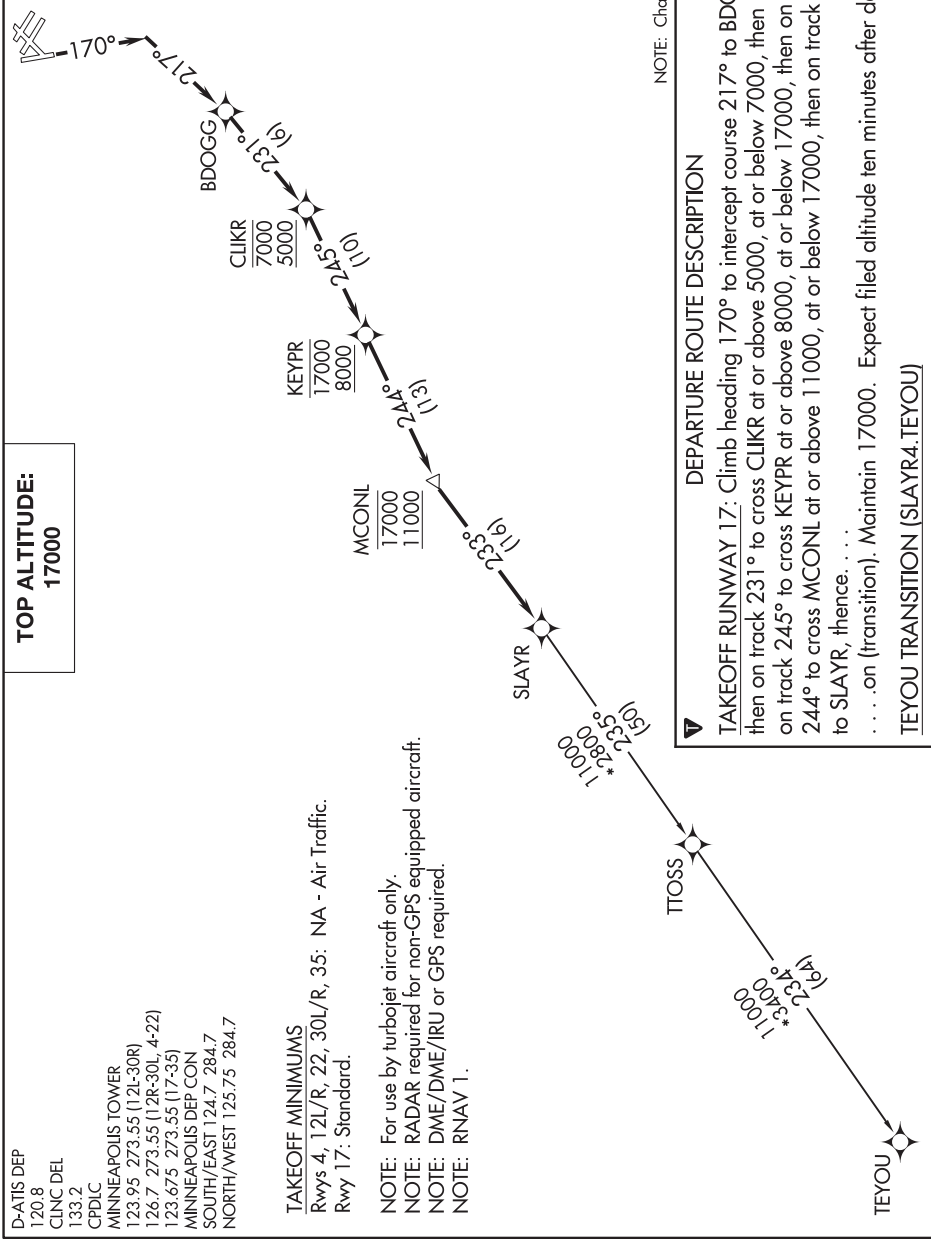
MINNEAPOLIS, MINNESOTA

TOP ALTITUDE: 17000

D-ATIS DEP
120.8
CLNC DEL
133.2
CPDLC
MINNEAPOLIS TOWER
123.95 273.55 (12L-30R)
126.7 273.55 (12R-30L, 4-22)
123.675 273.55 (17-35)
MINNEAPOLIS DEP CON
SOUTH/EAST 124.7 284.7
NORTH/WEST 125.75 284.7

TAKEOFF MINIMUMS
Rwys 4, 12L/R, 22, 30L/R, 35: NA - Air Traffic.
Rwy 17: Standard.

NOTE: For use by turbojet aircraft only.
NOTE: RADAR required for non-GPS equipped aircraft.
NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.



NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb heading 170° to intercept course 217° to BDOGG, then on track 231° to cross CLIKR at or above 5000, at or below 7000, then on track 245° to cross KEYPR at or above 8000, at or below 17000, then on track 244° to cross MCONL at or above 11000, at or below 17000, then on track 233° to SLAYR, thence. . . .

. . . .on (transition). Maintain 17000. Expect filed altitude ten minutes after departure.

TEYOU TRANSITION (SLAYR4.TEYOU)

NC-1, 25 FEB 2021 to 22 APR 2021

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D-ATIS DEP
120.8
CLNC DEL
133.2
CPDLC
MINNEAPOLIS TOWER
123.95 273.55 (12L-30R)
126.7 273.55 (12R-30L, 4-22)
123.675 273.55 (17-35)
MINNEAPOLIS DEP CON
SOUTH/EAST 124.7 335.65
NORTH/WEST 125.75 335.65

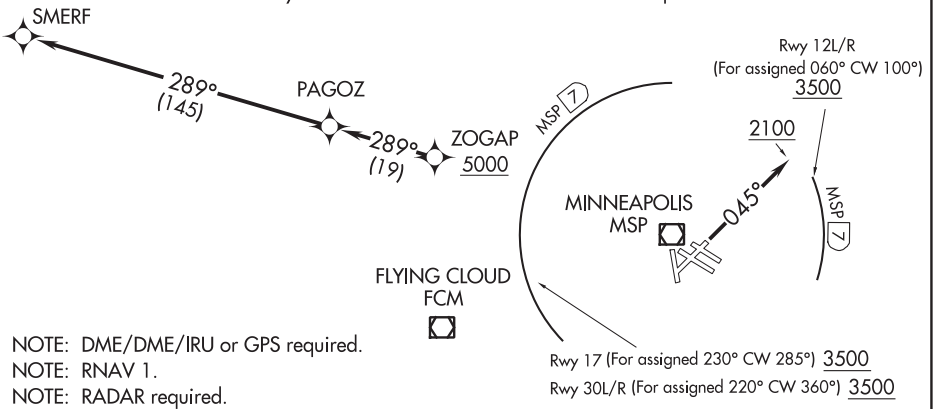
TOP ALTITUDE: (JETS) 7000/ (PROPS) 5000

TAKEOFF MINIMUMS

Rwys 4, 12R, 17, 22, 30L/R: Standard.

Rwy 12L: 300-1½ or standard with minimum climb of 207′ per NM to 1100, or alternatively, with standard takeoff minimums and a normal 200′ per NM climb gradient, takeoff must occur no later that 1300′ prior to DER.

Rwy 35: Standard with minimum climb of 219′ per NM to 2100.



NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 4: Climb heading 045° to 2100. Thence . . . .

TAKEOFF RUNWAYS 12L/R: For assigned headings from 060° clockwise to 100°, cross MSP VOR/DME 7 DME Arc at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKEOFF RUNWAY 17: For assigned headings from 230° clockwise to 285°, cross MSP VOR/DME 7 DME Arc at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKEOFF RUNWAYS 22, 35: Climb on assigned heading for RADAR vectors. Thence . . . .

TAKEOFF RUNWAYS 30L/R: For assigned headings from 220° clockwise to 360°, cross MSP VOR/DME 7 DME Arc at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

. . . . expect RADAR vectors to cross ZOGAP at or above 5000, then on track 289° to PAGOZ and on track 289° to SMERF, turbojet aircraft maintain 7000 or lower assigned altitude, all other aircraft maintain 5000 or lower assigned altitude. Expect filed altitude/ flight level ten minutes after departure.

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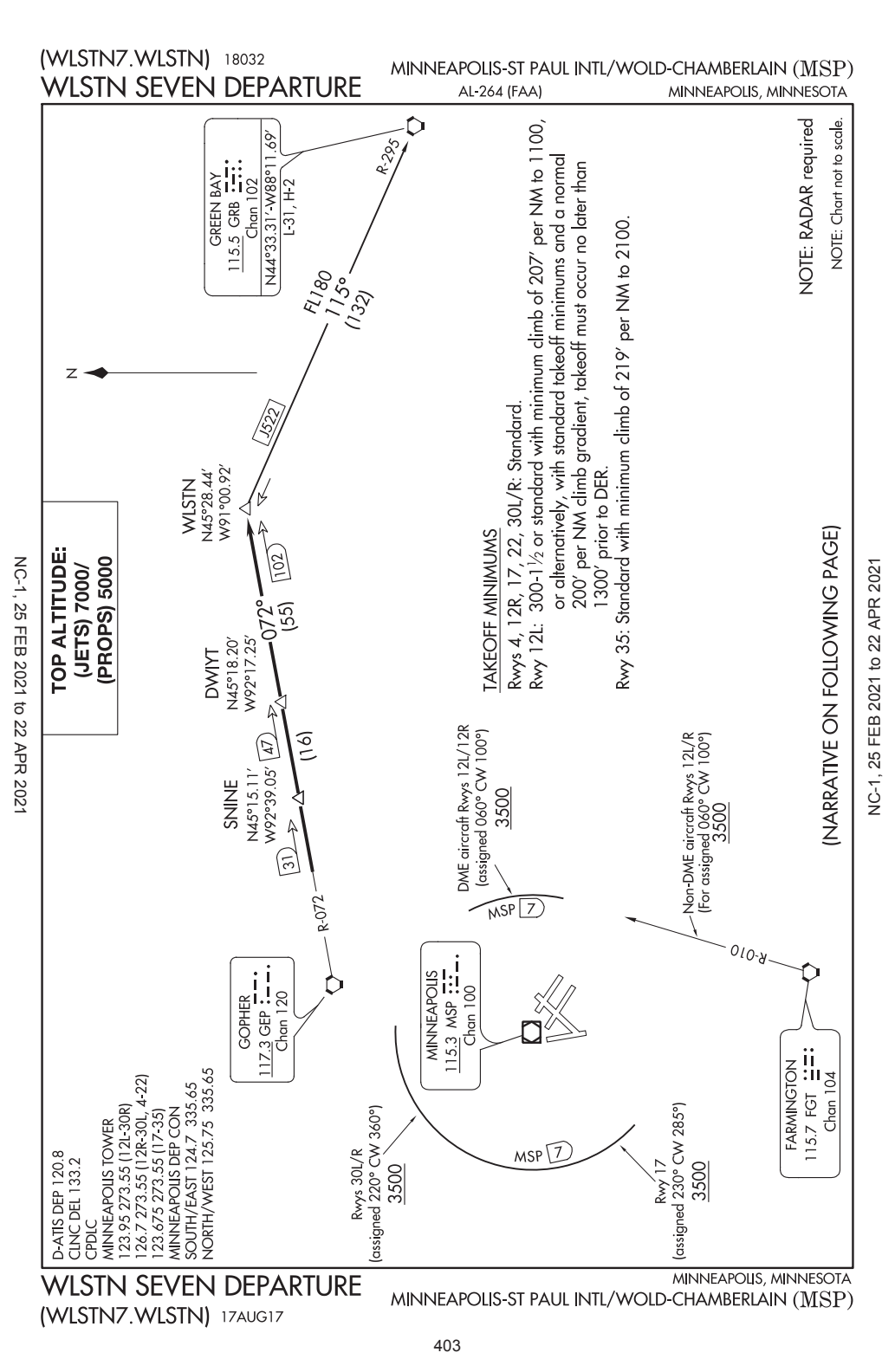
WLSTN SEVEN DEPARTURE

MINNEAPOLIS, MINNESOTA



NC-1, 25 FEB 2021 to 22 APR 2021

DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: Fly assigned heading for RADAR vectors to GEP R-072 to WLSTN/GEP 102 DME. Turbojet aircraft maintain 7000 or lower assigned altitude, all other aircraft maintain 5000 or lower assigned altitude. Thence . . . .

DME EQUIPPED AIRCRAFT RUNWAYS 12L/R DEPARTURES: For assigned headings from 060° clockwise to 100°, cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure, thence . . . .

NON-DME EQUIPPED AIRCRAFT RUNWAYS 12L/R DEPARTURES: For assigned headings from 060° clockwise to 100°, cross FGT R-010 at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure, thence . . . .

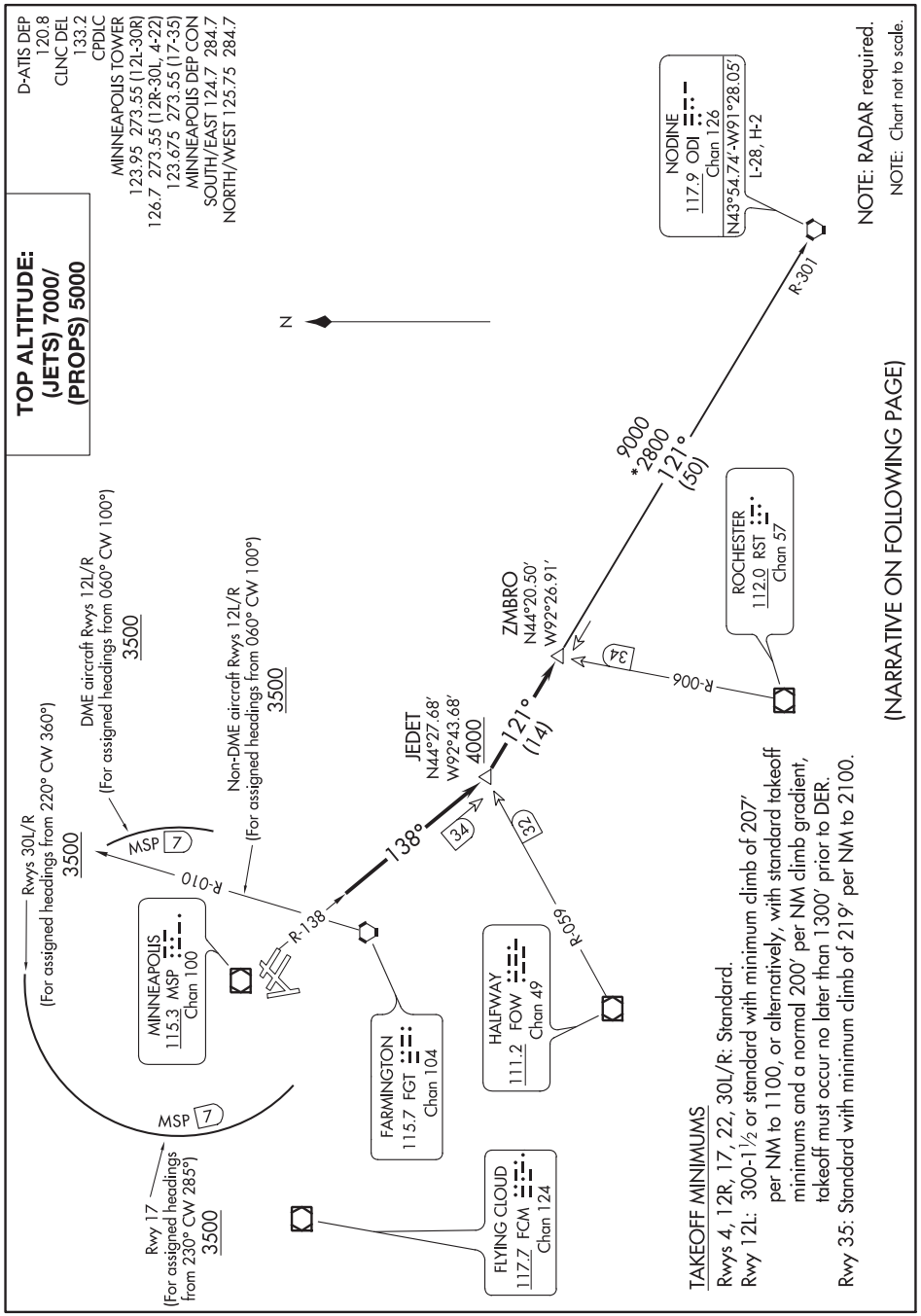
TAKEOFF RUNWAY 17: For assigned headings from 230° clockwise to 285° cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure, thence . . . .

TAKEOFF RUNWAYS 30L/R: For assigned headings from 220° clockwise to 360° cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure, thence . . . .

TAKEOFF RUNWAYS 4, 22, 35: Initially assigned heading, thence . . . .

. . . .on assigned transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

GREEN BAY TRANSITION (WLSTN7.GRB): From over WLSTN on GRB R-295 to GRB VORTAC.


D-ATIS DEP 120.8
CLNC DEL 133.2
CPDLC
MINNEAPOLIS TOWER
123.95 273.55 (12L-30R)
126.7 273.55 (12R-30L, 4-22)
123.675 273.55 (17-35)
MINNEAPOLIS DEP CON
SOUTH/EAST 124.7 284.7
NORTH/WEST 125.75 284.7
TOP ALTITUDE:
(JETS) 7000/
(PROPS) 5000
N
NODINE
117.9 ODI
Chan 126
N43°54.74'-W91°28.05'
L-28, H-2
R-301
NOTE: RADAR required.
NOTE: Chart not to scale.
9000
*2800
121°
(50)
ROCHESTER
112.0 RST
Chan 57
ZMBRO
N44°20.50'
W92°26.91'
34
R-006
121°
(14)
JEDET
N44°27.68'
W92°43.68'
4000
138°
34
32
R-059
DME aircraft Rwys 12L/R
(For assigned headings from 060° CW 100°)
3500
Non-DME aircraft Rwys 12L/R
(For assigned headings from 060° CW 100°)
3500
Rwys 30L/R
(For assigned headings from 220° CW 360°)
3500
MSP 7
R-010
MINNEAPOLIS
115.3 MSP
Chan 100
R-138
FARMINGTON
115.7 FGT
Chan 104
HALFWAY
111.2 FOW
Chan 49
MSP 7
Rwy 17
(For assigned headings from 230° CW 285°)
3500
FLYING CLOUD
117.7 FCM
Chan 124
TAKEOFF MINIMUMS
Rwys 4, 12R, 17, 22, 30L/R: Standard.
Rwy 12L: 300-1½ or standard with minimum climb of 207' per NM to 1100, or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1300' prior to DER.
Rwy 35: Standard with minimum climb of 219' per NM to 2100.
(NARRATIVE ON FOLLOWING PAGE)

DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: Fly assigned heading for RADAR vectors to MSP R-138 to cross JEDET INT/MSP 34 DME, at or above 4000; then on ODI R-301 to ZMBRO INT/ODI 50 DME. Turbojet aircraft maintain 7000 or lower assigned altitude, all other aircraft maintain 5000 or lower assigned altitude, thence. . . .

DME EQUIPPED AIRCRAFT RUNWAYS 12L/R DEPARTURES: For assigned headings from 060° clockwise to 100°, cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure, thence . . . .

NON-DME EQUIPPED AIRCRAFT RUNWAYS 12L/R DEPARTURES: For assigned headings from 060° clockwise to 100°, cross FGT R-010 at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure, thence . . . .

TAKEOFF RUNWAY 17: For assigned headings from 230° clockwise to 285°, cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure, thence . . . .

TAKEOFF RUNWAYS 30L/R: For assigned headings from 220° clockwise to 360°, cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure, thence . . . .

TAKEOFF RUNWAYS 4, 22, 35: Initially assigned heading. Thence . . . .

. . . .on assigned transition or route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

NODINE TRANSITION (ZMBRO7.ODI): From over ZMBRO on ODI R-301 to ODI VORTAC.

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ILS or LOC RWY 31
MINOT INTL (MOT)

LOC/DME I-MOT	APP CRS	Rwy ldg	7700
111.9	312°	TDZE	1679
Chan 56		Apt Elev	1716

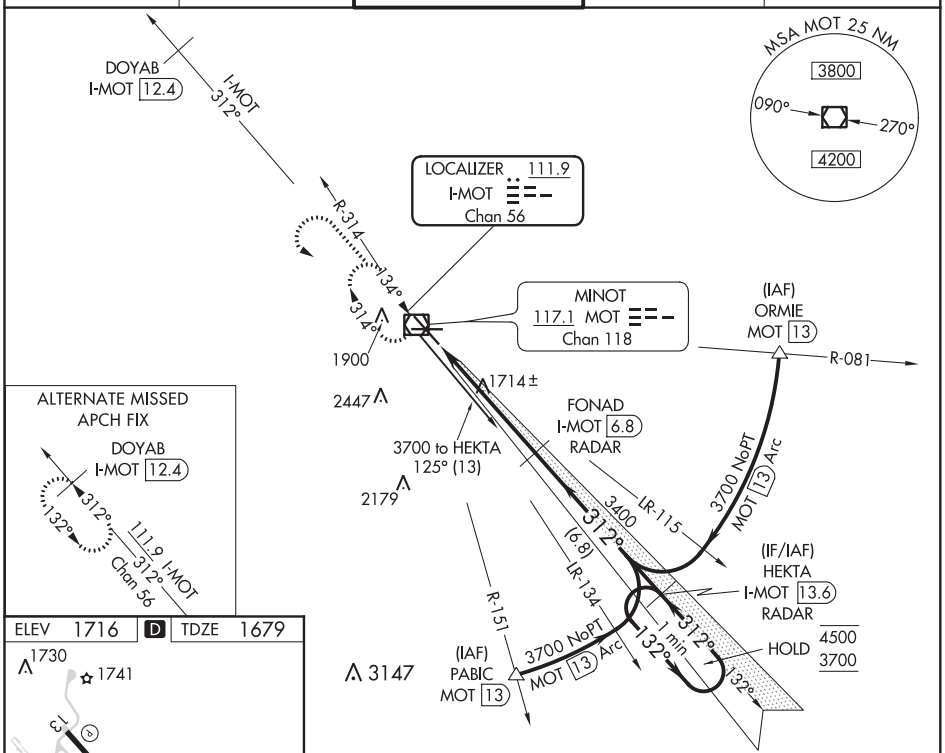
DME or RADAR required.

For Inop ALS, increase S-ILS 31 Cat E visibility to RVR 4000, and S-LOC 31 Cat C, D and E visibility to RVR 4500. Auto Pilot coupled approach NA below 2060.

MALSR

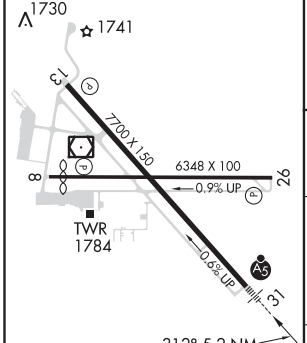
MISSED APPROACH: Climb to 3700 then left turn direct MOT VOR/DME and hold.

ASOS	MINOT APP CON ★	MAGIC CITY TOWER ★	GND CON	UNICOM
118.725	119.6 363.8	118.2 (CTAF) (L) 251.125	121.9	122.95



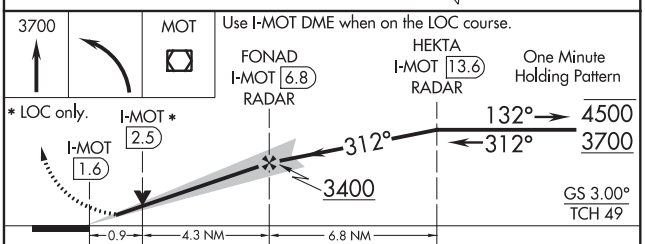
ALTERNATE MISSED APCH FIX

ELEV 1716 (D) TDZE 1679



REIL Rwy 13
REIL Rwys 8 and 26 (L)
HIRL Rwys 8-26 and 13-31 (L)

FAF to MAP 5.2 NM					
Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44



CATEGORY	A	B	C	D	E
S-ILS 31	1879/24 200 (200-½)				
S-LOC 31	1980/24 301 (300-½)			1980/40 301 (300-¾)	
CIRCLING	2200-1 484 (500-1)		2240-1½ 524 (600-1½)	2280-2 564 (600-2)	2800-3 1084 (1100-3)

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MINOT, NORTH DAKOTA — AL-635 (FAA) — 19283

WAAS CH 97616 W08A	APP CRS 084°	Rwy ldg 5957 TDZE 1712 Apt Elev 1716

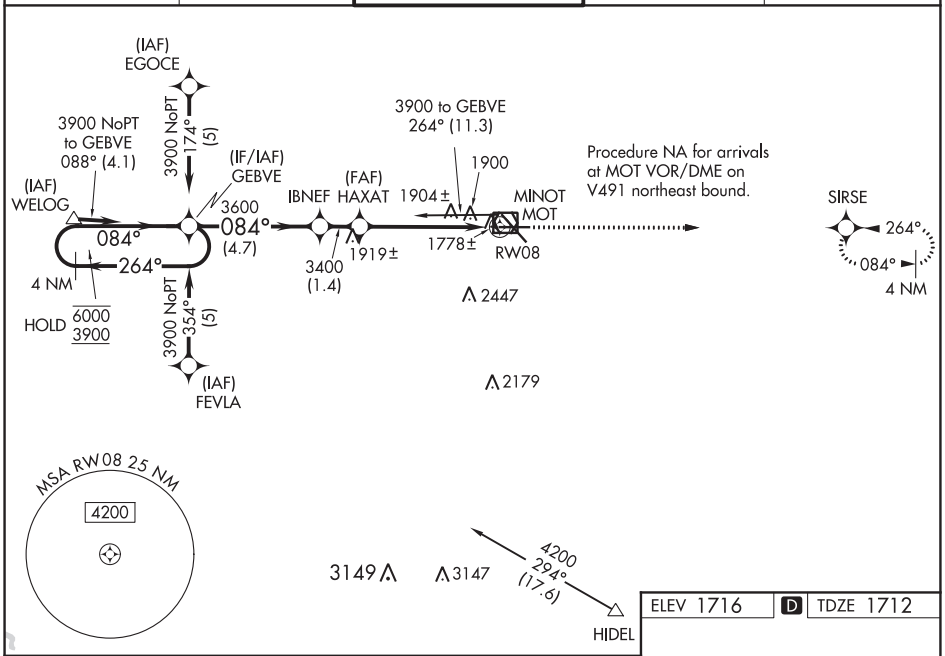
RNAV (GPS) RWY 8
MINOT INTL (MOT)

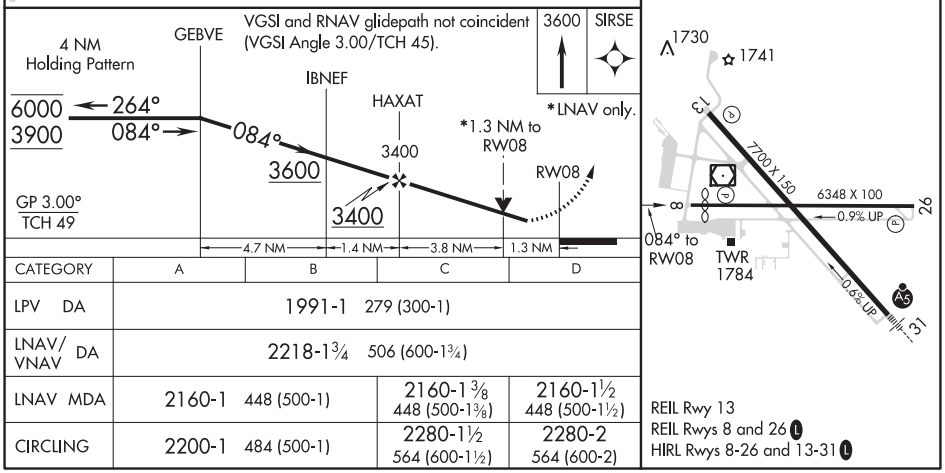
RNP APCH.

Rwy 8 helicopter visibility reduction below ¾ SM NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C or above 54°C.

MISSED APPROACH: Climb to 3600 direct SIRSE and hold.

ASOS	MINOT APP CON ★	MAGIC CITY TOWER ★	GND CON	UNICOM
118.725	119.6 363.8	118.2 (CTAF) L 251.125	121.9	122.95





CATEGORY	A	B	C	D
LPV DA	1991-1 279 (300-1)			
LNAV/VNAV DA	2218-1¾ 506 (600-1¾)			
LNAV MDA	2160-1 448 (500-1)		2160-1⅜ 448 (500-1⅜)	2160-1½ 448 (500-1½)
CIRCLING	2200-1 484 (500-1)		2280-1½ 564 (600-1½)	2280-2 564 (600-2)

REIL Rwy 13
REIL Rwys 8 and 26 L
HIRL Rwys 8-26 and 13-31 L

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WAAS CH 70399 W13A	APP CRS 132°	Rwy ldg 7700 TDZE 1702 Apt Elev 1716

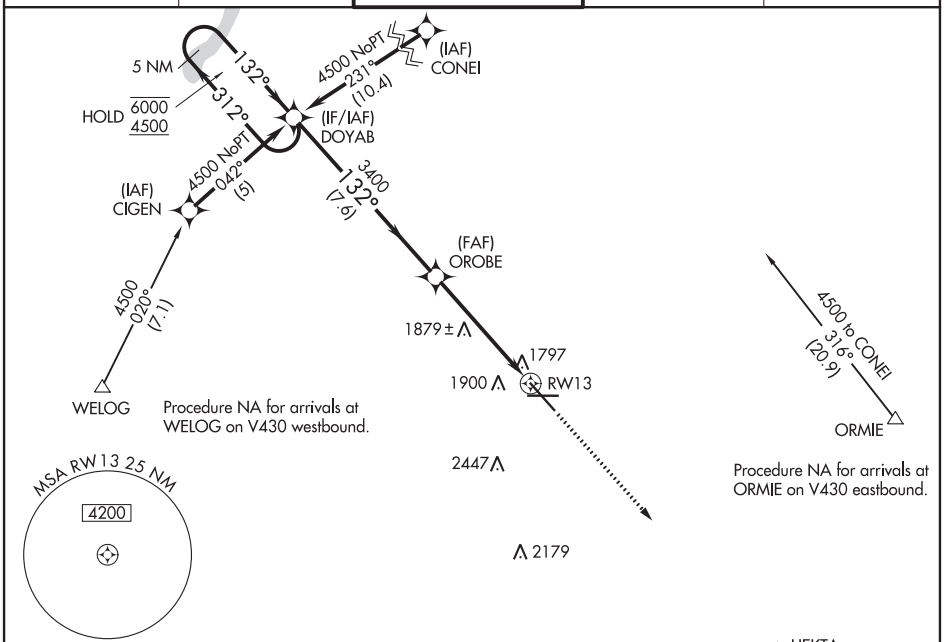
RNAV (GPS) RWY 13
MINOT INTL (MOT)

RNP APCH.

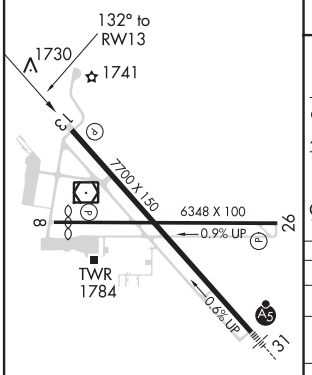
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C or above 54°C.

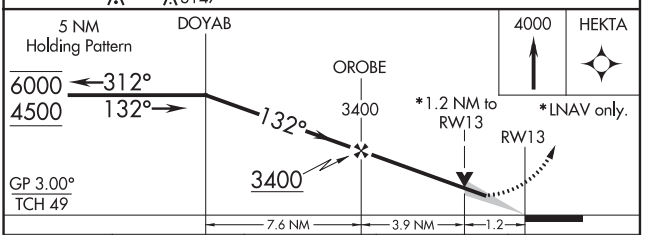
MISSED APPROACH: Climb to 4000 direct HEKTA and hold.

ASOS	MINOT APP CON ★	MAGIC CITY TOWER ★	GND CON	UNICOM
118.725	119.6 363.8	118.2 (CTAF) L 251.125	121.9	122.95



ELEV 1716 | D | TDZE 1702





CATEGORY	A	B	C	D
LPV DA	2021-1 319 (400-1)			
LNAV/VNAV DA	2181-1¾ 479 (500-1¾)			
LNAV MDA	2140-1 438 (500-1)		2140-1¼ 438 (500-1¼)	2140-1½ 438 (500-1½)
CIRCLING	2200-1 484 (500-1)		2280-1½ 564 (600-1½)	2280-2 564 (600-2)

REIL Rwy 13
REIL Rwys 8 and 26 L
HIRL Rwys 8-26 and 13-31 L

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MINOT, NORTH DAKOTA — AL-635 (FAA) — 19283

RNAV (GPS) RWY 26
MINOT INTL (MOT)

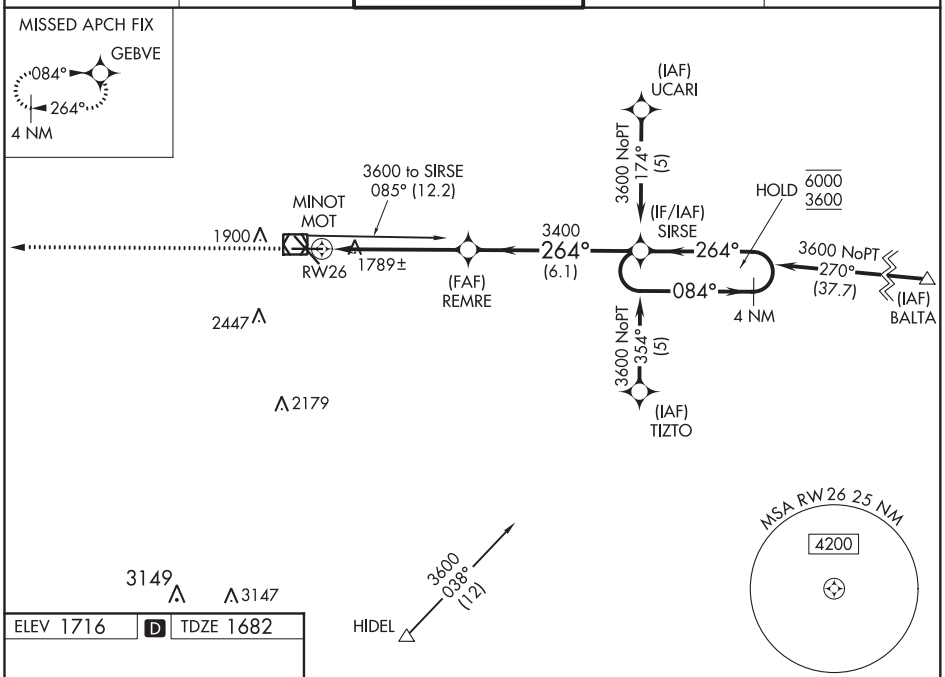
WAAS CH 56516 W26A	APP CRS 264°	Rwy ldg 6348 / TDZE 1682 / Apt Elev 1716

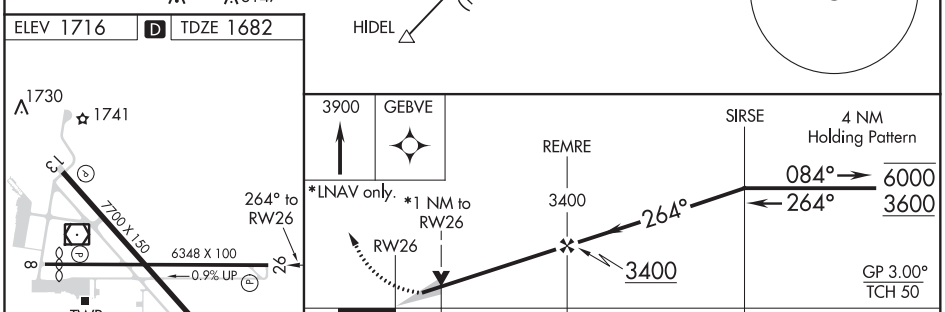
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C or above 54°C.

MISSED APPROACH: Climb to 3900 direct GEBVE and hold.

ASOS	MINOT APP CON ★	MAGIC CITY TOWER ★	GND CON	UNICOM
118.725	119.6 363.8	118.2 (CTAF) L 251.125	121.9	122.95





REIL Rwy 13
REIL Rwys 8 and 26 L
HIRL Rwys 8-26 and 13-31 L

CATEGORY	A	B	C	D
LPV DA	1932-1 250 (300-1)			
LNAV/VNAV DA	1932-1 250 (300-1)			
LNAV MDA	2040-1 358 (400-1)		2040-1⅜ 358 (400-1⅜)	
CIRCLING	2200-1 484 (500-1)		2280-1½ 564 (600-1½)	2280-2 564 (600-2)

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RNAV (GPS) RWY 31
MINOT INTL (MOT)

WAAS CH 66099 W31A	APP CRS 312°	Rwy ldg 7700 TDZE 1679 Apt Elev 1716

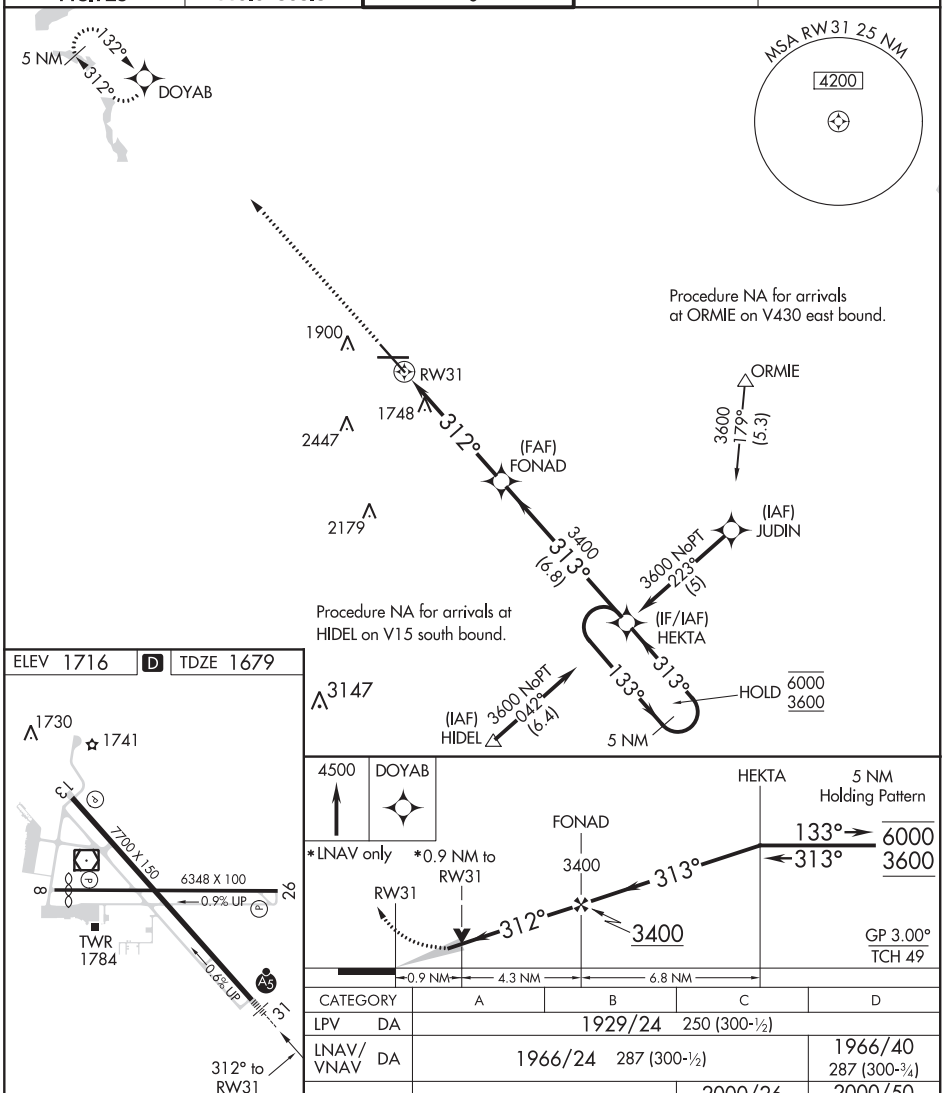
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C or above 54°C. For inop ALS increase LNAV/VNAV visibility to RVR 4500.

MALSR

MISSED APPROACH: Climb to 4500 direct DOYAB and hold.

ASOS	MINOT APP CON ★	MAGIC CITY TOWER ★	GND CON	UNICOM
118.725	119.6 363.8	118.2 (CTAF) (L) 251.125	121.9	122.95



CATEGORY	A	B	C	D
LPV DA	1929/24 250 (300-½)			
LNAV/VNAV DA	1966/24 287 (300-½)			1966/40 287 (300-¾)
LNAV MDA	2000/24 321 (300-½)		2000/26 321 (300-½)	2000/50 321 (300-1)
CIRCLING	2200-1 484 (500-1)		2280-1½ 564 (600-1½)	2280-2 564 (600-2)

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MINOT, NORTH DAKOTA

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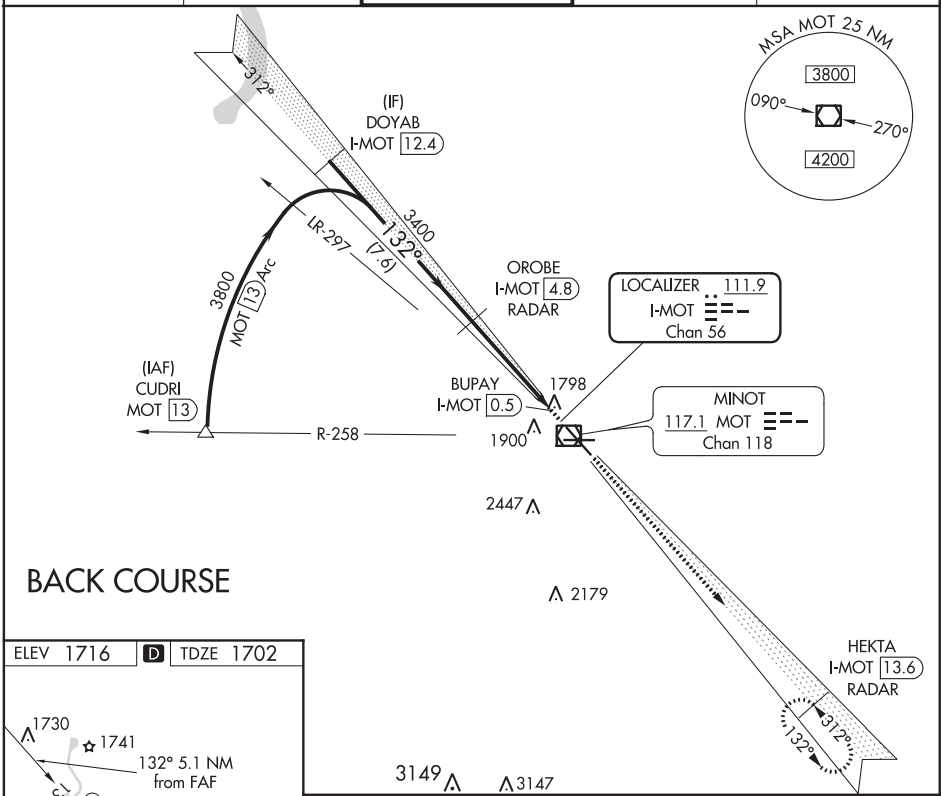
LOC BC RWY 13
MINOT INTL (MOT)

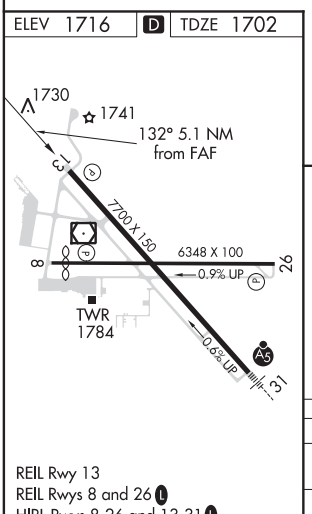
LOC/DME I-MOT	APP CRS	Rwy ldg	7700
111.9	132°	TDZE	1702
Chan 56		Apt Elev	1716

DME required

MISSED APPROACH: Climb to 3700 on I-MOT SE course to HEKTA/I-MOT 13.6 DME/RADAR and hold.

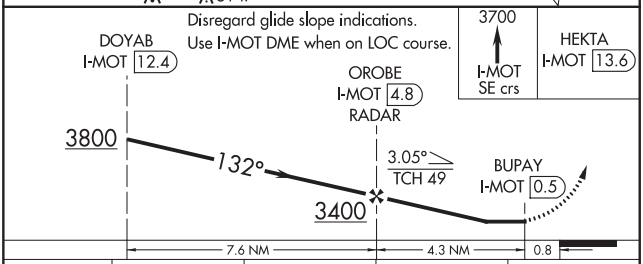
ASOS	MINOT APP CON ★	MAGIC CITY TOWER ★	GND CON	UNICOM
118.725	119.6 363.8	118.2 (CTAF) (L) 251.125	121.9	122.95





REIL Rwy 13
REIL Rwys 8 and 26 (L)
HIRL Rwys 8-26 and 13-31 (L)

Disregard glide slope indications.
Use I-MOT DME when on LOC course.



CATEGORY	A	B	C	D
S-LOC13	2060-1 358 (400-1)			
CIRCLING	2200-1 484 (500-1)		2280-1½ 564 (600-1½)	2280-2 564 (600-2)

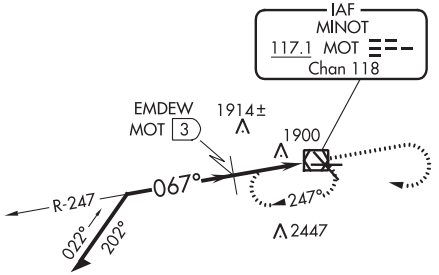
VOR/DME MOT 117.1 Chan 118	APP CRS 067°	Rwy ldg 5955 TDZE 1712 Apt Elev 1716

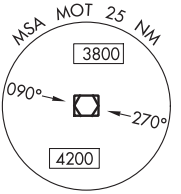
VOR RWY 8
MINOT INTL (MOT)

Rwy 8 helicopter visibility reduction below ¾NA.

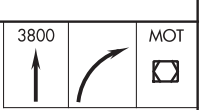
MISSED APPROACH: Climb to 3800 then right turn direct MOT VOR/DME and hold.

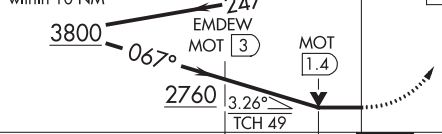
ASOS	MINOT APP CON ★	MAGIC CITY TOWER ★	GND CON	UNICOM
118.725	119.6 363.8	118.2 (CTAF) L 251.125	121.9	122.95





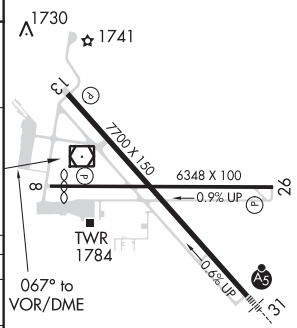
VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 45).





CATEGORY	A	B	C	D
S-8	2760-1¼ 1048 (1100-1¼)	2760-1½ 1048 (1100-1½)	2760-3 1048 (1100-3)	
CIRCLING	2760-1¼ 1044 (1100-1¼)	2760-1½ 1044 (1100-1½)	2760-3 1044 (1100-3)	
EMDEW FIX MINIMUMS				
S-8	2180-1 468 (500-1)		2180-1⅜ 468 (500-1⅜)	2180-1½ 468 (500-1½)
CIRCLING	2200-1 484 (500-1)		2280-1½ 564 (600-1½)	2280-2 564 (600-2)

ELEV 1716 D TDZE 1712



REIL Rwy 13
REIL Rwys 8 and 26 L
HIRL Rwys 8-26 and 13-31 L

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NC-1, 25 FEB 2021 to 22 APR 2021

MINOT, NORTH DAKOTA

AL-635 (FAA)

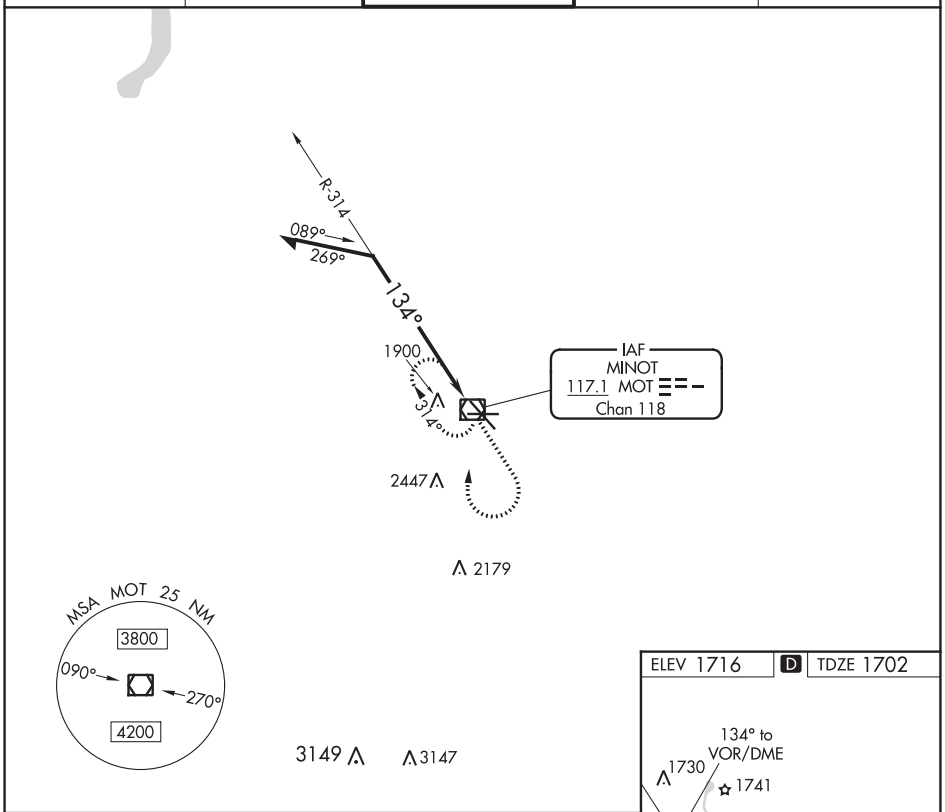
19283

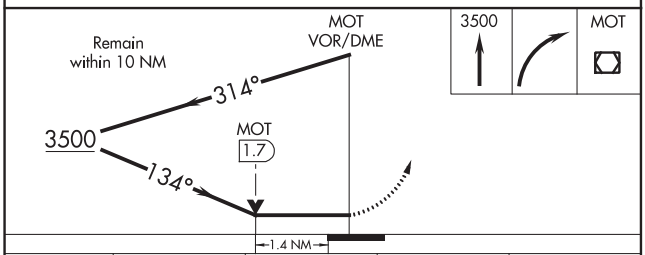
VOR RWY 13
MINOT INTL (MOT)

VOR/DME MOT	APP CRS	Rwy ldg	7700
117.1	134°	TDZE	1702
Chan 118		Apt Elev	1716

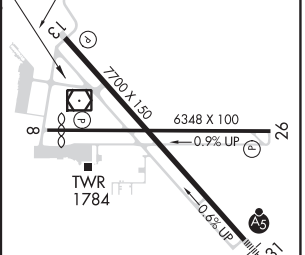
MISSED APPROACH: Climb to 3500 then right turn direct MOT VOR/DME and hold.

ASOS	MINOT APP CON ★	MAGIC CITY TOWER ★	GND CON	UNICOM
118.725	119.6 363.8	118.2 (CTAF) L 251.125	121.9	122.95





CATEGORY	A	B	C	D
S-13	2200-1	498 (500-1)	2200-1⅜ 498 (500-1⅜)	2200-1½ 498 (500-1½)
CIRCLING	2200-1	484 (500-1)	2280-1½ 564 (600-1½)	2280-2 564 (600-2)



REIL Rwy 13
REIL Rwys 8 and 26 L
HIRL Rwys 8-26 and 13-31 L

MINOT, NORTH DAKOTA
Amdt 11A 10OCT19

48°15′N-101°17′W

MINOT INTL (MOT)
VOR RWY 13

NC-1, 25 FEB 2021 to 22 APR 2021

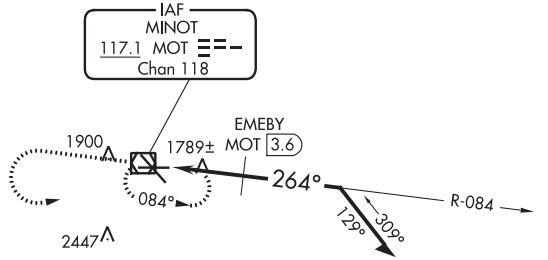
NC-1, 25 FEB 2021 to 22 APR 2021

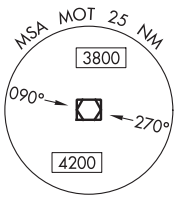
VOR RWY 26
MINOT INTL (MOT)

VOR/DME MOT 117.1 Chan 118	APP CRS 264°	Rwy ldg 6348 TDZE 1682 Apt Elev 1716

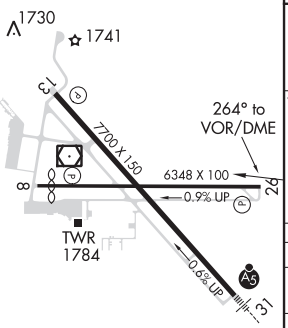
MISSED APPROACH: Climb to 3600 then left turn direct MOT VOR/DME and hold.

ASOS	MINOT APP CON ★	MAGIC CITY TOWER ★	GND CON	UNICOM
118.725	119.6 363.8	118.2 (CTAF) L 251.125	121.9	122.95

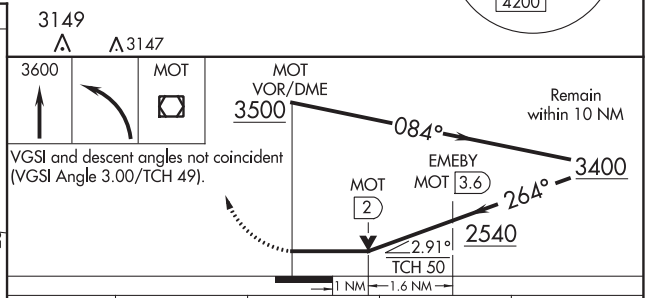




ELEV 1716 | D | TDZE 1682



REIL Rwy 13
REIL Rwys 8 and 26 L
HIRL Rwys 8-26 and 13-31 L



VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 49).

CATEGORY	A	B	C	D
S-26	2540-1 858 (900-1)	2540-1¼ 858 (900-1¼)	2540-2½ 858 (900-2½)	2540-2¾ 858 (900-2¾)
CIRCLING	2540-1 824 (900-1)	2540-1¼ 824 (900-1¼)	2540-2½ 824 (900-2½)	2540-2¾ 824 (900-2¾)
EMEBY FIX MINIMUMS				
S-26	2040-1 358 (400-1)			2040-1¼ 358 (400-1¼)
CIRCLING	2200-1 484 (500-1)		2280-1½ 564 (600-1½)	2280-2 564 (600-2)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

MINOT, NORTH DAKOTA

AL-635 (FAA)

20310

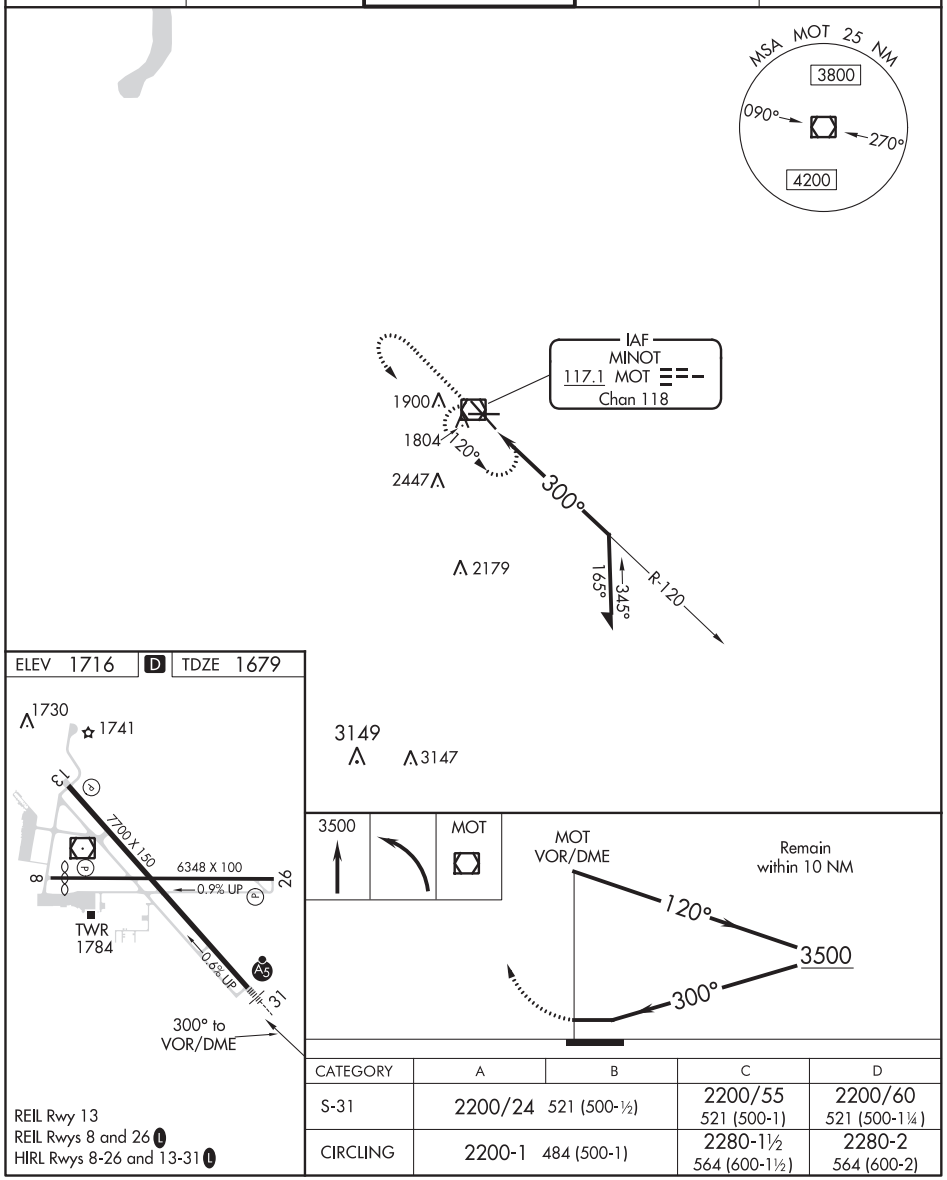
VOR RWY 31
MINOT INTL (MOT)

VOR/DME MOT	APP CRS	Rwy ldg	7700
117.1	300°	TDZE	1679
Chan 118		Apt Elev	1716

MALSR

MISSED APPROACH: Climb to 3500 then left turn direct MOT VOR/DME and hold.

ASOS	MINOT APP CON ★	MAGIC CITY TOWER ★	GND CON	UNICOM
118.725	119.6 363.8	118.2 (CTAF) L 251.125	121.9	122.95



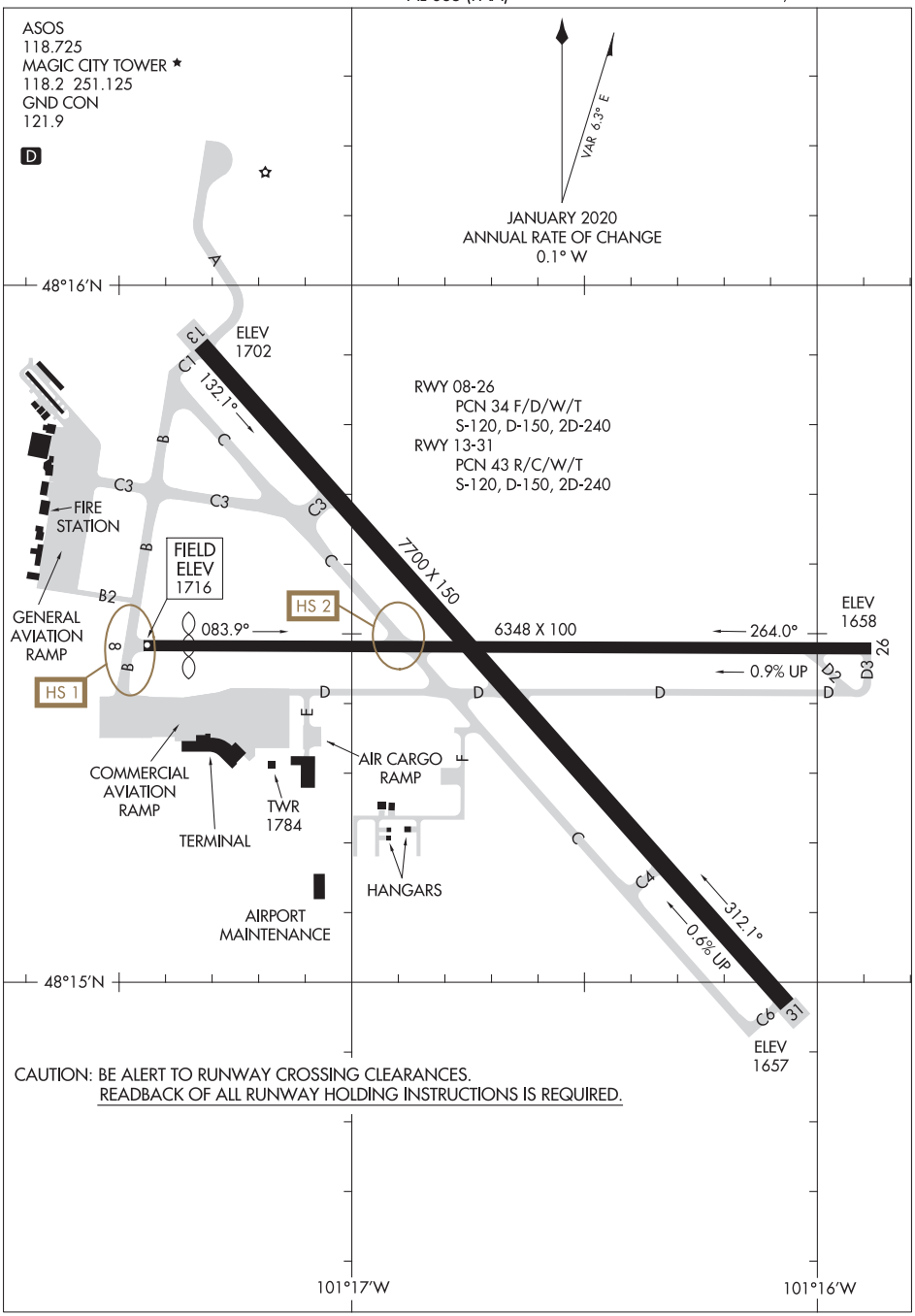
CATEGORY	A	B	C	D
S-31	2200/24	521 (500-½)	2200/55 521 (500-1)	2200/60 521 (500-1¼)
CIRCLING	2200-1	484 (500-1)	2280-1½ 564 (600-1½)	2280-2 564 (600-2)

REIL Rwy 13
REIL Rwys 8 and 26 L
HIRL Rwys 8-26 and 13-31 L

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

AL-635 (FAA)



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

19227

MINOT, NORTH DAKOTA

ILS or LOC Y RWY 12

LOC I-MJW 109.9	APCH CRS 118°	Rwy ldg 13,198 TDZE 1666 Arpt Elev 1666	AL-5013 [USAF]	MINOT AFB (KMIB)

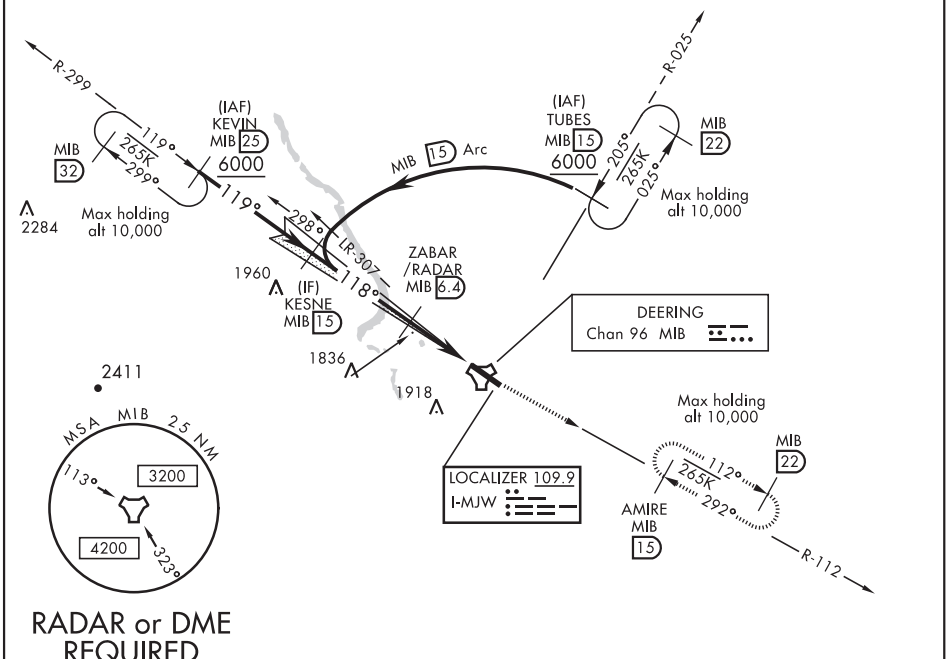
* When ALS inop, increase RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile, CAT CDE vis to 1¼ miles.

ALSF-1 (A1)

MISSED APPROACH: Climb to 5000 via MIB TACAN R-112 direct AMIRE and hold.

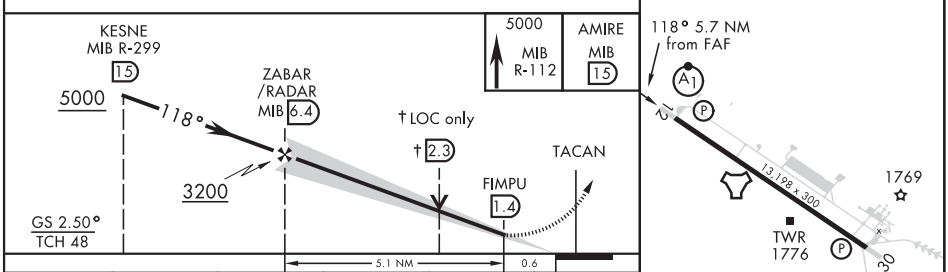
ATIS ★	MINOT APP CON	MINOT TOWER ★	GND CON	CLNC DEL
278.8	119.6 363.8	120.65 253.5	134.0 275.8	326.2

*** Circling not authorized N of Rwy 12-30.



RADAR or DME REQUIRED

EMERG SAFE ALT 100 NM 4700



CATEGORY	A	B	C	D	E
S-ILS 12*	1866/24 200 (200-½)				
S-LOC 12**	2100/24 434 (500-½)		2100/40 434 (500-¾)		
C CIRCLING***	2120-1 454 (500-1)	2140-1 474 (500-1)	2180-1½ 514 (600-1½)	2220-2 554 (600-2)	

FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

MINOT, NORTH DAKOTA 48°25′N-101°21′W MINOT AFB (KMIB)

Amdt 1 25APR19

ILS or LOC Y RWY 12

NC-1, 25 FEB 2021 to 22 APR 2021

MINOT, NORTH DAKOTA

ILS or LOC Y RWY 30

MINOT AFB (KMIB)

LOC I-MIB 109.9	APCH CRS 298°	Rwy ldg 13,198 TDZE 1646 Arpt Elev 1666	AL-5013 [USAF]

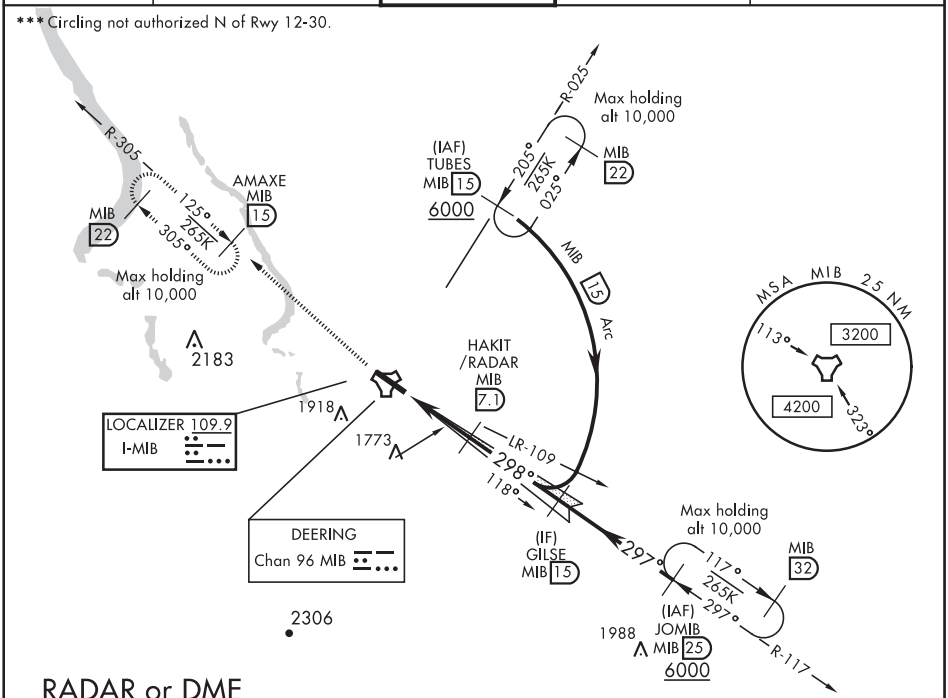
* When ALS inop, increase CAT ABCDE RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile, CAT CDE RVR to 60 and vis to 1⅛ miles.

ALSF-1

MISSED APPROACH: Climb to 5000 via MIB TACAN R-305 direct AMAXE and hold.

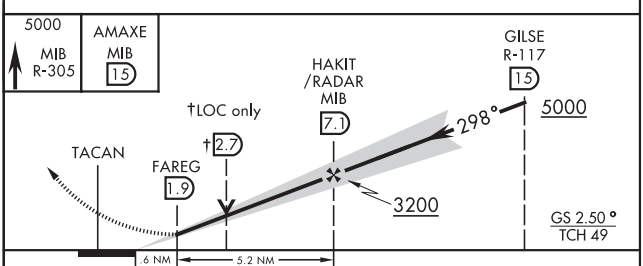
ATIS ★	MINOT APP CON	MINOT TOWER ★	GND CON	CLNC DEL
278.8	119.6 363.8	120.65 253.5	134.0 275.8	326.2

*** Circling not authorized N of Rwy 12-30.

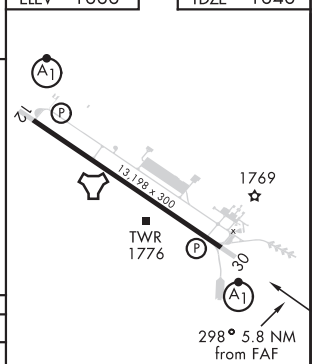


RADAR or DME REQUIRED

EMERG SAFE ALT 100 NM 4700



ELEV 1666 TDZE 1646



HIRL Rwy 12-30

CATEGORY	A	B	C	D	E
S-ILS 30 *	1846/24 200 (200-½)				
S-LOC 30 **	2040/24 394 (400-½)		2040/35 394 (400-⅝)		
C CIRCLING ***	2120-1 454 (500-1)	2140-1 474 (500-1)	2180-1½ 514 (600-1½)	2220-2 554 (600-2)	

FAF to MAP 5.2 NM					
Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

NC-1, 25 FEB 2021 to 22 APR 2021

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MINOT, NORTH DAKOTA

TACAN Y RWY 12

TACAN MIB Chan 96	APCH CRS 125°	Rwy ldg 13,198 TDZE 1666 Arpt Elev 1666

AL-5013 [USAF]

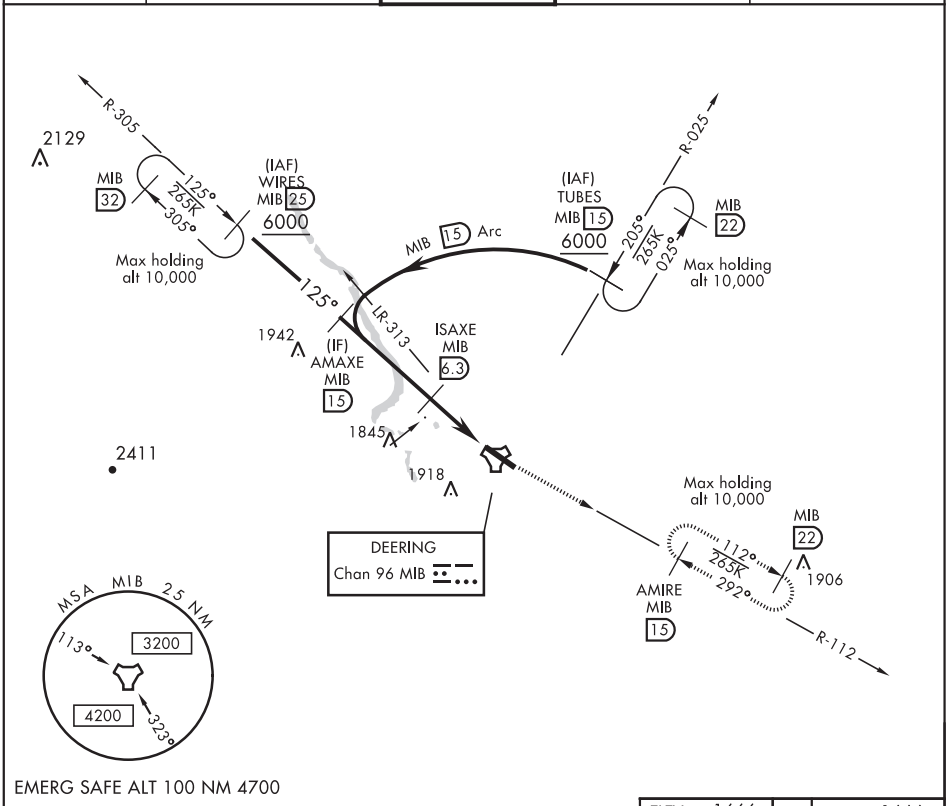
MINOT AFB (KMIB)

* When ALS inop, increase CAT AB RVR to 55 vis to 1 mile, CAT CDE vis to 1¼ miles.
** Circling not authorized N of Rwy 12-30.

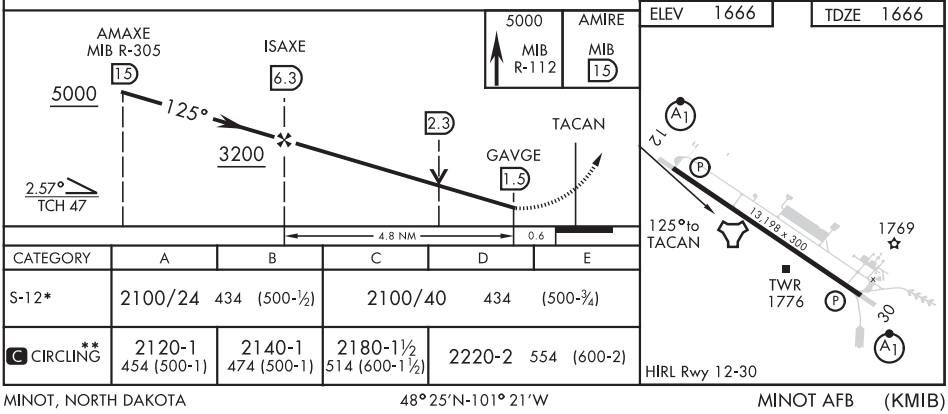
ALSF-1

MISSED APPROACH: Climb to 5000 via MIB TACAN R-112 direct AMIRE and hold.

ATIS ★	MINOT APP CON	MINOT TOWER ★	GND CON	CLNC DEL
278.8	119.6 363.8	120.65 253.5	134.0 275.8	326.2



EMERG SAFE ALT 100 NM 4700



CATEGORY	A	B	C	D	E
S-12*	2100/24 434 (500-½)		2100/40 434 (500-¾)		
C CIRCLING**	2120-1 454 (500-1)	2140-1 474 (500-1)	2180-1½ 514 (600-1½)	2220-2 554 (600-2)	

MINOT, NORTH DAKOTA 48° 25′N-101° 21′W MINOT AFB (KMIB)

Orig 21JUL16

TACAN Y RWY 12

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

MINOT, NORTH DAKOTA

TACAN Y RWY 30

MINOT AFB (KMIB)

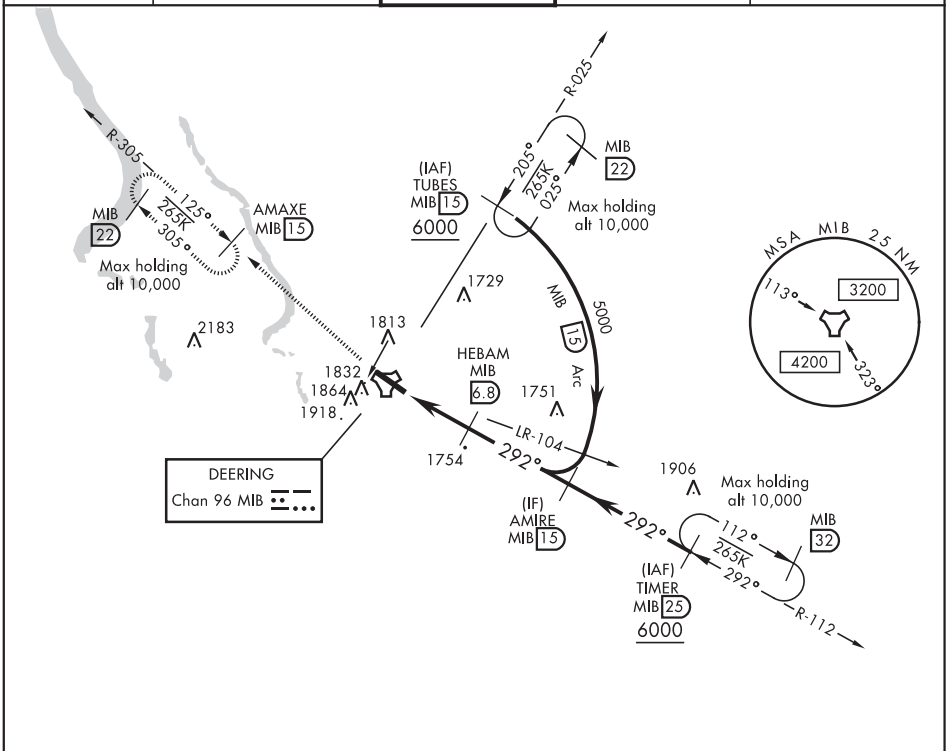
TACAN MIB Chan 96	APCH CRS 292°	Rwy ldg 13,198 TDZE 1646 Arpt Elev 1666	AL-5013 [USAF]

* When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile, CAT CDE vis to 1⅜ miles.
** Circling not authorized N of Rwy 12-30

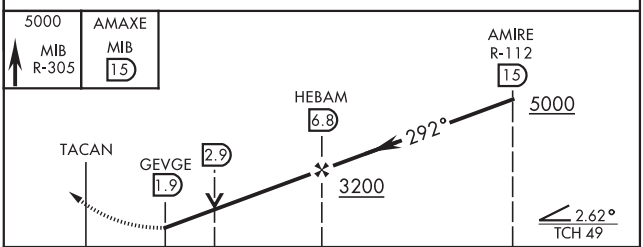
ALSF-1

MISSED APPROACH: Climb to 5000 via MIB TACAN R-305 direct AMAXE and hold.

ATIS ★	MINOT APP CON	MINOT TOWER ★	GND CON	CLNC DEL
278.8	119.6 363.8	120.65 253.5	134.0 275.8	326.2

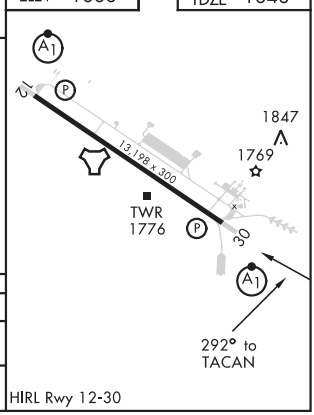


EMERG SAFE ALT 100 NM 4700



CATEGORY	A	B	C	D	E
S-30 *	2100/24 454 (500-½)		2100/45 454 (500-⅞)		
C CIRCLING **	2120-1 454 (500-1)	2140-1 474 (500-1)	2180-1½ 514 (600-1½)	2220-2 554 (600-2)	

ELEV 1666 TDZE 1646



HIRL Rwy 12-30

MINOT, NORTH DAKOTA 48° 25′N-101° 21′W MINOT AFB (KMIB)

Orig 21JUL16

TACAN Y RWY 30

NC-1, 25 FEB 2021 to 22 APR 2021

19227

MINOT, NORTH DAKOTA

COPTER RNAV (GPS) RWY 12

WAAS CH 71280 W12A	APCH CRS 118°	Rwy ldg 13,198 TDZE 1666 Arpt Elev 1666

AL-5013 (USAF)

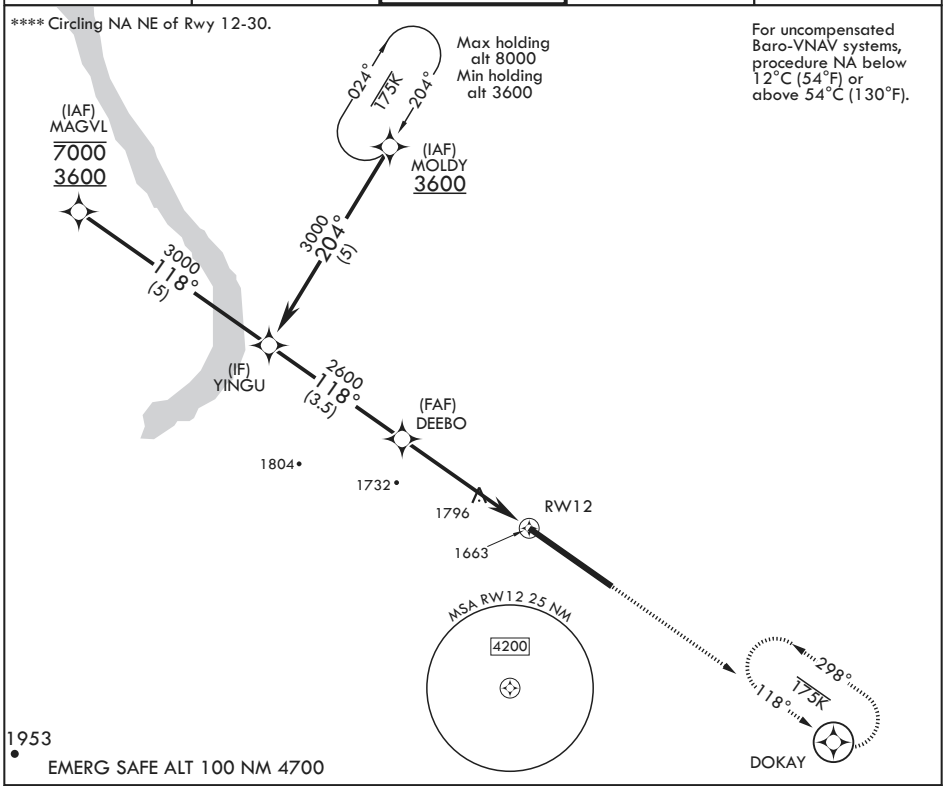
MINOT AFB (KMIB)

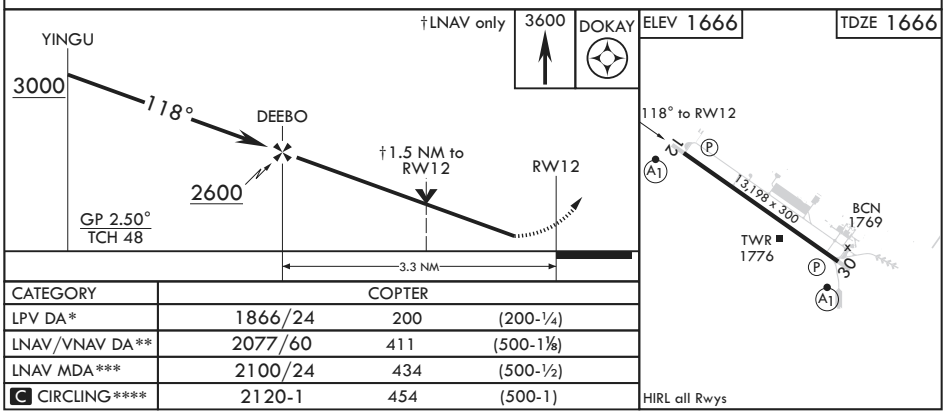
* When ALS inop, increase CAT A RVR to 40, vis to 3/4 mile.
** When ALS inop, increase CAT A vis to 1 5/8 miles.
*** When ALS inop, increase CAT A RVR to 55, vis to 1 mile.

ALSF-1

MISSED APPROACH: Climb to 3600 direct DOKAY and hold.

ATIS★	APP CON	TOWER★	GND CON	CLNC DEL
278.8	119.6 363.8	120.65 253.5	134.0 275.8	326.2





CATEGORY	COPTER		
LPV DA*	1866/24	200	(200-¼)
LNAV/VNAV DA**	2077/60	411	(500-1⅛)
LNAV MDA***	2100/24	434	(500-½)
C CIRCLING****	2120-1	454	(500-1)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

MINOT, NORTH DAKOTA

COPTER RNAV (GPS) RWY 30

WAAS CH 91355 W30A	APCH CRS 298°	Rwy ldg 13,198 TDZE 1646 Arpt Elev 1666

AL-5013 (USAF)

MINOT AFB (KMIB)

* When ALS inop, increase CAT A RVR to 40, vis to 3/4 mile.
** When ALS inop, increase CAT A vis to 1 5/8 miles.
*** When ALS inop, increase CAT A RVR to 55, vis to 1 mile.

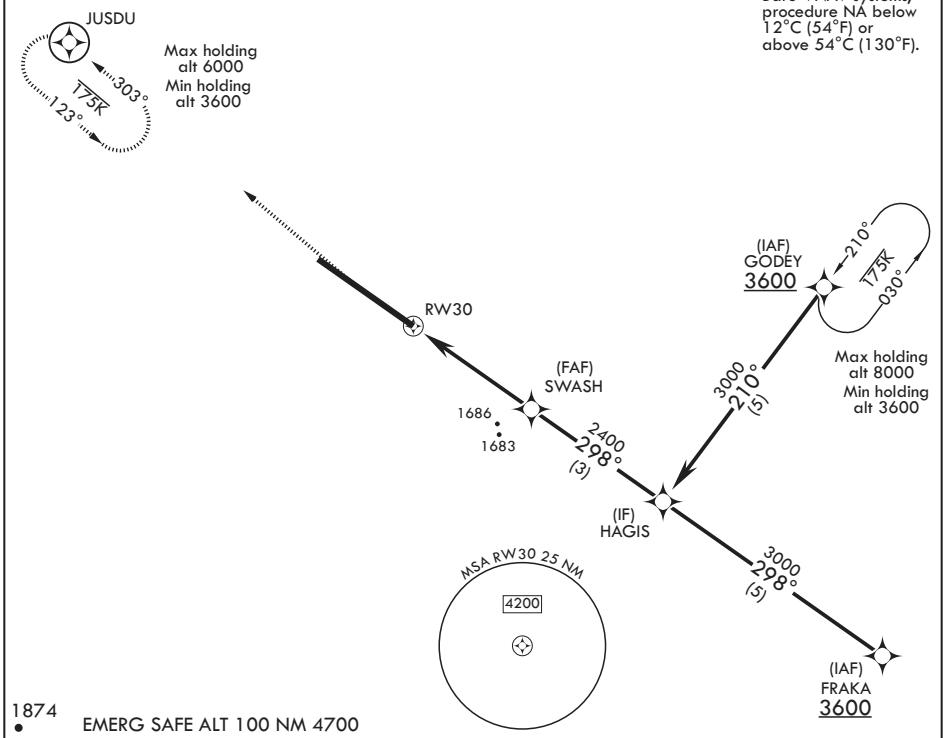
ALSF-1

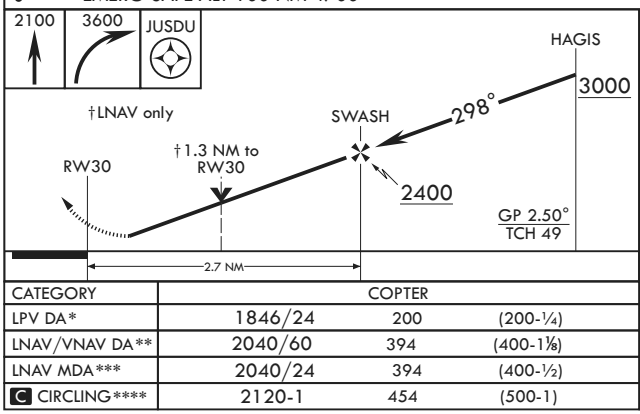
MISSED APPROACH: Climb to 2100 then climbing right turn to 3600 direct JUSDU and hold, continue climb-in-hold to 3600.

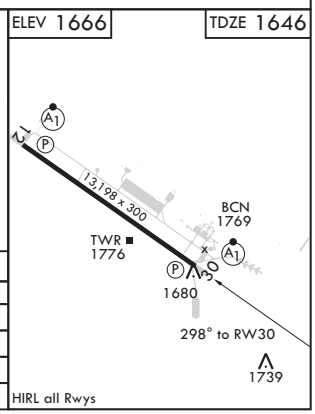
ATIS★	APP CON	TOWER★	GND CON	CLNC DEL
278.8	119.6 363.8	120.65 253.5	134.0 275.8	326.2

**** Circling NA NE of Rwy 12-30.

For uncompensated Baro-VNAV systems, procedure NA below 12°C (54°F) or above 54°C (130°F).







CATEGORY	COPTER		
LPV DA*	1846/24	200	(200-¼)
LNAV/VNAV DA**	2040/60	394	(400-1⅛)
LNAV MDA***	2040/24	394	(400-½)
C CIRCLING****	2120-1	454	(500-1)

MINOT, NORTH DAKOTA

48°25'N - 101°21'W

MINOT AFB (KMIB)

Orig 19JUL18

COPTER RNAV (GPS) RWY 30

NC-1, 25 FEB 2021 to 22 APR 2021

19227

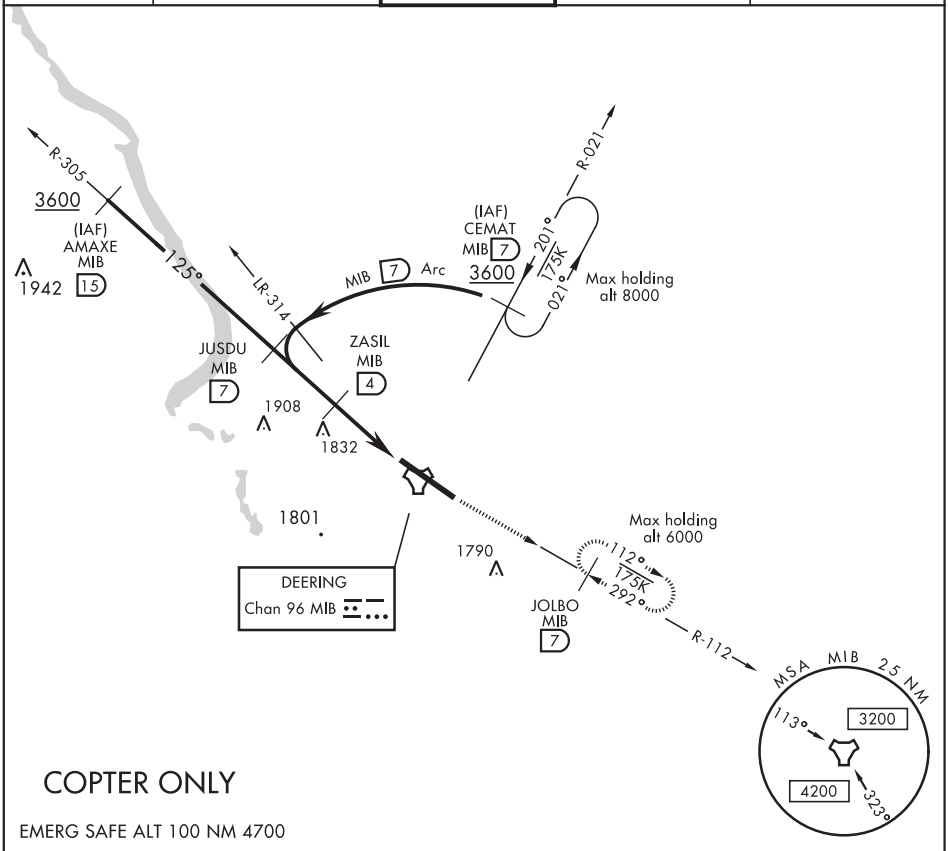
MINOT, NORTH DAKOTA

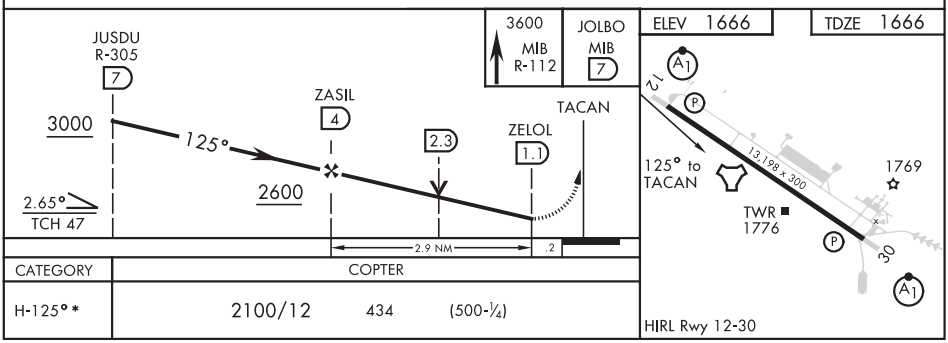
COPTER TACAN 125°

TACAN MIB Chan 96	APCH CRS 125°	Rwy ldg 13,198 TDZE 1666 Arpt Elev 1666	AL-5013 [USAF]	MINOT AFB (KMIB)

* When ALS inop, increase RVR to 28 and vis to ½ mile.	ALSF-1 A1	MISSED APPROACH: Climb to 3600 via MIB TACAN R-112 direct JOLBO and hold.

ATIS ★	MINOT APP CON	MINOT TOWER ★	GND CON	CLNC DEL
278.8	119.6 363.8	120.65 253.5	134.0 275.8	326.2





CATEGORY	COPTER		
H-125°*	2100/12	434	(500-¼)

MINOT, NORTH DAKOTA 48° 25′N-101° 21′W MINOT AFB (KMIB)

Orig 21JUL16

COPTER TACAN 125°

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

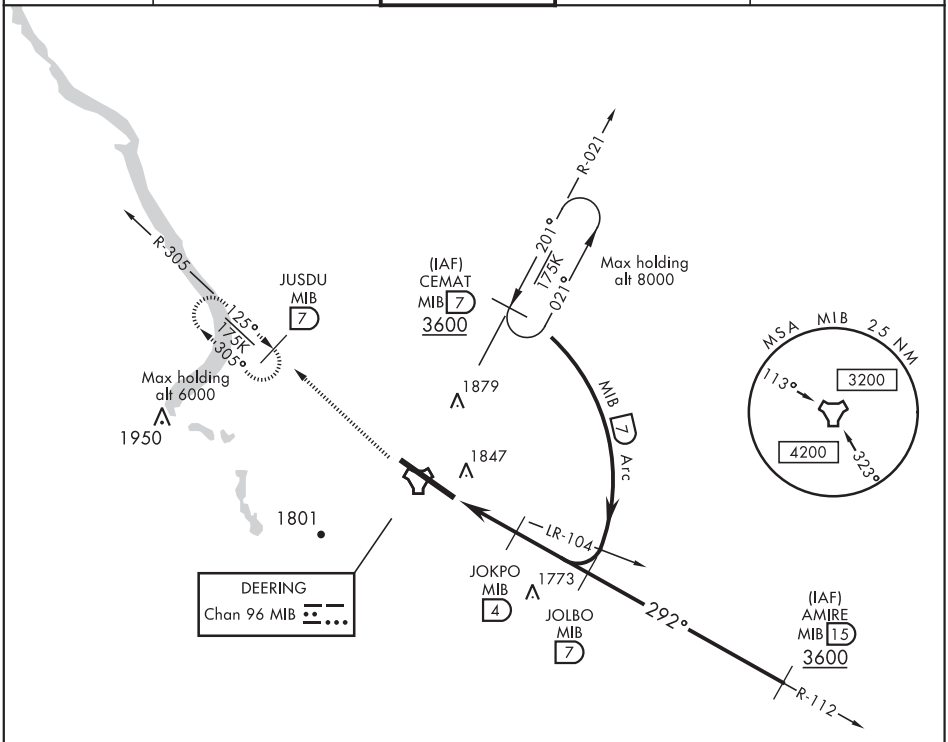
MINOT, NORTH DAKOTA

COPTER TACAN 292°

TACAN MIB Chan 96	APCH CRS 292°	Rwy ldg 13,198 TDZE 1646 Arpt Elev 1666	AL-5013 [USAF]	MINOT AFB (KMIB)

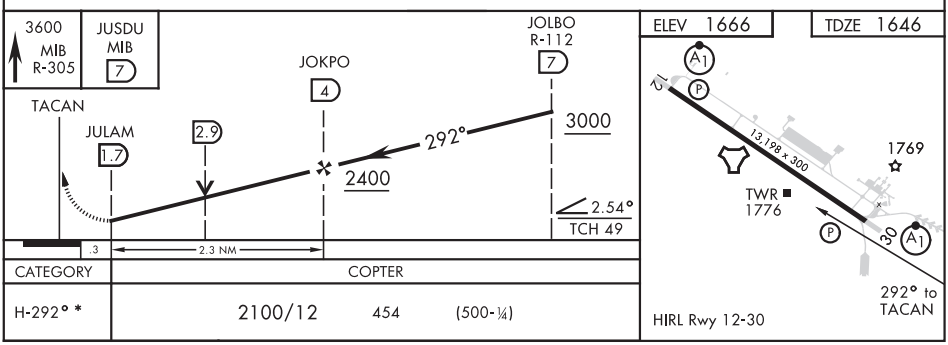
* When ALS inop, increase RVR to 28 and vis to ½ mile.	ALSF-1 A1	MISSED APPROACH: Climb to 3600 via MIB TACAN R-305 direct JUSDU and hold.

ATIS ★	MINOT APP CON	MINOT TOWER ★	GND CON	CLNC DEL
278.8	119.6 363.8	120.65 253.5	134.0 275.8	326.2



COPTER ONLY

EMERG SAFE ALT 100 NM 4700



CATEGORY	COPTER		
H-292° *	2100/12	454	(500-¼)

MINOT, NORTH DAKOTA 48° 25′N-101° 21′W MINOT AFB (KMIB)

Orig 21JUL16

COPTER TACAN 292°

NC-1, 25 FEB 2021 to 22 APR 2021

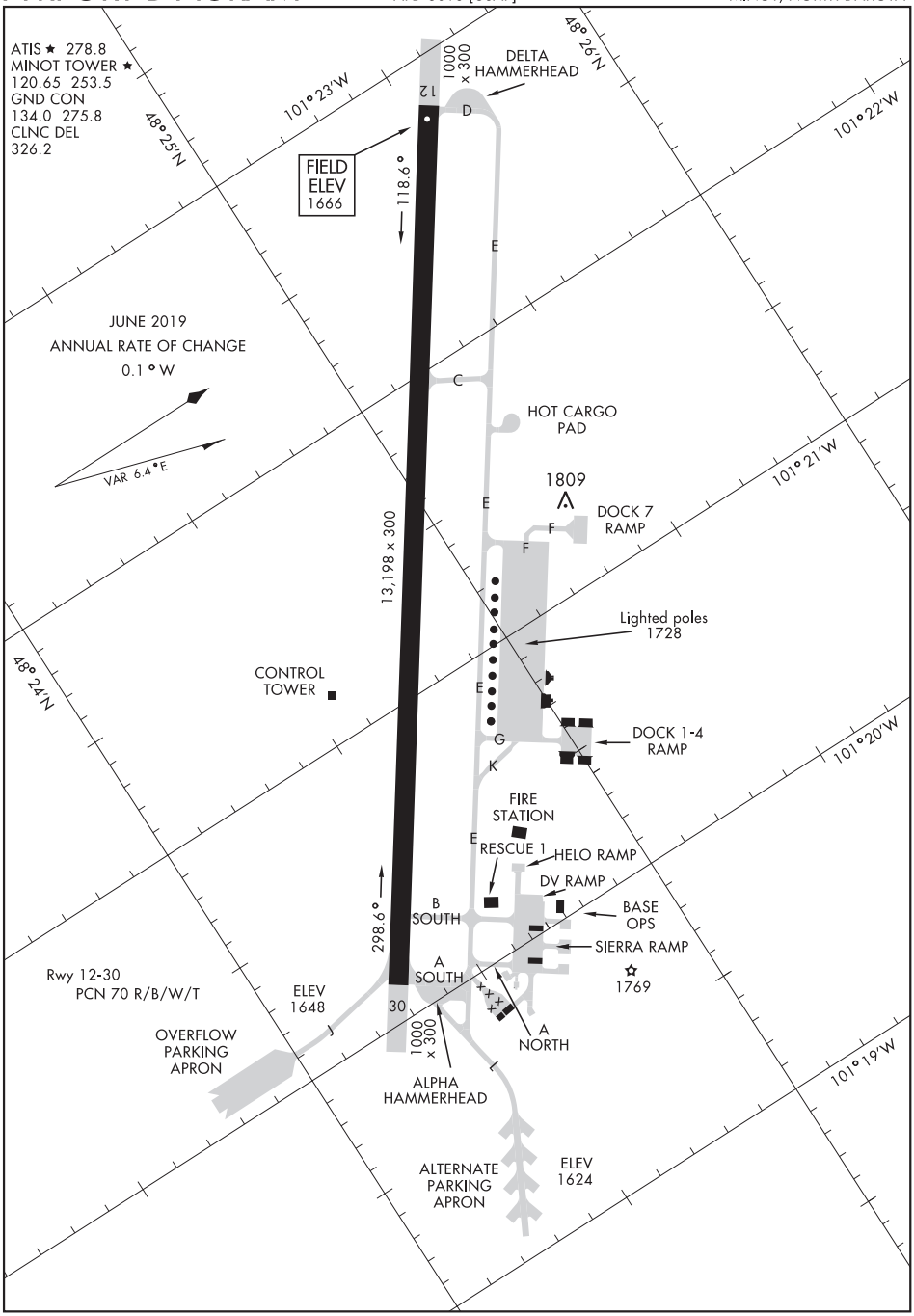
NC-1, 25 FEB 2021 to 22 APR 2021

19171

AIRPORT DIAGRAM

AFD-5013 [USAF]

MINOT AFB (KMIB)
MINOT, NORTH DAKOTA



NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

AIRPORT DIAGRAM

MINOT, NORTH DAKOTA
MINOT AFB (KMIB)

ILS or LOC RWY 31
MITCHELL MUNI (MHE)

LOC I-LPA	APP CRS	Rwy ldg	6700
109.7	310°	TDZE	1304
		Apt Elev	1304

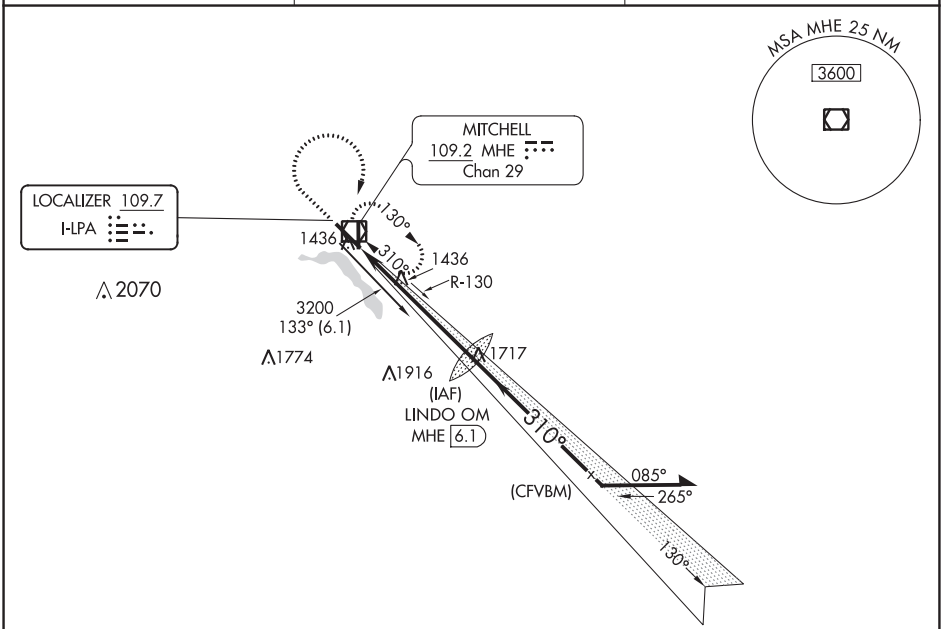
DME required.

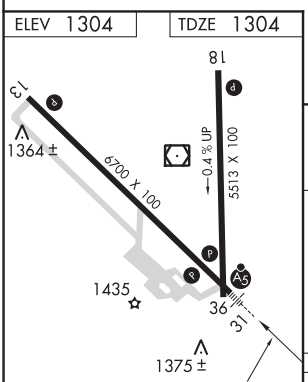
T A NA Autopilot coupled approach NA below 2174 MSL.
For inop ALS, increase S-LOC 31 Cats C and D visibility to 1⅛ SM.

MALSR A5

MISSED APPROACH: Climb to 3200 then right turn direct MHE VOR/DME and hold.

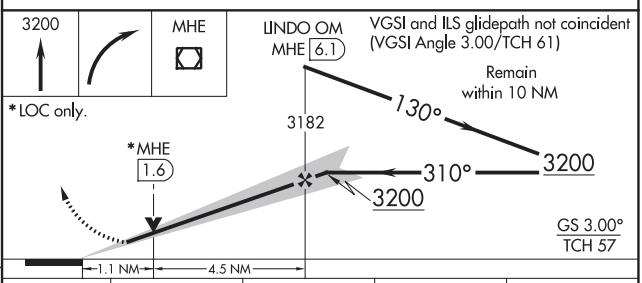
ASOS	MINNEAPOLIS CENTER	UNICOM
124.175	126.25 339.8	122.8 (CTAF) L





HIRL Rwy 13-31 L
MIRL Rwy 18-36 L
REIL Rwys 13 and 18 L

FAF to MAP 5.6 NM					
Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52



CATEGORY	A	B	C	D
S-ILS 31	1554-½ 250 (300-½)			
S-LOC 31	1700-½ 396 (400-½)		1700-¾ 396 (400-¾)	
C CIRCLING	1740-1 436 (500-1)	1760-1 456 (500-1)	1820-1½ 516 (600-1½)	1860-2 556 (600-2)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

MITCHELL, SOUTH DAKOTA AL-5234 (FAA) 21056

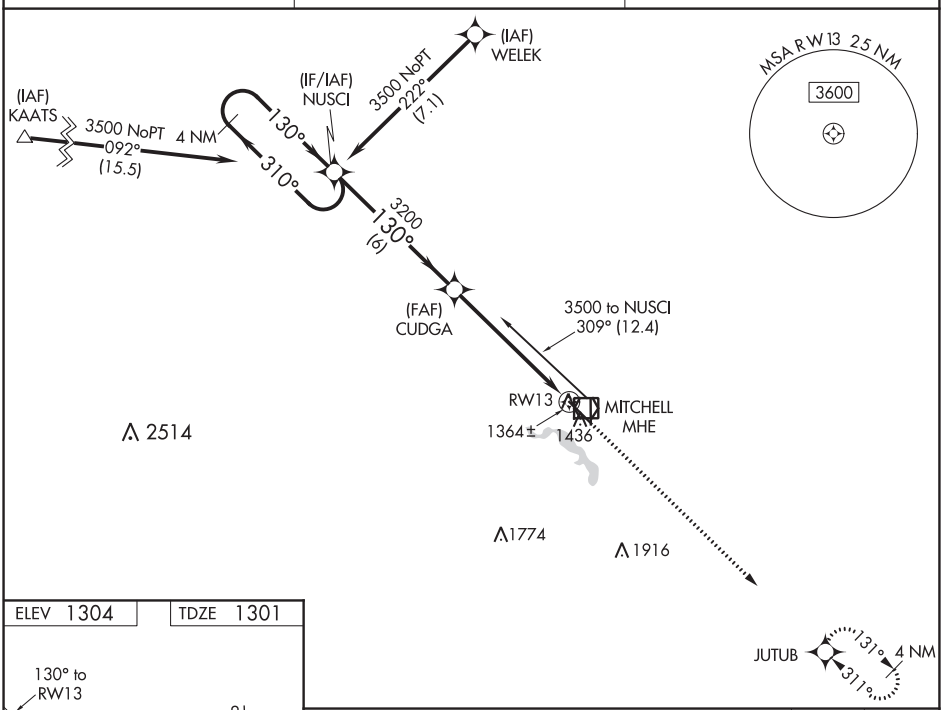
WAAS CH 77900 W13A	APP CRS 130°	Rwy ldg 6700 TDZE 1301 Apt Elev 1304

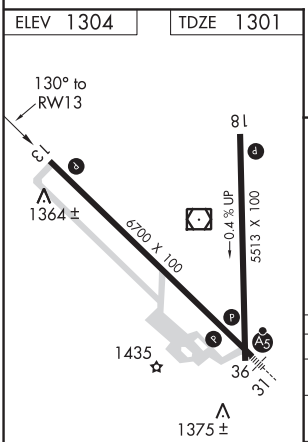
RNAV (GPS) RWY 13
MITCHELL MUNI (MHE)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). Baro-VNAV and VDP NA with Huron Rgnl altimeter setting.
DME/DME RNP-0.3 NA. When local altimeter setting not received, use Huron Rgnl altimeter setting and increase all DA 89 feet and all MDA 100 feet. Increase LPV all Cats visibility ¼ mile, LNAV/VNAV all Cats and LNAV Cats C/D visibility ⅛ mile and Circling Cat C visibility ¼ mile.

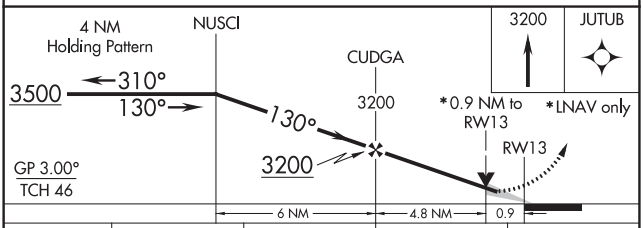
MISSED APPROACH: Climb to 3200 direct JUTUB and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
124.175	126.25 339.8	122.8 (CTAF) L





HIRL Rwy 13-31 L
MIRL Rwy 18-36 L
REIL Rwys 13 and 18 L



CATEGORY	A	B	C	D
LPV DA	1575-1 274 (300-1)			
LNAV/VNAV DA	1627-1¼ 326 (400-1¼)			
LNAV MDA	1620-1 319 (400-1)			
C CIRCLING	1740-1¼ 436 (500-1¼)	1760-1¼ 456 (500-1¼)	1820-1½ 516 (600-1½)	1860-2 556 (600-2)

NC-1, 25 FEB 2021 to 22 APR 2021

MITCHELL, SOUTH DAKOTA
Orig-A 10DEC15
43°46′N-98°02′W
MITCHELL MUNI (MHE)
RNAV (GPS) RWY 13

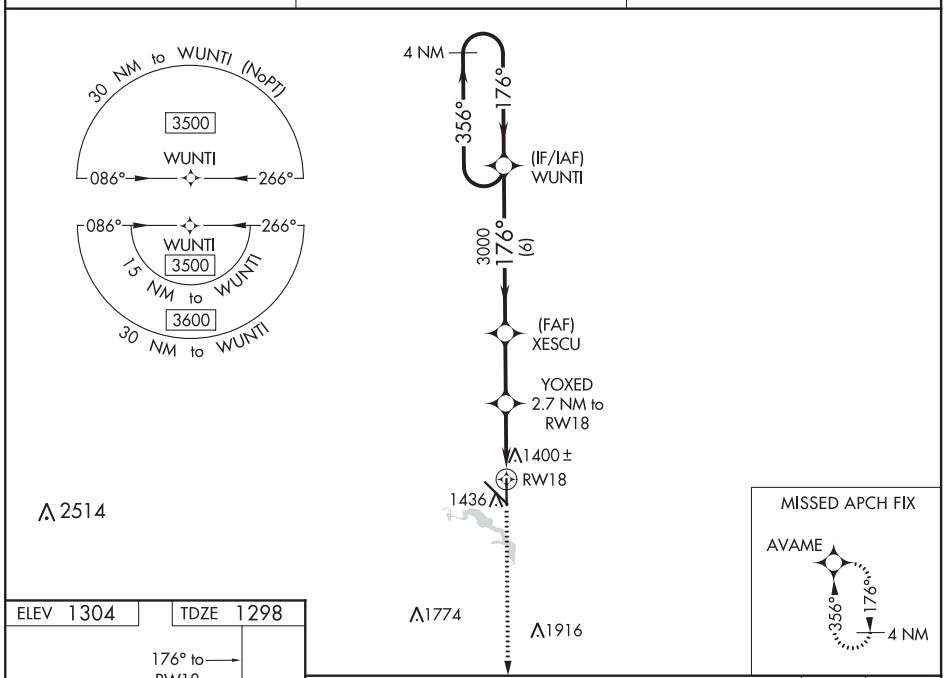
WAAS CH 86938 W18A	APP CRS 176°	Rwy ldg 5513 TDZE 1298 Apt Elev 1304

RNAV (GPS) RWY 18
MITCHELL MUNI (MHE)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received use Huron Rgnl altimeter setting and increase LPV DA to 1637, LNAV/VNAV DA to 1685 and increase all MDA 100 feet. Increase LPV visibility all Cats to 1⅛ mile, LNAV/VNAV visibility all Cats to 1⅜ mile and LNAV Cats C/D to 1⅜ mile. Increase Circling Cat C visibility to 1¾ mile. Baro VNAV and VDP NA when using Huron Rgnl altimeter setting.

MISSED APPROACH: Climb to 3500 direct AVAME and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
124.175	126.25 339.8	122.8 (CTAF) L



HIRL Rwy 13-31 L
MIRL Rwy 18-36 L
REIL Rwys 13 and 18 L

CATEGORY	A	B	C	D
LPV DA	1548-1 250 (300-1)			
LNAV/VNAV DA	1596-1 298 (300-1)			
LNAV MDA	1660-1 362 (400-1)			
C CIRCLING	1740-1 436 (500-1)	1760-1 456 (500-1)	1820-1½ 516 (600-1½)	1860-2 556 (600-2)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 70700 W31A	APP CRS 310°	Rwy ldg 6700 TDZE 1304 Apt Elev 1304

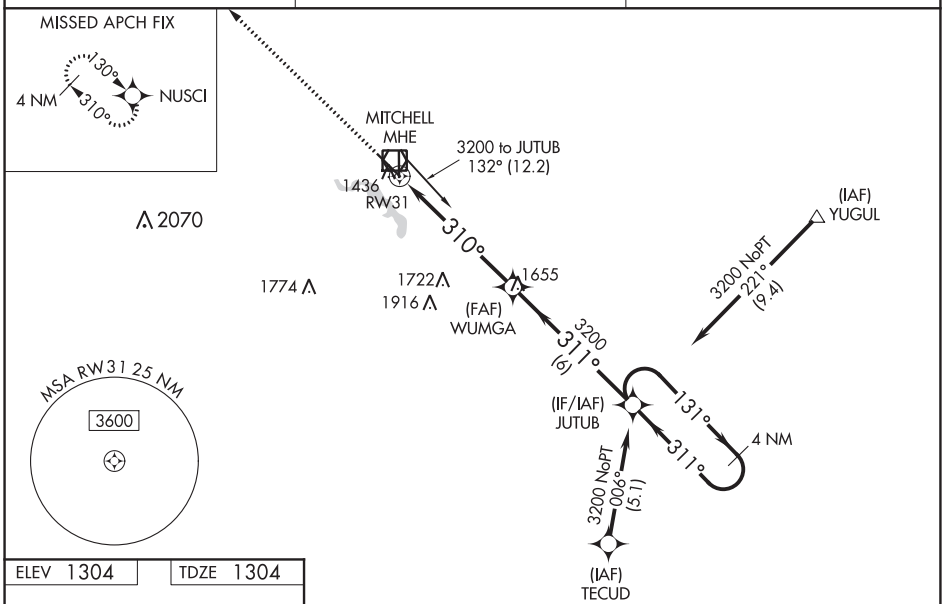
RNAV (GPS) RWY 31
MITCHELL MUNI (MHE)

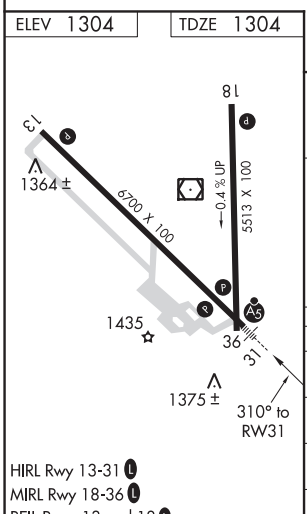
For uncompensated Baro-VNAV systems, LNAV-VNAV NA below -16°C (4°F) or above 54°C (130°F). Baro-VNAV and VDP NA when using Huron Rgnl altimeter setting. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Huron Rgnl altimeter setting and increase all DA 89 feet and all MDA 100 feet. Increase LPV all Cats visibility ⅛ mile. Increase LNAV/VNAV all Cats, LNAV Cats C/D and Circling Cat C visibility ¼ mile. For inop MALSR, increase LNAV/VNAV all Cats visibility to 1 mile and LNAV Cats C/D to 1⅜ mile. For inop MALSR when using Huron Rgnl altimeter setting, increase LPV all Cats visibility to 1⅛ mile.

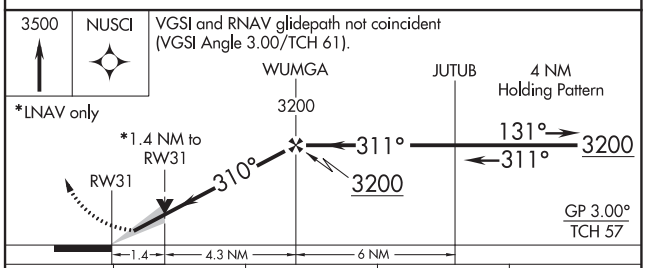
MALSR

MISSED APPROACH: Climb to 3500 direct NUSCI and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
124.175	126.25 339.8	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1554-½ 250 (300-½)			
LNAV/VNAV DA	1625-⅝ 321 (400-⅝)			
LNAV MDA	1800-½ 496 (500-½)		1800-1 496 (500-1)	
C CIRCLING	1800-1 496 (500-1)		1820-1½ 516 (600-1½)	1860-2 556 (600-2)

NC-1, 25 FEB 2021 to 22 APR 2021

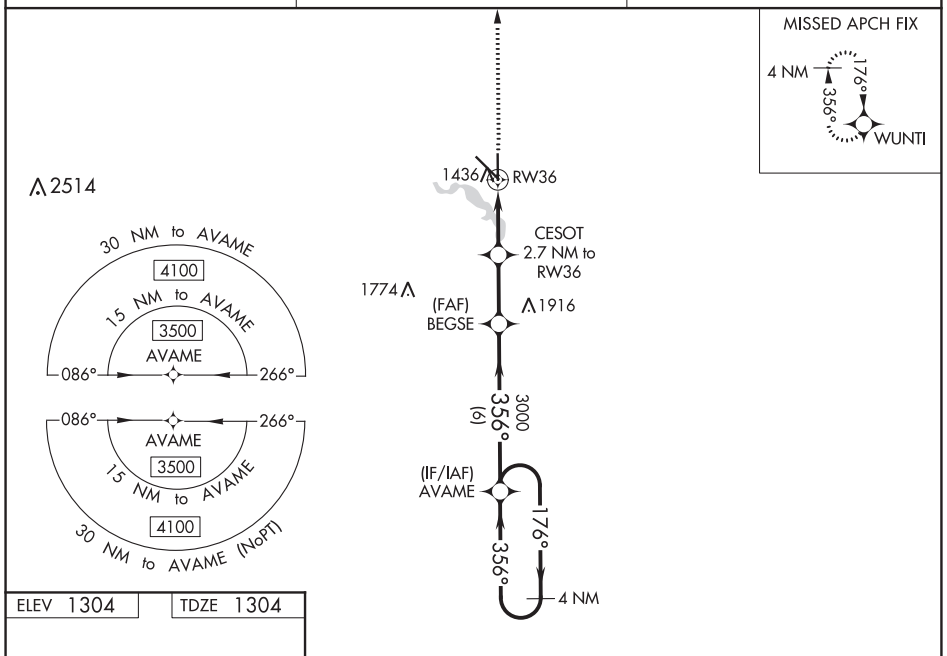
WAAS CH 63038 W36A	APP CRS 356°	Rwy ldg 5513 TDZE 1304 Apt Elev 1304

RNAV (GPS) RWY 36
MITCHELL MUNI (MHE)

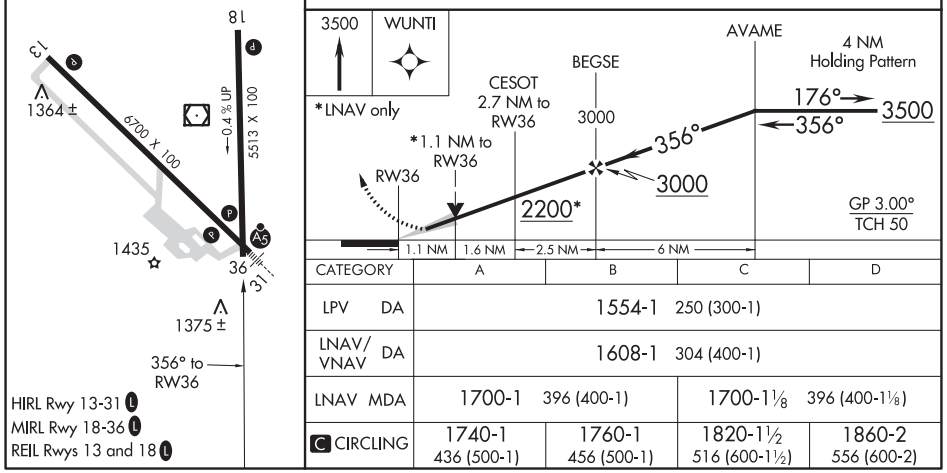
T A For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C (-5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Huron Rgnl altimeter setting and increase LPV DA to 1643, and LNAV/VNAV DA to 1697. Increase all MDA 100 feet. Increase LPV visibility, all Cats, to 1⅛ mile, LNAV/VNAV visibility, all Cats, and LNAV visibility Cats C/D to 1⅜ mile and increase Circling Cat C visibility to 1¾ mile. Baro-VNAV and VDP NA when using Huron Rgnl altimeter setting.

MISSED APPROACH: Climb to 3500 direct WUNTI and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
124.175	126.25 339.8	122.8 (CTAF) L



ELEV 1304	TDZE 1304



HIRL Rwy 13-31 L
MIRL Rwy 18-36 L
REIL Rwys 13 and 18 L

CATEGORY	A	B	C	D
LPV DA	1554-1 250 (300-1)			
LNAV/VNAV DA	1608-1 304 (400-1)			
LNAV MDA	1700-1 396 (400-1)		1700-1⅛ 396 (400-1⅛)	
C CIRCLING	1740-1 436 (500-1)	1760-1 456 (500-1)	1820-1½ 516 (600-1½)	1860-2 556 (600-2)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

MITCHELL, SOUTH DAKOTA | AL-5234 (FAA) | 20086

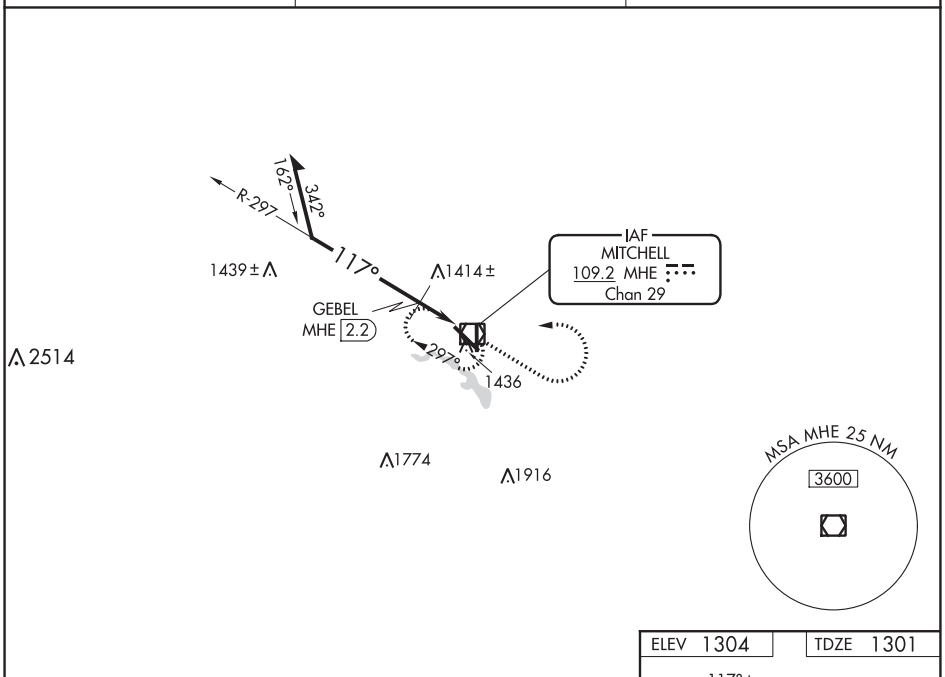
VOR RWY 13
MITCHELL MUNI (MHE)

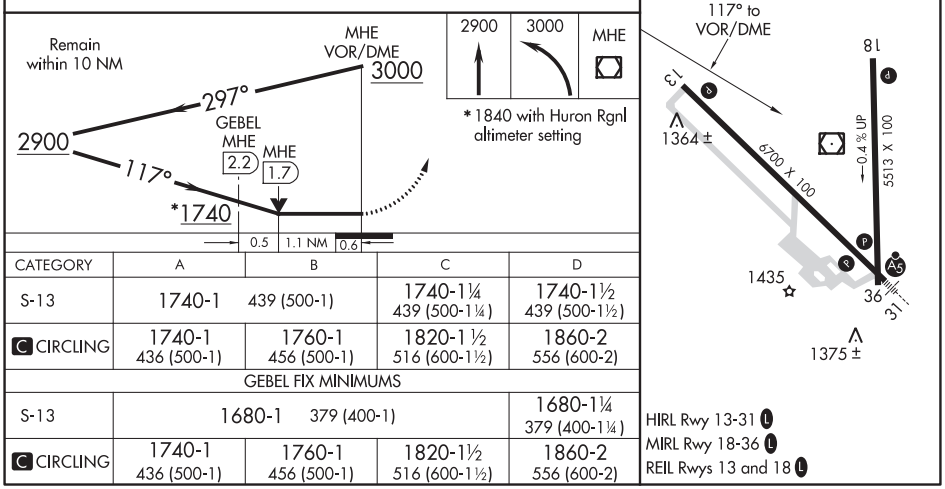
VOR/DME MHE	APP CRS	Rwy ldg	6700
109.2	117°	TDZE	1301
Chan 29		Apt Elev	1304

VDP NA with Huron Rgnl altimeter setting. If local altimeter setting not received, use Huron Regional altimeter setting and increase all MDAs 100 feet. Increase S-13 and Circling Cat C visibility ¼ mile, increase GEBEL fix minimums S-13 Cat C visibility ⅜ mile and Cat D ⅛ mile.

MISSED APPROACH: Climb to 2900 then climbing left turn to 3000 direct MHE VOR/DME and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
124.175	126.25 339.8	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-13	1740-1 439 (500-1)		1740-1¼ 439 (500-1¼)	1740-1½ 439 (500-1½)
C CIRCLING	1740-1 436 (500-1)	1760-1 456 (500-1)	1820-1½ 516 (600-1½)	1860-2 556 (600-2)
GEBEL FIX MINIMUMS				
S-13	1680-1 379 (400-1)			1680-1¼ 379 (400-1¼)
C CIRCLING	1740-1 436 (500-1)	1760-1 456 (500-1)	1820-1½ 516 (600-1½)	1860-2 556 (600-2)

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NC-1, 25 FEB 2021 to 22 APR 2021

APP CRS	Rwy ldg	4410
118°	TDZE	1703
	Apt Elev	1715

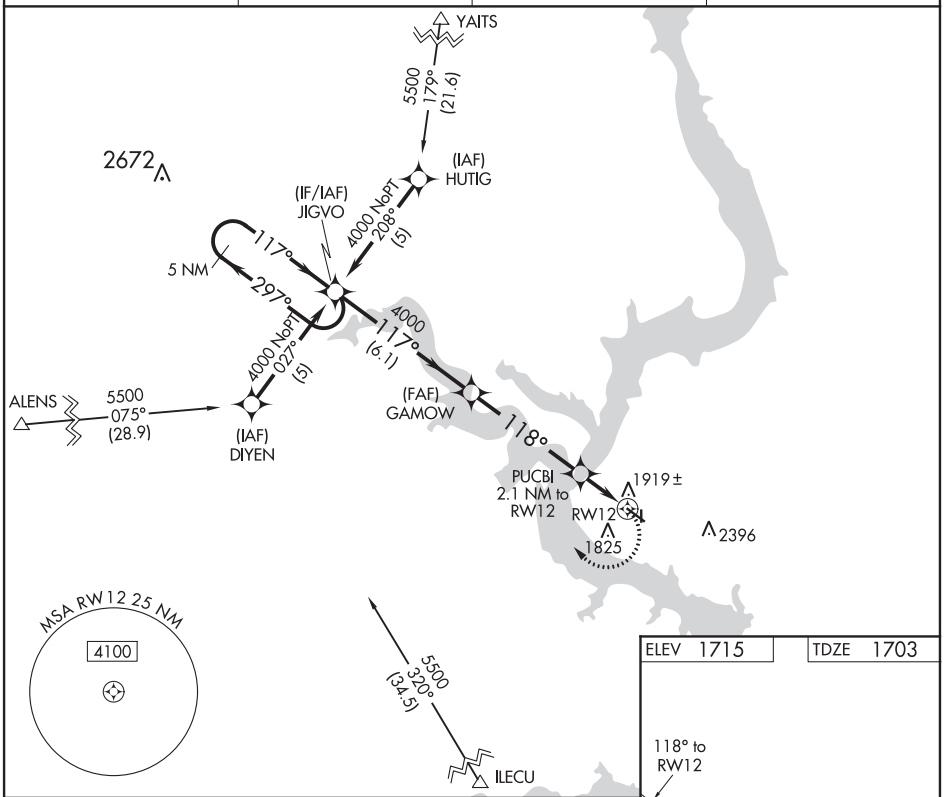
RNAV (GPS) RWY 12
MOBRIDGE MUNI (MBG)

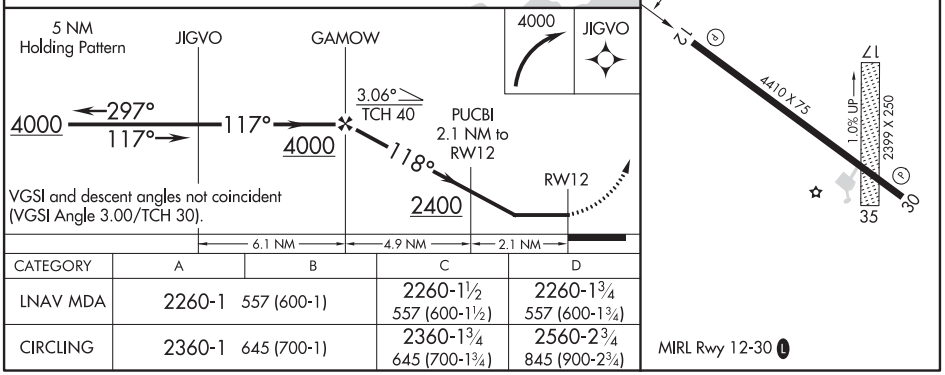
T
A
-31°C

DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM not authorized. If local altimeter setting not received, use Pierre Rgnl altimeter setting and increase all MDAs 180 feet.

MISSED APPROACH: Climbing right turn to 4000 direct JIGVO and hold.

ASOS	MINNEAPOLIS CENTER	GCO	UNICOM
121.425	135.25 256.7	121.725	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	2260-1 557 (600-1)		2260-1½ 557 (600-1½)	2260-1¾ 557 (600-1¾)
CIRCLING	2360-1 645 (700-1)		2360-1¾ 645 (700-1¾)	2560-2¾ 845 (900-2¾)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 72622 W30A	APP CRS 298°	Rwy ldg 4410 TDZE 1701 Apt Elev 1716

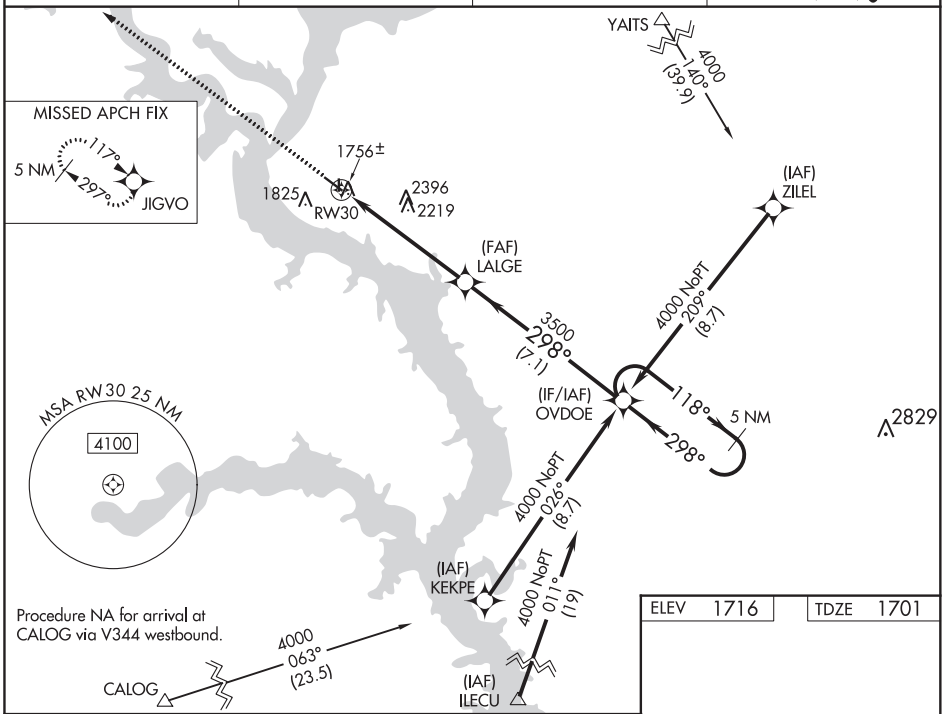
RNAV (GPS) RWY 30
MOBRIDGE MUNI (MBG)

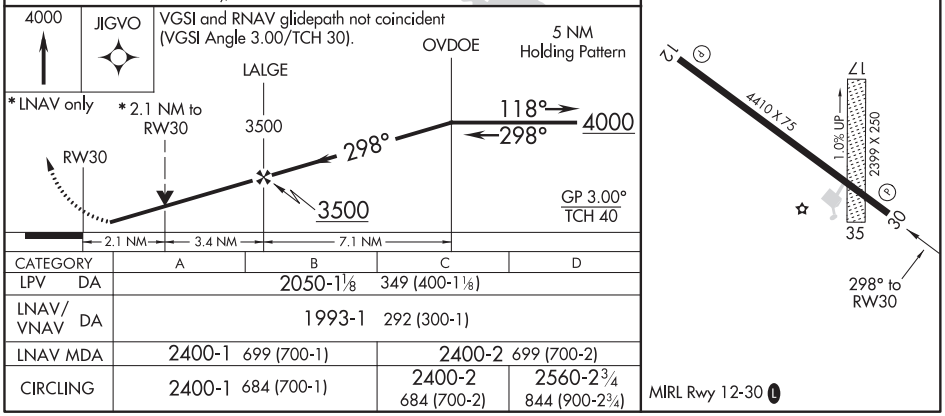
-31°C

Baro-VNAV NA when using Pierre Rgnl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 33°C (91°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. VDP NA with Pierre Rgnl altimeter setting. When local altimeter setting not received, use Pierre Rgnl altimeter setting and increase all DA 165 feet and all MDA 180 feet, increase LPV and LNAV/VNAV all Cats visibility ⅝ mile, LNAV Cat B visibility ¼ mile, Cat C/D ½ mile, Circling Cat A/B/D ¼ mile, Cat C ½ mile.

MISSED APPROACH: Climb to 4000 direct JIGVO and hold.

ASOS	MINNEAPOLIS CENTER	GCO	UNICOM
121.425	135.25 256.7	121.725	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	2050-1⅛ 349 (400-1⅛)			
LNAV/VNAV DA	1993-1 292 (300-1)			
LNAV MDA	2400-1 699 (700-1)		2400-2 699 (700-2)	
CIRCLING	2400-1 684 (700-1)		2400-2 684 (700-2)	2560-2¾ 844 (900-2¾)

NC-1, 25 FEB 2021 to 22 APR 2021

APP CRS	Rwy ldg	3121
311°	TDZE	1649
	Apt Elev	1649

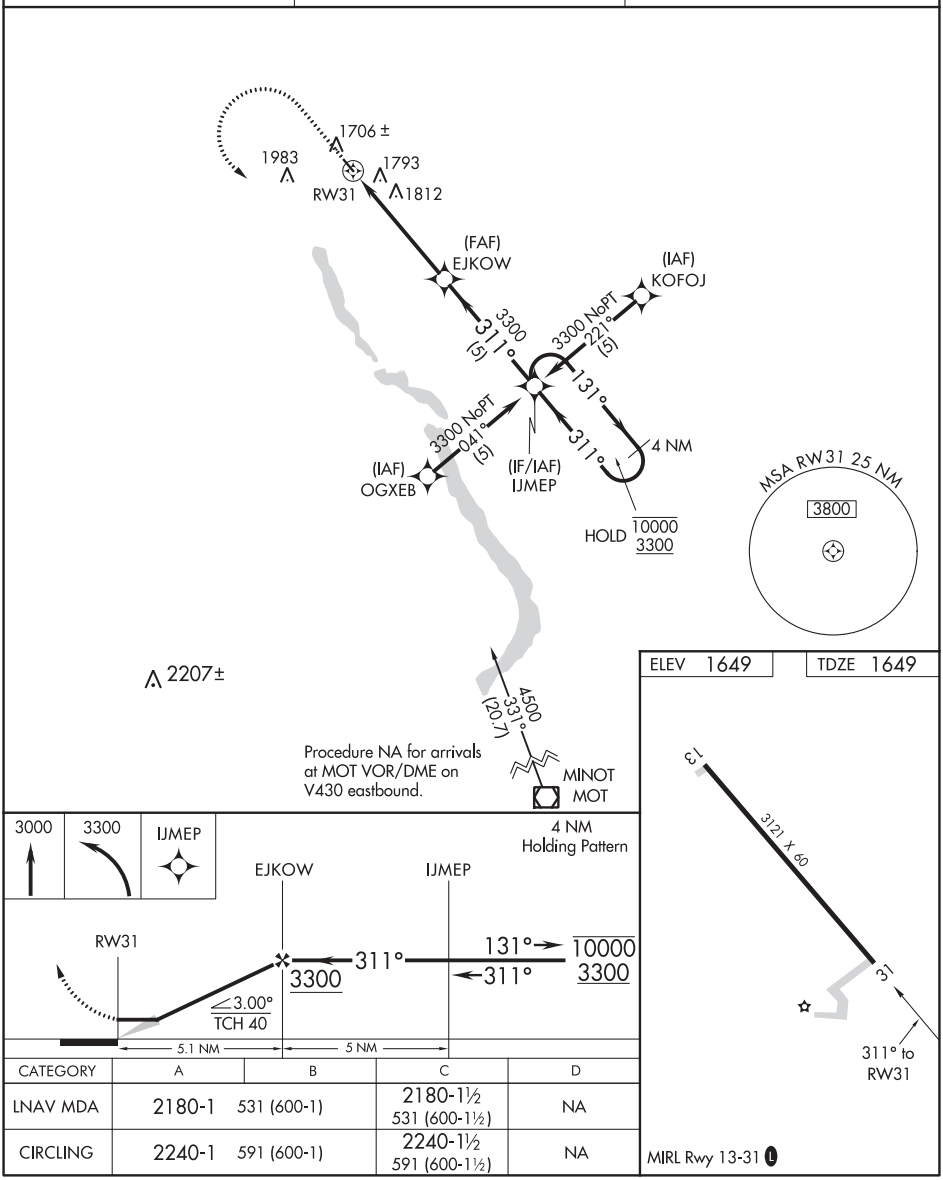
RNAV (GPS) RWY 31
MOHALL MUNI (HBC)

RNP APCH.
T
A NA

Use Minot Intl altimeter setting.

MISSED APPROACH: Climb to 3000 then climbing left turn to 3300 direct IJMEP and hold.

MOT ASOS	MINOT APP CON ★	UNICOM
118.725	119.6 363.8	122.8 (CTAF)



CATEGORY	A	B	C	D
LNAV MDA	2180-1	531 (600-1)	2180-1½ 531 (600-1½)	NA
CIRCLING	2240-1	591 (600-1)	2240-1½ 591 (600-1½)	NA

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

MONTEVIDEO, MINNESOTA AL-5569 (FAA) 19171

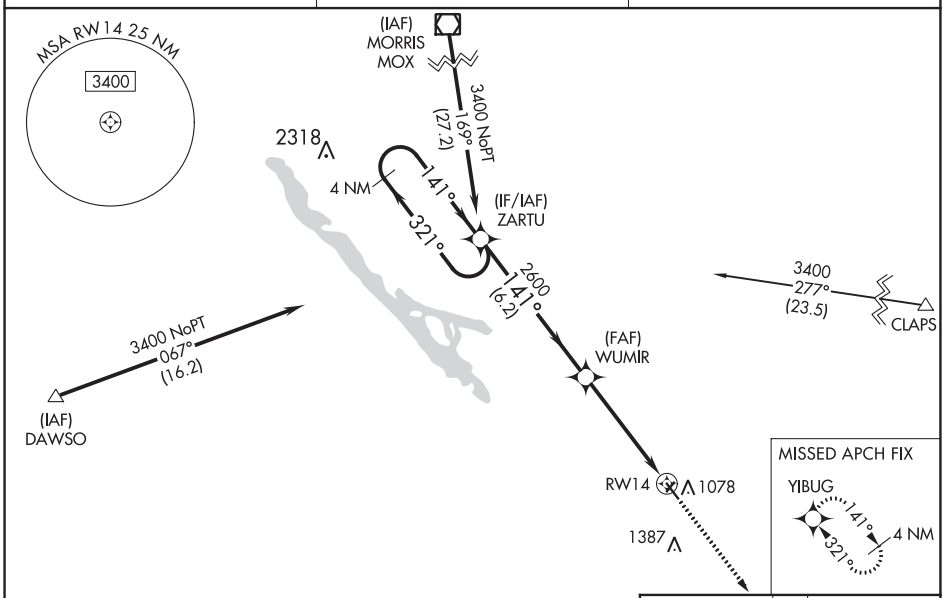
WAAS CH 58030 W14A	APP CRS 141°	Rwy ldg 3999 TDZE 1034 Apt Elev 1035

RNAV (GPS) RWY 14
MONTEVIDEO-CHIPPEWA COUNTY (MVE)

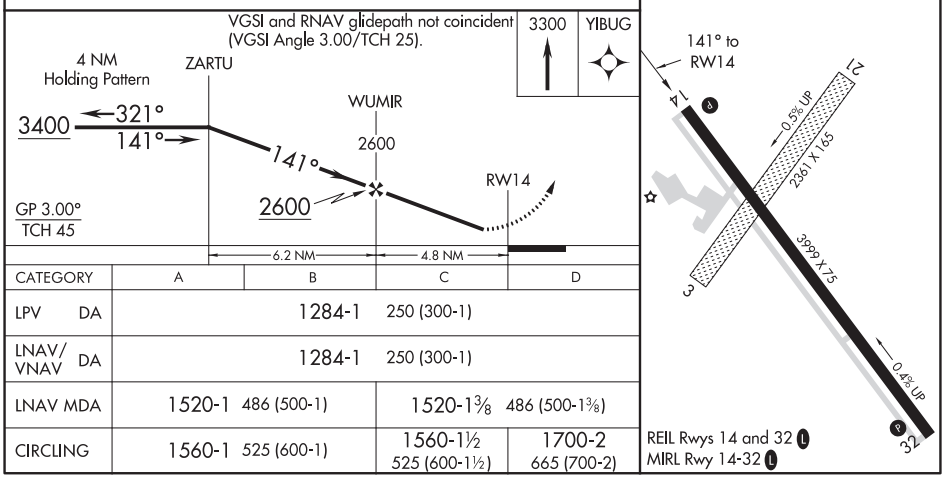
Baro-VNAV NA when using Granite Falls altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -30°C (-22°F) or above 54°C (130°F). When local altimeter setting not received, use Granite Falls altimeter setting and increase all DA 36 feet and MDA 40 feet, increase LNAV Cats C and D visibility ⅛ mile and Circling Cat D visibility ¼ mile. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA. When VGSI inop, Straight-in and Circling Rwy 14 procedures NA at night. Circling to Rwy 3-21 NA.

