Federal Aviation Administration

TM

# U.S. Terminal Procedures Publication

## Northwest (NW) Vol 1 of 1

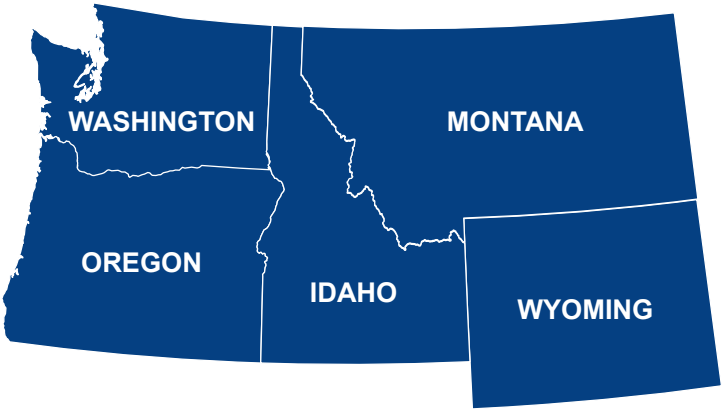
Effective: 0901Z

**05 NOV 2020**

to: 0901Z

**31 DEC 2020**

Consult the Change Notice (CN) effective 03 DEC 2020 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:
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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†<br>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 |

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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<br>288 (300-1) |
| CIRCLING | 1540-1<br>361 (400-1) | 1640-1<br>461 (500-1) | 1640-1½<br>461 (500-1½) | 1740-2<br>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.<br>#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)

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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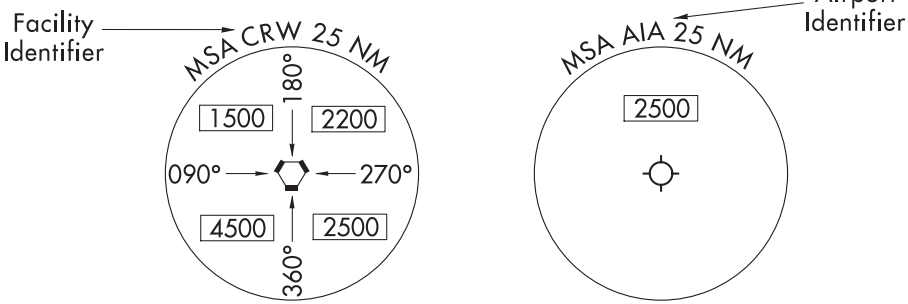
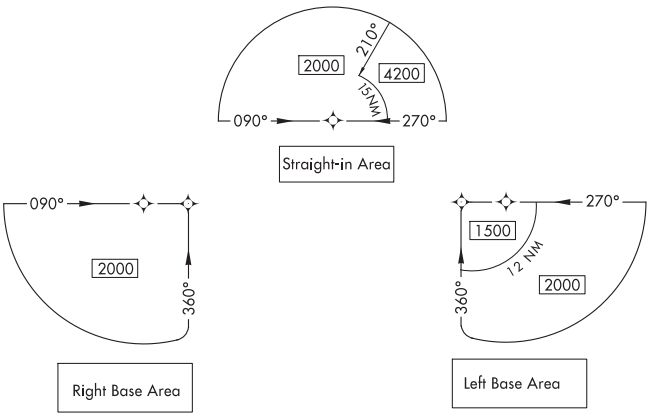
## PLANVIEW SYMBOLS

### 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

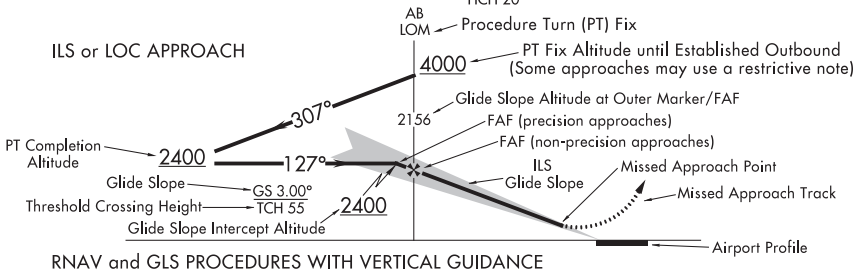
Three different methods are used to depict either electronic or vertical guidance: "GS", "GP", or "VDA".

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.

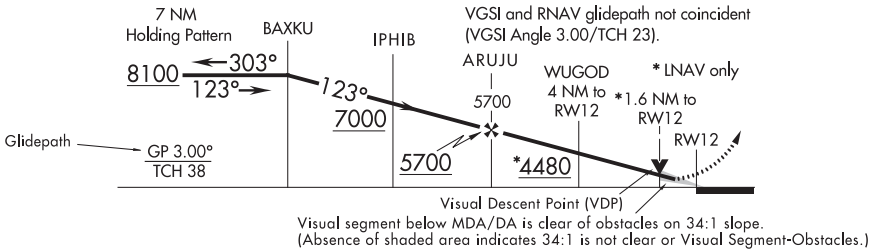
2. "GP" on GLS and RNAV procedures indicates that either electronic vertical guidance (via Wide Area Augmentation System - WAAS or Ground Based Augmentation System - GBAS) or barometric vertical guidance is provided. GLS and RNAV procedures with a published decision altitude (DA/H) depict a GP angle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

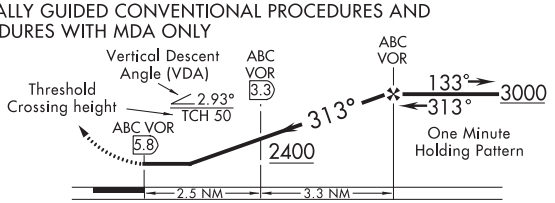
ILS or LOC APPROACH



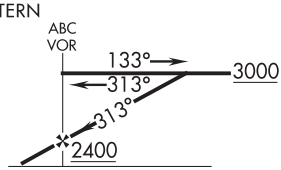

RNAV and GLS PROCEDURES WITH VERTICAL GUIDANCE




NON-VERTICALLY GUIDED CONVENTIONAL PROCEDURES AND RNAV PROCEDURES WITH MDA ONLY




DESCENT FROM HOLDING PATTERN




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

### 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.

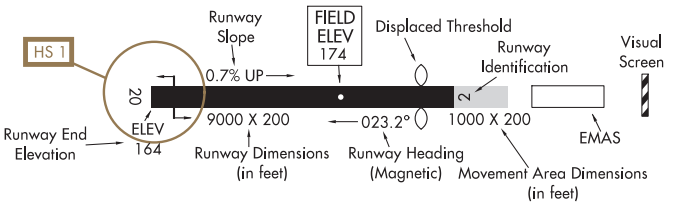
True/magnetic North orientation may vary from diagram to diagram

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.



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# LEGEND 15344

INSTRUMENT APPROACH PROCEDURES (CHARTS)

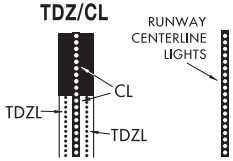
## APPROACH LIGHTING SYSTEM - UNITED STATES

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**

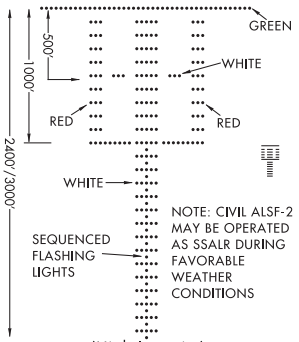



AVAILABILITY of TDZ/CL will be shown by NOTE in SKETCH e.g. "TDZ/CL Rwy 15"

### APPROACH LIGHTING SYSTEM

A

**ALSF-2**



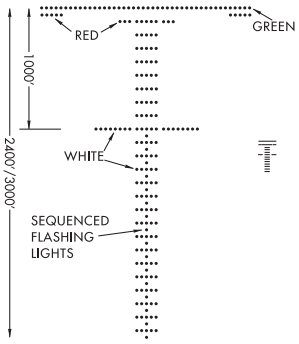

NOTE: CIVIL ALSF-2 MAY BE OPERATED AS SSALR DURING FAVORABLE WEATHER CONDITIONS

(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)

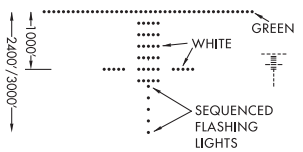
SAME AS INNER 1500' OF ALSF-1

### SIMPLIFIED SHORT APPROACH LIGHTING SYSTEM

with Runway Alignment Indicator Lights

A3

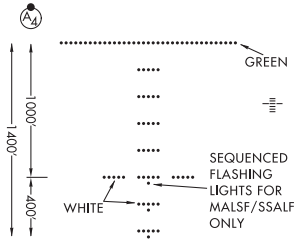
**SSALR**




(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

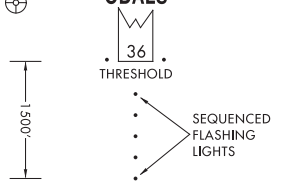
A5

**MALSR**

SAME LIGHT CONFIGURATION AS SSALR.

### OMNIDIRECTIONAL APPROACH LIGHTING SYSTEM

**ODALS**




LENGTH 1500 FEET

### VISUAL APPROACH SLOPE INDICATOR

V

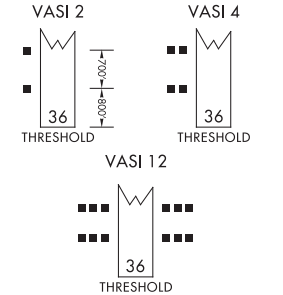
**VASI**

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

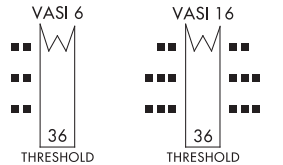



### VISUAL APPROACH SLOPE INDICATOR

V3

**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)

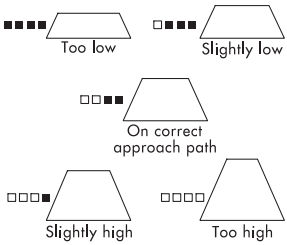
# APPROACH LIGHTING SYSTEM - UNITED STATES

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

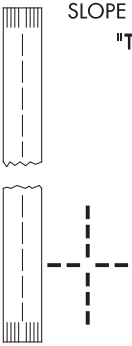
**PAPI**




Legend: □ White ■ Red

## (V1) "T"-VISUAL APPROACH SLOPE INDICATOR

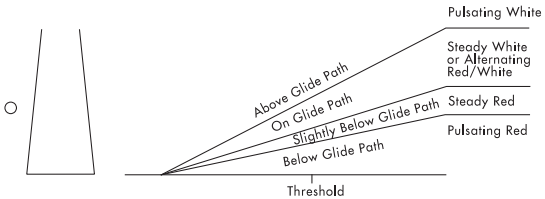
**"T"-VASI**



"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

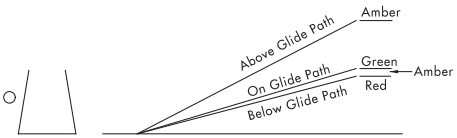
**PVASI**




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

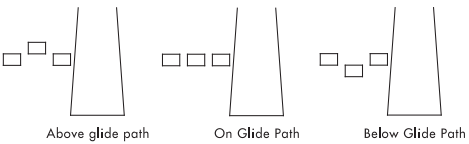
**TRCV**




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

## ABBOTSFORD, BC
**ABBOTSFORD(CYXX)**
STARS ..... MADEE FOUR (RNAV) ..... Z26

## AFTON, WY
**AFTON MUNI(AFO)**
TAKEOFF MINIMUMS ..... L
IAPS ..... RNAV (GPS) RWY 16 ..... 1
RNAV (GPS) RWY 34 ..... 2
DPS ..... AFTON FOUR (OBSTACLE) (RNAV) ..... 3
LUNDI TWO (OBSTACLE) (RNAV) ..... 4

**AJ EISENBERG**
**---SEE OAK HARBOR, WA**

## ALBANY, OR
**ALBANY MUNI(S12)**
TAKEOFF MINIMUMS ..... L
ALTERNATE MINIMUMS ..... M
IAPS ..... VOR/DME OR GPS-A ..... 5

## ANACONDA, MT
**BOWMAN FIELD(3U3)**
TAKEOFF MINIMUMS ..... L
IAPS ..... VOR/DME OR GPS-A ..... 6

## ARCO, ID
**ARCO-BUTTE COUNTY(AOC)**
TAKEOFF MINIMUMS ..... L
IAPS ..... RNAV (GPS)-A ..... 7
DPS ..... JATTS ONE (OBSTACLE) (RNAV) ..... 8

## ARLINGTON, WA
**ARLINGTON MUNI(AWO)**
TAKEOFF MINIMUMS ..... L
DIVERSE VECTOR AREA ..... L
ALTERNATE MINIMUMS ..... M
IAPS ..... RNAV (GPS) RWY 34 ..... 9
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## ASTORIA, OR
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## AUBURN, WA
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DPS ..... BLAKO ONE (OBSTACLE) (RNAV) ..... 23

## AURORA, OR
**AURORA STATE(UAO)**
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DIVERSE VECTOR AREA ..... L
ALTERNATE MINIMUMS ..... M
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STARS ..... HELNS SIX ..... Z16
IAPS ..... RNAV (GPS) RWY 17 ..... 24
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## BAKER, MT
**BAKER MUNI(BHK)**
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## BAKER CITY, OR
**BAKER CITY MUNI(BKE)**
TAKEOFF MINIMUMS ..... L
ALTERNATE MINIMUMS ..... M
IAPS ..... RNAV (GPS) RWY 13 ..... 33
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**BEAR LAKE COUNTY**
**---SEE PARIS, ID**

## BELLINGHAM, WA
**BELLINGHAM INTL(BLI)**
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DIVERSE VECTOR AREA ..... L
ALTERNATE MINIMUMS ..... M
HOT SPOT ..... P
STARS ..... MADEE FOUR (RNAV) ..... Z26
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**BEND MUNI(BDN)**
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**BERT MOONEY**
**---SEE BUTTE, MT**

**BIG HORN COUNTY**
**---SEE HARDIN, MT**

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## BIG TIMBER, MT
### BIG TIMBER(6S0)
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## BLACKFOOT, ID
### MCCARLEY FIELD(U02)
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DPS ..... IDAHO FALLS THREE (RNAV) ....66
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**BOEING FIELD/KING COUNTY INTL**
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## BOISE, ID
### BOISE AIR TERMINAL/GOWEN FIELD(BOI)
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ALTERNATE MINIMUMS ....M
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STARS ..... BEWTE THREE (RNAV) ....Z4
KOURT THREE (RNAV) ....Z21
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RNAV (RNP) Z RWY 10R ....75
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RNAV (RNP) Z RWY 28R ....77
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## BONNERS FERRY, ID
### BOUNDARY COUNTY(65S)
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## BOUNDARY BAY, BC
### BOUNDARY BAY(CZBB)
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**BOUNDARY COUNTY**
**---SEE BONNERS FERRY, ID**

**BOWERMAN**
**---SEE HOQUIAM, WA**

**BOWERS FIELD**
**---SEE ELLENSBURG, WA**

**BOWMAN FIELD**
**---SEE ANACONDA, MT**

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### BOZEMAN, MT
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### BREMERTON, WA
**BREMERTON NATIONAL(PWT)**
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### BUFFALO, WY
**JOHNSON COUNTY(BYG)**
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ALTERNATE MINIMUMS ....M
IAPS ..... RNAV (GPS) RWY 31 ....103
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### BURLEY, ID
**BURLEY MUNI(BYI)**
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ALTERNATE MINIMUMS ....M
IAPS ..... RNAV (GPS) RWY 20 ....105
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### BURLINGTON/MOUNT VERNON, WA
**SKAGIT RGNL(BVS)**
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ALTERNATE MINIMUMS ....M
IAPS ..... RNAV (GPS) RWY 11 ....107
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### BURNS, OR
**BURNS MUNI(BNO)**
TAKEOFF MINIMUMS ....L
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### BUTTE, MT
**BERT MOONEY(BTM)**
TAKEOFF MINIMUMS ....L
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### CALDWELL, ID
**CALDWELL INDUSTRIAL(EUL)**
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ALTERNATE MINIMUMS ....M
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**CAMP GUERNSEY**
**---SEE GUERNSEY, WY**

### CASPER, WY
**CASPER/NATRONA COUNTY INTL(CPR)**
TAKEOFF MINIMUMS ....L
ALTERNATE MINIMUMS ....M
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IAPS ..... ILS OR LOC RWY 03 ....117
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RNAV (GPS) RWY 08 ....119
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**CASPER/NATRONA COUNTY INTL**
**---SEE CASPER, WY**

**CENTRAL WYOMING RGNL**
**---SEE RIVERTON, WY**

### CHEHALIS, WA
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IAPS ..... RNAV (GPS) RWY 16 ....126

**CHEHALIS-CENTRALIA**
**---SEE CHEHALIS, WA**

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**CHEYENNE RGNL/JERRY OLSON FIELD(CYS)**
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**CODY, WY**
**YELLOWSTONE RGNL(COD)**
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**COEUR D'ALENE, ID**
**COEUR D'ALENE-PAPPY BOYINGTON FIELD (COE)**
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**COLSTRIP, MT**
**COLSTRIP(M46)**
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**COLUMBIA GORGE RGNL/THE DALLES MUNI**
**---SEE THE DALLES, OR**

**CONRAD, MT**
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**CONVERSE COUNTY**
**---SEE DOUGLAS, WY**

**CORVALLIS, OR**
**CORVALLIS MUNI(CVO)**
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ALTERNATE MINIMUMS ....M
IAPS ..... ILS OR LOC RWY 17 ....152
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VOR-A ....156
DPS ..... CORVALLIS TWO ....157
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**COWLEY/LOVELL/BYRON, WY**
**NORTH BIG HORN COUNTY(U68)**
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**---SEE KLAMATH FALLS, OR**

**CRESWELL, OR**
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**CUT BANK, MT**
**CUT BANK INTL(CTB)**
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**DAWSON COMMUNITY**
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**DEER PARK(DEW)**
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**DILLON, MT**
**DILLON(DLN)**
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**DIXON, WY**
**DIXON(DWX)**
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**DOUGLAS, WY**
**CONVERSE COUNTY(DGW)**
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## DRIGGS, ID
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DPS ..... LAMON TWO (OBSTACLE) (RNAV) ....186

### EASTERN OREGON RGNL AT PENDLETON
### ---SEE PENDLETON, OR

## EASTSOUND, WA
### ORCAS ISLAND(ORS)
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## ELLENSBURG, WA
### BOWERS FIELD(ELN)
TAKEOFF MINIMUMS ....L
ALTERNATE MINIMUMS ....M
IAPS ..... RNAV (GPS) RWY 29 ....191
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## ENNIS, MT
### ENNIS - BIG SKY(EKS)
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ALTERNATE MINIMUMS ....M
IAPS ..... RNAV (GPS) RWY 16 ....195
RNAV (GPS) RWY 34 ....196
DPS ..... ENNIS ONE (OBSTACLE) (RNAV) ....197

## EPHRATA, WA
### EPHRATA MUNI(EPH)
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## EUGENE, OR
### MAHLON SWEET FIELD(EUG)
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RNAV (RNP) Z RWY 16L ....205
RNAV (RNP) Z RWY 16R ....206
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RNAV (RNP) Z RWY 34R ....208
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## EVANSTON, WY
### EVANSTON-UINTA COUNTY BURNS FIELD(EVW)
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## EVERETT, WA
### SNOHOMISH COUNTY (PAINE FIELD)(PAE)
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STARS ..... CHINS FOUR ....Z6
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IAPS ..... ILS Y OR LOC Y RWY 16R ....220
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**FORT BENTON(79S)**
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**FORT BRIDGER(FBR)**
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**FRANK WILEY FIELD**
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**FRIDAY HARBOR, WA**
**FRIDAY HARBOR(FHR)**
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**---SEE KALISPELL, MT**

**GLASGOW, MT**
**WOKAL FIELD/GLASGOW-VALLEY COUNTY (GGW)**
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RNAV (GPS) RWY 30 ....249
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**GLENDIVE, MT**
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**GOODING, ID**
**GOODING MUNI(GNG)**
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**IDAHO COUNTY(GIC)**
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RNAV (GPS) RWY 26 ....259
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**GRANT COUNTY INTL**
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**GRANT COUNTY**
**---SEE JOHN DAY, OR**

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**GRANTS PASS(3S8)**
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**GREAT FALLS INTL(GTF)**
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ILS RWY 03 (CAT II - III) ....270
RNAV (RNP) Z RWY 03 ....271
RNAV (RNP) Z RWY 21 ....272
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DPS ..... AURELIA THREE (RNAV) ....291

### HAMILTON, MT
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IAPS ..... RNAV (GPS)-A ....292
RNAV (GPS)-B ....293
DPS ..... HAMEY ONE (OBSTACLE) (RNAV) ....294

### HARDIN, MT
**BIG HORN COUNTY(00U)**
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IAPS ..... RNAV (GPS) RWY 26 ....295

### HARLOWTON, MT
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IAPS ..... RNAV (GPS) RWY 09 ....296
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### HARVEY FIELD
**---SEE SNOHOMISH, WA**

### HAVRE, MT
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ALTERNATE MINIMUMS ....M
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### HELENA, MT
**HELENA RGNL(HLN)**
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### HERMISTON, OR
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### HOBBY FIELD
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### HOQUIAM, WA
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IAPS ..... ILS OR LOC/DME RWY 24 ....321
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### HOT SPRINGS COUNTY
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### HULETT, WY
**HULETT MUNI(W43)**
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IAPS ..... RNAV (GPS) RWY 13 ....325
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### HUNT FIELD
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### IDAHO COUNTY
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## JACKSON, WY
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## JOHN DAY, OR
### GRANT COUNTY(GCD)
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**---SEE GRAY AAF**

**JOSLIN FIELD - MAGIC VALLEY RGNL**
**---SEE TWIN FALLS, ID**

## KALISPELL, MT
### GLACIER PARK INTL(GPI)
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## KLAMATH FALLS, OR
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### LA GRANDE/UNION COUNTY(LGD)
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## LAKEVIEW, OR
### LAKE COUNTY(LKV)
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**LARAMIE RGNL(LAR)**
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IAPS ..... RNAV (GPS) RWY 03 ....382
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### LAUREL, MT
**LAUREL MUNI(6S8)**
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IAPS ..... RNAV (GPS) RWY 04 ....390
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DPS ..... BILLINGS FIVE ....393

**LEMHI COUNTY**
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### LEWISTON, ID
**LEWISTON-NEZ PERCE COUNTY(LWS)**
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ALTERNATE MINIMUMS ....M
HOT SPOT .... P
IAPS ..... ILS RWY 26 ....394
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RNAV (RNP) Z RWY 12 ....397
RNAV (RNP) Z RWY 26 ....398
RNAV (GPS) Y RWY 08 ....399
RNAV (GPS) Y RWY 12 ....400
RNAV (GPS) Y RWY 26 ....401
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### LEWISTOWN, MT
**LEWISTOWN MUNI(LWT)**
TAKEOFF MINIMUMS ....L
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RNAV (GPS) RWY 26 ....405
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### LEXINGTON, OR
**LEXINGTON(9S9)**
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### LIBBY, MT
**LIBBY(S59)**
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DPS ..... EYESE ONE (OBSTACLE) (RNAV) ....410

### LIVINGSTON, MT
**MISSION FIELD(LVM)**
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IAPS ..... RNAV (GPS) RWY 22 ....411
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DPS ..... LIVINGSTON TWO (OBSTACLE) ....413

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### MALTA, MT
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### MC CALL, ID
**MC CALL MUNI(MYL)**
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ALTERNATE MINIMUMS ....M
IAPS ..... RNAV (GPS) RWY 16 ....418
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DPS ..... PEPUC TWO (OBSTACLE) (RNAV) ....420

### MC MINNVILLE, OR
**MC MINNVILLE MUNI(MMV)**
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DIVERSE VECTOR AREA ....L
ALTERNATE MINIMUMS ....M
IAPS ..... ILS OR LOC RWY 22 ....421
RNAV (GPS) RWY 04 ....422
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**---SEE BLACKFOOT, ID**

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### MCCHORD FIELD(KTCM)
**TACOMA, WA**
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STARS ..... ADYMS TWO (RNAV) .... Z1
ARRIE SEVEN .... Z3
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WHYTE SIX .... Z37
IAPS ..... ILS OR LOC RWY 16 ....425
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### MEDFORD, OR
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### MILES CITY, MT
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**MISSION FIELD**
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**---SEE NEWCASTLE, WY**

### MOSES LAKE, WA
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**MOUNTAIN HOME MUNI(U76)**
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IAPS ..... RNAV (GPS) RWY 28 ....488

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**MOUNTAIN HOME, ID**
TAKEOFF MINIMUMS ....L
IAPS ..... ILS OR LOC Z RWY 12 ....489
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## NAMPA, ID
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IAPS ..... RNAV (GPS) RWY 11 ....494
RNAV (GPS)-B ....495
DPS ..... ADEXE ONE (OBSTACLE) (RNAV) ....496
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## NEWCASTLE, WY
### MONDELL FIELD(ECS)
TAKEOFF MINIMUMS ....L
ALTERNATE MINIMUMS ....M
IAPS ..... RNAV (GPS) RWY 14 ....498
RNAV (GPS) RWY 32 ....499
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## NEWPORT, OR
### NEWPORT MUNI(ONP)
TAKEOFF MINIMUMS ....L
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IAPS ..... ILS OR LOC RWY 16 ....501
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DPS ..... NEWPORT ONE (OBSTACLE) ....505

## NORTH BEND, OR
### SOUTHWEST OREGON RGNL(OTH)
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IAPS ..... ILS OR LOC RWY 05 ....506
RNAV (RNP) Z RWY 05 ....507
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## OAK HARBOR, WA
### AJ EISENBERG(OKH)
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ALTERNATE MINIMUMS ....M
IAPS ..... RNAV (GPS) RWY 07 ....513

**OAK HARBOR, WA**
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## OLYMPIA, WA
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IAPS ..... ILS OR LOC RWY 17 ....514
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DPS ..... YELM FIVE ....520

## OMAK, WA
### OMAK(OMK)
TAKEOFF MINIMUMS ....L
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## ONTARIO, OR
### ONTARIO MUNI(ONO)
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ALTERNATE MINIMUMS ....M
IAPS ..... RNAV (GPS) RWY 15 ....523
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**---SEE EASTSOUND, WA**

**PANGBORN MEMORIAL**
**---SEE WENATCHEE, WA**

## PARIS, ID
### BEAR LAKE COUNTY(1U7)
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IAPS ..... RNAV (GPS) RWY 10 ....525
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## PASCO, WA
### TRI-CITIES(PSC)
TAKEOFF MINIMUMS ....L
DIVERSE VECTOR AREA ....L
ALTERNATE MINIMUMS ....M
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IAPS ..... ILS OR LOC RWY 21R ....527
RNAV (RNP) Z RWY 03L ....528
RNAV (RNP) Z RWY 12 ....529
RNAV (RNP) Z RWY 21R ....530
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HOT SPOT ....P
IAPS ..... ILS OR LOC RWY 26 ....540
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RNAV (GPS) RWY 11 ....542
RNAV (GPS) RWY 26 ....543
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**---SEE PUYALLUP, WA**

### PINEDALE, WY
**RALPH WENZ FIELD(PNA)**
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IAPS ..... RNAV (GPS) RWY 11 ....547
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### PLENTYWOOD, MT
**SHER-WOOD(PWD)**
TAKEOFF MINIMUMS ....L
ALTERNATE MINIMUMS ....M
IAPS ..... RNAV (GPS) RWY 12 ....550
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### POCATELLO, ID
**POCATELLO RGNL(PIH)**
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RNAV (GPS) RWY 03 ....553
RNAV (GPS) RWY 21 ....554
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DPS ..... KNURL ONE (OBSTACLE) ....557

### POLSON, MT
**POLSON(8S1)**
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DPS ..... ANGIL ONE (OBSTACLE) (RNAV) ....560

### POPLAR, MT
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IAPS ..... COPTER RNAV (GPS) RWY 26 ....563
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ALTERNATE MINIMUMS ....M
IAPS ..... ILS OR LOC RWY 08 ....565
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DPS ..... WATTR SEVEN (OBSTACLE) ....568

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**JEFFERSON COUNTY INTL(0S9)**
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### PORTLAND, OR
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RNAV (RNP) Z RWY 10L ..... 579
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RNAV (RNP) Z RWY 28L ..... 581
RNAV (RNP) Z RWY 28R ..... 582
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RNAV (GPS) Y RWY 10L ..... 585
RNAV (GPS) Y RWY 10R ..... 586
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LAHSO ..... O
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IAPS ..... ILS OR LOC RWY 13R ..... 600
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ALTERNATE MINIMUMS ..... M
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AIRPORT DIAGRAM ..... 612
DPS ..... BLUE LAKE THREE ..... 613

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TAKEOFF MINIMUMS ..... L
ALTERNATE MINIMUMS ..... M
IAPS ..... ILS OR LOC RWY 05 ..... 619
RNAV (RNP) Z RWY 23 ..... 620
RNAV (GPS) RWY 05 ..... 621
RNAV (GPS) Y RWY 23 ..... 622
VOR RWY 05 ..... 623
AIRPORT DIAGRAM ..... 624

### PUYALLUP, WA
**PIERCE COUNTY - THUN FIELD(PLU)**
TAKEOFF MINIMUMS ..... L
DIVERSE VECTOR AREA ..... L
IAPS ..... RNAV (GPS) RWY 35 ..... 625

### RALPH WENZ FIELD
**---SEE PINEDALE, WY**

### RAVALLI COUNTY
**---SEE HAMILTON, MT**

### RAWLINS, WY
**RAWLINS MUNI/HARVEY FIELD(RWL)**
TAKEOFF MINIMUMS ..... L
ALTERNATE MINIMUMS ..... M
IAPS ..... RNAV (GPS) RWY 22 ..... 626

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## REDMOND, OR
### ROBERTS FIELD(RDM)
TAKEOFF MINIMUMS ..... L
ALTERNATE MINIMUMS ..... M
HOT SPOT ..... P
IAPS ..... ILS OR LOC RWY 23 ..... 627
RNAV (RNP) Z RWY 05 ..... 628
RNAV (RNP) Z RWY 23 ..... 629
RNAV (GPS) RWY 11 ..... 630
RNAV (GPS) Y RWY 05 ..... 631
RNAV (GPS) Y RWY 23 ..... 632
RNAV (GPS) Y RWY 29 ..... 633
RNAV (GPS) Z RWY 29 ..... 634
VOR-A ..... 635
JUNIPER VISUAL RWY 23 ..... 636
AIRPORT DIAGRAM ..... 637
DPS ..... REDMOND THREE ..... 638

## RENTON, WA
### RENTON MUNI(RNT)
TAKEOFF MINIMUMS ..... L
ALTERNATE MINIMUMS ..... M
STARS ..... CHINS FOUR ..... Z6
EPHRATA EIGHT ..... Z11
GLASR ONE ..... Z12
OLYMPIA TWO ..... Z30
IAPS ..... RNAV (GPS) RWY 34 ..... 639
RNAV (GPS) Y RWY 16 ..... 640
RNAV (GPS) Z RWY 16 ..... 641
AIRPORT DIAGRAM ..... 642
DPS ..... BELLEVUE FOUR ..... 643
RENTN THREE ..... 644

## REXBURG, ID
### REXBURG-MADISON COUNTY(RXE)
TAKEOFF MINIMUMS ..... L
ALTERNATE MINIMUMS ..... M
IAPS ..... RNAV (GPS) RWY 35 ..... 645
VOR RWY 35 ..... 646

## RICHLAND, WA
### RICHLAND(RLD)
TAKEOFF MINIMUMS ..... L
IAPS ..... RNAV (GPS) RWY 26 ..... 647
RNAV (GPS) Y RWY 19 ..... 648
RNAV (GPS) Z RWY 19 ..... 649
LOC RWY 19 ..... 650
VOR/DME-A ..... 651

## RIVERTON, WY
### CENTRAL WYOMING RGNL(RIW)
TAKEOFF MINIMUMS ..... L
ALTERNATE MINIMUMS ..... M
IAPS ..... ILS OR LOC RWY 28 ..... 652
RNAV (GPS) RWY 10 ..... 653
RNAV (GPS) RWY 28 ..... 654
VOR RWY 10 ..... 655
VOR RWY 28 ..... 656
AIRPORT DIAGRAM ..... 657

### ROBERTS FIELD
**---SEE REDMOND, OR**

## ROCK SPRINGS, WY
### SOUTHWEST WYOMING RGNL(RKS)
TAKEOFF MINIMUMS ..... L
ALTERNATE MINIMUMS ..... M
IAPS ..... ILS OR LOC RWY 27 ..... 658
RNAV (GPS) RWY 09 ..... 659
RNAV (GPS) RWY 27 ..... 660
VOR RWY 09 ..... 661
VOR/DME RWY 27 ..... 662
AIRPORT DIAGRAM ..... 663

### ROGUE VALLEY INTL - MEDFORD
**---SEE MEDFORD, OR**

## RONAN, MT
### RONAN(7S0)
TAKEOFF MINIMUMS ..... L
IAPS ..... RNAV (GPS) RWY 16 ..... 664
RNAV (GPS) RWY 34 ..... 665
DPS ..... HANIM TWO (RNAV) ..... 666
RONAN THREE (RNAV) ..... 667

## ROSEBURG, OR
### ROSEBURG RGNL(RBG)
TAKEOFF MINIMUMS ..... L
ALTERNATE MINIMUMS ..... M
IAPS ..... RNAV (GPS)-B ..... 668
VOR-A ..... 669

## ROUNDUP, MT
### ROUNDUP(RPX)
TAKEOFF MINIMUMS ..... L
IAPS ..... RNAV (GPS) RWY 07 ..... 670
RNAV (GPS) RWY 25 ..... 671

## SALEM, OR
### MCNARY FIELD(SLE)
TAKEOFF MINIMUMS ..... L
ALTERNATE MINIMUMS ..... M
LAHSO ..... O
IAPS ..... ILS OR LOC Z RWY 31 ..... 672
RNAV (GPS) RWY 13 ..... 673
RNAV (GPS) RWY 31 ..... 674
LOC Y RWY 31 ..... 675
LOC BC RWY 13 ..... 676
AIRPORT DIAGRAM ..... 677
DPS ..... SALEM FOUR ..... 678

## SALMON, ID
### LEMHI COUNTY(SMN)
TAKEOFF MINIMUMS ..... L
IAPS ..... RNAV (GPS) RWY 17 ..... 679
RNAV (GPS)-D ..... 680
VOR/DME-B ..... 681
DPS ..... AHEHU THREE (RNAV) ..... 682

### SANDERSON FIELD
**---SEE SHELTON, WA**

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## SANDPOINT, ID
### SANDPOINT(SZT)
TAKEOFF MINIMUMS ....L
ALTERNATE MINIMUMS ....M
IAPS ..... RNAV (GPS) Y RWY 20 ....683
RNAV (GPS) Z RWY 20 ....684
RNAV (GPS)-B ....685
LOC-A ....686

## SARATOGA, WY
### SHIVELY FIELD(SAA)
TAKEOFF MINIMUMS ....L
ALTERNATE MINIMUMS ....M
IAPS ..... RNAV (GPS) RWY 05 ....687
RNAV (GPS)-B ....688
NDB-A ....689

## SCAPPOOSE, OR
### SCAPPOOSE INDUSTRIAL AIRPARK(SPB)
TAKEOFF MINIMUMS ....L
DIVERSE VECTOR AREA ....L
ALTERNATE MINIMUMS ....M
IAPS ..... RNAV (GPS) RWY 15 ....690
LOC/DME RWY 15 ....691
VOR/DME-A ....692

## SCOBEY, MT
### SCOBEY(9S2)
TAKEOFF MINIMUMS ....L
IAPS ..... RNAV (GPS) RWY 12 ....693

## SEATTLE, WA
### BOEING FIELD/KING COUNTY INTL(BFI)
TAKEOFF MINIMUMS ....L
ALTERNATE MINIMUMS ....M
HOT SPOT ....P
STARS ..... CHINS FOUR ....Z6
EPHRATA EIGHT ....Z11
GLASR ONE ....Z12
JAWBN SIX ....Z20
OLYMPIA TWO ....Z30
IAPS ..... ILS OR LOC RWY 14R ....694
ILS OR LOC RWY 32L ....695
RNAV (RNP) Z RWY 14R ....696
RNAV (GPS) Y RWY 14R ....697
HARBOR VISUAL RWY 14R ....698
AIRPORT DIAGRAM ....699
DPS ..... CBAIN ONE (RNAV) ....700
KENT EIGHT ....701
NEEDLE ONE ....703
NRVNA ONE (RNAV) ....704

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NAME PROC SECT PG

## SEATTLE, WA
### SEATTLE-TACOMA INTL(SEA)
TAKEOFF MINIMUMS ..... L
DIVERSE VECTOR AREA ..... L
HOT SPOT ..... P
STARS ..... CHINS FOUR ..... Z6
EPHRATA EIGHT ..... Z11
GLASR ONE ..... Z12
HAWKZ SEVEN (RNAV) ..... Z14
JAWBN SIX ..... Z20
MARNR SEVEN (RNAV) ..... Z27
OLYMPIA TWO ..... Z30
IAPS ..... ILS OR LOC RWY 16C ..... 705
ILS OR LOC RWY 16L ..... 707
ILS OR LOC RWY 16R ..... 708
ILS OR LOC RWY 34C ..... 709
ILS OR LOC RWY 34L ..... 710
ILS OR LOC RWY 34R ..... 711
ILS RWY 16C (SA CAT I) ..... 712
ILS RWY 16L (SA CAT I) ..... 713
ILS RWY 16R (SA CAT I) ..... 714
ILS RWY 34C (SA CAT I - II) ..... 715
ILS RWY 34L (SA CAT I - II) ..... 716
ILS RWY 34R (SA CAT I - II) ..... 717
ILS RWY 16C (CAT II - III) ..... 718
ILS RWY 16L (CAT II - III) ..... 719
ILS RWY 16R (CAT II - III) ..... 720
RNAV (RNP) Z RWY 16C ..... 721
RNAV (RNP) Z RWY 16L ..... 723
RNAV (RNP) Z RWY 16R ..... 724
RNAV (RNP) Z RWY 34C ..... 725
RNAV (RNP) Z RWY 34L ..... 726
RNAV (RNP) Z RWY 34R ..... 727
RNAV (GPS) Y RWY 16C ..... 728
RNAV (GPS) Y RWY 16L ..... 730
RNAV (GPS) Y RWY 16R ..... 731
RNAV (GPS) Y RWY 34C ..... 732
RNAV (GPS) Y RWY 34L ..... 733
RNAV (GPS) Y RWY 34R ..... 734
BAY VISUAL RWY 16 R/C/L ..... 735
HUSKY VISUAL RWY 16 R/C/L ..... 737
MALL VISUAL RWY 34 R/C/L ..... 739
AIRPORT DIAGRAM ..... 740
DPS ..... BANGR NINE (RNAV) ..... 741
ELMAA THREE ..... 743
HAROB SIX (RNAV) ..... 744
ISBRG ONE (RNAV) ..... 746
JEFPO ONE (RNAV) ..... 747
MOUNTAIN ONE ..... 748
OZWLD ONE (RNAV) ..... 750
SEATTLE SEVEN ..... 751
SUMMA TWO ..... 752

## SHELBY, MT
### SHELBY(SBX)
TAKEOFF MINIMUMS ..... L
IAPS ..... RNAV (GPS) RWY 05 ..... 754
RNAV (GPS) RWY 23 ..... 755

## SHELTON, WA
### SANDERSON FIELD(SHN)
TAKEOFF MINIMUMS ..... L
ALTERNATE MINIMUMS ..... M
IAPS ..... RNAV (GPS) RWY 05 ..... 756
RNAV (GPS) RWY 23 ..... 757

## SHERIDAN, WY
### SHERIDAN COUNTY(SHR)
TAKEOFF MINIMUMS ..... L
ALTERNATE MINIMUMS ..... M
IAPS ..... ILS OR LOC/DME RWY 33 ..... 758
RNAV (GPS) RWY 15 ..... 759
RNAV (GPS) RWY 33 ..... 760
VOR RWY 15 ..... 761
AIRPORT DIAGRAM ..... 762

**SHER-WOOD**
**---SEE PLENTYWOOD, MT**

**SHIVELY FIELD**
**---SEE SARATOGA, WY**

## SIDNEY, MT
### SIDNEY-RICHLAND RGNL(SDY)
TAKEOFF MINIMUMS ..... L
ALTERNATE MINIMUMS ..... M
IAPS ..... RNAV (GPS) RWY 01 ..... 763
RNAV (GPS) RWY 19 ..... 764
AIRPORT DIAGRAM ..... 765

**SIDNEY-RICHLAND RGNL**
**---SEE SIDNEY, MT**

**SKAGIT RGNL**
**---SEE BURLINGTON/MOUNT VERNON, WA**

## SNOHOMISH, WA
### HARVEY FIELD(S43)
TAKEOFF MINIMUMS ..... L
IAPS ..... RNAV (GPS)-A ..... 766

**SNOHOMISH COUNTY (PAINE FIELD)**
**---SEE EVERETT, WA**

**SOUTH BIG HORN COUNTY**
**---SEE GREYBULL, WY**

**SOUTHWEST OREGON RGNL**
**---SEE NORTH BEND, OR**

**SOUTHWEST WASHINGTON RGNL**
**---SEE KELSO, WA**

**SOUTHWEST WYOMING RGNL**
**---SEE ROCK SPRINGS, WY**

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### SPOKANE, WA
**FELTS FIELD(SFF)**
TAKEOFF MINIMUMS ..... L
DIVERSE VECTOR AREA ..... L
ALTERNATE MINIMUMS ..... M
STARS ..... HILIE TWO ..... Z19
ZOOMR ONE ..... Z39
IAPS ..... ILS OR LOC RWY 22R ..... 767
RNAV (GPS) RWY 04L ..... 768
VOR RWY 04L ..... 769
AIRPORT DIAGRAM ..... 770
DPS ..... FELTS FOUR ..... 771
HAYDEN FOUR ..... 772
**SPOKANE INTL(GEG)**
TAKEOFF MINIMUMS ..... L
DIVERSE VECTOR AREA ..... L
ALTERNATE MINIMUMS ..... M
STARS ..... HILIE TWO ..... Z19
ZOOMR ONE ..... Z39
IAPS ..... ILS OR LOC RWY 03 ..... 773
ILS OR LOC RWY 21 ..... 774
ILS RWY 03 (SA CAT I) ..... 775
ILS RWY 21 (SA CAT I) ..... 776
ILS RWY 03 (CAT II - III) ..... 777
ILS RWY 21 (CAT II - III) ..... 778
RNAV (RNP) Z RWY 03 ..... 779
RNAV (RNP) Z RWY 08 ..... 780
RNAV (RNP) Z RWY 21 ..... 781
RNAV (RNP) Z RWY 26 ..... 782
RNAV (GPS) Y RWY 03 ..... 783
RNAV (GPS) Y RWY 08 ..... 784
RNAV (GPS) Y RWY 21 ..... 785
RNAV (GPS) Y RWY 26 ..... 786
VOR RWY 03 ..... 787
RIDDLE HILL VISUAL RWY 08 ..... 788
AIRPORT DIAGRAM ..... 789
DPS ..... SPOKANE SIX ..... 790

**SPOKANE, WA**
**---SEE FAIRCHILD AFB**

### STEVENSVILLE, MT
**STEVENSVILLE(32S)**
TAKEOFF MINIMUMS ..... L
IAPS ..... RNAV (GPS)-A ..... 792

### SUNRIVER, OR
**SUNRIVER(S21)**
TAKEOFF MINIMUMS ..... L
IAPS ..... RNAV (GPS) RWY 18 ..... 793

### TACOMA, WA
**TACOMA NARROWS(TIW)**
TAKEOFF MINIMUMS ..... L
ALTERNATE MINIMUMS ..... M
IAPS ..... ILS OR LOC RWY 17 ..... 794
RNAV (GPS) RWY 17 ..... 795
RNAV (GPS) RWY 35 ..... 796
AIRPORT DIAGRAM ..... 797
DPS ..... NARROWS ONE ..... 798

**TACOMA, WA**
**---SEE MCCHORD FIELD**

### THE DALLES, OR
**COLUMBIA GORGE RGNL/THE DALLES MUNI (DLS)**
TAKEOFF MINIMUMS ..... L
ALTERNATE MINIMUMS ..... M
IAPS ..... RNAV (GPS)-A ..... 799
LDA/DME RWY 25 ..... 800
COPTER LDA/DME RWY 25 ..... 801
DPS ..... DALLES ONE (OBSTACLE) ..... 802

### THERMOPOLIS, WY
**HOT SPRINGS COUNTY(HSG)**
TAKEOFF MINIMUMS ..... L
ALTERNATE MINIMUMS ..... M
IAPS ..... RNAV (GPS) RWY 05 ..... 803
RNAV (GPS) RWY 23 ..... 804

### TILLAMOOK, OR
**TILLAMOOK(TMK)**
TAKEOFF MINIMUMS ..... L
IAPS ..... RNAV (GPS) RWY 13 ..... 805
DPS ..... FETUJ THREE (OBSTACLE) (RNAV) ..... 806

**TILLITT FIELD**
**---SEE FORSYTH, MT**

### TOLEDO, WA
**ED CARLSON MEMORIAL FIELD-SOUTH LEWIS COUNTY(TDO)**
TAKEOFF MINIMUMS ..... L
IAPS ..... RNAV (GPS) RWY 06 ..... 807
RNAV (GPS) RWY 24 ..... 808
DPS ..... ATASY TWO (OBSTACLE) (RNAV) ..... 809

### TORRINGTON, WY
**TORRINGTON MUNI(TOR)**
TAKEOFF MINIMUMS ..... L
IAPS ..... GPS RWY 10 ..... 810
GPS RWY 28 ..... 811
NDB RWY 10 ..... 812
NDB RWY 28 ..... 813

**TRI-CITIES**
**---SEE PASCO, WA**

### TWIN BRIDGES, MT
**TWIN BRIDGES(7S1)**
TAKEOFF MINIMUMS ..... L
ALTERNATE MINIMUMS ..... M
IAPS ..... RNAV (GPS) RWY 17 ..... 814
RNAV (GPS) RWY 35 ..... 815
DPS ..... BRIDGES ONE (OBSTACLE) (RNAV) ..... 816
DILLON ONE (OBSTACLE) (RNAV) ..... 817

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### TWIN FALLS, ID
**JOSLIN FIELD - MAGIC VALLEY RGNL(TWF)**
TAKEOFF MINIMUMS ....L
ALTERNATE MINIMUMS ....M
LAHSO ....O
HOT SPOT ....P
IAPS ..... ILS OR LOC RWY 26 ....818
RNAV (GPS) RWY 08 ....819
RNAV (GPS) RWY 26 ....820
VOR/DME RWY 08 ....821
VOR RWY 08 ....822
VOR RWY 26 ....823
AIRPORT DIAGRAM ....824
DPS ..... SNAKO THREE ....825

### VANCOUVER, WA
**PEARSON FIELD(VUO)**
TAKEOFF MINIMUMS ....L
ALTERNATE MINIMUMS ....M
IAPS ..... LDA-A ....826

### WALLA WALLA, WA
**WALLA WALLA RGNL(ALW)**
TAKEOFF MINIMUMS ....L
ALTERNATE MINIMUMS ....M
IAPS ..... ILS Y OR LOC RWY 20 ....827
ILS Z OR LOC/DME RWY 20 ....828
RNAV (GPS) RWY 02 ....829
RNAV (GPS) RWY 20 ....830
VOR/DME RWY 02 ....831
VOR RWY 20 ....832
AIRPORT DIAGRAM ....833
DPS ..... WALLA WALLA ONE ....834

### WEISER, ID
**WEISER MUNI(S87)**
TAKEOFF MINIMUMS ....L
IAPS ..... RNAV (GPS)-A ....835

### WENATCHEE, WA
**PANGBORN MEMORIAL(EAT)**
TAKEOFF MINIMUMS ....L
ALTERNATE MINIMUMS ....M
IAPS ..... ILS Y RWY 12 ....836
ILS Z RWY 12 ....837
RNAV (RNP) RWY 12 ....838
RNAV (RNP) Z RWY 30 ....839
VOR-A ....840
VOR-B ....841
AIRPORT DIAGRAM ....842
DPS ..... WENATCHEE TWO (OBSTACLE) ....843
OFARO TWO (RNAV) ....845
ZARLO TWO (RNAV) ....846

### WEST YELLOWSTONE, MT
**YELLOWSTONE(WYS)**
TAKEOFF MINIMUMS ....L
IAPS ..... ILS OR LOC RWY 01 ....847
RNAV (GPS) RWY 01 ....848
RNAV (GPS) RWY 19 ....849
DPS ..... TARGY ONE (OBSTACLE) ....850

### WHEATLAND, WY
**PHIFER AIRFIELD(EAN)**
TAKEOFF MINIMUMS ....L
IAPS ..... RNAV (GPS)-A ....851
DPS ..... SLATR ONE (OBSTACLE) (RNAV) ....852

**WHEATLAND COUNTY AT HARLOWTON**
**---SEE HARLOWTON, MT**

### WHIDBEY ISLAND NAS (AULT FIELD)(NUW)
**OAK HARBOR, WA**
TAKEOFF MINIMUMS ....L
RADAR MINIMUMS ....N
IAPS ..... ILS OR LOC/DME RWY 14 ....853
RNAV (GPS) RWY 07 ....854
RNAV (GPS) RWY 14 ....855
RNAV (GPS) RWY 25 ....856
RNAV (GPS) RWY 32 ....857
TACAN RWY 07 ....858
TACAN RWY 14 ....859
TACAN RWY 25 ....860
TACAN RWY 32 ....861
AIRPORT DIAGRAM ....862
DPS ..... NASWI TWO (OBSTACLE) ....863
PENN COVE FIVE ....864

### WILBUR, WA
**WILBUR(2S8)**
TAKEOFF MINIMUMS ....L
IAPS ..... RNAV (GPS)-A ....865
DPS ..... WIPES ONE (OBSTACLE) (RNAV) ....866

**WILLIAM R FAIRCHILD INTL**
**---SEE PORT ANGELES, WA**

**WOKAL FIELD/GLASGOW-VALLEY COUNTY**
**---SEE GLASGOW, MT**

### WOLF POINT, MT
**L M CLAYTON(OLF)**
ALTERNATE MINIMUMS ....M
IAPS ..... RNAV (GPS) RWY 11 ....867
RNAV (GPS) RWY 29 ....868
AIRPORT DIAGRAM ....869

### WORLAND, WY
**WORLAND MUNI(WRL)**
TAKEOFF MINIMUMS ....L
ALTERNATE MINIMUMS ....M
IAPS ..... RNAV (GPS) RWY 16 ....870
RNAV (GPS) RWY 34 ....871
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### YAKIMA, WA

**YAKIMA AIR TERMINAL/MCALLISTER FIELD(YKM)**

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ALTERNATE MINIMUMS .....M
HOT SPOT ..... P
IAPS ..... ILS OR LOC RWY 27 .....874
RNAV (RNP) RWY 09 .....875
RNAV (RNP) Y RWY 27 .....876
RNAV (RNP) Z RWY 27 .....877
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GROMO FOUR .....884
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**YELLOWSTONE**
**---SEE WEST YELLOWSTONE, MT**

**YELLOWSTONE RGNL**
**---SEE CODY, WY**


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# 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.



## AFTON, WY

AFTON MUNI (AFO)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 28SEP06 (06271) (FAA)

DEPARTURE PROCEDURE:

**Rwy 16,** Use LUNDI DEPARTURE.

**Rwy 34,** use AFTON DEPARTURE.

## ALBANY, OR

ALBANY MUNI (S12)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2B 10DEC15 (15344) (FAA)

DEPARTURE PROCEDURE:

**Rwy 16,** turn right.

**Rwy 34**, turn left.

All aircraft climb direct CVO VOR/DME and continue climb in CVO VOR/DME holding pattern, (East, right turns, 261° inbound) to cross CVO VOR/DME at or above 3400.

TAKEOFF OBSTACLE NOTES:

**Rwy 16,** pole 1391' from DER, 277' right of centerline, 30' AGL/265" MSL.

**Rwy 34,** light poles 860' from DER, 69' right of centerline, 40' AGL/262' MSL.

Light poles 906' from DER, 15' left of centerline, 41' AGL/262' MSL.

## ANACONDA, MT

BOWMAN FIELD (3U3)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 05JUL07 (07186) (FAA)

TAKEOFF MINIMUMS:
**Rwy 4,** std. w/ min. climb of 417' per NM to 9000, or 2800-3 for climb in visual conditions.
**Rwy 17,** std. w/ min. climb of 321' per NM to 10200, or 2800-3 for climb in visual conditions.
**Rwy 22,** NA-obstacles.
**Rwy 35,** std. w/ min. climb of 369' per NM to 9100, or 2800-3 for climb in visual conditions.

DEPARTURE PROCEDURE:
**Rwys 4, 35,** climbing right turn to 10200 via heading 130° and CPN VOR/DME R-340 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound), or for climb in visual conditions, cross Bowman Field Airport at or above 7700 then proceed via CPN R-309 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound).
**Rwy 17,** climbing left turn to 10200 via heading 100° and CPN VOR/DME R-335 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound), or for climb in visual conditions, cross Bowman Field Airport at or above 7700 then proceed via CPN R-309 to CPN VOR/DME, continue climb-in-hold to 10200 (north, left turn, 166° inbound).

TAKEOFF OBSTACLE NOTES:
**Rwy 17,** multiple trees beginning 865' from DER, 243' left of centerline, up to 70' AGL/5097' MSL.
Rod on hangar 570' from DER, 278' left of centerline, 54' AGL/5054' MSL.
Multiple trees beginning 787' from DER, 165' right of centerline, up to 70' AGL/5098' MSL.
Multiple transmission lines beginning 4602' from DER, 1664' right of centerline, 80' AGL/5159' MSL.
**Rwy 35,** multiple transmission lines beginning 2242' from DER, 964' left of centerline, up to 80' AGL/5159' MSL.

## ARCO, ID

ARCO-BUTTE COUNTY (AOC)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 05JUN08 (08157) (FAA)

TAKEOFF MINIMUMS:
**Rwy 6,** NA - Obstacles.

DEPARTURE PROCEDURE:
Use JATTS DEPARTURE.

## ARLINGTON, WA

ARLINGTON MUNI (AWO)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 25AUG11 (11237) (FAA)

TAKEOFF MINIMUMS:
**Rwy 11,** std. w/min. climb of 400'per NM to 1000, or 1200-2½ for climb in visual conditions.
**Rwy 16,** std. w/min. climb of 300'per NM to 1500, or 1200-2½ for climb in visual conditions.
**Rwy 29,** std. w/min. climb of 245'per NM to 1400, or 1200-2½ for climb in visual conditions.
**Rwy 34,** std. w/min. climb of 260'per NM to 800, or 1200-2½ for climb in visual conditions.

DEPARTURE PROCEDURE:
**Rwy 11,** climbing right turn direct WATON LOM, or for climb in visual conditions, cross Arlington Muni at or above 1200 then proceed on 161° course to WATON LOM, thence...
**Rwy 16,**climb direct WATON LOM, or for climb in visual conditions, cross Arlington Muni at or above 1200 then proceed on 161° course to WATON LOM, thence ...
**Rwy 29,** climbing left turn on 113° course to WATON LOM, or for climb in visual conditions, cross Arlington Muni at or above 1200 then proceed on 161° course to WATON LOM, thence ...
**Rwy 34,** climbing left turn on 134° course to WATON LOM, or for climb in visual conditions, cross Arlington Muni at or above 1200 then proceed on 161° course to WATON LOM, thence ...
... Aircraft departing WATON LOM on bearings 150° CW 340° from WATON LOM climb on course. Aircraft departing WATON LOM on bearings 340° CW 150° from WATON LOM, climb in holding pattern (South, left turns, 342° inbound) to cross WATON LOM at or above 4500 before proceeding on course.

TAKEOFF OBSTACLE NOTES:
**Rwy 11,** airport beacon 1116' from DER, 699' left of centerline, 58' AGL/186' MSL.
Tree 1443' from DER, 803' left of centerline, 108' AGL/236' MSL.
Tree 1819' from DER, 688' right of centerline, 46' AGL/174' MSL.
Trees beginning 1.2 NM from DER, left and right of centerline, up to 127' AGL/486' MSL.
**Rwy 16,** tree 1240' from DER, 723' left of centerline, 47' AGL/174' MSL.
Trees beginning 1289' from DER, 713' right of centerline, up to 87' AGL/214' MSL.
**Rwy 29,** trees beginning 897' from DER, 548' right of centerline, up to 97' AGL/229' MSL.
**Rwy 34,** trees beginning 1557' from DER, left and right of centerline, up to 96' AGL/236' MSL.
Trees beginning 2379' from DER, 196' right of centerline, up to 84' AGL/224' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 1 15SEP16 (16259) (FAA)
**Rwy 16,** heading as assigned by ATC.
**Rwy 34,** heading as assigned by ATC; requires minimum climb of 260' per NM to 1400.

## ASTORIA, OR

ASTORIA RGNL (AST)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 7 19JUL18 (18200) (FAA)

DEPARTURE PROCEDURE:

See ASTORIA DEPARTURE.

TAKEOFF OBSTACLE NOTES:

**Rwy 8,** bush 57' from DER, 120' left of centerline, 14' MSL.
Fence, bushes, trees beginning 65' from DER, 102' left of centerline, up to 17' AGL/27' MSL.
Fence, bush, trees, beginning 70' from DER, 215' right of centerline, up to 22' MSL.
Trees, building beginning 151' from DER, 76' right of centerline, up to 36' MSL.
Trees beginning 207' right of centerline, up to 41' MSL.
Trees beginning 510' from DER, 79' left of centerline, up to 34' MSL.
Trees beginning 668' from DER, 281' right of centerline, up to 43' MSL.
Trees beginning 815' from DER, 336' right of centerline, up to 52' MSL.
Tree 1112' from DER, 453' right of centerline, 58' MSL.
Trees beginning 3167' from DER, 1145' right of centerline, up to 119' AGL/124' MSL.
**Rwy 14,** pole 44' from DER, 224' left of centerline, 12' AGL/25' MSL.
Tree 354' from DER, 381' left of centerline, 67' MSL.
Tree 524' from DER, 316' right of centerline, 33' MSL.
Trees beginning 571' from DER, 641' left of centerline, up to 87' MSL.
Tree 666' from DER, 544' right of centerline, 78' MSL.
Trees beginning 1255' from DER, 450' right of centerline, up to 121' MSL.
Tree 1792' from DER, 104' left of centerline, 89' MSL.
Tree 2493' from DER, 280' left of centerline, 121' MSL.
Tree 3291' from DER, 312' right of centerline, 154' MSL.
Tree 1.3 NM from DER, 2289' left of centerline, 100' AGL/249' MSL.
Tree 1.5 NM from DER, 2813' left of centerline, 100' AGL/299' MSL.
Tree 1.5 NM from DER, 2950' left of centerline, 100' AGL/349' MSL.
Tree 2.1 NM from DER, 3088' left of centerline, 100' AGL/399' MSL.
Tree 2.3 NM from DER, 2635' left of centerline, 100' AGL/449' MSL.
Tree 2.3 NM from DER, 2875' left of centerline, up to 100' AGL/499' MSL.
**Rwy 26,** terrain 25' from DER, 14' left of centerline, 13' MSL.
Bushes beginning 38' from DER, 241' left of centerline, up to 16' MSL.
Trees and bush beginning 42' from DER, 266' right of centerline, up to 18' AGL/27' MSL.
Traverse way 226' from DER, 439' left of centerline, 24' MSL.
Trees, bush beginning 247' from DER, 372' right of centerline, up to 30' MSL.
Trees beginning 695' from DER, 625' left of centerline, up to 54' MSL.
Tree 736' from DER, 620' right of centerline, 36' MSL.
Tree 1380' from DER, 720' left of centerline, 58' MSL.
Tree 1698' from DER, 702' left of centerline, 73' MSL.
Trees beginning 1975' from DER, 273' left of centerline, up to 92' MSL.
Sign 1982' from DER, 1010' right of centerline, 64' MSL.
Tree 2137' from DER, 490' left of centerline, 93' MSL.
Trees beginning 2239' from DER, 64' left of centerline, up to 102' AGL/107' MSL.
Tree 3051' from DER, 1157' left of centerline, 116' MSL.
Tree 3089' from DER, 849' left of centerline, 122' MSL.
Tree 3140' from DER, 699' left of centerline, 124' MSL.
Trees beginning 3194' from DER, 248' left of centerline, up to 131' AGL/139' MSL.
Trees beginning 4022' from DER, 879' right of centerline, up to 130' MSL.
Trees beginning 4103' from DER, 273' right of centerline, up to 145' MSL.
Trees beginning 4206' from DER, 150' right of centerline, up to 141' AGL/148' MSL.
Trees beginning 4250' from DER, 229' left of centerline, up to 146' MSL.
Trees beginning 4690' from DER, 1267' left of centerline, up to 149' MSL.
Tree 4744' from DER, 1488' left of centerline, 150' MSL.
Trees beginning 4821' from DER, 218' left of centerline, up to 164' MSL.
Tree 5241' from DER, 1316' left of centerline, 165' MSL.
Trees beginning 5434' from DER, 1603' left of centerline, up to 171' MSL.
Tree 5893' from DER, 1752' left of centerline, 173' MSL.
Trees beginning 6051' from DER, 1803' left of centerline, up to 174' AGL/182' MSL.
Antenna 1 NM from DER, 1558' right of centerline, 164' AGL/173' MSL.
**Rwy 32,** vehicles, trees, fence beginning 2' from DER, 231' left of centerline, up to 46' MSL.


NW-1, 05 NOV 2020 to 31 DEC 2020

## AUBURN, WA

AUBURN MUNI (S50)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 31MAR16 (16091) (FAA)

TAKEOFF MINIMUMS:

Use BLAKO (RNAV) DEPARTURE.

DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 1 10NOV16 (16315) (FAA)

**Rwy 16,** heading as assigned by ATC; requires minimum climb of 270' per NM to 1000.

**Rwy 34,** heading as assigned by ATC; requires minimum climb of 390' per NM to 800.

## AURORA, OR

AURORA STATE (UAO)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 15DEC11 (11349) (FAA)

TAKEOFF MINIMUMS:

**Rwy 17,** std. w/min. climb of 292'per NM to 2100 or 1500-2½ for climb in visual conditions.

**Rwy 35,** std. w/min. climb of 312'per NM to 2100 or 1500-2½ for climb in visual conditions.

DEPARTURE PROCEDURE:

**Rwy 17,** climbing right turn, thence ... Or for climb in visual conditions cross Aurora State airport at or above 1500 thence...

**Rwy 35,** climbing left turn, thence ... Or for climb in visual conditions cross Aurora State airport at or above 1500 thence ...

... Aircraft departing on V23 intercept BTG R-175 and climb on course. All others proceed direct UBG VOR/DME and Hold (hold South, left turns, 003° Inbound) continue climb in hold to cross UBG VOR/DME at or above MEA for direction of flight before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 17,** trees beginning 31' from DER, 246' right of centerline, up to 87' AGL/316' MSL.

Tree 2270' from DER, 836' left of centerline, 87' AGL/303' MSL.

Vehicle on road 254' from DER, 349' left of centerline, 16' AGL/209' MSL.

**Rwy 35,** trees beginning 30' from DER, 163' left of centerline, up to 65' AGL/329' MSL.

Vehicle on road 212' from DER, 390' left of centerline, 16' AGL/212' MSL.

Trees 973' from DER, 281' right of centerline, up to 65' AGL/253' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

ORIG 05MAR15 (15064) (FAA)

**Rwy 17,** heading as assigned by ATC; requires minimum climb of 375' per NM to 2000.

**Rwy 35,** heading as assigned by ATC; requires minimum climb of 350' per NM to 2000.

## BAKER, MT

BAKER MUNI (BHK)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 26MAR20 (20086) (FAA)

TAKEOFF OBSTACLE NOTES:

**Rwy 13**, building, terrain beginning 3' from DER, 496' right of centerline, up to 10' AGL/2996' MSL.

Building 199' from DER, 399' left of centerline, 10' AGL/2988' MSL.

Building 356' from DER, 498' right of centerline, 9' AGL/2997' MSL.

**Rwy 31,** fence 168' from DER, 498' left of centerline, 2967' MSL.

Building 1015' from DER, 726' left of centerline, 2998' MSL.

Tower 3802' from DER, 148' left of centerline, 115' AGL/3069' MSL.

Antenna 3832' from DER, 135' left of centerline, 3073' MSL.

## BAKER CITY, OR

### BAKER CITY MUNI (BKE)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 18NOV10 (10322) (FAA)

TAKEOFF MINIMUMS:

**Rwy 8**,std. w/ min climb of 460' per NM to 6900, or 3700-3 for climb in visual conditions.
**Rwy 13**,std. w/ min climb of 470' per NM to 6900, or 3700-3 for climb in visual conditions.
**Rwy 17**,N/A-Environmental.
**Rwy 26**,std. w/ min climb of 400' per NM to 7200, or 3700-3 for climb in visual conditions.
**Rwys 31,35,** std. w/ min climb of 400' per NM to 6900, or 3700-3 for climb in visual conditions.

DEPARTURE PROCEDURE:

**Rwy 8**, climb heading 081° to 6900, then climbing left turn to BKE VOR/DME R-066 to BKE VOR/DME and hold, continue climb in BKE VOR/DME holding pattern (Hold S, right turns, 338° inbound) to cross BKE VOR/DME at or above MEA/MCA for route of flight, or for climb in visual conditions, cross BKE VOR/DME at or above 6900, then climb-in-hold to at or above MEA/MCA for route of flight.
**Rwy 13,** climb heading 126° to 6900, then climbing left turn to BKE VOR/DME R-095 to BKE VOR/DME and hold, continue climb in BKE VOR/DME holding pattern (Hold S, right turns, 338° inbound) to cross BKE VOR/DME at or above MEA/MCA for route of flight, or for climb in visual conditions, cross BKE VOR/DME at or above 6900, then climb-in-hold to at or above MEA/MCA for route of flight.
**Rwy 26,** climbing right turn on heading 330° and BKE VOR/DME R-297 to 7200, then right turn to intercept BKE VOR/DME R-297 to BKE VOR/DME and hold, continue climb in BKE VOR/DME holding pattern (Hold S, right turns, 338° inbound) to cross BKE VOR/DME at or above MEA/MCA for route of flight, or for climb in visual conditions, cross BKE VOR/DME at or above 6900, then climb-in-hold to at or above MEA/MCA for route of flight.
**Rwy 31,** climb heading 306° to 6900, then climbing right turn to BKE VOR/DME R-322 to BKE VOR/DME and hold, continue climb in BKE VOR/DME holding pattern (Hold S, right turns, 338° inbound) to cross BKE VOR/DME at or above MEA/MCA for route of flight, or for climb in visual conditions, cross BKE VOR/DME at or above 6900, then climb-in-hold to at or above MEA/MCA for route of flight.
**Rwy 35,** climb heading 345° to 6900, then climbing right turn to BKE VOR/DME R-351 to BKE VOR/DME and hold, continue climb in BKE VOR/DME holding pattern (Hold S, right turns, 338° inbound) to cross BKE VOR/DME at or above MEA/MCA for route of flight, or for climb in visual conditions, cross BKE VOR/DME at or above 6900, then climb-in-hold to at or above MEA/MCA for route of flight.

TAKEOFF OBSTACLE NOTES:

**Rwy 8**, vehicles on roadway 321' from DER, on centerline, 11' AGL/3380' MSL.
Trees beginning 2.5 NM from DER, 200' left of centerline, up to 100' AGL/3812' MSL.
Trees beginning 2.9 NM from DER, 2464' left of centerline. Up to 100' AGL/4270' MSL.
**Rwy 13,** trees beginning 2019' from DER, 969' right of centerline, up to 100' AGL/3469' MSL.
Bushes beginning 2.2 NM from DER, 4092' left of centerline, up to 3' AGL/3837' MSL.
Trees beginning 2.2 NM from DER, 4027' left of centerline, up to 100' AGL/3919' MSL.
**Rwy 26,** bushes 231' from DER, 55' left of centerline, up to 12' AGL/3381' MSL.
Bushes 241' from DER, 147' right of centerline, up to 15' AGL/3384' MSL.
Vehicles on roadway 393' from DER, on centerline, up to 18' AGL/3384' MSL.
Pole 1276' from DER, 530' left of centerline, 35' AGL/3404' MSL.
Trees beginning 2547' from DER, 742' left of centerline, up to 100' AGL/3469' MSL.
Trees beginning 2617' from DER. 108' right of centerline, up to 100' AGL/3441' MSL.
**Rwy 31,** trees beginning 74' from DER, 49' left of centerline, up to 100' AGL/3424' MSL.
Sign 489' from DER, 389' left of centerline, 25' AGL/3391' MSL.
Vehicles on roadway 499' from DER, 302' left of centerline, up to 21' AGL/3387' MSL.
Trees beginning 1107' from DER, 757' left of centerline, up to 100' AGL/3469' MSL.
**Rwy 35,** trees beginning 5.9 NM from DER, 724' right of centerline, up to 100' AGL/4779' MSL.

## BELLINGHAM, WA

### BELLINGHAM INTL (BLI)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 6 04FEB16 (16035) (FAA)

DEPARTURE PROCEDURE:

**Rwy 16,** climb heading 164° to 600, then climbing right turn direct HUH VORTAC. Do not exceed 210 KIAS until established northbound.
**Rwy 34,** climb heading 344° to 600, then climbing left turn to intercept HUH R-145 to HUH VORTAC, continue climb in holding HUH holding pattern (northwest, right turn, 149° inbound) to MEA as appropriate for direction of flight.

TAKEOFF OBSTACLE NOTES:

**Rwy 16,** tree and windsock beginning abeam DER, 258' right of centerline, up to 15' AGL/187' MSL.
Trees beginning 180' from DER, 534' right of centerline, up to 30' AGL/199' MSL.
Trees beginning 747' from DER, 404' right of centerline, up to 40' AGL/213' MSL.
Trees beginning 1128' from DER, 56' left of centerline, up to 75' AGL/249' MSL.
**Rwy 34,** windsock 92' from DER, 516' right of centerline, 19' AGL/169' MSL.
Trees beginning 1372' from DER, 698' right of centerline, up to 60' AGL/208' MSL.
Trees beginning 2682' from DER, 966' right of centerline, up to 100' AGL/246' MSL.
Trees beginning 3079' from DER, 619' right of centerline, up to 85' AGL/246' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

ORIG 03MAR16 (16063) (FAA)

**Rwy 16,** heading as assigned by ATC; requires minimum climb of 360' per NM to 2700.
**Rwy 34,** heading as assigned by ATC.

## BEND, OR

BEND MUNI (BDN)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4 02JUL09 (09183) (FAA)

DEPARTURE PROCEDURE:

Use BEND DEPARTURE.

## BIG PINEY, WY

MILEY MEMORIAL FIELD (BPI)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 21JUL16 (16203) (FAA)

TAKEOFF MINIMUMS:

**Rwy 8, 26,** NA-Environmental.

DEPARTURE PROCEDURE:

**Rwy 13,** climb to 8400 on BPI R-124 before proceeding on course.

**Rwy 31,** climb to 10800 on BPI R-320 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 13,** bldg 2' from DER, 475' left of centerline, 17' AGL/6963' MSL.

Tower 135' from DER, 518' left of centerline, 38' AGL/6983' MSL.

Bldg 138' from DER, 503' left of centerline, 12' AGL/6957' MSL.

**Rwy 31,** fence 94' from DER, 450' right of centerline, 10' AGL/7003' MSL.

## BIG TIMBER, MT

BIG TIMBER (6S0)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 07DEC17 (17341) (FAA)

TAKEOFF MINIMUMS:

**Rwys 18, 36,** NA-Environmental.

DEPARTURE PROCEDURE:

**Rwy 6,** climbing right turn heading 220° to intercept LVM VOR/DME R-070 to LVM VOR/DME before proceeding on course.

**Rwy 24,** climbing left turn direct LVM VOR/DME, continue climb in LVM holding pattern (hold east, right turns, 250° inbound) to cross LVM VOR/DME at or above MEA/MCA for route of flight.

TAKEOFF OBSTACLE NOTES:

**Rwy 6,** ground 7' from DER, 34' right of centerline, 4458 MSL.

Light 9' from DER, 28' right of centerline, 1'AGL/4458 MSL.

Fence 29' from DER, 447' left of centerline, 7' AGL/4461 MSL.

**Rwy 24,** light 9' from DER, 26' left of centerline, 1' AGL/4492' MSL.

Light 9' from DER, 28' right of centerline, 2' AGL/4492' MSL.

Fence beginning 106' from DER, beginning 432' left of centerline, up to 7' AGL/4500' MSL.

## BILLINGS, MT

BILLINGS LOGAN INTL (BIL)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 7A 01FEB18 (18032) (FAA)

TAKEOFF MINIMUMS:

**Rwy 10R,** NA - environmental.

DEPARTURE PROCEDURE:

**Rwy 10L,** climb heading 102° to 4600, then on assigned heading.

TAKEOFF OBSTACLE NOTES:

**Rwy 7,** ground beginning 9' from DER, 55' right of centerline, up to 3498' MSL.

Fence 466' from DER, 534' right of centerline, 3511' MSL.

**Rwy 10L,** ground beginning 22' from DER, 496' right of centerline, up to 3505' MSL.

Vehicles on road beginning 622' from DER, 426' right of centerline,15' AGL/3524' MSL.

Fence 464' from DER, 534' right of centerline,11' AGL/3511' MSL.

**Rwy 25,** ground beginning 16' from DER, 456' left of centerline, up to 3642' MSL.

Ground beginning 52' from DER, 366' right of centerline, up to 3647' MSL.

Numerous poles, vertical structures, and fence beginning 189' from centerline, 184' left of centerline, up to 37' AGL/3673' MSL.

Tree 4760' from DER,1545' right of centerline, 30' AGL/3769' MSL.

**Rwy 28L,** ground beginning 25' from DER, 365' left of centerline, up to 3660' MSL.

Building 1680' from DER, 717' left of centerline, 35' AGL/3707' MSL.

Building 3523' from DER, 708' left of centerline, 3743' MSL.

Tree 3682' from DER, 937' left of centerline, 30' AGL/3769' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 1 08NOV18 (18312) (FAA)

**Rwy 10L,** heading as assigned by ATC.

**BLACKFOOT, ID**
MCCARLEY FIELD (U02)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1A 19JUL18 (18200) (FAA)
DEPARTURE PROCEDURE:
**Rwy 1,** climb to 7000 direct IDA VOR/DME, before proceeding on course.
**Rwy 19,** climb to 7000 direct PIH VOR/DME, before proceeding on course.
TAKEOFF OBSTACLE NOTES:
**Rwy 1,** tree 140' from DER, 417' left of centerline, 4549' MSL.
Tree 313' from DER, 371' left of centerline, 4554' MSL.
**Rwy 19,** traverse way 168' from DER, 311' left of centerline, 15' AGL/4501' MSL.
Sign 3333' from DER, 643' right of centerline, 103' AGL/4586' MSL.

**BOISE, ID**
BOISE AIR TERMINAL /GOWEN FIELD (BOI)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6 11FEB10 (10042) (FAA)
DEPARTURE PROCEDURE:
Use GOWEN DEPARTURE.

DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 1 23JUL15 (15204) (FAA)
**Rwy 10L,** heading as assigned by ATC; requires minimum climb of 400' per NM to 5600.
**Rwy 10R,** heading as assigned by ATC; requires minimum climb of 330' per NM to 5200.
**Rwy 28L,** heading as assigned by ATC; requires minimum climb of 240' per NM to 6400.
**Rwy 28R,** heading as assigned by ATC; requires minimum climb of 270' per NM to 6100.

**BONNERS FERRY, ID**
BOUNDARY COUNTY (65S)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 29JUL10 (10210) (FAA)
TAKEOFF MINIMUMS:
**Rwy 2,** NA-Terrain.
DEPARTURE PROCEDURE:
**Rwy 20,** use KARPS (RNAV) DEPARTURE.

**BOZEMAN,MT**
BOZEMAN YELLOWSTONE INTL (BZN)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4B 24MAY18 (18144) (FAA)
TAKEOFF MINIMUMS:
**Rwys 3, 11, 21, 29,** NA - air traffic.
DEPARTURE PROCEDURE:
**Rwys 12, 30,** use BOZEMAN DEPARTURE.
TAKEOFF OBSTACLE NOTES:
**Rwy 30,** pole 641' from DER, 622' left of centerline, 35' AGL/4452' MSL.

**BREMERTON, WA**
BREMERTON NATIONAL (PWT)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6 26MAR20 (20086) (FAA)
TAKEOFF MINIMUMS:
**Rwy 2,** 300-1½ or std. w/min. climb of 407' per NM to 700.
DEPARTURE PROCEDURE:
**Rwy 2,** climbing right turn to 4000 on heading 220° and OLM VORTAC R-346 to CARRO INT/OLM 19.43 DME, thence ...
**Rwy 20,** climb on heading 197° to 4000 and OLM VORTAC R-346 to CARRO INT/OLM 19.43 DME, thence ...
... continue climb in hold (hold north, right turn, 166° inbound) to 4000 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
**Rwy 2,** poles beginning 3' from DER, 258' left of centerline, up to 2' AGL/442' MSL.
NAVAID 10' from DER, 64' right of centerline, 2' AGL/442' MSL.
Sign 38' from DER, 249' left of centerline, 3' AGL/444' MSL.
Vegetation 380' from DER, 521' left of centerline, 456' MSL.
Trees beginning 959' from DER, 709' right of centerline, up to 48' AGL/497' MSL.
Trees beginning 1125' from DER, 595' left of centerline, up to 78' AGL/518' MSL.
Trees beginning 1169' from DER, 695' right of centerline, up to 72' AGL/525' MSL.
Trees, wall beginning 1214' from DER, 770' right of centerline, up to 68' AGL/537' MSL.
Trees beginning 1386' from DER, 572' left of centerline, up to 112' AGL/542' MSL.
Trees beginning 1917' from DER, 798' left of centerline, up to 111' AGL/543' MSL.
Trees beginning 1937' from DER, 765' left of centerline, up to 131' AGL/566' MSL.
**CON'T**



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## BREMERTON,WA (CON'T)

BREMERTON NATIONAL (PWT) (CON'T)

**Rwy 2 (CON'T),** trees beginning 2238' from DER, 793' left of centerline, up to 158' AGL/591' MSL.
Trees beginning 2798' from DER, 100' left of centerline, up to 168' AGL/593' MSL.
Trees beginning 3081' from DER, 1176' right of centerline, up to 86' AGL/579' MSL.
Trees beginning 3102' from DER, 157' right of centerline, up to 599' MSL.
Trees beginning 1.1 NM from DER, 2413' right of centerline, up to 144' AGL/631' MSL.
Trees beginning 2.4 NM from DER, 4186' left of centerline, up to 138' AGL/884' MSL.
Trees beginning 2.4 NM from DER, 4295' left of centerline, up to 170' AGL/1020' MSL.
Trees beginning 2.4 NM from DER, 3978' left of centerline, up to 137' AGL/1077' MSL.
**Rwy 20,** vegetation beginning 1' from DER, 457' left of centerline, up to 452' MSL.
Vegetation 140' from DER, 401' right of centerline, 10' AGL/450' MSL.
Trees, vegetation beginning 177' from DER, 349' left of centerline, up to 471' MSL.
Trees, vegetation beginning 372' from DER, 224' right of centerline, up to 489' MSL.
Trees, vegetation beginning 752' from DER, 549' left of centerline, up to 514' MSL.
Trees beginning 1329' from DER, 684' right of centerline, up to 35' AGL/494' MSL.
Trees beginning 1712' from DER, 794' right of centerline, up to 44' AGL/500' MSL.
Trees beginning 1719' from DER, 302' left of centerline, up to 66' AGL/534' MSL.
Trees beginning 1754' from DER, 700' right of centerline, up to 51' AGL/505' MSL.
Trees beginning 1904' from DER, 767' right of centerline, up to 56' AGL/507' MSL.
Trees beginning 2410' from DER, 7' right of centerline, up to 66' AGL/509' MSL.
Trees beginning 2519' from DER, 150' right of centerline, up to 60' AGL/513' MSL.
Trees beginning 2974' from DER, 69' right of centerline, up to 108' AGL/552' MSL.
Trees beginning 3135' from DER, 70' right of centerline, up to 114' AGL/559' MSL.
Trees beginning 3266' from DER, 2' right of centerline, up to 120' AGL/560' MSL.
Trees beginning 3411' from DER, 30' left of centerline, up to 95' AGL/540' MSL.
Trees beginning 3417' from DER, 119' left of centerline, up to 112' AGL/545' MSL.
Trees beginning 4030' from DER, 578' left of centerline, up to 127ft AGL/547' MSL.
Trees beginning 4435' from DER, 843' left of centerline, up to 122' AGL/575' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 1 15SEP16 (16259) (FAA)

**Rwy 2,** heading as assigned by ATC; requires minimum climb of 410' per NM to 1500.
**Rwy 20,** heading as assigned by ATC.

## BUFFALO,WY

JOHNSON COUNTY (BYG)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 25JUN15 (15176) (FAA)

DEPARTURE PROCEDURE:
**Rwy 13,** Climbing left turn heading 290° to intercept SHR VOR/DME R-142 to SHR VOR/DME.
**Rwy 31,** Climb heading 306° to intercept SHR VOR/DME R-142 to SHR VOR/DME.

TAKEOFF OBSTACLE NOTES:
**Rwy 13,** fence 3' from DER, 349' left of centerline, 9' AGL/4907' MSL.
Bush 7' from DER, 42' right of centerline, 2' AGL/4906' MSL.
**Rwy 31,** fence beginning 63' from DER, 464' left of centerline, up to 10' AGL/5021' MSL.
Rising terrain starting 87' from DER, left and right of centerline, up to 5011' MSL.
Fence beginning 744' from DER, 87' right of centerline, up to 9' AGL/5010' MSL.

## BURLEY, ID

BURLEY MUNI (BYI)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 5A 30MAY13 (13150) (FAA)

TAKEOFF MINIMUMS:
**Rwy 2,** 200-1½ or std. w/min. climb of 210' per NM to 4400. Alternatively with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1300' prior to DER.
**Rwy 24,** 300-1½ or std. w/min. climb of 438' per NM to 4500.

DEPARTURE PROCEDURE:
**Rwys 2, 6,** climbing left turn direct BYI VOR/DME, continue climb in BYI VOR/DME holding pattern (hold NW, right turns, 125° inbound) to cross BYI VOR/DME at or above MEA for route of flight.
**Rwys 20, 24,** climbing right turn direct BYI VOR/DME, continue climb in BYI VOR/DME holding pattern (hold NW, right turns, 125° inbound) to cross BYI VOR/DME at or above MEA for route of flight.