MISSED APPROACH: Climb to 3300 direct YIBUG and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
111.6	125.5 323.1	122.8 (CTAF) L



ELEV 1035 TDZE 1034



CATEGORY	A	B	C	D
LPV DA	1284-1 250 (300-1)			
LNAV/VNAV DA	1284-1 250 (300-1)			
LNAV MDA	1520-1 486 (500-1)		1520-1⅜ 486 (500-1⅜)	
CIRCLING	1560-1 525 (600-1)		1560-1½ 525 (600-1½)	1700-2 665 (700-2)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

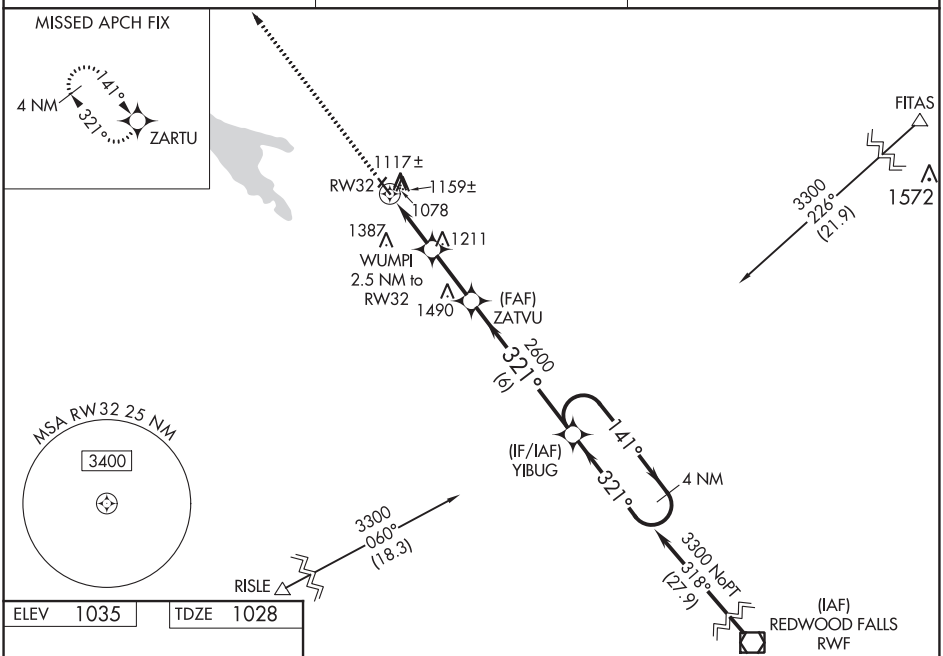
WAAS CH 86430 W32A	APP CRS 321°	Rwy ldg 3999 TDZE 1028 Apt Elev 1035

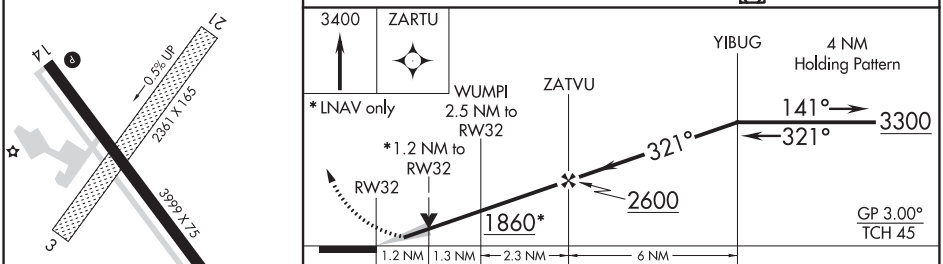
RNAV (GPS) RWY 32
MONTEVIDEO-CHIPPEWA COUNTY (MVE)

Circling to Rwy 14 NA at night. Baro-VNAV NA when using Granite Falls altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -30°C (-22°F) or above 54°C (130°F). When local altimeter setting not received, use Granite Falls altimeter setting and increase all DA 36 feet and MDA 40 feet and increase LNAV/VNAV visibility all Cats ⅛ mile, increase LNAV visibility Cats C and D ⅛ mile, and increase Circling visibility Cat D ¼ mile. DME/DME RNP -0.3 NA. Circling to Rwy 3-21 NA. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 3400 direct ZARTU and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
111.6	125.5 323.1	122.8 (CTAF) L





CATEGORY		A	B	C	D
LPV	DA	1234-1 206 (200-1)			
LNAV/VNAV	DA	1428-1⅜ 400 (400-1⅜)			
LNAV	MDA	1420-1 392 (400-1)		1420-1⅛ 392 (400-1⅛)	
CIRCLING		1560-1 525 (600-1)		1560-1½ 525 (600-1½)	1700-2 665 (700-2)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

VOR/DME MVE	APP CRS	Rwy ldg	3999
111.6	130°	TDZE	1034
Chan 53		Apt Elev	1035

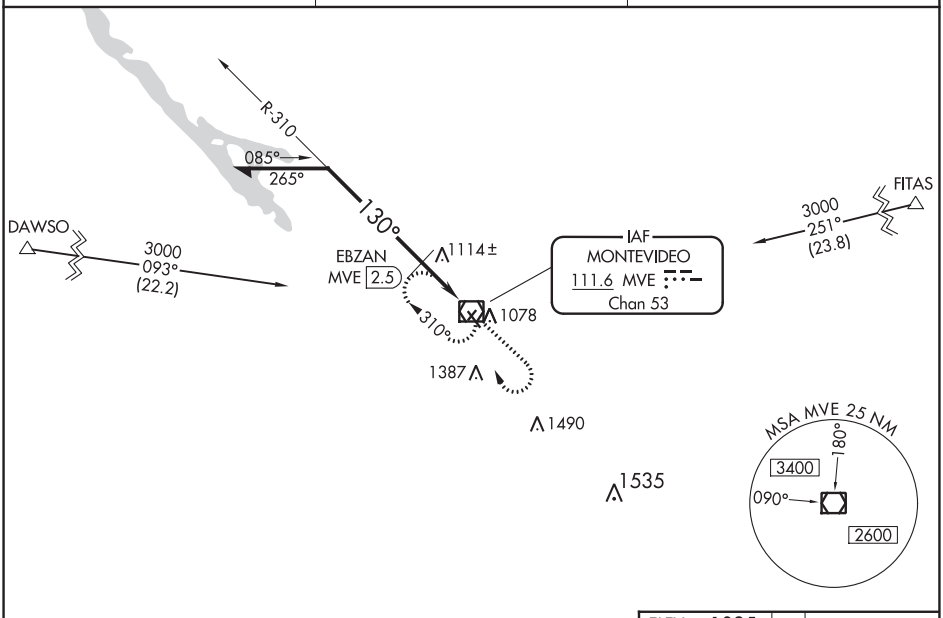
VOR RWY 14

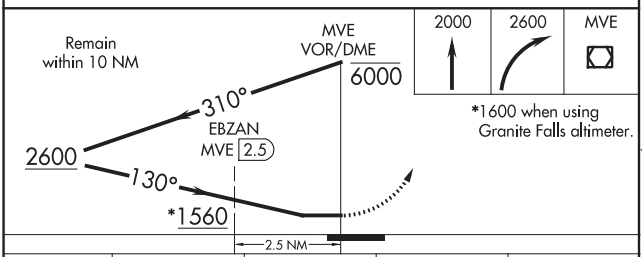
MONTEVIDEO-CHIPPEWA COUNTY (MVE)

When local altimeter setting not received, use Granite Falls altimeter setting and increase all MDA 40 feet, increase S-14 Cats C and D visibility ⅛ mile, Circling Cat C visibility ⅛ mile and Cat D visibility ¼ mile. Increase EBZAN fix Minimums S-14 Cats C and D visibility ⅛ mile and Circling Cat D visibility ¼ mile. When VGSI inop, Straight-In/Circling Rwy 14 Procedure NA at night. Rwy 14 helicopter visibility reduction below 1 SM NA. Circling to Rwy 3-21 NA.

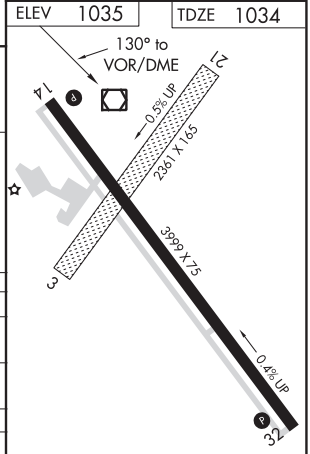
MISSED APPROACH: Climb to 2000 then climbing right turn to 2600 direct MVE VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
111.6	125.5 323.1	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-14	1560-1 526 (600-1)		1560-1½ 526 (600-1½)	
CIRCLING	1560-1 525 (600-1)		1560-1½ 525 (600-1½)	1700-2 665 (700-2)
EBZAN FIX MINIMUMS				
S-14	1380-1 346 (400-1)			
CIRCLING	1560-1 525 (600-1)		1560-1½ 525 (600-1½)	1700-2 665 (700-2)



REIL Rwys 14 and 32 L
MIRL Rwy 14-32 L

NC-1, 25 FEB 2021 to 22 APR 2021

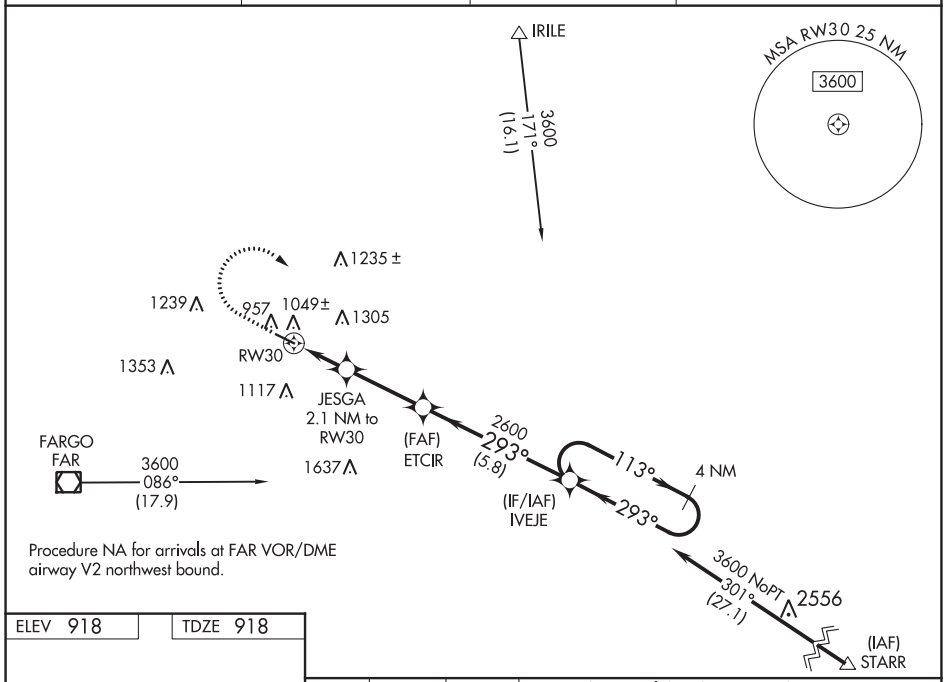
WAAS CH 70630 W30A	APP CRS 293°	Rwy ldg 4300 TDZE 918 Apt Elev 918

RNAV (GPS) RWY 30
MOORHEAD MUNI (JKJ)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Hector Intl altimeter setting and increase all DA 21 feet, increase all MDA 40 feet.

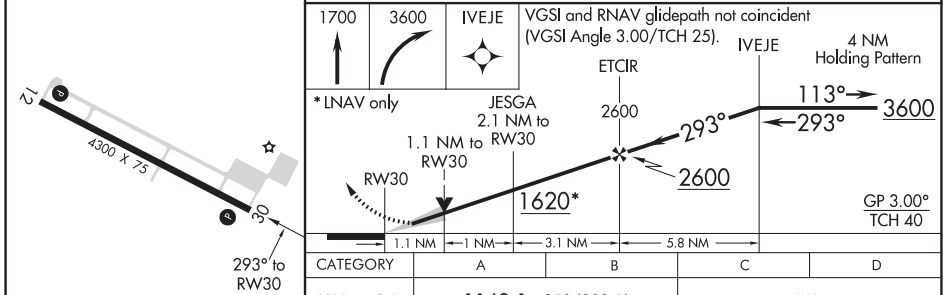
MISSED APPROACH: Climb to 1700 then climbing right turn to 3600 direct IVEJE and hold.

AWOS-3	FARGO APP CON	GCO	UNICOM
120.0	120.4 377.15	121.725	123.0 (CTAF) L



Procedure NA for arrivals at FAR VOR/DME airway V2 northwest bound.

ELEV 918	TDZE 918



CATEGORY	A	B	C	D
LPV DA	1168-1 250 (300-1)		NA	
LNAV/VNAV DA	1211-1 293 (300-1)		NA	
LNAV MDA	1300-1 382 (400-1)		NA	
CIRCLING	1360-1 442 (500-1)	1380-1 462 (500-1)	NA	

REIL Rwys 12 and 30 L
MIRL Rwy 12-30 L

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

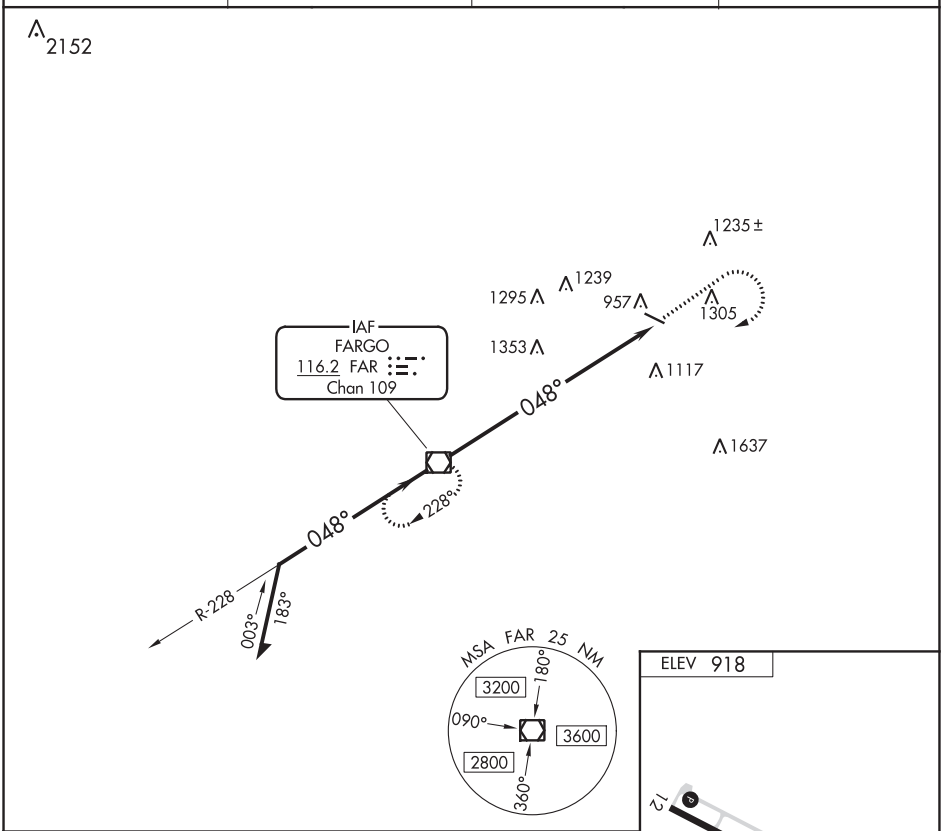
MOORHEAD, MINNESOTA | AL-9348 (FAA) | 20310

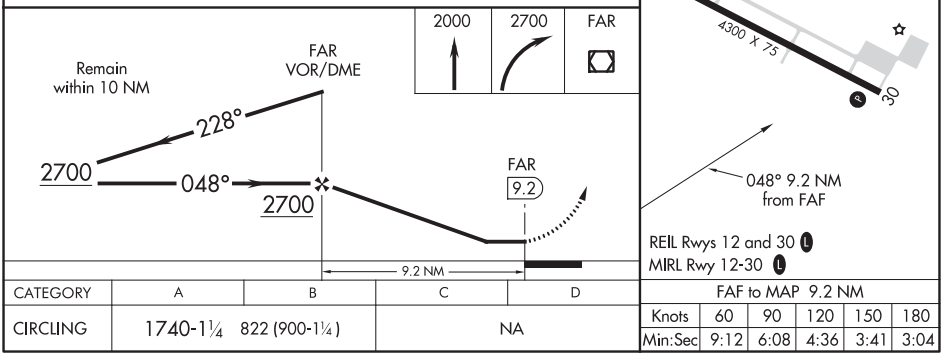
VOR-A
MOORHEAD MUNI (JKJ)

VOR/DME FAR 116.2 Chan 109	APP CRS 048°	Rwy ldg N/A TDZE N/A Apt Elev 918

MISSED APPROACH: Climb to 2000 then climbing right turn to 2700 direct FAR VOR/DME and hold.

AWOS-3	FARGO APP CON	GCO	UNICOM
120.0	120.4 377.15	121.725	123.0 (CTAF) L





CATEGORY	A	B	C	D
CIRCLING	1740-1¼ 822 (900-1¼)		NA	

FAF to MAP 9.2 NM

Knots	60	90	120	150	180
Min:Sec	9:12	6:08	4:36	3:41	3:04

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

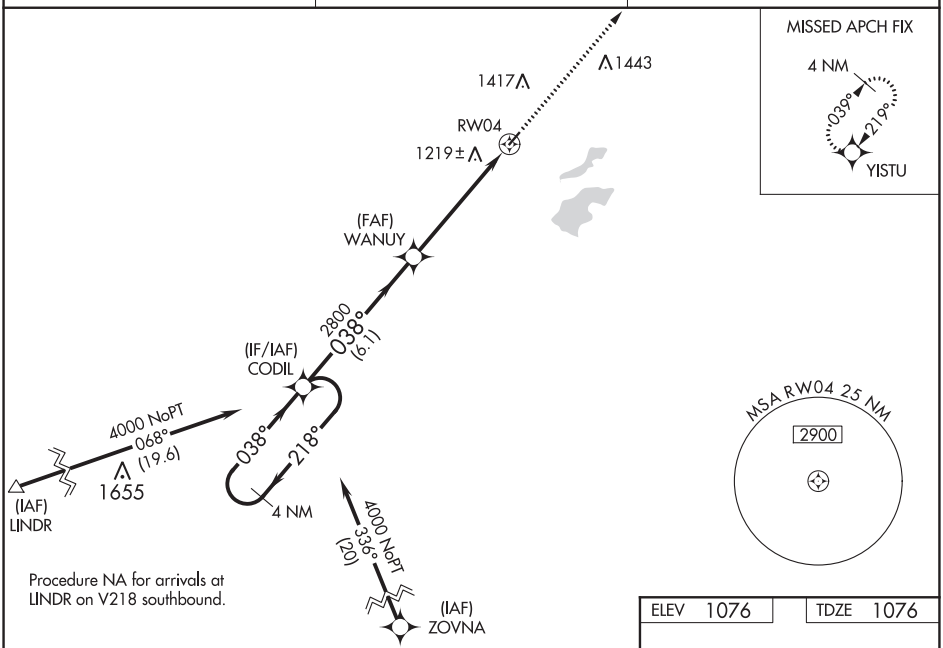
WAAS CH 82730 W04A	APP CRS 038°	Rwy ldg 3200 TDZE 1076 Apt Elev 1076

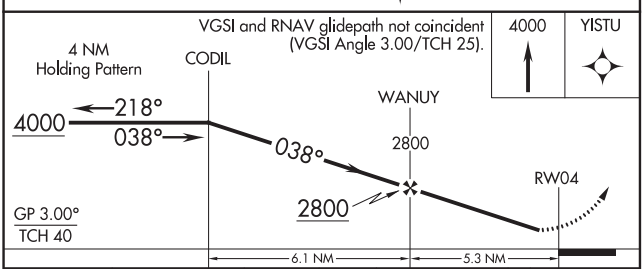
RNAV (GPS) RWY 4
MOOSE LAKE CARLTON COUNTY (MZH)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). Straight-in minimums NA at night. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Baro-VNAV NA when using Cloquet altimeter setting. When local altimeter setting not received, use Cloquet altimeter setting and increase all DA 77 feet and all MDA 80 feet; increase LPV all Cats visibility ⅛ mile and LNAV/VNAV all Cats visibility ⅜ mile.

MISSED APPROACH: Climb to 4000 direct YISTU and hold.

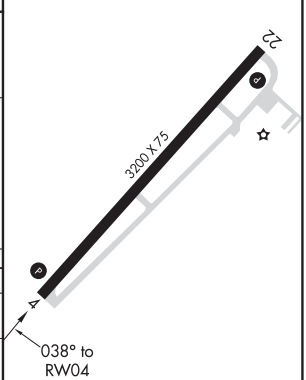
AWOS-3	DULUTH APP CON	CTAF
119.125	125.45 233.7	122.9 L





CATEGORY	A	B	C	D
LPV DA	1326-1	250 (300-1)	NA	
LNAV/VNAV DA	1529-1½	453 (500-1½)	NA	
LNAV MDA	1560-1	484 (500-1)	NA	
CIRCLING	1660-1	584 (600-1)	NA	

ELEV 1076 TDZE 1076



REIL Rwys 4 and 22 L
MIRL Rwy 4-22 L

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

MORA, MINNESOTA | AL-6885 (FAA) | 21056

RNAV (GPS) RWY 35
MORA MUNI (JMR)

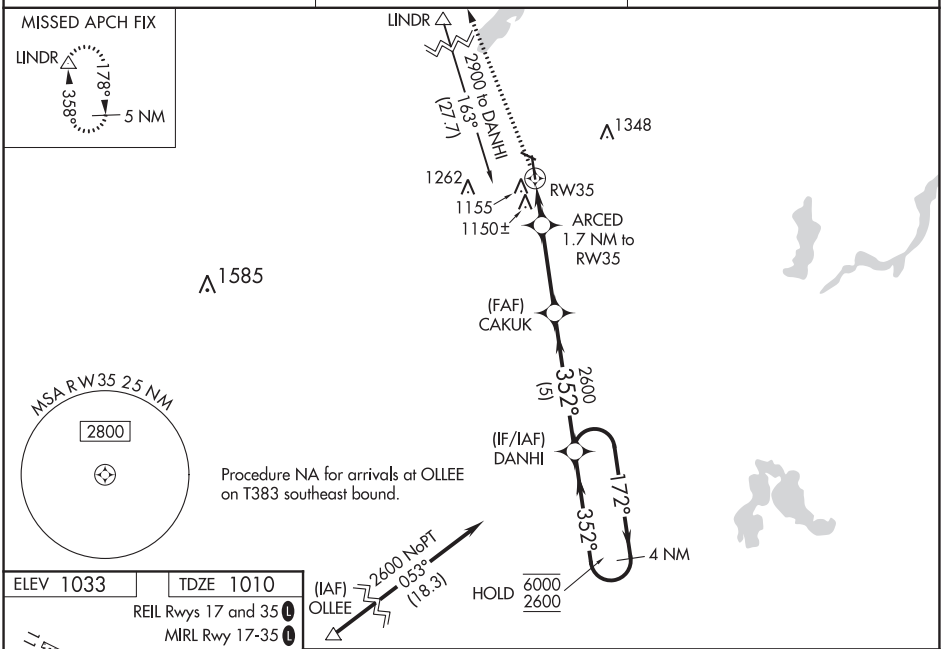
WAAS CH 90139 W35A	APP CRS 352°	Rwy ldg 4794 TDZE 1010 Apt Elev 1033

RNP APCH.

Circling NA to Rwys 11 and 29. Circling Rwy 17 NA at night. Baro-VNAV and VDP NA when using Hinckley altimeter setting. Rwy 35 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. When local altimeter setting not received, use Hinckley altimeter setting: increase all DAs 43 feet and increase LNAV/VNAV all Cat visibilities ⅛ SM; increase all MDAs 60 feet and LNAV and Circling Cat C and D visibilities ¼ SM.

MISSED APPROACH: Climb to 5500 direct LINDR and hold, continue climb-in-hold to 5500.

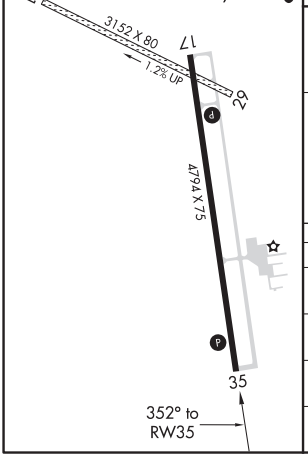
AWOS-3	MINNEAPOLIS CENTER	UNICOM
123.925	121.05 397.9	122.8 (CTAF) L

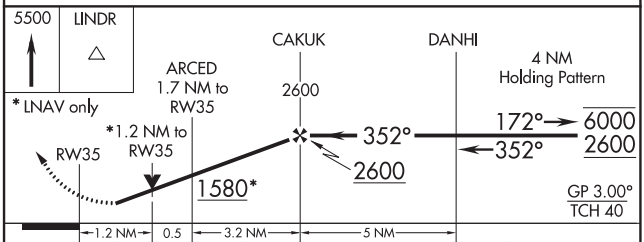


ELEV 1033 | TDZE 1010

REIL Rwys 17 and 35 L

MIRL Rwy 17-35 L





CATEGORY	A	B	C	D
LPV DA	1267-1 257 (300-1)			
LNAV/VNAV DA	1316-1 306 (300-1)			
LNAV MDA	1420-1 410 (400-1)		1420-1⅛ 410 (400-1⅛)	
C CIRCLING	1480-1 447 (500-1)	1500-1 467 (500-1)	1700-2 667 (700-2)	1700-2¼ 667 (700-2¼)

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WAAS CH 49032 W14A	APP CRS 142°	Rwy ldg 4002 TDZE 1131 Apt Elev 1136

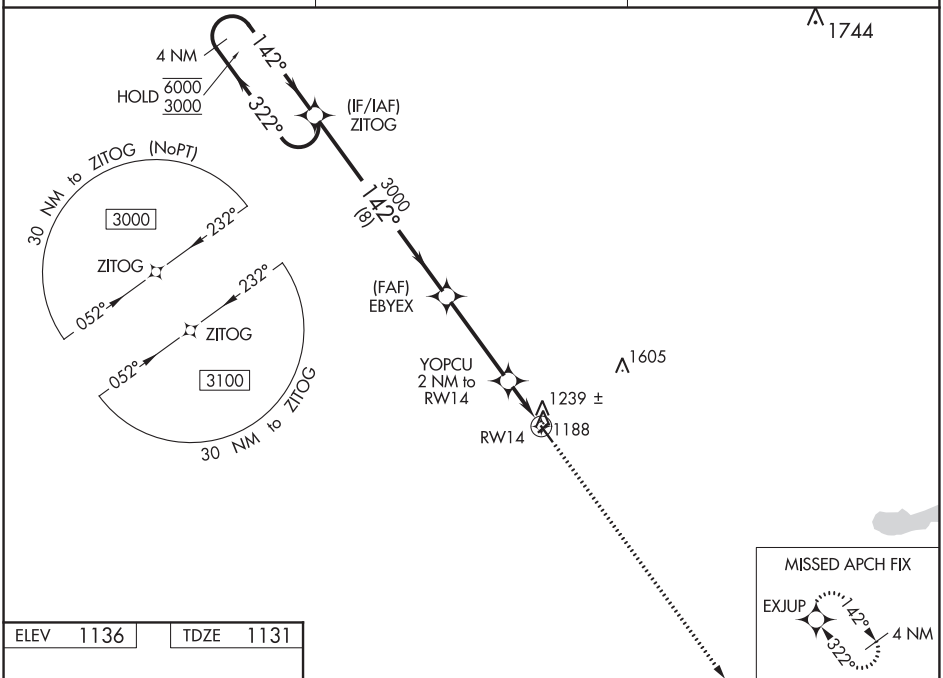
RNAV (GPS) RWY 14
MORRIS MUNI-CHARLIE SCHMIDT FIELD (MOX)

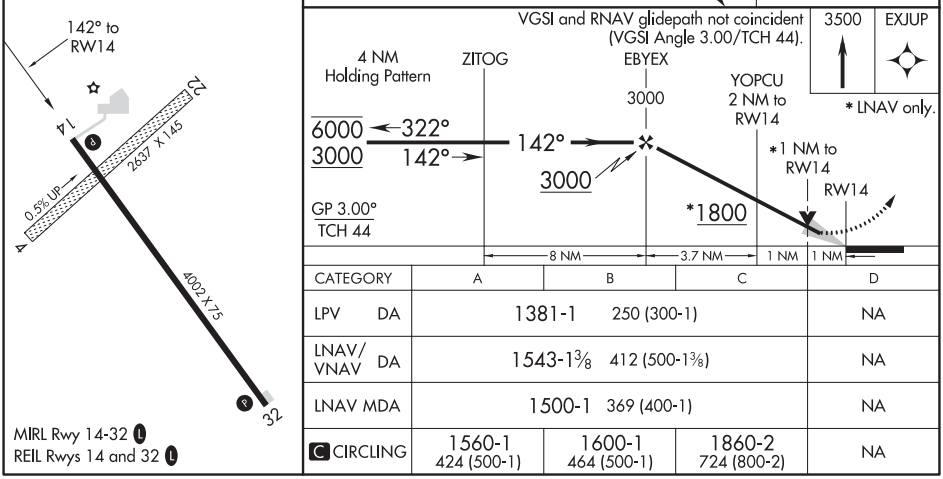
RNP APCH.

Circling NA to Rwys 4 and 22. Baro-VNAV and VDP NA when using Benson altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. When local altimeter setting not received, use Benson altimeter setting and increase LPV DA to 1440 feet LNAV/VNAV DA to 1602 feet and all MDA 60 feet, increase LNAV and Circling Cat C visibility ¼ SM.

MISSED APPROACH: Climb to 3500 direct EXJUP and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
109.6	126.1 269.2	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1381-1 250 (300-1)			NA
LNAV/VNAV DA	1543-1 3/8 412 (500-1 3/8)			NA
LNAV MDA	1500-1 369 (400-1)			NA
C CIRCLING	1560-1 424 (500-1)	1600-1 464 (500-1)	1860-2 724 (800-2)	NA

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

MORRIS, MINNESOTA

AL-5621 (FAA)

19171

RNAV (GPS) RWY 32

MORRIS MUNI-CHARLIE SCHMIDT FIELD (MOX)

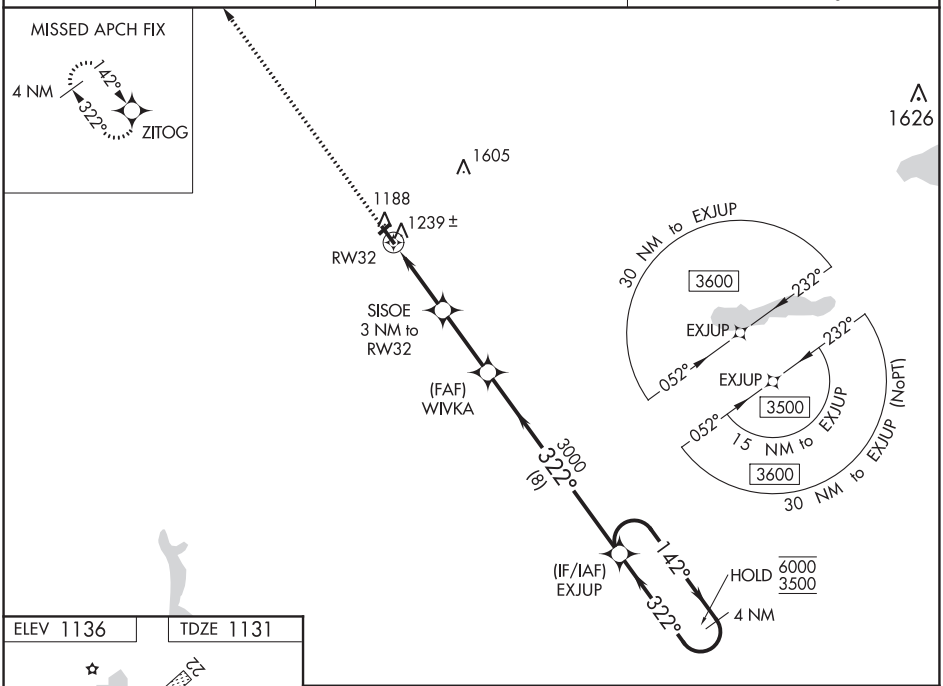
WAAS CH 93732 W32A	APP CRS 322°	Rwy ldg 4002 TDZE 1131 Apt Elev 1136

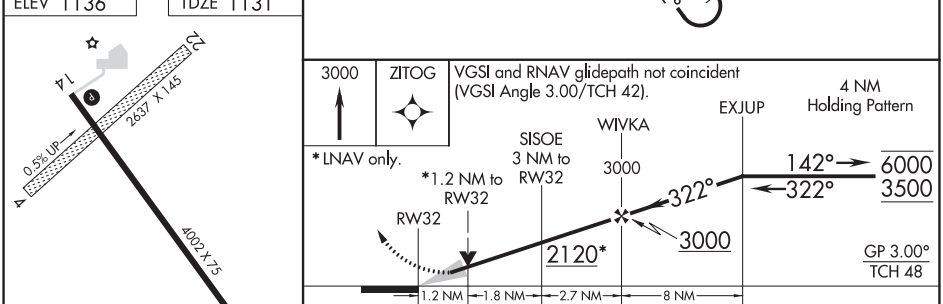
RNP APCH.

Circling NA to Rwys 4 and 22. Baro-VNAV and VDP NA when using Benson altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. When local altimeter setting not received, use Benson altimeter setting and increase LPV DA to 1440 feet, LNAV/VNAV DA to 1594 feet and all MDA 60 feet and increase LNAV and Circling Cat C visibility ¼ SM.

MISSED APPROACH: Climb to 3000 direct ZITOG and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
109.6	126.1 269.2	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1381-1 250 (300-1)			NA
LNAV/VNAV DA	1535-1⅜ 404 (400-1⅜)			NA
LNAV MDA	1540-1 409 (500-1)		1540-1⅛ 409 (500-1⅛)	NA
C CIRCLING	1560-1 424 (500-1)	1600-1 464 (500-1)	1860-2 724 (800-2)	NA

MIRL Rwy 14-32 L
REIL Rwys 14 and 32 L

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VOR/DME MOX 109.6 Chan 33	APP CRS 144°	Rwy ldg 4002 TDZE 1131 Apt Elev 1136

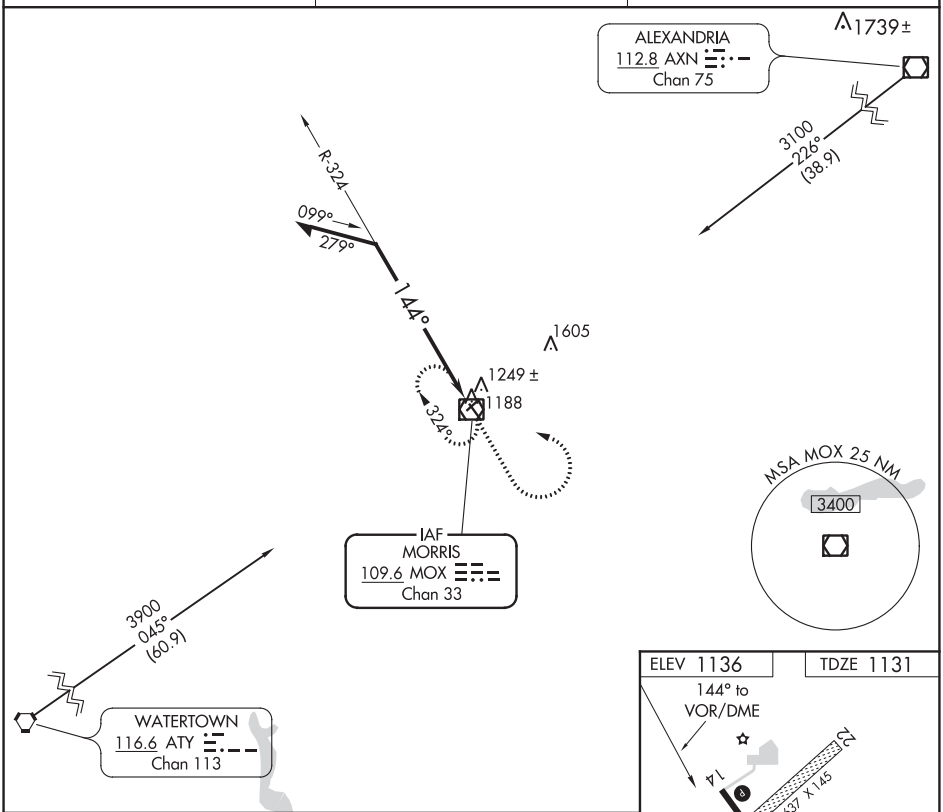
VOR RWY 14

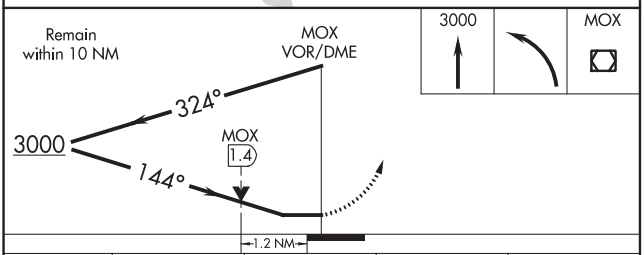
MORRIS MUNI-CHARLIE SCHMIDT FIELD (MOX)

T A NA — Circling NA to Rwys 4 and 22. VDP NA when using Benson altimeter setting. When local altimeter setting not received, use Benson altimeter setting and increase all MDA 60 feet, increase S-14 Cat C visibility ⅛ SM and Circling Cat C visibility ¼ SM.

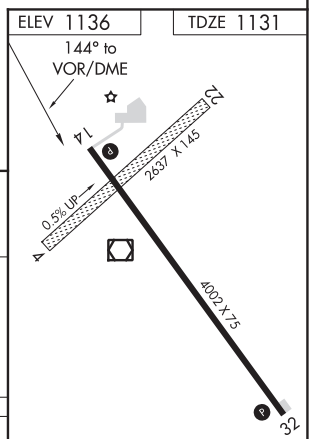
MISSED APPROACH: Climb to 3000 then left turn direct MOX VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
109.6	126.1 269.2	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-14	1560-1 429 (500-1)		1560-1¼ 429 (500-1¼)	NA
C CIRCLING	1560-1 424 (500-1)	1600-1 464 (500-1)	1860-2 724 (800-2)	NA



MIRL Rwy 14-32 L
REIL Rwys 14 and 32 L

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NC-1, 25 FEB 2021 to 22 APR 2021

MORRIS, MINNESOTA AL-5621 (FAA) 19171

VOR RWY 32

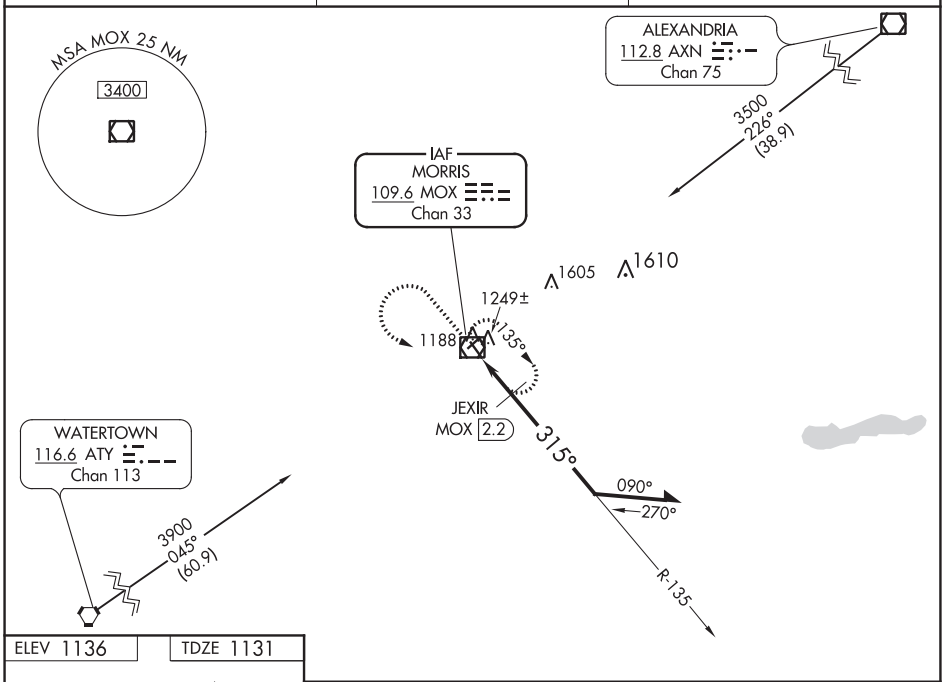
MORRIS MUNI-CHARLIE SCHMIDT FIELD (MOX)

VOR/DME MOX	APP CRS	Rwy ldg	4002
109.6	315°	TDZE	1131
Chan 33		Apt Elev	1136

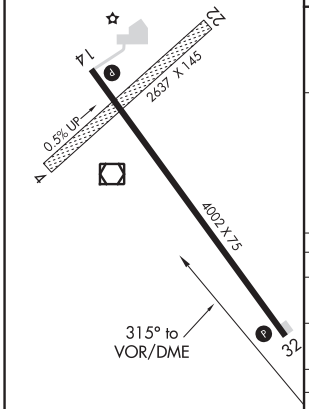
T NA Circling NA to Rwys 4 and 22. VDP NA when using Benson altimeter setting. When local altimeter setting not received, use Benson altimeter setting and increase all MDAs 60 feet and S-32 Cat C visibility ⅛ SM increase Circling Cat C visibility ¼ SM, JEXIR Fix minimums S-32 and Circling Cat C visibility ¼ SM.

MISSED APPROACH: Climb to 3000 then left turn direct MOX VOR/DME and hold.

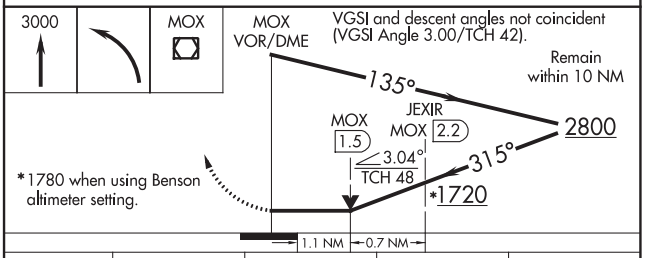
AWOS-3	MINNEAPOLIS CENTER	UNICOM
109.6	126.1 269.2	122.8 (CTAF) L



ELEV 1136 TDZE 1131



MIRL Rwy 14-32 L
REIL Rwys 14 and 32 L



CATEGORY	A	B	C	D
S-32	1720-1 589 (600-1)		1720-1¾ 589 (600-1¾)	NA
C CIRCLING	1720-1 584 (600-1)		1860-2 724 (800-2)	NA
JEXIR FIX MINIMUMS				
S-32	1500-1 369 (400-1)			NA
C CIRCLING	1560-1 424 (500-1)	1600-1 464 (500-1)	1860-2 724 (800-2)	NA

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APP CRS	Rwy ldg	3416
125°	TDZE	1924
	Apt Elev	1924

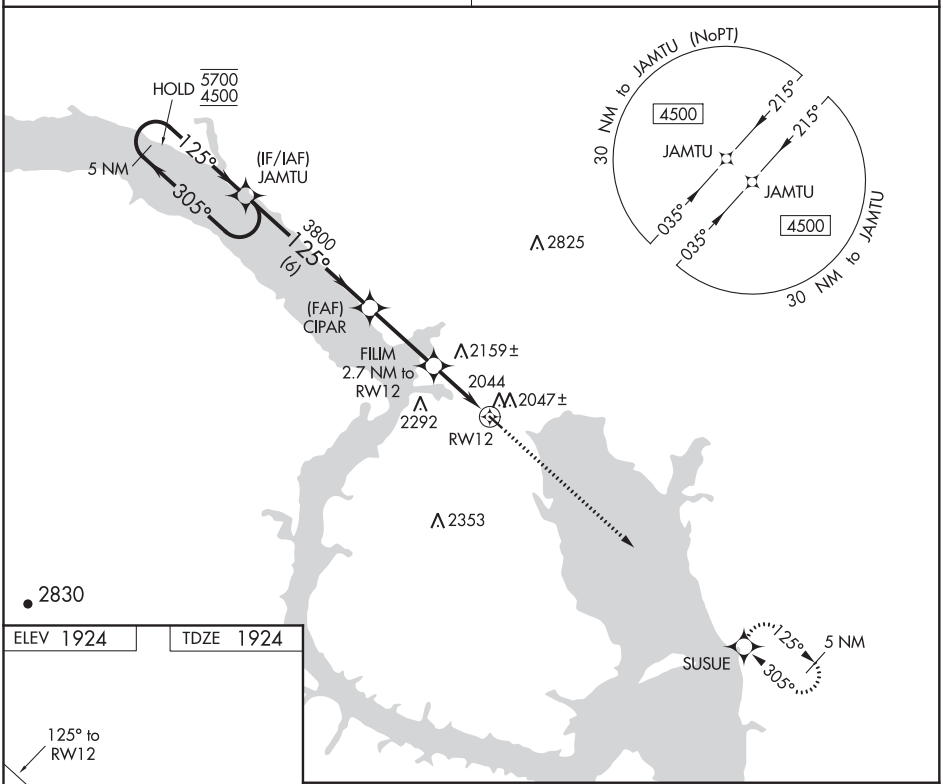
RNAV (GPS) RWY 12
NEW TOWN MUNI (Ø5D)

RNP APCH.

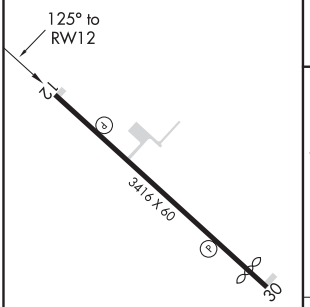
Use Stanley altimeter setting, when not received, use Tioga altimeter setting and increase all MDAs 40 feet. Increase Cat C visibilities ¼ SM. Rwy 12 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 4500 direct SUSUE and hold.

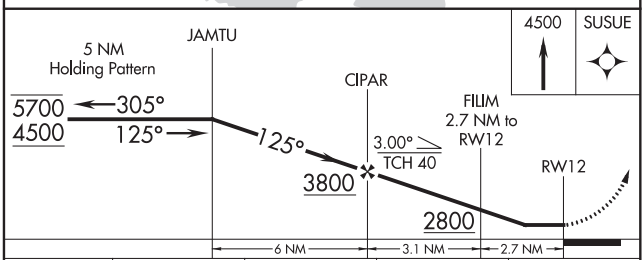
MINNEAPOLIS CENTER	CTAF
127.6 279.6	122.9 L



ELEV 1924 TDZE 1924



MIRL Rwy 12-30 L



CATEGORY	A	B	C	D
LNAV MDA	2440-1 516 (600-1)		2440-1⅜ 516 (600-1⅜)	NA
C CIRCLING	2520-1 596 (600-1)	2620-1 696 (700-1)	2780-2½ 856 (900-2½)	NA

NEW TOWN, NORTH DAKOTA | AL-10795 (FAA-O) | 20366

APP CRS	Rwy ldg	3120
305°	TDZE	1924
	Apt Elev	1924

RNAV (GPS) RWY 30
NEW TOWN MUNI (Ø5D)

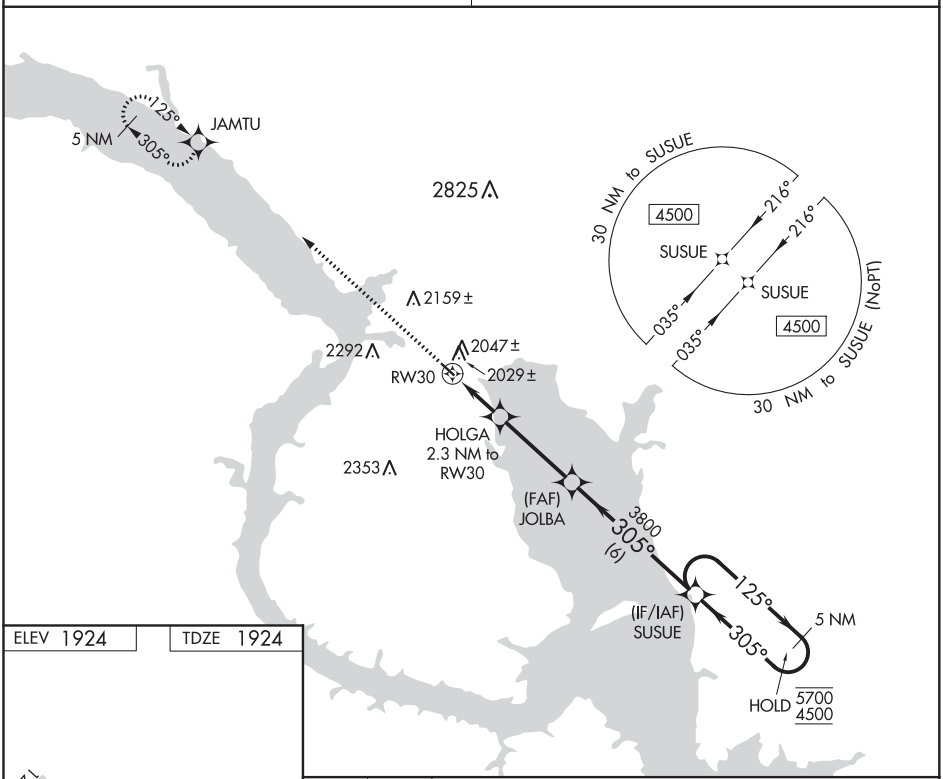
RNP APCH.

NA

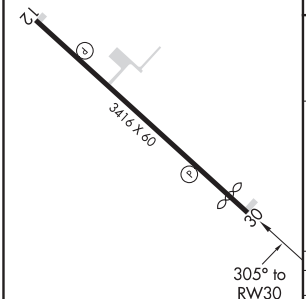
Use Stanley altimeter setting, when not received, use Tioga altimeter setting and increase all MDAs 40 feet. Increase Cat C visibility ¼ SM.

MISSED APPROACH: Climb to 4500 direct JAMTU and hold.

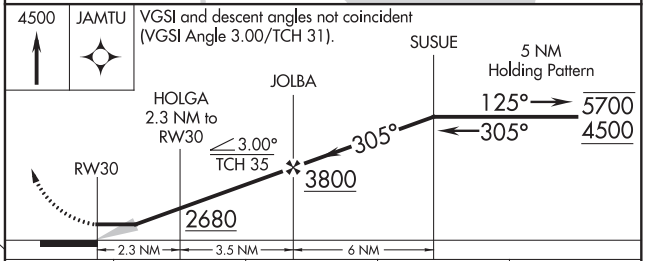
MINNEAPOLIS CENTER	CTAF
127.6 279.6	122.9 L



ELEV 1924 | TDZE 1924



MIRL Rwy 12-30 L



CATEGORY	A	B	C	D
LNAV MDA	2380-1 456 (500-1)		2380-1⅜ 456 (500-1⅜)	NA
C CIRCLING	2520-1 596 (600-1)	2620-1 696 (700-1)	2780-2½ 856 (900-2½)	NA

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WAAS CH 87131 W15A	APP CRS 150°	Rwy ldg 5401 TDZE 1011 Apt Elev 1011

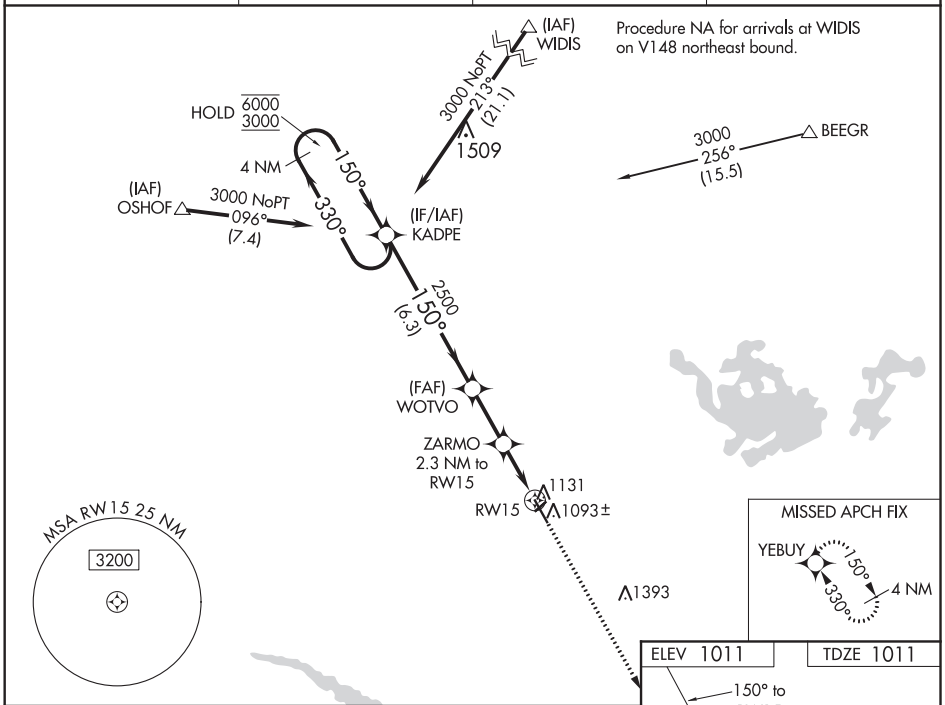
RNAV (GPS) RWY 15
NEW ULM MUNI (ULM)

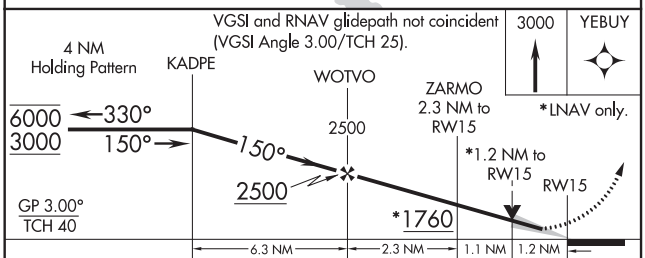
RNP APCH.

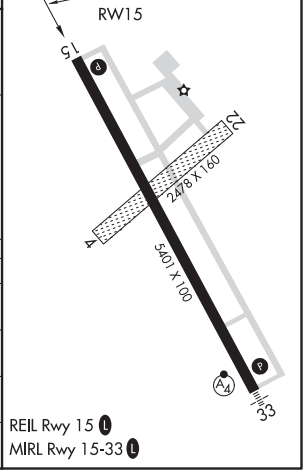
Circling NA to Rwys 4 and 22. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C.

MISSED APPROACH: Climb to 3000 direct YEBUY and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
118.325	127.1 290.2	121.725	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1261-⅞ 250 (300-⅞)			
LNAV/VNAV DA	1298-1 287 (300-1)			
LNAV MDA	1400-1 389 (400-1)		1400-1⅛ 389 (400-1⅛)	
C CIRCLING	1440-1 429 (500-1)	1500-1 489 (500-1)	1620-1¾ 609 (700-1¾)	1620-2 609 (700-2)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

NEW ULM, MINNESOTA AL-5670 (FAA) 21056

WAAS CH 56631 W33A	APP CRS 330°	Rwy ldg 5401 TDZE 1011 Apt Elev 1011

RNAV (GPS) RWY 33
NEW ULM MUNI (ULM)

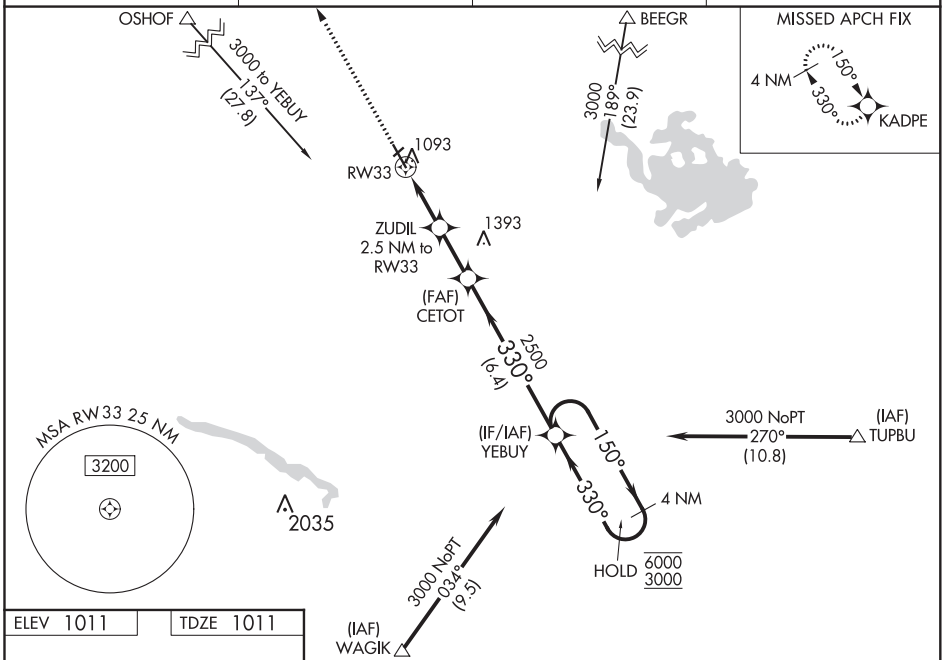
RNP APCH.

Circling NA to Rwys 4 and 22. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. Inop table does not apply to LPV all Cats. For inop ALS, increase LNAV/VNAV all Cats visibility to ⅞ SM, LNAV Cat D to 1⅛ SM.

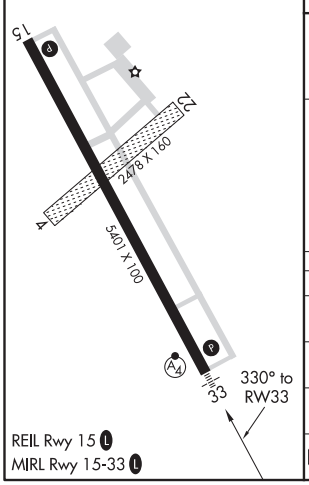
MALSF

MISSED APPROACH: Climb to 3000 direct KADPE and hold.

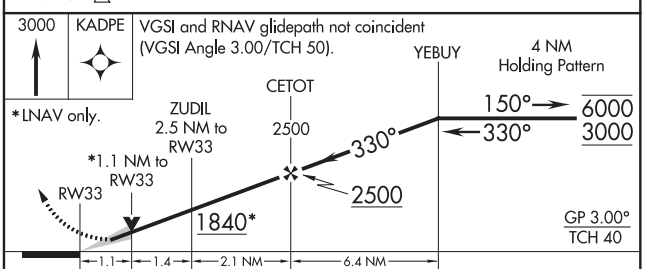
AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
118.325	127.1 290.2	121.725	122.8 (CTAF) L



ELEV 1011	TDZE 1011



REIL Rwy 15 L
MIRL Rwy 15-33 L



CATEGORY	A	B	C	D
LPV DA	1211-¾ 200 (200-¾)			
LNAV/VNAV DA	1312-¾ 301 (400-¾)			
LNAV MDA	1400-¾ 389 (400-¾)		1400-⅞ 389 (400-⅞)	
C CIRCLING	1440-1 429 (500-1)	1500-1 489 (500-1)	1620-1¾ 609 (700-1¾)	1620-2 609 (700-2)

NC-1, 25 FEB 2021 to 22 APR 2021

NEW ULM, MINNESOTA
Orig-B 25APR19

44°19′N-94°30′W

NEW ULM MUNI (ULM)
RNAV (GPS) RWY 33

APP CRS	Rwy ldg	3160
262°	TDZE	1117
	Apt Elev	1117

RNAV (GPS) RWY 26
NORTHWOOD MUNI-VINCE FIELD (4V4)

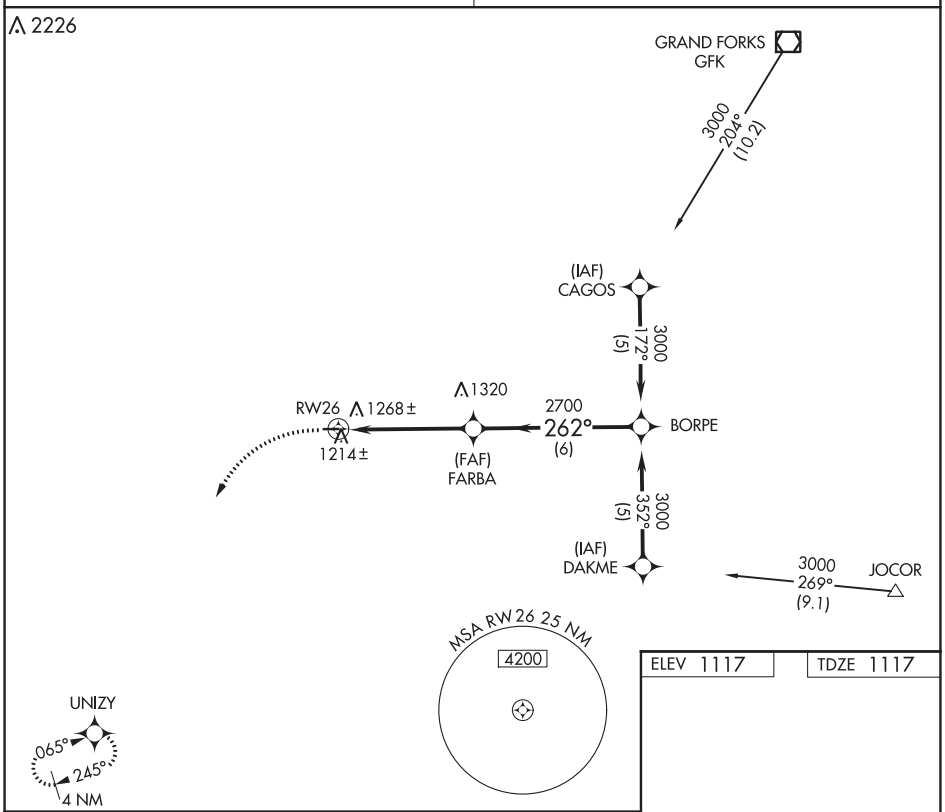
T
A NA

DME/DME RNP- 0.3 NA.
Use Grand Forks Intl altimeter setting.
Procedure NA at night.

MISSED APPROACH: Climb to 1800 then climbing left turn to 3500 direct UNIZY WP and hold.

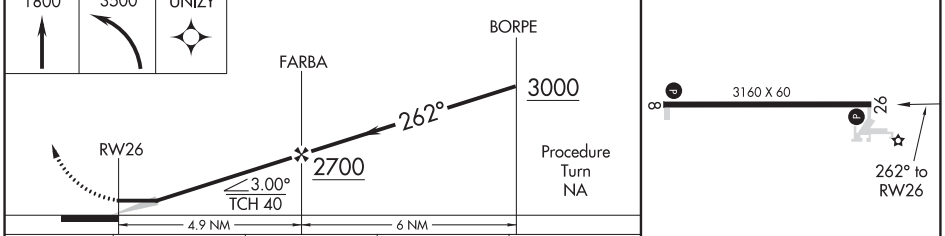
GRAND FORKS APP CON
118.1 318.1

UNICOM
122.8 (CTAF) L



ELEV 1117 TDZE 1117

1800	3500	UNIZY
↑	↰	◇



CATEGORY	A	B	C	D
LNAV MDA	1660-1 543 (600-1)		NA	
CIRCLING	1720-1 603 (700-1)		NA	

MIRL Rwy 8-26 L

NC-1, 25 FEB 2021 to 22 APR 2021

APP CRS	Rwy ldg	3505
305°	TDZE	1335
	Apt Elev	1335

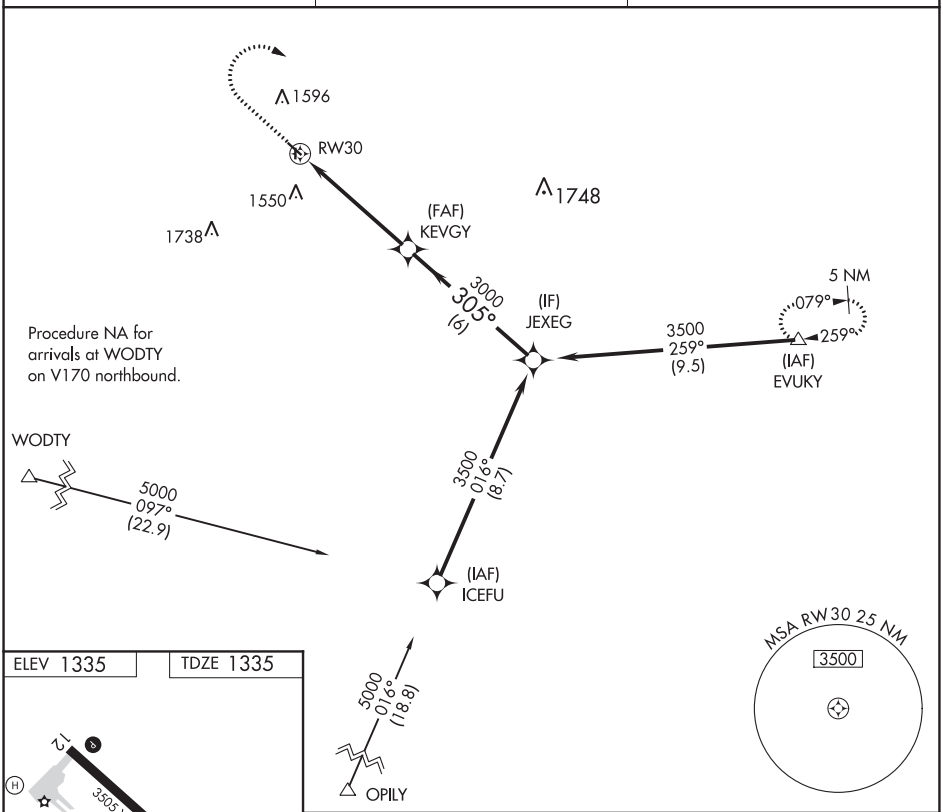
RNAV (GPS) RWY 30
OAKES MUNI (2D5)

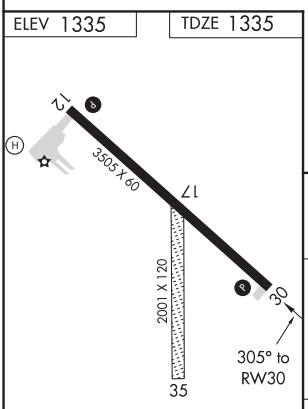
RNP APCH.

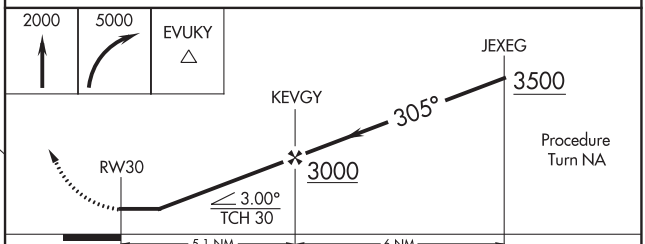
When local altimeter setting not received, use Aberdeen altimeter setting; increase all MDA 120 feet and LNAV and Circling Cat C visibility ¼ mile. Circling Rwy 17, 35 NA. Rwy 30 helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 2000 then climbing right turn to 5000 direct EVUKY and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
118.675	124.2 270.3	122.9 L







CATEGORY	A	B	C	D
LNAV MDA	1920-1	585 (600-1)	1920-1¾ 585 (600-1¾)	NA
CIRCLING	1920-1	585 (600-1)	2020-2 685 (700-2)	NA

MIRL Rwy 12-30 L

NC-1, 25 FEB 2021 to 22 APR 2021

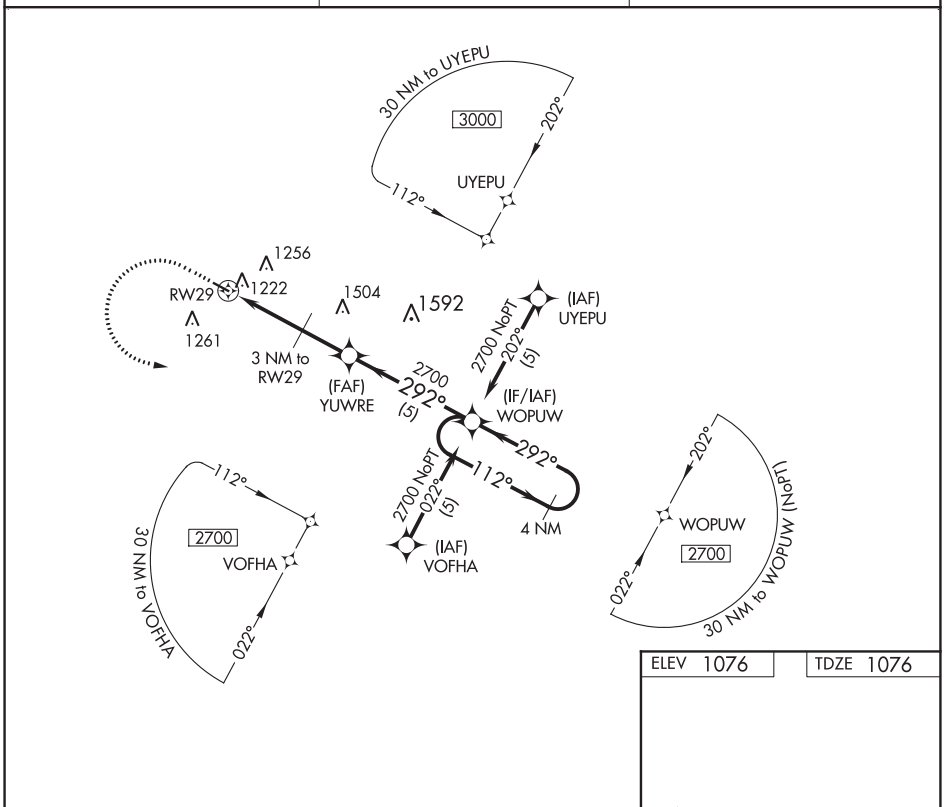
APP CRS	Rwy ldg	3498
292°	TDZE	1076
	Apt Elev	1076

RNAV (GPS) RWY 29
OLIVIA RGNL (OVL)

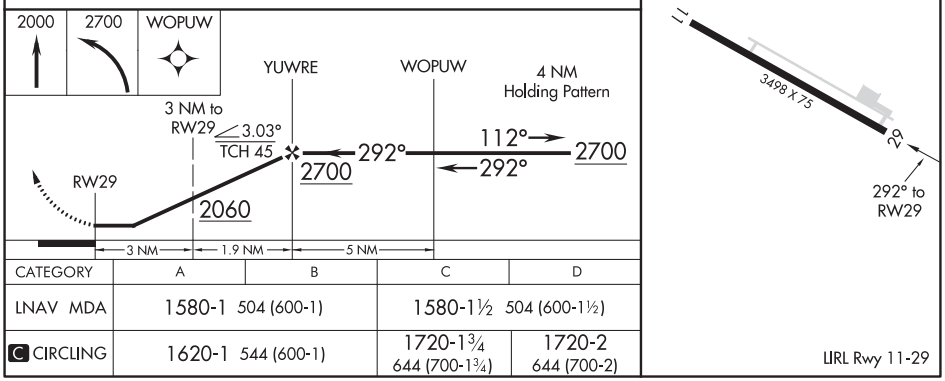
T A NA — DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 2000 then climbing left turn to 2700 direct WOPUW WP and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.275	127.1 290.2	122.8 (CTAF)



ELEV 1076	TDZE 1076



CATEGORY	A	B	C	D
LNAV MDA	1580-1 504 (600-1)		1580-1½ 504 (600-1½)	
C CIRCLING	1620-1 544 (600-1)		1720-1¾ 644 (700-1¾)	1720-2 644 (700-2)

LIRL Rwy 11-29

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

OLIVIA, MINNESOTA AL-6301 (FAA) 20310

VOR/DME RWF 113.3 Chan 80	APP CRS 005°	Rwy ldg N/A TDZE N/A Apt Elev 1076

VOR/DME or GPS-A

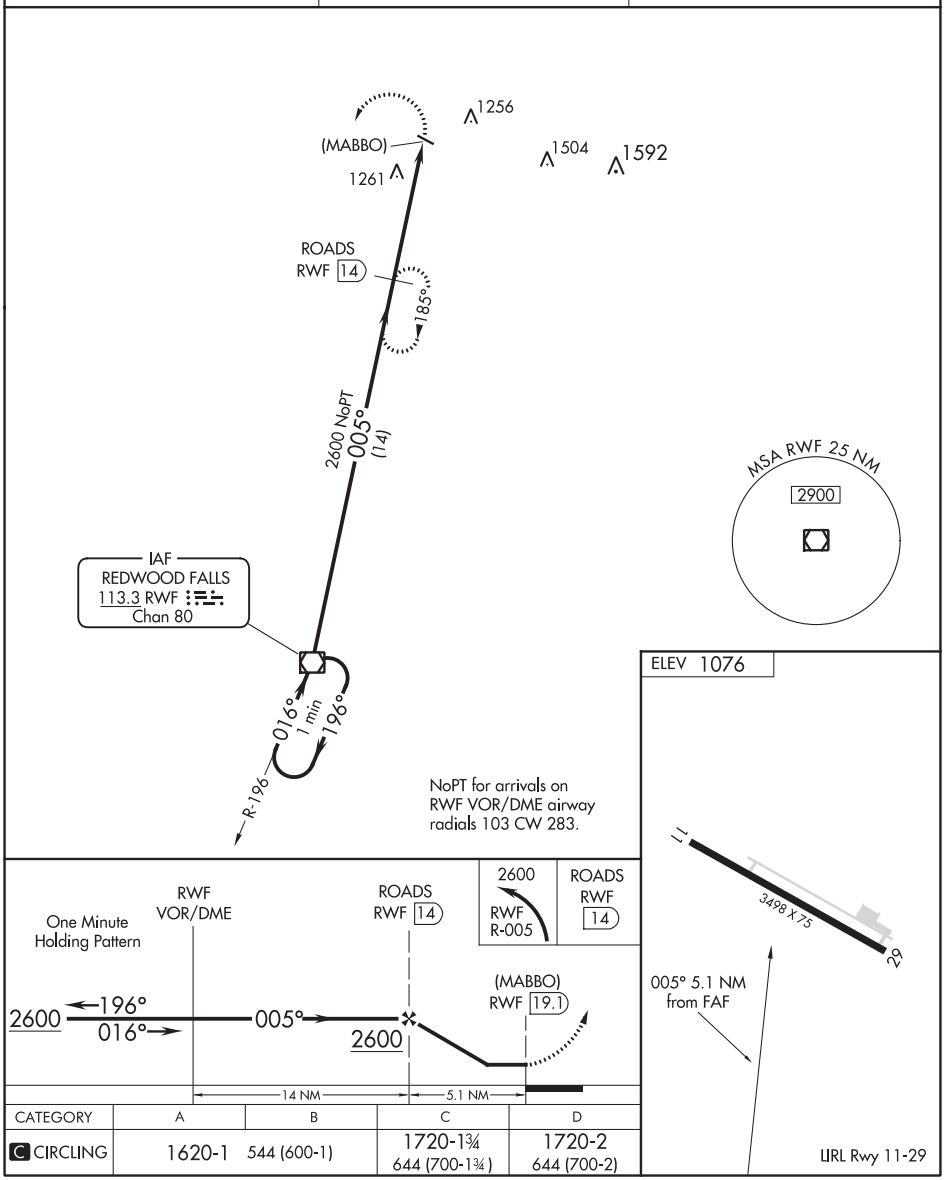
OLIVIA RGNL (OVL)

T

A NA

MISSED APPROACH: Climbing left turn to 2600 via RWF R-005 to ROADS 14 DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.275	127.1 290.2	122.8 (CTAF)



CATEGORY	A	B	C	D
C CIRCLING	1620-1	544 (600-1)	1720-1¾ 644 (700-1¾)	1720-2 644 (700-2)

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 53341 W13A	APP CRS 133°	Rwy ldg 3800 TDZE 1879 Apt Elev 1885

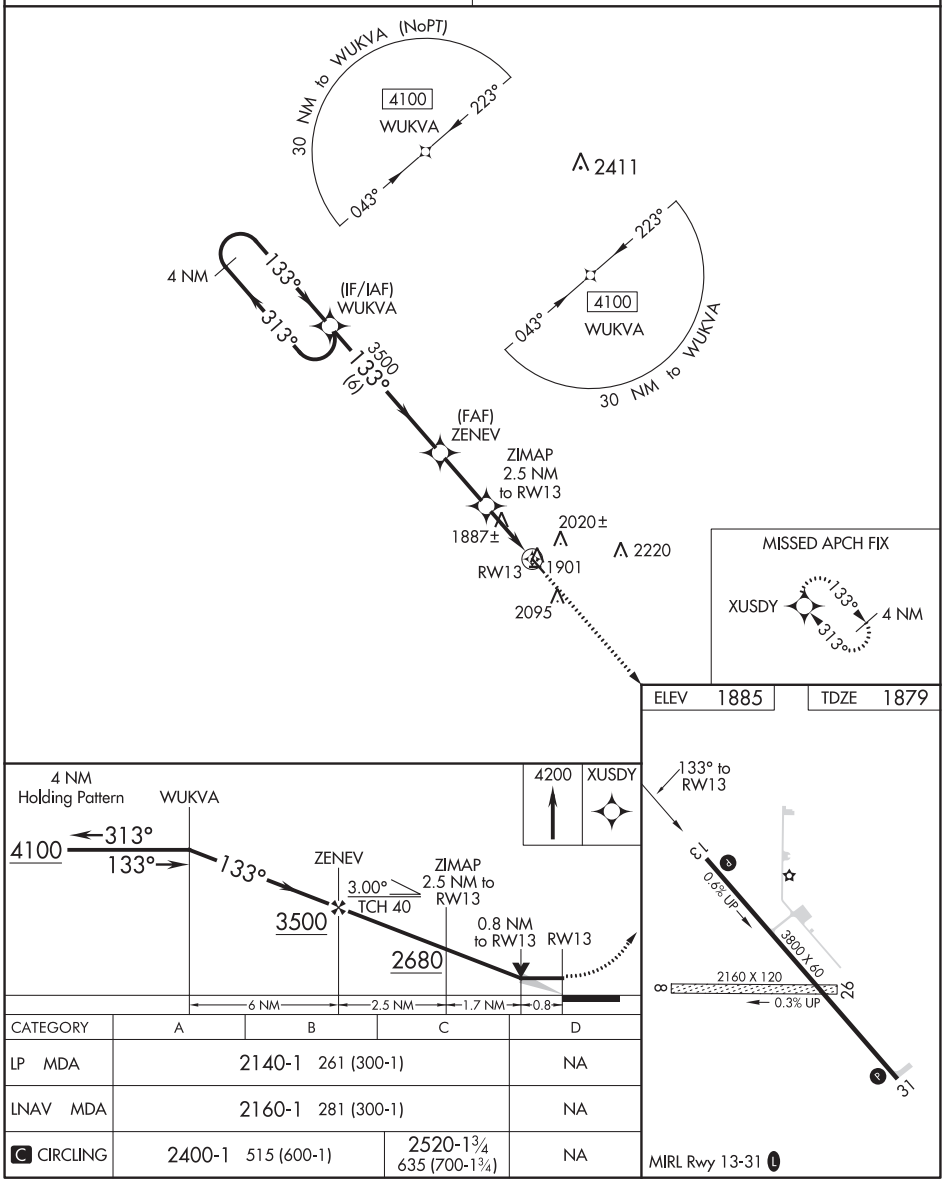
RNAV (GPS) RWY 13
ONIDA MUNI (98D)

DME/DME RNP-0.3 NA. VDP NA when using Pierre altimeter setting. When local altimeter setting not received, use Pierre altimeter setting: increase all MDAs 80 feet and Circling Cat C visibility ¼ SM.

NA

MISSED APPROACH: Climb to 4200 direct XUSDY and hold.

AWOS-2	MINNEAPOLIS CENTER
122.9 (CTAF) L	125.1 269.1



CATEGORY	A	B	C	D
LP MDA	2140-1 261 (300-1)			NA
LNAV MDA	2160-1 281 (300-1)			NA
C CIRCLING	2400-1 515 (600-1)		2520-1¾ 635 (700-1¾)	NA

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

ONIDA, SOUTH DAKOTA | AL-10269 (FAA) | 20310

WAAS CH 82341 W31A	APP CRS 313°	Rwy ldg 3800 TDZE 1885 Apt Elev 1885

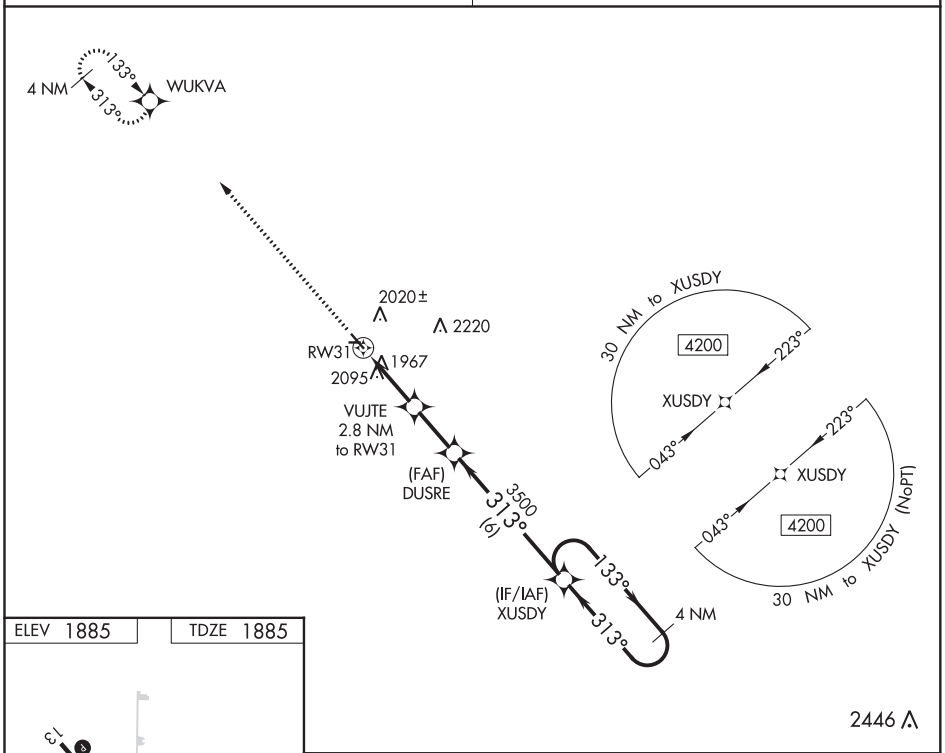
RNAV (GPS) RWY 31
ONIDA MUNI (98D)

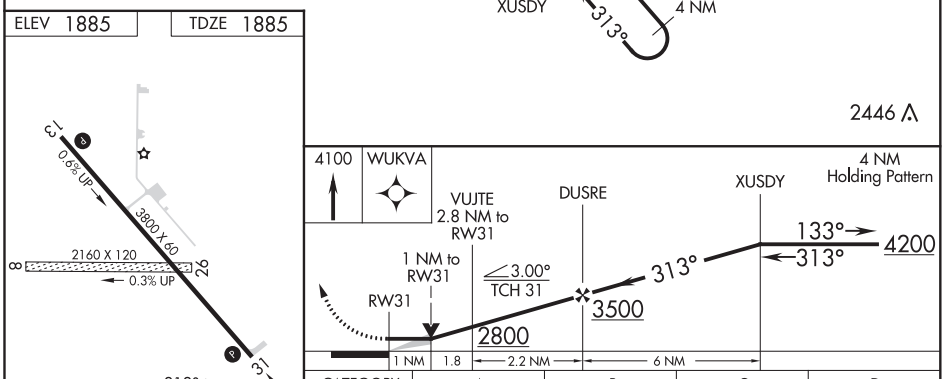
NA

DME/DME RNP-0.3 NA. VDP NA when using Pierre altimeter setting. When local altimeter setting not received, use Pierre altimeter setting: increase all MDAs 80 feet and LP Cat C visibility ⅛ SM and LNAV and Circling Cat C visibility ¼ SM.

MISSED APPROACH: Climb to 4100 direct WUKVA and hold.

AWOS-2	MINNEAPOLIS CENTER
122.9 (CTAF) L	125.1 269.1





CATEGORY	A	B	C	D
LP MDA	2220-1 335 (400-1)			NA
LNAV MDA	2360-1 475 (500-1)		2360-1⅜ 475 (500-1⅜)	NA
C CIRCLING	2400-1 515 (600-1)		2520-1¾ 635 (700-1¾)	NA

MIRL Rwy 13-31 L

NC-1, 25 FEB 2021 to 22 APR 2021

ONIDA, SOUTH DAKOTA
Orig 01FEB18

44°42′N-100°06′W

ONIDA MUNI (98D)
RNAV (GPS) RWY 31

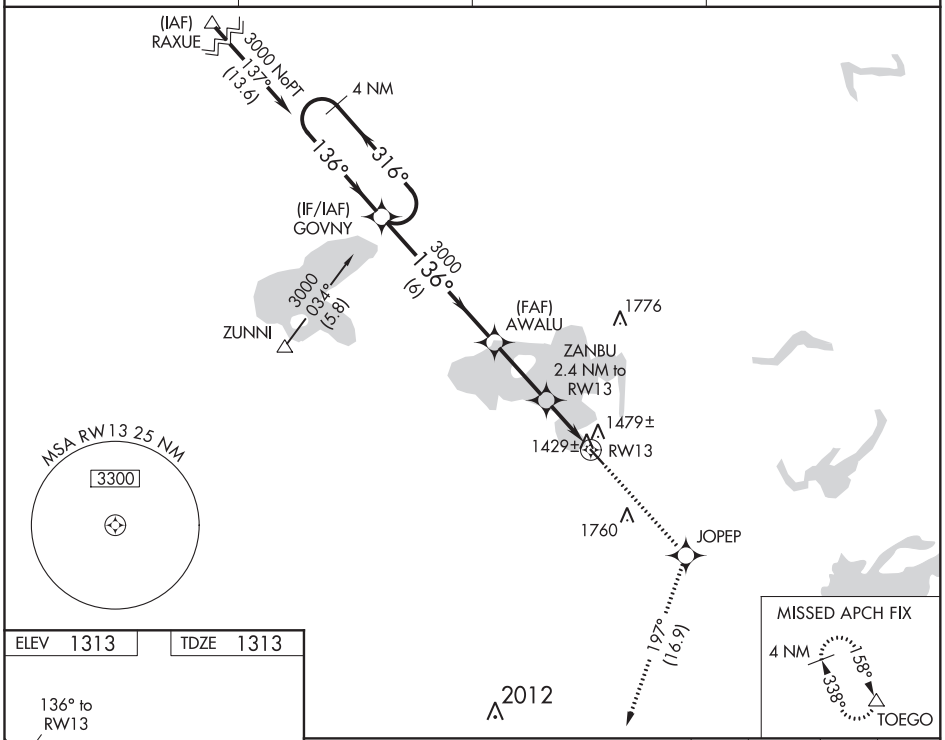
RNAV (GPS) RWY 13
ORR RGNL(ORB)

WAAS CH 69224 W13A	APP CRS 136°	Rwy ldg 4000 TDZE 1313 Apt Elev 1313

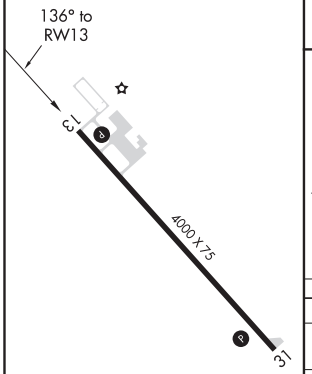
DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Cook altimeter setting and increase all MDA 40 feet. VDP NA when using Cook altimeter setting.

MISSED APPROACH: Climb to 3600 direct JOPEP and on track 197° to TOEGO and hold.

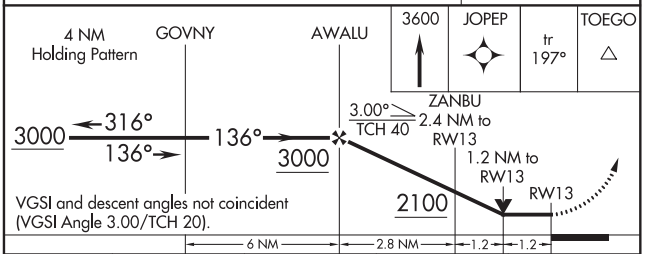
AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
118.325	120.9 377.1	121.725	122.8 (CTAF) L



ELEV 1313	TDZE 1313



REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L



CATEGORY	A	B	C	D
LP MDA	1720-1	407 (500-1)	1720-1⅛ 407 (500-1⅛)	NA
LNAV MDA	1760-1	447 (500-1)	1760-1⅜ 447 (500-1⅜)	NA
CIRCLING	1920-1	607 (700-1)	1920-1¾ 607 (700-1¾)	NA

NC-1, 25 FEB 2021 to 22 APR 2021
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ORTONVILLE, MINNESOTA AL-6661 (FAA) 21056

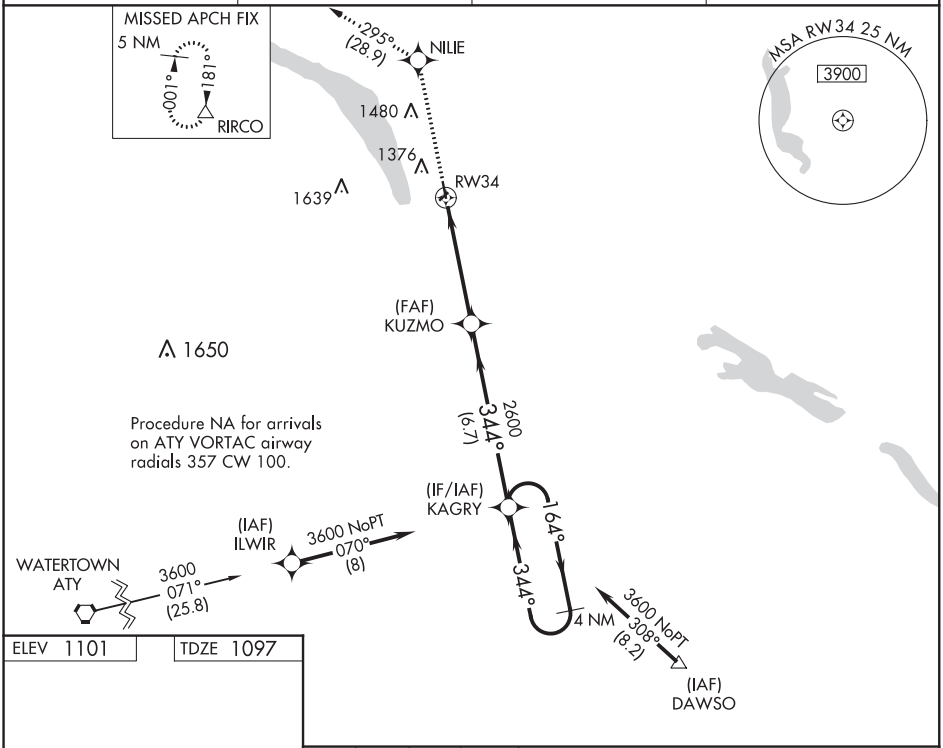
WAAS CH 87124 W34A	APP CRS 344°	Rwy ldg 3417 TDZE 1097 Apt Elev 1101

RNAV (GPS) RWY 34
ORTONVILLE MUNI-MARTINSON FIELD (VVV)

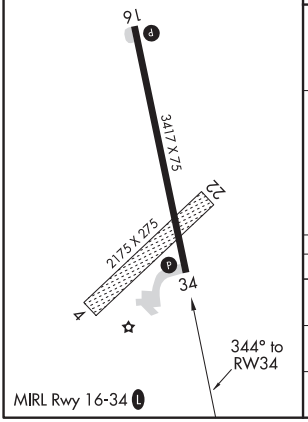
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Procedure NA at night. When local altimeter setting not received, use Appleton altimeter setting and increase all MDA 60 feet, increase LP and LNAV Cat C visibility to 1⅜ mile and Circling Cat C visibility to 2 miles.

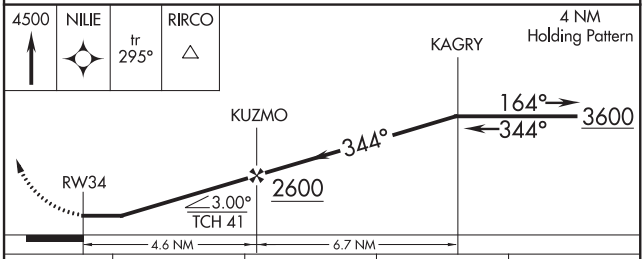
MISSED APPROACH: Climb to 4500 direct NILIE and on track 295° to RIRCO and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
119.225	128.5 306.2	121.725	122.8 (CTAF)



ELEV 1101 TDZE 1097





CATEGORY	A	B	C	D
LP MDA	1520-1 423 (500-1)		1520-1¼ 423 (500-1¼)	NA
LNAV MDA	1520-1 423 (500-1)		1520-1¼ 423 (500-1¼)	NA
CIRCLING	1740-1 639 (700-1)		1740-1¾ 639 (700-1¾)	NA

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NC-1, 25 FEB 2021 to 22 APR 2021

LOC/DME I-OWA	APP CRS	Rwy ldg	5500
109.55	302°	TDZE	1145
Chan 32(Y)		Apt Elev	1145

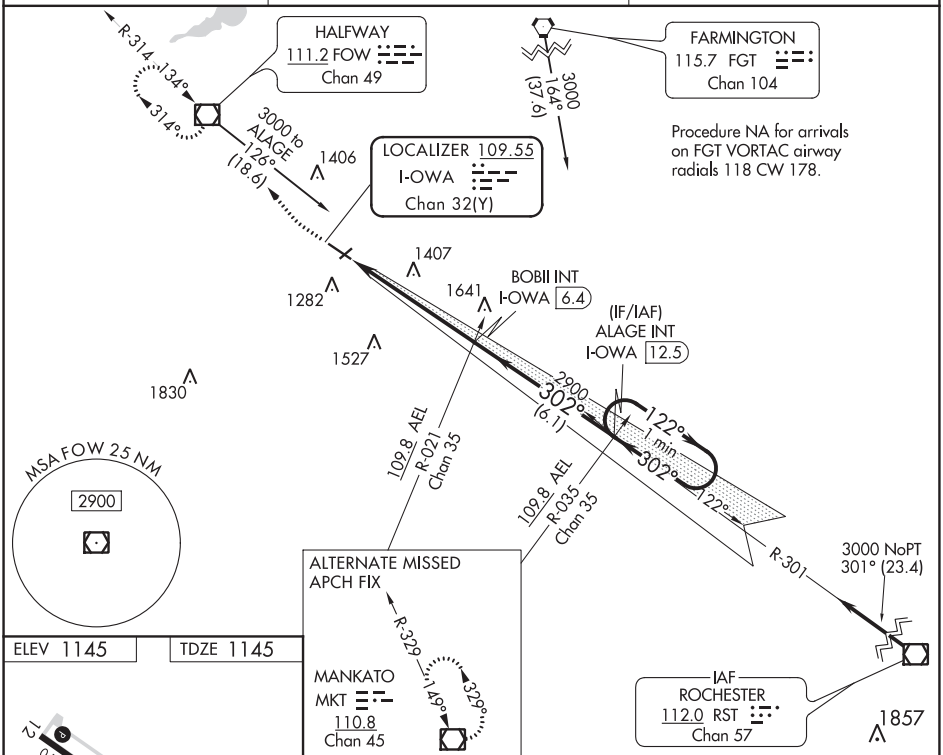
ILS or LOC RWY 30
OWATONNA DEGNER RGNL (OWA)

When local altimeter setting not received, use Faribault altimeter setting and increase all DA 41 feet and all MDA 60 feet. Increase S-LOC 30 Cats C/D visibility to 1⅜ mile and Circling Cat C visibility to 1⅞ and Cat D Circling visibility to 2½.

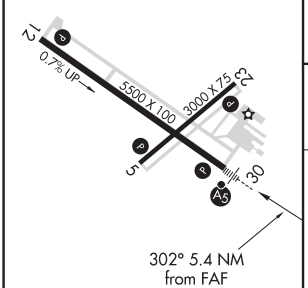
MALSR

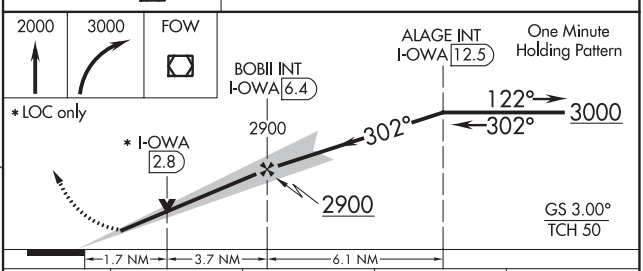
MISSED APPROACH Climb to 2000 then climbing right turn to 3000 direct FOW VOR/DME and hold.

AWOS-3	ROCHESTER APP CON ★	UNICOM
128.325	119.8 251.125	122.7 (CTAF) L



ELEV 1145 TDZE 1145





MIRL Rwy 5-23 L
REIL Rwys 5, 12, and 23 L
HIRL Rwy 12-30 L

FAF to MAP 5.4 NM					
Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

CATEGORY	A	B	C	D
S-ILS 30	1345-½ 200 (200-½)			
S-LOC 30	1740-½ 595 (600-½)		1740-1¼ 595 (600-1¼)	
C CIRCLING	1740-1 595 (600-1)		1740-1¾ 595 (600-1¾)	1880-2¼ 735 (800-2¼)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

OWATONNA, MINNESOTA | AL-5426 (FAA) | 20254

WAAS CH 82627 W12A	APP CRS 122°	Rwy ldg 5500 TDZE 1127 Apt Elev 1145

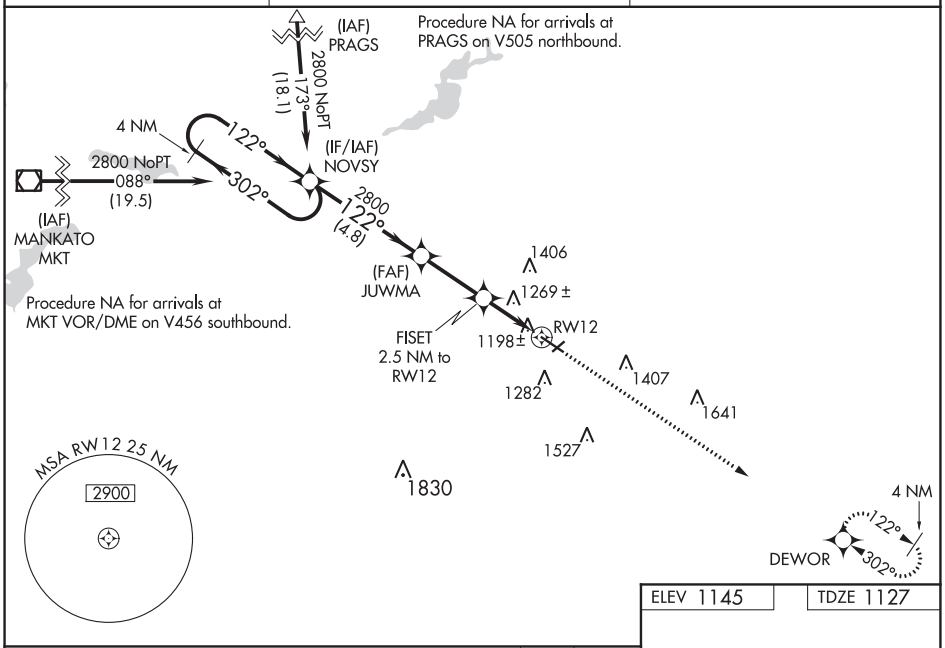
RNAV (GPS) RWY 12
OWATONNA DEGNER RGNL (OWA)

RNP APCH.

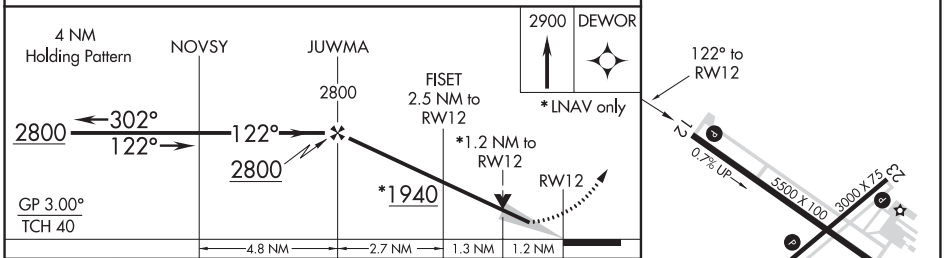
T A Baro-VNAV NA when using Faribault altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 36°C (96°F). VDP NA with Faribault altimeter setting. When local altimeter setting not received, use Faribault altimeter setting and increase all DA 41 feet and all MDA 60 feet. Increase LPV all Cats visibility to 1¼ SM. Increase LNAV/VNAV all Cats visibility to 1 SM and LNAV Cat C/D visibility to 1⅜ SM. Increase Circling Cat C visibility to 1¾ SM and Cat D visibility to 2½ SM.

MISSED APPROACH: Climb to 2900 direct DEWOR and hold.

AWOS-3	ROCHESTER APP CON *	UNICOM
128.325	119.8 251.125	122.7 (CTAF) L



ELEV 1145	TDZE 1127



CATEGORY	A	B	C	D
LPV DA	1441-1 314 (300-1)			
LNAV/VNAV DA	1400-⅞ 273 (300-⅞)			
LNAV MDA	1520-1 393 (400-1)		1520-1⅛ 393 (400-1⅛)	
C CIRCLING	1640-1 495 (500-1)	1700-1 555 (600-1)	1720-1½ 575 (600-1½)	1880-2¼ 735 (800-2¼)

MIRL Rwy 5-23 L
REIL Rwys 5, 12, and 23 L
HIRL Rwy 12-30 L

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 86627 W30A	APP CRS 302°	Rwy ldg 5500 TDZE 1145 Apt Elev 1145

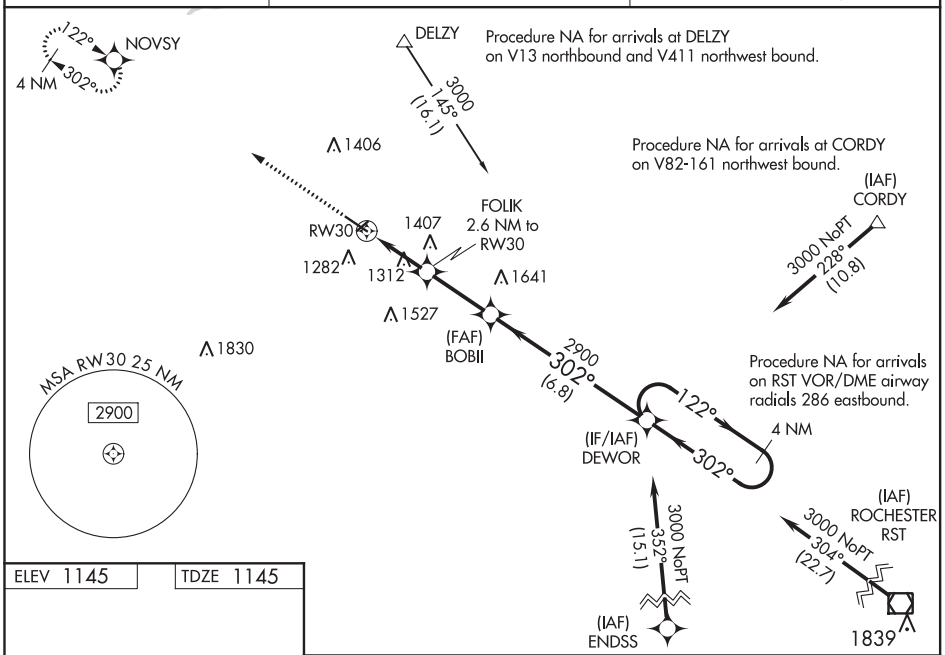
RNAV (GPS) RWY 30
OWATONNA DEGNER RGNL (OWA)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). DME/DME/RNP-0.3 NA. When local altimeter setting not received, use Faribault altimeter setting and increase all DA 41 feet and all MDA 60 feet. Increase LNAV/VNAV all Cats visibility to 1⅛ mile, increase LNAV Cats C/D visibility to 1 mile, Cat C Circling visibility to 1¾ mile and Cat D visibility to 2½ mile. VDP and Baro-VNAV NA when using Faribault altimeter setting. For inop MALSR increase LNAV/VNAV all Cats visibility to 1⅜ miles. For inop MALSR, when using Fairbault altimeter setting, increase LNAV/VNAV all Cats visibility to 1½ mile, LNAV Cats C/D visibility to 1⅜ mile.

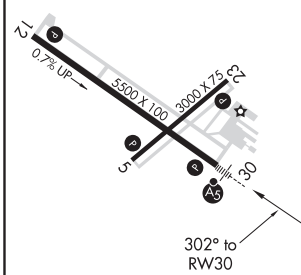
MALSR

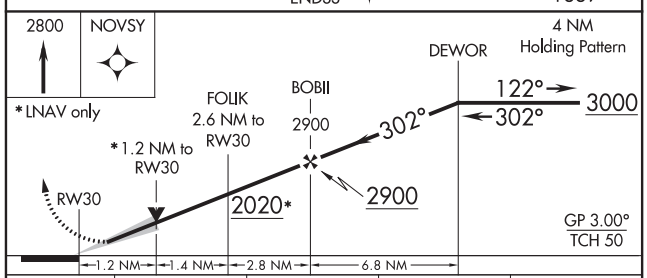
MISSED APPROACH: Climb to 2800 direct NOVSY and hold.

AWOS-3	ROCHESTER APP CON *	UNICOM
128.325	119.8 251.125	122.7 (CTAF) L



ELEV 1145 TDZE 1145





CATEGORY	A	B	C	D
LPV DA	1345-½ 200 (200-½)			
LNAV/VNAV DA	1567-1 422 (500-1)			
LNAV MDA	1580-½ 435 (500-½)		1580-¾ 435 (500-¾)	
C CIRCLING	1640-1 495 (500-1)	1700-1 555 (600-1)	1720-1½ 575 (600-1½)	1880-2¼ 735 (800-2¼)

MIRL Rwy 5-23 L
REIL Rwys 5, 12 and 23 L
HIRL Rwy 12-30 L

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

OWATONNA, MINNESOTA | AL-5426 (FAA) | 20254

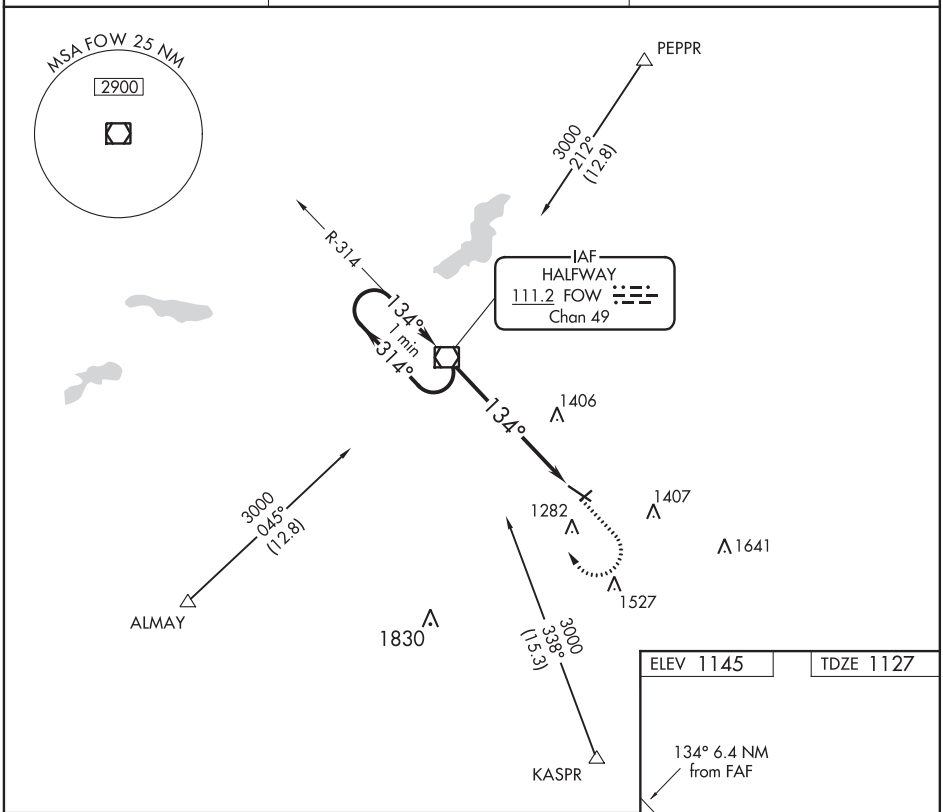
VOR/DME FOW	APP CRS	Rwy ldg	5500
111.2	134°	TDZE	1127
Chan 49		Apt Elev	1145

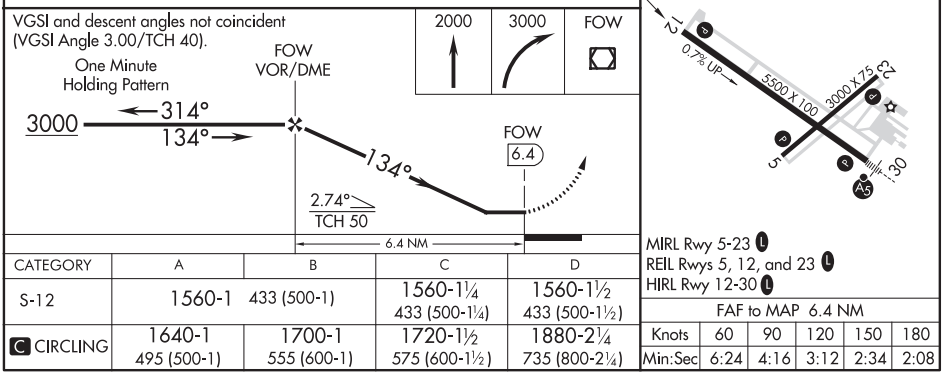
VOR RWY 12
OWATONNA DEGNER RGNL (OWA)

T
A NA

MISSED APPROACH Climb to 2000 then climbing right turn to 3000 direct FOW VOR/DME and hold.

AWOS-3	ROCHESTER APP CON ★	UNICOM
128.325	119.8 251.125	122.7 (CTAF) L





CATEGORY	A	B	C	D
S-12	1560-1	433 (500-1)	1560-1¼ 433 (500-1¼)	1560-1½ 433 (500-1½)
C CIRCLING	1640-1 495 (500-1)	1700-1 555 (600-1)	1720-1½ 575 (600-1½)	1880-2¼ 735 (800-2¼)

MIRL Rwy 5-23 L
REIL Rwys 5, 12, and 23 L
HIRL Rwy 12-30 L

FAF to MAP 6.4 NM					
Knots	60	90	120	150	180
Min:Sec	6:24	4:16	3:12	2:34	2:08

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

LOC I-PKD	APP CRS	Rwy ldg	5497
110.9	311°	TDZE	1444
		Apt Elev	1445

ILS or LOC RWY 31
PARK RAPIDS MUNI-KONSHOK FIELD (PKD)

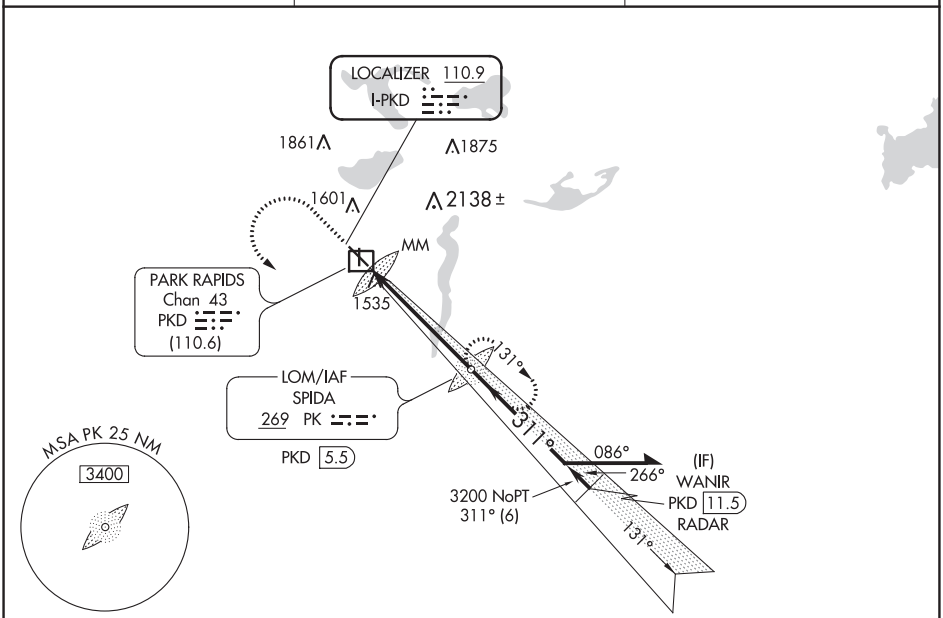
ADF required. ADF or RADAR required for procedure entry.

T A NA — Circling Rwy 18, 36 NA at night. For inop ALS, increase S-LOC 31 Cat C/D visibility to 1⅜ SM.

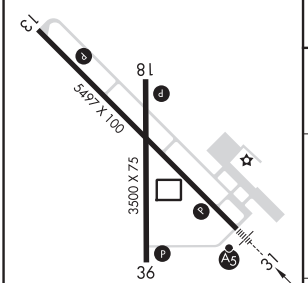
MALSR A5

MISSED APPROACH: Climb to 3200 then left turn direct SPIDA LOM and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
110.6	134.75 251.1	123.0 (CTAF) L

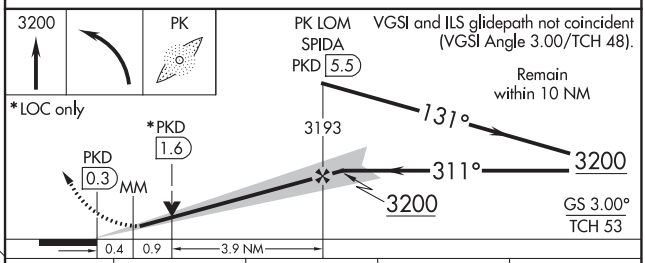


ELEV 1445 TDZE 1444



HIRL Rwy 13-31 L
MIRL Rwy 18-36 L
REIL Rwys 13, 18 and 36 L

FAF to MAP 5.3 NM					
Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46



CATEGORY	A	B	C	D
S-ILS 31	1644-½ 200 (200-½)			
S-LOC 31	1920-½ 476 (500-½)		1920-1 476 (500-1)	
C CIRCLING	1920-1 475 (500-1)	1980-1 535 (600-1)	2000-1½ 555 (600-1½)	2500-3 1055 (1100-3)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

PARK RAPIDS, MINNESOTA — AL-5298 (FAA) — 21056

WAAS CH 86925 W13A	APP CRS 131°	Rwy ldg 5497 TDZE 1445 Apt Elev 1445

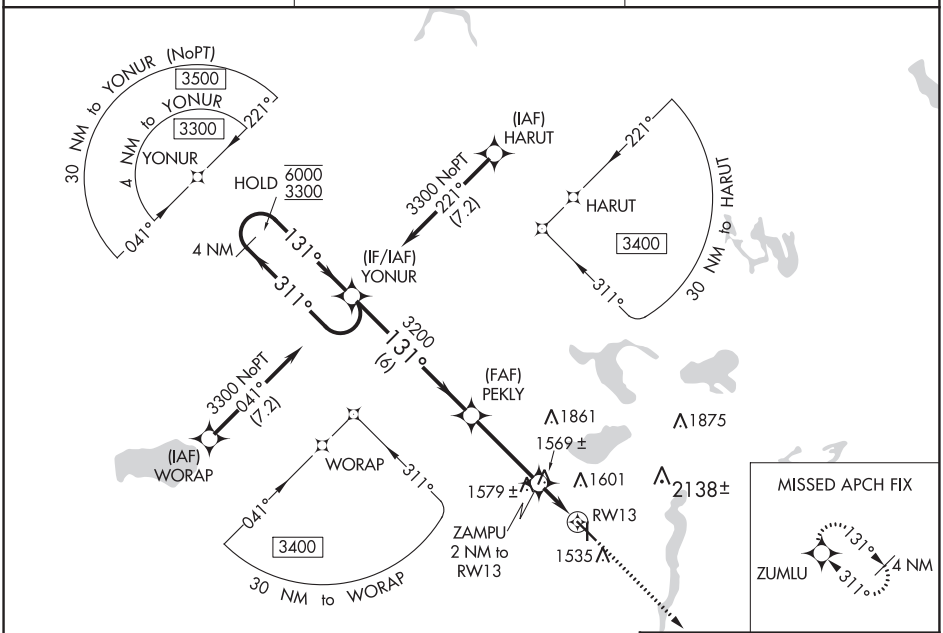
RNAV (GPS) RWY 13
PARK RAPIDS MUNI-KONSHOK FIELD (PKD)

RNP APCH.

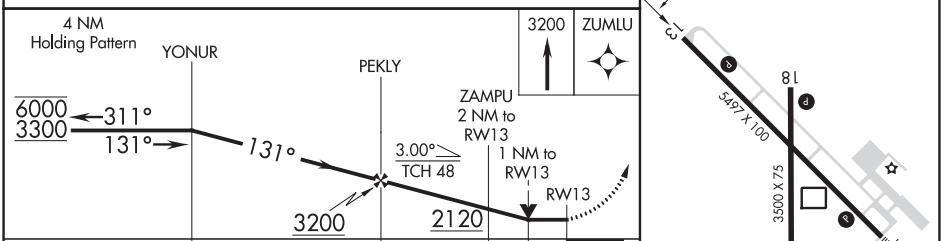
Circling Rwy 18, 36 NA at night.
Rwy 13 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3200 direct ZUMLU and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
110.6	134.75 251.1	123.0 (CTAF) L



ELEV 1445 TDZE 1445



CATEGORY	A	B	C	D
LP MDA	1820-1 375 (400-1)			
LNAV MDA	1840-1 395 (400-1)		1840-1⅛ 395 (400-1⅛)	
C CIRCLING	1900-1 455 (500-1)	1980-1 535 (600-1)	2000-1½ 555 (600-1½)	2500-3 1055 (1100-3)

HIRL Rwy 13-31 L
MIRL Rwy 18-36 L
REIL Rwys 13, 18 and 36 L

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 82525 W31A	APP CRS 311°	Rwy ldg 5497 TDZE 1444 Apt Elev 1445

RNAV (GPS) RWY 31
PARK RAPIDS MUNI-KONSHOK FIELD (PKD)

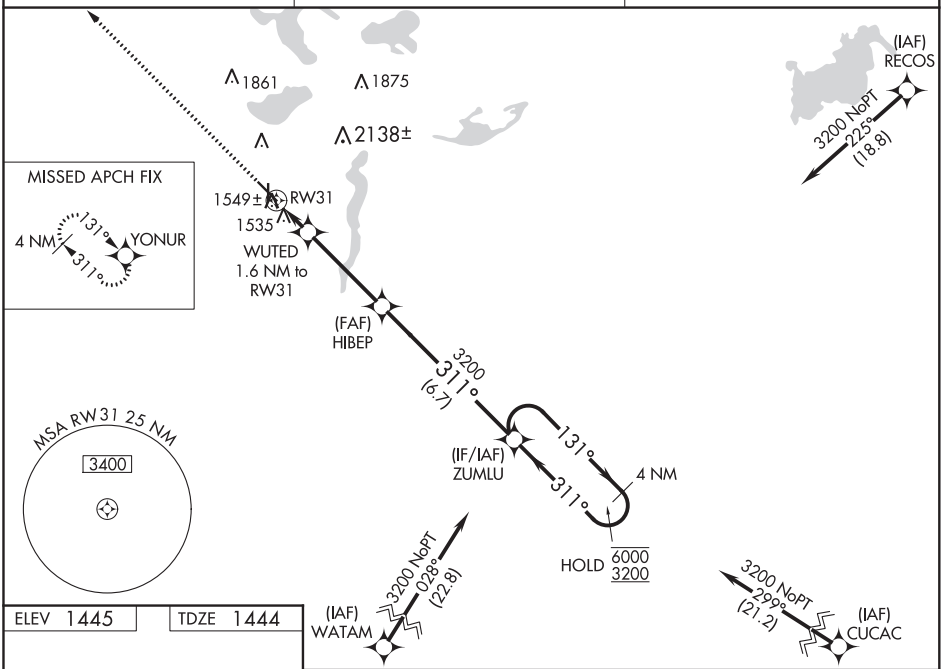
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 34°C.
Circling Rwy 18, 36 NA at night.
For inop ALS, increase LNAV/VNAV all Cats visibility to ⅞ SM and LNAV Cat C/D visibility to 1 SM.

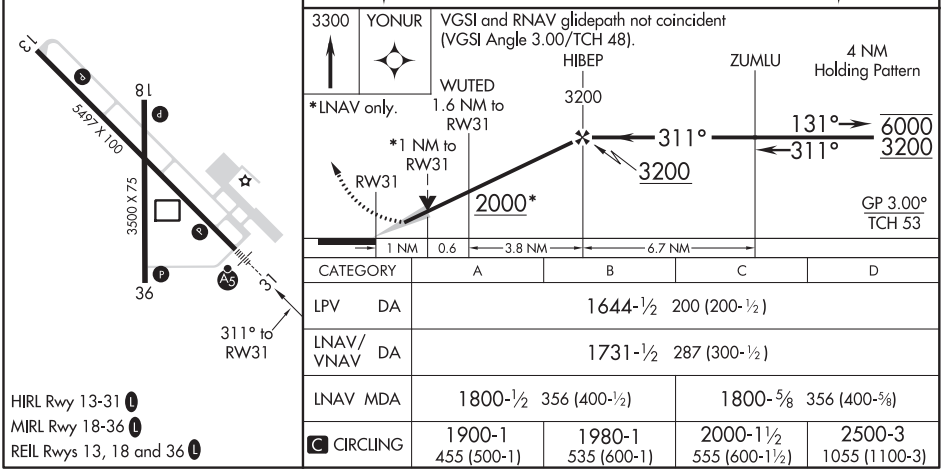
MALSR

MISSED APPROACH: Climb to 3300 direct YONUR and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
110.6	134.75 251.1	123.0 (CTAF) L



ELEV 1445 TDZE 1444



CATEGORY	A	B	C	D
LPV DA	1644-½ 200 (200-½)			
LNAV/VNAV DA	1731-½ 287 (300-½)			
LNAV MDA	1800-½ 356 (400-½)		1800-⅝ 356 (400-⅝)	
C CIRCLING	1900-1 455 (500-1)	1980-1 535 (600-1)	2000-1½ 555 (600-1½)	2500-3 1055 (1100-3)

HIRL Rwy 13-31 L
MIRL Rwy 18-36 L
REIL Rwys 13, 18 and 36 L

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

PARKSTON, SOUTH DAKOTA AL-10407 (FAA) 19283

RNAV (GPS) RWY 15
PARKSTON MUNI (8V3)

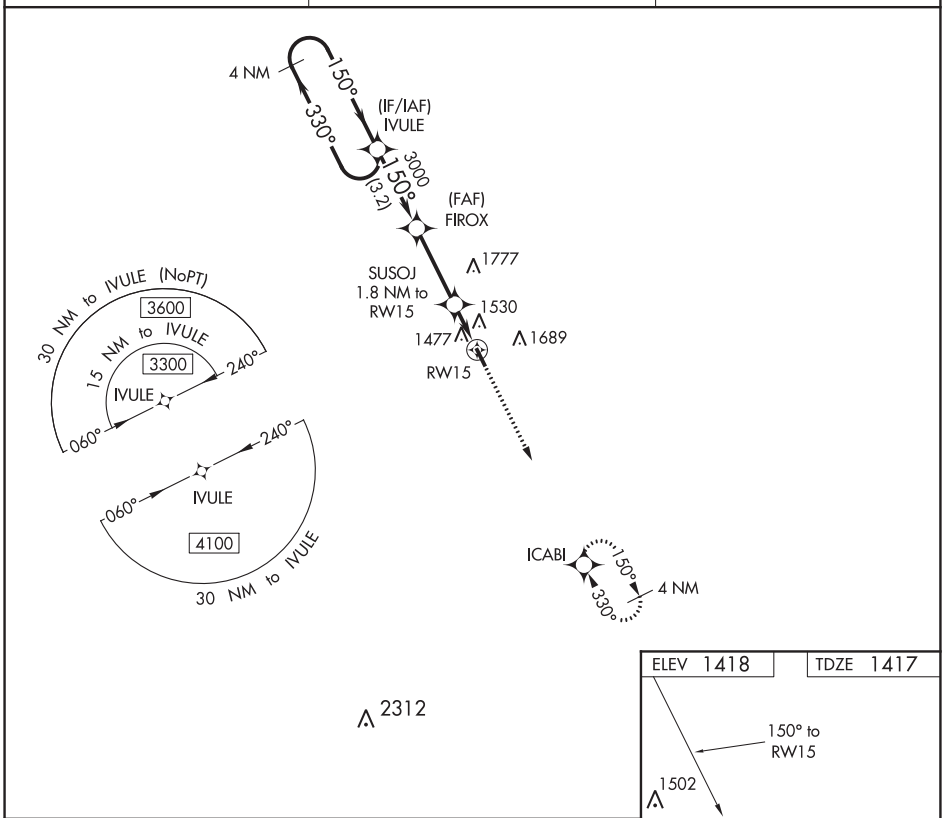
APP CRS	Rwy ldg	3600
150°	TDZE	1417
	Apt Elev	1418

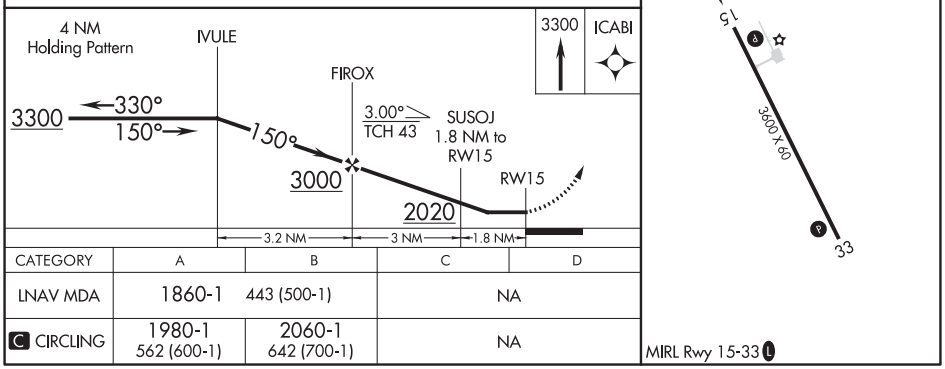
T A NA

DME/DME RNP-0.3 NA. Use Mitchell altimeter setting; when not received, use Yankton altimeter setting and increase all MDA 40 feet. Helicopter visibility reduction below ¾ SM not authorized.

MISSED APPROACH: Climb to 3300 direct ICABI and hold.

MHE ASOS	MINNEAPOLIS CENTER	AUNICOM
124.175	128.0 385.5	122.9 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	1860-1 443 (500-1)		NA	
C CIRCLING	1980-1 562 (600-1)	2060-1 642 (700-1)	NA	

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NC-1, 25 FEB 2021 to 22 APR 2021

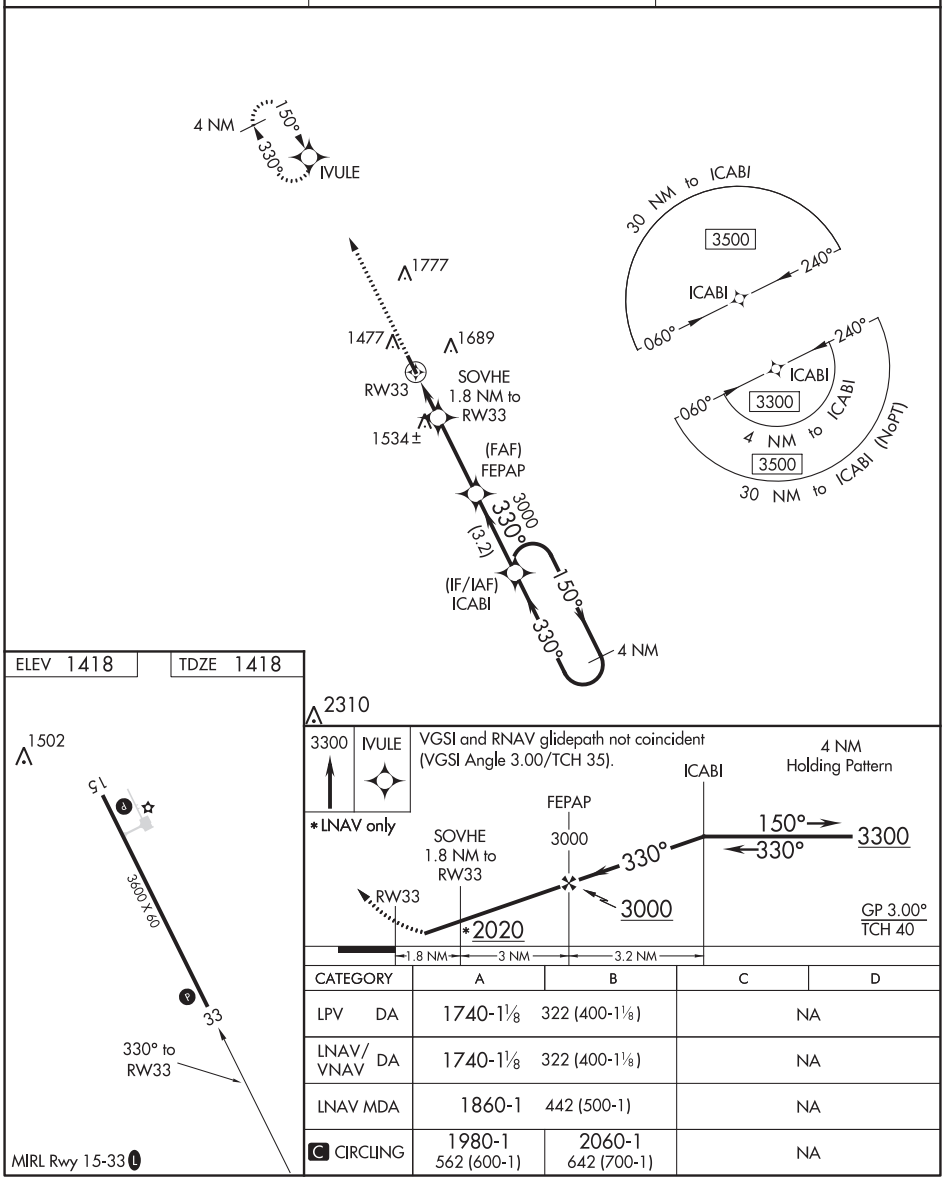
WAAS CH 62833 W33A	APP CRS 330°	Rwy ldg 3600 TDZE 1418 Apt Elev 1418

RNAV (GPS) RWY 33
PARKSTON MUNI (8V3)

NA DME/DME RNP-0.3 NA. Use Mitchell altimeter setting; when not received, use Yankton altimeter setting and increase all DA 32 feet and all MDA 40 feet. Helicopter visibility reduction below ¾ SM not authorized. Baro-VNAV NA.

MISSED APPROACH: Climb to 3300 direct IVULE and hold.

MHE ASOS	MINNEAPOLIS CENTER	AUNICOM
124.175	128.0 385.5	122.9 (CTAF) L



CATEGORY	A	B	C	D
LPV DA	1740-1⅛	322 (400-1⅛)	NA	
LNAV/VNAV DA	1740-1⅛	322 (400-1⅛)	NA	
LNAV MDA	1860-1	442 (500-1)	NA	
C CIRCLING	1980-1 562 (600-1)	2060-1 642 (700-1)	NA	

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PAYNESVILLE, MINNESOTA AL-10366 (FAA) 19227

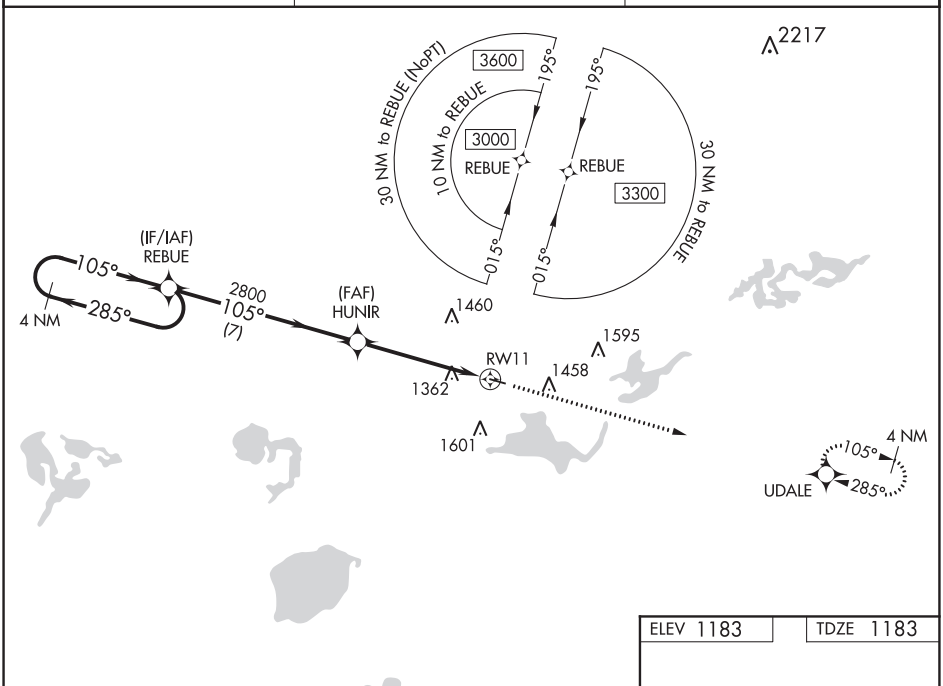
WAAS CH 50133 W11A	APP CRS 105°	Rwy ldg 3302 TDZE 1183 Apt Elev 1183

RNAV (GPS) RWY 11
PAYNESVILLE MUNI (PEX)

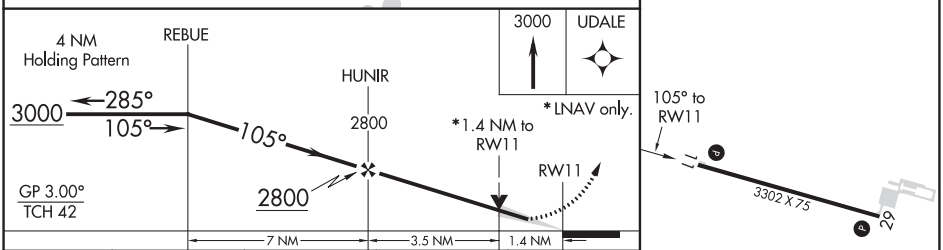
Baro-VNAV and VDP NA when using Litchfield altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Litchfield altimeter setting and increase all DA 51 feet and all MDA 60 feet; increase LPV and LNAV/VNAV all Cats visibility ⅛ mile and LNAV Cat C and Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 3000 direct UDALE and hold.

AWOS-3PT	MINNEAPOLIS CENTER	CTAF
120.35	125.5 323.1	122.9 L



ELEV 1183 TDZE 1183



CATEGORY	A	B	C	D
LPV DA	1383-1 200 (200-1)			NA
LNAV/VNAV DA	1653-1⅝ 470 (500-1⅝)			NA
LNAV MDA	1680-1 497 (500-1)		1680-1⅜ 497 (500-1⅜)	NA
CIRCLING	1680-1 497 (500-1)	1700-1 517 (600-1)	1780-1½ 597 (600-1½)	NA

MIRL Rwy 11-29 L
REIL Rwys 11 and 29 L

NC-1, 25 FEB 2021 to 22 APR 2021

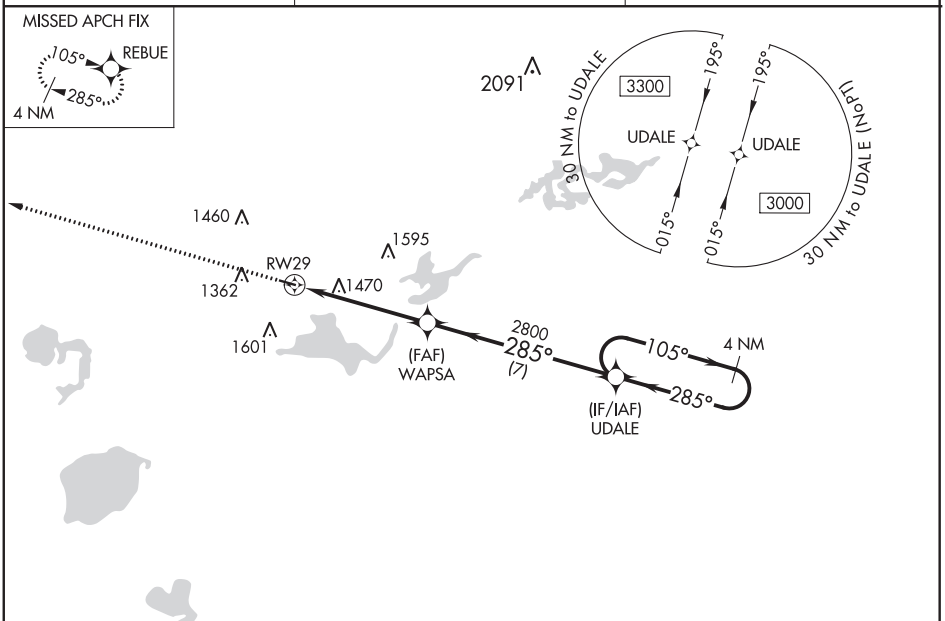
WAAS CH 65633 W29A	APP CRS 285°	Rwy ldg 3302 TDZE 1183 Apt Elev 1183

RNAV (GPS) RWY 29
PAYNESVILLE MUNI (PEX)

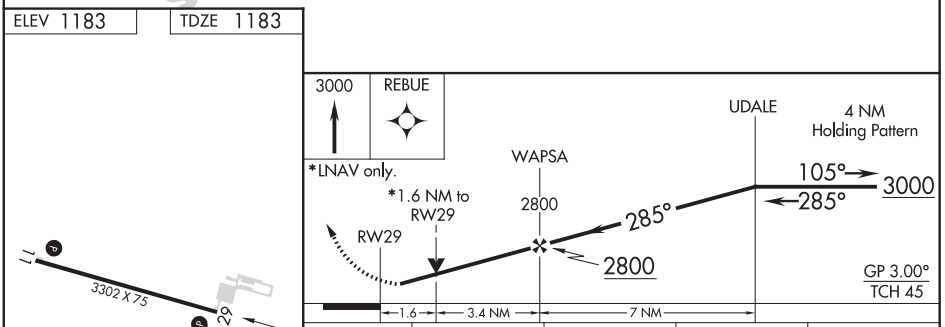
Baro-VNAV and VDP NA when using Litchfield altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA. When local altimeter not received, use Litchfield altimeter setting and increase all DA 51 feet and all MDA 60 feet; increase LNAV/VNAV all Cats and LNAV and Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 3000 direct REBUE and hold.

AWOS-3PT	MINNEAPOLIS CENTER	CTAF
120.35	125.5 323.1	122.9



ELEV 1183 TDZE 1183



CATEGORY	A	B	C	D
LPV DA	1383-1 200 (200-1)			NA
LNAV/VNAV DA	1810-2¼ 627 (700-2¼)			NA
LNAV MDA	1720-1 537 (600-1)		1720-1½ 537 (600-1½)	NA
CIRCLING	1720-1 537 (600-1)		1780-1½ 597 (600-1½)	NA

MIRL Rwy 11-29
REIL Rwys 11 and 29

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PEMBINA, NORTH DAKOTA | AL-315 (FAA) | 20282

APP CRS	Rwy ldg	3798
338°	TDZE	795
	Apt Elev	795

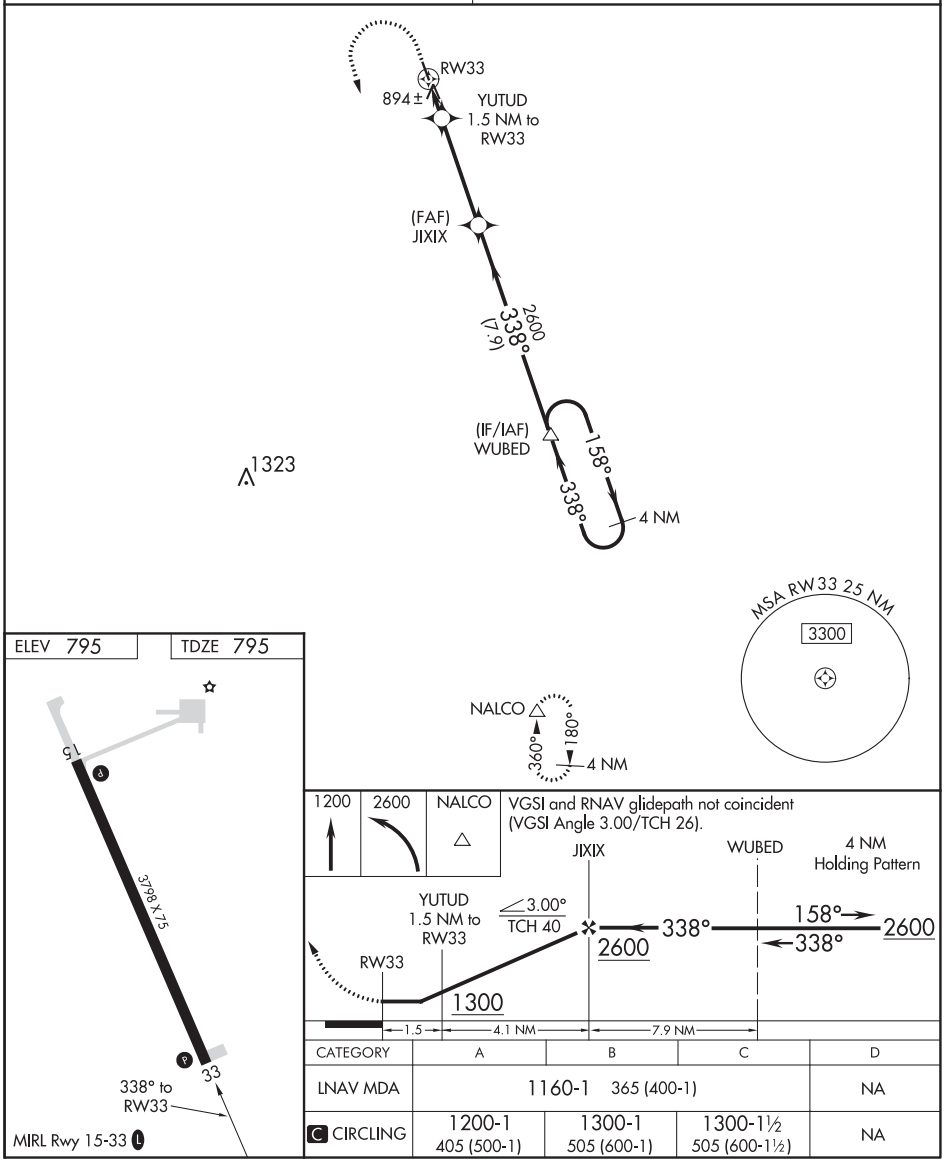
RNAV (GPS) RWY 33
PEMBINA MUNI (PMB)

RNP APCH.

T A NA — Procedure NA at night. Obtain local altimeter setting on CTAF; when not received use Hallock altimeter setting; increase all MDA 60 feet and LNAV Cat C visibility ¼ SM. Rwy 33 helicopter visibilty reduction below 1 SM NA.

MISSED APPROACH: Climb to 1200 then climbing left turn 2600 direct NALCO and hold.

MINNEAPOLIS CENTER	UNICOM
132.15 269.6	122.8 (CTAF) L



CATEGORY	A	B	C	D
LNAV MDA	1160-1 365 (400-1)			NA
C CIRCLING	1200-1 405 (500-1)	1300-1 505 (600-1)	1300-1½ 505 (600-1½)	NA

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VORTAC HML	APP CRS	Rwy Idg	N/A
112.4	303°	TDZE	N/A
Chan 71		Apt Elev	795

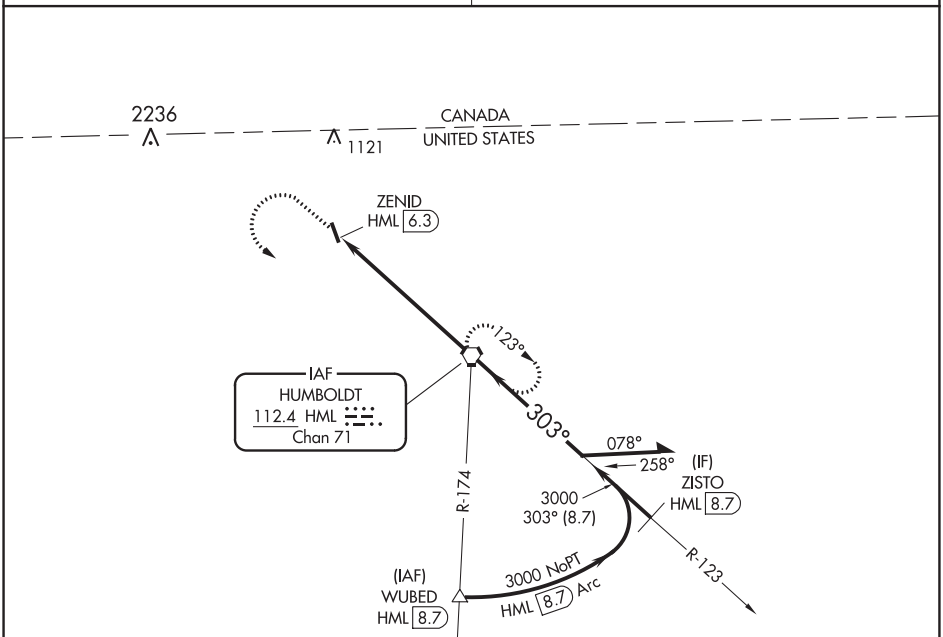
VOR-A
PEMBINA MUNI (PMB)

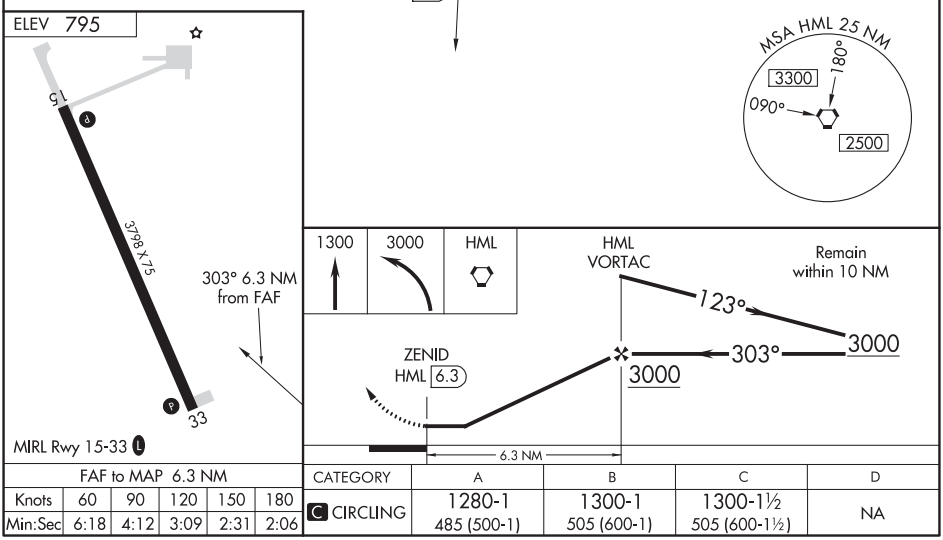
T A NA

Procedure NA at night. Obtain local altimeter setting on CTAF, when not received use Hallock altimeter setting and increase all MDA 60 feet.

MISSED APPROACH: Climb to 1300 then climbing left turn to 3000 direct HML VORTAC and hold.

MINNEAPOLIS CENTER	UNICOM
132.15 269.6	122.8 (CTAF) L





FAF to MAP 6.3 NM					
Knots	60	90	120	150	180
Min:Sec	6:18	4:12	3:09	2:31	2:06

CATEGORY	A	B	C	D
C CIRCLING	1280-1 485 (500-1)	1300-1 505 (600-1)	1300-1½ 505 (600-1½)	NA

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NC-1, 25 FEB 2021 to 22 APR 2021

PERHAM, MINNESOTA AL-9270 (FAA) 20254

WAAS CH 62933 W13A	APP CRS 128°	Rwy ldg 4102 TDZE 1376 Apt Elev 1376

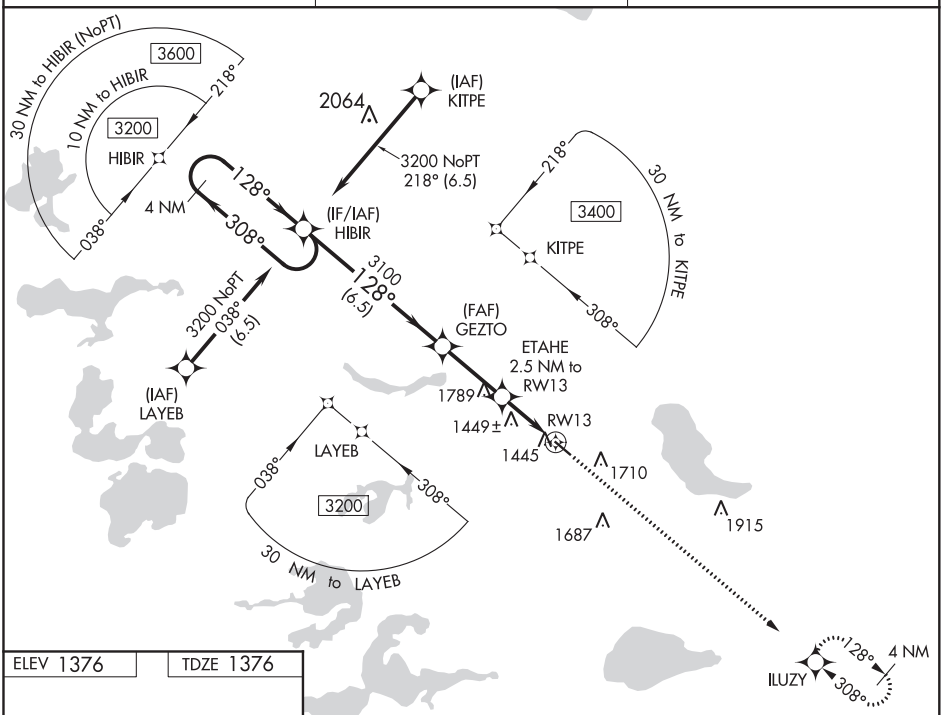
RNAV (GPS) RWY 13
PERHAM MUNI (16D)

T NA

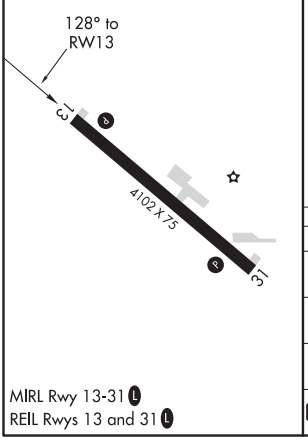
Baro-VNAV NA. DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA. Use Detroit Lakes altimeter setting; when not received, use Wadena altimeter setting.

MISSED APPROACH: Climb to 3000 direct ILUZY and hold.

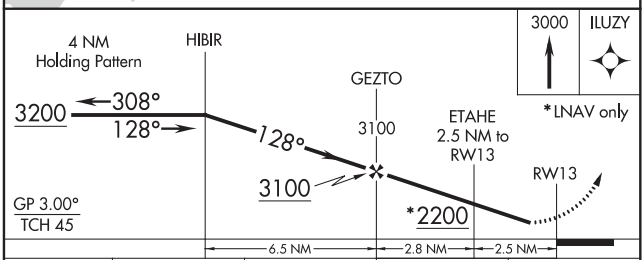
MINNEAPOLIS CENTER	GCO	CTAF
126.1 269.2	121.725	122.9 L



ELEV 1376 TDZE 1376



MIRL Rwy 13-31 L
REIL Rwys 13 and 31 L



CATEGORY	A	B	C	D
LPV DA	1671-1	295 (300-1)	NA	
LNAV/VNAV DA	1671-1	295 (300-1)	NA	
LNAV MDA	1760-1	384 (400-1)	NA	
C CIRCLING	2120-1	744 (800-1)	NA	

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 78133 W31A	APP CRS 308°	Rwy ldg 4102 TDZE 1374 Apt Elev 1376

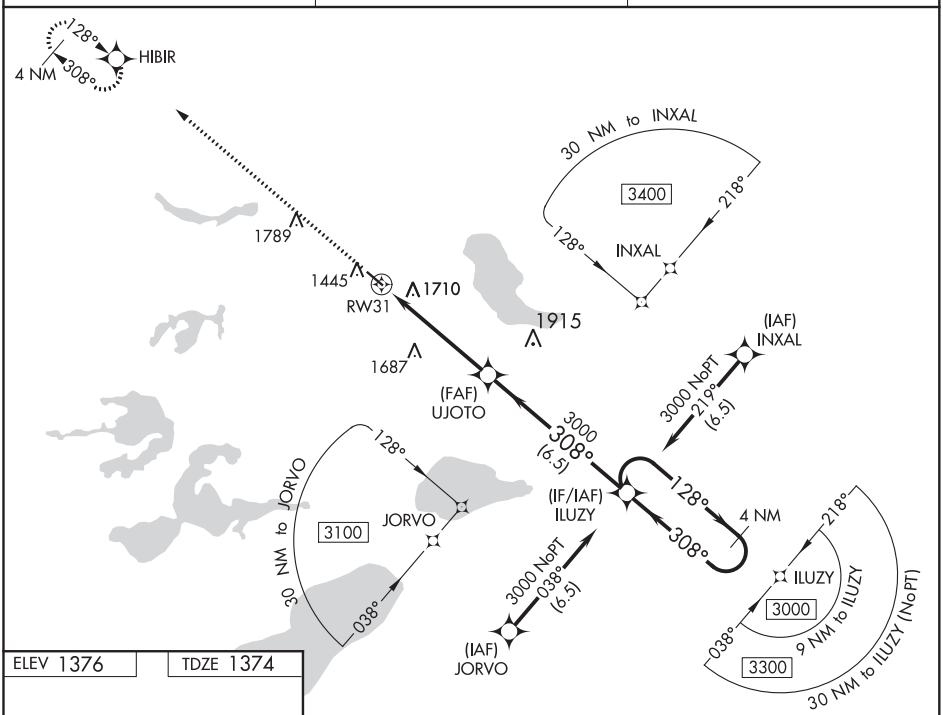
RNAV (GPS) RWY 31
PERHAM MUNI (16D)

T NA

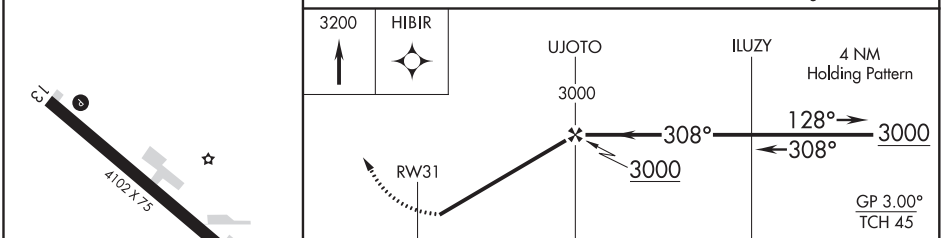
Baro-VNAV NA. DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA. Use Detroit Lakes altimeter setting; when not received, use Wadena altimeter setting.

MISSED APPROACH: Climb to 3200 direct HIBIR and hold.

MINNEAPOLIS CENTER	GCO	CTAF
126.1 269.2	121.725	122.9 L



ELEV 1376 TDZE 1374



CATEGORY	A	B	C	D
LPV DA	1669-1	295 (300-1)	NA	
LNAV/VNAV DA	2158-2½	784 (800-2½)	NA	
LNAV MDA	2080-1	706 (800-1)	NA	
C CIRCLING	2120-1	744 (800-1)	NA	

MIRL Rwy 13-31 L
REIL Rwys 13 and 31 L

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NC-1, 25 FEB 2021 to 22 APR 2021

PHILIP, SOUTH DAKOTA — AL-850 (FAA) — 20086

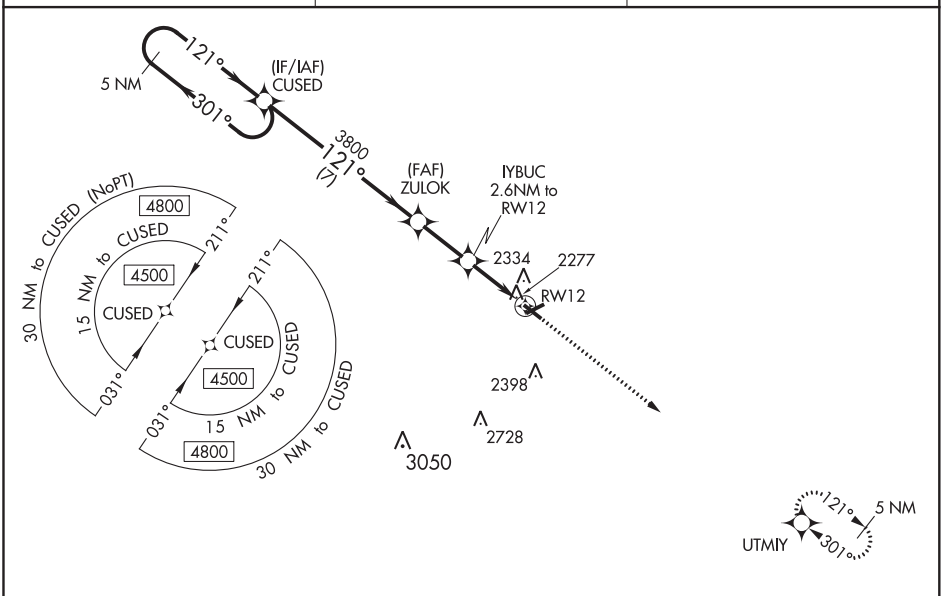
WAAS CH 78434 W12A	APP CRS 121°	Rwy ldg 3998 TDZE 2209 Apt Elev 2209

RNAV (GPS) RWY 12
PHILIP (PHP)

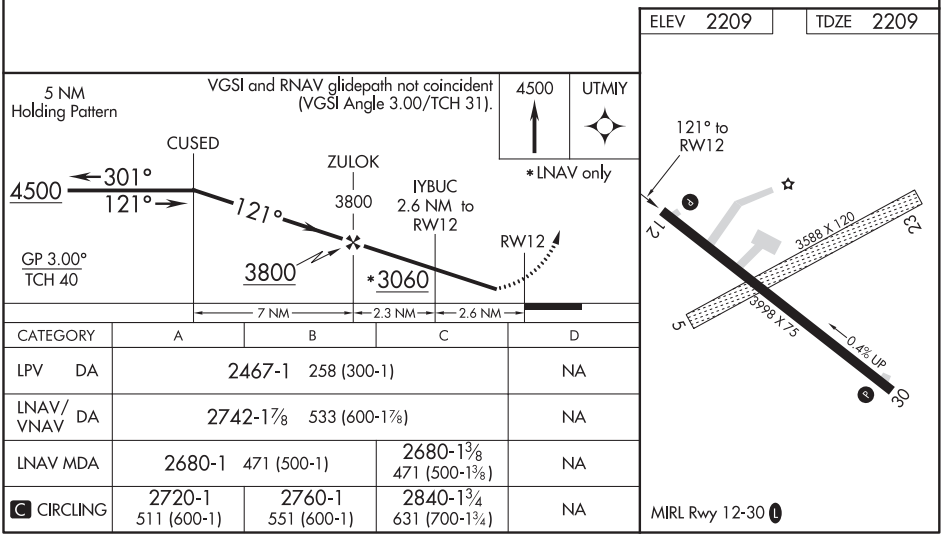
DME/DME RNP-0.3 NA. When local altimeter setting not received, use Pierre altimeter setting and increase all DA 204 feet and MDA 220 feet and increase LPV and LNAV/VNAV all Cats visibility 5/8 mile, increase LNAV Cat C visibility 1/2 mile, and increase Circling Cat C visibility 3/4 mile. Helicopter visibility reduction below 1 SM NA. Procedure NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -14°C (7°F) or above 54°C (130°F). Baro-VNAV NA when using Pierre altimeter setting.

MISSED APPROACH: Climb to 4500 direct UTMIY and hold.

ASOS	DENVER CENTER	UNICOM
118.375	127.95 338.2	122.8 (CTAF) L



ELEV 2209 | TDZE 2209



CATEGORY	A	B	C	D
LPV DA	2467-1 258 (300-1)			NA
LNAV/VNAV DA	2742-1 7/8 533 (600-1 7/8)			NA
LNAV MDA	2680-1 471 (500-1)		2680-1 3/8 471 (500-1 3/8)	NA
C CIRCLING	2720-1 511 (600-1)	2760-1 551 (600-1)	2840-1 3/4 631 (700-1 3/4)	NA

PHILIP, SOUTH DAKOTA
Orig-A 21AUG14

44°03'N-101°36'W

PHILIP (PHP)
RNAV (GPS) RWY 12

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

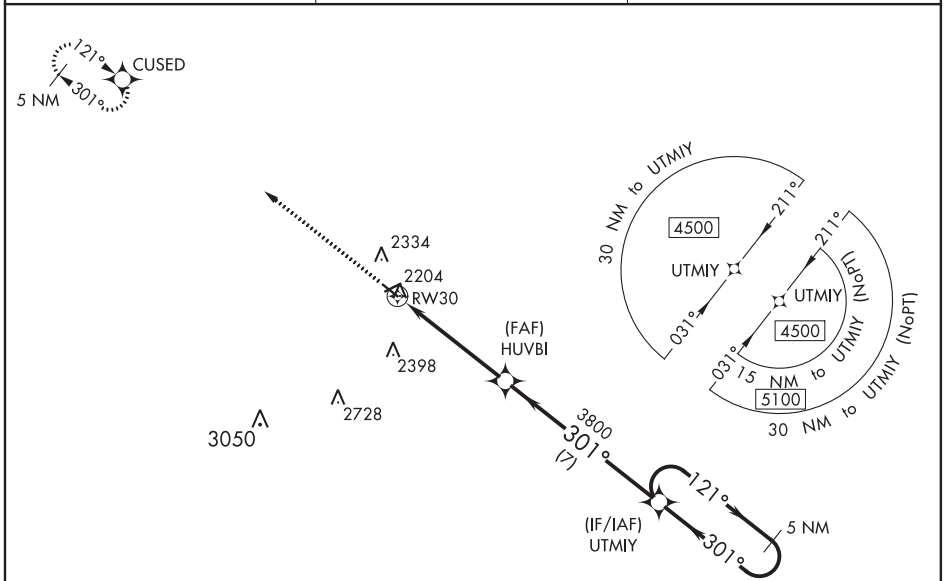
WAAS CH 99335 W30A	APP CRS 301°	Rwy ldg 3998 TDZE 2206 Apt Elev 2209

RNAV (GPS) RWY 30
PHILIP (PHP)

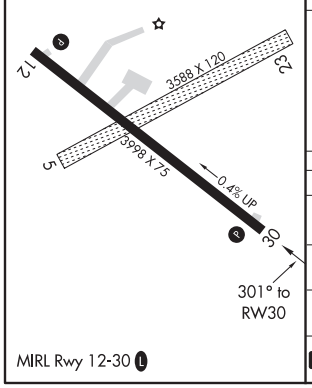
DME/DME RNP-0.3 NA. When local altimeter setting not received, use Pierre altimeter setting and increase all DA 204 feet and MDA 220 feet and increase LPV all Cats visibility ½ mile, increase LNAV/VNAV all Cats visibility 1 mile, increase LNAV Cat C visibility ½ mile, and increase Circling Cat C visibility ¾ mile. Helicopter visibility reduction below 1 SM NA. Procedure NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -14°C (7°F) or above 54°C (130°F). Baro-VNAV NA when using Pierre altimeter setting.

MISSED APPROACH: Climb to 4500 direct CUSED and hold.

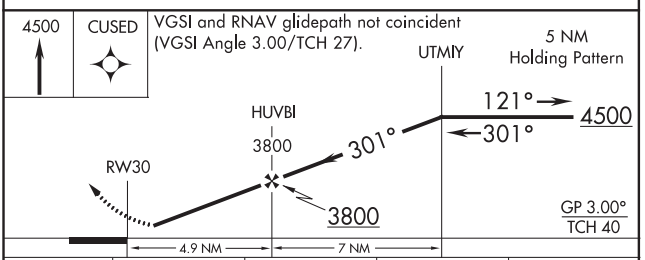
ASOS	DENVER CENTER	UNICOM
118.375	127.95 338.2	122.8 (CTAF) L



ELEV 2209 TDZE 2206



MIRL Rwy 12-30 L



CATEGORY	A	B	C	D
LPV DA	2456-1 250 (300-1)		2456-1⅜ 250 (300-1⅜)	NA
LNAV/VNAV DA	2794-2 588 (600-2)			NA
LNAV MDA	2620-1 414 (500-1)		2620-1¼ 414 (500-1¼)	NA
C CIRCLING	2720-1 511 (600-1)	2760-1 551 (600-1)	2840-1¾ 631 (700-1¾)	NA

NC-1, 25 FEB 2021 to 22 APR 2021

PHILIP, SOUTH DAKOTA | AL-850 (FAA) | 20310

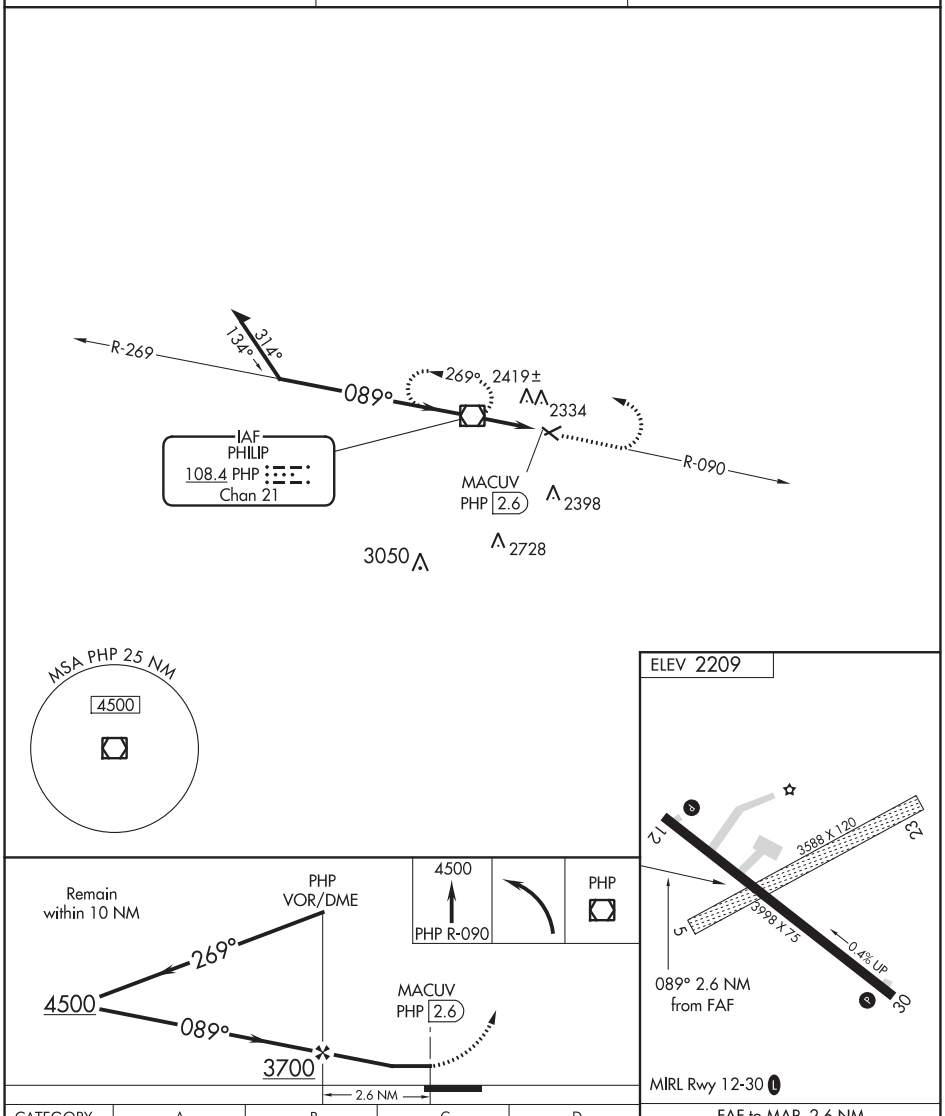
VOR-A
PHILIP (PHP)

VOR/DME PHP	APP CRS	Rwy ldg	N/A
108.4	089°	TDZE	N/A
Chan 21		Apt Elev	2209

Circling to Rwy 12-30 NA at night. When local altimeter setting not received, use Pierre Rgnl altimeter setting and increase all MDA 220 feet, and increase Circling Cat C visibility ¾ mile.

MISSED APPROACH: Climb to 4500 on PHP VOR/DME R-090, then left turn direct PHP VOR/DME and hold.

ASOS	DENVER CENTER	UNICOM
118.375	127.95 338.2	122.8 (CTAF) L



CATEGORY	A	B	C	D
C CIRCLING	2720-1 511 (600-1)	2760-1 551 (600-1)	2840-1¾ 631 (700-1¾)	NA

FAF to MAP 2.6 NM					
Knots	60	90	120	150	180
Min:Sec	2:36	1:44	1:18	1:02	0:52

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

ILS or LOC RWY 31
PIERRE RGNL (PIR)

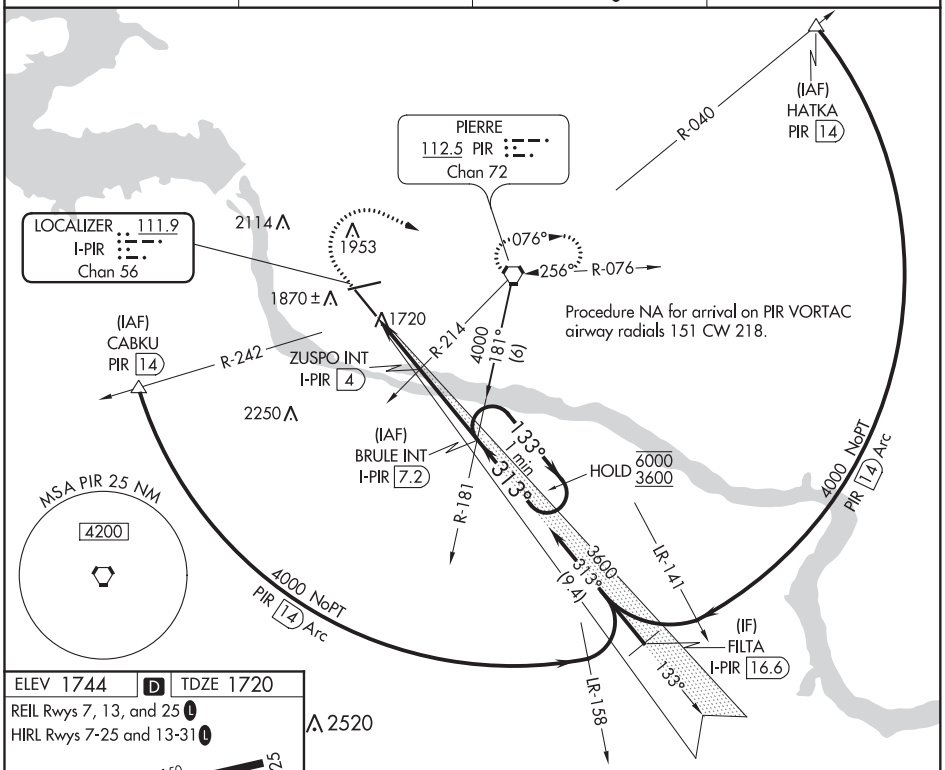
LOC/DME I-PIR	APP CRS	Rwy ldg	6900
111.9	313°	TDZE	1720
Chan 56		Apt Elev	1744

For inop ALS, increase S-LOC 31 Cat C/D visibility to ⅞ SM.

MALSR

MISSED APPROACH: Climb to 2400 then climbing right turn to 4000 direct PIR VORTAC and hold, continue climb-in-hold to 4000.

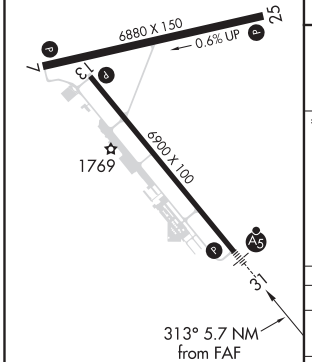
ASOS	MINNEAPOLIS CENTER	CTAF	UNICOM
119.025	125.1 269.1	122.7 L	122.95



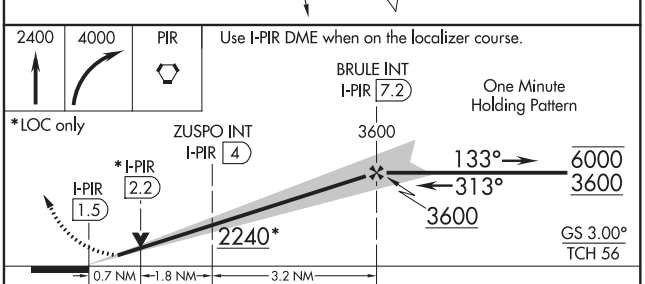
ELEV 1744 | D | TDZE 1720

REIL Rwys 7, 13, and 25 L

HIRL Rwys 7-25 and 13-31 L



FAF to MAP 5.7 NM					
Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54



CATEGORY	A	B	C	D
S-ILS 31	1920-½ 200 (200-½)			
S-LOC 31	1980-½ 260 (300-½)			
C CIRCLING	2240-1 496 (500-1)	2300-1 556 (600-1)	2400-1¾ 656 (700-1¾)	2460-2¼ 716 (800-2¼)

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

PIERRE, SOUTH DAKOTA AL-324 (FAA) 21056

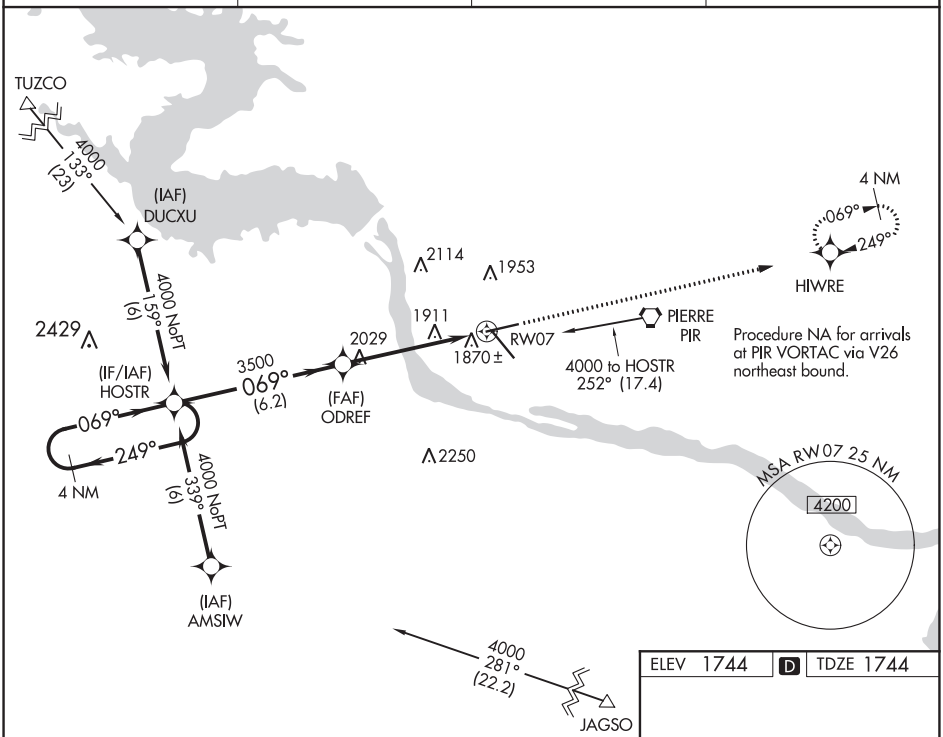
WAAS CH 45804 W07A	APP CRS 069°	Rwy ldg 6830 TDZE 1744 Apt Elev 1744

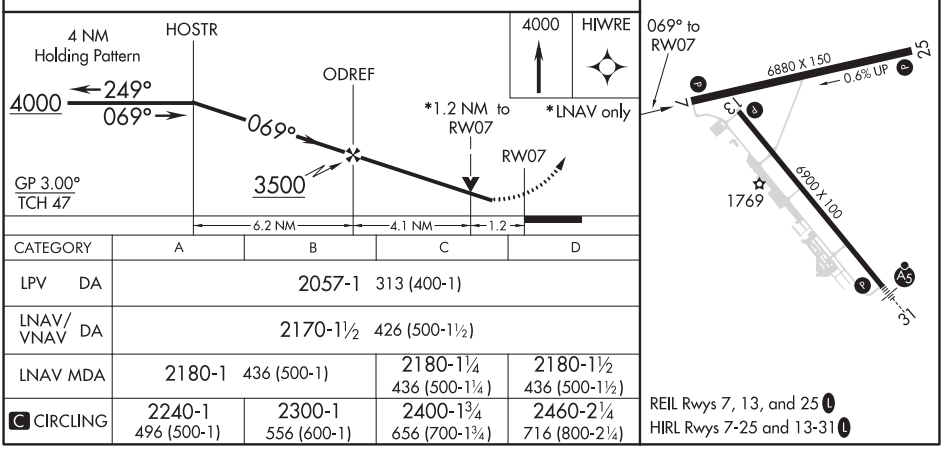
RNAV (GPS) RWY 7
PIERRE RGNL (PIR)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 45°C (113°F).
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 4000 direct HIWRE and hold.

ASOS	MINNEAPOLIS CENTER	CTAF	UNICOM
119.025	125.1 269.1	122.7 L	122.95





CATEGORY	A	B	C	D
LPV DA	2057-1 313 (400-1)			
LNAV/VNAV DA	2170-1½ 426 (500-1½)			
LNAV MDA	2180-1 436 (500-1)		2180-1¼ 436 (500-1¼)	2180-1½ 436 (500-1½)
C CIRCLING	2240-1 496 (500-1)	2300-1 556 (600-1)	2400-1¾ 656 (700-1¾)	2460-2¼ 716 (800-2¼)

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

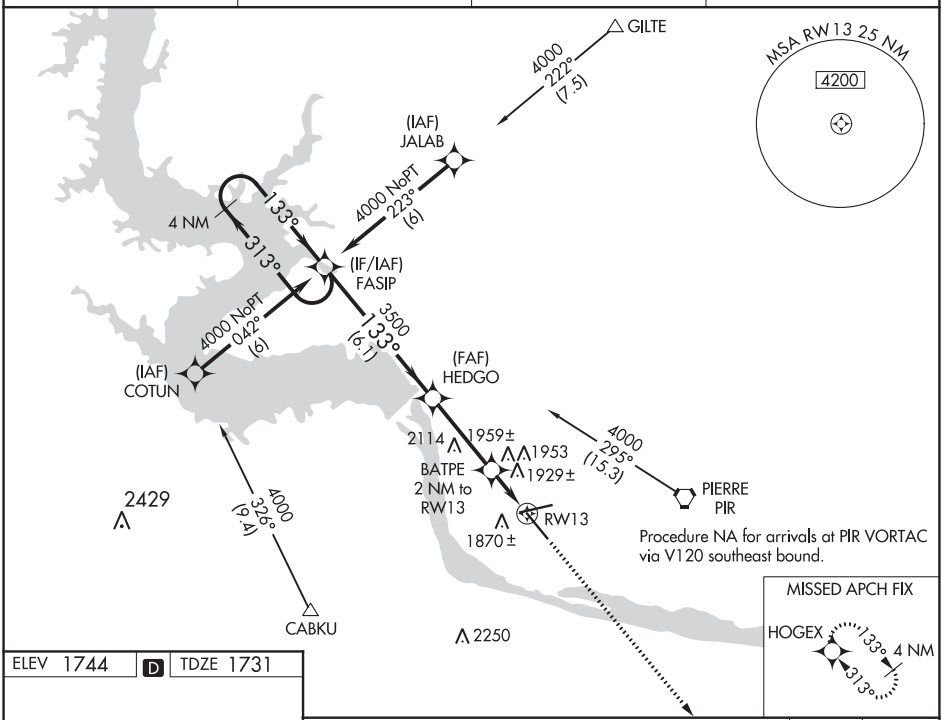
WAAS CH 53404 W13A	APP CRS 133°	Rwy ldg 6900 TDZE 1731 Apt Elev 1744

RNAV (GPS) RWY 13
PIERRE RGNL (PIR)

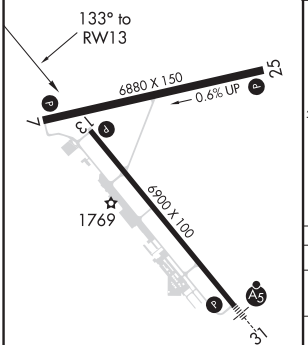
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 45°C (113°F). DME/DME RNP-0.3 NA.

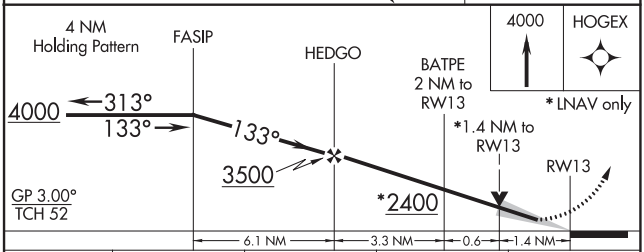
MISSED APPROACH: Climb to 4000 direct HOGEX and hold.

ASOS	MINNEAPOLIS CENTER	CTAF	UNICOM
119.025	125.1 269.1	122.7 L	122.95



ELEV 1744 D TDZE 1731





CATEGORY	A	B	C	D
LPV DA	1981-¾ 250 (300-¾)			
LNAV/VNAV DA	2285-2 554 (600-2)			
LNAV MDA	2220-1 489 (500-1)		2220-1¼ 489 (500-1¼)	2220-1½ 489 (500-1½)
C CIRCLING	2240-1 496 (500-1)	2300-1 556 (600-1)	2400-1¾ 656 (700-1¾)	2460-2¼ 716 (800-2¼)

REIL Rwys 7, 13, and 25 L
HIRL Rwys 7-25 and 13-31 L

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

PIERRE, SOUTH DAKOTA — AL-324 (FAA) — 21056

WAAS CH 63104 W25A	APP CRS 249°	Rwy ldg 6880 TDZE 1725 Apt Elev 1744

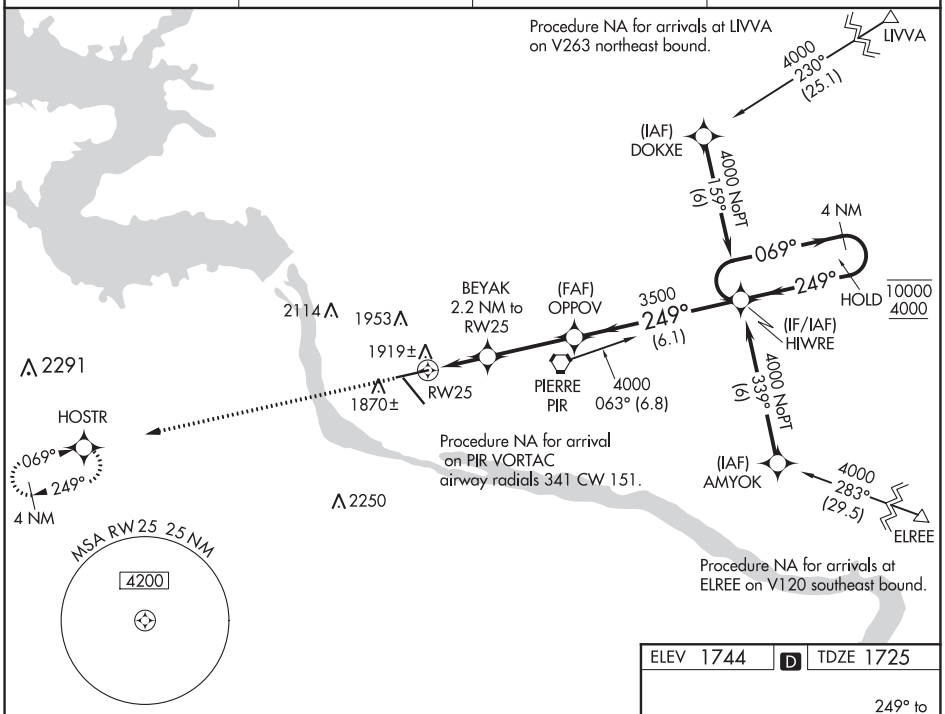
RNAV (GPS) RWY 25
PIERRE RGNL (PIR)

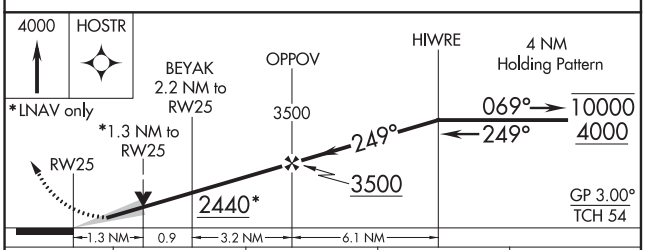
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -26°C or above 54°C.

MISSED APPROACH: Climb to 4000 direct HOSTR and hold.

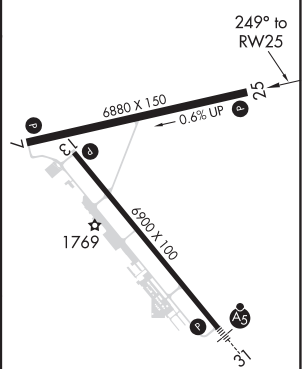
ASOS	MINNEAPOLIS CENTER	CTAF	UNICOM
119.025	125.1 269.1	122.7 L	122.95





CATEGORY	A	B	C	D
LPV DA	1975-1 250 (300-1)			
LNAV/VNAV DA	2179-1¾ 454 (500-1¾)			
LNAV MDA	2180-1 455 (500-1)		2180-1¼ 455 (500-1¼)	2180-1½ 455 (500-1½)
C CIRCLING	2240-1 496 (500-1)	2300-1 556 (600-1)	2400-1¾ 656 (700-1¾)	2460-2¼ 716 (800-2¼)

ELEV 1744 D TDZE 1725



REIL Rwys 7, 13, and 25 L
HIRL Rwys 7-25 and 13-31 L

PIERRE, SOUTH DAKOTA
Amdt 2A 25FEB21

44°23'N-100°17'W

PIERRE RGNL (PIR)
RNAV (GPS) RWY 25

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 65623 W31A	APP CRS 313°	Rwy ldg 6900 TDZE 1720 Apt Elev 1744

RNAV (GPS) RWY 31
PIERRE RGNL (PIR)

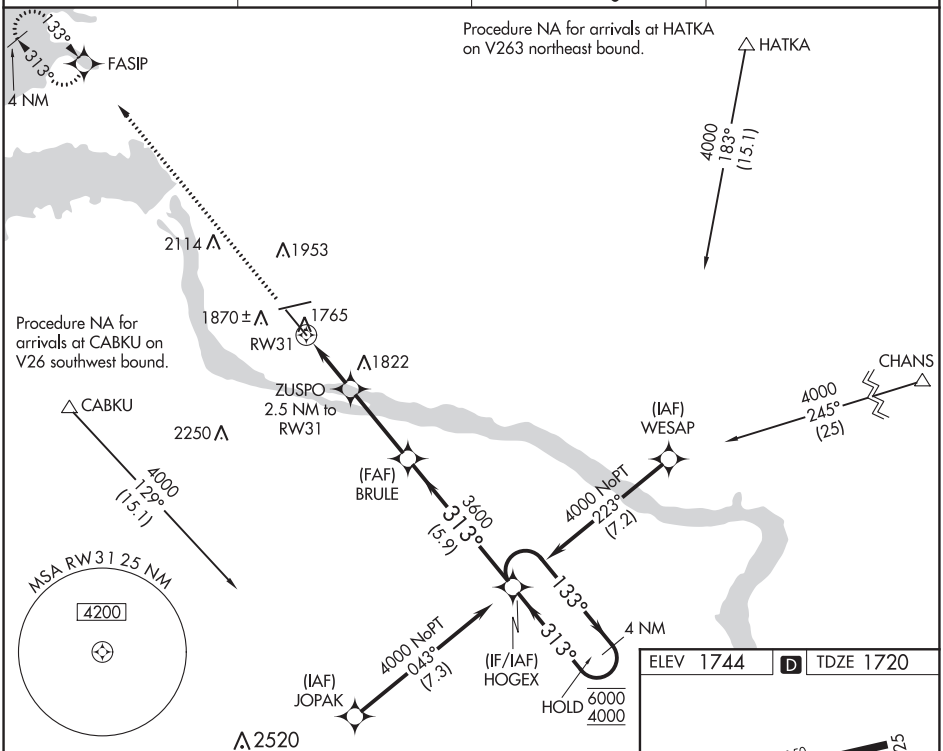
RNP APCH.

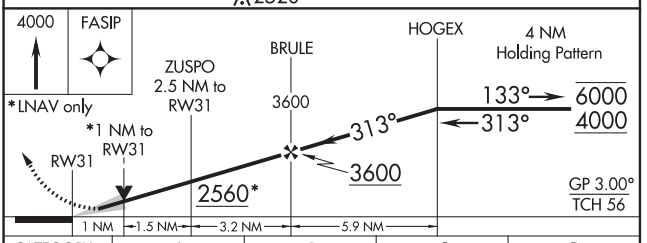
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -26°C or above 54°C. For inop ALS, increase LNAV/VNAV all Cats visibility to ¾ SM.

MALSR

MISSED APPROACH: Climb to 4000 direct FASIP and hold.

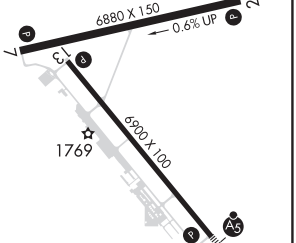
ASOS	MINNEAPOLIS CENTER	CTAF	UNICOM
119.025	125.1 269.1	122.7 L	122.95





CATEGORY	A	B	C	D
LPV DA	1920-½ 200 (200-½)			
LNAV/VNAV DA	1970-½ 250 (300-½)			
LNAV MDA	2020-½ 300 (300-½)			
C CIRCLING	2240-1 496 (500-1)	2300-1 556 (600-1)	2400-1¾ 656 (700-1¾)	2460-2¼ 716 (800-2¼)

ELEV 1744 D TDZE 1720



REIL Rwys 7, 13, and 25 L
HIRL Rwys 7-25 and 13-31 L

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

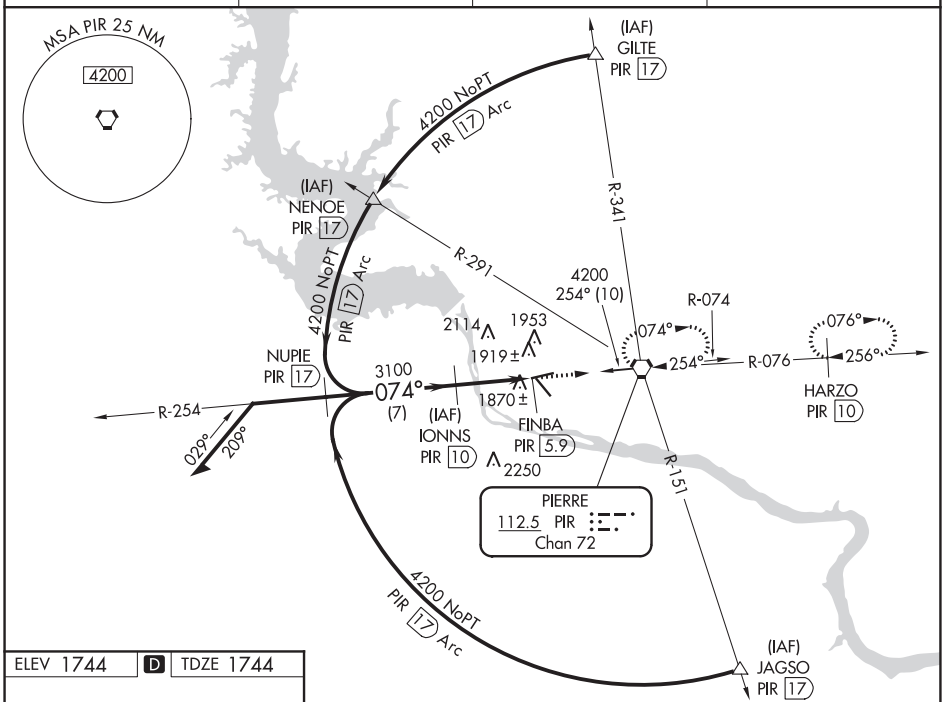
VORTAC PIR	APP CRS	Rwy ldg	6830
112.5	074°	TDZE	1744
Chan 72		Apt Elev	1744

VOR/DME or TACAN RWY 7

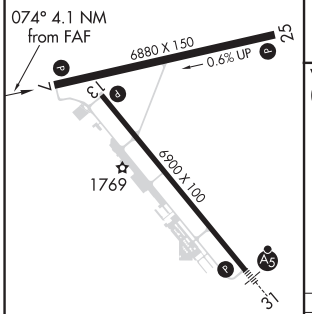
PIERRE RGNL (PIR)

MISSED APPROACH: Climb to 4000 then right turn direct PIR VORTAC and hold. (TACAN aircraft continue via PIR R-076 to HARZO 10 DME and hold East, right turns, 256° inbound).

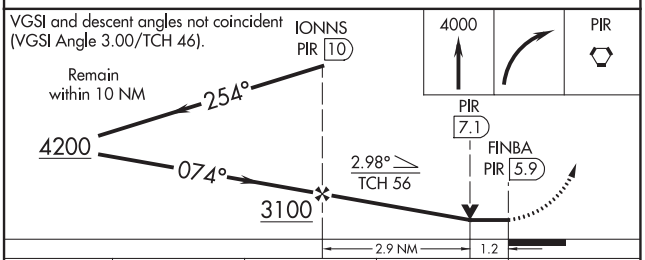
ASOS	MINNEAPOLIS CENTER	CTAF	UNICOM
119.025	125.1 269.1	122.7 L	122.95



ELEV 1744 D TDZE 1744



REIL Rwys 7, 13, and 25 L
HIRL Rwys 7-25 and 13-31 L



CATEGORY	A	B	C	D
S-7	2180-1 436 (500-1)		2180-1¼ 436 (500-1¼)	2180-1½ 436 (500-1½)
C CIRCLING	2240-1 496 (500-1)	2300-1 556 (600-1)	2400-1¾ 656 (700-1¾)	2460-2¼ 716 (800-2¼)

NC-1, 25 FEB 2021 to 22 APR 2021

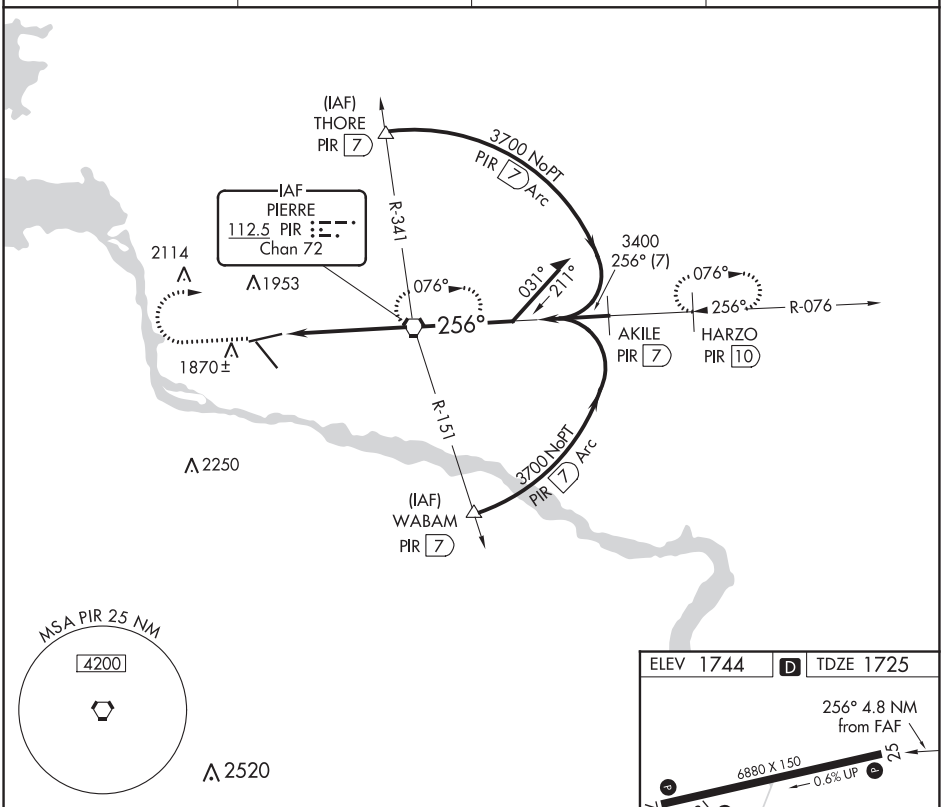
VORTAC PIR 112.5 Chan 72	APP CRS 256°	Rwy ldg 6880 TDZE 1725 Apt Elev 1744

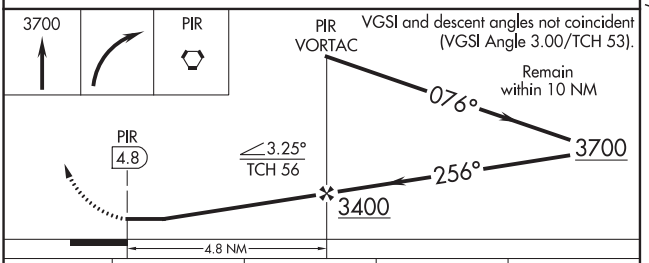
VOR or TACAN RWY 25

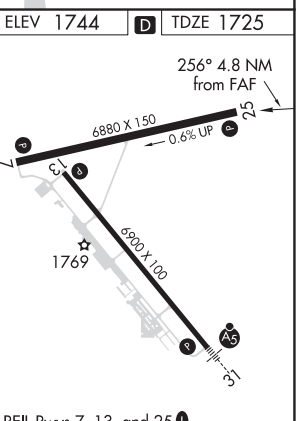
PIERRE RGNL (PIR)

MISSED APPROACH: Climb to 3700 then right turn direct PIR VORTAC and hold. (TACAN aircraft continue via PIR R-076 to HARZO 10 DME and hold east, right turns, 256° inbound)

ASOS	MINNEAPOLIS CENTER	CTAF	UNICOM
119.025	125.1 269.1	122.7 L	122.95







REIL Rwys 7, 13, and 25 L
HIRL Rwys 7-25 and 13-31 L

CATEGORY	A	B	C	D
S-25	2120-1 395 (400-1)			2120-1¼ 395 (400-1¼)
C CIRCLING	2240-1 496 (500-1)	2300-1 556 (600-1)	2400-1¾ 656 (700-1¾)	2460-2¼ 716 (800-2¼)

FAF to MAP 4.8 NM					
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

NC-1, 25 FEB 2021 to 22 APR 2021

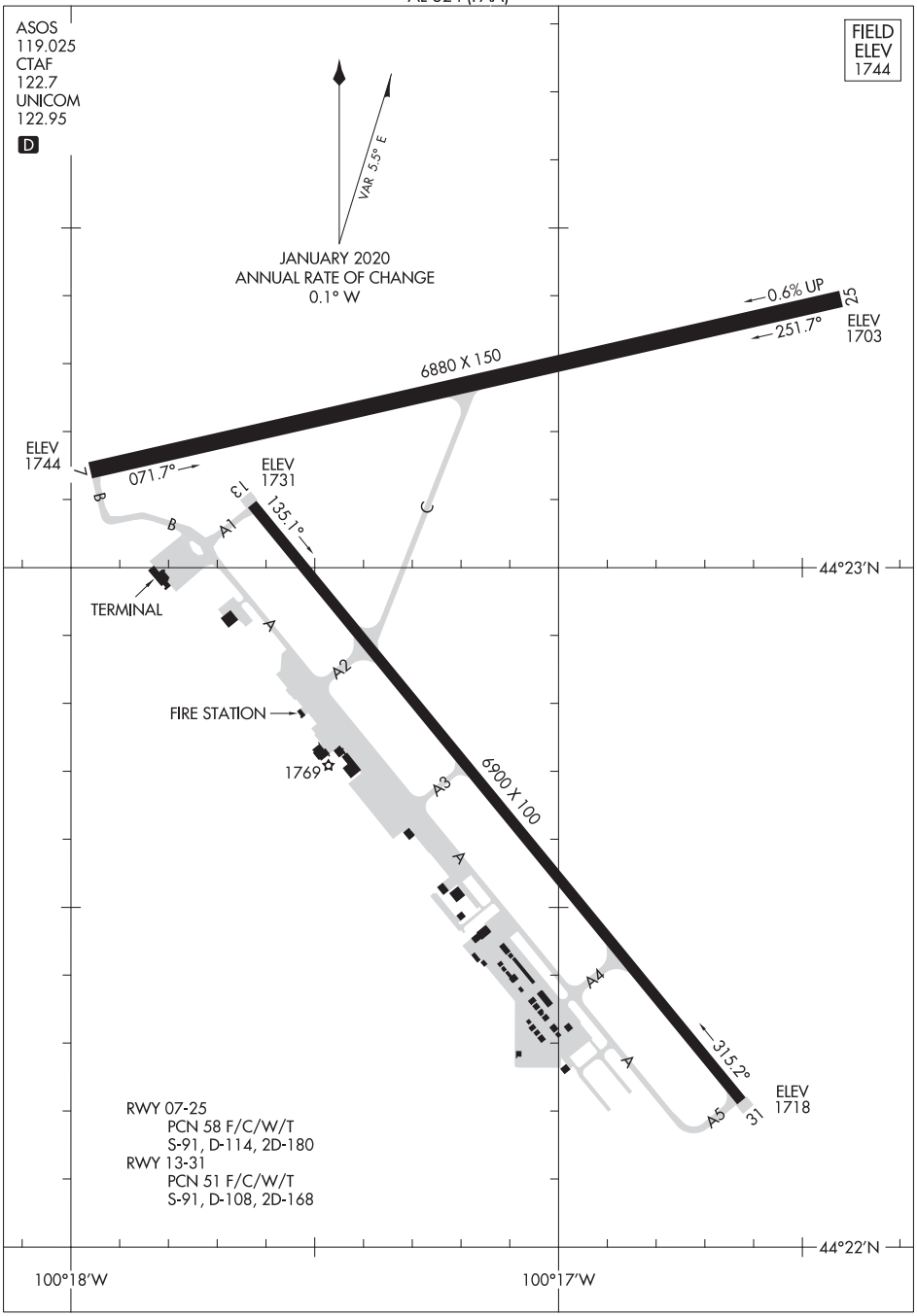
NC-1, 25 FEB 2021 to 22 APR 2021

20366

AIRPORT DIAGRAM

PIERRE RGNL (PIR)
PIERRE, SOUTH DAKOTA

AL-324 (FAA)



NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

AIRPORT DIAGRAM
20366
PIERRE, SOUTH DAKOTA
PIERRE RGNL (PIR)

WAAS CH 97542 W12A	APP CRS 122°	Rwy ldg 5000 TDZE 3319 Apt Elev 3333

RNAV (GPS) RWY 12
PINE RIDGE (IEN)

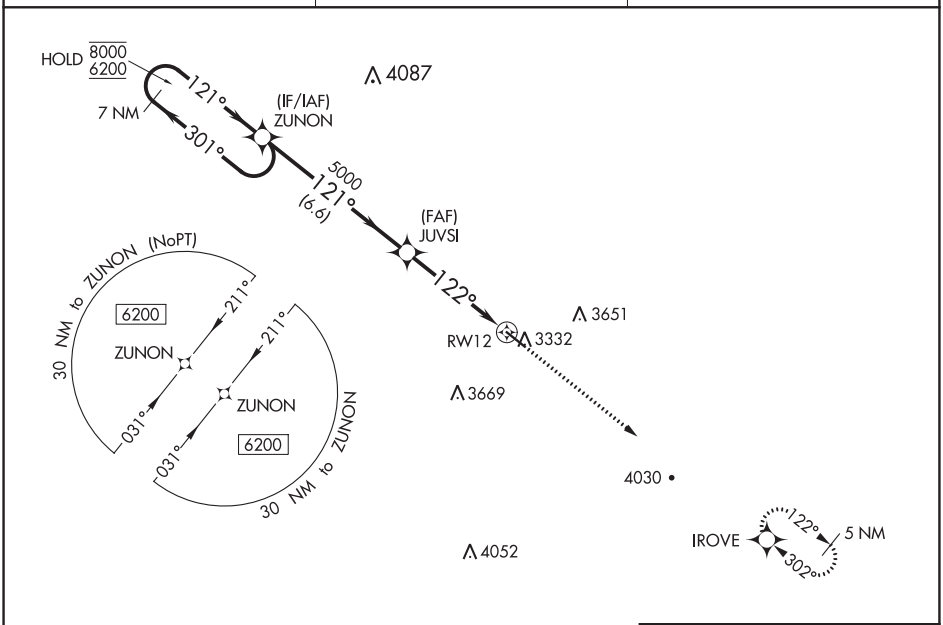
RNP APCH.

-33°C/-27°F

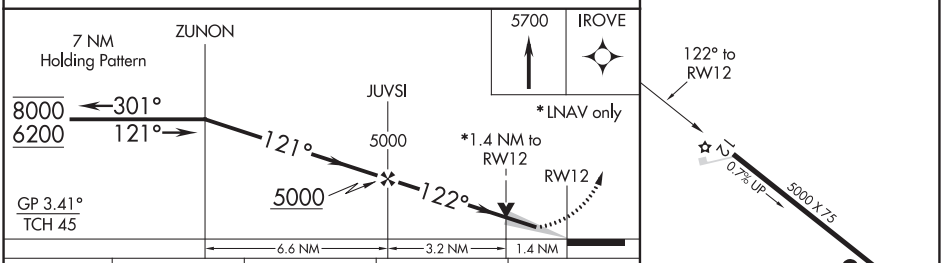
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -28°C or above 54°C.

MISSED APPROACH: Climb to 5700 direct IROVE and hold.

ASOS	DENVER CENTER	CTAF
126.775	127.95 338.2	122.9 L



ELEV 3333 TDZE 3319



CATEGORY	A	B	C	D
LPV DA	3589-1 270 (300-1)			NA
LNAV/VNAV DA	3772-1⅜ 453 (500-1⅜)			NA
LNAV MDA	3840-1 521 (600-1)		3840-1½ 521 (600-1½)	NA
C CIRCLING	3900-1 567 (600-1)	4080-1 747 (800-1)	4200-2½ 867 (900-2½)	NA

MIRL Rwy 12-30 L

NC-1, 25 FEB 2021 to 22 APR 2021

PINE RIDGE, SOUTH DAKOTA | AL-9036 (FAA) | 18256

APP CRS	Rwy ldg	5000
302°	TDZE	3333
	Apt Elev	3333

RNAV (GPS) RWY 30
PINE RIDGE (IEN)

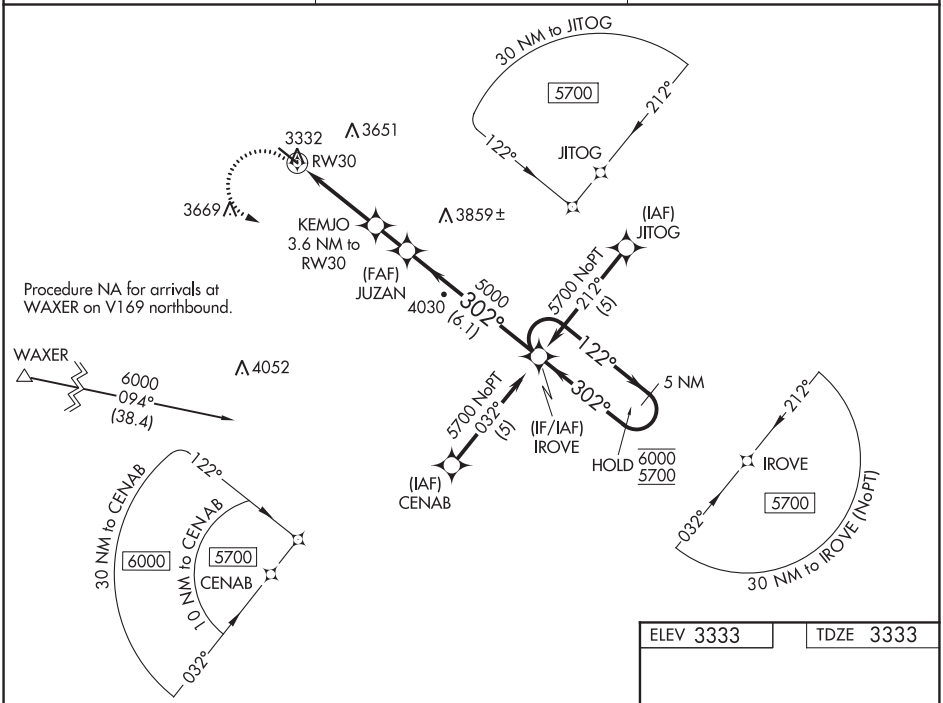
RNP APCH.

Rwy 30 helicopter visibility reduction below ¾ SM NA.

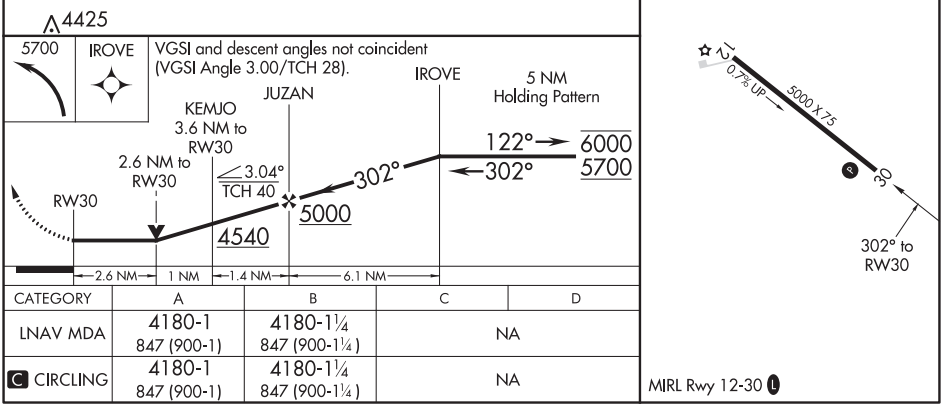
-33°C/-27°F

MISSED APPROACH: Climbing left turn to 5700 direct IROVE and hold.

ASOS	DENVER CENTER	CTAF
126.775	127.95 338.2	122.9 L



ELEV 3333 | TDZE 3333



CATEGORY	A	B	C	D
LNAV MDA	4180-1 847 (900-1)	4180-1¼ 847 (900-1¼)	NA	
C CIRCLING	4180-1 847 (900-1)	4180-1¼ 847 (900-1¼)	NA	

MIRL Rwy 12-30 L

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

APP CRS	Rwy ldg	3000
340°	TDZE	1295
	Apt Elev	1295

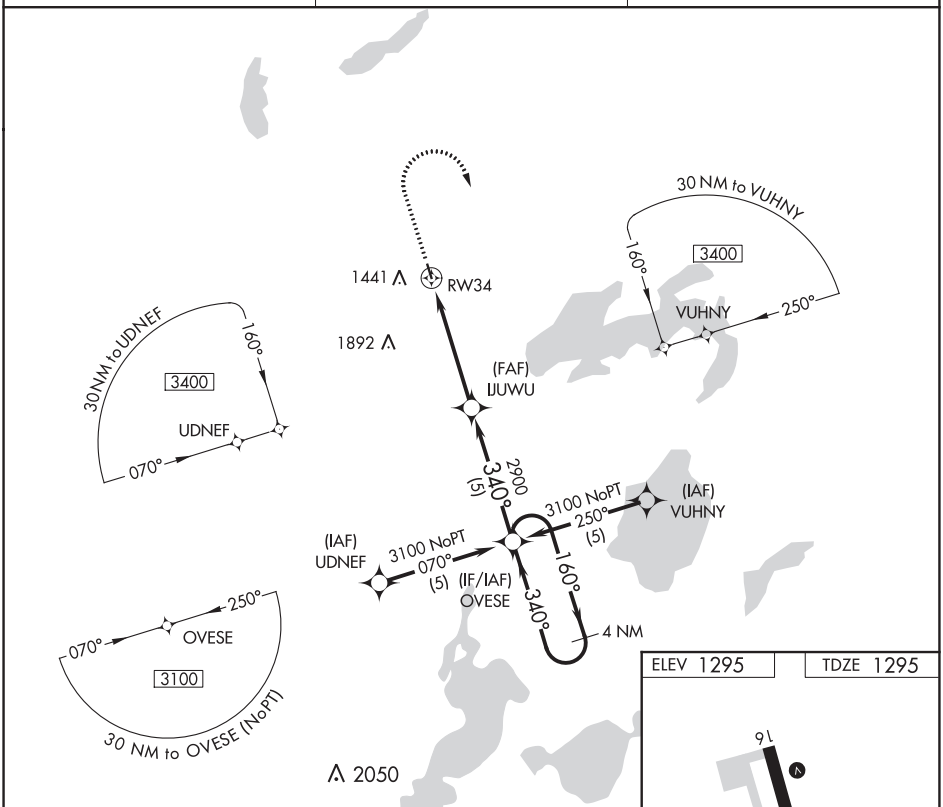
RNAV (GPS) RWY 34
PINE RIVER RGNL (PWC)

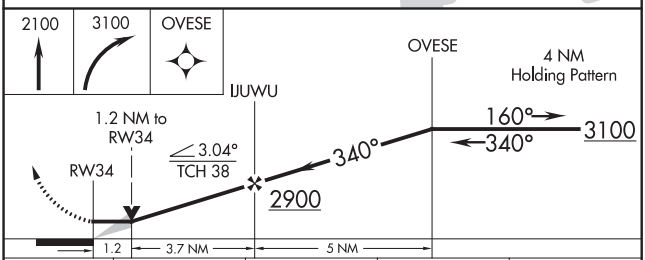
T
A NA

GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

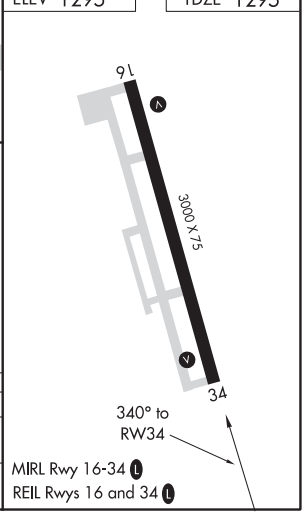
MISSED APPROACH: Climb to 2100 then climbing right turn to 3100 direct OVESE WP and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
118.525	118.05 239.0	122.9 L





CATEGORY	A	B	C	D
LNAV MDA	1700-1 405 (500-1)		1700-1¼ 405 (500-1¼)	NA
CIRCLING	1760-1 465 (500-1)		1760-1½ 465 (500-1½)	NA



NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

NDB PWC	APP CRS	Rwy ldg	3000
330	334°	TDZE	1296
		Apt Elev	1296

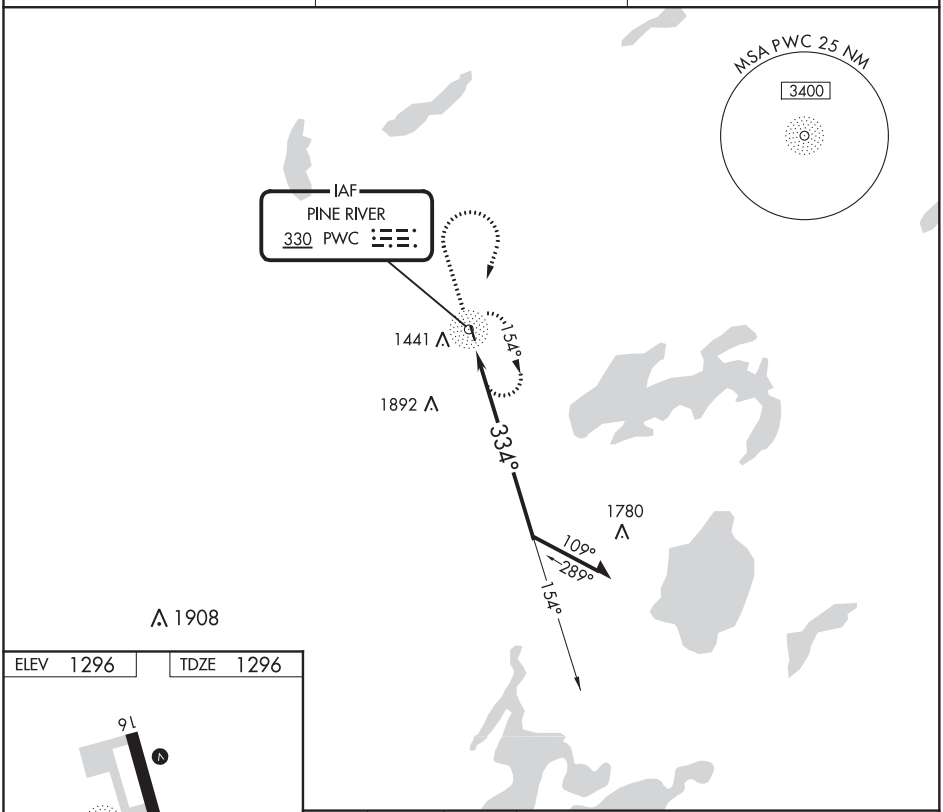
NDB RWY 34
PINE RIVER RGNL (PWC)

RADAR required for procedure entry.

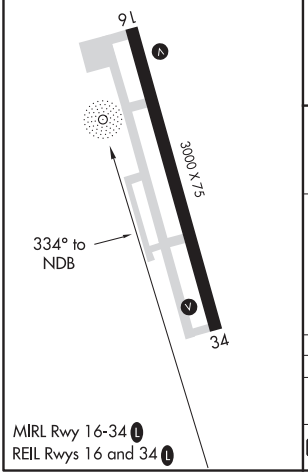
T A Rwy 34 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3100 then right turn direct PWC NDB and hold.

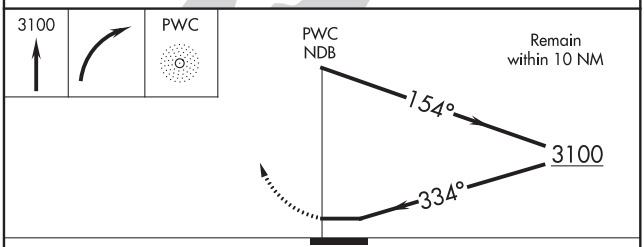
AWOS-3	MINNEAPOLIS CENTER	CTAF
118.525	118.05 239.0	122.9 L



ELEV 1296 TDZE 1296



MIRL Rwy 16-34 L
REIL Rwys 16 and 34 L



CATEGORY	A	B	C	D
S-34	2180-1¼	884 (900-1¼)	2180-2½ 884 (900-2½)	NA
C CIRCLING	2180-1¼	884 (900-1¼)	2180-2¾ 884 (900-2¾)	NA

NC-1, 25 FEB 2021 to 22 APR 2021

APP CRS	Rwy ldg	3297
147°	TDZE	1082
	Apt Elev	1082

RNAV (GPS) RWY 15
PINEY PINECREEK BORDER (48Y)

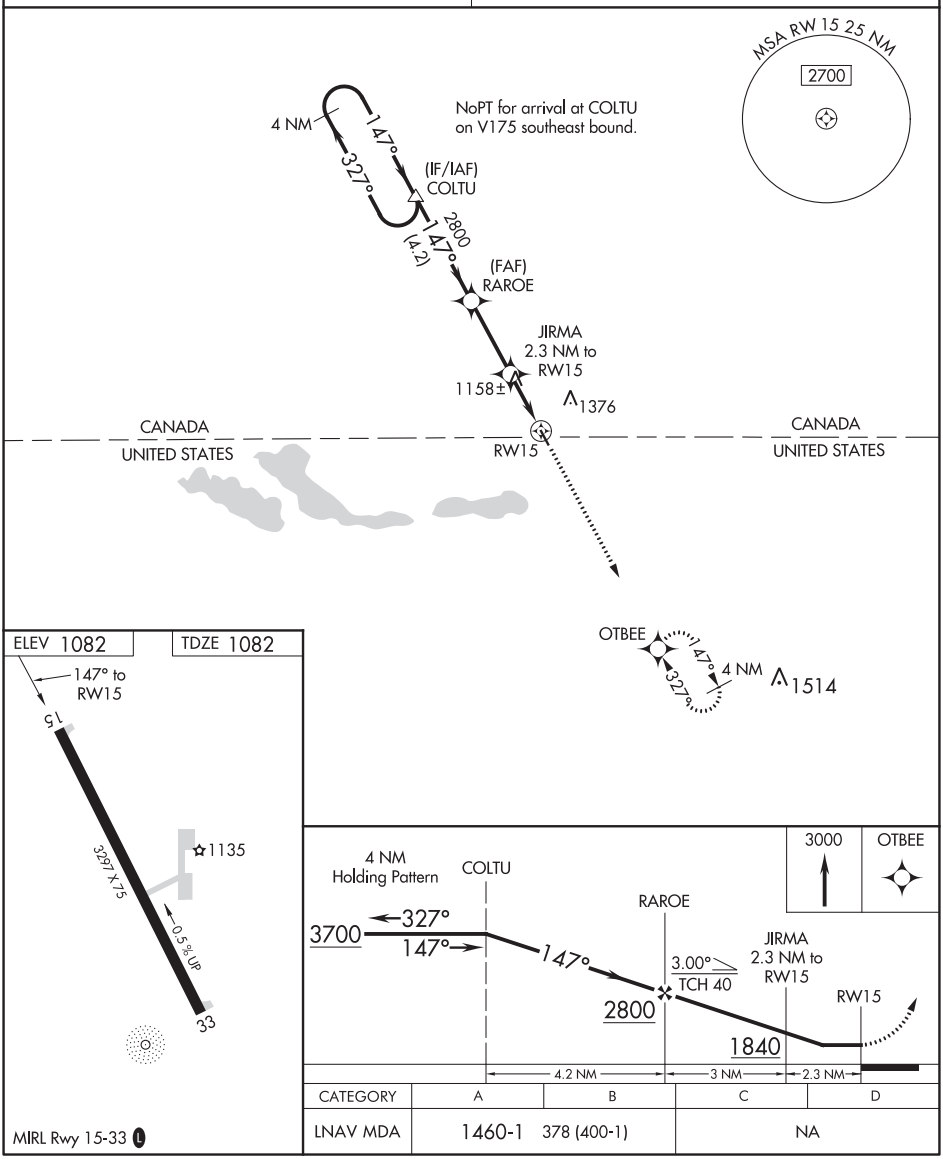
RNP APCH.

NA

Use Roseau altimeter setting; when not received, use Warroad altimeter setting and increase all MDA 40 feet. Rwy 15 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3000 direct OTBEE and hold.

MINNEAPOLIS CENTER	UNICOM
134.75 251.1	122.8 (CTAF) L



CATEGORY	A	B	C	D
LNAV MDA	1460-1	378 (400-1)	NA	

MIRL Rwy 15-33 L

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

PINECREEK, MINNESOTA

AL-9222 (FAA)

21056

RNAV (GPS) RWY 33
PINEY PINECREEK BORDER (48Y)

APP CRS	Rwy ldg	3297
327°	TDZE	1081
	Apt Elev	1082

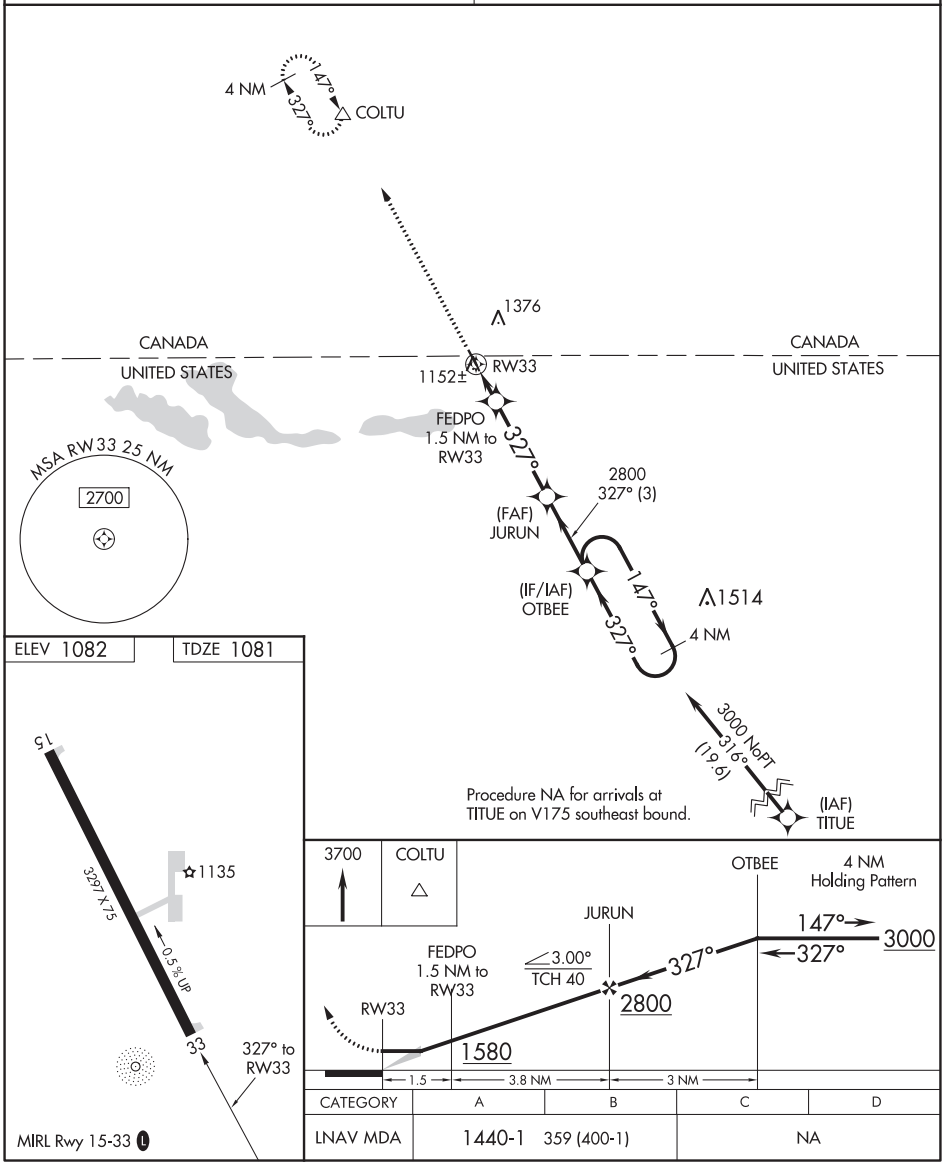
RNP APCH.

Use Roseau altimeter setting; when not received, use Warroad altimeter setting and increase all MDA 40 feet.

NA

MISSED APPROACH: Climb to 3700 direct COLTU and hold.

MINNEAPOLIS CENTER	UNICOM
134.75 251.1	122.8 (CTAF) L



CATEGORY	A	B	C	D
LNAV MDA	1440-1 359 (400-1)		NA	

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

NDB PFT	APP CRS	Rwy ldg	3297
342	317°	TDZE	1081
		Apt Elev	1082

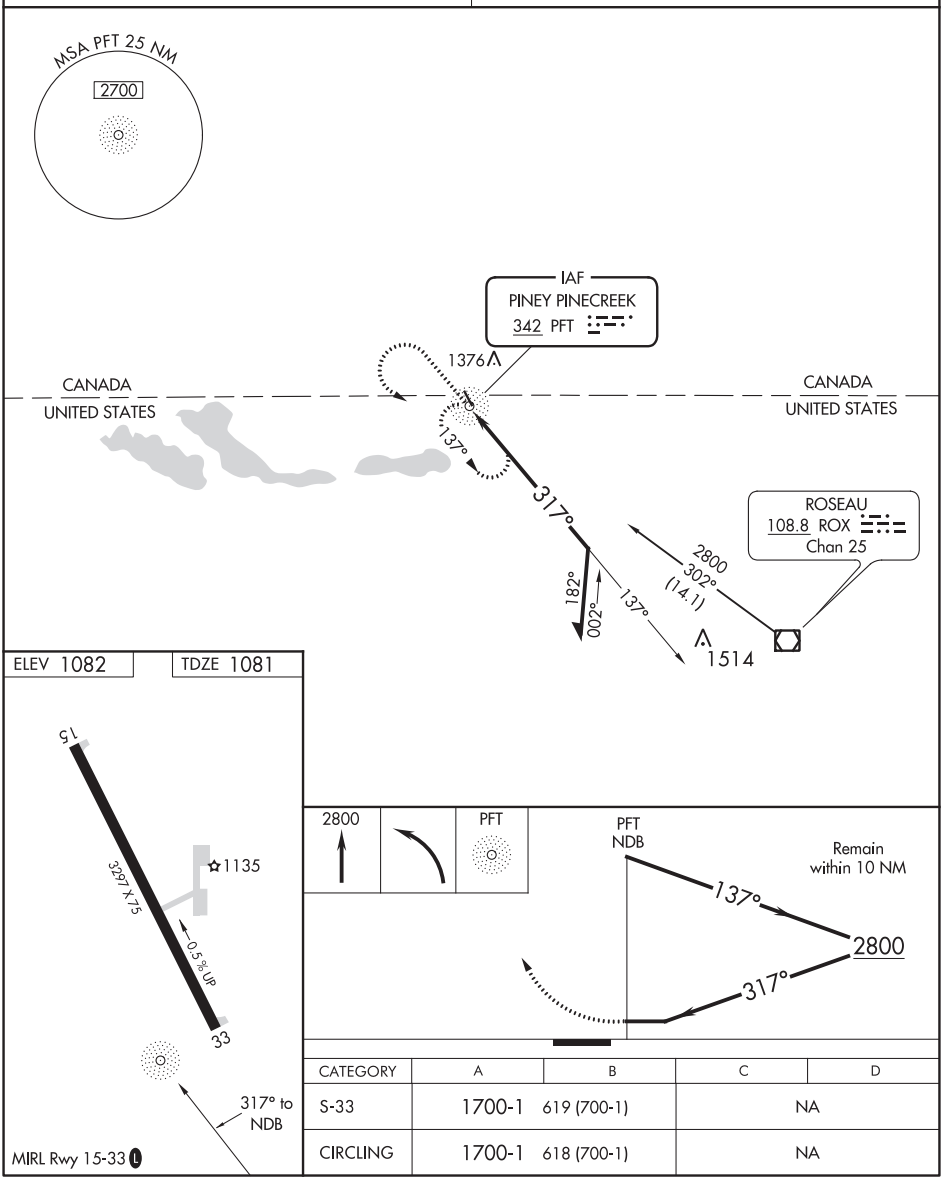
NDB RWY 33

PINEY PINECREEK BORDER (48Y)

T A NA — Use Roseau altimeter setting; when not received, use Warroad altimeter setting and increase all MDA 20 feet.

MISSED APPROACH: Climb to 2800 then left turn direct PFT NDB and hold.

MINNEAPOLIS CENTER	UNICOM
134.75 251.1	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-33	1700-1	619 (700-1)	NA	
CIRCLING	1700-1	618 (700-1)	NA	

NC-1, 25 FEB 2021 to 22 APR 2021
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PIPESTONE, MINNESOTA

AL-5688 (FAA)

19339

RNAV (GPS) RWY 18

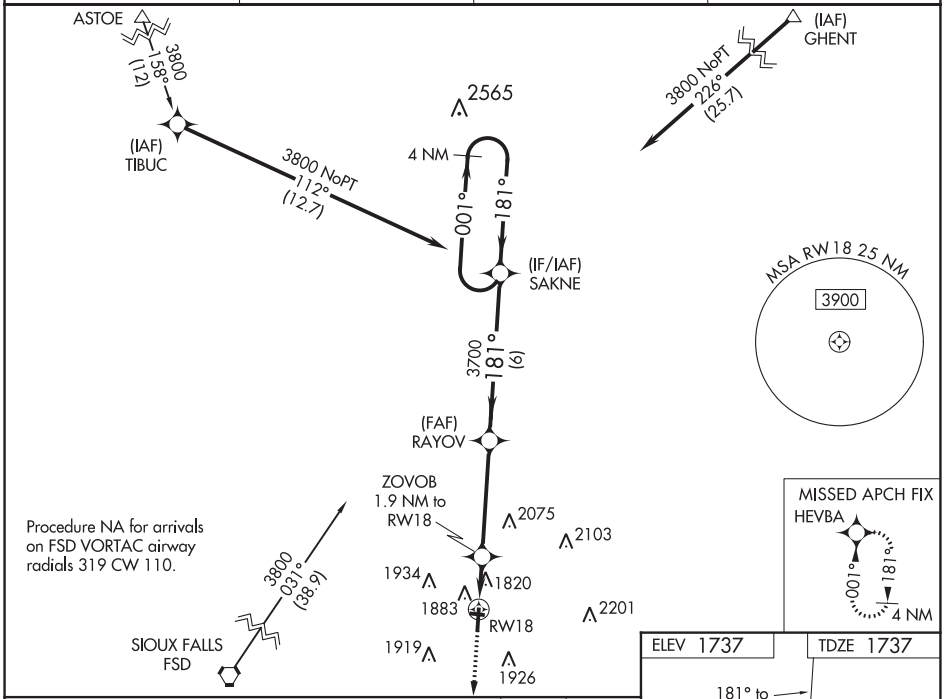
PIPESTONE MUNI (PQN)

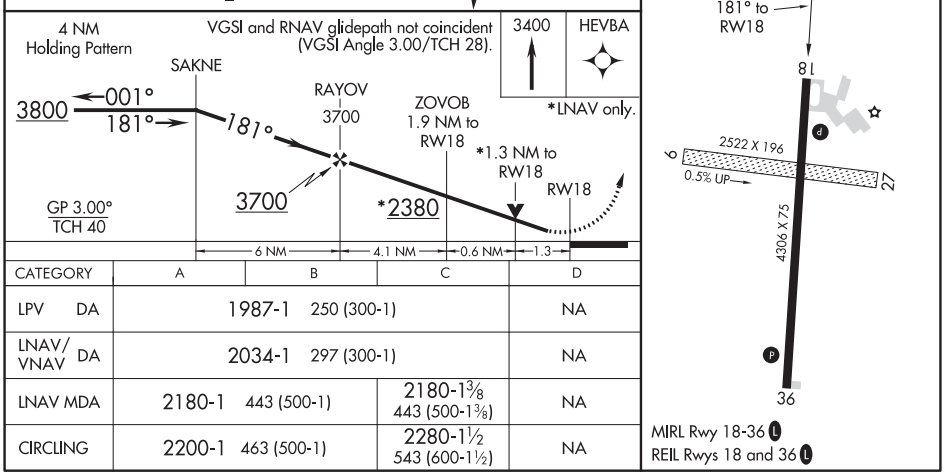
WAAS CH 40431 W18A	APP CRS 181°	Rwy ldg 4306 TDZE 1737 Apt Elev 1737

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 54°C (130°F). DME/DME RNP -0.3 NA. When local altimeter setting not received, use Slayton altimeter setting and increase all DA 68 feet and all MDA 80 feet; increase LPV all Cats, LNAV/VNAV all Cats, and Circling Cat C visibility ¼ mile; increase LNAV Cat C visibility ⅛ mile. Helicopter visibility reduction below ¾ SM NA. Baro-VNAV and VDP NA with Slayton altimeter setting. Circling NA to Rwys 9 and 27.

MISSED APPROACH: Climb to 3400 direct HEVBA and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
118.375	132.05 317.4	121.725	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1987-1 250 (300-1)			NA
LNAV/VNAV DA	2034-1 297 (300-1)			NA
LNAV MDA	2180-1 443 (500-1)		2180-1⅜ 443 (500-1⅜)	NA
CIRCLING	2200-1 463 (500-1)		2280-1½ 543 (600-1½)	NA

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WAAS CH 69332 W36A	APP CRS 001°	Rwy ldg 4306 TDZE 1734 Apt Elev 1737

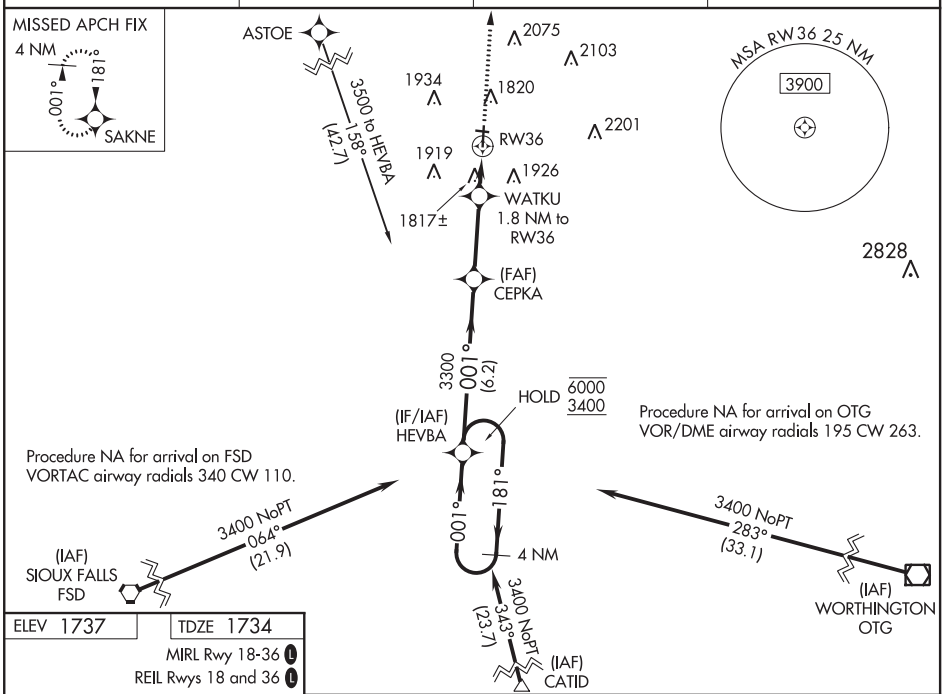
RNAV (GPS) RWY 36
PIPESTONE MUNI (PQN)

RNP APCH.

Circling NA to Rwy's 9 and 27. For uncompensated Baro-VNAV systems, LNAV-VNAV NA below -18°C or above 54°C .

MISSED APPROACH: Climb to 3800 direct SAKNE and hold.

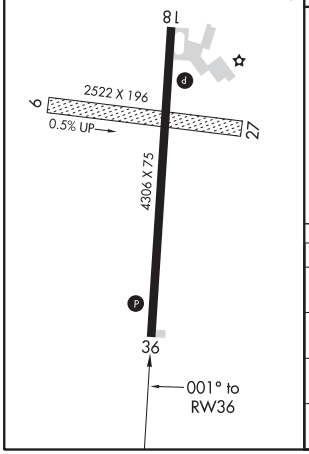
AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
118.375	132.05 317.4	121.725	122.8 (CTAF) L

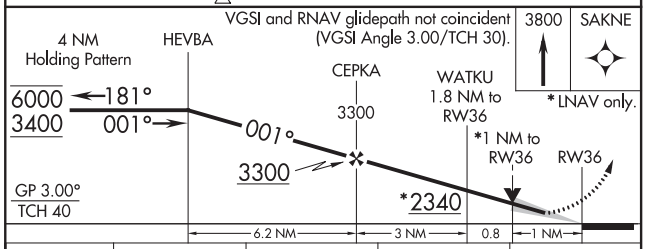


ELEV 1737 TDZE 1734

MIRL Rwy 18-36 L

REIL Rwys 18 and 36 L





CATEGORY	A	B	C	D
LPV DA	1934-1 200 (200-1)			NA
LNAV/VNAV DA	1984-1 250 (300-1)			NA
LNAV MDA	2080-1 346 (400-1)			NA
CIRCLING	2200-1 463 (500-1)		2280-1½ 543 (600-1½)	NA

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

PRESTON, MINNESOTA | AL-9286 (FAA) | 20310

WAAS CH 65829 W11A	APP CRS 106°	Rwy ldg 4001 TDZE 1277 Apt Elev 1277

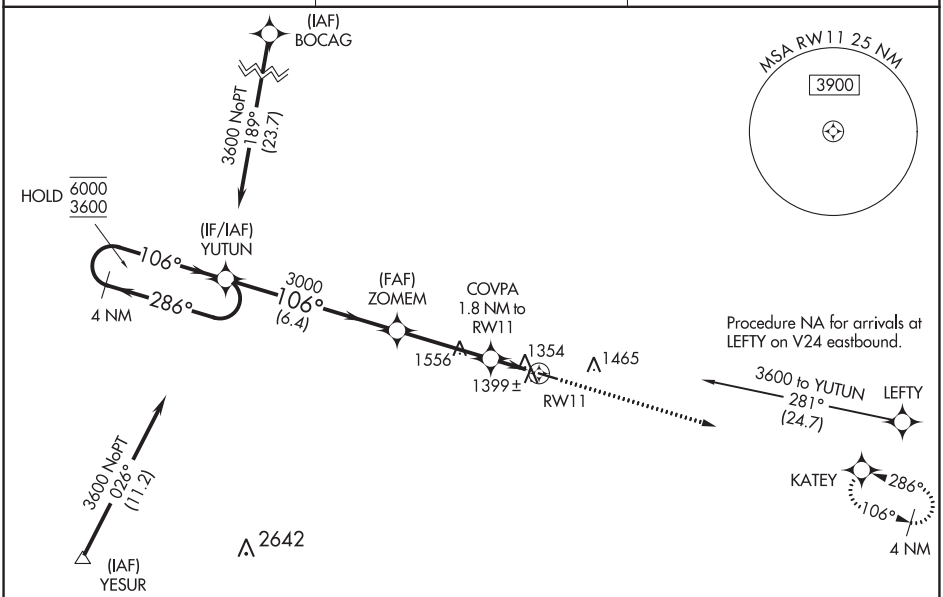
RNAV (GPS) RWY 11
FILLMORE COUNTY (FKA)

RNP APCH.

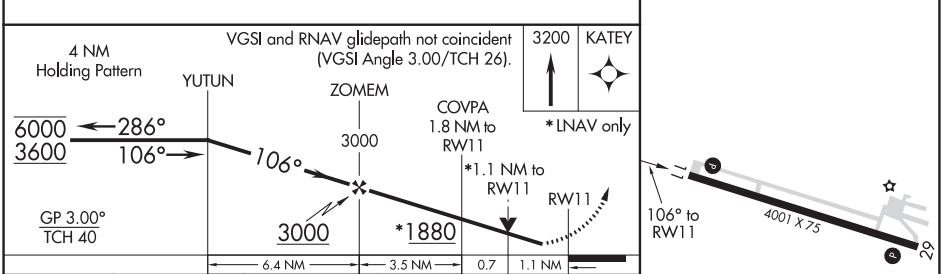
Rwy 11 helicopter visibility reduction below ¾ SM NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C.

MISSED APPROACH: Climb to 3200 direct KATEY and hold.

AWOS-3	ROCHESTER APP CON *	CTAF
118.55	119.8 251.125	122.9 L



ELEV 1277 | TDZE 1277



CATEGORY	A	B	C	D
LPV DA	1527-1 250 (300-1)			NA
LNAV/VNAV DA	1573-1 296 (300-1)			NA
LNAV MDA	1660-1 383 (400-1)		1660-1⅛ 383 (400-1⅛)	NA
C CIRCLING	1700-1 423 (500-1)	1900-1 623 (700-1)	1900-1¾ 623 (700-1¾)	NA

REIL Rwys 11 and 29
MIRL Rwy 11-29 L

PRESTON, MINNESOTA
Orig-D 26MAR20

43°41′N-92°11′W

FILLMORE COUNTY (FKA)
RNAV (GPS) RWY 11

NC-1, 25 FEB 2021 to 22 APR 2021

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WAAS CH 70529 W29A	APP CRS 286°	Rwy ldg 4001 TDZE 1277 Apt Elev 1277

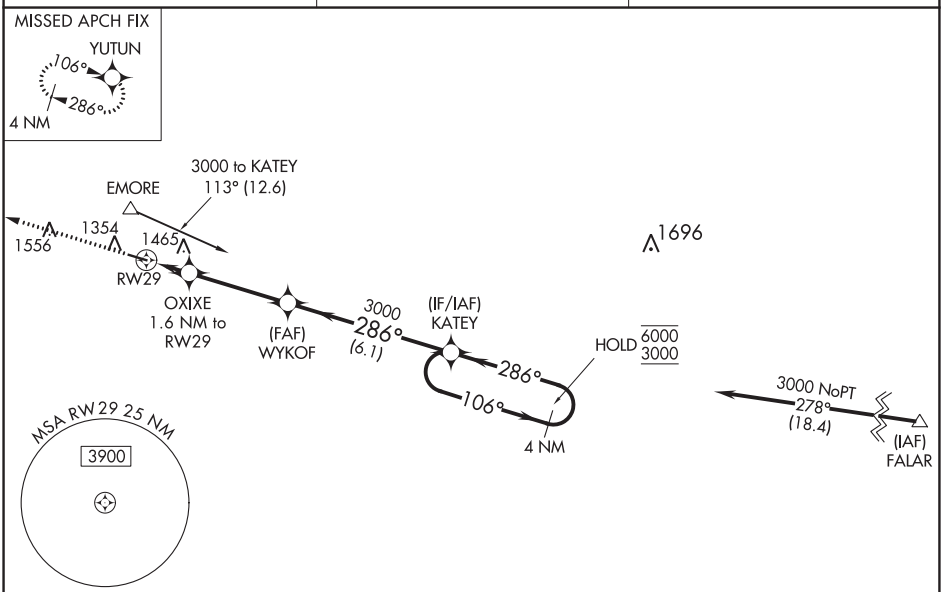
RNAV (GPS) RWY 29
FILLMORE COUNTY (FKA)

RNP APCH.

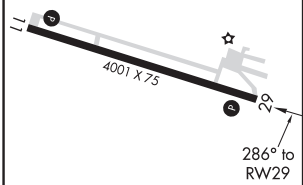
Rwy 29 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C.

MISSED APPROACH: Climb to 4000 direct YUTUN and hold

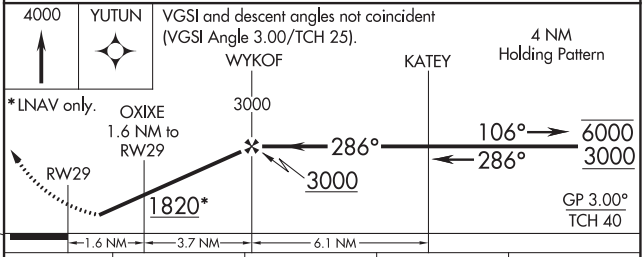
AWOS-3	ROCHESTER APP CON*	CTAF
118.55	119.8 251.125	122.9 L



ELEV 1277 TDZE 1277



REIL Rwys 11 and 29
MIRL Rwy 11-29 L



CATEGORY	A	B	C	D
LPV DA	1527-1 250 (300-1)			NA
LNAV/VNAV DA	1550-1 273 (300-1)			NA
LNAV MDA	1780-1 503 (600-1)		1780-1⅜ 503 (600-1⅜)	NA
C CIRCLING	1780-1 503 (600-1)	1900-1 623 (700-1)	1900-1¾ 623 (700-1¾)	NA

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

PRINCETON, MINNESOTA | AL-9091 (FAA) | 20366

APP CRS	Rwy ldg	3900
159°	TDZE	980
	Apt Elev	980

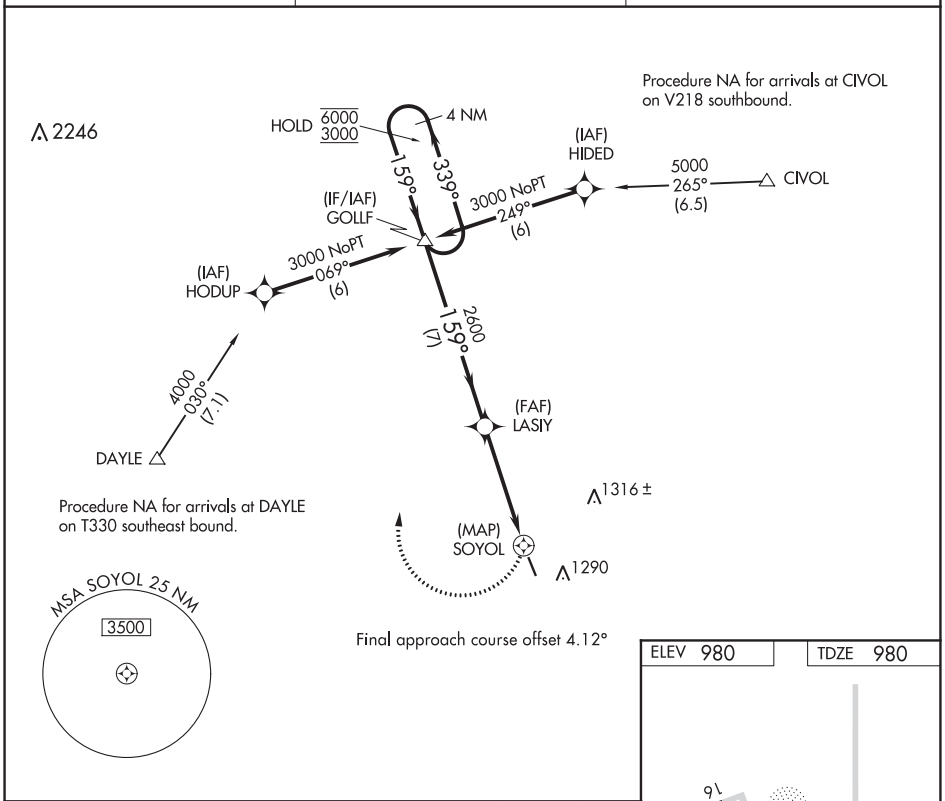
RNAV (GPS) RWY 16
PRINCETON MUNI (PNM)

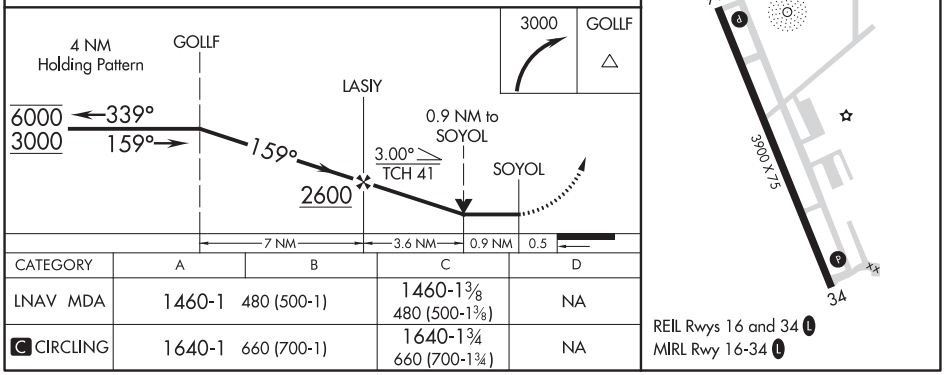
RNP APCH.

Rwy 16 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climbing right turn to 3000 direct GOLLF and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.025	121.05 397.9	123.0 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	1460-1 480 (500-1)		1460-1⅜ 480 (500-1⅜)	NA
C CIRCLING	1640-1 660 (700-1)		1640-1¾ 660 (700-1¾)	NA

PRINCETON, MINNESOTA
Orig-E 31DEC20

45°34′N-93°36′W

PRINCETON MUNI (PNM)
RNAV (GPS) RWY 16

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NC-1, 25 FEB 2021 to 22 APR 2021

APP CRS	Rwy ldg	3900
335°	TDZE	980
	Apt Elev	980

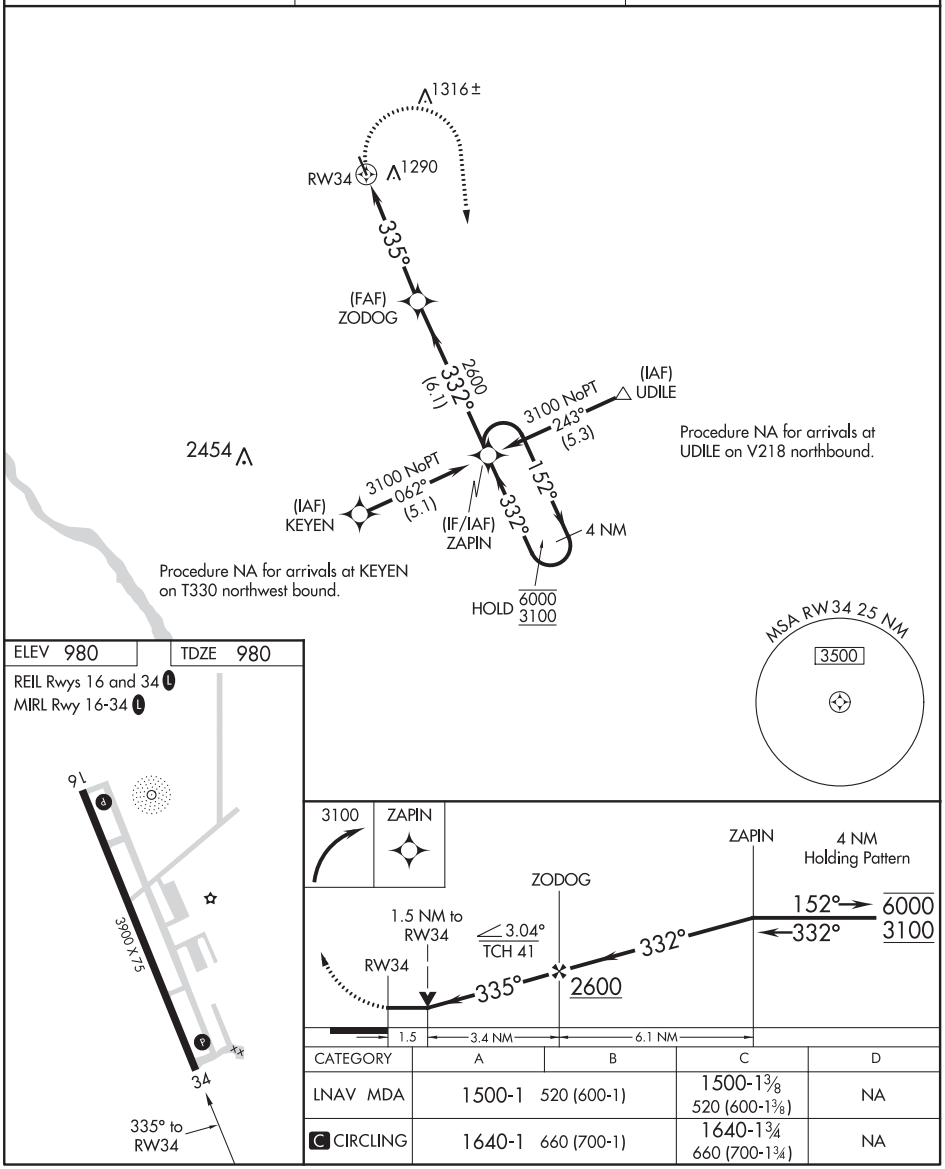
RNAV (GPS) RWY 34
PRINCETON MUNI (PNM)

RNP APCH.

Rwy 34 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climbing right turn to 3100 direct ZAPIN and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.025	121.05 397.9	123.0 (CTAF) L



CATEGORY	A	B	C	D
LNAV MDA	1500-1 520 (600-1)		1500-1⅜ 520 (600-1⅜)	NA
C CIRCLING	1640-1 660 (700-1)		1640-1¾ 660 (700-1¾)	NA

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LOC/DME I-RAP	APP CRS	Rwy ldg	8701
109.3	324°	TDZE	3160
Chan 30		Apt Elev	3204

ILS or LOC RWY 32

RAPID CITY RGNL (RAP)

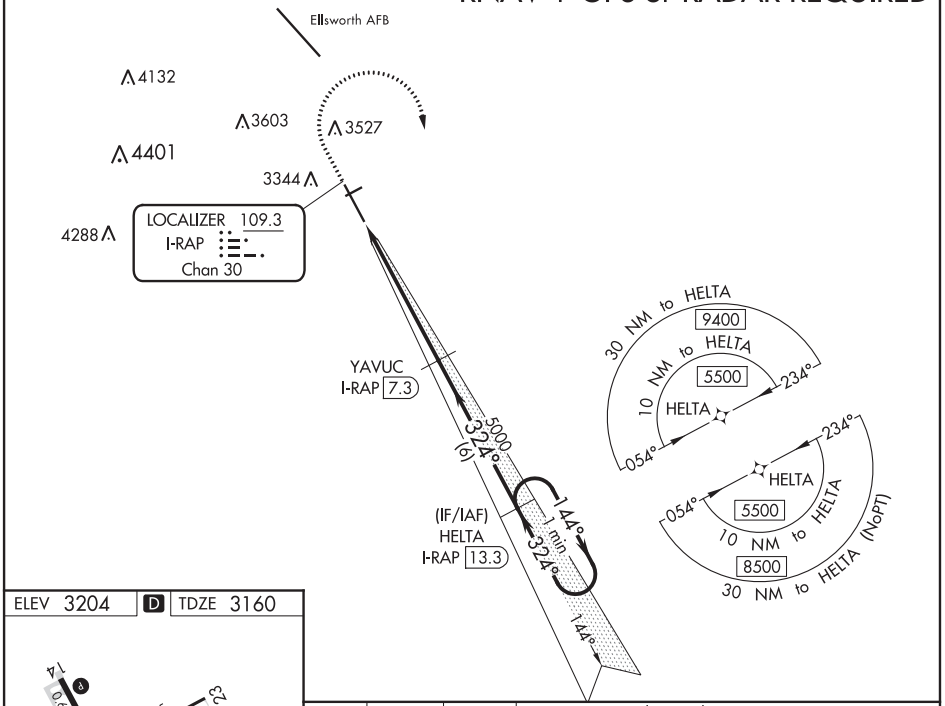
T A DME and RNAV 1-GPS required. ILS glideslope unusable for coupled approaches below 3360. For inop ALS, increase S-ILS Cat E visibility to RVR 4000 and S-LOC Cat E visibility to 1⅜ SM. # RVR 1800 authorized with use of FD or AP or HUD to DA.

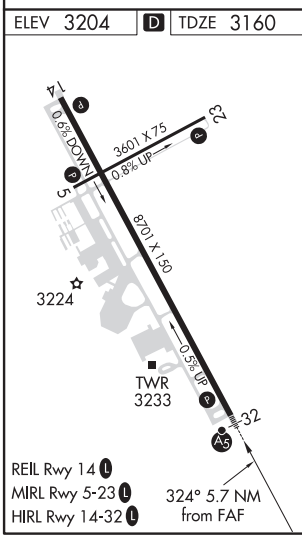
MALSR A5

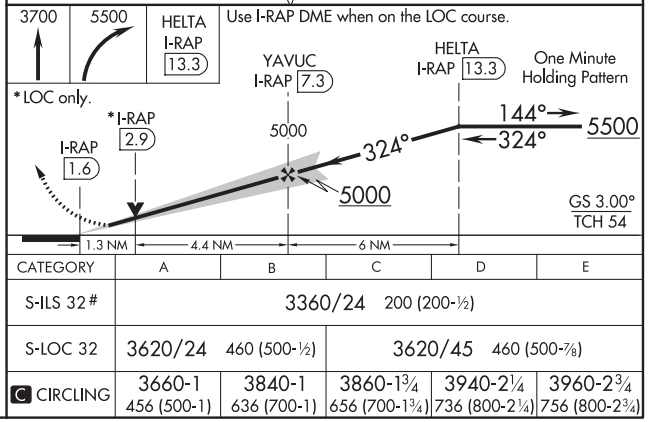
MISSED APPROACH: Climb to 3700 then climbing right turn to 5500 direct HELTA and hold.

ASOS	ELLSWORTH APP CON ★	RAPID CITY TOWER ★	GND CON	UNICOM
118.525	119.5 259.1	125.85 (CTAF) L 257.8	121.9	122.95

RNAV 1-GPS or RADAR REQUIRED







CATEGORY	A	B	C	D	E
S-ILS 32 #	3360/24 200 (200-½)				
S-LOC 32	3620/24 460 (500-½)		3620/45 460 (500-⅞)		
C CIRCLING	3660-1 456 (500-1)	3840-1 636 (700-1)	3860-1¾ 656 (700-1¾)	3940-2¼ 736 (800-2¼)	3960-2¾ 756 (800-2¾)

NC-1, 25 FEB 2021 to 22 APR 2021

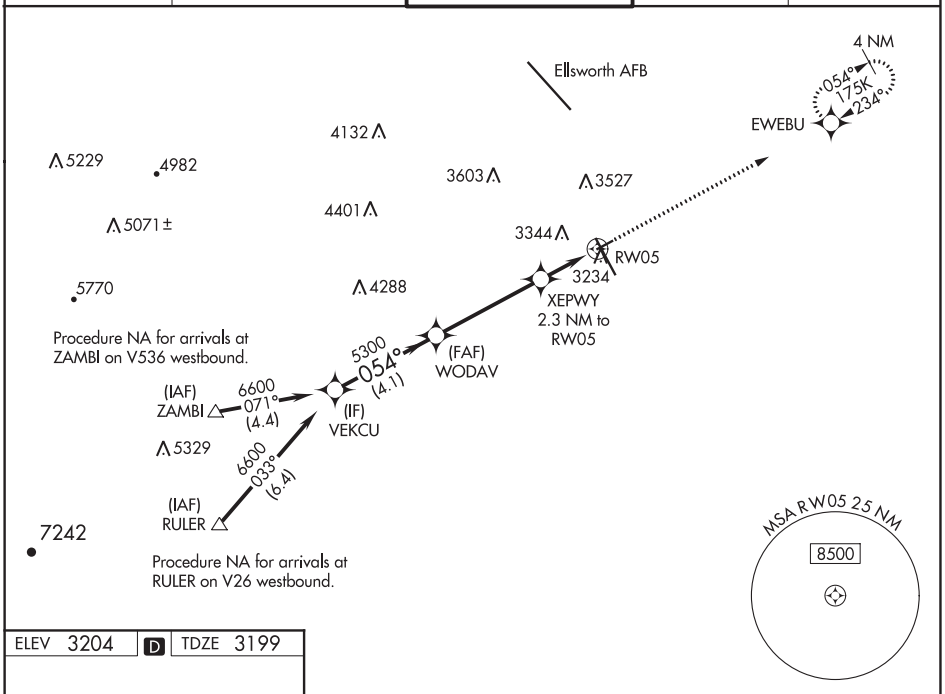
WAAS CH 82633 W05A	APP CRS 054°	Rwy ldg 3601 TDZE 3199 Apt Elev 3204

RNAV (GPS) RWY 5
RAPID CITY RGNL (RAP)

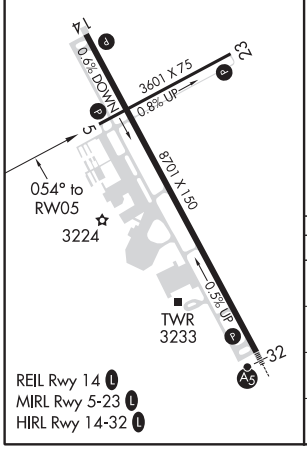
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C (-5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Ellsworth AFB altimeter setting and increase all DA 25 feet and all MDA 40 feet. VDP and Baro-VNAV NA with Ellsworth AFB altimeter setting.

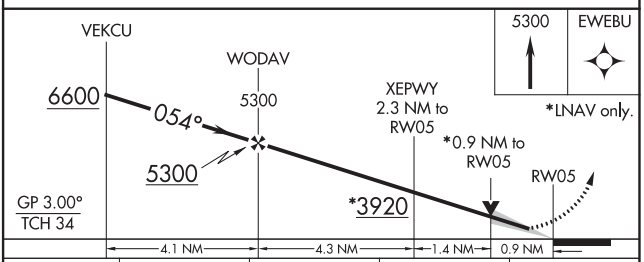
MISSED APPROACH: Climb to 5300 direct EWEBU and hold.

ASOS	ELLSWORTH APP CON ★	RAPID CITY TOWER ★	GND CON	UNICOM
118.525	119.5 259.1	125.85 (CTAF) L 257.8	121.9	122.95



ELEV 3204 D TDZE 3199





CATEGORY	A	B	C	D
LPV DA	3449-1 250 (300-1)		NA	
LNAV/VNAV DA	3449-1 250 (300-1)		NA	
LNAV MDA	3500-1 301 (300-1)		NA	
C CIRCLING	3660-1 456 (500-1)	3840-1 636 (700-1)	NA	

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WAAS CH 60919 W14A	APP CRS 144°	Rwy ldg 8701 TDZE 3191 Apt Elev 3204

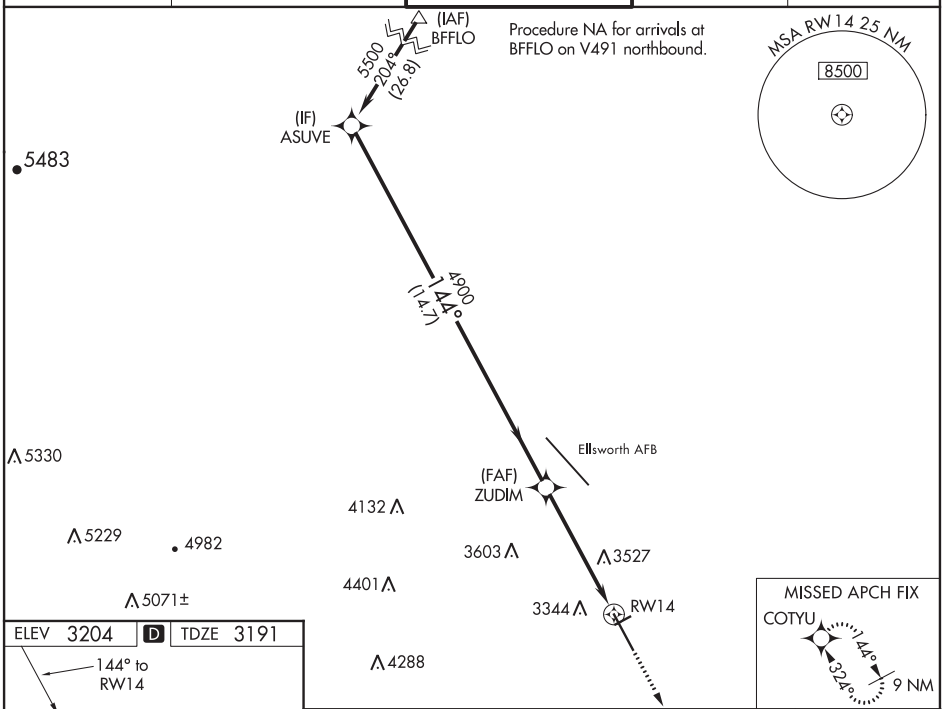
RNAV (GPS) RWY 14
RAPID CITY RGNL (RAP)

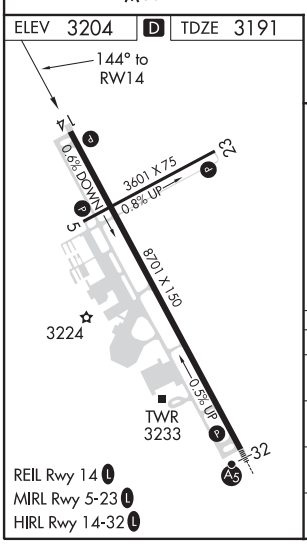
RNP APCH.

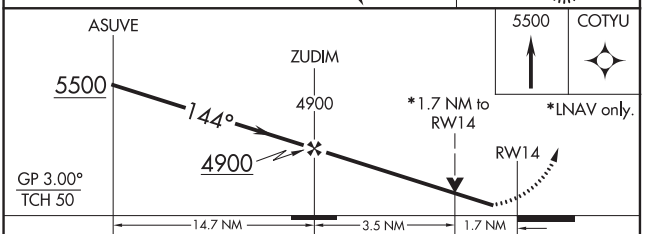
Rwy 14 helicopter visibility reduction below ¾ SM NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -26°C or above 48°C.

MISSED APPROACH: Climb to 5500 direct COTYU and hold.

ASOS	ELLSWORTH APP CON ★	RAPID CITY TOWER ★	GND CON	UNICOM
118.525	119.5 259.1	125.85 (CTAF) (L) 257.8	121.9	122.95







CATEGORY	A	B	C	D	E
LPV DA	3450-1 259 (300-1)				
LNAV/VNAV DA	3871-2½ 680 (700-2½)				
LNAV MDA	3780-1 589 (600-1)		3780-1¾ 589 (600-1¾)		
(C) CIRCLING	3780-1 576 (600-1)	3840-1 636 (700-1)	3860-1¾ 656 (700-1¾)	3940-2¼ 736 (800-2¼)	3960-2¾ 756 (800-2¾)

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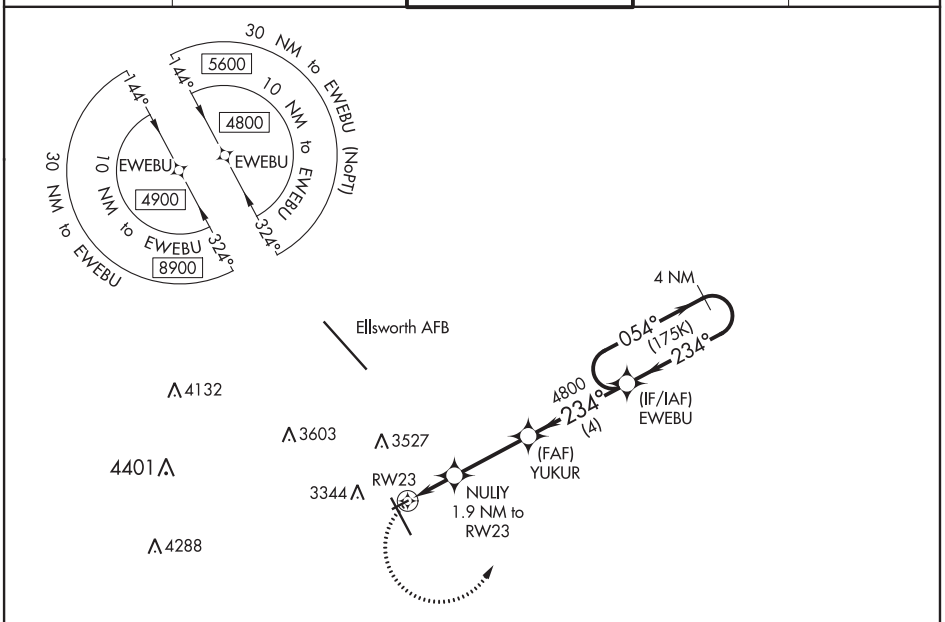
WAAS CH 40433 W23A	APP CRS 234°	Rwy ldg 3601 TDZE 3204 Apt Elev 3204

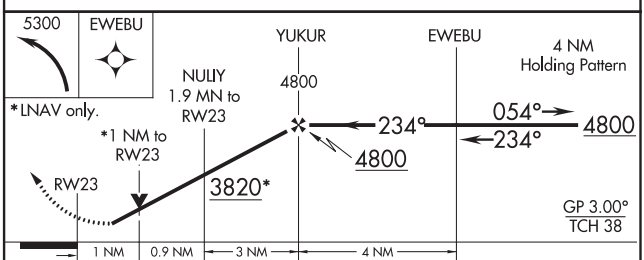
RNAV (GPS) RWY 23
RAPID CITY RGNL (RAP)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C (-5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Ellsworth AFB altimeter setting and increase all DA 25 feet and all MDA 40 feet. VDP and Baro-VNAV NA when using Ellsworth AFB altimeter setting.

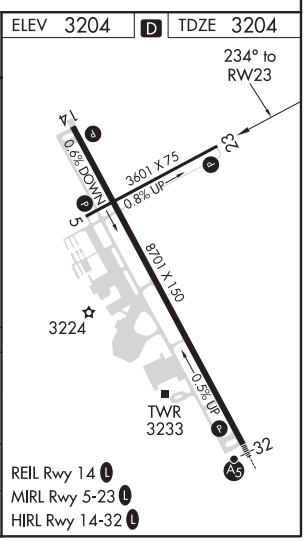
MISSED APPROACH: Climbing left turn to 5300 direct EWEBU and hold.

ASOS	ELLSWORTH APP CON ★	RAPID CITY TOWER ★	GND CON	UNICOM
118.525	119.5 259.1	125.85 (CTAF) (L) 257.8	121.9	122.95





CATEGORY		A	B	C	D
LPV	DA	3454-1 250 (300-1)		NA	
LNAV/VNAV	DA	3454-1 250 (300-1)		NA	
LNAV	MDA	3560-1 356 (400-1)		NA	
(C) CIRCLING		3660-1 456 (500-1)	3840-1 636 (700-1)	NA	



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RNAV (GPS) RWY 32
RAPID CITY RGNL (RAP)

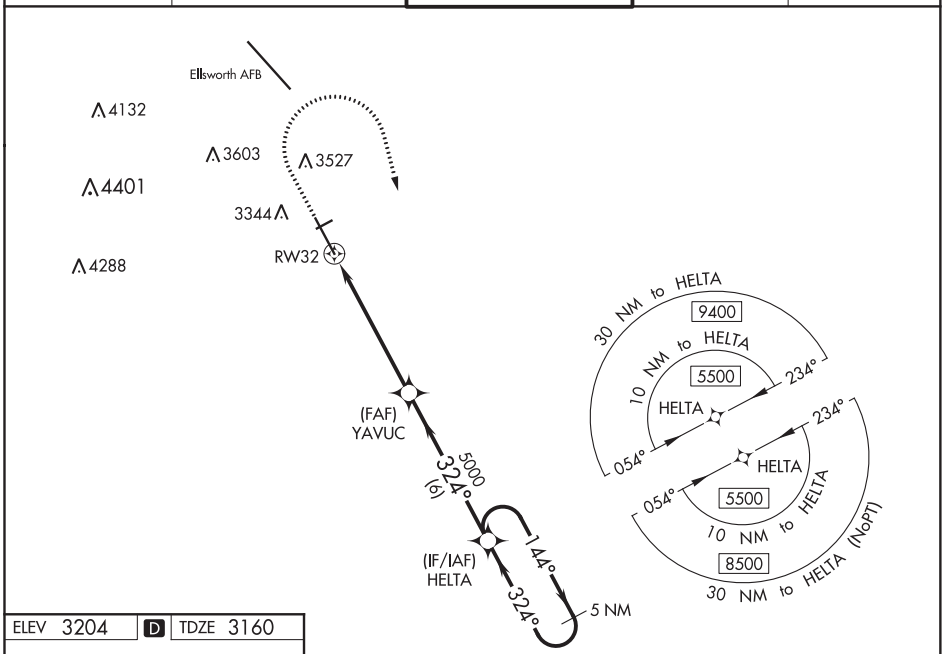
WAAS CH 93717 W32A	APP CRS 324°	Rwy ldg 8701 TDZE 3160 Apt Elev 3204

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C (-11°F) or above 51°C (125°F). DME/DME RNP-0.3 NA. For inop ALS, increase LPV Cat E visibility to RVR 4000, LNAV/VNAV all Cats to RVR 4500 and LNAV Cat E to 1⅜ SM. # RVR 1800 authorized with use of FD or AP or HUD to DA.

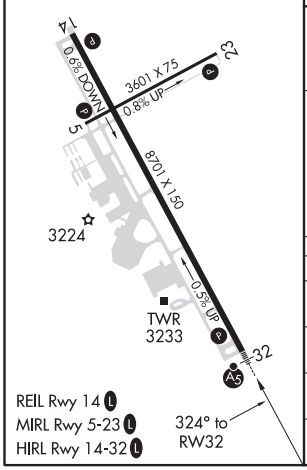
MALSR

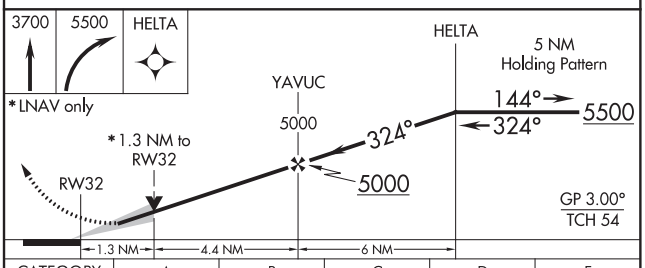
MISSED APPROACH: Climb to 3700 then climbing right turn to 5500 direct HELTA and hold.

ASOS	ELLSWORTH APP CON ★	RAPID CITY TOWER ★	GND CON	UNICOM
118.525	119.5 259.1	125.85 (CTAF) L 257.8	121.9	122.95



ELEV 3204 D TDZE 3160





CATEGORY	A	B	C	D	E
LPV DA#	3360/24 200 (200-½)				
LNAV/VNAV DA	3410/24 250 (300-½)				
LNAV MDA	3620/24 460 (500-½)		3620/45 460 (500-⅞)		
C CIRCLING	3660-1 456 (500-1)	3840-1 636 (700-1)	3860-1¾ 656 (700-1¾)	3940-2¼ 736 (800-2¼)	3960-2¾ 756 (800-2¾)

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VOR or TACAN RWY 14

RAPID CITY RGNL (RAP)

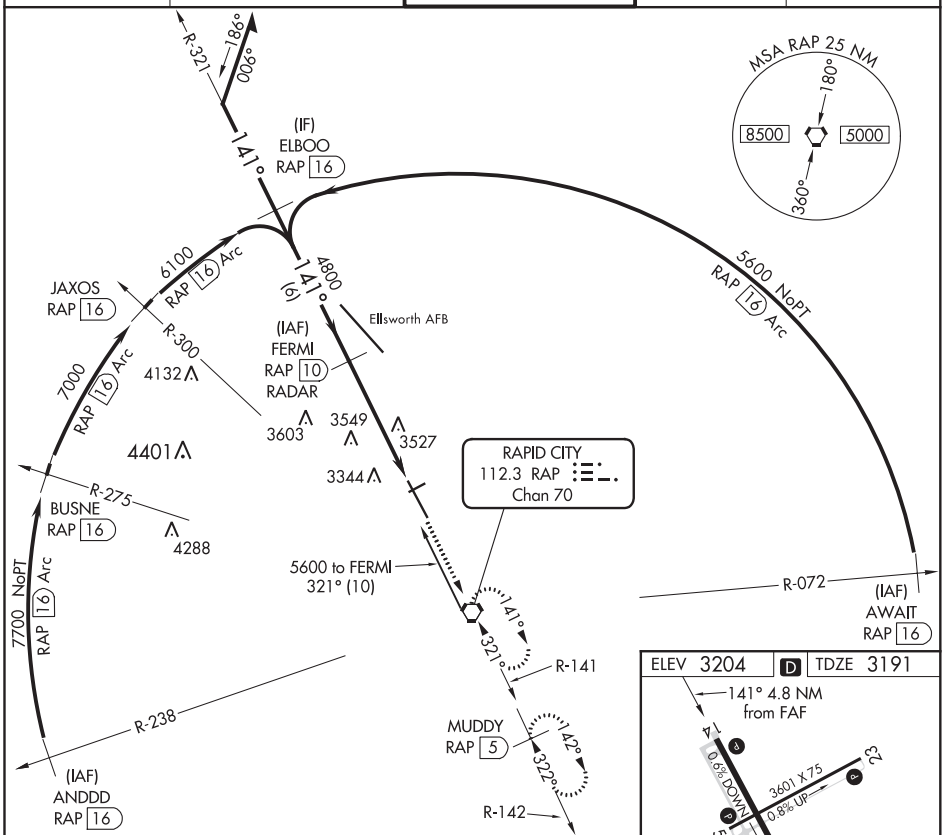
VORTAC RAP	APP CRS	Rwy ldg	8701
112.3	141°	TDZE	3191
Chan 70		Apt Elev	3204

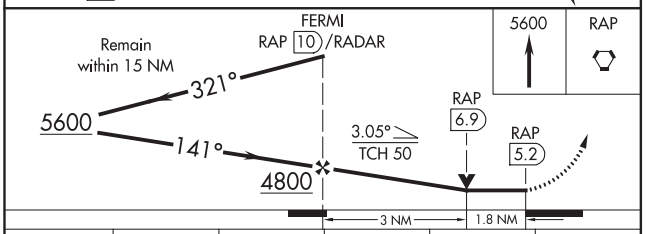
DME or RADAR required.

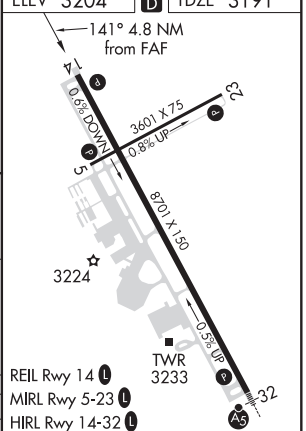
Rwy 14 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 5600 direct RAP VORTAC and hold, continue climb-in-hold to 5600. (TACAN aircraft continue on RAP R-142 to MUDDY 5 DME and hold SE, RT, 322° inbound.)

ASOS	ELLSWORTH APP CON ★	RAPID CITY TOWER ★	GND CON	UNICOM
118.525	119.5 259.1	125.85 (CTAF) L 257.8	121.9	122.95







CATEGORY	A	B	C	D	E
S-14	3800-1 609 (600-1)		3800-1¾ 609 (600-1¾)		3800-2 609 (600-2)
C CIRCLING	3800-1 596 (600-1)	3840-1 636 (700-1)	3860-1¾ 656 (700-1¾)	3940-2¼ 736 (800-2¼)	3960-2¾ 756 (800-2¾)

FAF to MAP 4.8 NM					
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

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RAPID CITY, SOUTH DAKOTA — AL-877 (FAA) — 19283

VOR or TACAN RWY 32

RAPID CITY RGNL (RAP)

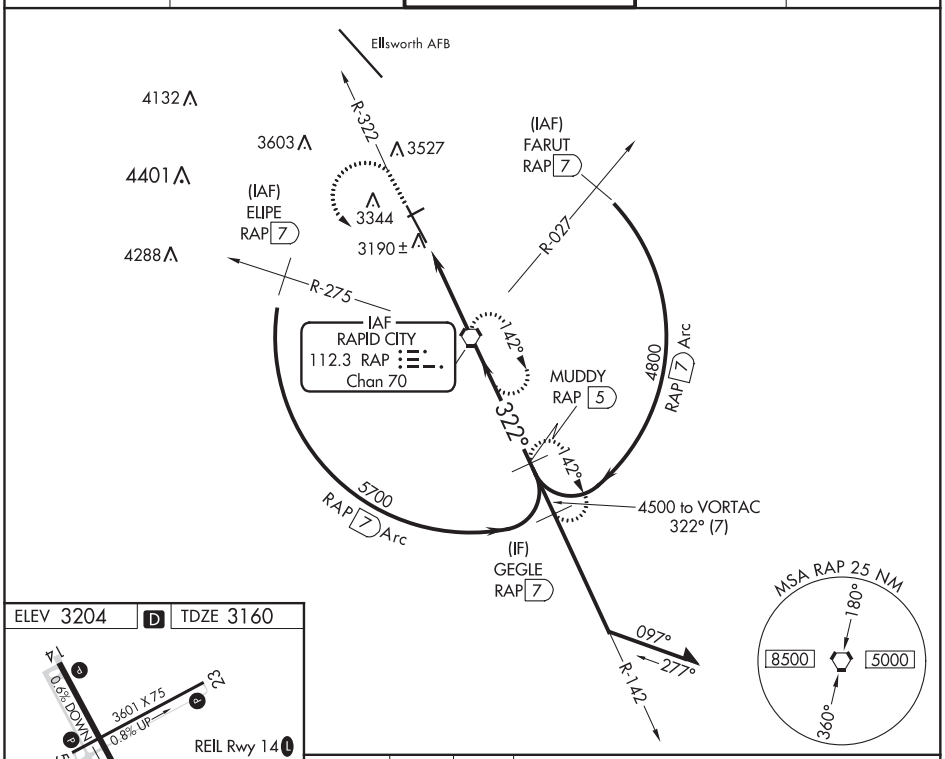
VORTAC RAP 112.3 Chan 70	APP CRS 322°	Rwy ldg 8701 TDZE 3160 Apt Elev 3204

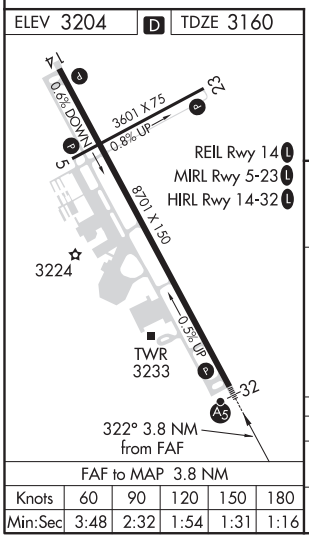
For inoperative ALS, increase S-32 all Cats visibility to 1 SM.