TAKEOFF OBSTACLE NOTES:
**Rwy 2,** tower 1.02 NM from DER, 862' right of centerline, 155' AGL/4304' MSL.
Obstruction light on bridge 252' from DER, 513' left of centerline, 57' AGL/4195' MSL.
Trees beginning 686' from DER, 201' right of centerline, up to 35' AGL/4184' MSL.
Tree 694' from DER, 375' left of centerline, 29' AGL/4178' MSL.
Obstruction light on building 736' from DER, 188' left of centerline, 11' AGL/4161' MSL.
Tower 803' from DER, 590' left of centerline, 55' AGL/4204' MSL.
Vehicles on road beginning 857' from DER, 1' right of centerline, up to 17' AGL/4168' MSL.
Poles beginning 1226' from DER, 549' left of centerline up to 72' AGL/4222' MSL.
Building vent 1240' from DER, 164' left of centerline, 27' AGL/4177' MSL.
Stack 2206' from DER, 856' right of centerline, 86' AGL/4236' MSL.

**CON'T**



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## BURLEY, ID (CON'T)

BURLEY MUNI (BYI) (CON'T)

**Rwy 2 (CON'T),** stack 2573' from DER, 614' left of centerline, 86' AGL/4236' MSL.
Elevators beginning 3980' from DER, 131' right of centerline, up to 133' AGL/4283' MSL.
**Rwy 6,** trees beginning 46' from DER, 172' right of centerline, up to 14' AGL/4163' MSL.
Rising terrain beginning 49' from DER, 326' right of centerline, up to 4149' MSL.
Bush 150' from DER, 103' right of centerline, 5' AGL/4147' MSL.
Antenna 586' from DER, 398' left of centerline, 15' AGL/4165' MSL.
Obstruction light on bridge 1061' from DER, 80' right of centerline, 39' AGL/4179' MSL.
**Rwy 20,** obstruction light pole 42' from DER, 124' left of centerline, 16' AGL/4170' MSL.
Railroad beginning 65' from DER, 4' left of centerline up to 23' AGL/4177' MSL.
Sign 181' from DER, 121' right of centerline, 18' AGL/4172' MSL.
Vehicles on road 162' from DER, 2' left of centerline, 17' AGL/4169' MSL.
Vehicles on road beginning 335' from DER, 348' right of centerline, up to 17' AGL/4171' MSL.
Pole 446' from DER, 210' right of centerline, 26' AGL/4180' MSL.
Antenna 523' from DER, 337' right of centerline, 63' AGL/4217' MSL.
Tree 586' from DER, 213' right of centerline, 28' AGL/4182' MSL.
Trees beginning 2014' from DER, 339' left of centerline, up to 96' AGL/4251' MSL.
**Rwy 24,** vehicles on road beginning 25' from DER, 9' left of centerline, up to 15' AGL/4169' MSL.
Fence 58' from DER, 8' left of centerline, 4' AGL/4154' MSL.
Rising terrain beginning 69' from DER, 201' right of centerline, up to 4154' MSL.
Railroad 152' from DER, 6' left of centerline, 23' AGL/4176' MSL.
Trees beginning 427' from DER, 101' right of centerline, up to 69' AGL/4223' MSL.
Vehicles on road beginning 509' from DER, 586' right of centerline, up to 15' AGL/4169' MSL.
Railroad beginning 568' from DER, 288' right of centerline, up to 23' AGL/4177' MSL.
Pole 735' from DER, 185' left of centerline, 18' AGL/4172' MSL.
Light standard 824' from DER, 58' right of centerline, 23' AGL/4177' MSL.
Antenna 1630' from DER, 112' left of centerline, 58' AGL/4212' MSL.
Tower 2766' from DER, 175' left of centerline, 123' AGL/4282' MSL.
Tower 3570' from DER, 158' right of centerline, 157' AGL/4312' MSL.
Obstruction light on elevators beginning 3115' from DER, 164' left of centerline, up to 184' AGL/4344' MSL.
Building 5.12 NM from DER, 149' left of centerline, 158' AGL/4323' MSL.

## BURLINGTON/MOUNT VERNON, WA

SKAGIT RGNL (BVS)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2A 04FEB16 (16035) (FAA)

TAKEOFF MINIMUMS:

**Rwy 4,** NA-Environmental.

DEPARTURE PROCEDURE:

**Rwy 11,** climbing right turn heading 245° to intercept CVV VOR/DME R-022 thence …
**Rwy 22,** climb heading 220° to 1500, then intercept CVV R-014, thence …
**Rwy 29,** climb heading 290° to 1000, then climbing left turn on heading 165° to intercept CVV R-015, thence…
...to CVV VOR/DME, climb in holding pattern (hold south, left turns, 346° inbound) to cross CVV VOR/DME at or above MEA for route of flight.

TAKEOFF OBSTACLE NOTES:

**Rwy 11,** fence 20' from DER, 390' left of centerline, 4' AGL/105' MSL.
Trees beginning 1418' from DER, 832' right of centerline, up to 140' AGL/196' MSL.
**Rwy 22,** ground beginning 13' from DER, 362' right of centerline, up to 97' MSL.
Bush 169' from DER, 287' right of centerline, 30' AGL/120' MSL.
Tree 509' from DER, 525' right of centerline, 30' AGL/133' MSL.
Tree 774' from DER, 507' left of centerline, 70' AGL/141' MSL.
Tanks beginning 913' from DER, 578' left of centerline, 55' AGL/130' MSL.
Trees beginning 1096' from DER, 543' right of centerline, up to 120' AGL/211' AGL.
Trees beginning 1388' from DER, 563' left of centerline, up to 120' AGL/188' MSL.
Trees beginning 1743' from DER, 791' right of centerline, up to 130' AGL/222' MSL.
Trees beginning 1800' from DER, 587' left of centerline, up to 110' AGL/177' MSL.
Tree 1887' from DER, 807' right of centerline, 150' AGL/230' MSL.
**Rwy 29,** ground 25' from DER, 431' right of centerline, 146' MSL.
Tree 40' from DER, 485' right of centerline, 40' AGL/182' MSL.
Trees 64' from DER, 470' left of centerline, 50' AGL/189' MSL.
Trees 485' from DER, 575' right of centerline, up to 100' AGL/240' MSL.
Trees 1732' from DER, 952' left of centerline, up to 130' AGL/247' MSL.
Trees 4325' from DER, 68' right of centerline, 140' AGL/272' MSL.

## BURNS, OR

BURNS MUNI (BNO)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 05AUG04 (04218) (FAA)

DEPARTURE PROCEDURE:

**Rwy 3,** climbing right turn, thence...

**Rwy 12**, climb to 4600 via heading 117°, thence...

**Rwys 21, 30,** climbing left turn, thence…

...All aircraft departing on ILR R-072 CW R-209, climb on course. All others climb on ILR R-123 within 10 NM to cross ILR VOR/DME at or above 5000.

TAKEOFF OBSTACLE NOTES:

**Rwy 21,** pole 820' from DER, 357' left of centerline, 20' AGL/4169' MSL.

## BUTTE, MT

BERT MOONEY (BTM)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 6 07DEC17 (17341) (FAA)

TAKEOFF MINIMUMS:

**Rwy 12,** N/A - obstacles.

**Rwy 15,** std. w/ min. climb of 570' per NM to 7800 or 3500-3 for VCOA.

**Rwy 30,** std. w/ min. climb of 830' per NM to 6700 or 3500-3 for VCOA.

**Rwy 33,** std. w/ min. climb of 385' per NM to 7000 or 3500-3 for VCOA.

DEPARTURE PROCEDURE:

**Rwy 15,** climbing right turn direct CPN VOR/DME, thence . . .

**Rwy 30,** climb heading 315° to intercept CPN VOR/DME R-082 to CPN VOR/DME, thence . . .

**Rwy 33,** climb heading 335° to 6300 before turning left direct to CPN VOR/DME, thence . . .

. . .continue Climb in CPN VOR/DME holding pattern (hold N, left turn, 166° inbound) to cross CPN VOR/DME at or above MEA/MCA for route of flight.

VCOA:

**Rwys 15, 30, 33,** obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross MARRG westbound at or above 8900 then via CPN VOR/DME R-097 to CPN VOR/DME, continue climb in CPN VOR/DME holding pattern (hold N, left turn, 166° inbound) to cross CPN VOR/DME at or above MEA/MCA for route of flight.

TAKEOFF OBSTACLE NOTES:

**Rwy 15,** rwy lights 9' from DER, 55' left and right of centerline, 1' AGL/5551' MSL.

**Rwy 30,** terrain 35' from DER, 483' left of centerline, 5524' MSL.

REILs 43' from DER, left and right of centerline, 5' AGL/5524' MSL.

Tree 370' from DER, 587' right of centerline, 5590' MSL.

Poles beginning 509' from DER, 140' left of centerline, up to 16' AGL/5536' MSL.

Tree 733' from DER, 590' right of centerline, 5591' MSL.

Pole 1012' from DER, 132' left of centerline, 33' AGL/5550' MSL.

Communications tower 3928' from DER, 164' right of centerline, 106' AGL/5619' MSL.

Trees on rising terrain beginning 1 NM from DER, 1474' left of centerline, up to 5770' MSL.

Trees on rising terrain beginning 1.1 NM from DER, 997' left of centerline, up to 5946' MSL.

Building, terrain and trees beginning 1.2 NM from DER, 1007' left of centerline, up to 6175' MSL.

Trees on rising terrain beginning 1.3 NM from DER, 885' left of centerline, up to 6241' MSL.

Pole, terrain and trees beginning 1.4 NM from DER, 923' left of centerline, up to 6251' MSL.

**Rwy 33,** runway lights 5' from DER, 14' left and right of centerline, 2' AGL/5508' MSL.

## CALDWELL, ID

CALDWELL INDUSTRIAL (EUL)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5 01SEP05 (05244) (FAA)

TAKEOFF MINIMUMS:

**Rwy 12,** std. with a min. climb of 300' per NM to 5600, or 2400-3 for climb in visual conditions.

DEPARTURE PROCEDURE:

**Rwy 12,** climb via heading 119° to 5600 before proceeding on course. For climb in visual conditions: Cross Caldwell Industrial Airport at or above 4800 before proceeding on course.

**Rwy 30,** climb via heading 299° to 4400 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 12,** levee 198' from DER, 281' left of centerline, 0' AGL/2451' MSL.

Multiple trees 1462' from DER, 877' right of centerline, up to 100' AGL/2505' MSL.

**Rwy 30,** multiple poles 206' from DER, 389' right of centerline, up to 39' AGL/2457' MSL.

Rod 353' from DER, 246' right of centerline, 21' AGL/2439' MSL.

## CASPER, WY

CASPER/NATRONA COUNTY INTL (CPR)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4 20SEP12 (12264) (FAA)

DEPARTURE PROCEDURE:

**Rwy 3,** climbing left turn on DDY R-202, to DDY VOR/DME before proceeding on course.

**Rwy 8,** climbing left turn on DDY R-190, to DDY VOR/DME before proceeding on course.

**Rwy 21,** climbing right turn on DDY R-215, to DDY VOR/DME before proceeding on course.

**Rwy 26,** climbing right turn on DDY R-223, to DDY VOR/DME before proceeding on course.

## CHEHALIS, WA

CHEHALIS-CENTRALIA (CLS)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 26JUL12 (12208) (FAA)

TAKEOFF MINIMUMS:

**Rwy 16,** 400-2¾ or std. w/min. climb of 240' per NM to 700.

**Rwy 34,** std. w/min. climb of 210' per NM to 500.

DEPARTURE PROCEDURE:

**Rwy 16,** climb heading 162° to 1000, then climbing left turn to 4000 heading 001° and OLM R-151 to OLM VORTAC then proceed on course.

**Rwy 34,** climb to 4000 on OLM R-176 to OLM VORTAC then proceed on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 16,** multiple buildings beginning 1560' from DER, left and right of centerline, up to 40' AGL/220' MSL.
Pole 136' from DER, 435' left of centerline, 30' AGL/233' MSL.
Trees beginning 523' from DER, left and right of centerline, up to 100' AGL/518' MSL.
**Rwy 34,** trees beginning 1679' from DER, left and right of centerline, up to 100' AGL/317' MSL.
Building 7169' from DER, 1968' left of centerline, 30' AGL/357' MSL.

## CHEYENNE, WY

CHEYENNE RGNL/JERRY OLSON FIELD (CYS)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4 20SEP12 (12264) (FAA)

DEPARTURE PROCEDURE:

**Rwy 31,** climb heading 306° to 6700 before turning left.

TAKEOFF OBSTACLE NOTES:

**Rwy 13,** fence beginning 30' from DER, 246' right of centerline, up to 9' AGL/6126' MSL.
Trees beginning 48' from DER, left and right of centerline, up to 68' AGL/6177' MSL.
Multiple poles beginning 165' from DER, left and right of centerline, up to 27' AGL/6136' MSL.
**Rwy 27,** localizer antenna 404' from DER, on centerline, 10' AGL/6156' MSL.
Light on localizer antenna, 408' from DER, 49' left of centerline, 10' AGL/6156' MSL.
Vehicles on road beginning 422' from DER, 247' left of centerline, up to 15' AGL/6162' MSL.
Trees beginning 514' from DER, left and right of centerline, up to 65' AGL/6224' MSL.
Multiple poles beginning 741' from DER, left and right of centerline, up to 60' AGL/6203' MSL.
**Rwy 31,** trees beginning 140' from DER, left and right of centerline, up to 57' AGL/6226' MSL.
Vehicles on road beginning 193' from DER, 248' left of centerline, up to 15' AGL/6179' MSL.
Fence beginning 196' from DER, 1' left of centerline, 9' AGL/6175' MSL.
Sign 370' from DER, 59' left of centerline, 9' AGL/6171' MSL.
Multiple poles beginning 383' from DER, left and right of centerline, up to 35' AGL/6229' MSL.
Sign 3248' from DER, 600' left of centerline, 56' AGL/6244' MSL.

## CHOTEAU, MT

CHOTEAU (CII)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 05DEC19 (19339) (FAA)

TAKEOFF MINIMUMS:

**Rwy 15,** std. w/min. climb of 230' per NM to 10700 or 3000-3 for VCOA.

**Rwy 23,** std. w/min. climb of 310' per NM to 10400 or 3000-3 for VCOA.

**Rwy 33,** std. w/min. climb of 260' per NM to 10300 or 3000-3 for VCOA.

DEPARTURE PROCEDURE:

**Rwy 5,** climb on heading 055° to 5700 before turning west.

**Rwy 15,** climb on heading 148° to 5200 before turning right.

**Rwy 33,** climb on heading 328° to 5800 before turning left.

VCOA:

**Rwys 15, 23, 33,** obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Choteau Airport at or above 6800 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 5,** fence beginning 19' from DER, 226' right of centerline, up to 10' AGL/3948' MSL.
Fence 35' from DER, 212' left of centerline, 12' AGL/3947' MSL.
Pole 909' from DER, 537' left of centerline, 35' AGL/3967' MSL.
**Rwy 15,** fence beginning 118' from DER, 494' left of centerline, up to 5' AGL/3947' MSL.
Antenna 1208' from DER, 712' right of centerline, 26' AGL/3981' MSL.
Tree 1468' from DER, 688' right of centerline, 4009' MSL.
Tree 1589' from DER, 718' right of centerline, 4011' MSL.
Tree 1997' from DER, 461' right of centerline, 4016' MSL.
Tree 2417' from DER, 400' left of centerline, 4004' MSL.
**Rwy 23,** fence, terrain beginning 71' from DER, 218' right of centerline, up to 7' AGL/3952' MSL.
Pole 359' from DER, 588' right of centerline, 34' AGL/3964' MSL.
**Rwy 33,** fence 11' from DER, 394' right of centerline, 5' AGL/3942' MSL.
Wind indicator 99' from DER, 199' left of centerline, 13' AGL/3952' MSL.

## CIRCLE, MT

### CIRCLE TOWN COUNTY (4U6)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 15NOV12 (12320) (FAA)

TAKEOFF MINIMUMS:

**Rwy 12,** std. w/min. climb of 221' per NM to 2900, or 1000-3 for climb in visual conditions.

DEPARTURE PROCEDURE:

**Rwy 12,** For climb in visual conditions cross Circle Town County airport at or above 3400 MSL before proceeding on course. When executing VCOA, notify ATC prior to departure.

TAKEOFF OBSTACLE NOTES:

**Rwy 12,** fence 8332' from DER, 1042' left of centerline, 3' AGL/2672' MSL.
Fence 122' from DER, 210' right of centerline, 3' AGL/2445' MSL.
Ground 1797' from DER, 235' left of centerline 2669' MSL.
Vehicle on road 231' from DER, 464' left of centerline, 15' AGL/2485' MSL.
Vehicle on road 76' from DER, 343' right of centerline, 15' AGL/2463' MSL.
**Rwy 30,** tree 656' from DER, 569' right of centerline, 37' AGL/2459' MSL.
Vehicle on road 13' from DER, 202' left of centerline, 15' AGL/2441' MSL.
Railroad 403' from DER, 121' right of centerline, 23' AGL/2446' MSL.
Pole 851' from DER, 455' right of centerline, 24' AGL/2450' MSL.

## CODY, WY

### YELLOWSTONE RGNL (COD)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5 26MAR20 (20086) (FAA)

TAKEOFF MINIMUMS:

**Rwy 4,** std. w/min. climb of 400' per NM to 8000' or 4400-3 for VCOA.
**Rwy 22,** std. w/min. climb of 420' per NM to 7400' or 4400-3 for VCOA.

DEPARTURE PROCEDURE:

**Rwy 4,** climb on heading 041° to 5900, then climbing left turn to intercept COD R-171 to COD VOR/DME.
**Rwy 22,** climb on heading 221° to 6600, then climbing left turn to intercept COD R-180 to COD VOR/DME.

VCOA:

Obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Yellowstone RGNL at or above 9400, then on COD R-189 to COD VOR/DME to cross COD VOR/DME at or above MEA for route of flight.

TAKEOFF OBSTACLE NOTES:

**Rwy 4,** vehicle on road, pole and tree beginning at DER, 30' right of centerline, up to 5089' MSL.
Terrain 246' from DER, 531' right of centerline, 5090' MSL.
Trees beginning 696' from DER, 608' right of centerline, up to 5132' MSL.
Trees and terrain beginning 949' from DER, 261' right of centerline, up to 5138' MSL.
Terrain beginning 1747' from DER, 407' right of centerline, up to 5146' MSL.
**Rwy 22,** electrical system and pole beginning 9' from DER, 60' left of centerline, up to 16' AGL/5103' MSL.
Electrical system and pole beginning 9' from DER, 29' right of centerline, up to 17' AGL/5104' MSL.
Vehicle on road 189' from DER, 540' right of centerline, 5108' MSL.
Traverse way 251' from DER, 480' right of centerline, 5111' MSL.
Vehicle on road 330' from DER, 410' right of centerline, 5114' MSL.
Vehicle on road 419' from DER, 343' right of centerline, 5117' MSL.
Pole and building beginning 431' from DER, 504' right of centerline, up to 32' AGL/5119' MSL.
Terrain 4775' from DER, 1212' left of centerline, 5227' MSL.
Terrain beginning 4889' from DER, 1085' left of centerline, up to 5247' MSL.
Terrain beginning 5250' from DER, 1036' left of centerline, up to 5291' MSL.
Terrain 5440' from DER, 1763' left of centerline, 5304' MSL.
Terrain beginning 5562' from DER, 704' left of centerline, up to 5311' MSL.
Terrain beginning 5777' from DER, 1358' left of centerline, up to 5318' MSL.
Terrain beginning 5870' from DER, 692' left of centerline, up to 5339' MSL.
Terrain 5910' from DER, 107' right of centerline, 5266' MSL.
Terrain beginning 5923' from DER, 83' left of centerline, up to 5351' MSL.
Transmission line, pole and terrain beginning 6056' from DER, 175' right of centerline, up to 45' AGL/5276' MSL.
Terrain beginning 1 NM from DER, 7' left of centerline, up to 5371' MSL.
Pole and transmission line beginning 1 NM from DER, 1428' right of centerline, up to 5286' MSL.
Transmission line and poles beginning 1 NM from DER, 1170' right of centerline, up to 46' AGL/5313' MSL.
Transmission line and pole beginning 1 NM from DER, 1017' right of centerline, up to 56' AGL/5322' MSL.
Pole and terrain beginning 1 NM from DER, 1009' right of centerline, up to 5325' MSL.
Transmission line, pole, terrain and fence beginning 1 NM from DER, 109' right of centerline, up to 24' AGL/5332' MSL.
Terrain beginning 1 NM from DER, 867' left of centerline, up to 5389' MSL.
Terrain, pole beginning 1 NM from DER, 341' left of centerline, up to 5396' MSL.
Terrain beginning 1 NM from DER, 140' left of centerline, up to 5410' MSL.
Terrain beginning 1 NM from DER, 718' left of centerline, up to 5427' MSL.
Terrain, pole, transmission line beginning 1 NM from DER, 93' left of centerline, up to 5431' MSL.
Pole, transmission line, terrain beginning 1.5 NM from DER, 306' right of centerline, up to 5354' MSL.
Pole, transmission line, terrain beginning 1.5 NM from DER, 16' right of centerline, up to 5410' MSL.
Terrain beginning 1.6 NM from DER, 336' right of centerline, up to 5434' MSL.

## COEUR D'ALENE, ID
COEUR D'ALENE-PAPPY BOYINGTON FIELD (COE)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 9 11FEB10 (10042) (FAA)
DEPARTURE PROCEDURE:
use COEUR D'ALENE DEPARTURE.

## COLSTRIP, MT
COLSTRIP (M46)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 05JUN08 (08157) (FAA)
TAKEOFF MINIMUMS:
**Rwy 6** use CISPU (RNAV) DEPARTURE.
**Rwy 24,** use CONUK (RNAV) DEPARTURE.

## CONRAD, MT
CONRAD (S01)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 28FEB19 (19059) (FAA)
TAKEOFF MINIMUMS:
**Rwys 15, 33,** NA- Environmental.
**Rwy 24,** std. w/min. climb of 256' per NM to 4400, or 1100-3 for VCOA.
VCOA:
**Rwy 24,** obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Conrad Airport at or above 4500 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
**Rwy 6,** lighting 8' from DER, 17' right of centerline, 2' AGL/3530' MSL.
Lighting 38' from DER, 111' left of centerline, 3' AGL/3530' MSL.
Building 59' from DER, 472' left of centerline, 24' AGL/3550' MSL.
Tower 307' from DER, 512' left of centerline, 40' AGL/3565' MSL.
Tree 378' from DER, 462' left of centerline, 3594' MSL.
Trees beginning 1166' from DER, 48' left of centerline, up to 3604' MSL.
Tree 2481' from DER, 176' right of centerline, 3593' MSL.
Tree 2575' from DER, 164' right of centerline, 3594' MSL.
**Rwy 24,** lighting 9' from DER, 17' right of centerline, 2' AGL/3550' MSL.
Lighting 9' from DER, 16' left of centerline, 3' AGL/3550' MSL.
Transmission line 1482' from DER, 789' left of centerline, 40' AGL/3600' MSL.
Transmission line 1667' from DER, 269' left of centerline, 39' AGL/3602' MSL.
Transmission line beginning 1833' from DER, 194' right of centerline, up to 40' AGL/3602' MSL.

## CORVALLIS, OR
CORVALLIS MUNI (CVO)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6A 10NOV16 (16315) (FAA)
TAKEOFF MINIMUMS:
**Rwy 9,** std. w/min. climb gradient of 270' per NM to 2900 or 3300-3 for VCOA.
**Rwy 17,** std. w/min. climb gradient of 271' per NM to 2900 or 3300-3 for VCOA.
**Rwy 27,** std. w/min. climb gradient of 337' per NM to 3100 or 3300-3 for VCOA.
**Rwy 35,** std. w/min. climb gradient of 350' per NM to 3100 or 3300-3 for VCOA.
DEPARTURE PROCEDURE:
**Rwy 9,** climb heading 097° to 1200, then climbing left turn direct CVO VOR/DME, thence . . .
**Rwy 17,** climb heading 172° to 1300, then climbing left turn direct CVO VOR/DME, thence . . .
**Rwy 27,** climb heading 277° to 1600, then climbing right turn direct CVO VOR/DME, thence . . .
**Rwy 35,** climb heading 352° to 1600, then climbing right turn direct CVO VOR/DME, thence . . .
. . . Climb in CVO VOR/DME holding pattern (east, right turn, 261° inbound) to depart CVO VOR/DME at or above 3400.
VCOA:
All runways: Obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross CVO VOR/DME at or above 3400.
TAKEOFF OBSTACLE NOTES:
**Rwy 9,** trees, trains on railroad, beginning 322' from DER, 5' left of centerline, up to 286' MSL.
Tree 608' from DER, 525' left of centerline, 292' MSL.
Tree 667' from DER, 309' left of centerline, 299' MSL.
Tree 3216' from DER, 946' left of centerline, 383' MSL.
Bush 586' from DER, 380' right of centerline, 275' MSL.
Tree 4404' from DER, 1133' right of centerline, 380' MSL.
**Rwy 27,** tree 39' from DER, 467' right of centerline, 6' AGL/246' MSL.
Ol on gs, 433' from DER, 325' left of centerline, 32' AGL/275' MSL.
**Rwy 35,** trees, beginning 3' from DER, 272' left of centerline, up to 247' MSL.
Trees, beginning 474' from DER, 549' left of centerline, up to 278' MSL.
Tree 507' from DER, 558' right of centerline, 261' MSL.
Tree 1507' from DER, 660' left of centerline, 283' MSL.
**CON'T**

## CORVALLIS, OR (CON'T)

CORVALLIS MUNI (CVO) (CON'T)

DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 2 10NOV16 (16315) (FAA)

**Rwy 17,** heading as assigned by ATC.

**Rwy 35,** heading as assigned by ATC; requires minimum climb of 210' per NM to 800.

## COWLEY/LOVELL/BYRON, WY

NORTH BIG HORN COUNTY (U68)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 12DEC13 (13346) (FAA)

DEPARTURE PROCEDURE:

**Rwy 9, all aircraft -** aircraft departing on HCY NDB bearings 130° CW 225°, climb heading 095° to 4800 then climb on course. All others, climb to 4800 then climbing right turn direct HCY NDB. Climb in HCY NDB holding pattern (hold W, right turns, 078° inbound) to cross HCY NDB at or above 9500 before proceeding on course.

**Rwy 27, all aircraft -** aircraft departing on HCY NDB bearings 130° CW 225°, climb heading 275° to 4800 then climb on course. All others, climb to 4800 then climbing left turn direct HCY NDB, climb in HCY NDB holding pattern (hold W, right turns, 078° inbound) to cross HCY NDB at or above 9500 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 9,** vehicles on road beginning 18' from DER, 451' left of centerline, up to 15' AGL/4114' MSL.
Vertical structure 13' from DER, 420' right of centerline, up to 4' AGL/4096' MSL.
Light support structure 8' from DER, 17' right of centerline, up to 2' AGL/4095' MSL.
**Rwy 27,** NAVAIDs beginning 40' from DER, left and right of centerline, up to 6' AGL/4085' MSL.
Ground beginning 137' from DER, 512' left of centerline, up to 4087' MSL.
Vertical structure beginning 181' from DER, 466' left of centerline, up to 11' AGL/4090' MSL.
Vertical structure beginning 298' from DER, 323' left of centerline, up to 9' AGL/3091' MSL.
Vertical structure beginning 300' from centerline, 311' left of centerline, up to 11' AGL/4092' MSL.
Vehicles on road beginning 551' from DER, left and right of centerline, up to 15' AGL/4108' MSL.
Pole beginning 1558' from DER, 793' right of centerline, up to 29' AGL/4128' MSL.

## CRESWELL, OR

HOBBY FIELD (77S)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 08NOV18 (18312) (FAA)

DEPARTURE PROCEDURE:

Use HOBBY DEPARTURE.

TAKEOFF OBSTACLE NOTES:

**Rwy 34,** vegetation 79' from DER, 268' right of centerline, 548' MSL.
Fence 197' from DER, 278' right of centerline, 8' AGL/550' MSL.
Tree 269' from DER, 287' right of centerline, 562' MSL.
Traverse way beginning 438' from DER, 593' left of centerline, up to 557' MSL.
Tree, transmission line beginning 879' from DER, 434' left of centerline, up to 573' MSL.
Pole 1061' from DER, 374' right of centerline, up to 586' MSL.
Pole 1122' from DER, 172' left of centerline, 36' AGL/580' MSL.
Pole, traverse way beginning 1134' from DER, 334' left of centerline, up to 61' AGL/605' MSL.
Pole, tree beginning 1214' from DER, 322' left of centerline, up to 616' MSL.
Trees beginning 2367' from DER, 960' right of centerline, up to 629' MSL.
Trees beginning 2448' from DER, 473' left of centerline, up to 643' MSL.
Tree 3232' from DER, 1009' left of centerline, 657' MSL.
Trees beginning 1.7 NM from DER, 2451' right of centerline, up to 1000' MSL.
Trees beginning 1.8 NM from DER, 2877' right of centerline, up to 1040' MSL.
Trees beginning 1.9 NM from DER, 1338' right of centerline, up to 98' AGL/1047' MSL.

## CUT BANK, MT

CUT BANK INTL (CTB)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 13NOV14 (14317) (FAA)

TAKEOFF OBSTACLE NOTES:

**Rwy 5,** runway light 11' from DER, 17' left of centerline, 1' AGL/3842' MSL.
**Rwy 14,** runway light 9' from DER, 48' left of centerline, 2' AGL/3843' MSL.
REIL 12' from DER, 114' right of centerline, 3' AGL/3844' MSL.
**Rwy 23,** fence 4' from DER, 239' right of centerline, 6' AGL/3857' MSL,
Runway lights beginning 8' from DER, left and right of centerline, up to 1' AGL/3855' MSL.
Fence 122' from DER, 240' right of centerline, 5' AGL/3857' MSL.
**Rwy 32,** runway lights beginning 9' from DER, left and right of centerline, up to 2' AGL/3859' MSL.

## DEER LODGE, MT

DEER LODGE-CITY-COUNTY (38S)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 10JAN13 (13010) (FAA)

TAKEOFF MINIMUMS:

**Rwy 13,** std. w/min. climb of 275' per NM to 5700 or 2300-3 for climb in visual conditions.

**Rwy 31,** std. w/min. climb of 370' per NM to 7000 or 2300-3 for climb in visual conditions.

DEPARTURE PROCEDURE:

**Rwys 13, 31,** climbing right turn heading 218° to 9700 to intercept CPN VOR/DME R-339 to CPN VOR/DME and hold, continue climb-in-hold (hold north, left turn, 166° inbound) to cross CPN VOR/DME at or above MEA of intended route before proceeding on course, or for climb in visual conditions cross Deer Lodge-City-County airport at or above 6800 then proceed on CPN R-339 to CPN VOR/DME, continue climb-in-hold (hold north, left turn, 166° inbound) to cross CPN VOR/DME at or above MEA of intended route before proceeding on course. When executing VCOA, notify ATC prior to departure.

TAKEOFF OBSTACLE NOTES:

**Rwy 13,** road beginning 3' from DER, 321' right of centerline, 4658' MSL.
Light support structure 9' from DER, 28' left of centerline, 3' AGL/4630' MSL,.
Terrain 27' from DER, 160' right of centerline, 4631' MSL.
Fence 128' from DER, 498' right of centerline, 10' AGL/4650' MSL.
**Rwy 31,** road beginning at DER, 270' left of centerline, 4757' MSL.
Light support structure 10' from DER, 27' left of centerline, 3' AGL/4695' MSL.
Terrain beginning 155' from DER, 93' left of centerline, 4743' MSL.
Terrain beginning 536' from DER, 438' right of centerline, 4715' MSL.
Terrain beginning 1832' from DER, 678' left of centerline, 4758' MSL.
Road beginning 1429' from DER, extending 869' left of centerline to 278' right of centerline, 4769' MSL.
Vertical structures 1577' from DER, 497' left of centerline, 5' AGL/4754' MSL.
Tree 2269' from DER, 412' left of centerline, 25' AGL/4785' MSL.
Poles beginning 4292' from DER, 1225' right of centerline, 50' AGL/4891' MSL.
Road beginning 4577' from DER, 1627' left of centerline, 4898' MSL.
Terrain beginning 4824' from DER, 30' left of centerline, 4932' MSL.
Agriculture equipment beginning 5237' DER, extending 71' left of centerline to 1202' right of centerline, 15' AGL/4845' MSL.

## DEER PARK, WA

DEER PARK (DEW)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 08APR10 (10098) (FAA)

TAKEOFF MINIMUMS:

**Rwy 34,** 300-1½ or std. with a min. climb of 455' per NM to 2500.

DEPARTURE PROCEDURE:

**Rwy 5,** climbing right turn heading 165° and GEG VORTAC R-006 to GEG VORTAC.
**Rwy 16,** climb heading 164° and GEG VORTAC R-006 to GEG VORTAC.
**Rwy 23,** climbing left turn heading 155° and GEG VORTAC R-006 to GEG VORTAC.
**Rwy 34,** climbing right turn heading 165° and GEG VORTAC R-006 to GEG VORTAC.

TAKEOFF OBSTACLE NOTES:

**Rwy 5,** aircraft 261' from DER, 511' left of centerline, up to 21' AGL/2210' MSL.
Trees beginning 1809' from DER, 413' left of centerline, up to 109' AGL/2299' MSL.
Aircraft 104' from DER, 186' right of centerline, up to 21' AGL/2200' MSL.
Trees beginning 1667' from DER, 373' right of centerline, up to 116' AGL/2319' MSL.
**Rwy 16,** trees beginning 31' from DER, 455' left of centerline, up to 109' AGL/2279' MSL.
Trees beginning 2587' from DER, 621' right of centerline, up to 104' AGL/2264' MSL.
**Rwy 23,** trees beginning 1461' from DER, 211' right of centerline, up to 90' AGL/2270' MSL.
**Rwy 34,** aircraft 23' from DER, 218' left of centerline, up to 21' AGL/2230' MSL.
Trees beginning 2678' from DER, 18' left of centerline, up to 165' AGL/2375' MSL.
Vehicles beginning 74' from DER, 339' right of centerline, up to 15' AGL/2234' MSL.
Trees beginning 2219' from DER, 260' right of centerline, up to 100' AGL/2382' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 1 10SEP20 (20254) (FAA)

**Rwy 16,** heading as assigned by ATC.
**Rwy 34,** heading as assigned by ATC, requires min. climb of 260' per NM to 2500. Do not exceed 240K until on assigned heading.

## DILLON, MT
DILLON (DLN)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3A 15OCT15 (15288) (FAA)
TAKEOFF MINIMUMS:
**Rwy 4,** NA-Obstacles.
**Rwy 35,** DME required.
**Rwy 17**, std. w/min. climb of 219' per NM to 6400 or 3700-3 for climb in visual conditions.
**Rwy 22,** 3700-3 for climb in visual conditions
DEPARTURE PROCEDURE:
**Rwy 17,** climbing right turn heading 042° thence …
or for climb in visual conditions cross Dillon airport at or above 9000 before proceeding on course. When executing VCOA, notify ATC prior to departure.
**Rwy 22,** for climb in visual conditions cross Dillon airport at or above 9000 before proceeding on course. When executing VCOA, notify ATC prior to departure.
**Rwy 35,** climbing right turn thence …
.... climb to 8900 on DLN R-005 to YARUP/DLN 19 DME fix. Aircraft departing north on V21 continue climb to MEA and proceed on course. Aircraft departing south on V121 and V21-257, climbing left turn heading 140° to intercept DLN R-005 southbound, cross DLN VOR/DME at or above 10000 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
**Rwy 17,** light 7' from DER, 27' left of centerline, 3' AGL/5247' MSL.
Vehicles on roadway beginning 13' from DER, left and right of centerline, up to 15' AGL/5262' MSL.
Pole 850' from DER, 507' left of centerline, 33' AGL/5274' MSL.
**Rwy 22,** light 10' from DER, 20' right of centerline, 2' AGL/5223' MSL.
Vehicles on roadway beginning 13' from DER, left and right of centerline, up to 15' AGL/5236' MSL.
**Rwy 35,** vehicles on roadway beginning 6' from DER, left and right of centerline, up to 15' AGL/5170' MSL.
Light 9' from DER, 27' left of centerline, 2' AGL/5158' MSL.

## DIXON, WY
DIXON (DWX)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 12OCT17 (17285) (FAA)
DEPARTURE PROCEDURE:
**Rwy 6,** use CARBON RNAV DEPARTURE.
**Rwy 24,** use DIXON RNAV DEPARTURE.

## DOUGLAS, WY
CONVERSE COUNTY (DGW)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1A 30MAY13 (13150) (FAA)
TAKEOFF MINIMUMS:
**Rwy 5,** 300-2 or std. w/min. climb of 271' per NM to 5200.
**Rwy 23,** 1700-3 or std. with a min. climb of 260' per NM to 7200.
DEPARTURE PROCEDURE:
**Rwy 5,** climbing right turn via IIP VOR/DME R-342 to IIP VOR/DME.
**Rwy 11,** climbing right turn via IIP VOR/DME R-312 to IIP VOR/DME.
**Rwy 23,** climbing left turn via IIP VOR/DME R-264 to IIP VOR/DME.
**Rwy 29,** climbing right turn via IIP VOR/DME R-325 to IIP VOR/DME.
**All aircraft** departing IIP R-253 CW R-180 climb on course. All others continue climb in IIP VOR/DME holding pattern (NW, left turns, 125° inbound) to cross IIP VOR/DME at or above: R-181 CW R-199 9600; R-200 CW R-252 8000.
TAKEOFF OBSTACLE NOTES:
**Rwy 5,** trees 1883' from DER, 549' right of centerline, 35' AGL/5014' MSL.
Trees 3407' from DER, 209' right of centerline, 35' AGL/5074' MSL.
Trees 5458' from DER, 1954' right of centerline, 35' AGL/5132' MSL.
Terrain 5020' from DER, 1805' right of centerline, 5089' MSL.
**Rwy 23,** trees 2068' from DER, 1008' left of centerline, 35' AGL/4994' MSL.
Trees 3130' from DER, 1215' left of centerline, 35' AGL/5014' MSL.

## DRIGGS, ID
DRIGGS-REED MEMORIAL (DIJ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 15DEC11 (11349) (FAA)
DEPARTURE PROCEDURE:
**Rwys 3, 21,** use LAMON DEPARTURE.

## EASTSOUND, WA

ORCAS ISLAND (ORS)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4 04FEB16 (16035) (FAA)

TAKEOFF MINIMUMS:

**Rwy 16,** 3200-3 for climb in visual conditions.

**Rwy 34,** 500-3 or std. w/min. climb of 224' per NM to 600.

DEPARTURE PROCEDURE:

**Rwy 34,** climbing right turn to intercept HUH VORTAC R-210 to HUH VORTAC, thence…

...climb in HUH holding pattern, hold south, left turns, 352° inbound, to cross HUH VORTAC at or above 3800 before proceeding on course.

VCOA:

**Rwy 16,** obtain ATC approval for climb in visual conditions when requesting IFR clearance. Climb in visual conditions to cross Orcas Island airport at or above 3200 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 16,** terrain beginning 9' from DER, 125' right of centerline, 37' MSL.
Vehicles on road and tree beginning 15' from DER, 362' right of centerline, up to 15' AGL/66' MSL.
Vehicles on road beginning 61' from DER, 301' left of centerline, 15' AGL/51' MSL.
Building and rising terrain beginning 102' from DER, 259' right of centerline, up to 35' AGL/71' MSL.
Tree 182' from DER, 393' right of centerline, up to 35' AGL/89' MSL.
Trees beginning 194' from DER, 466' right of centerline, up to 95' AGL/151' MSL.
Windsock, fence, and trees beginning 196' from DER, left and right of centerline, up to 65' AGL/106' MSL.
Trees on rising terrain beginning 591' from DER, left and right of centerline, up to 80' AGL/120' MSL.
Building and trees on rising terrain beginning 939' from DER, left and right of centerline, up to 100' AGL/177' MSL.
Buildings and trees beginning 1096' from DER, left and right of centerline, up to 100' AGL/182' MSL.
Pole, building, and trees beginning 1751' from DER, left and right of centerline, up to 100' AGL/199' MSL.
Trees beginning 2059' from DER, left and right of centerline, up to 100' AGL/208' MSL.
Trees beginning 2104' from DER, left and right of centerline, up to 100' AGL/224' MSL.
Trees beginning 2244' from DER, left and right of centerline, up to 100' AGL/225' MSL.
Trees beginning 2104' from DER, left and right of centerline, up to 100' AGL/224' MSL.
Building and trees on rising terrain beginning 2519' from DER, left and right of centerline, up to 100' AGL/245' MSL.
Trees beginning 2883' from DER, 884' right of centerline, up to 100' AGL/258' MSL.
Trees beginning 2909' from DER, 243' left of centerline to 1169' right of centerline, up to 100' AGL/327' MSL.
Tree 2972' from DER, 1074' right of centerline, 100' AGL/344' MSL.
Trees beginning 2986' from DER, 14' right of centerline, up to 100' AGL/366' MSL.
Building and trees beginning 3092' from DER, from 397' left of centerline to 1133' right of centerline, up to 100' AGL/381' MSL.
Trees beginning 3133' from DER,191' left of centerline to 1336' right of centerline, up to 100' AGL/400' MSL.
Building and trees on rising terrain beginning 3280' from DER, 90' right of centerline, up to 100' AGL/410' MSL.
**Rwy 34,** tree and vehicles on road beginning 3' from DER, 106' right of centerline, up to 15' AGL/29' MSL.
Tree, fence, and vehicles on road beginning 18' from DER, 155' left of centerline, up to 15' AGL/22' MSL.
Tree 192' from DER, 427' left of centerline, 35' AGL/50' MSL.
Trees beginning 201' from DER, 266' left of centerline, up to 40' AGL/68' MSL.
Building and trees beginning 275' from DER, 366' left of centerline, up to 45' AGL/71' MSL.
Vehicles on road beginning 321' from DER, from 109' left to 611' right of centerline, up to 15' AGL/30' MSL.
Trees beginning 2.5 NM from DER, 82' right of centerline up to 100' AGL/339' MSL.

## ELLENSBURG, WA

BOWERS FIELD (ELN)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2C 28FEB19 (19059) (FAA)

TAKEOFF MINIMUMS:

**Rwy 11,** 4600-3 or std. w/min. climb of 290' per NM to 7800.

**Rwy 29,** 4600-3 or std. w/min. climb of 320' per NM to 7800.

DEPARTURE PROCEDURE:

**Rwy 11,** climbing left turn direct ELN VOR/DME.

**Rwy 29,** climbing right turn direct ELN VOR/DME.

**All aircraft,** continue climbing in the ELN VOR/DME holding pattern (West, right turns, 087° inbound) to MEA/MOCA for route of flight.

TAKEOFF OBSTACLE NOTES:

**Rwy 11,** tree 1794' from DER, 676' left of centerline, 75' AGL/1822' MSL.

**Rwy 29,** fence and tree 152' from DER, 283' left of centerline, up to 11' AGL/1774' MSL.

Trees 144' from DER, 263' right of centerline, up to 19' AGL/1782' MSL.

Tree 1974' from DER, 463' right of centerline, 61' AGL/1824' MSL.

## ENNIS, MT

ENNIS-BIG SKY (EKS)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 06FEB14 (14037) (FAA)

DEPARTURE PROCEDURE:

**Rwys 16, 34,** Use ENNIS (RNAV) DEPARTURE.

## EPHRATA, WA

EPHRATA MUNI (EPH)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 07MAY09 (09127) (FAA)

TAKEOFF MINIMUMS:

**Rwy 29,** NA-Obstacles.

DEPARTURE PROCEDURE:

**Rwy 3,** climb heading 027° to 2300 before proceeding on course.

**Rwy 11,** climb heading 112° to 2200 before proceeding on course.

**Rwy 21,** climb heading 207° to 2800 before proceeding on course.

## EUGENE, OR

MAHLON SWEET FIELD (EUG)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 7B 13SEP18 (18256) (FAA)

DEPARTURE PROCEDURE:

**Rwy 16L,** climb heading 164° to 1200 then climbing right turn...

**Rwy 16R,** climb heading 164° to 1200 then climbing right turn...

**Rwy 34L,** climb heading 344° to 1200 then climbing left turn...

**Rwy 34R,** climb heading 344° to 1200 then climbing left turn...

...all aircraft climb direct EUG VORTAC, then climb in hold in EUG VORTAC holding pattern (hold north, right turns 180° inbound) to cross EUG VORTAC at or above MEA before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 16L,** power poles beginning 1036' from DER, 74' right of centerline, up to 35' AGL/408' MSL.

Power poles beginning 1017' from DER, 211' left of centerline, up to 31' AGL/404' MSL.

**Rwy 16R,** tree 1991' from DER, 83' left of centerline, 54' AGL/419' MSL.

Trees beginning 1504' from DER, 489' right of centerline, up to 43' AGL/408' MSL.

**Rwy 34L,** tree 1597' from DER, 842' left of centerline, 50' AGL/404' MSL.

**Rwy 34R,** tree 2897' from DER, 606' right of centerline, 77' AGL/440' MSL.

Tree 2535' from DER, 643' left of centerline, 65' AGL/428' MSL.

## EVANSTON, WY

EVANSTON-UINTA COUNTY BURNS FIELD (EVW)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 31AUG06 (06243) (FAA)

DEPARTURE PROCEDURE:

**Rwy 5**, climb via heading 050° and FBR VOR/DME R-243 to FBR VOR/DME.

**Rwy 23**, climbing left turn via heading 030° and FBR VOR/DME R-243 to FBR VOR/DME.

**All aircraft:** cross FBR VOR/DME at or above MEA for direction of flight.

## EVERETT, WA

SNOHOMISH COUNTY (PAINE FIELD) (PAE)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 10DEC15 (15344) (FAA)

DEPARTURE PROCEDURE:

**Rwy 16L/R,** climbing right turn, thence…

**Rwy 34L/R,** climbing left turn, thence...

...for aircraft departing on V287 westbound, climb on PAE VOR/DME R-236 to 3000. All others, climb direct PAE VOR/DME, climb in PAE VOR/DME holding pattern (NW, RT, 149° inbound) to MEA for route of flight before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 16R,** Rwy light 9' from DER, 15' right of centerline, 1' AGL/579' MSL.

Trees beginning 707' from DER, left and right of centerline, up to 116' AGL/625' MSL.

Tree 2130' from DER, 866' left of centerline, 151' AGL/660' MSL.

Trees beginning 2789' from DER, left and right of centerline, up to 163' AGL/698' MSL.

Trees beginning 3078' from DER, 238' left of centerline, up to 156' AGL/704' MSL.

**Rwy 16L,** poles, tower and tree beginning 107' from DER, left and right of centerline, up to 42' AGL/639' MSL.

Trees beginning 900' from DER, 477' left of centerline, up to 137' AGL/699' MSL.

Trees beginning 1412' from DER, left and right of centerline, up to 123' AGL/668' MSL.

Trees beginning 1785' from DER, 535' left of centerline, up to 155' AGL/700' MSL.

Tree 4646' from DER, 912' right of centerline, 178' AGL/717' MSL.

**Rwy 34R,** trees beginning 154' from DER, left and right of centerline, up to 86' AGL/648' MSL.

Tree 1324' from DER, 229' left of centerline, 97' AGL/655' MSL.

Trees beginning 2084' from DER, 548' right of centerline, up to 131' AGL/699' MSL.

Trees beginning 2720' from DER, 114' left of centerline, up to 135' AGL/690' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 1, 21JUL16 (16203)

**Rwy 16L/R, Rwy 34L/R,** heading as assigned by ATC.

## FAIRCHILD AFB (KSKA)

SPOKANE, WA

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1, 03MAY12 (12124)

DEPARTURE PROCEDURE:

**Rwy 5,** climb on track 051° to intercept SKA R-048 to 5300, then on course.

**Rwy 23,** climb on track 244° to 3400, then on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 23,** potential Aircraft 65' AGL/2518' MSL, 98' from DER, 437' right of centerline.
Terrain 2477' MSL, 493' to 511' from DER, 751' to 761' right of centerline.
Terrain 2472' MSL, 1018' from DER, 621' right of centerline.
Terrain 2467' MSL, 208' from DER, 405' right of centerline.

DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 1 23JUL15 (15204) (FAA)

**Rwy 5,** heading as assigned by ATC.

**Rwy 23,** heading as assigned by ATC; requires minimum climb of 270' per NM to 3100.

## FORSYTH, MT

TILLITT FIELD (1S3)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 26MAY16 (16147) (FAA)

TAKEOFF OBSTACLE NOTES:

**Rwy 9,** light support structure 10' from DER, 27' right of centerline, 2729' MSL.
Terrain 64' from DER, 214' left of centerline, 2730' MSL.
Road beginning 196' from DER, 535' right of centerline, up to 2743' MSL.
Road 529' from DER, 608' left of centerline, 2747' MSL.
Road beginning 540' from DER, 19' left of centerline, up to 2748' MSL.
**Rwy 27,** fence and light support structure abeam DER, 28' right of centerline, up to 2731' MSL.
Terrain 26' from DER, 220' right of centerline, 2737' MSL.
Road and terrain beginning 141' from DER, 196' right of centerline, up to 2742' MSL.
Terrain, road, building, and trees beginning 270' from DER, 445' right of centerline, up to 2760' MSL.
Terrain 479' from DER, 474' right of centerline, 2763' MSL.
Trees, road, and terrain beginning 500' from DER, 19' left of centerline, up to 2771' MSL.

## FORT BENTON, MT

FORT BENTON (79S)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 15MAR07 (07074) (FAA)

TAKEOFF MINIMUMS:

**Rwys 5, 23,** std. w/ min. climb of 274' per NM to 8900 or 5100-3 for climb in visual conditions.

DEPARTURE PROCEDURE:

**Rwys 5, 23,** for climb in visual conditions: Cross Fort Benton Airport at or above 8900 MSL before proceeding on course.

## FORT BRIDGER, WY

FORT BRIDGER (FBR)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 10OCT19 (19283) (FAA)

TAKEOFF MINIMUMS:

**Rwys 7, 25,** NA-Environmental.

DEPARTURE PROCEDURE:

**Rwy 4,** climbing left turn direct FBR VOR/DME, thence...

**Rwy 22,** climbing right turn direct FBR VOR/DME, thence... .

..continue climb in FBR VOR/DME holding pattern (hold northeast, right turn, 215° inbound) to MEA for route of flight.

TAKEOFF OBSTACLE NOTES:

**Rwy 4,** sign 14' from DER, 126' left of centerline, up to 4' AGL/7010' MSL.
Terrain beginning 16' from DER, 306' left of centerline, up to 7009' MSL.
Electrical system, NAVAID beginning 41' from DER, 111' right of centerline, up to 6' AGL/7009' MSL.
Buildings, vegetation beginning 83' from DER, 436' left of centerline, up to 15' AGL/7024' MSL.
Buildings, vegetation, traverse way beginning 92' from DER, 194' left of centerline, up to 17' AGL/7026' MSL.
**Rwy 22,** fence 5' from DER, 389' right of centerline, 6' AGL/7042' MSL.
Electrical system 40' from DER, 113' left of centerline, 5' AGL/7040' MSL.
Traverse way beginning 102' from DER, 265' right of centerline, up to 7051' MSL.
Vegetation 127' from DER, 388' left of centerline, 4' AGL/7044' MSL.
Fence 161' from DER, 404' left of centerline, 7' AGL/7047' MSL.
Traverse way 168' from DER, 418' left of centerline, 7056' MSL.
Traverse way 316' from DER, 416' left of centerline, 7057' MSL.
Traverse way beginning 461' from DER, 415' left of centerline, up to 7058' MSL.
Traverse way beginning 658' from DER, 111' left of centerline, up to 7059' MSL.

## FRIDAY HARBOR, WA

FRIDAY HARBOR (FHR)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3A 28APR16 (16119) (FAA)

TAKEOFF MINIMUMS:

**Rwy 34,** 400-2.

DEPARTURE PROCEDURE:

**Rwy 16,** climb to 1000 on heading 161° then climbing left turn direct FHR NDB, thence ...

**Rwy 34** climb to 1000 on heading 341° then climbing left turn direct FHR NDB, thence...

...continue climb-in-hold in FHR NDB holding pattern (Hold S, right turns, 339° inbound) to cross FHR NDB at or above 2300 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 16,** trees beginning 556' from DER, 20' left of centerline, up to 85' AGL/212' MSL.

Trees, fence, and road beginning 27' from DER, 67' right of centerline, up to 85' AGL/220' MSL.

**Rwy 34,** trees, beacon and pole beginning 385' from DER, 92' left of centerline, up to 85' AGL/348' MSL.

Trees, building and antenna beginning 808' from DER, 16' right of centerline, up to 85' AGL/504' MSL.

## GILLETTE, WY

NORTHEAST WYOMING RGNL (GCC)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5 10NOV16 (20310) (FAA)

TAKEOFF MINIMUMS:

**Rwy 16,** std. w/min. climb of 265' per NM to 5200 or 1200-3 for VCOA.

**Rwy 21,** std. w/min. climb of 373' per NM to 5400 or 1200-3 for VCOA.

DEPARTURE PROCEDURE:

**Rwy 16,** climb heading 161° to 5200 before proceeding on course.

**Rwy 21,** climb heading 209° to 5400 before proceeding on course.

VCOA:

**Rwys 16, 21,** obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Gillette-Campbell county airport at or above 5400 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 3,** vehicle on road 414' from DER, 589' right of centerline, 4328' MSL.

Vehicle on road 3' from DER, 433' left of centerline, 4317' MSL.

Wsk 1415' from DER, 100' left of centerline, 4366' MSL.

**Rwy 16,** post, tree beginning 1.7 NM from DER, 300' right of centerline, up to 4643' MSL.

Transmission tower 1.6 NM from DER, 1354' left of centerline, 4677' MSL.

T-l tower 1.6 NM from DER, 1354' left of centerline, 56' AGL/4677' MSL.

Pole, t-l tower beginning 1.7 NM from DER, 1264' left of centerline, up to 4685' MSL.

Pole 1.9 NM from DER, 3336' left of centerline, 4696' MSL.

T-l tower 1.9 NM from DER, 3336' left of centerline, 13' AGL/4696' MSL.

Tower 2.91 NM from DER, 2229' left of centerline, 172' AGL/4828' MSL.

Tower 2.96 NM from DER, 1863' left of centerline, 180' AGL/4902' MSL.

**Rwy 21,** terrain 1241' from DER, 594' right of centerline, 4379' MSL.

Ant, building beginning 1266' from DER, 494' right of centerline, up to 4394' MSL.

Terrain 1959' from DER, 855' right of centerline, 4399' MSL.

Pole, t-l tower beginning 3274' from DER, 1308' right of centerline, up to 4428' MSL.

T-l tower, pole beginning 3324' from DER, 960' right of centerline, up to 42' AGL/4429' MSL.

T-l tower, pole beginning 3477' from DER, 1110' right of centerline, up to 46' AGL/4436' MSL.

Terrain 1 NM from DER, 2002' right of centerline, 4513' MSL.

Terrain beginning 1 NM from DER, 1778' right of centerline, up to 4535' MSL.

Terrain 1.1 NM from DER, 1760' right of centerline, 4541' MSL.

Terrain beginning 1.2 NM from DER, 1353' right of centerline, up to 4576' MSL.

Terrain 1.2 NM from DER, 1534' right of centerline, 4583' MSL.

Terrain beginning 1.2 NM from DER, 1992' right of centerline, up to 4694' MSL.

Pole, ant, terrain beginning 1.2 NM from DER, 1983' right of centerline, up to 4' AGL/4699' MSL.

Transmission tower, t-l tower, fence, vertical structure, terrain, pole, ant, tree beginning 1.3 NM from DER, 316' right of centerline, up to 4739' MSL.

Pole, t-l tower beginning 1.7 NM from DER, 1923' right of centerline, up to 4743' MSL.

T-l tower, pole beginning 1.8 NM from DER, 1371' right of centerline, up to 38' AGL/4751' MSL.

T-l tower, Transmission tower beginning 1.8 NM from DER, 272' right of centerline, up to 57' AGL/4788' MSL.

Lt 10' from DER, 47' left of centerline, 4344' MSL.

Fence beginning 328' from DER, 267' left of centerline, up to 4352' MSL.

T-l tower, pole beginning 4850' from DER, 31' left of centerline, up to 37' AGL/4476' MSL.

Terrain 1.6 NM from DER, 4' left of centerline, 4693' MSL.

Terrain beginning 1.6 NM from DER, 371' left of centerline, up to 4696' MSL.

Terrain beginning 1.8 NM from DER, 372' left of centerline, up to 4755' MSL.

T-l tower, Transmission tower, terrain, ant, pole, vehicle on road beginning 1.8 NM from DER, 124' right of centerline, up to 50' AGL/4791' MSL.

Terrain, t-l tower, Transmission tower beginning 1.8 NM from DER, 93' left of centerline, up to 4848' MSL.

T-l tower, Transmission tower beginning 2.1 NM from DER, 3501' left of centerline, up to 70' AGL/4879' MSL.

Transmission tower, terrain, t-l tower, tower, ant, pole beginning 2.1 NM from DER, 430' left of centerline, up to 4929' MSL.

T-l tower 2.1 NM from DER, 3019' left of centerline, 74' AGL/4929' MSL.

T-l tower, pole beginning 2.5 NM from DER, 1176' left of centerline, up to 34' AGL/4745' MSL.

**CON'T**

## GILLETTE, WY (CON'T)

NORTHEAST WYOMING RGNL (GCC) (CON'T)

**Rwy 34,** fence beginning 1236' from DER, 723' left of centerline, up to 2' AGL/4380' MSL.
Vehicle on road beginning 1609' from DER, 419' left of centerline, up to 4393' MSL.
Vehicle on road 1610' from DER, 716' left of centerline, 4394' MSL.

## GLASGOW, MT

WOKAL FIELD/GLASGOW-VALLEY COUNTY (GGW)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 15AUG19 (19227) (FAA)

TAKEOFF OBSTACLE NOTES:

**Rwy 8**, terrain 10' from DER, 429' right of centerline, 2307' MSL.
Terrain beginning 10' from DER, 125' right of centerline, up to 2317' MSL.
Terrain 11' from DER, 178' left of centerline, 2307' MSL.
Terrain beginning 11' from DER, 177' left of centerline, up to 2313' MSL.
Terrain 215' from DER, 481' left of centerline, 2320' MSL.
Terrain beginning 418' from DER, 481' left of centerline, up to 2327' MSL.
**Rwy 12**, terrain beginning 62' from DER, 131' right of centerline, up to 2313' MSL.
Terrain 355' from DER, 9' left of centerline, 2297' MSL.
**Rwy 26**, terrain 68' from DER, 492' right of centerline, 2320' MSL.
Terrain beginning 68' from DER, 188' right of centerline, up to 2323' MSL.
Terrain beginning 69' from DER, 115' left of centerline, up to 2323' MSL.
Terrain beginning 272' from DER, 188' right of centerline, up to 2330' MSL.
Terrain beginning 272' from DER, 115' left of centerline, up to 2327' MSL.
Terrain beginning 475' from DER, 189' right of centerline, up to 2336' MSL.
Terrain 475' from DER, 114' left of centerline, 2330' MSL.
Terrain beginning 476' from DER, 114' left of centerline, up to 2333' MSL.
Terrain beginning 678' from DER, 189' right of centerline, up to 2340' MSL.
Terrain beginning 679' from DER, 114' left of centerline, up to 2336' MSL.
Terrain beginning 882' from DER, 112' left of centerline, up to 2340' MSL.
**Rwy 30,** terrain beginning 19' from DER, 178' right of centerline, up to 2317' MSL.
Terrain beginning 101' from DER, 102' left of centerline, up to 2327' MSL.
Terrain beginning 230' from DER, 38' right of centerline, up to 2336' MSL.
Terrain beginning 815' from DER, 24' left of centerline, up to 2333' MSL.
Terrain 880' from DER, 335' right of centerline, 2340' MSL.
Terrain beginning 944' from DER, 53' right of centerline, up to 2343' MSL.
Terrain beginning 1319' from DER, 87' left of centerline, up to 2336' MSL.

## GLENDIVE, MT

DAWSON COMMUNITY (GDV)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 25AUG11 (11237) (FAA)

TAKEOFF OBSTACLE NOTES:

**Rwy 12,** light support structure beginning 8' from DER, left and right of centerline, up to 15' AGL/2456' MSL.
Vehicle on road 514' from DER, 555' left of centerline, 56' AGL/2468' MSL.
Windsock 6' from DER, 301' left of centerline, 29' AGL/2464' MSL.
**Rwy 20,** vehicle on road beginning 367' from DER, left and right of centerline, up to 36' AGL/2471' MSL.
**Rwy30,** trees beginning 311' from DER, 511' left of centerline, up to 10' AGL/2487' MSL.
Light support structures beginning 8' from DER, left and right of centerline, up to 9' AGL/2460' MSL.
Fence beginning 193' from DER, left and right of centerline, up to 34' AGL/2468' MSL.
Sign 27' from DER, 200' left of centerline, 9' AGL/2460' MSL.
Vehicle on road beginning 298' from DER, left and right of centerline, up to 26' AGL/2477' MSL.
Vehicle on road beginning 427' from DER, 145' left of centerline, up to 26' AGL/2477' MSL.
Post 428' from DER, 241' left of centerline, 23' AGL/2474' MSL.

## GOODING, ID

GOODING MUNI (GNG)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 25SEP08 (08269) (FAA)

DEPARTURE PROCEDURE:

**Rwy 7,** climb heading 068° to 5000 before turning left.
**Rwy 25,** climb heading 233° to 5600 before turning right.

TAKEOFF OBSTACLE NOTES:

**Rwy 7,** rising terrain 59' from DER, 479' right of centerline, up to 3754' MSL.
Fence line 653' from DER, 332' right of centerline, 12' AGL up to 3751' MSL.
Bushes starting 877' from DER, 420' right of centerline, 20' AGL up to 3795' MSL.
**Rwy 25,** vehicle on road, 91' from DER, 257' left of centerline, up to 10' AGL/3678' MSL.

## GRANGEVILLE, ID
IDAHO COUNTY (GIC)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 10NOV16 (16315) (FAA)
TAKEOFF MINIMUMS:
**Rwy 8,** NA - Obstacles.
DEPARTURE PROCEDURE:
**Rwy 26,** Use MELLR DEPARTURE.

## GRANTS PASS, OR
GRANTS PASS (3S8)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 26JUL12 (12208) (FAA)
TAKEOFF MINIMUMS:
**Rwy 13,** NA - terrain.
**Rwy 31,** std. w/min. climb of 466' per NM to 4400.
DEPARTURE PROCEDURE:
**Rwy 31,** climb heading 320° and RBG R-169 to RBG VOR/DME before proceeding on course.
TAKEOFF OBSTACLE NOTES:
**Rwy 31,** trees beginning 188' from DER, 281' left of centerline, up to 100' AGL/1194' MSL.
Trees beginning 93' from DER, 283' right of centerline, up to 100' AGL/1194' MSL.

## GRAY AAF (KGRF)
JOINT BASE LEWIS MCCHORD, WA
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4 10OCT19 (19283)
TAKEOFF MINIMUMS:
**Rwy 15,** 9900-5 for VCOA.
**Rwy 33**, 9900-5 for VCOA.
VCOA:
**All Rwys,** obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual Conditions to cross Gray AAF (Joint Base Lewis-Mcchord) at or above 10,100 before proceeding on course.

## GREAT FALLS, MT
GREAT FALLS INTL (GTF)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1A 07DEC17 (17341) (FAA)
TAKEOFF OBSTACLE NOTES:
**Rwy 3**, rwy light 9' from DER, 55' left of centerline, 2' AGL/3660' MSL.
Rwy light 9' from DER, 54' right of centerline, 2' AGL/3661' MSL.
**Rwy 17,** ground 30' from DER, 410' left of centerline, 3670' MSL.
Ground 182' from DER, 410' left of centerline, 3673' MSL.
**Rwy 21,** rwy light 10' from DER, 4' right of centerline, 2' AGL/3681' MSL.
Rwy light 10' from DER, 5' left of centerline, 2' AGL/3681' MSL.
Pole 1555' from DER, 787' left of centerline, 36' AGL/3731' MSL.
**Rwy 35**, ground 5' from DER, 208' right of centerline, 3641' MSL.
Ground 7' from DER, 374' right of centerline, 3642' MSL.
Ground 9' from DER, 193' right of centerline, 3641' MSL.

## GREYBULL, WY

### SOUTH BIG HORN COUNTY (GEY)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 12OCT17 (17285) (FAA)

TAKEOFF MINIMUMS:

**Rwy 8, 16, 26,** std. w/min. climb of 310' per NM to 4800 or 1600-3 for VCOA.

**Rwy 34,** std. w/min. climb of 465' per NM to 4800 or 1600-3 for VCOA.

DEPARTURE PROCEDURE:

**Rwy 8,** climb to 4800 then climbing right turn thence...

**Rwy 16,** climb to 4800 then climbing right turn thence...

**Rwy 26,** climb to 4800 then climbing left turn thence...

**Rwy 34,** climbing left turn thence...

...proceed direct GEY NDB. Climb in GEY holding pattern (hold southeast, left turns, 324° inbound) to cross GEY NDB at or above 8500 before proceeding on course.

VCOA:

Obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross the GEY NDB at or above 5600. Continue Climb-in-hold at GEY NDB (hold southeast, left turns, 324° inbound) to cross GEY NDB at or above 8500 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 8,** tree abeam DER, 313' left of centerline, 3921' MSL.
Vehicle on road and bush beginning 8' from DER, 299' left of centerline, up to 15' AGL/3932' MSL.
Fence beginning 15' from DER, 438' right of centerline, up to 6' AGL/3925' MSL.
Fence beginning 74' from DER, 443' right of centerline, up to 11' AGL/3928' MSL.
Buildings beginning 279' from DER, 408' right of centerline, up to 19' AGL/3935' MSL.
Aircraft and vehicle on road beginning 337' from DER, 379' left of centerline, up to 3940' MSL.
Building 398' from DER, 492' right of centerline, 22' AGL/3937' MSL.
Poles beginning 425' from DER, 594' right of centerline, up to 33' AGL/3950' MSL.
**Rwy 16,** electrical system 9' from DER, 54' left of centerline, 10' AGL/3917' MSL.
Light support structure 9' from DER, 55' right of centerline, 2' AGL/3917' MSL.
**Rwy 26,** fence beginning 3' from DER, 450' left of centerline, up to 7' AGL/3951' MSL.
Tree 84' from DER, 178' right of centerline, 3944' MSL.
Tree 171' from DER, 298' right of centerline, 14' AGL/3954' MSL.
Fence beginning 181' from DER, 439' left of centerline, up to 3953' MSL.
Fence 411' from DER, 436' left of centerline, 7' AGL/3954' MSL.
Transmission line tower and trees beginning 523' from DER, 439' left of centerline, up to 22' AGL/3969' MSL.
Pole 594' from DER, 300' right of centerline, 11' AGL/3959' MSL.
**Rwy 26,** trees beginning 2110' from DER, 958' left of centerline, up to 4028' MSL.
Ridgeline and bush beginning 4119' from DER, 1513' right of centerline, up to 4102' MSL.
Vehicle on road on ridgeline beginning 1.1 NM from DER, 2309' right of centerline, up to 4131' MSL.
Vehicle on road on ridgeline beginning 1.1 NM from DER, 1750' right of centerline, up to 4136' MSL.
Vehicle on road on ridgeline beginning 1.2 NM from DER, 1865' right of centerline, up to 4140' MSL.
**Rwy 34,** electrical system and light support structure 7' from DER, 55' left of centerline, up to 12' AGL/3906' MSL.
Light support structure 7' from DER, 54' right of centerline, 2' AGL/3906' MSL.
Ridgeline beginning 2.1 NM from DER, 3251' right of centerline, up to 4454' MSL.
Ridgeline beginning 2.2 NM from DER, 2356' right of centerline, up to 4554' MSL.
Ridgeline beginning 2.3 NM from DER, 1356' right of centerline, up to 4704' MSL.


NW-1, 05 NOV 2020 to 31 DEC 2020

## GUERNSEY, WY

### CAMP GUERNSEY (GUR)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 07APR11 (11097) (FAA)

TAKEOFF MINIMUMS:

**Rwy 14,**300-2½ or std. w/min. climb of 363' per NM to 4800.

**Rwy 32,** std. w/min. climb of 360' per NM to 6500 or 2400-3 for climb in visual conditions.

DEPARTURE PROCEDURE:

**Rwy 14,** climb heading 141° to 5800 before proceeding on course.

**Rwy 32,** climbing right turn heading 070° to 6500 before proceeding on course or for climb in visual conditions cross Camp Guernsey Airport at or above 6700 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 14,** vehicles on road 42' from DER, 209' right of centerline, up to 15' AGL/4334' MSL.
Trees beginning 731' from DER, 336' right of centerline, up to 45' AGL/4564' MSL.
**Rwy 32,** trees beginning 181' from DER, 155' left of centerline, up to 45' AGL/4424' MSL.
Trees beginning 999' from DER, 192' right of centerline, up to 45' AGL/4504' MSL.

## HAILEY, ID
### FRIEDMAN MEMORIAL (SUN)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 21JUL16 (16203) (FAA)

TAKEOFF MINIMUMS:
**Rwy 31,** NA - obstacles.
**Rwy 13,** 900-2½ w/min. climb of 390' per NM to 7000, or std. w/min. climb of 605' per NM to 7000, or 3600-3 for climb in visual conditions.

DEPARTURE PROCEDURE:
**Rwy 13,** climb heading 147° and on 162° course to HLE NDB.

VCOA:
Obtain ATC approval for climb in visual conditions when requesting IFR clearance. Climb in visual conditions to cross Friedman Memorial airport at or above 8800 on 155° course to HLE NDB.

TAKEOFF OBSTACLE NOTES:
**Rwy 13,** fence abeam DER, 398' right of centerline, 6' AGL/5262' MSL.
Bushes beginning 24' from DER, 447' left of centerline, up to 4' AGL/5275' MSL.
Vehicle on road 200' from DER, 373' left of centerline, up to 17' AGL/5279' MSL.
Vehicle on road, multiple poles and trees beginning 234' from DER, 373' left of centerline, up to 5309' MSL.
Tree 765' from DER, 698' right of centerline, 87' AGL/5341' MSL.
Trees beginning 1006' from DER, 595' right of centerline, up to 100' AGL/5349' MSL.
Trees beginning 1233' from DER, 459' right of centerline, up to 93' AGL/5344' MSL.
Trees beginning 1408' from DER, 424' right of centerline, up to 5325' MSL.
Trees beginning 1656' from DER, 116' right of centerline, up to 88' AGL/5339' MSL.
Transmission tower 2079' from DER, 509' left of centerline, 66' AGL/5317' MSL.
Trees 2104' from DER, 77' left of centerline, up to 75' AGL/5318' MSL.
Trees 2351' from DER, 2' right of centerline, up to 91' AGL/5334' MSL.

## HAMILTON, MT
### RAVALLI COUNTY (6S5)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 10JUN04 (04162) (FAA)

DEPARTURE PROCEDURE:
Use HAMEY RNAV DEPARTURE.

## HARDIN, MT
### BIG HORN COUNTY (00U)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 16JUL20 (20198) (FAA)

TAKEOFF MINIMUMS:
**Rwy 26,** 200-1¼ or std. w/min. climb of 204' per NM to 3300, or alternatively, with std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1200 feet prior to DER.

TAKEOFF OBSTACLE NOTES:
**Rwy 26,** trees 24' from DER, 126' right of centerline, 4' AGL/3027' MSL.
Vehicles on road 499' from DER, 604' right of centerline, up to 3047' MSL.
Vehicles on road beginning 852' from DER, 604' right of centerline, up to 3048' MSL.
Transmission line 1 NM from DER, 732' right of centerline, 94' AGL/3180' MSL.

## HARLOWTON, MT
### WHEATLAND COUNTY AT HARLOWTON (HWQ)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 30JAN20 (20030) (FAA)

TAKEOFF MINIMUMS:
**Rwy 9,** std. w/min. climb of 240' per NM to 12000, or 3400-3 for VCOA.
**Rwy 27,** std. w/min. climb of 300 to 11000, or 3400-3 for VCOA.

DEPARTURE PROCEDURE:
**Rwy 9,** climb heading 088° to 6000 before proceeding on course.
**Rwy 27,** climb heading 268° to 6000 before proceeding on course.

VCOA:
**All runways,** obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Wheatland County at Harlowton airport at or above 7600 before proceeding on course.

TAKEOFF OBSTACLE NOTES:
**Rwy 9,** lighting 10' from DER, 10' right of centerline, 2' AGL/4263' MSL.
Vegetation 52' from DER, 407' left of centerline, 4266' MSL.
Vehicles on road 121' from DER, 527' right of centerline, 15' AGL/4265' MSL.
Terrain beginning 3264' from DER, 473' left of centerline, up to 4350' MSL.
**Rwy 27,** lighting 10' from DER, 10' right of centerline, 2' AGL/4314' MSL.
Trees, building, fence, pole beginning 91' from DER, 34' left of centerline, up to 26' AGL/4333' MSL.

## HAVRE, MT
HAVRE CITY-COUNTY (HVR)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 17DEC09 (09351) (FAA)
TAKEOFF MINIMUMS:
**Rwy 8,** 300-1¾ or std. w/ min. climb of 217' per NM to 3300.
DEPARTURE PROCEDURE:
**Rwy 3,** climb heading 032° to 3300 then climbing left turn to 8000 direct HVR VOR/DME thence…
**Rwy 8,** climb heading 077° to 3300 then climbing left turn to 8000 via HVR R-025 to HVR VOR/DME thence…
**Rwy 21,** climb heading 212° to 3300 then climbing right turn to 8000 direct HVR VOR/DME thence…
**Rwy 26,** climb heading 257° to 3300 then climbing right turn to 8000 direct HVR VOR/DME thence...
...continue climb in hold in HVR VOR/DME holding pattern (hold west, right turns, 094° inbound) to cross HVR VOR/DME at or above 8000 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
**Rwy 3,** pole 2682' from DER, 1044' left of centerline, 21' AGL/2680' MSL.
**Rwy 8,** obstruction light on windsock 59' from DER, 224' left of centerline, 9' AGL/2588' MSL.
Tree 1192' from DER, 752' left of centerline, 25' AGL/2610' MSL.
Tank 1.3 NM from DER, 2287' left of centerline, 57' AGL/2797' MSL.
**Rwy 26,** light on windsock, 50' from DER, 225' right of centerline, 9' AGL/2589' MSL.
Trees beginning 1617' from DER, 650' right of centerline, 25' AGL/2659' MSL.

## HELENA, MT
HELENA RGNL (HLN)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 10 30JUN11 (11181) (FAA)
DEPARTURE PROCEDURE:
use DIVIDE DEPARTURE.

## HERMISTON, OR
HERMISTON MUNI (HRI)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG-A 10NOV16 (16315) (FAA)
TAKEOFF OBSTACLE NOTES:
**Rwy 5,** tower 379' left of DER, 50' AGL/698' MSL.
**Rwy 23,** light pole 456' left of DER, 44' AGL/684' MSL.

## HOQUIAM, WA
BOWERMAN (HQM)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 01APR93 (93091) (FAA)
TAKEOFF MINIMUMS:
**Rwy 6**, 600-2 or std. with a min. climb of 260' per NM to 600.
DEPARTURE PROCEDURE:
**Rwy 6,** climbing right turn heading 110°:
**Rwy 24,** climb runway heading.
**All aircraft** climb to 600 continue climb on course.

## HULETT, WY
HULETT MUNI (W43)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 20DEC07 (07354) (FAA)
TAKEOFF MINIMUMS:
**Rwy 13,** std. w/ min. climb of 450' per NM to 6300, or 500-2¼ w/ min. climb of 295' per NM to 7700, or 2200-3 for climb in visual conditions.
DEPARTURE PROCEDURE:
**Rwy 13,** climb to 7700 via heading 132° before proceeding on course, or climb in visual conditions: cross Hulett Muni Airport at or above 6300 before proceeding on course.
**Rwy 31,** climbing right turn on a heading between 090° clockwise to 115° from DER to 7700 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
**Rwy 13,** road 398' from DER, 37' left of centerline, 15' AGL/4296' MSL.
Truck on road 1126' from DER, 346' right of centerline, 15' AGL/4334' MSL.
Trees beginning 4945' from DER, across centerline, up to 100' AGL/4657' MSL.
**Rwy 31,** terrain 104' from DER, 420' left of centerline, 4200' MSL.
Terrain 344' from DER, 233' left of centerline, 4207' MSL.

## IDAHO FALLS, ID

IDAHO FALLS RGNL (IDA)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5 03JAN19 (19003) (FAA)

TAKEOFF MINIMUMS:

**Rwy 17,** NA - Environmental.

DEPARTURE PROCEDURE:

**Rwys 3, 35,** all aircraft departing 210° CW 040° climb on course, all others climbing left turn direct IDA VOR/DME thence...

**Rwy 21,** all aircraft departing 210° CW 020° climb on course, all others climbing right turn direct IDA VOR/DME thence...

...Continue climb in IDA VOR/DME holding pattern (hold south, left turn, 019° inbound) to cross IDA VOR/DME at or above MEA for route of flight.

TAKEOFF OBSTACLE NOTES:

**Rwy 3,** pole 1039' from DER, 758' left of centerline, 42' AGL/4762' MSL.

**Rwy 35,** vehicle on traverse way 410' from DER, 581' right of centerline, 4742' MSL.

Trees beginning 882' from DER, 503' right of centerline, up to 48' AGL/4769' MSL.

Pole 1034' from DER, 715' left of centerline, 37' AGL/4762' MSL.

## JACKSON, WY

JACKSON HOLE (JAC)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 6 10JUN04 (04162) (FAA)

DEPARTURE PROCEDURE:

**Rwy 1,** use GEYSER DEPARTURE.

**Rwy 19,** use TETON DEPARTURE.

## JEROME, ID

JEROME COUNTY (JER)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 30JAN20 (20030) (FAA)

TAKEOFF MINIMUMS:

**Rwy 9,** 500-1⅞ or std. w/min. climb of 450' per NM to 4700.

DEPARTURE PROCEDURE:

**Rwy 9,** climb heading 086° to 5300 before proceeding on course.

**Rwy 27,** climb heading 266° to 4800 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 9,** vegetation 140' from DER, 500' left of centerline, 10' AGL/4076' MSL.

Transmission line 600' from DER, 425' right of centerline, 33' AGL/4085' MSL.

Poles beginning 1052' from DER, 338' right of centerline, up to 35' AGL/4088' MSL.

Pole 1260' from DER, 298' right of centerline, 34' AGL/4090' MSL.

Pole 1432' from DER, 364' left of centerline, 33' AGL/4106' MSL.

Sign 1473' from DER, 548' left of centerline, 40' AGL/4119' MSL.

Tree and pole beginning 1651' from DER, 612' left of centerline, up to 39' AGL/4125' MSL.

Tree and building beginning 2084' from DER, 174' left of centerline, up to 41' AGL/4133' MSL.

Tree 2442' from DER, 101' left of centerline, 44' AGL/4137' MSL.

Pole 3699' from DER, 622' left of centerline, 37' AGL/4167' MSL.

Pole 3804' from DER, 33' left of centerline, 33' AGL/4169' MSL.

Pole 3858' from DER, 253' right of centerline, 37' AGL/4173' MSL.

Irrigation system 4752' from DER, 518' left of centerline, 12' AGL/4175' MSL.

Trees beginning 1 NM from DER, 2159' left of centerline, up to 50' AGL/4257' MSL.

Tree 1.1 NM from DER, 2277' left of centerline, 50' AGL/4260' MSL.

Tree 1.1 NM from DER, 2316' left of centerline, 50' AGL/4263' MSL.

Tree 1.2 NM from DER, 2356' left of centerline, 50' AGL/4266' MSL.

Tree 1.2 NM from DER, 2395' left of centerline, 50' AGL/4273' MSL.

Tree 1.2 NM from DER, 2434' left of centerline, 50' AGL/4279' MSL.

Tree 1.3 NM from DER, 2474' left of centerline, 50' AGL/4286' MSL.

Tree 1.3 NM from DER, 2513' left of centerline, 50' AGL/4299' MSL.

Trees beginning 1.3 NM from DER, 2253' left of centerline, up to 50' AGL/4306' MSL.

Tower and trees beginning 1.4 NM from DER, 2292' left of centerline, up to 250' AGL/4533' MSL.

Tree 1.4 NM from DER, 2670' left of centerline, 50' AGL/4283' MSL.

**Rwy 27,** fence beginning abeam DER, 440' left of centerline, up to 4' AGL/3969' MSL.

## JOHN DAY, OR
GRANT COUNTY RGNL/OGILVIE FIELD (GCD)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 15SEP16 (16259) (FAA)
TAKEOFF MINIMUMS:
**Rwys 9, 17, 35,** NA, Terrain.
DEPARTURE PROCEDURE:
**Rwy 27,** climbing left turn to 12000 heading 270° and IMB R-100 to IMB VOR/DME, climb in IMB VOR/DME holding pattern (E, right turns, 280° inbound) to cross IMB VOR/DME at or above MEA for route of flight.
TAKEOFF OBSTACLE NOTES:
**Rwy 27,** fence beginning 195' from DER, 50' right of centerline, up to 16' AGL/3665' MSL.
Trees beginning 229' from DER, 261' right of centerline, up to 26' AGL/3662' MSL.
Bush 389' from DER, 438' right of centerline, 20' AGL/3659' MSL.

## KALISPELL, MT
GLACIER PARK INTL (GPI)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 03AUG06 (06215) (FAA)
DEPARTURE PROCEDURE:
Use SKOTT DEPARTURE.