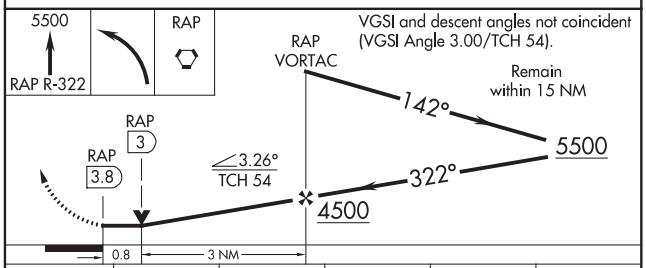
MALSR

MISSED APPROACH: Climb to 5500 on RAP R-322 then left turn direct RAP VORTAC and hold. (TACAN aircraft continue on RAP R-142 to MUDDY/RAP 5 DME and hold SE, RT, 322° inbound.)

ASOS	ELLSWORTH APP CON ★	RAPID CITY TOWER ★	GND CON	UNICOM
118.525	119.5 259.1	125.85 (CTAF) L 257.8	121.9	122.95







FAF to MAP 3.8 NM					
Knots	60	90	120	150	180
Min:Sec	3:48	2:32	1:54	1:31	1:16

CATEGORY	A	B	C	D	E
S-32	3440/40 280 (300-¾)				
C CIRCLING	3660-1 456 (500-1)	3840-1 636 (700-1)	3860-1¾ 656 (700-1¾)	3940-2¼ 736 (700-2¼)	3960-2¾ 756 (800-2¾)

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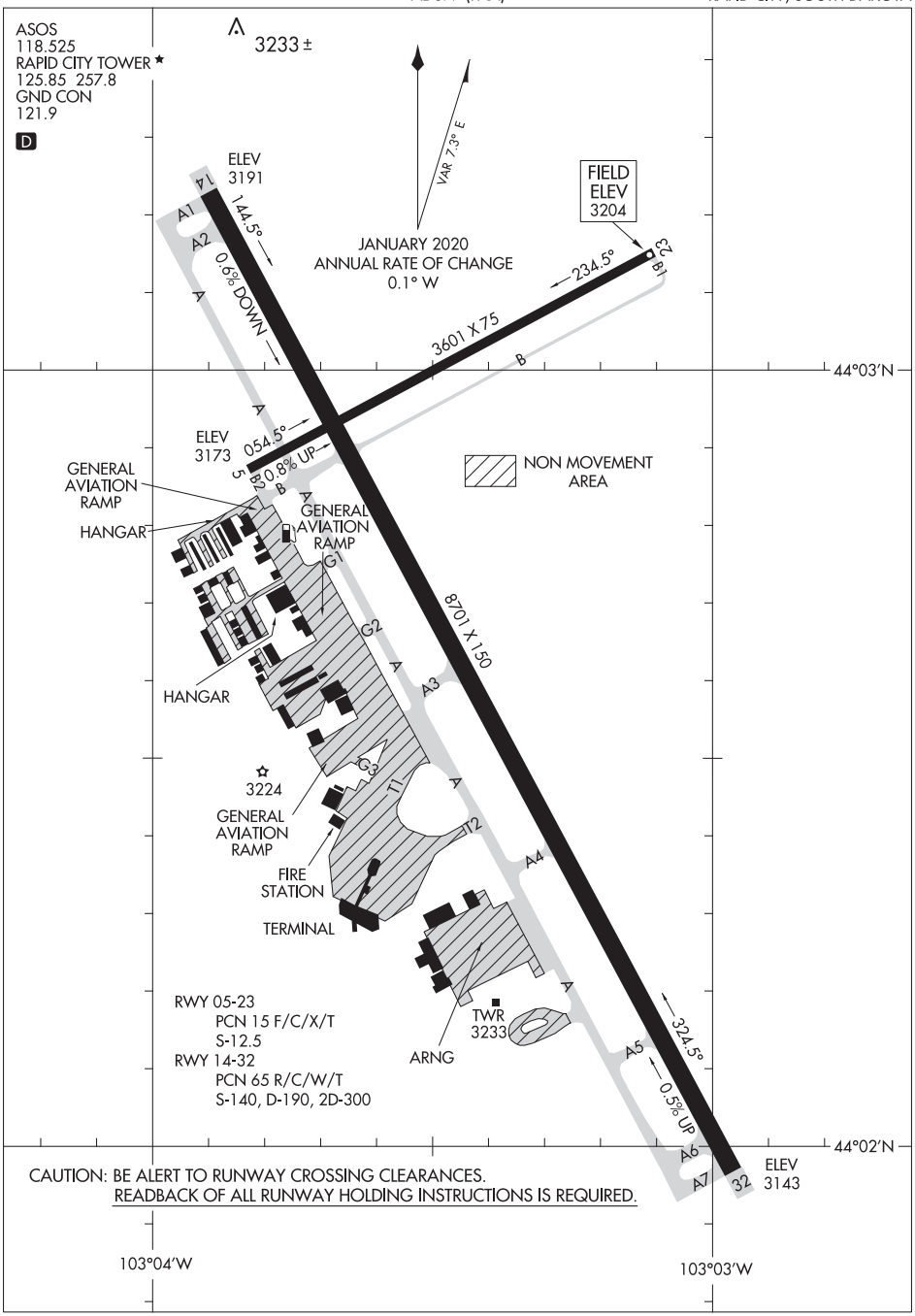

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CAMP RIPLEY, MINNESOTA

ILS or LOC RWY 31

LOC I-RYM 111.1 Chan 48	APCH CRS 312°	Rwy ldg 6100 TDZE 1146 Arpt Elev 1150	AL-5226 [USA]	RAY S. MILLER AAF (KRYM)

When local altimeter setting not received, use Little Falls altimeter setting.

MALSF

MISSED APPROACH: Climb to 2000, then climbing left turn to 3500 direct XCR NDB and hold. Continue climb in hold to 3500.

MINNEAPOLIS CENTER	MILLER TOWER ★	CLNC DEL
118.05 239.0	126.2 L 254.4 46.7	126.2

Inoperative table does not apply to S-ILS or S-LOC CAT AB.

Procedure NA when R-4301 is active.

Procedure NA for arrival on AXN VOR/DME airway radials 103 clockwise to 114.

R-4301

RIPLEY 404 XCR

ALEXANDRIA 112.8 AXN Chan 75

1547

to XCR 3500 072° (37.9)

MM

LOCALIZER 111.1 I-RYM Chan 48

3300 132° to PEGGO (5.8)

1680

132°

ZAKPI I-RYM 3.7

1289

(IAF) PEGGO I-RYM 7.5

087° 267°

312°

URHIL

NoPT

(IF) TODEE I-RYM 15.6

3200

132°

3300 352° (21.8)

MSA XCR 25 NM

3300

SAINT CLOUD 112.1 STC Chan 58

ADF and DME REQUIRED

RADAR REQUIRED

(For procedure entry at STC VOR/DME)

2000 | 3500 | XCR

†† LOC Only

PEGGO 7.5

5000

132°

3300

Remain within 10 NM of PEGGO

VDP NA with Little Falls altimeter setting.

I-RYM DME

ZAKPI 3.7

312°

1.2

MM 1344

††2.4

††1980

3200

GS 3.00° TCH 40

2.5 NM | 3.8 NM

ELEV 1150 | TDZE 1146

TWR

132°

6100 × 100

3500 × 80

Assault Strip

312°

1299

312° 6.3 NM from FAF

HIRL Rwy 13-31 L

CATEGORY	A	B	C	D
S-ILS 31	1346-1 200 (200-1)			
S-LOC 31	1580-1 434 (500-1)			
C CIRCLING	1640-1 490 (500-1)	1660-1 510 (600-1)	1720-1½ 570 (600-1½)	2080-3 930 (1000-3)
LITTLE FALLS ALTIMETER SETTING MINIMUMS				
S-ILS 31	1370-1 224 (300-1)			
S-LOC 31	1620-1 474 (500-1)		1620-1⅛ 474 (500-1⅛)	
C CIRCLING	1680-1 530 (600-1)	1700-1 550 (600-1)	1760-1¾ 610 (700-1¾)	2120-3 970 (1000-3)

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CAMP RIPLEY, MINNESOTA

RNAV (GPS) RWY 13

APCH CRS	Rwy ldg	6100
132°	TDZE	1150
	Arpt Elev	1150

AL-5226 [USA]

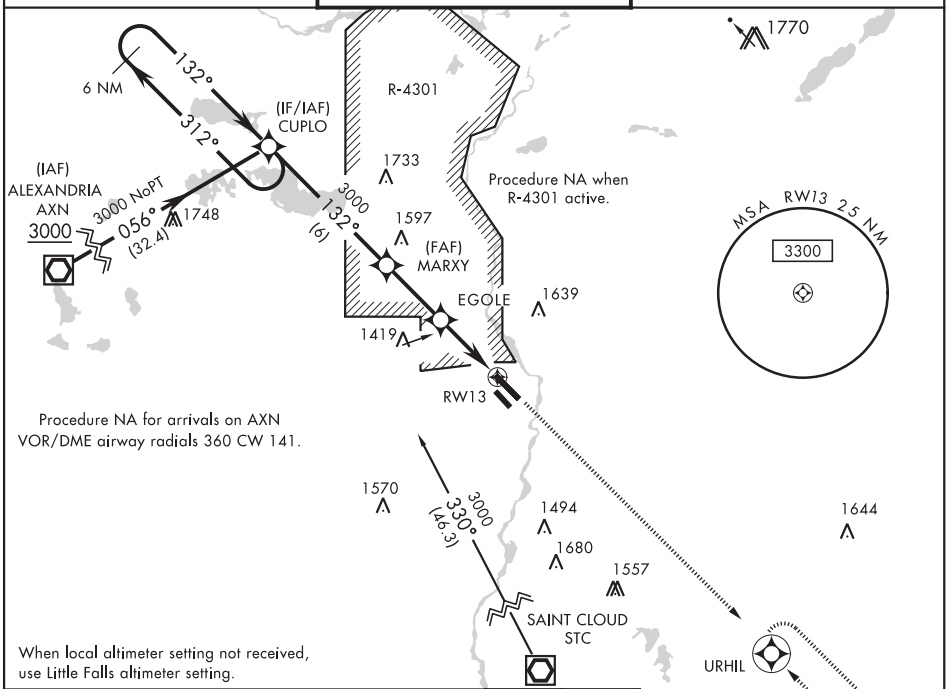
RAY S. MILLER AAF (KRYM)

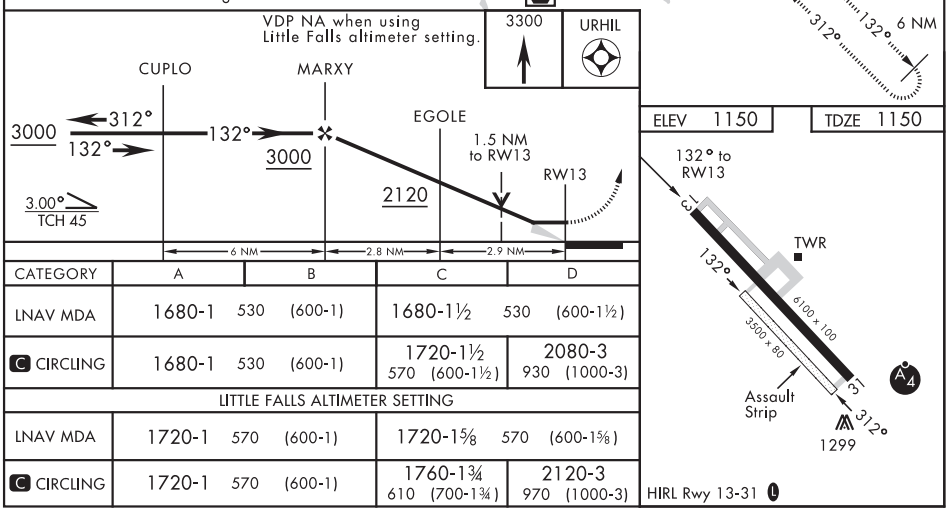
RNP APCH

NA

MISSED APPROACH: Climb to 3300 direct URHIL and hold.

MINNEAPOLIS CENTER	MILLER TOWER ★	CLNC DEL
118.05 239.0	126.2 254.4 46.7	126.2





CATEGORY	A	B	C	D
LNAV MDA	1680-1 530 (600-1)		1680-1½ 530 (600-1½)	
C CIRCLING	1680-1 530 (600-1)		1720-1½ 570 (600-1½)	2080-3 930 (1000-3)
LITTLE FALLS ALTIMETER SETTING				
LNAV MDA	1720-1 570 (600-1)		1720-1⅝ 570 (600-1⅝)	
C CIRCLING	1720-1 570 (600-1)		1760-1¾ 610 (700-1¾)	2120-3 970 (1000-3)

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20198

CAMP RIPLEY, MINNESOTA

RNAV (GPS) RWY 31

APCH CRS	Rwy ldg	6100
312°	THRE	1146
	Arpt Elev	1150

AL-5226 [USA]

RAY S. MILLER AAF (KRYM)

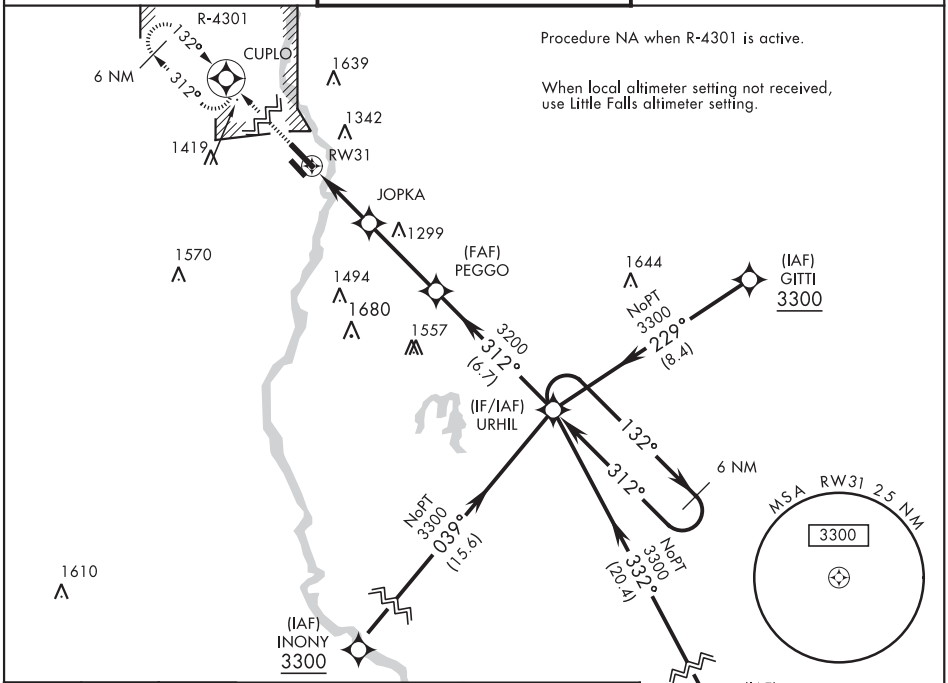
T ✱ When ALS inop, increase CAT D vis to 1¼ miles.

A NA DME/DME RNP-0.3 NA.

MALSF

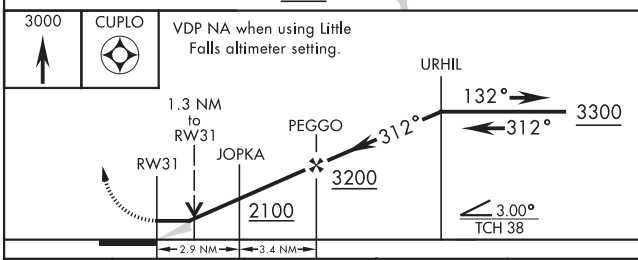
MISSED APPROACH: Climb to 3000 direct CUPLO and hold.

MINNEAPOLIS CENTER	MILLER TOWER ✱	CLNC DEL
118.05 239.0	126.2 (L) 254.4 46.7	126.2

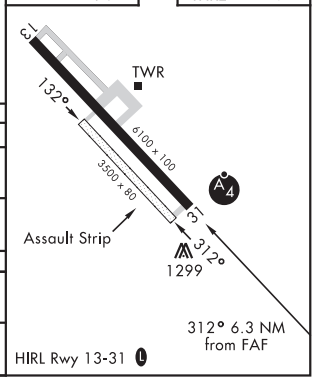


Procedure NA when R-4301 is active.

When local altimeter setting not received, use Little Falls altimeter setting.



ELEV 1150 THRE 1146



CATEGORY	A	B	C	D
LNAV MDA ✱	1580-¾ 434 (500-¾)		1580-1 434 (500-1)	
(C) CIRCLING	1640-1 490 (500-1)	1660-1 510 (600-1)	1720-1½ 570 (600-1½)	2080-3 930 (1000-3)
LITTLE FALLS ALTIMETER SETTING				
LNAV MDA ✱	1620-¾ 474 (500-¾)		1620-1⅛ 474 (500-1⅛)	
(C) CIRCLING	1680-1 530 (600-1)		1760-1¾ 610 (700-1¾)	2120-3 970 (1000-3)

CAMP RIPLEY, MINNESOTA

Amdt 2A 19JUL18

46° 05′N-94° 21′W

RAY S. MILLER AAF (KRYM)

RNAV (GPS) RWY 31

NC-1, 25 FEB 2021 to 22 APR 2021

CAMP RIPLEY, MINNESOTA

NDB RWY 31

RAY S. MILLER AAF (KRYM)

NDB XCR 404	APCH CRS 301°	Rwy ldg 6100 THRE 1146 Arpt Elev 1150	AL-5226 [USA]

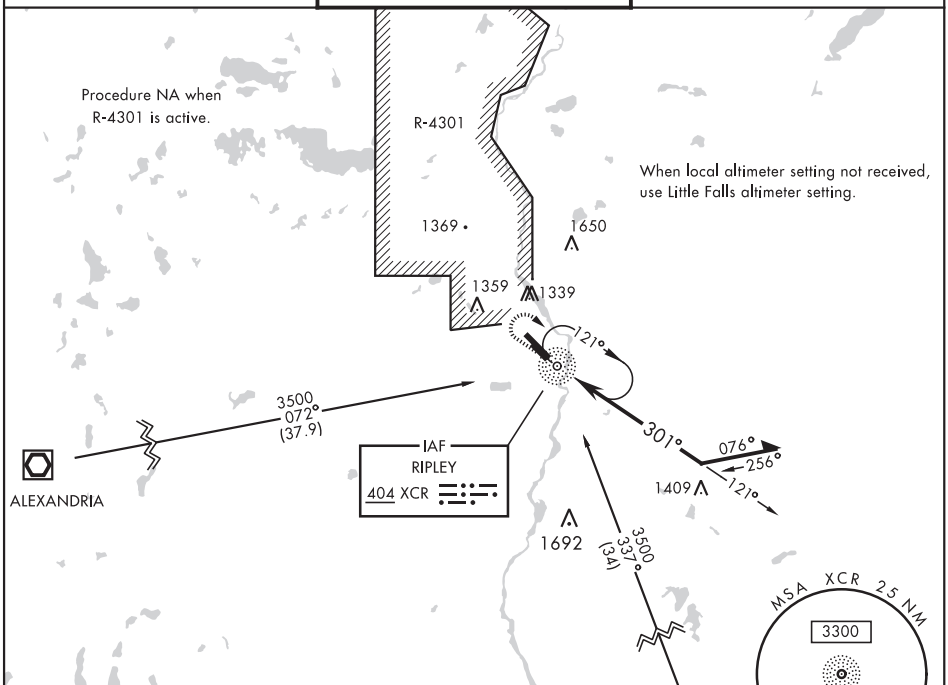
* When ALS inop, increase CAT CD vis to 2 miles.

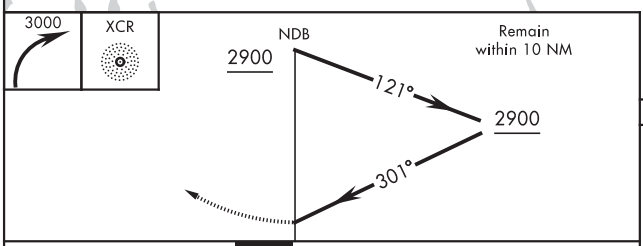
NA

MALSF

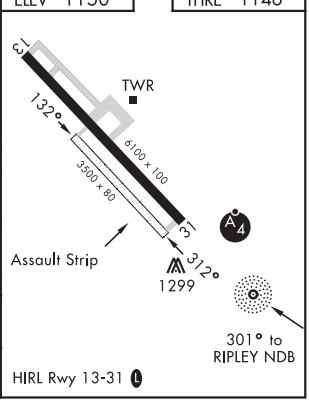
MISSED APPROACH: Climbing right turn to 3000 in XCR NDB holding pattern.

MINNEAPOLIS CENTER	MILLER TOWER *	CLNC DEL
118.05 239.0	126.2 (L) 254.4 46.7	126.2





ELEV 1150 THRE 1146



CATEGORY	A	B	C	D
S-31	1860-1 714 (800-1)		1860-1¾ 714 (800-1¾)	
(C) CIRCLING	1860-1 710 (800-1)		1860-2 710 (800-2)	2080-3 930 (1000-3)
LITTLE FALLS ALTIMETER SETTING MINIMUMS				
S-31*	1900-1 754 (800-1)		1900-1⅞ 754 (800-1⅞)	
(C) CIRCLING	1900-1 750 (800-1)	1900-1¼ 750 (800-1¼)	1900-2¼ 750 (800-2¼)	2120-3 970 (1000-3)

CAMP RIPLEY, MINNESOTA 46° 05′N-94° 21′W RAY S. MILLER AAF (KRYM)

Amdt 3 19JUL18

NDB RWY 31

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RED WING, MINNESOTA

AL-6662 (FAA)

20254

ILS or LOC RWY 9

RED WING RGNL (RGK)

LOC I-RGK	APP CRS	Rwy ldg	5010
110.1	091°	TDZE	778
		Apt Elev	778

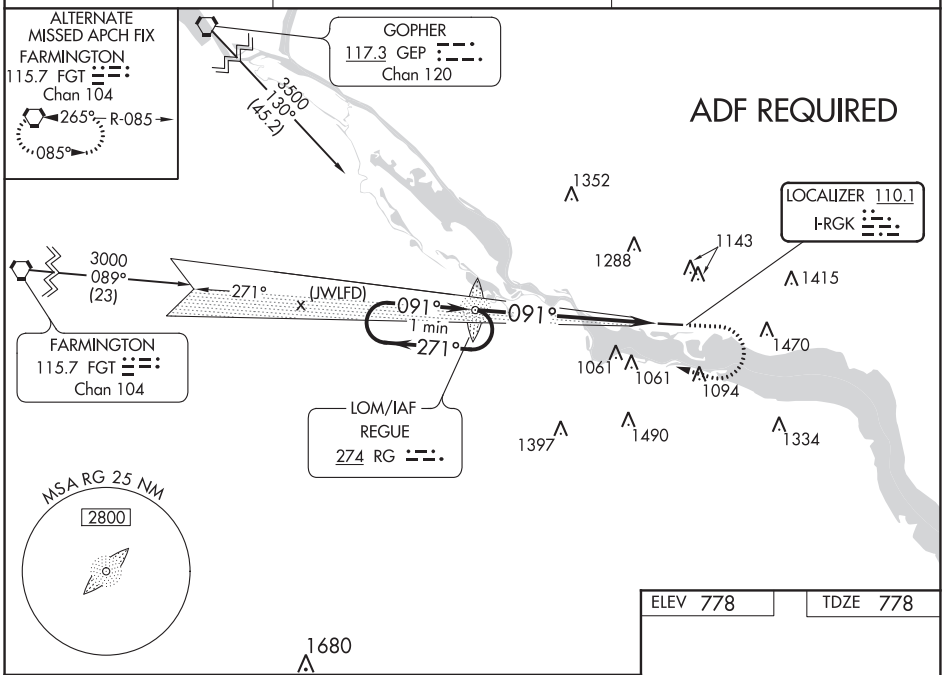
NA

ADF Required. When local altimeter setting not received, use South St. Paul altimeter setting and increase all DA 72 feet and all MDA 80 feet; increase S-LOC 9 Cat C/D visibility ⅛ mile, and Circling Cat A/C/D visibility ¼ mile. For inop MALSR, increase S-LOC 9 Cat C/D visibility ¼ mile. For inop MALSR when using South St. Paul altimeter setting, increase S-ILS 9 all Cats visibility ⅜ mile, and S-LOC 9 Cat C/D visibility ¾ mile.

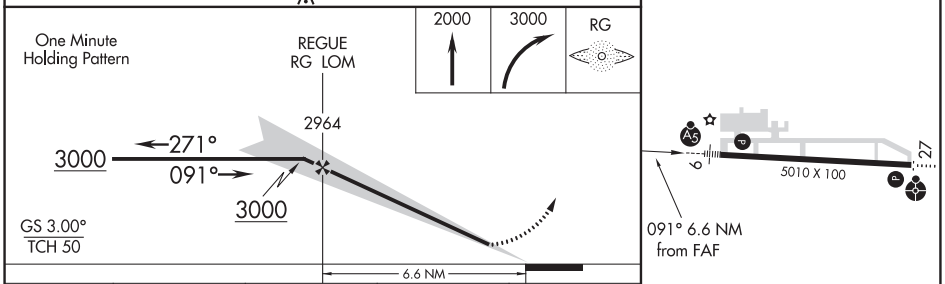
MALSR

MISSED APPROACH: Climb to 2000 then climbing right turn to 3000 direct REGUE LOM and hold.

AWOS-3	MINNEAPOLIS APP CON	UNICOM
119.25	121.2 335.65	123.05 (CTAF) L



ELEV 778 | TDZE 778



HIRL Rwy 9-27 L

CATEGORY	A	B	C	D
S-ILS 9	978-½ 200 (200-½)			
S-LOC 9	1520-½ 742 (800-½)	1520-¾ 742 (800-¾)	1520-1¾ 742 (800-1¾)	
CIRCLING	1520-1 742 (800-1)	1520-1¼ 742 (800-1¼)	1540-2¼ 762 (800-2¼)	1540-2½ 762 (800-2½)

FAF to MAP 6.6 NM

Knots	60	90	120	150	180
Min:Sec	6:36	4:24	3:18	2:38	2:12

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RNAV (GPS) RWY 9
RED WING RGNL (RGK)

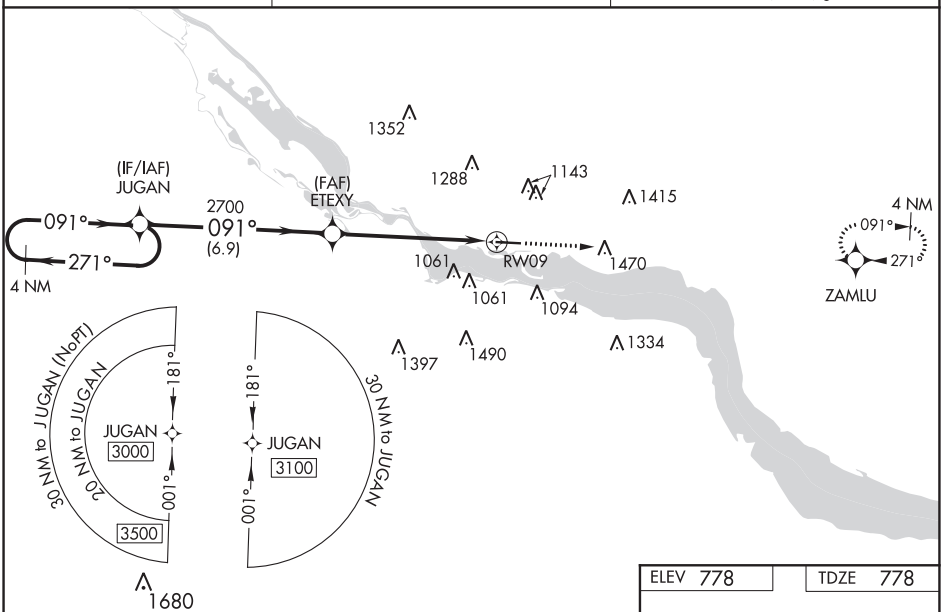
WAAS CH 56526 W09A	APP CRS 091°	Rwy ldg 5010 TDZE 778 Apt Elev 778

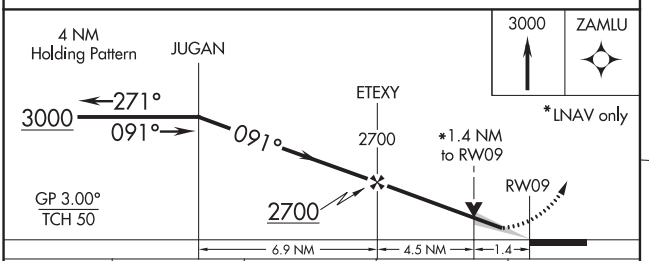
Baro-VNAV NA when using South St. Paul altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 38°C (100°F). DME/DME RNP-0.3 NA. VDP NA with South St. Paul altimeter setting. When local altimeter setting not received, use South St. Paul altimeter setting and increase all DA 72 feet and all MDA 80 feet; increase LNAV/VNAV visibility ⅜ mile all Cats, LNAV and Circling Cat B/C/D visibility ¼ mile. For inop MALSR, increase LNAV Cat C/D visibility ⅜ mile. For inop MALSR when using South St. Paul altimeter setting, increase LPV visibility ⅜ mile all Cats, LNAV/VNAV all Cats and LNAV Cat C/D visibility ¾ mile.

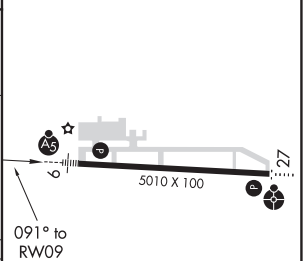
MALSR A5

MISSED APPROACH: Climb to 3000 direct ZAMLU and hold.

AWOS-3	MINNEAPOLIS APP CON	UNICOM
119.25	121.2 335.65	123.05 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	978-½ 200 (200-½)			
LNAV/VNAV DA	1160-¾ 382 (400-¾)			
LNAV MDA	1260-½ 482 (500-½)		1260-1 482 (500-1)	
CIRCLING	1480-1 702 (800-1)	1520-1 742 (800-1)	1540-2¼ 762 (800-2¼)	1540-2½ 762 (800-2½)

HIRL Rwy 9-27 L

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RED WING, MINNESOTA

AL-6662 (FAA)

20254

RNAV (GPS) RWY 27

RED WING RGNL (RGK)

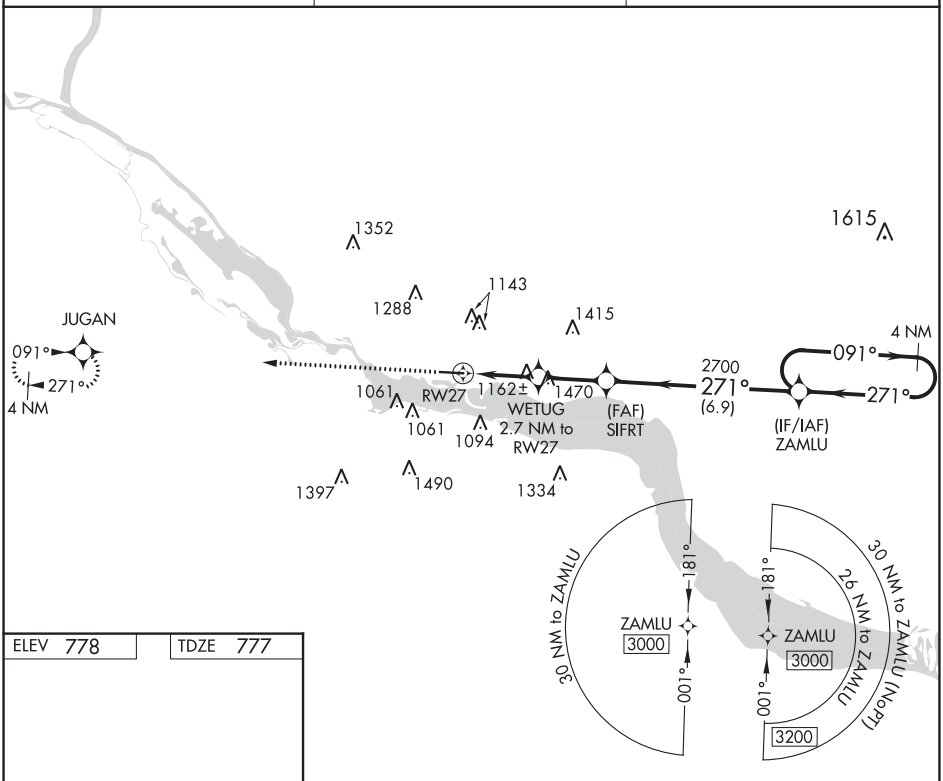
APP CRS	Rwy ldg	5010
271°	TDZE	777
	Apt Elev	778

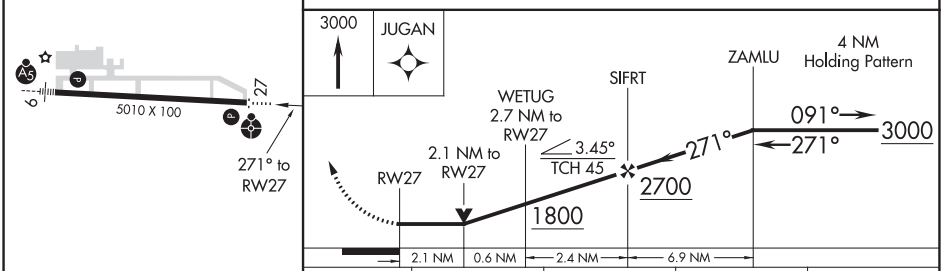
DME/DME RNP-0.3 NA. VDP NA with South St. Paul altimeter setting. When local altimeter setting not received, use South St. Paul altimeter setting: increase all MDA 80 feet and LNAV Cat C visibility ½ mile, Circling Cat A and C visibility ¼ mile. Helicopter visibility reduction below ¾ SM NA.
Inop table does not apply to LNAV Cat C.

ODALS

MISSED APPROACH: Climb to 3000 direct JUGAN and hold.

AWOS-3	MINNEAPOLIS APP CON	UNICOM
119.25	121.2 335.65	123.05 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	1520-¾ 743 (800-¾)	1520-1¼ 743 (800-1¼)	1520-2 743 (800-2)	NA
CIRCLING	1520-1 742 (800-1)	1520-1¼ 742 (800-1¼)	1540-2¼ 762 (800-2¼)	NA

HIRL Rwy 9-27 L

NC-1, 25 FEB 2021 to 22 APR 2021

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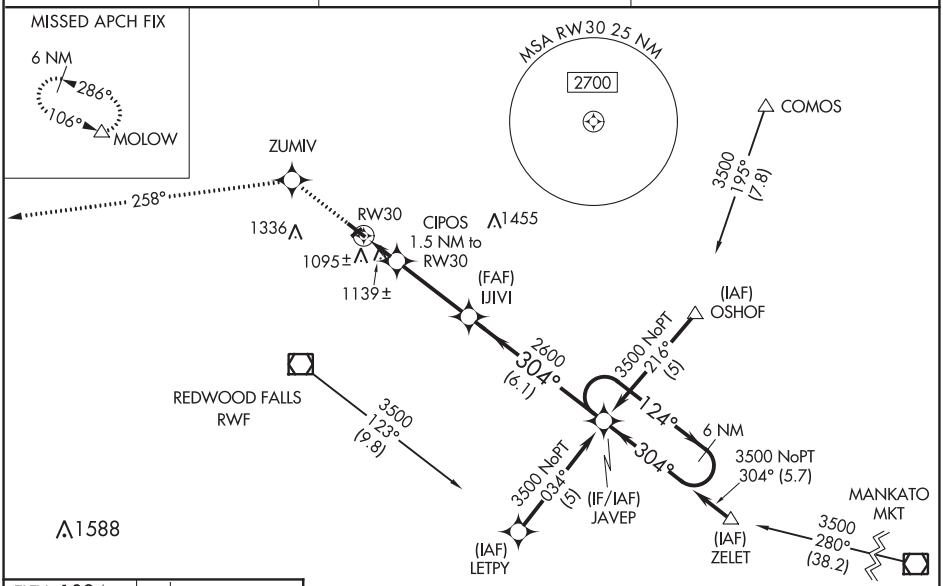
WAAS CH **86610** **W30A**	APP CRS **304°**	Rwy ldg **4001** TDZE **1024** Apt Elev **1024**

RNAV (GPS) RWY 30
REDWOOD FALLS MUNI (RWF)

DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F).
Baro-VNAV NA when using Olivia Rgnl altimeter setting.
When local altimeter setting not received, use Olivia Rgnl altimeter setting and increase all DA/MDA 40 feet and LNAV Cat C visibility ¼ mile.

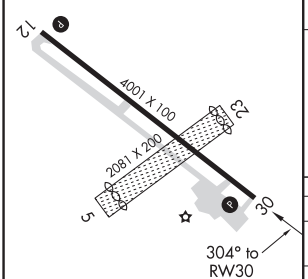
MISSED APPROACH: Climb to 3800 direct ZUMIV and via 258° track to MOLOW and hold.

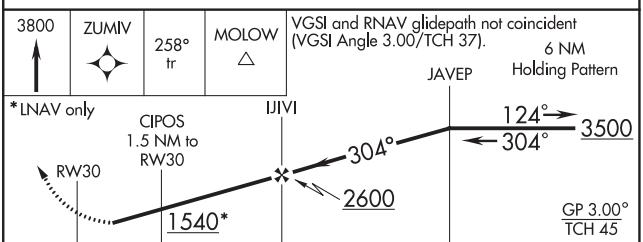
ASOS	MINNEAPOLIS CENTER	UNICOM
126.575	**127.1 290.2**	**123.0** (CTAF) L



Procedure NA for arrivals at MKT VOR/DME via V250 northeast bound.

ELEV 1024 TDZE 1024





CATEGORY	A	B	C	D
LPV DA	1304-1 280 (300-1)			
LNAV/VNAV DA	1440-1½ 416 (500-1½)			
LNAV MDA	1400-1 376 (400-1)			1400-1¼ 376 (400-1¼)
CIRCLING	1480-1 456 (500-1)	1580-1 556 (600-1)	1580-1½ 556 (600-1½)	1700-2¼ 676 (700-2¼)

REIL Rwys 12 and 30 L
MIRL Rwy 12-30 L

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REDWOOD FALLS, MINNESOTA

AL-5200 (FAA)

20310

VOR-A

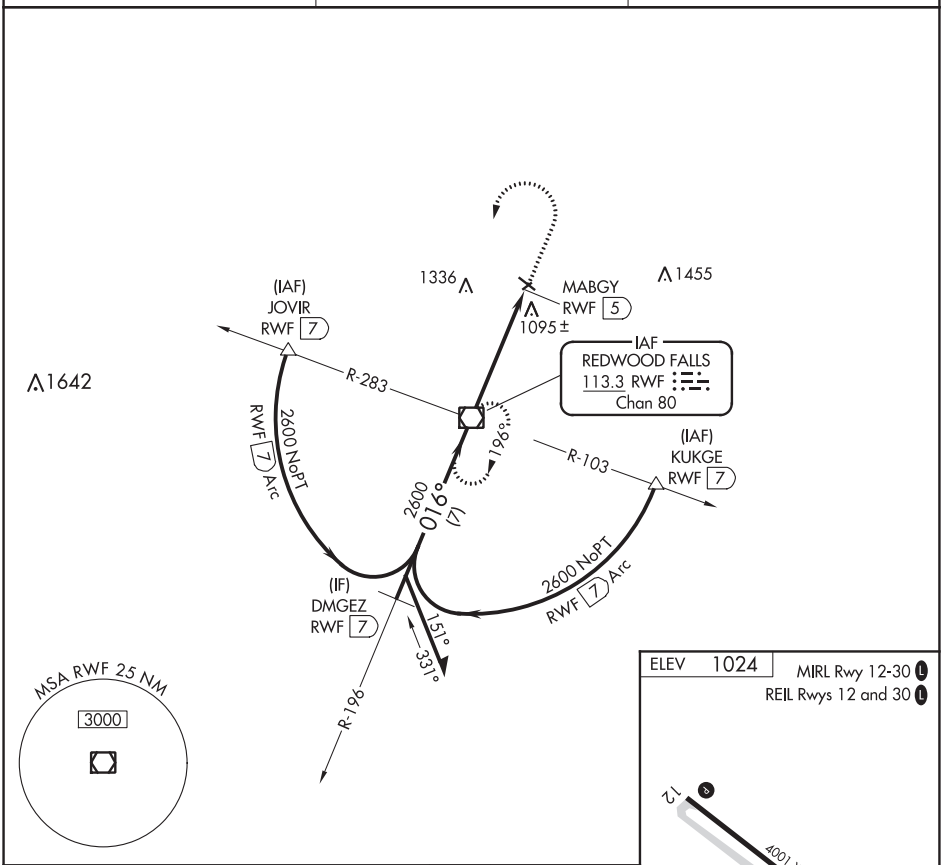
REDWOOD FALLS MUNI (RWF)

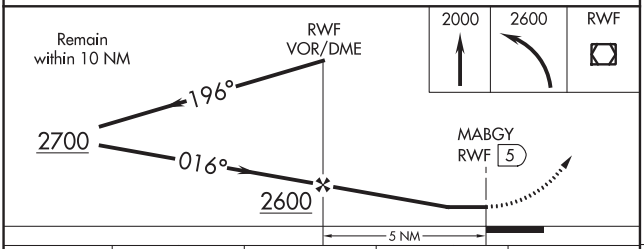
VOR/DME RWF 113.3 Chan 80	APP CRS 016°	Rwy ldg N/A TDZE N/A Apt Elev 1024

When local altimeter setting not received, use Olivia Rgnl altimeter setting and increase all MDA 40 feet.

MISSED APPROACH: Climb to 2000 then climbing left turn to 2600 direct RWF VOR/DME and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
126.575	127.1 290.2	123.0 (CTAF) L





CATEGORY	A	B	C	D
CIRCLING	1540-1 516 (600-1)	1580-1 556 (600-1)	1580-1½ 556 (600-1½)	1700-2¼ 676 (700-2¼)

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

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NC-1, 25 FEB 2021 to 22 APR 2021

LOC I-MNK	APP CRS	Rwy ldg	9033
109.1	131°	TDZE	1280
		Apt Elev	1317

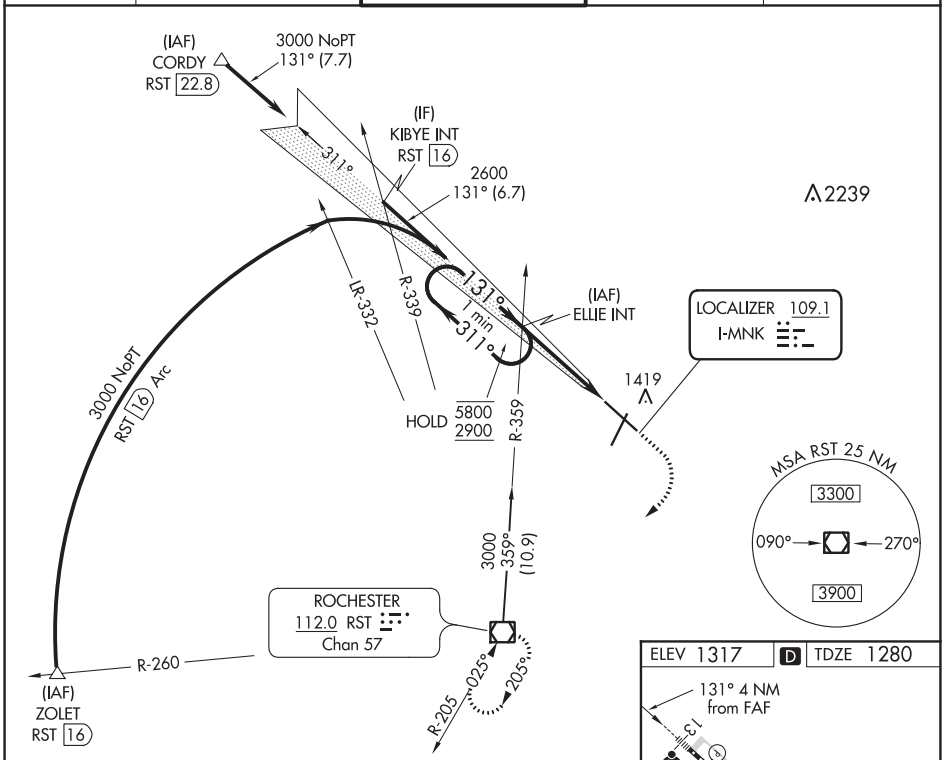
ILS or LOC RWY 13
ROCHESTER INTL (RST)

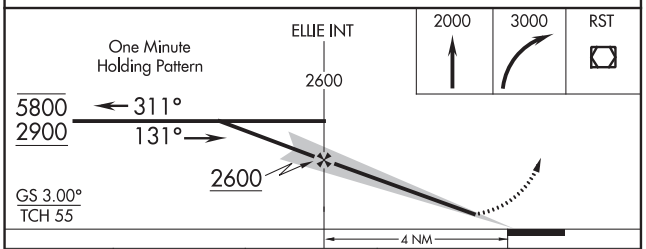
ASR

MALSR

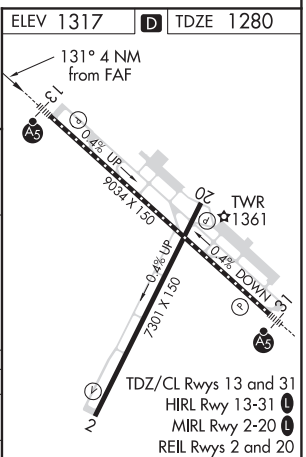
MISSED APPROACH: Climb to 2000 then climbing right turn to 3000 direct RST VOR/DME and hold.

ATIS	ROCHESTER APP CON★	ROCHESTER TOWER★	GND CON	UNICOM
120.5	119.8 251.125	118.3 (CTAF) L 257.8	121.9	122.95





CATEGORY	A	B	C	D
S-ILS 13	1480/18 200 (200-½)			
S-LOC 13	1680/24 400 (400-½)		1680/35 400 (400-⅝)	
C CIRCLING	1720-1 403 (500-1)	1780-1 463 (500-1)	1900-1½ 583 (600-1½)	1900-2 583 (600-2)



FAF to MAP 4 NM					
Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20

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ROCHESTER, MINNESOTA | AL-5041 (FAA) | 20254

ILS Z or LOC Z RWY 31
ROCHESTER INTL (RST)

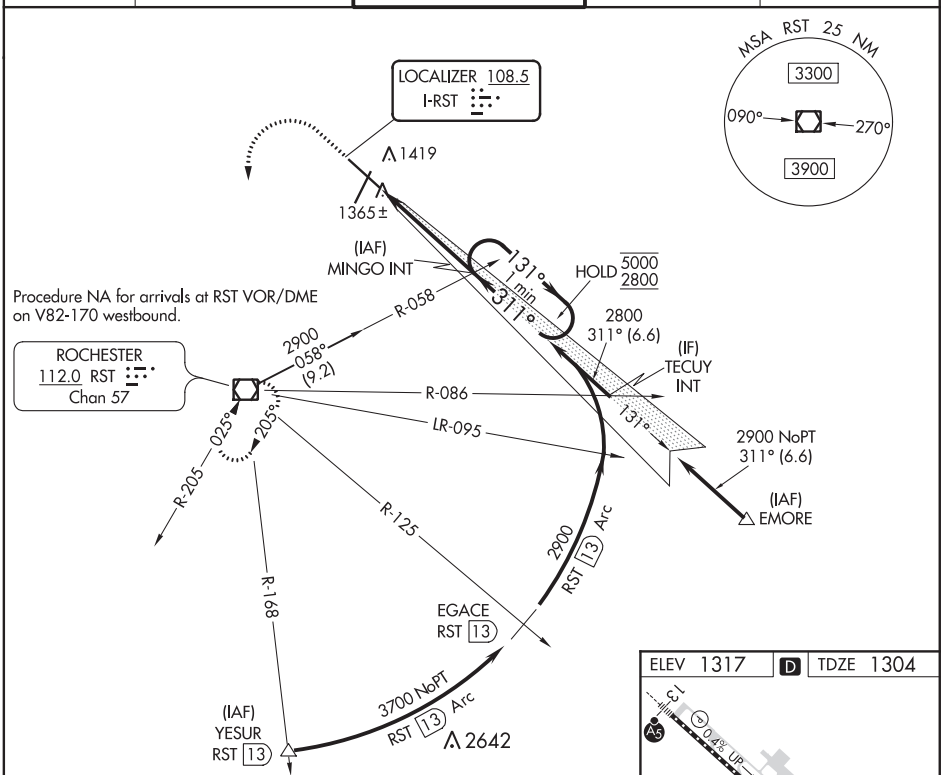
LOC I-RST	APP CRS	Rwy ldg / TDZE / Apt Elev
108.5	311°	9033 / 1304 / 1317

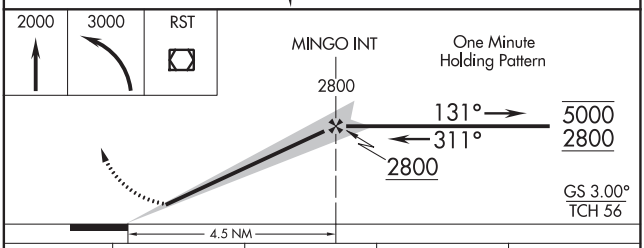
ASR: For inop ALS, increase S-LOC 31 Cat C/D visibility to RVR 5500.

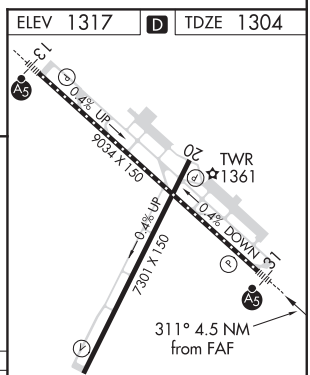
MALSR

MISSED APPROACH: Climb to 2000 then climbing left turn to 3000 direct RST VOR/DME and hold.

ATIS	ROCHESTER APP CON★	ROCHESTER TOWER★	GND CON	UNICOM
120.5	119.8 251.125	118.3 (CTAF) L 257.8	121.9	122.95







CATEGORY	A	B	C	D
S-ILS 31	1504/18 200 (200-½)			
S-LOC 31	1620/24 316 (400-½)			
C CIRCLING	1720-1 403 (500-1)	1780-1 463 (500-1)	1900-1½ 583 (600-1½)	1900-2 583 (600-2)

FAF to MAP 4.5 NM

Knots	60	90	120	150	180
Min:Sec	4:30	3:00	2:15	1:48	1:30

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LOC I-RST	APP CRS	Rwy ldg	9033
108.5	311°	TDZE	1304
		Apt Elev	1317

ILS Z RWY 31 (SA CAT I & II)

ROCHESTER INTL (RST)

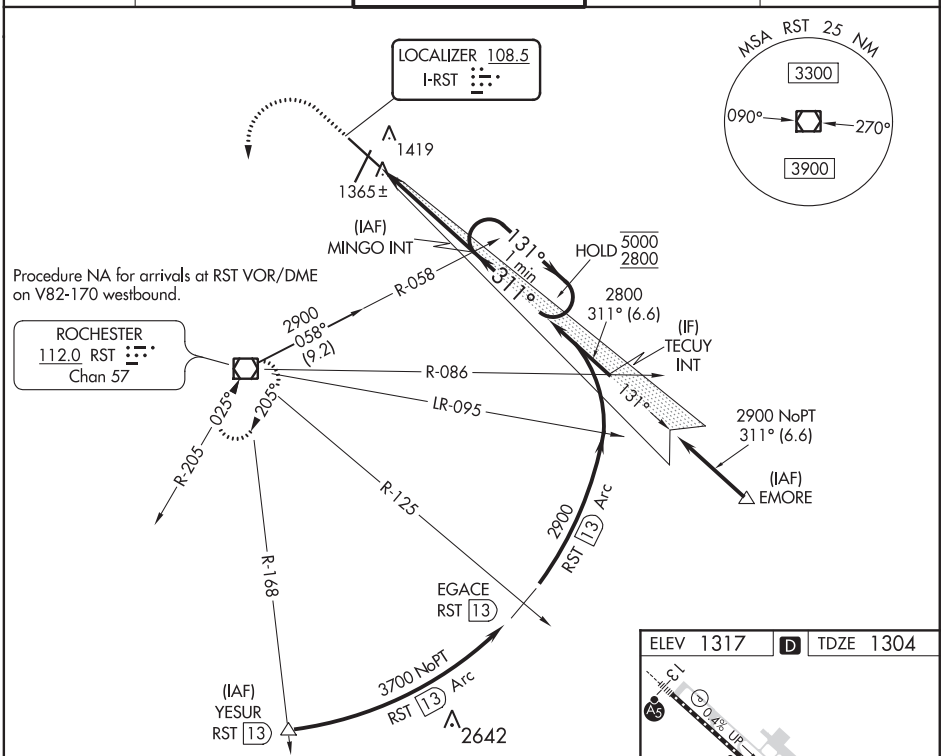
ASR

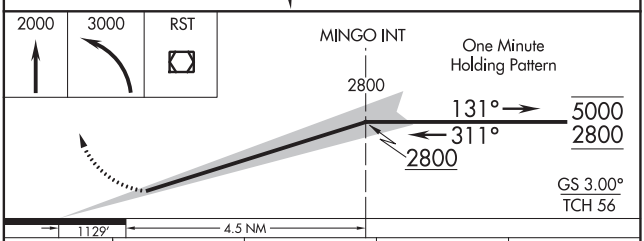
SA CAT I : Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH.
SA CAT II : Reduced Lighting: Requires specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown.
Procedure NA when tower closed.

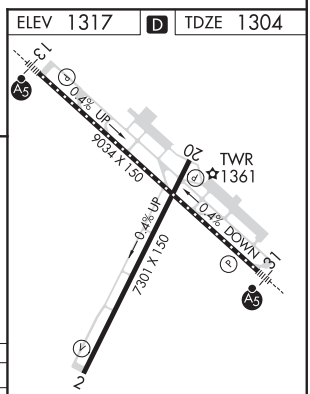
MALSR

MISSED APPROACH: Climb to 2000 then climbing left turn to 3000 direct RST VOR/DME and hold.

ATIS	ROCHESTER APP CON★	ROCHESTER TOWER★	GND CON	UNICOM
120.5	119.8 251.125	118.3 (CTAF) L 257.8	121.9	122.95







CATEGORY	A	B	C	D
S-ILS 31	SA CAT I RA 204/14 150 DA 1454			
S-ILS 31	SA CAT II RA 104/12 100 DA 1404			

SA CATEGORY I & II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

TDZ/CL Rwys 13 and 31
HIRL Rwy 13-31 L
MIRL Rwy 2-20 L
REIL Rwys 2 and 20

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ROCHESTER, MINNESOTA

AL-5041 (FAA)

20310

RNAV (GPS) RWY 2
ROCHESTER INTL (RST)

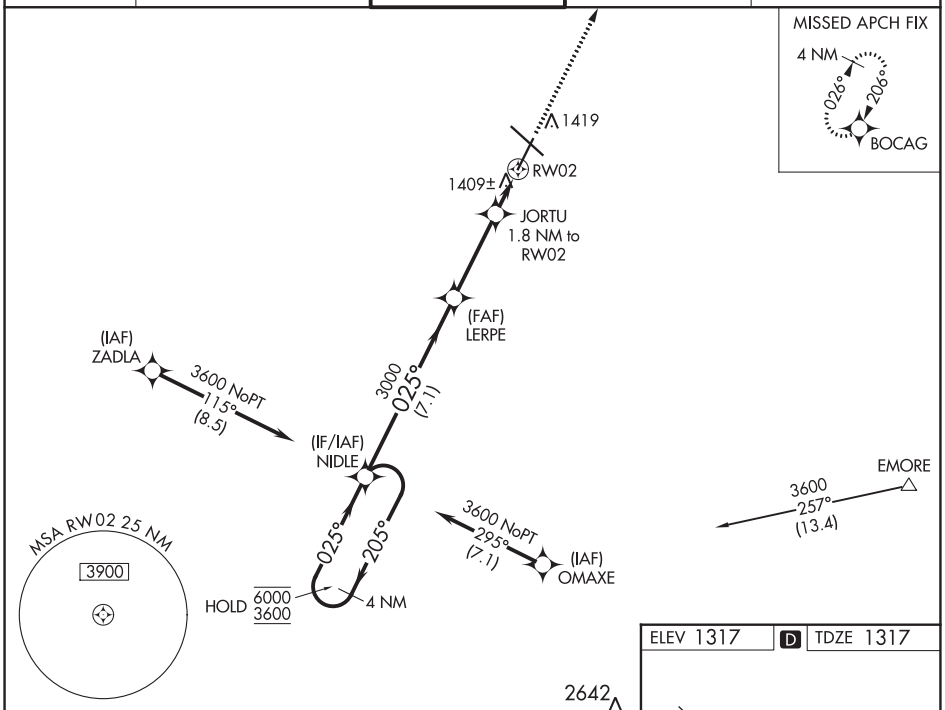
WAAS CH 69621 W02A	APP CRS 025°	Rwy ldg 7300 TDZE 1317 Apt Elev 1317

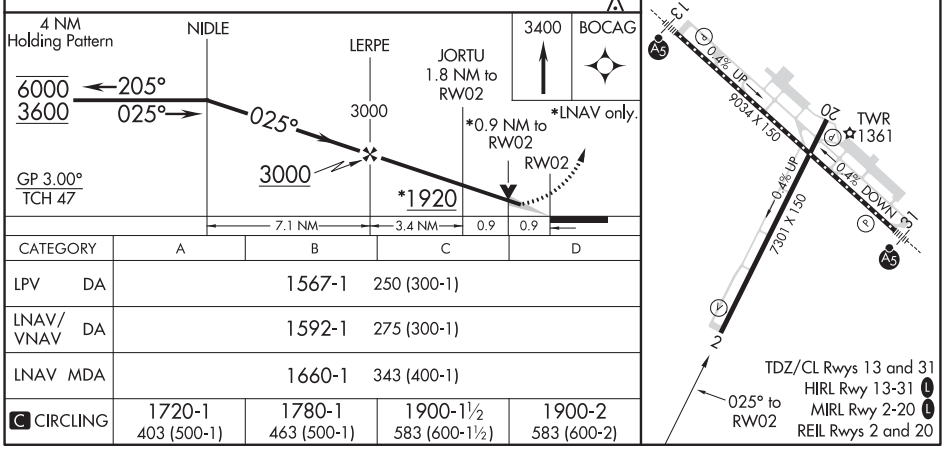
RNP APCH.

ASR For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -28°C or above 54°C.

MISSED APPROACH: Climb to 3400 direct BOCAG and hold, continue climb-in-hold to 4800.

ATIS	ROCHESTER APP CON *	ROCHESTER TOWER *	GND CON	UNICOM
120.5	119.8 251.125	118.3 (CTAF) L 257.8	121.9	122.95





ROCHESTER, MINNESOTA
Amdt 3C 30JAN20

43°54′N-92°30′W

ROCHESTER INTL (RST)
RNAV (GPS) RWY 2

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RNAV (GPS) RWY 13
ROCHESTER INTL (RST)

WAAS CH 90202 W13A	APP CRS 131°	Rwy ldg 9033 TDZE 1280 Apt Elev 1317

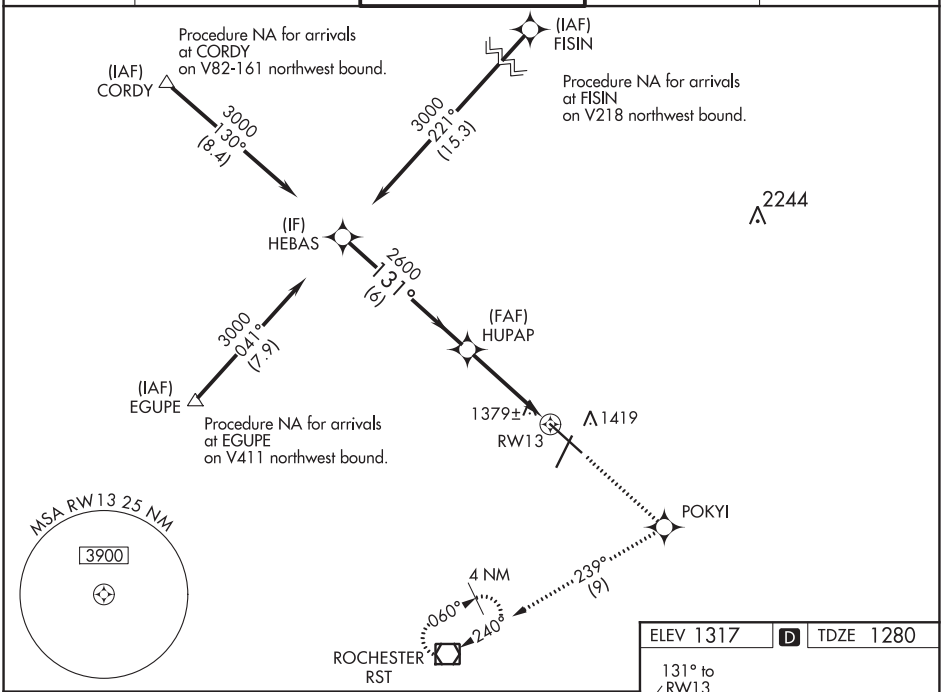
RNP APCH.

ASR: For uncompensated Baro-VNAV system, LNAV/VNAV NA below -17°C or above 54°C. For inop ALS, increase LNAV Cat C/D visibility to RVR 5500.

MALSR

MISSED APPROACH: Climb to 2900 direct POKYI and on track 239° to RST VOR/DME and hold.

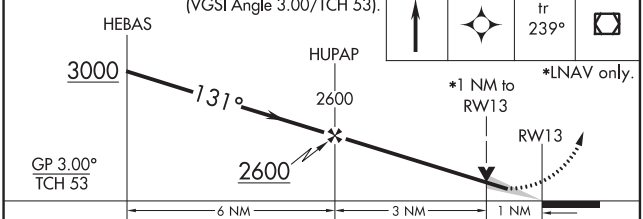
ATIS	ROCHESTER APP CON★	ROCHESTER TOWER★	GND CON	UNICOM
120.5	119.8 251.125	118.3 (CTAF) L 257.8	121.9	122.95



VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 53).

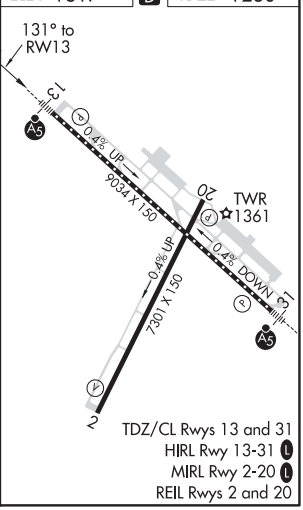
2900	POKYI	tr 239°	RST

*LNAV only.



CATEGORY	A	B	C	D
LPV DA	1530/18 250 (300-½)			
LNAV/VNAV DA	1679/50 399 (400-1)			
LNAV MDA	1640/24 360 (400-½)		1640/30 360 (400-⅝)	1640/50 360 (400-1)
C CIRCLING	1720-1 403 (500-1)	1780-1 463 (500-1)	1900-1½ 583 (600-1½)	1900-2 583 (600-2)

ELEV 1317 D TDZE 1280



TDZ/CL Rwys 13 and 31
HIRL Rwy 13-31 L
MIRL Rwy 2-20 L
REIL Rwys 2 and 20

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NC-1, 25 FEB 2021 to 22 APR 2021

ROCHESTER, MINNESOTA | AL-5041 (FAA) | 20310

WAAS CH 57922 W20A	APP CRS 206°	Rwy ldg 7300 TDZE 1305 Apt Elev 1317

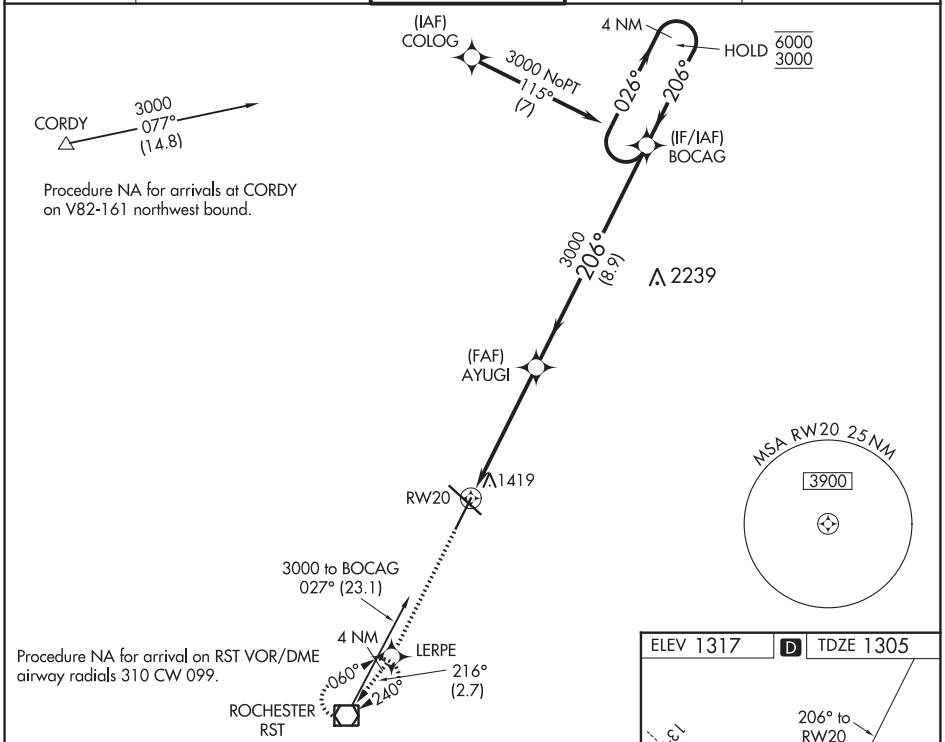
RNAV (GPS) RWY 20
ROCHESTER INTL (RST)

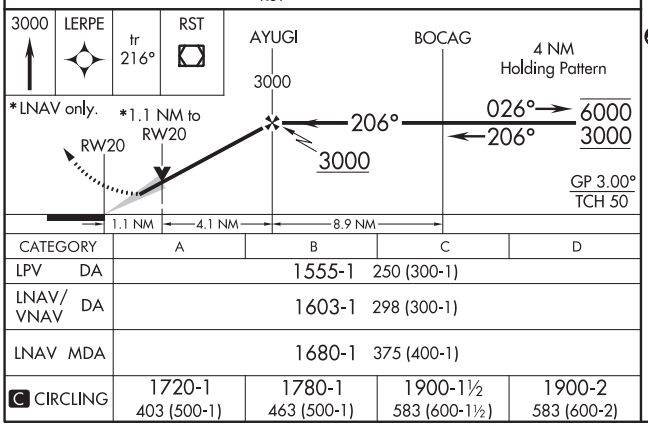
RNP APCH.

ASR For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -28°C or above 54°C.

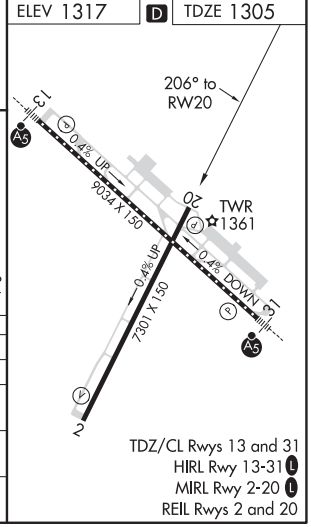
MISSED APPROACH: Climb to 3000 direct LERPE and on track 216° to RST VOR/DME and hold.

ATIS	ROCHESTER APP CON ★	ROCHESTER TOWER ★	GND CON	UNICOM
120.5	119.8 251.125	118.3 (CTAF) L 257.8	121.9	122.95





CATEGORY	A	B	C	D
LPV DA	1555-1 250 (300-1)			
LNAV/VNAV DA	1603-1 298 (300-1)			
LNAV MDA	1680-1 375 (400-1)			
C CIRCLING	1720-1 403 (500-1)	1780-1 463 (500-1)	1900-1½ 583 (600-1½)	1900-2 583 (600-2)



ROCHESTER, MINNESOTA
Amdt 2C 05NOV20

43°54′N-92°30′W

ROCHESTER INTL (RST)
RNAV (GPS) RWY 20

NC-1, 25 FEB 2021 to 22 APR 2021

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WAAS CH 49028 W31A	APP CRS 311°	Rwy ldg 9033 TDZE 1304 Apt Elev 1317

RNAV (GPS) RWY 31
ROCHESTER INTL (RST)

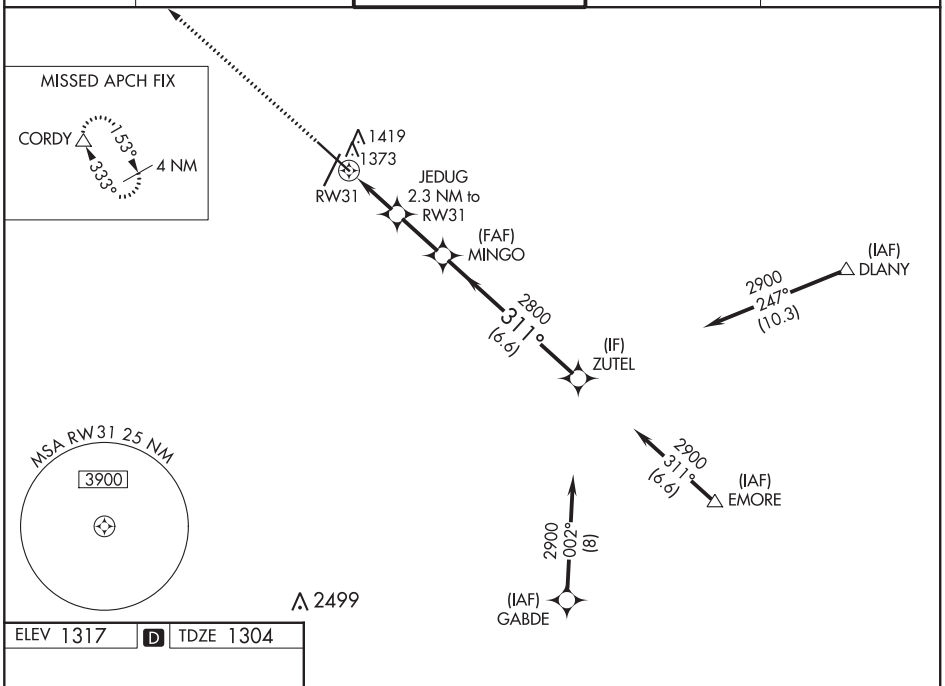
RNP APCH.

ASR For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C or above 54°C. For inop ALS, increase LNAV/VNAV all Cats visibility to RVR 4500, increase LNAV Cat C/D visibility to RVR 5500.

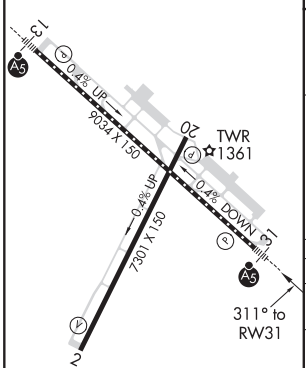
MALSR A5

MISSED APPROACH: Climb to 3000 direct CORDY and hold.

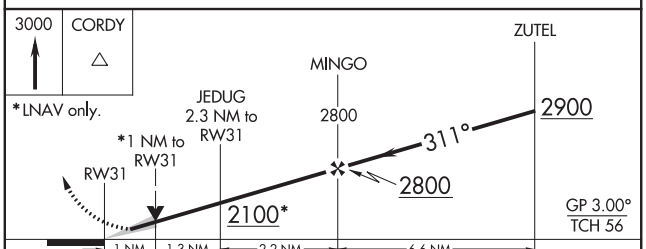
ATIS	ROCHESTER APP CON*	ROCHESTER TOWER*	GND CON	UNICOM
120.5	119.8 251.125	118.3 (CTAF) L 257.8	121.9	122.95



ELEV 1317 D TDZE 1304



TDZ/CL Rwys 13 and 31
HIRL Rwy 13-31 L
MIRL Rwy 2-20 L
REIL Rwys 2 and 20



CATEGORY	A	B	C	D
LPV DA	1504/18 200 (200-½)			
LNAV/VNAV DA	1554/24 250 (300-½)			
LNAV MDA	1640/24 336 (400-½)		1640/35 336 (400-⅝)	
C CIRCLING	1720-1 403 (500-1)	1780-1 463 (500-1)	1900-1½ 583 (600-1½)	1900-2 583 (600-2)

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ROCHESTER, MINNESOTA AL-5041 (FAA) 20254

COPTER ILS Y or LOC Y RWY 31

ROCHESTER INTL (RST)

LOC I-RST	APP CRS	Rwy ldg / TDZE / Apt Elev
108.5	311°	9033 / 1304 / 1317

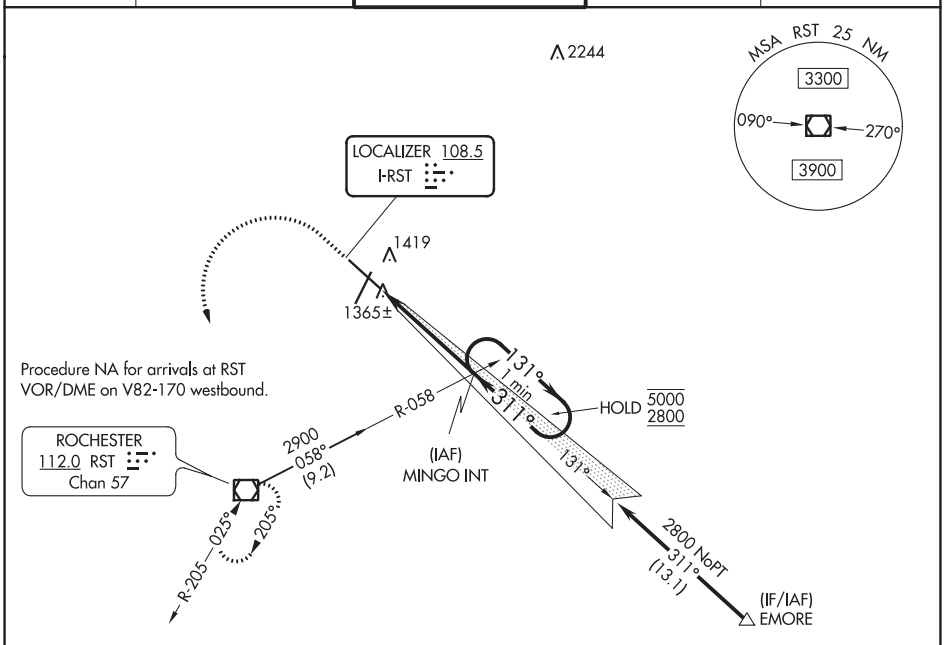
ASR

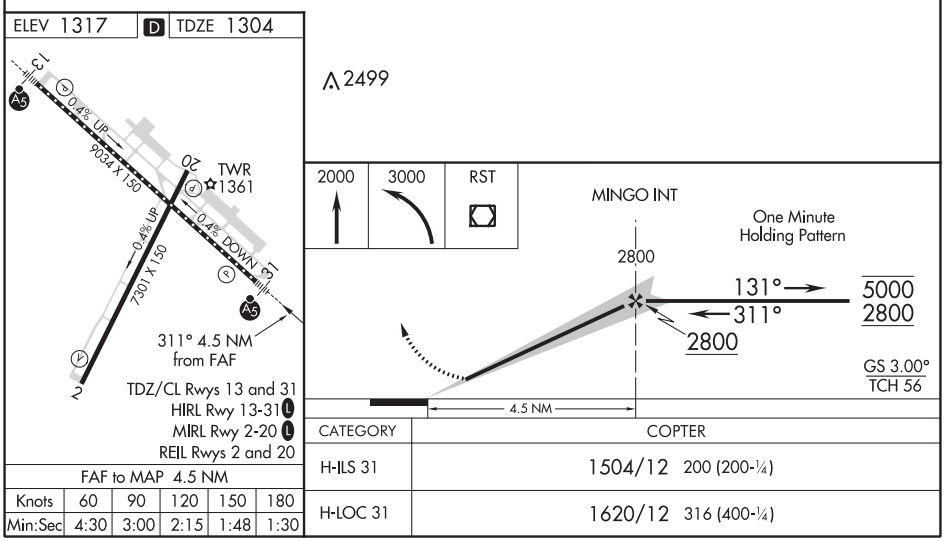
For inop ALS, increase visibility to 1 mile.

MALSR

MISSED APPROACH: Climb to 2000 then climbing left turn to 3000 direct RST VOR/DME and hold.

ATIS	ROCHESTER APP CON★	ROCHESTER TOWER★	GND CON	UNICOM
120.5	119.8 251.125	118.3 (CTAF) L 257.8	121.9	122.95





FAF to MAP 4.5 NM					
Knots	60	90	120	150	180
Min:Sec	4:30	3:00	2:15	1:48	1:30

CATEGORY	COPTER
H-ILS 31	1504/12 200 (200-¼)
H-LOC 31	1620/12 316 (400-¼)

ROCHESTER, MINNESOTA
Amdt 3A 21MAY20

43°54′N-92°30′W

ROCHESTER INTL (RST)

COPTER ILS Y or LOC Y RWY 31

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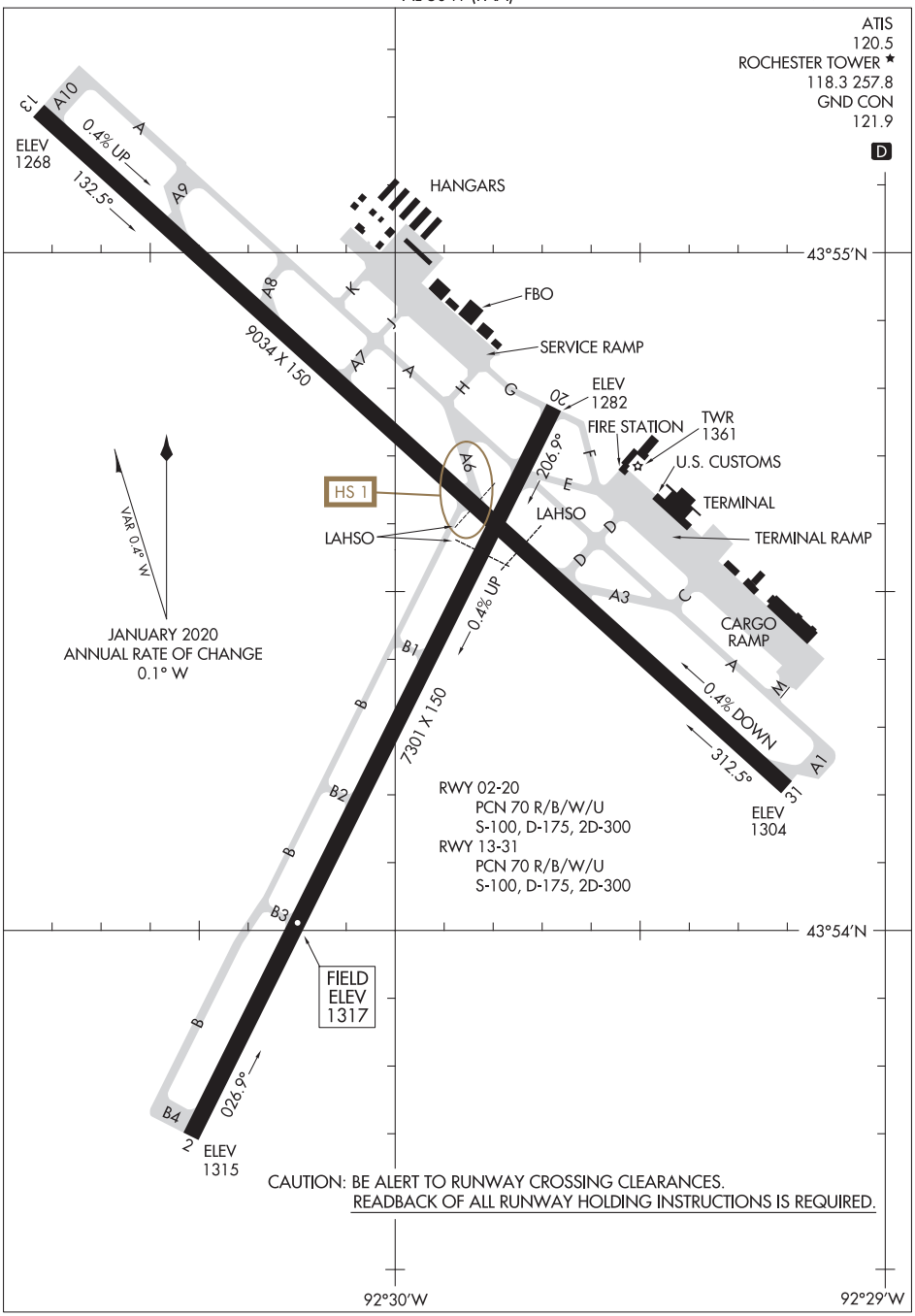
AL-5041 (FAA)



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ROLLA, NORTH DAKOTA — AL-9236 (FAA) — 19339

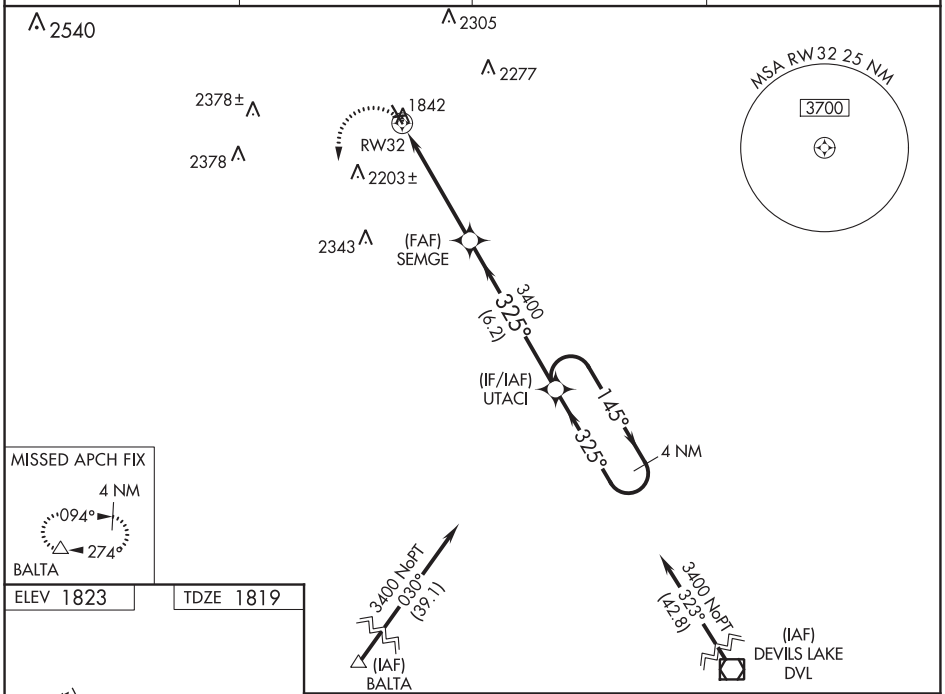
WAAS CH 81834 W32A	APP CRS 325°	Rwy ldg 4300 TDZE 1819 Apt Elev 1823

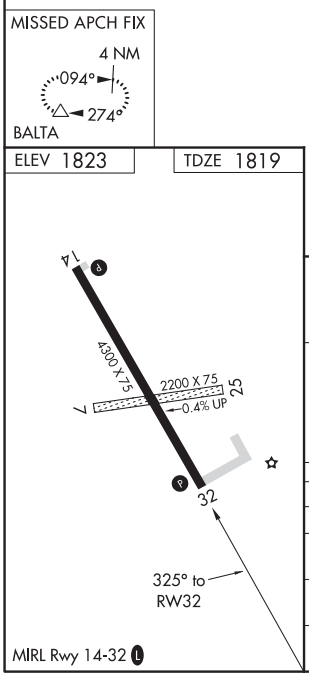
RNAV (GPS) RWY 32
ROLLA MUNI (Ø6D)

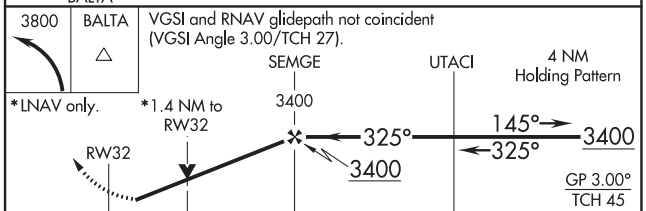
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Baro-VNAV and VDP NA when using Cando Muni altimeter setting. Rwy 32 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Cando Muni altimeter setting and increase all DA 114 feet and LPV visibility ½ mile all Cats and LNAV/VNAV visibility ⅝ mile all Cats; increase all MDA 120 feet and LNAV Cat C and D visibility ½ mile; increase Circling Cat C visibility ¾ mile, Cat D visibility ¼ mile. Circling NA to Rwys 7 and 25. Circling Rwy 14 NA at night.

MISSED APPROACH: Climbing left turn to 3800 direct BALTA and hold.

AWOS-3	9D7 AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.125	118.325	127.6 279.6	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	2069-1 250 (300-1)			
LNAV/VNAV DA	2172-1¼ 353 (400-1¼)			
LNAV MDA	2300-1 481 (500-1)		2300-1⅜ 481 (500-1⅜)	
C CIRCLING	2300-1 477 (500-1)	2340-1 517 (600-1)	2560-2 737 (800-2)	2700-2¾ 877 (900-2¾)

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 56304 W16A	APP CRS 162°	Rwy ldg 4401 TDZE 1055 Apt Elev 1060

RNAV (GPS) RWY 16
ROSEAU MUNI/RUDY BILLBERG FIELD (ROX)

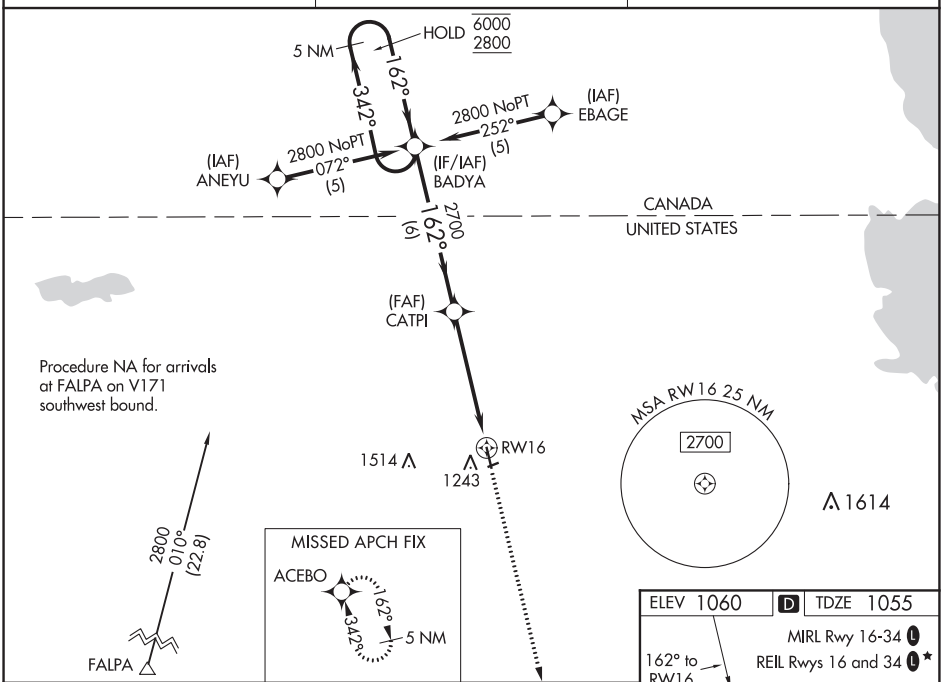
RNP APCH.

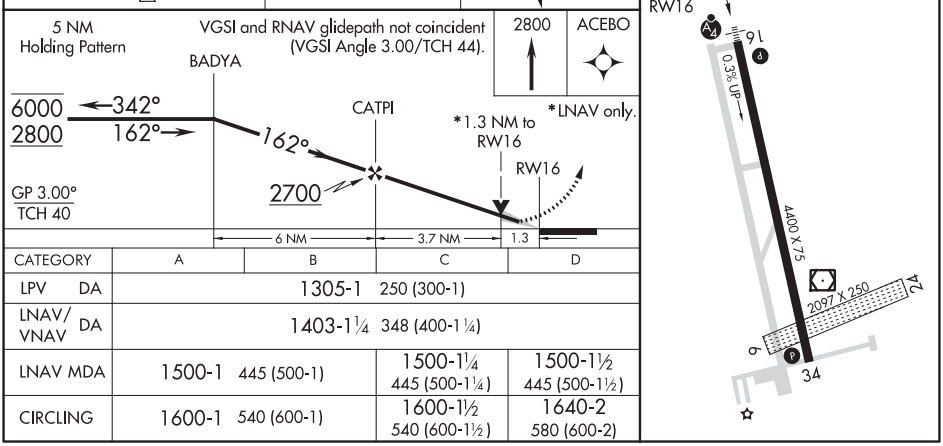
Circling NA to Rwys 6 and 24. Baro-VNAV and VDP NA when using Warroad altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 46°C. When local altimeter setting not received, use Warroad altimeter setting and increase LPV DA to 1341 feet, LNAV/VNAV DA to 1439 feet and all MDA 40 feet, increase LNAV Cat C visibility ⅛ SM.

MALSF

MISSED APPROACH: Climb to 2800 direct ACEBO and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
108.8	134.75 251.1	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1305-1 250 (300-1)			
LNAV/VNAV DA	1403-1¼ 348 (400-1¼)			
LNAV MDA	1500-1 445 (500-1)		1500-1¼ 445 (500-1¼)	1500-1½ 445 (500-1½)
CIRCLING	1600-1 540 (600-1)		1600-1½ 540 (600-1½)	1640-2 580 (600-2)

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ROSEAU, MINNESOTA — AL-5635 (FAA) — 20366

WAAS CH 99404 W34A	APP CRS 342°	Rwy ldg 4401 TDZE 1060 Apt Elev 1060

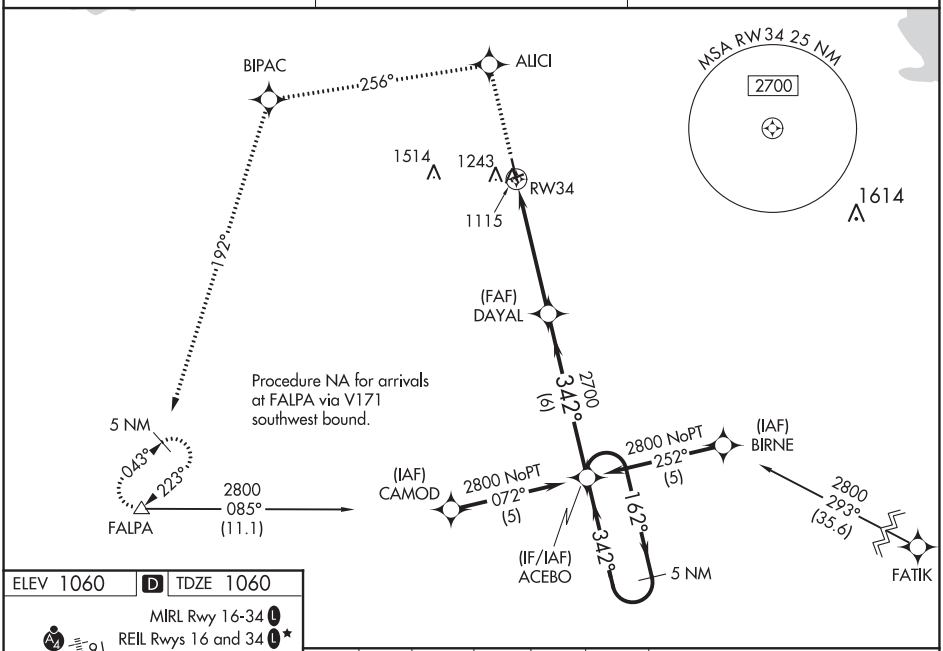
RNAV (GPS) RWY 34
ROSEAU MUNI/RUDY BILLBERG FIELD (ROX)

T A W

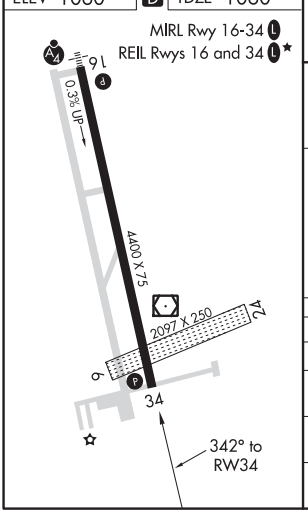
If local altimeter setting not received, use Warroad altimeter setting and increase all DAs 36 feet/MDAs 40 feet.
VDP NA when using Warroad altimeter setting.
Baro-VNAV NA when using Warroad altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F).
Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

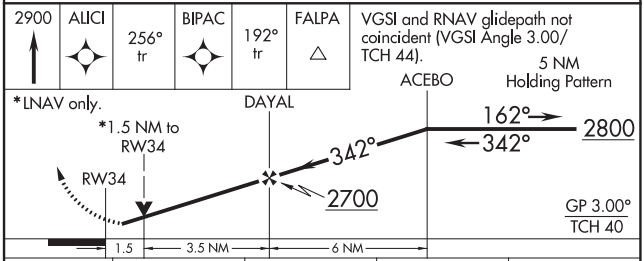
MISSED APPROACH: Climb to 2900 direct ALICI and via 256° track to BIPAC and 192° track to FALPA and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
108.8	134.75 251.1	122.8 (CTAF) L



ELEV 1060 | D | TDZE 1060





CATEGORY	A	B	C	D
LPV DA	1310-1 250 (300-1)			
LNAV/VNAV DA	1485-1½ 425 (500-1½)			
LNAV MDA	1560-1 500 (500-1)		1560-1¼ 500 (500-1¼)	1560-1½ 500 (500-1½)
CIRCLING	1600-1 540 (600-1)		1600-1½ 540 (600-1½)	1640-2 580 (600-2)

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VOR/DME ROX	APP CRS	Rwy ldg	4401
108.8	156°	TDZE	1055
Chan 25		Apt Elev	1060

VOR RWY 16

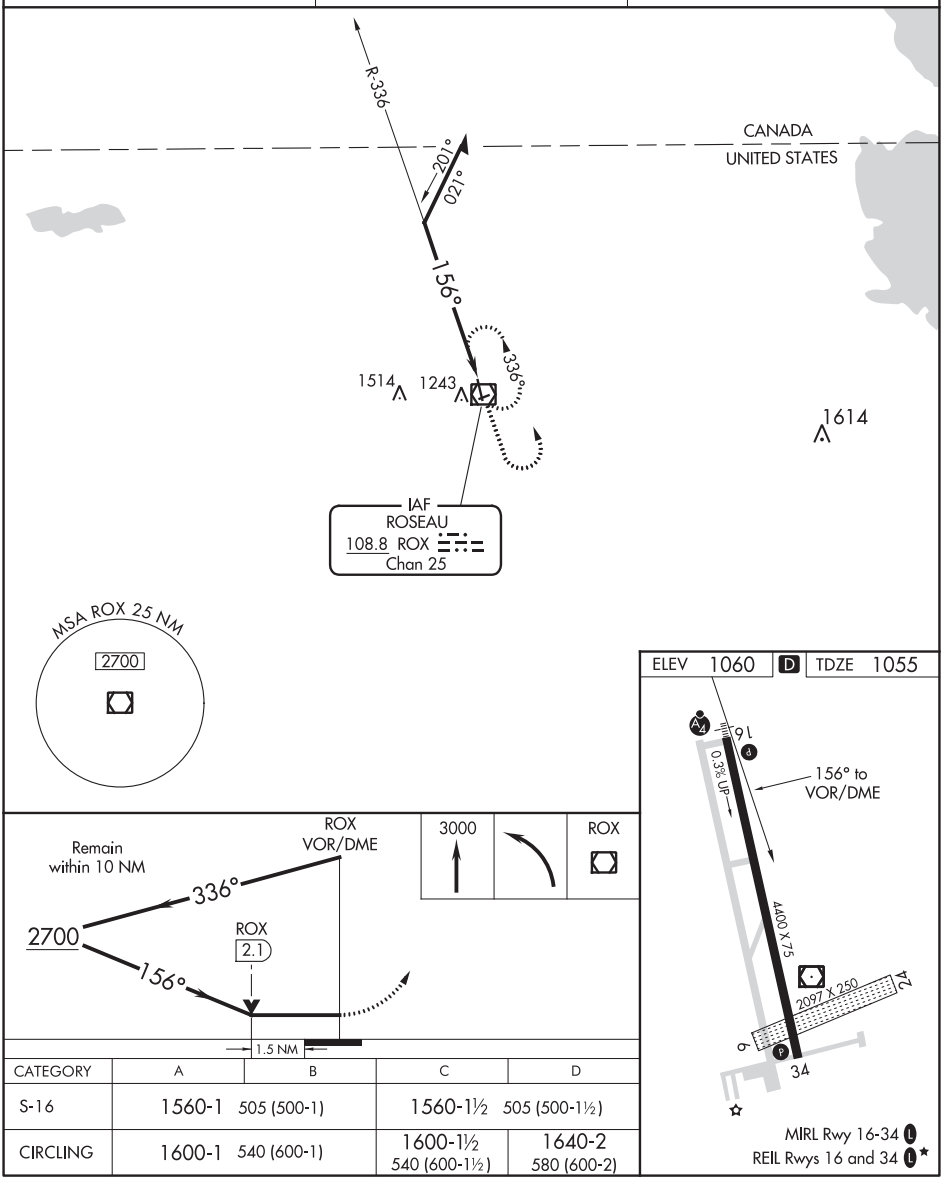
ROSEAU MUNI/RUDY BILLBERG FIELD (ROX)

T NA — If local altimeter setting not received, use Warroad altimeter setting and increase all MDAs 40 feet. VDP NA when using Warroad altimeter setting.

MALSF

MISSED APPROACH: Climb to 3000 then left turn direct ROX VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
108.8	134.75 251.1	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-16	1560-1 505 (500-1)		1560-1½ 505 (500-1½)	
CIRCLING	1600-1 540 (600-1)		1600-1½ 540 (600-1½)	1640-2 580 (600-2)

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ROSEAU, MINNESOTA | AL-5635 (FAA) | 20366

VOR RWY 34

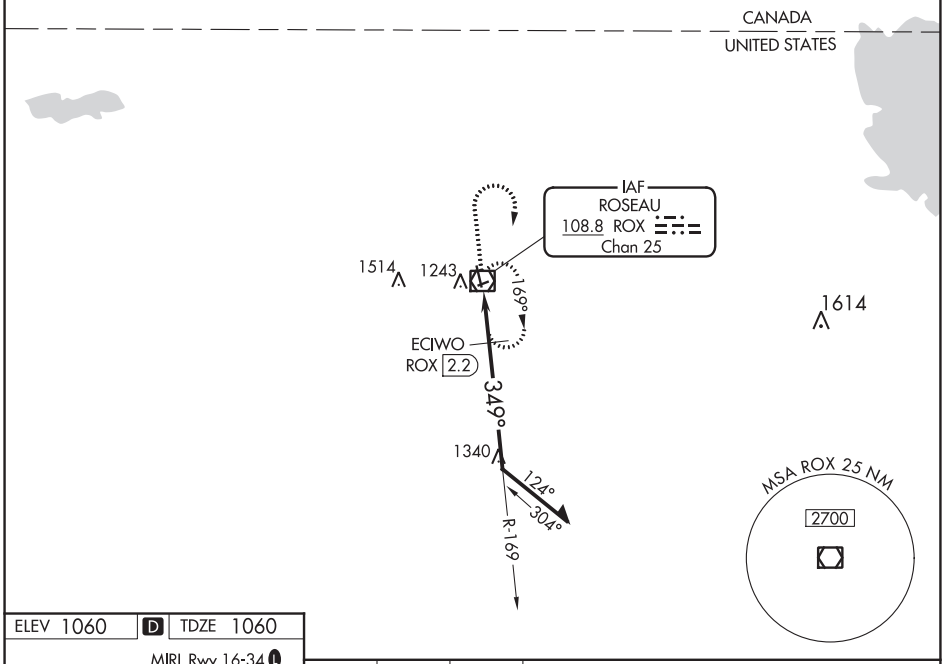
ROSEAU MUNI/RUDY BILLBERG FIELD (ROX)

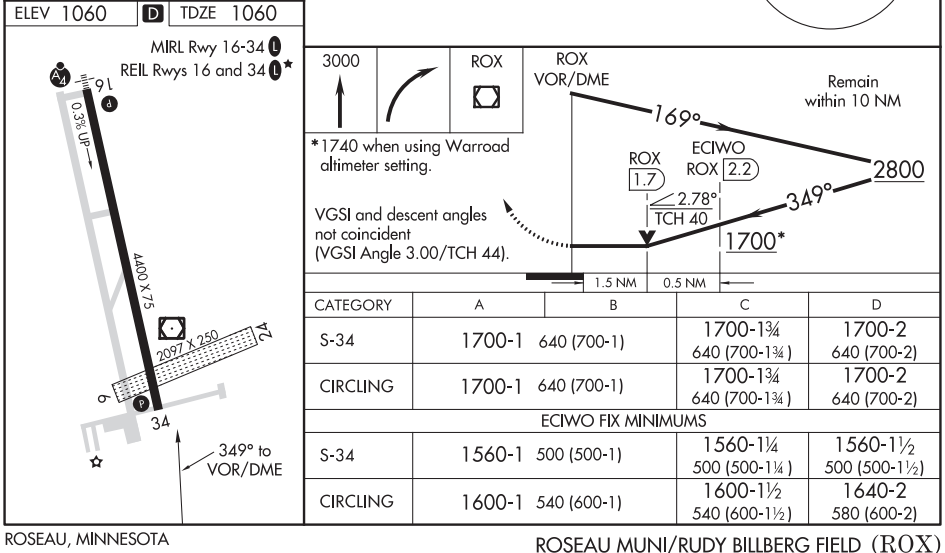
VOR/DME ROX	APP CRS	Rwy ldg	4401
108.8	349°	TDZE	1060
Chan 25		Apt Elev	1060

If local altimeter setting not received, use Warroad altimeter setting and increase all MDAs 40 feet.
VDP NA when using Warroad altimeter setting.
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 3000 then right turn direct ROX VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
108.8	134.75 251.1	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-34	1700-1	640 (700-1)	1700-1¾ 640 (700-1¾)	1700-2 640 (700-2)
CIRCLING	1700-1	640 (700-1)	1700-1¾ 640 (700-1¾)	1700-2 640 (700-2)
ECIWO FIX MINIMUMS				
S-34	1560-1	500 (500-1)	1560-1¼ 500 (500-1¼)	1560-1½ 500 (500-1½)
CIRCLING	1600-1	540 (600-1)	1600-1½ 540 (600-1½)	1640-2 580 (600-2)

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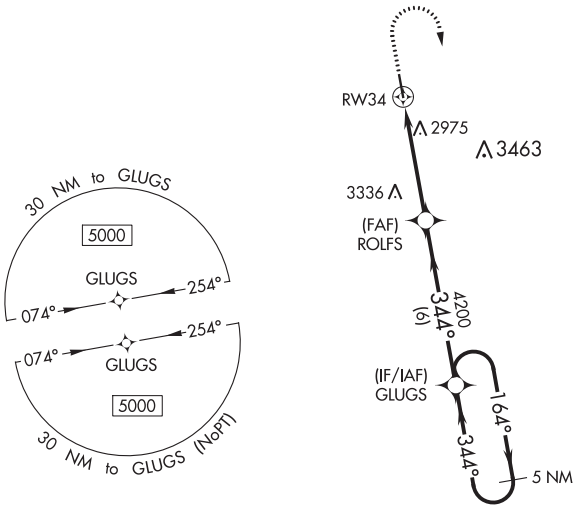
WAAS CH 69241 W34A	APP CRS 344°	Rwy ldg 4800 TDZE 2724 Apt Elev 2724

RNAV (GPS) RWY 34
ROSEBUD SIOUX TRIBAL (SUO)

T A NA — Rwy 34 helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA. Use Valentine altimeter setting, when not received procedure NA.

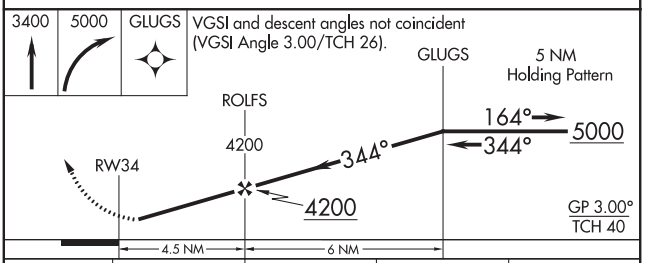
MISSED APPROACH: (Do not exceed 165K until GLUGS) Climb to 3400, then climbing right turn to 5000 direct GLUGS and hold.

DENVER CENTER	CTAF
127.95 338.2	122.9 L



ELEV 2724 | D | TDZE 2724

MIRL Rwy 16-34 L



CATEGORY	A	B	C	D
LPV DA	3083-1¼ 359 (400-1¼)			NA
LNAV MDA	3320-1 596 (600-1)		3320-1¾ 596 (600-1¾)	NA
C CIRCLING	3340-1 616 (700-1)	3360-1 636 (700-1)	3440-2 716 (800-2)	NA

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RUGBY, NORTH DAKOTA AL-6084 (FAA) 20310

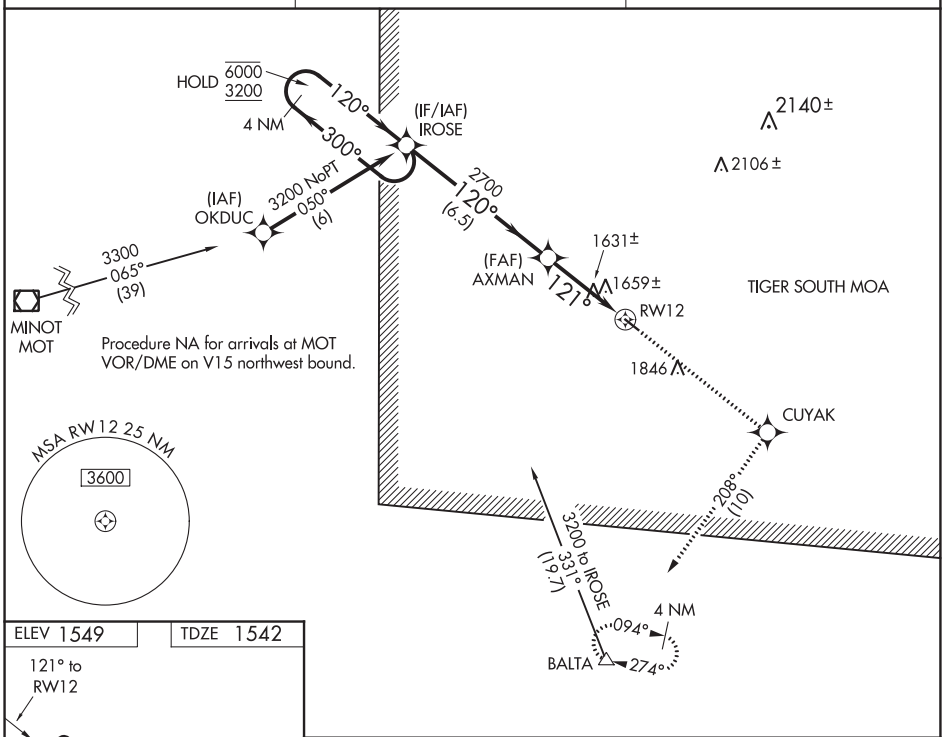
WAAS CH 58124 W12A	APP CRS 121°	Rwy ldg 3600 TDZE 1542 Apt Elev 1549

RNAV (GPS) RWY 12
RUGBY MUNI (RUG)

RNP APCH.

MISSED APPROACH: Climb to 3600 direct CUYAK and on track 208° to BALTA and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.475	127.6 279.6	122.8 (CTAF) L



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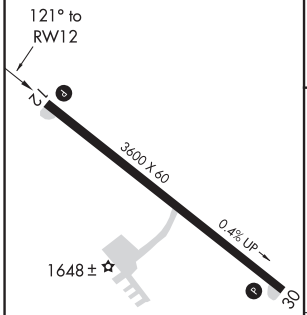
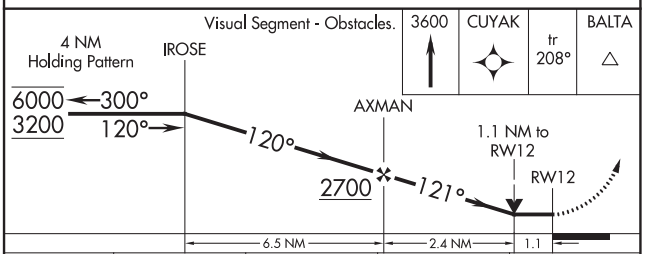
ELEV 1549	TDZE 1542





CATEGORY	A	B	C	D
LP MDA	1900-1 358 (400-1)			NA
LNAV MDA	1920-1 378 (400-1)			NA
CIRCLING	2080-1 531 (600-1)	2160-1 611 (700-1)	2160-1¾ 611 (700-1¾)	NA

REIL Rwy 12 and 30 L
MIRL Rwy 12-30 L

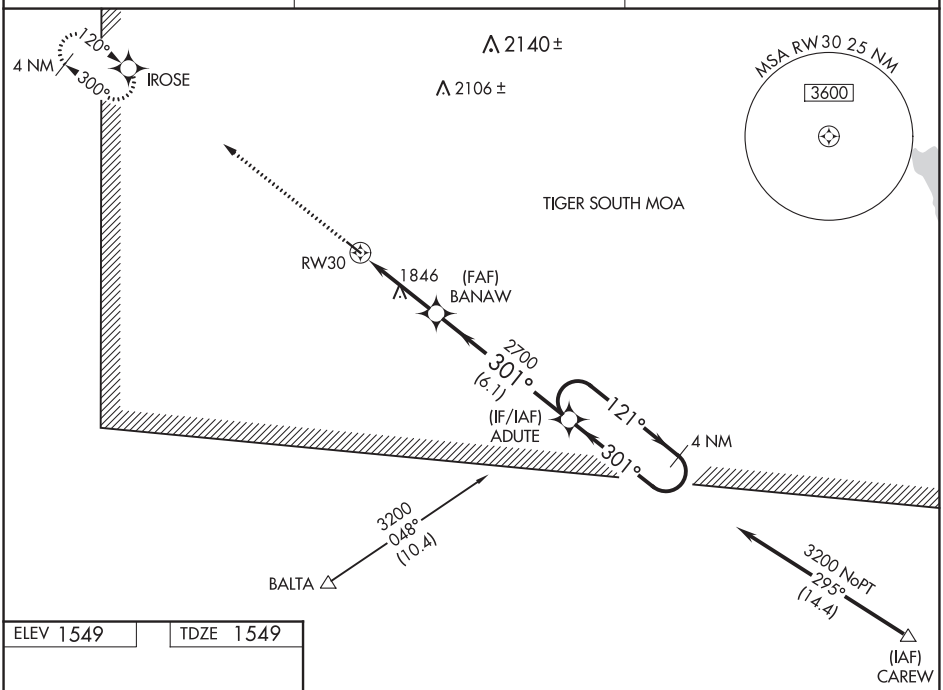
WAAS CH 99524 W30A	APP CRS 301°	Rwy ldg 3600 TDZE 1549 Apt Elev 1549

RNAV (GPS) RWY 30
RUGBY MUNI (RUG)

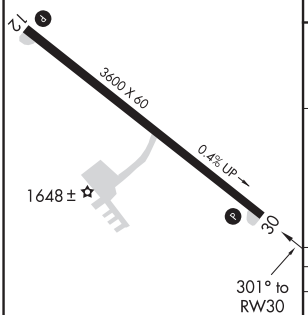
DME/DME RNP-0.3 NA. When local altimeter setting not received, use Devils Lake altimeter setting and increase all MDA 140 feet, increase LP and LNAV Cats B/C visibility ¼ mile, and Circling Cat B visibility ¼ mile and Cat C visibility ½ mile. Rwy 30 helicopter visibility reduction below ¾ SM NA.

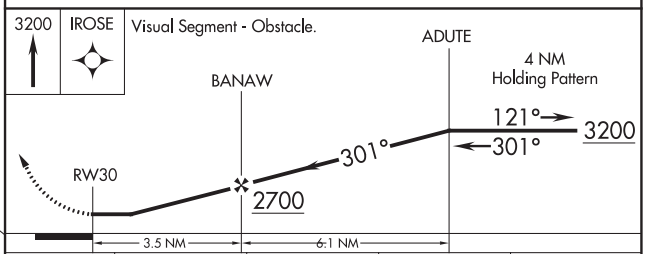
MISSED APPROACH: Climb to 3200 direct IROSE and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.475	127.6 279.6	122.8 (CTAF) L



ELEV 1549 TDZE 1549





CATEGORY	A	B	C	D
LP MDA	2160-1	611 (700-1)	2160-1¾ 611 (700-1¾)	NA
LNAV MDA	2160-1	611 (700-1)	2160-1¾ 611 (700-1¾)	NA
CIRCLING	2160-1	611 (700-1)	2160-1¾ 611 (700-1¾)	NA

REIL Rwy 12 and 30 L
MIRL Rwy 12-30 L

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RUSH CITY, MINNESOTA | AL-9377 (FAA) | 20254

WAAS CH 49020 W34A	APP CRS 339°	Rwy ldg 4401 TDZE 926 Apt Elev 926

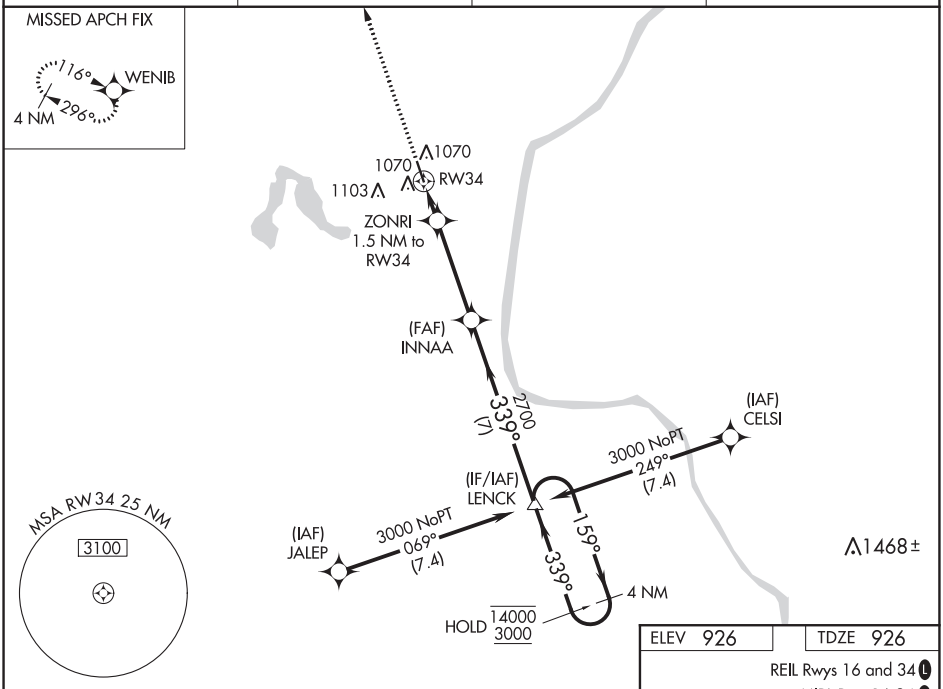
RNAV (GPS) RWY 34
RUSH CITY RGNL (ROS)

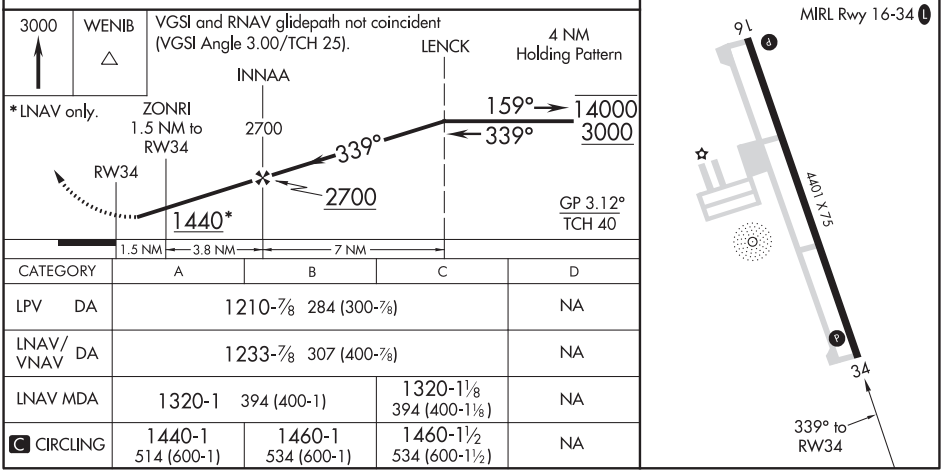
RNP APCH.

Circling Rwy 16 NA at night. Rwy 34 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 54°C.

MISSED APPROACH: Climb to 3000 direct WENIB and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
118.8	121.05 397.9	121.725	122.9 L





CATEGORY	A	B	C	D
LPV DA	1210-⅞ 284 (300-⅞)			NA
LNAV/VNAV DA	1233-⅞ 307 (400-⅞)			NA
LNAV MDA	1320-1 394 (400-1)		1320-1⅛ 394 (400-1⅛)	NA
C CIRCLING	1440-1 514 (600-1)	1460-1 534 (600-1)	1460-1½ 534 (600-1½)	NA

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NDB ROS	APP CRS	Rwy ldg	4401
282	329°	TDZE	926
		Apt Elev	926

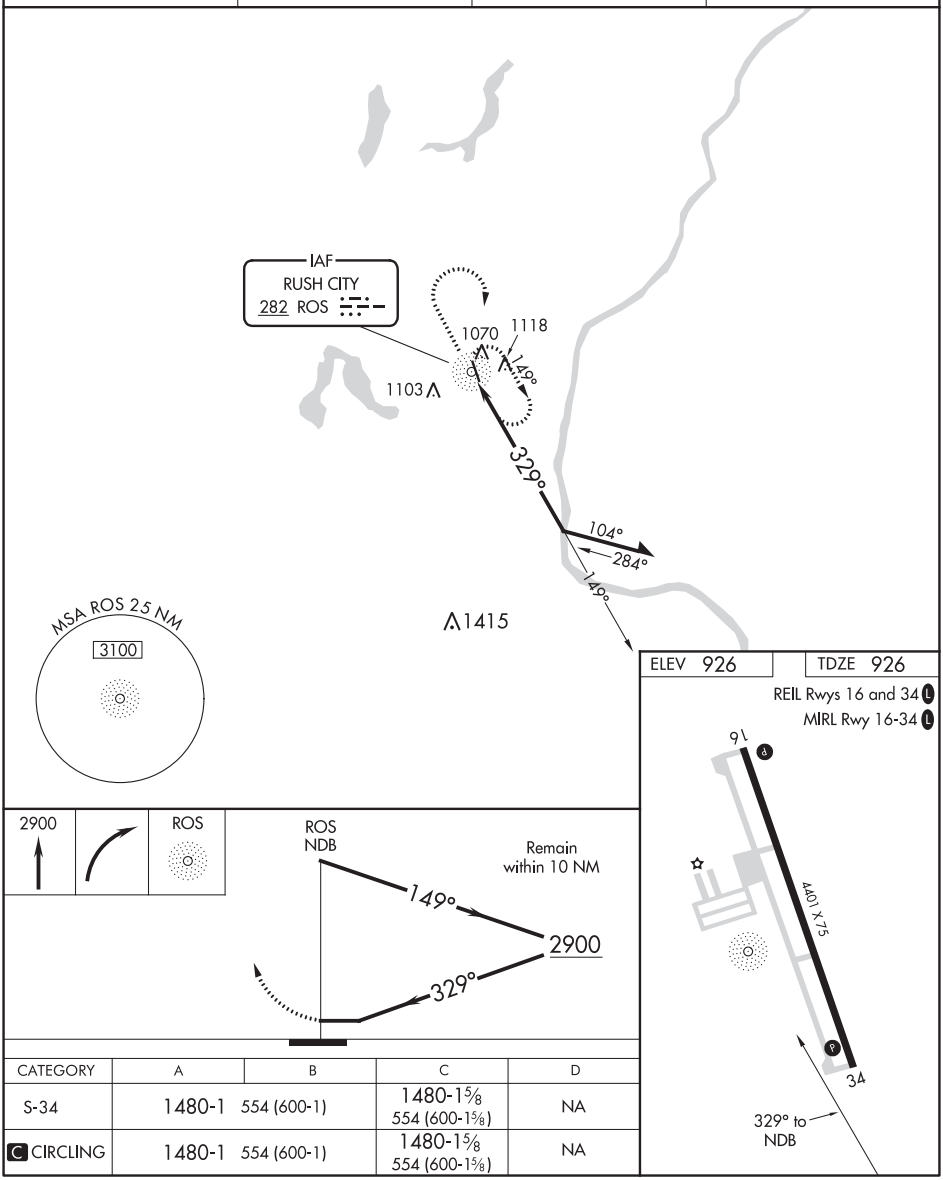
NDB RWY 34
RUSH CITY RGNL (ROS)

Radar required for procedure entry.

Circling Rwy 16 NA at night. Rwy 34 helicopter visibity reduction below 3/4 SM NA.

MISSED APPROACH: Climb to 2900, then right turn direct ROS NDB and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
118.8	121.05 397.9	121.725	122.9 L



CATEGORY	A	B	C	D
S-34	1480-1 554 (600-1)		1480-1 5/8 554 (600-1 5/8)	NA
C CIRCLING	1480-1 554 (600-1)		1480-1 5/8 554 (600-1 5/8)	NA

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RUSHFORD, MINNESOTA | AL-6563 (FAA) | 20310

APP CRS	Rwy ldg	3200
341°	TDZE	1209
	Apt Elev	1211

RNAV (GPS) RWY 34

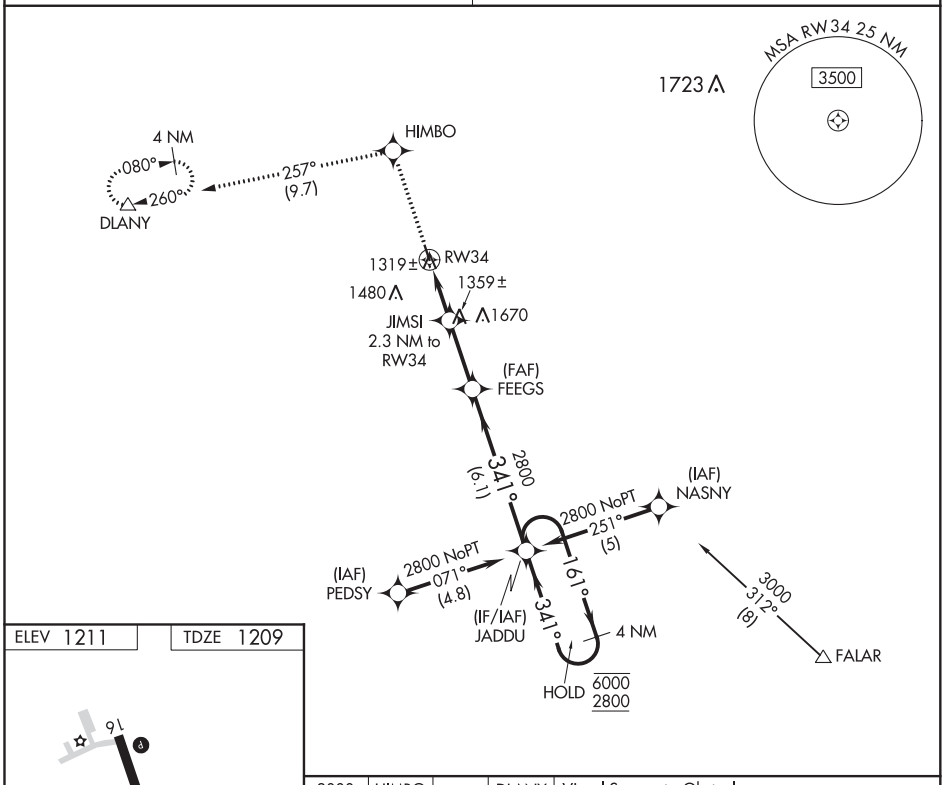
RUSHFORD MUNI-ROBERT W BUNKE FIELD (55Y)

RNP APCH.

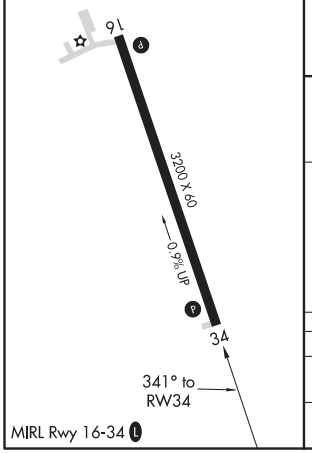
NA Rwy 34 helicopter visibility reduction below 1 SM NA. Use Preston altimeter setting, when not received use Winona altimeter setting; increase all MDA 80 feet; increase LNAV Cat C visibility ⅛ SM.

MISSED APPROACH: Climb to 3000 direct HIMBO and track 257° to DLANY and hold.

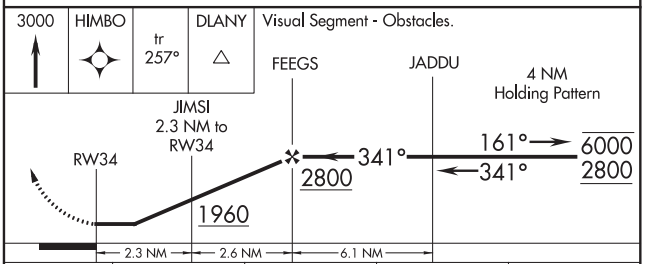
ROCHESTER APP CON ★	CTAF
119.8 251.125	122.9 L



ELEV 1211 | TDZE 1209



MIRL Rwy 16-34 L



CATEGORY	A	B	C	D
LNAV MDA	1620-1 411 (500-1)		1620-1¼ 411 (500-1¼)	NA
CIRCLING	1720-1 509 (600-1)		1720-1½ 509 (600-1½)	NA

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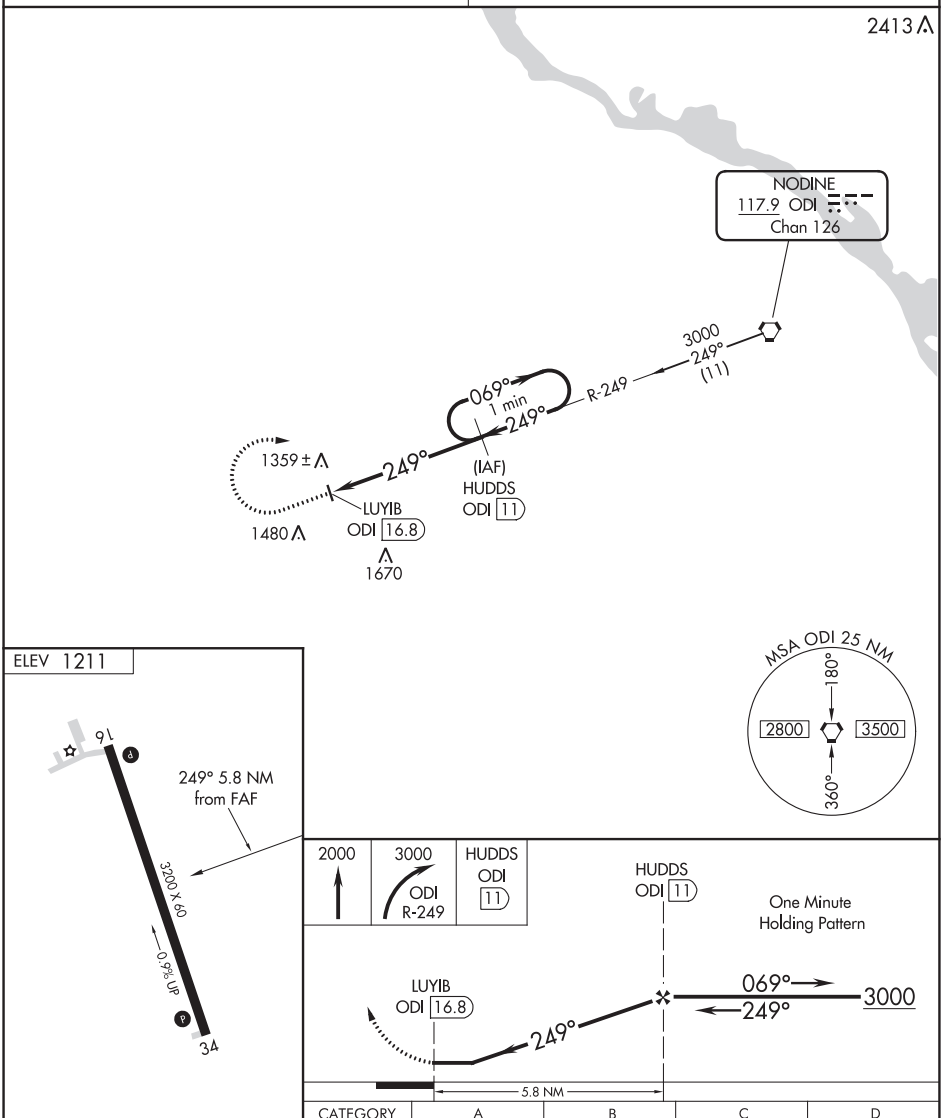
VORTAC ODI 117.9 Chan 126	APP CRS 249°	Rwy ldg N/A TDZE N/A Apt Elev 1211

VOR-A

RUSHFORD MUNI-ROBERT W BUNKE FIELD (55Y)

T NA Use Preston altimeter setting, when not received use Winona altimeter setting and increase all MDA 80 feet. DME required.	MISSED APPROACH: Climb to 2000, then climbing right turn to 3000 on ODI VORTAC R-249 to HUDDS/ODI 11 DME and hold.
ROCHESTER APP CON ★ 119.8 251.125	CTAF 122.9 L



CATEGORY	A	B	C	D
CIRCLING	1720-1	509 (600-1)	1720-1½ 509 (600-1½)	NA

MIRL Rwy 16-34 L

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ST. CLOUD, MINNESOTA — AL-5799 (FAA) — 20142

ILS or LOC RWY 31
ST CLOUD RGNL (STC)

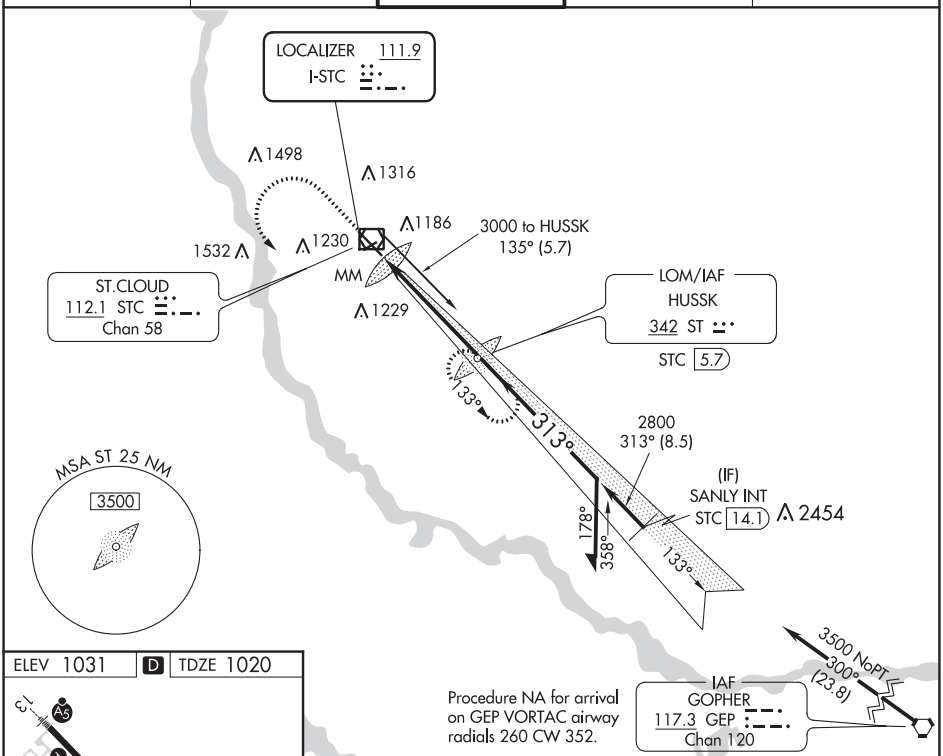
LOC I-STC	APP CRS	Rwy ldg / TDZE / Apt Elev
111.9	313°	7000 / 1020 / 1031

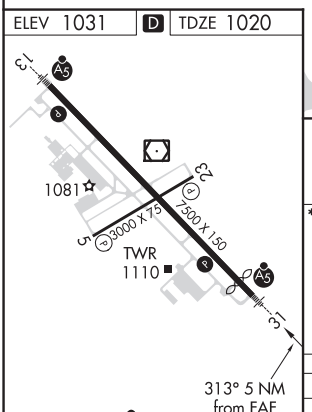
T A NA — VDP NA when using Little Falls altimeter setting. When local altimeter setting not received, use Little Falls altimeter setting and increase all DA 76 feet and all MDA 80 feet and increase S-LOC 31 Cat C/D visibility ⅛ SM. ADF required.

MALSR

MISSED APPROACH: Climb to 3000 then left turn direct HUSSK LOM and hold.

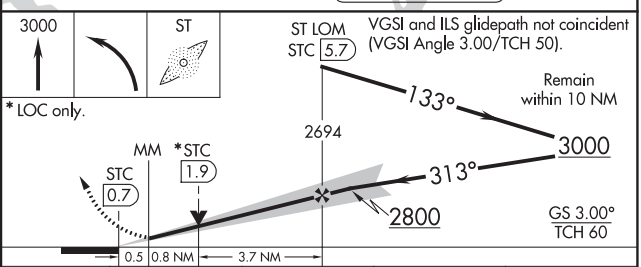
ATIS	MINNEAPOLIS CENTER	ST. CLOUD TOWER★	GND CON	UNICOM
119.375	121.05 397.9	118.25 (CTAF) L	123.75	123.5





MIRL Rwy 5-23 L
HIRL Rwy 13-31 L

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40



CATEGORY	A	B	C	D
S-ILS 31	1220-½ 200 (200-½)			
S-LOC 31	1480-½ 460 (500-½)		1480-⅞ 460 (500-⅞)	
CIRCLING	1500-1 469 (500-1)		1500-1½ 469 (500-1½)	1620-2 589 (600-2)

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LOC I-BPM	APP CRS	Rwy ldg	7500
111.9	133°	TDZE	1031
		Apt Elev	1031

ILS or LOC/DME RWY 13

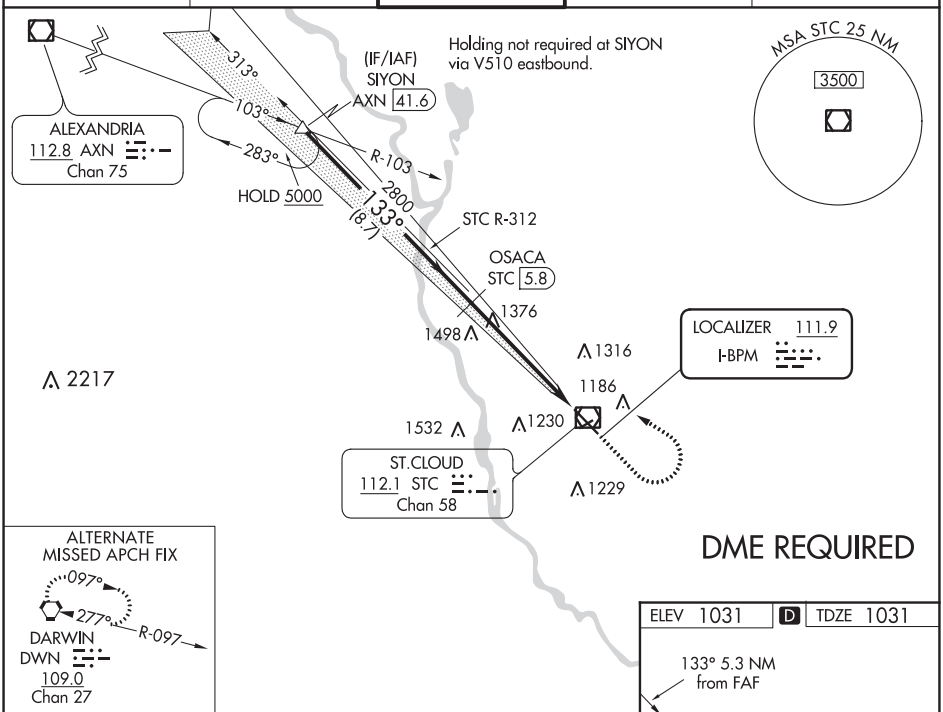
ST CLOUD RGNL (STC)

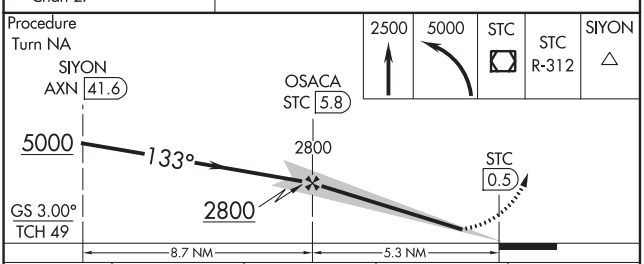
Circling to Rwy 5-23 NA at night. DME from STC VOR/DME. Simultaneous reception of I-BPM and STC DME required. DME required. When local altimeter setting not received, use Little Falls altimeter setting and increase DA to 1307 and all MDAs 80 feet. Increase S-LOC 13 Cats C/D and Circling Cats C/D visibility ¼ mile. For inoperative MALSR when using Little Falls altimeter setting, increase S-ILS 13 all Cats visibility ½ mile.

MALSR A5

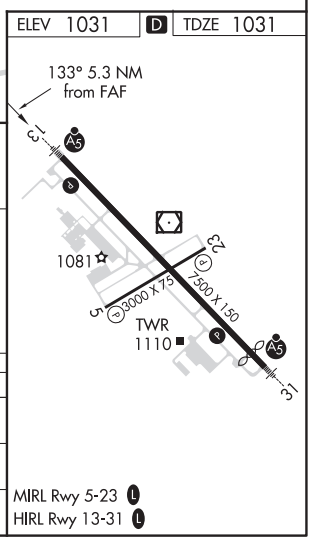
MISSED APPROACH: Climb to 2500 then climbing left turn to 5000 direct STC VOR/DME and via STC VOR/DME R-312 to SIYON/AXN VOR/DME 41.6 DME and hold.

ATIS	MINNEAPOLIS CENTER	ST. CLOUD TOWER ★	GND CON	UNICOM
119.375	121.05 397.9	118.25 (CTAF) L	123.75	123.5





CATEGORY	A	B	C	D
S-ILS 13	1231-½ 200 (200-½)			
S-LOC 13	1680-½ 649 (700-½)		1680-1¼ 649 (700-1¼)	1680-1½ 649 (700-1½)
CIRCLING	1680-1 649 (700-1)		1680-1¾ 649 (700-1¾)	1680-2 649 (700-2)



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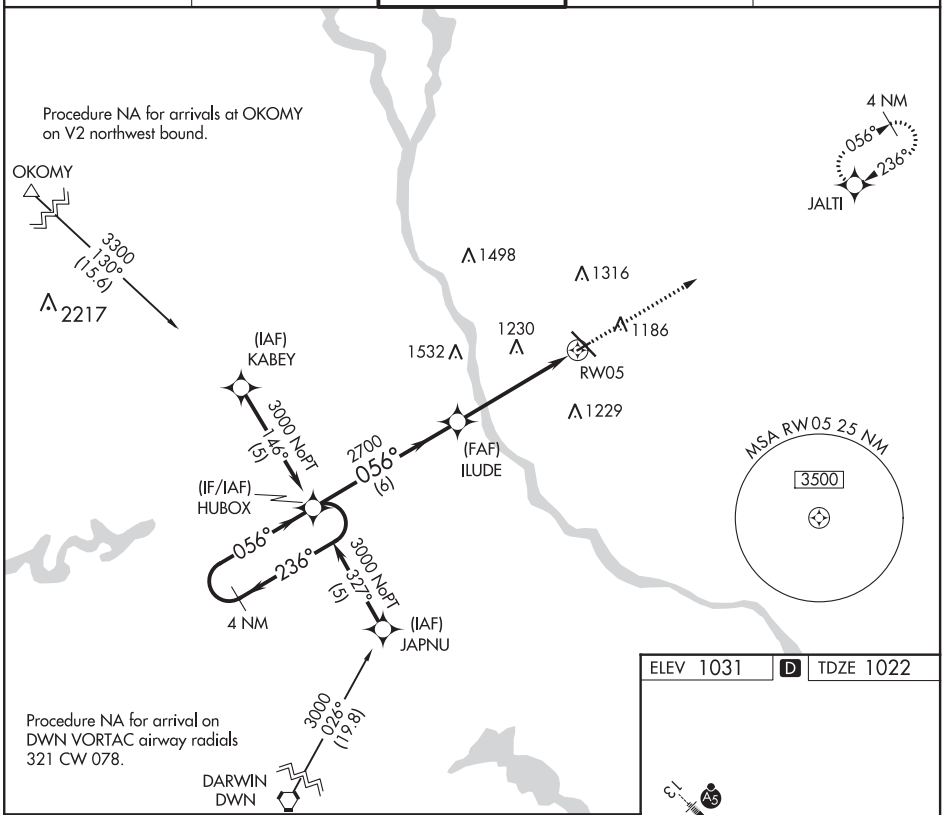
APP CRS	Rwy ldg	3000
056°	TDZE	1022
	Apt Elev	1031

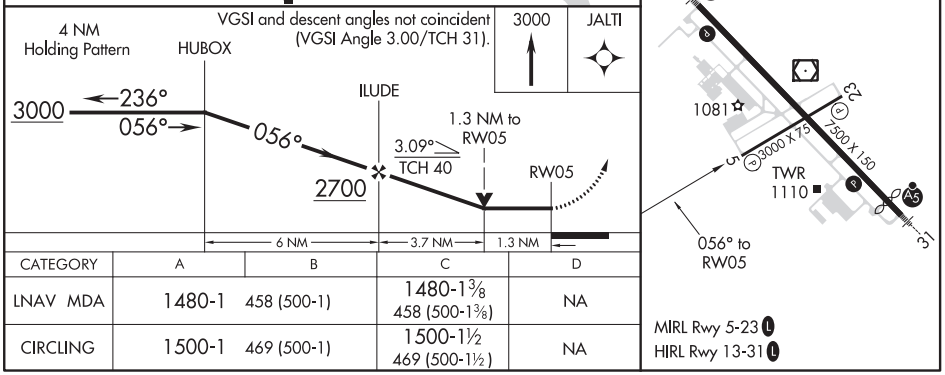
RNAV (GPS) RWY 5
ST CLOUD RGNL (STC)

Rwy 5 helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA. VDP NA when using Little Falls altimeter setting. When local altimeter setting not received, use Little Falls altimeter setting and increase all MDA 80 feet and LNAV Cat C visibility ⅛ SM.

MISSED APPROACH: Climb to 3000 direct JALTI and hold.

ATIS	MINNEAPOLIS CENTER	ST. CLOUD TOWER ★	GND CON	UNICOM
119.375	121.05 397.9	118.25 (CTAF) L	123.75	123.5





CATEGORY	A	B	C	D
LNAV MDA	1480-1 458 (500-1)		1480-1⅜ 458 (500-1⅜)	NA
CIRCLING	1500-1 469 (500-1)		1500-1½ 469 (500-1½)	NA

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WAAS CH 82013 W13A	APP CRS 133°	Rwy ldg 7500 TDZE 1031 Apt Elev 1031

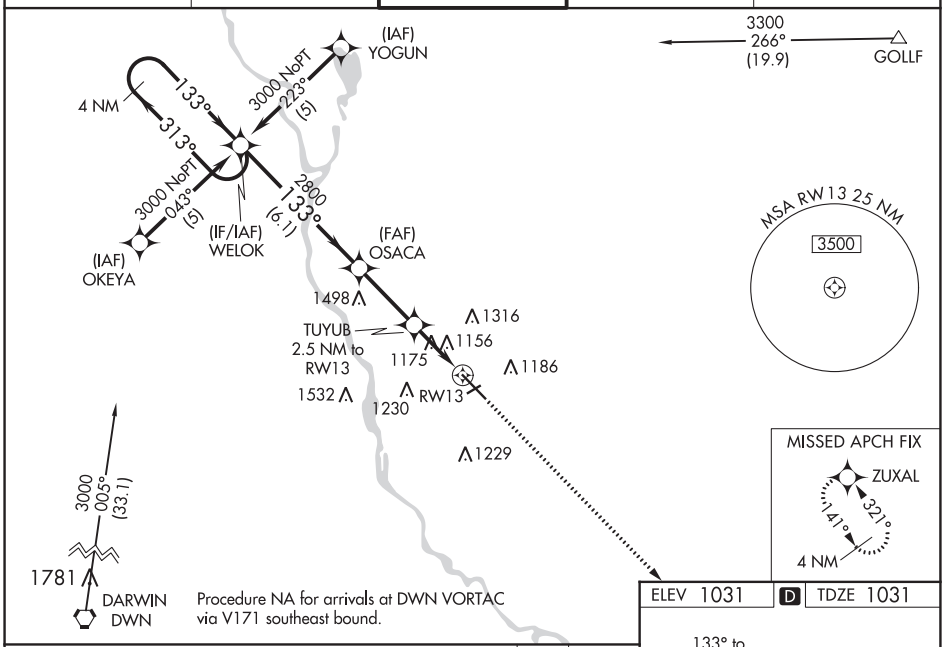
RNAV (GPS) RWY 13
ST CLOUD RGNL (STC)

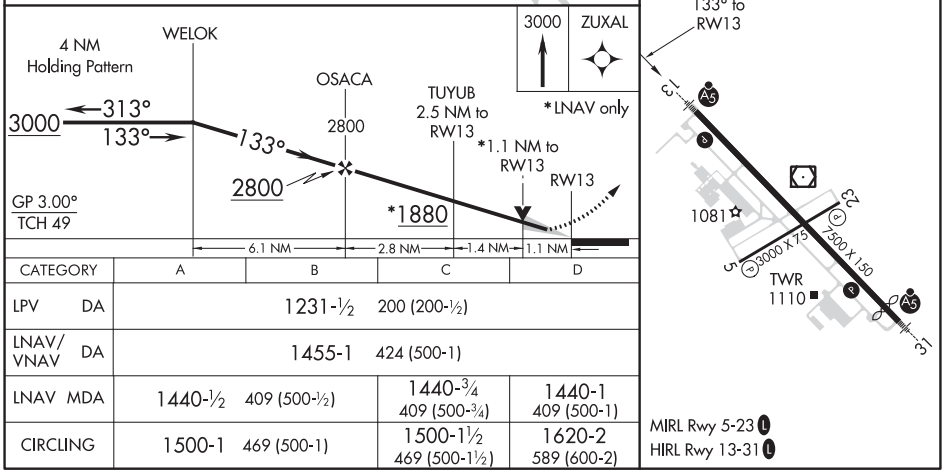
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. VDP and Baro-VNAV NA when using Little Falls altimeter setting. When local altimeter setting not received, use Little Falls altimeter setting and increase all DA 76 feet and all MDA 80 feet. Increase LNAV/ VNAV visibility ¼ mile all Cats. Circling to Rwy 5-23 NA at night. For inoperative MALSR, increase LNAV Cat D visibility ¼ mile. For inoperative MALSR when using Little Falls altimeter setting, increase LPV all Cats visibility ½ mile.

MALSR

MISSED APPROACH: Climb to 3000 direct ZUXAL and hold.

ATIS	MINNEAPOLIS CENTER	ST. CLOUD TOWER *	GND CON	UNICOM
119.375	121.05 397.9	118.25 (CTAF) L	123.75	123.5





CATEGORY	A	B	C	D
LPV DA	1231-½ 200 (200-½)			
LNAV/ VNAV DA	1455-1 424 (500-1)			
LNAV MDA	1440-½ 409 (500-½)		1440-¾ 409 (500-¾)	1440-1 409 (500-1)
CIRCLING	1500-1 469 (500-1)		1500-1½ 469 (500-1½)	1620-2 589 (600-2)

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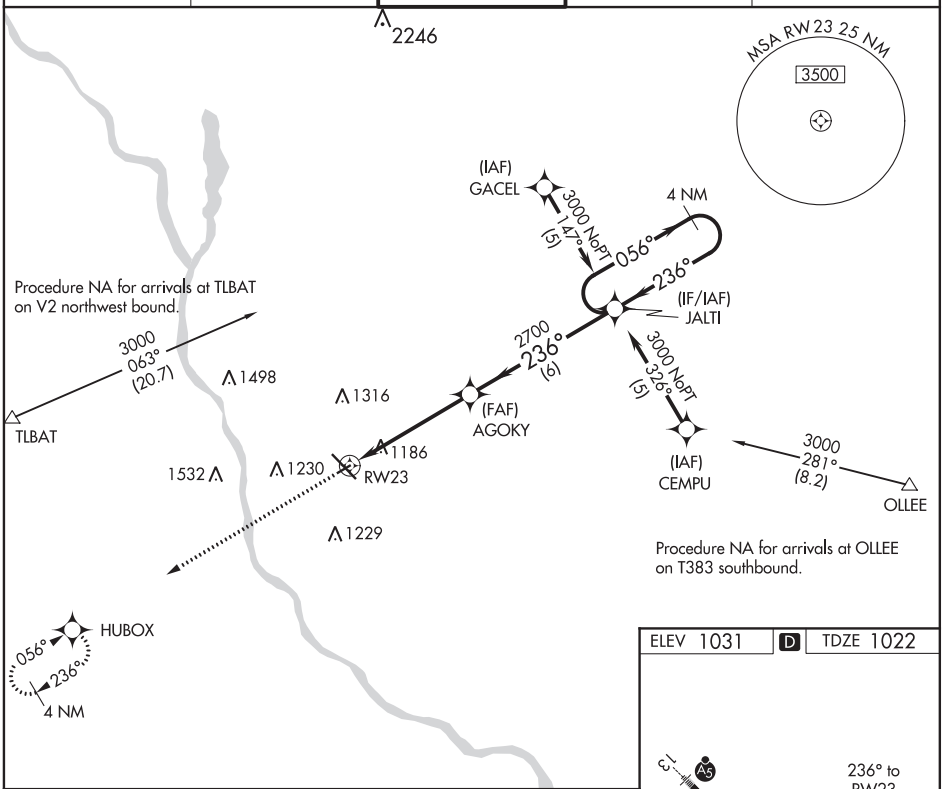
APP CRS	Rwy ldg	3000
236°	TDZE	1022
	Apt Elev	1031

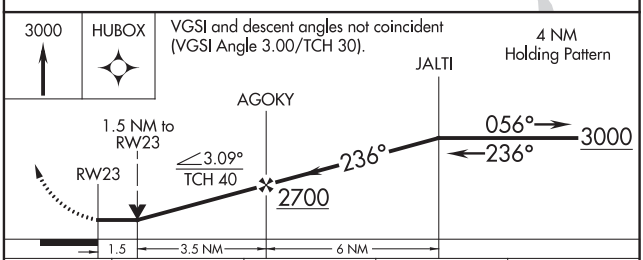
RNAV (GPS) RWY 23
ST CLOUD RGNL (STC)

Rwy 23 helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA. VDP NA when using Little Falls altimeter setting. When local altimeter setting not received, use Little Falls altimeter setting and increase all MDA 80 feet and increase LNAV Cat C visibility ⅜ SM and Circling Cat C visibility ¼ SM.

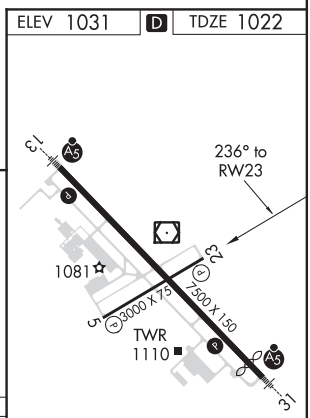
MISSED APPROACH: Climb to 3000 direct HUBOX and hold.

ATIS	MINNEAPOLIS CENTER	ST. CLOUD TOWER ★	GND CON	UNICOM
119.375	121.05 397.9	118.25 (CTAF) L	123.75	123.5





CATEGORY	A	B	C	D
LNAV MDA	1540-1 518 (600-1)		1540-1⅜ 518 (600-1⅜)	NA
CIRCLING	1540-1 509 (600-1)		1540-1½ 509 (600-1½)	NA



ST. CLOUD, MINNESOTA
Orig-B 29MAR18

45°33'N-94°04'W

ST CLOUD RGNL (STC)
RNAV (GPS) RWY 23

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WAAS CH 61213 W31A	APP CRS 313°	Rwy ldg 7000 TDZE 1020 Apt Elev 1031

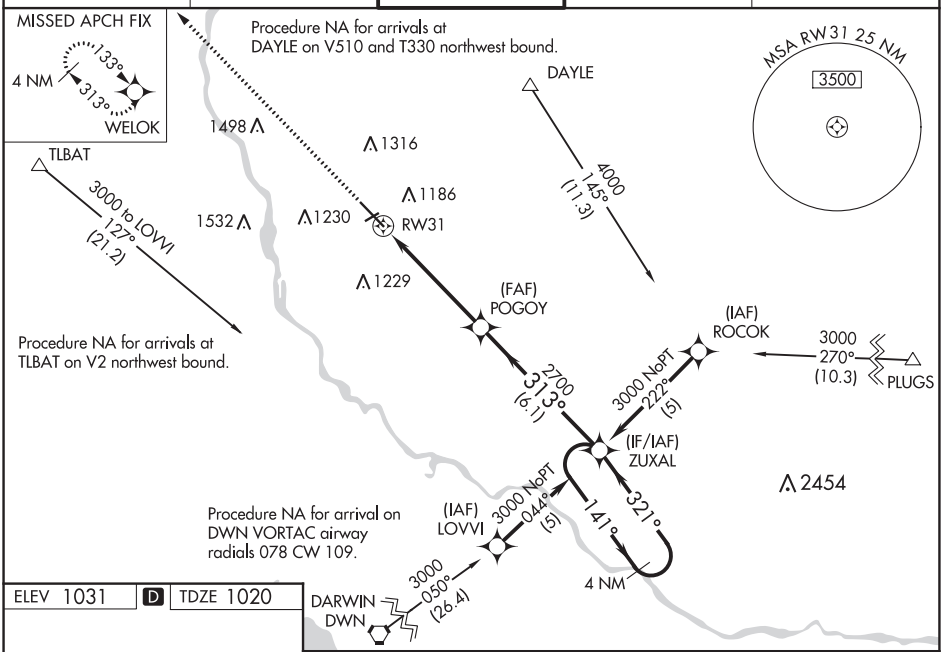
RNAV (GPS) RWY 31
ST CLOUD RGNL (STC)

DME/DME RNP-0.3 NA. When local altimeter setting not received, use Little Falls altimeter setting and increase all DA 76 feet, and all MDA 80 feet; increase LNAV/VNAV all Cats visibility ¼ SM and LNAV Cat C/D visibility ¼ SM. For inop ALS when using Little Falls altimeter setting, increase LPV all Cats visibility to ⅞ SM and LNAV Cat C/D visibility to 1⅜ SM. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). Baro-VNAV and VDP NA when using Little Falls altimeter setting.

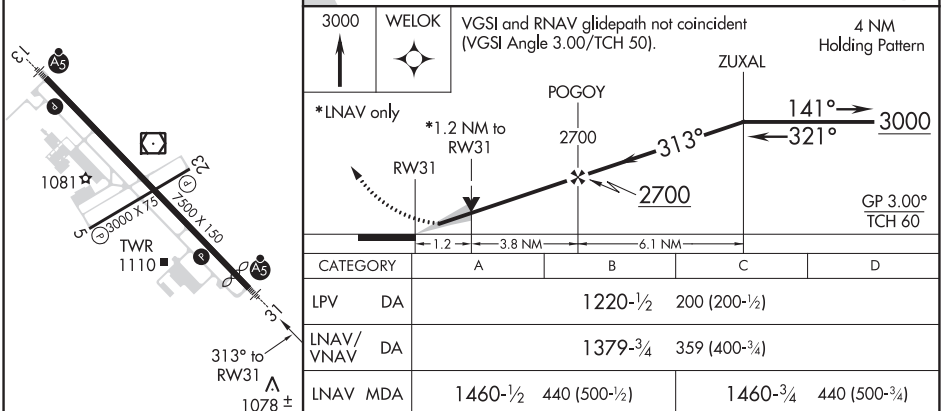
MALSR

MISSED APPROACH: Climb to 3000 direct WELOK and hold.

ATIS	MINNEAPOLIS CENTER	ST. CLOUD TOWER ★	GND CON	UNICOM
119.375	121.05 397.9	118.25 (CTAF) L	123.75	123.5



ELEV 1031 D TDZE 1020



CATEGORY		A	B	C	D
LPV	DA	1220-½ 200 (200-½)			
LNAV/VNAV	DA	1379-¾ 359 (400-¾)			
LNAV	MDA	1460-½ 440 (500-½)		1460-¾ 440 (500-¾)	
CIRCLING		1500-1 469 (500-1)		1500-1½ 469 (500-1½)	1620-2 589 (600-2)

NC-1, 25 FEB 2021 to 22 APR 2021

ST. CLOUD, MINNESOTA | AL-5799 (FAA) | 20142

VOR RWY 31
ST CLOUD RGNL (STC)

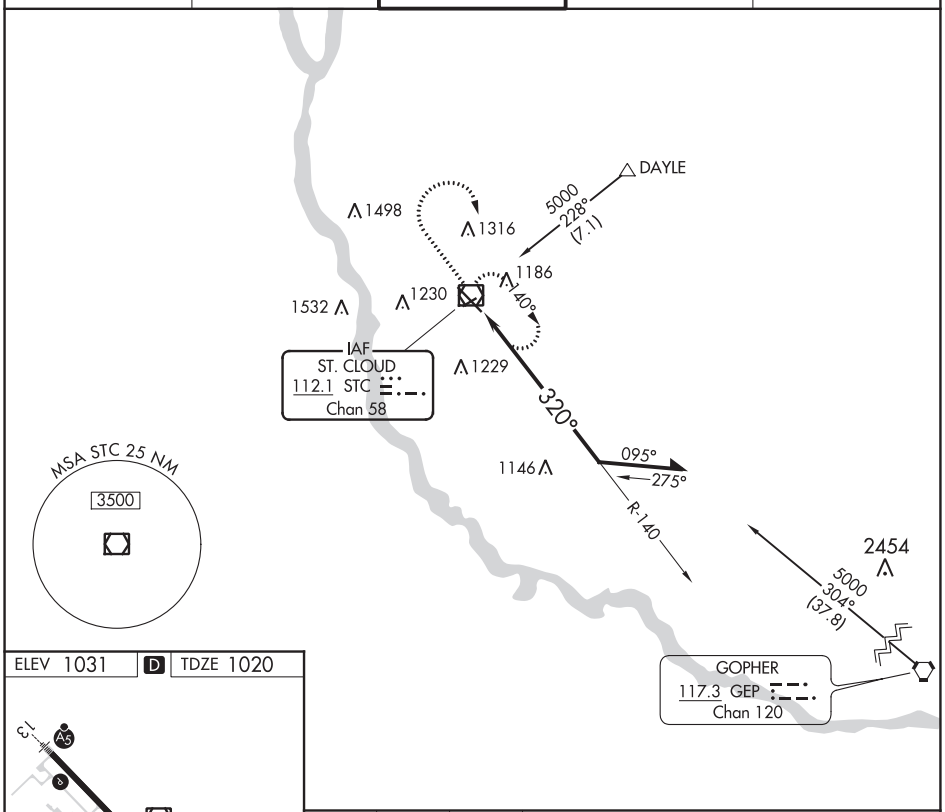
VOR/DME STC	APP CRS	Rwy ldg	7000
112.1	320°	TDZE	1020
Chan 58		Apt Elev	1031

For inop ALS, increase S-31 Cat C and D visibility to 1⅜ SM.

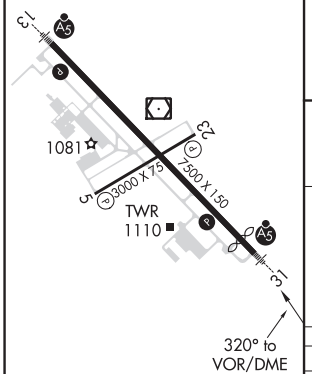
MALSR

MISSED APPROACH: Climb to 2700 then right turn direct STC VOR/DME and hold.

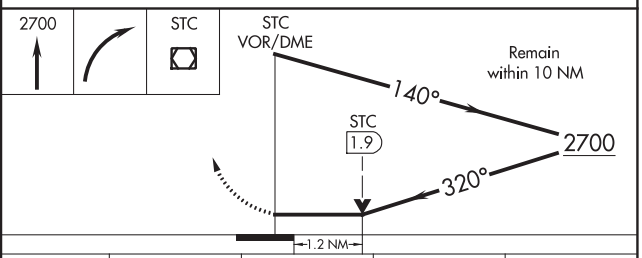
ATIS	MINNEAPOLIS CENTER	ST. CLOUD TOWER ★	GND CON	UNICOM
119.375	121.05 397.9	118.25 (CTAF) L	123.75	123.5



ELEV 1031 | D | TDZE 1020



MIRL Rwy 5-23 L
HIRL Rwy 13-31 L



CATEGORY	A	B	C	D
S-31	1460-½ 440 (500-½)		1460-¾ 440 (500-¾)	1460-1 440 (500-1)
CIRCLING	1500-1 469 (500-1)		1500-1½ 469 (500-1½)	1620-2 589 (600-2)

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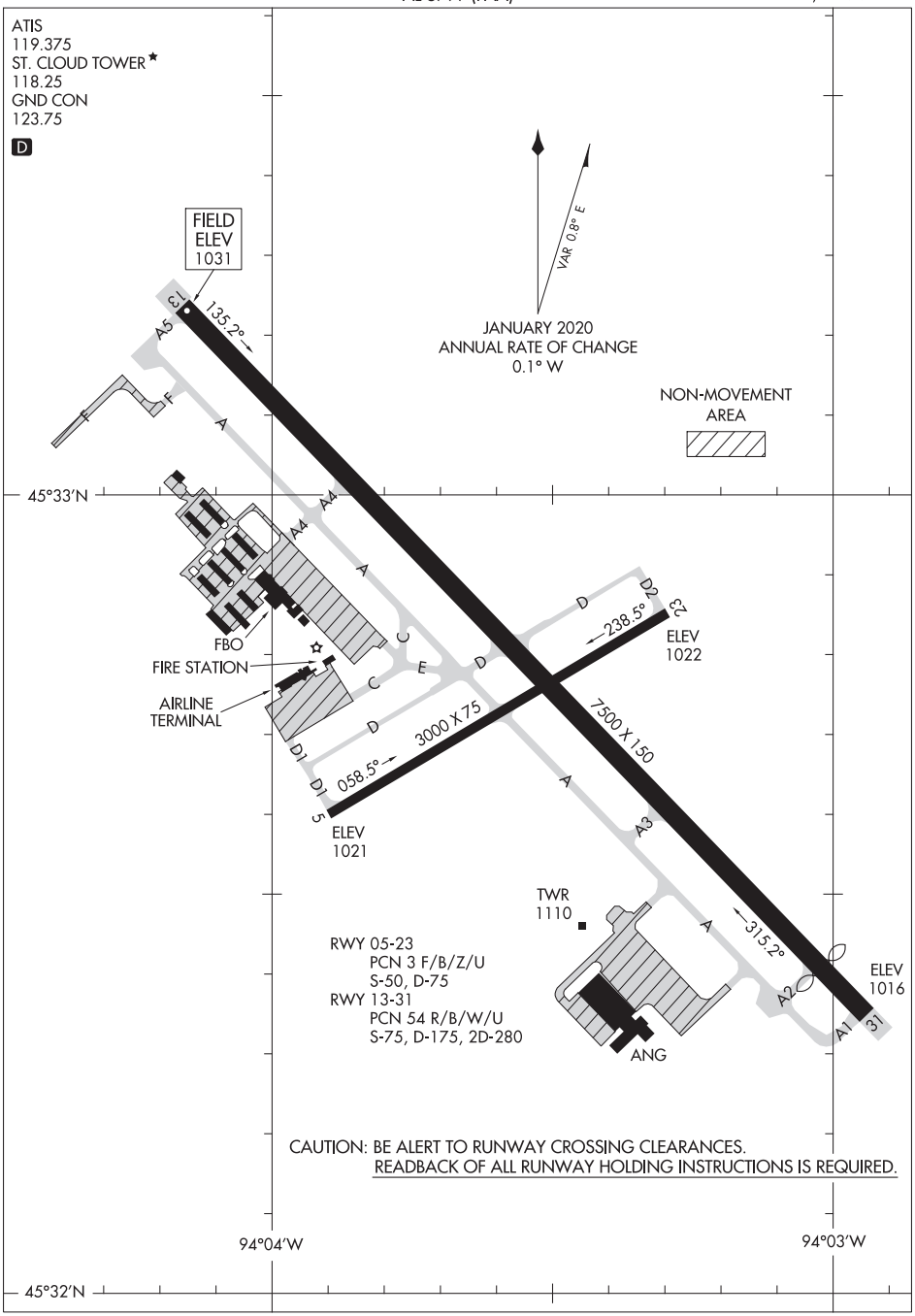

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ST. JAMES, MINNESOTA | AL-9192 (FAA) | 20366

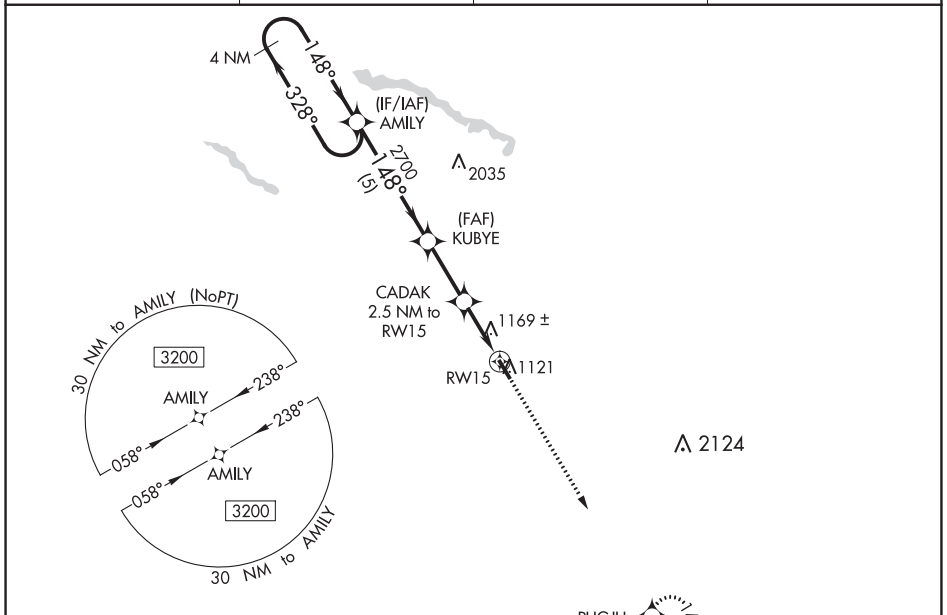
WAAS CH 58138 W15A	APP CRS 148°	Rwy ldg 3999 TDZE 1067 Apt Elev 1067

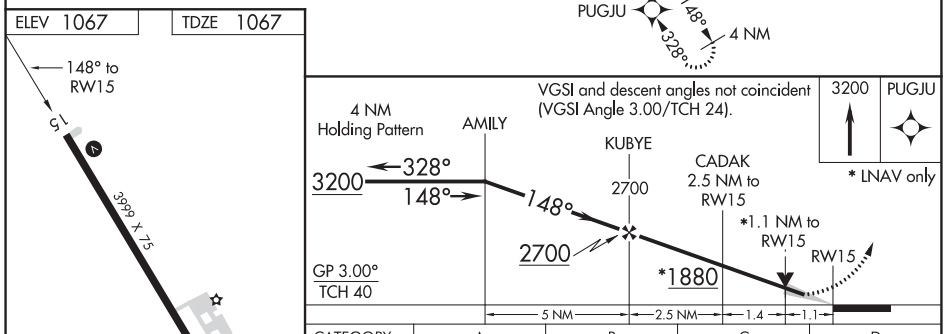
RNAV (GPS) RWY 15
ST JAMES MUNI (JYG)

DME/DME RNP-0.3 NA. For uncompensated Baro-VNAV systems, procedure NA below -17°C (2°F) or above 54°C (130°F). Baro-VNAV and VDP NA when using New Ulm altimeter setting. When local altimeter not received, use New Ulm, MN altimeter setting and increase LPV DA to 1372 feet and LNAV/VNAV DA to 1530 feet, and all MDA 60 feet.

MISSED APPROACH: Climb to 3200 direct PUGJU and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
123.7	127.75 257.7	121.725	122.9 L





CATEGORY	A	B	C	D
LPV DA	1317-1 250 (300-1)		NA	
LNAV/VNAV DA	1475-1 3/8 408 (500-1 3/8)		NA	
LNAV MDA	1420-1 353 (400-1)		NA	
C CIRCLING	1500-1 433 (500-1)	1520-1 453 (500-1)	NA	

MIRL Rwy 15-33 L
REIL Rwys 15 and 33 L

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 53538 W33A	APP CRS 328°	Rwy ldg 3999 TDZE 1067 Apt Elev 1067

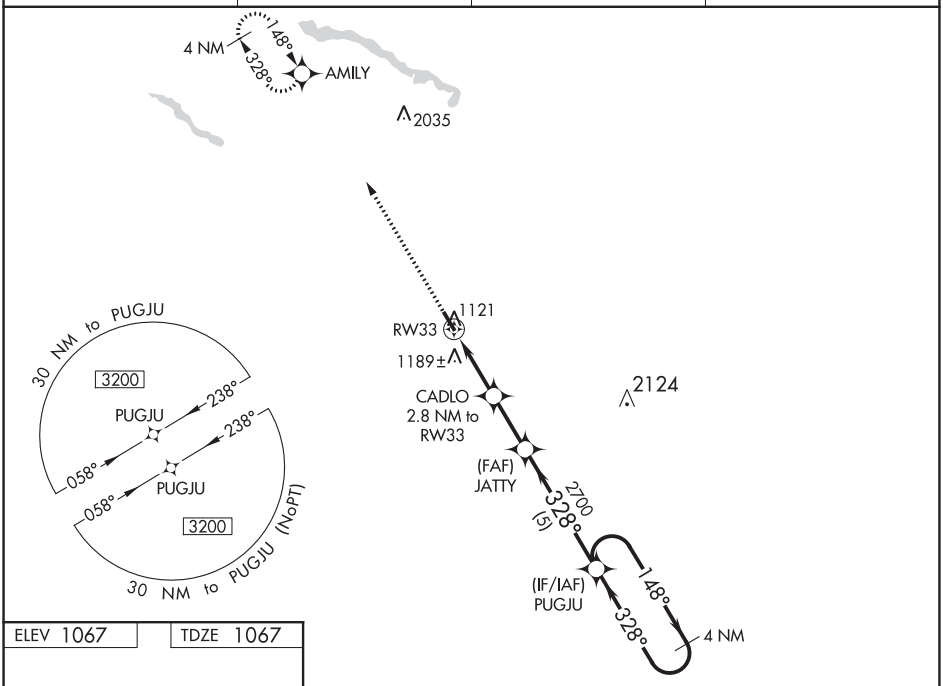
RNAV (GPS) RWY 33

ST JAMES MUNI (JYG)

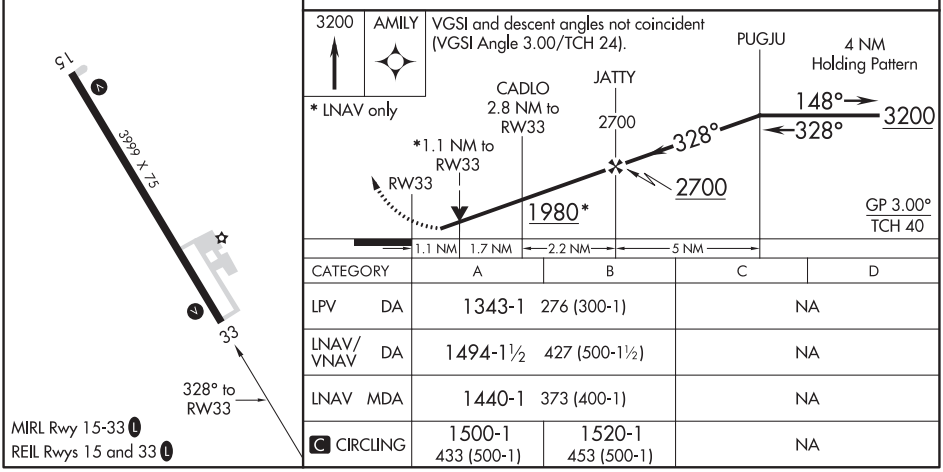
For uncompensated Baro-VNAV systems, procedure NA below -17°C (2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA. Baro-VNAV and VDP NA when using New Ulm altimeter setting. When local altimeter setting not received, use New Ulm, MN altimeter setting and increase LPV DA to 1398 feet, LNAV/VNAV DA to 1549 feet, and all MDA 60 feet.

MISSED APPROACH: Climb to 3200 direct AMILY and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
123.7	127.75 257.7	121.725	122.9 L



ELEV 1067 TDZE 1067



CATEGORY	A	B	C	D
LPV DA	1343-1	276 (300-1)	NA	
LNAV/VNAV DA	1494-1½	427 (500-1½)	NA	
LNAV MDA	1440-1	373 (400-1)	NA	
C CIRCLING	1500-1 433 (500-1)	1520-1 453 (500-1)	NA	

MIRL Rwy 15-33 L
REIL Rwys 15 and 33 L

NC-1, 25 FEB 2021 to 22 APR 2021

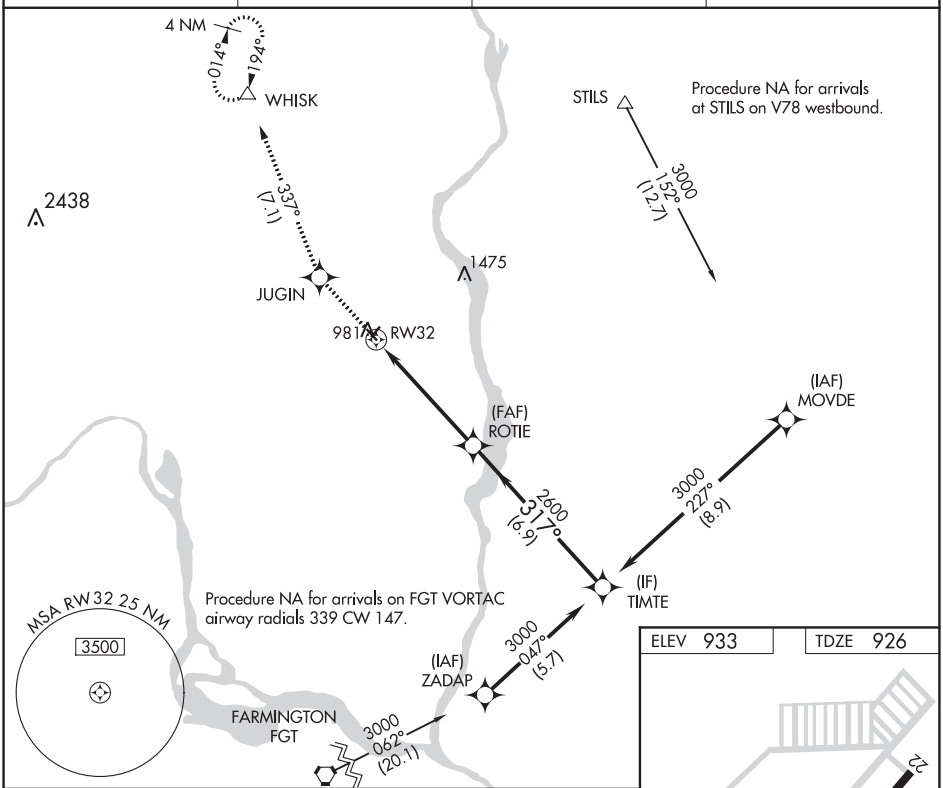
APP CRS	Rwy ldg	2849
317°	TDZE	926
	Apt Elev	933

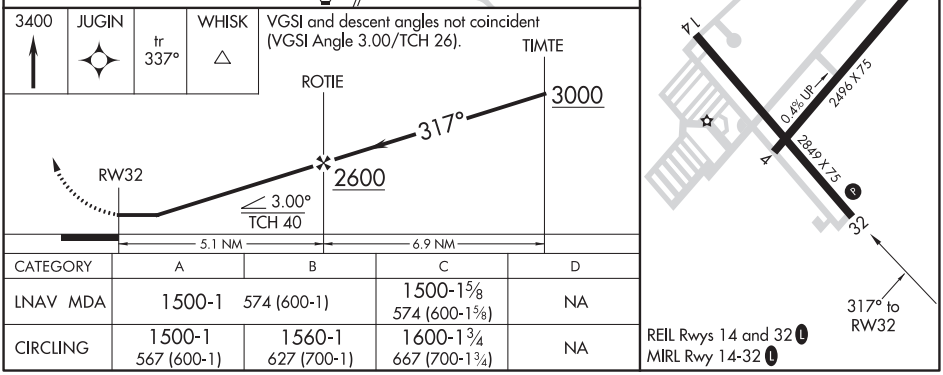
RNAV (GPS) RWY 32
LAKE ELMO (21D)

DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use St Paul Downtown Holman Field altimeter setting and increase all MDA 60 feet, increase LNAV Cat C visibility ⅛ mile and Circling Cat C visibility ¼ mile. Circling Rwys 14/22 NA at night. When VGSI inoperative, Straight-In/Circling Rwy 32 procedure NA at night.

MISSED APPROACH: Climb to 3400 direct JUGIN and on track 337° to WHISK and hold.

AWOS-3	MINNEAPOLIS APP CON	CLNC DEL	UNICOM
120.075	121.2 335.65	118.625	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	1500-1 574 (600-1)		1500-1⅝ 574 (600-1⅝)	NA
CIRCLING	1500-1 567 (600-1)	1560-1 627 (700-1)	1600-1¾ 667 (700-1¾)	NA

REIL Rwys 14 and 32 L
MIRL Rwy 14-32 L

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LOC/DME I-VKG	APP CRS	Rwy ldg	6148
111.5	146°	TDZE	705
Chan 52		Apt Elev	705

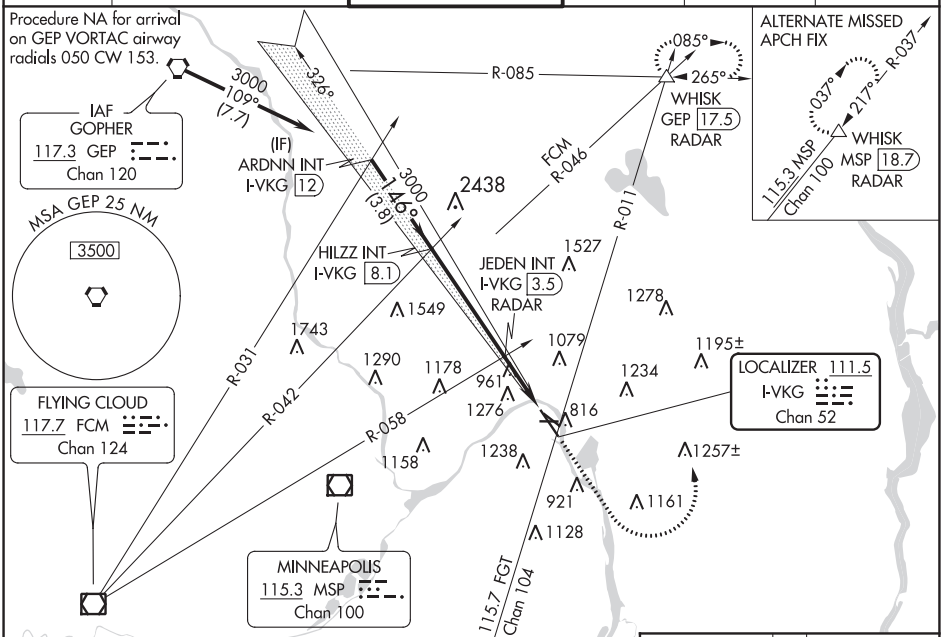
ILS or LOC RWY 14
ST PAUL DOWNTOWN HOLMAN FIELD (STP)

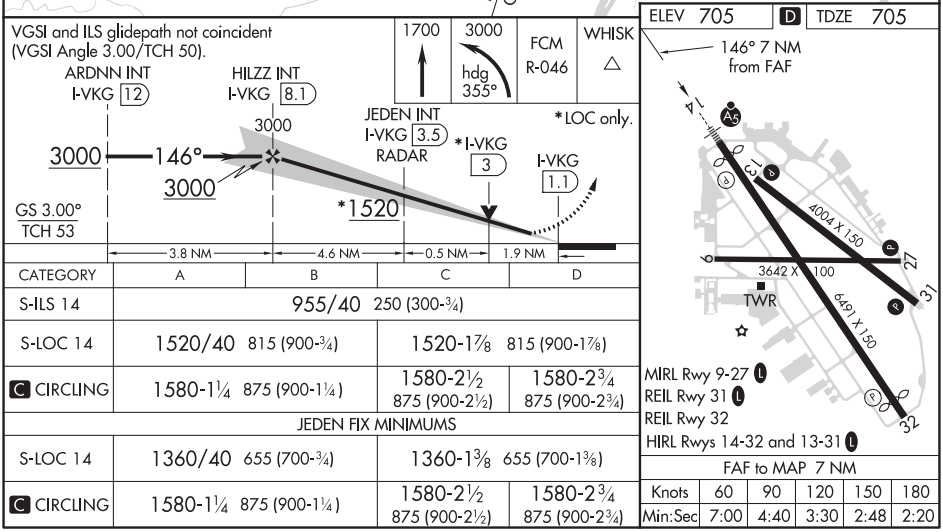
T A Inop table does not apply to S-ILS 14. Rwy 14 helicopter visibility reduction below RVR 4000 NA. For inop ALS, increase S-LOC 14 Cat A visibility to RVR 5500, Cat B visibility to RVR 6000, and Cat C/D visibility to 2½ SM.

MALSR A5

MISSED APPROACH: Climb to 1700 then climbing left turn to 3000 on heading 355° and on FCM VOR/DME R-046 to WHISK INT/GEP 17.5 DME/RADAR and hold.

ATIS	MINNEAPOLIS APP CON	ST. PAUL TOWER ★	GND CON	CLNC DEL	UNICOM
118.35	121.2 335.65	119.1(CTAF) L 257.8	121.675	121.675	122.95





CATEGORY	A	B	C	D
S-ILS 14	955/40 250 (300-¾)			
S-LOC 14	1520/40 815 (900-¾)		1520-1⅞ 815 (900-1⅞)	
C CIRCLING	1580-1¼ 875 (900-1¼)		1580-2½ 875 (900-2½)	1580-2¾ 875 (900-2¾)
JEDEN FIX MINIMUMS				
S-LOC 14	1360/40 655 (700-¾)		1360-1⅜ 655 (700-1⅜)	
C CIRCLING	1580-1¼ 875 (900-1¼)		1580-2½ 875 (900-2½)	1580-2¾ 875 (900-2¾)

FAF to MAP 7 NM

Knots	60	90	120	150	180
Min:Sec	7:00	4:40	3:30	2:48	2:20

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ILS or LOC RWY 32
ST PAUL DOWNTOWN HOLMAN FIELD (STP)

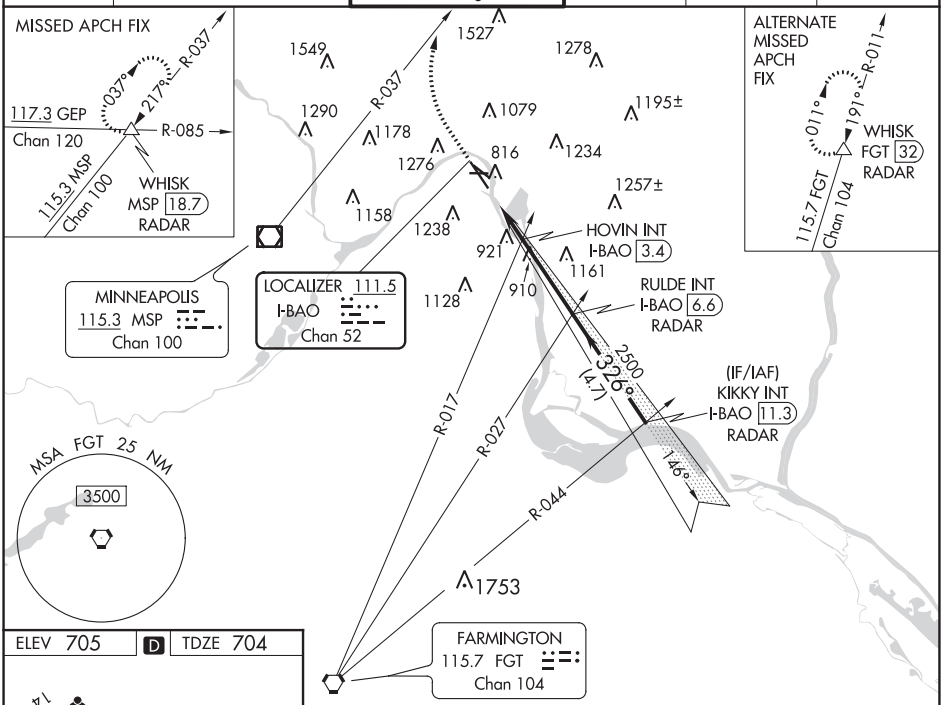
LOC/DME I-BAO	APP CRS	Rwy ldg	6109
111.5	326°	TDZE	704
Chan 52		Apt Elev	705

DME or RADAR required. RADAR required for procedure entry.

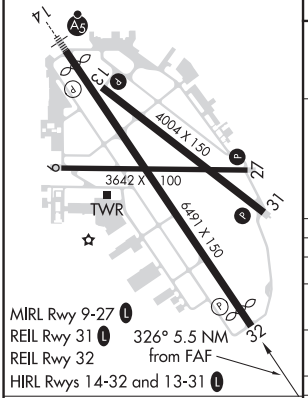
T A Rwy 32 helicopter visibility reduction below RVR 4000 NA. Inop table does not apply to S-ILS 32 all Cats and S-LOC all Cats. HOVIN FIX MINIMUMS: Inop table does not apply to Cats A/B. For inop ALS, increase Cats C/D visibility to 1⅜ SM.

MISSED APPROACH: Climb to 1300 then climbing right turn to 4000 on heading 010° and MSP R-037 to WHISK INT/MSP 18.7 DME/RADAR and hold.

ATIS	MINNEAPOLIS APP CON	ST. PAUL TOWER ★	GND CON	CLNC DEL	UNICOM
118.35	121.2 335.65	119.1 (CTAF) L 257.8	121.675	121.675	122.95

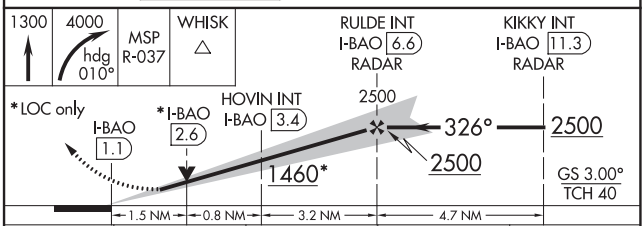


ELEV 705 D TDZE 704



MIRL Rwy 9-27 L
REIL Rwy 31 L 326° 5.5 NM from FAF
REIL Rwy 32
HIRL Rwys 14-32 and 13-31 L

FAF to MAP 5.5 NM					
Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50



CATEGORY	A	B	C	D
S-ILS 32	1011/50 307 (400-1)			
S-LOC 32	1460/55 756 (800-1)	1460/60 756 (800-1¼)	1460-2 756 (800-2)	
C CIRCLING	1580-1¼ 875 (900-1¼)		1580-2½ 875 (900-2½)	1580-2¾ 875 (900-2¾)
HOVIN FIX MINIMUMS				
S-LOC 32	1220/55 516 (600-1)		1220-1¼ 516 (600-1¼)	
C CIRCLING	1580-1¼ 875 (900-1¼)		1580-2½ 875 (900-2½)	1580-2¾ 875 (900-2¾)

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WAAS CH 62828 W14A	APP CRS 146°	Rwy ldg 6148 TDZE 705 Apt Elev 705

RNAV (GPS) RWY 14

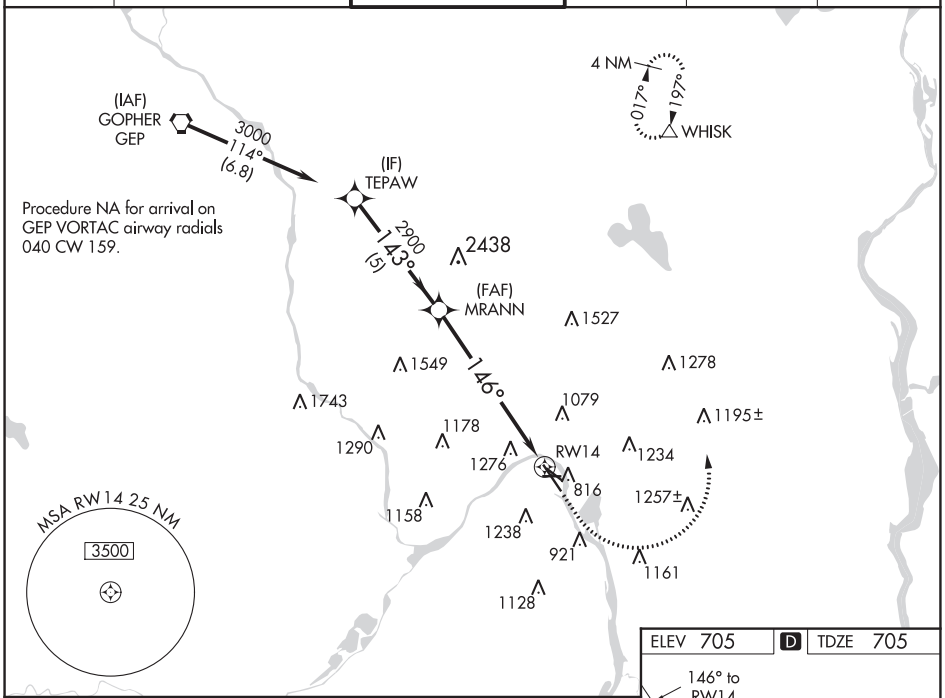
ST PAUL DOWNTOWN HOLMAN FIELD (STP)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C (-5°F) or above 54°C (130°F). Rwy 14 helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA. For inop MALSR, increase LNAV Cats C and D to 2½ SM.

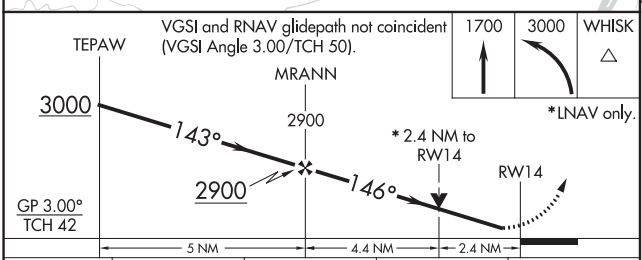
MALSR

MISSED APPROACH: (Do not exceed 250K until WHISK) Climb to 1700 then climbing left turn to 3000 direct WHISK and hold.

ATIS	MINNEAPOLIS APP CON	ST. PAUL TOWER ★	GND CON	CLNC DEL	UNICOM
118.35	121.2 335.65	119.1(CTAF) L 257.8	121.675	121.675	122.95

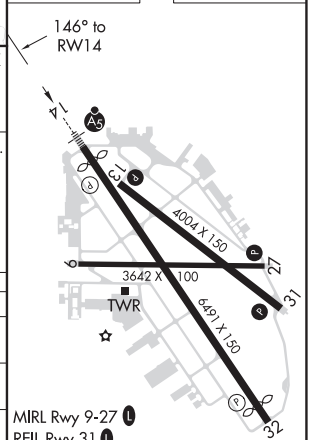


Procedure NA for arrival on GEP VORTAC airway radials 040 CW 159.



CATEGORY	A	B	C	D
LPV DA	955/40 250 (300-¾)			
LNAV/VNAV DA	1511-2½ 806 (900-2½)			
LNAV MDA	1520/40 815 (900-¾)		1520-1⅞ 815 (900-1⅞)	
C CIRCLING	1580-1¼ 875 (900-1¼)		1580-2½ 875 (900-2½)	1580-2¾ 875 (900-2¾)

ELEV 705 D TDZE 705



MIRL Rwy 9-27 L
REIL Rwy 31 L
REIL Rwy 32
HIRL Rwys 14-32 and 13-31 L

ST PAUL, MINNESOTA
Amdt 1B 17AUG17
44°56′N-93°04′W
ST PAUL DOWNTOWN HOLMAN FIELD (STP)
RNAV (GPS) RWY 14
549

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WAAS CH 50123 W32A	APP CRS 326°	Rwy ldg 6109 TDZE 704 Apt Elev 705

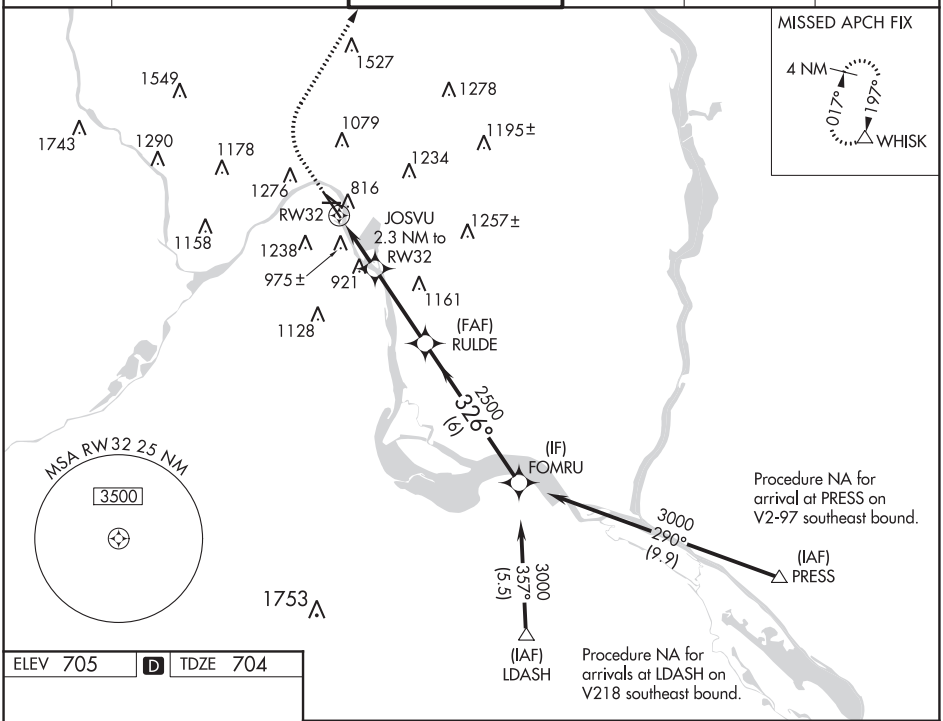
RNAV (GPS) RWY 32

ST PAUL DOWNTOWN HOLMAN FIELD (STP)

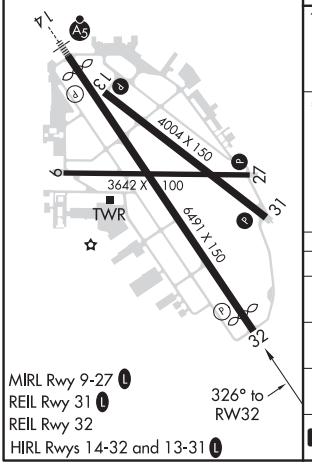
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C (-5°F) or above 54°C (130°F). Rwy 32 helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA.

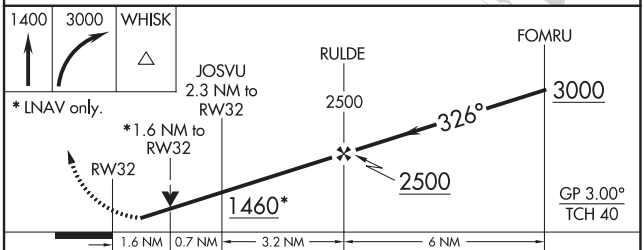
MISSED APPROACH: Climb to 1400 then climbing right turn to 3000 direct WHISK and hold.

ATIS	MINNEAPOLIS APP CON	ST. PAUL TOWER ★	GND CON	CLNC DEL	UNICOM
118.35	121.2 335.65	119.1(CTAF) L 257.8	121.675	121.675	122.95



ELEV 705 | D | TDZE 704





CATEGORY	A	B	C	D
LPV DA	1031/60 327 (400-1¼)			
LNAV/VNAV DA	1258-1⅞ 554 (600-1⅞)			
LNAV MDA	1240/55 536 (600-1)		1240-1½ 536 (600-1½)	
C CIRCLING	1580-1¼ 875 (900-1¼)		1580-2½ 875 (900-2½)	1580-2¾ 875 (900-2¾)

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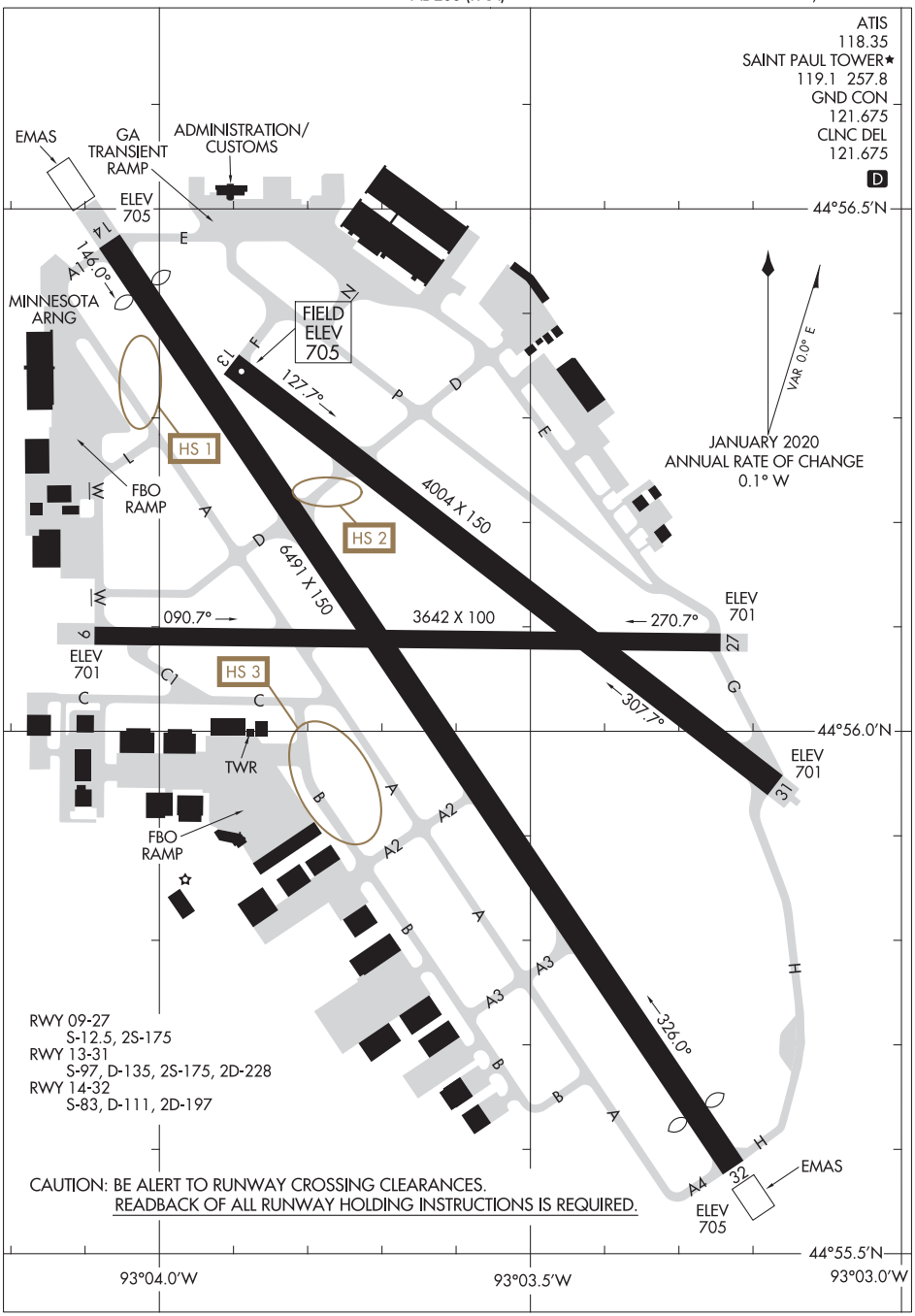

RWY 09-27
S-12.5, 2S-175
RWY 13-31
S-97, D-135, 2S-175, 2D-228
RWY 14-32
S-83, D-111, 2D-197

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

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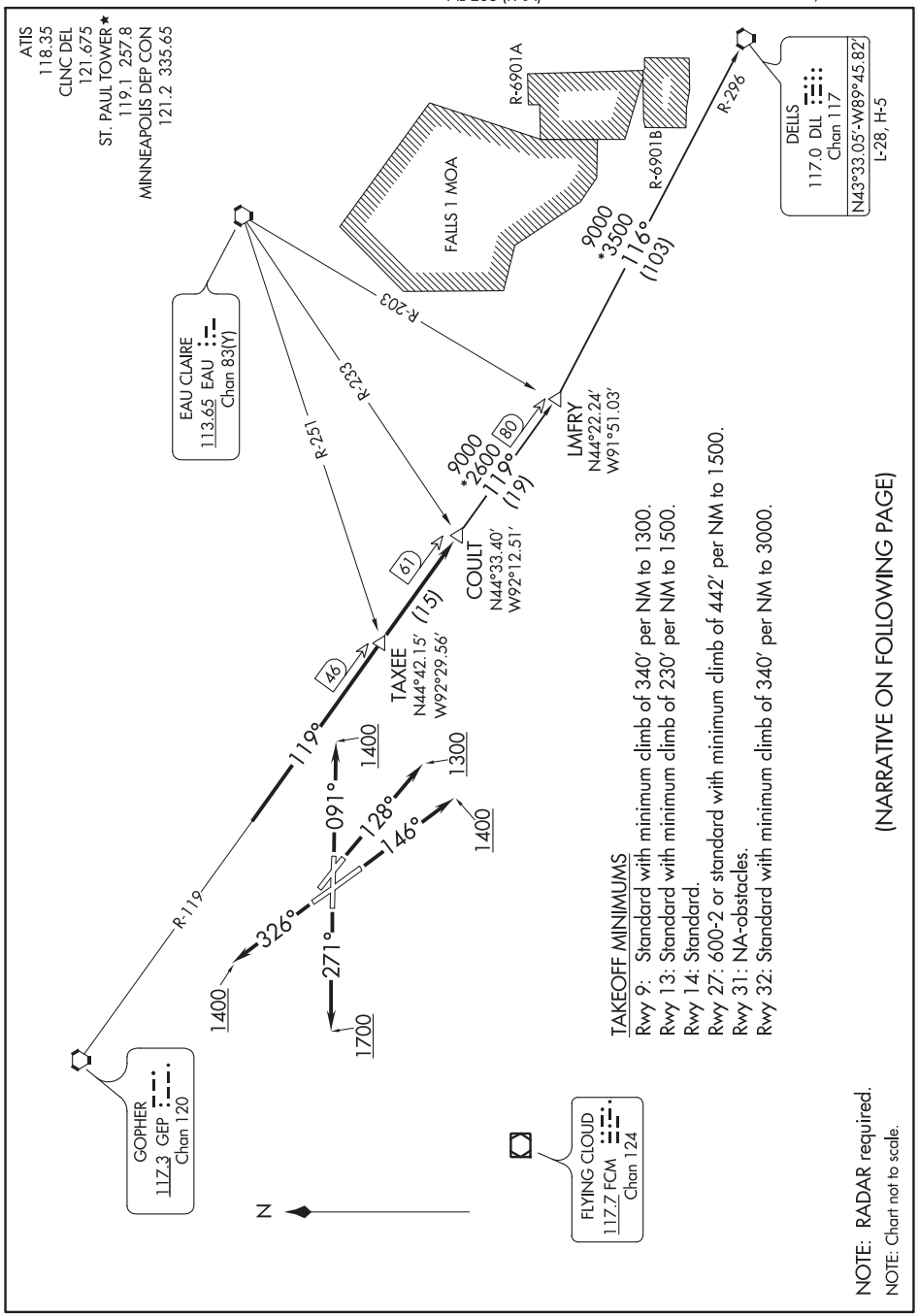
(COULT7.COULT) 19339

COULT SEVEN DEPARTURE

ST PAUL DOWNTOWN HOLMAN FIELD (STP)
ST. PAUL, MINNESOTA

AL-263 (FAA)



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COULT SEVEN DEPARTURE

ST. PAUL, MINNESOTA
ST PAUL DOWNTOWN HOLMAN FIELD (STP)

(COULT7.COULT) 29MAR18

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climb heading 091° to 1400 for RADAR vectors to intercept GEP R-119 to COULT INT/GEP 61 DME, thence . . . .
TAKEOFF RUNWAY 13: Climb heading 128° to 1300 for RADAR vectors to intercept GEP R-119 to COULT INT/GEP 61 DME, thence . . . .
TAKEOFF RUNWAY 14: Climb heading 146° to 1400 for RADAR vectors to intercept GEP R-119 to COULT INT/GEP 61 DME, thence . . . .
TAKEOFF RUNWAY 27: Climb heading 271° to 1700 for RADAR vectors to intercept GEP R-119 to COULT INT/GEP 61 DME, thence . . . .
TAKEOFF RUNWAY 32: Climb heading 326° to 1400 for RADAR vectors to intercept GEP R-119 to COULT INT/GEP 61 DME, thence . . . .

. . . . on transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

DELLS TRANSITION (COULT7.DLL): From over COULT INT on GEP R-119 to LMFRY INT then on DLL R-296 to DLL VORTAC.

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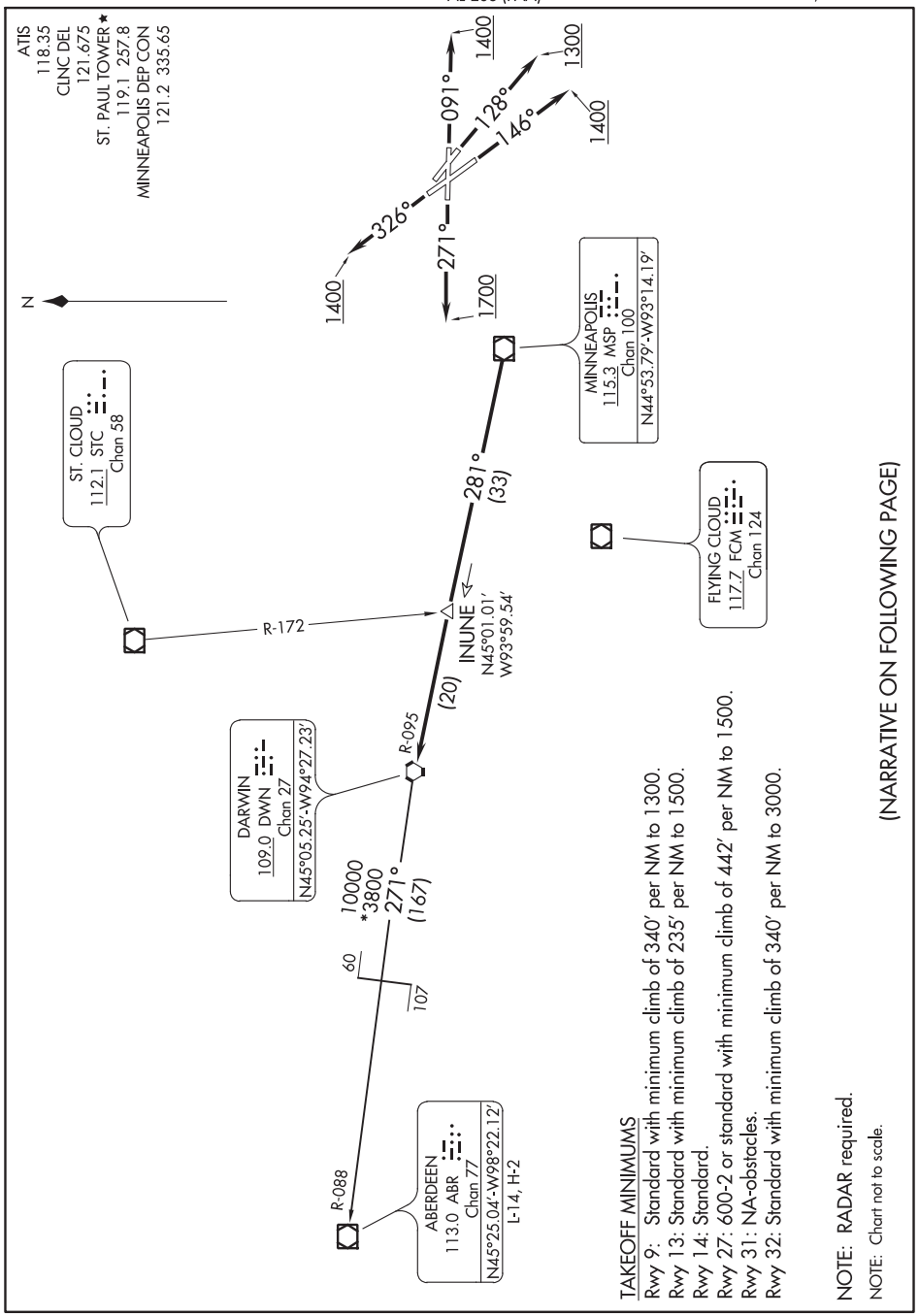
(DWN8.DWN) 20086

DARWIN EIGHT DEPARTURE

ST PAUL DOWNTOWN HOLMAN FIELD (STP)
ST. PAUL, MINNESOTA

AL-263 (FAA)



TAKEOFF MINIMUMS
Rwy 9: Standard with minimum climb of 340′ per NM to 1300.
Rwy 13: Standard with minimum climb of 235′ per NM to 1500.
Rwy 14: Standard.
Rwy 27: 600-2 or standard with minimum climb of 442′ per NM to 1500.
Rwy 31: NA-obstacles.
Rwy 32: Standard with minimum climb of 340′ per NM to 3000.

NOTE: RADAR required.
NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

NC-1, 25 FEB 2021 to 22 APR 2021

DARWIN EIGHT DEPARTURE
(DWN8.DWN) 05DEC19

ST. PAUL, MINNESOTA
ST PAUL DOWNTOWN HOLMAN FIELD (STP)

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climb on heading 091° to 1400 for RADAR vectors to MSP VOR/DME then on MSP R-281 and DWN R-095 to DWN VORTAC, thence . . . .
TAKEOFF RUNWAY 13: Climb on heading 128° to 1300 for RADAR vectors to MSP VOR/DME then on MSP R-281 and DWN R-095 to DWN VORTAC, thence . . . .
TAKEOFF RUNWAY 14: Climb on heading 146° to 1400 for RADAR vectors to MSP VOR/DME then on MSP R-281 and DWN R-095 to DWN VORTAC, thence . . . .
TAKEOFF RUNWAY 27: Climb on heading 271° to 1700 for RADAR vectors to MSP VOR/DME then on MSP R-281 and DWN R-095 to DWN VORTAC, thence . . . .
TAKEOFF RUNWAY 32: Climb on heading 326° to 1400 for RADAR vectors to MSP VOR/DME then on MSP R-281 and DWN R-095 to DWN VORTAC, thence . . . .

. . . . then on transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

ABERDEEN TRANSITION (DWN8.ABR): From over DWN VORTAC on DWN R-271 and ABR R-088 to ABR VOR/DME.

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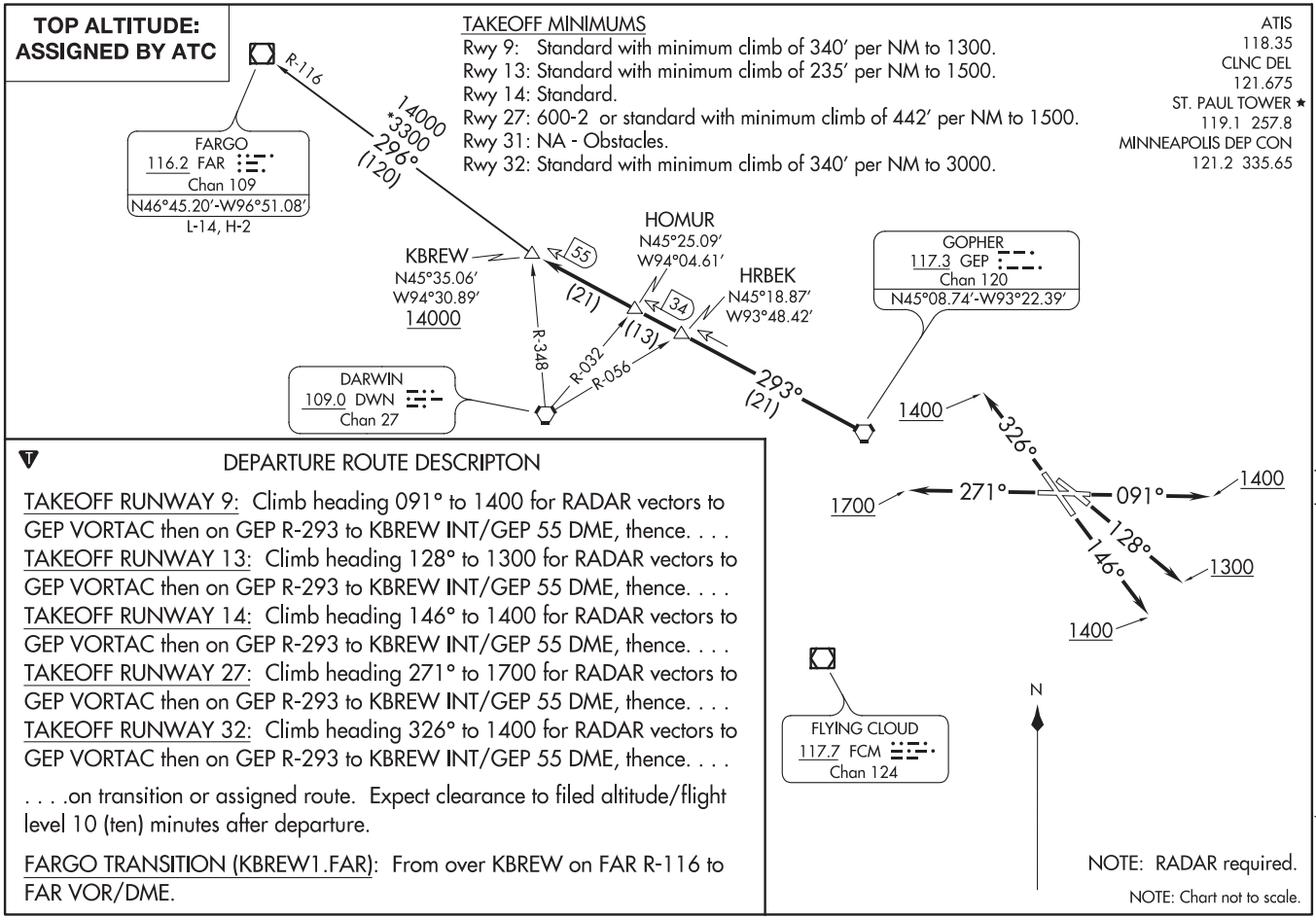
TOP ALTITUDE: ASSIGNED BY ATC

TAKEOFF MINIMUMS
Rwy 9: Standard with minimum climb of 340′ per NM to 1300.
Rwy 13: Standard with minimum climb of 235′ per NM to 1500.
Rwy 14: Standard.
Rwy 27: 600-2 or standard with minimum climb of 442′ per NM to 1500.
Rwy 31: NA - Obstacles.
Rwy 32: Standard with minimum climb of 340′ per NM to 3000.

ATIS
118.35
CLNC DEL
121.675
ST. PAUL TOWER ★
119.1 257.8
MINNEAPOLIS DEP CON
121.2 335.65



NOTE: RADAR required.

NOTE: Chart not to scale.

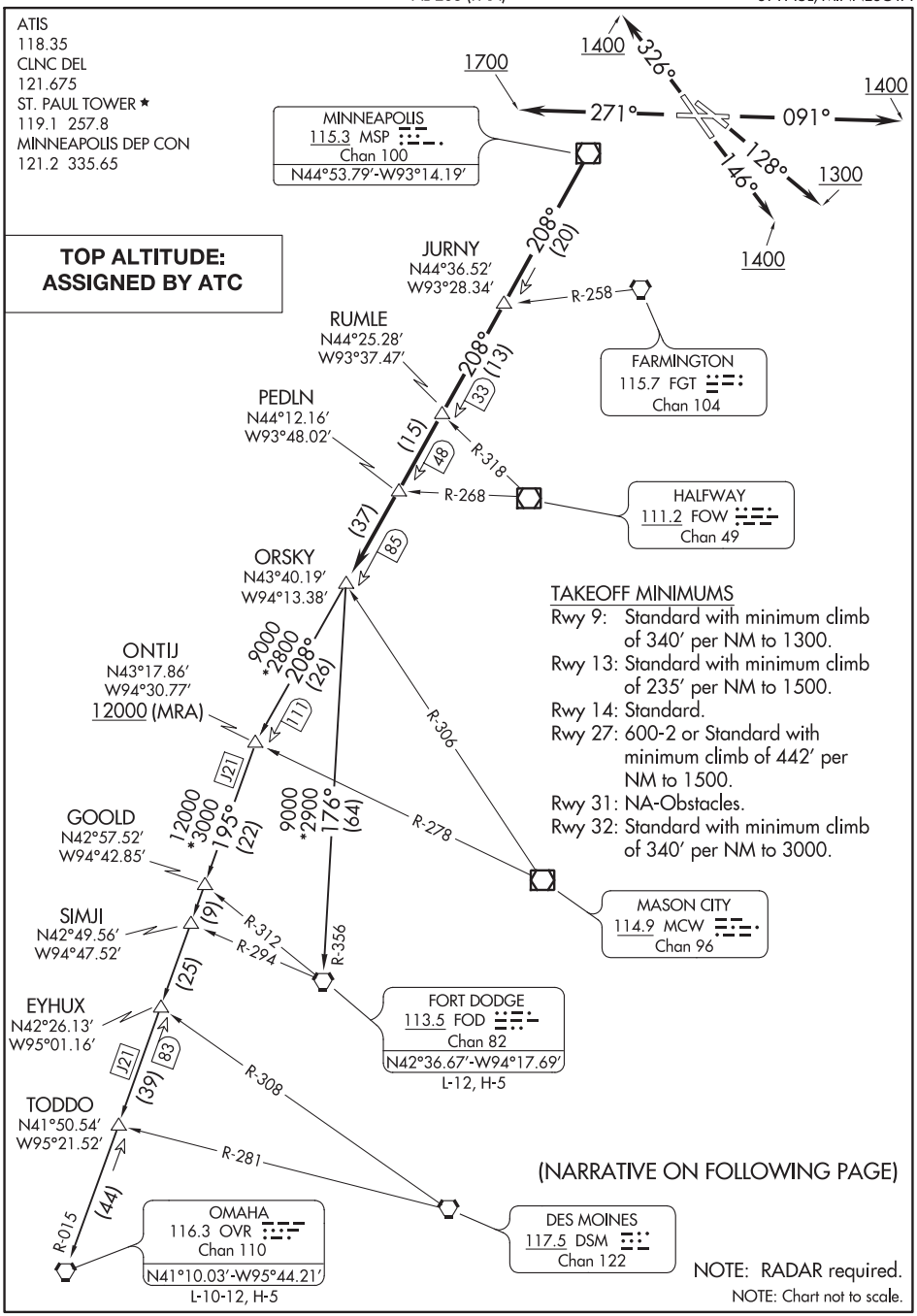
DEPARTURE ROUTE DESCRIPTON

TAKEOFF RUNWAY 9: Climb heading 091° to 1400 for RADAR vectors to GEP VORTAC then on GEP R-293 to KBREW INT/GEP 55 DME, thence. . . .
TAKEOFF RUNWAY 13: Climb heading 128° to 1300 for RADAR vectors to GEP VORTAC then on GEP R-293 to KBREW INT/GEP 55 DME, thence. . . .
TAKEOFF RUNWAY 14: Climb heading 146° to 1400 for RADAR vectors to GEP VORTAC then on GEP R-293 to KBREW INT/GEP 55 DME, thence. . . .
TAKEOFF RUNWAY 27: Climb heading 271° to 1700 for RADAR vectors to GEP VORTAC then on GEP R-293 to KBREW INT/GEP 55 DME, thence. . . .
TAKEOFF RUNWAY 32: Climb heading 326° to 1400 for RADAR vectors to GEP VORTAC then on GEP R-293 to KBREW INT/GEP 55 DME, thence. . . .

. . . .on transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

FARGO TRANSITION (KBREW1.FAR): From over KBREW on FAR R-116 to FAR VOR/DME.

ORSKY TWO DEPARTURE



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(ORSKY2.ORSKY) 19059

ORSKY TWO DEPARTURE

AL-263 (FAA)

ST PAUL DOWNTOWN HOLMAN FIELD (STP)
ST PAUL, MINNESOTA

DEPARTURE ROUTE DESCRIPTON

TAKEOFF RUNWAY 9: Climb heading 091° to 1400 for RADAR vectors to MSP VOR/DME then on MSP R-208 to ORSKY INT/MSP 85 DME. Thence . . . .
TAKEOFF RUNWAY 13: Climb heading 128° to 1300 for RADAR vectors to MSP VOR/DME then on MSP R-208 to ORSKY INT/MSP 85 DME. Thence . . . .
TAKEOFF RUNWAY 14: Climb heading 146° to 1400 for RADAR vectors to MSP VOR/DME then on MSP R-208 to ORSKY INT/MSP 85 DME. Thence . . . .
TAKEOFF RUNWAY 27: Climb heading 271° to 1700 for RADAR vectors to MSP VOR/DME then on MSP R-208 to ORSKY INT/MSP 85 DME. Thence . . . .
TAKEOFF RUNWAY 32: Climb heading 326° to 1400 for RADAR vectors to MSP VOR/DME then on MSP R-208 to ORSKY INT/MSP 85 DME. Thence . . . .

. . . .on transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

FORT DODGE TRANSITION (ORSKY2.FOD): From over ORSKY INT on FOD R-356 to FOD VORTAC.

OMAHA TRANSITION (ORSKY2.OVR): From over ORSKY INT on MSP R-208 to ONTIJ INT, then on OVR R-015 to OVR VORTAC.

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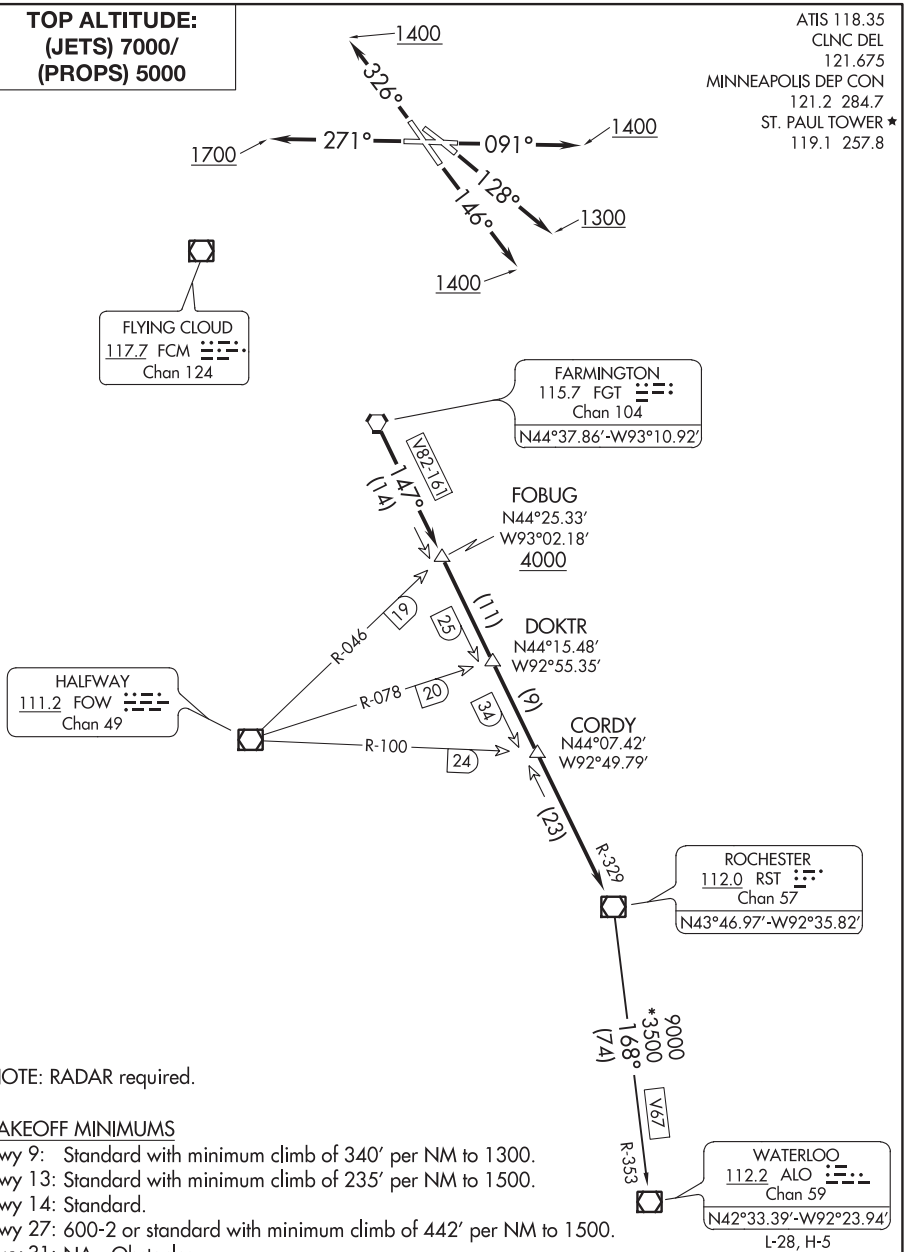
TOP ALTITUDE:
(JETS) 7000/
(PROPS) 5000

ATIS 118.35
CLNC DEL
121.675
MINNEAPOLIS DEP CON
121.2 284.7
ST. PAUL TOWER ★
119.1 257.8



NOTE: RADAR required.

TAKEOFF MINIMUMS
Rwy 9: Standard with minimum climb of 340′ per NM to 1300.
Rwy 13: Standard with minimum climb of 235′ per NM to 1500.
Rwy 14: Standard.
Rwy 27: 600-2 or standard with minimum climb of 442′ per NM to 1500.
Rwy 31: NA - Obstacles.
Rwy 32: Standard with minimum climb of 340′ per NM to 3000.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

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DEPARTURE ROUTE DESCRIPTON

TAKEOFF RUNWAY 9: Climb heading 091° to 1400 for RADAR vectors to FGT VORTAC then on FGT R-147 and RST R-329 to RST VOR/DME. Cross FOBUG INT/FGT 14 DME at or above 4000, thence . . . .

TAKEOFF RUNWAY 13: Climb heading 128° to 1300 for RADAR vectors to FGT VORTAC then on FGT R-147 and RST R-329 to RST VOR/DME. Cross FOBUG INT/FGT 14 DME at or above 4000, thence . . . .

TAKEOFF RUNWAY 14: Climb heading 146° to 1400 for RADAR vectors to FGT VORTAC then on FGT R-147 and RST R-329 to RST VOR/DME. Cross FOBUG INT/FGT 14 DME at or above 4000, thence . . . .

TAKEOFF RUNWAY 27: Climb heading 271° to 1700 for RADAR vectors to FGT VORTAC then on FGT R-147 and RST R-329 to RST VOR/DME. Cross FOBUG INT/FGT 14 DME at or above 4000, thence . . . .

TAKEOFF RUNWAY 32: Climb heading 326° to 1400 for RADAR vectors to FGT VORTAC then on FGT R-147 and RST R-329 to RST VOR/DME. Cross FOBUG INT/FGT 14 DME at or above 4000, thence . . . .

. . . .on assigned transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

WATERLOO TRANSITION (RST1.ALO): From over RST VOR/DME on RST R-168 and ALO R-353 to ALO VOR/DME.

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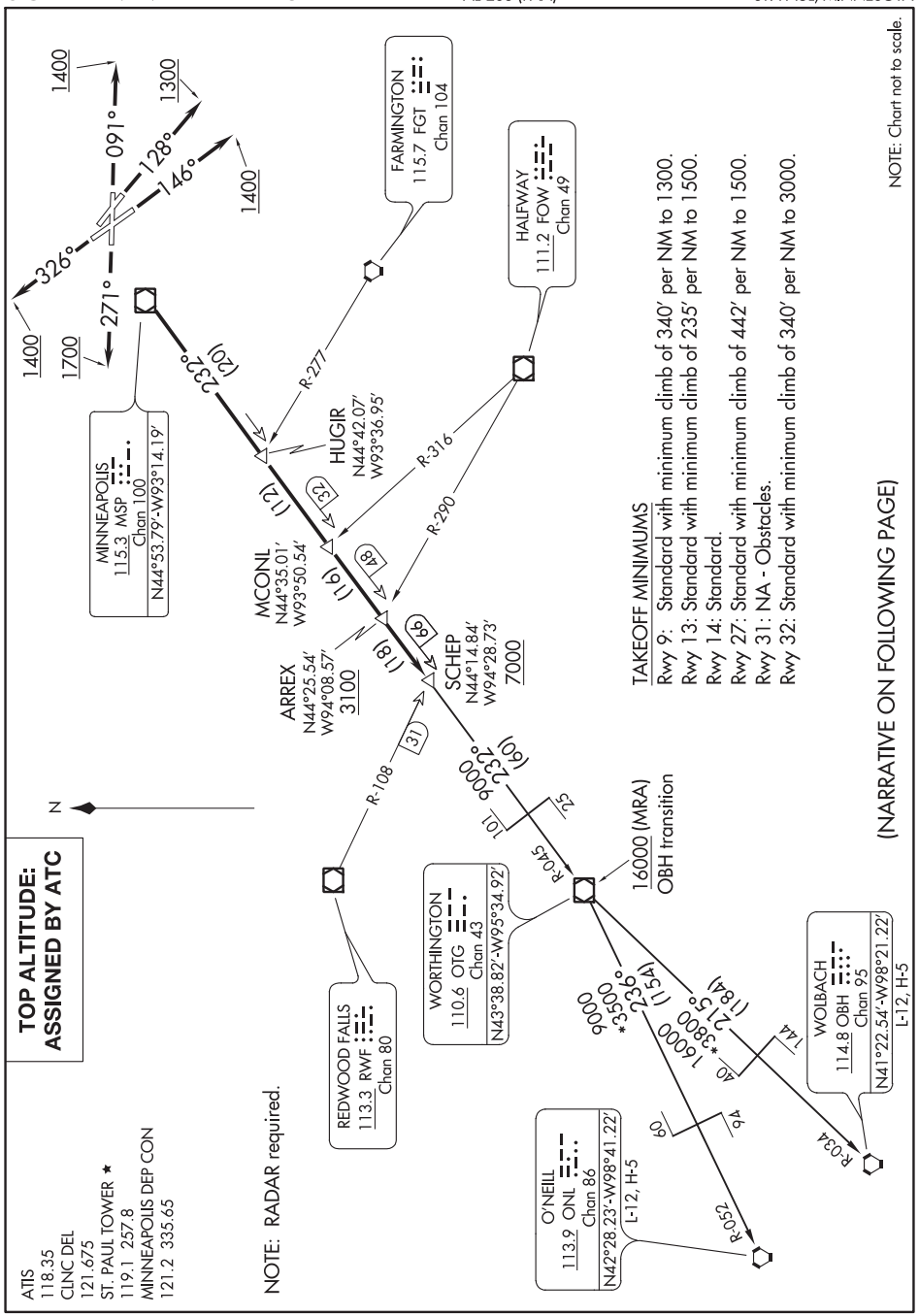
1400
1300
160°
128°
146°
1400
326°
271°
1400
1700
232°
(20)
R-277
FARMINGTON
115.7 FGT
Chan 104
HALFWAY
111.2 FOW
Chan 49
MINNEAPOLIS
115.3 MSP
Chan 100
N44°53.79'-W93°14.19'
HUGIR
N44°42.07'
W93°36.95'
R-316
R-290
(12)
53
(19)
48
MCONL
N44°35.01'
W93°50.54'
(18)
68
ARREX
N44°25.54'
W94°08.57'
3100
SCHEP
N44°14.84'
W94°28.73'
7000
31
R-108
232°
(60)
9000
101
25
R-045
N
TOP ALTITUDE:
ASSIGNED BY ATC
ATIS
118.35
CLNC DEL
121.675
ST. PAUL TOWER ★
119.1 257.8
MINNEAPOLIS DEP CON
121.2 335.65
NOTE: RADAR required.
REDWOOD FALLS
113.3 RWF
Chan 80
WORTHINGTON
110.6 OTG
Chan 43
N43°38.82'-W95°34.92'
16000 (MRA)
OBH transition
9000
*3500
236°
(154)
16000
*3800
215°
(184)
40
144
60
94
R-052
R-034
O'NEILL
113.9 ONL
Chan 86
N42°28.23'-W98°41.22'
L-12, H-5
WOLBACH
114.8 OBH
Chan 95
N41°22.54'-W98°21.22'
L-12, H-5
TAKEOFF MINIMUMS
Rwy 9: Standard with minimum climb of 340' per NM to 1300.
Rwy 13: Standard with minimum climb of 235' per NM to 1500.
Rwy 14: Standard.
Rwy 27: Standard with minimum climb of 442' per NM to 1500.
Rwy 31: NA - Obstacles.
Rwy 32: Standard with minimum climb of 340' per NM to 3000.
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)

DEPARTURE ROUTE DESCRIPTON

TAKEOFF RUNWAY 9: Climb heading 091° to 1400 for RADAR vectors to MSP VOR/DME, then on MSP R-232 to SCHEP INT/MSP 66 DME, thence . . . .
TAKEOFF RUNWAY 13: Climb heading 128° to 1300 for RADAR vectors to MSP VOR/DME then on MSP R-232 to SCHEP INT/MSP 66 DME, thence . . . .
TAKEOFF RUNWAY 14: Climb heading 146° to 1400 for RADAR vectors to MSP VOR/DME then on MSP R-232 to SCHEP INT/MSP 66 DME, thence . . . .
TAKEOFF RUNWAY 27: Climb heading 271° to 1700 for RADAR vectors to MSP VOR/DME then on MSP R-232 to SCHEP INT/MSP 66 DME, thence . . . .
TAKEOFF RUNWAY 32: Climb heading 326° to 1400 for RADAR vectors to MSP VOR/DME then on MSP R-232 to SCHEP INT/MSP 66 DME, thence . . . .

. . . .on transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

O'NEILL TRANSITION (SCHEP9.ONL): From over SCHEP INT on MSP R-232 and OTG R-045 to OTG VOR/DME, then on OTG R-236 and ONL R-052 to ONL VORTAC.

WOLBACH TRANSITION (SCHEP9.OBH): From over SCHEP INT on MSP R-232 and OTG R-045 to OTG VOR/DME, then on OTG R-215 and OBH R-034 to OBH VORTAC.

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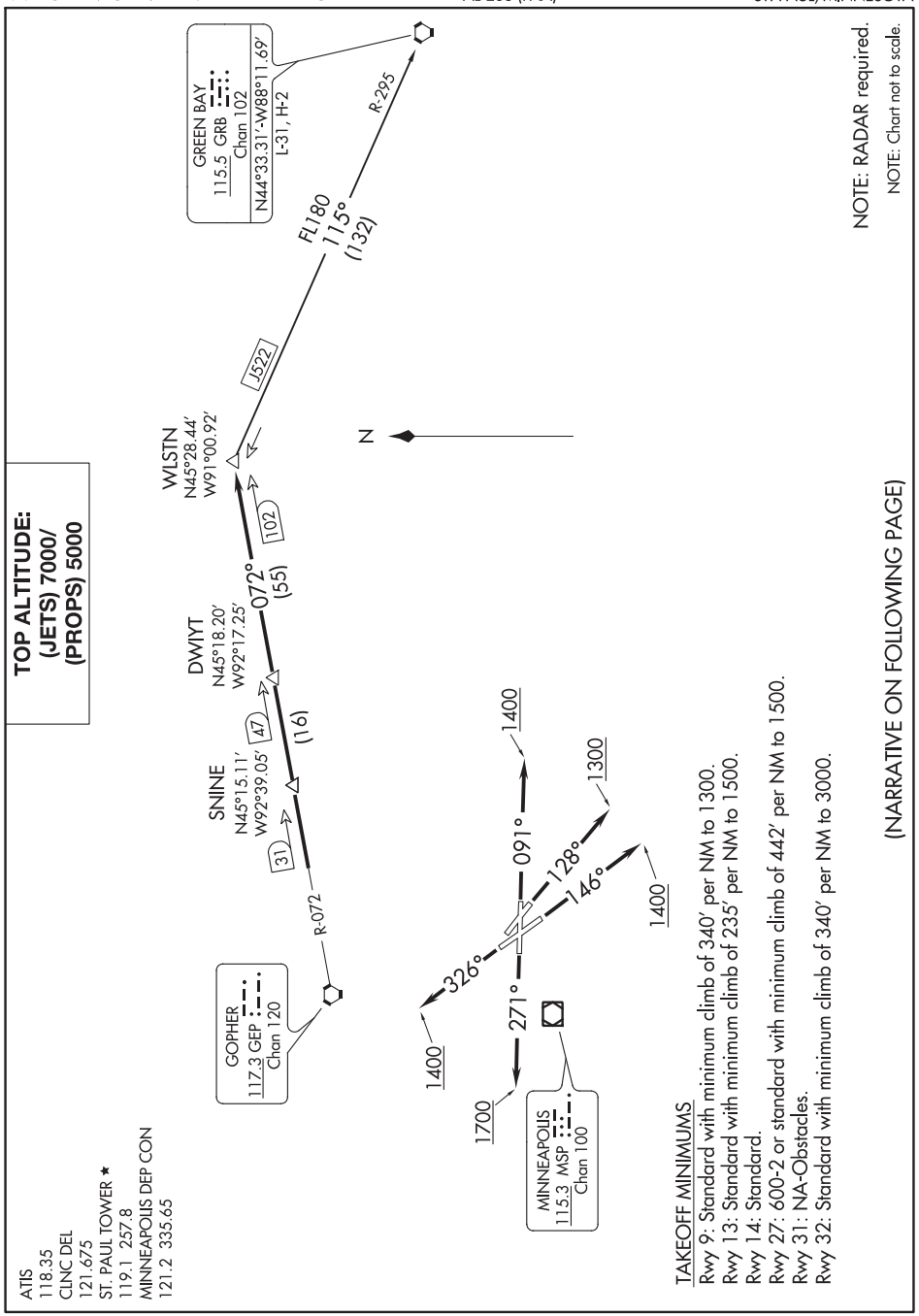
TOP ALTITUDE:
(JETS) 7000/
(PROPS) 5000
GREEN BAY
115.5 GRB
Chan 102
N44°33.31'-W88°11.69'
L-31, H-2
R-295
FL180
115°
(132)
J522
WLSTN
N45°28.44'
W91°00.92'
102
N
DWIYT
N45°18.20'
W92°17.25'
072°
(55)
47
(16)
SNINE
N45°15.11'
W92°39.05'
31
R-072
GOPHER
117.3 GEP
Chan 120
1400
091°
1400
128°
1300
146°
1400
326°
271°
1700
MINNEAPOLIS
115.3 MSP
Chan 100
ATIS
118.35
CLNC DEL
121.675
ST. PAUL TOWER ★
119.1 257.8
MINNEAPOLIS DEP CON
121.2 335.65
TAKEOFF MINIMUMS
Rwy 9: Standard with minimum climb of 340' per NM to 1300.
Rwy 13: Standard with minimum climb of 235' per NM to 1500.
Rwy 14: Standard.
Rwy 27: 600-2 or standard with minimum climb of 442' per NM to 1500.
Rwy 31: NA-Obstacles.
Rwy 32: Standard with minimum climb of 340' per NM to 3000.
NOTE: RADAR required.
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)

DEPARTURE ROUTE DESCRIPTON

TAKEOFF RUNWAY 9: Climb heading 091° to 1400 for RADAR vectors to GEP R-072 to WLSTN/GEP 102 DME, thence . . . .
TAKEOFF RUNWAY 13: Climb heading 128° to 1300 for RADAR vectors to GEP R-072 to WLSTN/GEP 102 DME, thence . . . .
TAKEOFF RUNWAY 14: Climb heading 146° to 1400 for RADAR vectors to GEP R-072 to WLSTN/GEP 102 DME, thence . . . .
TAKEOFF RUNWAY 27: Climb heading 271° to 1700 for RADAR vectors to GEP R-072 to WLSTN/GEP 102 DME, thence. . . .
TAKEOFF RUNWAY 32: Climb heading 326° to 1400 for RADAR vectors to GEP R-072 to WLSTN/GEP 102 DME, thence . . . .

. . . .on assigned transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

GREEN BAY TRANSITION (WLSTN7.GRB): From over WLSTN on GRB R-295 to GRB VORTAC.

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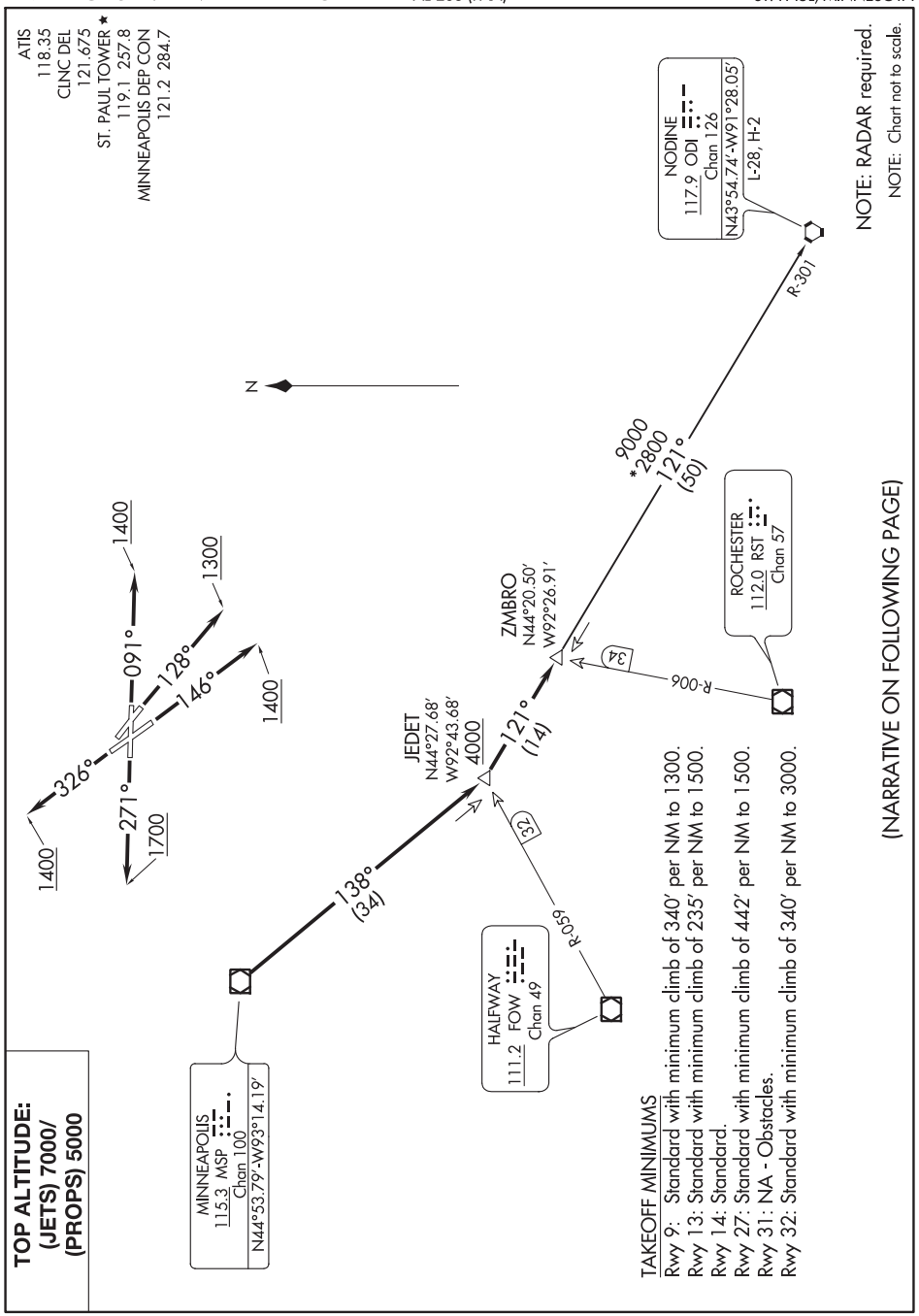
ATIS
118.35
CINC DEL
121.675
ST. PAUL TOWER ★
119.1 257.8
MINNEAPOLIS DEP CON
121.2 284.7
N
1400
091°
1300
128°
146°
1400
326°
271°
1700
1400
138°
(34)
MINNEAPOLIS
115.3 MSP
Chan 100
N44°53.79'-W93°14.19'
JEDET
N44°27.68'
W92°43.68'
4000
121°
(14)
32
R-059
HALFWAY
111.2 FOW
Chan 49
ZMBRO
N44°20.50'
W92°26.91'
34
R-006
ROCHESTER
112.0 RST
Chan 57
9000
*2800
121°
(50)
R-301
NODINE
117.9 ODI
Chan 126
N43°54.74'-W91°28.05'
L-28, H-2
TOP ALTITUDE:
(JETS) 7000/
(PROPS) 5000
TAKEOFF MINIMUMS
Rwy 9: Standard with minimum climb of 340' per NM to 1300.
Rwy 13: Standard with minimum climb of 235' per NM to 1500.
Rwy 14: Standard.
Rwy 27: Standard with minimum climb of 442' per NM to 1500.
Rwy 31: NA - Obstacles.
Rwy 32: Standard with minimum climb of 340' per NM to 3000.
NOTE: RADAR required.
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)

DEPARTURE ROUTE DESCRIPTON

TAKEOFF RUNWAY 9: Climb heading 091° to 1400 for RADAR vectors to MSP VOR/DME then on MSP R-138 to cross JEDET INT/MSP 34 DME, at or above 4000; then on ODI R-301 to ZMBRO INT/ODI 50 DME, thence . . . .
TAKEOFF RUNWAY 13: Climb heading 128° to 1300 for RADAR vectors to MSP VOR/DME then on MSP R-138 to cross JEDET INT/MSP 34 DME, at or above 4000; then on ODI R-301 to ZMBRO INT/ODI 50 DME, thence . . . .
TAKEOFF RUNWAY 14: Climb heading 146° to 1400 for RADAR vectors to MSP VOR/DME then on MSP R-138 to cross JEDET INT/MSP 34 DME, at or above 4000; then on ODI R-301 to ZMBRO INT/ODI 50 DME, thence . . . .
TAKEOFF RUNWAY 27: Climb heading 271° to 1700 for RADAR vectors to MSP VOR/DME then on MSP R-138 to cross JEDET INT/MSP 34 DME, at or above 4000; then on ODI R-301 to ZMBRO INT/ODI 50 DME, thence . . . .
TAKEOFF RUNWAY 32: Climb heading 326° to 1400 for RADAR vectors to MSP VOR/DME then on MSP R-138 to cross JEDET INT/MSP 34 DME, at or above 4000; then on ODI R-301 to ZMBRO INT/ODI 50 DME, thence . . . .

. . . .on assigned transition or route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

NODINE TRANSITION (ZMBRO7.ODI): From over ZMBRO on ODI R-301 to ODI VORTAC.

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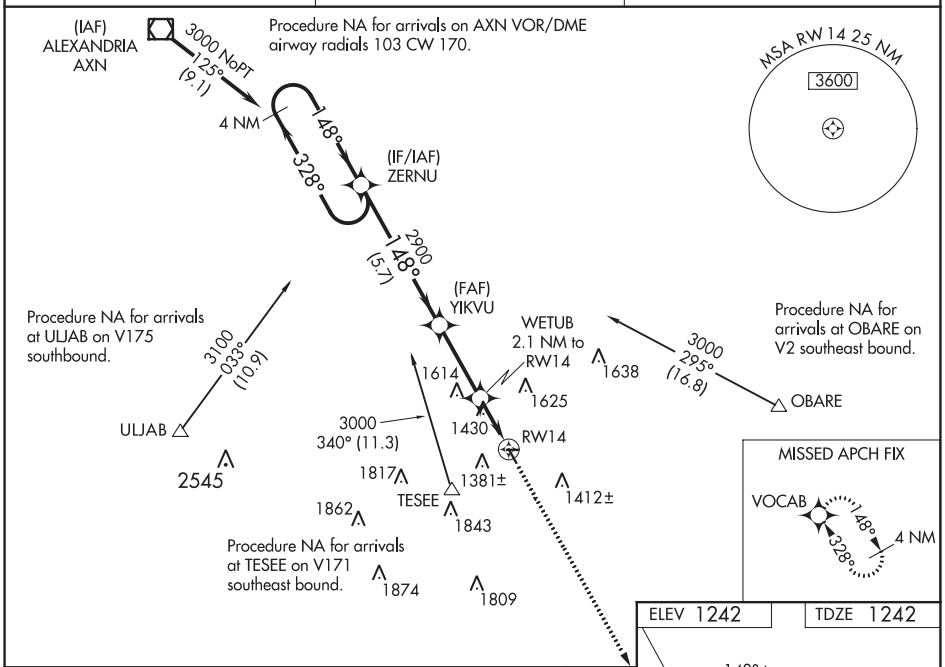
WAAS CH 97636 W14A	APP CRS 148°	Rwy ldg 3296 TDZE 1242 Apt Elev 1242

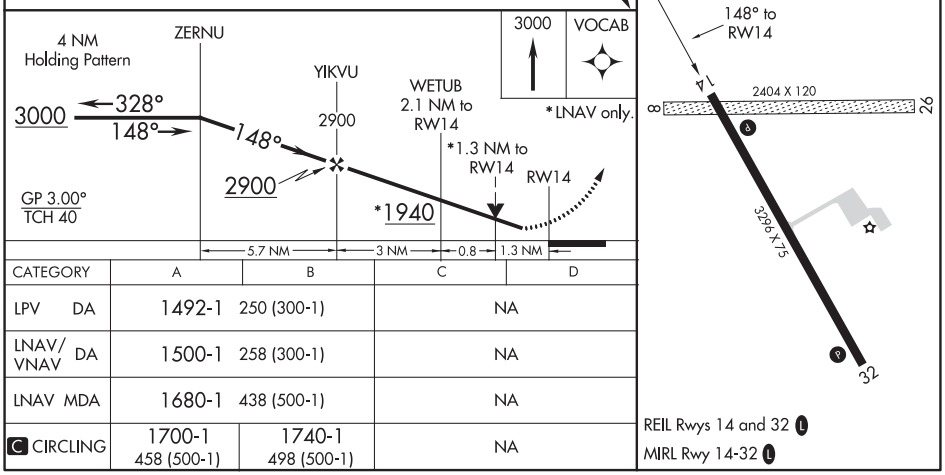
RNAV (GPS) RWY 14
SAUK CENTRE MUNI (D39)

T A Baro-VNAV NA when using Glenwood altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. VDP NA with Glenwood altimeter setting. When local altimeter setting not received, use Glenwood altimeter setting and increase all DA/MDA 60 feet, increase LNAV/VNAV all Cats visibility ⅛ mile. Rwy 14 helicopter visibility reduction below ¾ SM NA. Circling NA to Rwys 8 and 26.

MISSED APPROACH: Climb to 3000 direct VOCAB and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
118.475	126.1 269.2	122.9 L





CATEGORY	A	B	C	D
LPV DA	1492-1	250 (300-1)	NA	
LNAV/VNAV DA	1500-1	258 (300-1)	NA	
LNAV MDA	1680-1	438 (500-1)	NA	
C CIRCLING	1700-1 458 (500-1)	1740-1 498 (500-1)	NA	

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SAUK CENTRE, MINNESOTA | AL-9262 (FAA) | 21056

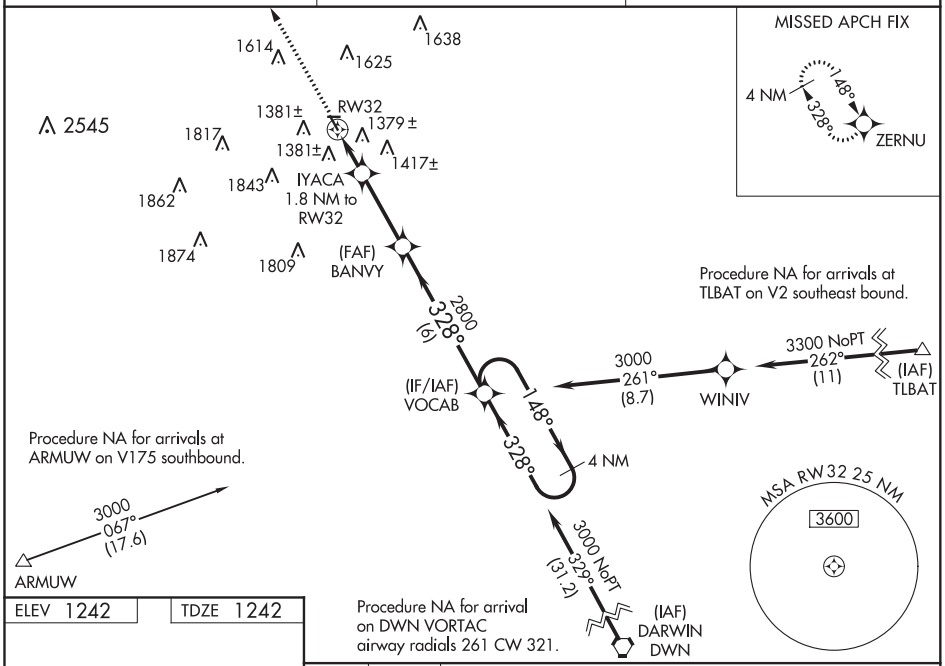
WAAS CH 56622 W32A	APP CRS 328°	Rwy ldg 3296 TDZE 1242 Apt Elev 1242

RNAV (GPS) RWY 32
SAUK CENTRE MUNI (D39)

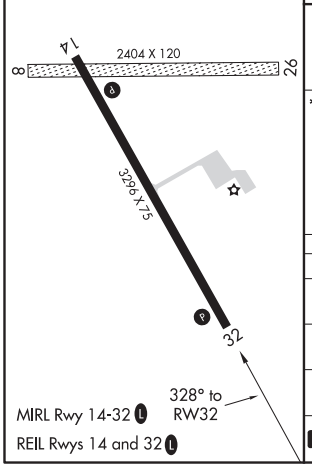
T A Baro-VNAV NA when using Glenwood altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). When local altimeter setting not received, use Glenwood altimeter setting and increase all DA/MDA 60 feet, and increase LNAV/VNAV all Cats visibility ¼ mile. DME/DME RNP-0.3 NA. VDP NA with Glenwood altimeter setting. Rwy 32 helicopter visibility reduction below ¾ SM NA. Circling NA to Rwys 8 and 26.

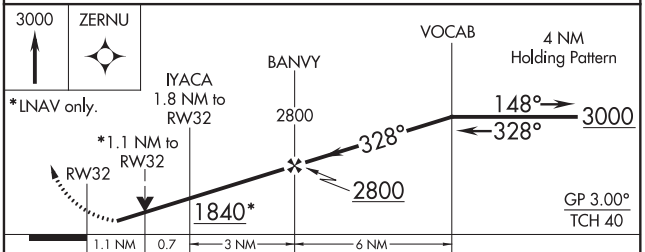
MISSED APPROACH: Climb to 3000 direct ZERNU and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
118.475	126.1 269.2	122.9 L



ELEV 1242 | TDZE 1242





CATEGORY	A	B	C	D
LPV DA	1492-1 250 (300-1)		NA	
LNAV/VNAV DA	1541-1 299 (300-1)		NA	
LNAV MDA	1640-1 398 (400-1)		NA	
C CIRCLING	1700-1 458 (500-1)	1740-1 498 (500-1)	NA	

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ILS or LOC RWY 3
JOE FOSS FIELD (FSD)

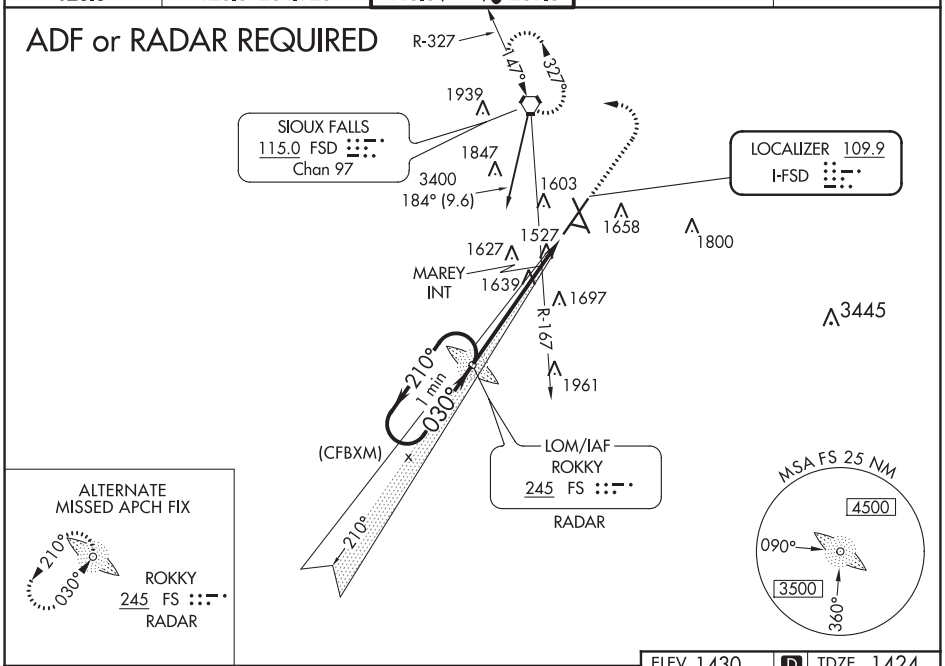
LOC I-FSD	APP CRS	Rwy ldg / TDZE / Apt Elev
109.9	030°	8999 / 1424 / 1430

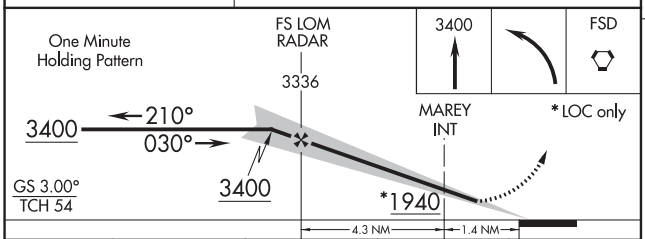
T
A
ASR
-31°C

MALSR

MISSED APPROACH: Climb to 3400 then left turn direct FSD VORTAC and hold.

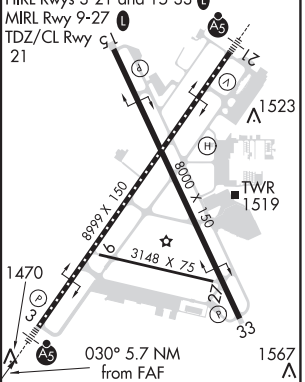
ATIS	SIOUX FALLS APP CON ★	SIOUX FALLS TOWER ★	GND CON	UNICOM
126.6	125.8 284.725	118.3 (CTAF) L 257.8	121.9 348.6	122.95





CATEGORY	A	B	C	D
S-ILS 3	1674/24 250 (300-½)			
S-LOC 3	1940/24 516 (600-½)		1940/55 516 (600-1)	
C CIRCLING	1960-1 530 (600-1)	1980-1 550 (600-1)	2060-1¾ 630 (700-1¾)	2200-2½ 770 (800-2½)
MAREY FIX MINIMUMS (DUAL VOR RECEIVERS REQUIRED)				
S-LOC 3	1800/24 376 (400-½)		1800/35 376 (400-⅝)	
C CIRCLING	1960-1 530 (600-1)	1980-1 550 (600-1)	2060-1¾ 630 (700-1¾)	2200-2½ 770 (800-2½)

ELEV 1430 D TDZE 1424
REIL Rwys 15 and 33 L
HIRL Rwys 3-21 and 15-33 L
MIRL Rwy 9-27 L
TDZ/CL Rwy 21



FAF to MAP 5.7 NM					
Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54

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LOC I-JOU	APP CRS	Rwy ldg	8999
111.1	210°	TDZE	1430
		Apt Elev	1430

ILS or LOC RWY 21
JOE FOSS FIELD (FSD)

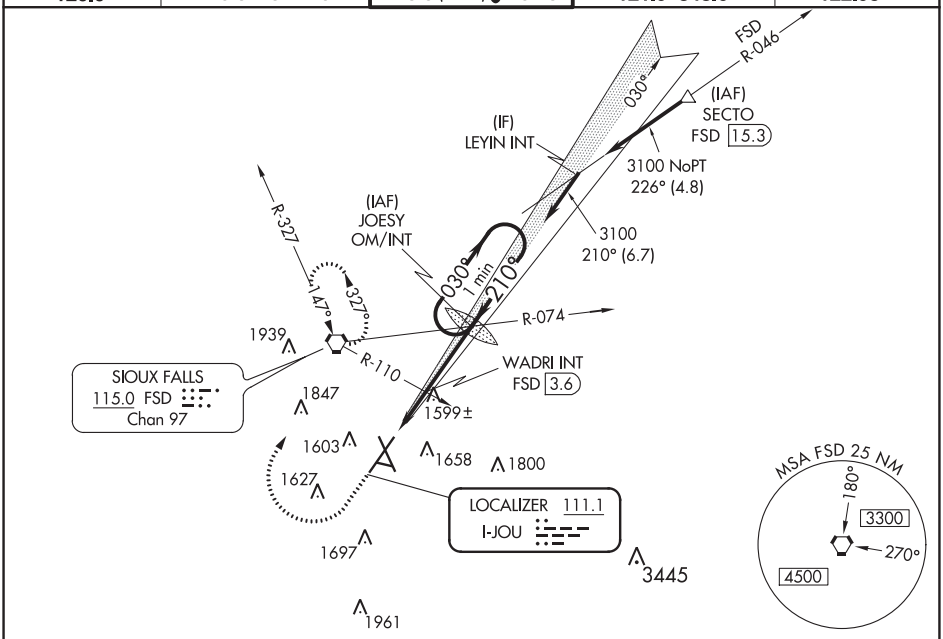
ASR -31°C

For inoperative MALSR increase S-ILS all Cats visibility to ¾ mile, increase S-LOC 21 Cat C/D visibility to 1⅞ mile. When using WADRI FIX minimums, increase S-LOC 21 Cat C/D visibility to 1 mile.

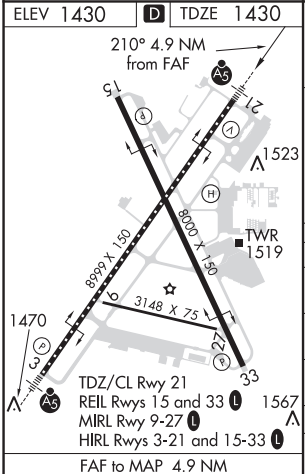
MALSR

MISSED APPROACH: Climb to 3400 then right turn direct FSD VORTAC and hold.

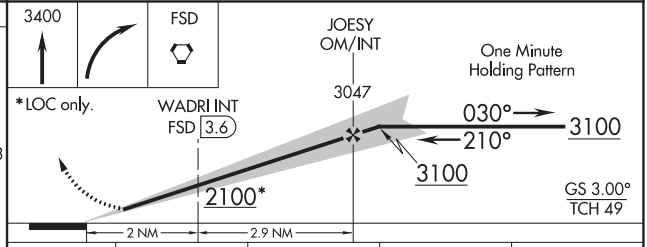
ATIS	SIOUX FALLS APP CON ★	SIOUX FALLS TOWER ★	GND CON	UNICOM
126.6	125.8 284.725	118.3 (CTAF) L 257.8	121.9 348.6	122.95



ELEV 1430 | D | TDZE 1430



FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38



CATEGORY	A	B	C	D
S-ILS 21	1630/18 200 (200-½)			
S-LOC 21	2100/24 670 (700-½)		2100-1½ 670 (700-1½)	
C CIRCLING	2100-1 670 (700-1)		2100-1¾ 670 (700-1¾)	2200-2½ 770 (800-2½)
WADRI FIX MINIMUMS				
S-LOC 21	1800/24 370 (400-½)		1800/35 370 (400-⅝)	
C CIRCLING	1960-1 530 (600-1)	1980-1 550 (600-1)	2060-1¾ 630 (700-1¾)	2200-2½ 770 (800-2½)

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WAAS CH 97722 W03A	APP CRS 030°	Rwy ldg 8999 TDZE 1424 Apt Elev 1430

RNAV (GPS) RWY 3
JOE FOSS FIELD (FSD)

RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). For inop ALS, increase LNAV/VNAV all Cats visibility to RVR 4500 and LNAV Cats C/D visibility to 1⅜ SM.

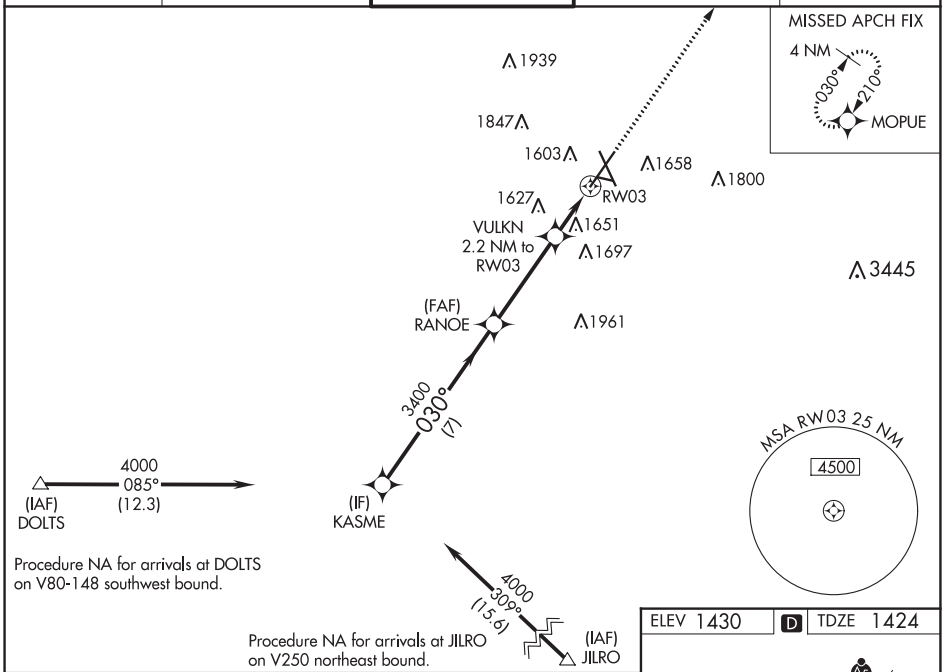
ASR

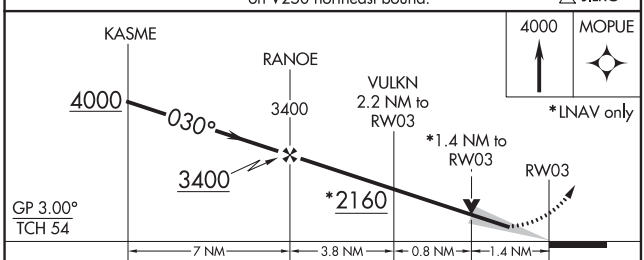
-31°C

MALSR

MISSED APPROACH: Climb to 4000 direct MOPUE and hold.

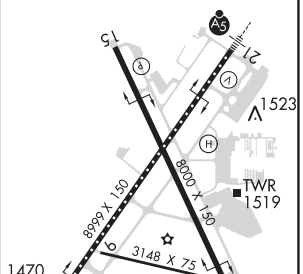
ATIS	SIOUX FALLS APP CON*	SIOUX FALLS TOWER*	GND CON	UNICOM
126.6	125.8 284.725	118.3 (CTAF) L 257.8	121.9 348.6	122.95





CATEGORY	A	B	C	D
LPV DA	1674/24 250 (300-½)			
LNAV/VNAV DA	1726/24 302 (300-½)			
LNAV MDA	1920/24 496 (500-½)		1920/50 496 (500-1)	
C CIRCLING	1960-1 530 (600-1)	1980-1 550 (600-1)	2060-1¾ 630 (700-1¾)	2200-2½ 770 (800-2½)

ELEV 1430 D TDZE 1424



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APP CRS	Rwy ldg	3148
098°	TDZE	1424
	Apt Elev	1430

RNAV (GPS) RWY 9
JOE FOSS FIELD (FSD)

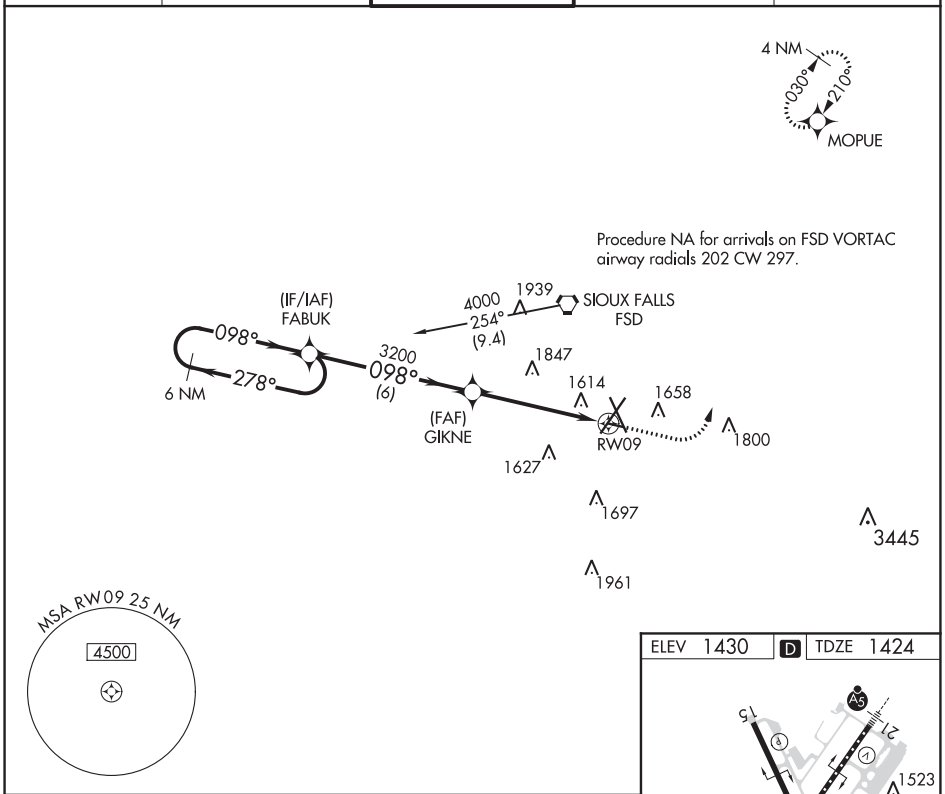
RNP APCH.

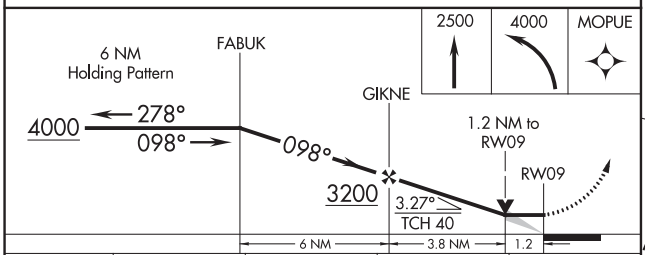
ASR Rwy 9 helicopter visibility reduction below ¾ SM NA.

-31°C

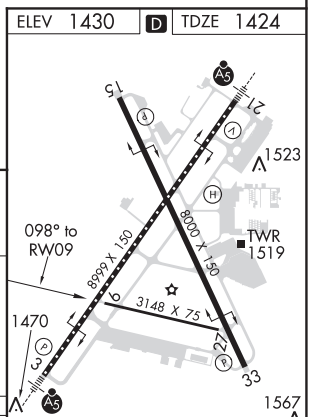
MISSED APPROACH: Climb to 2500 then climbing left turn to 4000 direct MOPUE WP and hold.

ATIS	SIOUX FALLS APP CON★	SIOUX FALLS TOWER★	GND CON	UNICOM
126.6	125.8 284.725	118.3 (CTAF) L 257.8	121.9 348.6	122.95





CATEGORY	A	B	C	D
LNAV MDA	1880-1 456 (500-1)		NA	
C CIRCLING	1960-1 530 (600-1)	1980-1 550 (600-1)	NA	



TDZ/CL Rwy 21
MIRL Rwy 9-27 L
REIL Rwys 15 and 33 L
HIRL Rwys 3-21 and 15-33 L

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WAAS CH 90235 W15A	APP CRS 150°	Rwy ldg 8000 TDZE 1429 Apt Elev 1430

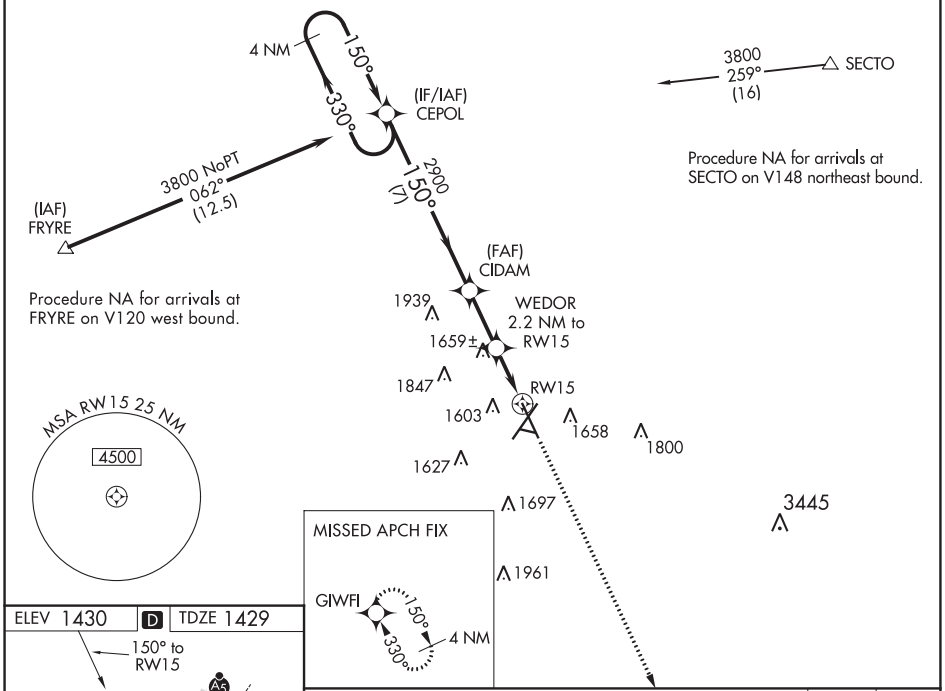
RNAV (GPS) RWY 15
JOE FOSS FIELD (FSD)

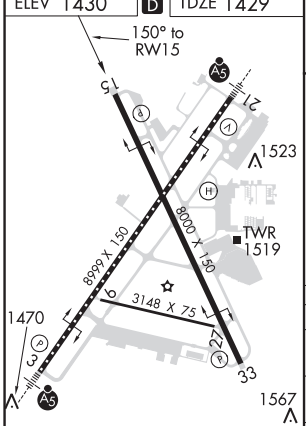
T A ASR -31°C

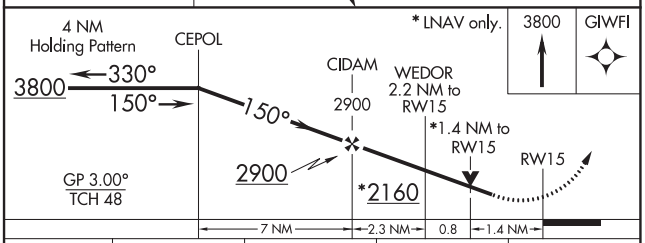
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C (-5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM not authorized.

MISSED APPROACH: Climb to 3800 direct GIWFI and hold.

ATIS	SIOUX FALLS APP CON ★	SIOUX FALLS TOWER ★	GND CON	UNICOM
126.6	125.8 284.725	118.3 (CTAF) L 257.8	121.9 348.6	122.95







CATEGORY	A	B	C	D
LPV DA	1839-1⅜ 410 (500-1⅜)			
LNAV/VNAV DA	1906-1⅝ 477 (500-1⅝)			
LNAV MDA	1920-1 491 (500-1)		1920-1⅜ 491 (500-1⅜)	
C CIRCLING	1980-1 550 (600-1)		2200-2¼ 770 (800-2¼)	2200-2½ 770 (800-2½)

TDZ/CL Rwy 21
MIRL Rwy 9-27 L
REIL Rwys 15 and 33 L
HIRL Rwys 3-21 and 15-33 L

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WAAS CH 99323 W21A	APP CRS 210°	Rwy ldg 8999 TDZE 1430 Apt Elev 1430

RNAV (GPS) RWY 21
JOE FOSS FIELD (FSD)

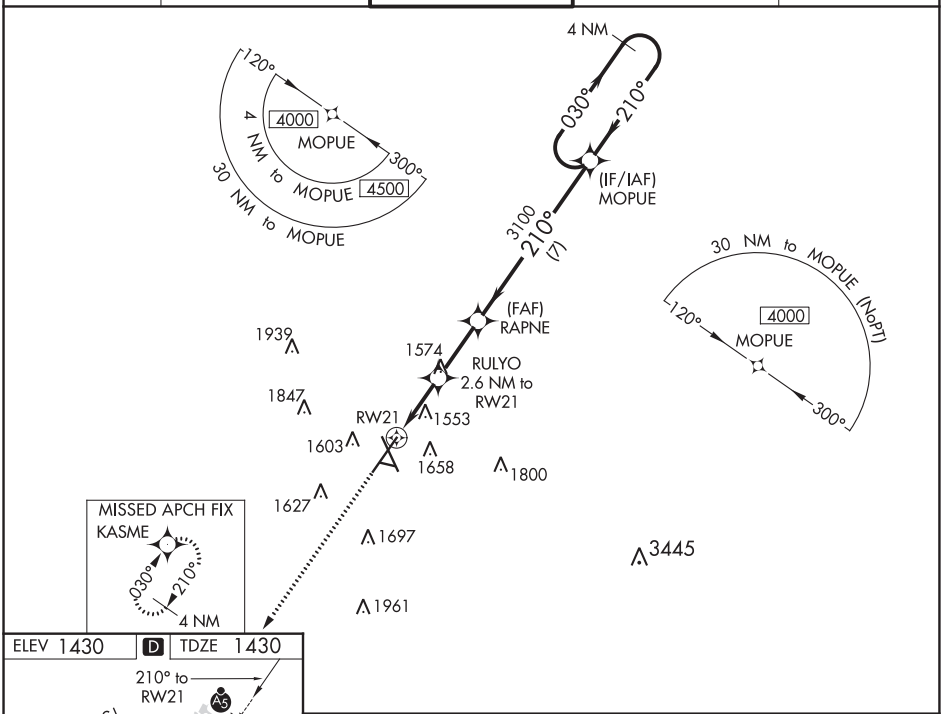
T A ASR -31°C

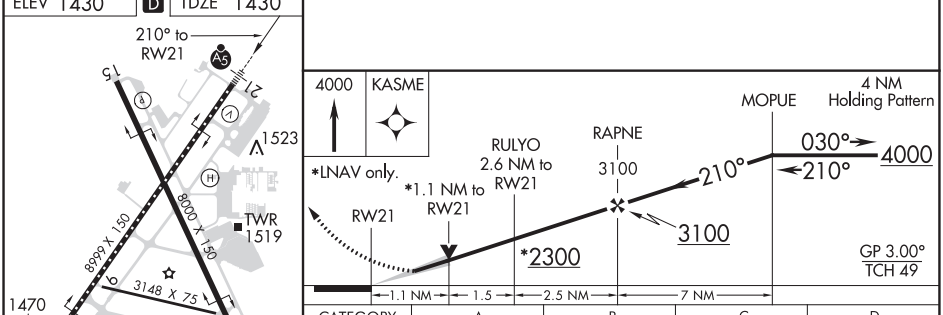
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C (-7°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. For inop ALS, increase LPV all Cats visibility to RVR 4000 and LNAV/VNAV all Cats visibility to RVR 4500.

MALSR

MISSED APPROACH: Climb to 4000 direct KASME and hold.

ATIS	SIOUX FALLS APP CON★	SIOUX FALLS TOWER★	GND CON	UNICOM
126.6	125.8 284.725	118.3 (CTAF) L 257.8	121.9 348.6	122.95





TDZ/CL Rwy 21
MIRL Rwy 9-27 L
REIL Rwys 15 and 33 L
HIRL Rwys 3-21 and 15-33 L

CATEGORY	A	B	C	D
LPV DA	1630/18 200 (300-½)			
LNAV/VNAV DA	1704/24 274 (300-½)			
LNAV MDA	1820/24 390 (400-½)		1820/35 390 (400-⅝)	
C CIRCLING	1960-1 530 (600-1)	1980-1 550 (600-1)	2060-1¾ 630 (700-1¾)	2200-2½ 770 (800-2½)

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RNAV (GPS) RWY 27
JOE FOSS FIELD (FSD)

APP CRS	Rwy ldg	3148
272°	TDZE	1424
	Apt Elev	1430

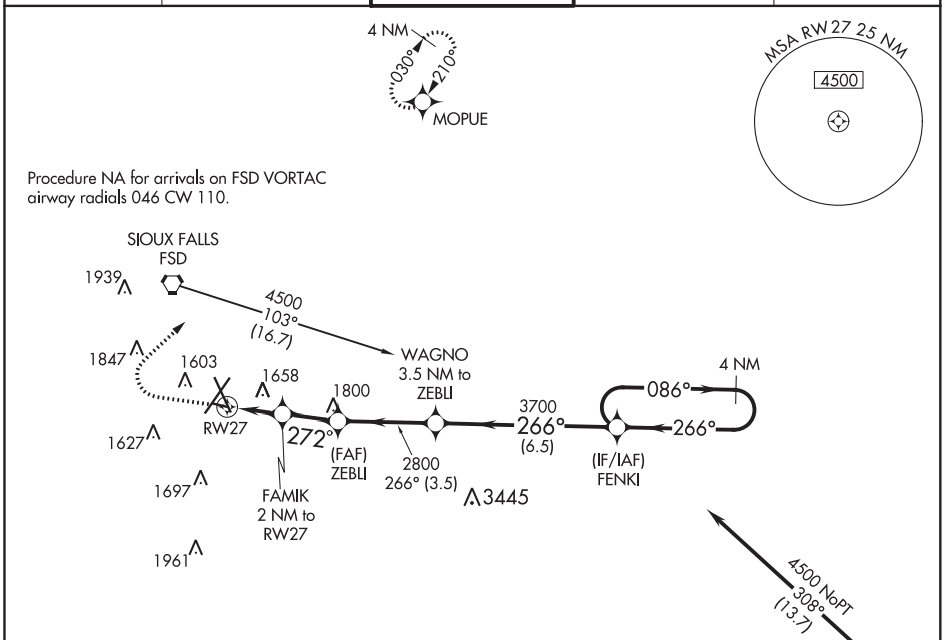
RNP APCH.

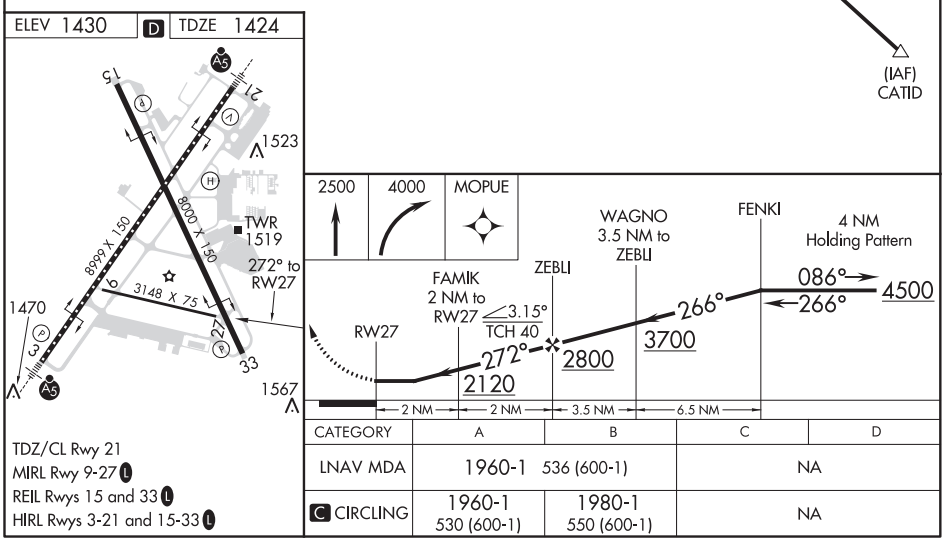
ASR Rwy 27 helicopter visibility reduction below ¾ SM NA.

-31°C

MISSED APPROACH: Climb to 2500, then climbing right turn to 4000 direct MOPUE WP and hold.