## KELSO, WA
SOUTHWEST WASHINGTON RGNL (KLS)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4 30JAN20 (20030) (FAA)
TAKEOFF MINIMUMS:
**Rwy 12,** NA- Terrain.
**Rwy 30,** use KELSO (RNAV) departure.
TAKEOFF OBSTACLE NOTES:
**Rwy 30,** poles 21' from DER, 299' right of centerline, 31' AGL/49' MSL.
Trees 92' from DER, 439' right of centerline, 59' MSL.
Poles beginning 190' from DER, 348' left of centerline, up to 29' AGL/49' MSL.
Trees, pole beginning 213' from DER, 43' right of centerline, up to 155' MSL.
Vehicles on road 387' from DER, 596' left of centerline, 57' MSL.
Towers 501' from DER, 425' left of centerline, 49' AGL/70' MSL.
Trees beginning 531' from DER, 201' left of centerline, up to 91' MSL.
Transmission lines beginning 1648' from DER, 644' left of centerline, up to 79' AGL/100' MSL.
Trees, transmission line beginning 1737' from DER, 17' left of centerline, up to 131' MSL.
Trees beginning 2235' from DER, 35' right of centerline, up to 157' MSL.
Trees, transmission line beginning 2335' from DER, 110' left of centerline, up to 146' MSL.
Trees 4956' from DER, 112' left of centerline, 164' MSL.
Trees beginning 1.9 NM from DER, 2281' right of centerline, up to 342' MSL.
Trees beginning 2 NM from DER, 980' right of centerline, up to 407' MSL.
Trees beginning 2.1 NM from DER, 364' right of centerline, up to 433' MSL.
Trees beginning 2.2 NM from DER, 2680' right of centerline, up to 477' MSL.
Towers, trees beginning 2.3 NM from DER, 2369' right of centerline, up to 105' AGL/569' MSL.
Trees beginning 2.4 NM from DER, 2095' right of centerline, up to 584' MSL.

## KEMMERER, WY
KEMMERER MUNI (EMM)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 08JAN15 (15008) (FAA)
TAKEOFF MINIMUMS:
**Rwys 4, 10, 22, 28,** NA - Rwy surfaces.
DEPARTURE PROCEDURE:
**Rwy 16,** climb heading 163° to 9100 then climbing left turn to intercept FBR VOR/DME R-330 to FBR VOR/DME before proceeding on course.
**Rwy 34,** climb heading 343° to 8200 then climbing right turn on heading 135° and FBR VOR/DME R-345 to FBR VOR/DME before proceeding on course.
TAKEOFF OBSTACLE NOTES:
**Rwy 16,** fence 17' from DER, 320' left of centerline, 8' AGL/7279' MSL.
Fence 150' from DER, 250' right of centerline, 9' AGL/7286' MSL.
**Rwy 34,** fence 73' from DER, 253' left of centerline, 7' AGL/7295' MSL.

## KLAMATH FALLS, OR

### CRATER LAKE-KLAMATH RGNL (LMT)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5A 26MAY16 (16147) (FAA)

TAKEOFF MINIMUMS:

**Rwy 7,** NA-Terrain.

**Rwy 14,** std. w/ min. climb of 300' per NM to 7100, or 3100-3 for climb in visual conditions.

**Rwy 25,** std. w/ min. climb of 400' per NM to 7100, or 3100-3 for climb in visual conditions.

**Rwy 32,** std. w/min. climb of 350' per NM to 7100, or 3100-3 for climb in visual conditions.

DEPARTURE PROCEDURE:

**Rwy 14,** climb on heading 141° to 6500 then climbing right turn to intercept LMT R-181 to LMT VORTAC, thence…

**Rwy 25,** climb on heading 253° to 6000 then climbing right turn to intercept LMT R-306 to LMT VORTAC, thence…

**Rwy 32,** climb on heading 321° to 6700 then climbing left turn to intercept LMT R-277 to LMT VORTAC, thence…

… continue climb in LMT VORTAC holding pattern (hold W, RT, 070° inbound) to cross LMT VORTAC at or above MEA for route of flight before proceeding on course.

VCOA:

**Rwys 14, 25, 32,** obtain ATC approval for climb in visual conditions when requesting IFR clearance. Climb in visual conditions to cross Crater Lake-Klamath regional airport at or above 7000 then climb direct LMT VORTAC, continue climb in LMT VORTAC holding pattern (hold W, right turns, 070° inbound) to cross LMT VORTAC at or above MEA for route of flight before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 14,** tree 3108' from DER, 1240' left of centerline, 88' AGL/4183' MSL.

**Rwy 25,** vehicle on road and railroad beginning 254' from DER, 127' left of centerline, up to 23' AGL/4113' MSL.

Tree 597' from DER, 419' left of centerline, 18' AGL/4122' MSL.

Tree and terrain beginning 8254' from DER, 2238' left of centerline, up to 100' AGL/4499' MSL.

**Rwy 32,** trees beginning 2625' from DER, 742' left of centerline, up to 100' AGL/4191' MSL.

## LA GRANDE, OR

### LA GRANDE/UNION COUNTY (LGD)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 13JUL00 (00195) (FAA)

TAKEOFF MINIMUMS:

**Rwy 12,** Cat A/B 2900-3 or std. with a min. climb of 350' per NM to 6100. Cat C/D 4500-3 or std. with a min. climb of 500' per NM to 7800.

**Rwy 30,** Cat A/B 2900-3 or std. with a min. climb of 350' per NM to 6100. Cat C/D 3600-3 or std. with a min. climb of 450' per NM to 6800.

**Rwy 34,** 2900-3 or std. with a min. climb of 350' per NM to 6100.

**Rwy 16,** 2000-3 or std. with a min. climb of 500' per NM to 5000.

DEPARTURE PROCEDURE:

**Rwys 12,16,** climbing left turn direct LGD NDB, thence;

**Rwys 30,34,** climbing right turn heading 010°, thence;

**all aircraft** climb to 7000 via the 339° bearing from LGD NDB, then climbing right turn direct LGD NDB.

## LAKEVIEW, OR

### LAKE COUNTY (LKV)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 22AUG13 (13234) (FAA)

TAKEOFF MINIMUMS:

**Rwy 17,** std. w/min. climb of 315' per NM to 6700.

**Rwy 35,** std. w/min. climb of 255' per NM to 5400, or 1400-3 for VCOA.

DEPARTURE PROCEDURE:

**Rwy 17**, climbing right turn heading 310° to intercept LKV VORTAC R-158 to LKV VORTAC. Do not exceed 240 KIAS until established on the LKV VORTAC R-158, or for climb in visual conditions, cross Lake County airport at or above 7200, then proceed on LKV VORTAC R-147 to LKV VORTAC. When executing VCOA, notify ATC prior to departure, thence….

**Rwy 35,** climb heading 351° to intercept LKV VORTAC R-130 to LKV VORTAC, or for climb in visual conditions, cross Lake County airport at or above 7200, then proceed on LKV VORTAC R-147 to LKV VORTAC. When executing VCOA, notify ATC prior to departure, thence….

... Continue climb in holding pattern (hold NW, right turns, 148° inbound) to cross LKV VORTAC at or above 9700.

TAKEOFF OBSTACLE NOTES:

**Rwy 17,** runway end identifier lights beginning 35' from DER, left and right of centerline, up to 2' AGL/4726' MSL.

## LANDER, WY
### HUNT FIELD (LND)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 05DEC19 (19339) (FAA)

TAKEOFF MINIMUMS:
**Rwy 22**, std. w/min. climb of 495' per NM to 8500, or 6200-3 for VCOA.

DEPARTURE PROCEDURE:
**Rwy 4,** climb on heading between 320° CW to 130° from DER to 6000 before proceeding on course.
**Rwy 22,** climbing right turn to intercept RIW VOR R-220 to 8500 before proceeding on course. Do not exceed 240K until established direct RIW VOR.

VCOA:
**Rwy 22,** obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Hunt Field at or above 11600 before proceeding on course.

TAKEOFF OBSTACLE NOTES:
**Rwy 22,** pole 5' from DER, 62' right of centerline, 5590' MSL.
Fence and vegetation beginning 22' from DER, 403' right of centerline, up to 8' AGL/5601' MSL.
Fence 80' from DER, 426' right of centerline, 14' AGL/5602' MSL.
NAVAID, wind indicator and fence beginning 100' from DER, 324' right of centerline, up to 19' AGL/5606' MSL.
Trees 149' from DER, 30' left of centerline, 5594' MSL.
Trees 1871' from DER, 555' right of centerline, 35' AGL/5645' MSL.
Trees 2659 ' from DER, 307' right of centerline, 5656' MSL.
Trees 3415' from DER, 393' left of centerline, 33' AGL/5675' MSL.
Trees beginning 3425' from DER, 309' left of centerline, up to 37' AGL/5682' MSL.
Trees 3429' from DER, 1359' left of centerline, 5684' MSL.
Trees beginning 3432' from DER, 378' left of centerline, up to 47' AGL/5689' MSL.
Trees beginning 3463' from DER, 229' left of centerline, up to 5694' MSL.
Trees, terrain beginning 3538' from DER, 135' left of centerline, up to 44' AGL/5697' MSL.
Trees and terrain beginning 3858' from DER, 322' left of centerline, up to 19' AGL/5703' MSL.
Trees, terrain and vegetation beginning 4029' from DER, 547' left of centerline, up to 34' AGL/5733' MSL.

## LARAMIE, WY
### LARAMIE RGNL (LAR)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 05APR12 (12096) (FAA)

DEPARTURE PROCEDURE:
**Rwys 3, 12,21,30,** use LARAMIE DEPARTURE.

## LAUREL, MT
### LAUREL MUNI (6S8)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 3 12DEC13 (13346) (FAA)

TAKEOFF MINIMUMS:
**Rwys 9, 14, 27, 32,** NA.

DEPARTURE PROCEDURE:
**Rwy 4**, climbing left turn direct BIL VORTAC, thence...
**Rwy 22**, climbing left turn direct BIL VORTAC, thence…
...if required, continue climb in BIL VORTAC holding pattern (hold W, right turns, 072° inbound) to cross BIL VORTAC at or above MEA/MCA for route of flight.

TAKEOFF OBSTACLE NOTES:
**Rwy 4**, ground beginning 47' from DER, 397' left of centerline, up to 3480' MSL.
Multiple trees beginning 309' from DER, 260' right of centerline, up to 68' AGL/3522' MSL.
Fence beginning 64' from DER, 281' left of centerline, up to 15' AGL/3469' MSL.
**Rwy 22**, ground beginning 34' from DER, 264' right of centerline, up to 3498' MSL.

## LEWISTON, ID

LEWISTON-NEZ PERCE COUNTY (LWS)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4 05JAN17 (17005) (FAA)

TAKEOFF MINIMUMS:

**Rwy 08,** std. w/min. climb of 310' per NM to 3000 or 2500-3 for VCOA.
**Rwy 12,** std. w/min. climb of 280' per NM to 3000 or 2500-3 for VCOA.
**Rwy 26,** std. w/min. climb of 265' per NM to 3000 or 2500-3 for VCOA.
**Rwy 30,** std. w/min. climb of 260' per NM to 3000 or 2500-3 for VCOA.

DEPARTURE PROCEDURE:

**Rwys 8,12, 26, 30**, climbing left turn direct MQG VOR/DME, continue climb in MQG holding pattern (hold SW, left turns, 066° inbound) to cross MQG VOR/DME at or above MEA/MCA for route of flight.

VCOA:

**Rwys 8, 12, 26, 30,** obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Lewiston-Nez Pearce County airport at or above 3800 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 12,** airport sign 14' from DER, 117' right of centerline, 3' AGL/1443' MSL.
**Rwy 26,** elec sys 31' from DER, 150' right of centerline, 13' AGL/1428' MSL.
**Rwy 30,** REIL 39' from DER, 113' left of centerline, 2' AGL/1373' MSL.
Trees beginning 543' from DER, 42' crossing centerline, 50' AGL/1398' MSL.

## LEWISTOWN, MT

LEWISTOWN MUNI (LWT)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4 05JAN17 (17005) (FAA)

TAKEOFF MINIMUMS:

**Rwy 3,** std. w/min. climb of 315' per NM to 6700.
**Rwys 8, 13,** std. w/min climb of 255' per NM to 5400, or 1400-3 for VCOA.

DEPARTURE PROCEDURE:

**Rwys 3, 31** left turn.
**Rwys 8, 13, 21**, right turn.
**Rwy 26**, climb heading 259°.
**All aircraft** climb direct LWT VOR/DME. Continue climb in holding pattern (W, right turns, 094° inbound) to MEA for route of flight.

VCOA:

**Rwys 8, 13,** obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Lewistown Muni airport direct LWT VOR/DME at or above 5400.

TAKEOFF OBSTACLE NOTES:

**Rwy 3,** aircraft tail on taxiway 636' from DER, 350' left of centerline, 11' AGL/4151' MSL.
**Rwy 13,** vehicle on road crossing right to left 483' from DER, 15' AGL/4175' MSL.
**Rwy 21,** grain bin 1530' from DER, 294 left of centerline, 22ft AGL/4210' MSL.
Elevator 1664' from DER, 330 left of centerline, 26' AGL/4214' MSL.
**Rwy 26,** terrain beginning 105' from DER, 404' left of centerline, 4133' MSL.
**Rwy 31,** tree 457' from DER, 381' left of centerline, 35' AGL/4156' MSL.
Tree 467' from DER, 340' left of centerline, 29' AGL/4150' MSL.
Movie screen ltd 1114' from DER, 593' right of centerline, 48' AGL/4161' MSL.

## LEXINGTON, OR

LEXINGTON (9S9)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 20JAN05 (05020) (FAA)

TAKEOFF MINIMUMS:

**Rwy 26,** std. with min. climb of 280' per NM to 7600, or 1600-2 ½ for climb in visual conditions.
**Rwy 8,** std. with min. climb of 490' per NM to 4200, or 1600-2 ½ for climb in visual conditions.

DEPARTURE PROCEDURE:

**Rwys 8, 26,** for climb in visual conditions: cross Lexington Airport at or above 3600.

TAKEOFF OBSTACLE NOTES:

**Rwy 8,** trees 1.42 NM from DER, 2386' left of centerline, 100' AGL/2159' MSL.
Trees 1.48 NM from DER, 2755' left of centerline, 100' AGL/2179' MSL.

## LIBBY, MT

LIBBY (S59)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 10AUG00 (00223) (FAA)

TAKEOFF MINIMUMS:

**Rwy 33,** not authorized.
**Rwy 15,** use EYESE RNAV DEPARTURE.

## LIVINGSTON, MT

MISSION FIELD (LVM)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 12MAR09 (09071) (FAA)

TAKEOFF MINIMUMS:

**Rwys 8, 13, 26, 31,** NA-Environmental.

DEPARTURE PROCEDURE:

**Rwys 4, 22,** Use LIVINGSTON DEPARTURE.

## MADRAS, OR

MADRAS MUNI (S33)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1A 30JAN20 (20030) (FAA)

TAKEOFF MINIMUMS:

**Rwys 16, 22**, std. w/min. climb of 298' per NM to 3900 or 1300-3 for climb in visual conditions.

DEPARTURE PROCEDURE:

**Rwys 4, 34,** climbing left turn heading 210° to intercept DSD R-348 to DSD VORTAC, thence...

**Rwy 16,** climbing right turn heading 210° to intercept DSD R-348 to DSD VORTAC, thence...

**Rwy 22,** climb on heading 216° to intercept DSD R-348 to DSD VORTAC, thence...

...continue climb-in-hold (hold north, right turn, 168° inbound) to MEA/MCA for route of flight.

VCOA:

**Rwys 16, 22,** obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Madras Municipal airport at or above 3600, then proceed on DSD R-356 to DSD VORTAC. Continue climb-in-hold (hold north, right turn, 168° inbound) to MEA/MCA for route of flight.

TAKEOFF OBSTACLE NOTES:

**Rwy 4,** aircraft on taxiway 98' from DER, 237' right of centerline, 16' AGL/2455' MSL.
Vegetation 383' from DER, 483' right of centerline, 2439' MSL.
Vehicles on road 742' from DER, 113' right of centerline, 2447' MSL.
**Rwy 16,** aircraft on turf runway abeam DER, 185' right of centerline, 16' AGL/2455' MSL.
Vegetation 196' from DER, 151' left of centerline, 2444' MSL.
**Rwy 34,** aircraft on taxiway abeam DER, 250' right of centerline, 16' AGL/2455' MSL.
Aircraft on taxiway 215' from DER, on centerline, 16' AGL/2455' MSL.
Aircraft on runway 1396' from DER, 375' left of centerline, 16' AGL/2455 MSL.
Vegetation 92' from DER, 133' right of centerline, 2437' MSL.

## MALTA, MT

MALTA (M75)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 15DEC11 (11349) (FAA)

DEPARTURE PROCEDURE:

**Rwy 26,** climb heading 257° to 3000 before turning right.

TAKEOFF OBSTACLE NOTES:

**Rwy 8,** wind sock 37' from DER, 433' left of centerline, 12' AGL/2273' MSL.
**Rwy 26,** vehicle on roadway 348' from DER, 507' left of centerline, 15' AGL/2265' MSL.

## MC CALL, ID

MC CALL MUNI (MYL)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 20OCT11 (11293) (FAA)

TAKEOFF MINIMUMS:

**Rwy 34**, NA-Obstacles.

DEPARTURE PROCEDURE:

**Rwy 16**, use PEPUC (RNAV) DEPARTURE.

## MC CHORD FIELD (KTCM)

TACOMA, WA

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

03JUN10 (10154)

DEPARTURE PROCEDURE:

**Rwy 16,** Track heading 160°, turn left to intercept SEA VORTAC R-168 (V495) to SEA 168/37.1 DME (ALDER). Cross ALDER at or above 4000. After ALDER, maintain MEA/MOCA for route of flight.

**Rwy 34,** Track heading 340°, then turn right to intercept SEA VORTAC R-168 (V495) to SEA R-168/37.1 DME (ALDER). Cross ALDER at or above 4000. Maintain MEA/MOCA for route of flight.

TAKEOFF OBSTACLE NOTES:

**Rwy 16,** Grove of trees 143' AGL/454' MSL, 4892' from DER, 1353' left of centerline.
Grove of trees 102' AGL/419' MSL, 2395' from DER, 1028' right of centerline.
Trees 136' AGL/447' MSL, 2867' from DER, 1261' left of centerline.
Trees 120' AGL/430' MSL, 2594' from DER, 1113' left of centerline.
Trees 85' AGL/394' MSL, 2310' from DER, 957' left of centerline.
Trees 83' AGL/392' MSL, 2006' from DER, 959' left of centerline.
Trees 87' AGL/389' MSL, 1758' from DER, 971' left of centerline.
**Rwy 34,** Tree 106' AGL/348' MSL, 2307' from DER, 1038' left of centerline.
Tree 121' AGL/370' MSL, 3190' from DER, 526' right of centerline.
Aircraft 65' AGL/317' MSL, 186' from DER, 407' left of centerline.
Tree 64' AGL/343' MSL, 2260' from DER, 1036' left of centerline.
Building 40' AGL/321' MSL, 1668' from DER, 810' left of centerline.

DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 1 20JUN19 (19171) (FAA)

**Rwys 16, 34,** heading as assigned by ATC.

## MC MINNVILLE, OR

MC MINNVILLE MUNI (MMV)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4 20NOV08 (08325) (FAA)

TAKEOFF MINIMUMS:

**Rwy 4,** 400-1¼ or std. w/min. climb of 238' per NM to 400, or alternatively, with std. takeoff minimums and normal 200'/NM climb gradient, takeoff must occur no later than 2000' prior to DER.

**Rwy 17,** std. w/min. climb of 300' per NM to 1200 or 1800-2½ for climb in visual conditions.

**Rwy 22,** std. w/min. climb of 303' per NM to 1400 or 1800-2½ for climb in visual conditions.

DEPARTURE PROCEDURE:

**Rwy 4,** climb heading 038° to intercept UBG R-170 to UBG VOR/DME, thence ...

**Rwys 17,22,** climbing left turn to intercept UBG R-183 to UBG VOR/DME, thence ...
or for climb in visual conditions: cross Mc Minnville Muni at or above 1800 before proceeding on course.

**Rwy 35,** climb heading 347° to intercept UBG R-221 to UBG VOR/DME, thence...
... continue climb in UBG VOR/DME holding pattern (S, left turns, 003° inbound) until reaching MEA for route of flight.

TAKEOFF OBSTACLE NOTES:

**Rwy 4,** multiple trees beginning 2040' from DER, 353' left and 209' right of centerline, up to 100' AGL/339 feet MSL.

**Rwy 17,** tree 1719' from DER, 456' right of centerline, 100' AGL/231' MSL.
Tree 1760' from DER, 627' left of centerline, 100' AGL/257' MSL.

**Rwy 22,** multiple trees beginning 282' from DER, 120' left and 144' right of centerline, up to 100' AGL/246' MSL.
Tree 4047' from DER, 1319' left of centerline, 100' AGL/284' MSL.

**Rwy 35,** multiple trees beginning 1551' from DER, 229' right of centerline, up to 100' AGL/277'MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

ORIG 05MAR15 (15064) (FAA)

**Rwys 4, 17, 22, 35,** heading as assigned by ATC; requires minimum climb of 350' per NM to 4300.

## MEDFORD, OR

ROGUE VALLEY INTL-MEDFORD (MFR)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 10A 28APR16 (16119) (FAA)

TAKEOFF MINIMUMS:

**Rwy 14,** std. w/ min. climb of 435' per NM to 4500, or 2900-3 for climb in visual conditions.

**Rwy 32,** std. w/ min. climb of 260' per NM to 6800, or 2900-3 for climb in visual conditions.

DEPARTURE PROCEDURE:

**Rwy 14,** climbing right turn direct OED VORTAC, or for climb in visual conditions, cross Rogue Valley Intl-Medford airport at or above 4100 before proceeding direct OED VORTAC. When executing VCOA, notify ATC prior to departure. Thence …

**Rwy 32,** climbing right turn direct OED VORTAC, or for climb in visual conditions, cross Rogue Valley Intl-Medford airport at or above 4100 before proceeding direct OED VORTAC. When executing VCOA, notify ATC prior to departure. Thence …

...all aircraft climb in OED VORTAC holding pattern (hold NW, right turns, 153° inbound) to cross OED VORTAC at or above MEA or MCA for direction of flight.

TAKEOFF OBSTACLE NOTES:

**Rwy 14,** building 1585' from DER, 846' left of centerline, 40' AGL/1385' MSL.

## MILES CITY, MT

FRANK WILEY FIELD (MLS)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 26MAY16 (16147) (FAA)

TAKEOFF OBSTACLE NOTES:

**Rwy 4,** NAVAID 40' from DER, 115' right of centerline, 2628' MSL.
NAVAID 40' from DER, 112' left of centerline, 2627' MSL.
Fence 130' from DER, 400' left of centerline, 2629' MSL.
**Rwy 22,** vehicle on road, beginning 0' from DER, 333' left of centerline, up to 2636' MSL.
REIL 40' from DER, 90' right of centerline, 4' AGL/2627' MSL.
REIL 40' from DER, 115' right of centerline, 3' AGL/2627' MSL.
**Rwy 13,** vehicle on road, beginning 0' from DER, 322' left of centerline, up to 2636' MSL.
REIL, 40' from DER, 90 and 115' right of centerline, up to 4' AGL/2627' MSL.
REIL 40' from DER, 89' left of centerline, 2627' MSL.
**Rwy 31,** vehicle on road, tree, post, beginning 4' from DER, 398' right of centerline, up to 2640' MSL.
Vehicle on road, REIL, tree, beginning 15' from DER, 89' left of centerline, up to 2638' MSL.
Tree, vehicle on road, beginning 71' from DER, 395' right of centerline, up to 2647' MSL.

## MISSOULA, MT

MISSOULA INTL (MSO)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 9 24MAY18 (18144) (FAA)

TAKEOFF MINIMUMS:

**Rwys 8, 26,** NA - obstacles.

DEPARTURE PROCEDURE:

**Rwy 12, 30,** use GRZLY DEPARTURE.

TAKEOFF OBSTACLE NOTES:

**Rwy 12,** fence beginning 22' from DER, 487' right of centerline, up to 9' AGL/3215' MSL.

## MOSES LAKE, WA

GRANT COUNTY INTL (MWH)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 20SEP12 (12264) (FAA)

TAKEOFF OBSTACLE NOTES:

**Rwy 14R,** antenna 3902' from DER, 828' right of centerline, 98' AGL/1268' MSL.
**Rwy 18,** pole 405' from DER, 334' right of centerline, 30' AGL/1209' MSL.
Windsock 496' from DER, 371' left of centerline, 16' AGL/1195' MSL.
**Rwy 32L,** antenna 660' from DER, 401' left of centerline, 11' AGL/1191' MSL.
Pole 1317' from DER, 369' left of centerline, 22' AGL/1202' MSL.

## MOUNTAIN HOME AFB (KMUO)

MOUNTAIN HOME, ID

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 05APR12 (12096)

**Rwy 12, 30**, 6700-3*
* Or standard with minimum climb of 270/NM to 9100.

TAKEOFF OBSTACLE NOTES:

**Rwy 12,** Terrain 0' AGL/3035' MSL, 824' from DER, 721' right of centerline.
Terrain 0' AGL/3035' MSL, 848' from DER, 686' right of centerline.
Terrain 0' AGL/3032' MSL, 378' from DER, 600' right of centerline.
Road/Vehicle 15' AGL/3024' MSL, 1144' from DER, 793' right of centerline.
Power pole 35' AGL/3049' MSL, 2911' from DER, 939' right of centerline.
Tower 30' AGL/3030' MSL, 1064' from DER, 901' right of centerline.
Tower 28' AGL/3037' MSL, 1168' from DER, 795' right of centerline.
Tower 45' AGL/3049' MSL, 2148' from DER, 1479' left of centerline.
**Rwy 30,** Terrain 0' AGL/2995' MSL, 16' from DER, 500' left of centerline.
Terrain 0' AGL/2995' MSL, 81' from DER, 500' left of centerline.
Terrain 0' AGL/2995' MSL, 296' from DER, 579' left of centerline.
Terrain 0' AGL/2995' MSL, 427' from DER, 614' left of centerline.
Terrain 0' AGL/2995' MSL, 445' from DER, 619' left of centerline.
Terrain 0' AGL/2998' MSL, 253' from DER, 568' right of centerline.
Terrain 0' AGL/3000' MSL, 378' from DER, 500' right of centerline.
Terrain 0' AGL/3007' MSL, 570' from DER, 653' right of centerline.
Terrain 0' AGL/3002' MSL, 737' from DER, 525' right of centerline.
Road/Vehicle 35' AGL/3018' MSL, 949' from DER, 772' left of centerline.

## MOUNTAIN HOME, ID

MOUNTAIN HOME MUNI (U76)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5 22JUN17 (17173) (FAA)

TAKEOFF MINIMUMS:

**Rwy 10,** std. w/min. climb gradient 420' per NM to 9000 or 3400-3 for VCOA.

**Rwy 28,** std. w/min. climb gradient 380' per NM to 8900 or 3400-3 for VCOA.

VCOA:

**Rwy 10, 28,** Obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Mountain Home Municipal airport at or above 6400, before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 10,** vegetation 24' from DER, 282' left of centerline, 4' AGL/3160' MSL.
Building 575' from DER, 602' right of centerline, 41' AGL/3197' MSL.
Transmission line towers beginning 1107' from DER, 461' left of centerline, up to 46'AGL/3196' MSL.
Transmission line towers beginning 1107' from DER, 125' left of centerline, up to 52' AGL/3198' MSL.
Transmission line towers beginning 1484' from DER, 50' right of centerline, up to 52' AGL/3201' MSL.
Tower 3249' from DER, 889' right of centerline, 126' AGL/3273' MSL.

**Rwy 28,** railroad 1038' from DER, 322' right of centerline, 3193' MSL.

## NAMPA, ID

NAMPA MUNI (MAN)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 12OCT17 (17285) (FAA)

DEPARTURE PROCEDURE:

**Rwy 11,** use ADEXE (RNAV) DEPARTURE.

**Rwy 29,** use CADKI (RNAV) DEPARTURE.

## NEWCASTLE, WY

MONDELL FIELD (ECS)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4 21AUG14 (14233) (FAA)

TAKEOFF MINIMUMS:

**Rwy 32,** 200-1½ or std. w/min. climb of 265' per NM to 4500.

DEPARTURE PROCEDURE:

**Rwy 14,** climb heading 136° and ECS VOR R-143, until reaching 5500, thence…

**Rwy 32,** climbing left turn direct ECS VOR, then on ECS VOR R-143 to 5500, thence...
...Climbing right turn to 7500 direct ECS VOR, continue climb-in-holding to 7500 (hold SE, left turns, 323° inbound) before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 14,** obstruction light on antenna 1442' from DER, 880' left of centerline, 93' AGL/4244' MSL.
Terrain 2826' from DER, 1242' right of centerline 4292' MSL.

**Rwy 32,** ground beginning 59' from DER, 393' right of centerline up to 4182' MSL.
Railroad 212' from DER, 284' right of centerline up to 23' AGL/4205' MSL.
Fence 247' from DER, 314' right of centerline 12' AGL/4175' MSL.
Multiple poles beginning 294' from DER 236' right of centerline up to 26' AGL/4203' MSL.
Transmission line tower 294' from DER, 436' right of centerline 26' AGL/4203' MSL.
Road beginning 426' from DER, 238' right of course up to 15' AGL/4194' MSL.
Ground beginning 5148' from DER, 1085' right of centerline 4366' MSL.
Bush 6286' from DER, 1440' right of centerline 11' AGL/4363' MSL.
Road beginning 426' from DER, 238' right of centerline, up to 15' AGL/4195' MSL.

## NEWPORT, OR

NEWPORT MUNI (ONP)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 21JUL16 (16203) (FAA)

TAKEOFF MINIMUMS:

**Rwy 2**, NA-Obstacles.

DEPARTURE PROCEDURE:

**Rwys 16, 20,34,** use NEWPORT DEPARTURE.

## NORTH BEND, OR

SOUTHWEST OREGON RGNL (OTH)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 7 26MAR20 (20086) (FAA)

TAKEOFF MINIMUMS:

**Rwy 5,** 900-3 w/min. climb of 300' per NM to 1500 or std. w/min. climb of 475' per NM to 1200 or 1600-3 for VCOA.
**Rwy 13,** 400-2½ w/min. climb of 250' per NM to 2500 or 1600-3 for VCOA.
**Rwy 31,** 300-1¾ or std. w/min. climb of 280' per NM to 300.

DEPARTURE PROCEDURE:

**Rwy 5,** climb on heading 046° to intercept OTH VOR/DME R-340 northwest bound to 1800 before proceeding on course.
**Rwy 13,** climb on heading 135° to 1300 before proceeding on course.
**Rwy 23,** climb on heading 226° to 700 before proceeding on course.
**Rwy 31,** climb on heading 315° to 800 before proceeding on course.

VCOA:

**Rwys 5, 13,** obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Southwest Oregon RGNL airport at or above 1500 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 5,** tower 383' from DER, 207' right of centerline, 23' AGL/35' MSL.
Ship 1000' from DER, on centerline, up to 140 MSL.
Bridge beginning 1886' from DER, 628' left of centerline, up to 89' AGL/93' MSL.
Transmission line 4259' from DER, 1563' right of centerline, 215' AGL/228' MSL.
Bridge, transmission line beginning 4741' from DER, 579' right of centerline, up to 265' AGL/268' MSL.
Tree 1.2 NM from DER, 410' left of centerline, 211' MSL.
Tree 1.3 NM from DER, 1380' left of centerline, 428' MSL.
Trees beginning 1.4 NM from DER, 704' left of centerline, up to 435' MSL.
Tree 1.5 NM from DER, 984' left of centerline, 463' MSL.
Tree 1.5 NM from DER, 946' left of centerline, 467' MSL.
Trees, buildings beginning 1.6 NM from DER, 777' left of centerline, up to 513' MSL.
Tree 1.6 NM from DER, 2832' right of centerline, 348' MSL.
Tree 1.6 NM from DER, 1768' right of centerline, 367' MSL.
Tree 2.1 NM from DER, 36' left of centerline, 515' MSL.
Tree 2.3 NM from DER, 2038' right of centerline, 648' MSL.
Trees beginning 2.5 NM from DER, 894' right of centerline, up to 767' MSL.
**Rwy 13,** vegetation, vehicle on road beginning 37' from DER, 174' left of centerline, up to 33' MSL.
Vegetation 192' from DER, 145' right of centerline, 37' MSL.
Tree 345' from DER, 509' right of centerline, 62' MSL.
Trees, buildings, transmission lines, poles beginning 412' from DER, 14' right of centerline, up to 76' MSL.
Tree 627' from DER, 52' left of centerline, 38' MSL.
Tree 2536' from DER, 648' right of centerline, 94' MSL.
Tree 2644' from DER, 529' right of centerline, 98' MSL.
Tree 3012' from DER, 1101' left of centerline, 214' MSL.
Tree, building beginning 3059' from DER, 299' right of centerline, up to 108' MSL.
Trees, spire beginning 3066' from DER, 68' left of centerline, up to 243' MSL.
Pole 3418' from DER, 512' right of centerline, 77' AGL/114' MSL.
Trees beginning 3578' from DER, 9' left of centerline, up to 291' MSL.
Trees, pole beginning 3876' from DER, 7' left of centerline, up to 298' MSL.
Tree 4451' from DER, 182' right of centerline, 137' MSL.
Tree 1 NM from DER, 58' right of centerline, 204' MSL.
Trees, pole beginning 1 NM from DER, 16' right of centerline, up to 238' MSL.
Pole 1.3 NM from DER, 977' right of centerline, 75' AGL/247' MSL.
**Rwy 23,** ship 4050' from DER, on centerline, up to 140 MSL.
**Rwy 31,** ship 1000' from DER, on centerline, up to 140 MSL.
Trees beginning 5037' from DER, 272' left of centerline, up to 185' MSL.
Tree 5426' from DER, 140' left of centerline, 202' MSL.
Trees beginning 5714' from DER, 13' left of centerline, up to 208' MSL.
Tree 5984' from DER, 1420' right of centerline, 188' MSL.
Tree 1.3 NM from DER, 803' left of centerline, 232' MSL.

## OAK HARBOR, WA

A J EISENBERG (OKH)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 12MAR09 (09071) (FAA)

TAKEOFF MINIMUMS:

**Rwy 7,** 300-1.
**Rwy 25,** 300-1

DEPARTURE PROCEDURE:

**Rwy 7,** climb via heading 071° to 2000, then climbing right turn direct CVV VOR/DME. Continue climb on course.
**Rwy 25,** climb via heading 251° to 2100, then climbing left turn direct CVV VOR/DME. Continue climb on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 7,** multiple trees beginning 1167' from DER, 212' left of centerline, up to 80' AGL/319' MSL.
Multiple trees beginning 664' from DER, 208' right of centerline, up to 80' AGL/299' MSL.
Fence 612' from DER, right and left of centerline, 10' AGL/229' MSL.
Multiple bushes beginning 240' from DER, 64' left of centerline, up to 8' AGL/227' MSL.
**Rwy 25,** cars on road 87' from DER, left and right of centerline, up to 15' AGL/174' MSL.
Multiple trees beginning 2271' from DER, right and left of centerline, up to 80' AGL/279' MSL.

## OLYMPIA, WA

OLYMPIA RGNL (OLM)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 6 24MAY18 (18144) (FAA)

TAKEOFF MINIMUMS:

**Rwy 17,** 300-2 or std. w/ min. climb of 720' per NM to 500.

DEPARTURE PROCEDURE:

**Rwy 8,** climb heading 089° to 1000, then climbing left turn direct OLM VORTAC, thence . . .

**Rwy 17,** climb heading 176° to 1200, then climbing right turn direct OLM VORTAC, thence . . .

**Rwy 26,** climbing left turn direct OLM VORTAC, thence . . .

**Rwy 35,** climbing right turn direct OLM VORTAC, thence . . .

...continue climb in OLM VORTAC holding pattern (south, right turn, 356° inbound) to cross OLM VORTAC at or above MEA/MCA for route of flight.

TAKEOFF OBSTACLE NOTES:

**Rwy 8,** pole 879' from DER, 348' left of centerline, 31' AGL/236' MSL.
Trees beginning 970' from DER, 213' left of centerline, up to 267' MSL.
Tree 1635' from DER, 434' right of centerline, 267' MSL.
Tree 1743' from DER, 539' right of centerline, 291' MSL.
Tree 2270' from DER, 341' left of centerline, 275' MSL.
Tree, tower beginning 2931' from DER, 130' right of centerline, up to 320' MSL.
Trees beginning 3168' from DER, 569' left of centerline, up to 343' MSL.

**Rwy 17,** trees beginning 751' from DER, 658' right of centerline, up to 281' MSL.
Trees beginning 1005' from DER, 634' left of centerline, up to 293' MSL.
Trees beginning 1160' from DER, 719' right of centerline, up to 306' MSL.
Trees beginning 1203' from DER, 664' left of centerline, up to 298' MSL.
Trees beginning 1293' from DER, 681' right of centerline, up to 331' MSL.
Trees beginning 1418' from DER, 70' right of centerline, up to 340' MSL.
Trees beginning 1758' from DER, 221' left of centerline, up to 337' MSL.
Trees beginning 1820' from DER, 112' left of centerline, up to 366' MSL.
Trees beginning 3873' from DER, 437' left of centerline, up to 377' MSL.
Trees beginning 3953' from DER, 3' right of centerline, up to 370' MSL.
Trees beginning 4000' from DER, 23' left of centerline, up to 388' MSL.
Tree 1.5 nm from DER, 2745' left of centerline, 490' MSL.

**Rwy 26,** tree 338' from DER, 339' right of centerline, 220' MSL.
Building 475' from DER, 594' left of centerline, 28' AGL/224' MSL.
Tree 496' from DER, 555' right of centerline, 237' MSL.
Trees beginning 2171' from DER, 623' right of centerline, up to 309' MSL.
Trees beginning 4173' from DER, 680' left of centerline, up to 330' MSL.

**Rwy 35,** building 692' from DER, 620' right of centerline, 32' AGL/226' MSL.
Trees beginning 961' from DER, 652' right of centerline, up to 266' MSL.
Tree 1664' from DER, 912' right of centerline, 267' MSL.
Trees beginning 1714' from DER, 634' right of centerline, up to 283' MSL.
Trees beginning 1940' from DER, 895' right of centerline, up to 287' MSL.
Trees beginning 2175' from DER, 859' left of centerline, up to 275' MSL.
Trees beginning 2358' from DER, 834' right of centerline, up to 288' MSL.
Trees beginning 2851' from DER, 1033' right of centerline, up to 299' MSL.
Trees beginning 3025' from DER, 1046' right of centerline, up to 315' MSL.
Tree 3878' from DER, 702' left of centerline, 298' MSL.
Trees beginning 4015' from DER, 198' left of centerline, up to 313' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 2 24MAY18 (18144) (FAA)

**Rwy 8,** heading as assigned by ATC; requires minimum climb of 220 feet per NM to 1500.

**Rwy 26,** heading as assigned by ATC.

**Rwy 35,** heading as assigned by ATC; requires minimum climb of 230 feet per NM to 1100.

## OMAK, WA

OMAK (OMK)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 06FEB14 (14037) (FAA)

TAKEOFF MINIMUMS:

**Rwy 35,** NA - obstacles.

DEPARTURE PROCEDURE:

**Rwy 17,** use GETNG DEPARTURE.

## ONTARIO, OR

### ONTARIO MUNI (ONO)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5 07DEC17 (17341) (FAA)

TAKEOFF MINIMUMS:

**Rwy 33,** 300-2 or std. w/ min. climb of 240' per NM to 3800, or 1300-3 for VCOA.

DEPARTURE PROCEDURE:

**Rwy 33,** climb on a heading between 033° CW 145° from DER, or min. climb of 270' per NM to 3600 for all other courses.

VCOA:

Obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Ontario Airport at or above 3300 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 15,** fence beginning 5' from DER, 340' left of centerline, up to 4' AGL/2191' MSL.
Lighting 9' from DER, 39' right of centerline, 2' AGL/2190' MSL.
Fence 19' from DER, 337' left of centerline, 9' AGL/2194' MSL.
Transmission line 582' from DER, 478' right of centerline, 32' AGL/2214' MSL.
Tree, transmission line, pole beginning 644' from DER, 39' right of centerline, up to 43' AGL/2225' MSL.
Building 674' from DER, 330' left of centerline, 25' AGL/2210' MSL.
Building beginning 737' from DER, 448' left of centerline, up to 28' AGL/2214' MSL.
Pole, transmission line beginning 1095' from DER, 175' left of centerline, up to 2221' MSL.
Transmission line 1122' from DER, 386' left of centerline, 42' AGL/2227' MSL.
Transmission line, pole beginning 1211' from DER, 471' left of centerline, up to 46' AGL/2230' MSL.
Tower 1249' from DER, 463' left of centerline, 56' AGL/2240' MSL.
Pole, transmission line, tree beginning 1253' from DER, 425' left of centerline, up to 70' AGL/2255' MSL.
Antenna, tower beginning 1752' from DER, 689' left of centerline, up to 82' AGL/2266' MSL.
**Rwy 33,** fence 7' from DER, 471' right of centerline, 5' AGL/2198' MSL.
Vehicle on road, fence beginning 42' from DER, 270' right of centerline, up to 2207' MSL.
Vehicle on road beginning 270' from DER, 493' left of centerline, up to 2205' MSL.
Vehicle on road 313' from DER, 309' left of centerline, up to 2206' MSL.
Tower 1.2 NM from DER, 190' right of centerline, 98' AGL/2413' MSL.
Tree 1.2 NM from DER, 333' left of centerline, 2402' MSL.
Tree 1.3 NM from DER, 996' right of centerline, 67' AGL/2429' MSL.
Trees beginning 1.3 NM from DER, 687' right of centerline, up to 2431' MSL.
Tree 1.3 NM from DER, 627' left of centerline, 2424' MSL.
Tree 1.4 NM from DER, 499' left of centerline, 2430' MSL.
Tree, pole beginning 1.4 NM from DER, 999' left of centerline, up to 79' AGL/2447' MSL.

## PARIS, ID

### BEAR LAKE COUNTY (1U7)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 13SEP18 (18256) (FAA)

TAKEOFF MINIMUMS:

**Rwy 10**, std. w/min. climb of 365' per NM to 10000 or 3600-3 for VCOA.
**Rwy 16,** std. w/min. climb of 305' per NM to 10500 or 3600-3 for VCOA.
**Rwy 28,** std. w/min. climb of 500' per NM to 11000 or 3600-3 for VCOA.
**Rwy 34,** std. w/min. climb of 390' per NM to 11300 or 3600-3 for VCOA.

DEPARTURE PROCEDURE:

**Rwy 10,** climb heading 104° to 9000 before proceeding on course.
**Rwy 16,** climb heading 164° to 8900 before proceeding on course.
**Rwy 28,** climb heading 284° to 8000 before proceeding on course.
**Rwy 34,** climb heading 344° to 9800 before proceeding on course.

VCOA:

**All runways,** obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Bear Lake County Airport at or above 9400 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 16,** tree 1127' from DER, 689' right of centerline, 5960' MSL.
**Rwy 28,** vegetation 34' from DER, 133' left of centerline, 5931' MSL.

## PASCO, WA

### TRI-CITIES (PSC)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 8 13NOV14 (14317) (FAA)

DEPARTURE PROCEDURE:

**Rwy 30,** climb heading 301° to 1400, thence …
**Rwy 12,** climb heading 121° to 1500, thence …
**Rwys 3L, 3R,** climb heading 031° to 1500, thence …
**Rwys 21L, 21R,** climb heading 211° to 1700, thence …
... **Rwy 12** turn left, all others turn right. Then climb direct PSC VOR/DME, climb in PSC VOR/DME holding pattern (hold East, right turns, 272° inbound) to MEA/MCA for route of flight before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 3L,** bush 94' from DER, 479' left of centerline, up to 5' AGL/405' MSL.
Trains beginning 1680' from DER, crossing centerline, up to 23' AGL/447' MSL.
Tower 2447' from DER, 910' right of centerline, up to 56' AGL/479' MSL.
Electrical system 2466' from DER, 94' right of centerline, up to 45' AGL/464' MSL.
Tower 2501' from DER, 1076' right of centerline, up to 64' AGL/480' MSL.
**Rwy 3R,** terrain 172' from DER, 229' right of centerline, up to 408' MSL.
Bushes beginning 255' from DER, 204' right of centerline, up to 5' AGL/413' MSL.
Fence beginning 851' from DER, crossing centerline, up to 8' AGL/427' MSL.
Bushes 970' from DER, 48' right of centerline, 5' AGL/430' MSL.
Towers 1431' from DER, 603' right of centerline, up to 50' AGL/473' MSL.
Rod on tower 1512' from DER, 883' right of centerline, up to 109' AGL/528' MSL.
Rod on tower 2271' from DER, 845' right of centerline, up to 107' AGL/526' MSL.
Tower 2460' from DER, 111' right of centerline, up to 56' AGL/479' MSL.
Tower 2514' from DER, 277' right of centerline, up to 64' AGL/480' MSL.
Trees 2580' from DER, 871' right of centerline, up to 75' AGL/504' MSL.
**Rwy 12,** vehicles on road beginning 407' from DER, crossing centerline, up to 15' AGL/424' MSL.
Trees 657' from DER, 618' right of centerline, up to 75' AGL/454' MSL.
Pole 947' from DER, 635' left of centerline, 25' AGL/434' MSL.
Pole 1092' from DER, 588' left of centerline, 25' AGL/442' MSL.
Trees beginning 1195' from DER, 602' right of centerline, up to 61' AGL/461' MSL.
Trees beginning 2989' from DER, 620' left of centerline, up to 75' AGL/484' MSL.
**Rwy 30,** terrain 3750' from DER, 887' left of centerline, up to 496' MSL.
**Rwy 21R,** trees beginning 918' from DER, 468' right of centerline, up to 75' AGL/484' MSL.
**Rwy 21L,** aircraft 15' from DER, 458' left of centerline to 689' right of centerline, up to 45' AGL/454' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 2 26MAY16 (16147) (FAA)

**Rwy 3L,** heading as assigned by ATC; requires minimum climb of 240' per NM to 3100.
**Rwy 3R,** heading as assigned by ATC; requires minimum climb of 230' per NM to 3100.
**Rwy 12,** heading as assigned by ATC; requires minimum climb of 290' per NM to 3200.
**Rwy 21L/R,** heading as assigned by ATC; requires minimum climb of 290' per NM to 3200.
**Rwy 30,** heading as assigned by ATC; requires minimum climb of 230' per NM to 3300.

## PENDLETON, OR

### EASTERN OREGON RGNL AT PENDLETON (PDT)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5 05DEC19 (19339) (FAA)

DEPARTURE PROCEDURE:

**Rwy 8,** climbing left turn to intercept PDT VORTAC R-060 to PDT VORTAC, thence...
**Rwy 11,** climbing right turn to intercept PDT VORTAC R-120 to PDT VORTAC, thence...
**Rwy 26,** climb direct PDT VORTAC, thence...
**Rwy 29,** climbing left turn direct PDT VORTAC, thence...
...continue climb in PDT VORTAC holding pattern (West, left turn, 079° inbound) to cross PDT VORTAC at or above MEA before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 8,** terrain 0' from DER, 76' left of centerline, 1487' MSL.
Terrain 2' from DER, 101' right of centerline, 1488' MSL.
**Rwy 11,** terrain beginning 0' from DER, on centerline, up to 1496' MSL.
Terrain 0' from DER, 51' left of centerline, 1496' MSL.
Vehicles on roadway 34' from DER, 377' left of centerline, 1499' MSL.
**Rwy 26,** terrain 8' from DER, 124' left of centerline, 1487' MSL.
Terrain 54' from DER, 394' left of centerline, 1492' MSL.
Terrain beginning 197' from DER, 390' left of centerline, up to 1495' MSL.
Terrain 479' from DER, 595' left of centerline, 1500' MSL.
Terrain 654' from DER, 591' left of centerline, 1507' MSL.
Terrain, building beginning 829' from DER, 258' left of centerline, up to 1512' MSL.
Terrain 1074' from DER, 581' left of centerline, 1513' MSL.
Terrain beginning 1219' from DER, 786' left of centerline, up to 1523' MSL.
**Rwy 29,** terrain 0' from DER, 50' left of centerline, 1488' MSL.
Terrain 21' from DER, 124' left of centerline, 1489' MSL.
Terrain beginning 74' from DER, 84' left of centerline, up to 1495' MSL.
Terrain beginning 87' from DER, 168' left of centerline, up to 1496' MSL.

## PINEDALE, WY

PINEDALE/RALPH WENZ FIELD (PNA)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 22OCT09 (09295) (FAA)

TAKEOFF MINIMUMS:

**Rwy 29,** std. with a min. climb of 310' per NM to 8300, or 4900-3 for climb in visual conditions.

DEPARTURE PROCEDURE:

**Rwy 11,** climbing right turn to 10000 via heading 190° and BPI R-040 to BPI VOR/DME before proceeding on course.

**Rwy 29,** climbing left turn to 10000 via heading 230° and BPI R-020 to BPI VOR/DME before proceeding on course or for climb in visual conditions: cross Pinedale/Ralph Wenz Field at or above 11800 before proceeding on course.

## PLENTYWOOD, MT

SHER-WOOD (PWD)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 15MAR07 (07074) (FAA)

TAKEOFF OBSTACLE NOTES:

**Rwy 12,** multiple bushes beginning 47' from DER, 71' left of centerline, up to 12' AGL/2251' MSL.
Multiple bushes beginning 362' from DER, 514' right of centerline, up to 12' AGL/ 2251' MSL.

**Rwy 30,** multiple bushes and road beginning 68' from DER, 75' right of centerline, up to 12' AGL/2303' MSL.
Multiple bushes beginning 217' from DER, 60' left of centerline, up to 12' AGL/2296' MSL.

## POCATELLO, ID

POCATELLO RGNL (PIH)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 7 17DEC09 (09351) (FAA)

DEPARTURE PROCEDURE:

use KNURL ONE DEPARTURE.

## POLSON, MT

POLSON (8S1)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 06MAR14 (14065) (FAA)

TAKEOFF MINIMUMS:

**Rwy 18,** NA - Obstacles.

DEPARTURE PROCEDURE:

**Rwy 36,** use ANGIL DEPARTURE.

## POPLAR, MT

POPLAR MUNI (PO1)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 10JAN13 (13010) (FAA)

TAKEOFF MINIMUMS:

**Rwys 2,20** NA - ATC.

TAKEOFF OBSTACLE NOTES:

**Rwy 9,** light support structure 10' from DER, 18' right of centerline, 2' AGL/2038' MSL.
Fence 24' from DER, 344' left of centerline, 10' AGL/2046' MSL.
Terrain 26' from DER, 492' left of centerline, 2037' MSL.
Tree 504' from DER, 483' left of centerline, 40' AGL/2080' MSL.
Pole 1175' from DER, 756' right of centerline, 31' AGL/2067' MSL.
Pole 1233' from DER, 619' left of centerline, 32' AGL/2068' MSL.
Pole 1423' from DER, 618' right of centerline, 38' AGL/2074' MSL.
Pole 1742' from DER, 593' right of centerline, 45' AGL/2081' MSL.

**Rwy 27,** light support structure 10' from DER, 17' left of centerline, 2' AGL/2027' MSL.
Fence 65' from DER, 341' right of centerline, 4' AGL/2029' MSL.
Tree 248' from DER, 497' right of centerline, 21' AGL/2047' MSL.

## PORT ANGELES, WA

### PORT ANGELES CGAS (NOW)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4A 08JAN15 (15008) (FAA)

DEPARTURE PROCEDURE:

**Rwy 8,** climbing left turn heading 010° to intercept CVV VOR/DME R-247 to 5400 ...

**Rwy 26,** climbing right turn heading 010° to intercept CVV VOR/DME R-247 to 5400 ...

... All aircraft proceed on CVV R-247 to JIGEB INT/CVV 12.1 DME; cross JIGEB at or above MEA/MCA for route of flight.

TAKEOFF OBSTACLE NOTES:

**Rwy 8,** ships on waterway 1792' from DER, across centerline, up to 80' MSL.

**Rwy 26,** vehicles on roadway beginning 309' from DER, across centerline, up to 15' AGL/24' MSL.

Ships on waterway 590' from DER, 316' left of centerline, 80' MSL.

Ships on waterway 632' from DER, 350' right of centerline, 80' MSL.

### WILLIAM R FAIRCHILD INTL (CLM)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3A 19JUL18 (18200) (FAA)

DEPARTURE PROCEDURE:

Use WATTR DEPARTURE.

TAKEOFF OBSTACLE NOTES:

**Rwy 8,** sign 46' from DER, 198' right of centerline, 4' AGL/295' MSL.
Terrain 54' from DER, 449' right of centerline, 296' MSL.
Sign 79' from DER, 352' right of centerline, 4' AGL/299' MSL.
Building, terrain, NAVAID beginning 99' from DER, 1' right of centerline, up to 17' AGL/314' MSL.
Fence 102' from DER, 526' left of centerline, 7' AGL/299' MSL.
Fence 270' from DER, 526' left of centerline, 7' AGL/300' MSL.
Building 298' from DER, 258' left of centerline, 20' AGL/311' MSL.
Tree, pole beginning 575' from DER, 69' left of centerline, up to 377' MSL.
Pole, traverse way beginning 677' from DER, 630' right of centerline, up to 32' AGL/338' MSL.
Transmission line 922' from DER, 630' right of centerline, 51' AGL/355' MSL.
Tree, transmission line, pole beginning 927' from DER, 136' right of centerline, up to 385' MSL.
Trees beginning 1107' from DER, 391' right of centerline, up to 420' MSL.
Trees beginning 1312' from DER, 169' right of centerline, up to 464' MSL.
Tree 1412' from DER, 695' left of centerline, 396' MSL.
Tree 1454' from DER, 811' left of centerline, 424' MSL.
Trees beginning 1523' from DER, 191' right of centerline, up to 466' MSL.
Tree 1613' from DER, 790' left of centerline, 439' MSL.
Trees beginning 1740' from DER, 35' right of centerline, up to 469' MSL.
Trees beginning 1826' from DER, 166' left of centerline, up to 454' MSL.
Trees beginning 2421' from DER, 670' left of centerline, up to 455' MSL.
Trees beginning 2922' from DER, 9' left of centerline, up to 457' MSL.
Trees beginning 3272' from DER, 406' right of centerline, up to 473' MSL.
Trees beginning 3375' from DER, 105' right of centerline, up to 481' MSL.
Tree, pole beginning 3453' from DER, 105' right of centerline, up to 490' MSL.
Trees beginning 3601' from DER, 28' left of centerline, up to 460' MSL.
Trees beginning 3746' from DER, 32' left of centerline, up to 461' MSL.
Trees beginning 4375' from DER, 622' right of centerline, up to 498' MSL.
Trees beginning 4460' from DER, 137' right of centerline, up to 502' MSL.
Trees beginning 4985' from DER, 717' right of centerline, up to 465' MSL.

**Rwy 13**, terrain 40' from DER, 485' right of centerline, 274' MSL.
Sign, terrain beginning 44' from DER, 169' right of centerline, up to 4' AGL/278' MSL.
Sign 67' from DER, 229' left of centerline, 7' AGL/276' MSL.
Building 546' from DER, 556' right of centerline, 20' AGL/297' MSL.
Pole, building beginning 604' from DER, 447' right of centerline, up to 29' AGL/305' MSL.
Tree 807' from DER, 448' right of centerline, 321' MSL.
Trees beginning 829' from DER, 114' right of centerline, up to 325' MSL.
Building 1149' from DER, 226' left of centerline, 23' AGL/304' MSL.
Pole 1214' from DER, 226' left of centerline, 24' AGL/308' MSL.
Building, pole beginning 1215' from DER, 186' left of centerline, up to 28' AGL/312' MSL.
Building beginning 1291' from DER, 321' left of centerline, up to 36' AGL/320' MSL.
Tree, pole, building beginning 1357' from DER, 19' left of centerline, up to 323' MSL.
Trees beginning 1554' from DER, 624' right of centerline, up to 376' MSL.
Tree, pole beginning 1669' from DER, 51' left of centerline, up to 337' MSL.
Tree, pole beginning 1792' from DER, 52' right of centerline, up to 405' MSL.
Tree, pole, tower beginning 1821' from DER, 448' left of centerline, up to 346' MSL.
Rig, pole, tree, vertical point beginning 2195' from DER, 568' left of centerline, up to 59' AGL/359' MSL.
Tree 2211' from DER, 501' right of centerline, 408' MSL.
Tree, pole beginning 2271' from DER, 66' right of centerline, up to 412' MSL.
Pole, tree beginning 2716' from DER, 741' left of centerline, up to 59' AGL/372' MSL.
Tree, pole beginning 2785' from DER, 1' left of centerline, up to 410' MSL.
Trees beginning 3039' from DER, 79' left of centerline, up to 420' MSL.
Tree, pole, vegetation, building beginning 3133' from DER, 15' left of centerline, up to 456' MSL.
Trees beginning 3290' from DER, 240' right of centerline, up to 422' MSL.
Tree, pole beginning 3658' from DER, 50' right of centerline, up to 487' MSL.

**CON'T**

## PORT ANGELES, WA (CON'T)

### WILLIAM R FAIRCHILD INTL (CLM) (CON'T)

**Rwy 13 (CON'T),** tree, building beginning 3723' from DER, 41' right of centerline, up to 488' MSL.
Trees beginning 1.6 NM from DER, 2938' right of centerline, up to 951' MSL.
Trees beginning 1.7 NM from DER, 2811' right of centerline, up to 1041' MSL.
Trees beginning 1.7 NM from DER, 2983' right of centerline, up to 1090' MSL.
Tree, building beginning 1.7 NM from DER, 1982' right of centerline, up to 1145' MSL.
**Rwy 26,** lighting 10' from DER, 54' right of centerline, 3' AGL/287' MSL.
Lighting 10' from DER, 55' left of centerline, 3' AGL/286' MSL.
Trees beginning 2709' from DER, 130' left of centerline, up to 406' MSL.
Trees beginning 3951' from DER, 530' right of centerline, up to 393' MSL.
Trees beginning 4446' from DER, 1173' left of centerline, up to 421' MSL.
**Rwy 31,** tree, pole beginning 1' from DER, 222' right of centerline, up to 315' MSL.
Trees beginning 8' from DER, 4' left of centerline, up to 321' MSL.
Tree 338' from DER, 524' right of centerline, 316' MSL.
Trees beginning 431' from DER, 121' right of centerline, up to 320' MSL.
Trees beginning 505' from DER, 39' left of centerline, up to 324' MSL.
Trees beginning 638' from DER, 8' right of centerline, up to 323' MSL.

## PORTLAND, OR

### PORTLAND INTL (PDX)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 8 20SEP12 (12264) (FAA)

TAKEOFF MINIMUMS:
**Rwy 3,** 500-3 or std. w/ min. climb of 355' per NM to 700.
**Rwy 10L,** std. w/ min. climb of 280' per NM to 2900.
**Rwy 10R,** std. w/ min. climb of 265' per NM to 2900.
**Rwy 21,** std. w/ min. climb of 290' per NM to 1800.

DEPARTURE PROCEDURE:
**Rwy 3,** climb heading 029° to 700, then climbing left turn direct BTG VORTAC, thence ...
**Rwys 10L,10R,** climb heading 103° to 500, then climbing left turn direct BTG VORTAC, thence ...
**Rwy 21,** climb heading 209° to 500, then climbing right turn direct BTG VORTAC, thence ...
**Rwys 28L, 28R,** climb heading 283° to 500, then climbing right turn direct BTG VORTAC, thence ...
... continue climb in BTG VORTAC holding pattern (hold NW, right turns, 149° inbound) to cross BTG VORTAC at or above MCA/MEA before proceeding on course.

TAKEOFF OBSTACLE NOTES:
**Rwy 3,** sign 1' from DER, 133' left of centerline, 5' AGL/28' MSL.
Vehicle on road 1363' from DER, 795' left of centerline, 15' AGL/76' MSL.
Vehicle on road 1675' from DER, 5' right of centerline, 15' AGL/76' MSL.
Multiple trees, towers beginning 1.2 NM from DER, 278' left of centerline, up to 85' AGL/463' MSL.
Multiple trees, building, electrical system and pole beginning 1.3 NM from DER, 63' right of centerline, up to 85' AGL/430' MSL.
Tree 1.7 NM from DER, 8' right of centerline, 85' AGL/413' MSL.
**Rwy 10L,** vehicles on road beginning abeam DER, 376' left of centerline, up to 15' AGL/78' MSL.
Trees beginning 1201' from DER, 753' right of centerline, up to 75' AGL/95' MSL.
**Rwy 10R**, pole 1996' from DER, 759' right of centerline, 54' AGL/74' MSL.
**Rwy 21,** light on DME 354' from DER, 255' left of centerline, 23' AGL/37' MSL.
Multiple trees, poles, tower beginning 1327' from DER, 23' left of centerline, up to 93' AGL/328 MSL.
Multiple trees, poles beginning 1098' from DER, 42' right of centerline up to 75' AGL/329' MSL.
Trees beginning 2229' from DER, on centerline, up to 75' AGL/190' MSL.
**Rwy 28L,** trees 1873' from DER, 837' left of centerline, up to 75' AGL/95' MSL.
**Rwy 28R,** building, antennas, vehicles on road beginning 130' from DER, 257' right of centerline, up to 27' AGL/58' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 1 05NOV20 (20310) (FAA)
**Rwy 3,** heading as assigned by ATC; requires min. climb of 378' per NM to 4500.
**Rwy 10L,** heading as assigned by ATC; requires min. climb of 367' per NM to 4700.
**Rwy 10R,** heading as assigned by ATC; requires min. climb of 440' per NM to 3600.
**Rwy 21,** heading as assigned by ATC; requires min. climb of 430' per NM to 3000.
**Rwy 28L,** heading as assigned by ATC; requires min. climb of 374' per NM to 3800.
**Rwy 28R,** heading as assigned by ATC; requires min. climb of 340' per NM to 5200.

## PORTLAND, OR (CON'T)

PORTLAND-HILLSBORO (HIO)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 7A 01FEB18 (18032) (FAA)

TAKEOFF MINIMUMS:

**Rwy 2,** std. w/ min. climb of 215' per NM to 1900 or 600-2½ for climb in visual conditions.

**Rwy 13R,** 200-1¼ or std. w/min. climb of 233' per NM to 400 or alternatively, with std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1800' prior to DER.

**Rwy 31L,** std. w/ min. climb of 242' per NM to 2700 or 600-2½ for climb in visual conditions.

**Rwy 31R,** std. w/ min. climb of 230' per NM to 2700 or 600-2½ for climb in visual conditions.

DEPARTURE PROCEDURE:

**Rwy 13L, 13R,** Climbing right turn direct UBG VOR/DME thence…

**Rwy 2, 20, 31L, 31R,** Climbing left turn direct UBG VOR/DME thence…

…continue climb in UBG VOR/DME holding pattern (hold W, right turns, 108° inbound) to cross UBG VOR/DME at or above MEA for direction of flight before proceeding on course.

VCOA:

**Rwys 2, 31L, 31R,** obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Portland-Hillsboro Airport at or above 700 then proceed direct UBG VOR/DME…

…continue climb in UBG VOR/DME holding pattern (hold W, right turns, 108° inbound) to cross UBG VOR/DME at or above MEA for direction of flight before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 2,** fence 35' from DER, 498' left of centerline, 4' AGL/212' MSL.
Fence 70' from DER, 378' right of centerline, 8' AGL/214' MSL.
Fence 163' from DER, 333' left of centerline, 11' AGL/219' MSL.
Vehicles on road 246' from DER, 252' right of centerline, 218' MSL.
Vehicles on road 452' from DER, 1' right of centerline, 220' MSL.
Tree 1793' from DER, 608' right of centerline, 270' MSL.
Tank and building beginning 2423' from DER, 895' left of centerline, up to 60' AGL/274' MSL.
Building 2668' from DER, 798' left of centerline, 67' AGL/279' MSL.
**Rwy 13L,** NAVAID 10' from DER, 20' right of centerline, 1' AGL/207' MSL.
Sign 60' from DER, 202' left of centerline, 2' AGL/208' MSL.
Trees beginning 2518' from DER, 270' left of centerline, up to 302' MSL.
Tree 2741' from DER, 523' left of centerline, 323' MSL.
Trees beginning 2776' from DER, 264' left of centerline, up to 329' MSL.
Trees beginning 3303' from DER, 259' left of centerline, up to 330' MSL.
Tree 3385' from DER, 360' left of centerline, 337' MSL.
Tower 4794' from DER, 781' left of centerline, 160' AGL/350' MSL.
**Rwy 13R,** pole 38' from DER, 150' left of centerline, 4' AGL/200' MSL.
Sign 72' from DER, 299' right of centerline, 5' AGL/201' MSL.
Tree 1030' from DER, 754' right of centerline, 260' MSL.
Tree 1103' from DER, 613' left of centerline, 234' MSL.
Trees beginning 1835' from DER, 172' left of centerline, up to 307' MSL.
Tree 2458' from DER, 434' right of centerline, 263' MSL.
Tree 2617' from DER, 230' right of centerline, 274' MSL.
Trees beginning 2666' from DER, 10' right of centerline, up to 290' MSL.
Trees beginning 3343' from DER, 146' right of centerline, up to 316' MSL.
Tree 3388' from DER, 124' right of centerline, 320' MSL.
Tree 3417' from DER, 154' right of centerline, 321' MSL.
Tree 3490' from DER, 578' right of centerline, 322' MSL.
Trees beginning 3529' from DER, 28' right of centerline, up to 326' MSL.
Tree 3625' from DER, 218' left of centerline, 308' MSL.
Trees beginning 3736' from DER, 12' left of centerline, up to 328' MSL.
Trees beginning 3844' from DER, 8' right of centerline, up to 334' MSL.
Trees beginning 4454' from DER, 506' right of centerline, up to 342' MSL.
Tree 5186' from DER, 639' right of centerline, 343' MSL.
Tree 5264' from DER, 704' right of centerline, 348' MSL.
**Rwy 20,** poles and fence beginning 14' from DER, 261' right of centerline, up to 27' AGL/229' MSL.
Pole, tree, and buildings beginning 215' from DER, 418' left of centerline, up to 34' AGL/236' MSL.
Trees beginning 767' from DER, 611' left of centerline, up to 290' MSL.
Trees beginning 772' from DER, 417' right of centerline, up to 52' AGL/250' MSL.
Trees and pole beginning 823' from DER, 411' right of centerline, up to 53' AGL/253' MSL.
Trees and pole beginning 1139' from DER, 454' left of centerline, up to 294' MSL.
Tree 2430' from DER, 671' right of centerline, 280' MSL.
Trees beginning 2514' from DER, 31' left of centerline, up to 311' MSL.
Tree 4822' from DER, 337' left of centerline, 327' MSL.
**Rwy 31L,** trees beginning 1663' from DER, 625' right of centerline, up to 271' MSL.
**Rwy 31R,** NAVAID 10' from DER, 20' left of centerline, 4' AGL/201' MSL.
Sign 20' from DER, 162' right of centerline, 5' AGL/202' MSL.
Bush 116' from DER, 193' left of centerline, 205' MSL.
Trees, pole, and tower beginning 1259' from DER, 138' right of centerline, up to 272' MSL.

**CON'T**

## PORTLAND, OR (CON'T)

### PORTLAND-HILLSBORO (HIO) (CON'T)

DIVERSE VECTOR AREA (RADAR VECTORS)
ORIG 30APR15 (15120) (FAA)

**Rwy 2,** heading as assigned by ATC; requires minimum climb of 290' per NM to 2700.
**Rwy 13L,** heading as assigned by ATC; requires minimum climb of 290' per NM to 2800.
**Rwy 13R,** heading as assigned by ATC; requires minimum climb of 300' per NM to 2800.
**Rwy 20,** heading as assigned by ATC; requires minimum climb of 260' per NM to 4900.
**Rwy 31L,** heading as assigned by ATC; requires minimum climb of 270' per NM to 4900.
**Rwy 31R,** heading as assigned by ATC; requires minimum climb of 260' per NM to 4900.

### PORTLAND-TROUTDALE (TTD)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 7 19JUL18 (18200) (FAA)

TAKEOFF MINIMUMS:
**Rwy 7,** std. w/min. climb of 325' per NM to 2800 or 1400-3 for VCOA.
**Rwy 25,** std. w/min. climb of 380' per NM to 1300 or 1400-3 for VCOA.

DEPARTURE PROCEDURE:
**Rwy 7,** climbing left turn to intercept BTG R-125 to BTG VORTAC. Continue climb on BTG R-329 within 10NM to cross BTG VORTAC at or above: BTG R-355 CW R-055 or R-085 CW R-115 5000. All others 2500.
**Rwy 25,** climbing right turn to intercept BTG R-125 to BTG VORTAC. Continue climb on BTG R-329 within 10 NM to cross BTG VORTAC at or above: BTG R-355 CW R-055 or R-085 CW R-115 5000. All others 2500.

VCOA:
**All Rwys,** obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Portland-Troutdale Airport northwest bound at or above 1300, then climb on BTG R-125 to BTG VORTAC. Continue climb on BTG R-329 within 10 NM to cross BTG VORTAC at or above: BTG R-355 CW R-055 or R-085 CW R-115 5000. All others 2500.

TAKEOFF OBSTACLE NOTES:
**Rwy 7**, building 25' from DER, 410' left of centerline, 19' AGL/58' MSL.
Pole beginning 123' from DER, 458' left of centerline, up to 30' AGL/70' MSL.
Pole 169' from DER, 169' right of centerline, 6' AGL/45' MSL.
Electrical system 298' from DER, 302' right of centerline, 30' AGL/69' MSL.
Tree, traverse way beginning 450' from DER, 1' right of centerline, up to 80' MSL.
Tree 564' from DER, 592' left of centerline, 72' MSL.
Trees beginning 783' from DER, 43' left of centerline, up to 114' MSL.
Tree 944' from DER, 215' right of centerline, 92' MSL.
Tree 1734' from DER, 525' right of centerline, 114' MSL.
Tree 1843' from DER, 509' left of centerline, 116' MSL.
Tree 1868' from DER, 138' right of centerline, 120' MSL.
Tree 1887' from DER, 598' left of centerline, 121' MSL.
Trees beginning 1889' from DER, 37' left of centerline, up to 134' MSL.
Tree 1939' from DER, 255' left of centerline, 137' MSL.
Trees beginning 1942' from DER, 148' left of centerline, up to 142' MSL.
Tree 3280' from DER, 661' left of centerline, 149' MSL.
Trees beginning 3446' from DER, 586' right of centerline, up to 144' MSL.
Tree 3792' from DER, 575' left of centerline, 154' MSL.
Tree 4233' from DER, 145' right of centerline, 154' MSL.
Transmission line 1 NM from DER, 1899' left of centerline, 210 AGL/240' MSL.
Other 1.8 NM from DER, 3553' right of centerline, 100' AGL/379' MSL.
Other 1.9 NM from DER, 3742' right of centerline, 100' AGL/419' MSL.
**Rwy 25,** tree 195' from DER, 385' left of centerline, 50' MSL.
Trees beginning 352' from DER, 361' left of centerline, up to 92' MSL.
Trees beginning 759' from DER, 635' right of centerline, up to 103' MSL.
Tree, building beginning 1180' from DER, 598' left of centerline, up to 111' MSL.
Trees beginning 1544' from DER, 64' left of centerline, up to 151' MSL.
Trees beginning 1635' from DER, 222' right of centerline, up to 108' MSL.
Trees beginning 2563' from DER, 430' right of centerline, up to 111' MSL.
Trees beginning 2612' from DER, 84' right of centerline, up to 117' MSL.
Tree 2739' from DER, 733' right of centerline, 125' MSL.
Tree 3442' from DER, 508' right of centerline,135' MSL.
Trees beginning 3499' from DER, 236' right of centerline, up to 140' MSL.
Trees beginning 3622' from DER, 526' right of centerline, up to 177' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)
ORIG 02APR15 (15092) (FAA)

**Rwy 7,** heading as assigned by ATC; requires minimum climb of 330' per NM to 2900.
**Rwy 25,** heading as assigned by ATC; requires minimum climb of 360' per NM to 4300.

## PORT TOWNSEND, WA

### JEFFERSON COUNTY INTL (0S9)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 22AUG13 (13234) (FAA)

TAKEOFF MINIMUMS:

**Rwy 9,** 300-1

**Rwy 27,** 300-1 with a min. climb of 445' per NM to 900, or 1000-2½ for climb in visual conditions.

DEPARTURE PROCEDURE:

**Rwy 9,** climb on heading 088° to intercept CVV VOR/DME R-166 to CVV VOR/DME, thence …

**Rwy 27,** climbing right turn heading 090° to intercept CVV VOR/DME R-166 to CVV VOR/DME, or for climb in visual conditions cross Jefferson County Intl airport at or above 1000 then climb on CVV R-178 to CVV VOR/DME. When executing VCOA, notify ATC prior to departure. Thence…

... Climb in holding pattern (hold South, left turns, 346° inbound) to cross CVV VOR/DME at or above MEA for route of flight.

TAKEOFF OBSTACLE NOTES:

**Rwy 9,** bushes beginning 21' from DER, left and right of centerline, up to 5' AGL/123' MSL.
Terrain beginning 148' from DER, 313' right of centerline, up to 126' MSL.
Trees beginning 661' from DER, left and right of centerline, up to 90' AGL/284' MSL.
**Rwy 27,** trees beginning 105' from DER, left and right of centerline, up to 90' AGL/260' MSL.
Poles beginning 105' from DER, 298' left of centerline, up to 53' AGL/159' MSL.

## POWELL, WY

### POWELL MUNI (POY)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 19SEP13 (13262) (FAA)

TAKEOFF MINIMUMS:

**Rwys 3,17,21,35,** NA-Environmental.

DEPARTURE PROCEDURE:

**Rwy 13,** turn right, thence…

**Rwy 31,** turn left, thence…

... All aircraft climb direct COD VOR/DME. Continue climb in COD VOR/DME holding pattern (hold North, left turns, 189° inbound) to cross COD VOR/DME at or above 9400 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 13,** pole 13' from DER, 288' right of centerline, 8' AGL/5107' MSL.
Windsock 13' from DER, 287' right of centerline, 5' AGL/5104' MSL.
Pole 110' from DER, 407' right of centerline, 4' AGL/5104' MSL.
Terrain 148' from DER, 526' left of centerline; 0' AGL/5100' MSL.
Vehicles on road beginning 414' from DER, beginning 53' right of centerline, up to 15' AGL/5115' MSL.
Terrain 674' from DER, 429' right of centerline, 0' AGL/5119' MSL .
**Rwy 31,** windsock 9' from DER, 297' right of centerline, 3' AGL/5002' MSL.
Pole 10' from DER, 296' right of centerline, 6' AGL/5005' MSL.

## PRINEVILLE, OR

### PRINEVILLE (S39)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2A 23JUN16 (16175) (FAA)

TAKEOFF MINIMUMS:

**Rwy 10**, std. with a min. climb of 290' per NM to 5500, or 2600-3 for climb in visual conditions.
**Rwy 15**, std. with a min. climb of 320' per NM to 6000, or 2600-3 for climb in visual conditions.
**Rwy 28**, std. with a min. climb of 415' per NM to 6600, or 2600-3 for climb in visual conditions.
**Rwy 33**, std. with a min. climb of 380' per NM to 6700, or 2600-3 for climb in visual conditions.

DEPARTURE PROCEDURE:

**Rwy 10**, climb heading 104° to 5500 before proceeding on course or for climb in visual conditions cross Prineville airport at or above 5700 before proceeding on course. When executing VCOA, notify ATC prior to departure.
**Rwy 15**, climb heading 156° to 6000 before proceeding on course or for climb in visual conditions cross Prineville airport at or above 5700 before proceeding on course. When executing VCOA, notify ATC prior to departure.
**Rwy 28**, climb heading 284° to 6600 before proceeding on course or for climb in visual conditions cross Prineville airport at or above 5700 before proceeding on course. When executing VCOA, notify ATC prior to departure.
**Rwy 33**, climb heading 336° to 6700 before proceeding on course or for climb in visual conditions cross Prineville airport at or above 5700 before proceeding on course. When executing VCOA, notify ATC prior to departure.

TAKEOFF OBSTACLE NOTES:

**Rwy 10**, flag pole 69' from DER, 248' left of centerline, 22' AGL/3258' MSL.
Tree, vehicle on road, and pole beginning 542' from DER, 277' right of centerline, up to 47' AGL/3307' MSL.
**Rwy 15**, building 36' from DER, 368' left of centerline, 27' AGL/3277' MSL.
Trees beginning 106' from DER, 151' right of centerline, up to 20' AGL/3266' MSL.
Trees beginning 192' from DER, 25' left of centerline, up to 27' AGL/3277' MSL.
**Rwy 28**, trees beginning 51' from DER, 33' left of centerline, up to 28' AGL/3283' MSL.
Trees beginning 161' from DER, 183' right of centerline, up to 30' AGL/3589' MSL.
**Rwy 33**, terrain and trees beginning 100' from DER, 72' right of centerline, up to 43' AGL/3287' MSL.
Terrain 129' from DER, 81' left of centerline, 3243' MSL.

## PULLMAN/MOSCOW, WA

PULLMAN/MOSCOW RGNL (PUW)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5 10OCT19 (19283) (FAA)

TAKEOFF MINIMUMS:

**Rwy 5,** 300-1¼ w/min. climb of 276' per NM to 3600 or std. w/min. climb of 405' per NM to 3100 or 4600-3 for VCOA.

DEPARTURE PROCEDURE:

**Rwy 5,** climb heading 050° to 3100 then climbing left turn direct PUW VOR/DME, continue climb in PUW VOR/DME holding pattern (southwest, left turns, 032° inbound) to cross PUW VOR/DME at or above MEA for direction of flight.

**Rwy 23,** climbing left turn to intercept PUW VOR/DME R-018 to PUW VOR/DME, continue climb in PUW VOR/DME holding pattern (southwest, left turns, 032° inbound) to cross PUW VOR/DME at or above MEA for direction of flight.

VCOA:

**Rwy 5,** obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Pullman/Moscow Rgnl airport at or above 4500 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 5,** terrain, vegetation beginning 185' from DER, 135' right of centerline, up to 2624' MSL.
Buildings beginning 483' from DER, 610' left of centerline, up to 40' AGL/2590' MSL.
Terrain 1077' from DER, 383' right of centerline, 2625' MSL.
Terrain, electrical system beginning 1137' from DER, 17' right of centerline, up to 2626' MSL.
Terrain 1264' from DER, 408' right of centerline, 2634' MSL.
Terrain, traverse way beginning 1301' from DER, 285' right of centerline, up to 2635' MSL.
Terrain, vertical point, traverse way beginning 1325' from DER, 9' right of centerline, up to 2639' MSL.
Terrain 1687' from DER, 179' left of centerline, 2601' MSL.
Terrain beginning 1713' from DER, 114' left of centerline, up to 2602' MSL.
Terrain 1803' from DER, 103' left of centerline, 2611' MSL.
Terrain beginning 1807' from DER, 42' left of centerline, up to 2613' MSL.
Terrain, pole beginning 1900' from DER, 99' left of centerline, up to 2621' MSL.
Terrain 1968' from DER, 57' left of centerline, 2622' MSL.
Terrain beginning 2008' from DER, 161' left of centerline, up to 2624' MSL.
Terrain beginning 2057' from DER, 83' left of centerline, up to 2628' MSL.
Electrical system, terrain, pole beginning 2111' from DER, 8' left of centerline, up to 20' AGL/2634' MSL.
Terrain beginning 2140' from DER, 55' right of centerline, up to 2641' MSL.
Terrain beginning 2203' from DER, 90' right of centerline, up to 2651' MSL.
Terrain 2309' from DER, 393' right of centerline, 2657' MSL.
Terrain beginning 2321' from DER, 298' right of centerline, up to 2658' MSL.
Terrain beginning 2465' from DER, 436' right of centerline, up to 2665' MSL.
Terrain beginning 2493' from DER, 22' right of centerline, up to 2673' MSL.
Terrain beginning 2614' from DER, 82' left of centerline, up to 2637' MSL.
Terrain 2662' from DER, 649' right of centerline, 2675' MSL.
Terrain beginning 2665' from DER, 91' right of centerline, up to 2690' MSL.
Terrain beginning 2720' from DER, 85' left of centerline, up to 2649' MSL.
Terrain 2788' from DER, 136' left of centerline, 2650' MSL.
Terrain, traverse way beginning 2825' from DER, 20' left of centerline, up to 2652' MSL.
Terrain beginning 2828' from DER, 52' right of centerline, up to 2700' MSL.
Terrain beginning 3148' from DER, 53' right of centerline, up to 2711' MSL.
Terrain, traverse way, fence, buildings, trees beginning 3264' from DER, 20' right of centerline, up to 2712' MSL.
Terrain beginning 3594' from DER, 1283' left of centerline, up to 2663' MSL.
Terrain beginning 3767' from DER, 1280' left of centerline, up to 2667' MSL.
Trees 4073' from DER, 483' left of centerline, 2672' MSL.
Trees beginning 4151' from DER, 394' left of centerline, up to 2682' MSL.
Trees, terrain beginning 4253' from DER, 62' left of centerline, up to 2692' MSL.
Terrain beginning 4889' from DER, 730' right of centerline, up to 2718' MSL.
Terrain beginning 4974' from DER, 494' right of centerline, up to 2719' MSL.
Terrain beginning 5114' from DER, 611' right of centerline, up to 2720' MSL.
Terrain beginning 5325' from DER, 430' right of centerline, up to 2724' MSL.
Terrain beginning 5533' from DER, 360' right of centerline, up to 2727' MSL.
Terrain beginning 5720' from DER, 320' right of centerline, up to 2730' MSL.
Terrain beginning 5794' from DER, 372' right of centerline, up to 2732' MSL.
Terrain beginning 5867' from DER, 440' right of centerline, up to 2733' MSL.
Terrain 1 NM from DER, 903' left of centerline, 2709' MSL.
Terrain beginning 1 NM from DER, 714' left of centerline, up to 2714' MSL.
Terrain 1 NM from DER, 604' left of centerline, 2716' MSL.
**Rwy 23,** terrain 364' from DER, 483' left of centerline, 2581' MSL.
Terrain beginning 566' from DER, 548' left of centerline, up to 2595' MSL.
Terrain beginning 711' from DER, 652' left of centerline, up to 2610' MSL.
Buildings, terrain, trees beginning 952' from DER, 646' left of centerline, up to 13' AGL/2649' MSL.
Trees 4309' from DER, 1559' right of centerline, 2675' MSL.
Trees 4455' from DER, 1524' right of centerline, 2687' MSL.
Trees, buildings beginning 4465' from DER, 1595' right of centerline, up to 2703' MSL.

## PUYALLUP, WA

### PIERCE COUNTY-THUN FIELD (PLU)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 08NOV18 (18312) (FAA)

TAKEOFF MINIMUMS:

**Rwy 35,** 300-1 w/min. climb of 270' per NM to 1000 or std. w/min. climb of 470' per NM to 800.

DEPARTURE PROCEDURE:

**Rwy 17,** climbing right turn heading 023° to intercept SEA R-158 to COTNY INT/SEA 18.00 DME and hold. Continue climb in holding pattern (hold south, left turns, 338° inbound) to cross COTNY at or above the MEA for direction of flight. Do not exceed 175 KIAS until established at MEA for route of flight.

**Rwy 35,** climb on heading 346° and SEA R-158 to COTNY INT/SEA 18.00 DME and hold. Continue climb in holding pattern (hold south, left turns, 338° inbound) to cross COTNY at or above the MEA for direction of flight. Do not exceed 175 KIAS until established at MEA for route of flight.

TAKEOFF OBSTACLE NOTES:

**Rwy 17,** building, tree beginning 187' from DER, 416' left of centerline, up to 40' AGL/575' MSL.
Pole 510' from DER, 566' right of centerline, 40' AGL/552' MSL.
Traverse way 1149' from DER, 511' right of centerline, 574' MSL.
Traverse way, terrain beginning 1290' from DER, 351' right of centerline, up to 582' MSL.
Terrain, general utility beginning 1293' from DER, 302' left of centerline, up to 581' MSL.
Tree 3360' from DER, 539' right of centerline, 647' MSL.
Tree 4174' from DER, 656' left of centerline, 660' MSL.
Terrain+veg, tree beginning 4450' from DER, 158' left of centerline, up to 100' AGL/665' MSL.
Terrain+veg beginning 5360' from DER, 1870' left of centerline, up to 100' AGL/701' MSL.
**Rwy 35,** tree, terrain+veg beginning 58' from DER, 112' right of centerline, up to 609' MSL.
Terrain+veg 83' from DER, 510' left of centerline, 100' AGL/599' MSL.
Terrain+veg, tree beginning 85' from DER, 95' left of centerline, up to 100' AGL/602' MSL.
Terrain+veg, tree, building beginning 389' from DER, 98' left of centerline, up to 100' AGL/606' MSL.
Terrain+veg 394' from DER, 109' right of centerline, 100' AGL/612' MSL.
Terrain+veg beginning 396' from DER, 105' right of centerline, up to 100' AGL/616' MSL.
Terrain+veg 695' from DER, 101' left of centerline, 100' AGL/609' MSL.
Terrain+veg, tree beginning 700' from DER, 102' right of centerline, up to 100' AGL/619' MSL.
Tree, terrain+veg, pole beginning 778' from DER, 104' left of centerline, up to 636' MSL.
Tree, terrain+veg beginning 1130' from DER, 93' right of centerline, up to 631' MSL.
Terrain+veg beginning 1922' from DER, 86' right of centerline, up to 100' AGL/632' MSL.
Terrain+veg 2532' from DER, 1123' right of centerline, 100' AGL/635' MSL.
Tree, terrain+veg beginning 2651' from DER, 290' right of centerline, up to 694' MSL.
Tree 2798' from DER, 22' left of centerline, 654' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 1 15OCT15 (15288) (FAA)

**Rwy 17,** heading as assigned by ATC; requires minimum climb of 230' per NM to 2100.
**Rwy 35,** heading as assigned by ATC; requires minimum climb of 470' per NM to 800.

## RAWLINS, WY

### RAWLINS MUNI/HARVEY FIELD (RWL)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 6 15AUG19 (19227) (FAA)

TAKEOFF MINIMUMS:

**Rwys 11, 29,** NA – environmental.
**Rwy 4**, 500-3 or std. w/min. climb of 270' per NM to 7500.
**Rwy 22**, 600-3 w/min. climb of 255' per NM to 7900, or std. w/min. climb of 350' per NM to 7500, or 1500-3 for VCOA.

DEPARTURE PROCEDURE:

**Rwy 4,** climbing right turn to 10000 on heading 170° to intercept CKW VOR/DME R-080 to CKW VOR/DME, then proceed on course.

**Rwy 22,** climb to 10000 on heading 224° to intercept CKW VOR/DME R-085 to CKW VOR/DME, then proceed on course.

VCOA:

**Rwy 22,** obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Rawlings Muni/Harvey field at or above 8200 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 4,** terrain, NAVAID beginning 12' from DER, 123' left of centerline, 6826' MSL.
Terrain 29' from DER, 360' left of centerline, 6835' MSL.
Terrain, tree beginning 88' from DER, 149' right of centerline, up to 6828' MSL.
Terrain 170' from DER, 389' left of centerline, 6836' MSL.
Road, terrain beginning 193' from DER, 419' right of centerline, up to 6844' MSL.
Utility, vertical point beginning 204' from DER, 426' left of centerline, up to 4' AGL/6842' MSL.
Road, terrain beginning 239' from DER, 362' right of centerline, up to 6846' MSL.
Road, terrain beginning 347' from DER, 478' left of centerline, up to 6859' MSL.
Road 628' from DER, 580' left of centerline, 6868' MSL.
Road 705' from DER, 581' right of centerline, 6852' MSL.
Road, fence, terrain beginning 814' from DER, 55' right of centerline, up to 6856' MSL
Road, terrain, fence beginning 873' from DER, 418' left of centerline, up to 6877' MSL.
Road 1007' from DER, 581' left of centerline, 6881' MSL.
Road, terrain beginning 1109' from DER, 559' left of centerline, up to 6884' MSL.
Road, terrain, fence beginning 1217' from DER, 313' left of centerline, up to 6886' MSL.

**CON'T**



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

## RAWLINS, WY (CON'T)

### RAWLINS MUNI/HARVEY FIELD (RWL) (CON'T)

**Rwy 4 (CON'T),** fence, terrain beginning 1941' from DER, 797' left of centerline, up to 10' AGL/6890' MSL.
Terrain beginning 3568' from DER, 1223' left of centerline, up to 6911' MSL.
Roads beginning 3761' from DER, 358' left of centerline, 6928' MSL.
Road, terrain, vegetation beginning 3885' from DER, 789' left of centerline, up to 6931' MSL.
**Rwy 22,** road at DER, 184' left of centerline, 6758' MSL.
Roads beginning 24' from DER, 4' right of centerline, 6759' MSL.
Road, building beginning 39' from DER, 235' right of centerline, up to 6760' MSL.
Pole, building beginning 206 ' from DER, 317' right of centerline, up to 24' AGL/6769' MSL.
Transmission line, pole, tank beginning 340' from DER, 324' right of centerline, up to 32' AGL/6774' MSL.
Road, vegetation beginning 1.8 NM from DER, 3474' left of centerline, 7060' MSL.
Vegetation, roads beginning 1.9 NM from DER, 3380' left of centerline, up to 60' AGL/7118' MSL.
Vegetation, transmission line beginning 2 NM from DER, 2979' left of centerline, up to 60' AGL/7266' MSL.
Tower, vegetation, transmission line, pole, antenna, road beginning 2.1 NM from DER, 2203' left of centerline, up to 110' AGL/7322' MSL.

## REDMOND, OR

### ROBERTS FIELD (RDM)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 6 20AUG15 (15232) (FAA)

TAKEOFF MINIMUMS:
**Rwy 5,** std. w/min. climb of 260' per NM to 5000.
**Rwy 23,** std. w/min. climb of 235' per NM to 4500.
**Rwy 29,** std. w/min. climb of 240' per NM to 4500.

DEPARTURE PROCEDURE:
**Rwy 5,** Climbing left turn on heading 269° and DSD R-047 to DSD VORTAC, thence…
**Rwy 11,** Climbing right turn on heading 244° and DSD R-090 to DSD VORTAC, thence…
**Rwy 23,** Climb heading 226° and DSD R-090 to DSD VORTAC, thence…
**Rwy 29,** Climbing left turn on heading 279° and DSD R-045 to DSD VORTAC, thence…
...climb in DSD VORTAC holding pattern (hold North, right turn,168° inbound) to cross DSD VORTAC at or above MEA/MCA for route of flight before proceeding on course.

TAKEOFF OBSTACLE NOTES:
**Rwy 29,** trees beginning 12' from DER, 421' right of centerline, up to 12' AGL/3079' MSL.
Tree 364' from DER, 449' left of centerline, 15' AGL/3054' MSL.

## RENTON, WA

### RENTON MUNI (RNT)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 8A 13SEP18 (18256) (FAA)

TAKEOFF MINIMUMS:
**Rwy 16,** std. w/min. climb of 405' per NM to 2000.
**Rwy 34,** std. w/min. climb of 330' per NM to 2700.

DEPARTURE PROCEDURE:
**Rwy 16,** climb heading 157° to 3000 then climbing right turn to intercept SEA R-180 to SEA VORTAC, thence . . .
**Rwy 34,** climb heading 337° to 3000 then climbing left turn to intercept SEA R-340 to SEA VORTAC, thence . . .
. . . continue climb in SEA holding pattern (hold east, left turns, 290° inbound) to cross SEA VORTAC at or above MEA/MCA for route of flight.

TAKEOFF OBSTACLE NOTES:
**Rwy 16,** building, vehicles on roads, walls, general utility, poles beginning 8' from DER, 3' left of centerline, up to 26' AGL/59' MSL.
Sign, vehicles on roads, wall beginning 40' from DER, 116' right of centerline, up to 19' AGL/49' MSL.
Poles, vehicles on roads, trees, sign, buildings beginning 181' from DER, 3' right of centerline, up to 40' AGL/73' MSL.
Poles, vehicles on road, buildings, vegetation, trees beginning 287' from DER, 10' left of centerline, up to 39' AGL/71' MSL.
Trees, poles beginning 585' from DER, 39' right of centerline, up to 101' MSL.
Trees, building beginning 716' from DER, 5' right of centerline, up to 106' MSL.
Trees 941' from DER, 383' right of centerline, 120' MSL.
Trees beginning 998' from DER, 9' right of centerline, up to 146' MSL.
Trees beginning 1626' from DER, 3' left of centerline, up to 82' MSL.
Trees beginning 1638' from DER, 70' left of centerline, up to 119' MSL.
Trees, building beginning 1720' from DER, 9' left of centerline, up to 120' MSL.
Transmission line 1.4 NM from DER, 2562' left of centerline, 121' AGL/453' MSL.
Trees 1.9 NM from DER, 3214' left of centerline, 572' MSL.
**Rwy 34,** vehicles on road 2' from DER, 194' right of centerline, 9' AGL/28' MSL.
Vehicles on road 2' from DER, 242' right of centerline, 10' AGL/29' MSL.
Lighting 6' from DER, 80' left of centerline, 2' AGL/25' MSL.
Fence 17' from DER, 329' left of centerline, 8' AGL/29' MSL.

## REXBURG, ID

REXBURG-MADISON COUNTY (RXE)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5 06DEC18 (18340) (FAA)

DEPARTURE PROCEDURE:

**Rwy 17,** climbing right turn on heading 215° and IDA VOR/DME R-015 to RIGBY INT to MEA for route of flight, if not at MEA continue climb in RIGBY INT holding pattern (hold north, right turn, 195° inbound) to cross RIGBY INT at or above MEA before proceeding on course.

**Rwy 35**, climbing left turn on heading 165° and IDA VOR/DME R-015 to RIGBY INT to MEA for route of flight before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 17,** lt support structure 7' from DER, 6' right of centerline, 4860' MSL.
Building, REIL, NAVAID, and vehicle on road beginning 22' from DER, 113' right of centerline, up to 23' AGL/4880' MSL.
Tree and fence beginning 27' from DER, 135' left of centerline, up to 23' AGL/4882' MSL.
Pole, building and trees beginning 104' from DER, 51' left of centerline, up to 4913' MSL.
Pole 237' from DER, 515' right of centerline, 39' AGL/4896' MSL.
Trees beginning 281' from DER, 291' right of centerline, up to 4901' MSL.
Trees, pole and vehicle on road beginning 296' from DER, 311' right of centerline, up to 4906' MSL.
Trees beginning 1732' from DER, 481' right of centerline, up to 4920' MSL.
Trees beginning 1968' from DER, 403' right of centerline, up to 4928' MSL.
**Rwy 35,** tree 18' from DER, 367' right of centerline, 48' AGL/4898' MSL.
Trees and vehicle on road beginning 23' from DER, 41' right of centerline, up to 4937' MSL.
Tree 27' from DER, 125' left of centerline, 4861' MSL.
Tree 57' from DER, 449' left of centerline, 4866' MSL.
Tree 188' from DER, 424' left of centerline, 4872' MSL.
Trees beginning 204' from DER, 470' left of centerline, up to 4898' MSL.
Trees beginning 240' from DER, 28' left of centerline, up to 4924' MSL.

## RICHLAND, WA

RICHLAND (RLD)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 9 13NOV14 (14317) (FAA)

TAKEOFF MINIMUMS:

**Rwys 1, 8,** std. w/ min. climb of 310' per NM to 5000, or 4600-3 for climb in visual conditions.
**Rwy 19,** std. w/ min. climb of 480' per NM to 5000, or 4600-3 for climb in visual conditions.
**Rwy 26,** std. w/ min. climb of 355' per NM to 5000, or 4600-3 for climb in visual conditions.

DEPARTURE PROCEDURE:

**Rwys 1, 8,** climbing left turn heading 220° to intercept PSC VOR/DME R-273 to 6000 to PAPPS INT /PSC 32.51 DME before proceeding on course.

**Rwy 19,** climbing right turn heading 310° to intercept PSC VOR/DME R-273 to 6000 to PAPPS INT/PSC 32.51 DME before proceeding on course.

**Rwy 26,** climbing right turn heading 290° to intercept PSC VOR/DME R-273 to 6000 to PAPPS INT/PSC 32.51 DME before proceeding on course.

VCOA:

**All runways,** obtain ATC approval for climb in visual conditions when requesting IFR clearance. Climb in visual conditions to cross Richland Airport at or above 4800 then on PSC VOR/DME R-273 to PAPPS INT/PSC 32.51 DME before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 1,** tree and terrain beginning 34' from DER, 35' left of centerline, up to 27' AGL/407' MSL.
Terrain 125' from DER, 154' right of centerline, 394' MSL.
Pole and transmission pole beginning 752' from DER, 446' right of centerline, up to 41' AGL/416' MSL.
**Rwy 8,** sign 22' from DER, 122' right of centerline, 3' AGL/391' MSL.
Terrain beginning 91' from DER, left and right of centerline, 394' MSL.
Railroad cars beginning 204' from DER, left and right of centerline, up to 27' AGL/410' MSL.
Multiple trees beginning 1510' from DER, 12' right of centerline, up to 25' AGL/438' MSL.
Multiple trees beginning 2240' from DER, 94' left of centerline, up to 25' AGL/456' MSL.
**Rwy 19,** bush 22' from DER, 493' left of centerline, 11' AGL/401' MSL.
Terrain 64' from DER, 169' right of centerline, 394' MSL.
Bush 204' from DER, 297' left of centerline, 4' AGL/399' MSL.
Multiple trees beginning 323' from DER, 478' right of centerline, up to 25' AGL/424' MSL.
Multiple trees beginning 665' from DER, 399' left of centerline, up to 25' AGL/472' MSL.
**Rwy 26,** terrain and multiple trees beginning 72' from DER, left and right of centerline, up to 17' AGL/407' MSL.
Antenna 304' from DER, 445' right of centerline, 5' AGL/408' MSL.
Pole 392' from DER, 255' right of centerline, 1' AGL/409' MSL.
Fence 450' from DER, left and right of centerline, up to 5' AGL/425' MSL.
Bush, terrain and multiple trees beginning 729' from DER, 231' right of centerline, up to 17' AGL/427' MSL.
Multiple trees beginning 1742' from DER, 869' left of centerline, up to 25' AGL/457' MSL.

## RIVERTON, WY

CENTRAL WYOMING RGNL (RIW)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 10DEC15 (20310) (FAA)

TAKEOFF MINIMUMS:

**Rwy 28,** 200-1¼ or std. w/min. climb of 235' per NM to 5800, or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1800' prior to DER.

DEPARTURE PROCEDURE:

**Rwy 1, 10, 19, 28,** Climbing right turn direct RIW VOR/DME, continue climb in RIW VOR/DME holding pattern (hold se, rt, 293° inbound) to cross RIW VOR/DME at or above MEA for route of flight.

TAKEOFF OBSTACLE NOTES:

**Rwy 1,** lt support structure 10' from DER, 17' left of centerline, 3' AGL/5481' MSL.
Vehicles on road, terrain, and fence beginning 17' from DER, 335' left of centerline, up to 15' AGL/5497' MSL.
**Rwy 10,** vehicles on road beginning 1' from DER, 92' right of centerline, up to 15' AGL/5456' MSL.
Airfield lt 11' from DER, 4' right of centerline, 2' AGL/5444' MSL.
Airfield lt 11' from DER, 6' left of centerline, 2' AGL/5444' MSL.
Vehicles on road beginning 90' from DER, 21' right of centerline, up to 15' AGL/5455' MSL.
**Rwy 19,** lt support structure 10' from DER, 17' right of centerline, 2' AGL/5465' MSL.
Vehicles on road and fence beginning 13' from DER, 255' right of centerline, up to 15' AGL/5473' MSL.
T-l tower 936' from DER, 682' right of centerline, 31' AGL/5490' MSL.
**Rwy 28,** vehicles on road and terrain beginning 18' from DER, 305' left of centerline, up to 15' AGL/5552' MSL.
Vehicles on road beginning 32' from DER, 281' right of centerline, up to 15' AGL/5538' MSL.
Building 956' from DER, 287' right of centerline, 4' AGL/5545' MSL.
NAVAID 1002' from DER, 2' left of centerline, 7' AGL/5546' MSL.
Vehicle on road 1074' from DER, 5' right of centerline, up to 15' AGL/5555' MSL.
Vehicles on road and terrain beginning 1300' from DER, 111' right of centerline, up to 15' AGL/5580' MSL.
Terrain beginning 1796' from DER, crossing centerline, up to 5571' MSL.
Vehicles on road and fence beginning 2497' from DER, crossing centerline, up to 15' AGL/5594' MSL.
Vehicles on road beginning 2067' from DER, 754' left of centerline, up to 15' AGL/5597' MSL.
Poles beginning 1987' from DER, 365' left of centerline, up to 28' AGL/5611' MSL.
T-l towers and catenaries beginning 3401' from DER, crossing centerline, up to 72' AGL/5656' MSL.
Antenna and pole beginning 5656' from DER, 1594' right of centerline, up to 50' AGL/5682' MSL.
Tower 5972' from DER, 1848' left of centerline, 64' AGL/5679' MSL.

## ROCK SPRINGS, WY

SOUTHWEST WYOMING RGNL (RKS)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 6A 08NOV18 (18312) (FAA)

DEPARTURE PROCEDURE:

**Rwy 3,** climb heading 032° to 8000 then climbing left turn direct OCS VOR/DME, continue climb in OCS VOR/DME holding pattern (hold east, right turn, 260° inbound) to cross OCS VOR/DME at or above MEA for route of flight.
**Rwy 9,** climb heading 090° to 8200 then climbing left turn direct OCS VOR/DME, continue climb in OCS VOR/DME holding pattern (hold east, right turn, 260° inbound) to cross OCS VOR/DME at or above MEA for route of flight.
**Rwy 21,** climb heading 212° to 8400 then climbing right turn direct OCS VOR/DME, continue climb in OCS VOR/DME holding pattern (hold east, right turn, 260° inbound) to cross OCS VOR/DME at or above MEA for route of flight.
**Rwy 27,** climb heading 270° to 7900 then climbing right turn on OCS R-291 to OCS VOR/DME, continue climb in OCS VOR/DME holding pattern (hold east, right turn, 260° inbound) to cross OCS VOR/DME at or above MEA for route of flight.

TAKEOFF OBSTACLE NOTES:

**Rwy 3,** vehicles on road beginning 22' from DER, 120 left of centerline, up to 20' AGL/6760' MSL.
Bushes beginning 178' from DER, 517' right of centerline, up to 15' AGL/6755' MSL.
**Rwy 21,** bush 53' from DER, 221' left of centerline, 15' AGL/6737' MSL.

## RONAN, MT

RONAN (7S0)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 22OCT09 (09295) (FAA)

TAKEOFF MINIMUMS:

**Rwy 16,** std. w/ min. climb of 260' per NM to 9900 or 6100-3 for climb in visual conditions.
**Rwy 34,** std. w/ min. climb of 250' per NM to 9900 or 6100-3 in visual conditions.

DEPARTURE PROCEDURE:

**Rwy 16,** climb to 8800 on a heading between 177° CW to 336° from DER or for climb in visual conditions, cross Ronan airport at or above 9000 before proceeding on course.
**Rwy 34,** climb to 8800 on a heading between 336° CCW to 177° from DER or for climb in visual conditions, cross Ronan airport at or above 9000 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 16,** tree 485' from DER, 386' left of centerline 50' AGL/3149' MSL.
**Rwy 34,** building 158' from DER, 370' left of centerline 40' AGL/3130' MSL.
Tree 1358' from DER, 556' left of centerline 50' AGL/3149' MSL.

## ROSEBURG, OR
ROSEBURG RGNL (RBG)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 7 20SEP12 (12264) (FAA)

TAKEOFF MINIMUMS:
**Rwys 16, 34,** NA at night-Unlit obstacles.
**Rwy 16**, 800-2 w/ min. climb of 500' per NM to 4500, or 2700-3 for climb in visual conditions.
**Rwy 34**, 900-2½ w/ min. climb of 500' per NM to 4500, or 2700-3 for climb in visual conditions.

DEPARTURE PROCEDURE:
**Rwy 16,** climb direct RBG VOR/DME, continue climb in RBG VOR/DME holding pattern (Hold N, right turns, 163° inbound) to cross RBG VOR/DME at or above MEA/MCA for route of flight, thence ...
**Rwy 34,** climb heading 342° to 2900 before proceeding on course, thence …
...or for climb in visual conditions cross Roseburg RGNL Airport southbound at or above 3100 then direct RBG VOR/DME, continue climb in RBG VOR/DME holding pattern (Hold N, right turns, 163° inbound) to cross RBG VOR/DME at or above MEA/MCA for route of flight. When executing VCOA, notify ATC prior to departure.

TAKEOFF OBSTACLE NOTES:
**Rwy 16,** pole, 54' from DER, 290' left of centerline, 13' AGL/525' MSL.
Vehicle on road, 269' from DER, 259' right of centerline, 15' AGL/528' MSL.
Trees, beginning 296' from DER, 437' left of centerline, up to 100' AGL/611' MSL.
Area of trees and towers, 1.27 NM from DER beginning 466' right of centerline, up to 123' AGL/1268' MSL.
**Rwy 34,** pole, 238' from DER, 361' left of centerline, 28' AGL/557' MSL.
Trees, beginning 245' from DER, left and right of centerline, up to 100' AGL/1339' MSL.
Sign, 390' from DER, 557' left of centerline, 60' AGL/565' MSL.
Sign, 620' from DER, 557' left of centerline, 60' AGL/565' MSL.
Terrain, 663' from DER, 290' right of centerline, 608' MSL.

## ROUNDUP, MT
ROUNDUP (RPX)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 20SEP12 (12264) (FAA)

DEPARTURE PROCEDURE:
**Rwy 25,** climb heading 247° to 4500 before turning right.

TAKEOFF OBSTACLE NOTES:
**Rwy 7,** trees and terrain beginning 13' from DER, 360' right of centerline, up to 45' AGL/3445' MSL.
Trees beginning 502' from DER, 590' right of centerline, up to 45' AGL/3446' MSL.
Poles 85' from DER, 458' right of centerline, up to 16' AGL/3439' MSL.
**Rwy 25,** trees and terrain beginning 12' from DER, 8' left of centerline, up to 45' AGL/3523' MSL.
Poles 313' from DER, 192' right of centerline, up to 16' AGL/3500' MSL.
Trees beginning 343' from DER, 204' right of centerline, up to 45' AGL/3502' MSL.
Vehicles on roadway 535' from DER, across centerline, up to 15' AGL/3519' MSL.
Trees and terrain beginning 676' from DER, 2' left of centerline, up to 45' AGL/3528' MSL.
Trees and terrain beginning 729' from DER, 1' right of centerline, up to 45' AGL/3519' MSL.

## SALEM, OR
MCNARY FIELD (SLE)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 9 27APR17 (17117) (FAA)

TAKEOFF MINIMUMS:
**Rwy 13,** std. w/min. climb of 260' per NM to 1100 or 1500-2½ for VCOA.
**Rwy 16,** std. w/min. climb of 570' per NM to 1100 or 400-2½ w/min. climb of 260' per NM to 1100 or 1500-2½ for VCOA.

DEPARTURE PROCEDURE:
**Rwy 13,** climb direct TURNO NDB (ADF required). Westbound aircraft proceed on course. Eastbound aircraft continue climb in holding (hold se, left turns, 313° inbound) to cross TURNO NDB/INT at or above 2500' before proceeding on course. When executing VCOA, notify ATC prior to departure.
**Rwy 16,** climbing left turn direct TURNO NDB (ADF required). Westbound aircraft proceed on course. Eastbound aircraft continue climb in holding (hold se, left turns, 313° inbound) to cross TURNO NDB/INT at or above 2500' before proceeding on course. When executing VCOA, notify ATC prior to departure.
**Rwy 31, 34,** climbing right turn direct TURNO NDB (ADF required). Westbound aircraft proceed on course. Eastbound aircraft continue climb in holding (hold se, left turns, 313° inbound) to cross TURNO NDB/INT at or above 2500' before proceeding on course.

VCOA:
**Rwy 13, 16,** obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions, cross McNary field airport at or above 1600 before proceeding on course.

TAKEOFF OBSTACLE NOTES:
**Rwy 13**, tree 1515' from DER, 737' left of centerline, 262' MSL.
Tree 3712' from DER, 952' right of centerline, 315' MSL.
Trees beginning 3831' from DER, 1104' right of centerline, up to 339' MSL.
Tree 4163' from DER, 590' left of centerline, 320' MSL.
Tree 5077' from DER, 1442' right of centerline, 372' MSL.
Tree 1.9 NM from DER, 3300' right of centerline, 514' MSL.
**Rwy 16**, tree, poles and tower beginning 554' from DER, 66' right of centerline, up to 279' MSL.
Tree 1202' from DER, 302' left of centerline, 252' MSL.
Building 1202' from DER, 66' left of centerline, 39' AGL/255' MSL.

**CON'T**

## SALEM, OR (CON'T)

MCNARY FIELD (SLE) (CON'T)

**Rwy 16 (CON'T),** tree 1819' from DER, 780' left of centerline, 305' MSL.
Tree 1950' from DER, 358' right of centerline, 285' MSL.
Trees beginning 3042' from DER, 216' right of centerline, up to 426' MSL.
Trees beginning 4527' from DER, 273' left of centerline, up to 424' MSL.
Trees beginning 5227' from DER, 369' right of centerline, up to 480' MSL.
Tree, t-l tower, and pole beginning 1.0 NM from DER, 219' left of centerline, up to 495' MSL.
Trees beginning 1.2 NM from DER, 541' left of centerline, up to 534' MSL.
Tree 1.3 NM from DER, 200' right of centerline, 569' MSL.
Tree 1.9 NM from DER, 2677' right of centerline, 562' MSL.
**Rwy 31**, trees beginning 1220' from DER, 480' left of centerline, up to 247' MSL.
Tree 1709' from DER, 749' left of centerline, 251' MSL.
Tree 2045' from DER, 802' left of centerline, 268' MSL.
Tree 2988' from DER, 277' right of centerline, 270' MSL.
**Rwy 34**, vehicle on road 469' from DER, 252' right of centerline, 208' MSL.
Trees beginning 1691' from DER, 229' right of centerline, up to 265' MSL.
Trees beginning 3112' from DER, 340' right of centerline, up to 282' MSL.
Tree 3238' from DER, 330' left of centerline, 288' MSL.

## SALMON, ID

LEMHI COUNTY (SMN)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 31MAR16 (16091) (FAA)

TAKEOFF MINIMUMS:
**Rwy 17,** NA - Obstacles.
**Rwy 35,** std. w/min. climb of 500' per NM to 10700, or 5900-3 for climb in visual conditions.

DEPARTURE PROCEDURE:
**Rwy 35,** climb on heading 355° to 9000, then climbing left turn to 12000 direct LKT VOR/DME before proceeding on course.

VCOA:
**Rwy 35,** obtain ATC approval for climb in visual conditions when requesting IFR clearance. Climb in visual conditions to cross Lemhi County airport southwest bound at or above 9800, then continue climb on LKT R-042 to cross LKT VOR/DME at or above MEA for route of flight.

TAKEOFF OBSTACLE NOTES:
**Rwy 35,** tree 104' from DER, 222' left of centerline, 13' AGL/4046' MSL.
Power line 230' from DER, 498' left of centerline, 30' AGL/4060' MSL.
Power line, fence, buildings, vehicles beginning 466' from DER, 394' right of centerline, up to 30' AGL/4104' MSL.
Power line 814' from DER, 562' right of centerline, 30' AGL/4107' MSL.
Rising terrain beginning 4198' from DER, 1373' right of centerline, up to 4187' MSL.
Rising terrain beginning 4859' from DER, 1717' right of centerline, up to 4220' MSL.
Rising terrain beginning 5189' from DER, 1889' right of centerline, up to 4262' MSL.

## SANDPOINT, ID

SANDPOINT (SZT)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 21JUL16 (16203) (FAA)

TAKEOFF MINIMUMS:
**Rwy 2,** std. w/min. climb of 520' per NM to 5800, or 3000-3 for climb in visual conditions.
**Rwy 20,** std. w/min. climb of 480' per NM to 4800, or 3000-3 for climb in visual conditions.

DEPARTURE PROCEDURE:
**Rwy 2,** climbing right turn heading 204° and on COE R-360 to cross COE VOR/DME at or above 9000.
**Rwy 20,** climbing left turn heading 184° and on COE R-360 to cross COE VOR/DME at or above 9000.

VCOA:
**Rwys 2, 20,** obtain ATC approval for climb in visual conditions when requesting IFR clearance. Climb in visual conditions to cross Sandpoint airport at or above 5000, then on heading 184° and COE R-360 to cross COE VOR/DME at or above 9000.

TAKEOFF OBSTACLE NOTES:
**Rwy 2,** building 11' from DER, 448' right of centerline, 37' AGL/2166' MSL.
Vehicles on road beginning 35' from DER, 328' right of centerline, up to 15' AGL/2135' MSL.
Trees beginning 59' from DER, 241' right of centerline, up to 82' AGL/2206' MSL.
Tree beginning 150' from DER, 235' right of centerline, up to 108' AGL/2223' MSL.
Trees beginning 540' from DER, left and right of centerline, up to 114' AGL/2243' MSL.
Trees beginning 3334' from DER, left and right of centerline, up to 142' AGL/2270' MSL.
Building 3655' from DER, 686' left of centerline, 36' AGL/2159' MSL.
**Rwy 20,** trees beginning 621' from DER, 174' left of centerline, up to 100' AGL/2259' MSL.
Trees beginning 5971' from DER, 2047' right of centerline, up to 100' AGL/2319' MSL.

## SARATOGA, WY

SHIVELY FIELD (SAA)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 03JAN19 (19003) (FAA)

TAKEOFF MINIMUMS:

**Rwy 23,** 400-1 or std. w/min. climb of 220 feet per NM to 7400.

DEPARTURE PROCEDURE:

**Rwy 5,** turn left heading 280°, thence...

**Rwy 23,** turn right heading 340°, thence...

...all aircraft climb to 9000 on a 310° bearing from SAA NDB then continue climb on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 23,** trees 1700' from DER, left and right of centerline 7174' MSL.

## SCAPPOOSE, OR

SCAPPOOSE INDUSTRIAL AIRPARK (SPB)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1A 10NOV16 (16315) (FAA)

DEPARTURE PROCEDURE:

**Rwy 15**, climbing left turn direct BTG VORTAC.

**Rwy 33,** climbing right turn direct BTG VORTAC. Aircraft departing BTG R-160 CW R-329 climbing left turn on course. All others climb in BTG VORTAC holding pattern (NW, right turns, 149° inbound) to cross BTG VORTAC at or above MEA/MCA for direction of flight.

TAKEOFF OBSTACLE NOTES:

**Rwy 15,** tree 469' from DER, 499' right of centerline, 131' MSL.
Tree 619' from DER, 441' right of centerline, 94' MSL.
**Rwy 33,** tree 55' from DER, 428' left of centerline 171' MSL.
Trees beginning 210' from DER, 404' left of centerline, up to 100' MSL.
Vehicle on road 346' from DER, 291' left of centerline, 75' MSL.
Tree 480' from DER, 285' left of centerline, 97' MSL.
Tree 559' from DER, 579' right of centerline, 133' MSL.
Tree 1021' from DER, 663' left of centerline, 124' MSL.
Trees beginning 1662' from DER, 335' right of centerline, up to 175' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

ORIG 28MAY15 (15148) (FAA)

**Rwys 15, 33,** heading as assigned by ATC; requires minimum climb of 280' per NM to 4200.

## SCOBEY, MT

SCOBEY (9S2)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 06MAR14 (14065) (FAA)

TAKEOFF MINIMUMS:

**Rwy 12,** 300-1½ or std. w/ min. climb of 253' per NM to 2700, or alternatively, 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 12,** climb heading 122° to 3200 before turning left.

TAKEOFF OBSTACLE NOTES:

**Rwy 12,** pole 11' from DER, 338' left of centerline, 14' AGL/2448' MSL.
Light 12' from DER, 26' right of centerline, 2' AGL/2436' MSL.
Tree 79' from DER, 444' left of centerline, 23' AGL/2453' MSL.
Terrain beginning 81' from DER, 338' right of centerline, 2438' MSL.
Vehicles on road beginning 178' from DER, 116' left of centerline, up to 15' AGL/2452' MSL.
Vehicles on road beginning 318' from DER, 15' right of centerline, up to 15' AGL/2452' MSL.
Building, grain silo and water tower beginning 4734' from DER, 135' right of centerline, up to 127' AGL/2626' MSL.
**Rwy 30,** light 9' from DER, 27' left of centerline, 2' AGL/2392' MSL.
Light 9' from DER, 27' right of centerline, 2' AGL/2392' MSL.
Multiple trees beginning 219' from DER, 166' left of centerline, up to 16' AGL/2406' MSL.

## SEATTLE, WA

BOEING FIELD/KING COUNTY INTL (BFI)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 8 14SEP17 (17257)

TAKEOFF MINIMUMS:

**Rwy 14L,** 500-2¾ w/min. climb of 270' per NM to 700 or std. w/min. climb of 708' per NM to 500 or 1000-2½ for VCOA.
**Rwy 14R,** 500-2 w/min. climb of 315' per NM to 700 or std. w/min. climb of 500' per NM to 600 or 1000-2½ for VCOA.
**Rwy 32L,** 400-1⅞ w/min. climb of 235' per NM to 800 or std. w/min. climb of 425' per NM to 500 or 1000-2½ for VCOA.
**Rwy 32R,** 400-2 w/min. climb of 230' per NM to 800 or std. w/min. climb of 345' per NM to 500 or 1000-2½ for VCOA.

DEPARTURE PROCEDURE:

**Rwy 14L,** climbing right turn thence...
**Rwy 14R,** climbing right turn thence...
**Rwy 32L,** climbing left turn thence...
**Rwy 32R,** climbing left turn thence...
...all aircraft climb direct to SEA VORTAC, continue climb in SEA VORTAC holding pattern (hold east, left turns, 290° inbound) to cross SEA VORTAC at or above 3000 before proceeding on course.

VCOA:

**All Runways,** obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Boeing Field/King County Intl airport at or above 900, then climb to 3000 via SEA R-344 to SEA VORTAC, continue climb in SEA VORTAC holding pattern (hold E, left turns, 290° inbound) to cross SEA VORTAC at or above 3000 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 14L,** sign 76' from DER, 135' left of centerline, 3' AGL/20' MSL.
Building 403' from DER, 411' left of centerline, 14' AGL/32' MSL.
Building 403' from DER, 491' left of centerline, 35' MSL.
Building 622' from DER, 526' left of centerline, 34' AGL/51' MSL.
Buildings beginning 647' from DER, 473' left of centerline, up to 54' MSL.
Tree 1052' from DER, 688' left of centerline, 56' MSL.
Transmission towers and buildings beginning 1147' from DER, 426' left of centerline, up to 63' MSL.
Tower and transmission tower beginning 1545' from DER, 658' left of centerline, up to 50' AGL/72' MSL.
Poles, tower and trees beginning 1784' from DER, 714' left of centerline, up to 103' MSL.
Tree 2591' from DER, 1156' left of centerline, 141' MSL.
Tree 2701' from DER, 1134' left of centerline, 143' MSL.
Tree 2730' from DER, 1030' left of centerline, 157' MSL.
Trees beginning 2820' from DER, 646' left of centerline, up to 192' MSL.
Tree 2931' from DER, 1162' left of centerline, 201' MSL.
Trees beginning 2967' from DER, 619' left of centerline, up to 226' MSL.
Trees beginning 3060' from DER, 914' left of centerline, up to 235' MSL.
Trees beginning 3100' from DER, 553' left of centerline, up to 266' MSL.
Trees beginning 3259' from DER, 906' left of centerline, up to 277' MSL.
Trees beginning 3332' from DER, 732' left of centerline, up to 302' MSL.
Trees, transmission towers and buildings beginning 3675' from DER, 384' left of centerline, up to 116' AGL/342' MSL.
Trees, transmission towers and buildings beginning 4032' from DER, 296' left of centerline, up to 103' AGL/356' MSL.
Trees, buildings, transmission towers, ground and roads beginning 4538' from DER, 380' left of centerline, up to 110' AGL/365' MSL.
Transmission tower and trees beginning 1.6 NM from DER, 1787' left of centerline, up to 135' AGL/382' MSL.
Trees, towers, electric transmission lines and buildings beginning 1.7 NM from DER, 936' left of centerline, up to 438' MSL.
Trees, transmission towers, buildings, electric transmission line, roads and ground beginning 1.9 NM from DER, 888' left of centerline, up to 478' MSL.
Trees, buildings, towers, fences, roads, ground, parking lots, electric transmission lines and poles beginning 2 NM from DER, 638' left of centerline, up to 531' MSL.
**Rwy 14R,** railroad 50' from DER, 453' left of centerline, 46' MSL.
Railroad, tree and road beginning 128' from DER, 277' left of centerline, up to 47' MSL.
Lt pole 202' from DER, 539' right of centerline, 64' MSL.
Signs, railroads, roads and trees beginning 263' from DER, 280' left of centerline, up to 98' MSL.
Poles, OL DME, NAVAID and trees beginning 411' from DER, 283' right of centerline, up to 66' MSL.
Trees, railroads and road beginning 793' from DER, 240' left of centerline, up to 61' AGL/116' MSL.
Trees, roads, railroads, poles, sign, electric system, towers and electric transmission lines beginning 891' from DER, 142' left of centerline, up to 113' AGL/129' MSL.
Trees, building and poles beginning 1123' from DER, 2' right of centerline, up to 87' MSL.
Transmission towers beginning 2880' from DER, 90' right of centerline, up to 74' AGL/94' MSL.
Transmission tower 3138' from DER, 1305' right of centerline, 100' MSL.
Trees beginning 3181' from DER, 344' right of centerline, up to 91' AGL/106' MSL.
Pole 3278' from DER, 1292' right of centerline, 111' MSL.
Electric transmission line 3363' from DER, 1389' right of centerline, 121' MSL.
Electric transmission lines and trees beginning 3373' from DER, 597' right of centerline, up to 124' MSL.
Electric transmission line and trees beginning 3511' from DER, 278' right of centerline, up to 125' MSL.
Trees beginning 3574' from DER, 710' right of centerline, up to 132' MSL.
Tree 3658' from DER, 486' right of centerline, 139' MSL.
Trees beginning 3680' from DER, 724' right of centerline, up to 146' MSL.
Trees and transmission tower beginning 3710' from DER, 270' right of centerline, up to 155' MSL.
Trees and poles beginning 3894' from DER, 773' right of centerline, up to 183' MSL.
Trees, electric transmission lines, antenna and towers beginning 4017' from DER, 16' right of centerline, up to 88' AGL/195' MSL.

**CON'T**

## SEATTLE, WA (CON'T)

### BOEING FIELD/KING COUNTY INTL (BFI) (CON'T)

**Rwy 14R (CON'T),** trees beginning 4142' from DER, 11' left of centerline, up to 137' MSL.
Trees beginning 4429' from DER, 4' left of centerline, up to 130' AGL/149' MSL.
Tree 4671' from DER, 31' left of centerline, 130' AGL/153' MSL.
Trees beginning 4694' from DER, 1172' left of centerline, up to 167' MSL.
Trees beginning 4807' from DER, 1051' left of centerline, up to 193' MSL.
Trees beginning 4978' from DER, 828' left of centerline, up to 202' MSL.
Trees beginning 5257' from DER, 825' left of centerline, up to 212' MSL.
Trees beginning 5405' from DER, 773' left of centerline, up to 221' MSL.
Trees beginning 5519' from DER, 684' left of centerline, up to 229' MSL.
Trees and electric transmission line beginning 5636' from DER, 75' left of centerline, up to 234' MSL.
Trees, towers and electric transmission lines beginning 5685' from DER, 168' left of centerline, up to 247' MSL.
Trees beginning 5697' from DER, 477' right of centerline, up to 95' AGL/217' MSL.
Electric transmission lines, trees and towers beginning 5832' from DER, 421' left of centerline, up to 360' MSL.
Trees and transmission tower beginning 1 NM from DER, 719' left of centerline, up to 399' MSL.
Trees, ground, buildings, electric transmission line, transmission towers, roads and fence beginning 1.1 NM from DER, 970' left of centerline, up to 437' MSL.
Trees, transmission towers, roads, buildings, fences, ground, parking lots, electric transmission line, poles and antenna beginning 1.3 NM from DER, 948' left of centerline, up to 116' AGL/506' MSL.
Trees beginning 2 NM from DER, 2647' left of centerline, up to 523' MSL.
Trees beginning 2.1 NM from DER, 2225' left of centerline, up to 543' MSL.
Trees beginning 2.3 NM from DER, 2603' left of centerline, up to 553' MSL.
**Rwy 32L,** fence 249' from DER, 452' left of centerline, 26' MSL.
Building 1022' from DER, 728' left of centerline, 50' MSL.
Light pole 1111' from DER, 683' right of centerline, 50' MSL.
Trees and light pole beginning 1166' from DER, 768' right of centerline, up to 60' MSL.
Poles, buildings and trees beginning 1216' from DER, 571' left of centerline, up to 101' MSL.
Transmission towers beginning 1598' from DER, 790' right of centerline, up to 68' MSL.
Tree 2192' from DER, 403' right of centerline, 54' AGL/81' MSL.
Building and tree beginning 2286' from DER, 385' right of centerline, up to 85' MSL.
Trees beginning 2407' from DER, 261' left of centerline, up to 91' AGL/113' MSL.
Transmission tower and tree beginning 2413' from DER, 350' right of centerline, up to 97' MSL.
Trees and poles beginning 2468' from DER, 440' right of centerline, up to 114' MSL.
Tree 2640' from DER, 1143' right of centerline, 127' MSL.
Trees and poles beginning 2717' from DER, 875' right of centerline, up to 129' MSL.
Trees, towers and light poles beginning 3080' from DER, 431' right of centerline, up to 140' MSL.
Tree 3316' from DER, 1366' right of centerline, 148' MSL.
Trees beginning 3358' from DER, 821' right of centerline, up to 157' MSL.
Trees and poles beginning 3449' from DER, 894' right of centerline, up to 158' MSL.
Trees beginning 3606' from DER, 787' right of centerline, up to 180' MSL.
Buildings, trees, poles and stacks beginning 3711' from DER, 543' right of centerline, up to 196' MSL.
Buildings, trees and light pole beginning 3979' from DER, 883' right of centerline, up to 216' MSL.
Trees, buildings, light poles, transmission towers, antenna, parking lot and ground beginning 4213' from DER, 706' right of centerline, up to 241' MSL.
Trees, buildings, transmission towers and light poles beginning 5403' from DER, 764' right of centerline, up to 248' MSL.
Trees, buildings, transmission towers, light poles and ground beginning 1 NM from DER, 851' right of centerline, up to 260' MSL.
Trees, ground, transmission tower and poles beginning 1.1 NM from DER, 1141' right of centerline, up to 282' MSL.
Trees, light pole, buildings, transmission towers, electric transmission lines and roads beginning 1.2 NM from DER, 1307' right of centerline, up to 345' MSL.
**Rwy 32R,** ground 14' from DER, 29' right of centerline, 18' MSL.
Buildings beginning 160' from DER, 488' right of centerline, up to 37' AGL/56' MSL.
Pole 214' from DER, 126' left of centerline, 12' AGL/28' MSL.
Pole, AWOS, RVR, GS and tower beginning 461' from DER, 68' left of centerline, up to 34' AGL/51' MSL.
Buildings beginning 719' from DER, 459' right of centerline, up to 61' MSL.
Trees, buildings, transmission towers, light pole and railroad beginning 808' from DER, 404' right of centerline, up to 73' MSL.
Buildings and transmission towers beginning 1425' from DER, 513' right of centerline, up to 61' AGL/81' MSL.
Antenna, transmission towers and tree beginning 1831' from DER, 557' right of centerline, up to 108' MSL.
Poles, buildings and tree beginning 2493' from DER, 948' left of centerline, up to 101' MSL.
Light pole 3032' from DER, 1207' right of centerline, 114' MSL.
Trees and light pole beginning 3238' from DER, 1118' right of centerline, up to 155' MSL.
Trees, buildings, transmission towers and light poles beginning 3352' from DER, 585' right of centerline, up to 168' MSL.
Tree 3684' from DER, 947' left of centerline, 91' AGL/113' MSL.
Trees, transmission towers, buildings and poles beginning 4585' from DER, 835' right of centerline, up to 202' MSL.
Trees, light pole, buildings and transmission towers beginning 5166' from DER, 919' right of centerline, up to 229' MSL.
Trees, buildings and transmission towers beginning 5490' from DER, 1039' right of centerline, up to 241 ' MSL.
Trees, buildings, transmission towers and fence beginning 1 NM from DER, 738' right of centerline, up to 263' MSL.
Trees, buildings, transmission towers and ground beginning 1.1 NM from DER, 795' right of centerline, up to 300' MSL.
Trees, buildings and transmission towers beginning 1.2 NM from DER, 1042' right of centerline, up to 320' MSL.
Towers, buildings, trees, electric transmission lines, light pole beginning 1.3 NM from DER, 1027' right of centerline, up to 376' MSL.

## SEATTLE, WA (CON'T)

### SEATTLE-TACOMA INTL (SEA)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4B 13SEP18 (18256) (FAA)

TAKEOFF MINIMUMS:

**Rwy 16L,** 300-1 or std. w/min. climb of 425' per NM to 600.

**Rwy 16R,** 300-1¼ or std. w/min. climb of 215' per NM to 600.

DEPARTURE PROCEDURE:

**Rwys 16L, 16C, 16R,** climb to 1000 on heading 164°, then climbing right turn direct SEA VORTAC, thence . . .

**Rwys 34L, 34C, 34R,** climb to 1000 on heading 344°, then climbing left turn direct SEA VORTAC, thence . . .

. . . climb in SEA VORTAC holding pattern (hold southeast, left turns, 310° inbound) to MEA/MCA for route of flight.

TAKEOFF OBSTACLE NOTES:

**Rwy 16L,** tree 48' from DER, 483' right of centerline, 372' MSL.
Lighting 85' from DER, 287' left of centerline, 3' AGL/349' MSL.
Tree 193' from DER, 510' right of centerline, 378' MSL.
Tree 2567' from DER, 357' right of centerline, 415' MSL.
Trees beginning 2602' from DER, 365' right of centerline, up to 416' MSL.
Tree 2663' from DER, 1144' right of centerline, 449' MSL.
Tree 2779' from DER, 1135' right of centerline, 456' MSL.
Trees beginning 2785' from DER, 1003' right of centerline, up to 472' MSL.
Trees beginning 2806' from DER, 1022' right of centerline, up to 481' MSL.
Trees beginning 2880' from DER, 1038' right of centerline, up to 499' MSL.
**Rwy 16C,** vertical point 132' from DER, 255' left of centerline, 6' AGL/368' MSL.
Tree 4477' from DER, 550' right of centerline, 476' MSL.
Tree 4598' from DER, 415' right of centerline, 478' MSL.
Tree 4657' from DER, 1183' right of centerline, 483' MSL.
Tree 4714' from DER, 1250' right of centerline, 488' MSL.
Tree 4784' from DER, 961' right of centerline, 503' MSL.
Trees beginning 4804' from DER, 1069' right of centerline, up to 506' MSL.
Trees beginning 4838' from DER, 445' right of centerline, up to 509' MSL.
**Rwy 16R,** tree 8' from DER, 497' right of centerline, 369' MSL.
Lighting 10' from DER, 5' left of centerline, 1' AGL/357' MSL.
Sign 62' from DER, 286' left of centerline, 3' AGL/359' MSL.
Building 488' from DER, 604' left of centerline, 24' AGL/384' MSL.
Tree 1137' from DER, 586' right of centerline, 398' MSL.
Tree 1271' from DER, 689' right of centerline, 414' MSL.
Tree 1634' from DER, 932' right of centerline, 427' MSL.
Tree, transmission line beginning 3124' from DER, 718' right of centerline, up to 468' MSL.
Tree 5709' from DER, 738' left of centerline, 503' MSL.
Trees beginning 5729' from DER, 487' left of centerline, up to 506' MSL.
Trees beginning 5763' from DER, 440' left of centerline, up to 509' MSL.
**Rwy 34L,** lighting 10' from DER, 5' right of centerline, 1' AGL/416' MSL.
Tree 4009' from DER, 1367' left of centerline, 521' MSL.
Trees beginning 4129' from DER, 857' left of centerline, up to 528' MSL.
Tree 4315' from DER, 989' left of centerline, 537' MSL.
**Rwy 34C,** lighting 5' from DER, 5' left of centerline, 1' AGL/430' MSL.
Pole 129' from DER, 282' right of centerline, 6' AGL/434' MSL.
**Rwy 34R,** lighting 9' from DER, 4' left of centerline, 1' AGL/434' MSL.
Lighting 53' from DER, 139' right of centerline, 4' AGL/436' MSL.
Sign 92' from DER, 277' right of centerline, 4' AGL/437' MSL.
Tree 2933' from DER, 918' right of centerline, 506' MSL.
Trees beginning 3031' from DER, 781' right of centerline, up to 534' MSL.
Tree 3798' from DER, 1434' right of centerline, 565' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

AMDT 1 13SEP18 (18256) (FAA)

**Rwy 16L,** heading as assigned by ATC; requires min. climb of 425' per NM to 600.

**Rwy 16R,** heading as assigned by ATC; requires min. climb of 215' per NM to 600.

**Rwys 16C, 34L/C/R,** heading as assigned by ATC.

## SHELBY, MT

### SHELBY (SBX)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 15MAR07 (07074) (FAA)

TAKEOFF MINIMUMS:

**Rwy 5,** 200-1¼ or std. w/ min. climb of 212' per NM to 3700, or alternatively, w/ std. takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1300' prior to DER.

TAKEOFF OBSTACLE NOTES:

**Rwy 5,** fence post 320' from DER, 162' right of centerline, 12' AGL/3455' MSL.
Truck on road beginning 515' from DER, 632' right of centerline, 17' AGL/3498' MSL.
Tree 1 NM from DER, 1242' left of centerline, 75' AGL/3604' MSL.
**Rwy 11,** truck on road 906' from DER, 691' left of centerline, 17' AGL/3456' MSL.
Tree 1697' from DER, 26' right of centerline, 75' AGL/3495' MSL.
Tree 1561' from DER, 322' left of centerline, 75' AGL/3514' MSL.
Light standard 852' from DER, 174' left of centerline, 22' AGL/3451' MSL.

## SHELTON, WA
### SANDERSON FIELD (SHN)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4 28SEP06 (06271) (FAA)

TAKEOFF MINIMUMS:
**Rwy 5,** std. w/ a min. climb of 312' per NM to 4000, or 1500-2½ for a climb in visual conditions.
**Rwy 23**, std. w/ a min. climb of 414' per NM to 4000, or 1500-2½ for a climb in visual conditions.

DEPARTURE PROCEDURE:
**Rwy 5,** climbing right turn to intercept SEA R-230 to CARRO intersection. Or for climb in visual conditions: Cross Sanderson Field northeast bound at or above 1600, thence via SEA R-230 to cross CARRO intersection at or above 4000.
**Rwy 23,** climbing left turn to intercept SEA R-230 to CARRO intersection. Or for climb in visual conditions: Cross Sanderson Field northeast bound at or above 1600, thence via SEA R-230 to cross CARRO intersection at or above 4000.

TAKEOFF OBSTACLE NOTES:
**Rwy 5,** multiple trees beginning 550' from DER, 107' left of centerline, up to 94' AGL/366' MSL.
Multiple trees beginning 130' from DER, 70' right of centerline, up to 80' AGL/352' MSL.
**Rwy 23,** multiple trees beginning 52' from DER, 149'left of centerline, up to 72' AGL/330' MSL.
Multiple trees beginning 886' from DER, 153' right of centerline, up to 155' AGL/486' MSL.

## SHERIDAN, WY
### SHERIDAN COUNTY (SHR)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4A 15AUG19 (19227) (FAA)

TAKEOFF MINIMUMS:
**Rwy 6,** std. w/min. climb of 270' per NM to 5000 or 1400-3 for VCOA.
**Rwy 15,** std. w/min. climb of 265' per NM to 5100 or 1400-3 for VCOA.
**Rwy 24,** std. w/min. climb of 370' per NM to 5200 or 1400-3 for VCOA.

DEPARTURE PROCEDURE:
**Rwy 6,** climbing left turn to intercept SHR R-109 to SHR VOR/DME, thence…
**Rwy 15,** climbing left turn heading 330° to intercept SHR R-109 to SHR VOR/DME, thence…
**Rwy 24,** climbing right turn to intercept SHR R-156 to SHR VOR/DME, thence…
**Rwy 33,** climb heading 326° to intercept SHR R-109 to SHR VOR/DME, thence…
…continue climb in SHR VOR/DME holding pattern (hold northwest, left turns, 136° inbound) to cross SHR VOR/DME at or above MEA for direction of flight before proceeding on course.

VCOA:
**Rwys 6, 15, 24,** obtain ATC approval for climb in visual conditions when requesting IFR clearance. Climb in visual conditions to cross Sheridan County airport at or above 5300, then proceed on SHR R-132 to SHR VOR/DME. Continue climb in SHR VOR/DME holding pattern (hold northwest, left turns, 136° inbound) to cross SHR VOR/DME at or above MEA for direction of flight before proceeding on course.

TAKEOFF OBSTACLE NOTES:
**Rwy 6,** elec sys 10' from DER, 17' left of centerline, 6' AGL/3941 MSL.
Sign 38' from DER, 350' right of centerline, 7' AGL/3943' MSL.
Multiple trees and buildings beginning 92' from DER, 213' left of centerline, up to 80' AGL/3993' MSL.
**Rwy 15**, lighting 10' from DER, 5' right of centerline, 1' AGL/3976' MSL.
Lighting 10' from DER, 5' left of centerline, 1' AGL/3976' MSL.
**Rwy 24**, rising terrain beginning 17' from DER up to 4445' MSL.
Trees, towers, road, poles, NAVAID and bushes beginning 41' from DER up to 65' AGL/4286' MSL.
Fence beginning 74' from DER, 497' left and 594' right of centerline, up to 10' AGL/4060' MSL.
Power lines beginning 4393' from DER, 1531' left of centerline, up to 67 ' AGL/4286' MSL.
**Rwy 33**, lighting beginning 10' from DER, 30' left of centerline, up to 3' AGL/4016' MSL.
Electrical system, vertical point beginning 52' from DER, 397' right of centerline, up to 14' AGL/4020' MSL.

## SIDNEY, MT
### SIDNEY-RICHLAND RGNL (SDY)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 6 17AUG17 (17229) (FAA)

TAKEOFF MINIMUMS:
**Rwy 29**, 300-2¼ or std. w/min. climb of 330' per NM to 2300.

DEPARTURE PROCEDURE:
**Rwy 11,** climb heading 108° to 2700 before turning right.
**Rwy 29,** climb heading 288° to 2800 before turning left.

TAKEOFF OBSTACLE NOTES:
**Rwy 1,** Rwy light, NAVAID beginning 9' from DER, 39' right of centerline, up to 1983' MSL.
Tree 86' from DER, 358' left of centerline, 2004' MSL.
Tree 145' from DER, 376' right of centerline, 2039' MSL.
Tree 171' from DER, 538' left of centerline, 2019' MSL.
Trees beginning 188' from DER, 90' right of centerline, up to 2040' MSL.
Tree 193' from DER, 470' left of centerline, 2026' MSL.
Tree, vehicle on road beginning 304' from DER, 99' left of centerline, up to 2037' MSL.
Tree 640' from DER, 585' left of centerline, 2038' MSL.
Tree, ground beginning 763' from DER, 123' left of centerline, up to 2049' MSL.
Trees beginning 1094' from DER, 137' right of centerline, up to 2041' MSL.
Trees beginning 1218' from DER, 269' right of centerline, up to 2044' MSL.
Trees beginning 1313' from DER, 270' right of centerline, up to 2052' MSL.

**CON'T**

## SIDNEY, MT (CON'T)

### SIDNEY-RICHLAND RGNL (SDY) (CON'T)

**Rwy 1 (CON'T),** trees beginning 1341' from DER, 1' right of centerline, up to 2053' MSL.
Trees beginning 1410' from DER, 10' left of centerline, up to 2051' MSL.
Trees beginning 1708' from DER, 11' left of centerline, up to 2080' MSL.
**Rwy 11,** terrain+vegetation, vehicle on road, tree beginning 50' from DER, 38' right of centerline, up to 40' AGL/1996' MSL.
Tree 86' from DER, 310' left of centerline, 1977' MSL.
Terrain+vegetation, vehicle on road beginning 94' from DER, 19' left of centerline, up to 40' AGL/1996' MSL.
Tree terrain+vegetation beginning 809' from DER, 123' right of centerline, up to 2020' MSL.
Trees beginning 2102' from DER, 161' right of centerline, up to 2035' MSL.
**Rwy 19,** NAVAID 18' from DER, 125' right of centerline, 2' AGL/1984' MSL.
Vehicle on road 19' from DER, 336' right of centerline, 1997' MSL.
**Rwy 29,** NAVAID beginning 7' from DER, 41' left of centerline, up to 1983' MSL.
Fence, NAVAID beginning 26' from DER, 124' right of centerline, up to 7' AGL/1984' MSL.
Trees beginning 55' from DER, 195' right of centerline, up to 1997' MSL.
Tree, fence, bush beginning 146' from DER, 178' right of centerline, up to 2012' MSL.
Ground beginning 155' from DER, 400' left of centerline, up to 1989' MSL.
Tree, vehicle on road beginning 193' from DER, 9' right of centerline, up to 2023' MSL.
Trees beginning 400' from DER, 28' left of centerline, up to 1998' MSL.
Tree, vehicle on road beginning 516' from DER, 6' left of centerline, up to 2000' MSL.
Trees beginning 590' from DER, 8' right of centerline, up to 2026' MSL.
Tree 611' from DER, 91' left of centerline, 2001' MSL.
Trees beginning 651' from DER, 36' left of centerline, up to 2006' MSL.
Trees beginning 677' from DER, 2' right of centerline, up to 2039' MSL.
Trees beginning 891' from DER, 60' left of centerline, up to 2007' MSL.
Ground, tree beginning 942' from DER, 0' of centerline, up to 2052' MSL.
Tree 953' from DER, 76' left of centerline, 2008' MSL.
Tree 999' from DER, 120' left of centerline, 2010' MSL.
Trees beginning 1076' from DER, 122' left of centerline, up to 2012' MSL.
Pole, tree beginning 1166' from DER, 12' left of centerline, up to 30' AGL/2021' MSL.
Ground, tree beginning 1184' from DER, 4' right of centerline, up to 2054' MSL.
Ground 1389' from DER, 847' right of centerline, 2067' MSL.
Ground 1396' from DER, 814' left of centerline, 2023' MSL.
**Rwy 29,** Oil pump 1438' from DER, 211' left of centerline, 36' AGL/2027' MSL.
Pole, tree beginning 1517' from DER, 710' right of centerline, up to 34' AGL/2104' MSL.
Ground beginning 1540' from DER, 603' left of centerline, up to 2051' MSL.
Pole, tree beginning 1786' from DER, 720' left of centerline, up to 19' AGL/2104' MSL.
Tree, ground, pole, catenary, fence beginning 1865' from DER, 39' right of centerline, up to 2120' MSL.
Ground beginning 1919' from DER, 858' left of centerline, up to 2107' MSL.
Ground, tree beginning 2536' from DER, 18' left of centerline, up to 2108' MSL.
Transmission tower, ground, tree beginning 3107' from DER, 1037' left of centerline, up to 43' AGL/2132' MSL.
Pole, ground, tree beginning 4435' from DER, 494' right of centerline, up to 30' AGL/2133' MSL.
Catenary, ground beginning 5121' from DER, 1729' right of centerline, up to 33' AGL/2159' MSL.
Pole, ground beginning 5227' from DER, 1469' right of centerline, up to 55' AGL/2180' MSL.
Pole, transmission tower, ground, vehicle on road, fence beginning 5280' from DER, 1205' right of centerline, up to 60' AGL/2186' MSL.
Ground beginning 5280' from DER, 1255' left of centerline, up to 2135' MSL.
Ground beginning 5544' from DER, 1382' left of centerline, up to 2142' MSL.
Ground beginning 1.1 NM from DER, 2019' left of centerline, up to 2158' MSL.
Tree 1.1 NM from DER, 1644' left of centerline, 2163' MSL.
Ground, tree beginning 1.1 NM from DER, 1976' left of centerline, up to 2162' MSL.
Tree 1.2 NM from DER, 1747' left of centerline, 2166' MSL.
Ground 1.2 NM from DER, 2280' left of centerline, 2171' MSL.
Ground 1.3 NM from DER, 2458' left of centerline, 2184' MSL.
Ground beginning 1.3 NM from DER, 2355' left of centerline, up to 2197' MSL.
Ground, fence beginning 1.4 NM from DER, 2126' left of centerline, up to 2204' MSL.
Ground beginning 1.4 NM from DER, 2625' left of centerline, up to 2206' MSL.
Ground 1.5 NM from DER, 2775' left of centerline, 2212' MSL.
Ground 1.5 NM from DER, 2909' left of centerline, 2216' MSL.
Fence 1.8 NM from DER, 3160' left of centerline, 3' AGL/2263' MSL.
Ground 1.8 NM from DER, 3123' left of centerline, 2261' MSL.

## SNOHOMISH, WA

### HARVEY FIELD (S43)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1A 02MAY13 (13122) (FAA)

TAKEOFF MINIMUMS:

**Rwys 15R, 33L**, NA-obstacles.

**Rwy 15L,** std. w/ min. climb of 355' per NM to 1100, or 1200-2½ for climb in visual conditions.

**Rwy 33R,** std. w/ min. climb of 480' per NM to 800, or 1200-2½ for climb in visual conditions.

DEPARTURE PROCEDURE:

**Rwy 15L,** climbing right turn on 344° course to WATON LOM, or for climb in visual conditions, cross Harvey Field at or above 1100 then proceed on 332° course to WATON LOM, thence ...

**Rwy 33R,** climb on 332° course to WATON LOM, or for climb in visual conditions, cross Harvey Field at or above 1100 then proceed on 332° course to WATON LOM, thence ...

... aircraft departing WATON LOM on bearings 150° CW 340° from WATON LOM climb on course. Aircraft departing WATON LOM on bearings 340° CW 150° from WATON LOM, climb in holding pattern (South, left turns, 342° inbound) to cross WATON LOM at or above 4500 before proceeding on course.

TAKEOFF OBSTACLE NOTES:

**Rwy 15L,** fence 37' from DER, left and right of centerline, 10' AGL/32' MSL.
Vehicles on roadway 44' from DER, left and right of centerline, 15' AGL/37' MSL.
Tree 81' from DER, 177' right of centerline, 83' AGL/106' MSL.
Trees 685' from DER, left and right of centerline, up to 48' AGL/70' MSL.
**Rwy 33R,** Power line beginning 32' from DER, left and right of centerline, 22' AGL/38' MSL.
Power line 131' from DER, left and right of centerline, 47' AGL/63' MSL.
Tower 5708' from DER, 1956' right of centerline, 207' AGL/301' MSL.
Tower 1 NM from DER, 2033' right of centerline, 212' AGL/264' MSL.

## SPOKANE, WA

### FELTS FIELD (SFF)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 6 22AUG13 (13234) (FAA)

TAKEOFF MINIMUMS:

**Rwy 4L/R,** std. w/min. climb of 400' per NM to 3700, or 2300-3 for climb in visual conditions.

**Rwy 22L/R,** std. w/min. climb of 370' per NM to 3200, or 2300-3 for climb in visual conditions.

DEPARTURE PROCEDURE:

**Rwy 4L/R,** climb heading 038° to 3600, then climbing right turn on heading 210° and GEG R-050 to GEG VORTAC or for climb in visual conditions: cross Felts Field airport at or above 4100, then on heading 165° and GEG R-050 to GEG VORTAC. Cross GEG VORTAC at or above MCA/MEA for route of flight.

**Rwy 22L/R,** climb heading 218° to 3200, then climbing left turn on heading 190° and GEG R-050 to GEG VORTAC or for climb in visual conditions: cross Felts Field airport at or above 4100, then on heading 165° and GEG R-050 to GEG VORTAC. Cross GEG VORTAC at or above MCA/MEA for route of flight.

TAKEOFF OBSTACLE NOTES:

**Rwy 4L,** trees and buildings beginning 1151' from DER, 757' right of centerline, up to 25' AGL/2037' MSL.
Trees beginning 4873' from DER, 348' left of centerline, up to 25' AGL/2099' MSL.
Trees and buildings beginning 1.1 NM from DER, 67' left of centerline, up to 25' AGL/2274' MSL.
Trees 1.2 NM from DER, 970' left of centerline, up to 25' AGL/2304' MSL.
Buildings beginning 1.5 NM from DER, 1151' left of centerline, up to 2350' MSL.
Trees 1.6 NM from DER, 517' left of centerline, up to 25' AGL/2385' MSL.
Trees 2 NM from DER 590' left of centerline, up to 25' AGL/2513' MSL.
Trees 2.4 NM from DER, 13' right of centerline, up to 25' AGL/2480' MSL.
Transmission pole, trees and building beginning 2.5 NM from DER, 13' left of centerline, up to 25' AGL/2534' MSL.
Vertical structures beginning 2.7 NM from DER, 2839' left of centerline, 2449' MSL.
High terrain beginning 2.7 NM from DER, 42' left of centerline, 2439' MSL.
High terrain beginning 2.8 NM from DER, 48' right of centerline, 3375' MSL.
Vertical structure, trees and poles beginning 2.9 NM from DER, 605' right of centerline, up to 25' AGL/3442' MSL.
Trees, poles and antenna beginning 3 NM from DER, 1899' left of centerline, up to 25' AGL/2578' MSL.
Transmission tower 3.9 NM from DER, 995' right of centerline, 2570' MSL.
**Rwy 4R,** buildings, hanger and NDB 86' from DER, 257' right of centerline, up to 1987' MSL.
Trees beginning 930' from DER, 272' right of centerline, up to 25' AGL/2029' MSL.
Trees beginning 4884' from DER, 884' left of centerline, up to 25' AGL/2092' MSL.
Trees beginning 1.1 NM from DER, 29' left of centerline, up to 25' AGL/2295' MSL.
Trees and buildings beginning 2.4 NM from DER, 11' right of centerline, up to 25' AGL/2494' MSL.
Poles/Transmission poles beginning 2.5 NM from DER, 93' left of centerline, up to 2534' MSL.
Poles/Transmission poles beginning 2.6 NM from DER, 516' right of centerline, up to 2424' MSL.
High terrain beginning 2.5 NM from DER, 67' left of centerline, 2439' MSL.
High terrain beginning 2.6 NM from DER, 33' right of centerline, 3375' MSL.
Trees, poles and antenna beginning 3.1 NM from DER, 3238' left of centerline, 25' AGL/3442' MSL.
Transmission tower 3.9 NM from DER, 496' right of centerline, 2570' MSL.
**Rwy 22L,** buildings and signs beginning 55' from DER, 74' left of centerline, up to 1998' MSL.
Sign 95' from DER, 74' right of centerline, 1953' MSL.
Obstruction light pole on building 728' from DER, 301' left of centerline, 1992' MSL.
Vehicle on roadway 739' from DER, 481' left of centerline, up to 15' AGL/1971' MSL.
Trees and poles beginning 1294' from DER, 183' left of centerline. up to 25' AGL/2045' MSL.
Buildings and elevators 4492' from DER, 573' left of centerline, up to 2082' MSL.

**CON'T**

## SPOKANE, WA (CON'T)

FELTS FIELD (SFF) (CON'T)

**Rwy 22R,** navaids 38' from DER, left and right of centerline, 1953' MSL.
Vehicles on roadway 187' from DER, 446' right of centerline, up to 15' AGL/1954' MSL.
Trees beginning 187' from DER, 511' right of centerline, up to 25' AGL/1979' MSL.
Light on hanger 202' from DER, 496' left of centerline, 1969' MSL.
Buildings, obstruction light on buildings beginning 210' from DER, 230' left of centerline, up to 1979' MSL.
Poles beginning 1271' from DER, 63' right of centerline, up to 1987' MSL.
Transmission line towers beginning 1396' from DER, 2' left of centerline, up to 41' AGL/1986' MSL.
Elevator and building beginning 2653' from DER, 1073' left of centerline, up to 2082' MSL.
Tower 4066' from DER, 1554' left of centerline, 120' AGL/2072' MSL.
Rising terrain beginning 3.2 NM from DER, 5087' left of centerline, up to 2339' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 1 23JUL15 (15204) (FAA)

**Rwy 22L,** heading as assigned by ATC; requires minimum climb of 360' per NM to 3700.
**Rwy 22R,** heading as assigned by ATC; requires minimum climb of 370' per NM to 3600.

SPOKANE INTL (GEG)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 7 03JAN19 (19003) (FAA)

DEPARTURE PROCEDURE:
**Rwy 3,** climbing left turn direct GEG VORTAC, thence...
**Rwy 8,** climbing right turn direct GEG VORTAC, thence...
**Rwy 21,** climb on GEG VORTAC R-028 to GEG VORTAC, thence...
**Rwy 26,** climbing left turn direct GEG VORTAC, thence...
...Continue climb in GEG VORTAC holding pattern (hold southwest, right turns, 028° inbound) to cross GEG VORTAC at or above MEA/MCA for route of flight.

TAKEOFF OBSTACLE NOTES:
**Rwy 3,** tree 1089' from DER, 789' left of centerline, 2367' MSL.
Trees beginning 1315' from DER, 667' left of centerline, up to 2370' MSL.
**Rwy 21,** tree 2152' from DER, 1000' right of centerline, 2439' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)
AMDT 3 10SEP20 (20254) (FAA)

**Rwys 3, 8, 26,** heading as assigned by ATC.
**Rwy 21,** heading as assigned by ATC; requires minimum climb of 290' per NM to 3200.

## STEVENSVILLE, MT

STEVENSVILLE (32S)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 17MAR05 (05076) (FAA)

TAKEOFF MINIMUMS:
**Rwy 12,** do not exceed 210 knots until established on MSO R-163.
**Rwy 30,** do not exceed 210 knots until established on MSO R-160.

DEPARTURE PROCEDURE:
**Rwy 12,** climbing right turn via heading 335 and MSO R-163 to MSO VOR/DME climb in MSO VOR/DME holding pattern (southeast, right turn, 340° inbound) to 13000' before proceeding on course.
**Rwy 30,** climbing right turn via heading 025° and MSO R-160 to MSO VOR/DME Climb in MSO VOR/DME holding pattern (southeast, right turn, 340° inbound) to 13000' before proceeding on course.

## SUNRIVER, OR

SUNRIVER (S21)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 25JUL91 (91206) (FAA)

TAKEOFF MINIMUMS:
**Rwy 18**, 300-1 or std. with a min. climb of 360' per NM to 4400.
**Rwy 36,** 600-2 or std. with a min. climb of 240' per NM to 4900.

DEPARTURE PROCEDURE:
**Rwy 18,** climb runway heading to 7000 then climbing left turn direct DSD VORTAC.
**Rwy 36,** climb direct to DSD VORTAC. Then **all aircraft** climb on course.

## TACOMA, WA

TACOMA NARROWS (TIW)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 06SEP01 (01249) (FAA)

TAKEOFF MINIMUMS:

**Rwy 35**, 400-1 or std. with a min. climb of 210' per NM to 400'.

DEPARTURE PROCEDURE:

**Rwy 17,** turn right, climb via heading 230° to intercept OLM R-009 then direct OLM VORTAC.

**Rwy 35,** turn left, climb via heading 270° to intercept SEA R-230 then direct CARRO INT. Continue climb in holding (SW, right turns, 047° inbound) to MEA or assigned altitude for route of flight.

## THE DALLES, OR

COLUMBIA GORGE RGNL/THE DALLES MUNI (DLS)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 12DEC13 (13346) (FAA)

DEPARTURE PROCEDURE:

Use DALLES DEPARTURE.

## THERMOPOLIS, WY

HOT SPRINGS COUNTY (HSG)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG-A 28FEB19 (19059) (FAA)

TAKEOFF MINIMUMS:

**Rwy 23,** std. w/min. climb of 270' per NM to 6300 or 1600-3 for VCOA.

DEPARTURE PROCEDURE:

**Rwy 5,** climb on RLY VOR/DME R-222 to RLY VOR/DME, climb in RLY holding pattern (hold North, right turn, 159° inbound) to cross RLY VOR/ DME at or above MEA for route of flight.

**Rwy 23,** climbing left turn heading 060° and RLY VOR/DME R-207 to RLY VOR/DME, climb in RLY holding pattern (hold North, right turn, 159° inbound) to cross RLY VOR/DME at or above MEA for route of flight.

VCOA:

**Rwy 23,** obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Hot Springs County airport at or above 6300, then on RLY VOR/DME R-219 to RLY VOR/DME. Climb in RLY holding pattern (hold N, RT, 159° inbound) to cross RLY VOR/DME at or above MEA for route of flight.

TAKEOFF OBSTACLE NOTES:

**Rwy 5,** terrain 22' from DER, 261' left of centerline, 4893' MSL.

**Rwy 23,** terrain 10' from DER, 486' right of centerline, 4880' MSL.

Rising terrain beginning 93' from DER, 336' right of centerline, up to 4882' MSL.

Trees beginning 1904' from DER, 872' right of centerline, up to 64' AGL/4944' MSL.

AAO 5.3 NM from DER, 7072' left of centerline, 200' AGL/5940' MSL.

## TILLAMOOK, OR

TILLAMOOK (TMK)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 30JUN11 (11181) (FAA)

TAKEOFF MINIMUMS:

**Rwys 1, 13, 19,** NA-ATC.

DEPARTURE PROCEDURE:

**Rwy 31,** use FETUJ RNAV DEPARTURE.

## TOLEDO, WA

ED CARLSON MEMORIAL FIELD (TDO)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 18NOV10 (10322) (FAA)

DEPARTURE PROCEDURE:

Use ATASY DEPARTURE.

## TORRINGTON, WY

TORRINGTON MUNI (TOR)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 11FEB10 (10042) (FAA)

TAKEOFF OBSTACLE NOTES:

**Rwy 2,** terrain 30' from DER, 277' left of centerline, 4197' MSL.

**Rwy 10,** multiple trees and fence beginning 71' from DER, 143' right of centerline, up to 14' AGL/4214' MSL.

Terrain 14' from DER, 502' left of centerline, 4199' MSL.

**Rwy 28,** terrain 133' from DER, 386' right of centerline, 4213' MSL.

## TWIN BRIDGES, MT

TWIN BRIDGES (7S1)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 01FEB18 (18032) (FAA)

TAKEOFF MINIMUMS:

**Rwy 7,25,** NA – environmental.

DEPARTURE PROCEDURE:

**Rwy 17,** use DILLON (RNAV) DEPARTURE..

**Rwy 35,** use BRIDGES (RNAV) DEPARTURE.

## TWIN FALLS, ID

JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 17OCT13 (13290) (FAA)

TAKEOFF MINIMUMS:

**Rwy 12**, NA-Obstacles.

DEPARTURE PROCEDURE:

**Rwy 26,** aircraft departing on TWF VORTAC R-240 CW 080° climb on course. All others climb heading 258° to 6000 then climbing right turn direct TWF VORTAC. Climb in holding pattern (hold NW, right turns, 113° inbound) to MCA or MEA for direction of flight.

**Rwy 8,** aircraft departing on TWF VORTAC R-260 CW 080° climb on course. All others climb heading 078° to 6000 then climbing right turn direct TWF VORTAC. Climb in holding pattern (hold NW, right turns, 113° inbound) to MCA or MEA for direction of flight.

**Rwy 30,** aircraft departing on TWF VORTAC R-240 CW 080° climb on course. All others climb heading 303° to 6000 then climbing right turn direct TWF VORTAC. Climb in holding pattern (hold NW, right turns, 113° inbound) to MCA or MEA for direction of flight.

TAKEOFF OBSTACLE NOTES:

**Rwy 30,** tree 1184' from DER, 751' right of centerline, 71' AGL/4149' MSL.

## VANCOUVER, WA

PEARSON FIELD (VUO)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 4 08NOV18 (18312) (FAA)

TAKEOFF MINIMUMS:

**Rwy 8**, 500-3 or std. w/min. climb of 440' per NM to 600.

**Rwy 26,** 600-3.

DEPARTURE PROCEDURE:

**Rwy 8,** climb heading 082° to 600, then climbing left turn direct BTG VORTAC, thence...

**Rwy 26,** climb heading 262° to 700, then climbing right turn direct BTG VORTAC, thence...

... Continue climb in BTG VORTAC holding pattern (hold northwest, right turns, 149° inbound) to cross BTG VORTAC at or above MEA/MCA for route of flight.

TAKEOFF OBSTACLE NOTES:

**Rwy 8,** building 365' from DER, 62' left of centerline, 24' AGL/54' MSL.

Sign 1079' from DER, 163' right of centerline, 30' AGL/58' MSL.

Building, antenna beginning 1408' from DER, 276' left of centerline, up to 44' AGL/73' MSL.

Trees beginning 4121' from DER, 1584' left of centerline, 85' AGL/225' MSL.

Trees beginning 5751' from DER, 2009' left of centerline, 85' AGL/235' MSL.

Trees beginning 1 NM from DER, 2167' left of centerline, 85' AGL/325' MSL.

Trees beginning 1.1 NM from DER, 2119' left of centerline, 85' AGL/355' MSL.

Tree, tower beginning 1.2 NM from DER, 645' left of centerline, up to 435' MSL.

Tree 2.5 NM from DER, 833' left of centerline, 415' MSL.

**Rwy 26,** pole and tower beginning 1617' from DER, 37' left of centerline, up to 30' AGL/86' MSL.

Building 2467' from DER, 127' left of centerline, 84' AGL/117' MSL.

Bridge 2704' from DER, 586' left of centerline, 243' AGL/248' MSL.

Building 3526' from DER, 1136' right of centerline, 107' AGL/147' MSL.

Building and crane beginning 1.3 NM from DER, 2564' right of centerline, up to 339' AGL/376' MSL.

Transmission line 2.4 NM from DER, 2038' right of centerline, 516' AGL/537' MSL.

## WALLA WALLA, WA
WALLA WALLA RGNL (ALW)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 4A 30APR15 (15120) (FAA)
DEPARTURE PROCEDURE:
**All aircraft** climbing left turn to 2500 on ALW VOR/DME R-195, then climbing right turn direct ALW VOR/DME to cross ALW VOR/DME at or above MEA or MCA for route of flight.

## WEISER, ID
WEISER MUNI (S87)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
ORIG 25SEP08 (08269) (FAA)
TAKEOFF MINIMUMS:
**Rwy 12,** std. w/ min. climb of 310' per NM to 3900 or 2400-3 for climb in visual conditions.
**Rwy 30,** std. w/ min. climb of 360' per NM to 4000 or 2400-3 for climb in visual conditions.
DEPARTURE PROCEDURE:
**Rwy 12,** climb heading 121° to 3900 before proceeding on course.
**Rwy 30,** climb heading 301° to 4000 before proceeding on course
...for climb in visual conditions: cross Weiser Muni airport at or above 4400 before proceeding on course.
TAKEOFF OBSTACLE NOTES:
**Rwy 12,** tree 248' from DER, 443' right of centerline, 100' AGL/2184' MSL.
**Rwy 30,** tree 1907' from DER, 769' right of centerline, 100' AGL/2174' MSL.

## WENATCHEE, WA
PANGBORN MEMORIAL (EAT)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 5 10NOV16 (16315) (FAA)
DEPARTURE PROCEDURE:
Use WENATCHEE DEPARTURE.

## WEST YELLOWSTONE, MT
YELLOWSTONE (WYS)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 2 09FEB12 (12040) (FAA)
DEPARTURE PROCEDURE:
use TARGY DEPARTURE.

## WHEATLAND, WY
PHIFER AIRFIELD (EAN)
TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES
AMDT 1 30JAN20 (20030) (FAA)
DEPARTURE PROCEDURE:
Use SLATR (RNAV) departure.
TAKEOFF OBSTACLE NOTES:
**Rwy 26,** vehicles on road 7' from DER, 153' right of centerline, 4781' MSL.
Buildings, pole, fence, vertical point beginning 18' from DER, 186' left of centerline, up to 17' AGL/4796' MSL.
Vehicles on road 60' from DER, 150' right of centerline, 4786' MSL.
Trees, vehicles on road beginning 61' from DER, 151' right of centerline, up to 4814' MSL.
Pole, fence, terrain, tank, vehicles on road, tree beginning 149' from DER, 137' left of centerline, up to 25' AGL/4804' MSL.
Trees, poles beginning 365' from DER, 7' right of centerline, up to 4823' MSL.
Poles beginning 562' from DER, 353' left of centerline, up to 38' AGL/4817' MSL.
Trees, poles, buildings, transmission lines beginning 779' from DER, 38' left of centerline, up to 4825' MSL.
Trees, transmission lines, poles beginning 1121' from DER, 18' left of centerline, up to 4838' MSL.
Trees, pole, transmission line beginning 1192' from DER, 26' right of centerline, up to 4827' MSL.
Trees beginning 1328' from DER, 51' right of centerline, up to 4834' MSL.
Trees beginning 1552' from DER, 55' right of centerline, up to 4837' MSL.
Tree 1627' from DER, 73' left of centerline, 4842' MSL.

## WHIDBEY ISLAND NAS (AULT FIELD) (KNUW)

OAK HARBOR, WA

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 21MAY20 (20142)

DEPARTURE PROCEDURE:

**Rwy 7,** diverse departure not authorized.
**Rwy 14,** diverse departure authorized 135° to 310° CW, requires CG 228 to 800.
**Rwy 25,** diverse departure authorized 120° to 330° CW.
**Rwy 32,** diverse departure not authorized.
**All Rwys,** use NASWI TWO (OBSTACLE) DEPARTURE.