ATIS	SIOUX FALLS APP CON★	SIOUX FALLS TOWER★	GND CON	UNICOM
126.6	125.8 284.725	118.3 (CTAF) L 257.8	121.9 348.6	122.95





CATEGORY	A	B	C	D
LNAV MDA	1960-1 536 (600-1)		NA	
C CIRCLING	1960-1 530 (600-1)	1980-1 550 (600-1)	NA	

TDZ/CL Rwy 21
MIRL Rwy 9-27 L
REIL Rwys 15 and 33 L
HIRL Rwys 3-21 and 15-33 L

WAAS CH 40135 W33A	APP CRS 330°	Rwy ldg 8000 TDZE 1424 Apt Elev 1430

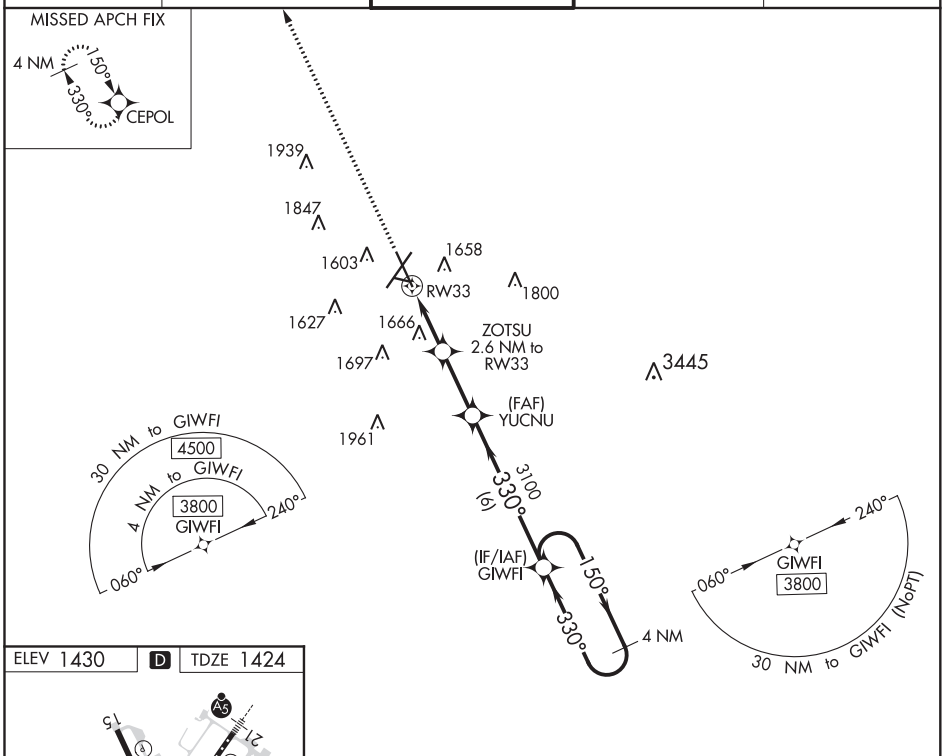
RNAV (GPS) RWY 33
JOE FOSS FIELD (FSD)

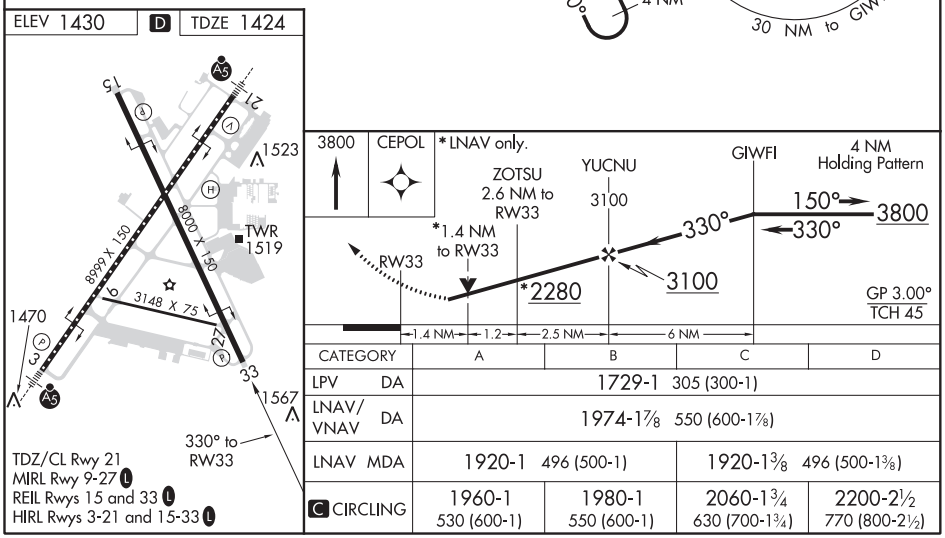
T ASR -31°C

For uncompensated Baro-VNAV systems, procedure NA below -22°C (-7°F) or above 54°C (130°F). Rwy 33 helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3800 direct CEPOL and hold.

ATIS	SIOUX FALLS APP CON ★	SIOUX FALLS TOWER ★	GND CON	UNICOM
126.6	125.8 284.725	118.3 (CTAF) L 257.8	121.9 348.6	122.95





CATEGORY	A	B	C	D
LPV DA	1729-1 305 (300-1)			
LNAV/VNAV DA	1974-1⅞ 550 (600-1⅞)			
LNAV MDA	1920-1 496 (500-1)		1920-1⅜ 496 (500-1⅜)	
C CIRCLING	1960-1 530 (600-1)	1980-1 550 (600-1)	2060-1¾ 630 (700-1¾)	2200-2½ 770 (800-2½)

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VORTAC FSD 115.0 Chan 97	APP CRS 326°	Rwy ldg 8000 TDZE 1424 Apt Elev 1430

VOR/DME or TACAN RWY 33

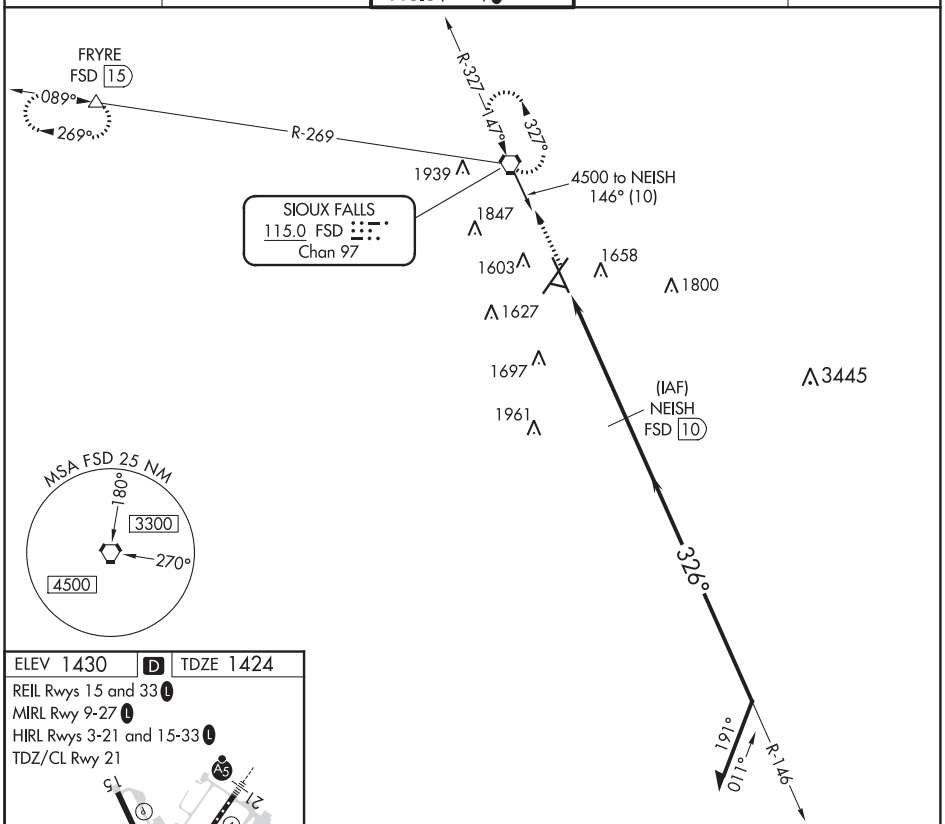
JOE FOSS FIELD (FSD)

T A ASR ❄ -31°C

Rwy 33 helicopter visibility reduction below ¾ SM NA.

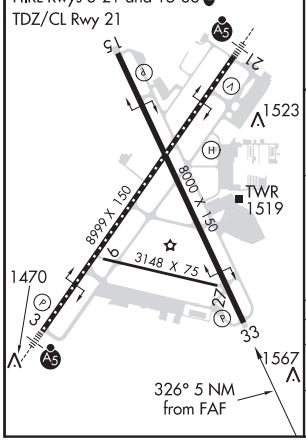
MISSED APPROACH: Climb to 3400 direct FSD VORTAC and hold. (TACAN aircraft continue climb to 5000 via FSD R-269 to FRYRE 15 DME and hold west, right turns, 089° inbound.)

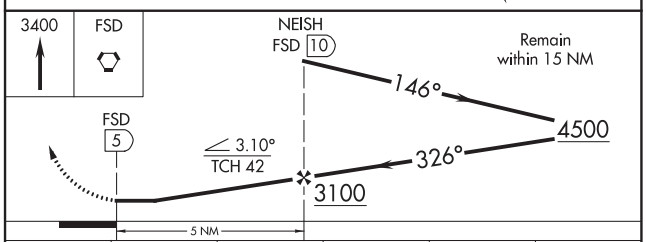
ATIS	SIOUX FALLS APP CON★	SIOUX FALLS TOWER★	GND CON	UNICOM
126.6	125.8 284.725	118.3 (CTAF) L 257.8	121.9 348.6	122.95



ELEV 1430 D TDZE 1424

REIL Rwys 15 and 33 L
MIRL Rwy 9-27 L
HIRL Rwys 3-21 and 15-33 L
TDZ/CL Rwy 21





CATEGORY	A	B	C	D	E
S-33	1940-1 516 (600-1)		1940-1⅜ 516 (600-1⅜)		
C CIRCLING	1960-1 530 (600-1)	1980-1 550 (600-1)	2060-1¾ 630 (700-1¾)	2200-2½ 770 (800-2½)	2300-3 870 (900-3)

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SIOUX FALLS, SOUTH DAKOTA | AL-396 (FAA) | 20310

VOR or TACAN RWY 15

JOE FOSS FIELD (FSD)

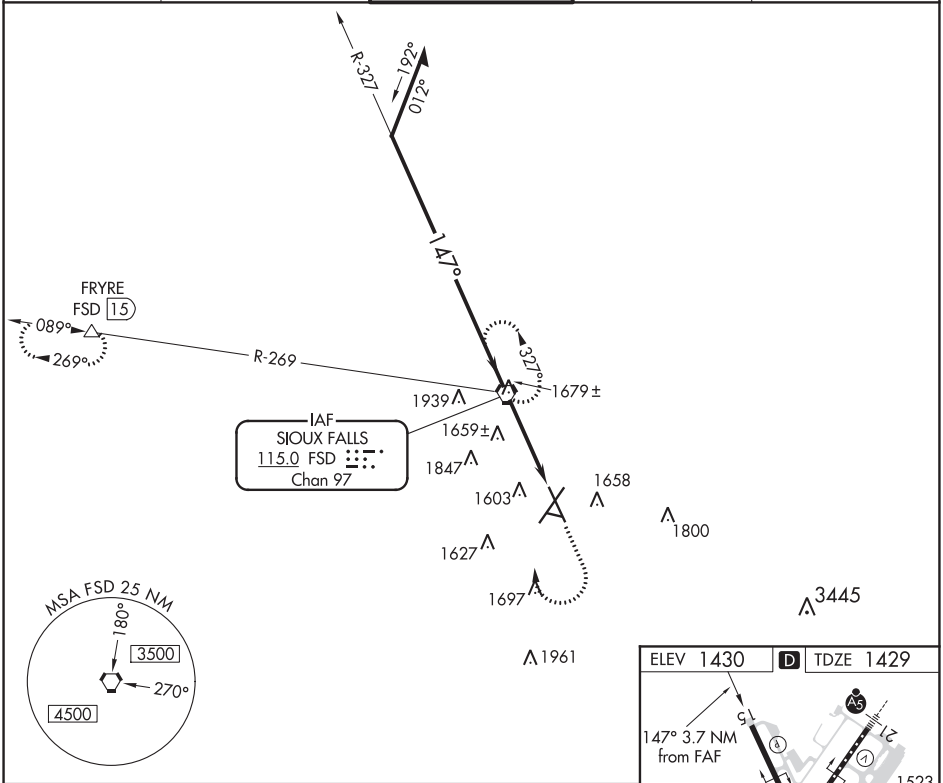
VORTAC FSD	APP CRS	Rwy ldg	8000
115.0	147°	TDZE	1429
Chan 97		Apt Elev	1430

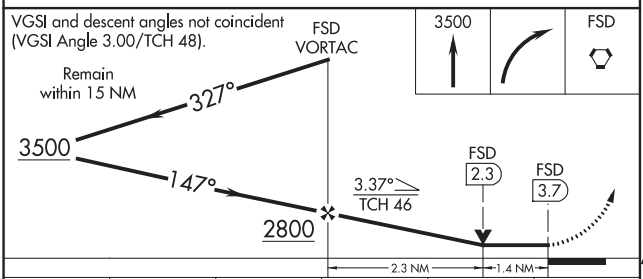
ASR
-31°C

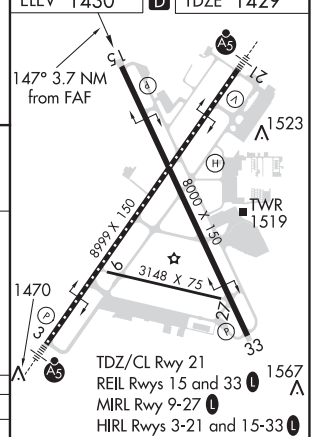
Rwy 15 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3500 then right turn direct FSD VORTAC and hold. (TACAN aircraft continue climb to 5000 via FSD R-269 to FRYRE 15 DME and hold west, right turns, 089° inbound)

ATIS	SIOUX FALLS APP CON★	SIOUX FALLS TOWER★	GND CON	UNICOM
126.6	125.8 284.725	118.3(CTAF)(L) 257.8	121.9 348.6	122.95







CATEGORY	A	B	C	D	E
S-15	1920-1 491 (500-1)		1920-1⅜ 491 (500-1⅜)		
(C) CIRCLING	1960-1 530 (600-1)	1980-1 550 (600-1)	2060-1¾ 630 (700-1¾)	2200-2½ 770 (800-2½)	2300-3 870 (900-3)

FAF to MAP 3.7 NM

Knots	60	90	120	150	180
Min:Sec	3:42	2:28	1:51	1:29	1:14

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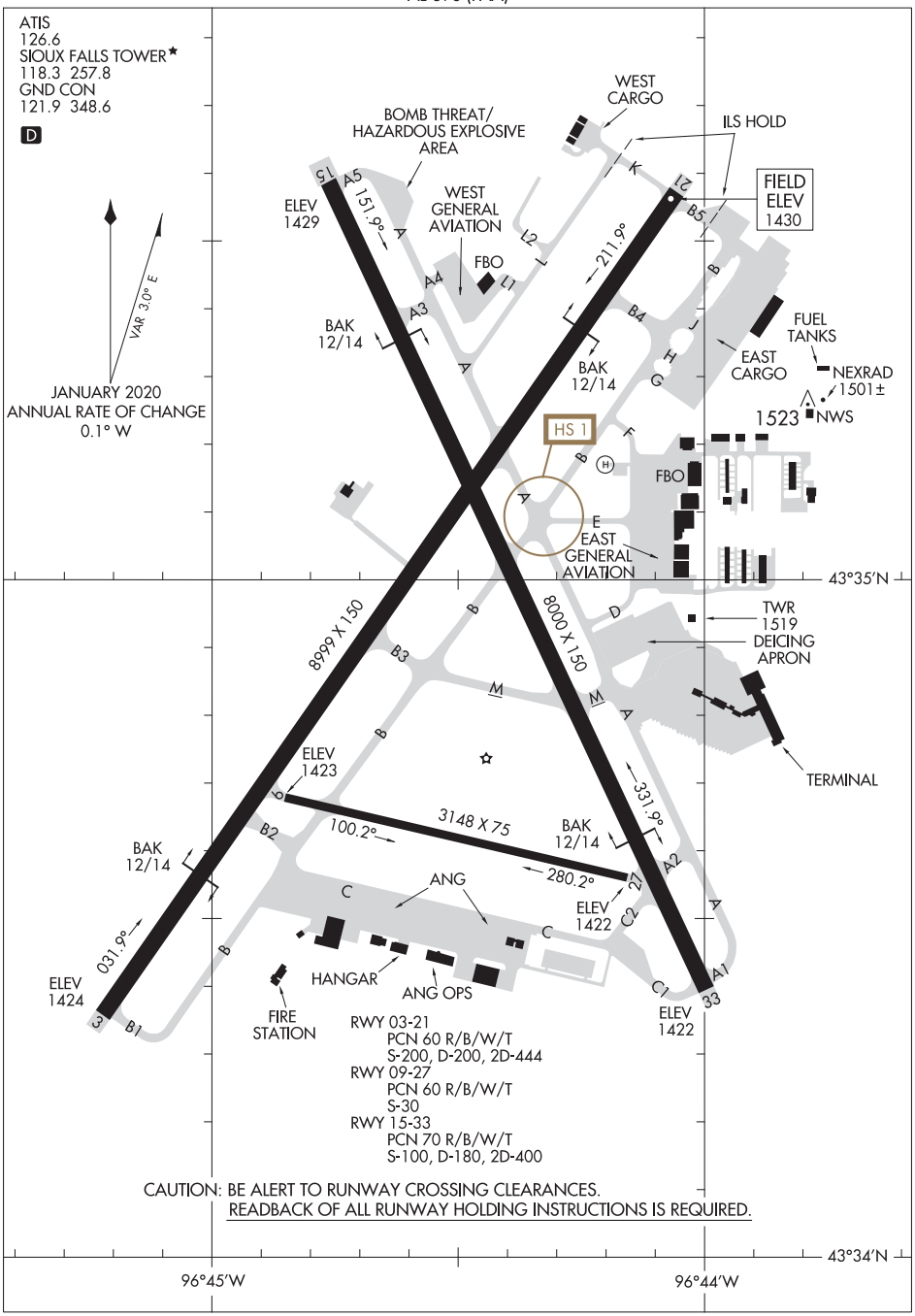

ATIS
126.6
SIOUX FALLS TOWER★
118.3 257.8
GND CON
121.9 348.6
D
VAR 3.0° E
JANUARY 2020
ANNUAL RATE OF CHANGE
0.1° W
WEST CARGO
ILS HOLD
BOMB THREAT/ HAZARDOUS EXPLOSIVE AREA
FIELD ELEV 1430
ELEV 1429
WEST GENERAL AVIATION
FBO
151.9°
211.9°
BAK 12/14
FUEL TANKS
EAST CARGO
NEXRAD 1501±
1523 NWS
HS 1
FBO
EAST GENERAL AVIATION
43°35'N
8999 X 150
8000 X 150
TWR 1519
DEICING APRON
TERMINAL
ELEV 1423
3148 X 75
100.2°
280.2°
331.9°
BAK 12/14
ANG
ELEV 1422
031.9°
ELEV 1424
HANGAR
ANG OPS
FIRE STATION
ELEV 1422
RWY 03-21
PCN 60 R/B/W/T
S-200, D-200, 2D-444
RWY 09-27
PCN 60 R/B/W/T
S-30
RWY 15-33
PCN 70 R/B/W/T
S-100, D-180, 2D-400
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
43°34'N
96°45'W
96°44'W

SISSETON, SOUTH DAKOTA | AL-10412 (FAA) | 19339

RNAV (GPS) RWY 16

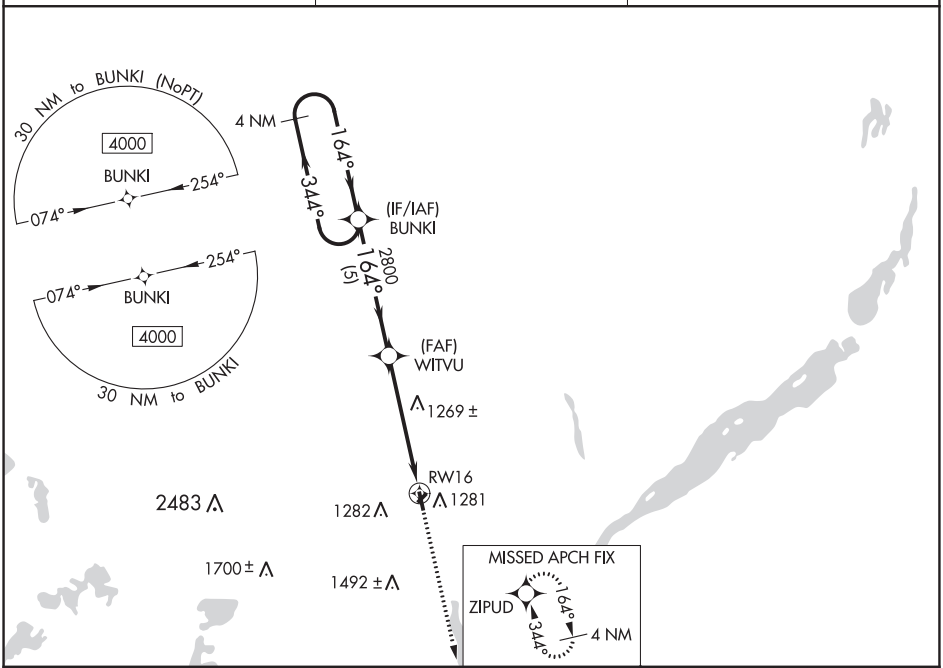
SISSETON MUNI (8D3)

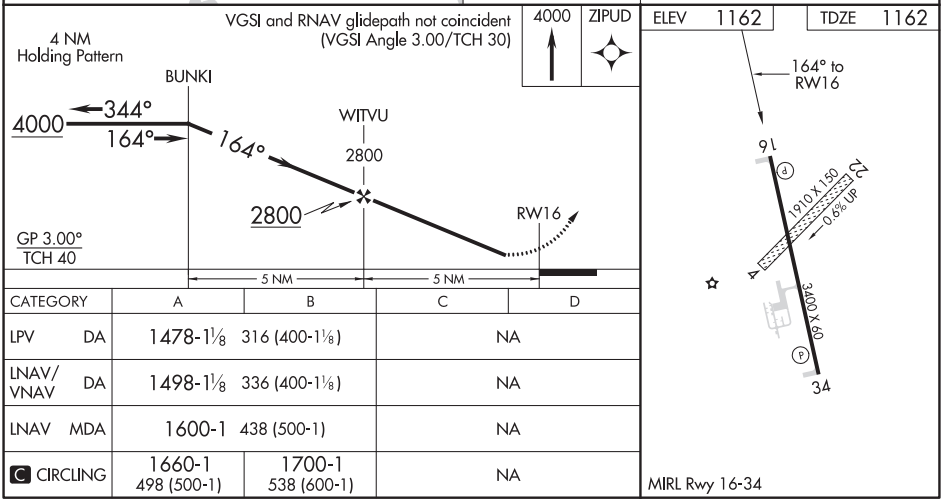
WAAS CH 50538 W16A	APP CRS 164°	Rwy ldg 3400 TDZE 1162 Apt Elev 1162

Circling NA to Rwys 4 and 22. Baro-VNAV NA. DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA. Use Wheaton altimeter setting; when not received, use Ortonville altimeter setting and increase LPV DA to 1496 feet, LNAV/VNAV DA to 1516 feet and all MDA 20 feet. Increase LNAV/VNAV Cats A/B visibility ⅛ mile.

MISSED APPROACH: Climb to 4000 direct ZIPUD and hold, continue climb-in-hold to 4000.

ETH AWOS-3	MINNEAPOLIS CENTER	CTAF
118.775	128.5 306.2	122.9





CATEGORY	A	B	C	D
LPV DA	1478-1⅛ 316 (400-1⅛)		NA	
LNAV/VNAV DA	1498-1⅛ 336 (400-1⅛)		NA	
LNAV MDA	1600-1 438 (500-1)		NA	
C CIRCLING	1660-1 498 (500-1)	1700-1 538 (600-1)	NA	

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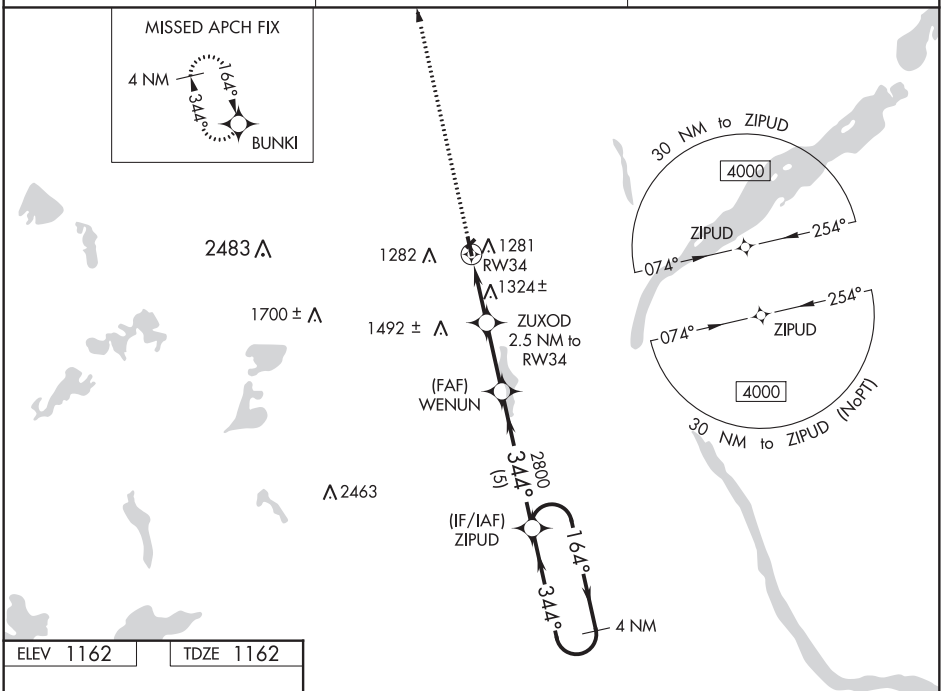
RNAV (GPS) RWY 34
SISSETON MUNI (8D3)

WAAS CH 56638 W34A	APP CRS 344°	Rwy ldg 3400 TDZE 1162 Apt Elev 1162

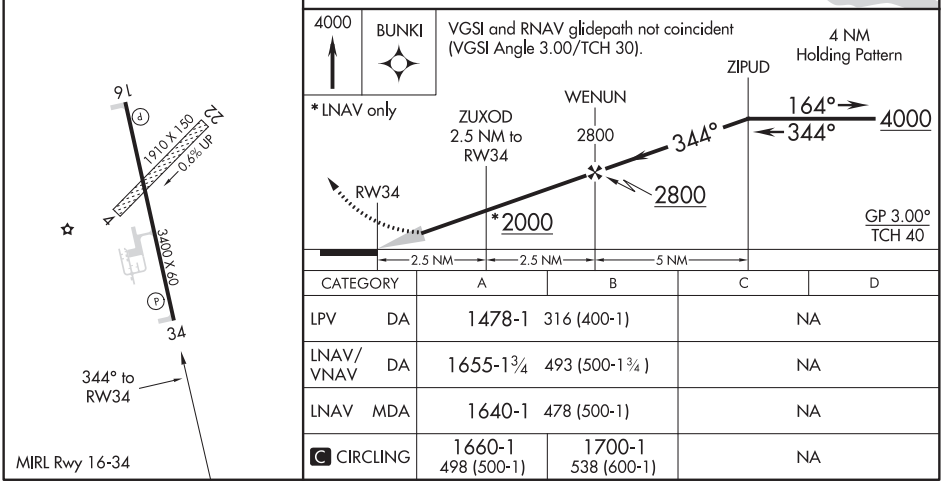
Circling NA to Rwys 4 and 22. Baro-VNAV NA. DME/DME RNP-0.3 NA.
Use Wheaton altimeter setting, when not received, use Ortonville altimeter setting and increase LPV DA to 1496 feet, LNAV/VNAV DA to 1673 feet and all MDA 20 feet. Increase LPV Cats A/B visibility ⅛ mile.

MISSED APPROACH: Climb to 4000 direct BUNKI and hold, continue climb in hold to 4000.

ETH AWOS-3	MINNEAPOLIS CENTER	CTAF
118.775	128.5 306.2	122.9



ELEV 1162 TDZE 1162



CATEGORY	A	B	C	D
LPV DA	1478-1 316 (400-1)		NA	
LNAV/VNAV DA	1655-1¾ 493 (500-1¾)		NA	
LNAV MDA	1640-1 478 (500-1)		NA	
C CIRCLING	1660-1 498 (500-1)	1700-1 538 (600-1)	NA	

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SLAYTON, MINNESOTA AL-9379 (FAA) 19171

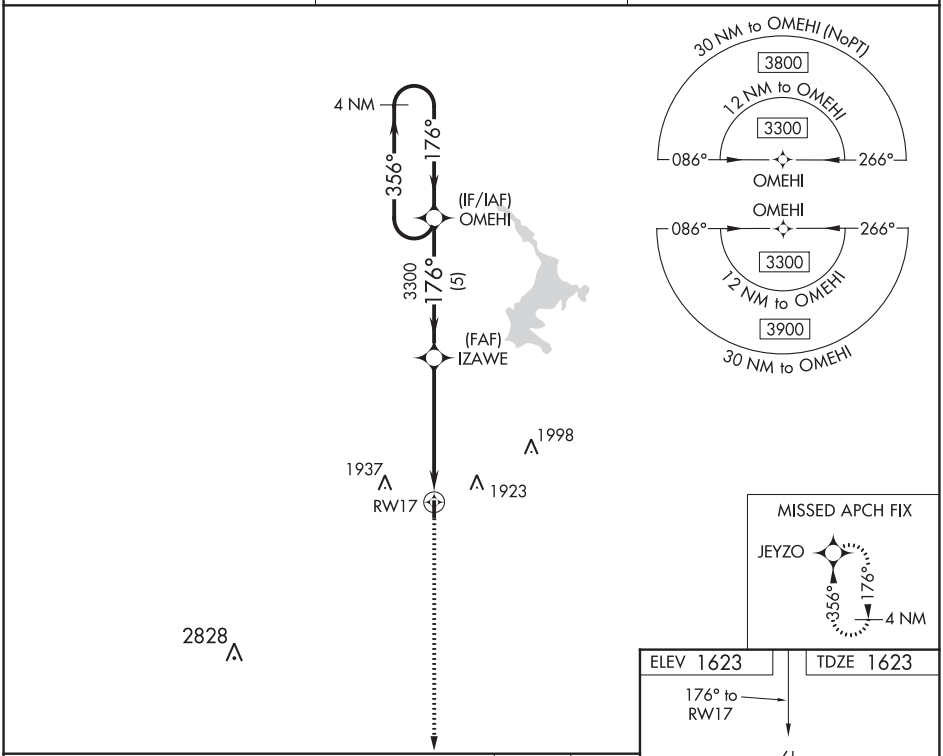
RNAV (GPS) RWY 17
SLAYTON MUNI (DVP)

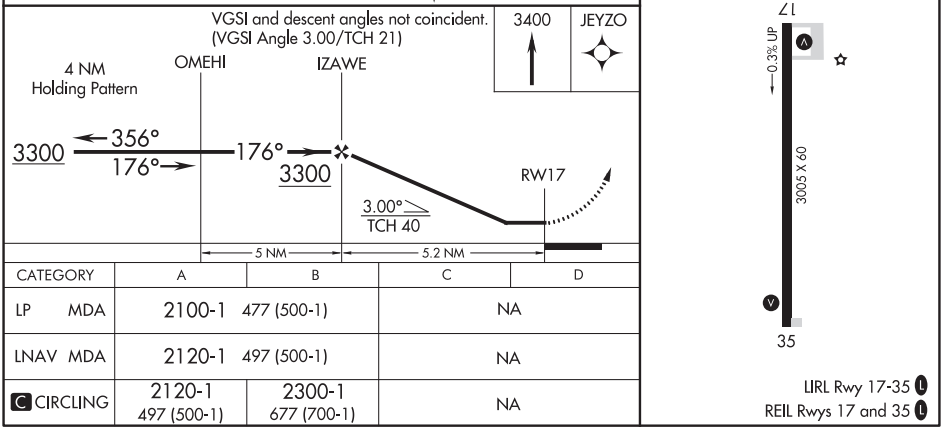
WAAS CH 53633 W17A	APP CRS 176°	Rwy ldg 3005 TDZE 1623 Apt Elev 1623

When local altimeter setting not received, use Tracy Muni altimeter setting and increase all MDAs 80 feet. DME/DME RNP-0.3 NA. Procedure NA at night. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 3400 direct JEYZO and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
118.55	132.05 317.4	122.9 L





CATEGORY	A	B	C	D
LP MDA	2100-1 477 (500-1)		NA	
LNAV MDA	2120-1 497 (500-1)		NA	
C CIRCLING	2120-1 497 (500-1)	2300-1 677 (700-1)	NA	

LIRL Rwy 17-35 L
REIL Rwys 17 and 35 L

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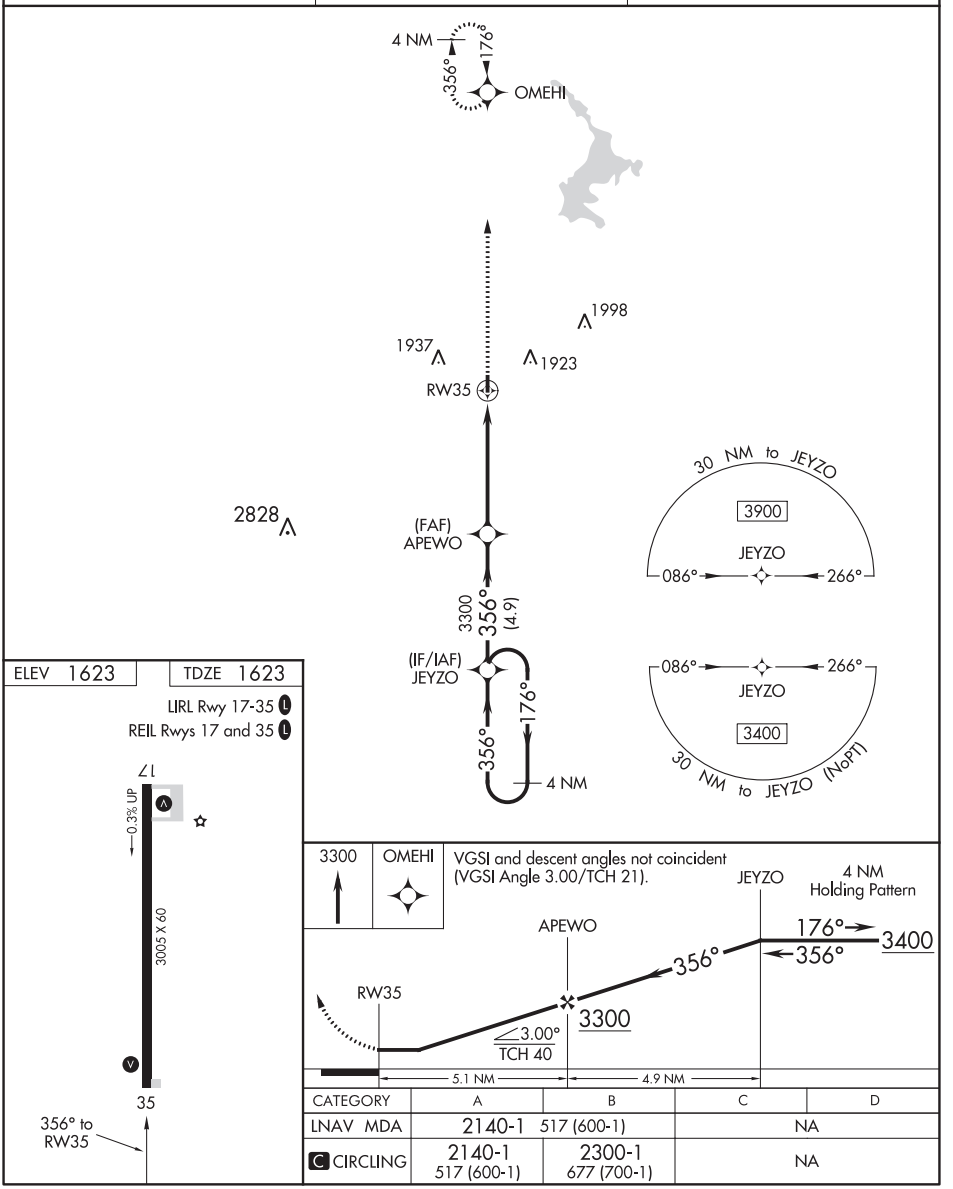
APP CRS	Rwy ldg	3005
356°	TDZE	1623
	Apt Elev	1623

RNAV (GPS) RWY 35
SLAYTON MUNI (DVP)

When local altimeter setting not received, use Tracy Muni altimeter setting and increase all MDAs 80 feet. DME/DME RNP-0.3 NA. Procedure NA at night. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 3300 direct OMEHI and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
118.55	132.05 317.4	122.9 L



CATEGORY	A	B	C	D
LNAV MDA	2140-1 517 (600-1)		NA	
C CIRCLING	2140-1 517 (600-1)	2300-1 677 (700-1)	NA	

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WAAS CH 99636 W34A	APP CRS 342°	Rwy ldg 4002 TDZE 820 Apt Elev 821

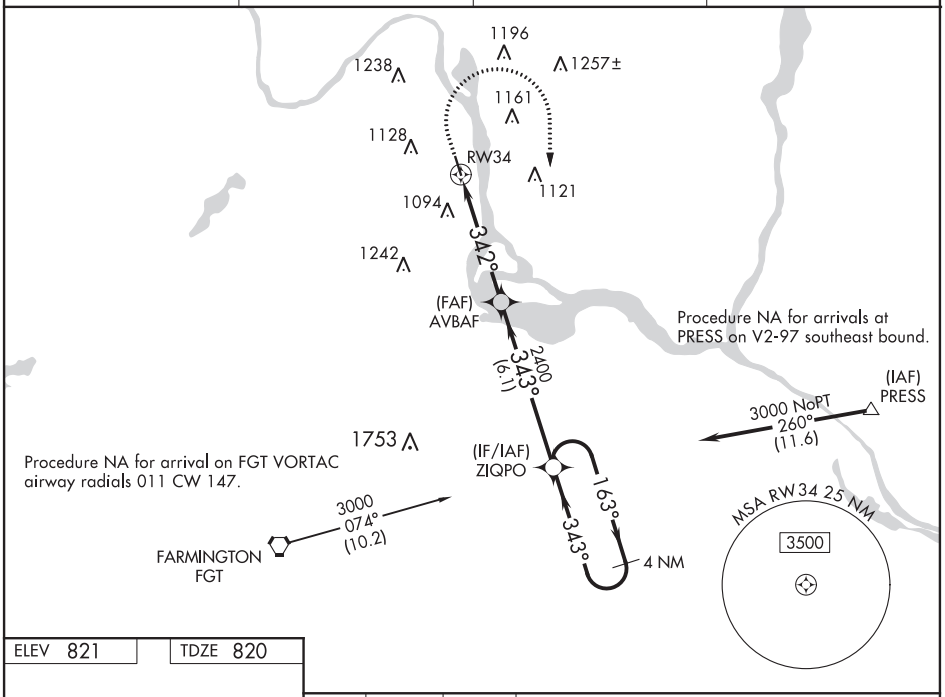
RNAV (GPS) RWY 34

SOUTH ST PAUL MUNI-RICHARD E FLEMING FIELD (SGS)

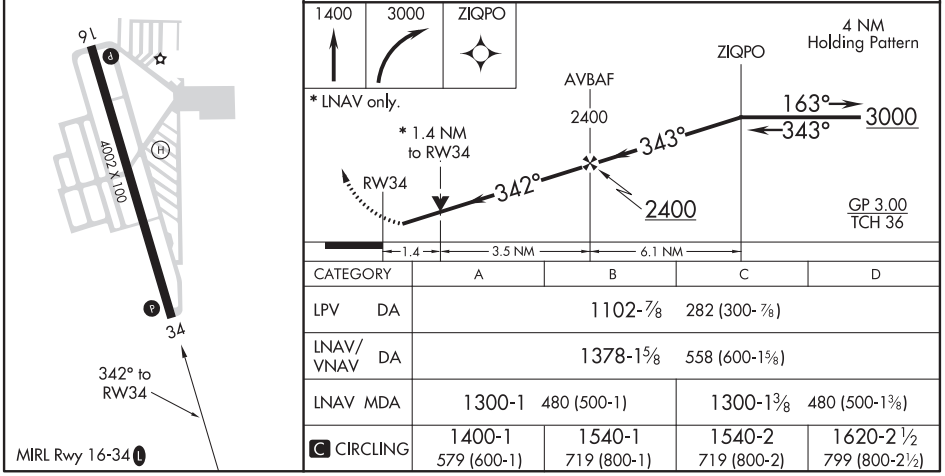
For uncompensated Baro-VNAV systems, LNAV-VNAV NA below -22°C (-7°F) or above 54°C (130°F). Rwy 34 helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 1400 then climbing right turn to 3000 direct ZIQPO and hold.

AWOS-3	MINNEAPOLIS APP CON	CLNC DEL	UNICOM
119.425	121.2 335.65	118.2	122.7 (CTAF) L



ELEV 821 TDZE 820



CATEGORY	A	B	C	D
LPV DA	1102-⅞ 282 (300-⅞)			
LNAV/VNAV DA	1378-1⅝ 558 (600-1⅝)			
LNAV MDA	1300-1 480 (500-1)		1300-1⅜ 480 (500-1⅜)	
C CIRCLING	1400-1 579 (600-1)	1540-1 719 (800-1)	1540-2 719 (800-2)	1620-2½ 799 (800-2½)

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LOC RWY 34

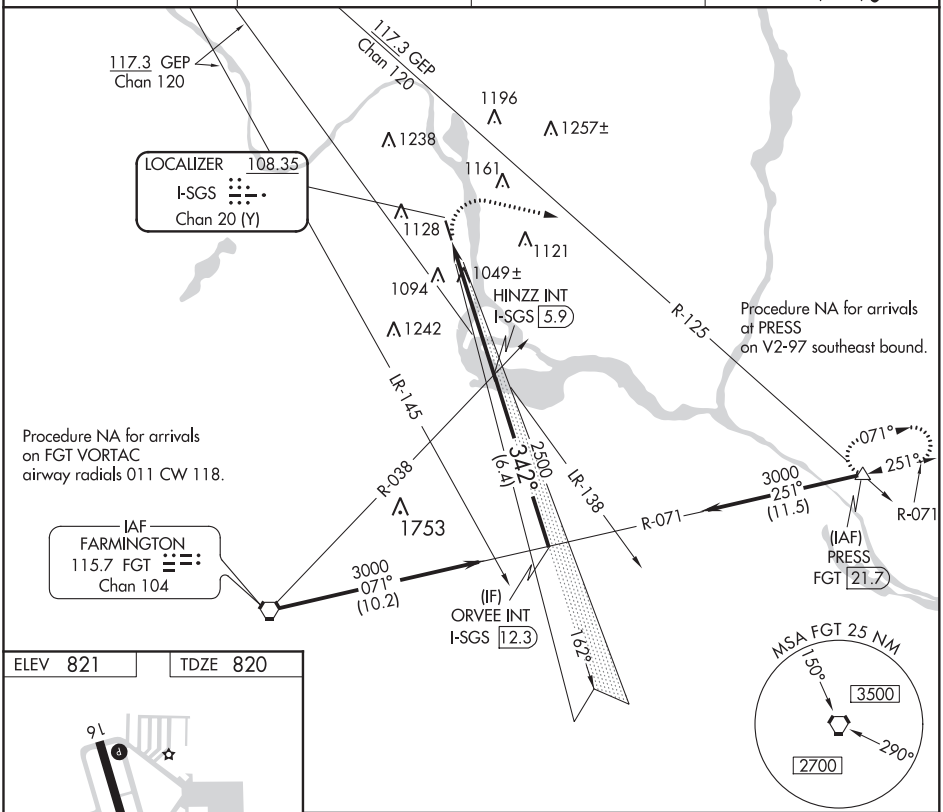
SOUTH ST PAUL MUNI-RICHARD E FLEMING FIELD (SGS)

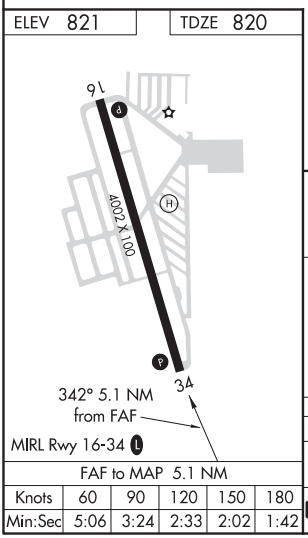
LOC/DME I-SGS	APP CRS	Rwy ldg	4002
108.35	342°	TDZE	820
Chan 20 (Y)		Apt Elev	821

T NA — Helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Minneapolis-St Paul Intl/ Wold-Chamberlain altimeter setting and increase all MDA 40 feet. Increase Circling Cat C/D visibility ¼ mile.

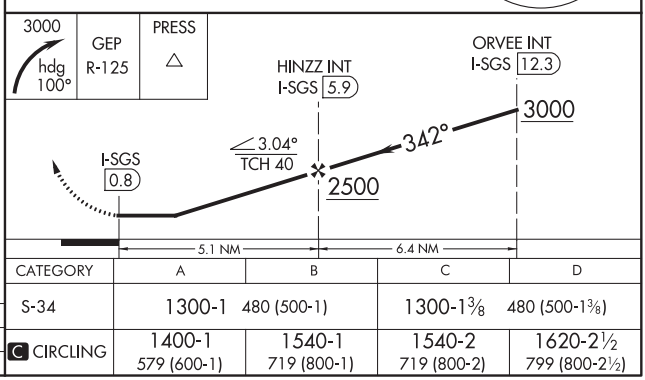
MISSED APPROACH: Climbing right turn to 3000 on heading 100° and on GEP VORTAC R-125 to PRESS INT/21.7 DME and hold.

AWOS-3	MINNEAPOLIS APP CON	CLNC DEL	UNICOM
119.425	121.2 335.65	118.2	122.7 (CTAF) L





FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42



CATEGORY	A	B	C	D
S-34	1300-1 480 (500-1)		1300-1⅜ 480 (500-1⅜)	
C CIRCLING	1400-1 579 (600-1)	1540-1 719 (800-1)	1540-2 719 (800-2)	1620-2½ 799 (800-2½)

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NC-1, 25 FEB 2021 to 22 APR 2021

SPEARFISH, SOUTH DAKOTA AL-592 (FAA) 19227

WAAS CH 70621 W13A	APP CRS 124°	Rwy ldg 6401 TDZE 3884 Apt Elev 3933

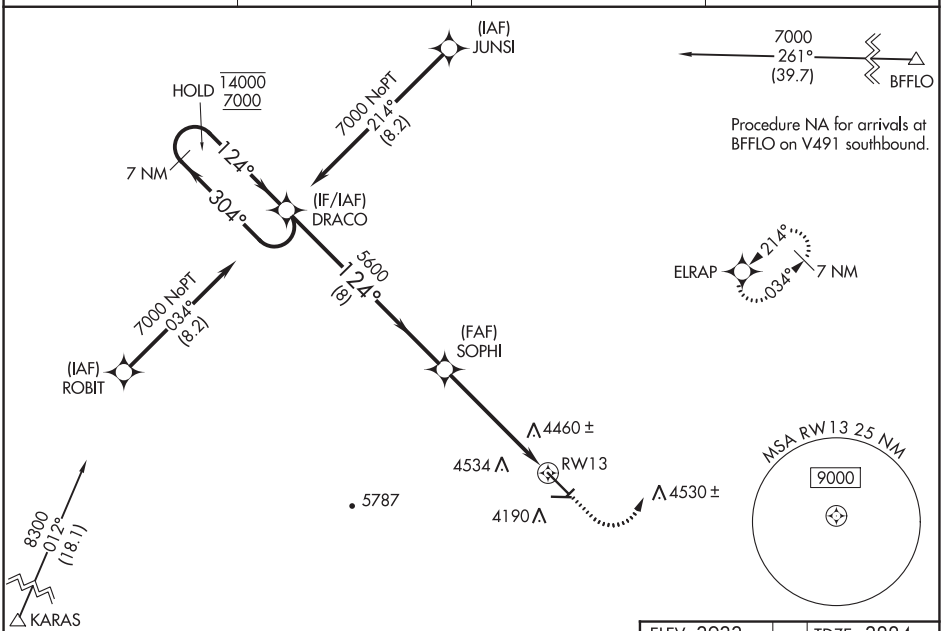
RNAV (GPS) RWY 13
BLACK HILLS-CLYDE ICE FIELD (SPF)

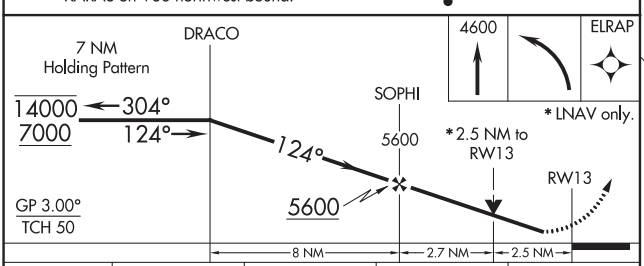
RNP APCH.

Circling NA to Rwys 4, 8, 22 and 26. Rwy 13 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C or above 54°C.

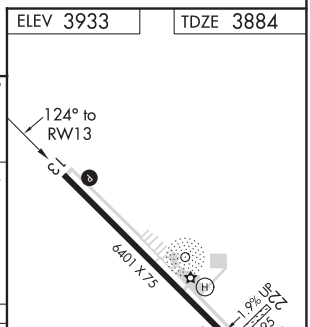
MISSED APPROACH: Climb to 4600 then climbing left turn to ELRAP and hold, continue climb-in-hold to 7000.

AWOS-3	ELLSWORTH APP CON*	GCO	UNICOM
118.325	119.5 259.1	121.725	122.7 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	4219-1⅛ 335 (300-1⅛)			NA
LNAV/VNAV DA	4852-4 968 (1000-4)			NA
LNAV MDA	4720-1 836 (800-1)	4720-1¼ 836 (800-1¼)	4720-2½ 836 (800-2½)	NA
C CIRCLING	4760-1¼ 827 (900-1¼)	4920-1½ 987 (1000-1½)	5540-3 1607 (1700-3)	NA



SPEARFISH, SOUTH DAKOTA
Orig-D 28FEB19

44°29′N-103°47′W

BLACK HILLS-CLYDE ICE FIELD (SPF)
RNAV (GPS) RWY 13

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WAAS CH 77821 W31A	APP CRS 304°	Rwy ldg 6401 TDZE 3895 Apt Elev 3933

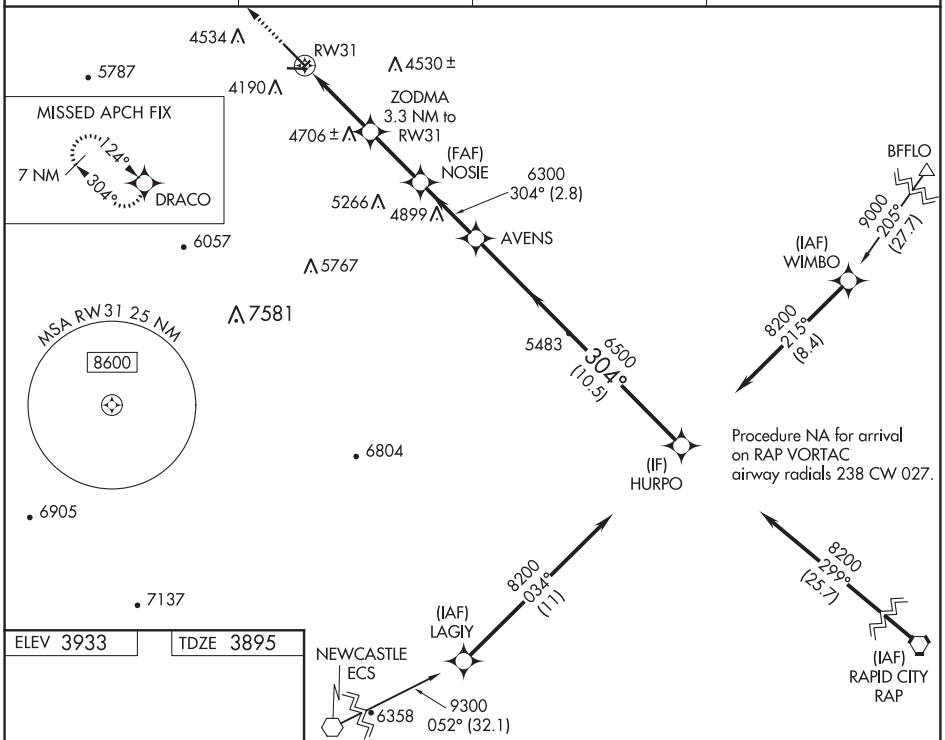
RNAV (GPS) RWY 31
BLACK HILLS-CLYDE ICE FIELD (SPF)

RNP APCH.

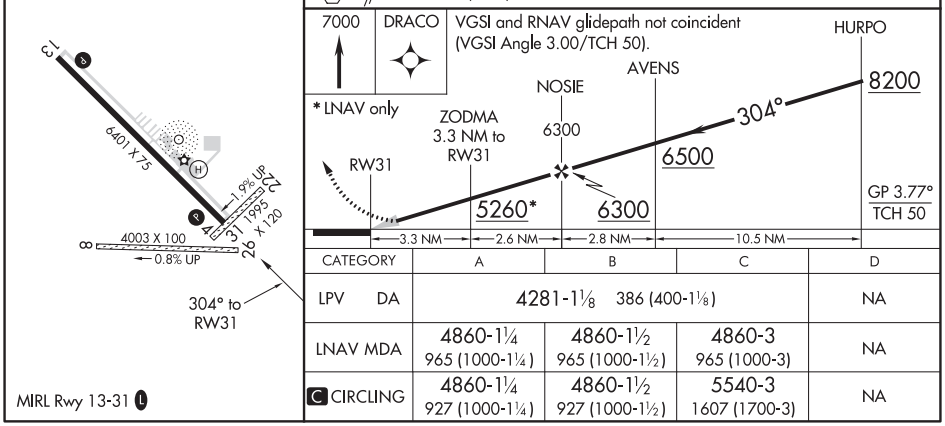
Circling NA to Rwys 4, 8, 22 and 26.

MISSED APPROACH: Climb to 7000 direct DRACO and hold.

AWOS-3	ELLSWORTH APP CON	GCO	UNICOM
118.325	119.5 259.1	121.725	122.7 (CTAF) L



ELEV 3933	TDZE 3895



CATEGORY	A	B	C	D
LPV DA	4281-1⅛ 386 (400-1⅛)			NA
LNAV MDA	4860-1¼ 965 (1000-1¼)	4860-1½ 965 (1000-1½)	4860-3 965 (1000-3)	NA
C CIRCLING	4860-1¼ 927 (1000-1¼)	4860-1½ 927 (1000-1½)	5540-3 1607 (1700-3)	NA

MIRL Rwy 13-31 L

NC-1, 25 FEB 2021 to 22 APR 2021
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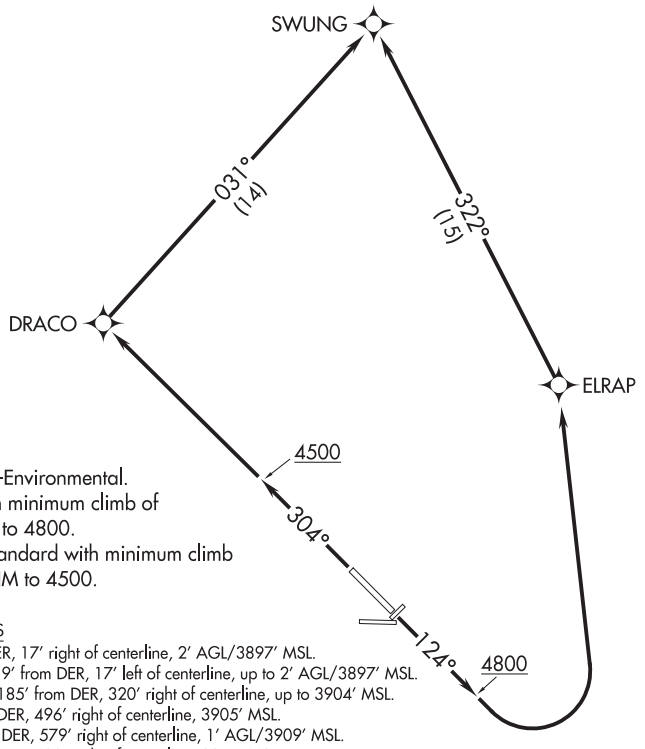
(SWUNG2.SWUNG) 19003 AL-592 (FAA)

SWUNG TWO DEPARTURE (OBSTACLE) (RNAV)

BLACK HILLS-CLYDE ICE FIELD (SPF)
SPEARFISH, SOUTH DAKOTA

AWOS-3
118.325
GCO
121.725
ELLSWORTH DEP CON
119.5 259.1
UNICOM
122.7 (CTAF)



NOTE: RNAV 1.
NOTE: GPS required.

TAKEOFF MINIMUMS
Rwys 4, 8, 22, 26: NA-Environmental.
Rwy 13: Standard with minimum climb of 380′ per NM to 4800.
Rwy 31: 300-1¾ or standard with minimum climb of 350′ per NM to 4500.

TAKEOFF OBSTACLE NOTES
Rwy 13: Lighting 9′ from DER, 17′ right of centerline, 2′ AGL/3897′ MSL.
Lighting beginning 9′ from DER, 17′ left of centerline, up to 2′ AGL/3897′ MSL.
Terrain beginning 185′ from DER, 320′ right of centerline, up to 3904′ MSL.
Terrain 338′ from DER, 496′ right of centerline, 3905′ MSL.
Lighting 487′ from DER, 579′ right of centerline, 1′ AGL/3909′ MSL.
Terrain 562′ from DER, 628′ right of centerline, 3911′ MSL.
Vehicle on traverse way 1071′ from DER, 480′ right of centerline, 3931′ MSL.
Rwy 31: Lighting 9′ from DER, 18′ left of centerline, 2′ AGL/3886′ MSL.
Lighting 9′ from DER, 17′ right of centerline, 2′ AGL/3886′ MSL.
Terrain beginning 53′ from DER, 356′ left of centerline, up to 3918′ MSL.
Terrain 142′ from DER, 394′ right of centerline, 3897′ MSL.
Terrain 192′ from DER, 492′ right of centerline, 3902′ MSL.
Terrain beginning 328′ from DER, 395′ right of centerline, up to 3907′ MSL.
Terrain beginning 346′ from DER, 450′ left of centerline, up to 3929′ MSL.
Terrain 592′ from DER, 641′ left of centerline, 3942′ MSL.
Pole, terrain beginning 734 from DER, 446′ left of centerline, up to 9′ AGL/3986′ MSL.
Tree 1.1 NM from DER, 2402′ right of centerline, 4084′ MSL.
Trees, vehicle on traverse way beginning 1.2 NM from DER, 1993′ right of centerline, up to 4112′ MSL.
Trees, terrain, vehicle on traverse way beginning 1.2 NM from DER, 1883′ right of centerline, up to 4126′ MSL.
Terrain, trees beginning 1.2 NM from DER, 1786′ right of centerline, up to 4155′ MSL.
Vehicle on traverse way 1.3 NM from DER, 2624′ right of centerline, 4217′ MSL.
Trees, terrain beginning 1.3 NM from DER, 744′ right of centerline, up to 4228′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 13: Climb heading 124° to 4800, then left turn direct ELRAP, then on track 322° to SWUNG, thence. . . .
TAKEOFF RUNWAY 31: Climb heading 304° to 4500, then direct DRACO, then on track 031° to SWUNG, thence. . . .
. . . .on assigned route and altitude.

SWUNG TWO DEPARTURE (OBSTACLE) (RNAV)
(SWUNG2.SWUNG) 03JAN19

SPEARFISH, SOUTH DAKOTA
BLACK HILLS-CLYDE ICE FIELD (SPF)

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH **86331** **W13A**	APP CRS **130°**	Rwy ldg **3402** TDZE **1073** Apt Elev **1073**

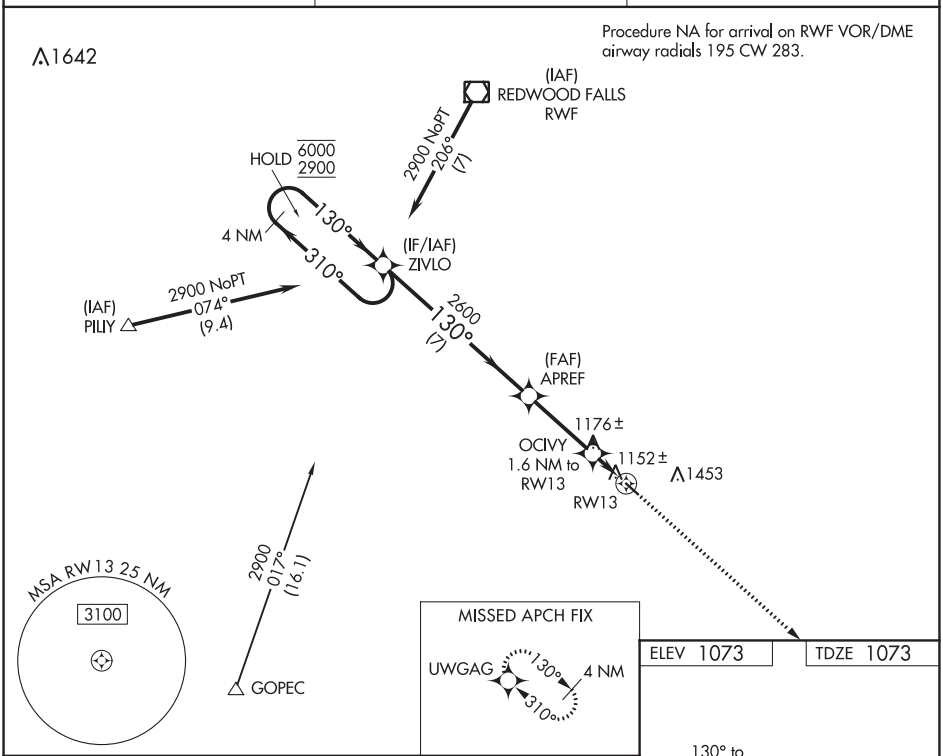
RNAV (GPS) RWY 13
SPRINGFIELD MUNI (D42)

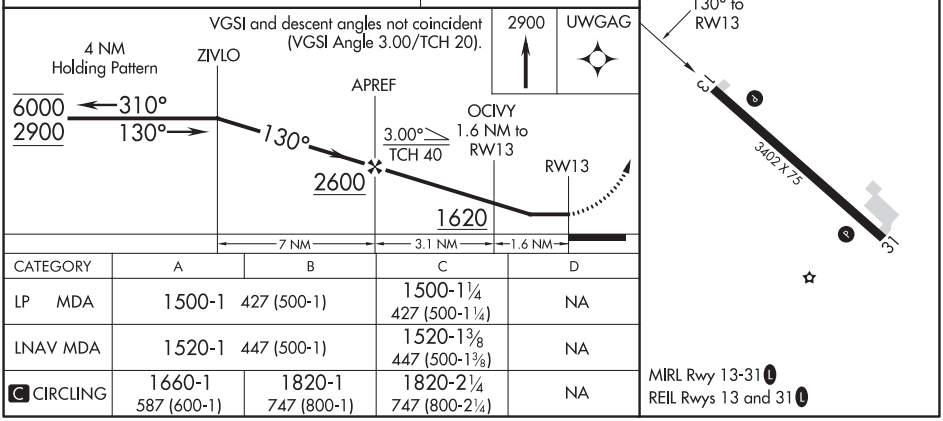
RNP APCH.

T A NA Rwy 13 helicopter visibility reduction below ¾ SM NA. Use Redwood Falls altimeter setting.

MISSED APPROACH: Climb to 2900 direct UWGAG and hold.

RWF ASOS	MINNEAPOLIS CENTER	UNICOM
126.575	**127.1 290.2**	**122.8** (CTAF) L





CATEGORY	A	B	C	D
LP MDA	1500-1 427 (500-1)		1500-1¼ 427 (500-1¼)	NA
LNAV MDA	1520-1 447 (500-1)		1520-1⅜ 447 (500-1⅜)	NA
C CIRCLING	1660-1 587 (600-1)	1820-1 747 (800-1)	1820-2¼ 747 (800-2¼)	NA

MIRL Rwy 13-31 L
REIL Rwys 13 and 31 L

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SPRINGFIELD, MINNESOTA | AL-6505 (FAA) | 21056

APP CRS	Rwy ldg	3402
310°	TDZE	1073
	Apt Elev	1073

RNAV (GPS) RWY 31
SPRINGFIELD MUNI (D42)

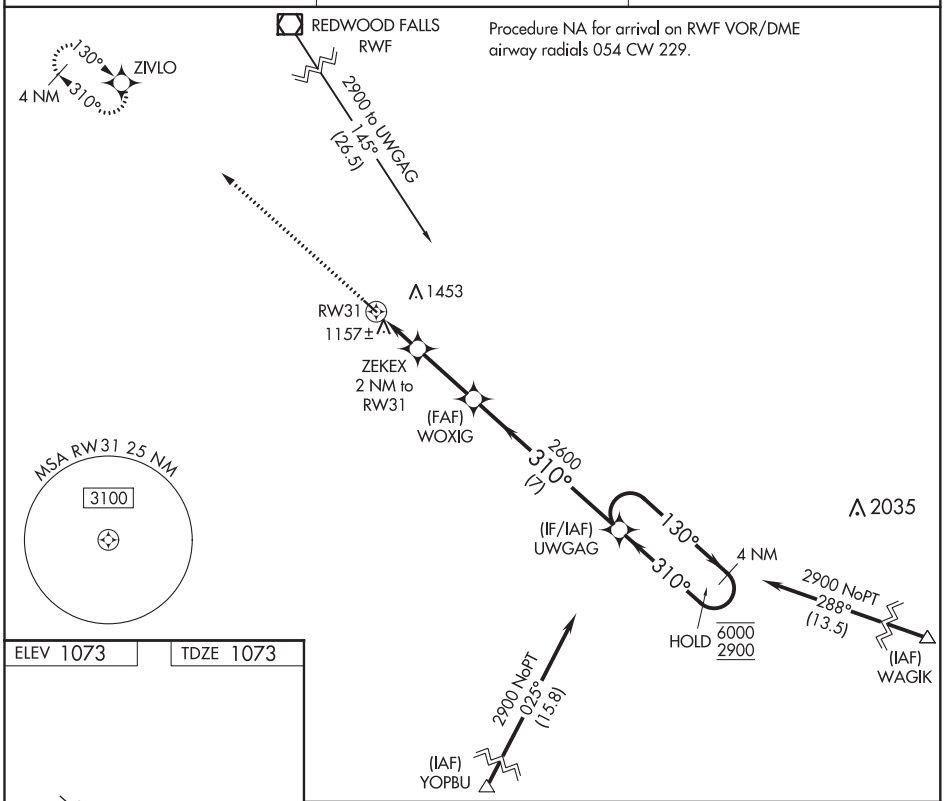
RNP APCH.

NA

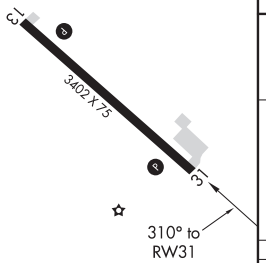
Use Redwood Falls altimeter setting.

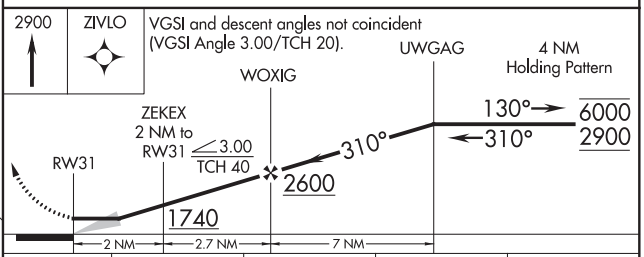
MISSED APPROACH: Climb to 2900 direct ZIVLO and hold.

RWF ASOS	MINNEAPOLIS CENTER	UNICOM
126.575	127.1 290.2	122.8 (CTAF) L



ELEV 1073	TDZE 1073





CATEGORY	A	B	C	D
LNAV MDA	1500-1 427 (500-1)		1500-1¼ 427 (500-1¼)	NA
C CIRCLING	1660-1 587 (600-1)	1820-1 747 (800-1)	1820-2¼ 747 (800-2¼)	NA

MIRL Rwy 13-31 L
REIL Rwys 13 and 31 L

NC-1, 25 FEB 2021 to 22 APR 2021

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VOR RWY 13
SPRINGFIELD MUNI (D42)

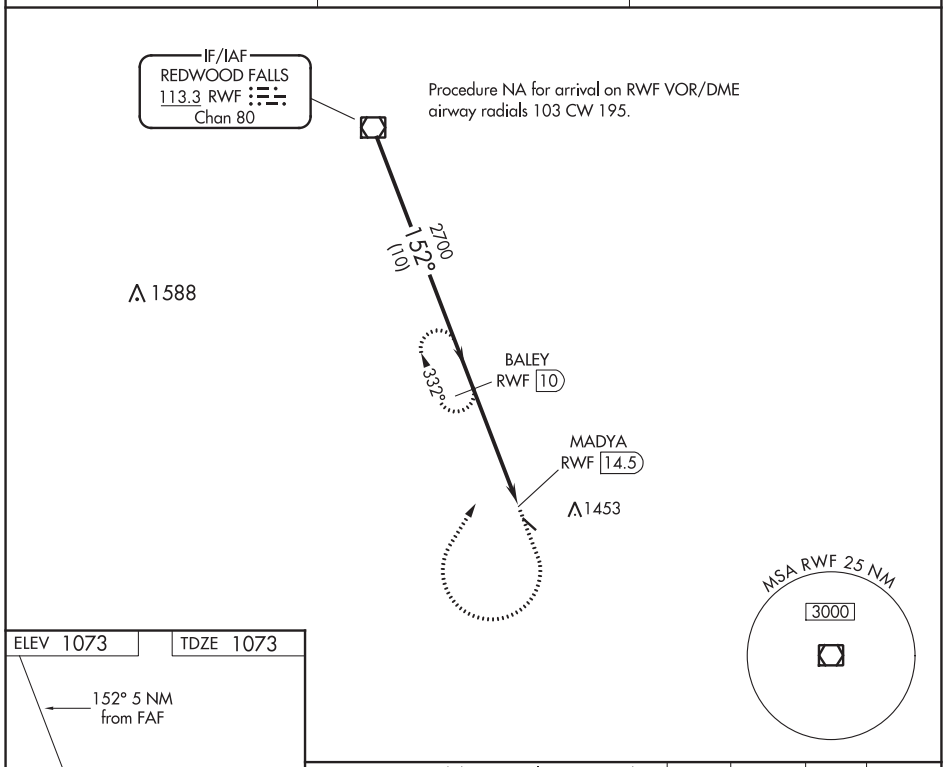
VOR/DME RWF 113.3 Chan 80	APP CRS 152°	Rwy ldg 3402 TDZE 1073 Apt Elev 1073

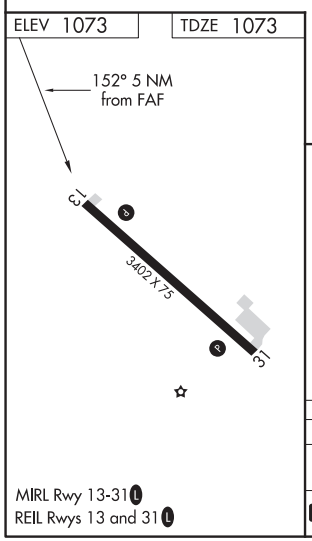
DME required.

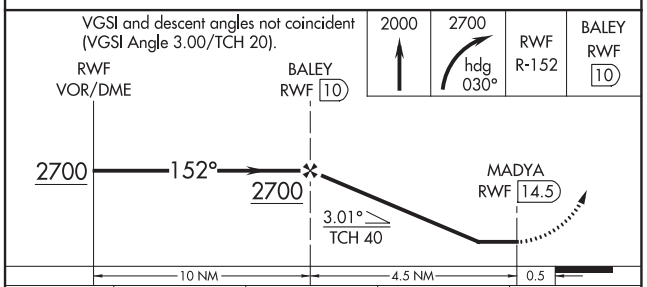
NA Procedure NA at night. Rwy 13 helicopter visibility reduction below 1 SM NA. Use Redwood Falls altimeter setting.

MISSED APPROACH: Climb to 2000 then climbing right turn to 2700 on heading 030° and RWF R-152 to BALEY/10 DME and hold.

RWF ASOS	MINNEAPOLIS CENTER	UNICOM
126.575	127.1 290.2	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-13	1620-1 547 (600-1)		1620-1¾ 547 (600-1¾)	NA
C CIRCLING	1660-1 587 (600-1)	1820-1 747 (800-1)	1820-2¼ 747 (800-2¼)	NA

MIRL Rwy 13-31 L
REIL Rwys 13 and 31 L

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STANLEY, NORTH DAKOTA — AL-9455 (FAA) — 18312

APP CRS	Rwy ldg	3900
278°	TDZE	2244
	Apt Elev	2245

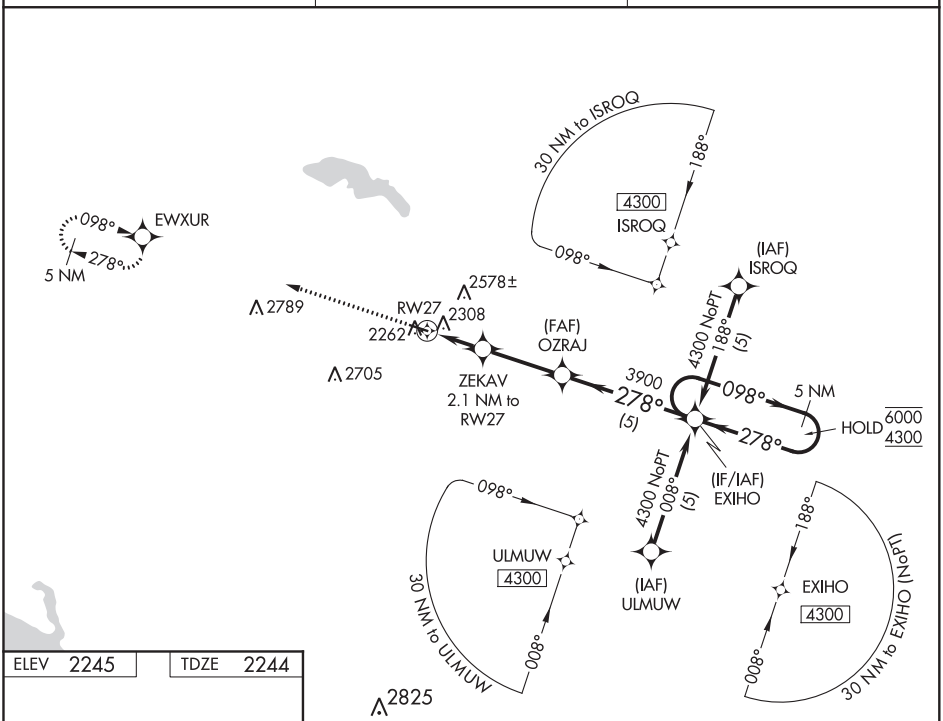
RNAV (GPS) RWY 27
STANLEY MUNI (Ø8D)

RNP APCH.

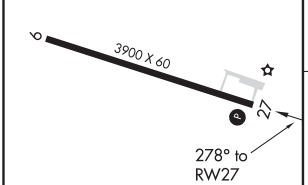
Procedure NA at night.
Rwy 27 helicopter visibility reduction below 1 SM NA.

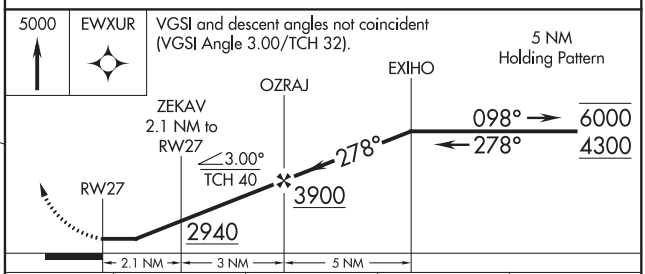
MISSED APPROACH: Climb to 5000 direct EWXUR and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
121.1	127.6 279.6	122.9 L



ELEV 2245	TDZE 2244





CATEGORY	A	B	C	D
LNAV MDA	2620-1 376 (400-1)		NA	
C CIRCLING	2720-1 475 (500-1)	2940-1 695 (700-1)	NA	

MIRL Rwy 9-27 L

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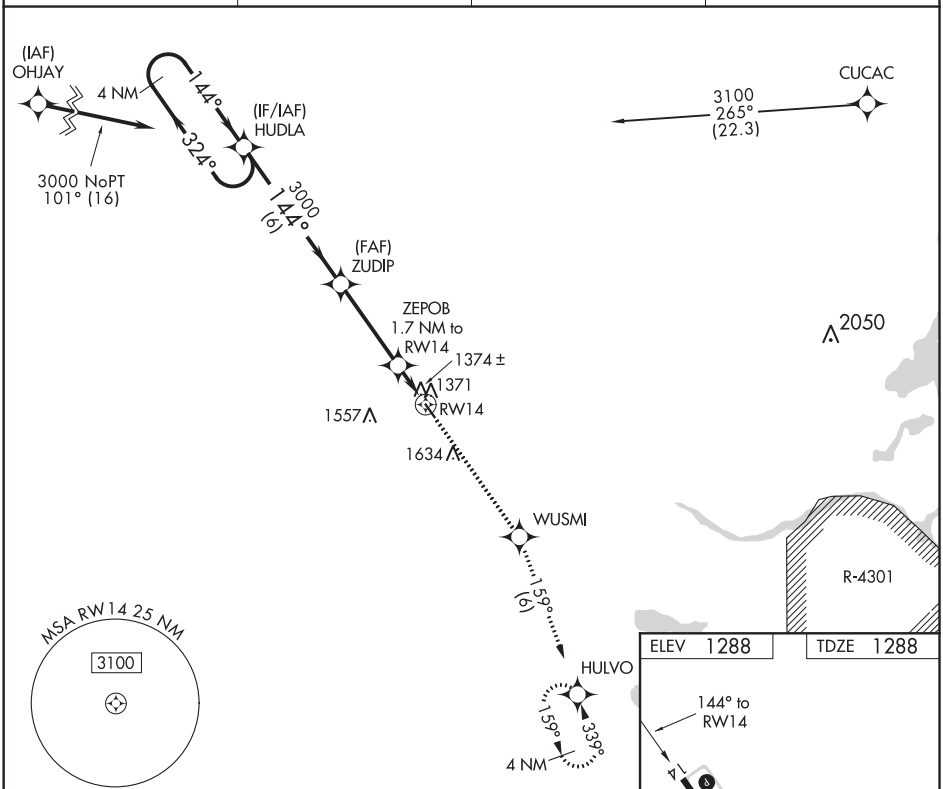
RNAV (GPS) RWY 14
STAPLES MUNI (SAZ)

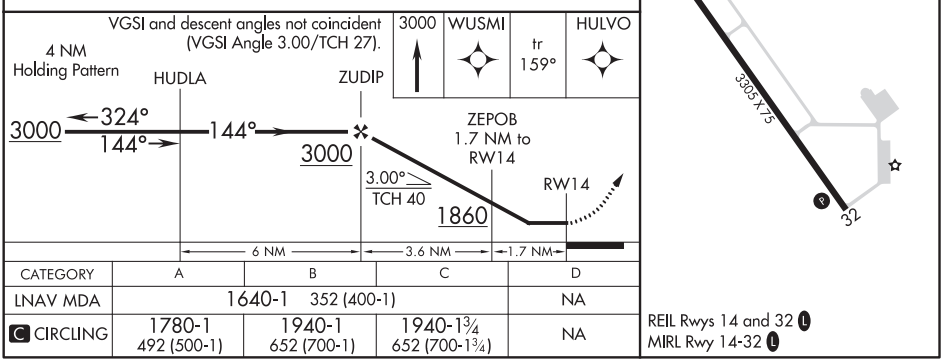
APP CRS	Rwy ldg	3305
144°	TDZE	1288
	Apt Elev	1288

Rwy 14 Straight-in and Circling minimums NA at night. Rwy 14 helicopter visibility reduction below 1 SM NA. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Pine River altimeter setting and increase all MDA 80 feet and all Cat C visibilities ¼ SM.

MISSED APPROACH: Climb to 3000 direct WUSMI and on track 159° to HULVO and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
118.325	118.05 239.0	121.725	122.9 L





CATEGORY	A	B	C	D
LNAV MDA	1640-1 352 (400-1)			NA
C CIRCLING	1780-1 492 (500-1)	1940-1 652 (700-1)	1940-1¾ 652 (700-1¾)	NA

STAPLES, MINNESOTA — AL-6105 (FAA) — 21056

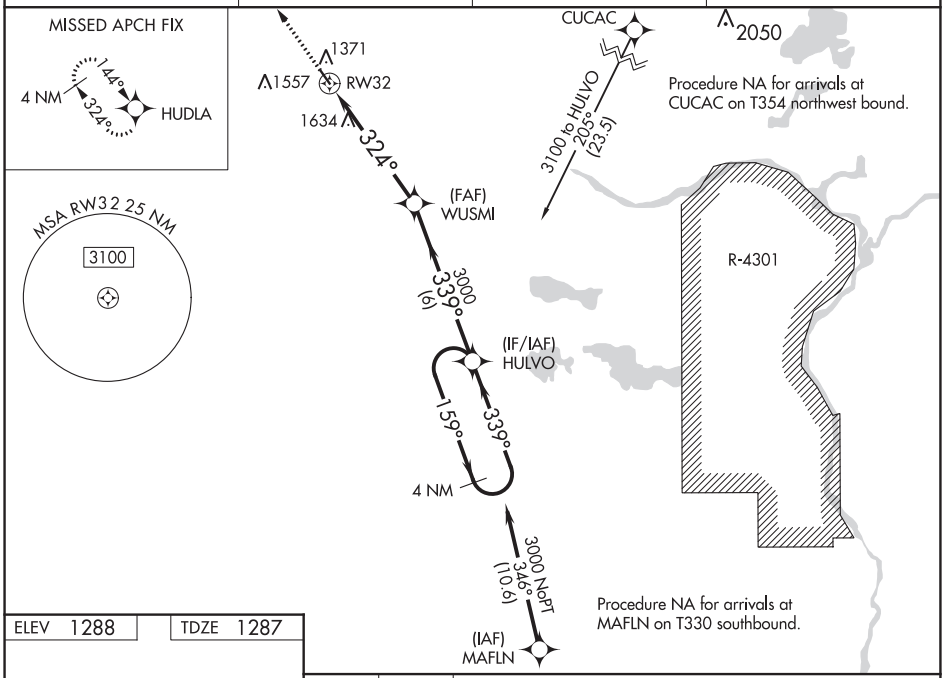
RNAV (GPS) RWY 32
STAPLES MUNI (SAZ)

WAAS CH 97528 W32A	APP CRS 324°	Rwy ldg 3305 TDZE 1287 Apt Elev 1288

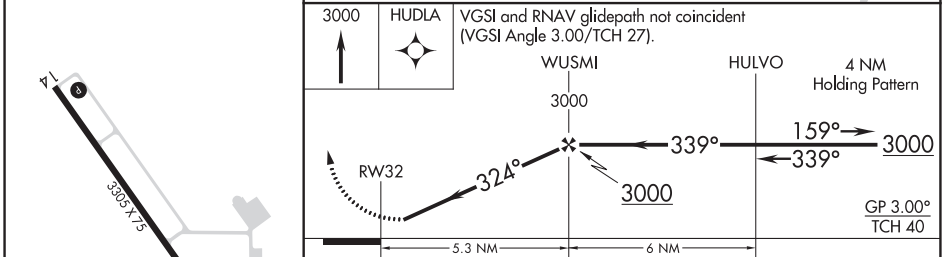
Circling to Rwy 14 NA at night. Baro-VNAV NA when using Pine River altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F).
DME/DME RNP-0.3 NA. When local altimeter setting not received, use Pine River altimeter setting and increase all DA 64 feet and all MDA 80 feet and increase LPV all Cats, LNAV/VNAV all Cats, LNAV Cat C and Circling Cat C visibility ¼ SM. Rwy 32 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3000 direct HUDLA and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
118.325	118.05 239.0	121.725	122.9 L



ELEV 1288 | TDZE 1287



CATEGORY	A	B	C	D
LPV DA	1592-1 305 (400-1)			NA
LNAV/VNAV DA	1965-2½ 678 (700-2½)			NA
LNAV MDA	1900-1 613 (700-1)		1900-1¾ 613 (700-1¾)	NA
C CIRCLING	1900-1 612 (700-1)	1940-1 652 (700-1)	1940-1¾ 652 (700-1¾)	NA

REIL Rwys 14 and 32 L
MIRL Rwy 14-32 L

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 53432 W11A	APP CRS 111°	Rwy ldg 5100 TDZE 3244 Apt Elev 3255

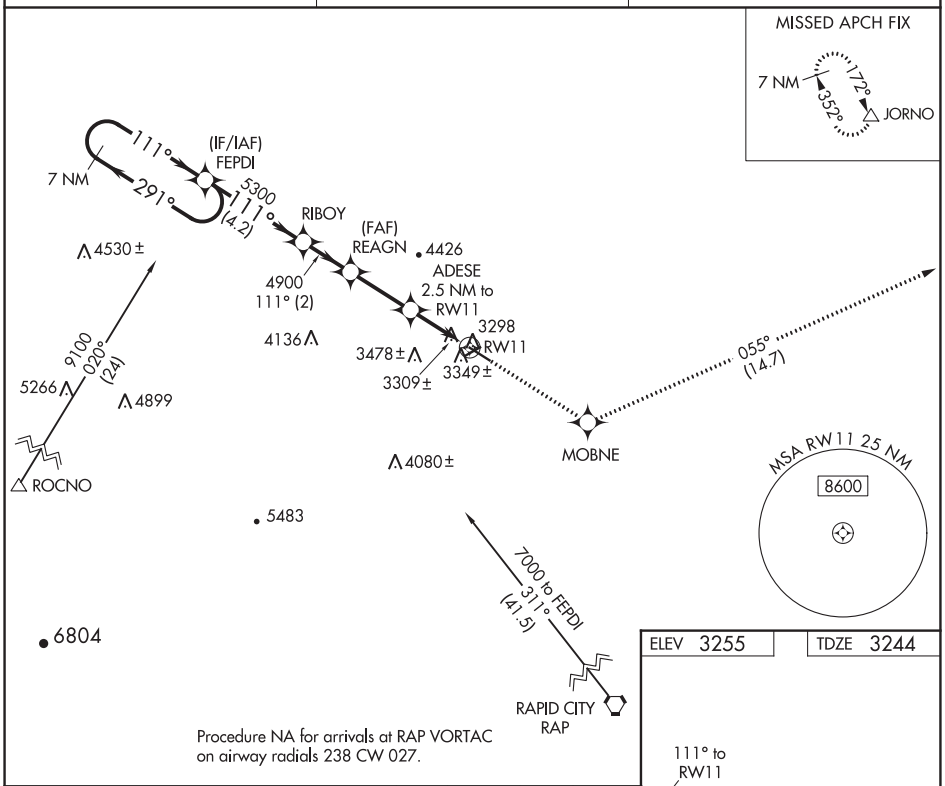
RNAV (GPS) RWY 11
STURGIS MUNI (49B)

RNP APCH.

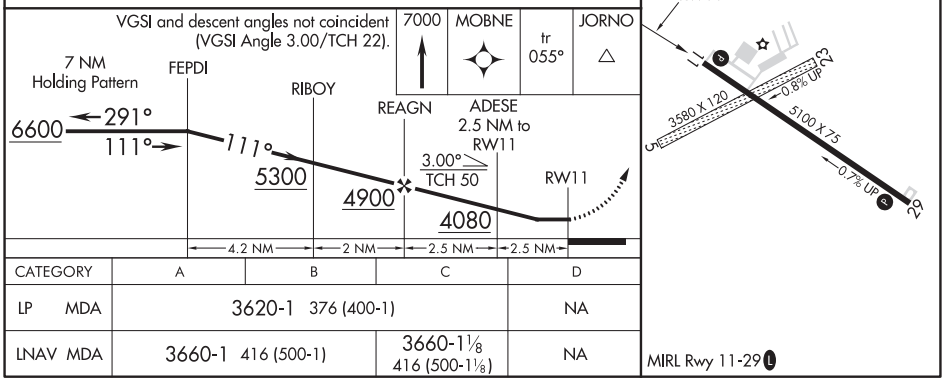
NA Use Ellsworth AFB altimeter setting; when not received, use Spearfish altimeter setting and increase all MDA 100 feet, increase LP Cat C visibility ⅜ SM and LNAV Cat C visibility ¼ SM. Rwy 11 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 7000 direct MOBNE and on track 055° to JORNO and hold.

ELLSWORTH APP CON ★	GCO	UNICOM
119.5 259.1	121.725	122.8 (CTAF) L



ELEV 3255 TDZE 3244



CATEGORY	A	B	C	D
LP MDA	3620-1 376 (400-1)			NA
LNAV MDA	3660-1 416 (500-1)		3660-1⅛ 416 (500-1⅛)	NA

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

STURGIS, SOUTH DAKOTA — AL-9215 (FAA) — 21056

WAAS CH 90321 W29A	APP CRS 292°	Rwy ldg 5100 TDZE 3231 Apt Elev 3255

RNAV (GPS) RWY 29
STURGIS MUNI (49B)

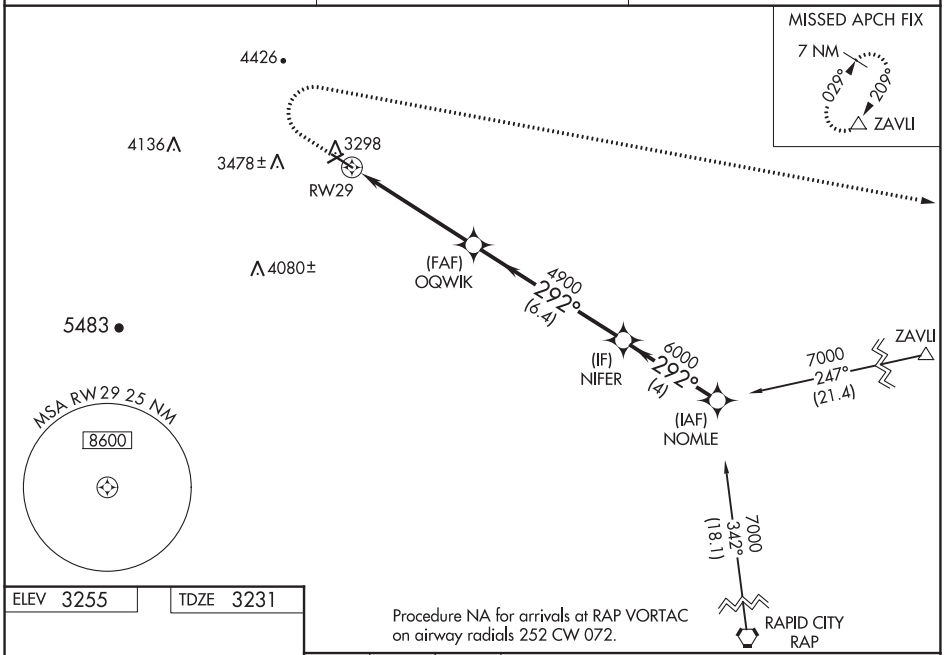
RNP APCH.

NA

Baro-VNAV NA. Use Ellsworth AFB altimeter setting, when not received, use Spearfish altimeter setting and increase all DA 87 feet and all MDA 100 feet and increase LPV Cat A/B visibility ¼ mile, and LPV (with climb gradient) Cat C visibility ½ mile.
*Missed approach requires minimum climb of 364 feet per NM to 4900.

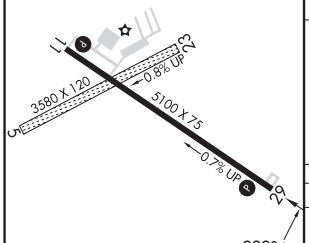
MISSED APPROACH: Climb to 3700 then climbing right turn to 7000 direct ZAVLI and hold.

ELLSWORTH APP CON ★	GCO	UNICOM
119.5 259.1	121.725	122.8 (CTAF) L

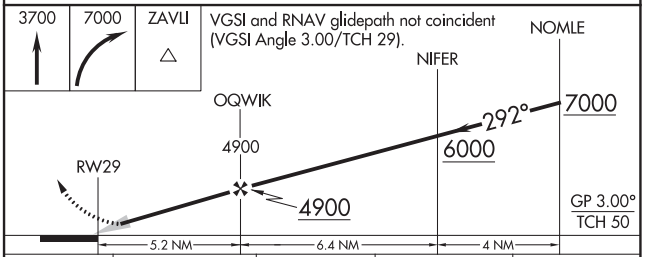


Procedure NA for arrivals at RAP VORTAC on airway radials 252 CW 072.

ELEV 3255 | TDZE 3231



MIRL Rwy 11-29 L



CATEGORY		A	B	C	D
LPV	DA*	3532-1 301 (300-1)			NA
LPV	DA	3532-1 301 (300-1)		4073-3 842 (900-3)	NA
LNAV/VNAV	DA	3532-1 301 (300-1)		3986-3 755 (800-3)	NA
LNAV	MDA	3640-1 409 (400-1)		4280-3 1049 (1100-3)	NA

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

LOC I-HYZ	APP CRS	Rwy ldg	6304
110.5	313°	TDZE	1114
		Apt Elev	1119

ILS or LOC RWY 31
THIEF RIVER FALLS RGNL (TVF)

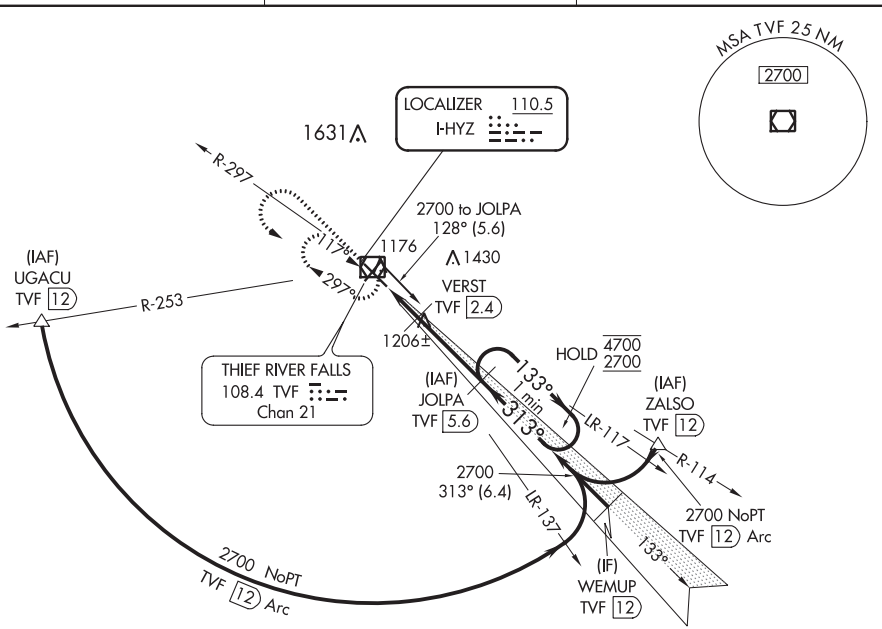
DME required for procedure entry. DME required.

For inop ALS, increase S-LOC 31 Cat C/D visibility to 1 SM.
DME from TVF VOR/DME. Simultaneous reception of I-HYZ and TVF DME required.

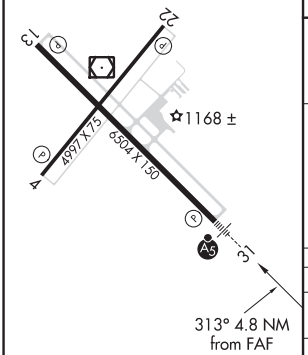
MALSR

MISSED APPROACH: Climb to 2700 then left turn direct TVF VOR/DME and hold.

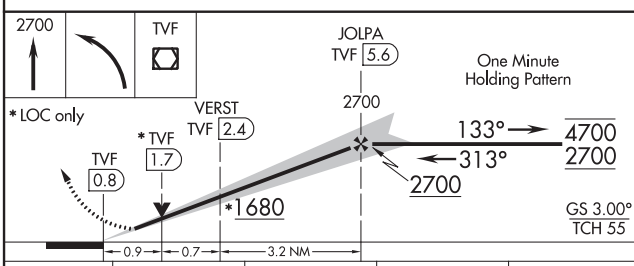
AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
119.025	132.15 269.6	122.8 (CTAF) L



ELEV 1119 | D | TDZE 1114



HIRL Rwy 13-31 L
MIRL Rwy 4-22 L
REIL Rwys 4, 13 and 22 L



CATEGORY	A	B	C	D
S-ILS 31	1314-½ 200 (200-½)			
S-LOC 31	1460-½ 346 (400-½)		1460-⅝ 346 (400-⅝)	
C CIRCLING	1540-1 421 (500-1)	1580-1 461 (500-1)	1820-2 701 (800-2)	1980-2¾ 861 (900-2¾)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

THIEF RIVER FALLS, MINNESOTA AL-5201 (FAA) 21056

WAAS CH 70636 W04A	APP CRS 037°	Rwy ldg 4997 TDZE 1116 Apt Elev 1119

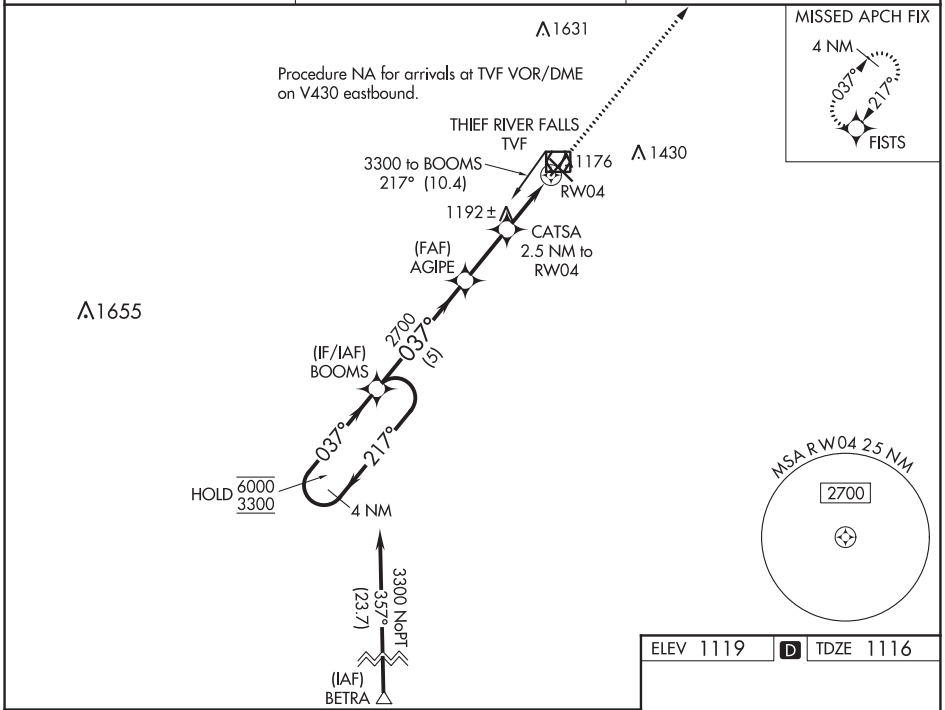
RNAV (GPS) RWY 4
THIEF RIVER FALLS RGNL (TVF)

RNP APCH.

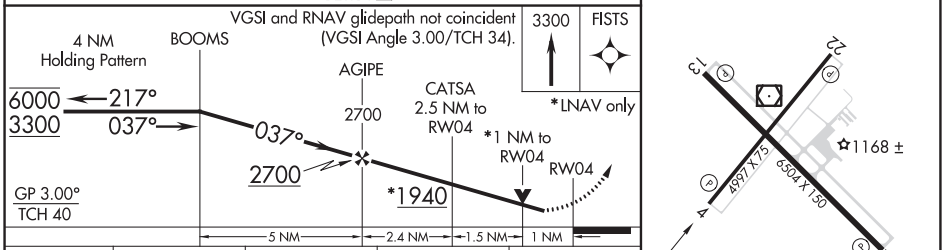
Rwy 4 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C.

MISSED APPROACH: Climb to 3300 direct FISTS and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
119.025	132.15 269.6	122.8 (CTAF) L



ELEV 1119 D TDZE 1116



CATEGORY	A	B	C	D
LPV DA	1366-1 250 (300-1)		NA	
LNAV/VNAV DA	1366-1 250 (300-1)		NA	
LNAV MDA	1460-1 344 (400-1)		NA	
C CIRCLING	1540-1 421 (500-1)	1580-1 461 (500-1)	NA	

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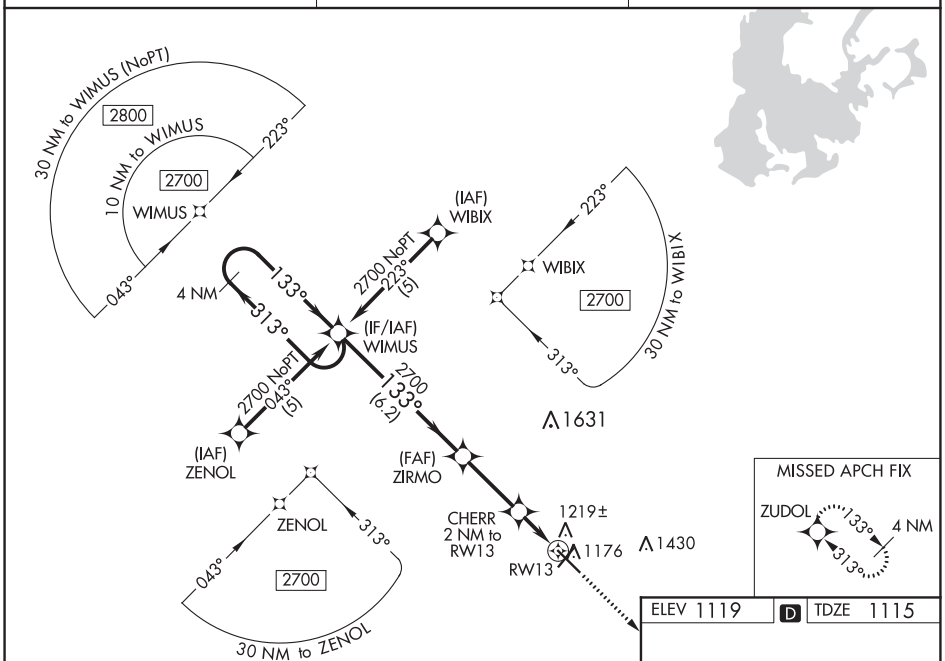
WAAS CH 72711 W13A	APP CRS 133°	Rwy ldg 6504 TDZE 1115 Apt Elev 1119

RNAV (GPS) RWY 13
THIEF RIVER FALLS RGNL (TVF)

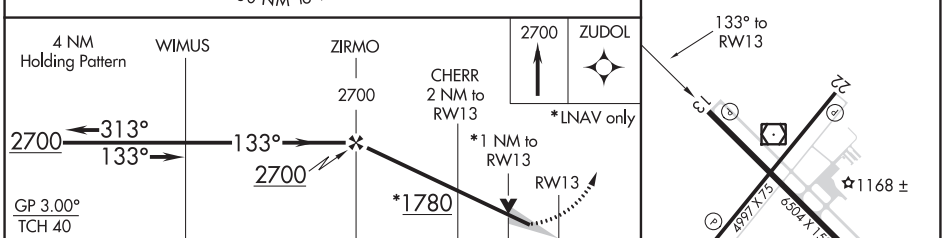
Baro-VNAV and VDP NA when using Crookston altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Crookston altimeter setting: increase LPV DA to 1447 feet and all visibilities ⅛ SM; increase LNAV/VNAV DA to 1518 feet and all visibilities ¼ SM; increase all MDAs 100 feet and visibility Cats C and D ⅜ SM.

MISSED APPROACH: Climb to 2700 direct ZUDOL and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
119.025	132.15 269.6	122.8 (CTAF) L



ELEV 1119 D TDZE 1115



CATEGORY	A	B	C	D
LPV DA	1365-1 250 (300-1)			
LNAV/VNAV DA	1436-1¼ 321 (400-1¼)			
LNAV MDA	1480-1 365 (400-1)			1480-1¼ 365 (400-1¼)
C CIRCLING	1540-1 421 (500-1)	1580-1 461 (500-1)	1820-2 701 (800-2)	1980-2¾ 861 (900-2¾)

HIRL Rwy 13-31 L
MIRL Rwy 4-22 L
REIL Rwys 4, 13 and 22 L

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

THIEF RIVER FALLS, MINNESOTA AL-5201 (FAA) 20254

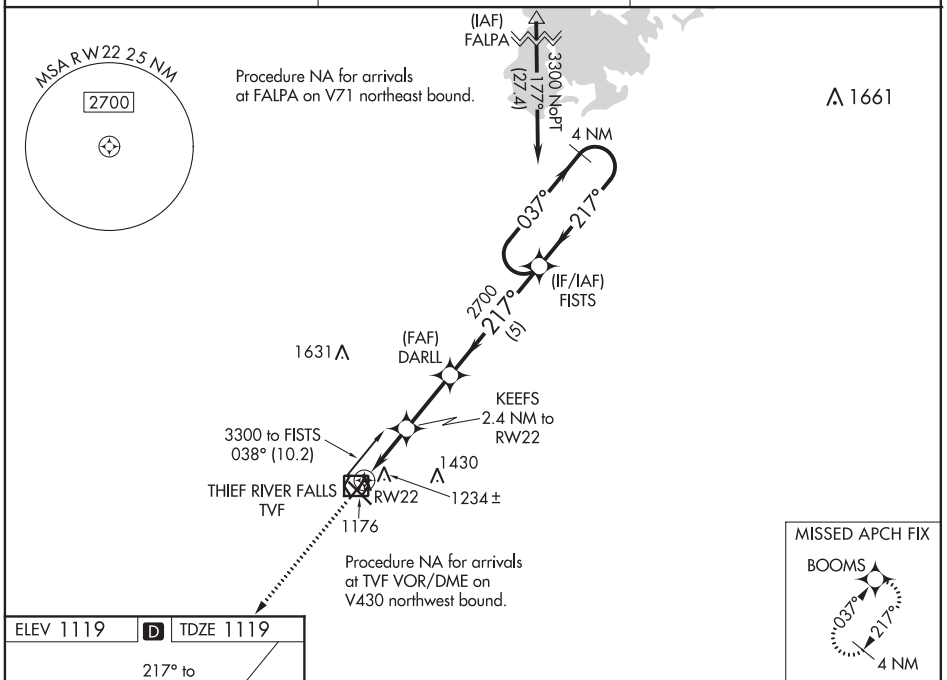
WAAS CH 77836 W22A	APP CRS 217°	Rwy ldg 4997 TDZE 1119 Apt Elev 1119

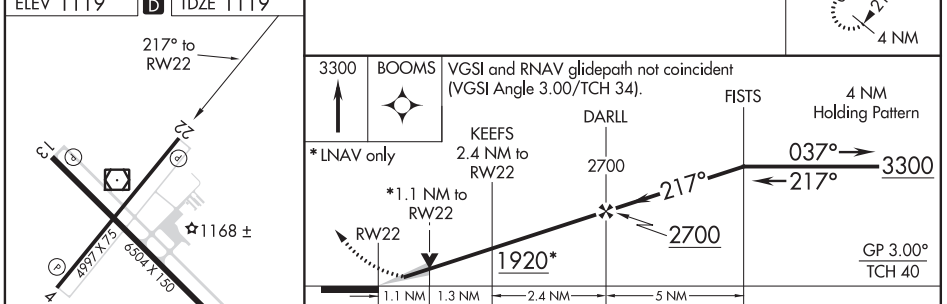
RNAV (GPS) RWY 22
THIEF RIVER FALLS RGNL (TVF)

Baro-VNAV and VDP NA when using Crookston altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Crookston altimeter setting and increase all DA 82 feet and all MDA 100 feet. Increase LPV all Cats visibility to 1⅛ mile and LNAV/VNAV all Cats visibility to 1¼ mile.

MISSED APPROACH: Climb 3300 direct BOOMS and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
119.025	132.15 269.6	122.8 (CTAF) L





CATEGORY		A	B	C	D
LPV	DA	1369-1 250 (300-1)		NA	
LNAV/VNAV	DA	1396-1 277 (300-1)		NA	
LNAV	MDA	1500-1 381 (400-1)		NA	
C CIRCLING		1540-1 421 (500-1)	1580-1 461 (500-1)	NA	

HIRL Rwy 13-31 L
MIRL Rwy 4-22 L
REIL Rwys 4, 13 and 22 L

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 69311 W31A	APP CRS 313°	Rwy ldg 6304 TDZE 1114 Apt Elev 1119

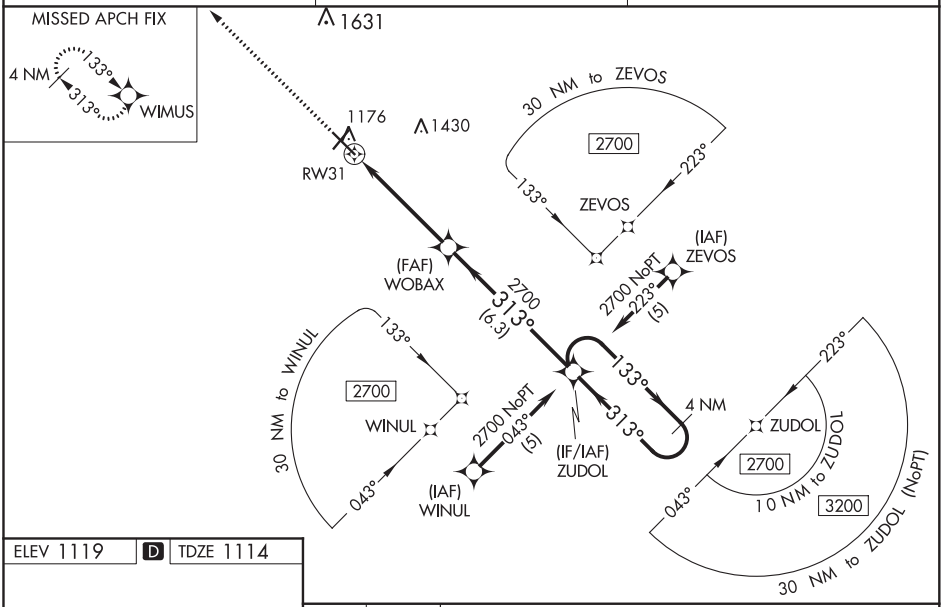
RNAV (GPS) RWY 31
THIEF RIVER FALLS RGNL (TVF)

Baro-VNAV and VDP NA when using Crookston altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Crookston altimeter setting: increase LPV DA to 1446 feet and all visibilities ⅛ SM; increase LNAV/VNAV DA to 1510 feet and all visibilities ⅜ SM; increase all MDAs 100 feet and visibility Cats C and D ¼ SM. For inoperative MALSR, increase LNAV Cats C/D visibility to 1⅜ mile. For inoperative MALSR, when using Crookston altimeter setting,increase LPV all Cats visibility to 1⅛ mile, LNAV/VNAV all Cats visibility to 1¼ mile, LNAV Cats C/D visibility to 1⅝ mile.

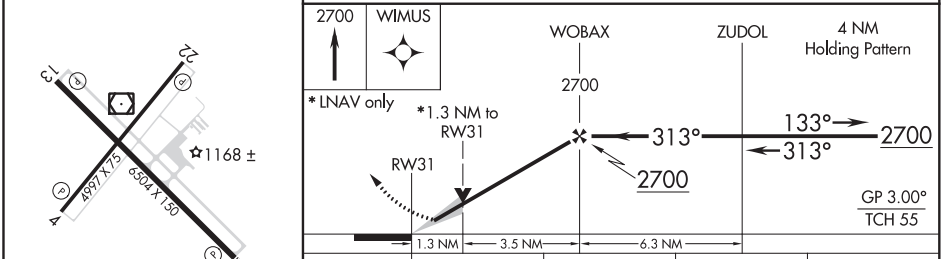
MALSR

MISSED APPROACH: Climb to 2700 direct WIMUS and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
119.025	132.15 269.6	122.8 (CTAF) L



ELEV 1119 | D | TDZE 1114



CATEGORY	A	B	C	D
LPV DA	1364-½ 250 (300-½)			
LNAV/VNAV DA	1428-½ 314 (400-½)			
LNAV MDA	1580-½ 466 (500-½)		1580-1 466 (500-1)	
C CIRCLING	1580-1 461 (500-1)		1820-2 701 (800-2)	1980-2¾ 861 (900-2¾)

HIRL Rwy 13-31 L
MIRL Rwy 4-22 L
REIL Rwys 4, 13 and 22 L

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

THIEF RIVER FALLS, MINNESOTA | AL-5201 (FAA) | 20254

VOR/DME TVF 108.4 Chan 21	APP CRS 312°	Rwy ldg 6304 TDZE 1114 Apt Elev 1119

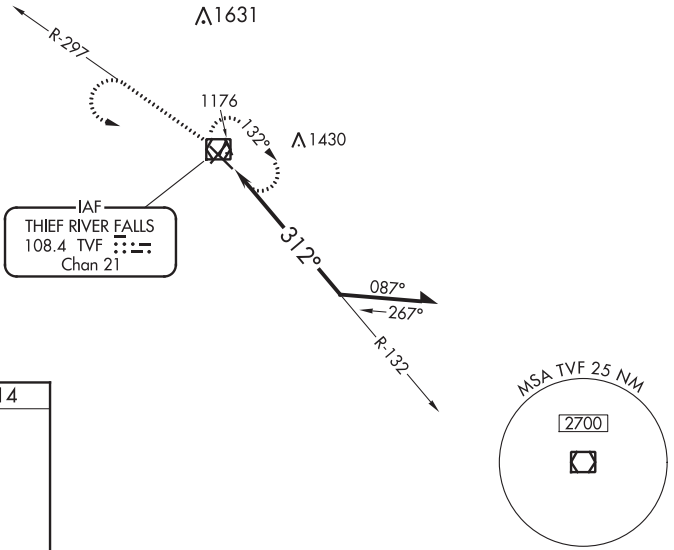
VOR RWY 31
THIEF RIVER FALLS RGNL (TVF)

T A

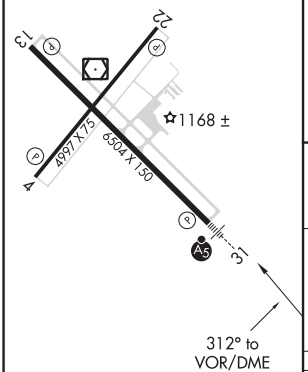
MALSR

MISSED APPROACH: Climb to 2700 on TVF R-297 then left turn direct TVF VOR/DME and hold.

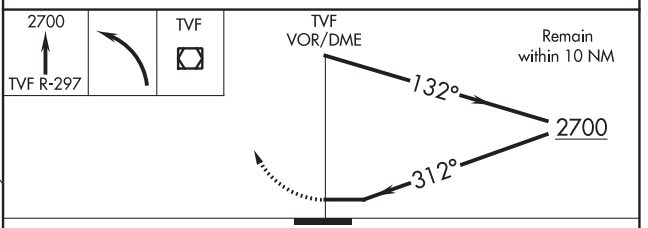
AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
119.025	132.15 269.6	122.8 (CTAF) L



ELEV 1119 | D | TDZE 1114



HIRL Rwy 13-31 L
MIRL Rwy 4-22 L
REIL Rwys 4, 13, and 22 L



CATEGORY	A	B	C	D
S-31	1660-½ 546 (600-½)		1660-1⅛	546 (600-1⅛)
C CIRCLING	1660-1	541 (600-1)	1820-2 701 (800-2)	1980-2¾ 861 (900-2¾)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

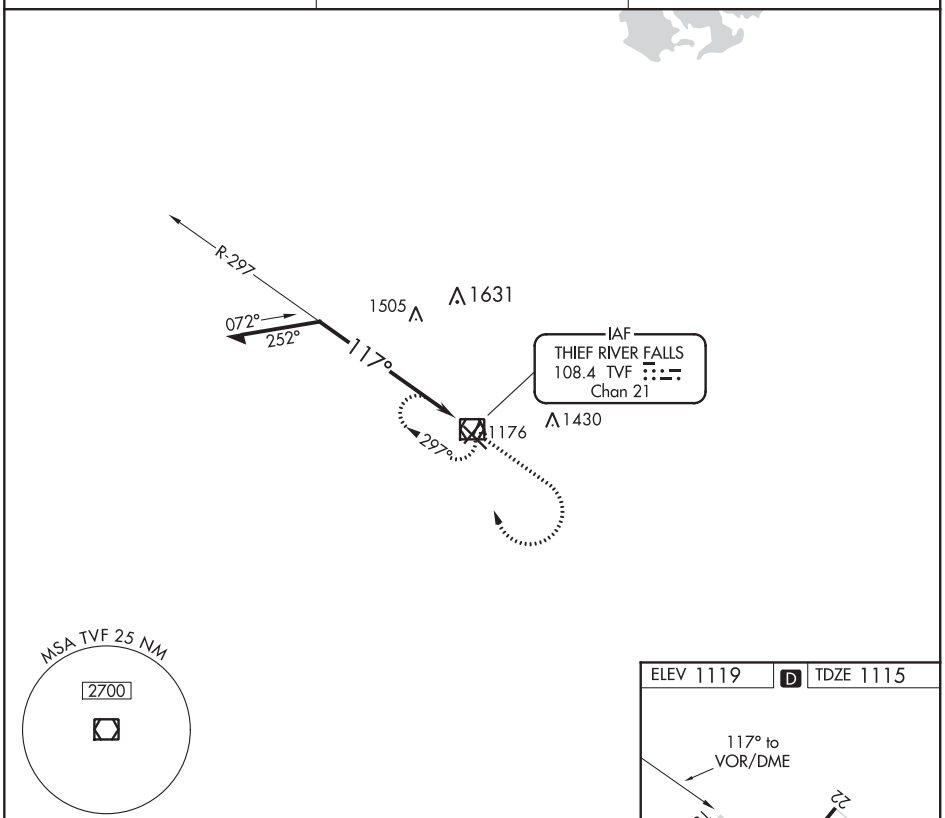
VOR/DME TVF	APP CRS	Rwy ldg	6504
108.4	117°	TDZE	1115
Chan 21		Apt Elev	1119

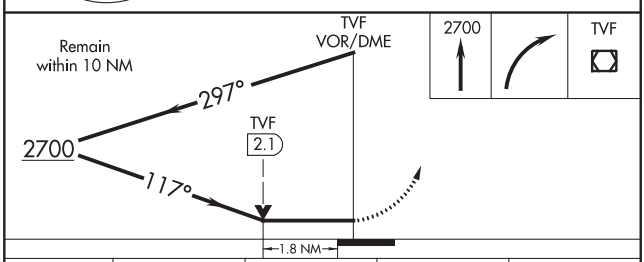
VOR Y RWY 13
THIEF RIVER FALLS RGNL (TVF)

T A Circling to Rwy 4/22 NA at night.

MISSED APPROACH: Climb to 2700 then right turn direct TVF VOR/DME and hold.

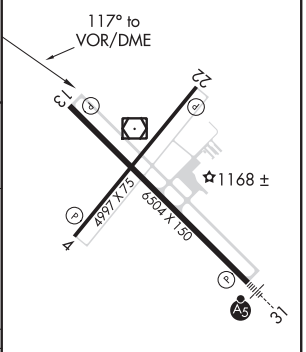
AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
119.025	132.15 269.6	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-13	1740-1	625 (700-1)	1740-1¾ 625 (700-1¾)	1740-2 625 (700-2)
C CIRCLING	1740-1	621 (700-1)	1820-2 701 (800-2)	1980-2¾ 861 (900-2¾)

ELEV 1119 D TDZE 1115



HIRL Rwy 13-31 L
MIRL Rwy 4-22 L
REIL Rwys 4, 13, and 22 L

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

THIEF RIVER FALLS, MINNESOTA AL-5201 (FAA) 20254

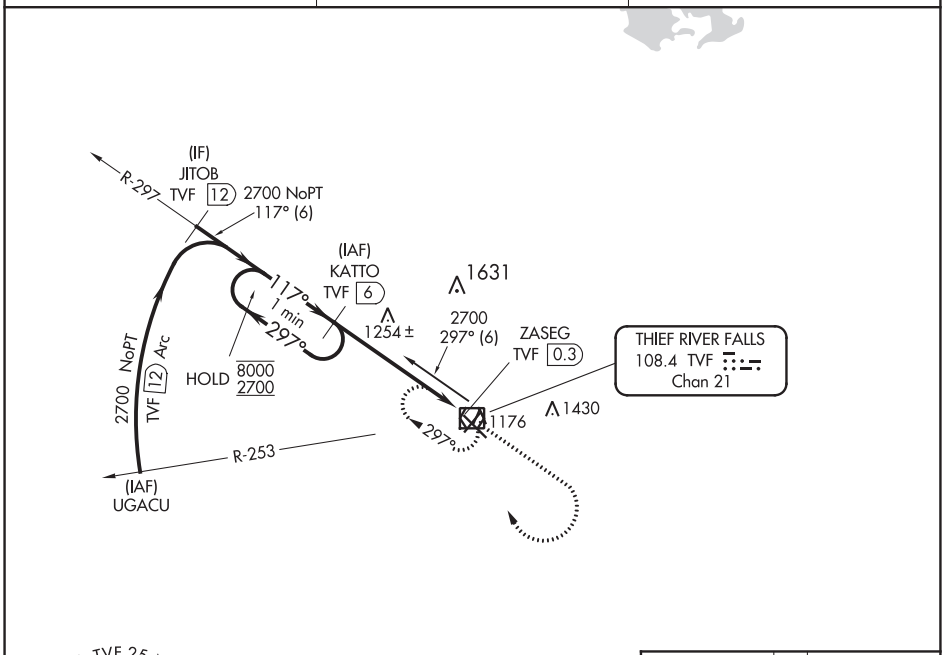
VOR Z RWY 13
THIEF RIVER FALLS RGNL (TVF)

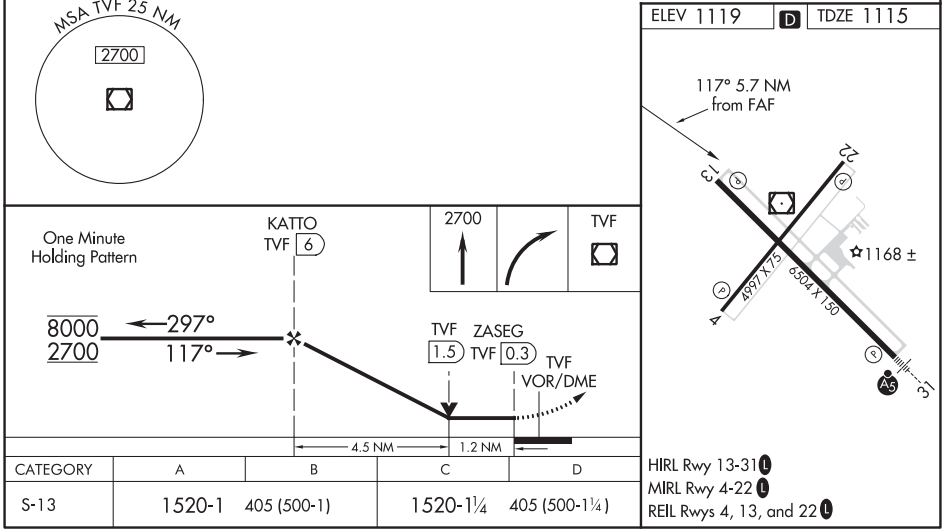
VOR/DME TVF 108.4 Chan 21	APP CRS 117°	Rwy ldg 6504 TDZE 1115 Apt Elev 1119

DME Required.

MISSED APPROACH: Climb to 2700 then right turn direct TVF VOR/DME and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
119.025	132.15 269.6	122.8 (CTAF) L



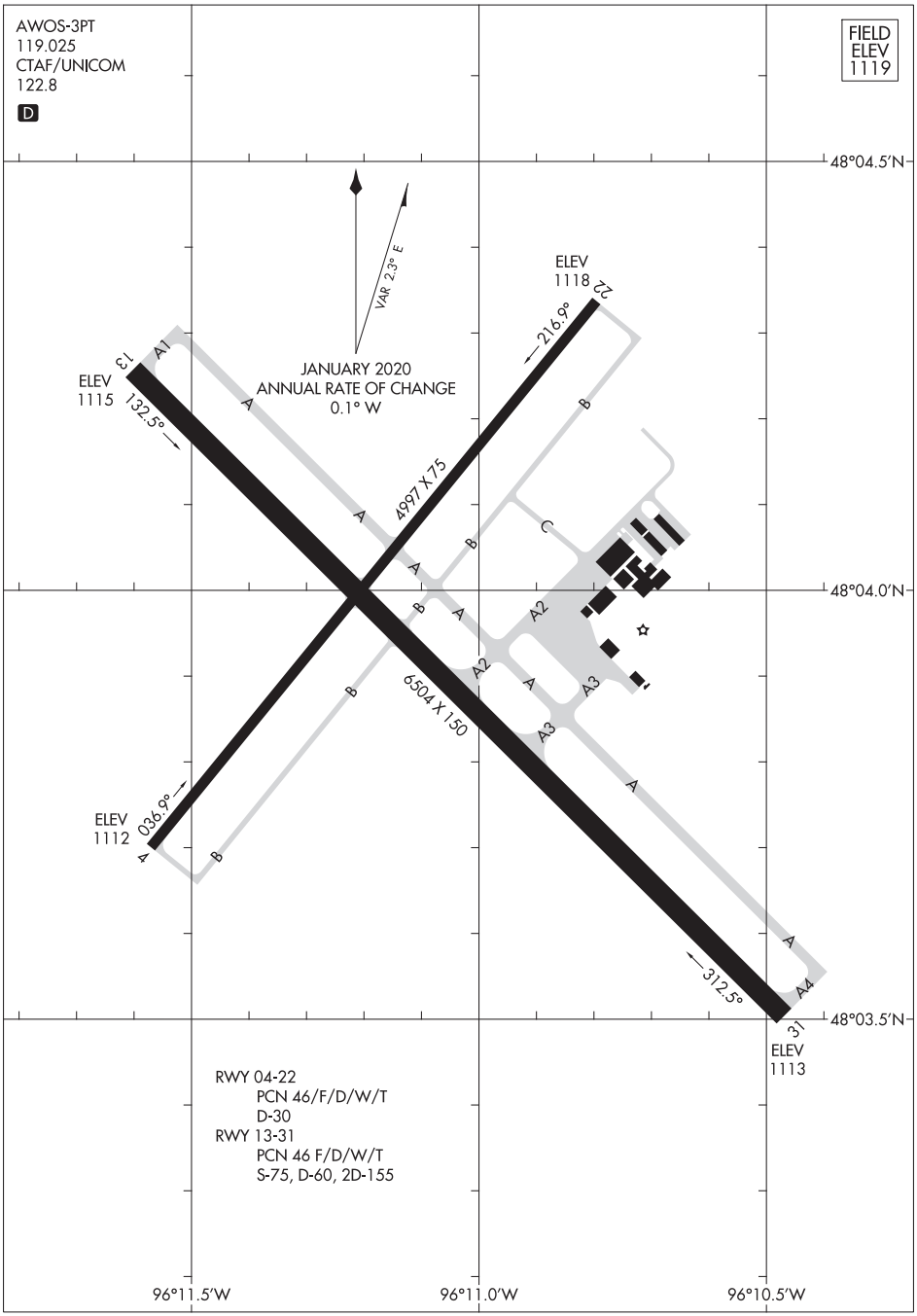


CATEGORY	A	B	C	D
S-13	1520-1 405 (500-1)		1520-1¼ 405 (500-1¼)	

HIRL Rwy 13-31 L
MIRL Rwy 4-22 L
REIL Rwys 4, 13, and 22 L

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021


AWOS-3PT
119.025
CTAF/UNICOM
122.8
D
FIELD
ELEV
1119
48°04.5'N
48°04.0'N
48°03.5'N
96°11.5'W
96°11.0'W
96°10.5'W
VAR 2.3° E
JANUARY 2020
ANNUAL RATE OF CHANGE
0.1° W
ELEV
1118
22
216.9°
ELEV
1115
13
132.5°
4997 X 75
6504 X 150
ELEV
1112
036.9°
312.5°
31
ELEV
1113
A1
A2
A3
A4
A
B
C
RWY 04-22
PCN 46/F/D/W/T
D-30
RWY 13-31
PCN 46 F/D/W/T
S-75, D-60, 2D-155

TIOGA, NORTH DAKOTA | AL-9025 (FAA) | 20142

RNAV (GPS) RWY 12

TIOGA MUNI (D60)

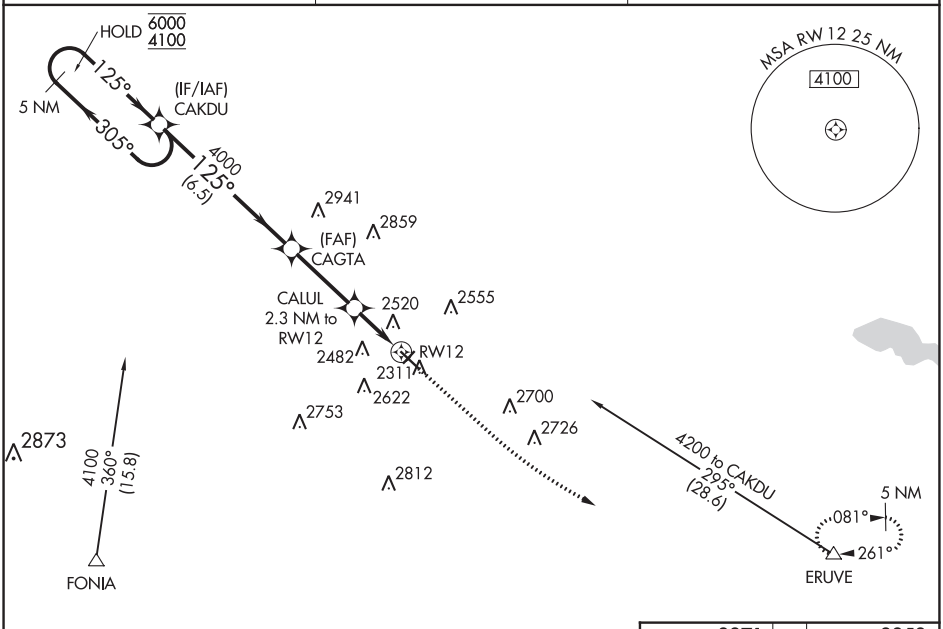
WAAS CH 82139 W12A	APP CRS 125°	Rwy ldg 5102 TDZE 2253 Apt Elev 2271

RNP APCH.

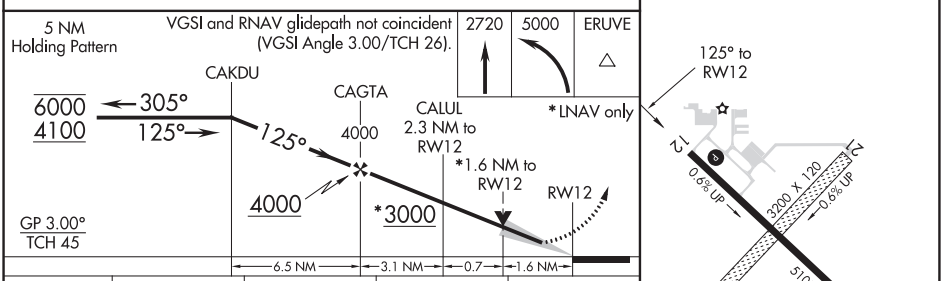
Circling NA to Rwys 3 and 21. For uncompensated Baro-VNAV systems, procedure NA below -19°C or above 54°C. When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 2720 then climbing left turn to 5000 direct ERUVE and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
118.575	127.6 279.6	122.9 L



ELEV 2271	TDZE 2253



CATEGORY	A	B	C	D
LPV DA	2503-1 250 (300-1)			
LNAV/VNAV DA	2819-2 566 (600-2)			
LNAV MDA	2780-1 527 (600-1)		2780-1½ 527 (600-1½)	
C CIRCLING	2820-1 549 (600-1)	2980-1 709 (800-1)	2980-2 709 (800-2)	3000-2¼ 729 (800-2¼)

MIRL Rwy 12-30 L

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 56630 W30A	APP CRS 305°	Rwy ldg 5102 TDZE 2271 Apt Elev 2271

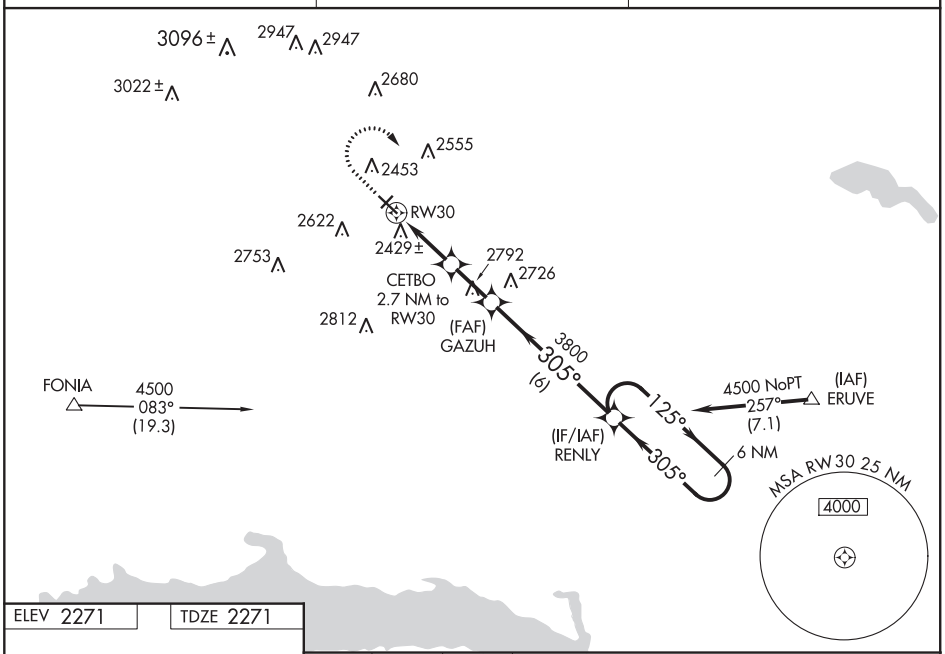
RNAV (GPS) RWY 30
TIOGA MUNI (D60)

RNP APCH.

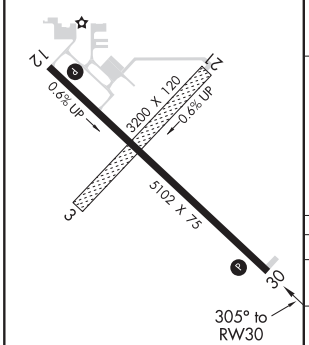
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C or above 54°C. Rwy 30 helicopter visibility reduction below ¾ SM NA. Circling NA to Rwys 3 and 21.

MISSED APPROACH: Climb to 3200 then climbing right turn to 4500 direct RENLY and hold.

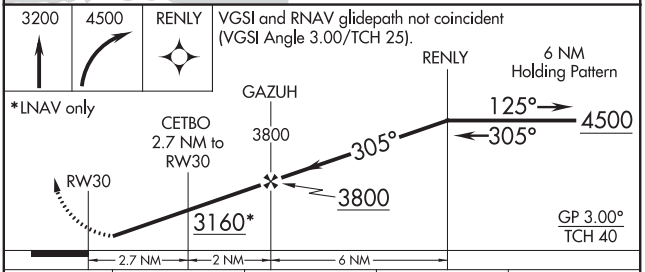
AWOS-3	MINNEAPOLIS CENTER	CTAF
118.575	127.6 279.6	122.9 L



ELEV 2271 TDZE 2271



MIRL Rwy 12-30 L



CATEGORY	A	B	C	D
LPV DA	2521-1 250 (300-1)			
LNAV/VNAV DA	2712-1⅜ 441 (500-1⅜)			
LNAV MDA	2720-1 449 (500-1)		2720-1⅜ 449 (500-1⅜)	
C CIRCLING	2820-1 549 (600-1)	2980-1 709 (800-1)	2980-2 709 (800-2)	3000-2¼ 729 (800-2¼)

NC-1, 25 FEB 2021 to 22 APR 2021
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TOWER, MINNESOTA | AL-10374 (FAA) | 20198

APP CRS	Rwy ldg	3400
088°	TDZE	1369
	Apt Elev	1370

RNAV (GPS) RWY 8
TOWER MUNI (12D)

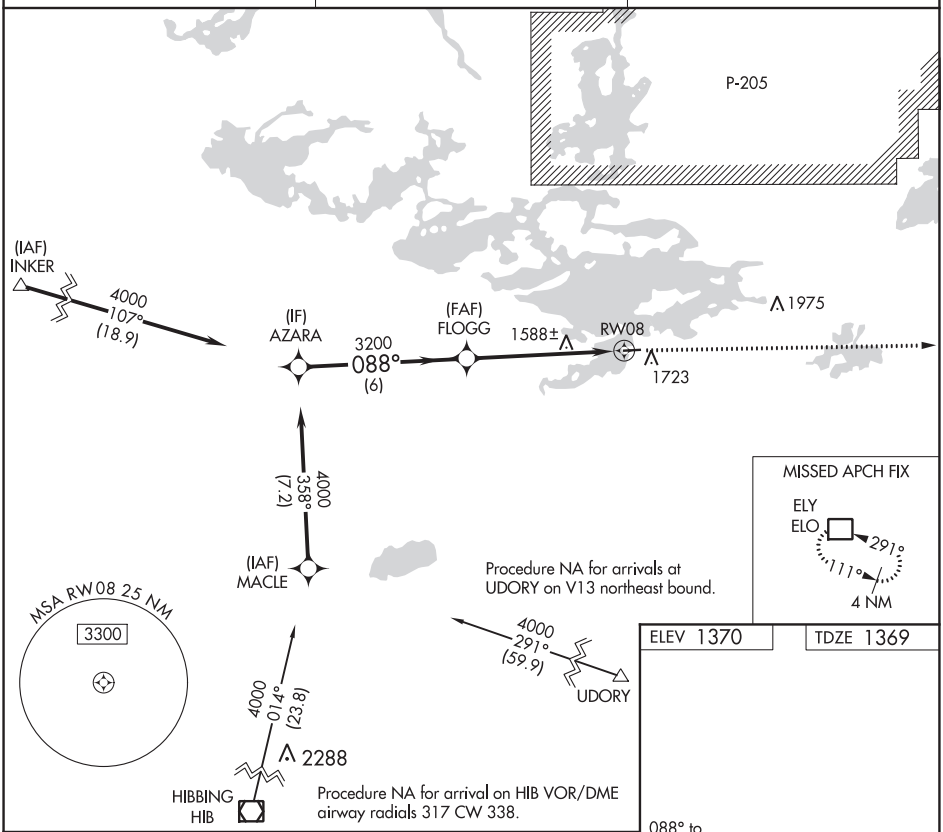
RNP APCH.

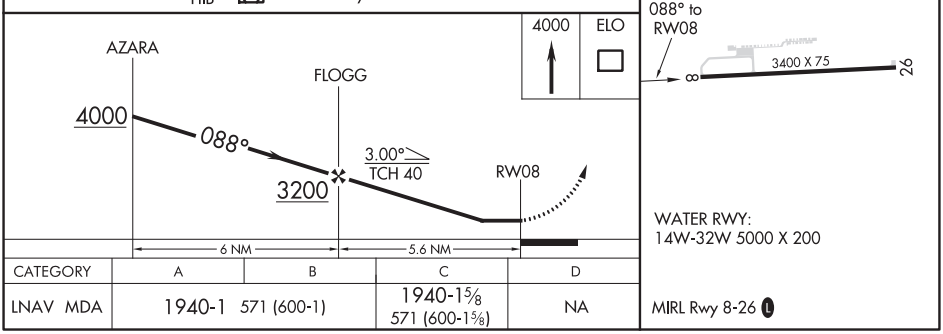
NA
-35°C

Procedure NA at night.
Rwy 8 helicopter visibility reduction below 1 SM NA.
Use Cook altimeter setting,

MISSED APPROACH: Climb to 4000 direct ELO DME and hold.

CQM AWOS-3	MINNEAPOLIS CENTER	CTAF
118.175	127.9 281.45	122.9 L





CATEGORY	A	B	C	D
LNAV MDA	1940-1 571 (600-1)		1940-1⅝ 571 (600-1⅝)	NA

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

APP CRS	Rwy ldg	3400
268°	TDZE	1370
	Apt Elev	1370

RNAV (GPS) RWY 26
TOWER MUNI (12D)

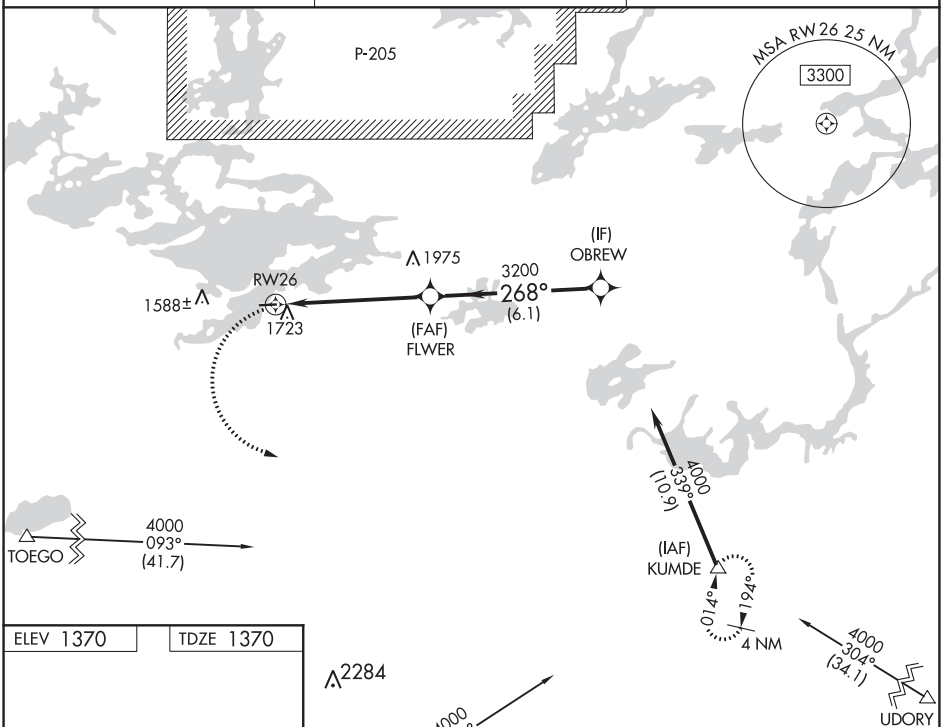
RNP APCH.

NA
-35°C

Procedure NA at night.
Rwy 26 helicopter visibility reduction below 1 SM NA.
Use Cook altimeter setting.

MISSED APPROACH: Climbing left turn to 4000 direct KUMDE and hold.

CQM AWOS-3	MINNEAPOLIS CENTER	CTAF
118.175	127.9 281.45	122.9 L



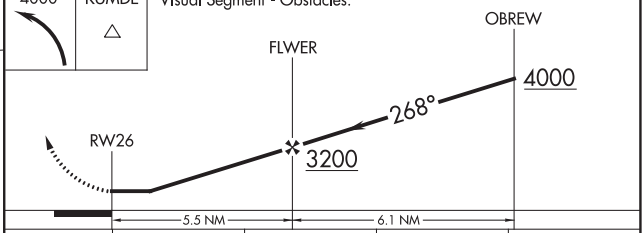
Procedure NA for arrivals at UDORY on V13 northeast bound.