TAKEOFF OBSTACLE NOTES:

**Rwy 7,** terrain 1901' from DER, 1009' right of cntrln, 75' MSL.
Terrain 1983' from DER, 1004' right of cntrln, 75' MSL.
Terrain 1903' from DER, 999' right of cntrln, 75' MSL.
**Rwy 14,** terrain 1238' from DER, 1007' left of cntrln, 82' MSL.
Terrain 1172' from DER, 1000' left of cntrln, 82' MSL.
Terrain 1153' from DER, 1005' left of cntrln, 82' MSL.

DIVERSE VECTOR AREA (RADAR VECTORS)

ORIG 21MAY20 (20142) (FAA)

**Rwy 14,** headings as assigned by ATC; requires min climb of 247 FT/NM to 5800.
**Rwy 25,** headings as assigned by ATC; requires min climb of 242 FT/NM to 5200.

## WILBUR, WA

WILBUR (2S8)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 07MAR13 (13066) (FAA)

DEPARTURE PROCEDURE:

**Rwys 2, 20,** Use WIPES (RNAV) DEPARTURE.

## WORLAND, WY

WORLAND MUNI (WRL)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 2 20SEP12 (12264) (FAA)

TAKEOFF MINIMUMS:

**Rwys 4, 10, 22, 28**, NA-Environmental.
**Rwy 16**, 300-1½ or std. with a min. climb of 212' per NM to 4500.

DEPARTURE PROCEDURE:

**Rwy 16,** climb heading 156° to 5000, then climbing right turn direct RLY VOR/DME. Thence …
**Rwy 34,** climb heading 336° to 5000, then climbing left turn direct RLY VOR/DME. Thence …
... Continue climb in RLY VOR/DME holding pattern, (hold N, right turns, 159° inbound) to cross RLY VOR/DME at or above the MEA For route of flight.

TAKEOFF OBSTACLE NOTES:

**Rwy 16,** road beginning 267' from DER, 17' right and 51' left of centerline, up to 4348' MSL.
Pole 661' from DER, 397' right of centerline, 15' AGL/4287' MSL.
Pole 183' from DER, 197' right of centerline, 5' AGL/4273' MSL.
Poles beginning 6344' from DER, left and right of centerline, 48' AGL/4421' MSL.
Light 10' from DER, 30' left of centerline, 2' AGL/4253' MSL.
REIL 40' from DER, 90' right of centerline, 2' AGL/4253' MSL.
**Rwy 34,** sign 16' from DER, 200' right of centerline, 1' AGL/4175' MSL.
Road 63' from DER, 486' left of centerline, 4182' MSL.
Road 86' from DER, 509' left of centerline, 4183' MSL.
Tower 288' from DER, 540' right of centerline, 37' AGL/4211' MSL.
Antenna on RTR tower 318' from DER, 550' right of centerline, 52' AGL/4226' MSL.
Rod on DF antenna 327' from DER, 505' left of centerline, 15' AGL/4189' MSL.
Pole 483' from DER, 535' right of centerline, 44' AGL/4218' MSL.
Trees beginning 700' from DER, 648' right of centerline, up to 64' AGL/4238' MSL.

## YAKIMA, WA

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 5 13JAN11 (11013) (FAA)

DEPARTURE PROCEDURE:

Use ZILLA DEPARTURE.

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

**ALBANY, OR**
ALBANY MUNI (S12)…….**VOR/DME or GPS-A**
NA except for operators with approved weather reporting service.

**ARLINGTON, WA**
ARLINGTON
MUNI (AWO)……...**RNAV (GPS) Rwy 34**
NA when local weather not available.
Category D, 800-2½.

**ASTORIA, OR**
ASTORIA
RGNL (AST)……..**RNAV (GPS) Rwy 8[1]**
**RNAV (GPS) Rwy 26[2]**
**VOR Rwy 8[13]**
[1]Category C, 1100-3; Category D, 1200-3.
[2]Categories A, B, 900-2; Category C, 1100-3; Category D, 1200-3.
[3]NA when local weather not available.

**AURORA, OR**
AURORA STATE (UAO)……**LOC Rwy 17[1]**
**RNAV (GPS) Rwy 17[2]**
**RNAV (GPS) Rwy 35[2]**
NA when local weather not available.
[1]Categories C, D, 800-2½.
[2]Category D, 800-2¼.

**BAKER, MT**
BAKER
MUNI (BHK)……....**RNAV (GPS) Rwy 13**
**RNAV (GPS) Rwy 31**
Category D, 900-2¾.

NAME — ALTERNATE MINIMUMS

**BAKER CITY, OR**
BAKER CITY
MUNI (BKE)……..…**RNAV (GPS) Rwy 13[1]**
**VOR-A[23]**
**VOR/DME Rwy 13[45]**
[1]Categories A, B, 900-2; Category C, 1200-3; Category D, 1400-3.
[2]NA when local weather not available.
[3]Categories A, B, 1900-2; Categories C, D, 1900-3.
[4]Category D, 900-2¾.
[5]NA when control zone not in effect.

**BELLINGHAM, WA**
BELLINGHAM
INTL (BLI) ……**ILS or LOC Rwy 16[1]**
**RNAV (GPS) Y Rwy 16[2]**
**RNAV (GPS) Y Rwy 34[2]**
NA when local weather not available.
[1]LOC, Category D, 1000-3.
[2]Category D, 1000-3

**BEND, OR**
BEND MUNI (BDN)……. **RNAV (GPS) Y Rwy 16**
**VOR/DME Rwy 16**
Category D, 1200-3.
NA when local weather not available.

**BIG PINEY, WY**
MILEY MEMORIAL
FIELD (BPI)…… **VOR Rwy 31**
Category D, 800-2¼.

**BIG TIMBER, MT**
BIG TIMBER (6S0)……. **RNAV (GPS) Rwy 6**
**RNAV (GPS) Rwy 24**
Category D, 900-2¾.

NAME ALTERNATE MINIMUMS

**BILLINGS, MT**
BILLINGS LOGAN
INTL (BIL)……..**ILS or LOC Rwy 28R**[1]
**ILS Y or LOC Y Rwy 10L**[2]
**RNAV (GPS) Rwy 7**[3]
**RNAV (GPS) Rwy 10L**[3]
**RNAV (GPS) Rwy 25**[3]
**RNAV (GPS) Y Rwy 28R**[3]
[1]ILS, LOC, Category D, 1000-3.
[2]LOC, Category D, 1000-3.
[3]Category D, 1000-3.

**BOISE, ID**
BOISE AIR TERMINAL/GOWEN
FIELD (BOI)……..**ILS or LOC Rwy 28R**[1]
**ILS Y or LOC Y Rwy 10R**[2]
**RNAV (GPS) Y Rwy 10L**[3]
**RNAV (GPS) Y Rwy 10R**[4]
**RNAV (GPS) Y Rwy 28L**[4]
**RNAV (GPS) Y Rwy 28R**[3]
**VOR/DME or TACAN Rwy 10L**[5]
**VOR/DME or TACAN Rwy 28L**[5]
[1]LOC, Categories A, B 900-2, Category C 900-2½, Category D 1000-3.
[2]LOC, Category C, 900-2½; Category D, 1000-3.
[3]Category C, 900-2½; Category D, 1000-3.
[4]Category C, 900-2½; Category D, 1000-3; Category E, 1100-3.
[5]Category E, 1000-3.

**BOZEMAN, MT**
BOZEMAN YELLOWSTONE
INTL (BZN)……..**ILS or LOC Rwy 12**[1]
**RNAV (GPS)-A**[2]
**RNAV (GPS) Y Rwy 12**[3]
**VOR Rwy 12**[4]
[1]LOC, Category D, 900-3.
[2]Categories A, B, 1600-2; Category C, 1600-3; Category D, 1900-3.
[3]Category D, 900-3.
[4]Categories A, B, 1000-2; Categories C, D, 1000-3.

**BREMERTON, WA**
BREMERTON
NATIONAL (PWT)……..**ILS or LOC Rwy 20**[1]
**RNAV (GPS) Rwy 2**[2]
**RNAV (GPS) Rwy 20**[3]
NA when local weather not available.
[1]LOC, Category C, 800-2¼; Category D, 800-2½.
[2]Category D, 800-2½.
[3]Categories A, B, C, D, 1000-4.

**BUFFALO, WY**
JOHNSON
COUNTY (BYG)……..**RNAV (GPS) Rwy 31**
**VOR/DME Rwy 31**[1]
NA when local weather not available.
[1]Category C, 800-2¼; Category D, 800-2½.

NAME ALTERNATE MINIMUMS

**BURLEY, ID**
BURLEY MUNI (BYI)……..**RNAV (GPS) Rwy 20**
**VOR-A**
NA when local weather not available.

**BURLINGTON/MOUNT VERNON, WA**
SKAGIT RGNL (BVS)……..**RNAV (GPS) Rwy 11**
**RNAV (GPS) Rwy 29**
NA when local weather not available.
Category D, 900-2¾.

**BURNS, OR**
BURNS MUNI (BNO)……..**VOR Rwy 30**
Categories A, B, 1400-2; Categories C, D, 1400-3.

**BUTTE, MT**
BERT MOONEY (BTM)……**RNAV (GPS) Rwy 15**[1]
**VOR-A**[2]
[1]Categories A, B, 1300-2; Categories C, D, 1600-3.
[2]Categories A, B, 1600-2; Categories C, D, 1600-3.

**CALDWELL, ID**
CALDWELL
INDUSTRIAL (EUL)……..**RNAV (GPS) Rwy 12**
**RNAV (GPS) Rwy 30**
NA when local weather not available.

**CASPER, WY**
CASPER/NATRONA
COUNTY INTL (CPR)……..**ILS or LOC Rwy 3**[12]
**VOR/DME Rwy 21**[3]
[1]NA when control tower closed.
[2]ILS, LOC, Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.
[3]NA when local weather not available.

**CHEHALIS, WA**
CHEHALIS-
CENTRALIA (CLS)……..**RNAV (GPS) Rwy 16**
NA when local weather not available.
Category B, 1000-2; Category C 1100-3; Category D 1200-3.

**CHEYENNE, WY**
CHEYENNE RGNL/JERRY OLSON
FIELD (CYS)……..**ILS or LOC Rwy 27**[1]
**RNAV (GPS) Rwy 9**[2]
**RNAV (GPS) Rwy 13**[2]
**RNAV (GPS) Rwy 27**[2]
**RNAV (GPS) Rwy 31**[2]
**VOR or TACAN-A**[2]
[1]ILS, Category C, 800-2; Category D, 800-2½; LOC, Category D, 800-2½.
[2]Category D, 800-2½.

NAME ALTERNATE MINIMUMS

**CODY, WY**
YELLOWSTONE
RGNL (COD)……..……**RNAV (GPS) Rwy 4[1]**
**RNAV (GPS) Rwy 22[2]**
**RNAV (GPS)-B[3]**
**VOR-A[2]**
NA when local weather not available.
[1]Categories A, B, C, 900-2½; Category D, 1900-3.
[2]Category B, 900-2; Category C, 900-2½; Category D, 1900-3.
[3]Categories A, B, 1100-2; Category C, 1100-3; Category D, 1900-3.

**COEUR D'ALENE, ID**
COEUR D'ALENE-PAPPY BOYINGTON
FIELD (COE)……..**ILS or LOC/DME Rwy 6**
**RNAV (GPS) Rwy 6**
NA when local weather not available.

**CORVALLIS, OR**
CORVALLIS
MUNI (CVO)……..……**ILS or LOC Rwy 17[1]**
**VOR Rwy 17[2]**
**VOR-A[3]**
[1]LOC, Category C, 800-2¼; Category D, 900-2¾.
[2]Category D, 900-2¾.
[3]Categories A, B, 1200-2; Categories C, D, 1200-3.

**CUT BANK, MT**
CUT BANK
INTL (CTB)……**RNAV (GPS) Rwy 5**
**RNAV (GPS) Rwy 14**
**RNAV (GPS) Rwy 23**
**RNAV (GPS) Rwy 32**
**VOR Rwy 32**
NA when local weather not available.
Category D, 800-2½.

**DEER PARK, WA**
DEER PARK (DEW)……..**RNAV (GPS) Rwy 34**
NA when local weather not available.

**DILLON, MT**
DILLON (DLN)……**RNAV (GPS) Rwy 17[2]**
**RNAV (GPS) Rwy 35[2]**
**VOR-A[1]**
**VOR/DME-B[2]**
[1]Categories A, B, 2900-2; Categories C, D, 2900-3.
[2]Category D, 1100-3.

**DIXON, WY**
DIXON (DWX)……..**RNAV (GPS) Rwy 24**
Categories A, B, 900-2; Category C, 900-2¾; Category D, 1400-3.

**DOUGLAS, WY**
CONVERSE COUNTY (DGW)…….**VOR Rwy 29**
Categories A, B, 1100-2; Categories C, D, 1100-3. DME standard.

NAME ALTERNATE MINIMUMS

**DRIGGS, ID**
DRIGGS-REED
MEMORIAL (DIJ)……..…**RNAV (GPS) Rwy 4[1]**
**RNAV (GPS)-A**
Category D, 1200-3.
[1]NA when local weather not available.

**EASTSOUND, WA**
ORCAS ISLAND (ORS)……**RNAV (GPS)-A**
**RNAV (GPS) Rwy 16**
**RNAV (GPS) Rwy 34**
NA when local weather not available.
Category A, 1100-2; Category B, 1800-2.

**ELLENSBURG, WA**
BOWERS FIELD (ELN)….....**RNAV (GPS) Rwy 29**
**RNAV (GPS)-C[1]**
**VOR-B[2]**
NA when local weather not available.
[1]Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.
[2]Category A, 1500-2.

**ENNIS, MT**
ENNIS-BIG SKY (EKS)……**RNAV (GPS) Rwy 16[1]**
**RNAV (GPS) Rwy 34[23]**
[1]Category D, 800-2¼.
[2]NA when local weather not available.
[3]Categories A, B, 900-2; Category C, 900-2½ ; Category D, 900-2¾.

**EPHRATA, WA**
EPHRATA MUNI (EPH)……...**RNAV (GPS) Rwy 3[1]**
**RNAV (GPS) Rwy 21[2]**
**VOR Rwy 21[1]**
NA when local weather not available.
[1]Category D, 1300-3.
[2]Category C, 800-2¼; Category D, 1300-3.

**EUGENE, OR**
MAHLON SWEET
FIELD (EUG)……..**ILS or LOC Rwy 16L[1]**
**ILS or LOC Rwy 16R[1]**
**RNAV (GPS) Y Rwy 16L[23]**
**RNAV (GPS) Y Rwy 16R[2]**
**RNAV (GPS) Y Rwy 34L[2]**
**RNAV (GPS) Y Rwy 34R[2]**
**VOR or TACAN Rwy 34L[2]**
[1]LOC, Category D, 800-2½.
[2]Category D, 800-2½ .
[3]NA when local weather not available.

**EVANSTON, WY**
EVANSTON-UINTA COUNTY BURNS
FIELD (EVW)……**ILS or LOC/DME Rwy 23**
Categories C, D, 700-2.

NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

NAME ALTERNATE MINIMUMS

## EVERETT, WA
SNOHOMISH COUNTY (PAINE FIELD) (PAE)……..…**ILS Y or LOC Y Rwy 16R**
**ILS Z or LOC Z Rwy 16R**
NA when control tower closed.

## FORT BENTON, MT
FORT BENTON (79S)……...**RNAV (GPS) Rwy 23**
NA when local weather not available.

## FRIDAY HARBOR, WA
FRIDAY HARBOR (FHR) .....**RNAV (GPS) Rwy 34**
NA when local weather not available.

## GILLETTE, WY
NORTHEAST WYOMING RGNL (GCC)……....…**ILS or LOC Rwy 34**[12]
**RNAV (GPS) Rwy 16**[3]
**RNAV (GPS) Rwy 34**[4]
**VOR Rwy 16**[4]
[1]NA when control tower closed.
[2]ILS Categories A, B, 900-2; Categories C, D, 1100-3; LOC Categories A, B, 900-2; Categories C, D, 1100-3.
[3]Category A, 800-2½; Category B, 900-2½; Categories C, D, 1100-3.
[4]Category B, 900-2; Categories C, D, 1100-3.

## GLASGOW, MT
WOKAL FIELD/GLASGOW-VALLEY COUNTY (GGW)……...…**RNAV (GPS) Rwy 12**
**RNAV (GPS) Rwy 30**
**VOR Rwy 12**[1]
**VOR Rwy 30**
NA when local weather not available.
[1]Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.

## GOODING, ID
GOODING MUNI (GNG)……**RNAV (GPS) Rwy 7**
**RNAV (GPS) Rwy 25**
NA when local weather not available.

## GRANGEVILLE, ID
IDAHO COUNTY (GIC)……**RNAV (GPS) Rwy 8**[1]
**RNAV (GPS) Rwy 26**[2]
[1]NA when local weather not available.
[2]Category C, 800-2¼; Category D, 800-2½.

## GRANTS PASS, OR
GRANTS PASS (3S8)……..…**RNAV (GPS) Rwy 13**
Category B, 1000-2; Category C, 1100-3; Category D, 1300-3.

## GRAY AAF (KGRF)
JOINT BASE LEWIS MCCHORD, WA…....**ILS or LOC Rwy 15**[1]
**RNAV (GPS) Rwy 15**
**RNAV (GPS) Rwy 33**
NA when local weather not available.
[1]NA when control tower closed.

NAME ALTERNATE MINIMUMS

## GREAT FALLS, MT
GREAT FALLS INTL (GTF)……**ILS or LOC Rwy 3**[1]
**RNAV (GPS) Rwy 17**[2]
**RNAV (GPS) Rwy 35**[2]
**RNAV (GPS) Y Rwy 3**[2]
**RNAV (GPS) Y Rwy 21**[2]
**VOR Rwy 21**[2]
[1]ILS, Category C, 700-2; Category D, 800-2¼; LOC, Category D, 800-2¼.
[2]Category D, 800-2¼.

## GREYBULL, WY
SOUTH BIG HORN COUNTY (GEY)……..**RNAV (GPS) Rwy 8**
**RNAV (GPS) Rwy 34**
NA when local weather not available.
Category C, 1400-3; Category D, 1600-3.

## HAILEY, ID
FRIEDMAN MEMORIAL (SUN)……**RNAV (GPS) X Rwy 31**[1]
**RNAV (GPS) Y Rwy 31**[2]
[1]Categories A, B, 1700-2; Categories C, D, 1700-3.
[2]Categories A, B, 2100-2; Category C, 2300-3; Category D, 2700-3.

## HARDIN, MT
BIG HORN COUNTY (00U)……..**RNAV (GPS) Rwy 26**
NA when local weather not available.

## HAVRE, MT
HAVRE CITY-COUNTY (HVR)……..**VOR Rwy 26**
Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.

## HELENA, MT
HELENA RGNL (HLN)……**ILS or LOC Y Rwy 27**[12]
**ILS or LOC Z Rwy 27**[12]
**LOC/DME BC-C**[13]
**RNAV (GPS) X Rwy 27**[4]
**RNAV (GPS) Y Rwy 9**[4]
**RNAV (RNP) Y Rwy 27**[5]
**RNAV (RNP) Z Rwy 9**[5]
**RNAV (RNP) Z Rwy 27**[56]
**VOR-A**[7]
**VOR/DME-B**[8]
[1]NA when control tower closed.
[2]LOC, Categories A, B, 1800-2; Categories C, D, E, 2100-3.
[3]Categories A, B, 1300-2; Categories C, 2100-3.
[4]Categories A, B, 1600-2; Categories C, D, 2100-3.
[5]NA when local weather not available.
[6]1000-4.
[7]Categories A, B, 2900-2; Categories C, D, 2900-3.
[8]Category A, 900-2; Category B, 1000-2; Categories C, D, 2100-3.

NAME ALTERNATE MINIMUMS

## HERMISTON, OR
HERMISTON MUNI (HRI)……**VOR-A**
NA when local weather not available.

## HOQUIAM, WA
BOWERMAN (HQM)……**RNAV (GPS) Rwy 24[2]**
**VOR Rwy 6[1]**
[1]Category D, 800-2¼.
[2]Category C, 800-2½.

## HULETT, WY
HULETT
MUNI (W43)……...**RNAV (GPS) Rwy 13**
NA when local weather not available.
Categories A, B, 900-2; Category C, 900-2½;
Category D, 1200-3.

## IDAHO FALLS, ID
IDAHO FALLS
RGNL (IDA)……**ILS or LOC Rwy 21[12]**
**LOC BC Rwy 3[12]**
**RNAV (GPS) Y Rwy 3[34]**
**RNAV (GPS) Y Rwy 21[3]**
**VOR Rwy 3[3]**
**VOR Rwy 21[3]**
[1]LOC, Category D, 800-2¼; Category E, 800-2½.
[2]NA when control tower closed.
[3]Category D, 800-2¼;
[4]NA when local weather not available.

## JACKSON, WY
JACKSON
HOLE (JAC)……**RNAV (GPS) X Rwy 1[1]**
**RNAV (GPS) Z Rwy 19[4]**
**RNAV (RNP) Y Rwy 1,** 1000-4
**VOR/DME Rwy 1[2]**
**VOR/DME Rwy 19[3]**
[1]Categories A, B, 1200-2; Categories C, D, 1200-3.
[2]Categories A, B, 1000-2; Categories C, D, 1000-3.
[3]Categories A, B, 1400-2; Categories C, D, 1400-3.
[4]Categories A, B, 1000-2; Category C, 1000-2¾; Category D, 1000-3.

## JEROME, ID
JEROME
COUNTY (JER)……...**RNAV (GPS) Rwy 9[1]**
**RNAV (GPS) Rwy 27[2]**
**VOR-A**
NA when local weather not available.
[1]Categories C, D, 900-2½.
[2]Categories A, B, 1300-2; Categories C, D, 1300-3.

## JOHN DAY, OR
GRANT COUNTY RGNL/
OGILVIE FIELD (GCD)……..**RNAV (GPS) Y Rwy 9**
Category B, 900-2; Category C, 900-2½.

NAME ALTERNATE MINIMUMS

## KALISPELL, MT
GLACIER PARK
INTL (GPI)……**ILS or LOC Rwy 2[1]**
**RNAV (GPS) Rwy 30[2]**
**RNAV (GPS) Z Rwy 2[2]**
**RNAV (RNP) Y Rwy 2[3]**
**RNAV (RNP) Rwy 20[34]**
**VOR/DME Rwy 30[2]**
[1]LOC, Category A, B, 1500-2;
Category C, D, 1500-3.
[2]Category D, 800-2½.
[3]NA when local weather not available.
[4]800-2½.

## KELSO, WA
SOUTHWEST WASHINGTON
RGNL (KLS)……**RNAV (GPS) Rwy 12**
NA when local weather not available.
Categories A, B, 1000-2.

## KEMMERER, WY
KEMMERER
MUNI (EMM)……...**RNAV (GPS) Rwy 16**
**RNAV (GPS) Rwy 34**
NA when local weather not available.
Category B, 1000-2.

## KLAMATH FALLS, OR
CRATER LAKE-KLAMATH
RGNL (LMT)……**ILS or LOC/DME Rwy 32[12]**
**RNAV (GPS) Rwy 14[3]**
**RNAV (GPS) Rwy 32[4]**
**VOR/DME or TACAN Rwy 14[5]**
**VOR/DME or TACAN Rwy 32[5]**
[1]ILS, Category A, 800-2; Category B, 900-2; Category C, 1400-3; Category D, 1600-3. LOC, Category B, 900-2; Category C, 1400-3; Category D, 1600-3.
[2]NA when control tower closed.
[3]Category A, B, 900-2. Category C, 1400-3; Category D, 1600-3.
[4]Category B, 900-2; Category C, 1400-3; Category D, 1600-3.
[5]Category B, 900-2; Category C, 1400-3; Category D, 1600-3; Category E, 1700-3.

## LAKEVIEW, OR
LAKE COUNTY (LKV)….....**RNAV (GPS) Rwy 17**
**RNAV (GPS) Rwy 35**
Category D, 800-2½.

## LANDER, WY
HUNT FIELD (LND)……..**RNAV (GPS) Rwy 22**
Categories A, B, 900-2; Category C, 1000-3.

## LARAMIE, WY
LARAMIE RGNL (LAR)……...**RNAV (GPS) Rwy 3**
**RNAV (GPS) Rwy 21**
NA when local weather not available.

NAME ALTERNATE MINIMUMS

**LAUREL, MT**
LAUREL
MUNI (6S8)……**RNAV (GPS) Rwy 4**[1]
**RNAV (GPS) Rwy 22**[1]
**VOR Rwy 22**[2]
[1]Category D, 800-2¼.
[2]Categories A, B, 900-2; Category C, 900-2¾; Category D, 900-3.

**LEWISTON, ID**
LEWISTON-NEZ PERCE
COUNTY (LWS)……..**ILS Rwy 26**[12]
**RNAV (GPS) Y Rwy 8**[23]
**RNAV (GPS) Y Rwy 26**[3]
**RNAV (RNP) Z Rwy 8**[2]
**RNAV (RNP) Z Rwy 12**[2]
**RNAV (RNP) Z Rwy 26**[2]
[1]NA when control tower closed.
[2]NA when local weather not available.
[3]Category D, 800-2¼.

**LEWISTOWN, MT**
LEWISTOWN
MUNI (LWT)……**RNAV (GPS) Rwy 8**
**RNAV (GPS) Rwy 26**
**VOR Rwy 8**
Category C, 900-2¼; Category D, 1100-3.

**LIVINGSTON, MT**
MISSION FIELD (LVM)……..**RNAV (GPS) Rwy 22**[1]
**VOR/DME-B**[2]
[1]Category D, 1000-3
[2]Categories A, B, 900-2; Category C, 900-2½; Category D, 1000-3.

**MC CALL, ID**
MC CALL MUNI (MYL)……...**RNAV (GPS) Rwy 16**[1]
**RNAV (GPS) Rwy 34**[23]
[1]Categories A, B, 1000-2; Category C, 1200-3.
[2]Category B, 900-2; Category C, 1200-3; Category D, 1700-3.
[3]NA when local weather not available.

**MC MINNVILLE, OR**
MC MINNVILLE
MUNI (MMV)……**ILS or LOC Rwy 22**
**RNAV (GPS) Rwy 4**
**RNAV (GPS) Rwy 22**
**VOR/DME-B**
NA when local weather not available.
Category D 800-2¼.

NAME ALTERNATE MINIMUMS

**MEDFORD, OR**
ROGUE VALLEY INTL-
MEDFORD (MFR)….....…**ILS or LOC Rwy 14**[12]
**LOC/DME BC-B**[23]
**RNAV (GPS)-D**[3]
**RNAV (GPS) Y Rwy 14**[4]
**VOR-A**[5]
**VOR/DME-C**[3]
**VOR/DME Rwy 14**[5]
[1]ILS, Categories A, B, C, D, 700-2; LOC, Category C, 800-2½; Category D, 1100-3.
[2]NA when control tower closed.
[3]Categories A, B, 2300-2; Categories C, D, 2300-3.
[4]Categories A, B, 1300-2; Category C, 2000-3; Category D, 2200-3.
[5]Categories A, B, 1400-2; Category C, D, 1400-3.

**MILES CITY, MT**
FRANK WILEY
FIELD (MLS)……**RNAV (GPS) Rwy 4**[1]
**RNAV (GPS) Rwy 13**[1]
**RNAV (GPS) Rwy 22**[1]
**RNAV (GPS) Rwy 31**[1]
**VOR Rwy 4**
**VOR/DME Rwy 22**[1]
NA when local weather not available.
[1]Category D 800-2¼.

**MISSOULA, MT**
MISSOULA
INTL (MSO)…….....…**ILS Z Rwy 12**[1]
**RNAV (GPS)-D**[2]
**RNAV (GPS) Y Rwy 12**[3]
**RNAV (RNP) Rwy 30**[4]
**RNAV (RNP) Z Rwy 12**[4]
**VOR-A**[5]
**VOR-B**[6]
[1]NA when control tower closed.
[2]Category A, 1100-2; Category B, 1500-2; Category C, 1500-3; Category D, 2000-3.
[3]Category A, 1400-2; Category B, 1500-2; Category C, 1500-3; Category D, 2000-3.
[4]NA when local weather not available.
[5]Categories A, B, 2000-2; Categories C, D, 2000-3.
[6]Categories A, B, 1800-2; Category C, 1800-3; Category D, 2000-3.

NAME ALTERNATE MINIMUMS

**MOSES LAKE, WA**
GRANT COUNTY
INTL (MWH)……**ILS or LOC Rwy 32R[1]**
**NDB Rwy 32R[2]**
**RNAV (GPS) Y Rwy 4[1]**
**RNAV (GPS) Y Rwy 14L[1]**
**RNAV (GPS) Y Rwy 22[1]**
**RNAV (GPS) Y Rwy 32R[1]**
**VOR Rwy 4[2]**
**VOR -1 Rwy 14L[23]**
**VOR -3 Rwy 14L[2]**
**VOR Rwy 22[2]**
**VOR Rwy 32R[2]**
[1]NA when local weather not available.
[2]NA when control tower closed.
[3]Category D 800-2¼.

**NAMPA, ID**
NAMPA
MUNI (MAN)……..**RNAV (GPS) Rwy 11**
**RNAV (GPS)-B[1]**
Category D, 800-2¼.
[1]NA when local weather not available.

**NEWCASTLE, WY**
MONDELL FIELD (ECS)……**RNAV (GPS) Rwy 14[2]**
**RNAV (GPS ) Rwy 32[3]**
**VOR Rwy 32[1]**
[1]Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.
[2]Category C, 800-2¼; Category D, 900-2¾.
[3]Category D, 900-2¾.

**NEWPORT, OR**
NEWPORT MUNI (ONP)…..**RNAV (GPS) Rwy 16[12]**
**RNAV (GPS ) Rwy 34[2]**
**VOR-A[3]**
[1]NA when local weather not available.
[2]Category B, 900-2; Category C, 1300-3; Category D, 1500-3.
[3]Categories A, B, 900-2; Category C, 1300-3; Category D, 1500-3.

**NORTH BEND, OR**
SOUTHWEST OREGON
RGNL (OTH)…….....**ILS or LOC Rwy 5[1]**
**RNAV (GPS) Y Rwy 5[2]**
**VOR-B[2]**
[1]LOC, Category B, 900-2.
[2]Category B, 900-2; Category C, 1100-3, Category D, 1200-3.

**OAK HARBOR, WA**
AJ EISENBERG (OKH)……...**RNAV (GPS) Rwy 7**
NA when local weather not available.

NAME ALTERNATE MINIMUMS

**OLYMPIA, WA**
OLYMPIA
RGNL (OLM)……...**ILS or LOC Rwy 17[12]**
**RNAV (GPS) Rwy 17[3]**
**RNAV (GPS) Rwy 35[3]**
**VOR Rwy 35[3]**
**VOR-A[3]**
[1]NA when tower closed.
[2]ILS, Category B, 700-2; Category C, 900-2½; Category D, 900-2¾; LOC, Category C, 900-2½; Category D, 900-2¾.
[3]Category C, 900-2½; Category D, 900-2¾.

**ONTARIO, OR**
ONTARIO MUNI (ONO)……..**RNAV (GPS) Rwy 15**
**RNAV (GPS) Rwy 33**
NA when local weather not available.
Category C, 1000-2¾; Category D, 1100-3.

**PASCO, WA**
TRI-CITIES (PSC)……..**ILS or LOC Rwy 21R[12]**
**RNAV (GPS) Y Rwy 3L[3]**
**RNAV (GPS) Y Rwy 12[3]**
**RNAV (GPS) Y Rwy 21R[3]**
**RNAV (GPS) Y Rwy 30[3]**
**VOR Rwy 21R[3]**
**VOR Rwy 30[3]**
NA when local weather not available.
[1]NA when control tower closed.
[2]LOC, Category D, 800-2¼.
[3]Category D, 800-2¼.

**PENDLETON, OR**
EASTERN OREGON RGNL AT
PENDLETON (PDT)….....….**ILS or LOC Rwy 26[1]**
**RNAV (GPS) Rwy 8[2]**
**RNAV (GPS) Rwy 11[2]**
**RNAV (GPS) Rwy 26[2]**
**RNAV (GPS) Rwy 29[2]**
**VOR Rwy 8[2]**
NA when local weather not available.
[1]NA when control tower closed.
[2]Category D, 800-2¼.

**PINEDALE, WY**
PINEDALE/RALPH WENZ
FIELD (PNA)……**NDB-A[1]**
**RNAV (GPS) Rwy 11**
**RNAV (GPS) Rwy 29**
NA when local weather not available.
[1]Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.

**PLENTYWOOD, MT**
SHER-WOOD (PWD)…… **RNAV (GPS) Rwy 12**
**RNAV (GPS) Rwy 30**
NA when local weather not available.
Category D, 900-2¾.

NAME ALTERNATE MINIMUMS

## POCATELLO, ID
POCATELLO
RGNL (PIH)……**ILS or LOC Rwy 21[1]**
**RNAV (GPS) Rwy 3[2]**
**RNAV (GPS) Rwy 21[2]**
**VOR Rwy 3[2]**
[1]NA when control tower closed.
[2]NA when local weather not available.

## PORT ANGELES, WA
PORT ANGELES
CGAS (NOW)……..**COPTER RNAV (GPS) Rwy 26**
NA when local weather not available.

WILLIAM R FAIRCHILD
INTL (CLM)…….....**RNAV (GPS) Rwy 8**
**RNAV (GPS) Rwy 26**
Category D, 800-2¼.

## PORTLAND, OR
PORTLAND
INTL (PDX)……**ILS or LOC Rwy 10L[1]**
**ILS or LOC Rwy 10R[2]**
**ILS or LOC Rwy 28L[3]**
**ILS or LOC Rwy 28R[3]**
**LOC/DME Rwy 21[4]**
**RNAV (GPS) Y Rwy 10L[4]**
**RNAV (GPS) Y Rwy 10R[4]**
**RNAV (GPS) X Rwy 28L[4]**
**RNAV (GPS) X Rwy 28R[4]**
**VOR-A[5]**
[1]LOC, Categories C, D, 1100-3;
Category E, 1200-3.
[2]LOC, Categories A, B, 900-2;
Categories C, D, 1100-3; Category E, 1200-3.
[3]ILS, Category A, 700-2; Category B, 800-2;
Categories C, D, 1100-3; Category E, 1200-3.
LOC, Categories C, D, 1100-3; Category E,
1200-3.
[4]Categories C, D, 1100-3.
[5]Categories A, B, 1000-2;
Categories C, D, 1100-3.

PORTLAND-
HILLSBORO (HIO)….……..**ILS or LOC Rwy 13R[12]**
**RNAV (GPS) Rwy 13R[34]**
**RNAV (GPS) Rwy 31L[34]**
**VOR-C[34]**
[1]NA when control tower closed.
[2]LOC, Categories A, B, 1500-2;
Categories C, D, 1500-3.
[3]Category D, 800-2½.
[4]NA when local weather not available.

PORTLAND-
TROUTDALE (TTD)……..**RNAV (GPS)-A**
Category A, 1000-2; Category B, 1100-2;
Categories C, D, 1300-3.
NA when local weather not available.

NAME ALTERNATE MINIMUMS

## PRINEVILLE, OR
PRINEVILLE
(S39)…….....**RNAV (GPS) Rwy 10**
**RNAV (GPS) Rwy 28**
Category B, 900-2; Category C, 900-2¼;
Category D, 900-2½.

## PULLMAN/MOSCOW, WA
PULLMAN/MOSCOW
RNGL (PUW)…….....**ILS or LOC Rwy 5[1]**
**RNAV (GPS) Rwy 5[2]**
**RNAV (GPS) Y Rwy 23**
**VOR Rwy 5[2]**
NA when local weather not available.
[1]LOC, Category D, 900-2¾.
[2]Category D, 900-2¾.

## RAWLINS, WY
RAWLINS MUNI/HARVEY
FIELD (RWL)……..**RNAV (GPS) Rwy 22**
Category C, 900-2½; Category D, 1100-3.
NA when local weather not available.

## REDMOND, OR
ROBERTS
FIELD (RDM)……..**RNAV (GPS) Rwy 11[1]**
**RNAV (GPS) Y Rwy 5[1]**
**RNAV (GPS) Y Rwy 23[2]**
**VOR-A[12]**
[1]NA when local weather not available.
[2]Category D, 800-2¼.

## RENTON, WA
RENTON
MUNI (RNT)……...…**RNAV (GPS) Y Rwy 16**
**RNAV (GPS) Rwy 34[1]**
Categories A, B, 900-2; Category C, 1000-3.
[1]NA when local weather not available.

## REXBURG, ID
REXBURG-MADISON
COUNTY (RXE)……**RNAV (GPS) Rwy 35[1]**
**VOR Rwy 35[2]**
[1]NA when local weather not available.
[2]Categories A, B, 900-2; Category C 900-2½;
Category D, 900-3.

## RIVERTON, WY
CENTRAL WYOMING
RGNL (RIW)……..…….…**RNAV (GPS) Rwy 10**
**RNAV (GPS) Rwy 28**
**VOR Rwy 10**
**VOR Rwy 28**
NA when local weather not available.

NAME ALTERNATE MINIMUMS

## ROCK SPRINGS, WY
SOUTHWEST WYOMING
RGNL (RKS)….....….….**ILS or LOC Rwy 27**[1]
**RNAV (GPS) Rwy 9**[2]
**RNAV (GPS) Rwy 27**[2]
[1]LOC, Category D, 800-2½.
[2]Category D, 800-2½.

## ROSEBURG, OR
ROSEBURG
RGNL (RBG)……...**RNAV (GPS)-B**
NA when local weather not available.
Categories A, B, 1200-2; Category C, 1200-3; Category D, 1400-3.

## SALEM, OR
MCNARY
FIELD (SLE)……..**ILS or LOC Z Rwy 31**[12]
**LOC BC Rwy 13**[13]
**LOC Y Rwy 31**[13]
**RNAV (GPS) Rwy 13**[3]
**RNAV (GPS) Rwy 31**[4]
[1]NA when local weather not available.
[2]ILS, LOC, Categories A, B, 900-2; Category C, 900-2½; Category D, 1100-3.
[3]Category C, 900-2½; Category D, 1100-3.
[4]Category C, 800-2¼; Category D, 1100-3.

## SANDPOINT, ID
SANDPOINT (SZT)……..**RNAV (GPS)-B**[3]
**RNAV (GPS) Y Rwy 20**[12]
**RNAV (GPS) Z Rwy 20**[2]
[1]Categories A, B, 1300-2; Category C, 1300-3.
[2]NA when local weather not available.
[3]Categories A, B, 1500-2; Category C, 1500-3; Category D, 2100-3.

## SARATOGA, WY
SHIVELY
FIELD (SAA)……...……..**RNAV (GPS) Rwy 5**
NA when local weather not available.

## SCAPPOOSE, OR
SCAPPOOSE INDUSTRIAL
AIRPARK (SPB)……**LOC/DME Rwy 15**[1]
**RNAV (GPS) Rwy 15**
**VOR/DME -A**
NA when local weather not available.
[1]Category D, 900-2½.

NAME ALTERNATE MINIMUMS

## SEATTLE, WA
BOEING FIELD/KING COUNTY
INTL (BFI)……**ILS or LOC Rwy 14R**[12]
**ILS or LOC Rwy 32L**[3]
**RNAV (GPS) Y Rwy 14R**[4]
**RNAV (RNP) Z Rwy 14R**[5]
[1]NA when control tower closed.
[2]ILS, Category A, 800-2; Category B, 900-2; Category C, 1000-2¾; Category D, 1000-3; LOC, Category B, 900-2; Category C, 1000-2¾; Category D, 1000-3.
[3]LOC, Category B, 900-2; Category C, 1000-2¾; Category D, 1000-3.
[4]Category B, 900-2; Category C, 1000-2¾; Category D, 1000-3.
[5]Categories A, B, C, D, 800-2½.

## SHELTON, WA
SANDERSON
FIELD (SHN)……**RNAV (GPS) Rwy 5**
**RNAV (GPS) Rwy 23**
NA when local weather not available.
Category D, 1000-3.

## SHERIDAN, WY
SHERIDAN
COUNTY (SHR)……**ILS or LOC/DME Rwy 33**[1]
**RNAV (GPS) Rwy 15**[2]
**RNAV (GPS) Rwy 33**[2]
**VOR Rwy 15**[2]
[1]ILS, Category B, 700-2; Category C, 900-2½; Category D, 1200-3; LOC, Category C, 900-2 ½; Category D, 1200-3.
[2]Category C, 900-2 ½; Category D, 1200-3.

## SIDNEY, MT
SIDNEY-RICHLAND
RGNL (SDY)……..**RNAV (GPS) Rwy 1**
**RNAV (GPS) Rwy 19**
Category D, 900-2¾.

## SPOKANE, WA
FELTS
FIELD (SFF)……**ILS or LOC Rwy 22R**[1]
**RNAV (GPS) Rwy 4L**[2]
**VOR Rwy 4L**[3]
NA when local weather not available.
[1]ILS, LOC, Categories A, B, 900-2; Category C, 1100-3.
[2]Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.
[3]Categories A, B, 1100-2; Categories C, 1100-3; Category D, 1500-3.

NAME ALTERNATE MINIMUMS

## SPOKANE, WA (CON'T)

SPOKANE INTL (GEG)……...**ILS or LOC Rwy 3**[1]
**ILS or LOC Rwy 21**[1]
**RNAV (GPS) Y Rwy 3**[2]
**RNAV (GPS) Y Rwy 8**[2]
**RNAV (GPS) Y Rwy 21**[2]
**RNAV (GPS) Y Rwy 26**[2]
**VOR Rwy 3**[3]

[1]LOC, Category C, 1000-2¾; Category D, 1100-3.
[2]Category C, 1000-2¾; Category D, 1100-3.
[3]Category C, 1000-2¾; Categories D, E, 1100-3.

## TACOMA, WA

TACOMA NARROWS (TIW)……..**ILS or LOC Rwy 17**[1]
**RNAV (GPS) Rwy 17**[12]
**RNAV (GPS) Rwy 35**[23]

[1]NA when control tower closed.
[2]Category D, 800-2¼.
[3]NA when local weather not available.

## THERMOPOLIS, WY

HOT SPRINGS COUNTY (HSG)……..**RNAV (GPS) RWY 5**
**RNAV (GPS) RWY 23**

Category D, 1000-3.

## THE DALLES, OR

COLUMBIA GEORGE RGNL/ THE DALLES MUNI (DLS)……**RNAV (GPS)-A**

NA when local weather not available.
Categories A, B, 1100-2; Category C, 1500-3; Category D, 1900-3.

## TWIN BRIDGES, MT

TWIN BRIDGES (7S1)…..... **RNAV (GPS) Rwy 17**[1]
**RNAV (GPS) Rwy 35**[2]

NA when local weather not available.
[1]Categories A, B, C, 800-3; Category D, 900-3.
[2]Category D, 900-2¾.

## TWIN FALLS, ID

JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)……**ILS or LOC Rwy 26**[1]
**RNAV (GPS) Rwy 8**[2]
**RNAV (GPS) Rwy 26**[3]
**VOR Rwy 8**[4]
**VOR Rwy 26**
**VOR/DME Rwy 8**[2]

NA when local weather not available.
[1]ILS, Category B, 700-2; Category C, 1000-2¾; Categories D, E, 1000-3. LOC, Category C, 1000-2¾; Categories D, E, 1000-3.
[2]Category C, 1000-2¾; Category D, 1000-3.
[3]Categories C, D, 1100-3.
[4]Categories A, B, 1000-2; Category C, 1000-2¾; Categories D, 1000-3.

NAME ALTERNATE MINIMUMS

## VANCOUVER, WA

PEARSON FIELD (VUO)……**LDA-A**
Categories A, B, 900-2

## WALLA WALLA, WA

WALLA WALLA RGNL (ALW)……**ILS Y or LOC Rwy 20**[12]
**ILS Z or LOC/DME Rwy 20**[13]
**RNAV (GPS) Rwy 2**[14]
**RNAV (GPS) Rwy 20**[1]
**VOR Rwy 20**[15]
**VOR/DME Rwy 2**[6]

[1]NA when local weather not available.
[2]ILS, LOC, Categories A, B, 1200-2; Categories C, D, 1200-3.
[3]ILS, Categories A, B, 800-2; Category C, 1000-2¾; Category D, 1200-3. LOC, Category C, 1000-2¾; Category D, 1200-3.
[4]Category C, 1000-2¾; Category D, 1200-3.
[5]Categories A, B, 1000-2; Category C, 1000-3; Category D, 1100-3.
[6]Category C, 900-2¾; Category D, 1100-3.

## WENATCHEE, WA

PANGBORN MEMORIAL (EAT)……...**ILS Y Rwy 12**, 1300-4
**ILS Z Rwy 12**[1]
**RNAV (RNP) Rwy 12**, 1200-5
**VOR-A**[2]
**VOR-B**[3]

[1]NA when local weather not available.
[2]Categories A, B, 2000-2; Category C, 2000-3; Category D, 2700-3.
[3]Categories A, B, 1500-2; Category C, 2000-3; Category D, 2700-3.

## WOLF POINT, MT

L.M. CLAYTON (OLF)…….**RNAV (GPS) Rwy 11**
**RNAV (GPS) Rwy 29**

NA when local weather not available.

## WORLAND, WY

WORLAND MUNI (WRL)……..**RNAV (GPS) Rwy 16**
**RNAV (GPS) Rwy 34**
**VOR Rwy 16**[1]

NA when local weather not available.
[1]Categories C, D, 800-2½.

NW-1, 05 NOV 2020 to 31 DEC 2020
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| NAME | ALTERNATE MINIMUMS | NAME | ALTERNATE MINIMUMS |
|---|---|---|---|
| **YAKIMA, WA** | | | |
| YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)……..……... | **ILS or LOC Rwy 27[1]** | | |
| | **LOC/DME BC-B[23]** | | |
| | **RNAV (GPS) X Rwy 27[4]** | | |
| | **RNAV (RNP) Rwy 9[5]** | | |
| | **RNAV (RNP) Y Rwy 27[6]** | | |
| | **VOR/DME or TACAN Rwy 27[27]** | | |
| | **VOR-A[23]** | | |

[1]ILS, Categories A, B, C, D, 700-2.
[2]NA when local weather not available.
[3]Category C, 900-2½; Category D, 1200-3.
[4]Category C, 800-2¼; Category D, 1200-3.
[5]Categories A, B, C, 900-2½.
[6]Categories A, B, C, D, 800-2¼.
[7]Categories A, B, 1100-2;
Category C, 1100-3; Category D, 1200-3.

## CHEYENNE, WY

Amdt 2, 29MAR18 (18088) (FAA) ELEV **6160**

### CHEYENNE RGNL/JERRY OLSON FIELD (CYS)

**RADAR-1** 124.55 263.075 T A NA

| | RWY | GP/TCH/RPI | CAT | DA/ MDA-VIS | HAT/ HAA | CEIL-VIS | CAT | DA/ MDA-VIS | HAT/ HAA | CEIL-VIS |
|---|---|---|---|---|---|---|---|---|---|---|
| PAR | 27 | 3.0°/55/918 | ABCDE | **6321**/24 | 200 | (200-½) | | | | |
| ASR | 27 | | AB | **6560**/24 | 439 | (500-½) | CDE | **6560**/40 | 439 | (500-¾) |
| C CIR | ALL RWY | | AB | **6640**-1 | 480 | (500-1) | C | **6900**-2 | 740 | (800-2) |
| | | | D | **6940**-2½ | 780 | (800-2½) | E | **6980**-3 | 820 | (900-3) |

For inoperative ALS, increase PAR 27 Cat E visibility to RVR 4000 and ASR 27 Cat E visibility to 1¼ SM. PAR not available when ASR out of service.

---

## GRAY AAF (KGRF),

Joint Base Lewis McChord, WA Amdt 3 (20310) (USA) ELEV **301**

**RADAR - (E)** 128.2 239.0 T A NA

| | RWY | GS/TCH/RPI | CAT | DH/ MDA-VIS | HAT/ HATh/ HAA | CEIL-VIS |
|---|---|---|---|---|---|---|
| PAR[1] | 15 | 3.0°/55/947 | ABCD | **500**/24 | 200 | (200-½) |
| | 33 | 3.0°/39/730 | ABCD | **550**-½ | 250 | (300-½) |

[1]No-NOTAM MP 1400-1600Z++ Fri. POC DSN 677-3883 or C253-477-3883. Svc incl PAR and apch mnt of ILS and NDB.

OPS 138.6
Contact Seattle approach for vectors to final on 120.1 290.9.

## WHIDBEY ISLAND NAS (AULT FLD) (KNUW), Oak Harbor, WA

Amdt 3, 21MAY20 (20170) (USN) ELEV **47**

**RADAR - (E)** 126.05 126.85 266.8 299.6 310.8 322.5 327.0 343.75 T

| | RWY | GS/TCH/RPI | CAT | DH/ MDA-VIS | HAT/ HATh/ HAT | CEIL-VIS |
|---|---|---|---|---|---|---|
| PAR[1] | 14[2] | 3.0°/48/947 | ABCDE | **147**-¼ | 108 | (100-¼) |
| | 7 | 3.0°/49/959 | ABCDE | **132**-½ | 107 | (100-½) |
| | 25[4 12] | 3.0°/40/716 | ABCDE | **228**-½ | 200 | (200-½) |
| | 32[3 11] | 3.0°/34/790 | ABCDE | **297**-½ | 250 | (300-½) |
| PAR W/O GS [1] | 14[5] | | ABCDE | **360**-¾ | 321 | (400-¾) |
| | 7 | | ABCDE | **360**-1 | 335 | (400-1) |
| | 25[6] | | AB | **580**-⅝ | 552 | (600-⅝) |
| | | | CDE | **580**-1⅛ | 552 | (600-1⅛) |
| | 32[10] | | AB | **560**-⅝ | 513 | (600-⅝) |
| | | | CDE | **560**-1 | 513 | (600-1) |
| ASR | 7 | | ABCDE | **400**-1¼ | 375 | (400-1¼) |
| | 14[8] | | AB | **520**-¾ | 481 | (500-¾) |
| | | | CDE | **520**-1 | 481 | (500-1) |
| | 25[7] | | AB | **740**-¾ | 712 | (700-¾) |
| | | | CDE | **740**-1⅝ | 712 | (700-1⅝) |
| | 32[9] | | AB | **740**-¾ | 693 | (700-¾) |
| | | | CDE | **740**-1½ | 693 | (700-1½) |
| C CIRCLING | | | A | **760**-1¼ | 713 | (800-1¼) |
| | | | B | **800**-1¼ | 753 | (800-1¼) |
| | | | C | **900**-2½ | 853 | (900-2½) |
| | | | D | **900**-2¾ | 853 | (900-2¾) |
| | | | E | **1200**-3 | 1153 | (1200-3) |

[1]No-NOTAM MP: PAR 1600-0800Z++ Mon.
[2]When ALS inop, increase vis CAT ABCDE to ½ mile.
[3]When ALS inop, increase vis CAT ABCDE to ¾ mile.
[4]When ALS inop, increase vis CAT ABCDE to ¾ mile.
[5]When ALS inop, increase vis CAT ABCDE to 1¼ miles.
[6]When ALS inop, increase vis CAT AB to 1 mile, CAT CDE to 1⅝ miles.
[7]When ALS inop, increase vis CAT AB to 1¼ miles, CAT CDE to 2 miles.
[8]When ALS inop, increase vis CAT AB to 1¼ miles, CAT CDE to 1⅜ miles.
[9] When ALS inop, increase vis CAT AB to 1¼ miles, CAT CDE to 2 miles.
[10] When ALS inop, increase vis CAT AB to 1⅛ miles, CAT CDE to 1⅜ miles.
[11] CAUTION: WCH group 2, 3, 4 less than 20 ft.
[12] CAUTION: WCH group 4 less than 20 ft.

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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 |
|---|---|---|---|
| BOZEMAN, MT | | | |
| GALLATIN FIELD (BZN) | 12 | 03-21 | 6,841 feet |
| MOSES LAKE, WA | | | |
| GRANT COUNTY INTL (MWH) | 04 | 14L-32R | 4,700 feet |
| | 14L | 04-22 | 7,550 feet |
| | 22 | 14L-32R | 4,650 feet |
| | 32R | 04-22 | 5,050 feet |
| PORTLAND, OR | | | |
| PORTLAND-HILLSBORO (HIO) | 13R | 02-20 | 4,922 feet |
| SALEM, OR | | | |
| MCNARY FIELD (SLE) | 31 | 16-34 | 3,150 feet |
| | 34 | 13-31 | 3,050 feet |
| TWIN FALLS, ID | | | |
| JOSLIN FIELD-MAGIC VALLEY RGNL (TWF) | 08 | 12-30 | 4,500 feet |
| | 12 | 08-26 | 2,750 feet |
| | 26 | 12-30 | 3,600 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* |
|---|---|---|
| AURORA, OR | | |
| AURORA STATE (UAO) | HS 1 | Rwy 17 at Twy A1. |
| | HS 2 | Rwy 17 at Twy A4. |
| BELLINGHAM, WA | | |
| BELLINGHAM INTL (BLI) | HS 1 | Confusing twy int for pilots exiting/taxiing Rwy 16-34 via Twy D. |
| | HS 2 | Congested int of Twy A and Twy F during Rwy 34 operations for aircraft taxiing to or exiting Rwy 34 via Twy F. |
| BILLINGS, MT | | |
| BILLINGS LOGAN INTL (BIL) | HS 1 | Complex int of Twy A, Twy C, ramp, and Rwy 10L-28R. |
| BOISE, ID | | |
| BOISE AIR TERMINAL/ GOWEN FLD (BOI) | HS 1 | Multiple hold lines visible, left turn at Twy W for departure on Rwy 10L. |
| BOZEMAN, MT | | |
| BOZEMAN YELLOWSTONE INTL (BZN) | HS 1 | Hold position at Twy A and Rwy 03-21. |
| BUTTE, MT | | |
| BERT MOONEY (BTM) | HS 1 | Restricted visibility between Rwy 33 and Rwy 30. |
| CASPER, WY | | |
| CASPER/NATRONA COUNTY INTL (CPR) | HS 1 | Twy A5 has ramp to rwy access. |
| CHEYENNE,WY | | |
| CHEYENNE RGNL/JERRY OLSON FIELD (CYS) | HS 1 | Confusing twy configuration. |
| EVERETT, WA | | |
| SNOHOMISH COUNTY (PAINE FIELD) (PAE) | HS 1 | Twy A between Twy A9 and Twy A10 not visible from ATCT. |
| | HS 2 | Twy A1 and Rwy 16R, unless Twy AA specified. |
| HAILEY, ID | | |
| FRIEDMAN MEMORIAL (SUN) | HS 1 | Twy B on east edge of ramp. |
| | HS 2 | Twy B on east edge of ramp. |
| | HS 3 | Twy B on east edge of ramp. |
| IDAHO FALLS, ID | | |
| IDAHO FALLS RGNL (IDA) | HS 1 | Rwy 17-35 Twy C hold bars. |
| | HS 2 | Pilots often line up for Rwy 17 instead of Rwy 21 on ldg. Rwy 21 and Rwy 17 thresholds in close proximity. |
| JACKSON, WY | | |
| JACKSON HOLE (JAC) | HS 1 | Aircraft sometimes miss Twy A1 and enter the blast pad. |

(SEE CONTINUATION PAGE FOR MORE LISTINGS)







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## HOT SPOTS

## (CONTINUED)

| CITY/AIRPORT | HOT SPOT | DESCRIPTION* |
|---|---|---|
| LEWISTON, ID | | |
| LEWISTON-NEZ PERCE COUNTY (LWS) | HS 1 | Multiple hold lines in close proximity. First hold line is for rwy in front of you. |
| MOSES LAKE, WA | | |
| GRANT COUNTY INTL (MWH) | HS 1 | Twy C and the Rwy 18 THR. |
| | HS 2 | Rwy 09-27 closed except for military operations. |
| NORTH BEND, OR | | |
| SOUTHWEST OREGON RGNL (OTH) | HS 1 | Twy A crosses the north end of Rwy 13-31. |
| OLYMPIA, WA | | |
| OLYMPIA RGNL (OLM) | HS 1 | Rwy 8-26 intersects Rwy 17-35. |
| PASCO, WA | | |
| TRI-CITIES (PSC) | HS 1 | Pilots sometimes exit Rwy 30 onto wrong rwy. |
| | HS 2 | Short twy distance from ramp to Rwy 21L. |
| PENDLETON, OR | | |
| EASTERN OREGON RGNL AT PENDLETON (PDT) | HS 1 | Hold line location across NE corner of the terminal apron and across Twy D . |
| PORTLAND, OR | | |
| PORTLAND-HILLSBORO (HIO) | HS 1 | Aircraft exiting Rwy 13R-31L at Twy A6 have only 90' of clearance between Twy A centerline and holding position markings. |
| | HS 2 | Twy A8 and Rwy 31L. |
| PORTLAND, OR | | |
| PORTLAND INTL (PDX) | HS 1 | Limited wing-tip clearance at twy convergence point. |
| | HS 2 | Rwy 03-21 hold line is on Twy K, hold short unless authorized to cross Rwy 03-21. |
| | HS 3 | Int of Rwy 10L-28R and Twy A4. |
| | HS 4 | Int of Rwy 10L-28R and Twy A3. |
| REDMOND, OR | | |
| ROBERTS FIELD (RDM) | HS 1 | Twy B and Twy F int in close proximity of Rwy 05-23. |
| | HS 2 | Twy C and Twy F int in close proximity of Rwy 05-23. |
| SEATTLE, WA | | |
| BOEING FIELD/ KING COUNTY INTL (BFI) | HS 1 | Twy Z restricted access area. |
| | HS 2 | Rwy 14R-32L and Twy A9. Wrong rwy departure risk. |
| | HS 3 | Extensive helicopter operations in the vicinity of Twy B5 |
| SEATTLE, WA | | |
| SEATTLE-TACOMA INTL (SEA) | HS 1 | Rwy 34R in close proximity to ramp, pilots sometimes cross Rwy 34R at Twy Q without authorization. |
| | HS 2 | Twy J to Twy H short taxi distance between Rwy 34C and Rwy 34R hold position. |
| TWIN FALLS | | |
| JOSLIN FIELD - MAGIC VALLEY RGNL (TWF) | HS 1 | Twy K in close proximity to ramp, rwy incursion risk. |
| | HS 2 | Twy A at Twy A3 – ATCT clearance required to cross movement-non movement boundary marking. |
| YAKIMA, WA | | |
| YAKIMA AIR TERMINAL/ MCALLISTER FLD (YKM) | HS 1 | Hold lines unusual distance from rwy edge, rwy markings not easily visible from hold line. |

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

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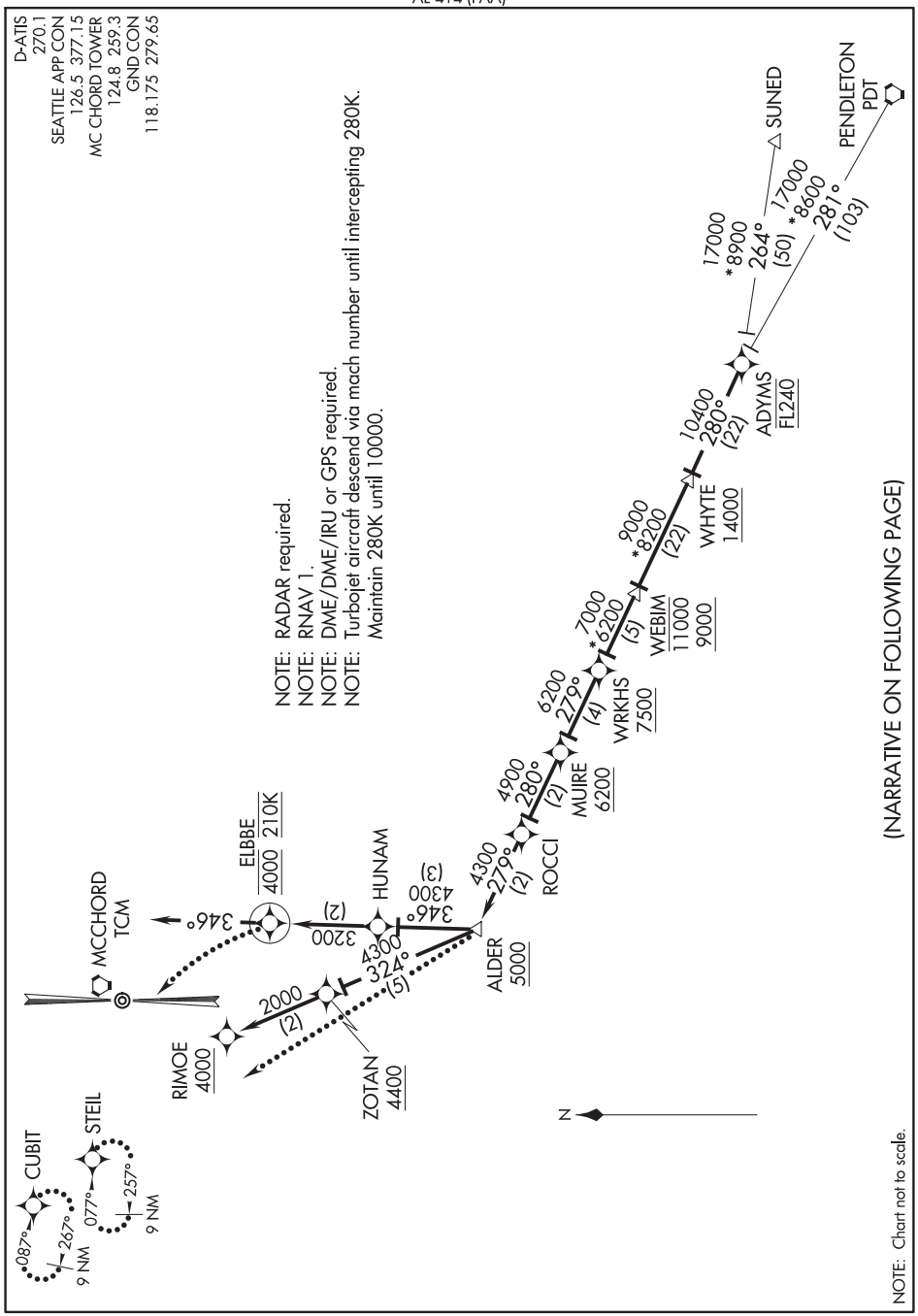
(ADYMS.ADYMS2) 17117

# ADYMS TWO ARRIVAL (RNAV)

MCCHORD FIELD (JOINT BASE LEWIS-MCCHORD) (KTCM)
TACOMA, WASHINGTON
AL-414 (FAA)

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ADYMS TWO ARRIVAL (RNAV)

(ADYMS.ADYMS2) 15OCT15

MCCHORD FIELD (JOINT BASE LEWIS-MCCHORD) (KTCM)
TACOMA, WASHINGTON

ARRIVAL ROUTE DESCRIPTION

PENDLETON TRANSITION (PDT.ADYMS2)
SUNED TRANSITION (SUNED.ADYMS2)

From ADYMS on track 280° to cross WHYTE at/above 14000, then on track 280° to cross WEBIM between 9000 and 11000, then on track 280° to cross WRKHS at/above 7500.

LANDING RUNWAY 16: From WRKHS on track 279° to cross MUIRE at/above 6200, then on track 280° to ROCCI, then on track 279° to cross ALDER at/above 5000, then on track 346° to HUNAM, then on track 346° to cross ELBBE at 4000 and at 210K, then on track 346°. Expect RADAR vectors to final approach course or visual approach.

LANDING RUNWAY 34: From WRKHS on track 279° to cross MUIRE at/above 6200, then on track 280° to ROCCI, then on track 279° to cross ALDER at/above 5000, then on track 324° to cross ZOTAN at/above 4400, then on track 324° to cross RIMOE at/above 4000.

LOST COMMUNICATIONS

RUNWAY 34: At ALDER, execute approach, if unable, proceed direct CUBIT and hold as published, maintain 4000, squawk appropriate beacon code.

RUNWAY 16: At ELBEE, turn left direct STEIL and execute approach, if unable hold as published, maintain 4000, squawk appropriate beacon code.

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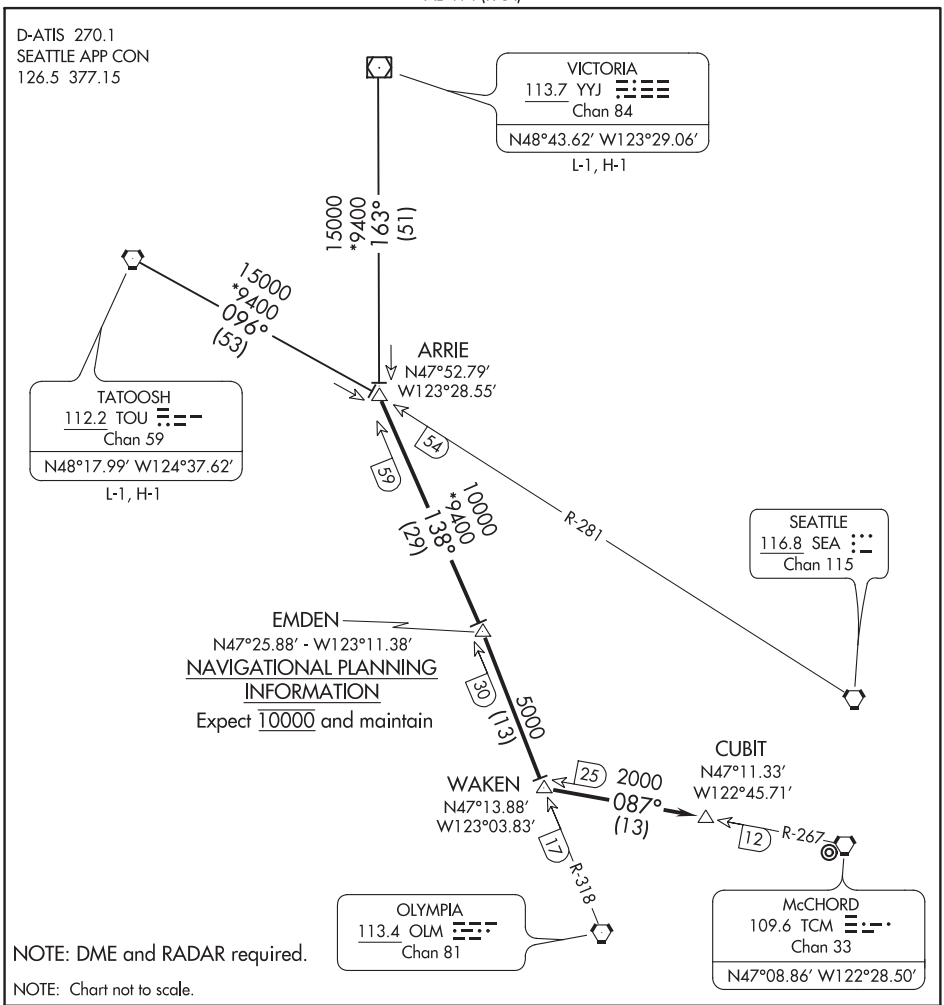
(ARRIE.ARRIE7) 19227

# ARRIE SEVEN ARRIVAL

MCCHORD FIELD (JOINT BASE LEWIS-MCCHORD) (KTCM)
AL-414 (FAA)
TACOMA, WASHINGTON

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## ARRIVAL ROUTE DESCRIPTION

TATOOSH TRANSITION (TOU.ARRIE7): From over TOU VORTAC on TOU R-096 to ARRIE. Thence. . . .

VICTORIA TRANSITION (YYJ.ARRIE7): From over YYJ VOR/DME on YYJ R-163 to ARRIE. Thence. . . .

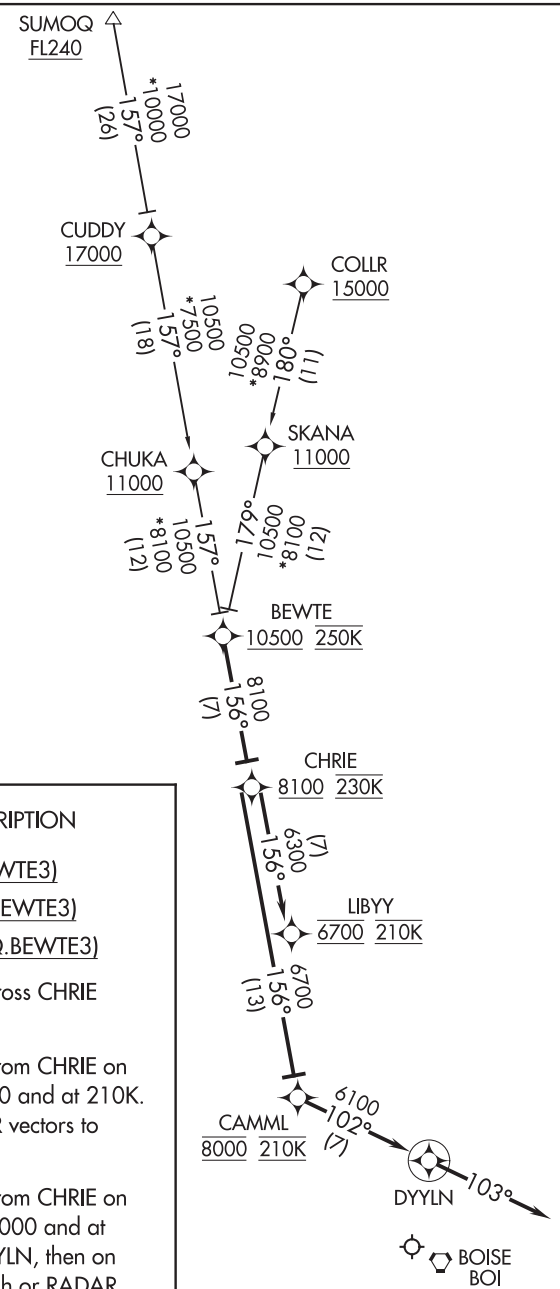
. . . .From over ARRIE on OLM R-318 and TCM R-267 to CUBIT, expect RADAR vectors to final approach course.

LOST COMMUNICATIONS: Proceed direct to TCM VORTAC.

# BEWTE THREE ARRIVAL (RNAV)

AL-57 (FAA)

BIG SKY APP CON
119.6 269.4 (SOUTH)
126.9 351.85 (NORTH)
D-ATIS
123.9 290.4
BOISE TOWER
118.1 257.8
GND CON
121.7 348.6




NOTE: RADAR required.

NOTE: RNAV 1.

NOTE: GPS required.

## ARRIVAL ROUTE DESCRIPTION

COLLR TRANSITION (COLLR.BEWTE3)

CUDDY TRANSITION (CUDDY.BEWTE3)

SUMOQ TRANSITION (SUMOQ.BEWTE3)

From BEWTE on track 156° to cross CHRIE at or above 8100 and at 230K.

LANDING RUNWAYS 10L/R: From CHRIE on track 156° to cross LIBYY at 6700 and at 210K. Expect RNP approach or RADAR vectors to final approach course.

LANDING RUNWAYS 28L/R: From CHRIE on track 156° to cross CAMML at 8000 and at 210K, then on track 102° to DYYLN, then on track 103°. Expect RNP approach or RADAR vectors to final approach course.

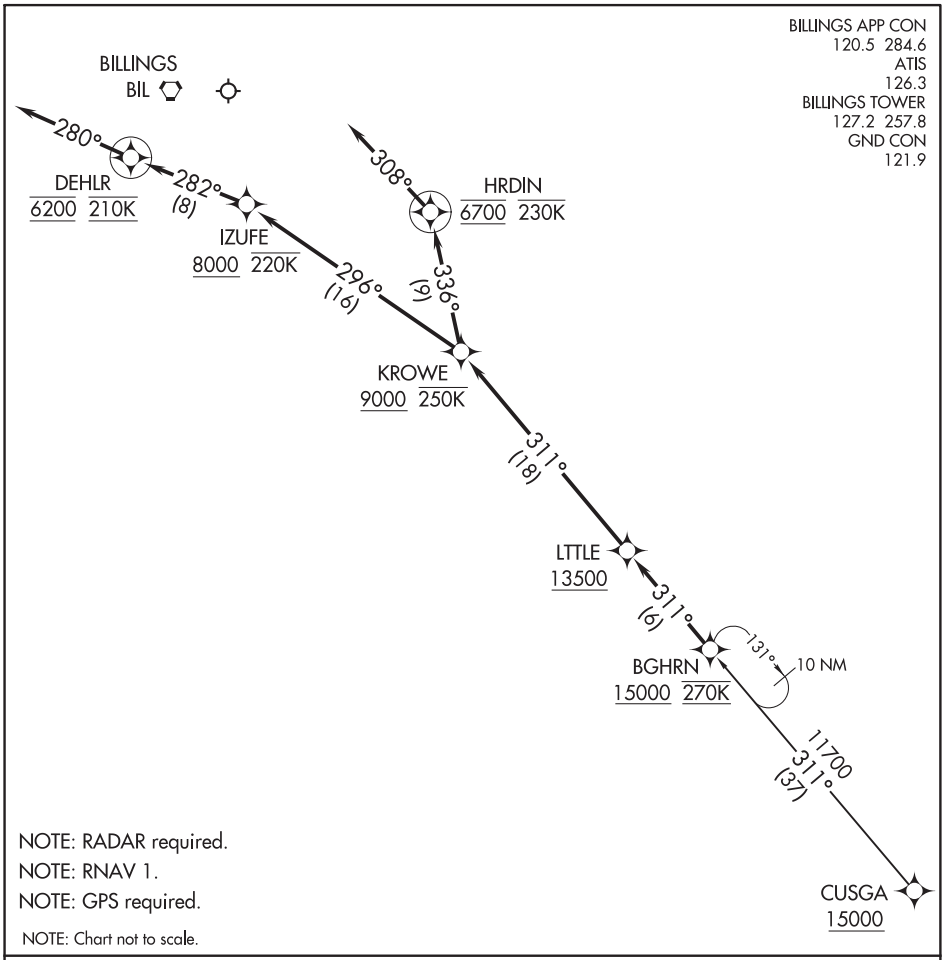
NOTE: Chart not to scale.

(BGHRN.BGHRN3) 18256

# BGHRN THREE ARRIVAL (RNAV)

AL-48 (FAA)

BILLINGS LOGAN INTL (BIL)
BILLINGS, MONTANA




NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: GPS required.
NOTE: Chart not to scale.

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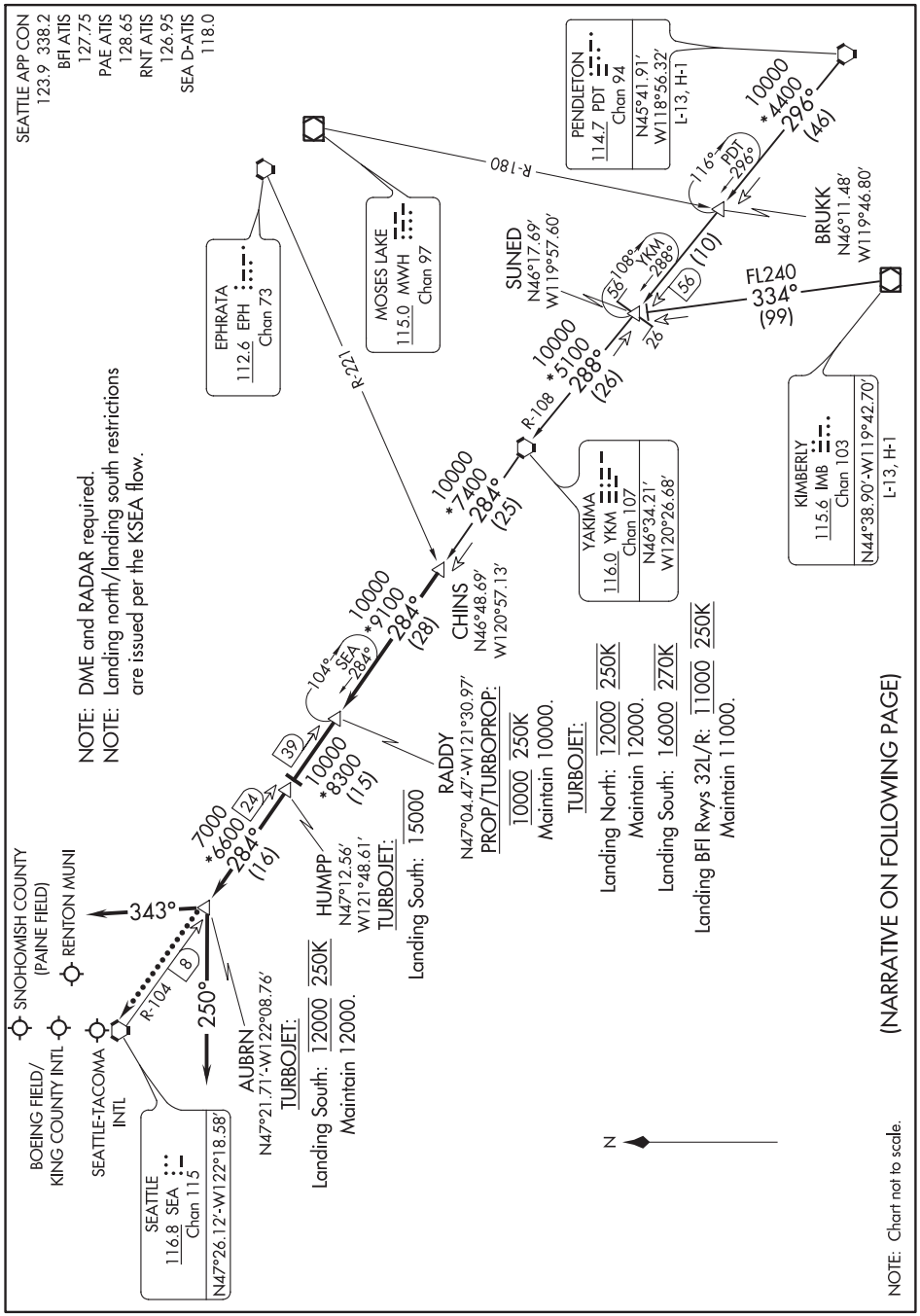
## ARRIVAL ROUTE DESCRIPTION

CUSGA TRANSITION (CUSGA.BGHRN3)

From BGHRN on track 311° to cross LTTLE at or above 13500, then on track 311° to cross KROWE at or above 9000 and at or below 250K.

LANDING RUNWAY 10L: From KROWE on track 296° to cross IZUFE at or above 8000 and at or below 220K, then on track 282° to cross DEHLR at 6200 and at 210K, then on heading 280° or as assigned by ATC. Expect assigned approach or RADAR vectors to final approach course.

LANDING RUNWAY 28R: From KROWE on track 336° to cross HRDIN at 6700 and at or below 230K, then on heading 308° or as assigned by ATC. Expect assigned approach or RADAR vectors to final approach course.


SEATTLE APP CON
123.9 338.2
BFI ATIS
127.75
PAE ATIS
128.65
RNT ATIS
126.95
SEA D-ATIS
118.0
NOTE: DME and RADAR required.
NOTE: Landing north/landing south restrictions are issued per the KSEA flow.
SNOHOMISH COUNTY (PAINE FIELD)
RENTON MUNI
BOEING FIELD/ KING COUNTY INTL
SEATTLE-TACOMA INTL
SEATTLE
116.8 SEA
Chan 115
N47°26.12'-W122°18.58'
343°
R-104
8
250°
7000
*6600
284°
(16)
24
39
AUBRN
N47°21.71'-W122°08.76'
TURBOJET:
Landing South: 12000 250K
Maintain 12000.
HUMPP
N47°12.56'
W121°48.61'
TURBOJET:
Landing South: 15000
10000
*8300
(15)
104°
SEA
284°
10000
*9100
284°
(28)
RADDY
N47°04.47'-W121°30.97'
PROP/TURBOPROP:
10000 250K
Maintain 10000.
TURBOJET:
Landing North: 12000 250K
Maintain 12000.
Landing South: 16000 270K
Landing BFI Rwys 32L/R: 11000 250K
Maintain 11000.
CHINS
N46°48.69'
W120°57.13'
10000
*7400
284°
(25)
R-221
EPHRATA
112.6 EPH
Chan 73
MOSES LAKE
115.0 MWH
Chan 97
R-180
R-108
10000
*5100
288°
(26)
26
58
108°
YKM
288°
56
(10)
SUNED
N46°17.69'
W119°57.60'
YAKIMA
116.0 YKM
Chan 107
N46°34.21'
W120°26.68'
PENDLETON
114.7 PDT
Chan 94
N45°41.91'
W118°56.32'
L-13, H-1
116°
PDT
296°
10000
*4400
296°
(46)
BRUKK
N46°11.48'
W119°46.80'
FL240
334°
(99)
KIMBERLY
115.6 IMB
Chan 103
N44°38.90'-W119°42.70'
L-13, H-1
N
NOTE: Chart not to scale.
(NARRATIVE ON FOLLOWING PAGE)

ARRIVAL ROUTE DESCRIPTION

KIMBERLY TRANSITION (IMB.CHINS4): From over IMB VOR/DME on IMB R-334 to SUNED, then on YKM R-108 to YKM VORTAC, then on YKM R-284 to CHINS, thence . . . .
PENDLETON TRANSITION (PDT.CHINS4): From over PDT VORTAC on PDT R-296 to SUNED, then on YKM R-108 to YKM VORTAC, then on YKM R-284 to CHINS, thence . . . .
SUNED TRANSITION (SUNED.CHINS4): From SUNED on YKM R-108 to YKM VORTAC, then on YKM R-284 to CHINS, thence . . . .

. . . . from CHINS on YKM R-284 and SEA R-104 to RADDY, then on SEA R-104 to HUMPP, then on SEA R-104 to AUBRN, thence . . . .

LANDING NORTH: Heading 250° for vectors to final approach course.

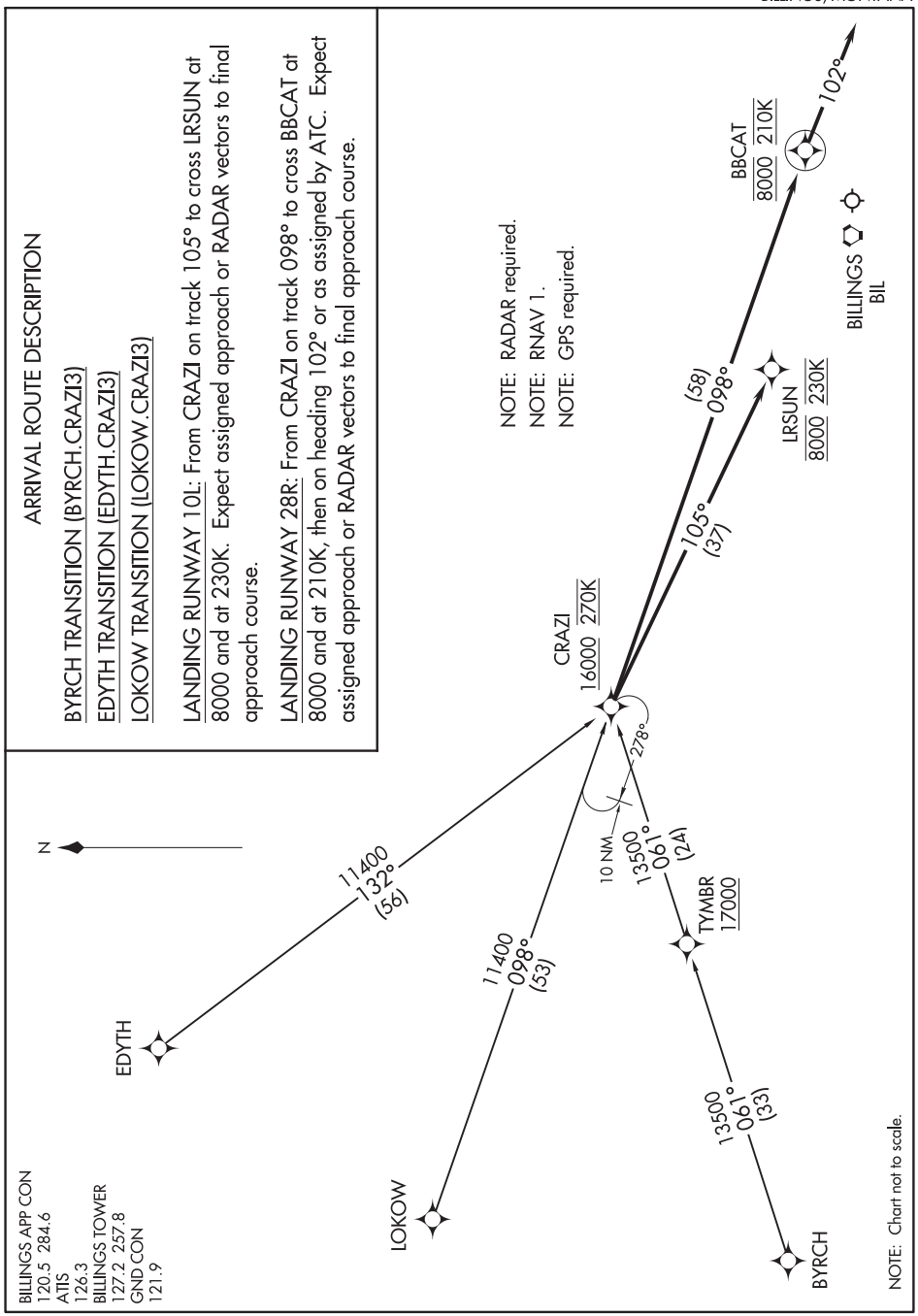
LANDING SOUTH: Heading 343° for vectors to final approach course.

LANDING RENTON MUNI: Heading 343° for vectors to final approach course.

LANDING SNOHOMISH COUNTY (PAINE FIELD): Heading 343° for vectors to final approach course.

LOST COMMUNICATIONS: After AUBRN proceed direct SEA VORTAC.


NW-1, 05 NOV 2020 to 31 DEC 2020

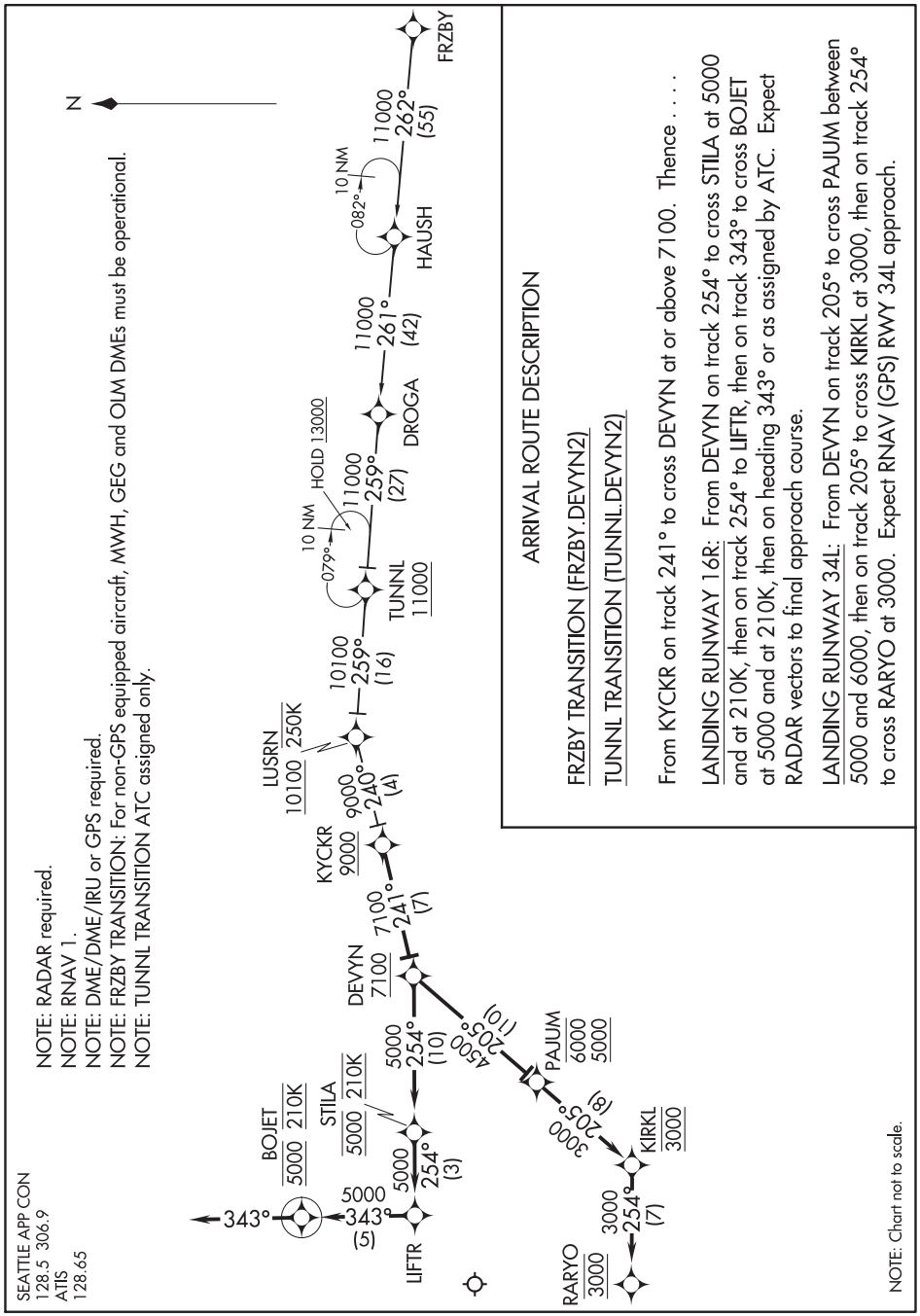

ARRIVAL ROUTE DESCRIPTION
BYRCH TRANSITION (BYRCH.CRAZI3)
EDYTH TRANSITION (EDYTH.CRAZI3)
LOKOW TRANSITION (LOKOW.CRAZI3)
LANDING RUNWAY 10L: From CRAZI on track 105° to cross LRSUN at 8000 and at 230K. Expect assigned approach or RADAR vectors to final approach course.
LANDING RUNWAY 28R: From CRAZI on track 098° to cross BBCAT at 8000 and at 210K, then on heading 102° or as assigned by ATC. Expect assigned approach or RADAR vectors to final approach course.
NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: GPS required.
BILLINGS APP CON
120.5 284.6
ATIS
126.3
BILLINGS TOWER
127.2 257.8
GND CON
121.9
N
EDYTH
LOKOW
BYRCH
TYMBR
17000
CRAZI
16000 270K
LRSUN
8000 230K
BBCAT
8000 210K
BILLINGS
BIL
11400
132°
(56)
11400
098°
(53)
13500
061°
(33)
13500
061°
(24)
10 NM
278°
105°
(37)
(58)
098°
102°
NOTE: Chart not to scale.

(KYCKR.DEVYN2) 17341

# DEVYN TWO ARRIVAL (RNAV)

AL-142 (FAA)

SNOHOMISH COUNTY (PAINE FIELD) (PAE)
EVERETT, WASHINGTON




## ARRIVAL ROUTE DESCRIPTION

FRZBY TRANSITION (FRZBY.DEVYN2)

TUNNL TRANSITION (TUNNL.DEVYN2)

From KYCKR on track 241° to cross DEVYN at or above 7100. Thence . . . .

LANDING RUNWAY 16R: From DEVYN on track 254° to cross STILA at 5000 and at 210K, then on track 254° to LIFTR, then on track 343° to cross BOJET at 5000 and at 210K, then on heading 343° or as assigned by ATC. Expect RADAR vectors to final approach course.

LANDING RUNWAY 34L: From DEVYN on track 205° to cross PAJUM between 5000 and 6000, then on track 205° to cross KIRKL at 3000, then on track 254° to cross RARYO at 3000. Expect RNAV (GPS) RWY 34L approach.

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

DEVYN TWO ARRIVAL (RNAV)

(KYCKR.DEVYN2) 07DEC17

EVERETT, WASHINGTON
SNOHOMISH COUNTY (PAINE FIELD) (PAE)

# ELLENSBURG THREE ARRIVAL (RNAV)

AL-414 (FAA)

TACOMA, WASHINGTON

## ARRIVAL ROUTE DESCRIPTION

### ELLENSBURG TRANSITION (ELN.ELN3)

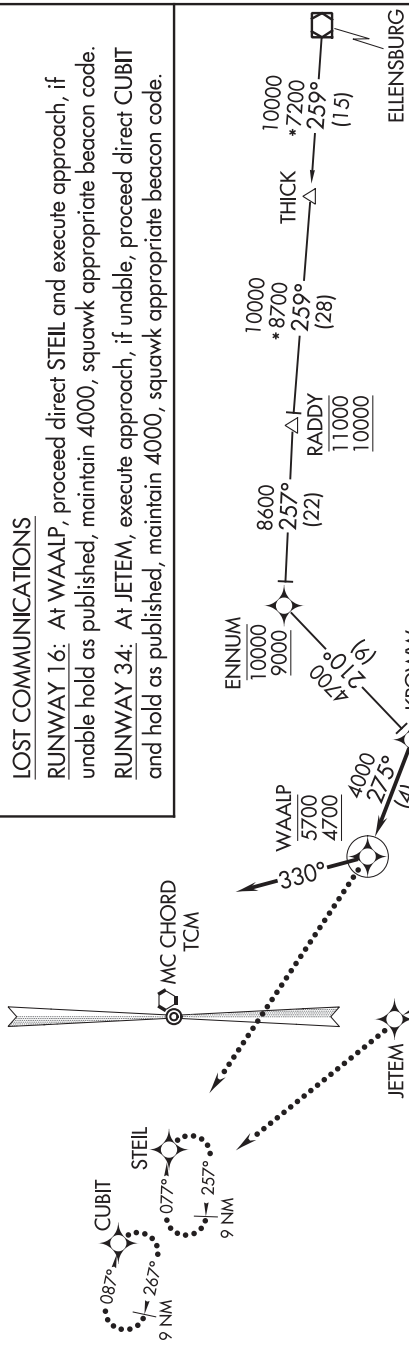
LANDING RUNWAY 16: From KPOWW on track 275° to cross WAALP between 4700 and 5700, then on heading 330° or as assigned by ATC. Expect RADAR vectors to final approach course.

LANDING RUNWAY 34: From KPOWW on track 210° to cross OWSIN at or above 5600, then on track 259° to TUNNR, then on track 316° to cross JETEM at/above 3200. Expect ILS or visual approach.

### LOST COMMUNICATIONS

RUNWAY 16: At WAALP, proceed direct STEIL and execute approach, if unable hold as published, maintain 4000, squawk appropriate beacon code.

RUNWAY 34: At JETEM, execute approach, if unable, proceed direct CUBIT and hold as published, maintain 4000, squawk appropriate beacon code.




NOTE: RADAR required.

NOTE: RNAV 1.

NOTE: DME/DME/IRU or GPS required.

NOTE: Turbojet aircraft descend via mach number until intercepting 280K, maintain 280K until 10000.

NOTE: Chart not to scale.

D-ATIS
270.1
SEATTLE APP CON
126.5 377.15
MC CHORD TOWER
124.8 259.3
GND CON
118.175 279.65



NW-1, 05 NOV 2020 to 31 DEC 2020

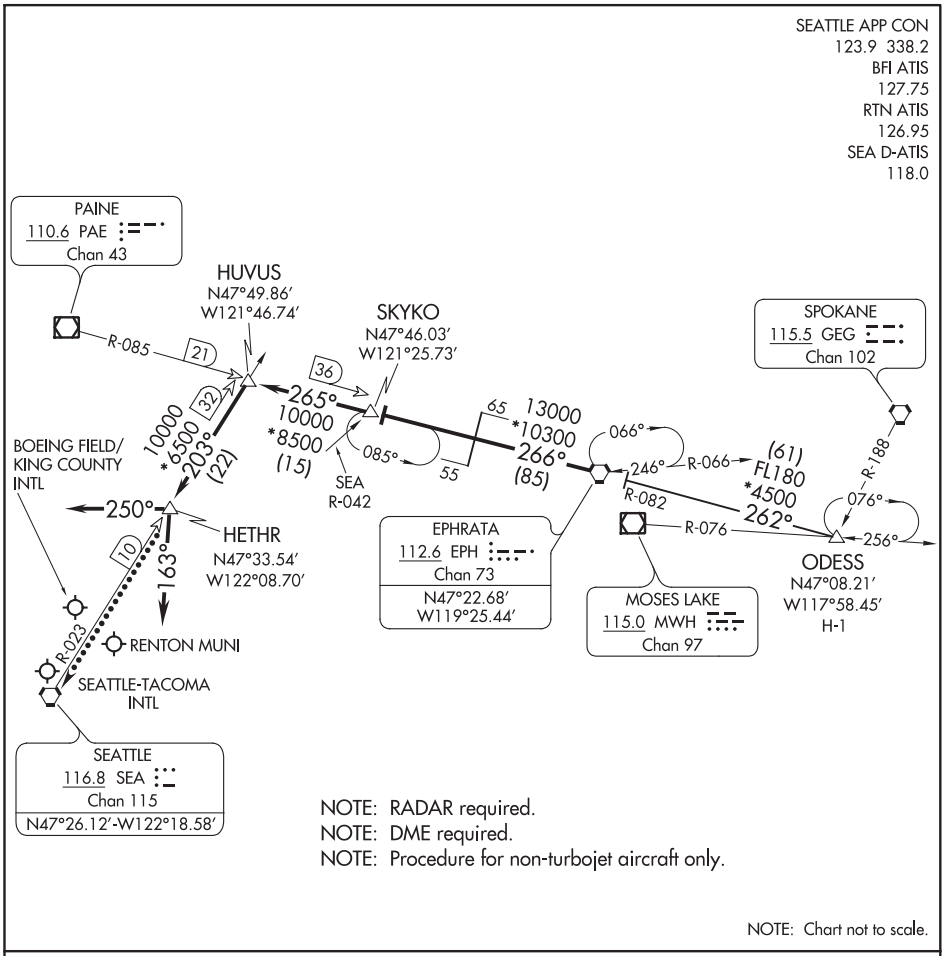
ELLENSBURG THREE ARRIVAL (RNAV)
TACOMA, WASHINGTON

(EPH.EPH8) 20198

# EPHRATA EIGHT ARRIVAL

AL-582 (FAA)

SEATTLE, WASHINGTON

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NW-1, 05 NOV 2020 to 31 DEC 2020

## ARRIVAL ROUTE DESCRIPTION

ODESS TRANSITION (ODESS.EPH8): From over ODESS INT on EPH R-082 to EPH VORTAC. Thence . . . .

. . . . from EPH VORTAC on EPH R-266 and PAE R-085 to SKYKO INT, then on PAE R-085 to HUVUS INT, then on SEA R-023 to HETHR INT, thence . . . .

LANDING NORTH: Heading 163°. Expect RADAR vectors to final approach course.
LANDING SOUTH: Heading 250°. Expect RADAR vectors to final approach course.

LOST COMMUNICATIONS: From over HETHR proceed direct SEA VORTAC.

EPHRATA EIGHT ARRIVAL

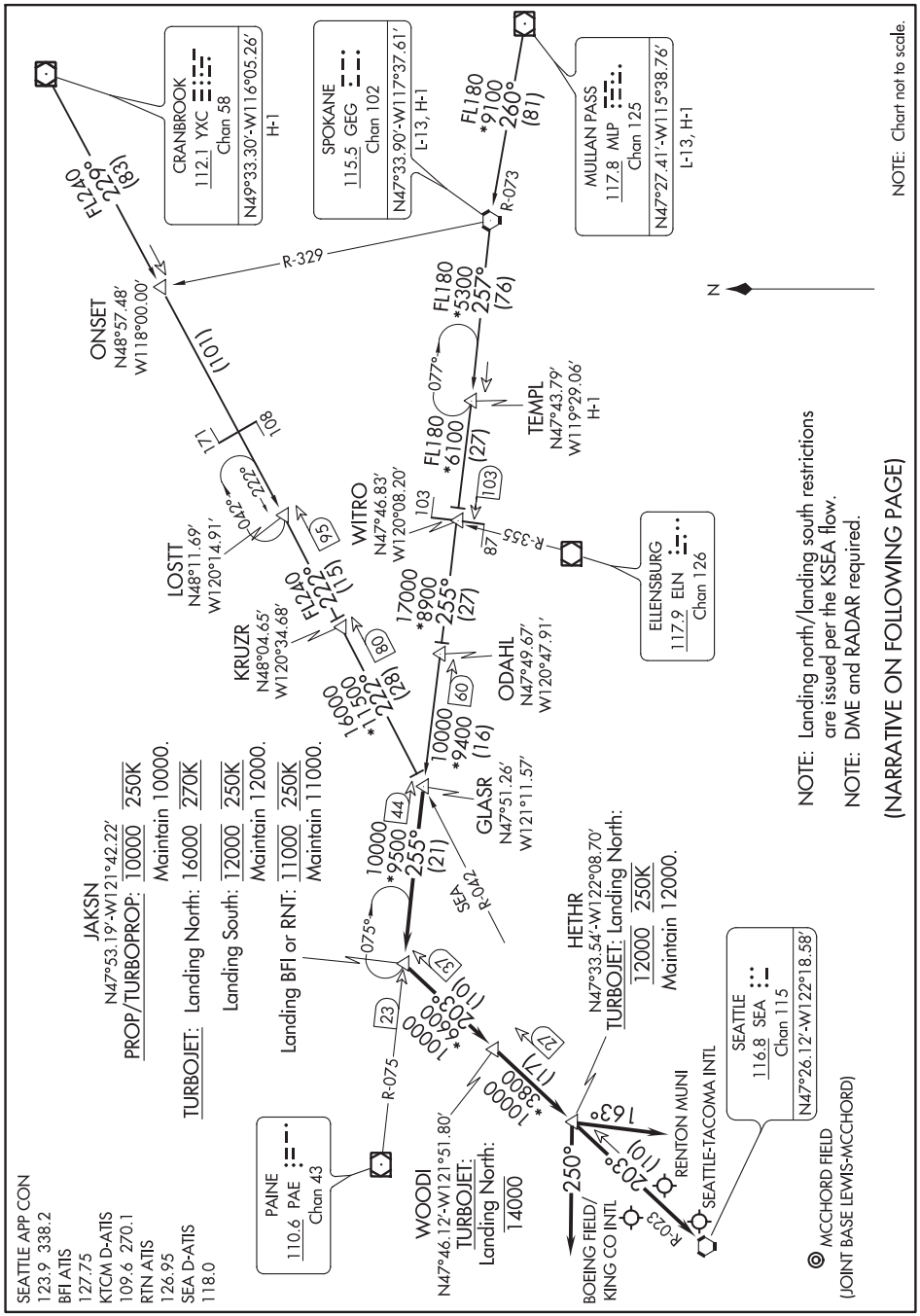
SEATTLE, WASHINGTON

(EPH.EPH8) 10NOV16

# GLASR ONE ARRIVAL

AL-582 (FAA)

SEATTLE, WASHINGTON



ARRIVAL ROUTE DESCRIPTION

CRANBROOK TRANSITION (YXC.GLASR1): From over YXC VOR/DME on YXC R-229 to ONSET, then on YXC R-229 and SEA R-042 to LOSTT, then on SEA R-042 to GLASR. Thence. . . .
LOSTT TRANSITION (LOSTT.GLASR1): From over LOSST on SEA R-042 to GLASR. Thence. . . .
MULLAN PASS TRANSITION (MLP.GLASR1): From over MLP VOR/DME on MLP R-260 and GEG R-073 to GEG VORTAC, then on GEG R-257 to WITRO, then on PAE R-075 to GLASR. Thence. . . .
SPOKANE TRANSITION (GEG.GLASR1): From over GEG VORTAC on GEG R-257 to WITRO, then on PAE R-075 to GLASR. Thence. . . .
TEMPL TRANSITION (TEMPL.GLASR1): From over TEMPL on GEG R-257 to WITRO, then on PAE R-075 to GLASR. Thence. . . .

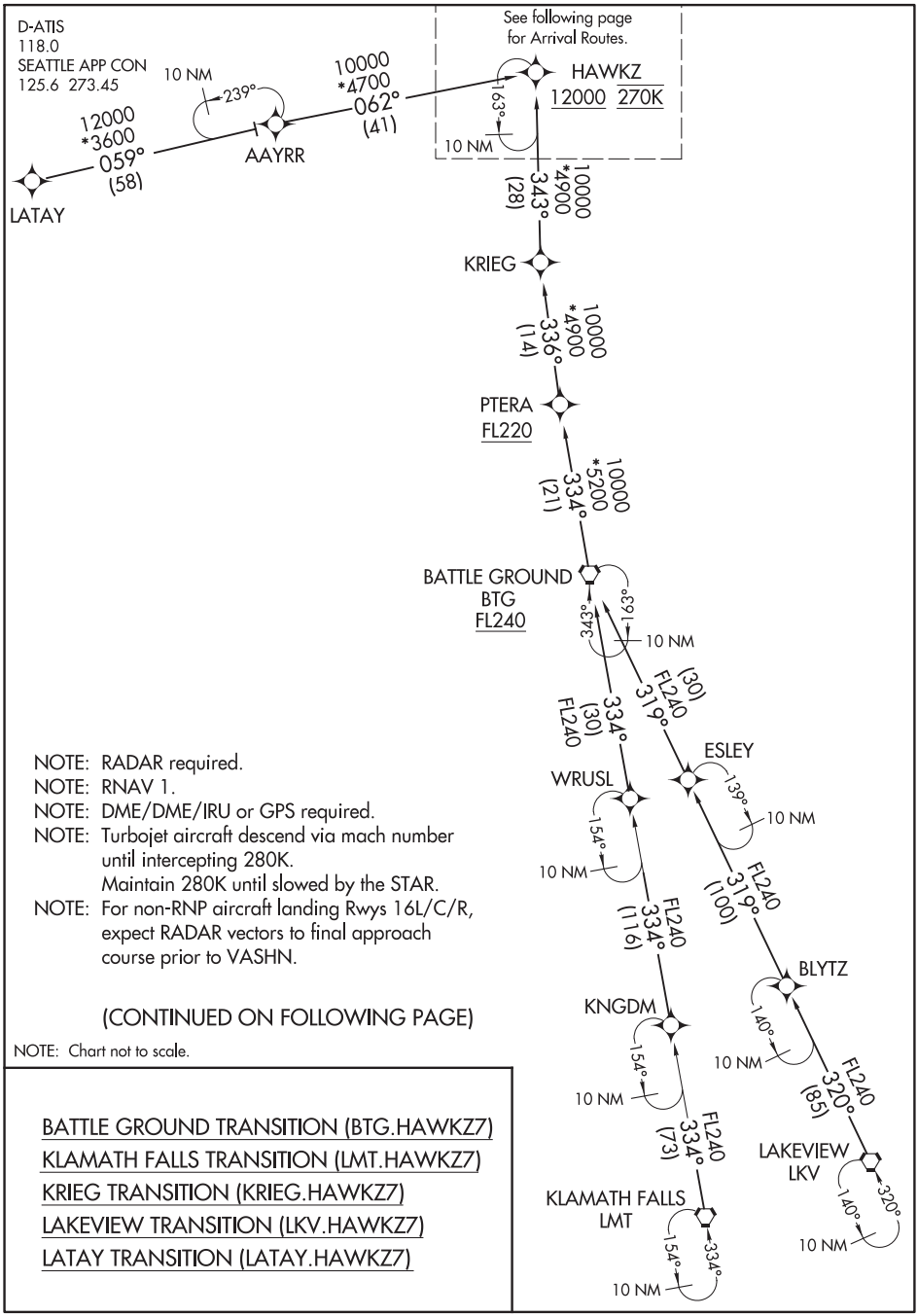
. . . .from GLASR on PAE R-075 to JAKSN, then on SEA R-023 to WOODI, then on SEA R-023 to HETHR. Thence:

LANDING NORTH: Heading 163° for vectors to final approach course.
LANDING SOUTH: Heading 250° for vectors to final approach course.
LANDING McCHORD FIELD: From over HETHR, proceed direct SEA VORTAC.
LANDING RENTON MUNI: From over HETHR, proceed direct SEA VORTAC.

LOST COMMUNICATIONS: From HETHR, proceed direct SEA VORTAC.

# HAWKZ SEVEN ARRIVAL (RNAV) Transition Routes






NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet aircraft descend via mach number until intercepting 280K.
Maintain 280K until slowed by the STAR.
NOTE: For non-RNP aircraft landing Rwys 16L/C/R, expect RADAR vectors to final approach course prior to VASHN.

(CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

BATTLE GROUND TRANSITION (BTG.HAWKZ7)
KLAMATH FALLS TRANSITION (LMT.HAWKZ7)
KRIEG TRANSITION (KRIEG.HAWKZ7)
LAKEVIEW TRANSITION (LKV.HAWKZ7)
LATAY TRANSITION (LATAY.HAWKZ7)


NW-1, 05 NOV 2020 to 31 DEC 2020

HAWKZ SEVEN ARRIVAL (RNAV) Transition Routes
SEATTLE, WASHINGTON
SEATTLE-TACOMA INTL (SEA)

(HAWKZ.HAWKZ7) 18256

AL-582 (FAA)

# HAWKZ SEVEN ARRIVAL (RNAV) Arrival Routes

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON

## ARRIVAL ROUTE DESCRIPTION

From HAWKZ on track 023° to LIINE.

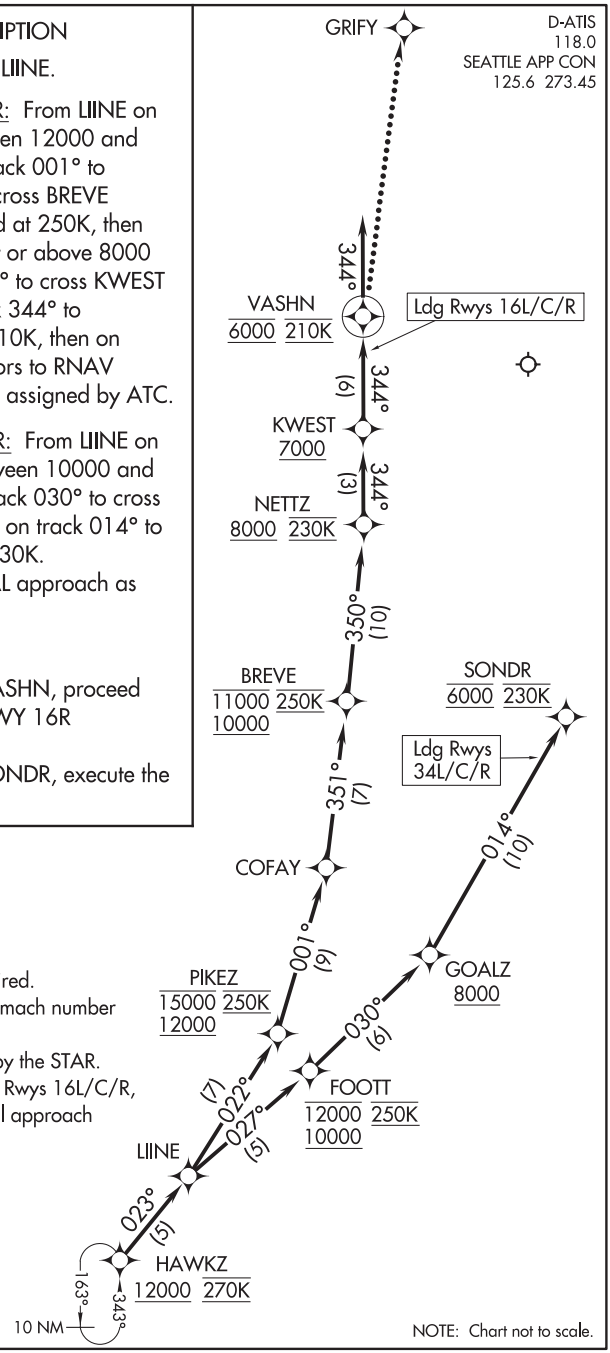
LANDING RUNWAYS 16L/C/R: From LIINE on track 022° to cross PIKEZ between 12000 and 15000 and at 250K, then on track 001° to COFAY, then on track 351° to cross BREVE between 10000 and 11000 and at 250K, then on track 350° to cross NETTZ at or above 8000 and at 230K, then on track 344° to cross KWEST at or above 7000, then on track 344° to cross VASHN at 6000 and at 210K, then on track 344°. Expect RADAR vectors to RNAV (RNP)/ILS/VISUAL approach as assigned by ATC.

LANDING RUNWAYS 34L/C/R: From LIINE on track 027° to cross FOOTT between 10000 and 12000 and at 250K, then on track 030° to cross GOALZ at or above 8000, then on track 014° to cross SONDR at 6000 and at 230K.
Expect RNAV (RNP)/ILS/VISUAL approach as assigned by ATC.

LOST COMMUNICATIONS

LANDING RUNWAY 16: At VASHN, proceed to GRIFY and execute the ILS RWY 16R approach.
LANDING RUNWAY 34: At SONDR, execute the ILS RWY 34L approach.

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet aircraft descend via mach number until intercepting 280K.
Maintain 280K until slowed by the STAR.
NOTE: For non-RNP aircraft landing Rwys 16L/C/R, expect RADAR vectors to final approach course prior to VASHN.




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

HAWKZ SEVEN ARRIVAL (RNAV) Arrival Routes

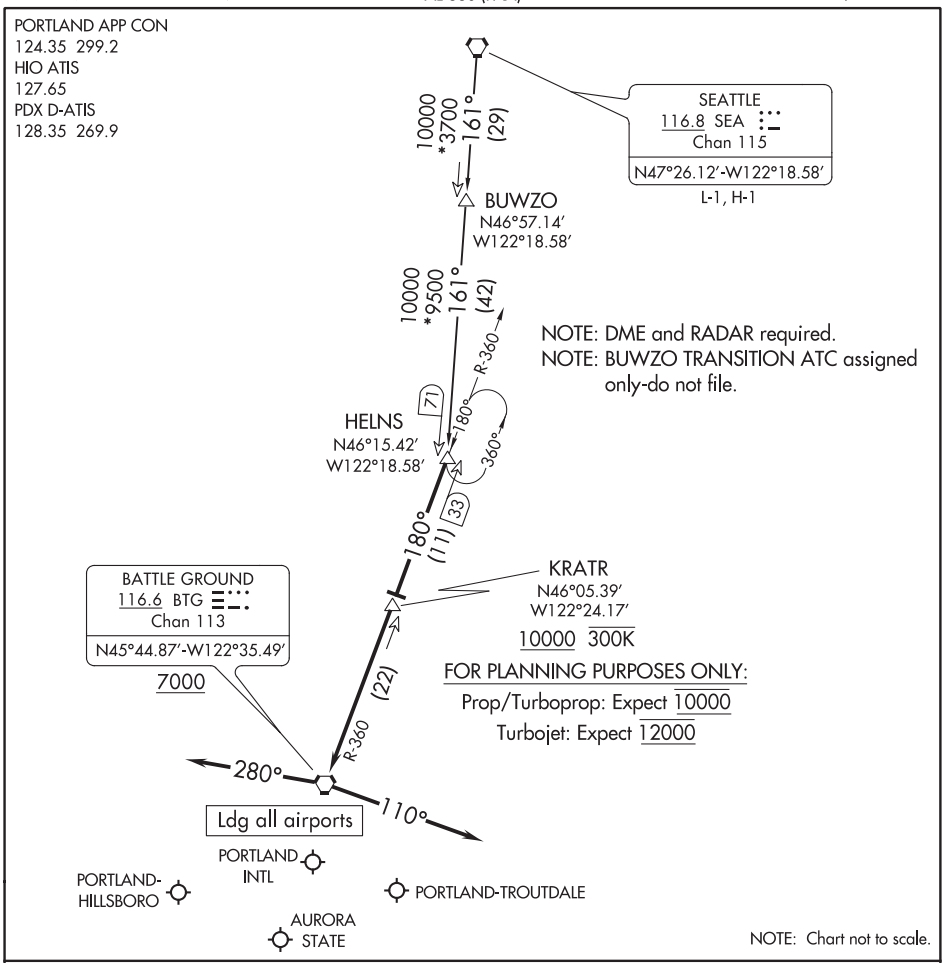
SEATTLE, WASHINGTON
SEATTLE-TACOMA INTL (SEA)

(HAWKZ.HAWKZ7) 13SEP18

# HELNS SIX ARRIVAL

AL-330 (FAA)

PORTLAND, OREGON




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

## ARRIVAL ROUTE DESCRIPTION

BUWZO TRANSITION (BUWZO.HELNS6): From over BUWZO via SEA R-161 to HELNS. Thence. . . .
SEATTLE TRANSITION (SEA.HELNS6): From over SEA VORTAC via SEA R-161 to HELNS. Thence. . . .

. . . . from over HELNS on BTG VORTAC R-360 to cross KRATR at or above 10000, then as depicted to cross BTG VORTAC at or above 7000.
LANDING EAST: From BTG VORTAC heading 280°, expect RADAR vectors to final approach course.
LANDING WEST: From BTG VORTAC heading 110°, expect RADAR vectors to final approach course.

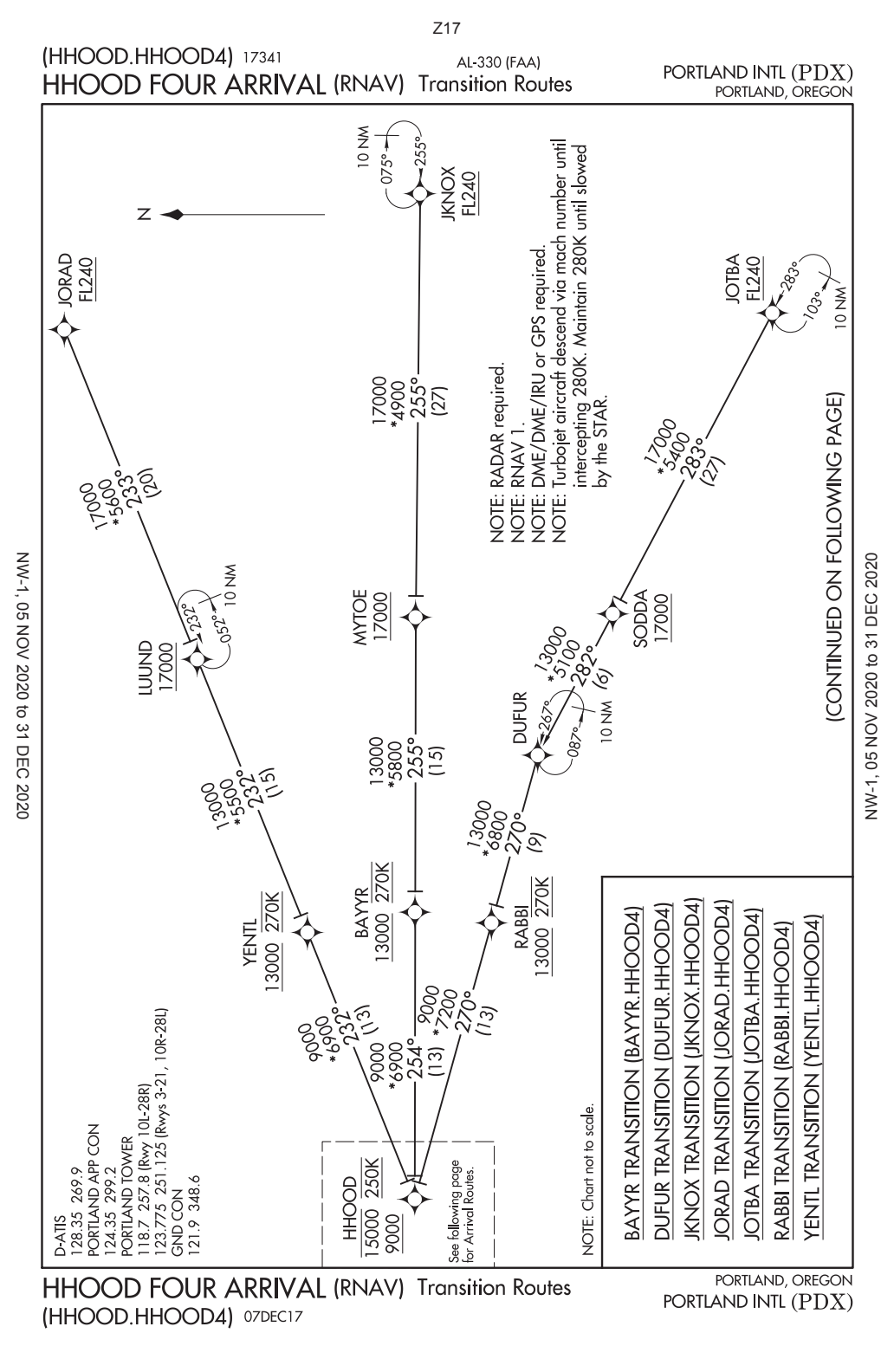
HELNS SIX ARRIVAL

PORTLAND, OREGON

(HHOOD.HHOOD4) 17341 AL-330 (FAA)

# HHOOD FOUR ARRIVAL (RNAV) Transition Routes

PORTLAND INTL (PDX)
PORTLAND, OREGON





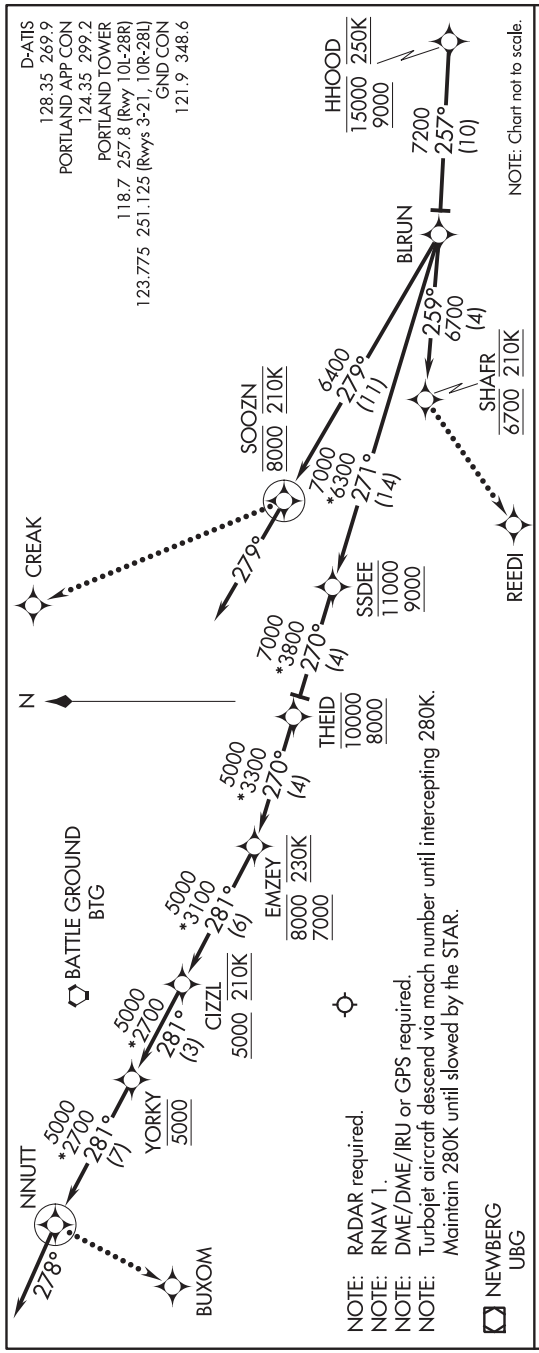

NW-1, 05 NOV 2020 to 31 DEC 2020

HHOOD FOUR ARRIVAL (RNAV) Transition Routes

(HHOOD.HHOOD4) 07DEC17

PORTLAND, OREGON
PORTLAND INTL (PDX)

# HHOOD FOUR ARRIVAL (RNAV) Arrival Routes




## ARRIVAL ROUTE DESCRIPTION

From HHOOD on track 257° to BLRUN, thence . . .

LANDING RUNWAYS 10L/R: From BLRUN on track 271° to cross SSDEE between 9000 and 11000, then on track 270° to cross THEID between 8000 and 10000, then on track 270° to cross EMZEY between 7000 and 8000 and at 230K, then on track 281° to cross CIZZL at or above 5000 and at 210K, then on track 281° to cross YORKY at 5000, then on track 281° to NNUTT, then on track 278°. Expect RADAR vectors to final approach course.

LANDING RUNWAY 21: From BLRUN on track 279° to cross SOOZN at 8000 and at 210K, then on track 279°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 28L/R: From BLRUN on track 259° to cross SHAFR at 6700 and at 210K. Expect RNAV (RNP)/ILS/VISUAL approach as assigned by ATC.

LOST COMMUNICATIONS

LANDING RUNWAY 10: At NNUTT, turn left direct to BUXOM and execute ILS RWY 10L approach.

LANDING RUNWAY 21: At SOOZN turn right direct to CREAK and execute LOC/DME RWY 21 approach.

LANDING RUNWAY 28: At SHAFR, turn left direct to REEDI and execute ILS RWY 28R approach.

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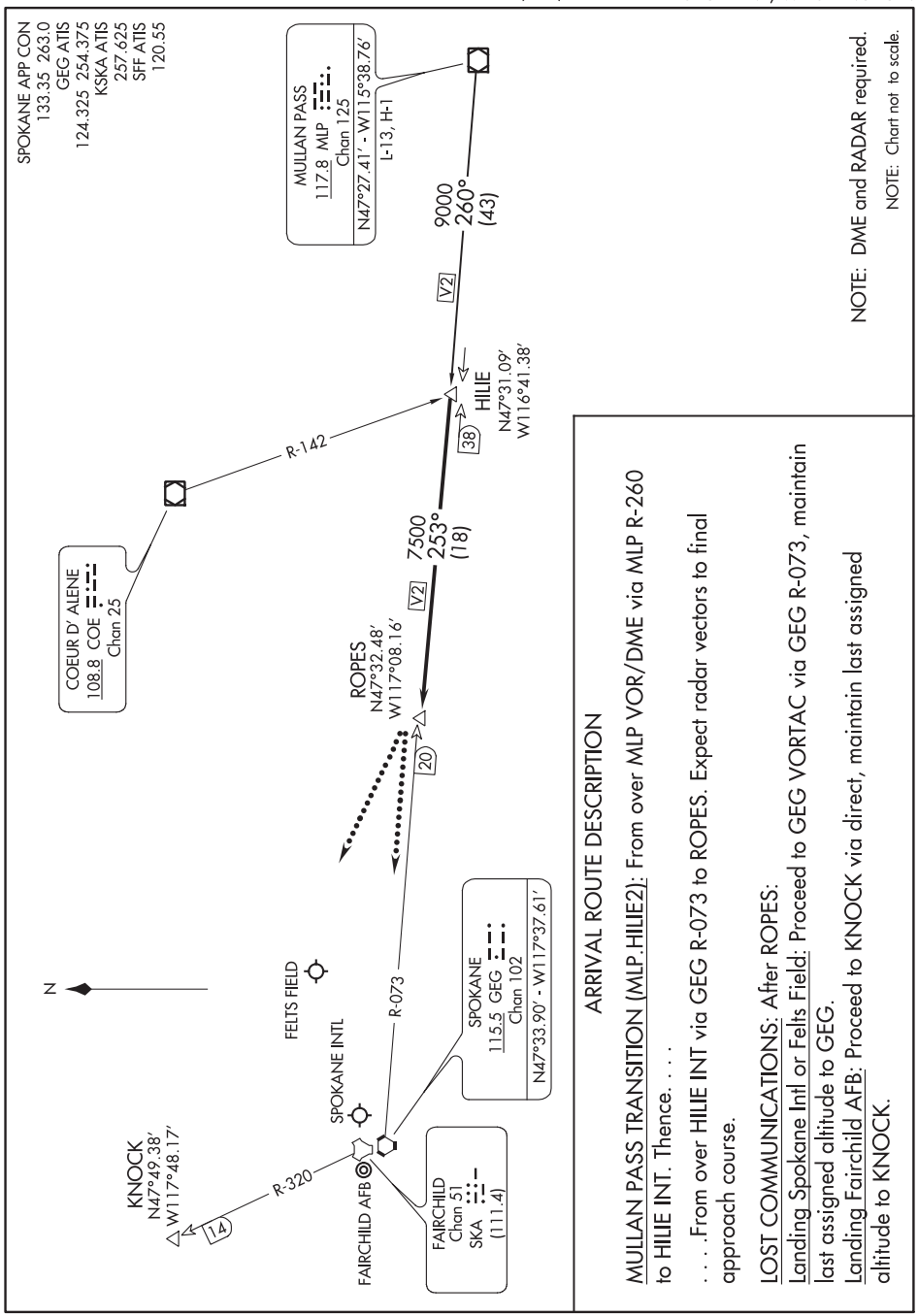
NW-1, 05 NOV 2020 to 31 DEC 2020

20198

# HILIE TWO ARRIVAL (HILIE.HILIE2)

AL-403 (FAA)

SPOKANE, WASHINGTON




NOTE: DME and RADAR required.

NOTE: Chart not to scale.

## ARRIVAL ROUTE DESCRIPTION

MULLAN PASS TRANSITION (MLP.HILIE2): From over MLP VOR/DME via MLP R-260 to HILIE INT. Thence. . . .

. . . .From over HILIE INT via GEG R-073 to ROPES. Expect radar vectors to final approach course.

LOST COMMUNICATIONS: After ROPES:
Landing Spokane Intl or Felts Field: Proceed to GEG VORTAC via GEG R-073, maintain last assigned altitude to GEG.
Landing Fairchild AFB: Proceed to KNOCK via direct, maintain last assigned altitude to KNOCK.

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NW-1, 05 NOV 2020 to 31 DEC 2020

HILIE TWO ARRIVAL (HILIE.HILIE2)

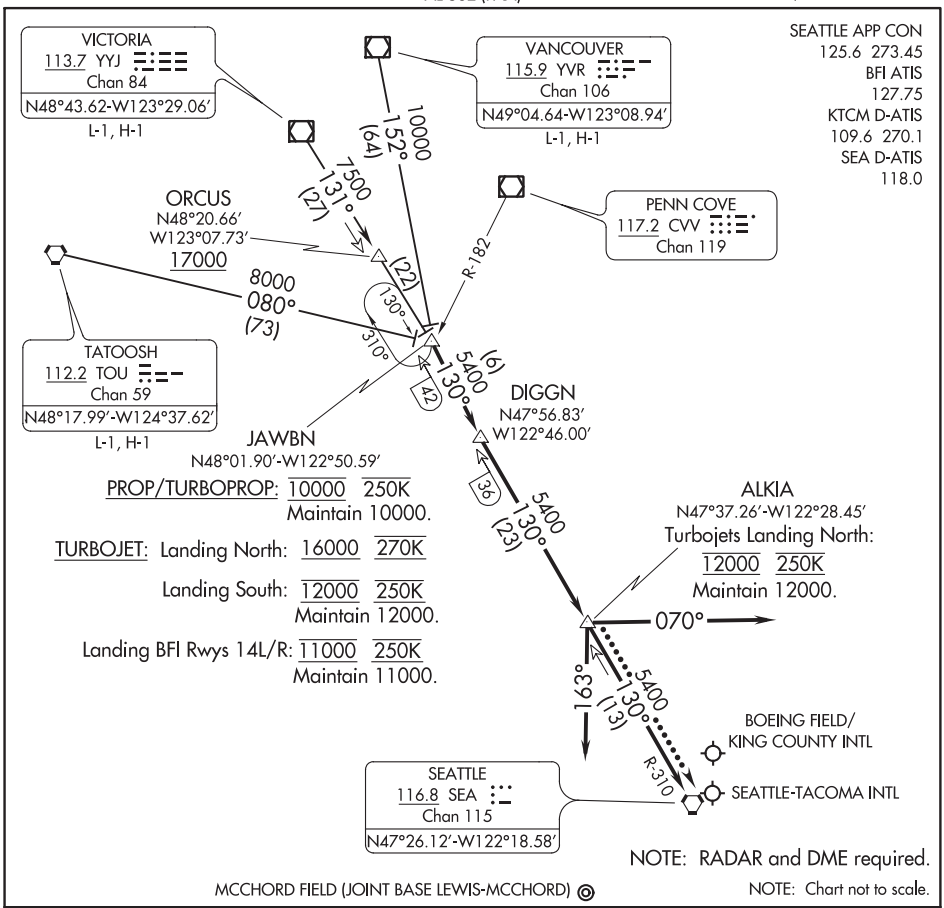
SPOKANE, WASHINGTON

13JAN11

# JAWBN SIX ARRIVAL

AL-582 (FAA)

SEATTLE, WASHINGTON




## ARRIVAL ROUTE DESCRIPTION

TATOOSH TRANSITION (TOU.JAWBN6): From over TOU VORTAC on TOU R-080 to JAWBN. Thence . . .

VANCOUVER TRANSITION (YVR.JAWBN6): From over YVR VOR/DME on YVR R-152 to JAWBN. Thence . . .

VICTORIA TRANSITION (YYJ.JAWBN6): From over YYJ VOR/DME on YYJ R-131 to JAWBN. Thence . . .

. . . from over JAWBN on SEA R-310 to DIGGN then on SEA R-310 to ALKIA thence . . .

LANDING SOUTH: depart ALKIA heading 070° for vectors to final approach course.

LANDING NORTH: depart ALKIA heading 163° for vectors to final approach course.

LANDING MCCHORD FIELD: depart ALKIA proceed direct SEA VORTAC.

LOST COMMUNICATIONS: After ALKIA, proceed direct SEA VORTAC.



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NW-1, 05 NOV 2020 to 31 DEC 2020

(KOURT.KOURT3) 17341

# KOURT THREE ARRIVAL (RNAV)

AL-57 (FAA)

BOISE AIR TERMINAL/GOWEN FIELD (BOI)
BOISE, IDAHO

BIG SKY APP CON
119.6 269.4 (SOUTH)
126.9 351.85 (NORTH)
D-ATIS
123.9 290.4
BOISE TOWER
118.1 257.8
GND CON
121.7 348.6

N

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: GPS required.

TESSA
282°
7500
282°
(2)
KOLKE
8000 210K
8000
282°
(3)
ROWBI
8100
8100
281°
(11)
LEAFS
8100
281°
(4)
GRZZY
8900
8900
281°
(7)
BOISE
BOI
LIITL
9000 250K
261°
8900
(4)
EREXE
9600 250K
9600
271°
(2)
BOLLS
9900
9900
271°
(10)
KOURT
12500
12000
*9400
271°
(8)
DERSO
14000
13000
*9400
272°
(25)
SOLDE
FL190
FL180
*8200
272°
(22)
REAPS
FL240

NOTE: Chart not to scale.

## ARRIVAL ROUTE DESCRIPTION

DERSO TRANSITION (DERSO.KOURT3)

REAPS TRANSITION (REAPS.KOURT3)

From KOURT on track 271° to cross BOLLS at/above 9900, then on track 271° to cross EREXE at/above 9600 and at 250K.

LANDING RUNWAYS 10L/R: From EREXE on track 281° to cross GRZZY at/above 8900, then on track 281° to LEAFS, then on track 281° to cross ROWBI at/above 8100, then on track 282° to cross KOLKE at 8000 and at 210K, then on track 282° to TESSA, then on track 282°. Expect assigned approach or RADAR vectors to final approach course.

LANDING RUNWAYS 28L/R: From EREXE on track 261° to cross LIITL at/above 9000 and at 250K. Expect assigned approach or RADAR vectors to final approach course.

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NW-1, 05 NOV 2020 to 31 DEC 2020

KOURT THREE ARRIVAL (RNAV)

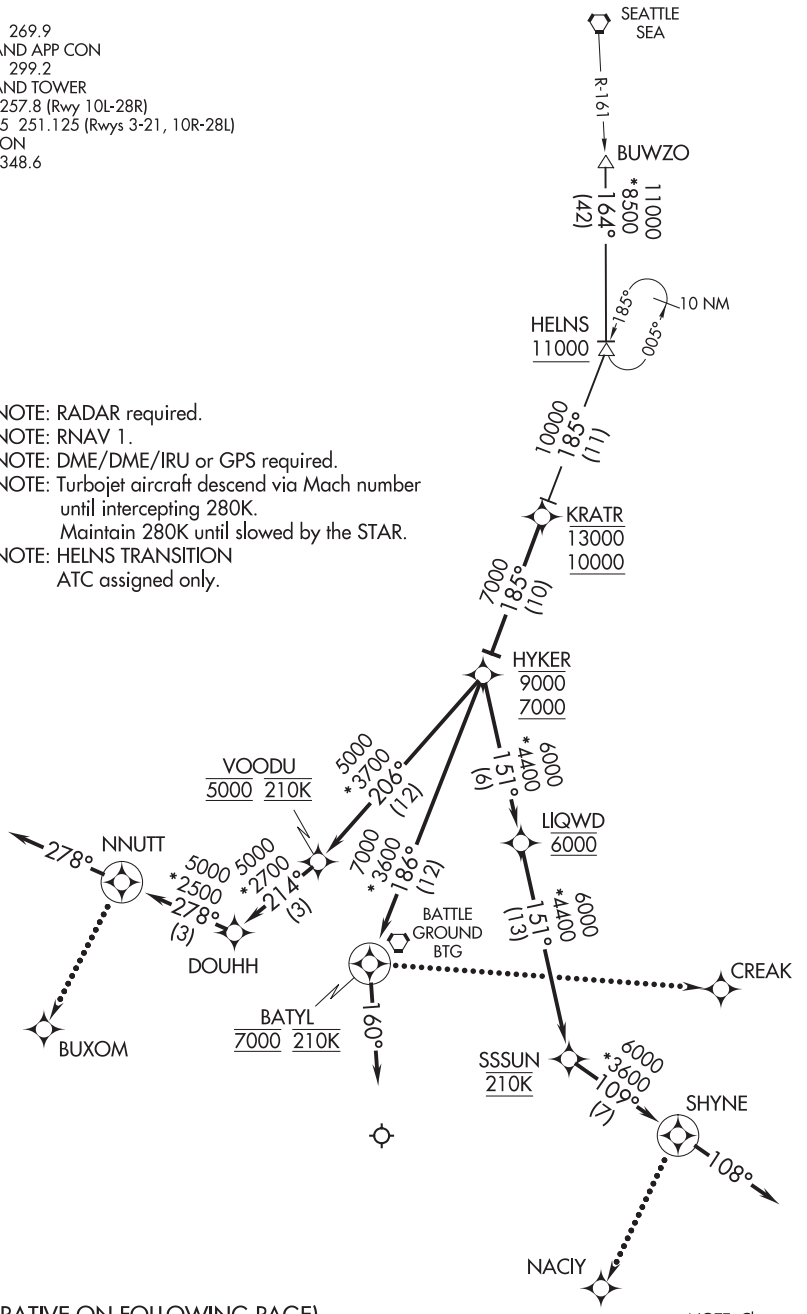
(KOURT.KOURT3) 07DEC17

BOISE, IDAHO
BOISE AIR TERMINAL/GOWEN FIELD (BOI)

# KRATR TWO ARRIVAL (RNAV)

AL-330 (FAA)

D-ATIS
128.35 269.9
PORTLAND APP CON
124.35 299.2
PORTLAND TOWER
118.7 257.8 (Rwy 10L-28R)
123.775 251.125 (Rwys 3-21, 10R-28L)
GND CON
121.9 348.6




NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet aircraft descend via Mach number until intercepting 280K. Maintain 280K until slowed by the STAR.
NOTE: HELNS TRANSITION ATC assigned only.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

BUWZO TRANSITION (BUWZO.KRATR2)
HELNS TRANSITION (HELNS.KRATR2):

From KRATR on track 185° to cross HYKER between 7000 and 9000. Thence. . . .

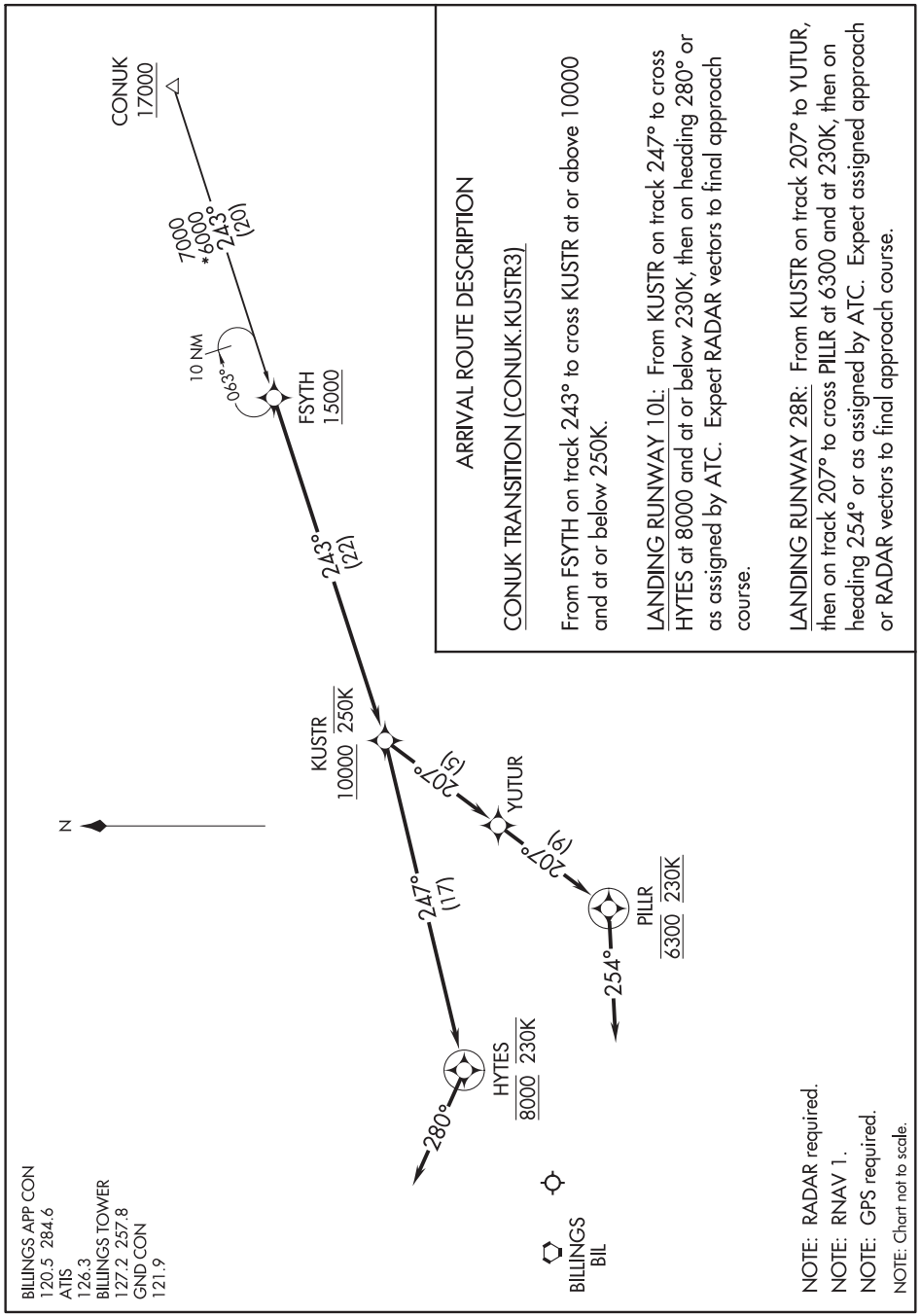
LANDING RUNWAYS 10L/R: From HYKER on track 206° to cross VOODU at 5000 and at 210K, then on track 214° to DOUHH, then on track 278° to NNUTT, then on track 278°. Expect RADAR vectors to final approach course.

LANDING RUNWAY 21: From HYKER on track 186° to cross BATYL at 7000 and at 210K, then on track 160°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 28L/R: From HYKER on track 151° to cross LIQWD at 6000, then on track 151° to cross SSSUN at 210K, then on track 109° to SHYNE, then on track 108°. Expect RADAR vectors to final approach course.

LOST COMMUNICATIONS:
LANDING RUNWAYS 10L/R: At NNUTT, turn left direct to BUXOM and execute ILS RWY 10L approach.
LANDING RUNWAY 21: At BATYL turn left direct to CREAK and execute LOC/DME RWY 21 approach.
LANDING RUNWAYS 28L/R: At SHYNE, turn right direct to NACIY and execute ILS RWY 28R approach.


NW-1, 05 NOV 2020 to 31 DEC 2020

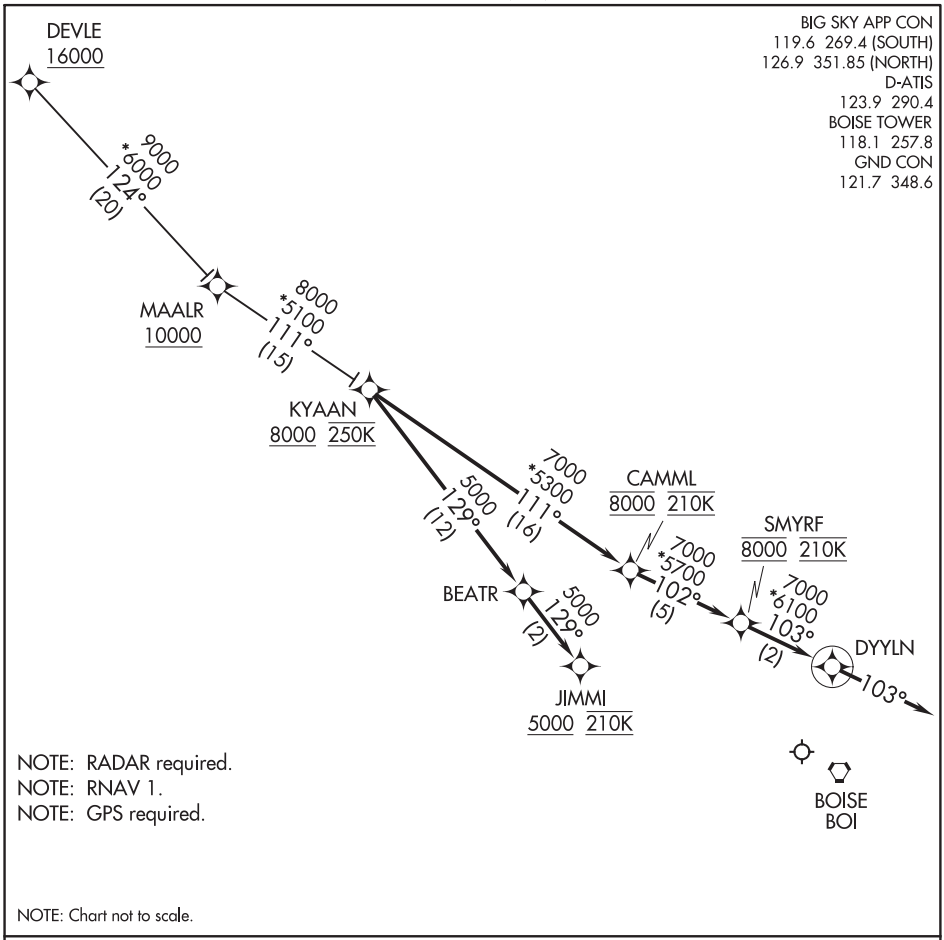

CONUK
17000
7000
*6000
243°
(20)
10 NM
090°
FSYTH
15000
243°
(22)
KUSTR
10000 250K
207°
(5)
YUTUR
207°
(9)
PILLR
6300 230K
254°
247°
(17)
HYTES
8000 230K
280°
BILLINGS
BIL
N
BILLINGS APP CON
120.5 284.6
ATIS
126.3
BILLINGS TOWER
127.2 257.8
GND CON
121.9
ARRIVAL ROUTE DESCRIPTION
CONUK TRANSITION (CONUK.KUSTR3)
From FSYTH on track 243° to cross KUSTR at or above 10000 and at or below 250K.
LANDING RUNWAY 10L: From KUSTR on track 247° to cross HYTES at 8000 and at or below 230K, then on heading 280° or as assigned by ATC. Expect RADAR vectors to final approach course.
LANDING RUNWAY 28R: From KUSTR on track 207° to YUTUR, then on track 207° to cross PILLR at 6300 and at 230K, then on heading 254° or as assigned by ATC. Expect assigned approach or RADAR vectors to final approach course.
NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: GPS required.
NOTE: Chart not to scale.

(KYAAN.KYAAN3) 17341

# KYAAN THREE ARRIVAL (RNAV)

AL-57 (FAA)

BOISE AIR TERMINAL/GOWEN FIELD (BOI)
BOISE, IDAHO




NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: GPS required.

NOTE: Chart not to scale.

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

## ARRIVAL ROUTE DESCRIPTION

DEVLE TRANSITION (DEVLE.KYAAN3)

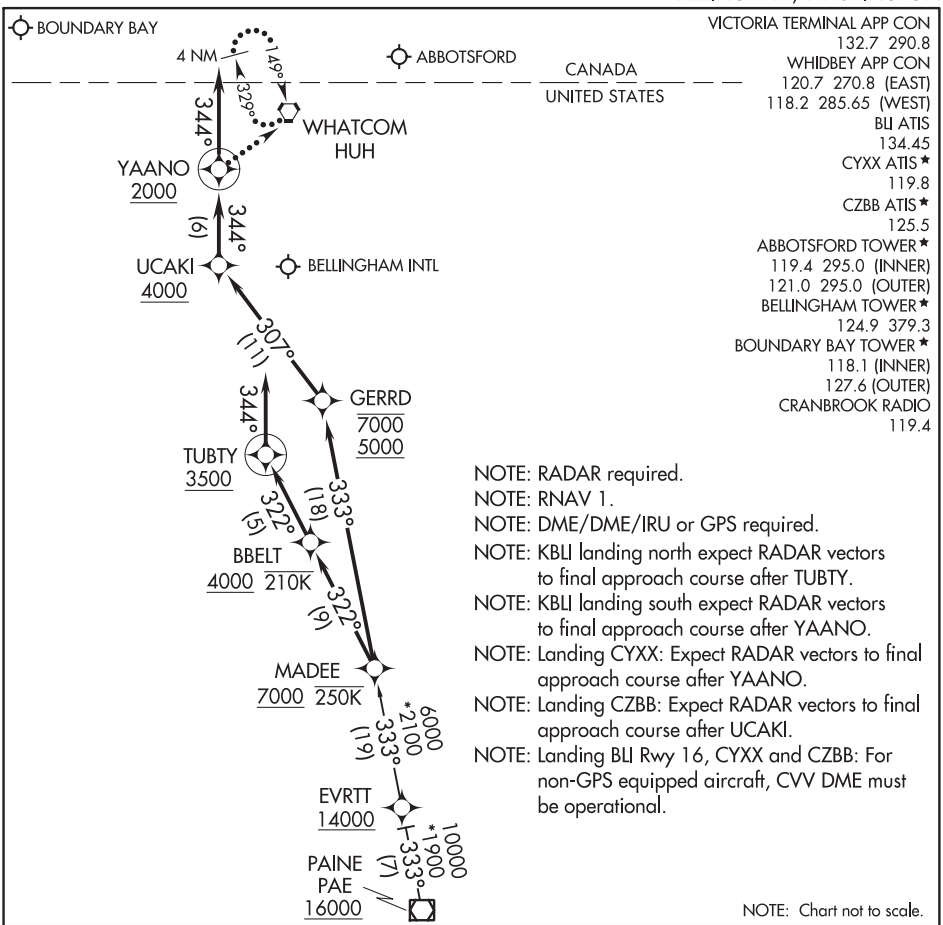
LANDING RUNWAYS 10L/R: From KYAAN on track 129° to BEATR, then on track 129° to cross JIMMI at or above 5000 and at 210K. Expect assigned approach or RADAR vectors to final approach course.

LANDING RUNWAYS 28L/R: From KYAAN on track 111° to cross CAMML at 8000 and at 210K, then on track 102° to cross SMYRF at 8000 and at 210K, then on track 103° to DYYLN, then on track 103°. Expect assigned approach or RADAR vectors to final approach course.

# MADEE FOUR ARRIVAL (RNAV)

AL-45 (FAA)

BELLINGHAM, WASHINGTON




## ARRIVAL ROUTE DESCRIPTION

PAINE TRANSITION (PAE.MADEE4)

LANDING BLI RUNWAY 16: From MADEE on track 333° to cross GERRD between 5000 and 7000, then on track 307° to cross UCAKI at or above 4000, then on track 344° to cross YAANO at or above 2000, then on track 344°. Expect RADAR vectors to final approach course.

LANDING BLI RUNWAY 34: From MADEE on track 322° to cross BBELT at or above 4000 and at or below 210K, then on track 322° to cross TUBTY at or above 3500, then on track 344°. Expect RADAR vectors to final approach course.

LANDING CYXX/CZBB: From MADEE on track 333° to cross GERRD between 5000 and 7000, then on track 307° to cross UCAKI at or above 4000, then on track 344° to cross YAANO at or above 2000, then on track 344°. Expect RADAR vectors to final approach course.

LOST COMMUNICATIONS

LANDING BLI RUNWAY 16, CYXX, and CZBB: After YAANO proceed direct HUH and hold.

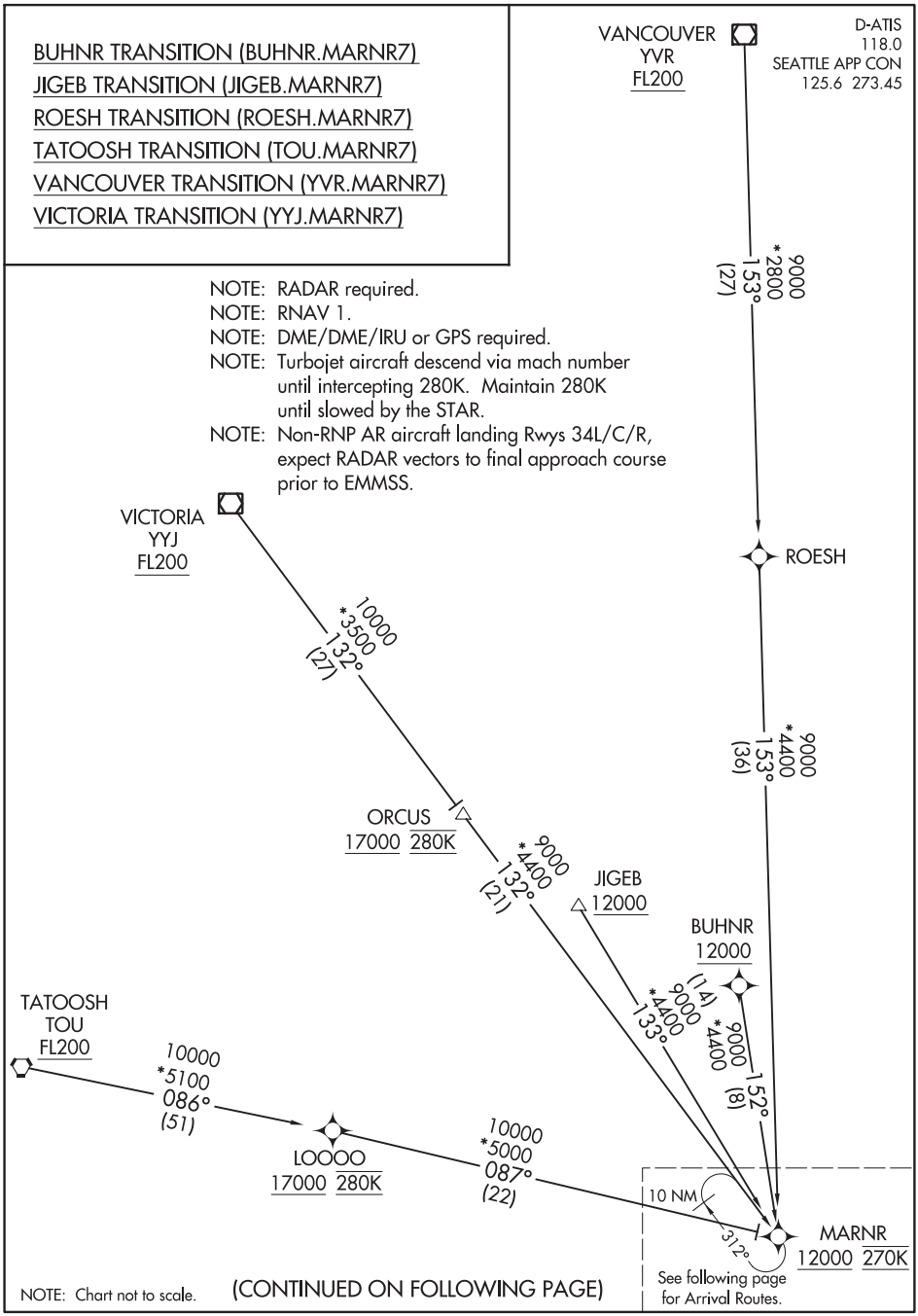
LANDING BLI RUNWAY 34: After TUBTY execute RNAV (GPS) Y RWY 34 approach.

(MARNR.MARNR7) 17285

AL-582 (FAA)

# MARNR SEVEN ARRIVAL (RNAV) Transition Routes

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON






NW-1, 05 NOV 2020 to 31 DEC 2020

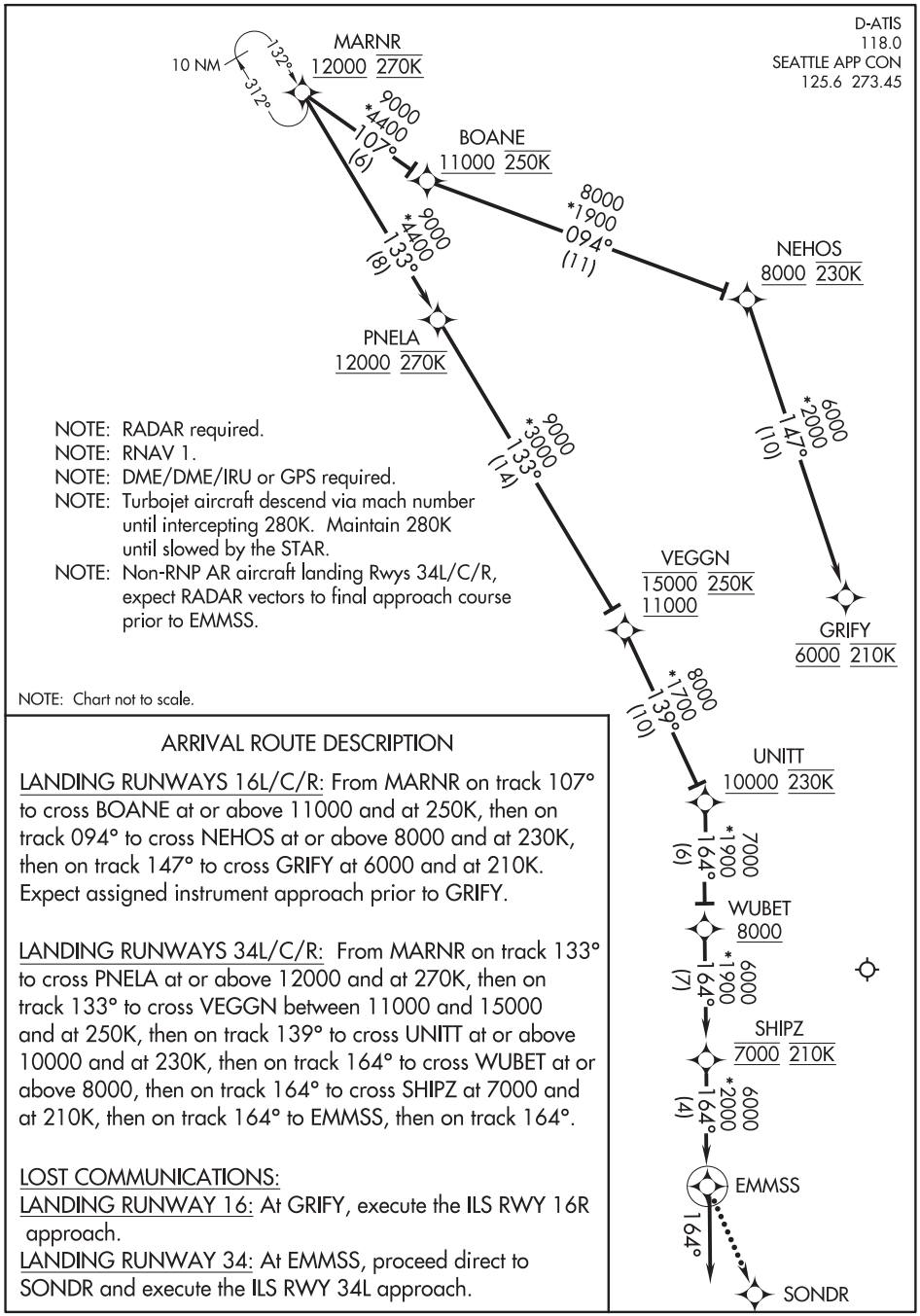
MARNR SEVEN ARRIVAL (RNAV) Transition Routes

SEATTLE, WASHINGTON
SEATTLE-TACOMA INTL (SEA)

(MARNR.MARNR7) 12OCT17

# MARNR SEVEN ARRIVAL (RNAV) Arrival Routes






NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: Turbojet aircraft descend via mach number until intercepting 280K. Maintain 280K until slowed by the STAR.
NOTE: Non-RNP AR aircraft landing Rwys 34L/C/R, expect RADAR vectors to final approach course prior to EMMSS.

NOTE: Chart not to scale.

## ARRIVAL ROUTE DESCRIPTION

LANDING RUNWAYS 16L/C/R: From MARNR on track 107° to cross BOANE at or above 11000 and at 250K, then on track 094° to cross NEHOS at or above 8000 and at 230K, then on track 147° to cross GRIFY at 6000 and at 210K. Expect assigned instrument approach prior to GRIFY.

LANDING RUNWAYS 34L/C/R: From MARNR on track 133° to cross PNELA at or above 12000 and at 270K, then on track 133° to cross VEGGN between 11000 and 15000 and at 250K, then on track 139° to cross UNITT at or above 10000 and at 230K, then on track 164° to cross WUBET at or above 8000, then on track 164° to cross SHIPZ at 7000 and at 210K, then on track 164° to EMMSS, then on track 164°.

LOST COMMUNICATIONS:
LANDING RUNWAY 16: At GRIFY, execute the ILS RWY 16R approach.
LANDING RUNWAY 34: At EMMSS, proceed direct to SONDR and execute the ILS RWY 34L approach.

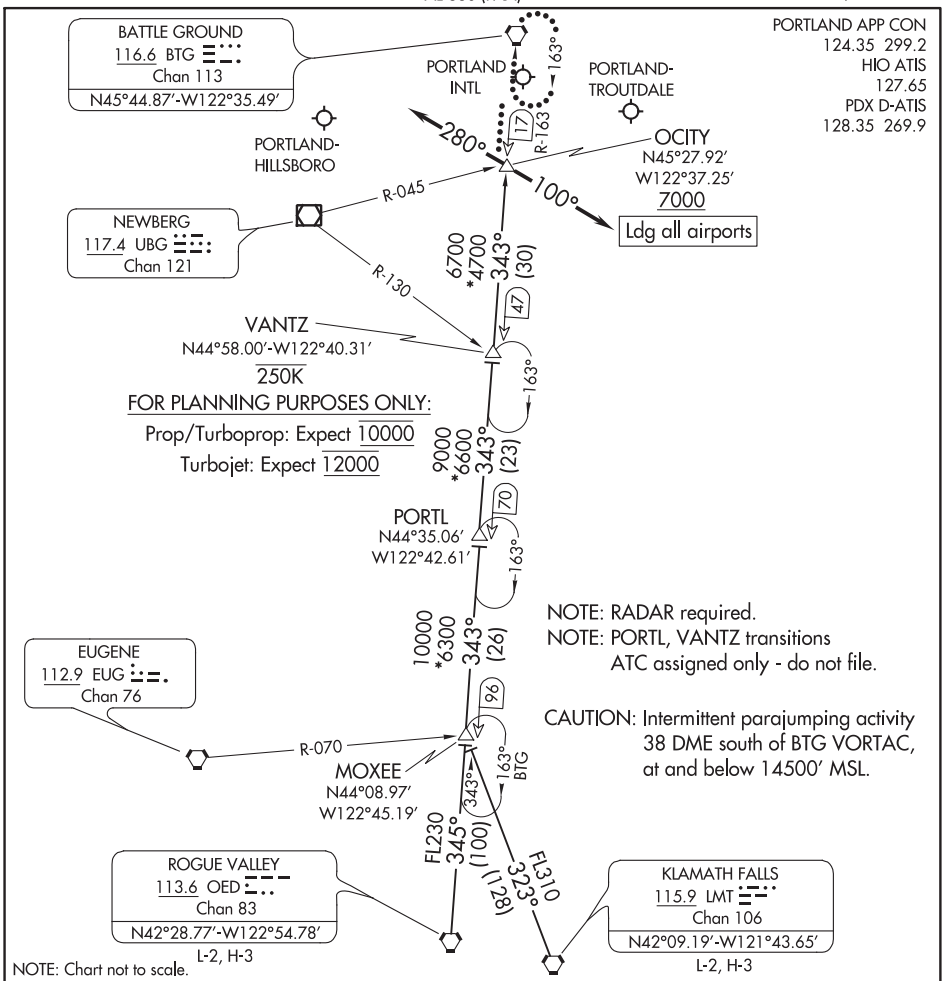

NW-1, 05 NOV 2020 to 31 DEC 2020

(OCITY.OCITY3) 20198

# OCITY THREE ARRIVAL

AL-330 (FAA)

PORTLAND, OREGON




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

## ARRIVAL ROUTE DESCRIPTION

KLAMATH FALLS TRANSITION (LMT.OCITY3): From over LMT VORTAC on LMT R-323 to MOXEE, then on BTG R-163 to OCITY. Thence. . . .