ELEV 1370 | TDZE 1370

WATER RWY:
14W-32W 5000 X 200

MIRL Rwy 8-26 L

4000	KUMDE	Visual Segment - Obstacles.



CATEGORY	A	B	C	D
LNAV MDA	2100-1	730 (800-1)	2100-2 730 (800-2)	NA

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

TRACY, MINNESOTA | AL-9494 (FAA) | 21056

APP CRS	Rwy ldg	3098
114°	TDZE	1336
	Apt Elev	1341

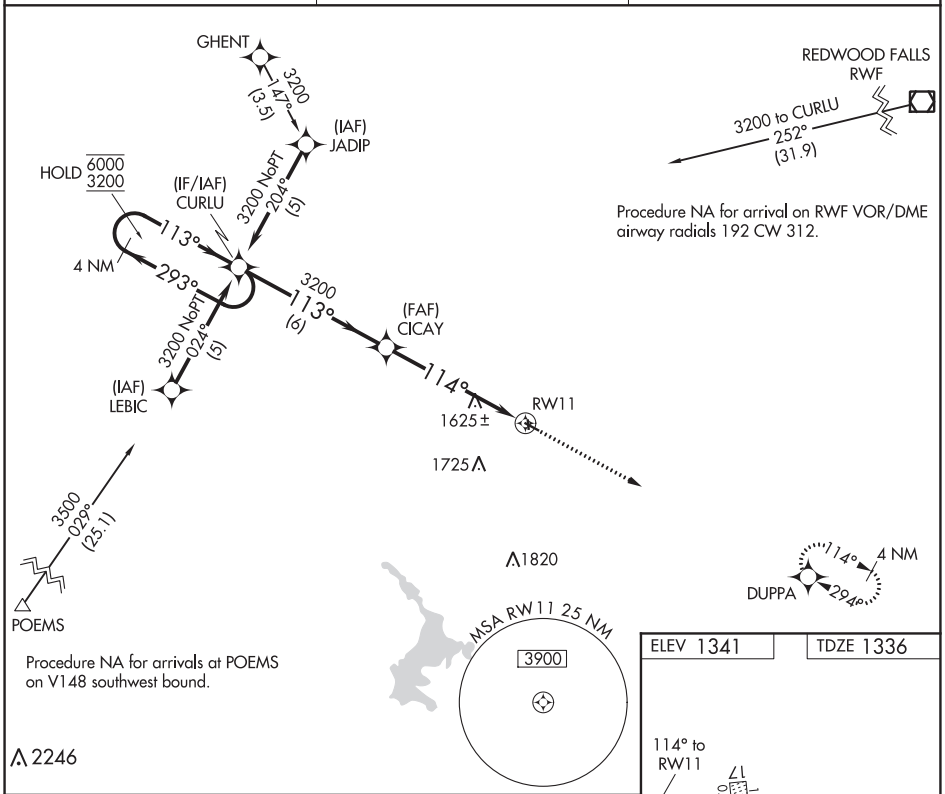
RNAV (GPS) RWY 11
TRACY MUNI (TKC)

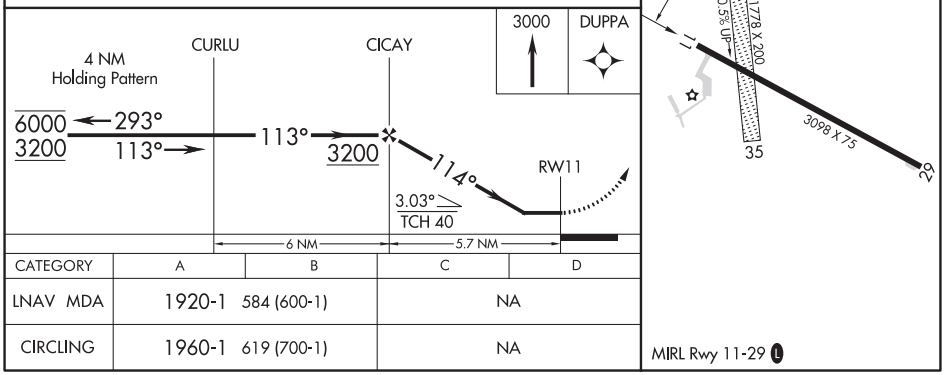
RNP APCH.

Procedure NA at night. Rwy 11 helicopter visibility reduction below 1 SM NA. Circling NA to Rwy 17-35.

MISSED APPROACH: Climb to 3000 direct DUPPA and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
120.0	127.1 290.2	122.9 L





CATEGORY	A	B	C	D
LNAV MDA	1920-1 584 (600-1)		NA	
CIRCLING	1960-1 619 (700-1)		NA	

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

APP CRS	Rwy ldg	3098
294°	TDZE	1335
	Apt Elev	1341

RNAV (GPS) RWY 29
TRACY MUNI (TKC)

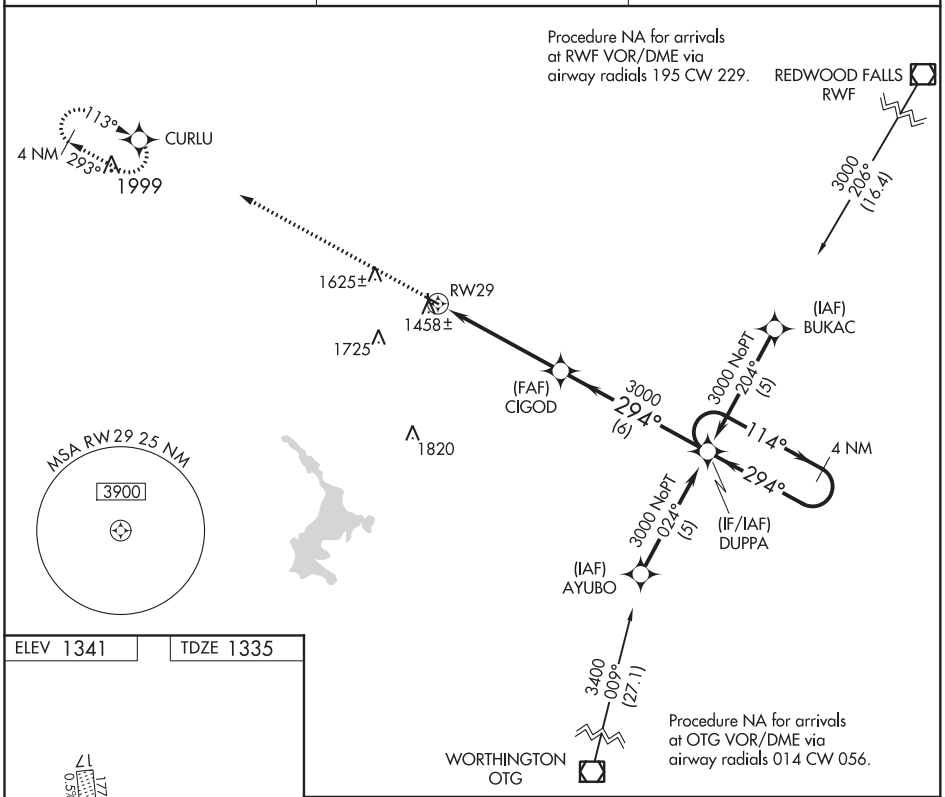
RNP APCH.

T NA

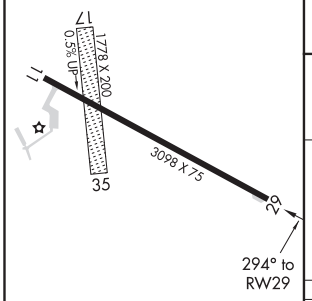
If local altimeter setting not received, use Marshall/Ryan altimeter setting and increase all MDAs 60 feet. Procedure NA at night. Circling NA to Rwy 17-35.

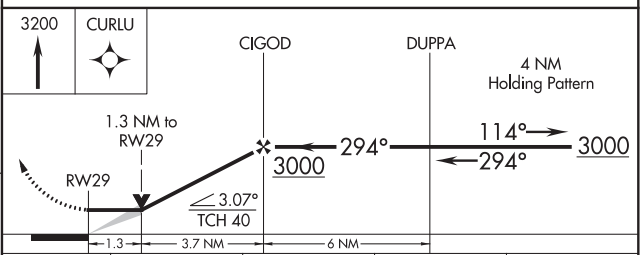
MISSED APPROACH: Climb to 3200 direct CURLU and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
120.0	127.1 290.2	122.9 L



ELEV 1341	TDZE 1335





CATEGORY	A	B	C	D
LNAV MDA	1780-1 445 (500-1)		NA	
CIRCLING	1920-1 579 (600-1)		NA	

MIRL Rwy 11-29 L

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

TWO HARBORS, MINNESOTA — AL-6981 (FAA) — 19339

WAAS CH 53721 W06A	APP CRS 061°	Rwy ldg 4400 TDZE 1073 Apt Elev 1073

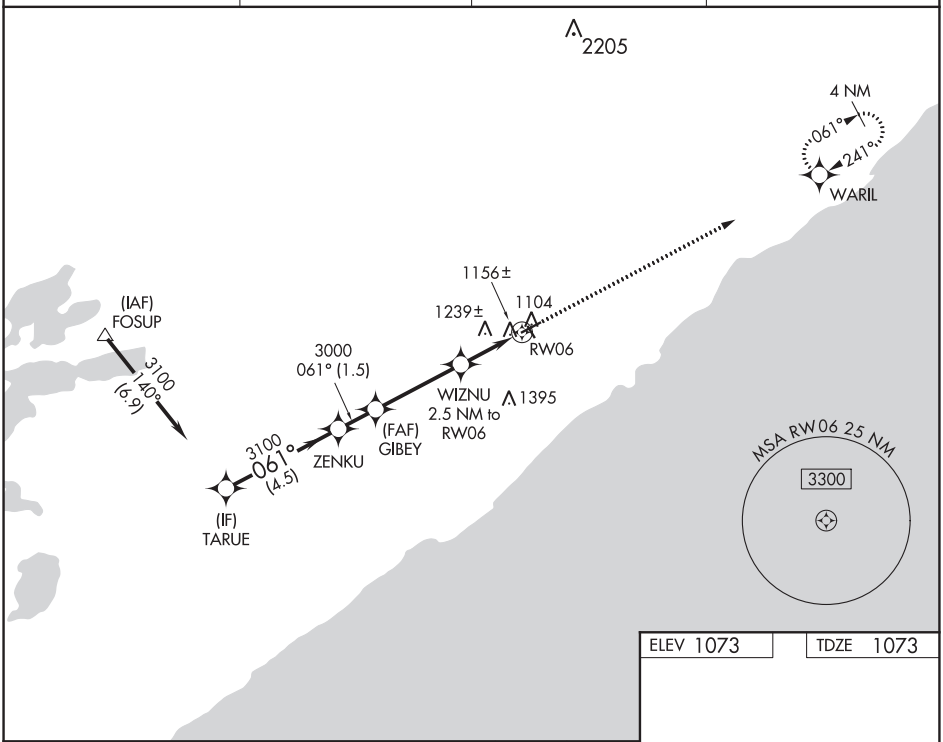
RNAV (GPS) RWY 6
RICHARD B HELGESON (TWM)

RNP APCH.

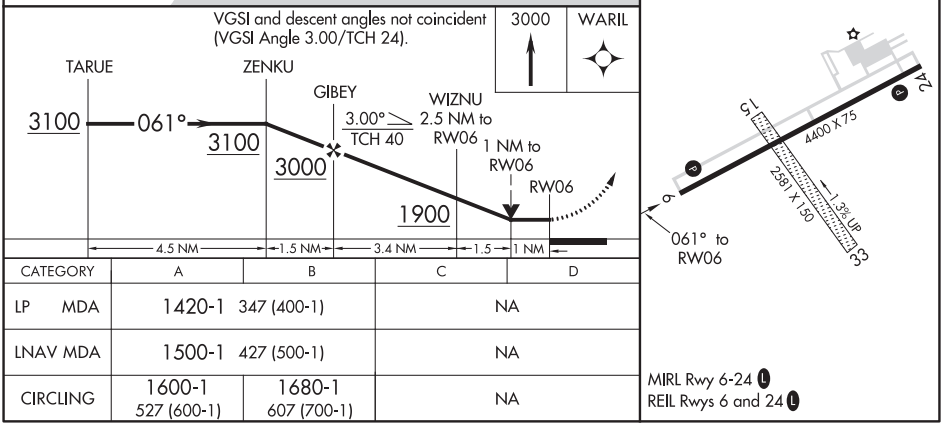
Rwy 6 helicopter visibility reduction below ¾ SM NA.
Circling Rwy 15, 33 NA.

MISSED APPROACH: Climb to 3000 direct WARIL and hold.

AWOS-3	DULUTH APP CON	GCO	CTAF
119.325	125.45 233.7	121.725	122.9 L



ELEV 1073 | TDZE 1073



CATEGORY	A	B	C	D
LP MDA	1420-1 347 (400-1)		NA	
LNAV MDA	1500-1 427 (500-1)		NA	
CIRCLING	1600-1 527 (600-1)	1680-1 607 (700-1)	NA	

NC-1, 25 FEB 2021 to 22 APR 2021
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WAAS CH 90521 W24A	APP CRS 241°	Rwy ldg 4400 TDZE 1073 Apt Elev 1073

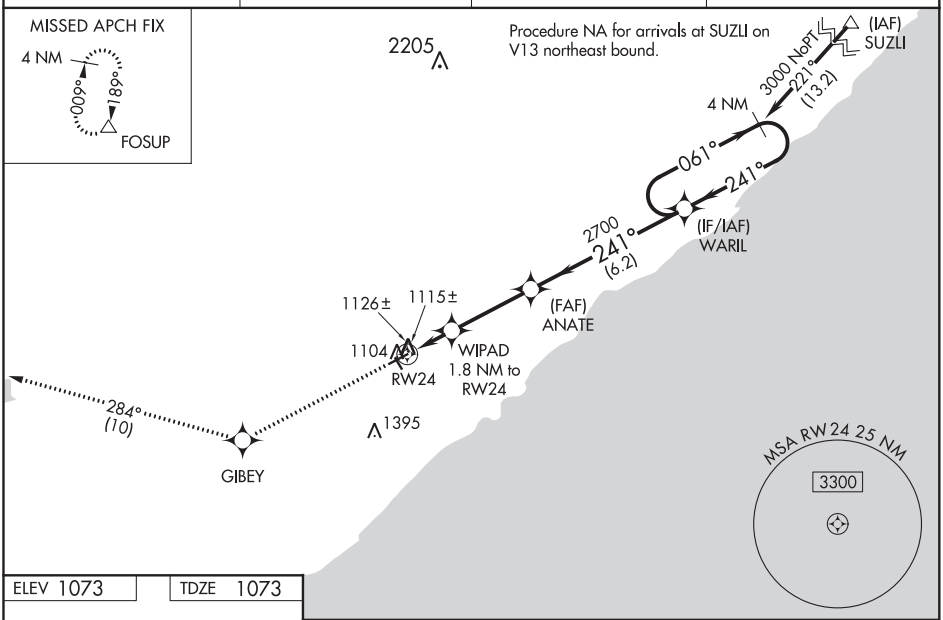
RNAV (GPS) RWY 24
RICHARD B HELGESON (TWM)

RNP APCH.

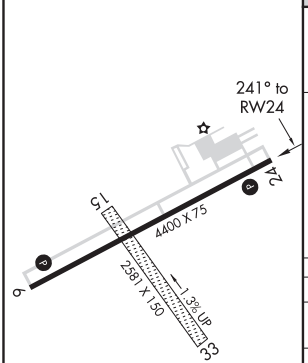
Baro-VNAV NA when using Silver Bay Muni altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. When local altimeter setting not received, use Silver Bay Muni altimeter setting and increase all DA 44 feet and all MDA 60 feet. Increase LPV and LNAV/VNAV Cats A/B visibility ⅛ mile. Rwy 24 helicopter visibility reduction below ¾ SM NA. VDP NA with Silver Bay Muni altimeter setting. Circling to Rwy 15, 33 NA.

MISSED APPROACH: Climb to 3600 direct GIBEY and on track 284° to FOSUP and hold.

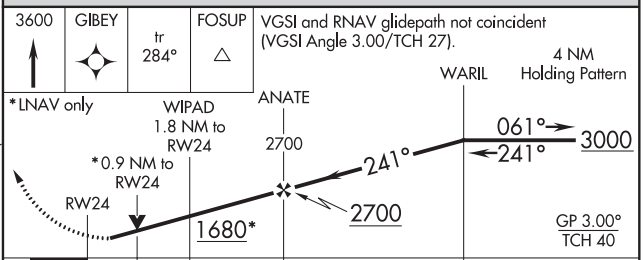
AWOS-3	DULUTH APP CON	GCO	CTAF
119.325	125.45 233.7	121.725	122.9 L



ELEV 1073	TDZE 1073



MIRL Rwy 6-24 L
REIL Rwys 6 and 24 L



CATEGORY	A	B	C	D
LPV DA	1323-⅞ 250 (300-⅞)		NA	
LNAV/VNAV DA	1323-⅞ 250 (300-⅞)		NA	
LNAV MDA	1380-1 307 (400-1)		NA	
CIRCLING	1600-1 527 (600-1)	1680-1 607 (700-1)	NA	

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VALLEY CITY, NORTH DAKOTA | AL-6808 (FAA) | 20086

WAAS CH 70618 W13A	APP CRS 127°	Rwy ldg 4202 TDZE 1402 Apt Elev 1402

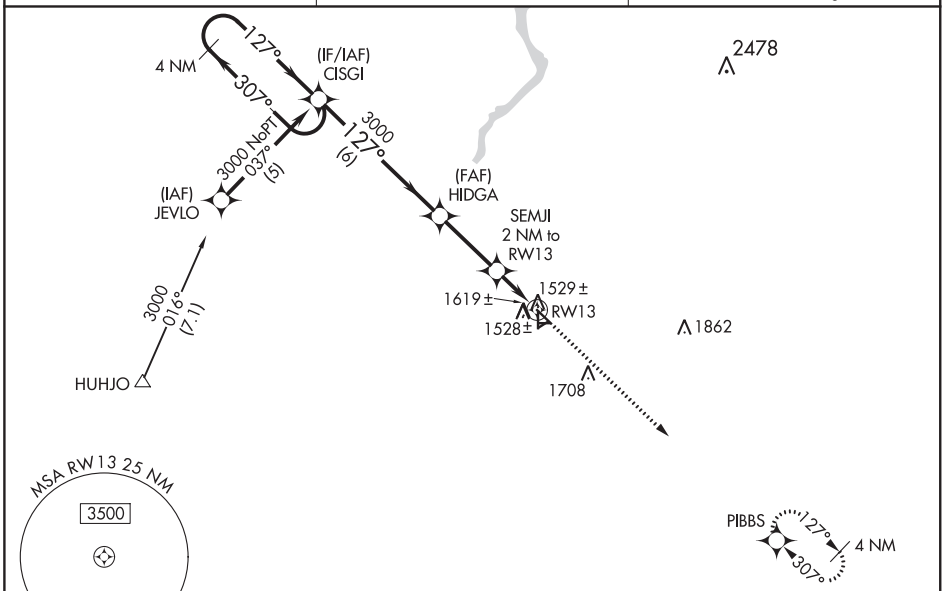
RNAV (GPS) RWY 13
BARNES COUNTY MUNI (BAC)

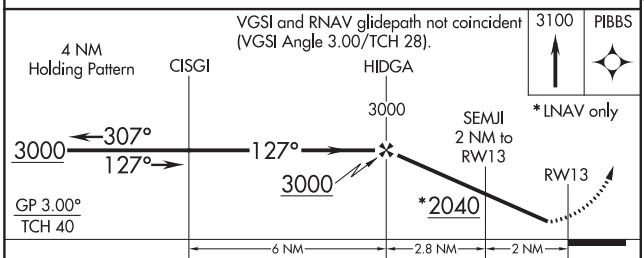
RNP APCH.

Baro-VNAV NA when using Jamestown altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. When local altimeter setting not received, use Jamestown altimeter setting and increase all DA 77 feet and all MDA 80 feet, increase LPV all Cats, LNAV/VNAV all Cats and LNAV Cat C visibility ¼ mile, and increase Circling Cat C visibility ½ mile. Circling NA to Rwys 5, 8, 17, 23, 26 and 35. Rwy 13 helicopter visibility reduction below ¾ SM NA.

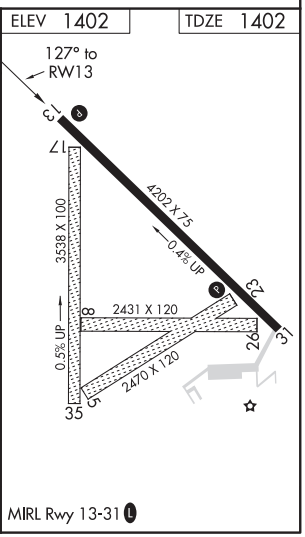
MISSED APPROACH: Climb to 3100 direct PIBBS and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.725	124.2 270.3	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1652-1 250 (300-1)			NA
LNAV/VNAV DA	1889-1¾ 487 (500-1¾)			NA
LNAV MDA	1880-1 478 (500-1)		1880-1¼ 478 (500-1¼)	NA
CIRCLING	1920-1 518 (600-1)	2000-1 598 (600-1)	2000-1½ 598 (600-1½)	NA



VALLEY CITY, NORTH DAKOTA
Orig-A 05DEC19

46°56'N-98°01'W

BARNES COUNTY MUNI (BAC)
RNAV (GPS) RWY 13

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 65918 W31A	APP CRS 307°	Rwy ldg 4202 TDZE 1394 Apt Elev 1402

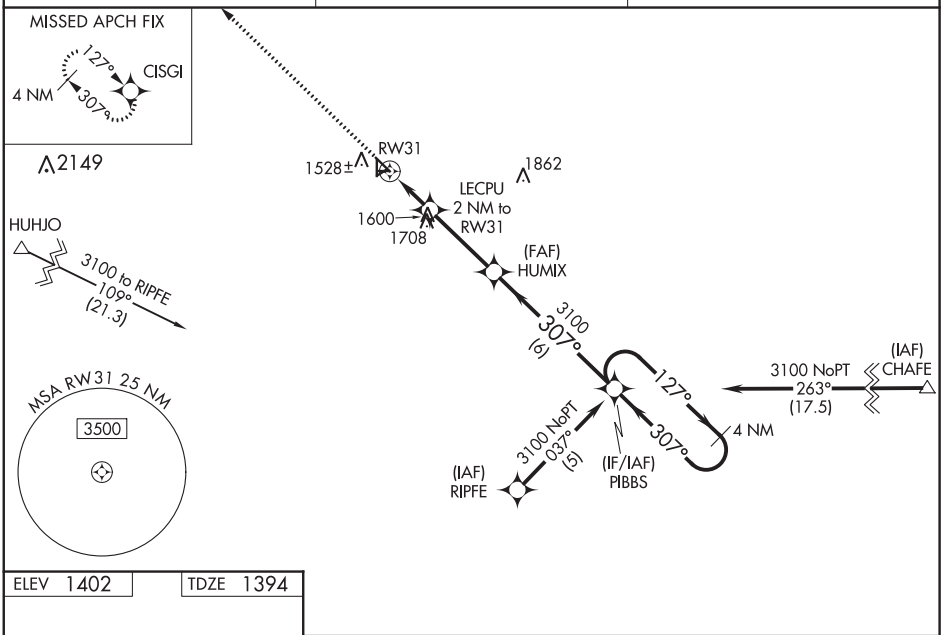
RNAV (GPS) RWY 31
BARNES COUNTY MUNI (BAC)

RNP APCH.

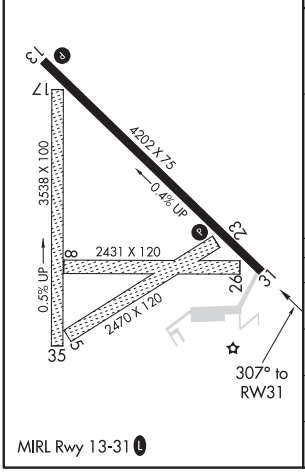
Baro-VNAV NA when using Jamestown altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. When local altimeter setting not received, use Jamestown altimeter setting and increase LPV DA 77 feet and LNAV/VNAV DA 227 feet, and all MDA 80 feet; increase LPV all Cats visibility ¼ mile, LNAV/VNAV all Cats visibility ¾ mile and increase Circling Cat C visibility ½ mile. Circling NA to Rwys 5, 8, 17, 23, 26, and 35. Rwy 31 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3000 direct CISGI and hold.

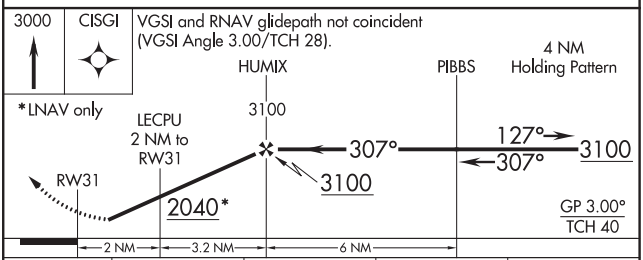
AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.725	124.2 270.3	122.8 (CTAF) L



ELEV 1402 TDZE 1394



MIRL Rwy 13-31 L



CATEGORY	A	B	C	D
LPV DA	1644-1 250 (300-1)			NA
LNAV/VNAV DA	1717-1¼ 323 (400-1¼)			NA
LNAV MDA	1900-1 506 (500-1)		1900-1½ 506 (500-1½)	NA
CIRCLING	1920-1 518 (600-1)	2000-1 598 (600-1)	2000-1½ 598 (600-1½)	NA

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

VERMILLION, SOUTH DAKOTA | AL-6946 (FAA) | 21056

WAAS CH 72836 W12A	APP CRS 123°	Rwy ldg 4105 TDZE 1147 Apt Elev 1147

RNAV (GPS) RWY 12
HAROLD DAVIDSON FIELD (VMR)

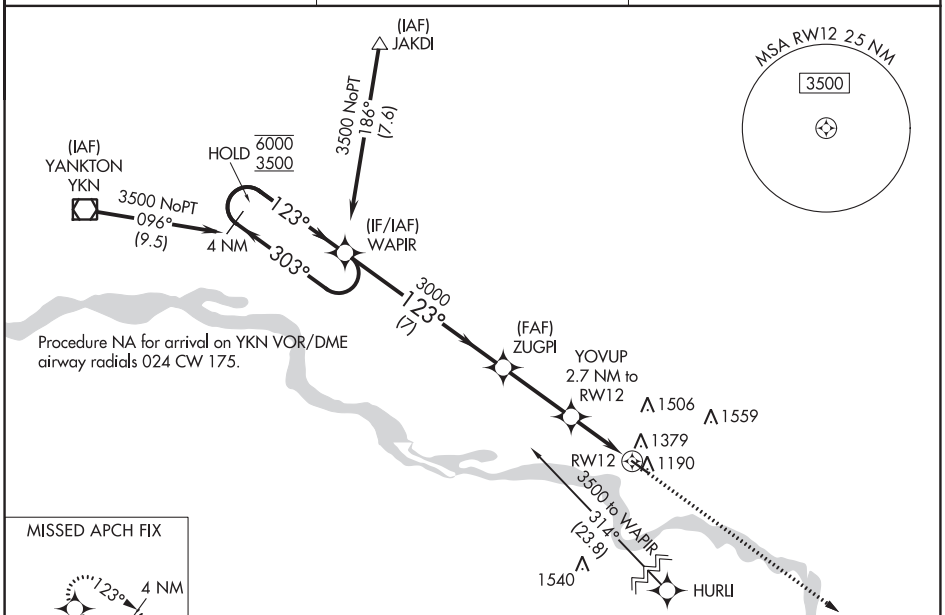
RNP APCH.

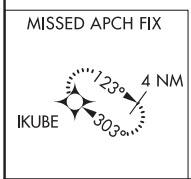
T
A NA

Baro-VNAV NA.
Use Yankton altimeter setting.

MISSED APPROACH:
Climb to 3500 direct IKUBE and hold.

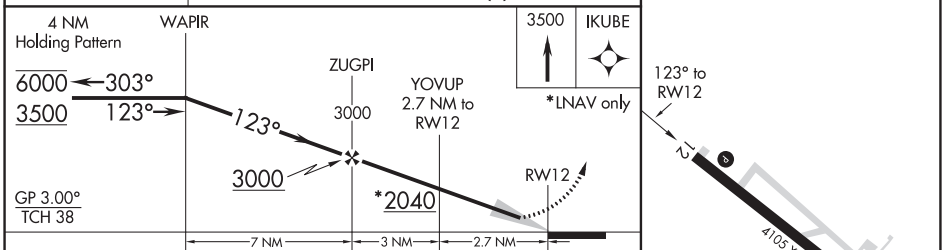
YKN AWOS-3PT	SIOUX CITY APP CON *	AUNICOM
119.05	124.6 307.0	122.8 (CTAF) L





ELEV 1147 | TDZE 1147

2465



CATEGORY	A	B	C	D
LPV DA	1470-1 323 (400-1)			NA
LNAV/VNAV DA	1659-1½ 512 (600-1½)			NA
LNAV MDA	1700-1 553 (600-1)		1700-1⅝ 553 (600-1⅝)	NA
C CIRCLING	1760-1 613 (700-1)		1900-2¼ 753 (800-2¼)	NA

NC-1, 25 FEB 2021 to 22 APR 2021
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WAAS CH 53614 W30A	APP CRS 303°	Rwy ldg 4105 TDZE 1147 Apt Elev 1147

RNAV (GPS) RWY 30
HAROLD DAVIDSON FIELD (VMR)

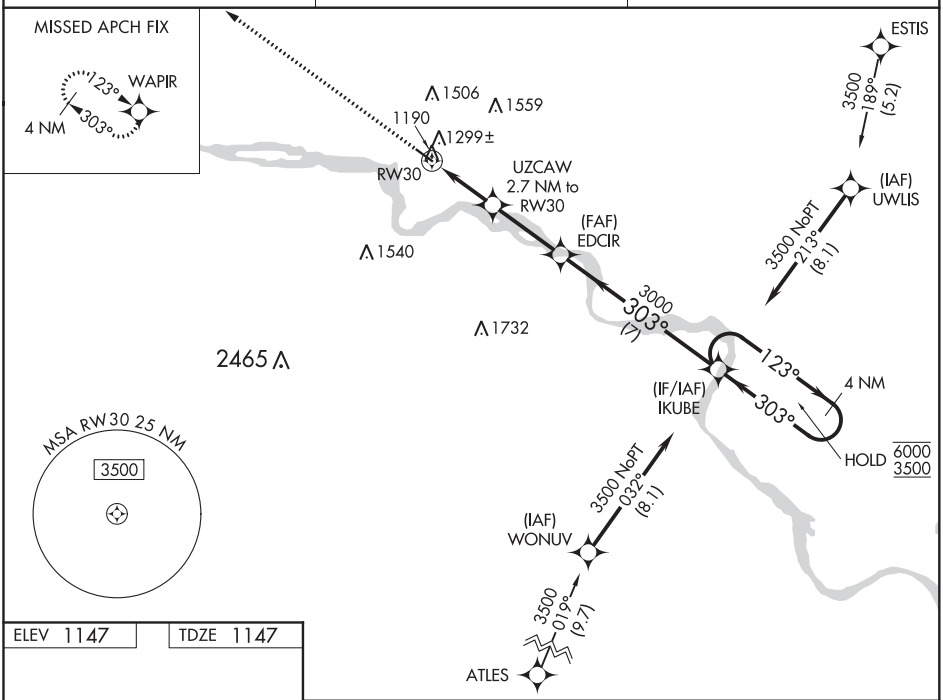
RNP APCH.

T A NA

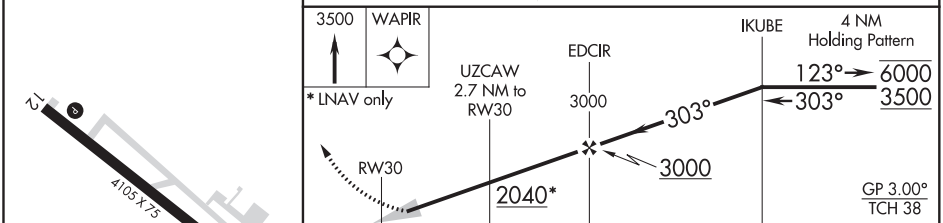
Baro-VNAV NA.
Use Yankton altimeter setting.

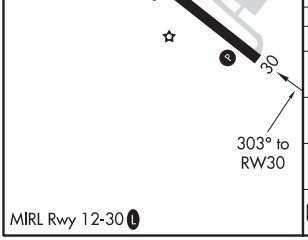
MISSED APPROACH: Climb to 3500 direct WAPIR and hold.

YKN AWOS-3PT	SIOUX CITY APP CON ★	AUNICOM
119.05	124.6 307.0	122.8 (CTAF) L



ELEV 1147 TDZE 1147





CATEGORY	A	B	C	D
LPV DA	1470-1 323 (400-1)			NA
LNAV/VNAV DA	1487-1 340 (400-1)			NA
LNAV MDA	1580-1 433 (500-1)		1580-1¼ 433 (500-1¼)	NA
C CIRCLING	1760-1 613 (700-1)		1900-2¼ 753 (800-2¼)	NA

MIRL Rwy 12-30 L

NC-1, 25 FEB 2021 to 22 APR 2021

WADENA, MINNESOTA

AL-9365 (FAA)

20254

RNAV (GPS) RWY 16

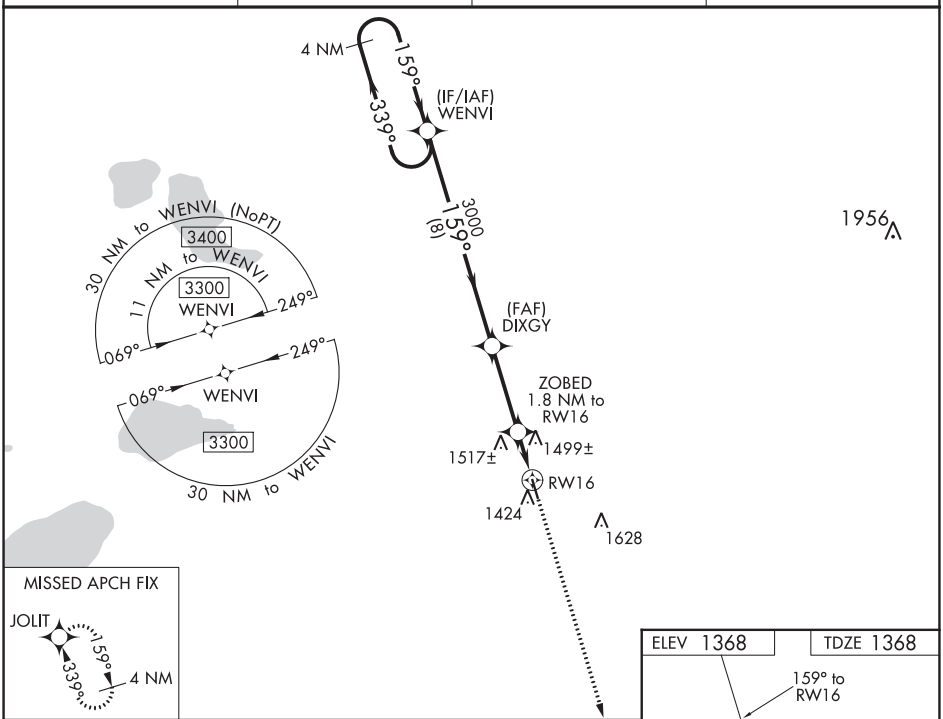
WADENA MUNI (ADC)

WAAS CH 58033 W16A	APP CRS 159°	Rwy ldg 4007 TDZE 1368 Apt Elev 1368

DME/DME RNP- 0.3 NA. Helicopter visibility reduction below 1 SM NA. VDP and Baro-VNAV NA with Staples altimeter setting. When local altimeter setting not received, use Staples altimeter setting and increase all DA 52 feet and all MDA 60 feet, increase LNAV/VNAV visibility ⅛ mile, LNAV Cat C visibility ¼ mile and Circling Cat C visibility ¼ mile. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (1°F) or above 54°C (130°F).

MISSED APPROACH: Climb to 3300 direct JOLIT and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
128.325	126.1 269.2	121.725	122.8 (CTAF) L



CATEGORY	A	B	C	D
LPV DA	1631-1 263 (300-1)			NA
LNAV/VNAV DA	1767-1⅜ 399 (400-1⅜)			NA
LNAV MDA	1760-1 392 (400-1)		1760-1⅛ 392 (400-1⅛)	NA
C CIRCLING	1780-1 412 (500-1)	1820-1 452 (500-1)	1940-1½ 572 (600-1½)	NA

MIRL Rwy 16-34 L
REIL Rwys 16 and 34 L

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

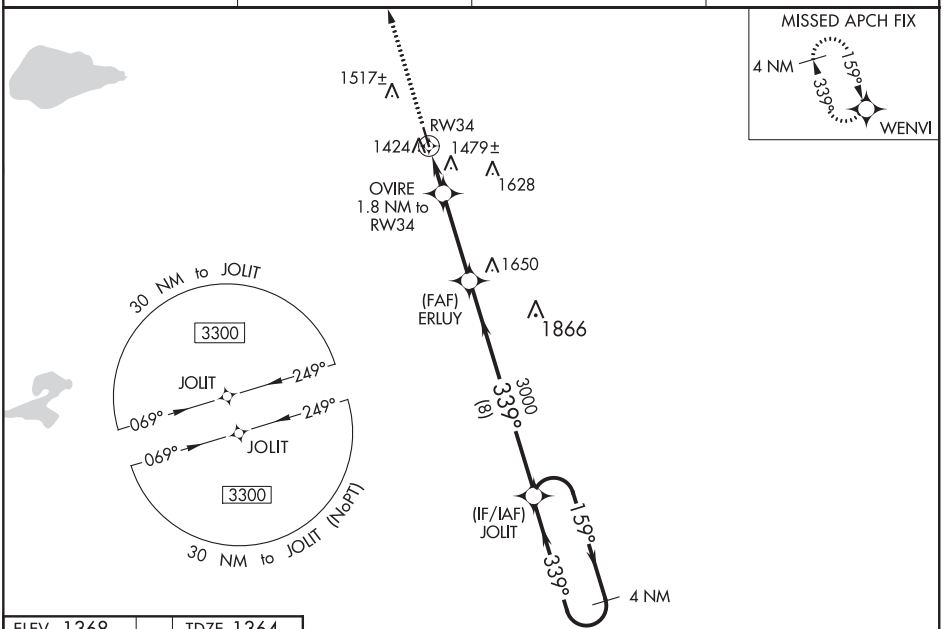
WAAS CH 70633 W34A	APP CRS 339°	Rwy ldg 4007 TDZE 1364 Apt Elev 1368

RNAV (GPS) RWY 34
WADENA MUNI (ADC)

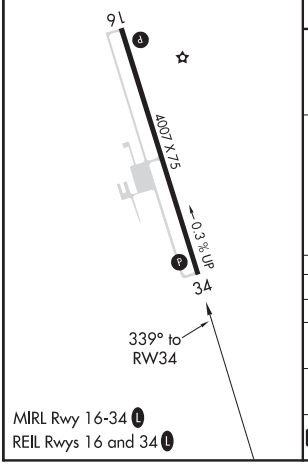
DME/DME RNP-0.3 NA. VDP and Baro-VNAV NA with Staples altimeter setting. When local altimeter setting not received, use Staples altimeter setting and increase all DA 52 feet and all MDA 60 feet, increase LNAV/VNAV visibility ⅛ mile, LNAV Cat C visibility ¼ mile and Circling Cat C visibility ¼ mile. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (1°F) or above 54°C (130°F).

MISSED APPROACH: Climb to 3300 direct WENVI and hold.

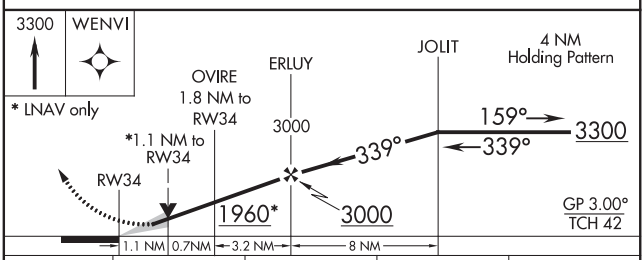
AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
128.325	126.1 269.2	121.725	122.8 (CTAF) L



ELEV 1368 TDZE 1364



MIRL Rwy 16-34 L
REIL Rwys 16 and 34 L



CATEGORY	A	B	C	D
LPV DA	1614-1 250 (300-1)			NA
LNAV/VNAV DA	1791-1½ 427 (500-1½)			NA
LNAV MDA	1740-1 376 (400-1)		1740-1⅛ 376 (400-1⅛)	NA
C CIRCLING	1780-1 412 (500-1)	1820-1 452 (500-1)	1940-1½ 572 (600-1½)	NA

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

WAGNER, SOUTH DAKOTA AL-10429 (FAA) 19339

WAAS CH 53334 W09A	APP CRS 090°	Rwy ldg 3500 TDZE 1478 Apt Elev 1478

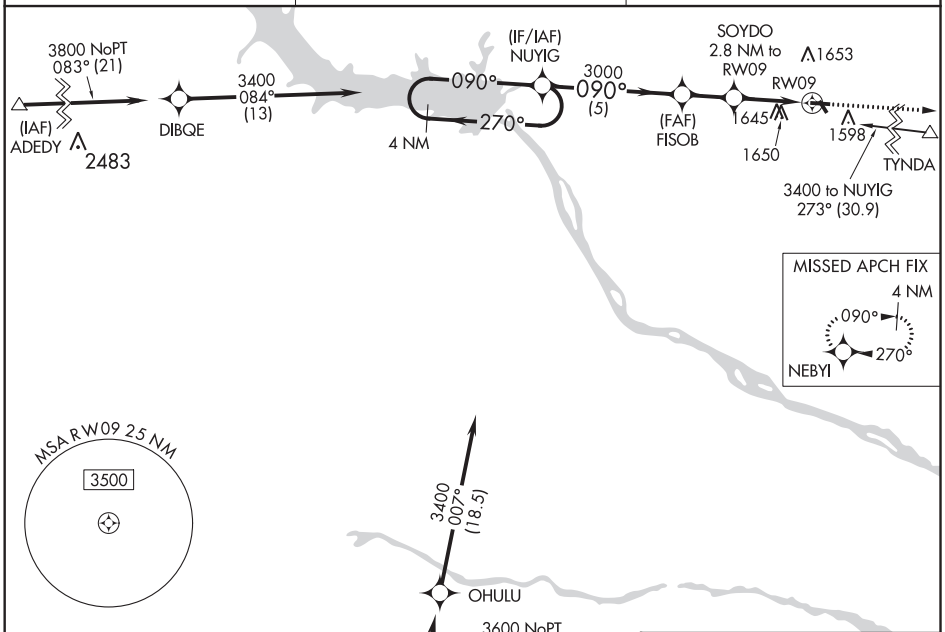
RNAV (GPS) RWY 9
WAGNER MUNI (AGZ)

T NA

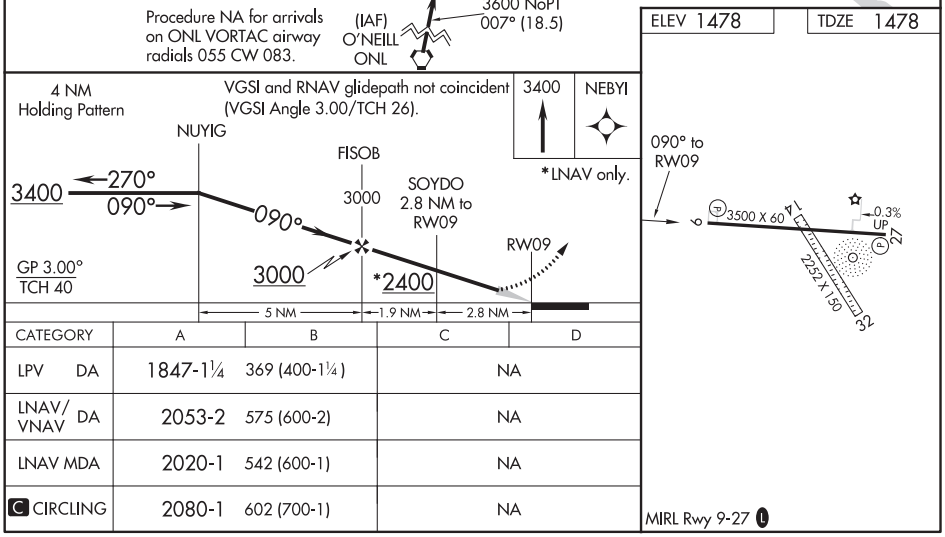
Circling NA to Rwys 14 and 32. Baro-VNAV NA. DME/DME RNP-0.3 NA. Use Yankton altimeter setting; when not received use O'Neill altimeter setting and increase all DA 51 feet, all MDA 60 feet and increase LPV all Cats visibility ⅛ mile, and LNAV/VNAV all Cats visibility ½ mile.

MISSED APPROACH: Climb to 3400 direct NEBYI and hold.

YKN AWOS-3PT	MINNEAPOLIS CENTER	AUNICOM
119.05	128.0 257.95	122.8 (CTAF) L



Procedure NA for arrivals on ONL VORTAC airway radials 055 CW 083.



CATEGORY	A	B	C	D
LPV DA	1847-1¼	369 (400-1¼)	NA	
LNAV/VNAV DA	2053-2	575 (600-2)	NA	
LNAV MDA	2020-1	542 (600-1)	NA	
C CIRCLING	2080-1	602 (700-1)	NA	

MIRL Rwy 9-27 L

NC-1, 25 FEB 2021 to 22 APR 2021

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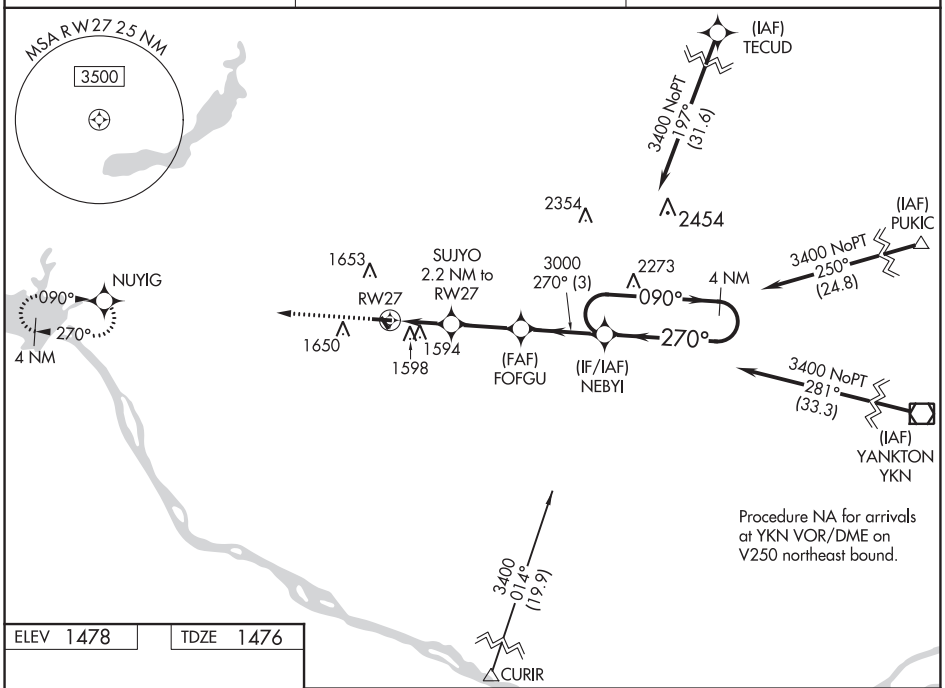
WAAS CH 40134 W27A	APP CRS 270°	Rwy ldg 3500 TDZE 1476 Apt Elev 1478

RNAV (GPS) RWY 27
WAGNER MUNI (AGZ)

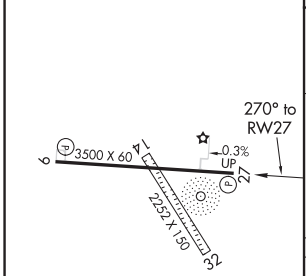
T A NA Baro-VNAV NA. DME/DME RNP-0.3 NA. Use Yankton altimeter setting; when not received, use O'Neill altimeter setting and increase all DA 51 feet, all MDA 60 feet and increase LPV all Cats and LNAV/VNAV all Cats visibility ⅛ mile. Rwy 27 helicopter visibility reduction below ¾ SM NA. Circling NA to Rwys 14 and 32.

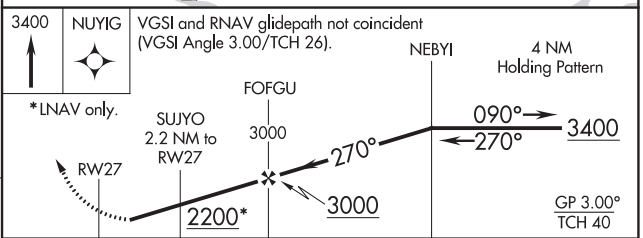
MISSED APPROACH: Climb to 3400 direct NUYIG and hold.

YKN AWOS-3PT	MINNEAPOLIS CENTER	AUNICOM
119.05	128.0 257.95	122.8 (CTAF) L



ELEV 1478 TDZE 1476





CATEGORY	A	B	C	D
LPV DA	1845-1¼	369 (400-1¼)	NA	
LNAV/VNAV DA	2004-1⅞	528 (600-1⅞)	NA	
LNAV MDA	1980-1	504 (600-1)	NA	
C CIRCLING	2080-1	602 (700-1)	NA	

MIRL Rwy 9-27 L

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WAHPETON, NORTH DAKOTA

AL-6654 (FAA)

20086

RNAV (GPS) RWY 15

HARRY STERN (BWP)

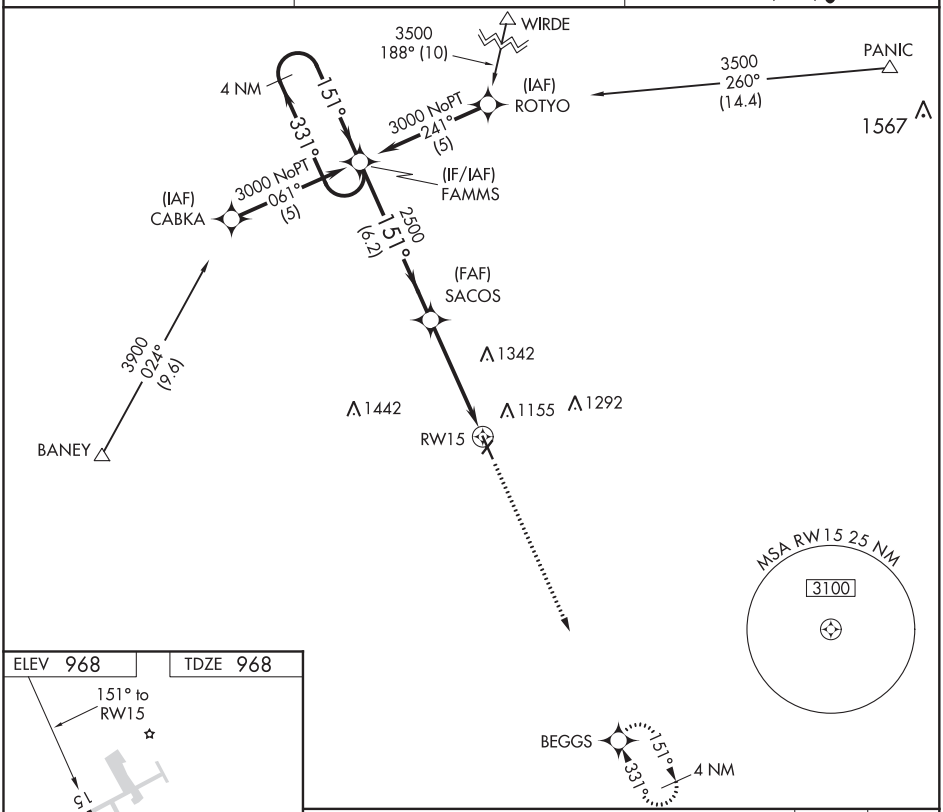
APP CRS	Rwy ldg	5100
151°	TDZE	968
	Apt Elev	968

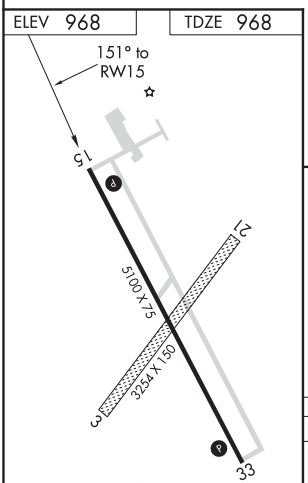
T ANA

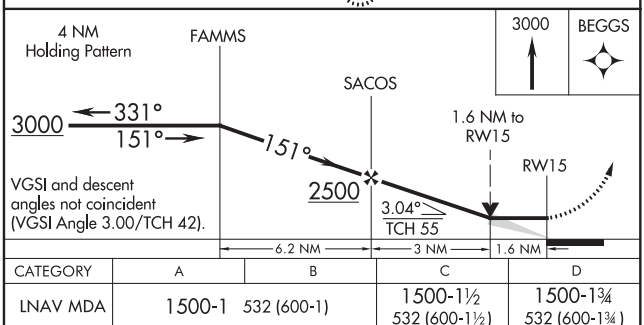
DME/DME RNP-0.3 NA. Circling to Rwy 3/21 NA at night.
If local altimeter setting not received, use Fergus Falls, MN altimeter setting and increase all MDAs 80 feet.
VDP NA when using Fergus Falls, MN altimeter setting.

MISSED APPROACH: Climb to 3000 direct BEGGS and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
127.875	127.35 278.3	123.0 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	1500-1 532 (600-1)		1500-1½ 532 (600-1½)	1500-1¾ 532 (600-1¾)
CIRCLING	1520-1 552 (600-1)		1520-1½ 552 (600-1½)	1560-2 592 (600-2)

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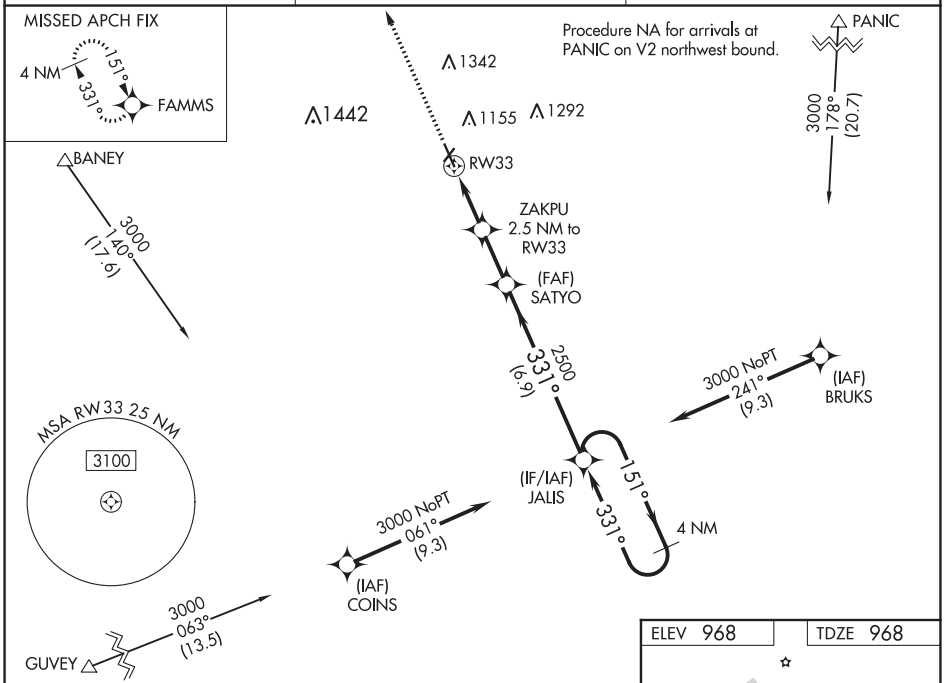
WAAS CH 77930 W33A	APP CRS 331°	Rwy ldg 5100 TDZE 968 Apt Elev 968

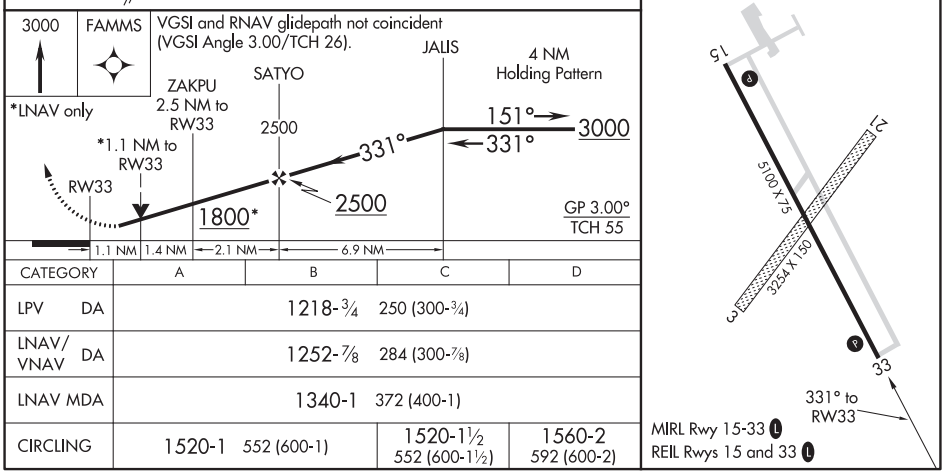
RNAV (GPS) RWY 33
HARRY STERN (BWP)

When VGSI inop, Circling Rwy 15 NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Fergus Falls altimeter setting and increase all DA/MDA 80 feet and all visibility ⅜ mile. Baro-VNAV and VDP NA when using Fergus Falls altimeter setting.

MISSED APPROACH: Climb to 3000 direct FAMMS and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
127.875	127.35 278.3	123.0 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1218-¾ 250 (300-¾)			
LNAV/VNAV DA	1252-⅞ 284 (300-⅞)			
LNAV MDA	1340-1 372 (400-1)			
CIRCLING	1520-1 552 (600-1)		1520-1½ 552 (600-1½)	1560-2 592 (600-2)

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WALHALLA, NORTH DAKOTA AL-9442 (FAA) 19115

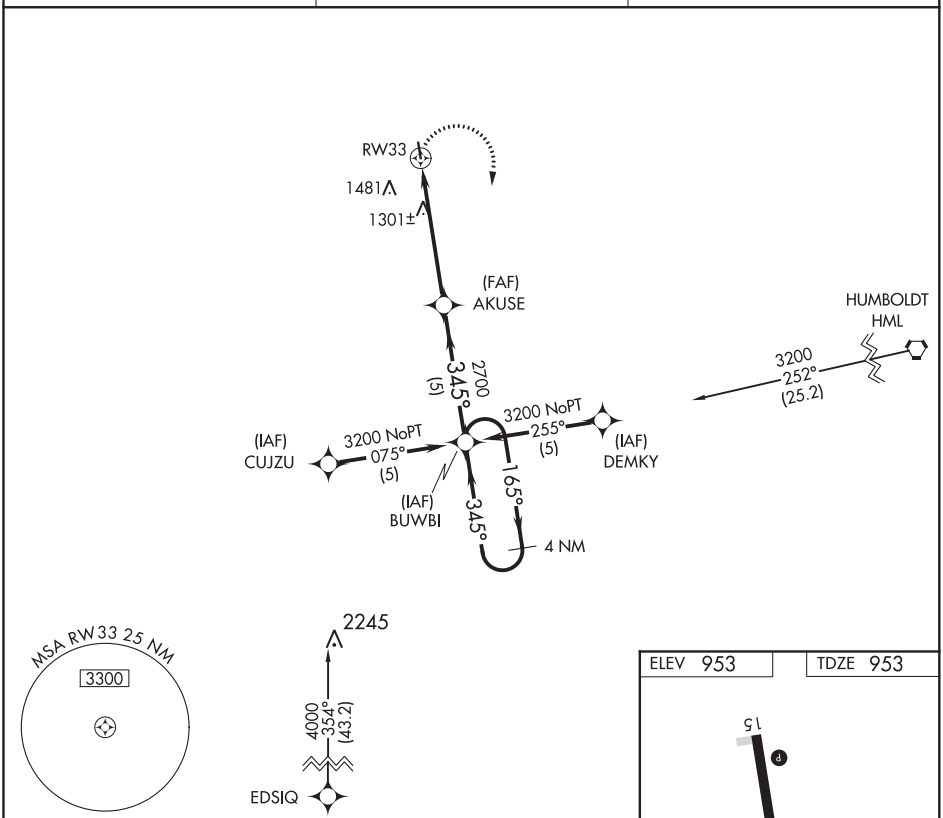
RNAV (GPS) RWY 33
WALHALLA MUNI (96D)

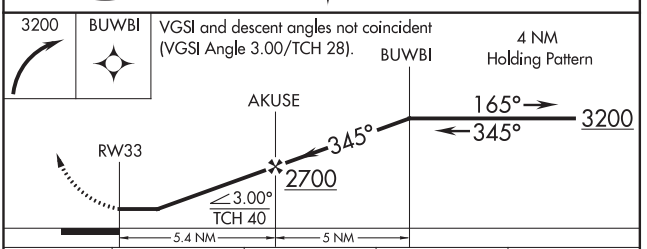
APP CRS	Rwy ldg	3400
345°	TDZE	953
	Apt Elev	953

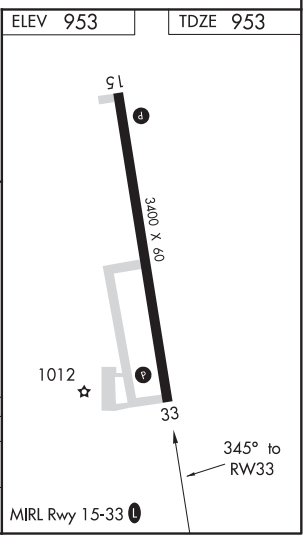
Use Hallock Muni altimeter setting.
DME/DME RNP-0.3 NA.
Helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climbing right turn to 3200 direct BUWBI WP and hold.

AWOS-3PT	MINNEAPOLIS CENTER	CTAF
118.175	132.15 269.6	122.9 L







CATEGORY	A	B	C	D
LNAV MDA	1680-1 727 (800-1)		NA	
CIRCLING	1680-1 727 (800-1)		NA	

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WAAS CH 73034 W15A	APP CRS 147°	Rwy ldg 3220 TDZE 1348 Apt Elev 1348

RNAV (GPS) RWY 15

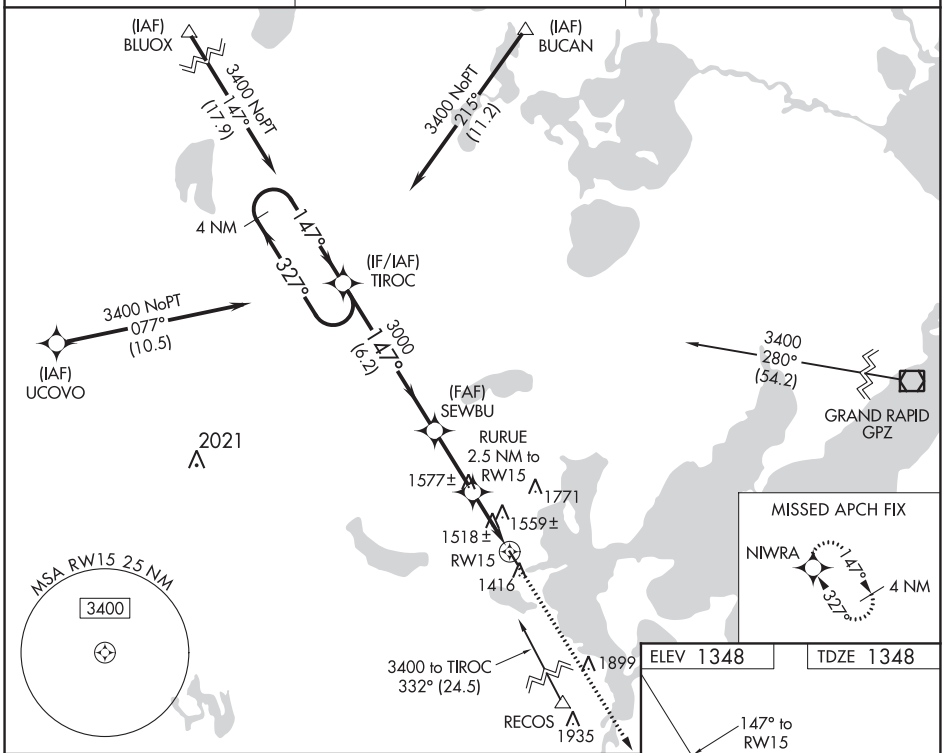
WALKER MUNI (Y49)

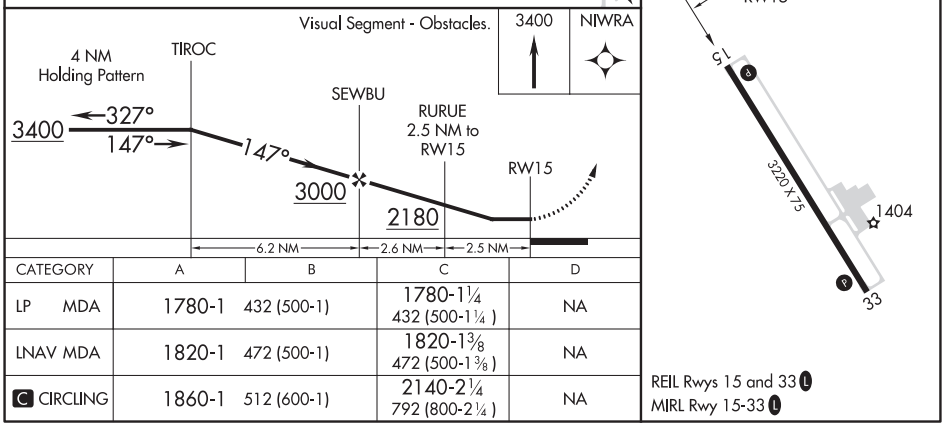
RNP APCH.

When local altimeter not received, use Longville altimeter setting and increase all MDA 60 feet; increase LP and LNAV Cat C visibility ⅛ SM and Circling Cat C visibility ¼ SM. Procedure NA at night. Rwy 15 helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 3400 direct NIWRA and hold.

AWOS-3PT	MINNEAPOLIS CENTER	CTAF
119.0	134.75 251.1	122.9 L





CATEGORY	A	B	C	D
LP MDA	1780-1	432 (500-1)	1780-1¼ 432 (500-1¼)	NA
LNAV MDA	1820-1	472 (500-1)	1820-1⅜ 472 (500-1⅜)	NA
C CIRCLING	1860-1	512 (600-1)	2140-2¼ 792 (800-2¼)	NA

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WALKER, MINNESOTA | AL-10403 (FAA) | 20310

RNAV (GPS) RWY 33

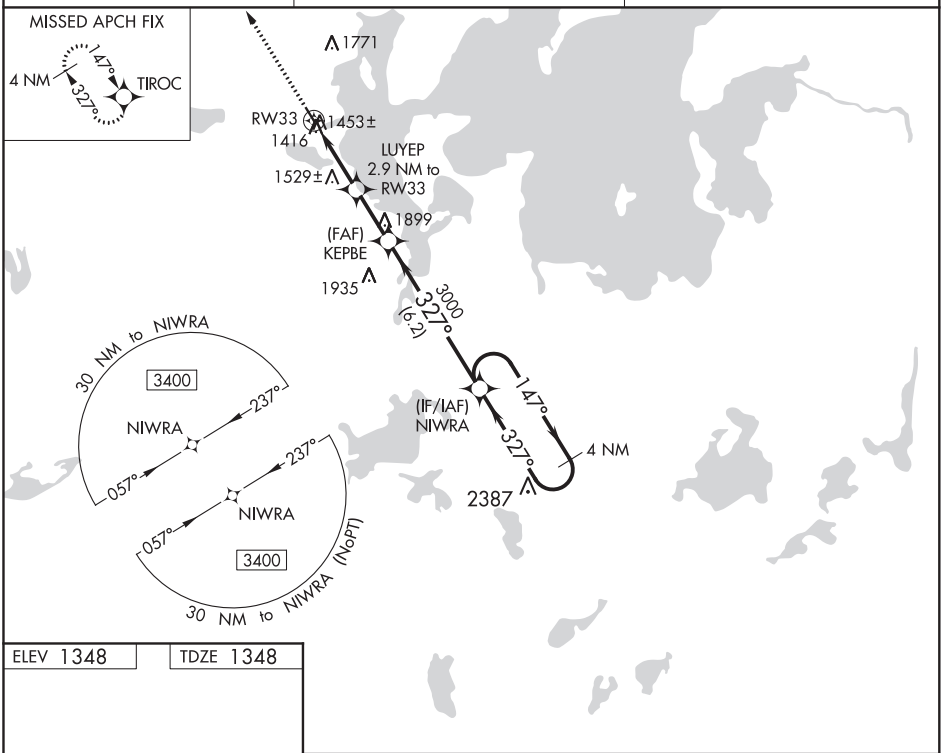
WALKER MUNI (Y49)

WAAS CH 82734 W33A	APP CRS 327°	Rwy ldg 3220 TDZE 1348 Apt Elev 1348

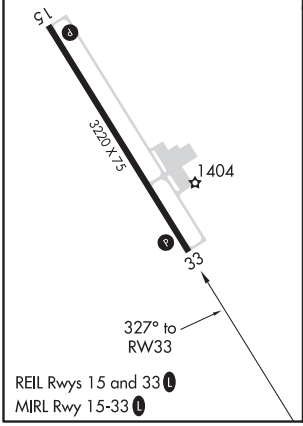
DME/DME RNP-0.3 NA. When local altimeter setting not received, use Longville altimeter setting and increase all MDA 60 feet; increase LP and Circling Cat C visibility ¼ SM; increase LNAV Cat C visibility ⅛ SM.
Procedure NA at night. Rwy 33 helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 3400 direct TIROC and hold.

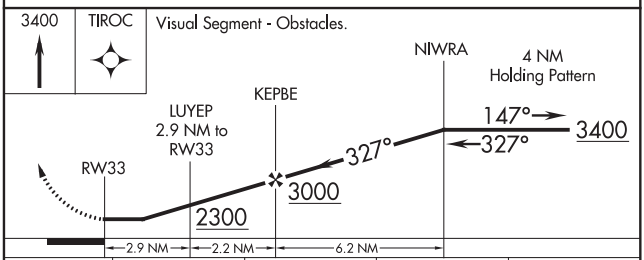
AWOS-3PT	MINNEAPOLIS CENTER	CTAF
119.0	134.75 251.1	122.9 L



ELEV 1348 | TDZE 1348



REIL Rwys 15 and 33 L
MIRL Rwy 15-33 L



CATEGORY	A	B	C	D
LP MDA	1720-1 372 (400-1)			NA
LNAV MDA	1780-1 432 (500-1)		1780-1¼ 432 (500-1¼)	NA
C CIRCLING	1860-1 512 (600-1)		2140-2¼ 792 (800-2¼)	NA

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APP CRS	Rwy ldg	3199
306°	TDZE	888
	Apt Elev	888

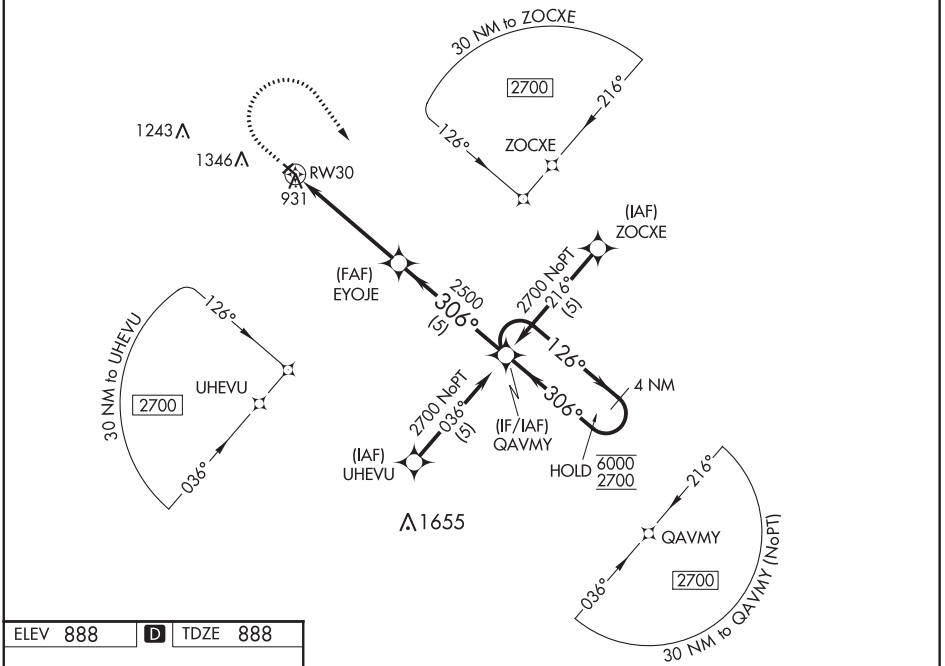
RNAV (GPS) RWY 30
WARREN MUNI (D37)

RNP APCH.

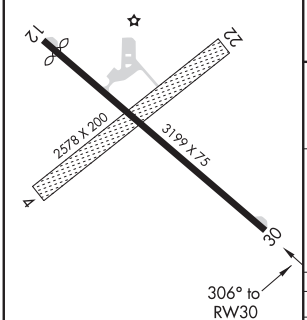
Circling NA to Rwys 4 and 22. Rwy 30 helicopter visibility reduction below ¾ SM NA. Use Crookston altimeter setting.

MISSED APPROACH: Climb to 2000 then climbing right turn to 2700 direct QAVMY and hold.

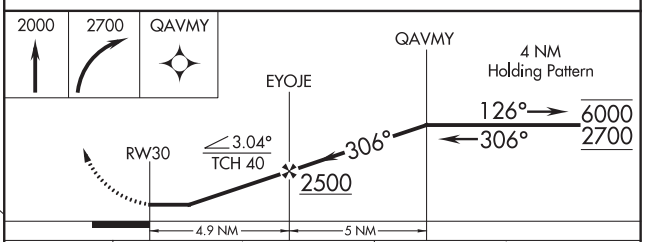
CROOKSTON MUNI-KIRKWOOD FIELD AWOS-3	GRAND FORKS APP CON	UNICOM
126.425	118.1 318.1	122.8 (CTAF)



ELEV 888 | D | TDZE 888



MIRL Rwy 12-30



CATEGORY	A	B	C	D
LNAV MDA	1480-1 592 (600-1)		NA	
CIRCLING	1480-1 592 (600-1)		NA	

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WARROAD, MINNESOTA | AL-6518 (FAA) | 20310

ILS or LOC RWY 31
WARROAD INTL MEMORIAL (RRT)

LOC/DME I-SWE	APP CRS	Rwy ldg	5400
110.1	315°	TDZE	1076
Chan 38		Apt Elev	1076

ADF required. RADAR required for procedure entry.

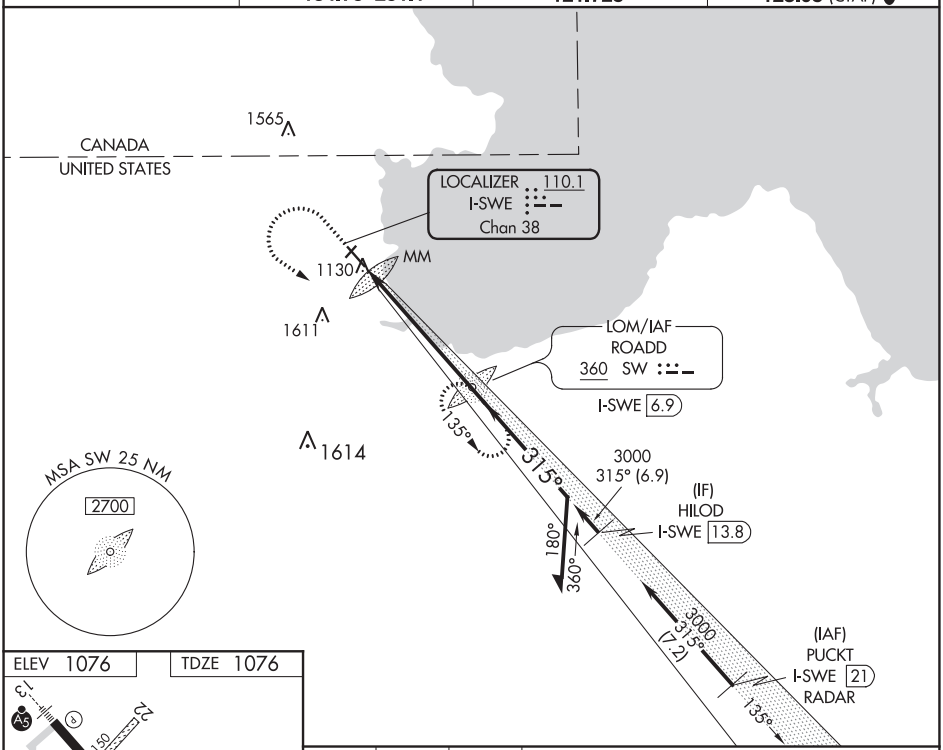
Circling NA to Rwys 4 and 22.
For inop ALS, increase S-LOC 31 Cat C/D visibility to 1⅜ SM.

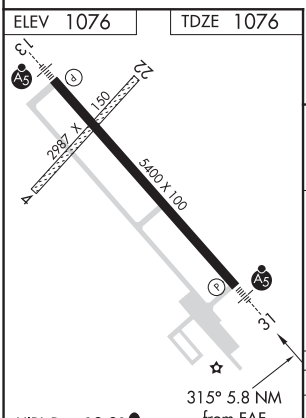
NA
-37°C

MALSR

MISSED APPROACH: Climb to 2900 then climbing left turn to 3000 direct ROADD LOM/I-SWE 6.9 DME and hold.

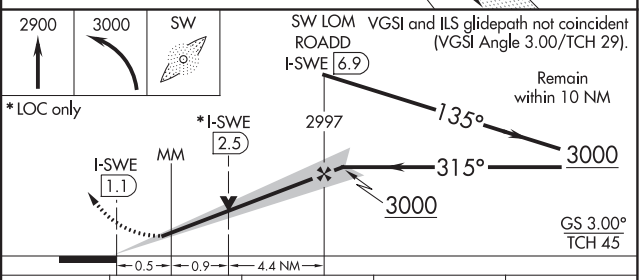
AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
119.925	134.75 251.1	121.725	123.05 (CTAF) L





HIRL Rwy 13-31 L
REIL Rwy 13 L

FAF to MAP 5.8 NM					
Knots	60	90	120	150	180
Min:Sec	5:48	3:52	2:54	2:19	1:56



CATEGORY	A	B	C	D
S-ILS 31	1276-½ 200 (200-½)			
S-LOC 31	1560-½ 484 (500-½)		1560-1 484 (500-1)	
C CIRCLING	1560-1 484 (500-1)		1960-2¾ 884 (900-2¾)	1960-3 884 (900-3)

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WAAS CH 69437 W13A	APP CRS 135°	Rwy ldg 5400 TDZE 1076 Apt Elev 1076

RNAV (GPS) RWY 13
WARROAD INTL MEMORIAL (RRT)

RNP APCH.

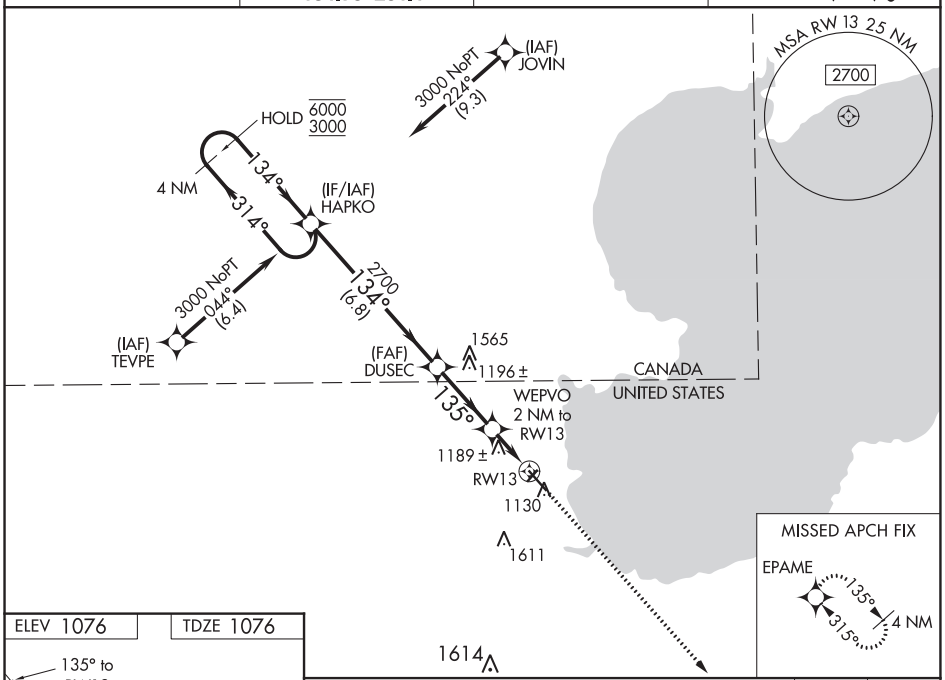
T
A
-37°C

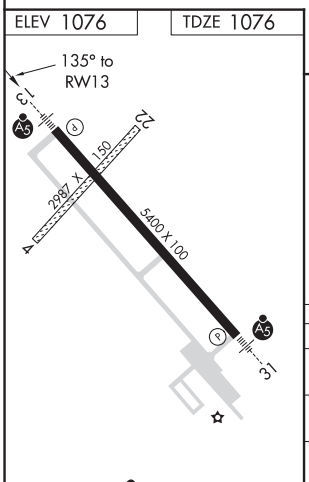
Circling NA to Rwys 4 and 22. Inop table does not apply. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C or above 54°C.

MALSR

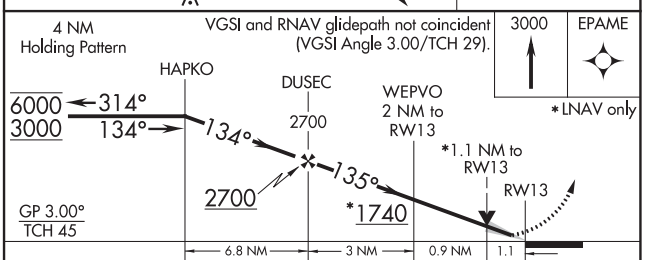
MISSED APPROACH: Climb to 3000 direct EPAME and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
119.925	134.75 251.1	121.725	123.05 (CTAF) L





HIRL Rwy 13-31 L
REIL Rwy 13 L



CATEGORY	A	B	C	D
LPV DA	1276-¾ 200 (200-¾)			
LNAV/VNAV DA	1365-1 289 (300-1)			
LNAV MDA	1440-1 364 (400-1)			
C CIRCLING	1500-1 424 (500-1)	1540-1 464 (500-1)	1960-2¾ 884 (900-2¾)	1960-3 884 (900-3)

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WARROAD, MINNESOTA

AL-6518 (FAA)

20310

RNAV (GPS) RWY 31
WARROAD INTL MEMORIAL (RRT)

WAAS CH 42706 W31A	APP CRS 315°	Rwy ldg 5400 TDZE 1076 Apt Elev 1076

RNP APCH.

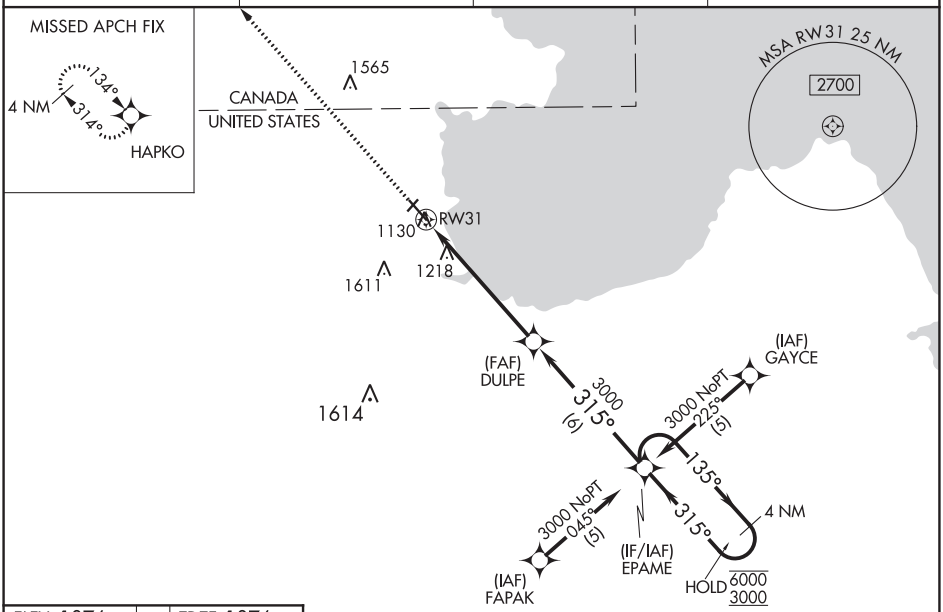
-37°C

Circling NA to Rwys 4 and 22. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. For inop ALS increase LNAV/VNAV all Cats visibility to 1 SM and LNAV Cat C/D visibility to 1⅛ SM.

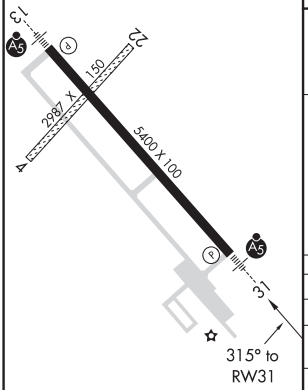
MALSR

MISSED APPROACH: Climb to 3000 direct HAPKO and hold.

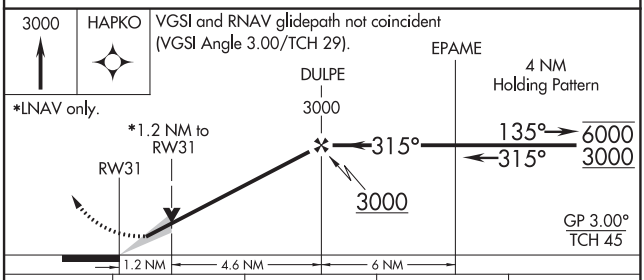
AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
119.925	134.75 251.1	121.725	123.05 (CTAF) L



ELEV 1076 | TDZE 1076



HIRL Rwy 13-31 L
REIL Rwy 13 L



CATEGORY	A	B	C	D
LPV DA	1326-½ 250 (300-½)			
LNAV/VNAV DA	1451-¾ 375 (400-¾)			
LNAV MDA	1480-½ 404 (500-½)		1480-¾ 404 (500-¾)	1480-1 404 (500-1)
C CIRCLING	1500-1 424 (500-1)	1540-1 464 (500-1)	1960-2¾ 884 (900-2¾)	1960-3 884 (900-3)

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RNAV (GPS) RWY 15
WASECA MUNI (ACQ)

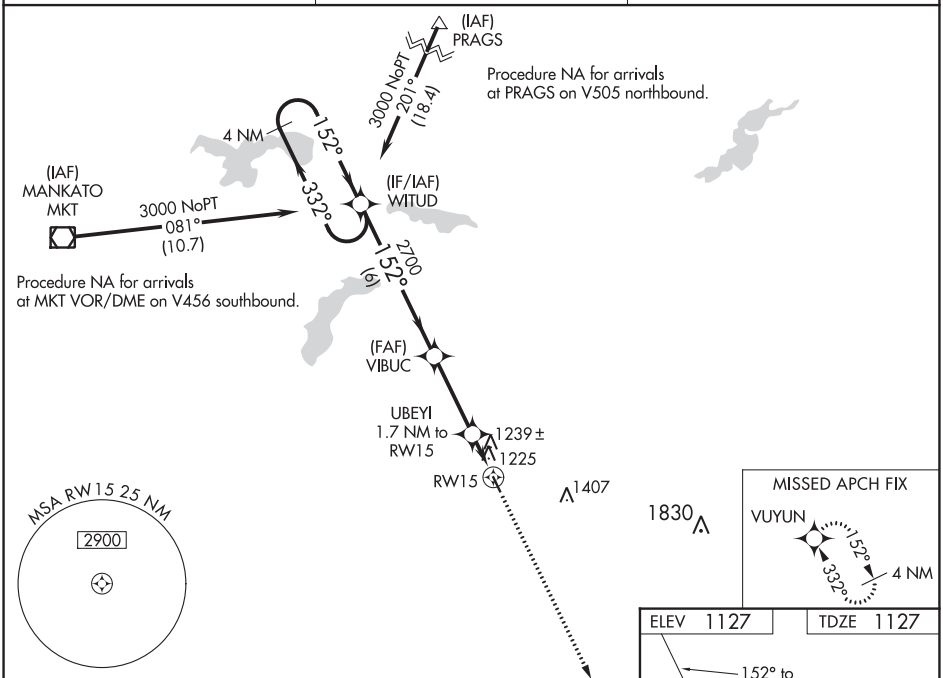
WAAS CH 70532 W15A	APP CRS 152°	Rwy ldg 3399	TDZE 1127	Apt Elev 1127

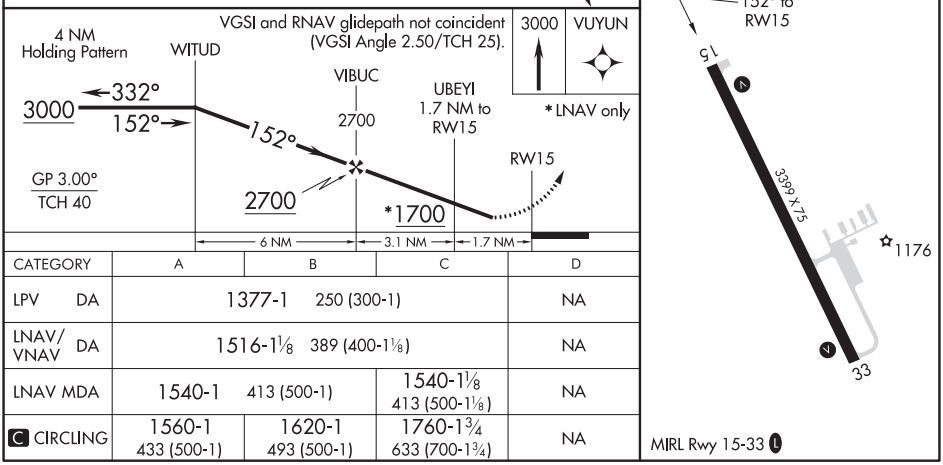
RNP APCH.

Baro-VNAV NA when using Owatonna altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. Procedure NA at night. When local altimeter setting not received, use Owatonna altimeter setting and increase all DA 34 feet and all MDAs 40 feet; increase LNAV/VNAV visibility all Cats ⅛ SM, LNAV and Circling Cat C visibility ¼ SM. Rwy 15 helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 3000 direct VUYUN and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.425	135.0 306.9	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1377-1 250 (300-1)			NA
LNAV/VNAV DA	1516-1⅛ 389 (400-1⅛)			NA
LNAV MDA	1540-1 413 (500-1)		1540-1⅛ 413 (500-1⅛)	NA
C CIRCLING	1560-1 433 (500-1)	1620-1 493 (500-1)	1760-1¾ 633 (700-1¾)	NA

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WASECA, MINNESOTA | AL-6150 (FAA) | 20198

RNAV (GPS) RWY 33

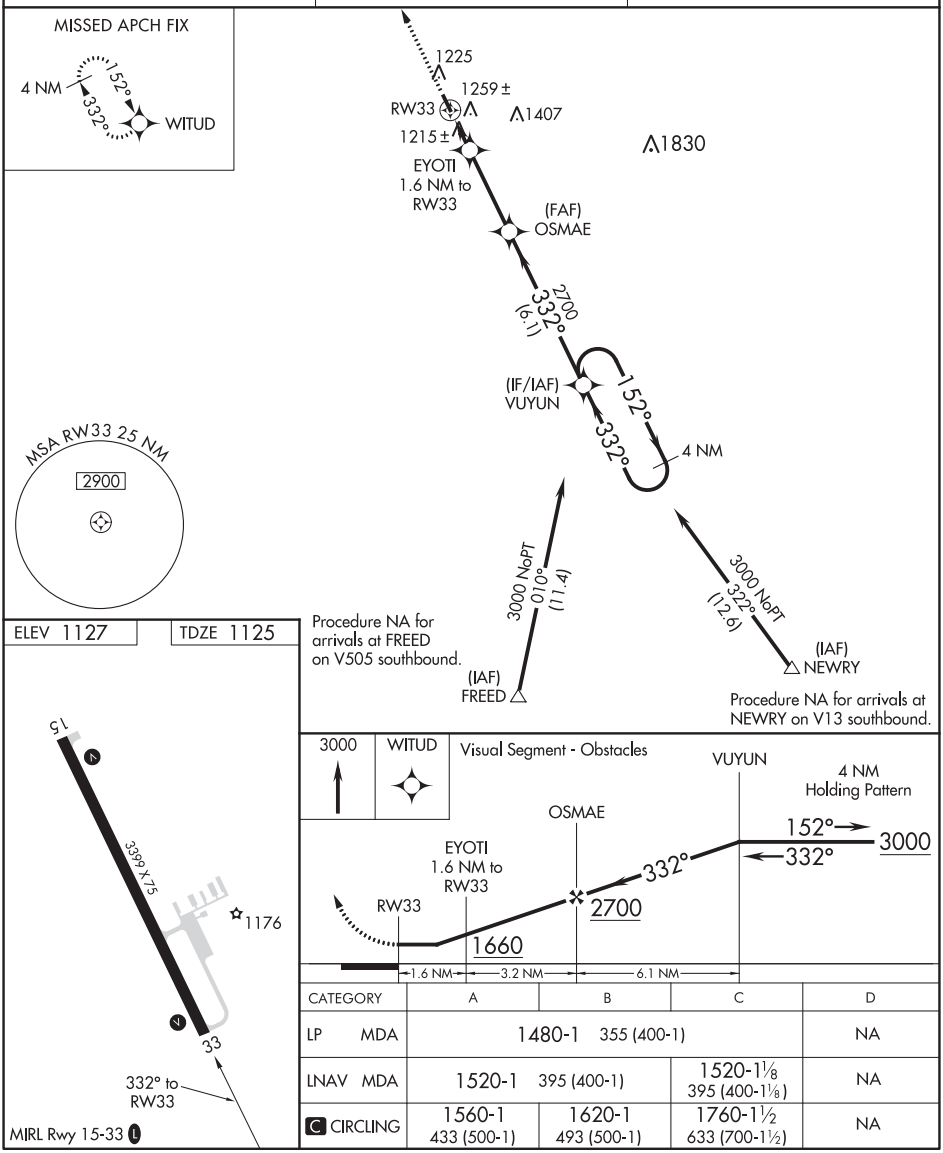
WASECA MUNI (ACQ)

WAAS CH 86532 W33A	APP CRS 332°	Rwy ldg 3399 TDZE 1125 Apt Elev 1127

When local altimeter setting not received, use Owatonna altimeter setting and increase all MDAs 40 feet, increase LP and LNAV Cat C visibility ⅛ mile and Circling Cat C visibility ⅛ mile. DME/DME RNP-0.3 NA. Procedure NA at night. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 3000 direct WITUD and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.425	135.0 306.9	122.8 (CTAF) L



CATEGORY	A	B	C	D
LP MDA	1480-1 355 (400-1)			NA
LNAV MDA	1520-1 395 (400-1)		1520-1⅛ 395 (400-1⅛)	NA
C CIRCLING	1560-1 433 (500-1)	1620-1 493 (500-1)	1760-1½ 633 (700-1½)	NA

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

ILS or LOC RWY 35
WATERTOWN RGNL (ATY)

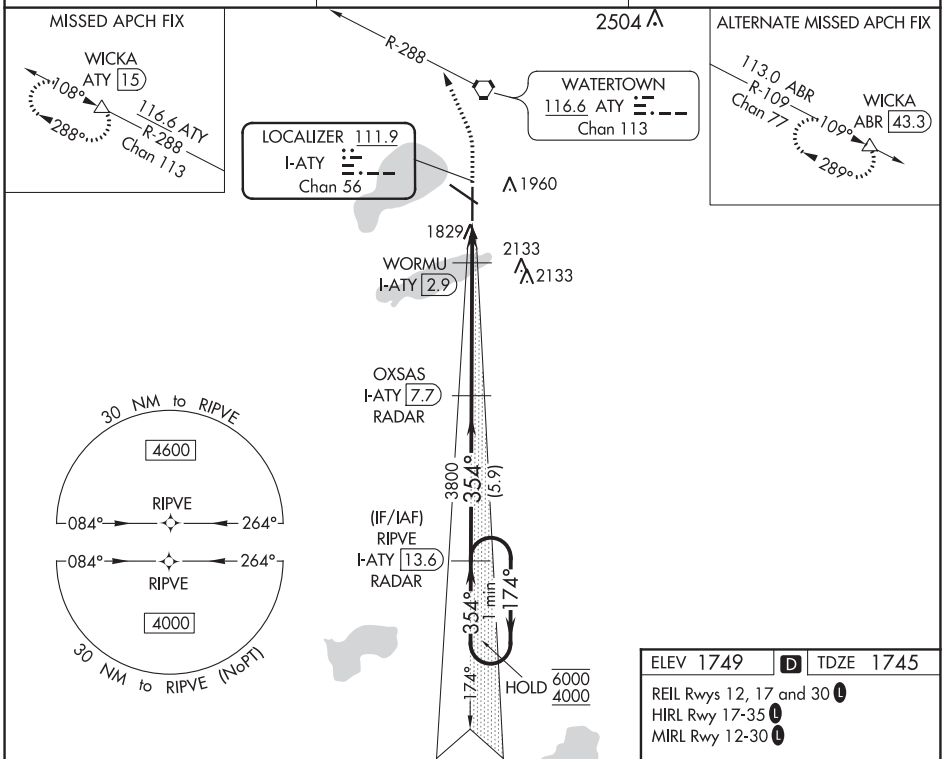
LOC/DME I-ATY	APP CRS	Rwy ldg	6893
111.9	354°	TDZE	1745
Chan 56		Apt Elev	1749

RNAV 1-GPS or RADAR required for procedure entry. DME required.

MALSR

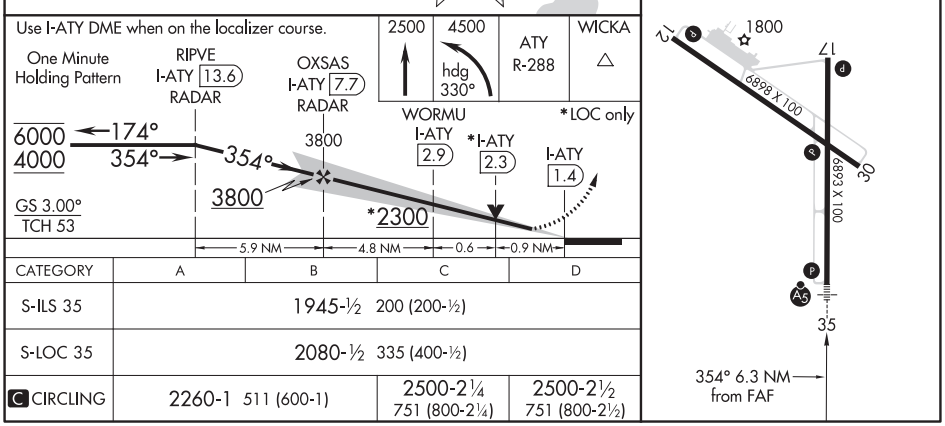
MISSED APPROACH: Climb to 2500 then climbing left turn to 4500 on heading 330° and ATY R-288 to WICKA/ATY 15 DME and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
126.625	128.5 306.2	123.05 (CTAF) L



ELEV 1749	D	TDZE 1745

REIL Rwys 12, 17 and 30 L
HIRL Rwy 17-35 L
MIRL Rwy 12-30 L



CATEGORY	A	B	C	D
S-ILS 35	1945-½ 200 (200-½)			
S-LOC 35	2080-½ 335 (400-½)			
C CIRCLING	2260-1 511 (600-1)		2500-2¼ 751 (800-2¼)	2500-2½ 751 (800-2½)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

WATERTOWN, SOUTH DAKOTA AL-444 (FAA) 21056

RNAV (GPS) RWY 12
WATERTOWN RGNL (ATY)

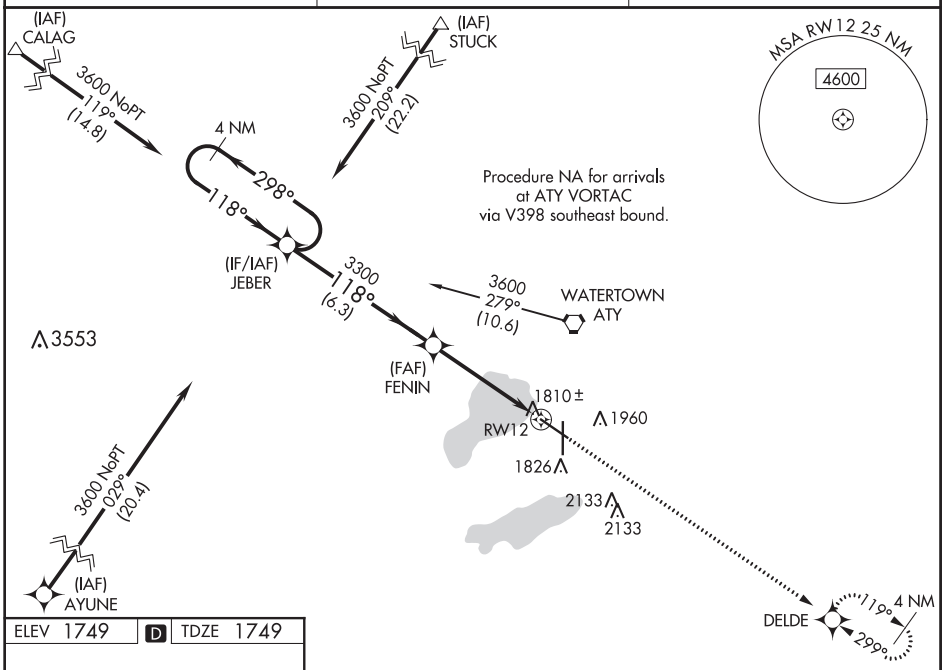
WAAS CH 53405 W12A	APP CRS 118°	Rwy ldg 6898 TDZE 1749 Apt Elev 1749

RNP APCH.

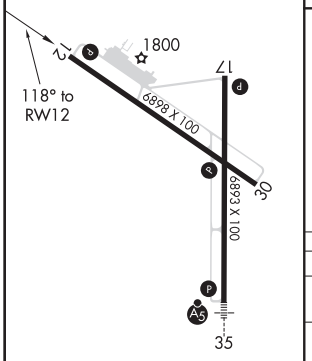
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 45°C (113°F). Rwy 12 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Brookings altimeter setting and increase all DA 105 feet and all MDA 120 feet, increase LNAV Cat C and D visibility ⅜ SM and Circling Cat C/D visibility ¼ SM. VDP NA when using Brookings altimeter setting. Baro-VNAV NA when using Brookings altimeter setting.

MISSED APPROACH: Climb to 3600 direct DELDE and hold.

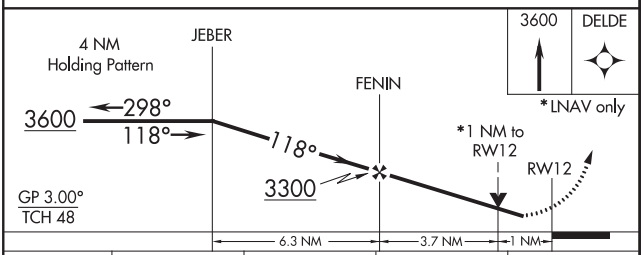
ASOS	MINNEAPOLIS CENTER	UNICOM
126.625	128.5 306.2	123.05 (CTAF) L



ELEV 1749 D TDZE 1749



REIL Rwys 12, 17 and 30 L
HIRL Rwy 17-35 L
MIRL Rwy 12-30 L



CATEGORY	A	B	C	D
LPV DA	2021-1 272 (300-1)			
LNAV/VNAV DA	2076-1¼ 327 (400-1¼)			
LNAV MDA	2100-1 351 (400-1)			
C CIRCLING	2260-1 511 (600-1)		2500-2¼ 751 (800-2¼)	2500-2½ 751 (800-2½)

NC-1, 25 FEB 2021 to 22 APR 2021

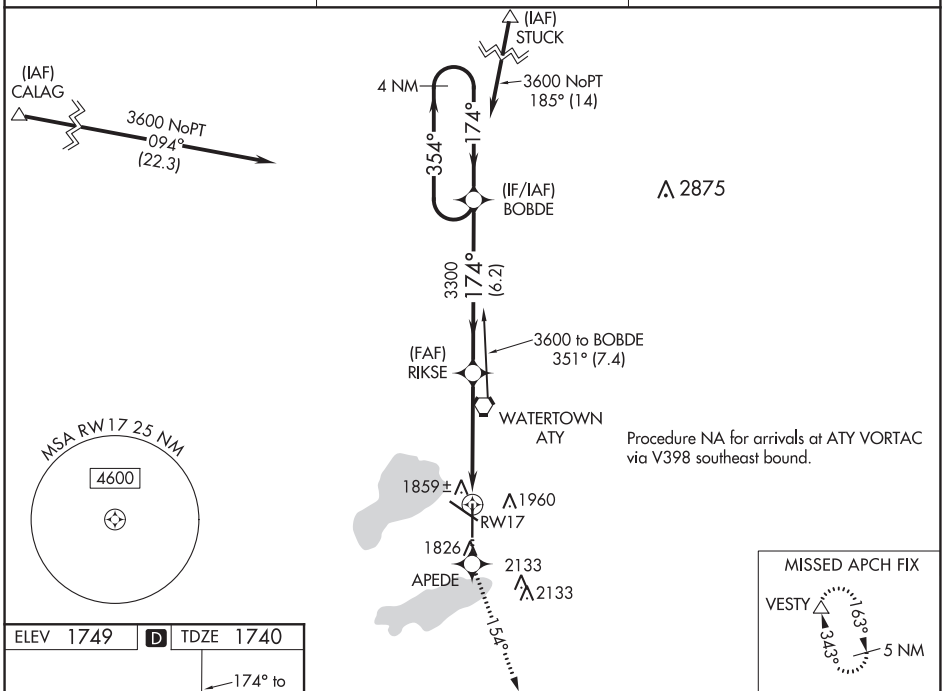
RNAV (GPS) RWY 17
WATERTOWN RGNL (ATY)

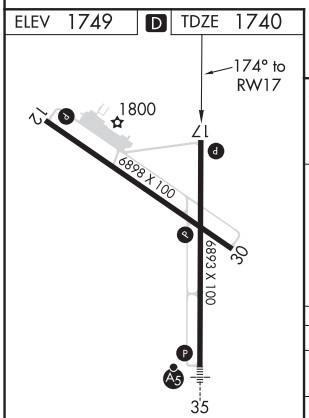
WAAS CH 82305 W17A	APP CRS 174°	Rwy ldg 6893 TDZE 1740 Apt Elev 1749

T A Baro-VNAV NA when using Brookings altimeter setting. DME/DME RNP-0.3 NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 45°C (113°F). VDP NA when using Brookings altimeter setting. When local altimeter setting not received, use Brookings altimeter setting and increase all DAs 105 feet and all MDAs 120 feet; increase Circling Cat C and D visibility ¼ SM.

MISSED APPROACH: Climb to 4000 direct APEDE and via 154° track to VESTY and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
126.625	128.5 306.2	123.05 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	2054-1 314 (400-1)			
LNAV/VNAV DA	2129-1¼ 389 (400-1¼)			
LNAV MDA	2120-1 380 (400-1)			2120-1¼ 380 (400-1¼)
C CIRCLING	2260-1 511 (600-1)		2500-2¼ 751 (800-2¼)	2500-2½ 751 (800-2½)

REIL Rwys 12, 17 and 30 L
HIRL Rwy 17-35 L
MIRL Rwy 12-30 L

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

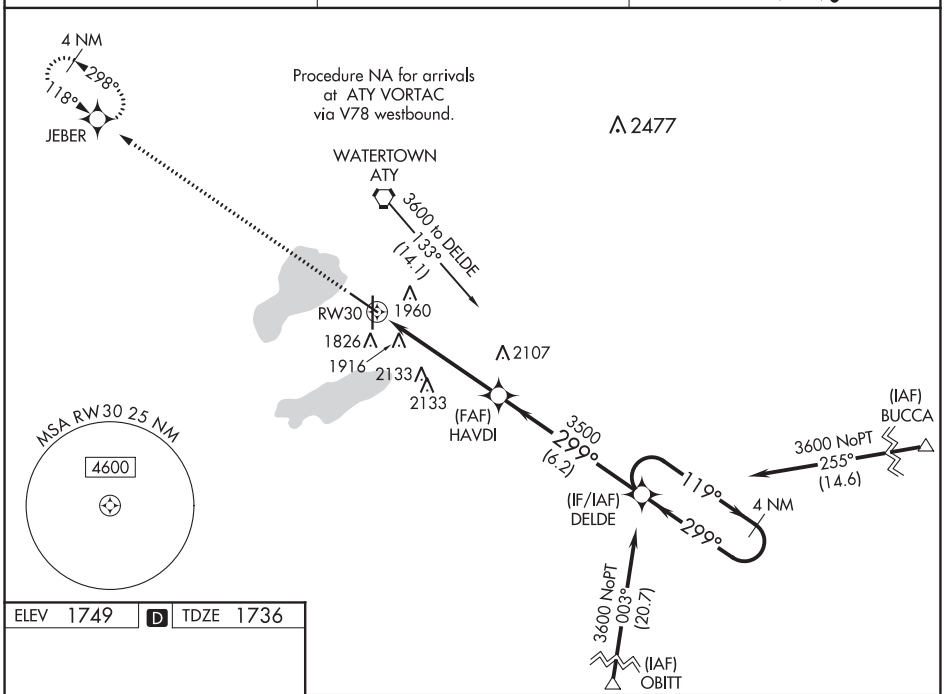
WAAS CH 50305 W30A	APP CRS 299°	Rwy ldg 6898 TDZE 1736 Apt Elev 1749

RNAV (GPS) RWY 30
WATERTOWN RGNL (ATY)

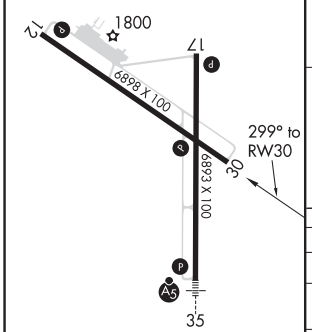
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 45°C (113°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Brookings altimeter setting and increase all DAs 105 feet and all MDAs 120 feet, increase LPV and LNAV/VNAV all Cats visibility ¼ SM, LNAV Cat B visibility ¼ SM, and Cat C/D visibility ½ SM, increase Circling Cats B/C/D visibility ¼ SM. VDP NA when using Brookings altimeter setting. Baro-VNAV NA when using Brookings altimeter setting.

MISSED APPROACH: Climb to 3600 direct JEBER and hold.

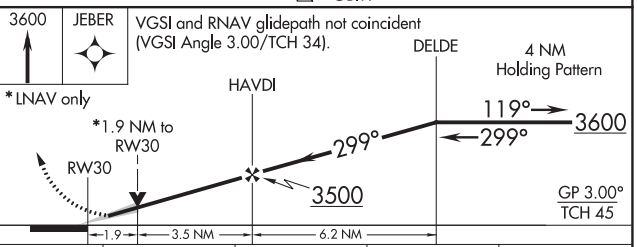
ASOS	MINNEAPOLIS CENTER	UNICOM
126.625	128.5 306.2	123.05 (CTAF) L



ELEV 1749	D	TDZE 1736



REIL Rwys 12, 17 and 30 L
HIRL Rwy 17-35 L
MIRL Rwy 12-30 L



CATEGORY	A	B	C	D
LPV DA	1990-1 254 (300-1)			
LNAV/VNAV DA	2208-1¾ 472 (500-1¾)			
LNAV MDA	2360-1 624 (700-1)		2360-1¾ 624 (700-1¾)	2360-2 624 (700-2)
C CIRCLING	2360-1 611 (700-1)		2500-2¼ 751 (800-2¼)	2500-2½ 751 (800-2½)

NC-1, 25 FEB 2021 to 22 APR 2021

RNAV (GPS) RWY 35
WATERTOWN RGNL (ATY)

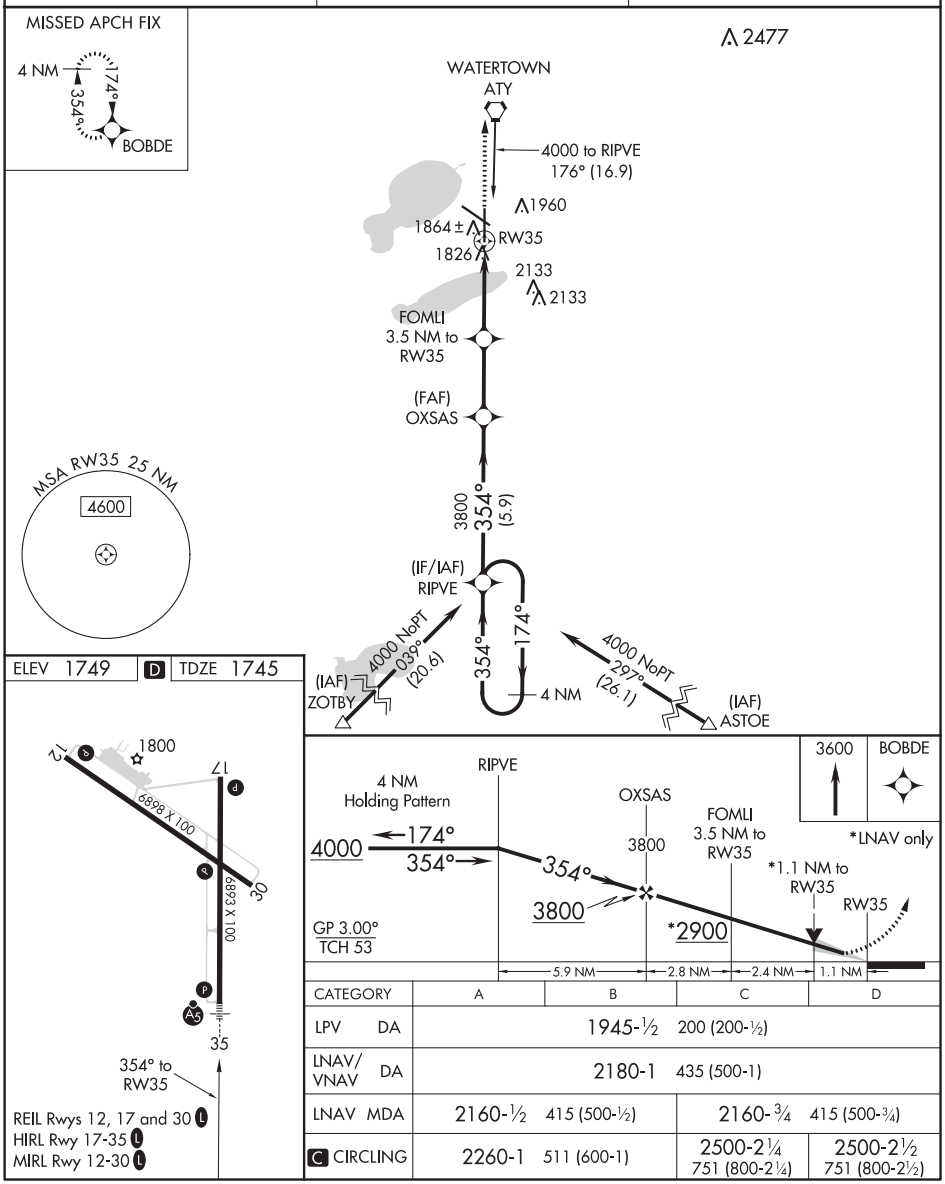
WAAS CH 82614 W35A	APP CRS 354°	Rwy ldg 6893 TDZE 1745 Apt Elev 1749

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C (-5°F) or above 54°C (130°F). DME/DME RNP -0.3 NA. For inop ALS, increase LNAV Cat C/D visibility to 1⅛ SM.

MALSR

MISSED APPROACH: Climb to 3600 direct BOBDE and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
126.625	128.5 306.2	123.05 (CTAF) L



CATEGORY	A	B	C	D
LPV DA	1945-½ 200 (200-½)			
LNAV/VNAV DA	2180-1 435 (500-1)			
LNAV MDA	2160-½ 415 (500-½)		2160-¾ 415 (500-¾)	
C CIRCLING	2260-1 511 (600-1)		2500-2¼ 751 (800-2¼)	2500-2½ 751 (800-2½)

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WATERTOWN, SOUTH DAKOTA AL-444 (FAA) 20366

LOC BC RWY 17
WATERTOWN RGNL (ATY)

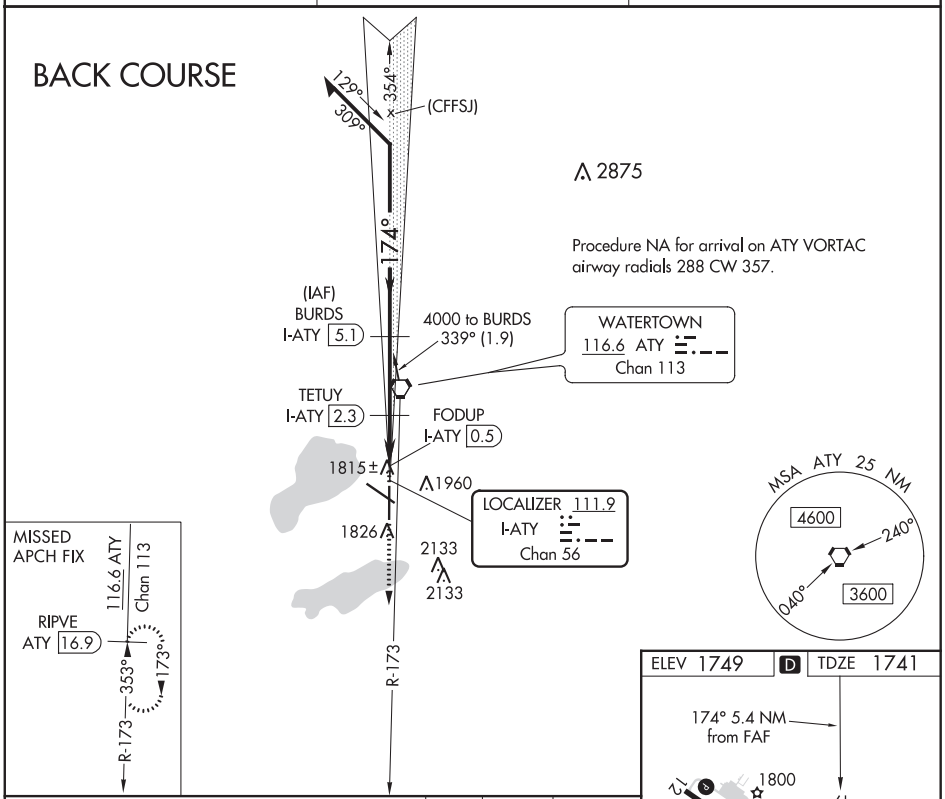
LOC/DME I-ATY	APP CRS	Rwy ldg	6893
111.9	174°	TDZE	1741
Chan 56		Apt Elev	1749

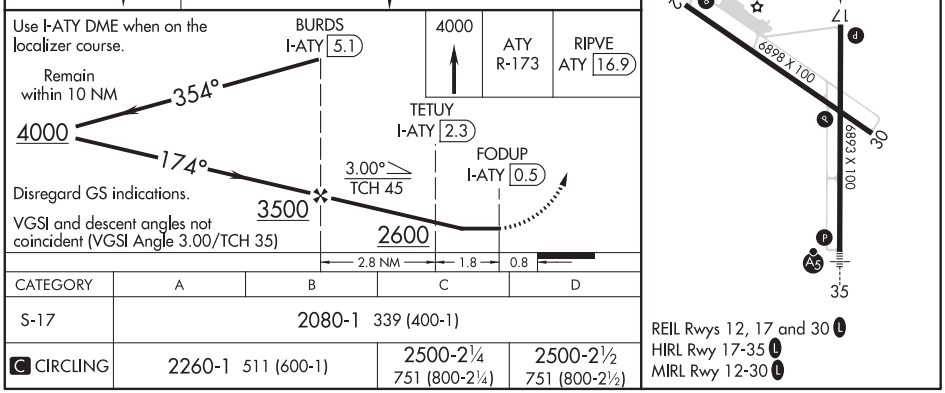
DME required.

T A

MISSED APPROACH: Climb to 4000 on ATY VORTAC R-173 to RIPVE/ATY VORTAC 16.9 DME and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
126.625	128.5 306.2	123.05 (CTAF) L





CATEGORY	A	B	C	D
S-17	2080-1 339 (400-1)			
C CIRCLING	2260-1 511 (600-1)		2500-2¼ 751 (800-2¼)	2500-2½ 751 (800-2½)

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NC-1, 25 FEB 2021 to 22 APR 2021

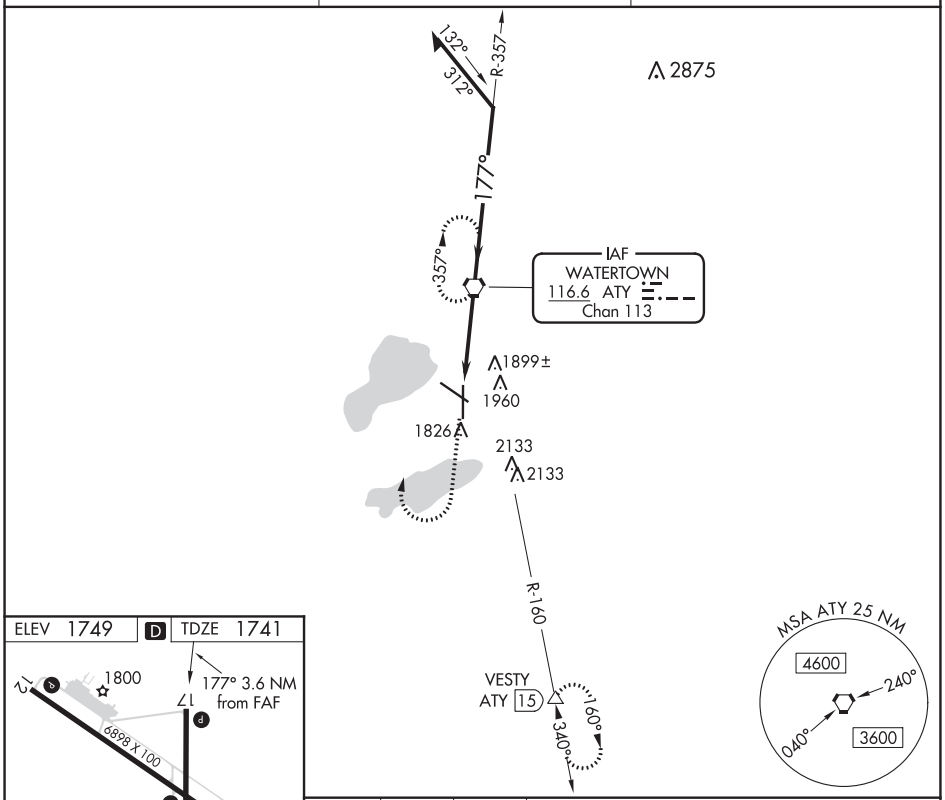
VOR or TACAN RWY 17
WATERTOWN RGNL (ATY)

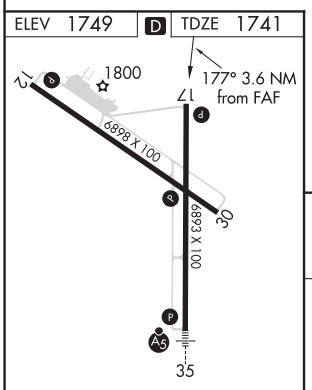
VORTAC ATY	APP CRS	Rwy ldg	6893
116.6	177°	TDZE	1741
Chan 113		Apt Elev	1749

T Rwy 17 helicopter visibility reduction below ¾ SM NA.
A When local altimeter setting not received, use Brookings altimeter setting and increase all MDAs 120 feet; increase Circling Cat C and D visibility ¼ SM. VDP NA when using Brookings altimeter setting.

MISSED APPROACH: Climb to 2400 then climbing right turn to 4000 direct ATY VORTAC and hold. (TACAN aircraft climb to 5000 on ATY VORTAC R-160 to VESTY/15 DME and hold south, right turn, 340° inbound.)

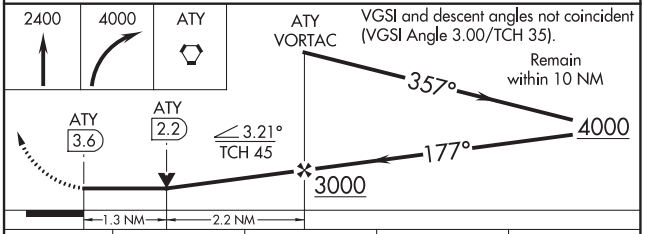
ASOS	MINNEAPOLIS CENTER	UNICOM
126.625	128.5 306.2	123.05 (CTAF) L





REIL Rwys 12, 17 and 30 L
HIRL Rwy 17-35 L
MIRL Rwy 12-30 L

FAF to MAP 3.6 NM					
Knots	60	90	120	150	180
Min:Sec	3:36	2:24	1:48	1:26	1:12



CATEGORY	A	B	C	D
S-17	2200-1	460 (500-1)	2200-1¼ 460 (500-1¼)	2200-1½ 460 (500-1½)
C CIRCLING	2260-1	511 (600-1)	2500-2¼ 751 (800-2¼)	2500-2½ 751 (800-2½)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

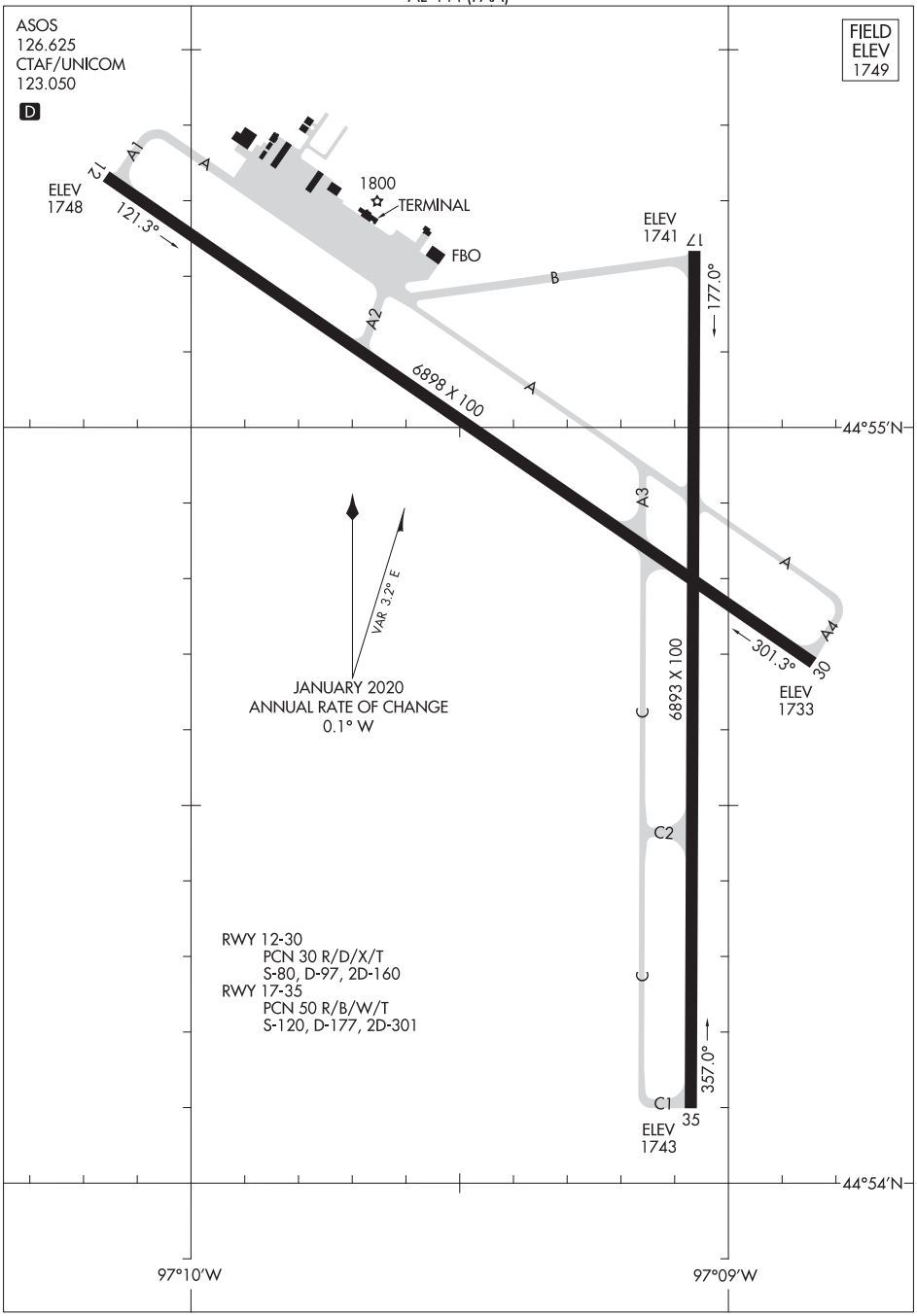
20198

AIRPORT DIAGRAM

WATERTOWN RGNL (ATY)

WATERTOWN, SOUTH DAKOTA

AL-444 (FAA)



NC-1, 25 FEB 2021 to 22 APR 2021

AIRPORT DIAGRAM
20198
WATERTOWN, SOUTH DAKOTA
WATERTOWN RGNL (ATY)

WAAS CH 70717 W12A	APP CRS 126°	Rwy ldg 4401 TDZE 2090 Apt Elev 2111

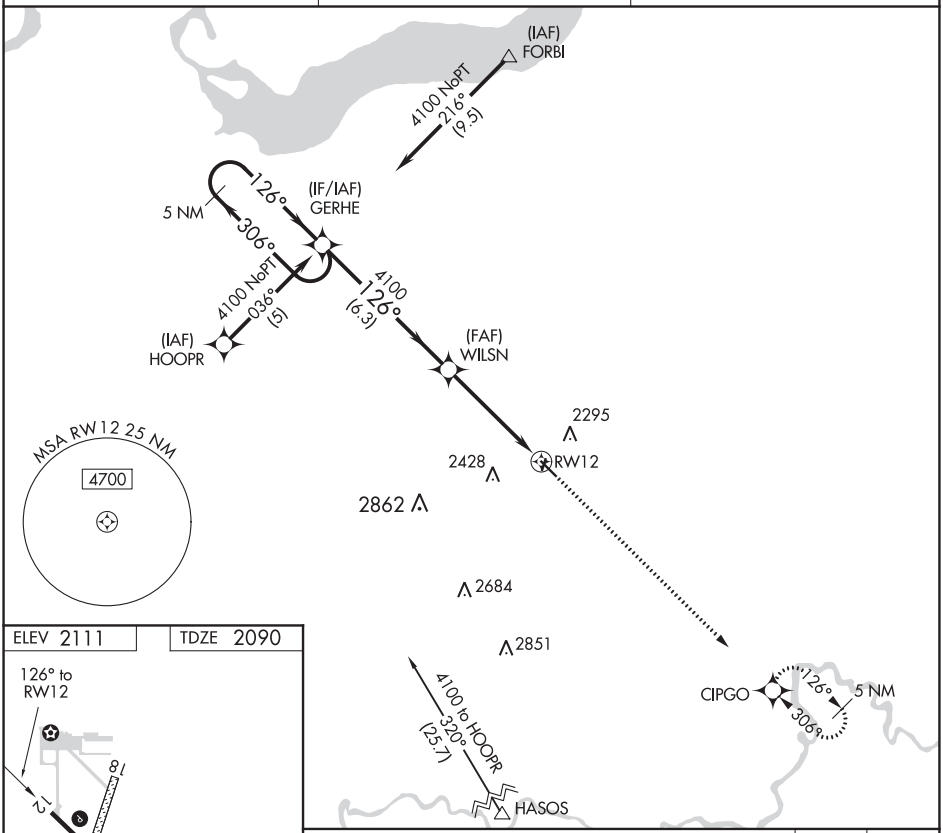
RNAV (GPS) RWY 12
WATFORD CITY MUNI (S25)

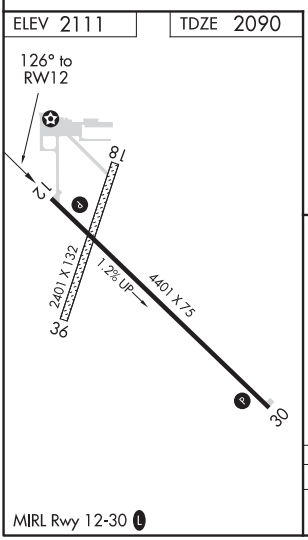
RNP APCH.

T NA Rwy 12 helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use Williston Basin Intl altimeter setting and increase DA to 2537 feet and increase all visibilities ⅜ SM. Procedure NA at night.

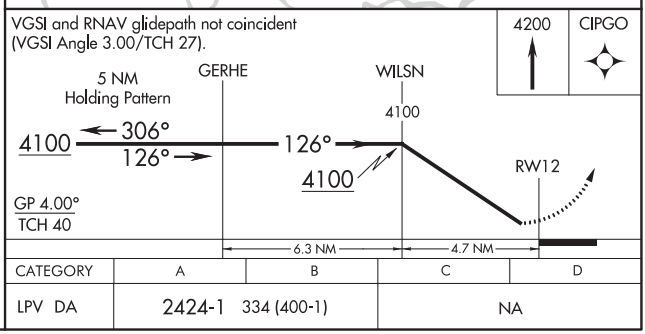
MISSED APPROACH: Climb to 4200 direct CIPGO and hold.

AWOS-3	SALT LAKE CENTER	UNICOM
118.125	126.85 305.2	122.8 (CTAF) L





MIRL Rwy 12-30 L



CATEGORY	A	B	C	D
LPV DA	2424-1 334 (400-1)		NA	

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NC-1, 25 FEB 2021 to 22 APR 2021

WATFORD CITY, NORTH DAKOTA AL-9026 (FAA) 20198

WAAS CH 69318 W30A	APP CRS 306°	Rwy ldg 4401 TDZE 2111 Apt Elev 2111

RNAV (GPS) RWY 30
WATFORD CITY MUNI (S25)

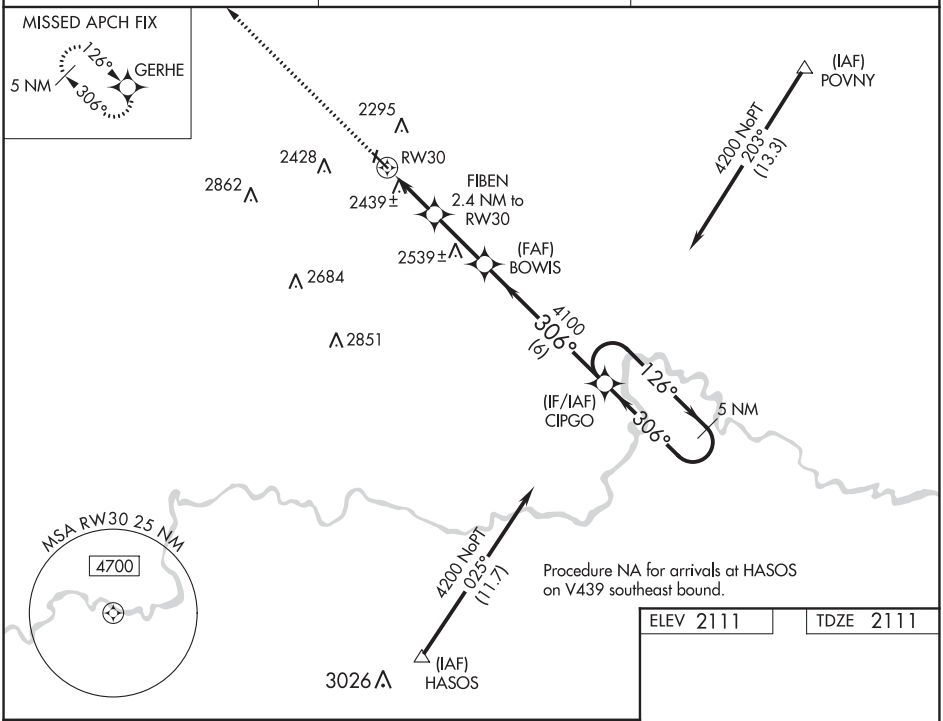
RNP APCH.

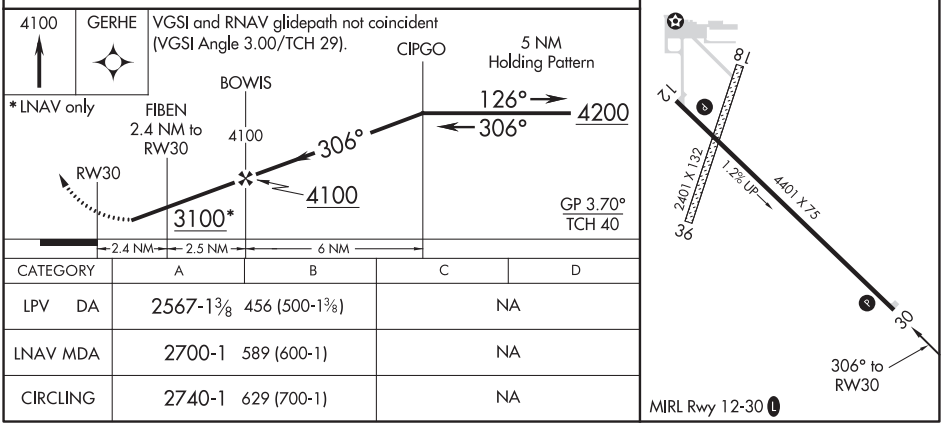
NA

Rwy 30 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Williston Basin Intl altimeter setting and increase DA to 2680 and all MDA 120 feet, increase LPV visibility all Cats ¼ SM. Circling NA to Rwys 18 and 36. Circling Rwy 12 NA at night.

MISSED APPROACH: Climb to 4100 direct GERHE and hold.

AWOS-3	SALT LAKE CENTER	UNICOM
118.125	126.85 305.2	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	2567-1⅜ 456 (500-1⅜)		NA	
LNAV MDA	2700-1 589 (600-1)		NA	
CIRCLING	2740-1 629 (700-1)		NA	

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NC-1, 25 FEB 2021 to 22 APR 2021

APP CRS	Rwy ldg	3600
127°	TDZE	1545
	Apt Elev	1545

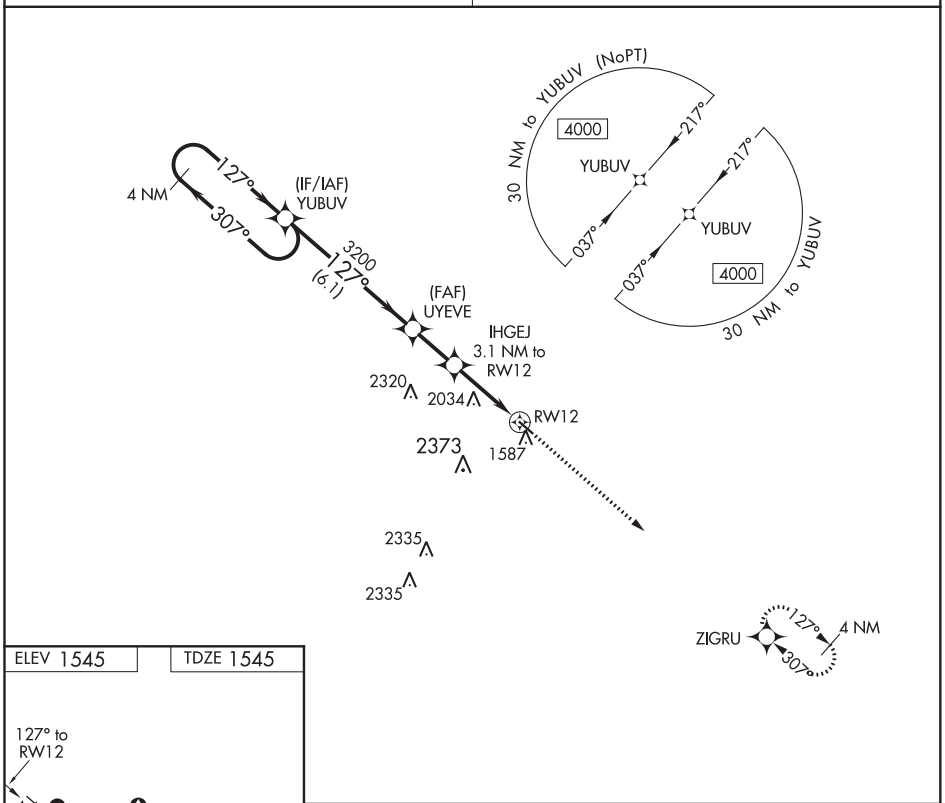
RNAV (GPS) RWY 12
WESSINGTON SPRINGS (4X4)

T A NA

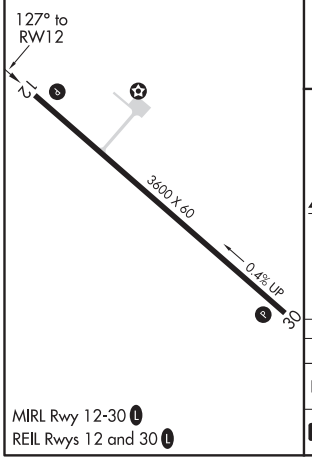
DME/DME RNP-0.3 NA. When local altimeter setting not received use Mitchell altimeter setting: increase all MDA 100 feet, LNAV visibility Cat C ½ SM and Circling visibility Cat A ¼ SM.

MISSED APPROACH: Climb to 4000 direct ZIGRU and hold.