MOXEE TRANSITION (MOXEE.OCITY3): From over MOXEE on BTG R-163 to OCITY. Thence. . .

ROGUE VALLEY TRANSITION (OED.OCITY3): From over OED VORTAC on OED R-345 to to MOXEE, then on BTG R-163 to OCITY. Thence. . . .

PORTL TRANSITION (PORTL.OCITY3): From over PORTL on BTG R -163 to OCITY. Thence. . . .

VANTZ TRANSITION (VANTZ.OCITY3): From over VANTZ on BTG R-163 to OCITY. Thence. . .

LANDING EAST: From OCITY heading 280°, expect RADAR vectors to final approach course.

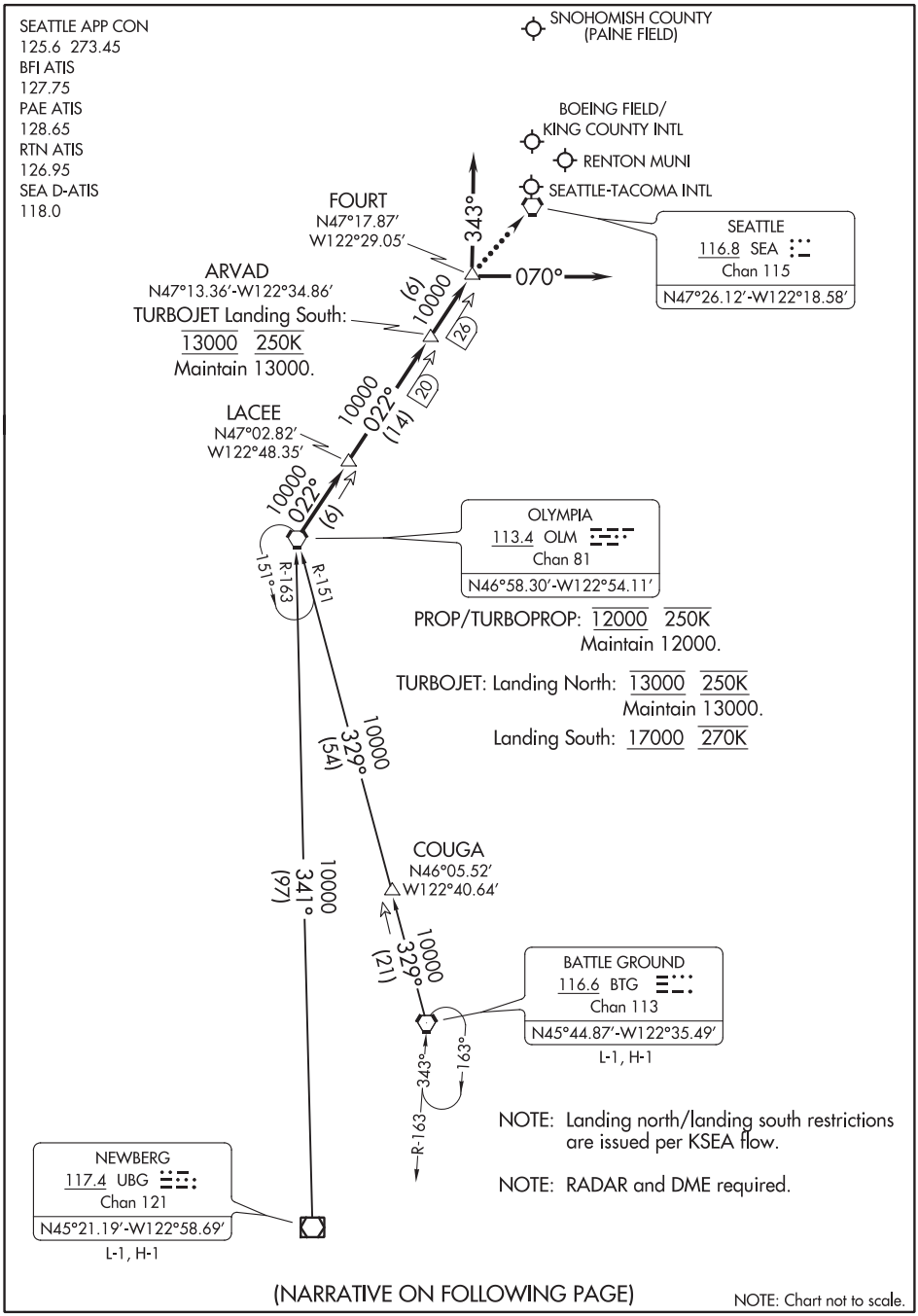
LANDING WEST: From OCITY heading 100°, expect RADAR vectors to final approach course.

LOST COMMUNICATIONS: After OCITY, proceed direct BTG VORTAC and hold.

OCITY THREE ARRIVAL

PORTLAND, OREGON

(OCITY.OCITY3) 30JAN20




(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.


NW-1, 05 NOV 2020 to 31 DEC 2020

ARRIVAL ROUTE DESCRIPTION

BATTLE GROUND TRANSITION (BTG.OLM2): From over BTG VORTAC on BTG R-329 to COUGA, then on BTG R-329 and OLM R-151 to OLM VORTAC. Thence. . . .

NEWBERG TRANSITION (UBG.OLM2): From over UBG VOR/DME on UBG R-341 and OLM R-163 to OLM VORTAC. Thence. . . .

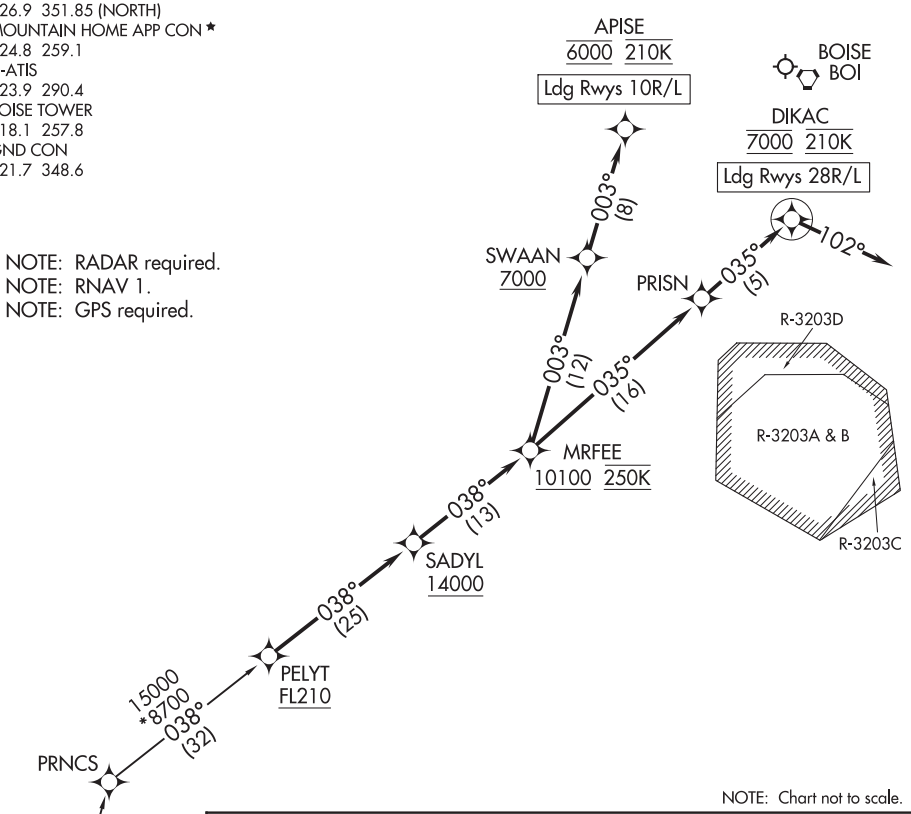
. . . . from over OLM VORTAC on OLM R-022 to LACEE, then on OLM R-022 to ARVAD, then on OLM R-022 to FOURT, thence. . . .

. . . . LANDING NORTH SEA/BFI: Depart FOURT heading 070° for vectors to final approach course.
. . . . LANDING SOUTH SEA/BFI: Depart FOURT heading 343° for vectors to final approach course.
. . . . LANDING SNOHOMISH COUNTY (PAINE FIELD): Depart FOURT heading 343° for vectors to final approach course.
. . . . LANDING RENTON MUNI: Depart FOURT heading 343° for vectors to final approach course.

LOST COMMUNICATIONS: From over FOURT, proceed direct SEA VORTAC.

BIG SKY APP CON
119.6 269.4 (SOUTH)
126.9 351.85 (NORTH)
MOUNTAIN HOME APP CON ★
124.8 259.1
D-ATIS
123.9 290.4
BOISE TOWER
118.1 257.8
GND CON
121.7 348.6

NOTE: RADAR required.
NOTE: RNAV 1.
NOTE: GPS required.




NOTE: Chart not to scale.

## ARRIVAL ROUTE DESCRIPTION

NEERO TRANSITION (NEERO.SADYL4)

PRNCS TRANSITION (PRNCS.SADYL4)

From PELYT on track 038° to cross SADYL at or above 14000, then on track 038° to cross MRFEE at or above 10100 and at 250K.

LANDING RUNWAYS 10L/R: From MRFEE on track 003° to cross SWAAN at or above 7000, then on track 003° to cross APISE at 6000 and at 210K. Expect RNP approach or RADAR vectors to final approach course.

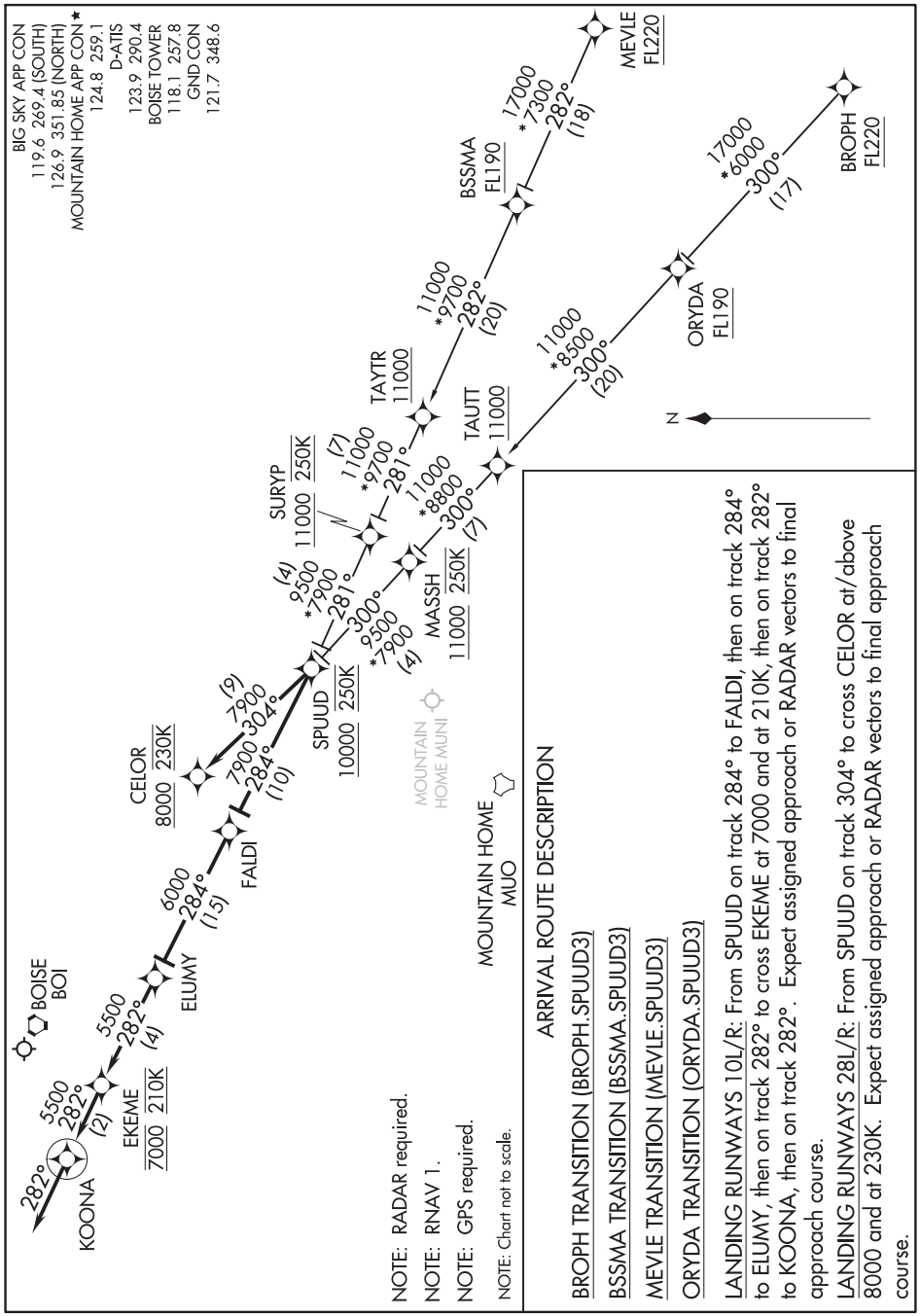
LANDING RUNWAYS 28L/R: From MRFEE on track 035° to PRISN, then on track 035° to cross DIKAC at 7000 and at 210K, then on heading 102° or as assigned by ATC. Expect RNP approach or RADAR vectors to final approach course.

(SPUUD.SPUUD3) 17341

# SPUUD THREE ARRIVAL (RNAV)

AL-57 (FAA)

BOISE AIR TERMINAL/GOWEN FIELD (BOI)
BOISE, IDAHO




NOTE: RADAR required.

NOTE: RNAV 1.

NOTE: GPS required.

NOTE: Chart not to scale.

## ARRIVAL ROUTE DESCRIPTION

BROPH TRANSITION (BROPH.SPUUD3)

BSSMA TRANSITION (BSSMA.SPUUD3)

MEVLE TRANSITION (MEVLE.SPUUD3)

ORYDA TRANSITION (ORYDA.SPUUD3)

LANDING RUNWAYS 10L/R: From SPUUD on track 284° to FALDI, then on track 284° to ELUMY, then on track 282° to cross EKEME at 7000 and at 210K, then on track 282° to KOONA, then on track 282°. Expect assigned approach or RADAR vectors to final approach course.

LANDING RUNWAYS 28L/R: From SPUUD on track 304° to cross CELOR at/above 8000 and at 230K. Expect assigned approach or RADAR vectors to final approach course.

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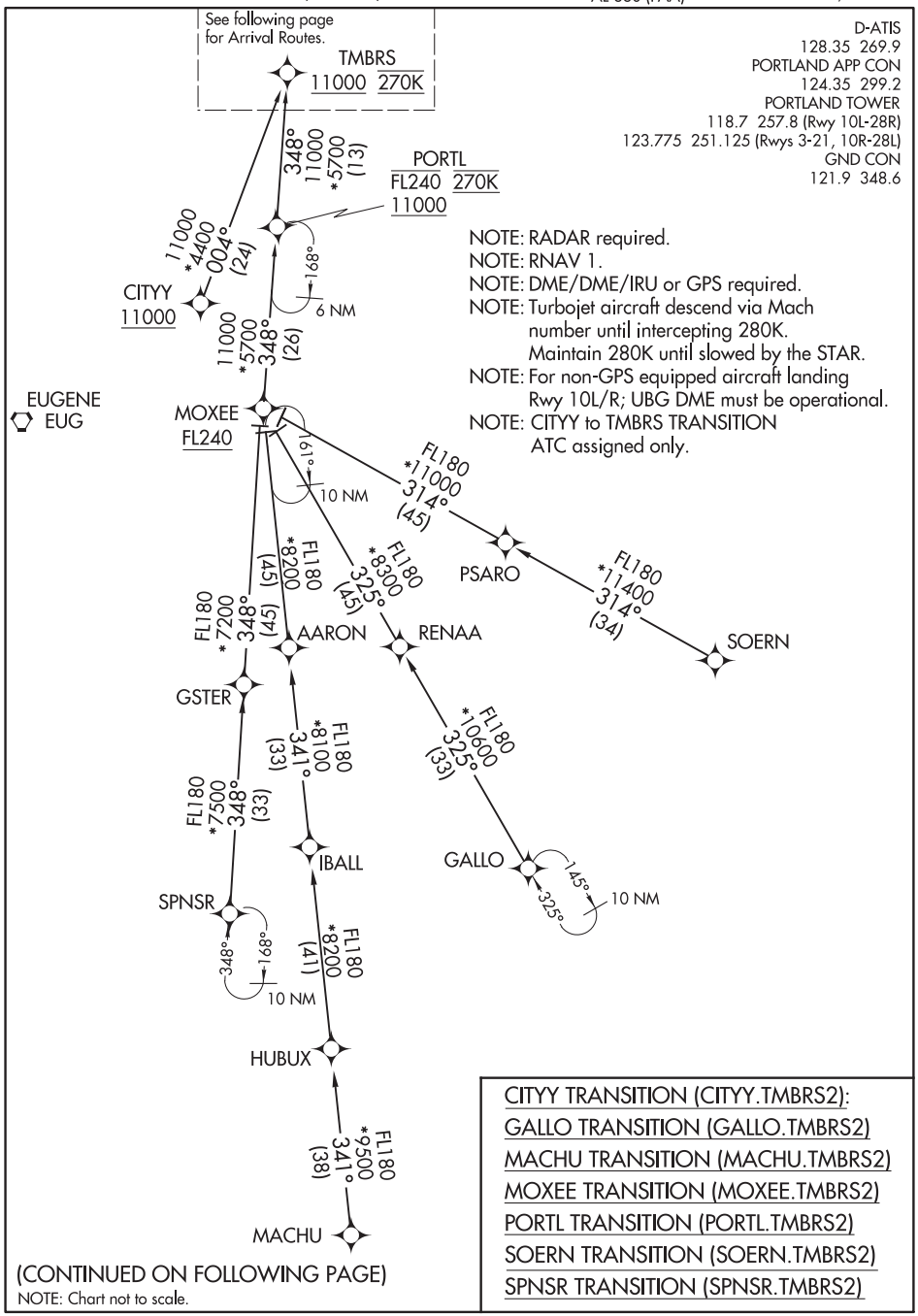
SPUUD THREE ARRIVAL (RNAV)

(SPUUD.SPUUD3) 07DEC17

BOISE, IDAHO
BOISE AIR TERMINAL/GOWEN FIELD (BOI)

# TMBRS TWO ARRIVAL (RNAV) Transition Routes

AL-330 (FAA)




(CONTINUED ON FOLLOWING PAGE)

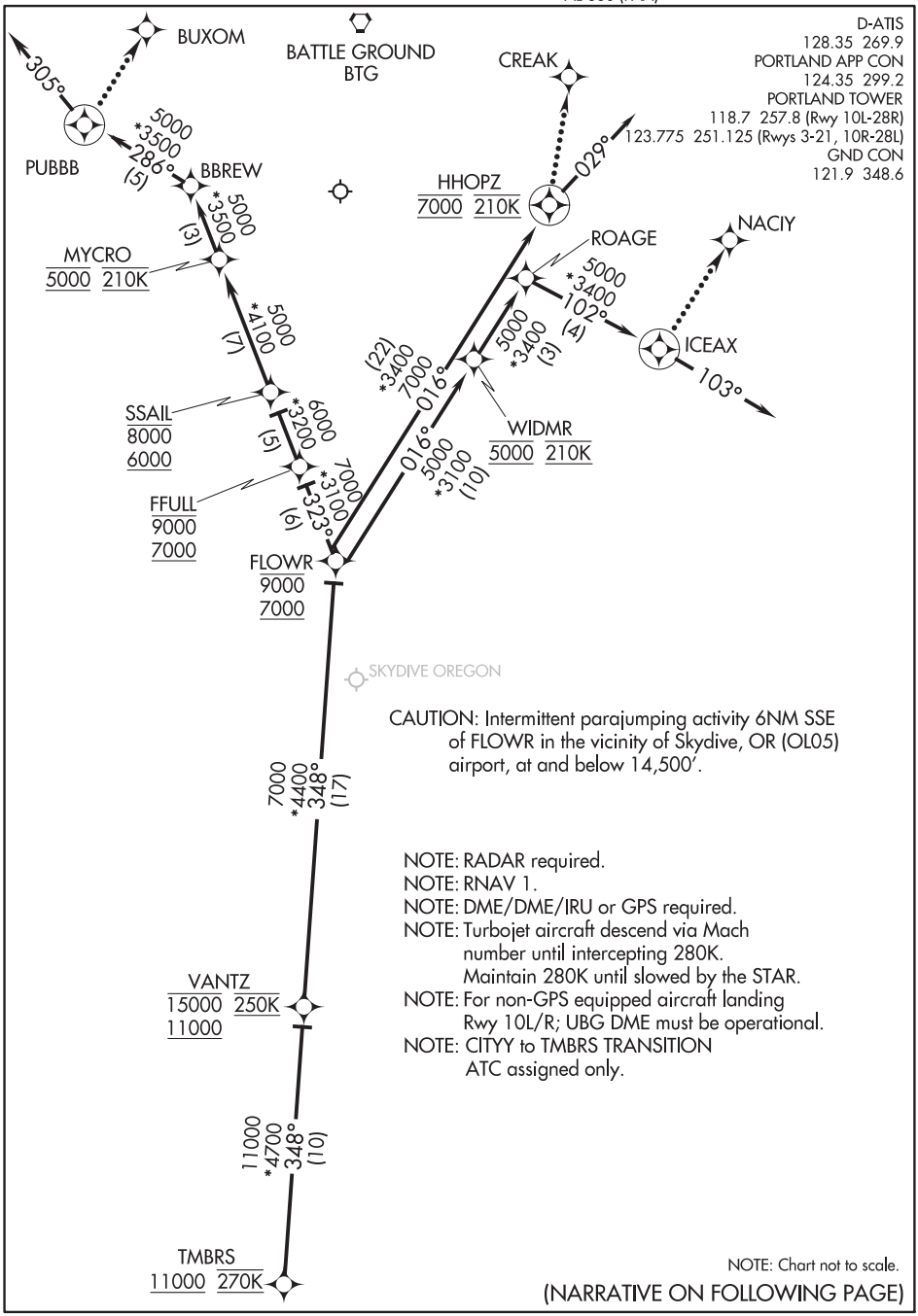
NOTE: Chart not to scale.

(TMBRS.TMBRS2) 19115

# TMBRS TWO ARRIVAL (RNAV) Arrival Routes

AL-330 (FAA)

PORTLAND INTL (PDX)
PORTLAND, OREGON




(NARRATIVE ON FOLLOWING PAGE)



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TMBRS TWO ARRIVAL (RNAV) Arrival Routes

(TMBRS.TMBRS2) 25JUN15

PORTLAND, OREGON
PORTLAND INTL (PDX)

ARRIVAL ROUTE DESCRIPTION

From TMBRS on track 348° to cross VANTZ between 11000 and 15000 and at 250K, then on track 348° to cross FLOWR between 7000 and 9000. Thence . . . .

LANDING RUNWAYS 10L/R: From FLOWR on track 323° to cross FFULL between 7000 and 9000, then on track 323° to cross SSAIL between 6000 and 8000, then on track 323° to cross MYCRO at 5000 and at 210K, then on track 323° to BBREW, then on track 286° to PUBBB, then on track 305°. Expect RADAR vectors to final approach course.

LANDING RUNWAY 21: From FLOWR on track 016° to cross HHOPZ at 7000 and at 210K, then on track 029°. Expect RADAR vectors to final approach course.

LANDING RUNWAYS 28L/R: From FLOWR on track 016° to cross WIDMR at 5000 and at 210K, then on track 016° to ROAGE, then on track 102° to cross ICEAX, then on track 103°. Expect RADAR vectors to final approach course.

LOST COMMUNICATIONS:

LANDING RUNWAY 10: At PUBBB, turn right direct to BUXOM and execute ILS RWY 10L approach.
LANDING RUNWAY 21: At HHOPZ turn left direct to CREAK and execute LOC/DME RWY 21 approach.
LANDING RUNWAY 28: At ICEAX, turn left direct to NACIY and execute ILS RWY 28R approach.

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NW-1, 05 NOV 2020 to 31 DEC 2020

(WHYTE.WHYTE6) 19339

# WHYTE SIX ARRIVAL

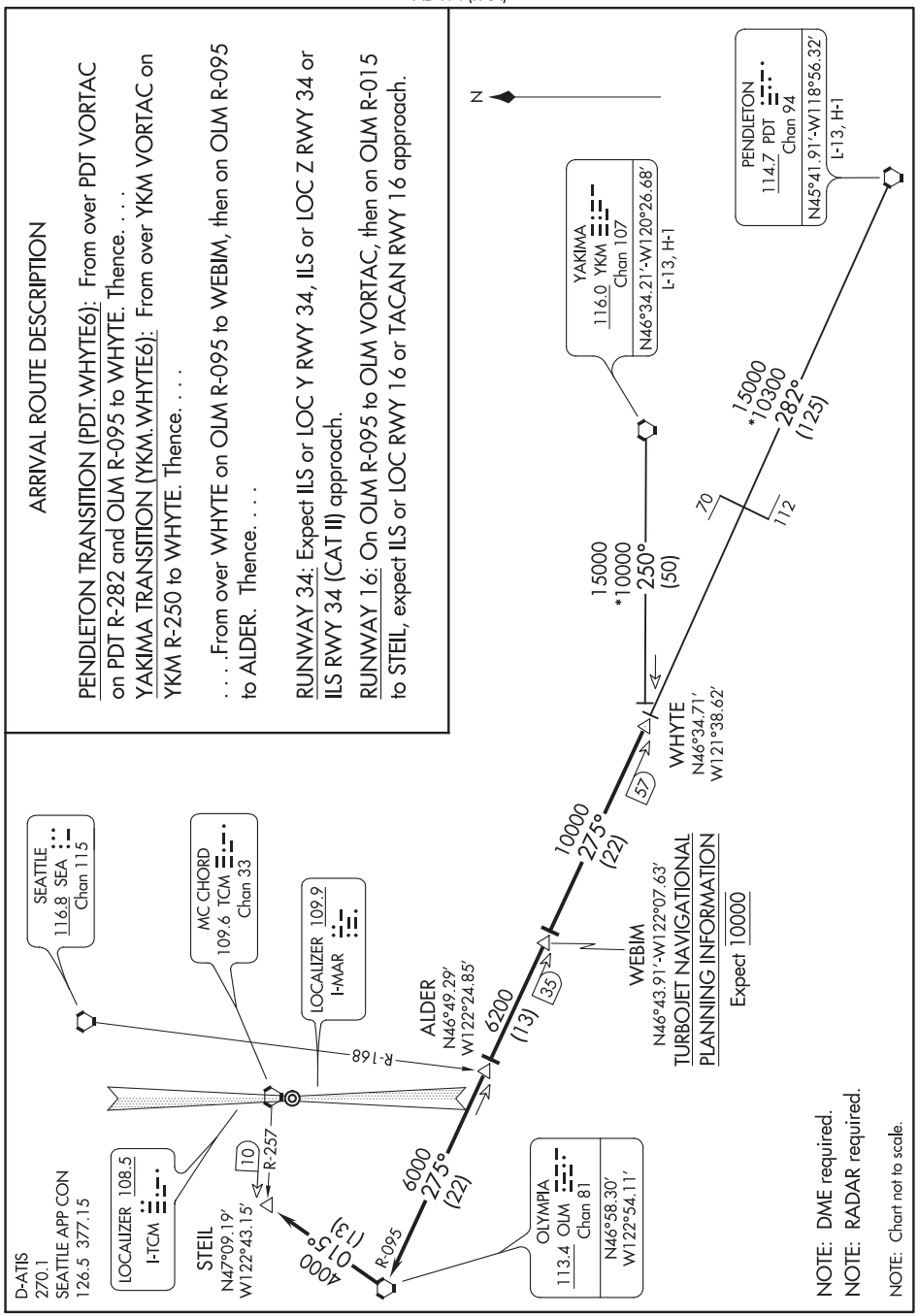
MCCHORD FIELD (JOINT BASE LEWIS-MCCHORD) (KTCM)
AL-414 (FAA)
TACOMA, WASHINGTON

## ARRIVAL ROUTE DESCRIPTION

PENDLETON TRANSITION (PDT.WHYTE6): From over PDT VORTAC on PDT R-282 and OLM R-095 to WHYTE. Thence. . . .
YAKIMA TRANSITION (YKM.WHYTE6): From over YKM VORTAC on YKM R-250 to WHYTE. Thence. . . .

. . . .From over WHYTE on OLM R-095 to WEBIM, then on OLM R-095 to ALDER. Thence. . . .

RUNWAY 34: Expect ILS or LOC Y RWY 34, ILS or LOC Z RWY 34 or ILS RWY 34 (CAT II) approach.
RUNWAY 16: On OLM R-095 to OLM VORTAC, then on OLM R-015 to STEIL, expect ILS or LOC RWY 16 or TACAN RWY 16 approach.

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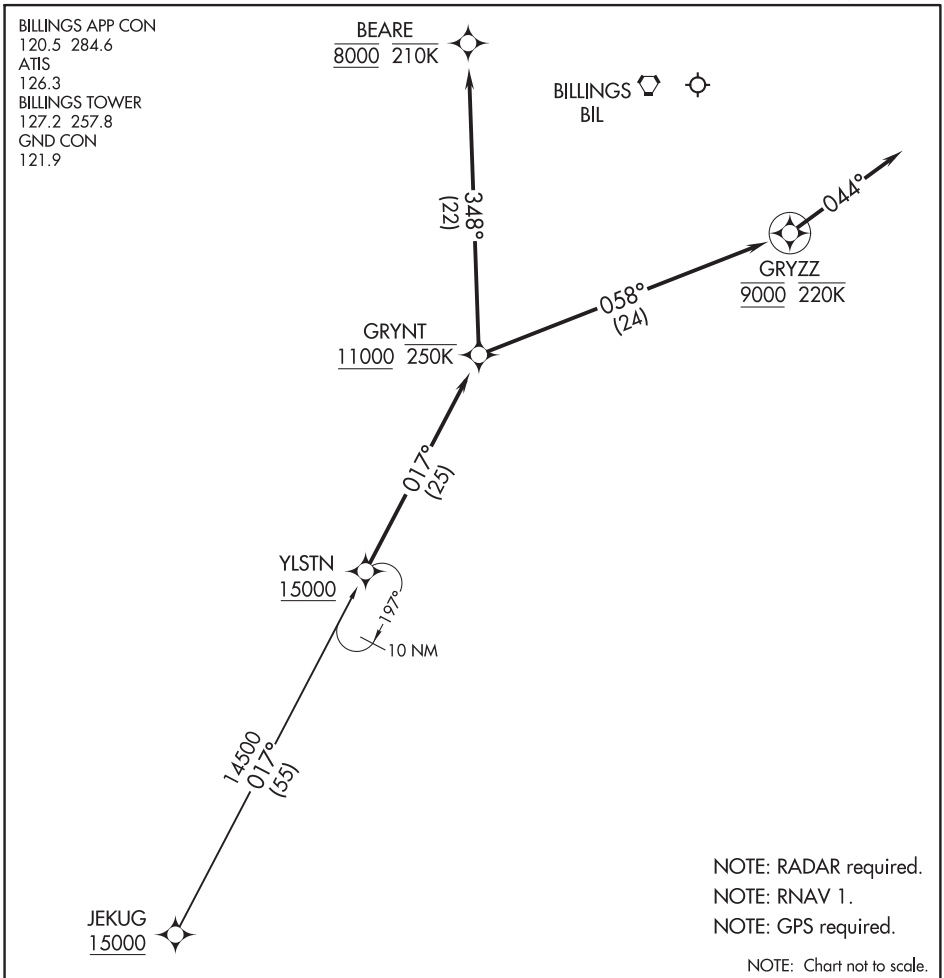
NW-1, 05 NOV 2020 to 31 DEC 2020

WHYTE SIX ARRIVAL
(WHYTE.WHYTE6) 05DEC19
TACOMA, WASHINGTON
MCCHORD FIELD (JOINT BASE LEWIS-MCCHORD) (KTCM)

# YLSTN THREE ARRIVAL (RNAV)

AL-48 (FAA)



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## ARRIVAL ROUTE DESCRIPTION

JEKUG TRANSITION (JEKUG.YLSTN3)

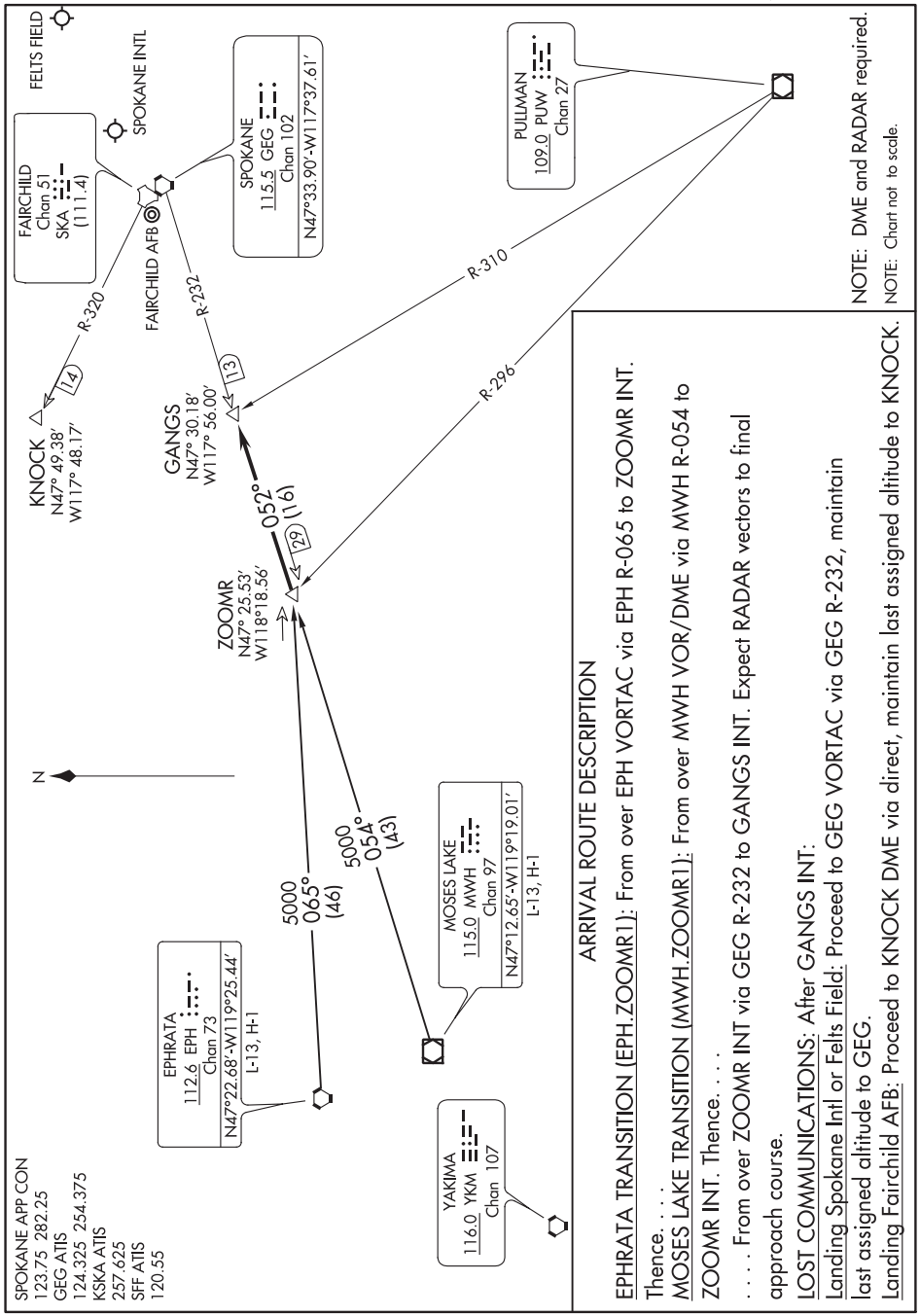
From YLSTN on track 017° to cross GRYNT at or above 11000 and at or below 250K.

LANDING RUNWAY 10L: From GRYNT on track 348° to cross BEARE at 8000 and at or below 210K. Expect assigned approach or RADAR vectors to final approach course.

LANDING RUNWAY 28R: From GRYNT on track 058° to cross GRYZZ at 9000 and at or below 220K, then on heading 044°. Expect assigned approach or RADAR vectors to final approach course.

# ZOOMR ONE ARRIVAL (ZOOMR.ZOOMR1)

SPOKANE, WASHINGTON




NOTE: DME and RADAR required.

NOTE: Chart not to scale.

## ARRIVAL ROUTE DESCRIPTION

EPHRATA TRANSITION (EPH.ZOOMR1): From over EPH VORTAC via EPH R-065 to ZOOMR INT. Thence. . . .

MOSES LAKE TRANSITION (MWH.ZOOMR1): From over MWH VOR/DME via MWH R-054 to ZOOMR INT. Thence. . . .

. . . . From over ZOOMR INT via GEG R-232 to GANGS INT. Expect RADAR vectors to final approach course.

LOST COMMUNICATIONS: After GANGS INT:

Landing Spokane Intl or Felts Field: Proceed to GEG VORTAC via GEG R-232, maintain last assigned altitude to GEG.

Landing Fairchild AFB: Proceed to KNOCK DME via direct, maintain last assigned altitude to KNOCK.

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NW-1, 05 NOV 2020 to 31 DEC 2020

ZOOMR ONE ARRIVAL (ZOOMR.ZOOMR1)

SPOKANE, WASHINGTON

| APP CRS | Rwy ldg | 7025 |
|---|---|---|
| 156° | TDZE | 6188 |
| | Apt Elev | 6221 |

# RNAV (GPS) RWY 16
## AFTON MUNI (AFO)

RNP APCH.

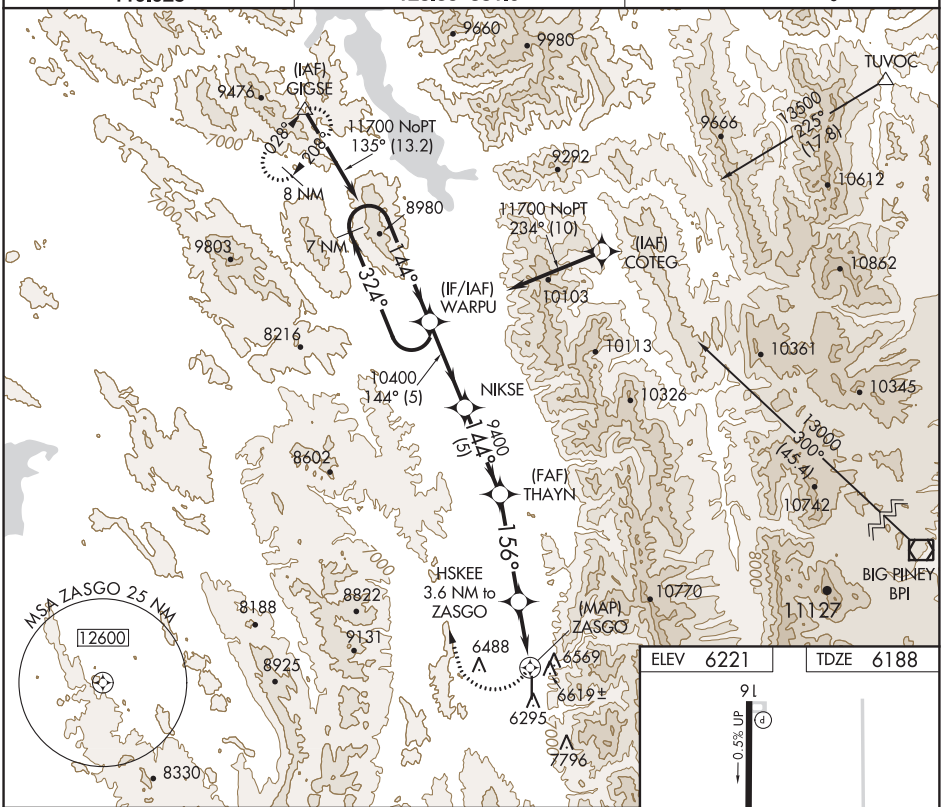
If local altimeter setting not received, procedure NA. Circling NA east of Rwy 16-34. Rwy 16 helicopter visibility reduction below ¾ SM NA.

NA

-22°C

MISSED APPROACH: Climbing right turn to 11700 direct GIGSE and hold.

| AWOS-3P | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 119.025 | 128.35 381.6 | 122.8 (CTAF) L |

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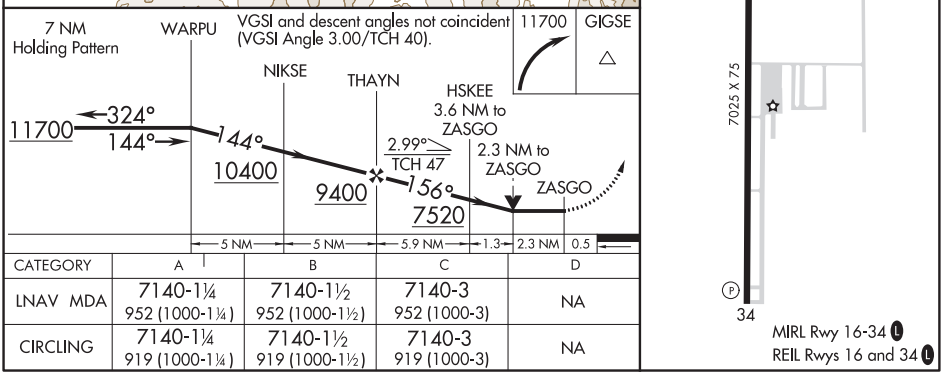
| ELEV 6221 | TDZE 6188 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 7140-1¼ 952 (1000-1¼) | 7140-1½ 952 (1000-1½) | 7140-3 952 (1000-3) | NA |
| CIRCLING | 7140-1¼ 919 (1000-1¼) | 7140-1½ 919 (1000-1½) | 7140-3 919 (1000-3) | NA |

AFTON, WYOMING | AL-9116 (FAA) | 20086

# RNAV (GPS) RWY 34
## AFTON MUNI (AFO)

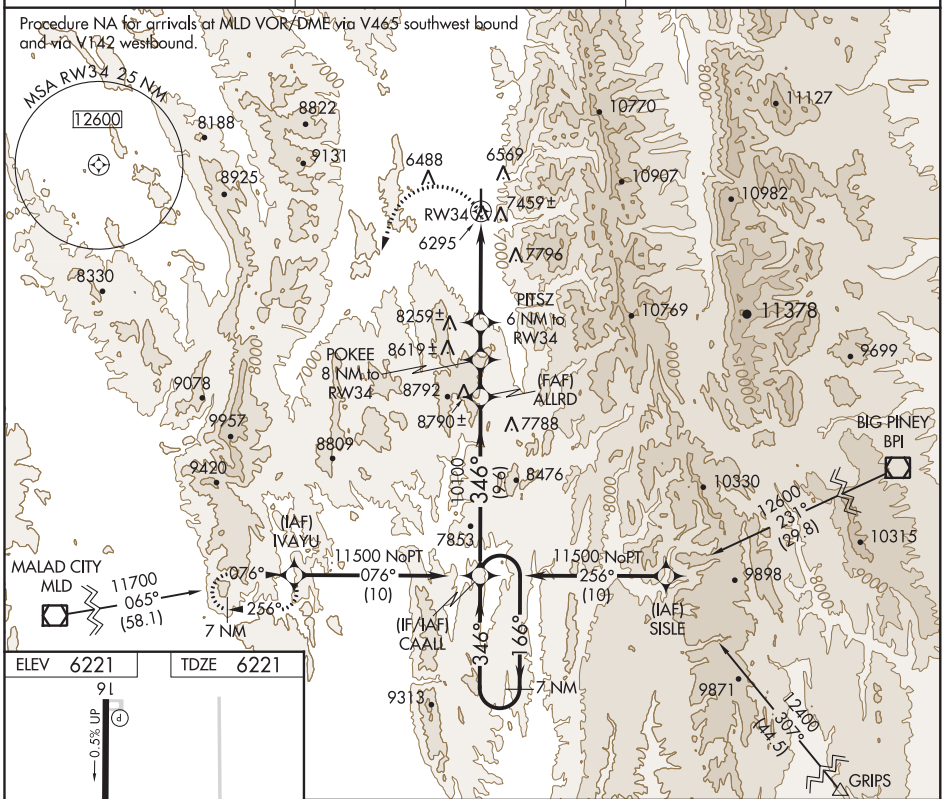
| APP CRS | Rwy ldg | 7025 |
|---|---|---|
| 346° | TDZE | 6221 |
| | Apt Elev | 6221 |

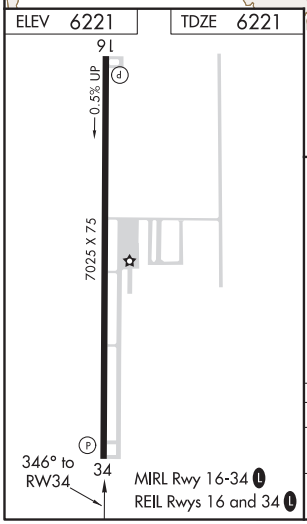
T
NA
-22°C

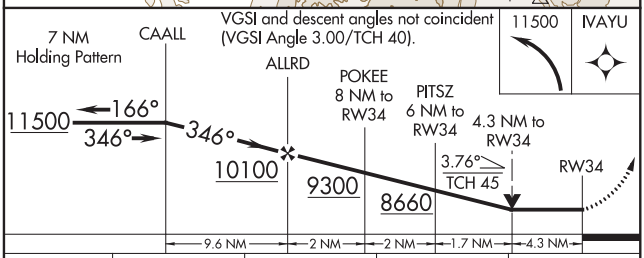
DME/DME RNP- 0.3 NA. Circling NA east of Rwy 16-34. Helicopter visibility reduction below ¾ SM NA. If local altimeter setting not received, procedure NA.

MISSED APPROACH: Climbing left turn to 11500 direct IVAYU and hold.

| AWOS-3P | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 119.025 | 128.35 381.6 | 122.8 (CTAF) L |



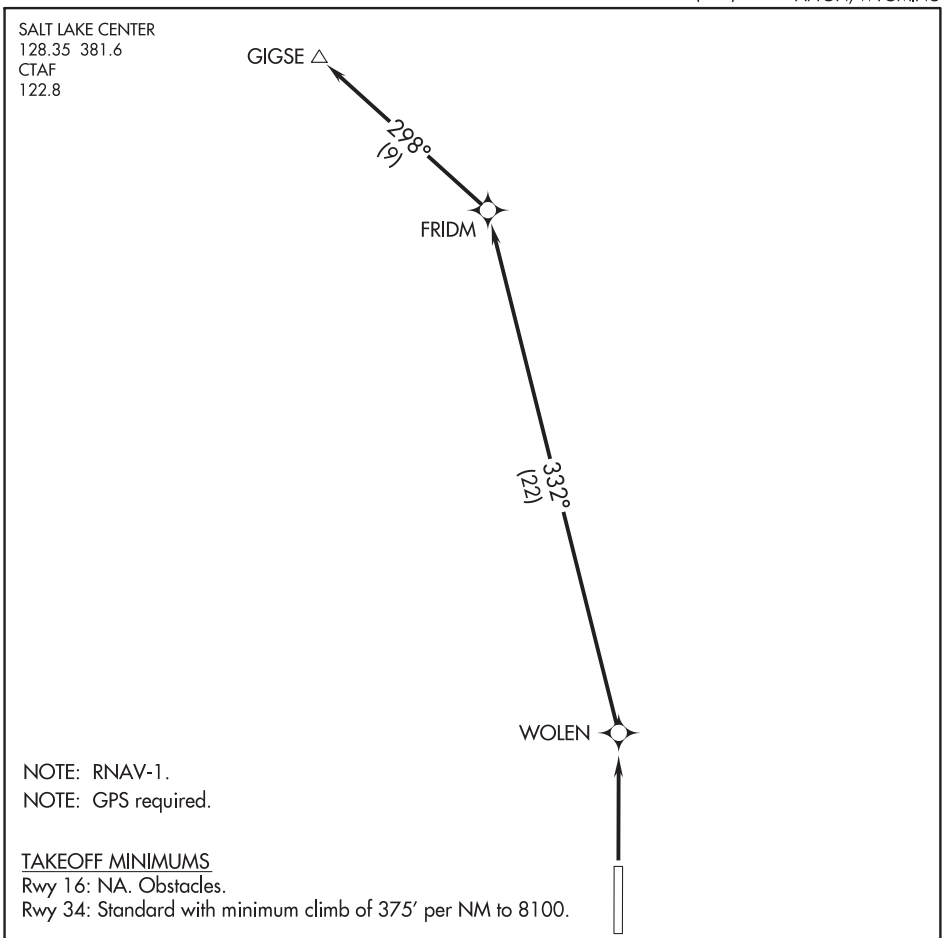




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 7620-1¼ 1399 (1400-1¼) | 7620-1½ 1399 (1400-1½) | 7620-3 1399 (1400-3) | NA |
| CIRCLING | 7620-1¼ 1399 (1400-1¼) | 7620-1½ 1399 (1400-1½) | 7620-3 1399 (1400-3) | NA |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020




NOTE: RNAV-1.
NOTE: GPS required.

TAKEOFF MINIMUMS
Rwy 16: NA. Obstacles.
Rwy 34: Standard with minimum climb of 375′ per NM to 8100.

TAKEOFF OBSTACLE NOTES
Rwy 34: Fence beginning 160′ from DER, 412′ from DER, up to 6200′ MSL.
Pole 474′ from DER, 364′ right of centerline, 5′ AGL/6205′ MSL.
Trees beginning 1038′ from DER, 428′ right of centerline, up to 6238′ MSL.
Trees beginning 1065′ from DER, 324′ left of centerline, up to 6218′ MSL.
Trees, transmission line beginning 1101′ from DER, 279′ left of centerline, up to 6229′ MSL.
Trees, transmission lines, traverse way beginning 1104′ from DER, 408′ right of centerline, up to 6246′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 34: Climb direct WOLEN, then on depicted route to GIGSE, maintain 16000 or ATC assigned altitude; expect clearence to filed altitude five minutes after departure.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

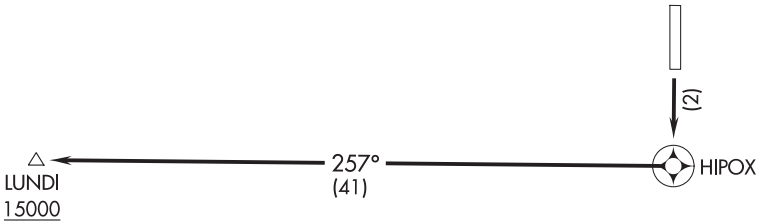
(LUNDI2.LUNDI) 20086

# LUNDI TWO DEPARTURE (OBSTACLE) (RNAV)

SL-9116 (FAA)

AFTON MUNI (AFO)
AFTON, WYOMING

SALT LAKE CENTER
128.35 381.6
CTAF
122.8




TAKEOFF MINIMUMS
Rwy 16: Standard with minimum climb of 515′ per NM to 10400.
Rwy 34: NA- obstacles.

TAKEOFF OBSTACLE NOTES
Rwy 16: Tree 1807′ from DER, 298′ right of centerline, 40′ AGL/6277′ MSL.

NOTE: GPS required.
NOTE: RNAV 1

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb to 15000 direct HIPOX and right turn via 257° track to LUNDI.


NW-1, 05 NOV 2020 to 31 DEC 2020

LUNDI TWO DEPARTURE (OBSTACLE) (RNAV)
(LUNDI2.LUNDI) 28SEP06

AFTON, WYOMING
AFTON MUNI (AFO)

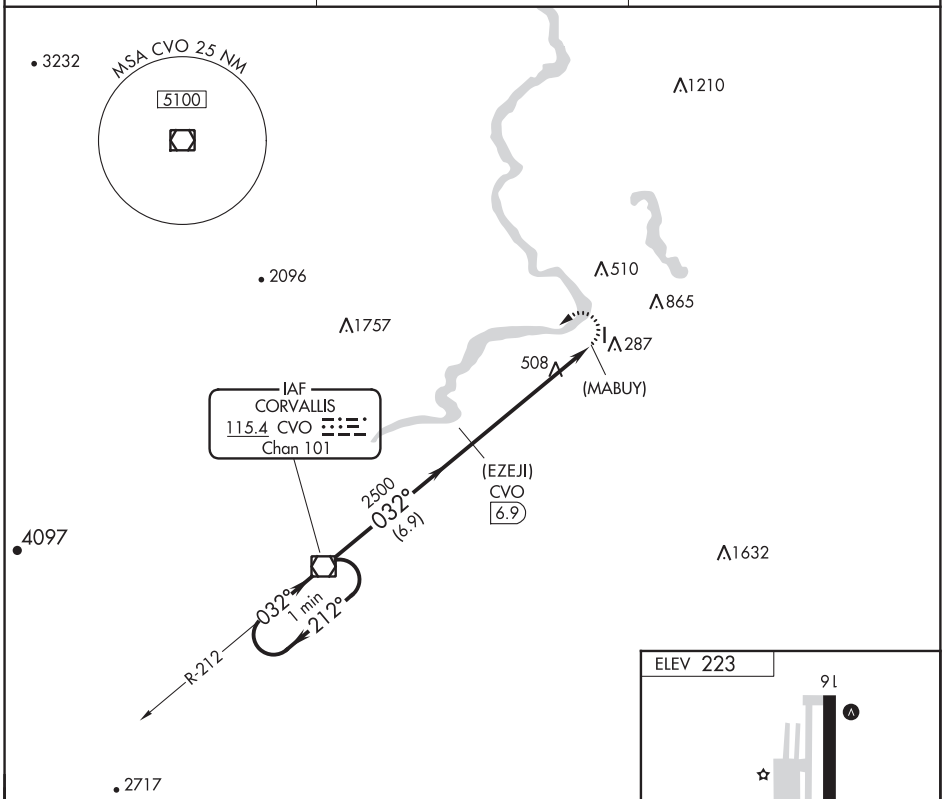
# VOR/DME or GPS-A
## ALBANY MUNI (S12)

| VOR/DME CVO | APP CRS | Rwy ldg | N/A |
|---|---|---|---|
| 115.4 | 032° | TDZE | N/A |
| Chan 101 | | Apt Elev | 223 |

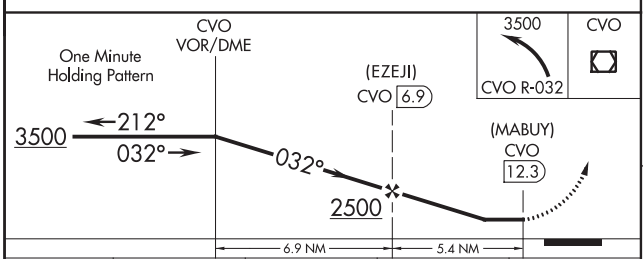
Use Corvallis altimeter setting.

MISSED APPROACH: Climbing left turn to 3500 via CVO R-032 to CVO VOR/DME and hold.

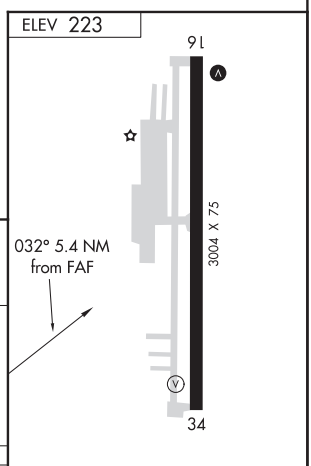
| CVO AWOS-3 | CASCADE APP CON ★ | UNICOM |
|---|---|---|
| 135.775 | 127.5 348.7 | 122.725 (CTAF) L |




NoPT for arrivals on CVO VOR/DME airways radials 154 clockwise to 177.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 940-1 714 (800-1) | | NA | |




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



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

ANACONDA, MONTANA AL-6986 (FAA) 20254

| VOR/DME CPN | APP CRS | Rwy ldg | N/A |
|---|---|---|---|
| 111.6 | 307° | TDZE | N/A |
| Chan 53 | | Apt Elev | 5030 |

# VOR/DME or GPS-A

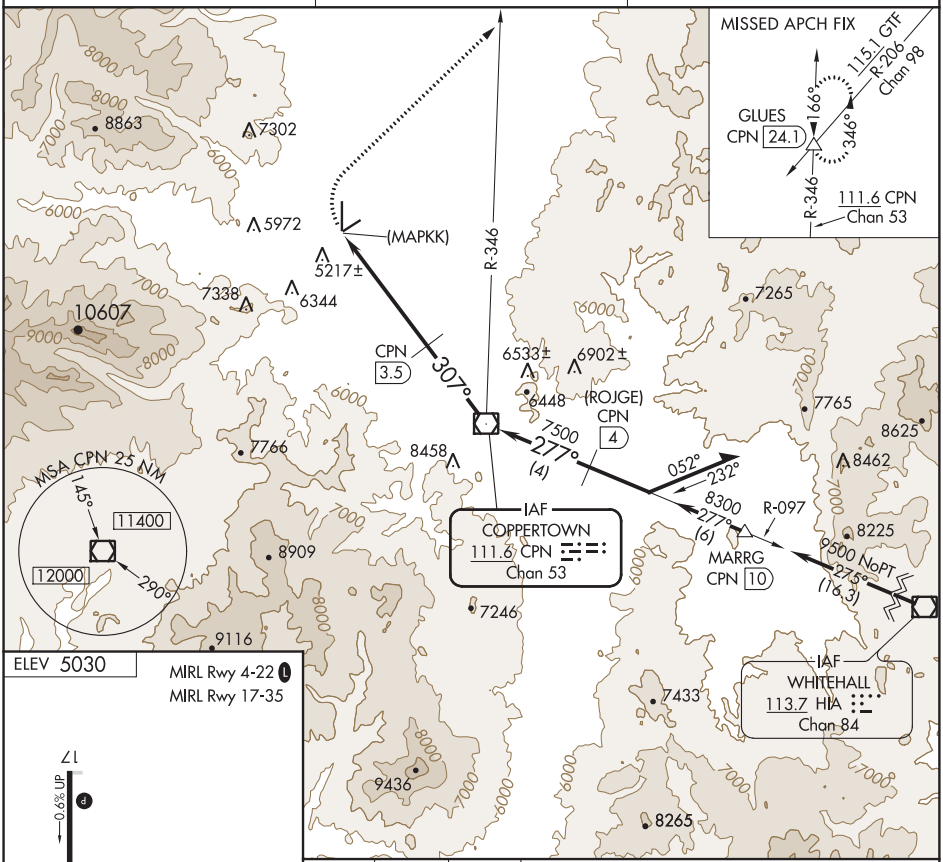
BOWMAN FIELD (3U3)

NA
-25°C

Use Butte (BTM) altimeter setting; when not received, procedure NA.

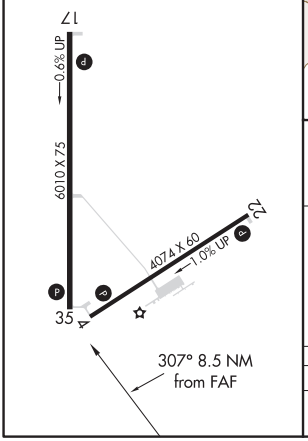
MISSED APPROACH: Climbing right turn to 9200 via heading 030° to intercept CPN R-346 to GLUES and hold.

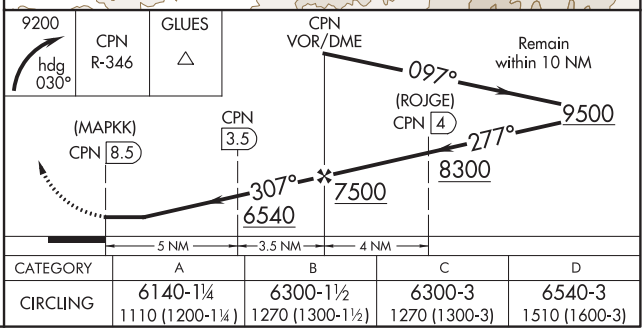
| AWOS-AV | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 122.8 | 132.4 338.3 | 122.8 (CTAF) |




ELEV 5030

MIRL Rwy 4-22
MIRL Rwy 17-35




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 6140-1¼<br>1110 (1200-1¼) | 6300-1½<br>1270 (1300-1½) | 6300-3<br>1270 (1300-3) | 6540-3<br>1510 (1600-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

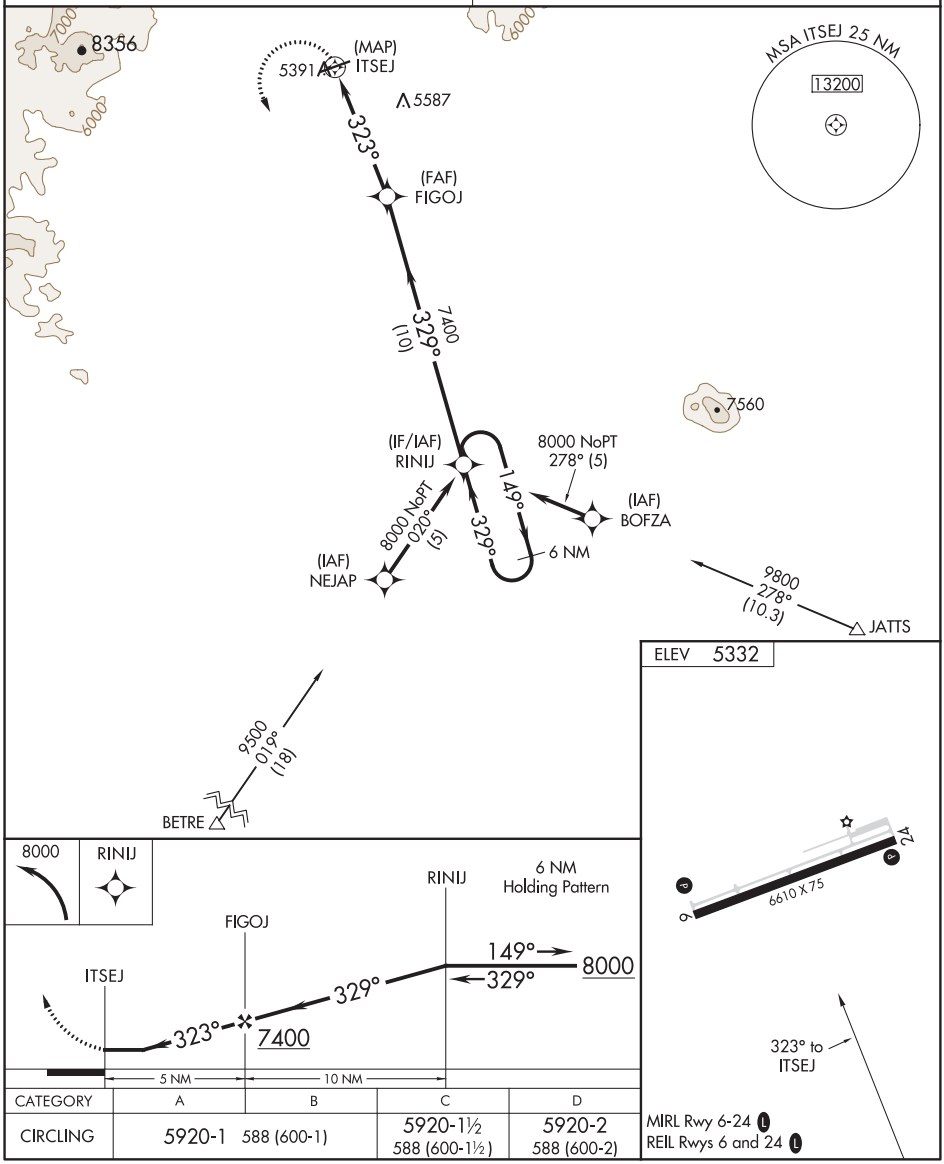
| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 323° | TDZE | N/A |
| | Apt Elev | 5332 |

# RNAV (GPS)-A
## ARCO-BUTTE COUNTY (AOC)

T NA
GPS or RNP- 0.3 required.
DME/DME RNP- 0.3 NA.
If local altimeter setting not received, use Pocatello Rgnl altimeter setting and increase all MDAs 600 feet.

MISSED APPROACH: Climbing left turn to 8000 direct RINIJ and hold.

| SALT LAKE CENTER | UNICOM |
|---|---|
| 128.35 239.25 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 5920-1 588 (600-1) | | 5920-1½ 588 (600-1½) | 5920-2 588 (600-2) |

MIRL Rwy 6-24 L
REIL Rwys 6 and 24 L

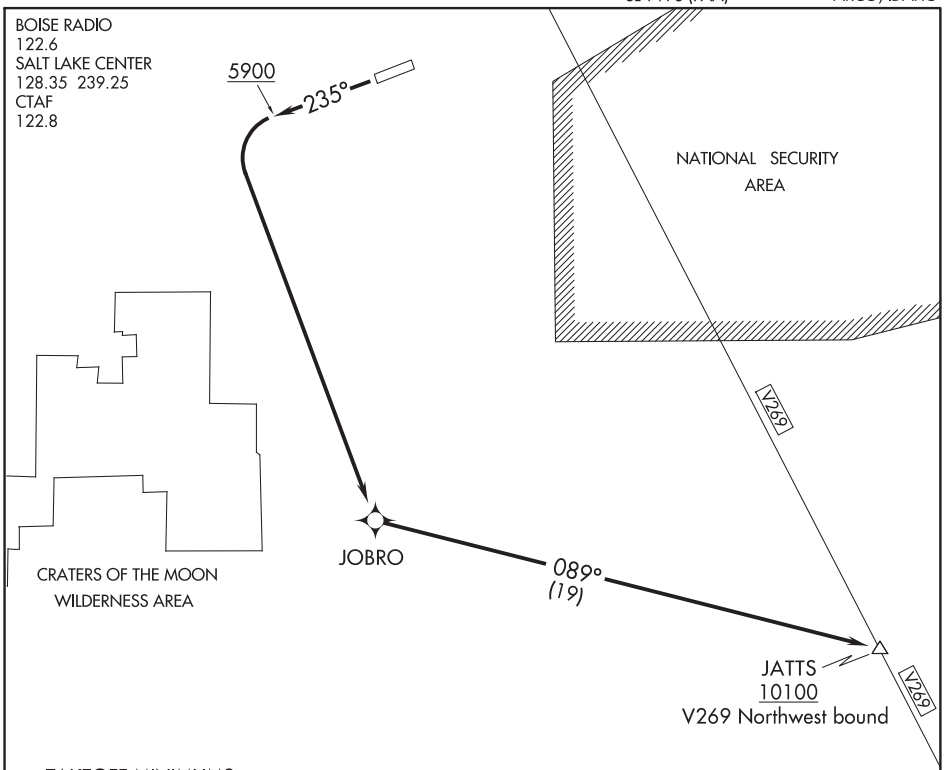
NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

(JATTS1.JATTS) 16147

# JATTS ONE DEPARTURE (OBSTACLE) (RNAV)

ARCO-BUTTE COUNTY (AOC)
SL-9198 (FAA)
ARCO, IDAHO






NW-1, 05 NOV 2020 to 31 DEC 2020

TAKEOFF MINIMUMS
Rwy 6: NA- Obstacles.
Rwy 24: Standard.

TAKEOFF OBSTACLE NOTE
Rwy 24: Numerous vehicles beginning 641′ from DER, 629′ right of centerline, 17′ AGL/5355′ MSL.

NOTE: GPS required.
NOTE: RNAV 1

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 24: Climb heading 235° to 5900 then climbing left turn direct JOBRO, then via 089° track to JATTS before proceeding on course.

| WAAS CH 90324 W34A | APP CRS 342° | Rwy ldg 5332<br>TDZE 135<br>Apt Elev 137 |
|---|---|---|

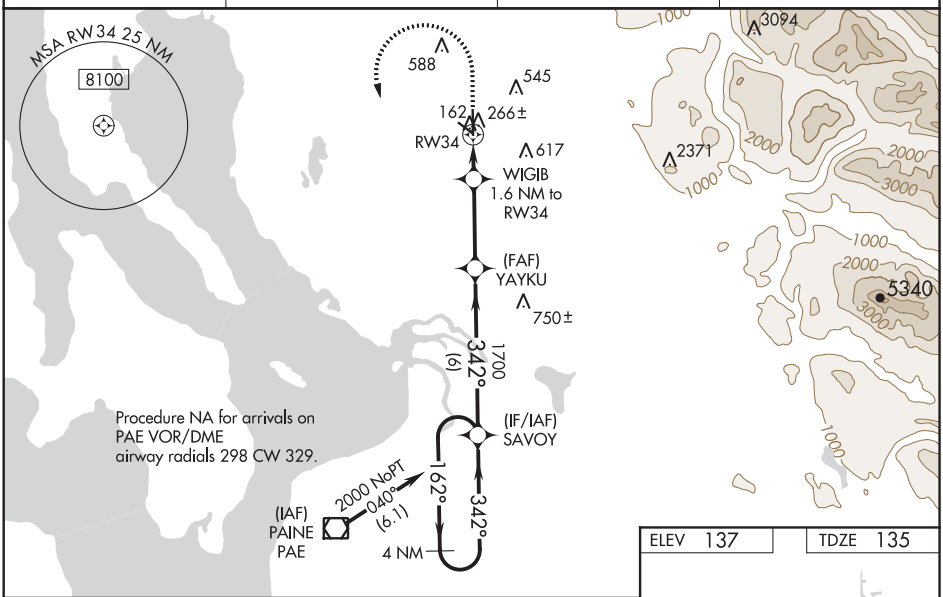
# RNAV (GPS) RWY 34
## ARLINGTON MUNI (AWO)

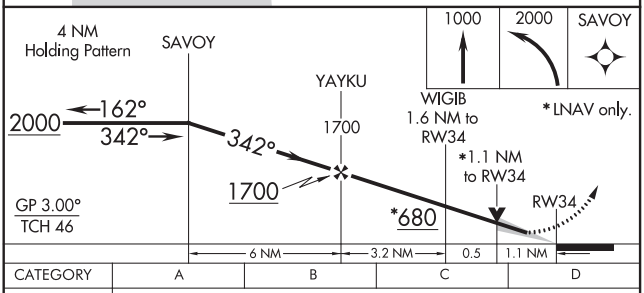
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 43°C (109°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Whidbey Island NAS (Ault Field) altimeter setting and increase all DA 66 feet and all MDA 80 feet and increase LNAV/VNAV all Cats, and LNAV and Circling Cats C and D visibility ¼ mile. For inoperative MALS, increase LNAV/VNAV Cat D visibility to 1¼ and increase LNAV Cat D visibility to 1⅛. For inoperative MALS when using Whidbey Island NAS (Ault Field) altimeter setting, increase LPV all Cats visibility to ⅞, increase LNAV/VNAV Cat D visibility to 1½, and increase LNAV Cat D visibility to 1⅜. Baro-VNAV and VDP NA with Whidbey Island NAS (Ault Field) altimeter setting.

MALS

MISSED APPROACH: Climb to 1000 then climbing left turn to 2000 direct SAVOY and hold.

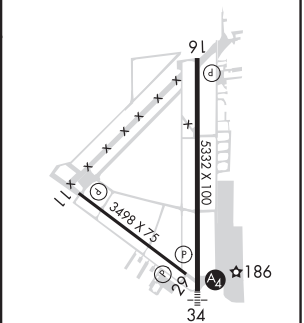
| AWOS-3PT | SEATTLE APP CON | CLNC DEL | CTAF |
|---|---|---|---|
| 135.625 | 128.5 306.9 | 121.725 | 122.725 L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 335-¾ 200 (200-¾) | | | |
| LNAV/VNAV DA | 510-1 375 (400-1) | | | |
| LNAV MDA | 520-¾ 385 (400-¾) | | 520-⅞ 385 (400-⅞) | |
| CIRCLING | 800-1 663 (700-1) | 860-1 723 (800-1) | 860-2 723 (800-2) | 920-2½ 783 (800-2½) |

ELEV 137 TDZE 135




MIRL Rwy 16-34
REIL Rwys 11, 16, and 29

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

ARLINGTON, WASHINGTON AL-795 (FAA) 18144

# LOC RWY 34
## ARLINGTON MUNI (AWO)

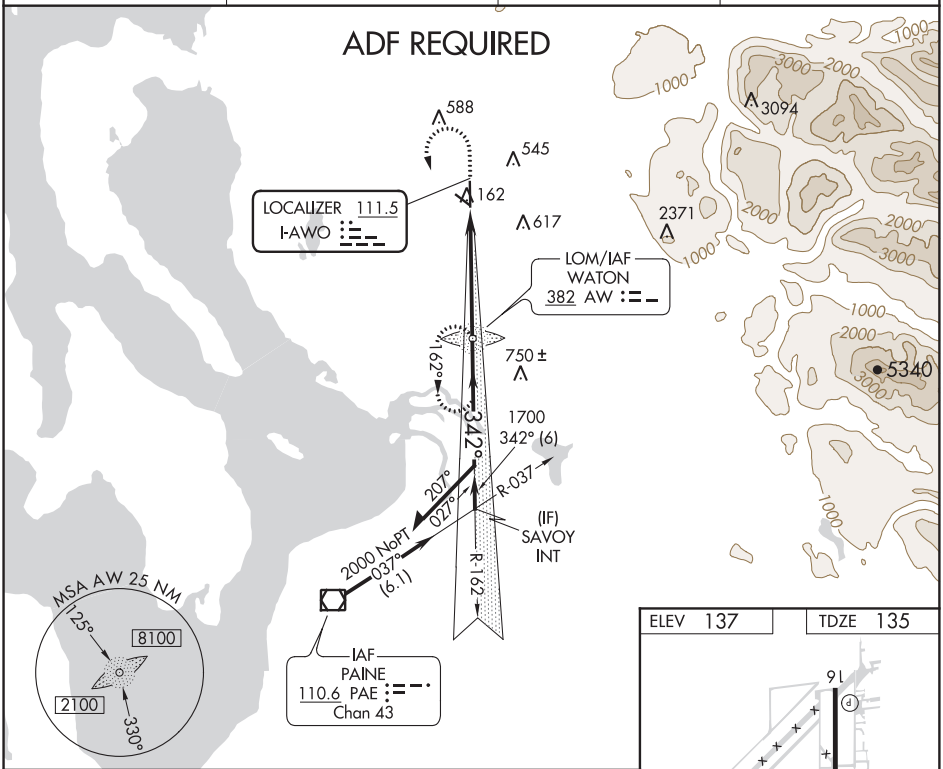
| LOC I-AWO | APP CRS | Rwy ldg | 5332 |
|---|---|---|---|
| 111.5 | 342° | TDZE | 135 |
| | | Apt Elev | 137 |

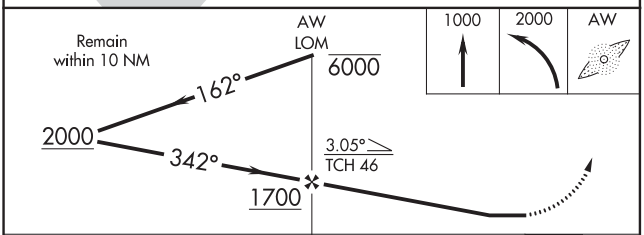
T NA ADF required. When local altimeter setting not received use Whidbey Island NAS (Ault Field) altimeter setting and increase all MDA 80 feet and increase S-34 and Circling Cats C and D visibility ¼ mile. For inoperative MALS, increase S-34 Cats C and D visibility to 1⅜. For inoperative MALS when using Whidbey Island NAS (Ault Field) altimeter setting, increase S-34 Cat D visibility to 1½.

MALS A4

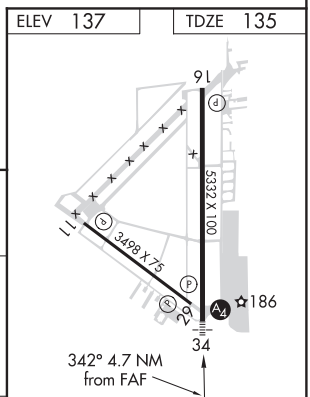
MISSED APPROACH: Climb to 1000 then climbing left turn to 2000 direct WATON LOM and hold.

| AWOS-3PT | SEATTLE APP CON | CLNC DEL | CTAF |
|---|---|---|---|
| 135.625 | 128.5 306.9 | 121.725 | 122.725 L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-34 | 580-¾ 445 (500-¾) | | 580-1 445 (500-1) | |
| CIRCLING | 800-1 663 (700-1) | 860-1 723 (800-1) | 860-2 723 (800-2) | 920-2½ 783 (800-2½) |




| FAF to MAP 4.7 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 4:42 | 3:08 | 2:21 | 1:53 | 1:34 |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| LOM AW | APP CRS | Rwy ldg | 5332 |
|---|---|---|---|
| 382 | 342° | TDZE | 135 |
| | | Apt Elev | 137 |

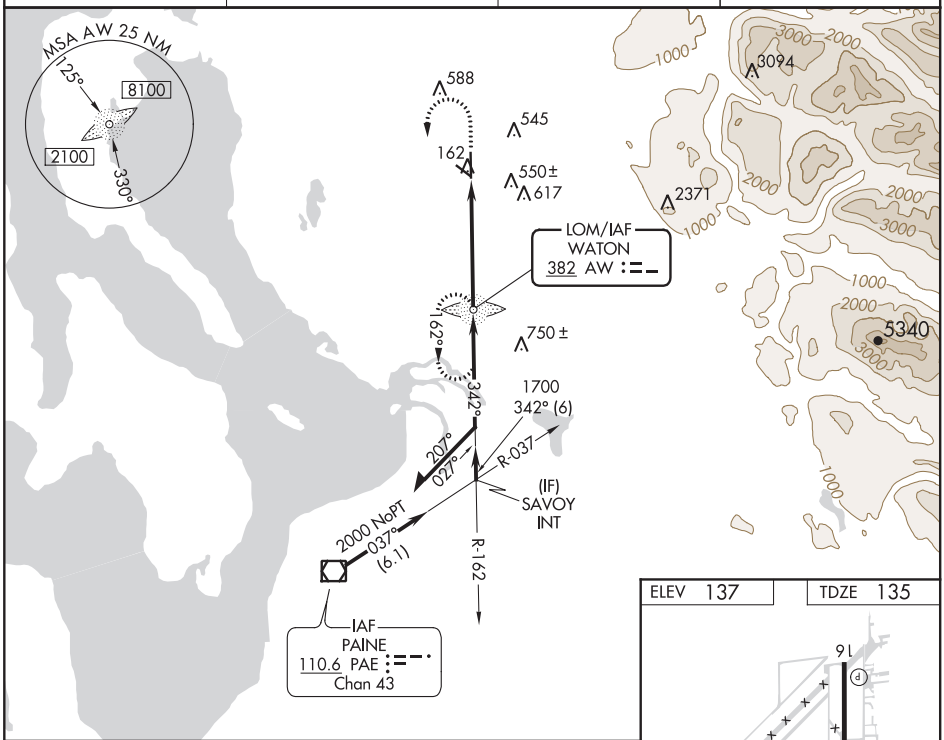
# NDB RWY 34
## ARLINGTON MUNI (AWO)

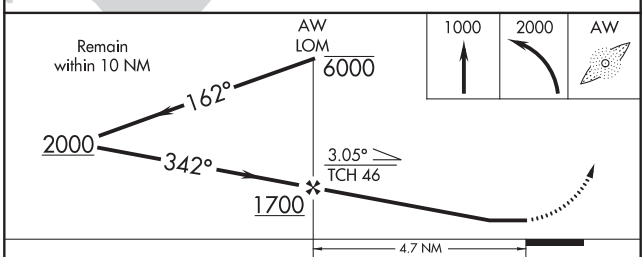
T A NA — When local altimeter setting not received, use Whidbey Island NAS (Ault Field) altimeter setting and increase all MDA 80 feet and increase S-34 Cats B, C, and D visibility ¼ mile and increase Circling Cat B and D visibility ¼ mile and Cat C visibility ½ mile. For inoperative MALS, increase S-34 Cat D visibility to 2. For inoperative MALS when using Whidbey Island NAS (Ault Field) altimeter setting, increase S-34 Cats C and D visibility to 2½.

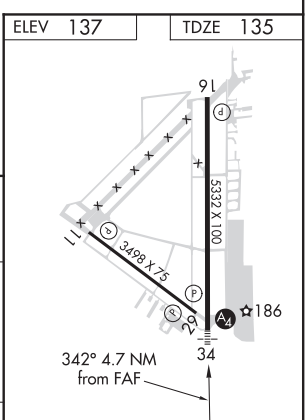
MALS — A2

MISSED APPROACH: Climb to 1000 then climbing left turn to 2000 direct AW LOM and hold.

| AWOS-3PT | SEATTLE APP CON | CLNC DEL | CTAF |
|---|---|---|---|
| 135.625 | 128.5 306.9 | 121.725 | 122.725 L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-34 | 860-¾ 725 (800-¾) | | 860-1¾ 725 (800-1¾) | |
| CIRCLING | 860-1 723 (800-1) | | 860-2 723 (800-2) | 920-2½ 783 (800-2½) |

| FAF to MAP 4.7 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 4:42 | 3:08 | 2:21 | 1:53 | 1:34 |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

18312

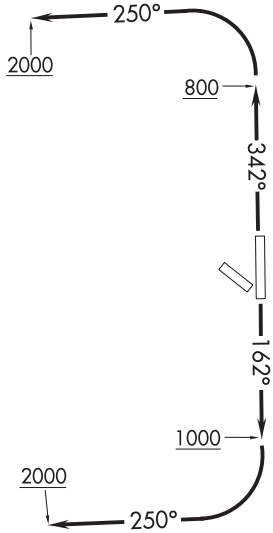
# ARLINGTON TWO DEPARTURE

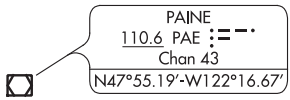
AL-795 (FAA)

ARLINGTON MUNI (AWO)
ARLINGTON, WASHINGTON

SEATTLE CLNC DEL
121.725
SEATTLE APP CON
128.5 306.9

**TOP ALTITUDE: 2000**




NOTE: RADAR required.

TAKEOFF MINIMUMS
Rwys 11, 29: NA - ATC.
Rwys 16, 34: Standard.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb heading 162° to 1000, then climbing right turn heading 250° to 2000, thence . . . .