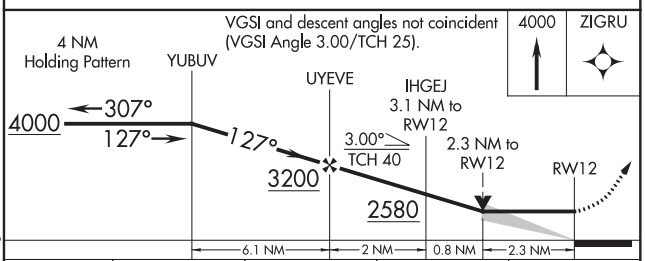
MINNEAPOLIS CENTER	CTAF
126.25 339.8	122.9 L



ELEV 1545 TDZE 1545



MIRL Rwy 12-30 L
REIL Rwys 12 and 30 L



CATEGORY	A	B	C	D
LNAV MDA	2300-1 755 (800-1)	2300-1¼ 755 (800-1¼)	2300-2 755 (800-2)	NA
C CIRCLING	2300-1 755 (800-1)	2340-1¼ 795 (800-1¼)	2720-3 1175 (1200-3)	NA

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NC-1, 25 FEB 2021 to 22 APR 2021

WESSINGTON SPRINGS, SOUTH DAKOTA AL-10549 (FAA) 20310

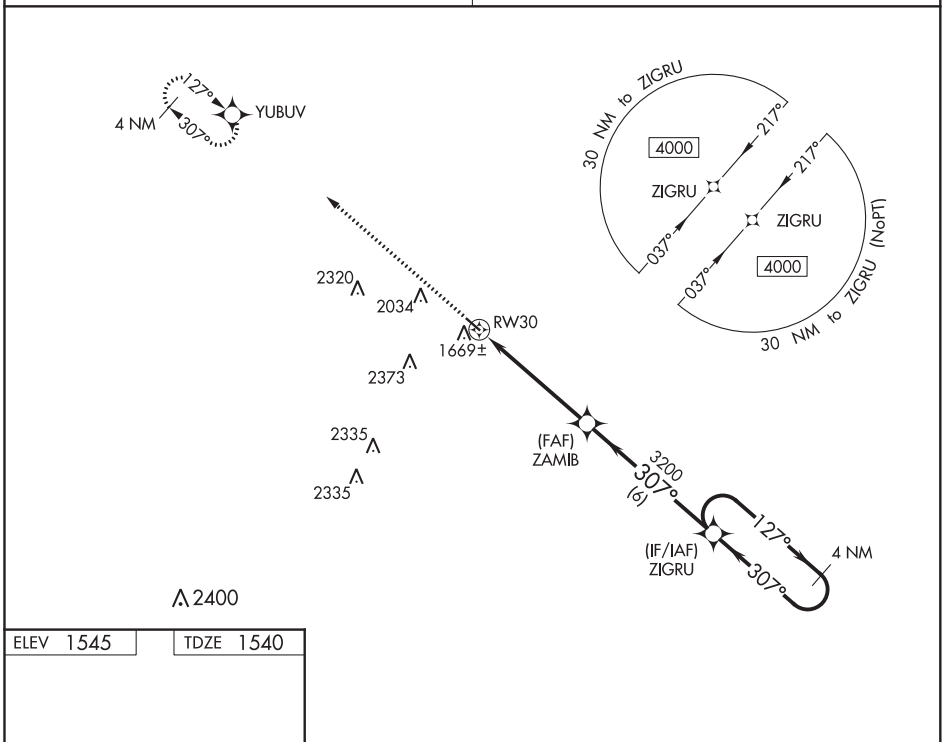
WAAS CH 40141 W30A	APP CRS 307°	Rwy ldg 3600 TDZE 1540 Apt Elev 1545

RNAV (GPS) RWY 30
WESSINGTON SPRINGS (4X4)

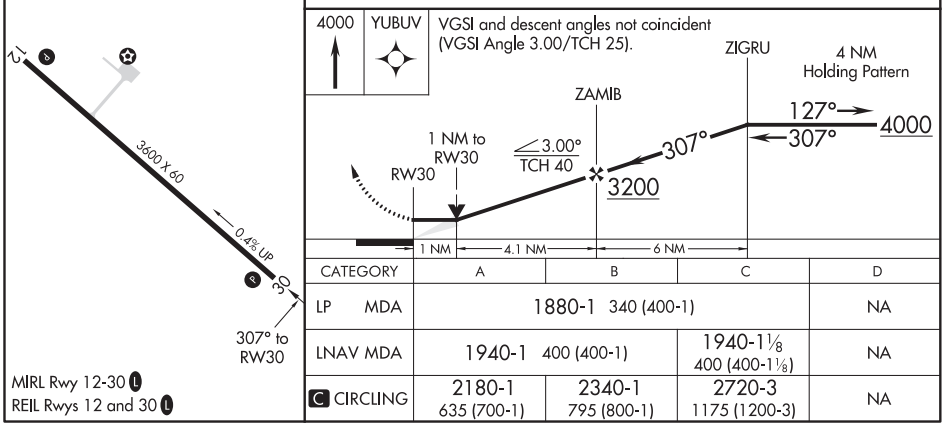
T A NA DME/DME RNP-0.3 NA. VDP NA when using Mitchell Muni altimeter setting. When local altimeter setting not received use Mitchell altimeter setting: increase all MDAs 100 feet and LNAV visibility Cat C ¼ SM, LP visibility Cat C ¼ SM, Circling visibility Cat B ¼ SM.

MISSED APPROACH: Climb to 4000 direct YUBUV and hold.

MINNEAPOLIS CENTER	CTAF
126.25 339.8	122.9 L



ELEV 1545	TDZE 1540



CATEGORY	A	B	C	D
LP MDA	1880-1 340 (400-1)			NA
LNAV MDA	1940-1 400 (400-1)		1940-1⅛ 400 (400-1⅛)	NA
C CIRCLING	2180-1 635 (700-1)	2340-1 795 (800-1)	2720-3 1175 (1200-3)	NA

MIRL Rwy 12-30 L
REIL Rwys 12 and 30 L

NC-1, 25 FEB 2021 to 22 APR 2021

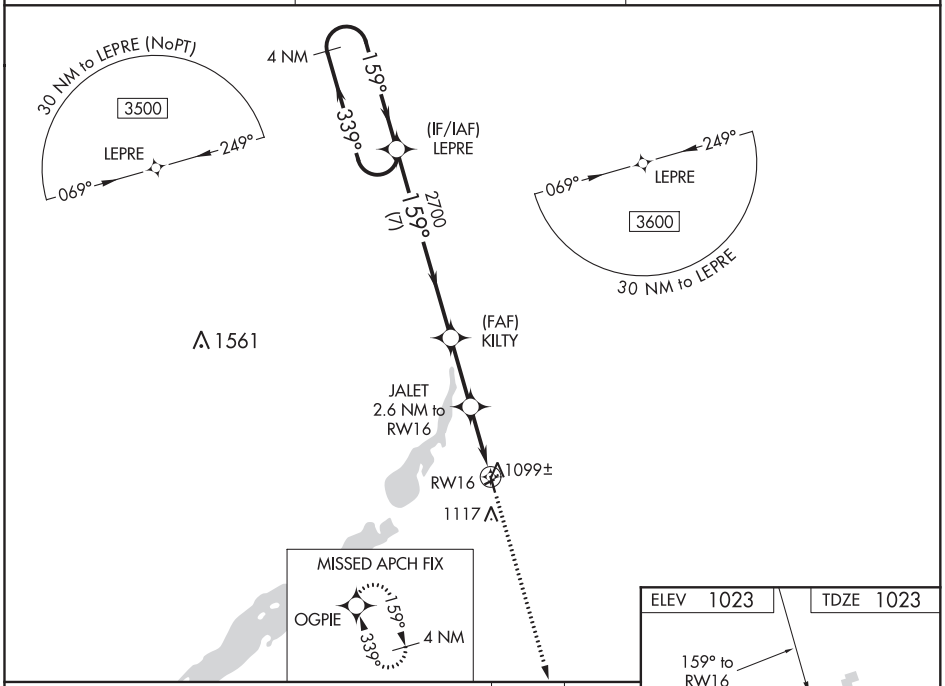
WAAS CH 42530 W16A	APP CRS 159°	Rwy ldg 3298 TDZE 1023 Apt Elev 1023

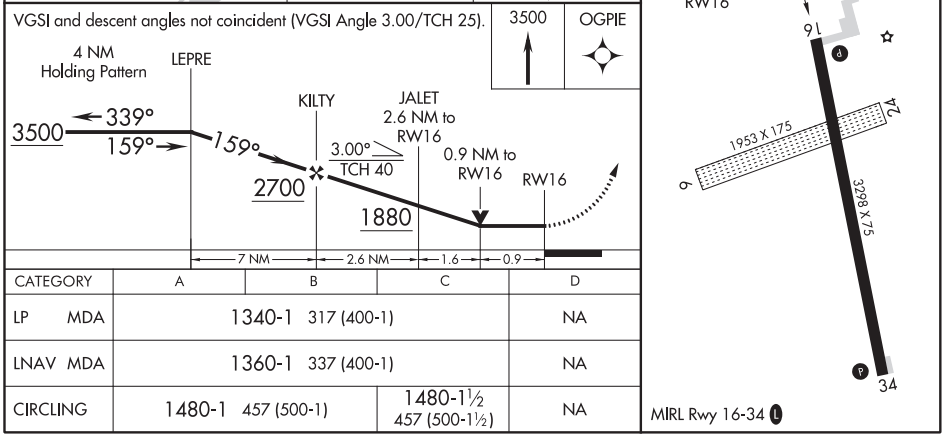
RNAV (GPS) RWY 16
WHEATON MUNI (ETH)

When VGSI inop, Circling Rwy 34 NA at night. DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.
VDP NA with Wahpeton/Harry Stern altimeter setting.
When local altimeter setting not received, use Wahpeton/Harry Stern altimeter setting and increase all MDA 80 feet, increase LP Cat C visibility to 1⅛ and LNAV Cat C visibility to 1¼ mile.

MISSED APPROACH: Climb to 3500 direct OGPIE and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.775	126.1 269.2	122.8 (CTAF) L





CATEGORY	A	B	C	D
LP MDA	1340-1 317 (400-1)			NA
LNAV MDA	1360-1 337 (400-1)			NA
CIRCLING	1480-1 457 (500-1)		1480-1½ 457 (500-1½)	NA

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

WHEATON, MINNESOTA

AL-6660 (FAA)

20086

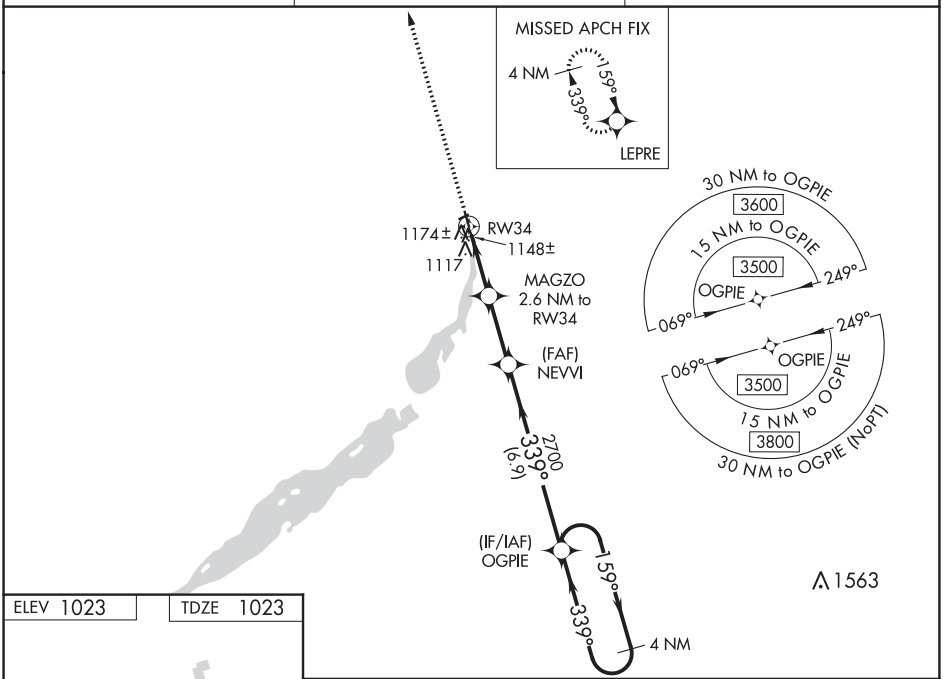
RNAV (GPS) RWY 34
WHEATON MUNI (ETH)

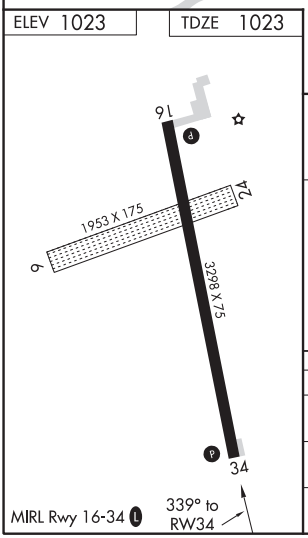
WAAS CH 86730 W34A	APP CRS 339°	Rwy ldg 3298 TDZE 1023 Apt Elev 1023

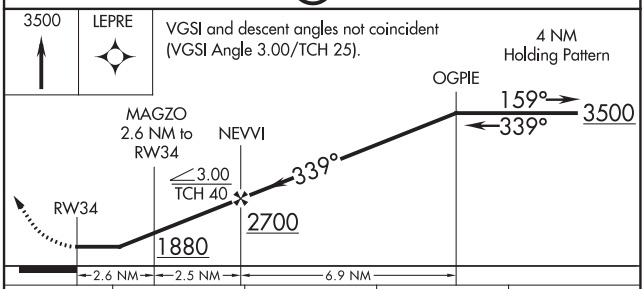
When VGSI inop, Straight-in/Circling Rwy 34 procedure NA at night.
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, use Wahpeton/Harry Stern altimeter setting and increase all MDA 80 feet and LP Cat C and LNAV Cat C visibility to 1⅜ mile.

MISSED APPROACH: Climb to 3500 direct LEPRE and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.775	126.1 269.2	122.8 (CTAF) L







CATEGORY	A	B	C	D
LP MDA	1400-1 377 (400-1)			NA
LNAV MDA	1440-1 417 (500-1)		1440-1⅛ 417 (500-1⅛)	NA
CIRCLING	1480-1 457 (500-1)		1480-1½ 457 (500-1½)	NA

ILS or LOC RWY 32
WILLISTON BASIN INTL (XWA)

LOC/DME I-XWA	APP CRS	Rwy ldg	7501
109.1	320°	TDZE	2350
Chan 28		Apt Elev	2353

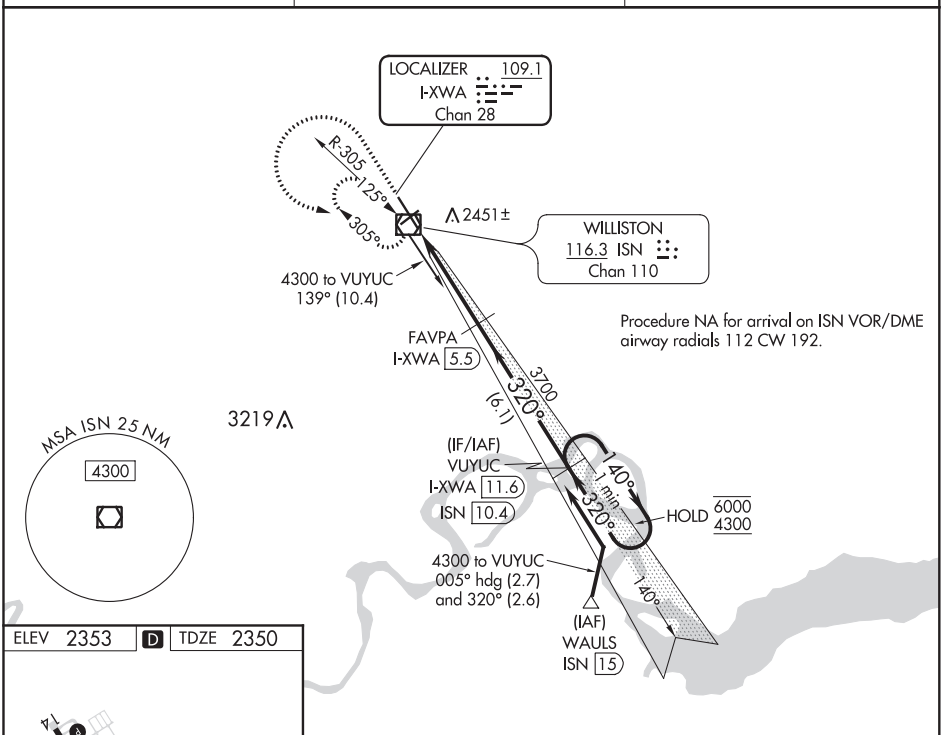
DME required.

NA — For inop ALS, increase S-LOC 32 Cat C/D visibility to ⅞ SM.

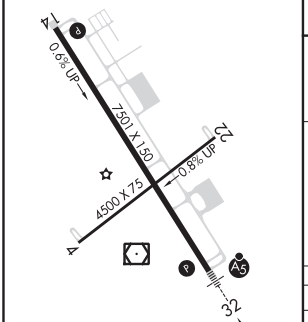
MALSR

MISSED APPROACH: Climb to 3500 then climbing left turn to 4300 direct ISN VOR/DME and hold, continue climb-in-hold to 4300.

ASOS	SALT LAKE CITY CENTER	UNICOM
125.925	126.85 305.2	122.8 (CTAF) L

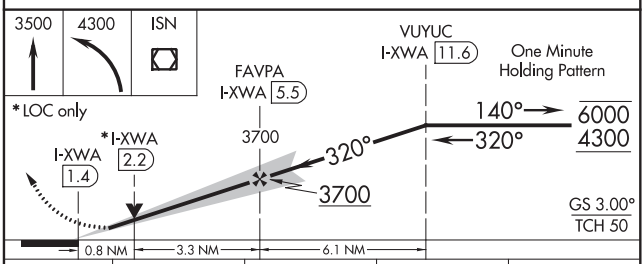


ELEV 2353 D TDZE 2350



320° 4.1 NM from FAF

MIRL Rwy 4-22 L
HIRL Rwy 14-32 L
REIL Rwy 4, 14 and 22 L



CATEGORY	A	B	C	D
S-ILS 32	2550-½ 200 (200-½)			
S-LOC 32	2660-½ 310 (400-½)			
C CIRCLING	2760-1 407 (500-1)	2820-1 467 (500-1)	2820-1½ 467 (500-1½)	2920-2 567 (600-2)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

WILLISTON, NORTH DAKOTA | AL-11234 (FAA) | 21056

WAAS CH 40143 W14A	APP CRS 140°	Rwy ldg 7501 TDZE 2316 Apt Elev 2353

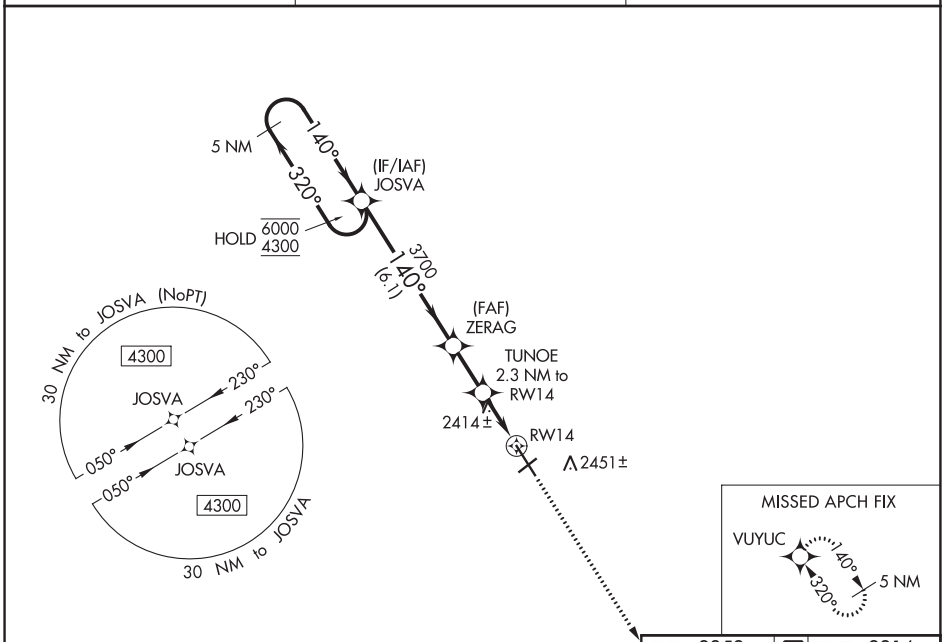
RNAV (GPS) RWY 14
WILLISTON BASIN INTL (XWA)

RNP APCH.

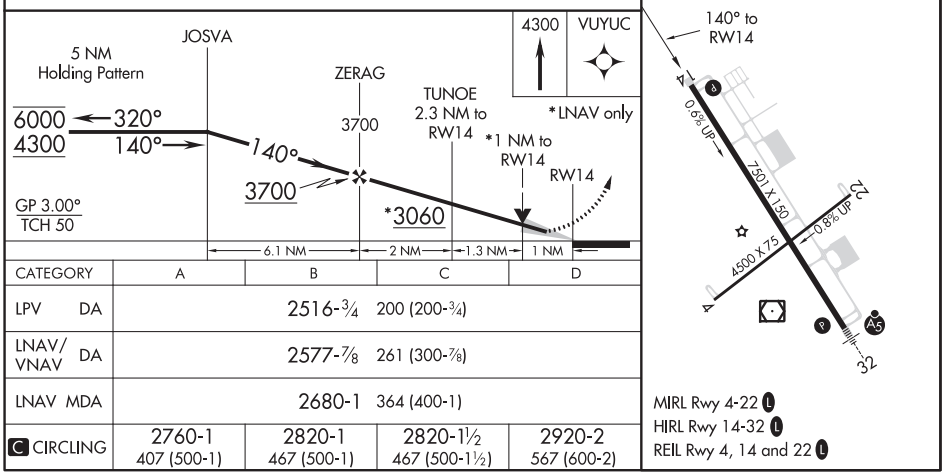
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C or above 54°C.

MISSED APPROACH: Climb to 4300 direct VUYUC and hold.

ASOS	SALT LAKE CITY CENTER	UNICOM
125.925	126.85 305.2	122.8 (CTAF) L



ELEV 2353 | D | TDZE 2316



CATEGORY	A	B	C	D
LPV DA	2516-¾ 200 (200-¾)			
LNAV/VNAV DA	2577-⅞ 261 (300-⅞)			
LNAV MDA	2680-1 364 (400-1)			
C CIRCLING	2760-1 407 (500-1)	2820-1 467 (500-1)	2820-1½ 467 (500-1½)	2920-2 567 (600-2)

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 78043 W32A	APP CRS 320°	Rwy ldg 7501 TDZE 2350 Apt Elev 2353

RNAV (GPS) RWY 32
WILLISTON BASIN INTL (XWA)

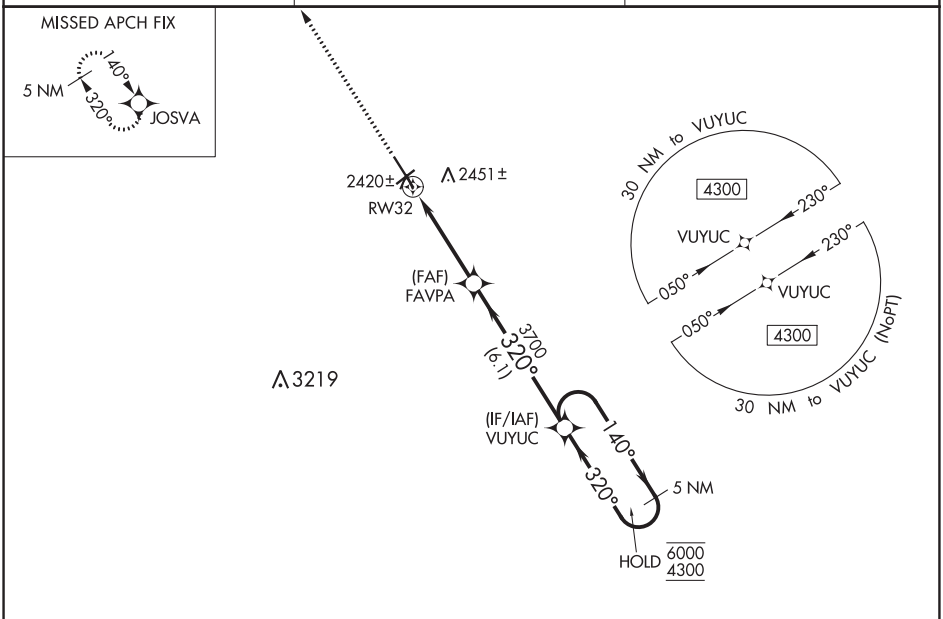
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C or above 54°C. For inop ALS, increase LNAV/VNAV all Cats visibility to ¾ SM.

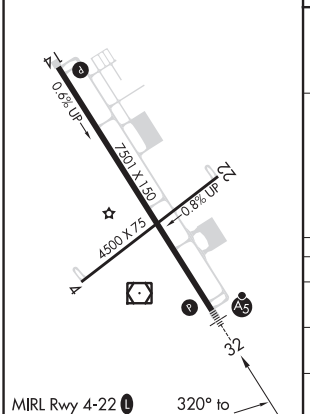
MALSR

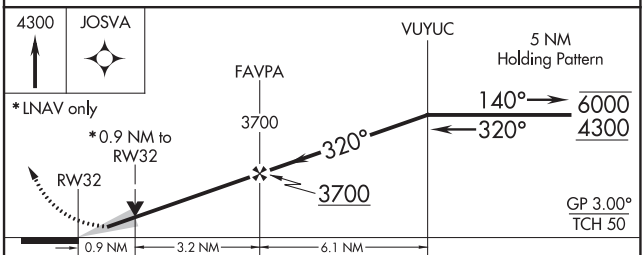
MISSED APPROACH: Climb to 4300 direct JOSVA and hold.

ASOS	SALT LAKE CITY CENTER	UNICOM
125.925	126.85 305.2	122.8 (CTAF) L



ELEV 2353 D TDZE 2350





CATEGORY	A	B	C	D
LPV DA	2550-½ 200 (200-½)			
LNAV/VNAV DA	2600-½ 250 (300-½)			
LNAV MDA	2680-½ 330 (400-½)			
C CIRCLING	2760-1 407 (500-1)	2820-1 467 (500-1)	2820-1½ 467 (500-1½)	2920-2 567 (600-2)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

WILLISTON, NORTH DAKOTA | AL-11234 (FAA) | 21056

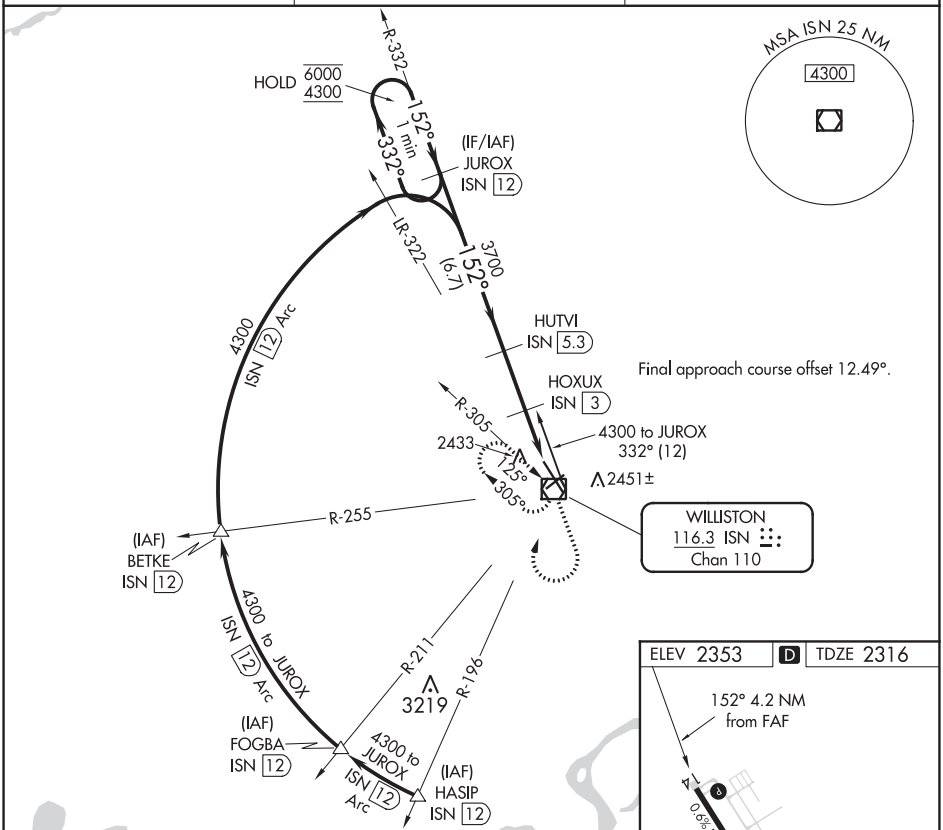
VOR RWY 14
WILLISTON BASIN INTL (XWA)

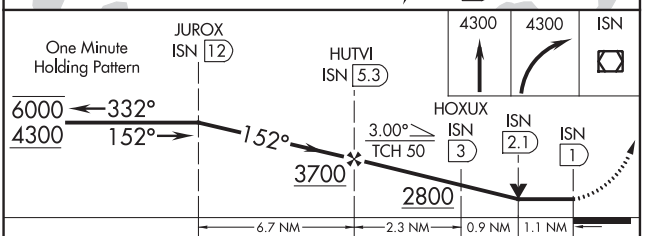
VOR/DME ISN	APP CRS	Rwy ldg	7501
116.3	152°	TDZE	2316
Chan 110		Apt Elev	2353

DME required.

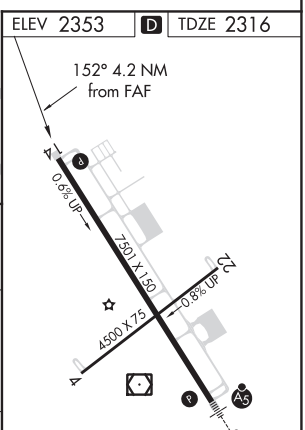
MISSED APPROACH: Climb to 4300 then climbing right turn to 4300 direct ISN VOR/DME and hold

ASOS	SALT LAKE CITY CENTER	UNICOM
125.925	126.85 305.2	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-14	2700-1 384 (400-1)		2700-1⅛ 384 (400-1⅛)	
C CIRCLING	2760-1 407 (500-1)	2820-1 467 (500-1)	2820-1½ 467 (500-1½)	2920-2 567 (600-2)



MIRL Rwy 4-22 L
HIRL Rwy 14-32 L
REIL Rwy 4, 14 and 22 L

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

VOR/DME ISN	APP CRS	Rwy ldg	7501
116.3	303°	TDZE	2350
Chan 110		Apt Elev	2353

VOR RWY 32
WILLISTON BASIN INTL (XWA)

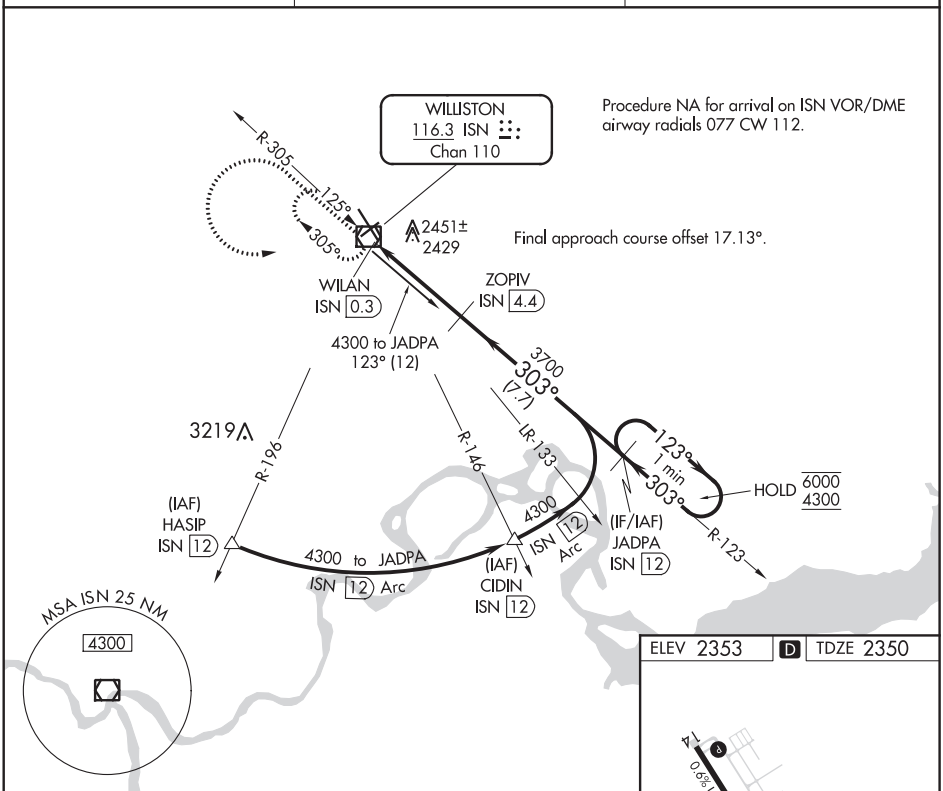
DME required.

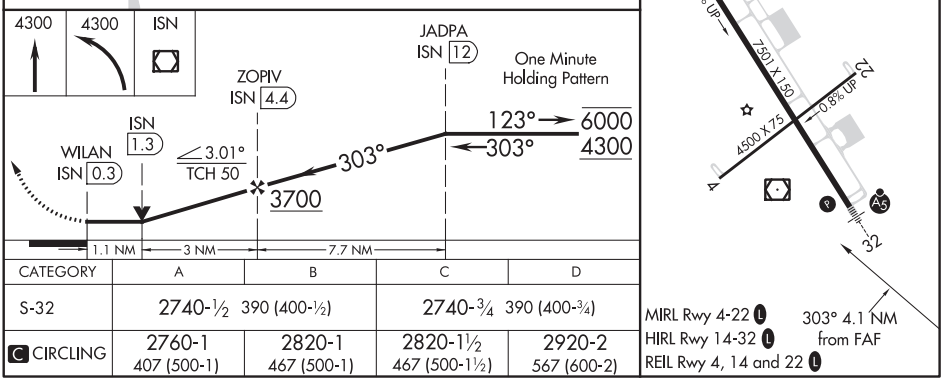
For inop ALS, increase S-32 Cats C/D visibility to 1⅛ SM.

MALSR

MISSED APPROACH: Climb to 4300 then climbing left turn to 4300 direct ISN VOR/DME and hold

ASOS	SALT LAKE CITY CENTER	UNICOM
125.925	126.85 305.2	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-32	2740-½ 390 (400-½)		2740-¾ 390 (400-¾)	
C CIRCLING	2760-1 407 (500-1)	2820-1 467 (500-1)	2820-1½ 467 (500-1½)	2920-2 567 (600-2)

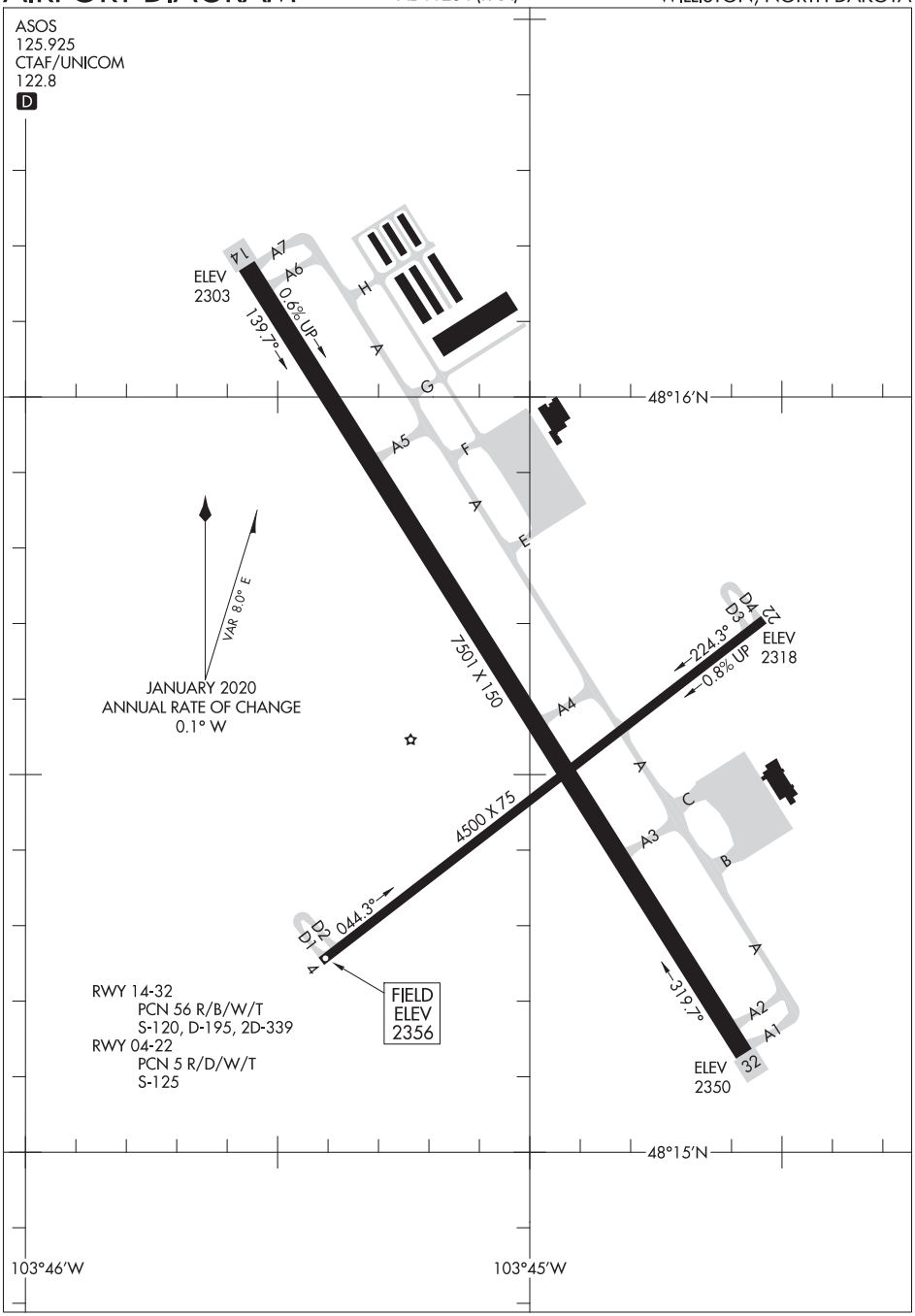
NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

20310

AIRPORT DIAGRAM

AL-11234 (FAA)

WILLISTON BASIN INTL (XWA)
WILLISTON, NORTH DAKOTA

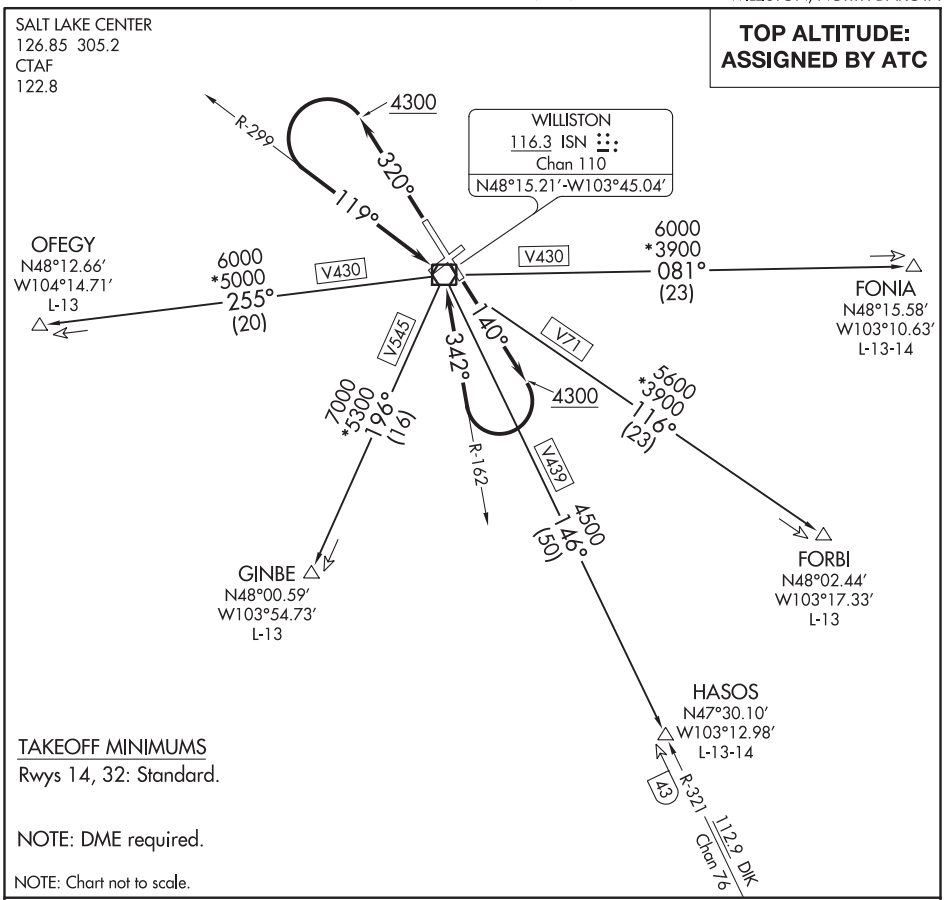


RWY 14-32
PCN 56 R/B/W/T
S-120, D-195, 2D-339
RWY 04-22
PCN 5 R/D/W/T
S-125

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

AIRPORT DIAGRAM
20310
WILLISTON, NORTH DAKOTA
WILLISTON BASIN INTL (XWA)



TAKEOFF MINIMUMS

Rwys 14, 32: Standard.

NOTE: DME required.

NOTE: Chart not to scale.

T

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb on heading 140° to 4300 then climbing right turn to intercept ISN VOR/DME R-162 to ISN VOR/DME, thence. . . .

TAKEOFF RUNWAY 32: Climb on heading 320° to 4300 then climbing left turn to intercept ISN VOR/DME R-299 to ISN VOR/DME, thence. . . .

. . . .on (transition). Maintain ATC assigned altitude. Expect filed altitude 10 minutes after departure.

FONIA TRANSITION (ISN5.FONIA): From over ISN VOR/DME on ISN R-081 to FONIA.

FORBI TRANSITION (ISN5.FORBI): From over ISN VOR/DME on ISN R-116 to FORBI.

GINBE TRANSITION (ISN5.GINBE): From over ISN VOR/DME on ISN R-196 to GINBE.

HASOS TRANSITION (ISN5.HASOS): From over ISN VOR/DME on ISN R-146 and DIK R-321 to HASOS.

OFEGY TRANSITION (ISN5.OFEGY): From over ISN VOR/DME on ISN R-255 to OFEGY.

WILLMAR, MINNESOTA AL-10310 (FAA) 21056

LOC I-BDH	APP CRS	Rwy ldg	5500
109.5	126°	TDZE	1124
		Apt Elev	1126

ILS or LOC RWY 13

WILLMAR MUNI-JOHN L RICE FIELD (BDH)

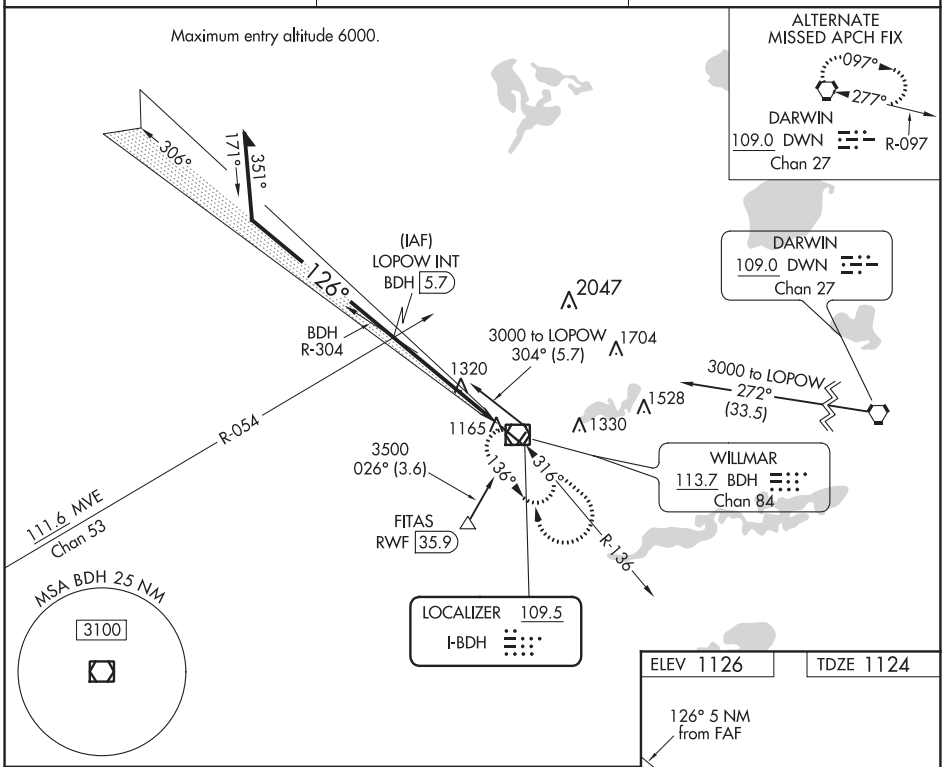
T
A NA

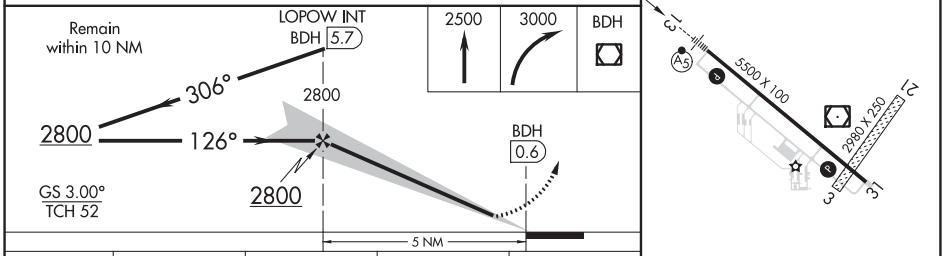
If local altimeter setting not received, use Olivia Rgnl altimeter setting and increase all DAs 55 feet and all MDAs 60 feet. Circling Rwy 3, 21 NA.

MALSR

MISSED APPROACH: Climb to 2500 then climbing right turn to 3000 direct BDH VOR/DME and hold.

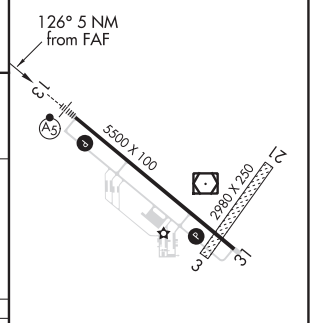
AWOS-3	MINNEAPOLIS CENTER	UNICOM
113.7	125.5 323.1	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-ILS 13	1324-¾ 200 (200-¾)			
S-LOC 13	1620-1 496 (500-1)		1620-1¼ 496 (500-1¼)	1620-1½ 496 (500-1½)
CIRCLING	1620-1 494 (500-1)		1620-1½ 494 (500-1½)	1680-2 554 (600-2)

ELEV 1126 TDZE 1124



HIRL Rwy 13-31 L
REIL Rwy 31 L

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 93902 W13A	APP CRS 126°	Rwy ldg 5500 TDZE 1124 Apt Elev 1126

RNAV (GPS) RWY 13
WILLMAR MUNI-JOHN L RICE FIELD (BDH)

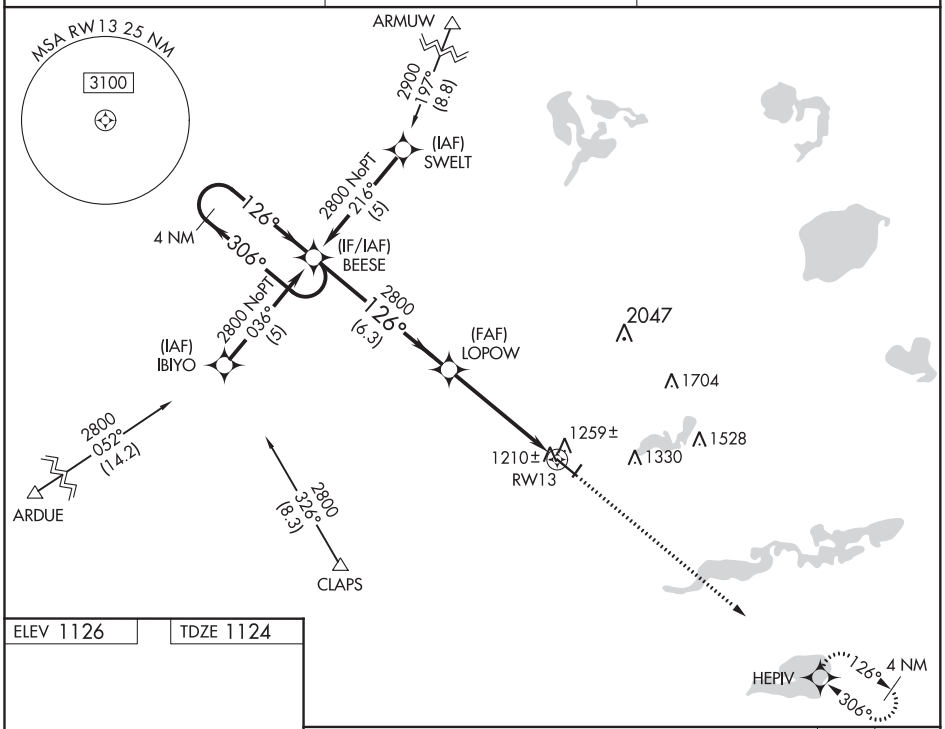
RNP APCH.

If local altimeter setting not received, use Olivia Rgnl altimeter setting and increase all DAs/MDAs 60 feet. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 46°C. Baro-VNAV and VDP NA when using Olivia Rgnl altimeter setting. Circling Rwy 3, 21 NA.

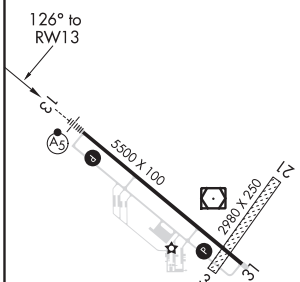
MALSR

MISSED APPROACH: Climb to 2800 direct HEPIV and hold.

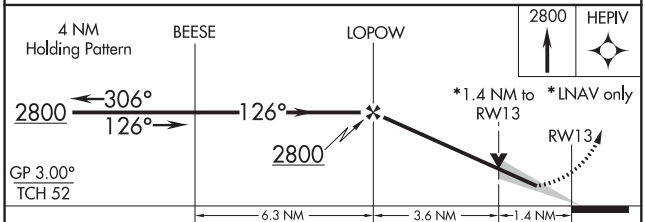
AWOS-3	MINNEAPOLIS CENTER	UNICOM
113.7	125.5 323.1	122.8 (CTAF) L



ELEV 1126 | TDZE 1124



HIRL Rwy 13-31 L
REIL Rwy 31 L



CATEGORY	A	B	C	D
LPV DA	1387-1 263 (300-1)			
LNAV/VNAV DA	1480-1¼ 356 (400-1¼)			
LNAV MDA	1620-1 496 (500-1)		1620-1¼ 496 (500-1¼)	1620-1½ 496 (500-1½)
CIRCLING	1620-1 494 (500-1)		1620-1½ 494 (500-1½)	1680-2 554 (600-2)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

WILLMAR, MINNESOTA | AL-10310 (FAA) | 21056

WAAS CH 72632 W31A	APP CRS 306°	Rwy ldg 5500 TDZE 1126 Apt Elev 1126

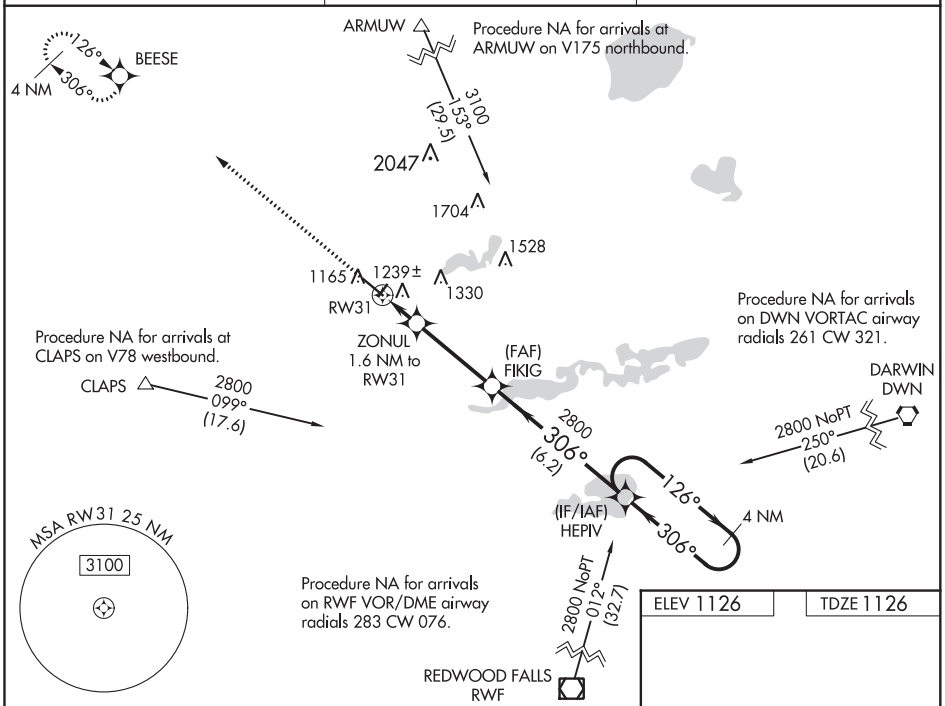
RNAV (GPS) RWY 31
WILLMAR MUNI-JOHN L RICE FIELD (BDH)

RNP APCH.

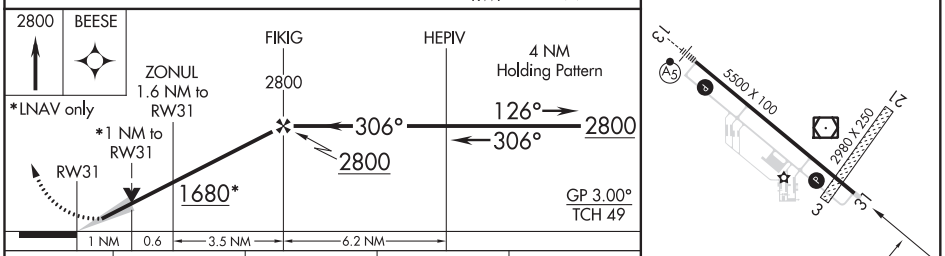
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 46°C. When local altimeter setting not received use Olivia altimeter setting and increase all DA 55 feet and all MDA 60 feet and increase LNAV/VNAV all Cats visibility ⅛ mile and LNAV Cats C and D visibility ¼ mile. Baro-VNAV and VDP NA with Olivia altimeter setting.

MISSED APPROACH: Climb to 2800 direct BEESE and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
113.7	125.5 323.1	122.8 (CTAF) L



ELEV 1126	TDZE 1126



CATEGORY		A	B	C	D
LPV	DA	1326-¾ 200 (200-¾)			
LNAV/VNAV	DA	1527-1⅜ 401 (500-1⅜)			
LNAV MDA		1500-1 374 (400-1)			

HIRL Rwy 13-31 L
REIL Rwy 31 L

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

VOR/DME BDH	APP CRS	Rwy ldg	5500
113.7	316°	TDZE	1126
Chan 84		Apt Elev	1126

VOR RWY 31

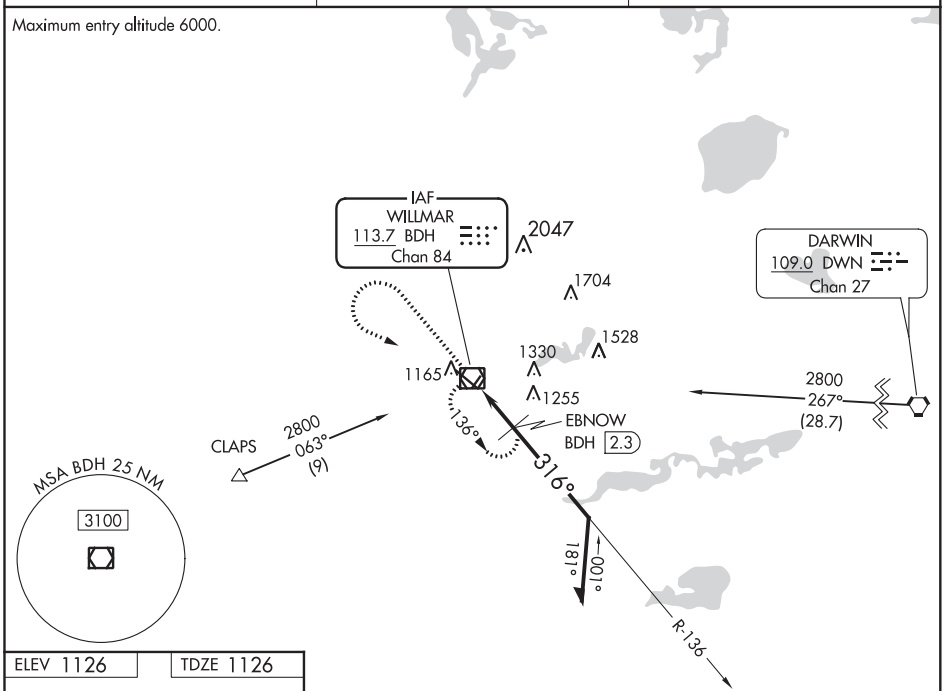
WILLMAR MUNI-JOHN L RICE FIELD (BDH)

If local altimeter setting not received, use Olivia Rgnl altimeter setting and increase all MDAs 60 feet. VDP NA with Olivia Rgnl altimeter setting. Circling Rwy 3, 21 NA.

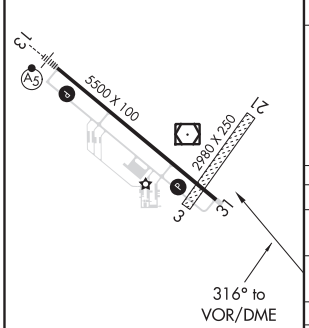
MISSED APPROACH: Climb to 2000, then climbing left turn to 2800 direct BDH VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
113.7	125.5 323.1	122.8 (CTAF) L

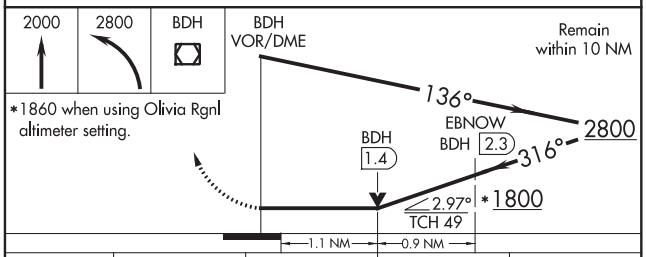
Maximum entry altitude 6000.



ELEV 1126 TDZE 1126



HIRL Rwy 13-31 L
REIL Rwy 31 L



CATEGORY	A	B	C	D
S-31	1800-1	674 (700-1)	1800-2 674 (700-2)	1800-2¼ 674 (700-2¼)
CIRCLING	1800-1	674 (700-1)	1800-2 674 (700-2)	1800-2¼ 674 (700-2¼)
EBNOW FIX MINIMUMS				
S-31	1520-1	394 (400-1)		1520-1¼ 394 (400-1¼)
CIRCLING	1620-1	494 (500-1)	1620-1½ 494 (500-1½)	1680-2 554 (600-2)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

WINDOM, MINNESOTA | AL-5644 (FAA) | 20310

WAAS CH 53742 W17A	APP CRS 177°	Rwy ldg 3598 TDZE 1411 Apt Elev 1411

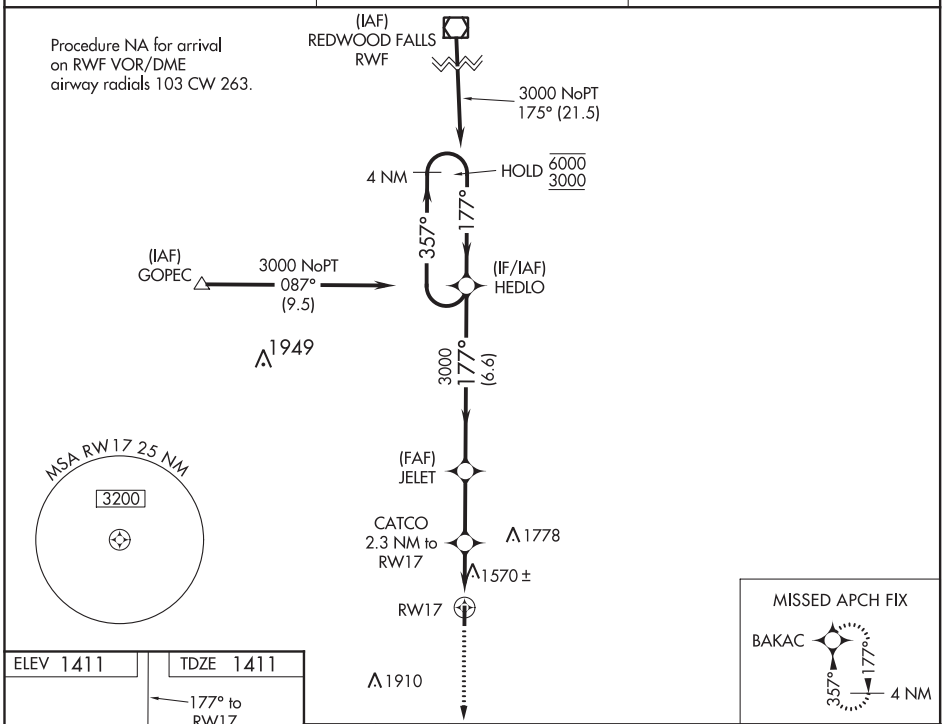
RNAV (GPS) RWY 17
WINDOM MUNI (MWM)

RNP APCH.

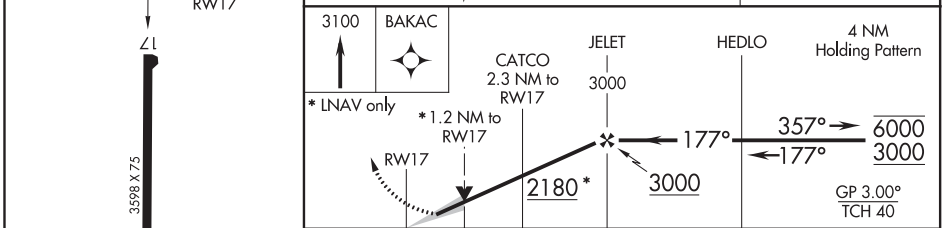
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C.

MISSED APPROACH: Climb to 3100 direct BAKAC and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
118.525	127.1 290.2	122.9 L



ELEV 1411	TDZE 1411



CATEGORY	A	B	C	D
LPV DA	1661-1 250 (300-1)			NA
LNAV/VNAV DA	1858-1⅜ 447 (500-1⅜)			NA
LNAV MDA	1820-1 409 (500-1)		1820-1⅛ 409 (500-1⅛)	NA
C CIRCLING	1880-1 469 (500-1)	1900-1 489 (500-1)	1920-1½ 509 (600-1½)	NA

MIRL Rwy 17-35 L
REIL Rwys 17 and 35 L

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH 63242 W35A	APP CRS 357°	Rwy ldg 3598 TDZE 1411 Apt Elev 1411

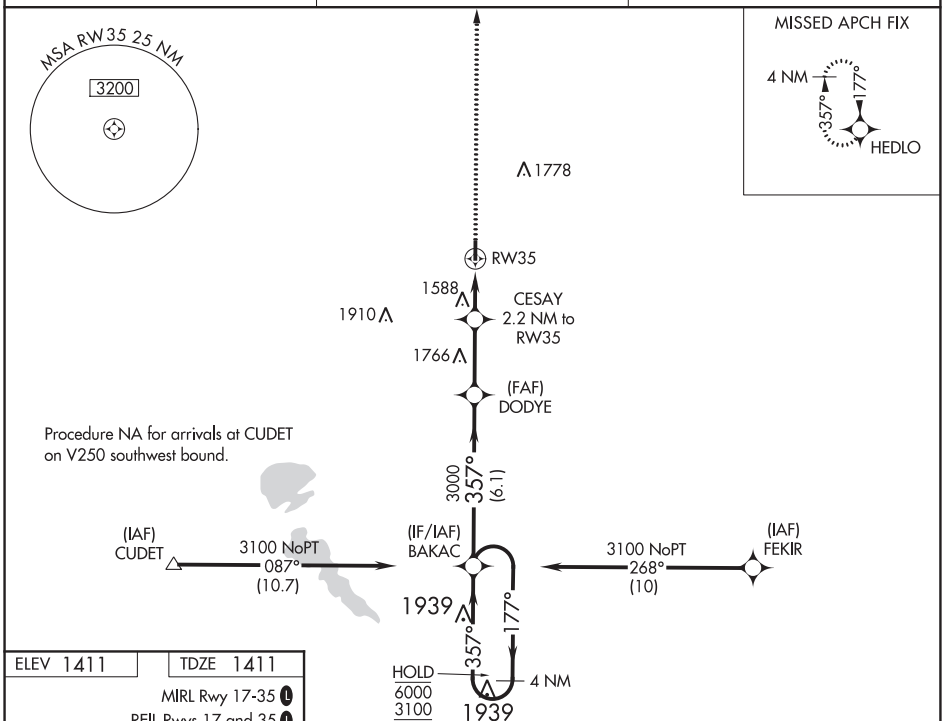
RNAV (GPS) RWY 35
WINDOM MUNI (MWM)

RNP APCH.

Rwy 35 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C.

MISSED APPROACH: Climb to 3000 direct HEDLO and hold.

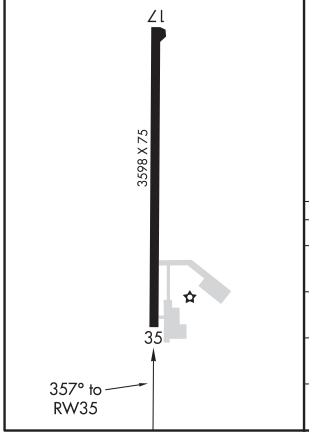
AWOS-3	MINNEAPOLIS CENTER	CTAF
118.525	127.1 290.2	122.9 L

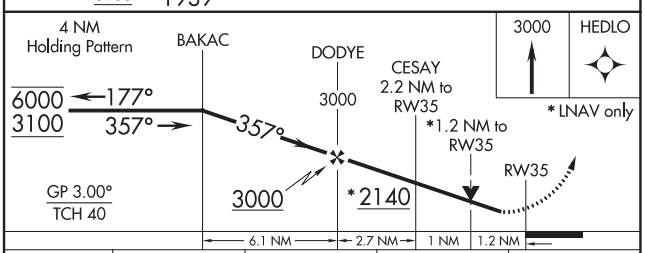


ELEV 1411	TDZE 1411

MIRL Rwy 17-35 L

REIL Rwys 17 and 35 L





CATEGORY	A	B	C	D
LPV DA	1661-1 250 (300-1)			NA
LNAV/VNAV DA	1672-1 261 (300-1)			NA
LNAV MDA	1840-1 429 (500-1)		1840-1¼ 429 (500-1¼)	NA
C CIRCLING	1880-1 469 (500-1)	1900-1 489 (500-1)	1920-1½ 509 (600-1½)	NA

NC-1, 25 FEB 2021 to 22 APR 2021
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WINNER, SOUTH DAKOTA AL-5105 (FAA) 21056

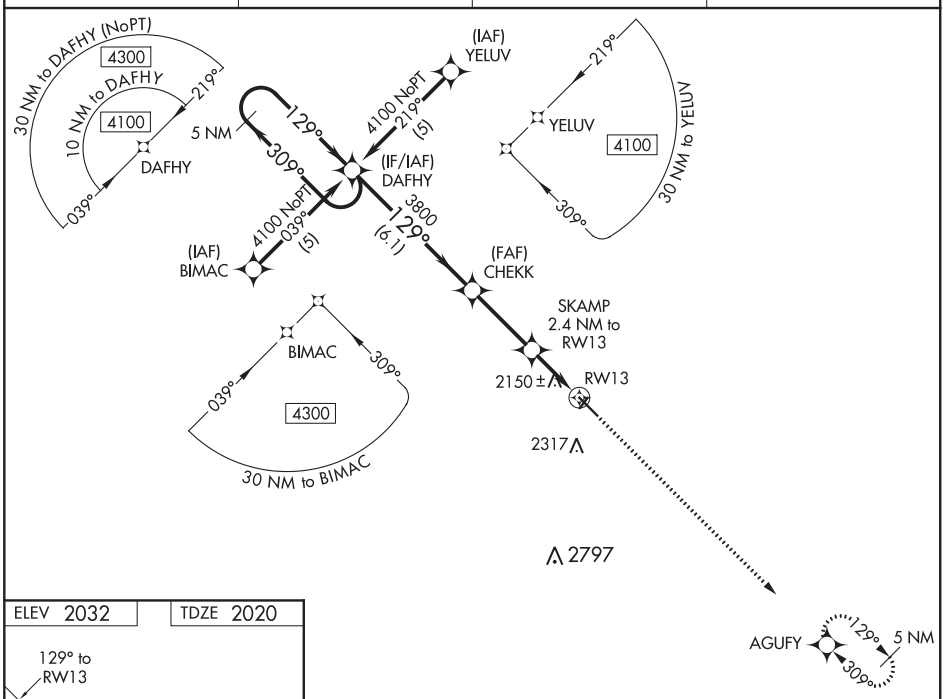
WAAS CH 61212 W13A	APP CRS 129°	Rwy ldg 5500 TDZE 2020 Apt Elev 2032

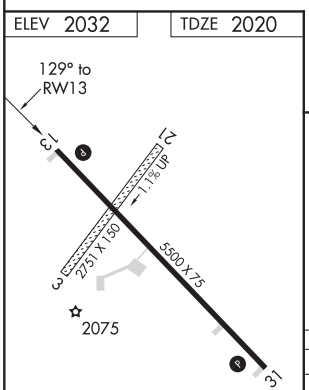
RNAV (GPS) RWY 13
WINNER RGNL (ICR)

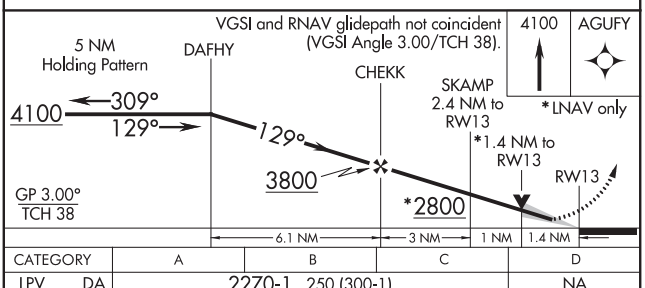
DME/DME RNP-0.3 NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C (-2°F) or above 54°C (130°F). Baro-VNAV and VDP NA when using Valentine altimeter setting. When local altimeter setting not received, use Valentine, NE altimeter setting and increase all DA/MDA 240 feet; increase LPV all Cats visibility ¾ mile, LNAV/VNAV all Cats visibility 1 mile, LNAV Cat C visibility ¾ mile, Circling Cat B visibility ¼ mile and Cat C visibility 1 mile. Circling NA to Rwys 3 and 21.

MISSED APPROACH: Climb to 4100 direct AGUFY and hold.

ASOS	MINNEAPOLIS CENTER	GCO	UNICOM
126.775	125.1 269.1	121.725	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	2270-1 250 (300-1)			NA
LNAV/VNAV DA	2456-1½ 436 (500-1½)			NA
LNAV MDA	2480-1 460 (500-1)		2480-1¼ 460 (500-1¼)	NA
C CIRCLING	2580-1 548 (600-1)	2680-1 648 (700-1)	2680-1¾ 648 (700-1¾)	NA

MIRL Rwy 13-31 L

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

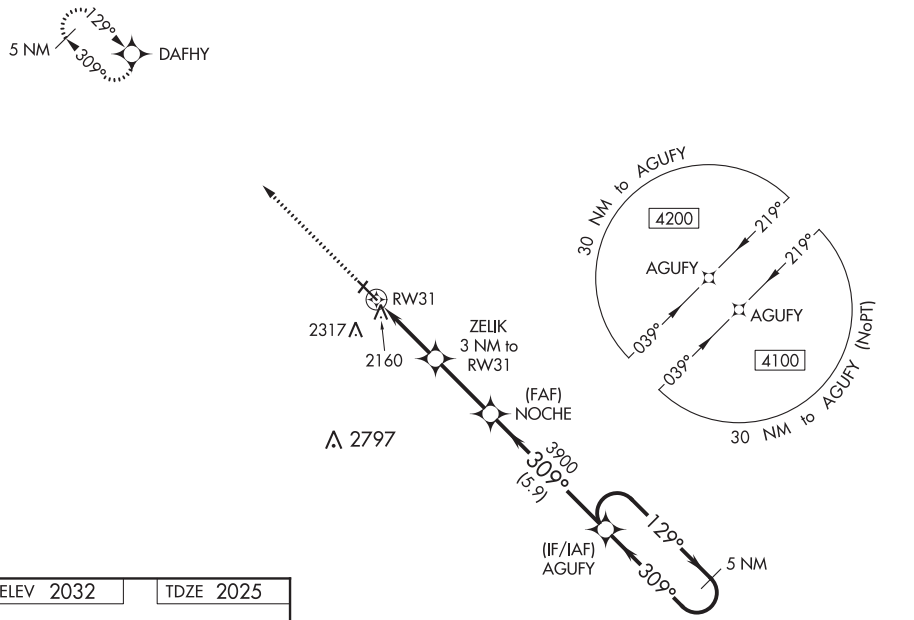
WAAS CH 97612 W31A	APP CRS 309°	Rwy ldg 5500 TDZE 2025 Apt Elev 2032

RNAV (GPS) RWY 31
WINNER RGNL (ICR)

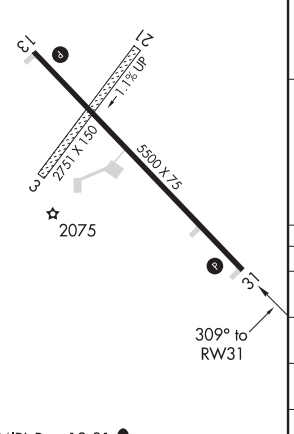
Circling NA to Rwys 3 and 21. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24° C (-11°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Baro-VNAV and VDP NA when using Valentine altimeter setting. When local altimeter setting not received, use Valentine, NE altimeter setting and increase LPV DA to 2514, LNAV/VNAV DA to 2549 and all visibilities ⅞ mile, increase all MDA 240 feet; increase Cat B visibility ¼ mile and Cat C 1 mile.

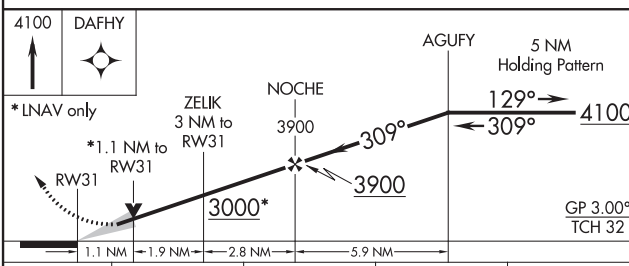
MISSED APPROACH: Climb to 4100 direct DAFHY and hold.

ASOS	MINNEAPOLIS CENTER	GCO	UNICOM
126.775	125.1 269.1	121.725	122.8 (CTAF) L



ELEV 2032 TDZE 2025





CATEGORY		A	B	C	D
LPV	DA	2275-1 250 (300-1)			NA
LNAV/VNAV	DA	2310-1 285 (300-1)			NA
LNAV	MDA	2420-1 395 (400-1)		2420-1⅛ 395 (400-1⅛)	NA
C CIRCLING		2580-1 548 (600-1)	2680-1 648 (700-1)	2680-1¾ 648 (700-1¾)	NA

MIRL Rwy 13-31 L

NC-1, 25 FEB 2021 to 22 APR 2021

LOC/DME I-ONA	APP CRS	Rwy ldg 5199
109.35	300°	TDZE 656
Chan 30 (Y)		Apt Elev 656

ILS Y or LOC Y RWY 30

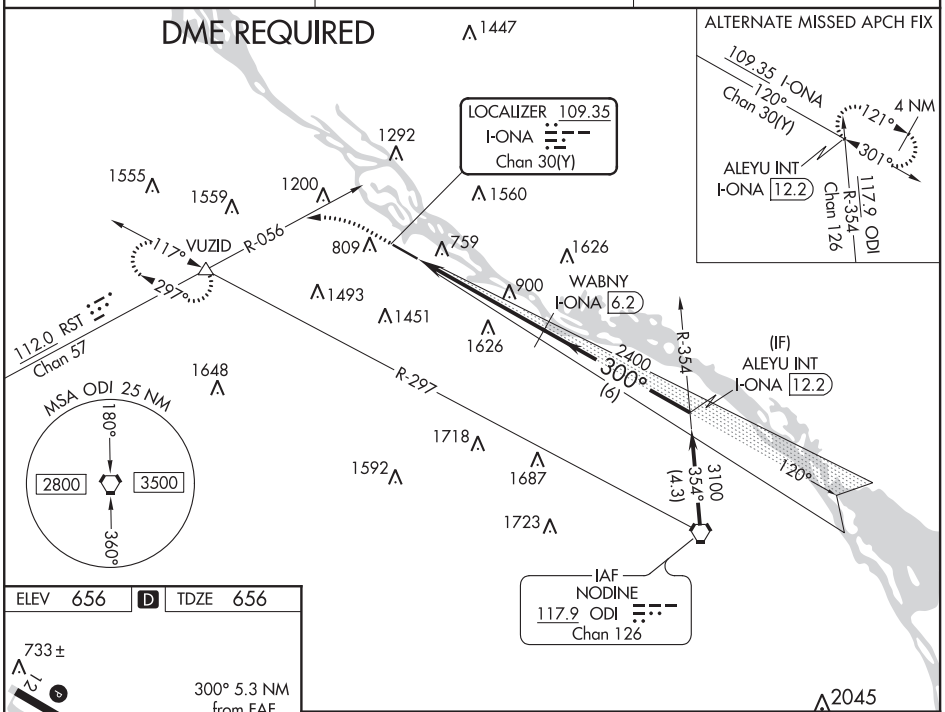
WINONA MUNI-MAX CONRAD FIELD (ONA)

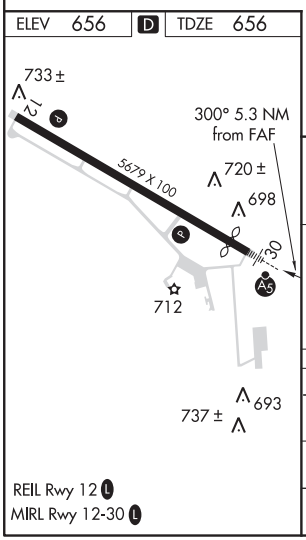
T A DME required. VDP NA with La Crosse altimeter setting. When local altimeter setting not received, use La Crosse altimeter setting and increase S-ILS 30 DA to 1127 and all visibilities ⅛ mile, increase all MDA 60 feet, and visibility S-LOC 30 Cat C/D ⅛ mile, and Circling Cat B ¼ mile. For inop ALS, increase S-ILS 30 all Cats visibility to 1⅜ mile, increase S-LOC 30 Cats C/D visibility to 1⅝ mile. For inop ALS when using La Crosse altimeter setting, increase S-ILS 30 all Cats visibility to 1⅝ mile, increase S-LOC 30 Cats C/D visibility to 1¾ mile.

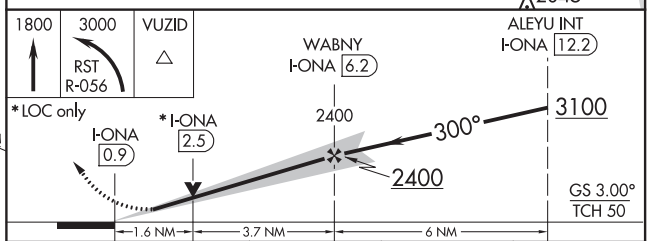
MALSR

MISSED APPROACH: Climb to 1800 then climbing left turn to 3000 on RST VOR/DME R-056 to VUZID INT and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.075	128.6 363.0	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-ILS 30	1074-1⅛ 418 (500-1⅛)			
S-LOC 30	1220-½ 564 (600-½)		1220-1¼ 564 (600-1¼)	
C CIRCLING	1560-1¼ 904 (1000-1¼)	1600-1¼ 944 (1000-1¼)	1780-3 1124 (1200-3)	1980-3 1324 (1400-3)

NC-1, 25 FEB 2021 to 22 APR 2021

LOC/DME I-ONA	APP CRS	Rwy ldg 5199
109.35	300°	TDZE 656
Chan 30 (Y)		Apt Elev 656

ILS Z or LOC Z RWY 30
WINONA MUNI-MAX CONRAD FIELD (ONA)

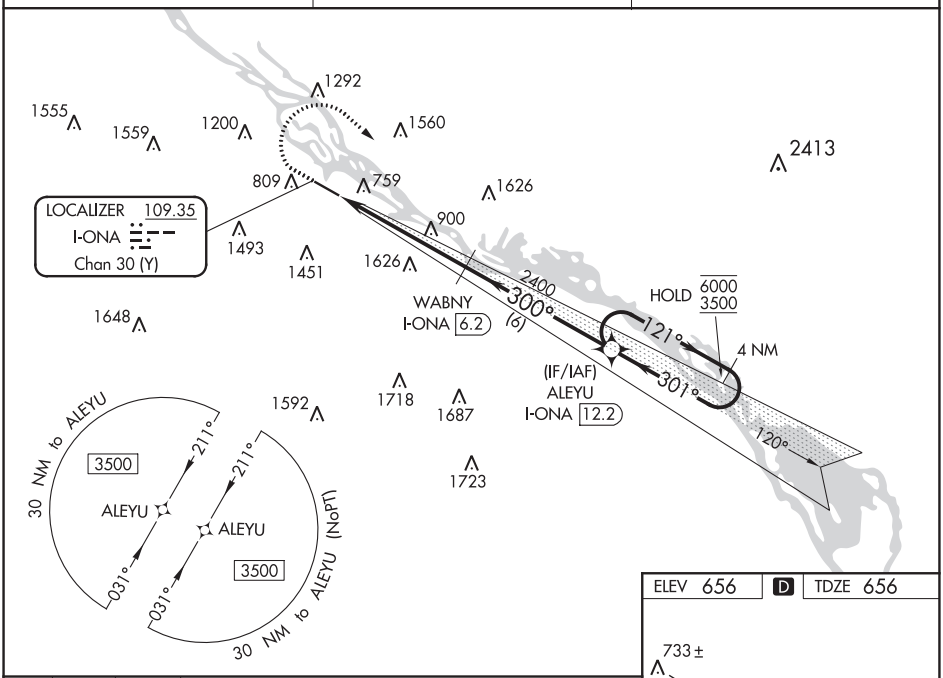
RNAV 1-GPS or radar required for procedure entry. DME required.
RNAV-1 GPS required from MAP to ALEYU.

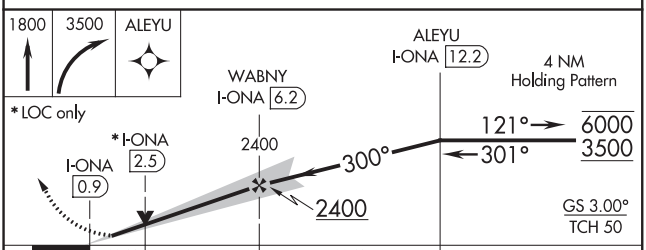
T A VDP NA with La Crosse altimeter setting. When local altimeter setting not received, use La Crosse altimeter setting and increase S-ILS 30 DA to 1064 and all visibilities ⅛ SM, increase all MDA 60 feet, and visibility S-LOC 30 Cat C/D ⅛ SM and Circling Cat B visibility ¼ SM. For inop ALS, increase S-ILS 30 all Cats visibility to 1⅛ SM, and S-LOC 30 Cats C/D visibility to 1⅝ SM. For inop ALS when using La Crosse altimeter setting, increase S-ILS 30 all Cats visibility to 1⅜ SM, and increase S-LOC 30 Cats C/D visibility to 1¾ SM.

MALSR

MISSED APPROACH: Climb to 1800 then climbing right turn to 3500 direct ALEYU and hold.

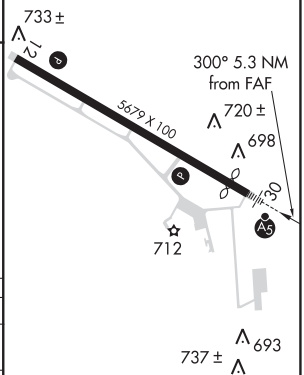
AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.075	128.6 363.0	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-ILS 30	1053-¾ 397 (400-¾)			
S-LOC 30	1220-½ 564 (600-½)		1220-1¼ 564 (600-1¼)	
C CIRCLING	1560-1¼ 904 (1000-1¼)	1600-1¼ 944 (1000-1¼)	1780-3 1124 (1200-3)	1980-3 1324 (1400-3)

ELEV 656 D TDZE 656



REIL Rwy 12 L
MIRL Rwy 12-30 L

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

WINONA, MINNESOTA | AL-5087 (FAA) | 19339

APP CRS	Rwy ldg	5199
120°	TDZE	656
	Apt Elev	656

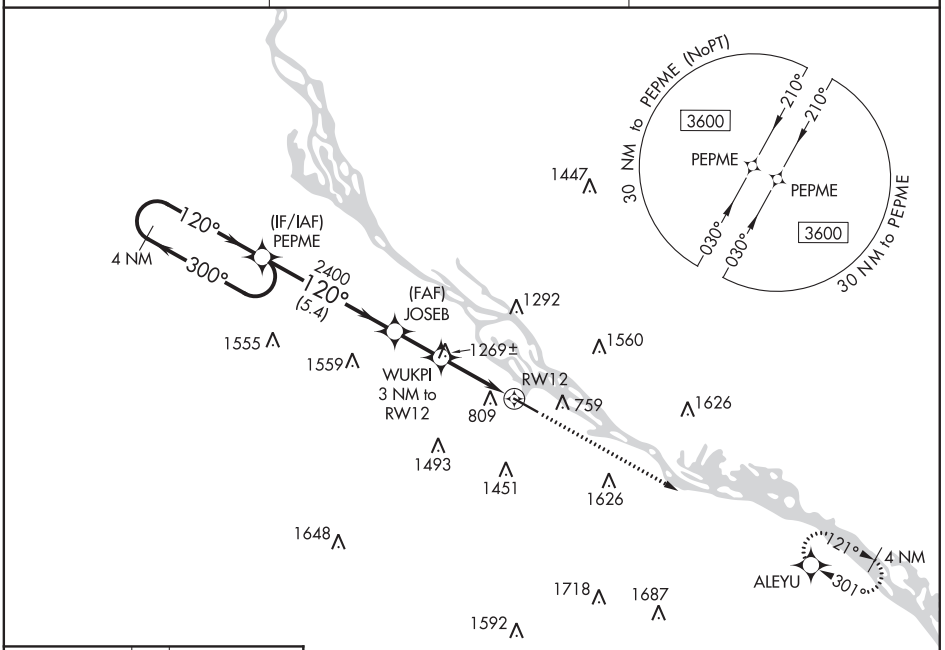
RNAV (GPS) RWY 12
WINONA MUNI-MAX CONRAD FIELD (ONA)

T A

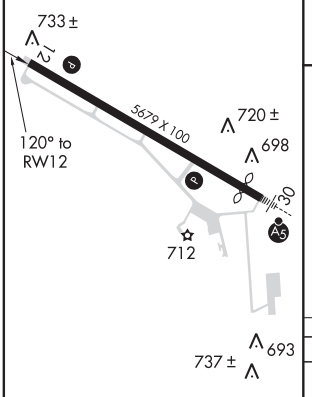
Rwy 12 helicopter visibility reduction below ¾ NA.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3500 direct ALEYU and hold.

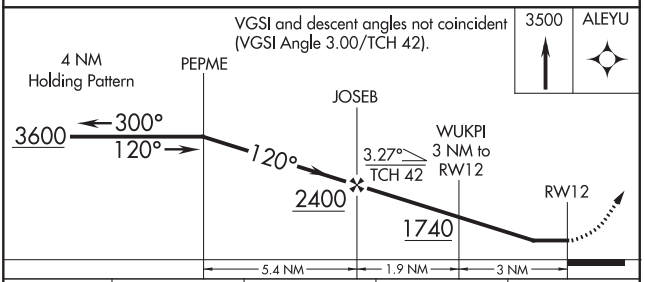
AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.075	128.6 363.0	122.8 (CTAF) L



ELEV 656 | D | TDZE 656



REIL Rwy 12 L
MIRL Rwy 12-30 L



CATEGORY	A	B	C	D
LNAV MDA	1520-1 864 (900-1)	1520-1¼ 864 (900-1¼)	1520-2½ 864 (900-2½)	
C CIRCLING	1560-1¼ 904 (1000-1¼)	1580-1¼ 924 (1000-1¼)	1780-3 1124 (1200-3)	1980-3 1324 (1400-3)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

WAAS CH **40329** **W30A**	APP CRS **300°**	Rwy ldg **5199** TDZE **656** Apt Elev **656**

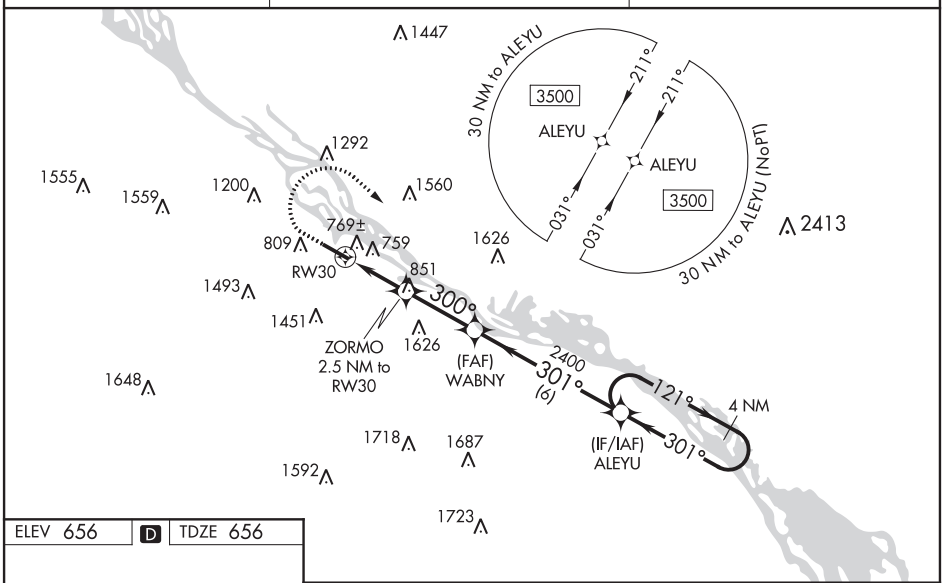
RNAV (GPS) RWY 30
WINONA MUNI-MAX CONRAD FIELD (ONA)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use La Crosse altimeter setting and increase all LPV DA to 1064 feet and visibility ⅛ mile all Cats, all LNAV/VNAV DA to 1193 and visibility ⅛ mile all Cats, and all MDA 60 feet, increase LNAV Cat C/D and Circling Cat B visibility ¼ mile. For inop ALS, increase LPV all Cats visibility to 1⅛ mile. For inop ALS when using La Crosse altimeter setting, increase LPV all Cats visibility to 1⅜ mile, and LNAV Cats C/D visibility to 2 mile. Baro-VNAV and VDP NA when using La Crosse altimeter setting.

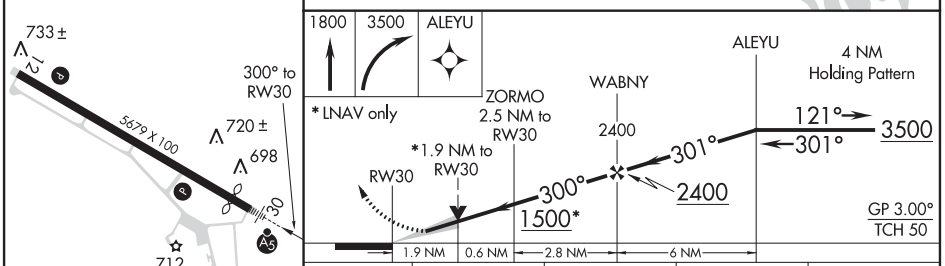
MALSR A5

MISSED APPROACH: Climb to 1800 then climbing right turn to 3500 direct ALEYU and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.075	**128.6 363.0**	**122.8** (CTAF) L



ELEV 656 D TDZE 656



CATEGORY	A	B	C	D
LPV DA	1011-¾ 355 (400-¾)			
LNAV/VNAV DA	1140-1⅛ 484 (500-1⅛)			
LNAV MDA	1280-½ 624 (700-½)		1280-1⅜ 624 (700-1⅜)	
C CIRCLING	1560-1¼ 904 (1000-1¼)	1600-1¼ 944 (1000-1¼)	1780-3 1124 (1200-3)	1980-3 1324 (1400-3)

REIL Rwy 12 L
MIRL Rwy 12-30 L

NC-1, 25 FEB 2021 to 22 APR 2021

NC-1, 25 FEB 2021 to 22 APR 2021

WORTHINGTON, MINNESOTA | AL-5209 (FAA) | 20086

LOC I-OTG	APP CRS	Rwy ldg	5500
111.7	293°	TDZE	1570
		Apt Elev	1574

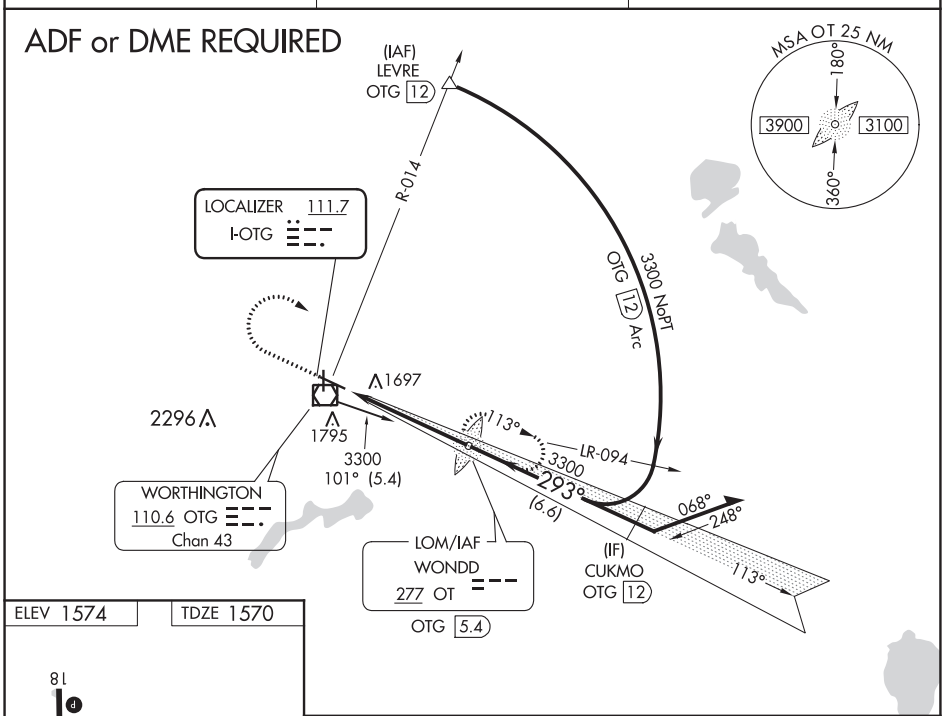
ILS or LOC RWY 29
WORTHINGTON MUNI (OTG)

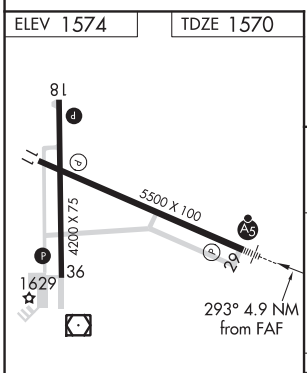
T A NA — ADF or DME required. Autopilot coupled approach NA below 1770. When local altimeter setting not received, use Jackson altimeter setting and increase all DA 78 feet, all MDA 80 feet, increase S-LOC 29 Cat C and D and Circling Cat C visibility ¼ mile. For inoperative MALSR, when using Jackson altimeter setting, increase S-ILS 29 all Cats visibility to ⅞ mile.

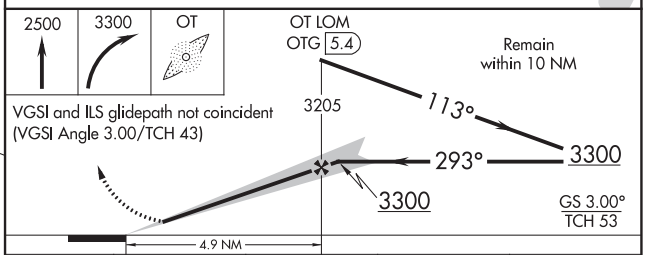
MALSR A5

MISSED APPROACH: Climb to 2500 then climbing right turn to 3300 direct WONDD LOM/OTG 5.4 DME and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
121.075	132.05 317.4	122.8 (CTAF) L







MIRL Rwy 18-36 L
HIRL Rwy 11-29 L
REIL Rwys 11, 18, and 36 L

FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

CATEGORY	A	B	C	D
S-ILS 29	1770-½ 200 (200-½)			
S-LOC 29	2000-½ 430 (500-½)		2000-¾ 430 (500-¾)	
CIRCLING	2100-1 526 (600-1)		2100-1½ 526 (600-1½)	2140-2 566 (600-2)

NC-1, 25 FEB 2021 to 22 APR 2021
NC-1, 25 FEB 2021 to 22 APR 2021

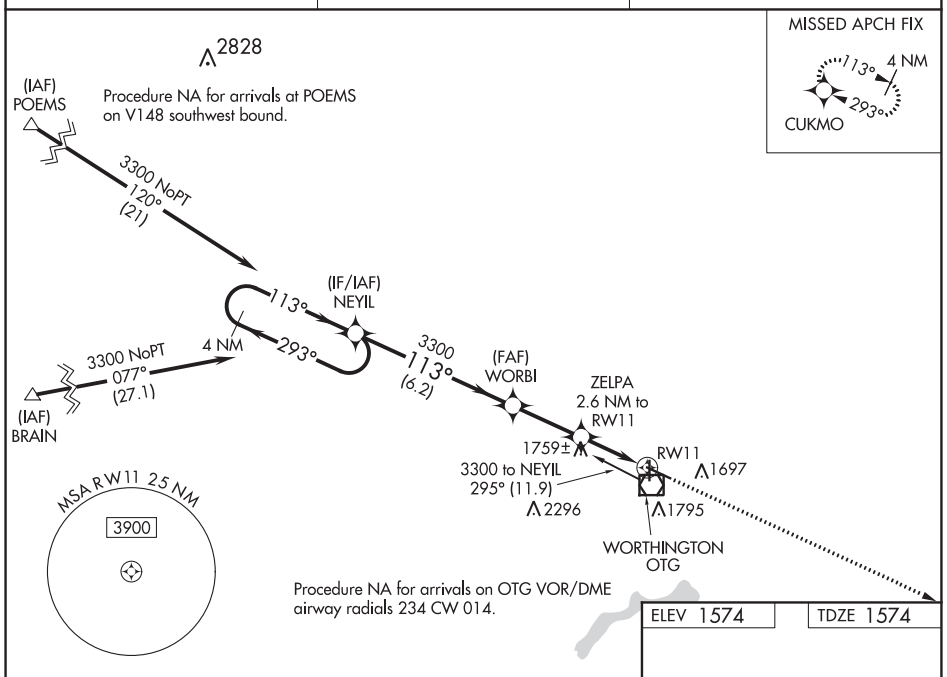
WAAS CH 58230 W11A	APP CRS 113°	Rwy ldg 5500 TDZE 1574 Apt Elev 1574

RNAV (GPS) RWY 11
WORTHINGTON MUNI (OTG)

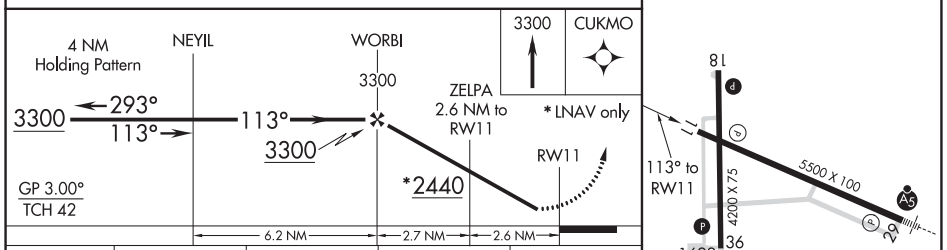
Baro-VNAV NA when using Jackson altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 54°C (130°F). When VGSI inop, Straight-in/Circling Rwy 11 procedure NA at night. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Jackson altimeter setting and increase all DA 78 feet, all MDA 80 feet, increase LPV and LNAV/VNAV all Cats and LNAV Cats C/D visibility ⅛ mile and Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 3300 direct CUKMO and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
121.075	132.05 317.4	122.8 (CTAF) L



ELEV 1574 TDZE 1574



CATEGORY	A	B	C	D
LPV DA	1824-1 250 (300-1)			
LNAV/VNAV DA	1826-1 252 (300-1)			
LNAV MDA	2020-1 446 (500-1)		2020-1⅜ 446 (500-1⅜)	
CIRCLING	2100-1 526 (600-1)		2100-1½ 526 (600-1½)	2140-2 566 (600-2)

MIRL Rwy 18-36 L
HIRL Rwy 11-29 L
REIL Rwys 11, 18, and 36 L

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WORTHINGTON, MINNESOTA | AL-5209 (FAA) | 19227

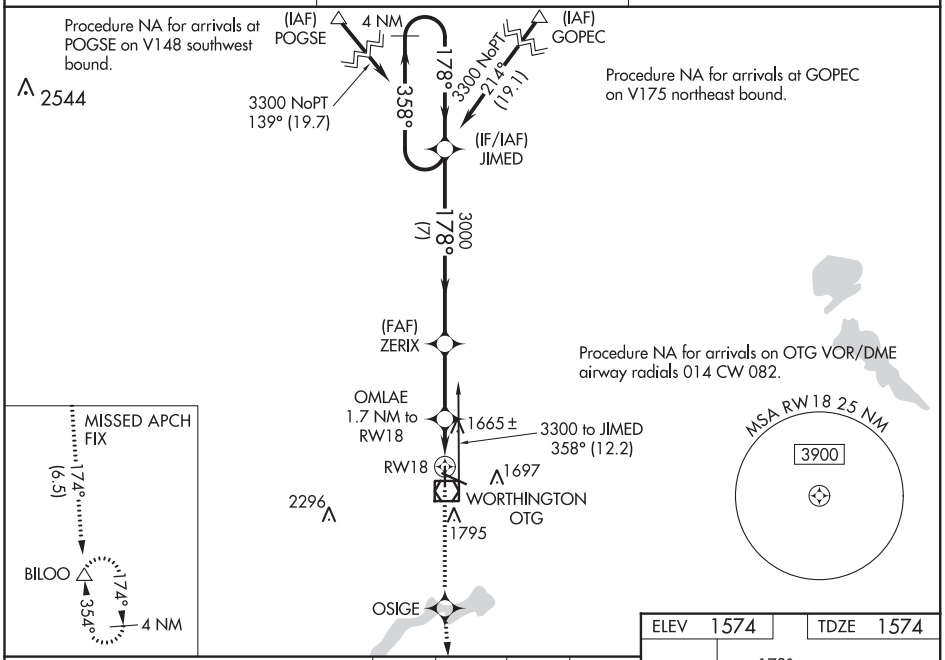
WAAS CH 93830 W18A	APP CRS 178°	Rwy ldg 4200 TDZE 1574 Apt Elev 1574

RNAV (GPS) RWY 18
WORTHINGTON MUNI (OTG)

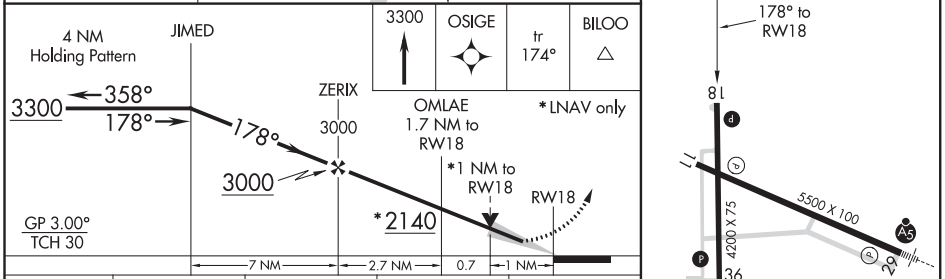
Baro-VNAV NA when using Jackson altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. VDP NA with Jackson altimeter setting. When local altimeter setting not received, use Jackson altimeter setting and increase all DA 78 feet and all MDA 80 feet, increase LPV and LNAV/VNAV all Cats, LNAV Cat C/D, and Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 3300 direct OSIGE and on track 174° to BILOO and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
121.075	132.05 317.4	122.8 (CTAF) L



3300	OSIGE	tr 174°	BILOO



CATEGORY	A	B	C	D
LPV DA	1774-1 200 (200-1)			
LNAV/VNAV DA	1824-1 250 (300-1)			
LNAV MDA	1920-1 346 (400-1)			
CIRCLING	2100-1 526 (600-1)		2100-1½ 526 (600-1½)	2140-2 566 (600-2)

MIRL Rwy 18-36 L
HIRL Rwy 11-29 L
REIL Rwys 11, 18, and 36 L

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WAAS CH 45930 W29A	APP CRS 293°	Rwy ldg 5500 TDZE 1570 Apt Elev 1574

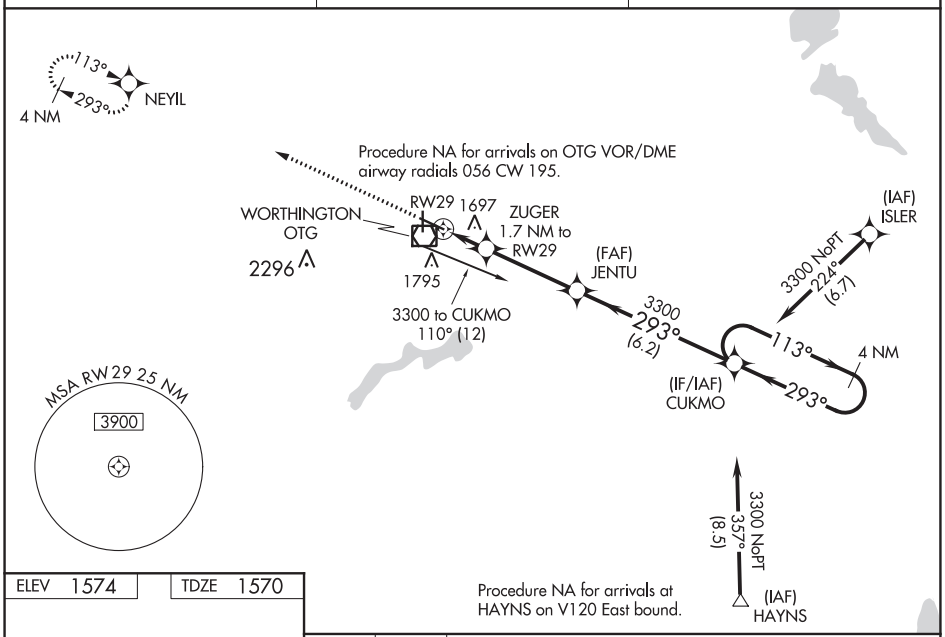
RNAV (GPS) RWY 29
WORTHINGTON MUNI (OTG)

Baro-VNAV NA when using Jackson altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. VDP NA with Jackson altimeter setting. When local altimeter setting not received, use Jackson altimeter setting and increase all DA 78 feet and all MDA 80 feet: increase LNAV/VNAV all Cats visibility ¼ mile, LNAV Cats C/D visibility ⅜ mile, and Circling Cat C visibility ¼ mile. For inoperative MALSR, when using Jackson altimeter setting, increase LPV all Cats visibility to ⅞ mile.

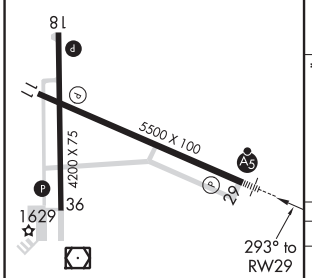
MALSR A5

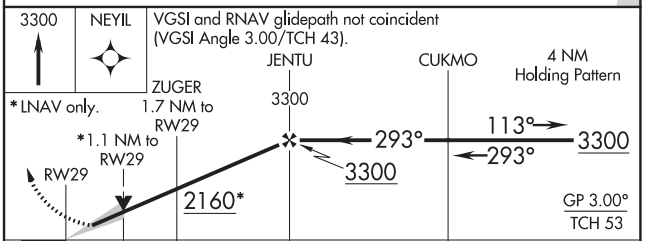
MISSED APPROACH: Climb to 3300 direct NEYIL and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
121.075	132.05 317.4	122.8 (CTAF) L



ELEV 1574 TDZE 1570





CATEGORY	A	B	C	D
LPV DA	1770-½ 200 (200-½)			
LNAV/VNAV DA	1992-1 422 (500-1)			
LNAV MDA	1960-½ 390 (400-½)		1960-⅝ 390 (400-⅝)	
CIRCLING	2100-1 526 (600-1)		2100-1½ 526 (600-1½)	2140-2 566 (600-2)

MIRL Rwy 18-36 L
HIRL Rwy 11-29 L
REIL Rwys 11, 18, and 36 L

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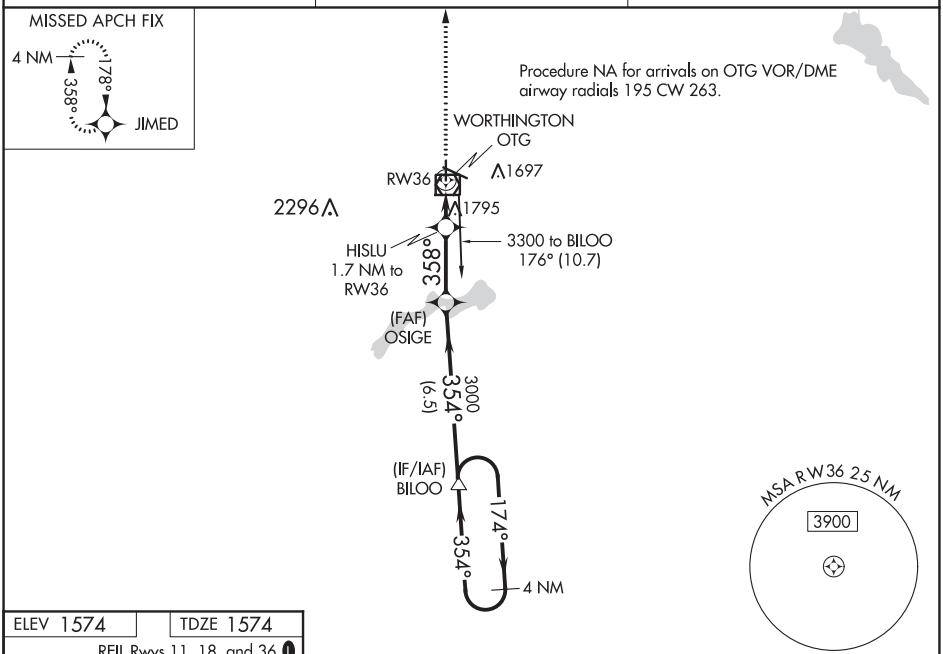
RNAV (GPS) RWY 36
WORTHINGTON MUNI (OTG)

WAAS	APP CRS	Rwy ldg	4200
CH 99329	358°	TDZE	1574
W36A		Apt Elev	1574

Baro-VNAV NA when using Jackson altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Jackson altimeter setting and increase all DA 78 feet and MDA 80 feet, increase LPV all Cats, LNAV Cat C/D and Circling Cat C visibility ¼ mile and LNAV/VNAV all Cats visibility ⅜ mile.

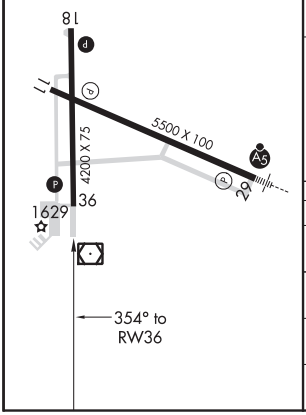
MISSED APPROACH: Climb to 3300 direct JIMED and hold.

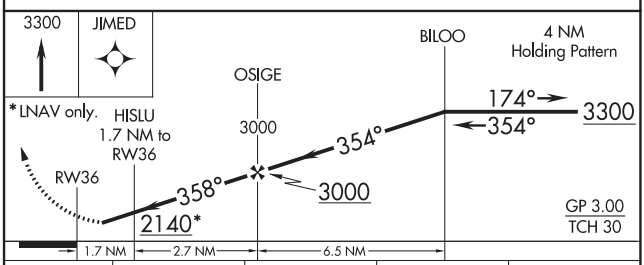
AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
121.075	132.05 317.4	122.8 (CTAF) L



ELEV 1574	TDZE 1574

REIL Rwys 11, 18, and 36 L
MIRL Rwy 18-36 L
HIRL Rwy 11-29 L





CATEGORY	A	B	C	D
LPV DA	1824-1 250 (300-1)			
LNAV/VNAV DA	2095-1⅞ 521 (600-1⅞)			
LNAV MDA	2060-1 486 (500-1)		2060-1⅜ 486 (500-1⅜)	
CIRCLING	2100-1 526 (600-1)		2100-1½ 526 (600-1½)	2140-2 566 (600-2)

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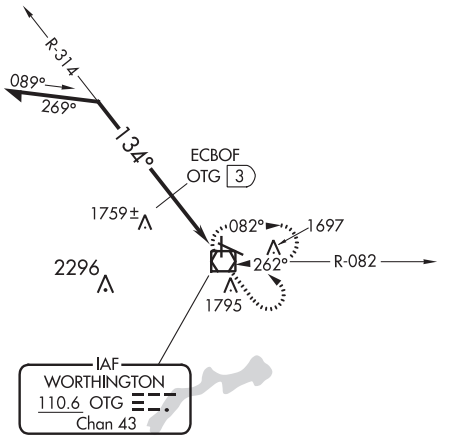
VOR/DME OTG	APP CRS	Rwy ldg	5500
110.6	134°	TDZE	1574
Chan 43		Apt Elev	1574

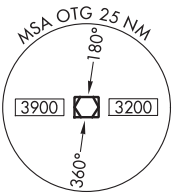
VOR RWY 11
WORTHINGTON MUNI (OTG)

When local altimeter setting not received, use Jackson altimeter setting and increase all MDA 80 feet, Circling Cat A and D visibility ¼ mile, increase ECBOF fix minimums S-11 Cat C/D visibility ⅛ mile and Circling Cat C visibility ¼ mile. When VGSI inop, Straight-in/Circling Rwy 11 procedure NA at night. Visibility reduction by helicopters NA.

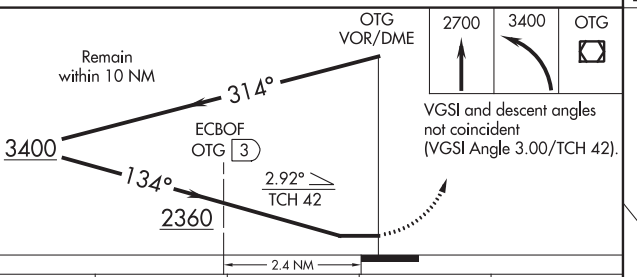
MISSED APPROACH: Climb to 2700 then climbing left turn to 3400 direct to OTG VOR/DME and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
121.075	132.05 317.4	122.8 (CTAF) L



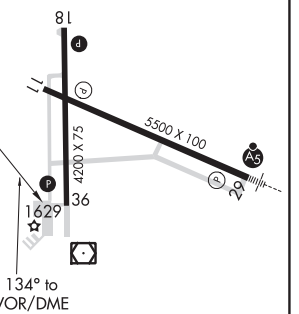


ELEV 1574 TDZE 1574



VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 42).

CATEGORY	A	B	C	D
S-11	2360-1 786 (800-1)	2360-1¼ 786 (800-1¼)	2360-2½ 786 (800-2½)	
CIRCLING	2360-1 786 (800-1)	2360-1¼ 786 (800-1¼)	2360-2½ 786 (800-2½)	
ECBOF FIX MINIMUMS (DME REQUIRED)				
S-11	2020-1 446 (500-1)		2020-1⅜ 446 (500-1⅜)	
CIRCLING	2100-1 526 (600-1)		2100-1½ 526 (600-1½)	2140-2 566 (600-2)



MIRL Rwy 18-36 L
HIRL Rwy 11-29 L
REIL Rwys 11, 18, and 36 L

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WORTHINGTON, MINNESOTA | AL-5209 (FAA) | 20086

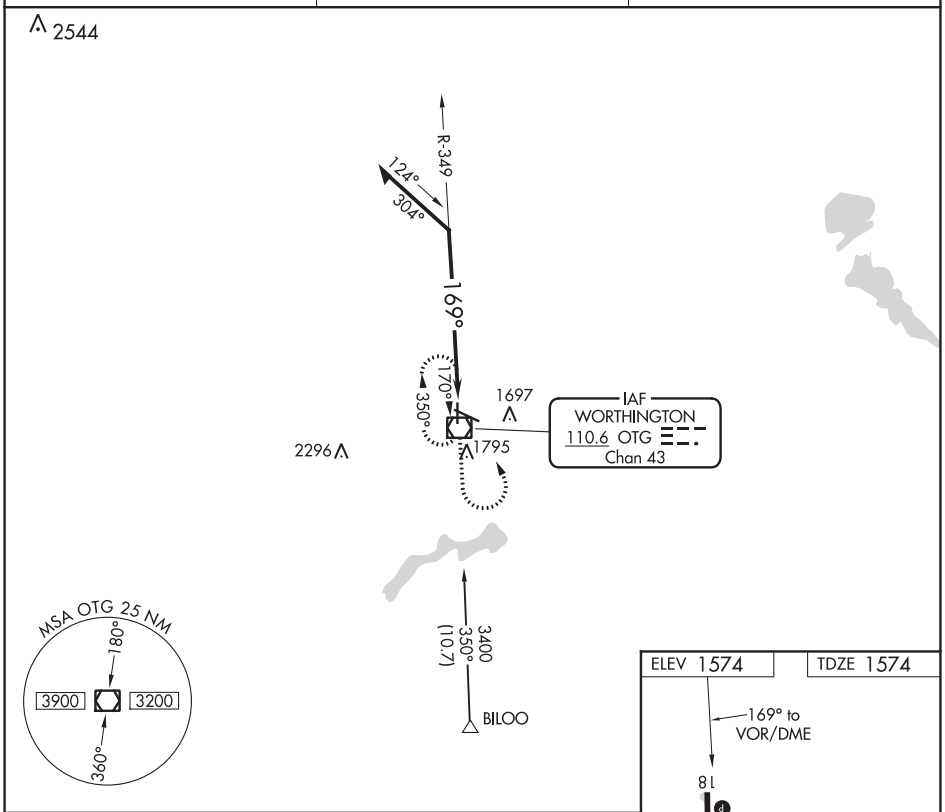
VOR/DME OTG	APP CRS	Rwy ldg	4200
110.6	169°	TDZE	1574
Chan 43		Apt Elev	1574

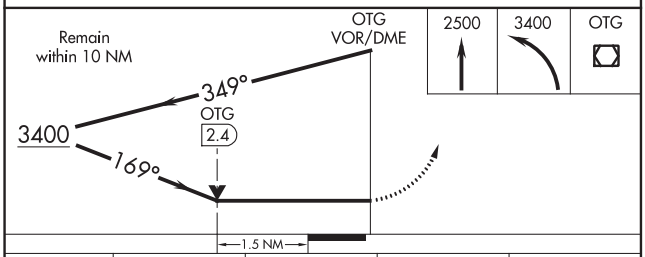
VOR RWY 18
WORTHINGTON MUNI (OTG)

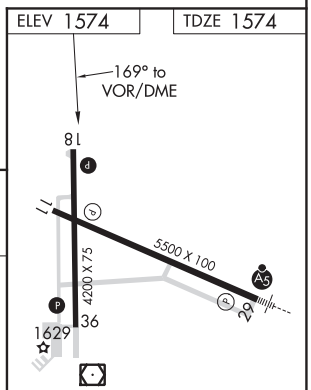
VDP NA with Jackson altimeter setting. When local altimeter setting not received, use Jackson altimeter setting and increase all MDA 80 feet and increase S-18 Cats C/D visibility ⅜ mile and Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 2500 then climbing left turn to 3400 direct OTG VOR/DME and hold, continue climb-in-hold to 3400.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
121.075	132.05 317.4	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-18	2080-1	506 (600-1)	2080-1⅜	506 (600-1⅜)
CIRCLING	2100-1	526 (600-1)	2100-1½ 526 (600-1½)	2140-2 566 (600-2)

MIRL Rwy 18-36 L
HIRL Rwy 11-29 L
REIL Rwys 11, 18, and 36 L

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ILS or LOC RWY 31
CHAN GURNEY MUNI (YKN)

LOC I-YKN	APP CRS	Rwy ldg	6095
109.5	313°	TDZE	1285
		Apt Elev	1306

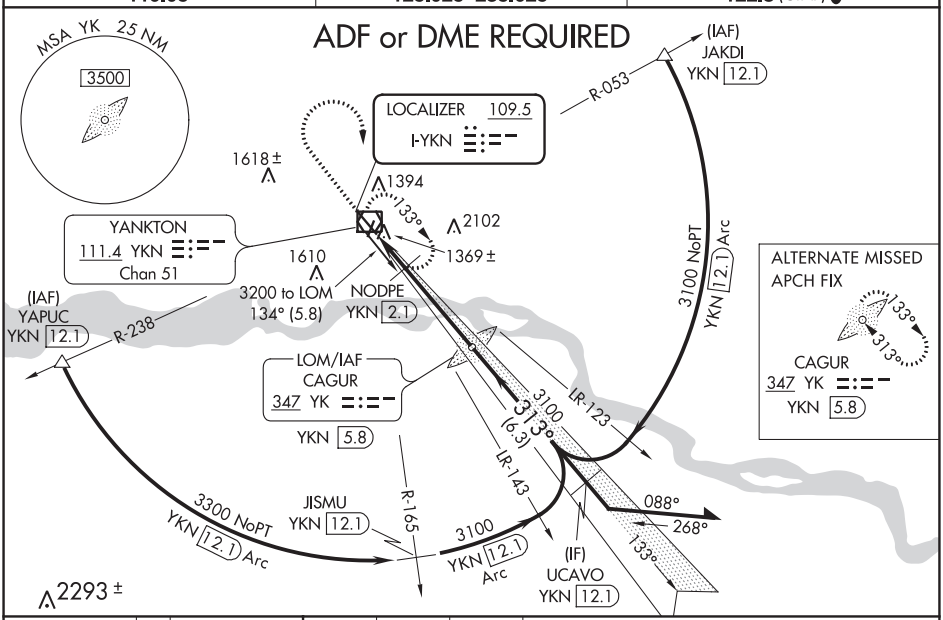
When VGSI inop, Circling Rwy 19 NA at night. When local altimeter setting not received, use Sioux Falls altimeter setting and increase all DA 130 feet and all MDA 140 feet, and increase S-ILS 31 visibility all Cats ⅛ mile, S-LOC 31 Cats C and D ⅜ mile, and Circling Cat C ⅜ mile, Cat D ¼ mile. NODPE fix minimums: increase S-LOC 31 visibility Cats C and D ⅜ mile, Circling Cats C and D ¼ mile. For inoperative MALSR when using Sioux Falls altimeter setting, increase S-ILS 31 all Cats visibility to 1⅛ mile.

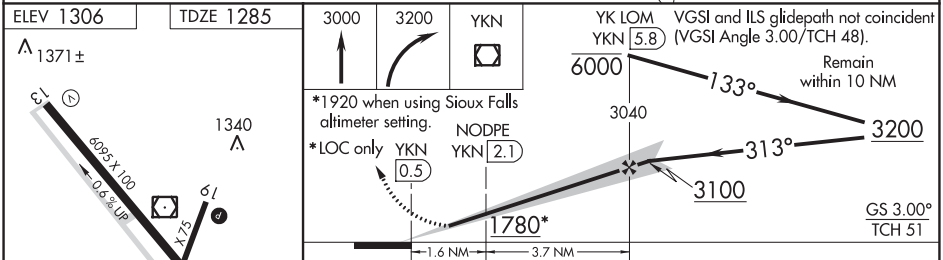
NA

MALSR

MISSED APPROACH: Climb to 3000 then climbing right turn to 3200 direct YKN VOR/DME and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
119.05	125.025 235.625	122.8 (CTAF)





FAF to MAP 5.3 NM					
Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46

CATEGORY	A	B	C	D
S-ILS 31	1485-½ 200 (200-½)			
S-LOC 31	1780-½ 495 (500-½)		1780-1 495 (500-1)	
CIRCLING	1780-1 474 (500-1)		1780-1½ 474 (500-1½)	1860-2 554 (600-2)
NODPE FIX MINIMUMS (DME REQUIRED)				
S-LOC 31	1620-½ 335 (400-½)		1620-⅝ 335 (400-⅝)	
CIRCLING	1780-1 474 (500-1)		1780-1½ 474 (500-1½)	1860-2 554 (600-2)

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YANKTON, SOUTH DAKOTA | AL-5235 (FAA) | 21056

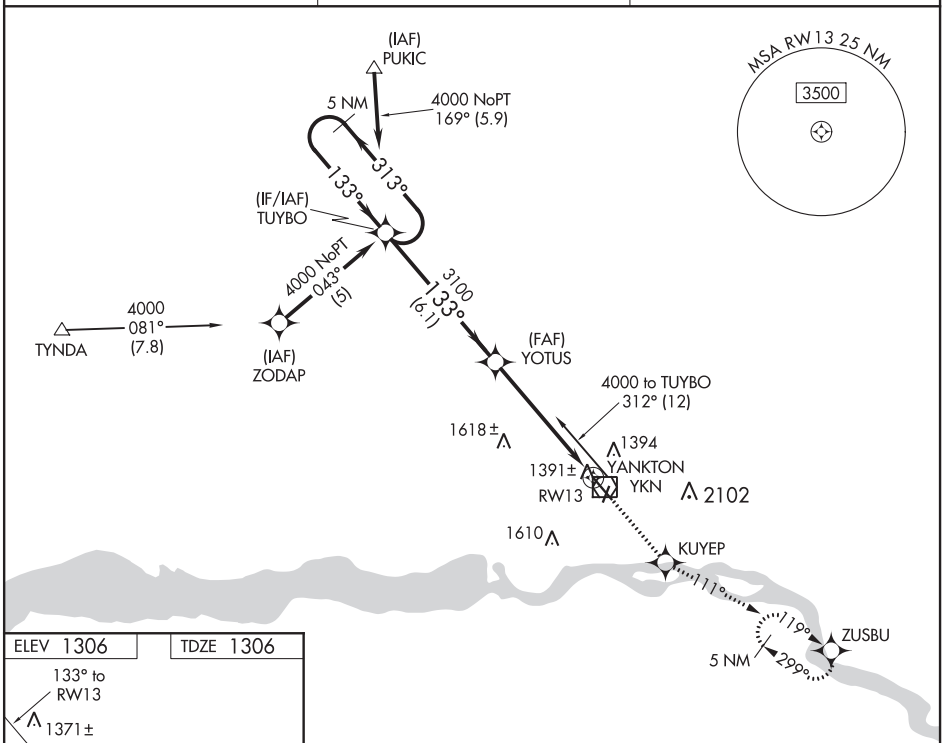
RNAV (GPS) RWY 13
CHAN GURNEY MUNI (YKN)

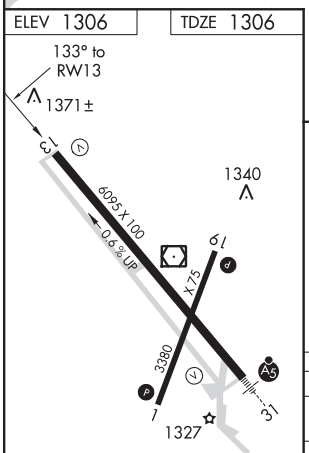
WAAS CH 50400 W13A	APP CRS 133°	Rwy ldg 6095 TDZE 1306 Apt Elev 1306

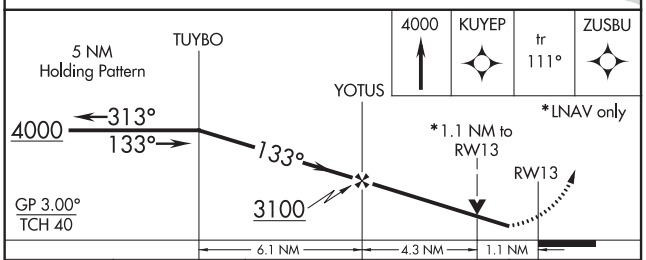
If local altimeter setting not received, use Sioux Falls altimeter setting and increase all DAs/MDAs 140 feet.
DME/DME RNP -0.3 NA.
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 4000 direct KUYEP and via 111° track to ZUSBU and hold, continue climb-in-hold to 4000.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
119.05	125.025 235.625	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1556-1 250 (300-1)			
LNAV MDA	1700-1 394 (400-1)			1700-1¼ 394 (400-1¼)
CIRCLING	1780-1 474 (500-1)		1780-1½ 474 (500-1½)	1860-2 554 (600-2)

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WAAS CH 50521 W31A	APP CRS 313°	Rwy ldg 6095 TDZE 1285 Apt Elev 1306

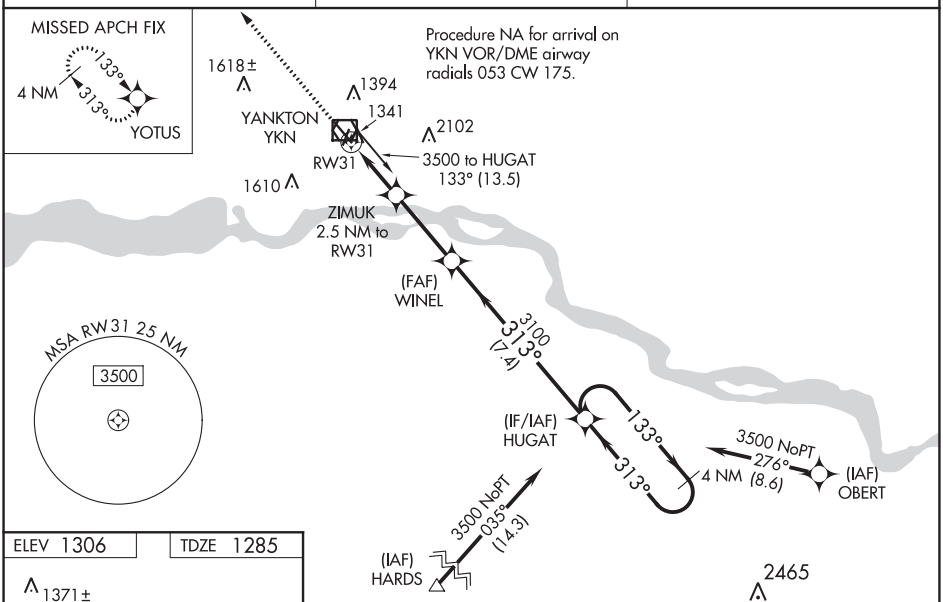
RNAV (GPS) RWY 31
CHAN GURNEY MUNI (YKN)

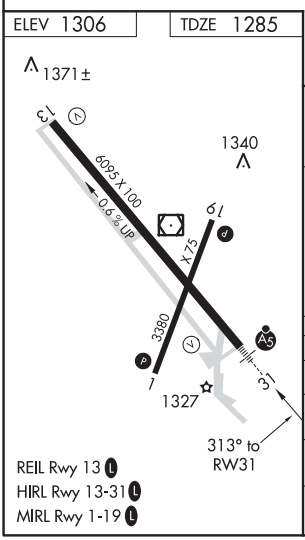
When VGSI inoperative, Circling Rwy 19 NA at night. Baro-VNAV NA when using Sioux Falls altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 35°C (95°F). DME/DME RNP-0.3 NA. VDP NA with Sioux Falls altimeter setting. When local altimeter setting not received, use Sioux Falls altimeter setting and increase all DA 130 feet and all MDA 140 feet. Increase LPV all Cats visibility ⅛ mile, LNAV/VNAV all Cats visibility ¼ mile, LNAV Cats C and D visibility ½ mile and Circling Cats C and D visibility ¼ mile. For inoperative MALSR when using Sioux Falls altimeter setting increase LPV visibility to 1⅛ all Cats, LNAV/VNAV visibility to 1¼ all Cats, LNAV Cats C and D to 1⅜ and increase Circling Cats C and D ¼ mile.

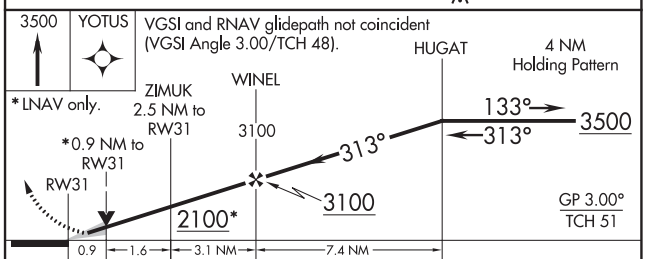
MALSR

MISSED APPROACH: Climb to 3500 direct YOTUS and hold, continue climb-in-hold to 3500.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
119.05	125.025 235.625	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1485-½ 200 (200-½)			
LNAV/VNAV DA	1535-½ 250 (300-½)			
LNAV MDA	1600-½ 315 (300-½)			
CIRCLING	1780-1 474 (500-1)		1780-1½ 474 (500-1½)	1860-2 554 (600-2)

YANKTON, SOUTH DAKOTA
Orig-A 05MAR15
42°55'N-97°23'W
CHAN GURNEY MUNI (YKN)
RNAV (GPS) RWY 31
675

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YANKTON, SOUTH DAKOTA AL-5235 (FAA) 20198

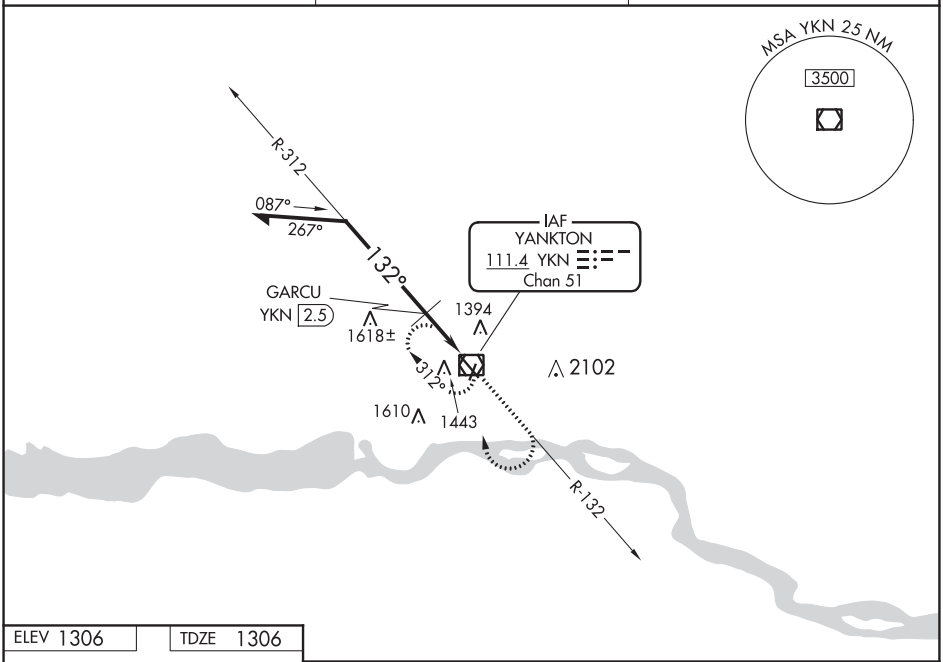
VOR RWY 13
CHAN GURNEY MUNI (YKN)

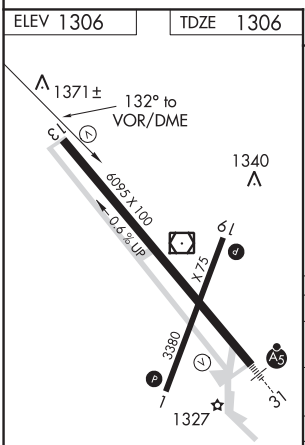
VOR/DME YKN	APP CRS	Rwy ldg	6095
111.4	132°	TDZE	1306
Chan 51		Apt Elev	1306

If local altimeter setting not received, use Sioux Falls altimeter setting and increase all MDAs 140 feet. VDP NA when using Sioux Falls altimeter setting. Visibility reduction by helicopters NA.

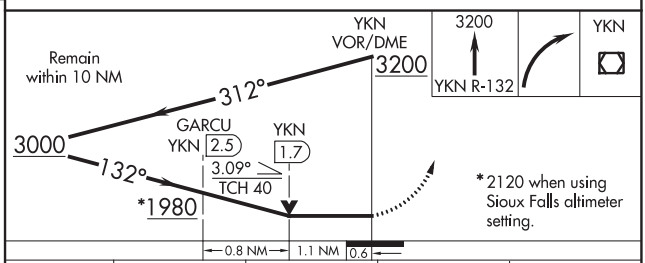
MISSED APPROACH: Climb to 3200 via YKN VOR/DME R-132 then right turn direct YKN VOR/DME and hold.

AWOS-3PT	MINNEAPOLIS CENTER	UNICOM
119.05	125.025 235.625	122.8 (CTAF) L





REIL Rwy 13 L
HIRL Rwy 13-31 L
MIRL Rwy 1-19 L



CATEGORY	A	B	C	D
S-13	1980-1 674 (700-1)		1980-2 674 (700-2)	1980-2¼ 674 (700-2¼)
CIRCLING	1980-1 674 (700-1)		1980-2 674 (700-2)	1980-2¼ 674 (700-2¼)
GARCU FIX MINIMUMS				
S-13	1700-1 394 (400-1)			1700-1¼ 394 (400-1¼)
CIRCLING	1780-1 474 (500-1)		1780-1½ 474 (500-1½)	1860-2 554 (600-2)

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YANKTON, SOUTH DAKOTA
Amdt 3 28SEP06

42°55'N-97°23'W

CHAN GURNEY MUNI (YKN)
VOR RWY 13

CLIMB/DESCENT TABLE 10042

INSTRUMENT TAKEOFF OR APPROACH PROCEDURE CHARTS
RATE OF CLIMB/DESCENT TABLE

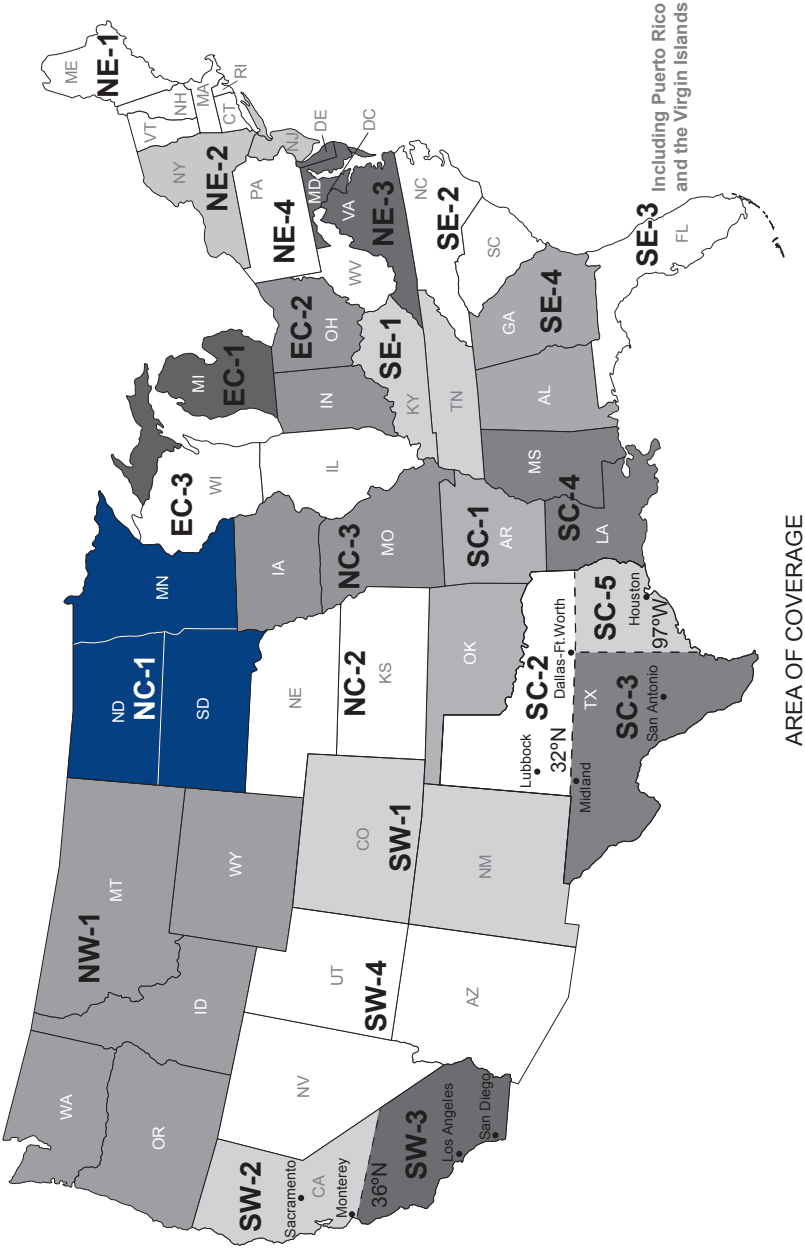
(ft. per min)

A rate of climb/descent table is provided for use in planning and executing climbs or descents under known or approximate ground speed conditions. It will be especially useful for approaches when the localizer only is used for course guidance. A best speed, power, altitude combination can be programmed which will result in a stable glide rate and altitude favorable for executing a landing if minimums exist upon breakout. Care should always be exercised so that minimum descent altitude and missed approach point are not exceeded.

CLIMB/ DESCENT ANGLE (degrees and tenths)	ft/NM	GROUND SPEED (knots)										
		60	90	120	150	180	210	240	270	300	330	360
2.0	210	210	320	425	530	635	743	850	955	1060	1165	1275
2.5	265	265	400	530	665	795	930	1060	1195	1325	1460	1590
VERTICAL PATH ANGLE 2.7	287	287	430	574	717	860	1003	1147	1290	1433	1576	1720
2.8	297	297	446	595	743	892	1041	1189	1338	1486	1635	1783
2.9	308	308	462	616	770	924	1078	1232	1386	1539	1693	1847
3.0	318	318	478	637	797	956	1115	1274	1433	1593	1752	1911
3.1	329	329	494	659	823	988	1152	1317	1481	1646	1810	1975
3.2	340	340	510	680	850	1020	1189	1359	1529	1699	1869	2039
3.3	350	350	526	701	876	1052	1227	1402	1577	1752	1927	2103
3.4	361	361	542	722	903	1083	1264	1444	1625	1805	1986	2166
3.5	370	370	555	745	930	1115	1300	1485	1670	1860	2045	2230
4.0	425	425	640	850	1065	1275	1490	1700	1915	2125	2340	2550
4.5	480	480	715	955	1195	1435	1675	1915	2150	2390	2630	2870
5.0	530	530	795	1065	1330	1595	1860	2125	2390	2660	2925	3190
5.5	585	585	880	1170	1465	1755	2050	2340	2635	2925	3220	3510
6.0	640	640	960	1275	1595	1915	2235	2555	2875	3195	3510	3830
6.5	690	690	1040	1385	1730	2075	2425	2770	3115	3460	3805	4155
7.0	745	745	1120	1490	1865	2240	2610	2985	3355	3730	4105	4475
7.5	800	800	1200	1600	2000	2400	2800	3200	3600	4000	4400	4800
8.0	855	855	1280	1710	2135	2560	2990	3415	3845	4270	4695	5125
8.5	910	910	1360	1815	2270	2725	3180	3630	4085	4540	4995	5450
9.0	960	960	1445	1925	2405	2885	3370	3850	4330	4810	5295	5775
9.5	1015	1015	1525	2035	2540	3050	3560	4065	4575	5085	5590	6100
10.0	1070	1070	1605	2145	2680	3215	3750	4285	4820	5355	5890	6430

CLIMB/DESCENT TABLE 10042

U.S. TERMINAL PUBLICATION VOLUMES



AREA OF COVERAGE

FAA Product ID: BTPPNC1

NSN 7641015059577

NGA REF. NO. OK-10-2859 TERMXFAABTPPNC1

EFF. DATE 21056