TAKEOFF RUNWAY 34: Climb heading 342° to 800, then climbing left turn heading 250° to 2000, thence . . . .

. . . . expect RADAR vectors to assigned route, expect clearance to filed altitude 5 minutes after departure.

LOST COMMUNICATIONS: If no transmissions are received for 3 minutes after departure, climb to filed altitude direct PAE VOR/DME, thence via assigned route.


NW-1, 05 NOV 2020 to 31 DEC 2020

ARLINGTON TWO DEPARTURE
26MAY16

ARLINGTON, WASHINGTON
ARLINGTON MUNI (AWO)

| LOC I-AST | APP CRS | Rwy ldg | 4780 |
|---|---|---|---|
| 109.5 | 261° | TDZE | 14 |
| | | Apt Elev | 14 |

# ILS RWY 26
## ASTORIA RGNL (AST)

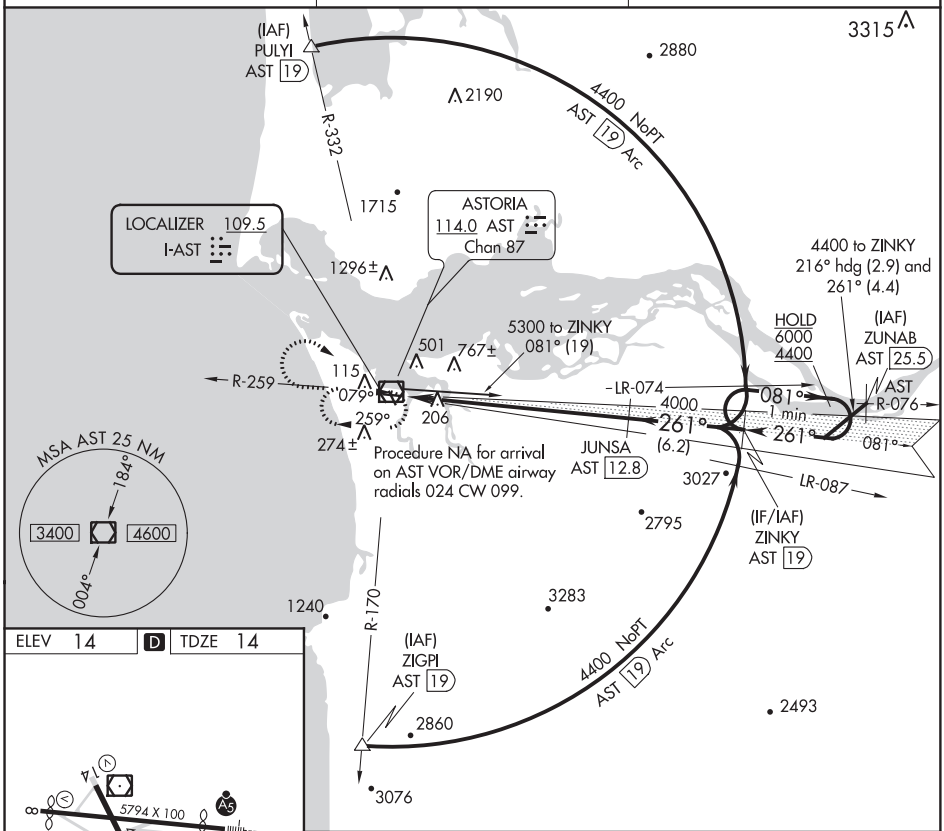
DME required for procedure entry.

T Rwy 26 helicopter visibility reduction below ¾ SM NA. Inoperative table does not apply.

MALSR

MISSED APPROACH: Climb to 1500 then climbing right turn to 2900 direct AST VOR/DME and hold.

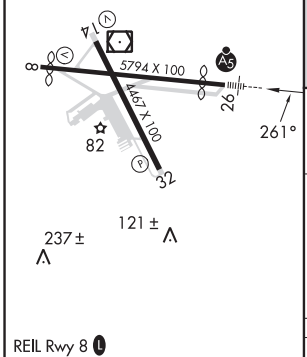
| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.375 | 124.2 317.6 | 122.8 (CTAF) L |



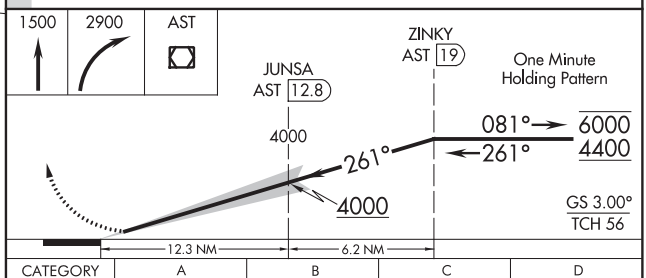

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 14 | D | TDZE 14




REIL Rwy 8 L
REIL Rwy 14
MIRL Rwys 8-26 and 14-32 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 26 | 264-1 250 (300-1) | | | |

ASTORIA, OREGON — AL-24 (FAA) — 20086

| WAAS CH 40032 W08A | APP CRS 080° | Rwy ldg 4894<br>TDZE 14<br>Apt Elev 14 |
|---|---|---|

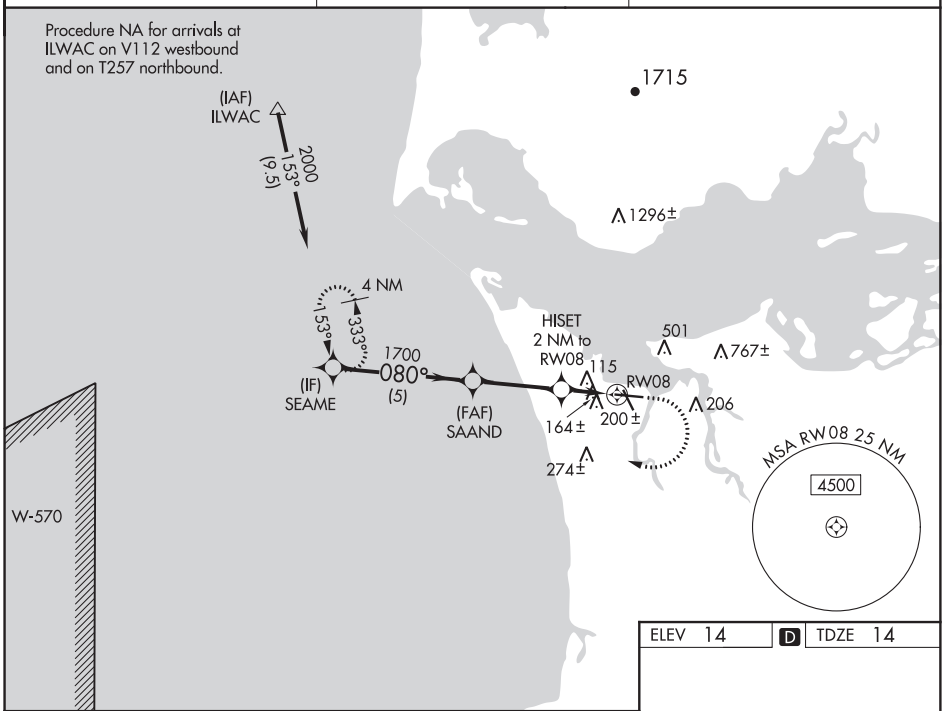
# RNAV (GPS) RWY 8
## ASTORIA RGNL (AST)

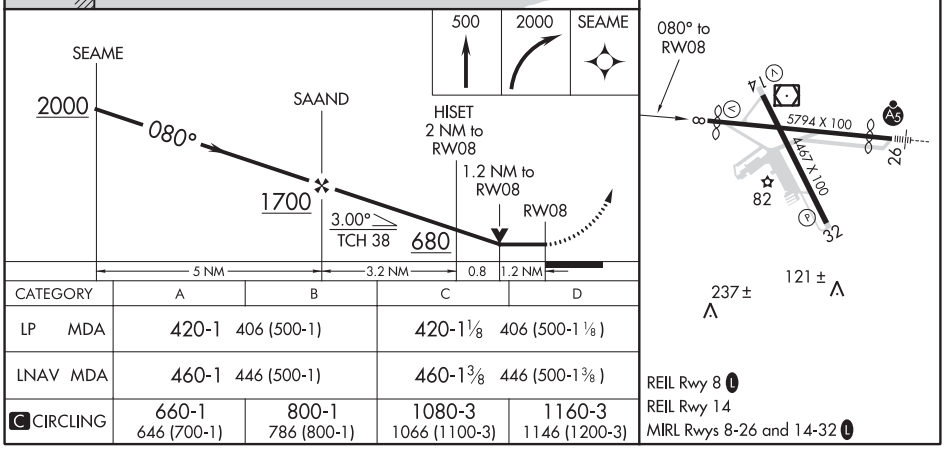
RNP APCH.

Rwy 8 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: (Do not exceed 225K until SEAME) Climb to 500, then climbing right turn to 2000 direct SEAME and hold.

| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.375 | 124.2 317.6 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LP MDA | 420-1 406 (500-1) | | 420-1⅛ 406 (500-1⅛) | |
| LNAV MDA | 460-1 446 (500-1) | | 460-1⅜ 446 (500-1⅜) | |
| C CIRCLING | 660-1 646 (700-1) | 800-1 786 (800-1) | 1080-3 1066 (1100-3) | 1160-3 1146 (1200-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 97711 W26A | APP CRS 261° | Rwy ldg 4780<br>TDZE 14<br>Apt Elev 14 |
|---|---|---|

# RNAV (GPS) RWY 26
## ASTORIA RGNL (AST)

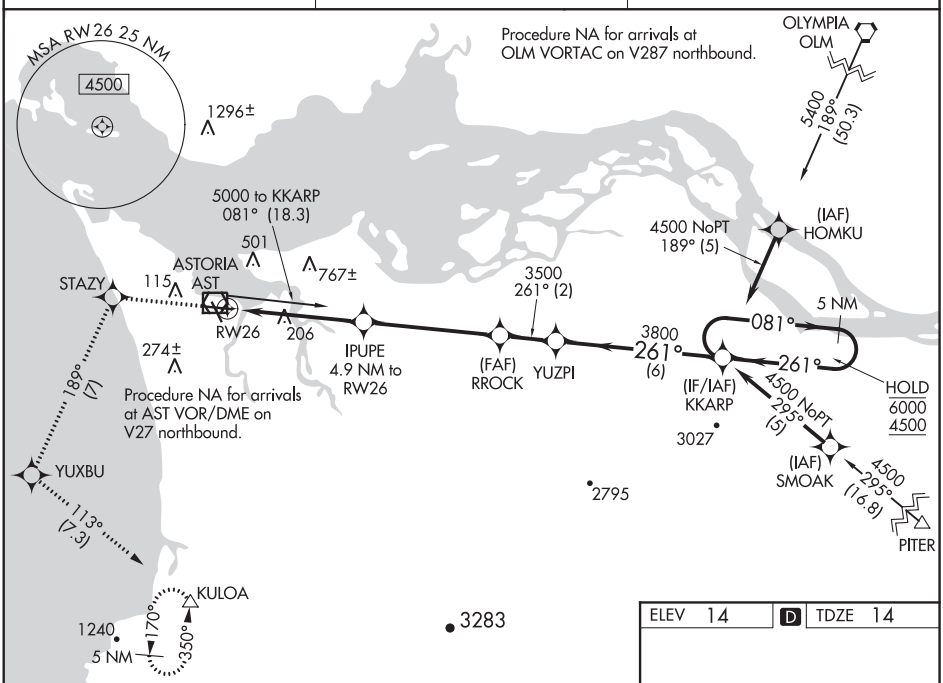
RNP APCH.

Inop table does not apply to LPV all Cats. Rwy 26 helicopter visibility reduction below ¾ SM NA. For inop ALS, increase LNAV Cat A/B visibility to 1 SM and Cat C/D to 2 ½ SM.

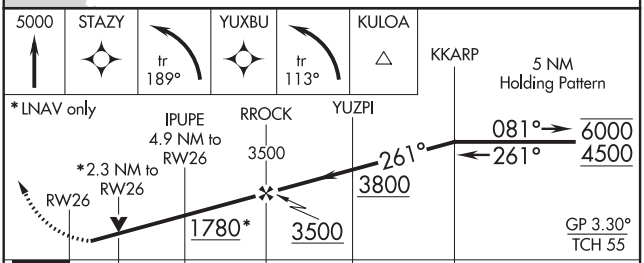
MALSR

MISSED APPROACH: (Do not exceed 210K until STAZY) Climb to 5000 direct STAZY and left turn on track 189° to YUXBU and left turn on track 113° to KULOA and hold, continue climb-in-hold to 5000.

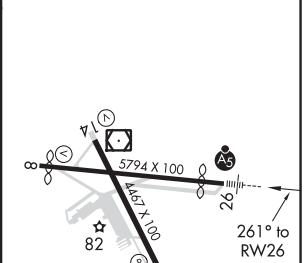
| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.375 | 124.2 317.6 | 122.8 (CTAF) L |




| 5000 | STAZY | tr 189° | YUXBU | tr 113° | KULOA |
|---|---|---|---|---|---|




ELEV 14 D TDZE 14




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 264-¾ 250 (300-¾) | | | |
| LNAV MDA | 860-¾ 846 (900-¾) | | 860-1⅞ 846 (900-1⅞) | |
| C CIRCLING | 860-1¼ 846 (900-1¼) | | 1080-3 1066 (1100-3) | 1160-3 1146 (1200-3) |

REIL Rwy 8 L
REIL Rwy 14
MIRL Rwys 8-26 and 14-32 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

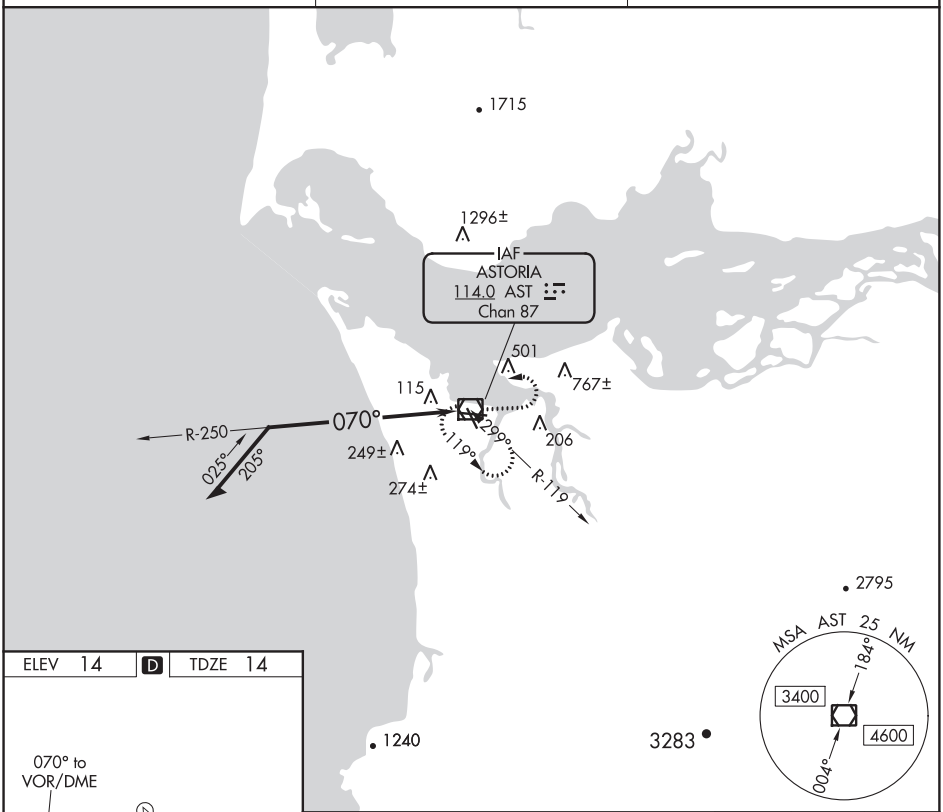
| VOR/DME AST | APP CRS | Rwy ldg | 4894 |
|---|---|---|---|
| 114.0 | 070° | TDZE | 14 |
| Chan 87 | | Apt Elev | 14 |

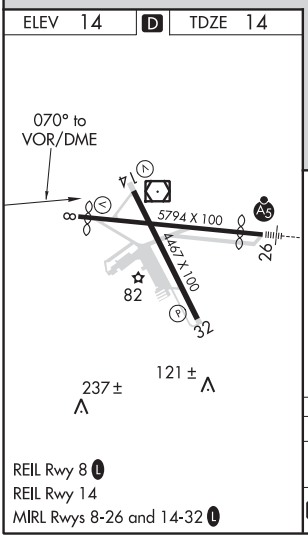
# VOR RWY 8
## ASTORIA RGNL (AST)

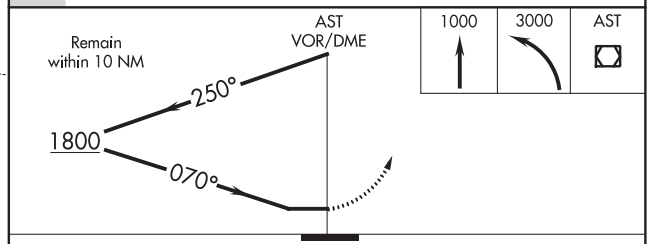
Rwy 8 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 1000 then climbing left turn to 3000 in AST VOR/DME holding pattern.

| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.375 | 124.2 317.6 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-8 | 660-1 646 (700-1) | | 660-1⅞ 646 (700-1⅞) | 660-2 646 (700-2) |
| C CIRCLING | 660-1 646 (700-1) | 800-1 786 (800-1) | 1080-3 1066 (1100-3) | 1160-3 1146 (1200-3) |




NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC I-AST | APP CRS | Rwy ldg | 4780 |
|---|---|---|---|
| 109.5 | 261° | TDZE | 14 |
| | | Elev | 14 |

# COPTER LOC RWY 26
## ASTORIA RGNL (AST)

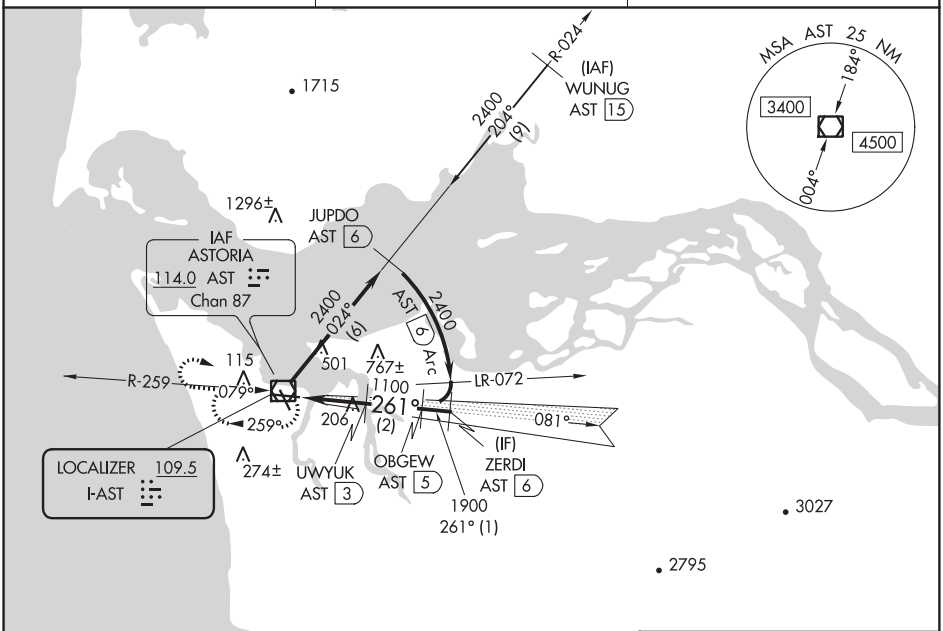
DME required.

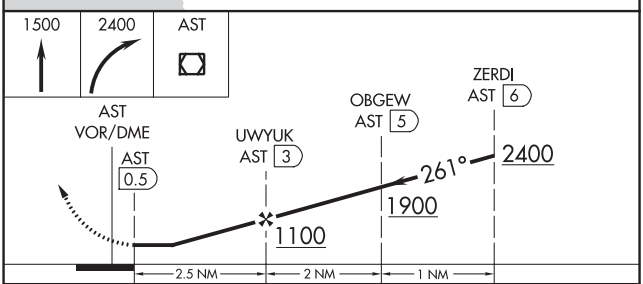
T A NA DME from AST VOR/DME. Simultaneous reception of I-AST and AST DME required. For inop ALS increase visibility to 1 SM.

MALSR A5

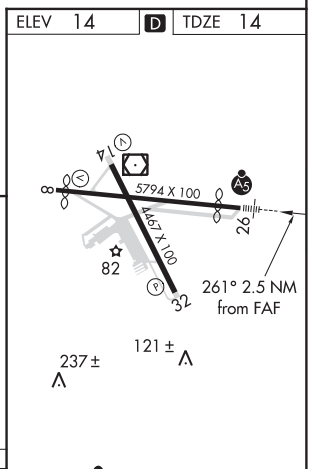
MISSED APPROACH: Climb to 1500 then climbing right turn to 2400 direct AST VOR/DME and hold.

| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.375 | 124.2 317.6 | 122.8 (CTAF) L |




| CATEGORY | COPTER |
|---|---|
| H-LOC 26 | 460-¾ 446 (500-¾) |




REIL Rwy 8 L
REIL Rwy 14
MIRL Rwys 8-26 and 14-32 L



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

| VOR/DME AST 114.0 Chan 87 | APP CRS 070° | Rwy ldg 4894<br>TDZE 14<br>Apt Elev 14 |
|---|---|---|

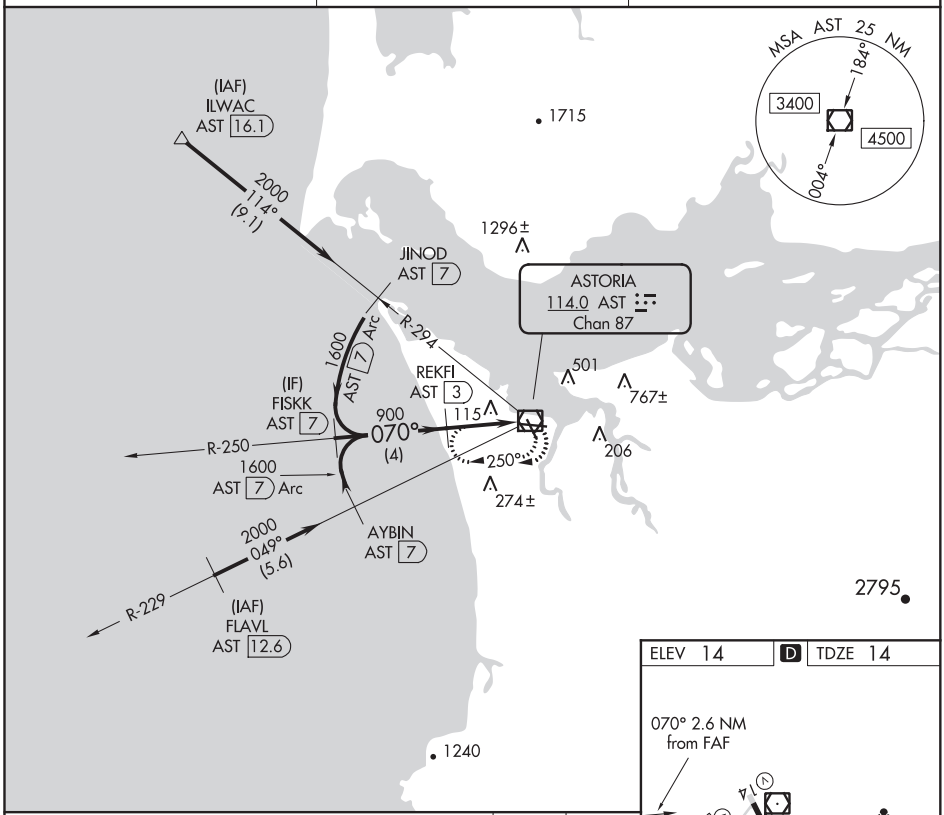
# COPTER VOR RWY 8
## ASTORIA RGNL (AST)

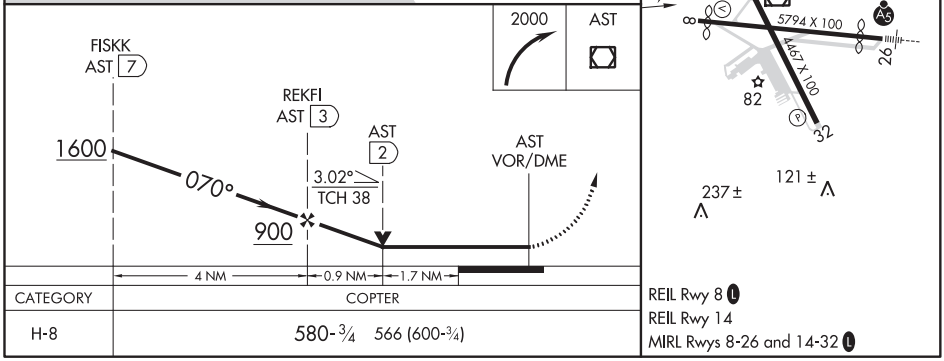
DME required.

NA

MISSED APPROACH: Climbing right turn to 2000 in AST VOR/DME holding pattern.

| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.375 | 124.2 317.6 | 122.8 (CTAF) L |



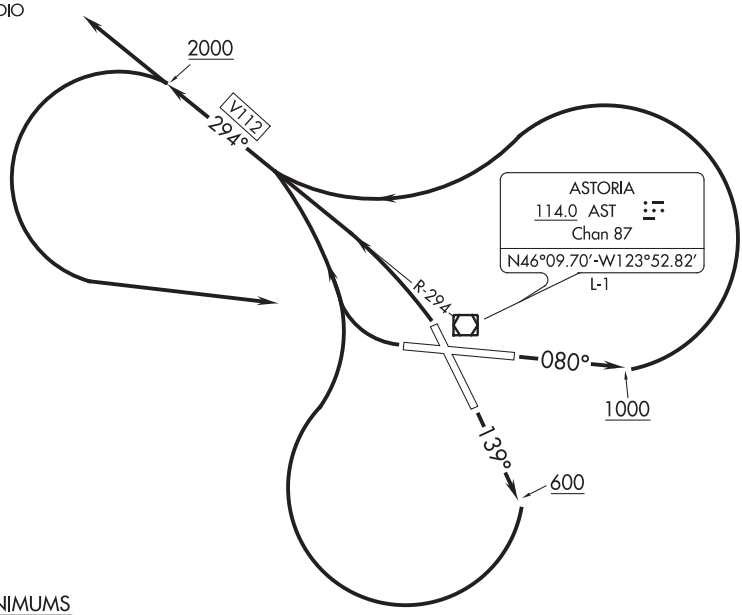

| CATEGORY | COPTER |
|---|---|
| H-8 | 580-¾ 566 (600-¾) |




NW-1, 05 NOV 2020 to 31 DEC 2020

# ASTORIA THREE DEPARTURE (OBSTACLE)

SEATTLE CENTER
124.2 317.6
McMINNVILLE RADIO
122.3




TAKEOFF MINIMUMS

Rwy 32: Standard.

Rwy 8: Standard with a minimum climb of 218′ per NM to 800, or 2300-3 for climb in visual conditions.

Rwy 14: 600-3 with a minimum climb gradient of 239′ per NM to 800, or standard with a minimum climb of 285′ per NM to 600 or 2300-3 for climb in visual conditions.

Rwy 26: 300-1¼ or standard with a minimum climb of 234′ per NM to 300 or alternatively, with standard takeoff minimums and a normal 200′ per NM climb gradient, takeoff must occur no later than 1800′ prior to DER or 2300-3 for climb in visual conditions.

(NOTES CONTINUED ON FOLLOWING PAGE) NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 8: Climb heading 080° to 1000 then climbing left turn, thence . . . .

TAKEOFF RUNWAY 14: Climb heading 139° to 600 then climbing right turn, thence . . . .

TAKEOFF RUNWAY 26: Climbing right turn, thence . . . .

TAKEOFF RUNWAY 32: Climbing left turn, thence . . . .

. . . . intercept the AST VOR/DME R-294 westbound, aircraft northwest bound intercept V112 and continue climb on course. All other aircraft climb to 2000 or above then turn left direct AST VOR/DME and continue climbing on course.

VCOA RUNWAYS 8, 14, 26: Obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Astoria Rgnl airport at or above 2300 before proceeding on course.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

# ASTORIA THREE DEPARTURE (OBSTACLE)

TAKEOFF OBSTACLE NOTES

Rwy 8: Bush 57′ from DER, 120′ left of centerline, 14′ MSL.
Fence, bushes, trees, beginning 65′ from DER, 102′ left of centerline, up to 17′ AGL/27′ MSL.
Fence, bush, trees beginning 70′ from DER, 215′ right of centerline, up to 22′ MSL.
Trees, building beginning 151′ from DER, 76′ right of centerline, up to 36′ MSL.
Trees beginning 207′ right of centerline, up to 41′ MSL.
Trees beginning 510′ from DER, 79′ left of centerline, up to 34′ MSL.
Trees beginning 668′ from DER, 281′ right of centerline, up to 43′ MSL.
Trees beginning 815′ from DER, 336′ right of centerline, up to 52′ MSL.
Tree 1112′ from DER, 453′ right of centerline, 58′ MSL.
Trees beginning 3167′ from DER, 1145′ right of centerline, up to 119′ AGL/124′ MSL.

Rwy 14: Pole 44′ from DER, 224′ left of centerline, 12′ AGL/25′ MSL.
Tree 354′ from DER, 381′ left of centerline, 67′ MSL.
Tree 524′ from DER, 316′ right of centerline, 33′ MSL.
Trees beginning 571′ from DER, 641′ left of centerline, up to 87′ MSL.
Tree 666′ from DER, 544′ right of centerline, 78′ MSL.
Trees beginning 1255′ from DER, 450′ right of centerline, up to 121′ MSL.
Tree 1792′ from DER, 104′ left of centerline, 89′ MSL.
Tree 2493′ from DER, 280′ left of centerline, 121′ MSL.
Tree 3291′ from DER, 312′ right of centerline, 154′ MSL.
Tree 1.3 NM from DER, 2289′ left of centerline, 100′ AGL/249′ MSL.
Tree 1.5 NM from DER, 2813′ left of centerline, 100′ AGL/299′ MSL.
Tree 1.5 NM from DER, 2950′ left of centerline, 100′ AGL/349′ MSL.
Tree 2.1 NM from DER, 3088′ left of centerline, 100′ AGL/399′ MSL.
Tree 2.3 NM from DER, 2635′ left of centerline, 100′ AGL/449′ MSL.
Tree 2.3 NM from DER, 2875′ left of centerline, up to 100′ AGL/499′ MSL.

Rwy 26: Terrain 25′ from DER, 14′ left of centerline, 13′ MSL.
Bushes beginning 38′ from DER, 241′ left of centerline, up to 16′ MSL.
Trees and bush beginning 42′ from DER, 266′ right of centerline, up to 18′ AGL/27′ MSL.
Traverse way 226′ from DER, 439′ left of centerline, 24′ MSL.
Trees, bush beginning 247′ from DER, 372′ right of centerline, up to 30′ MSL.
Trees, beginning 695′ from DER, 625′ left of centerline, up to 54′ MSL.
Tree 736′ from DER, 620′ right of centerline, 36′ MSL.
Tree 1380′ from DER, 720′ left of centerline, 58′ MSL.
Tree 1698′ from DER, 702′ left of centerline, 73′ MSL.
Trees beginning 1975′ from DER, 273′ left of centerline, up to 92′ MSL.
Sign 1982′ from DER, 1010′ right of centerline, 64′ MSL.
Tree 2137′ from DER, 490′ left of centerline, 93′ MSL.
Trees beginning 2239′ from DER, 64′ left of centerline, up to 102′ AGL/107′ MSL.
Tree 3051′ from DER, 1157′ left of centerline, 116′ MSL.
Tree 3089′ from DER, 849′ left of centerline, 122′ MSL.
Tree 3140′ from DER, 699′ left of centerline, 124′ MSL.
Trees beginning 3194′ from DER, 248′ left of centerline, up to 131′ AGL/139′ MSL.
Trees beginning 4022′ from DER, 879′ right of centerline, up to 130′ MSL.
Trees beginning 4103′ from DER, 273′ right of centerline, up to 145′ MSL.
Trees beginning 4206′ from DER, 150′ right of centerline, up to 141′ AGL/148′ MSL.
Trees beginning 4250′ from DER, 229′ left of centerline, up to 146′ MSL.
Trees beginning 4690′ from DER, 1267′ left of centerline, up to 149′ MSL.
Tree 4744′ from DER, 1488′ left of centerline, 150′ MSL.
Trees beginning 4821′ from DER, 218′ left of centerline, up to 164′ MSL.
Tree 5241′ from DER, 1316′ left of centerline, 165′ MSL.
Trees beginning 5434′ from DER, 1603′ left of centerline, up to 171′ MSL.
Tree 5893′ from DER, 1752′ left of centerline, 173′ MSL.
Trees beginning 6051′ from DER, 1803′ left of centerline, up to 174′ AGL/182′ MSL.
Antenna 1 NM from DER, 1558′ right of centerline, 164′ AGL/173′ MSL.

Rwy 32: Vehicles, trees, fence beginning 2′ from DER, 231′ left of centerline, up to 46′ MSL.


NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 331° | TDZE | N/A |
| | Apt Elev | 63 |

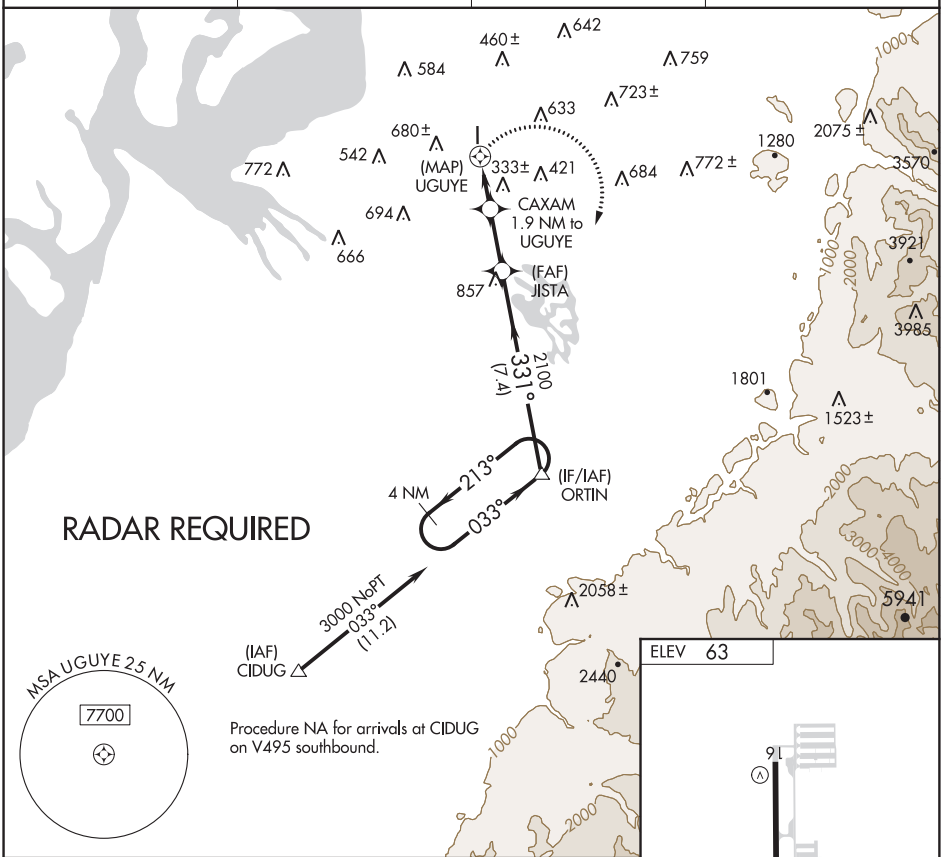
# RNAV (GPS)-A
## AUBURN MUNI (S50)

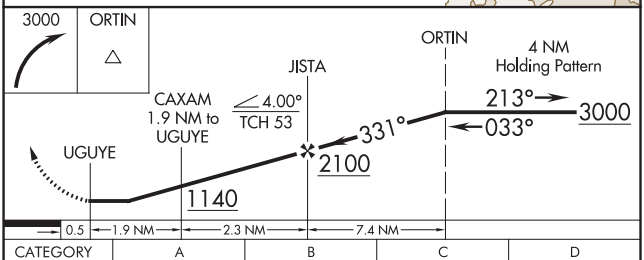
T NA

Circling NA west of Rwy 16-34.
DME/DME RNP-0.3 NA. Procedure NA at night.
Use Seattle-Tacoma Intl altimeter setting.

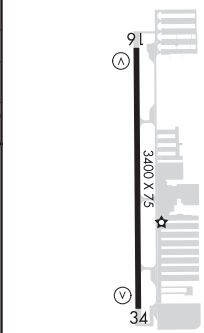
MISSED APPROACH: Climbing right turn to 3000 direct ORTIN and hold.

| SEA ASOS | SEATTLE APP CON | CLNC DEL | UNICOM |
|---|---|---|---|
| 118.0 | 123.85 | 123.85 | 122.8 (CTAF) L |




ELEV 63




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 920-1¼<br>857 (900-1¼) | 1040-1½<br>977 (1000-1½) | NA | |

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

NW-1, 05 NOV 2020 to 31 DEC 2020

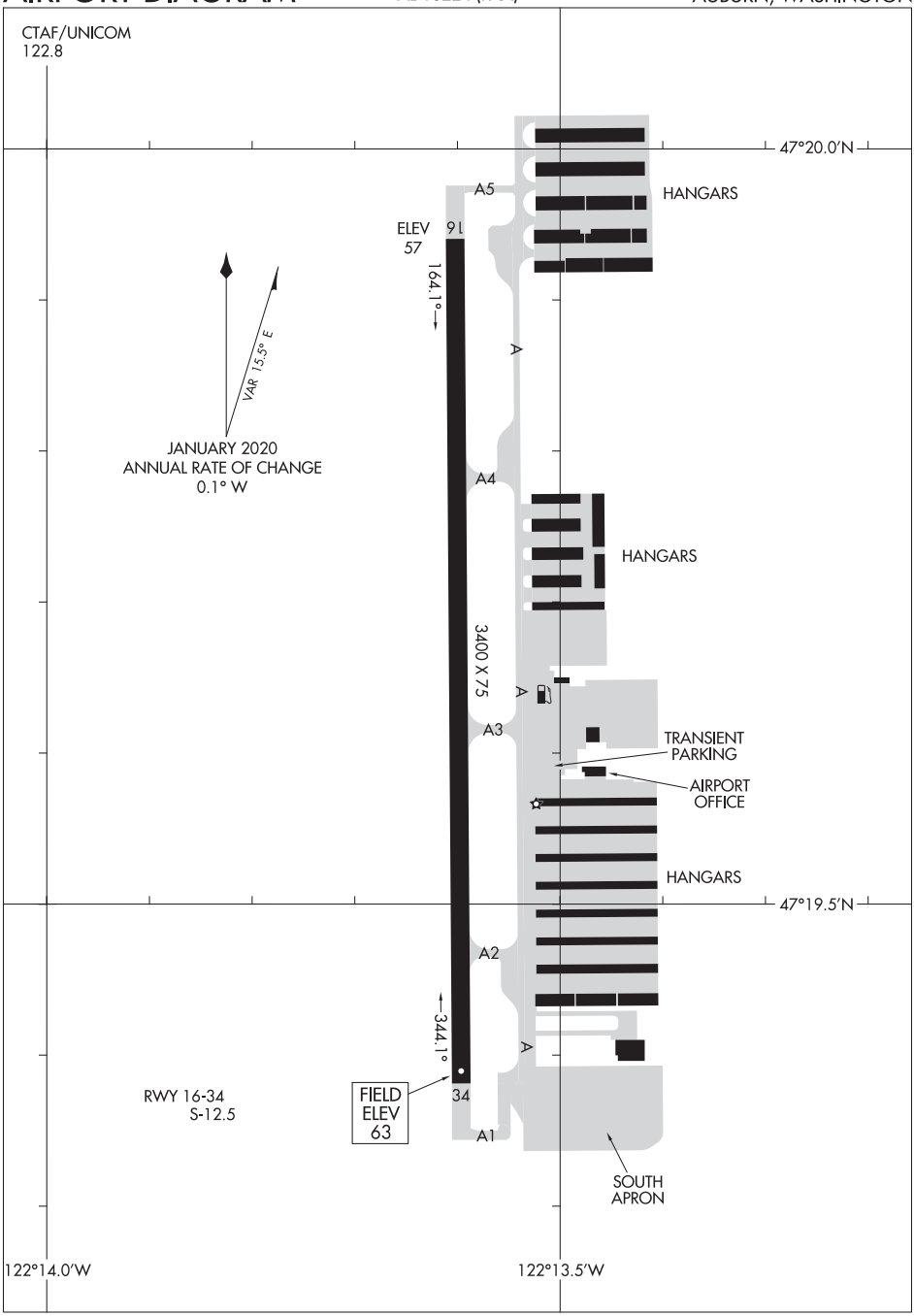
NW-1, 05 NOV 2020 to 31 DEC 2020

20254

# AIRPORT DIAGRAM

AL-10224 (FAA)

AUBURN MUNI (S50)
AUBURN, WASHINGTON



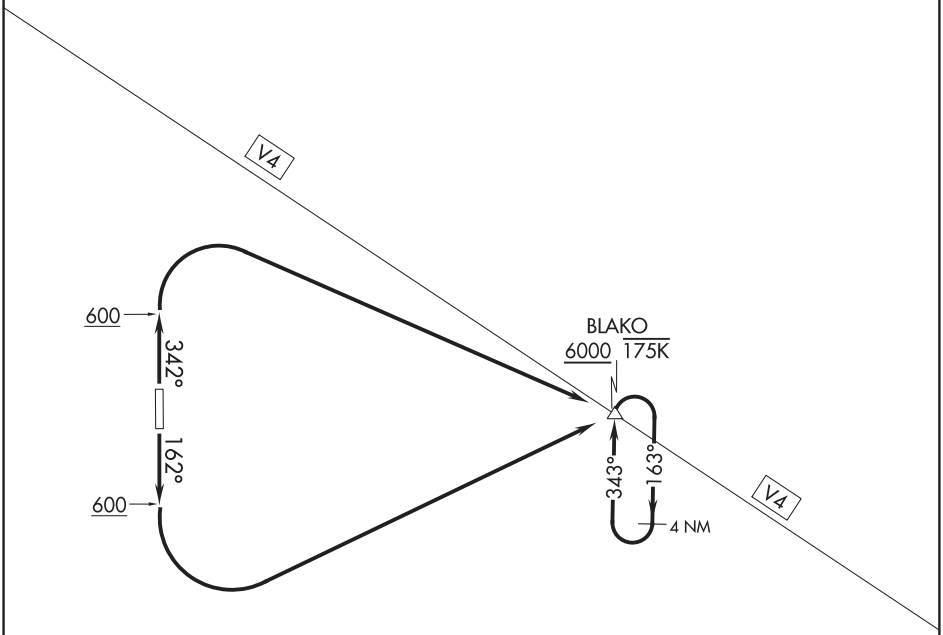

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM
20254

AUBURN, WASHINGTON
AUBURN MUNI (S50)

CLNC DEL
123.85
SEATTLE DEP CON
123.85




NOTE: GPS required.
NOTE: RNAV 1.

TAKEOFF MINIMUMS
Rwys 16, 34: Standard with minimum climb of 500′ per NM to 600 then 360′ per NM to 3200.

TAKEOFF OBSTACLE NOTES
Rwy 16: Building 355′ from DER, 482′ right of centerline 31′ AGL/97′ MSL.
AAO 3.2 NM from DER, 3643′ left of centerline 200′ AGL/724′ MSL.
Rwy 34: AAO 3.2 NM from DER, 5520′ right of centerline 200′ AGL/639′ MSL.
Powerline 1804′ from DER, on centerline, 80′ AGL/122′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb heading 162° to 600 then climbing left turn to 6000 direct BLAKO, thence. . . .

TAKEOFF RUNWAY 34: Climb heading 342° to 600 then climbing right turn to 6000 direct BLAKO, thence. . . .

. . . .climb in BLAKO holding pattern to cross BLAKO at or above MEA for route of flight.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

AURORA, OREGON | AL-5722 (FAA) | 20198

# RNAV (GPS) RWY 17
## AURORA STATE (UAO)

| WAAS CH 70308 W17A | APP CRS 172° | Rwy ldg 5003 TDZE 200 Apt Elev 200 |
|---|---|---|

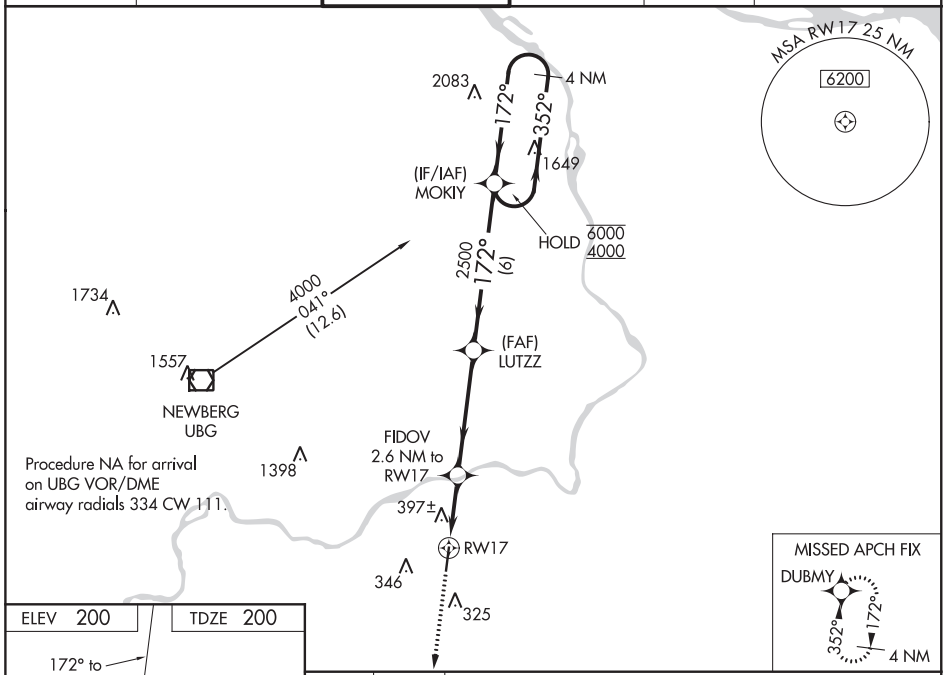
RNP APCH.

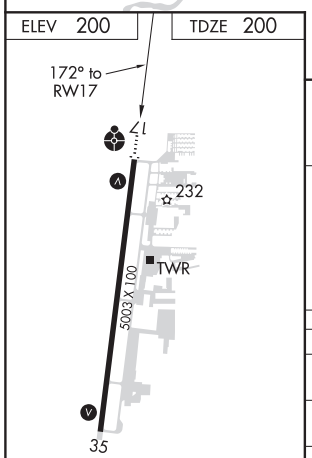
Rwy 17 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -6°C or above 54°C. For inop ALS, increase LNAV/VNAV Cat A/B and LNAV Cat C/D visibility to 1⅜ SM. Inop table does not apply to LPV and LNAV Cat A/B.

ODALS

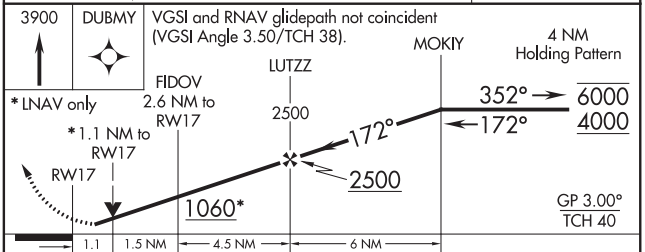
MISSED APPROACH: Climb to 3900 direct DUBMY and hold, continue climb-in-hold to 3900.

| ATIS* | PORTLAND APP CON | AURORA TOWER* | GND CON | CLNC DEL | PORTLAND CLNC DEL |
|---|---|---|---|---|---|
| 118.525 | 126.0 269.175 | 120.35 (CTAF) L | 119.15 | 119.15 | 119.95 (When tower closed) |




MIRL Rwy 17-35 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 511-⅞ 311 (400-⅞) | | | |
| LNAV/VNAV DA | 661-1¼ 461 (500-1¼) | | | |
| LNAV MDA | 660-1 460 (500-1) | | 660-1⅛ 460 (500-1⅛) | |
| C CIRCLING | 700-1 500 (500-1) | | 700-1½ 500 (500-1½) | 940-2¼ 740 (800-2¼) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 77508 W35A | APP CRS 352° | Rwy ldg 5003 TDZE 199 Apt Elev 200 |
|---|---|---|

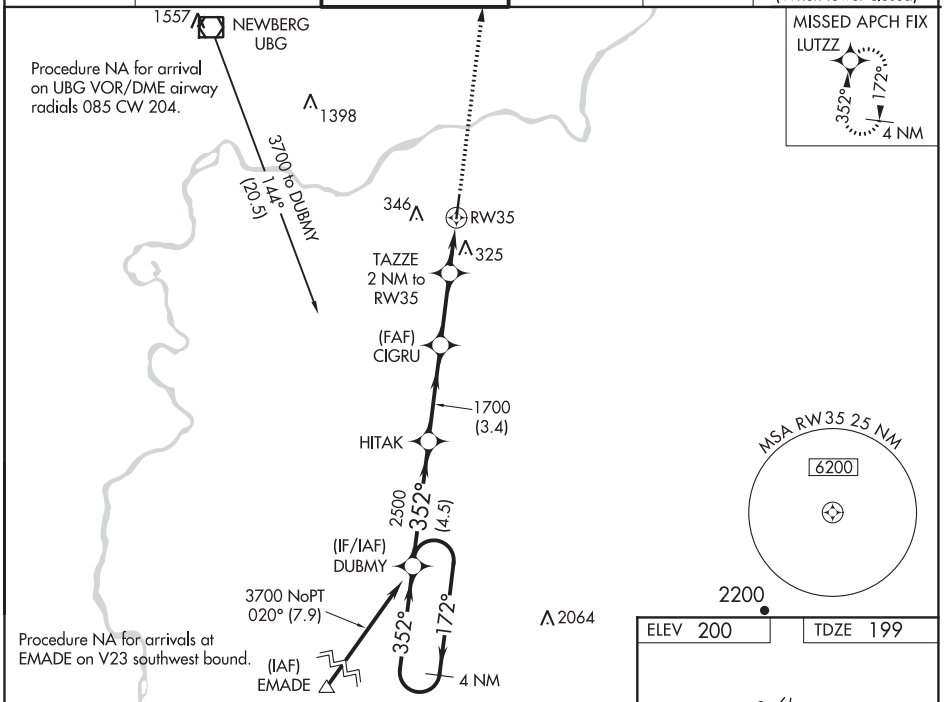
# RNAV (GPS) RWY 35
## AURORA STATE (UAO)

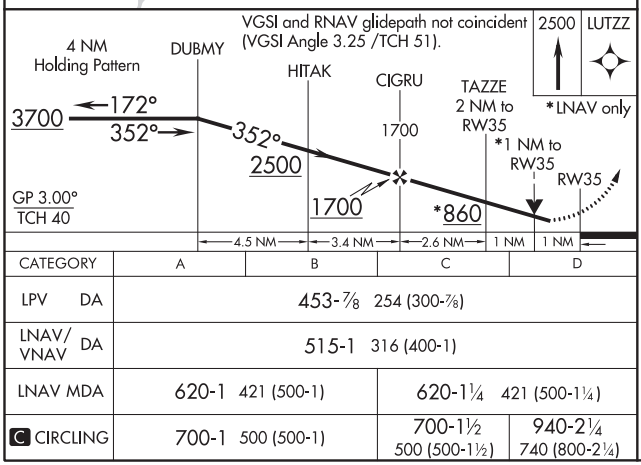
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -6°C or above 54°C. Rwy 35 helicopter visibility reduction below ¾ SM NA.

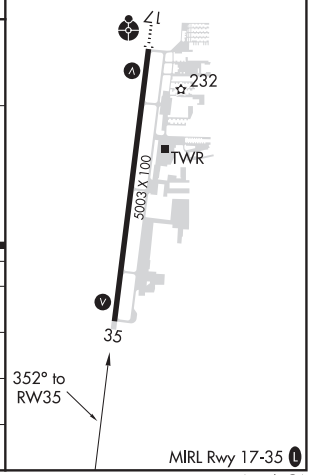
MISSED APPROACH: Climb to 2500 direct LUTZZ and hold.

| ATIS ★ | PORTLAND APP CON | AURORA TOWER ★ | GND CON | CLNC DEL | PORTLAND CLNC DEL |
|---|---|---|---|---|---|
| 118.525 | 126.0 269.175 | 120.35 (CTAF) L | 119.15 | 119.15 | 119.95 (When tower closed) |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 453-⅞ 254 (300-⅞) | | | |
| LNAV/VNAV DA | 515-1 316 (400-1) | | | |
| LNAV MDA | 620-1 421 (500-1) | | 620-1¼ 421 (500-1¼) | |
| C CIRCLING | 700-1 500 (500-1) | | 700-1½ 500 (500-1½) | 940-2¼ 740 (800-2¼) |





NW-1, 05 NOV 2020 to 31 DEC 2020

AURORA, OREGON | AL-5722 (FAA) | 20198

# LOC RWY 17
## AURORA STATE (UAO)

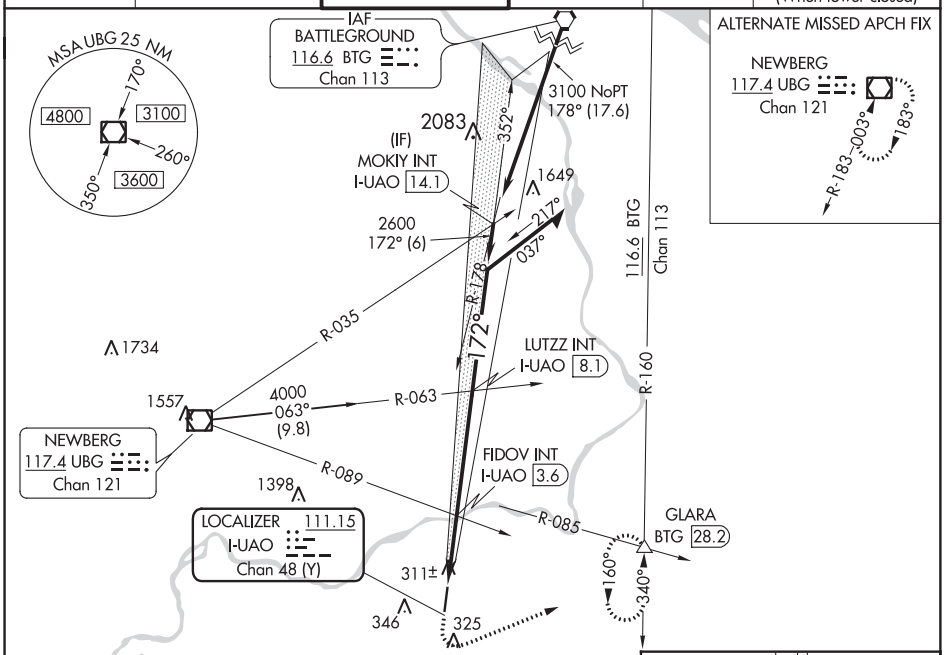
| LOC/DME I-UAO | APP CRS | Rwy ldg | 5003 |
|---|---|---|---|
| 111.15 | 172° | TDZE | 200 |
| Chan 48 (Y) | | Apt Elev | 200 |

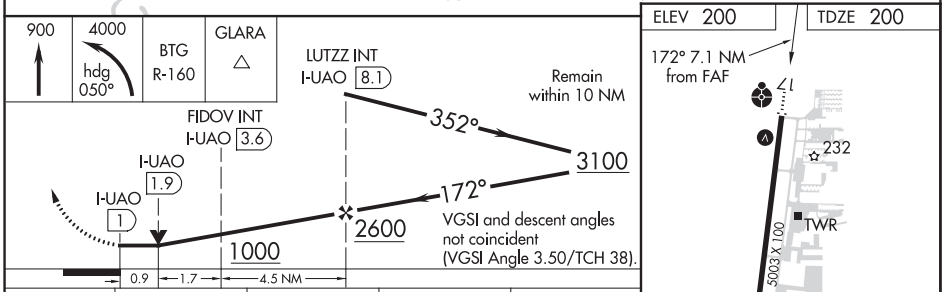
Rwy 17 helicopter visibility reduction below ¾ SM NA.
FIDOV fix minimums: Inop table does not apply to Cats C/D.
For inop ALS, increase S-17 Cats C/D visibility to 2½ SM.

ODALS

MISSED APPROACH: Climb to 900 then climbing left turn to 4000 on heading 050° and BTG R-160 to GLARA INT/ BTG 28.2 DME and hold, continue climb-in-hold to 4000.

| ATIS ★ | PORTLAND APP CON | AURORA TOWER ★ | GND CON | CLNC DEL | PORTLAND CLNC DEL |
|---|---|---|---|---|---|
| 118.525 | 126.0 269.175 | 120.35 (CTAF) L | 119.15 | 119.15 | 119.95 (When tower closed) |



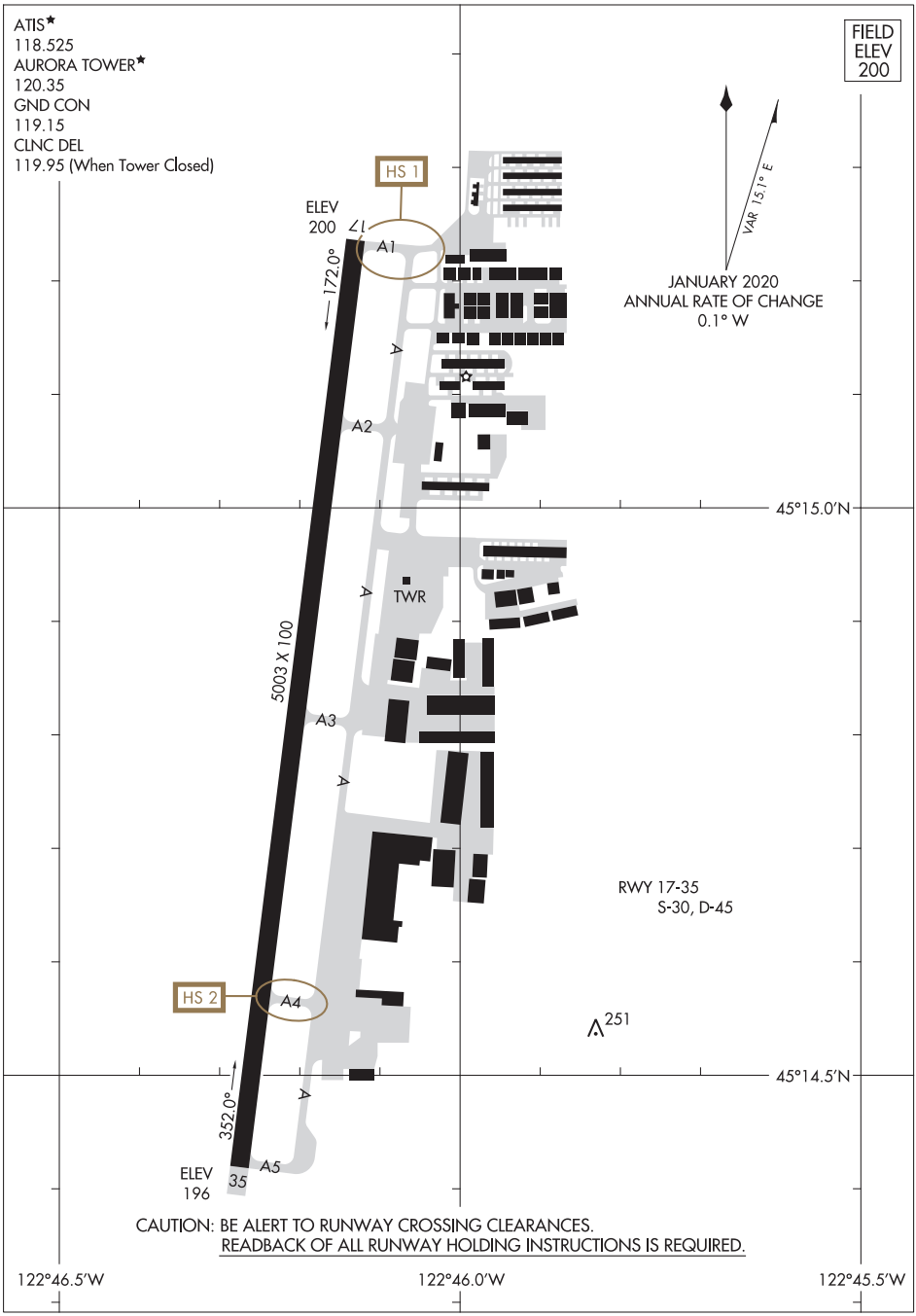

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-17 | 1000-¾ 800 (800-¾) | 1000-1 800 (800-1) | 1000-2 800 (800-2) | |
| C CIRCLING | 1000-1 800 (800-1) | 1000-1¼ 800 (800-1¼) | 1000-2½ 800 (800-2½) | |
| FIDOV FIX MINIMUMS | | | | |
| S-17 | 580-¾ 380 (400-¾) | | 580-1 380 (400-1) | |
| C CIRCLING | 700-1 500 (500-1) | | 700-1½ 500 (500-1½) | 940-2¼ 740 (800-2¼) |

FAF to MAP 7.1 NM

| Knots | 60 | 90 | 120 | 150 | 180 |
|---|---|---|---|---|---|
| Min:Sec | 7:06 | 4:44 | 3:33 | 2:50 | 2:22 |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020


ATIS★
118.525
AURORA TOWER★
120.35
GND CON
119.15
CLNC DEL
119.95 (When Tower Closed)
FIELD ELEV 200
HS 1
ELEV 200
17
A1
172.0°
A
A2
VAR 15.1° E
JANUARY 2020
ANNUAL RATE OF CHANGE
0.1° W
45°15.0'N
TWR
5003 X 100
A3
RWY 17-35
S-30, D-45
HS 2
A4
251
45°14.5'N
352.0°
ELEV 196
35
A5
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
122°46.5'W
122°46.0'W
122°45.5'W

(GLARA2.GLARA) 17285

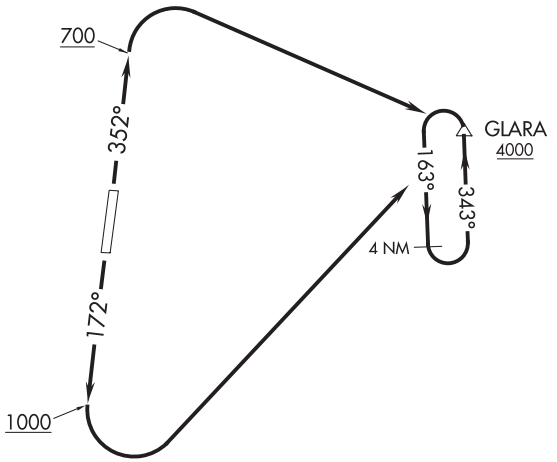
# GLARA TWO DEPARTURE (RNAV)

AL-5722 (FAA)

AURORA STATE (UAO)
AURORA, OREGON

**TOP ALTITUDE: ASSIGNED BY ATC**

ATIS ★
118.525
CLNC DEL
119.15
PORTLAND CLNC DEL
119.95 (when tower closed)
GND CON
119.15
AURORA TOWER ★
120.35
PORTLAND DEP CON
126.0 284.6




NOTE: RNAV 1.

NOTE: GPS required.

TAKEOFF MINIMUMS
Rwy 17: Standard with minimum climb of 375′ per NM to 1000.
Rwy 35: Standard with minimum climb of 350′ per NM to 700.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb heading 172° to 1000, then climbing left turn direct GLARA. Thence . . . .

TAKEOFF RUNWAY 35: Climb heading 352° to 700, then climbing right turn direct GLARA. Thence . . . .

. . . . continue climb in GLARA holding pattern to cross GLARA at or above 4000 before proceeding on course.

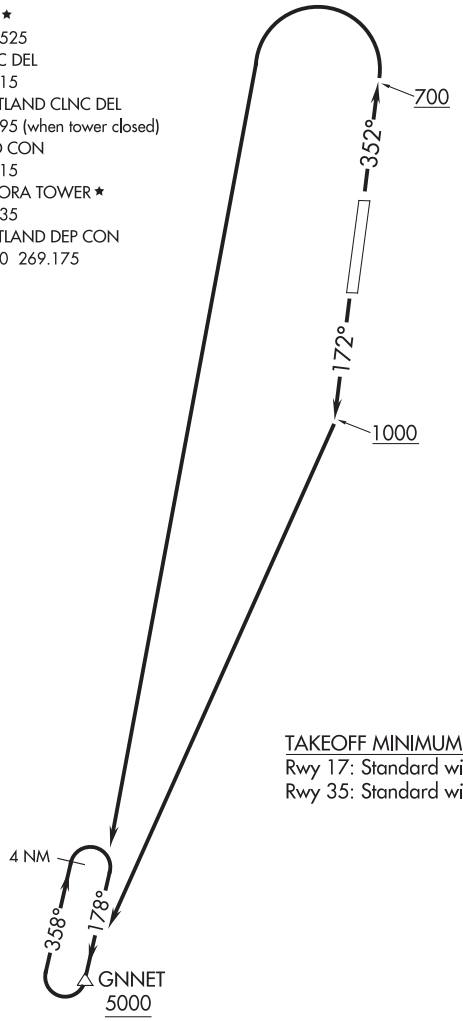

NW-1, 05 NOV 2020 to 31 DEC 2020

# GNNET TWO DEPARTURE (RNAV)

AL-5722 (FAA)

**TOP ALTITUDE: ASSIGNED BY ATC**

ATIS ★
118.525
CLNC DEL
119.15
PORTLAND CLNC DEL
119.95 (when tower closed)
GND CON
119.15
AURORA TOWER ★
120.35
PORTLAND DEP CON
126.0 269.175




NOTE: RNAV 1
NOTE: GPS required.

TAKEOFF MINIMUMS
Rwy 17: Standard with minimum climb of 375′ per NM to 1000.
Rwy 35: Standard with minimum climb of 350′ per NM to 2100.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb heading 172° to 1000, then climbing right turn direct GNNET. Thence . . . .

TAKEOFF RUNWAY 35: Climb heading 352° to 700, then climbing left turn direct GNNET. Thence . . . .

. . . . continue climb in GNNET holding pattern to cross GNNET at or above 5000 before proceeding on course.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

(UBG2.UBG) 17285

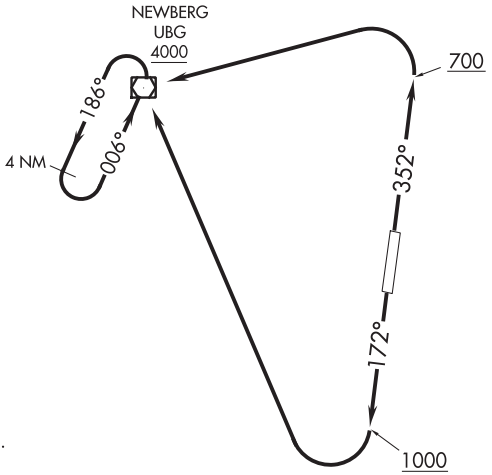
# NEWBERG TWO DEPARTURE (RNAV)

AL-5722 (FAA)

AURORA STATE (UAO)
AURORA, OREGON

**TOP ALTITUDE: ASSIGNED BY ATC**

ATIS ★
118.525
CLNC DEL
119.15
PORTLAND CLNC DEL
119.95 (when tower closed)
GND CON
119.15
AURORA TOWER ★
120.35
PORTLAND DEP CON
126.0 269.175




NOTE: RNAV 1.
NOTE: GPS required.

TAKEOFF MINIMUMS
Rwy 17: Standard with minimum climb of 375′ per NM to 2100.
Rwy 35: Standard with minimum climb of 350′ per NM to 2100.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb heading 172° to 1000, then climbing right turn direct UBG VOR/DME. Thence . . . .

TAKEOFF RUNWAY 35: Climb heading 352° to 700, then climbing left turn direct UBG VOR/DME. Thence . . . .

. . . . continue climb in hold UBG VOR/DME holding pattern to cross UBG VOR/DME at or above 4000 before proceeding on course.


NW-1, 05 NOV 2020 to 31 DEC 2020

NEWBERG TWO DEPARTURE (RNAV)
(UBG2.UBG) 27APR17

AURORA, OREGON
AURORA STATE (UAO)

| WAAS CH 86339 W13A | APP CRS 129° | Rwy ldg 5904<br>TDZE 2974<br>Apt Elev 2981 |
|---|---|---|

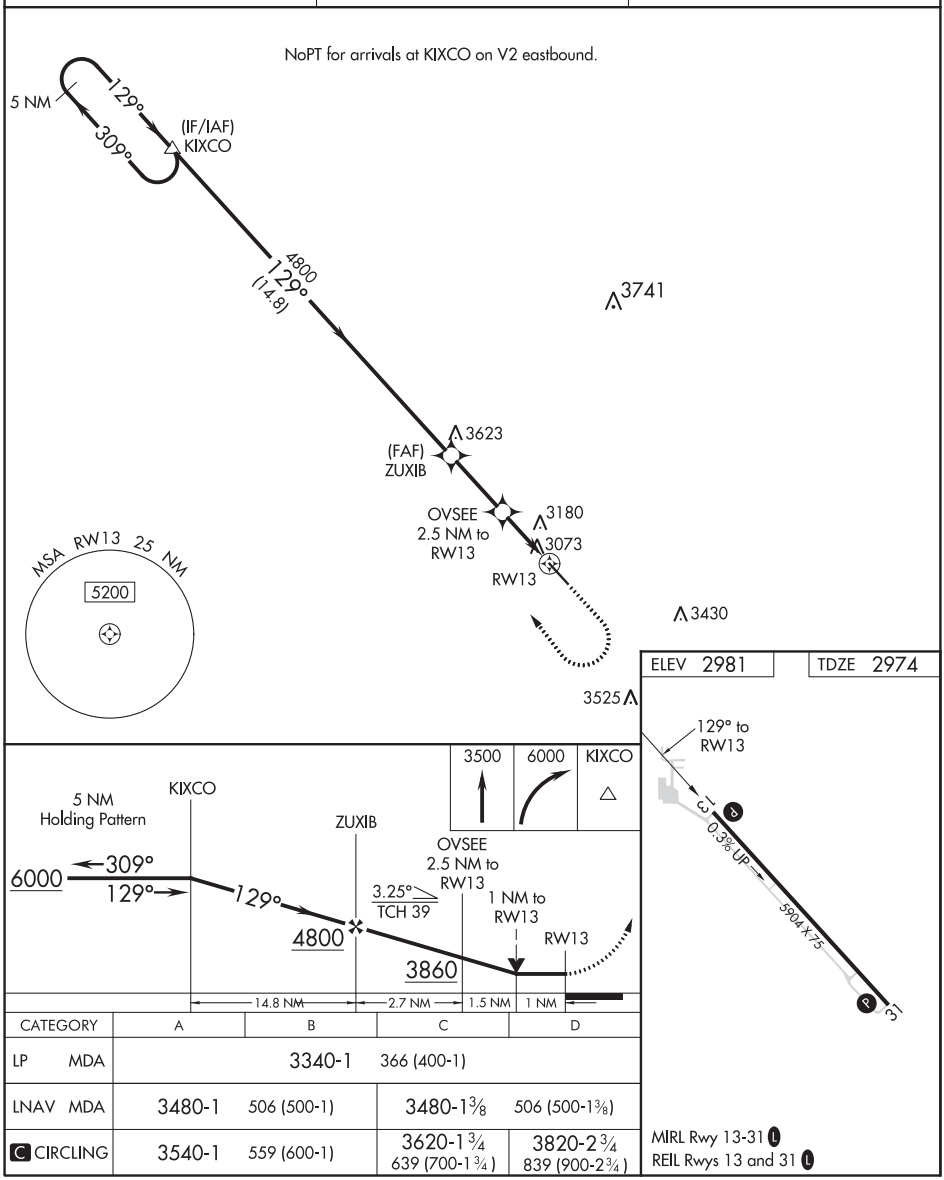
# RNAV (GPS) RWY 13
## BAKER MUNI (BHK)

DME/DME RNP-0.3 NA.
Helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3500 then climbing right turn to 6000 direct KIXCO and hold.

| ASOS | SALT LAKE CENTER | CTAF |
|---|---|---|
| 135.475 | 126.85 305.2 | 122.9 L |






| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LP MDA | 3340-1 366 (400-1) | | | |
| LNAV MDA | 3480-1 506 (500-1) | | 3480-1⅜ 506 (500-1⅜) | |
| C CIRCLING | 3540-1 559 (600-1) | | 3620-1¾ 639 (700-1¾) | 3820-2¾ 839 (900-2¾) |

MIRL Rwy 13-31 L
REIL Rwys 13 and 31 L

BAKER, MONTANA | AL-6943 (FAA) | 20198

| WAAS CH 50138 W31A | APP CRS 309° | Rwy ldg 5904 TDZE 2981 Apt Elev 2981 |
|---|---|---|

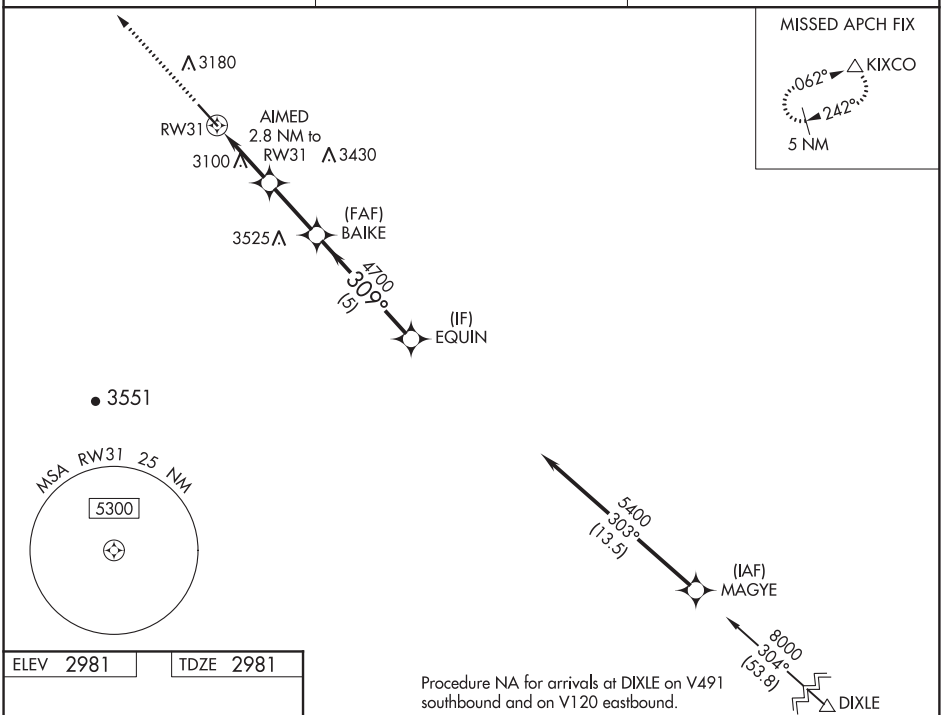
# RNAV (GPS) RWY 31
## BAKER MUNI (BHK)

RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -27°C or above 54°C. When local altimeter setting not received, procedure NA.

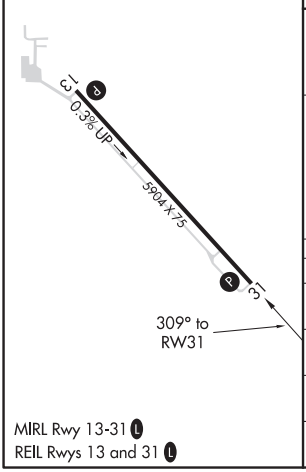
MISSED APPROACH: Climb to 3500 then climbing right turn 6000 direct KIXCO and hold.

| ASOS | SALT LAKE CENTER | CTAF |
|---|---|---|
| 135.475 | 126.85 305.2 | 122.9 L |

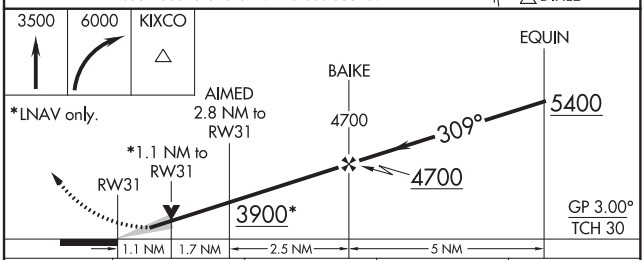



Procedure NA for arrivals at DIXLE on V491 southbound and on V120 eastbound.

ELEV 2981 | TDZE 2981




MIRL Rwy 13-31 L
REIL Rwys 13 and 31 L




| CATEGORY | | A | B | C | D |
|---|---|---|---|---|---|
| LPV | DA | 3231-⅞ 250 (300-⅞) | | | |
| LNAV/VNAV | DA | 3267-1 286 (300-1) | | | |
| LNAV MDA | | 3360-1 379 (400-1) | | | |
| C CIRCLING | | 3540-1 559 (600-1) | | 3620-1¾ 639 (700-1¾) | 3820-2¾ 839 (900-2¾) |


NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 90133 W13A | APP CRS 125° | Rwy ldg 5085<br>TDZE 3370<br>Apt Elev 3373 |
|---|---|---|

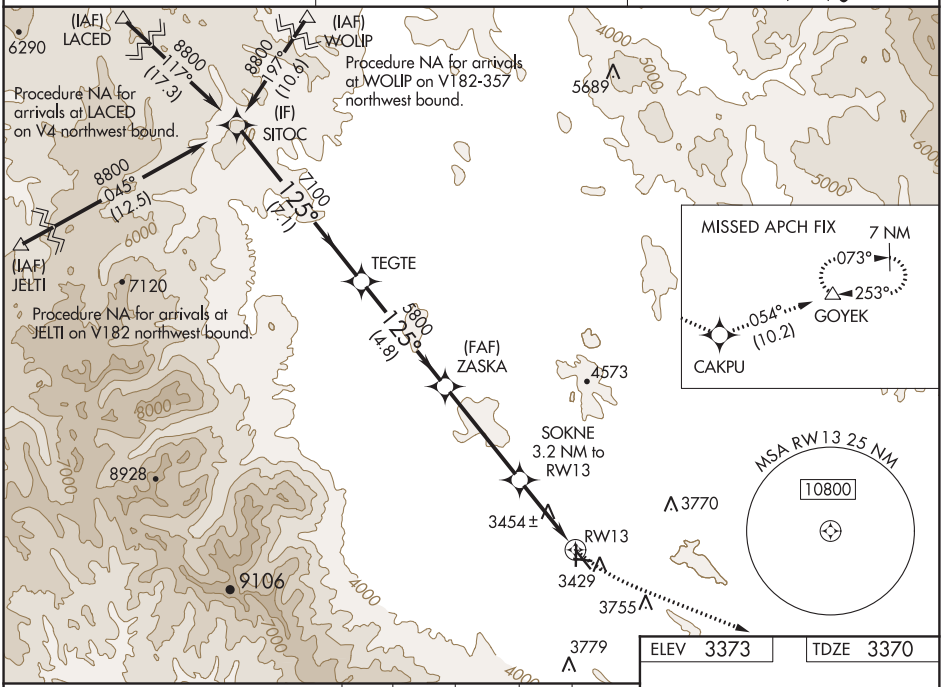
# RNAV (GPS) RWY 13
## BAKER CITY MUNI (BKE)

T
A
❄ -23°C

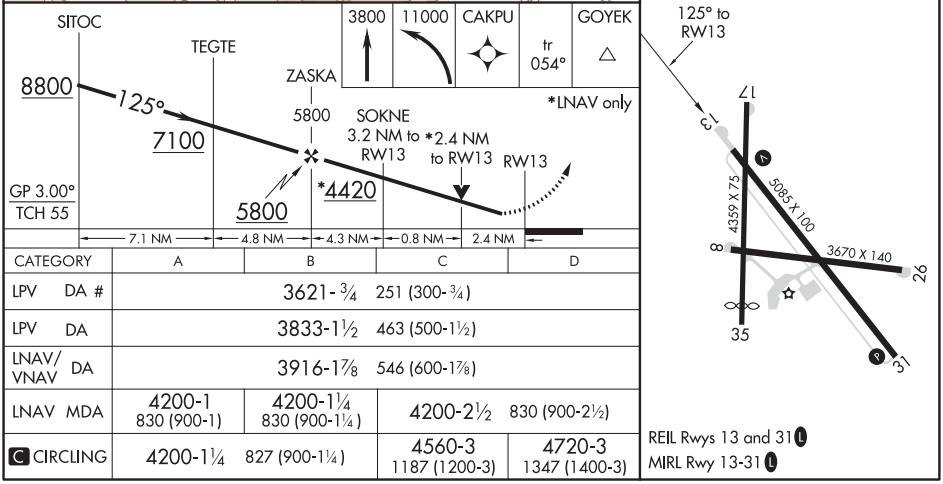
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C (-7°F) or above 51°C (124°F). Rwy 13 helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA. Circling Rwy 8, 17, 26, and 35 NA at night.

MISSED APPROACH: Climb to 3800 then climbing left turn to 11000 direct CAKPU and on track 054° to GOYEK and hold, continue climb-in-hold to 11000.
# Missed approach requires minimum climb of 266 feet per NM to 4580.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 134.275 | 128.05 306.95 | 123.0 (CTAF) L |




| ELEV 3373 | TDZE 3370 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA # | 3621-¾ 251 (300-¾) | | | |
| LPV DA | 3833-1½ 463 (500-1½) | | | |
| LNAV/VNAV DA | 3916-1⅞ 546 (600-1⅞) | | | |
| LNAV MDA | 4200-1 830 (900-1) | 4200-1¼ 830 (900-1¼) | 4200-2½ 830 (900-2½) | |
| C CIRCLING | 4200-1¼ 827 (900-1¼) | | 4560-3 1187 (1200-3) | 4720-3 1347 (1400-3) |

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

BAKER CITY, OREGON | AL-35 (FAA) | 20198

| VOR/DME BKE 115.3 Chan 100 | APP CRS 118° | Rwy ldg 5085<br>TDZE 3370<br>Apt Elev 3373 |
|---|---|---|

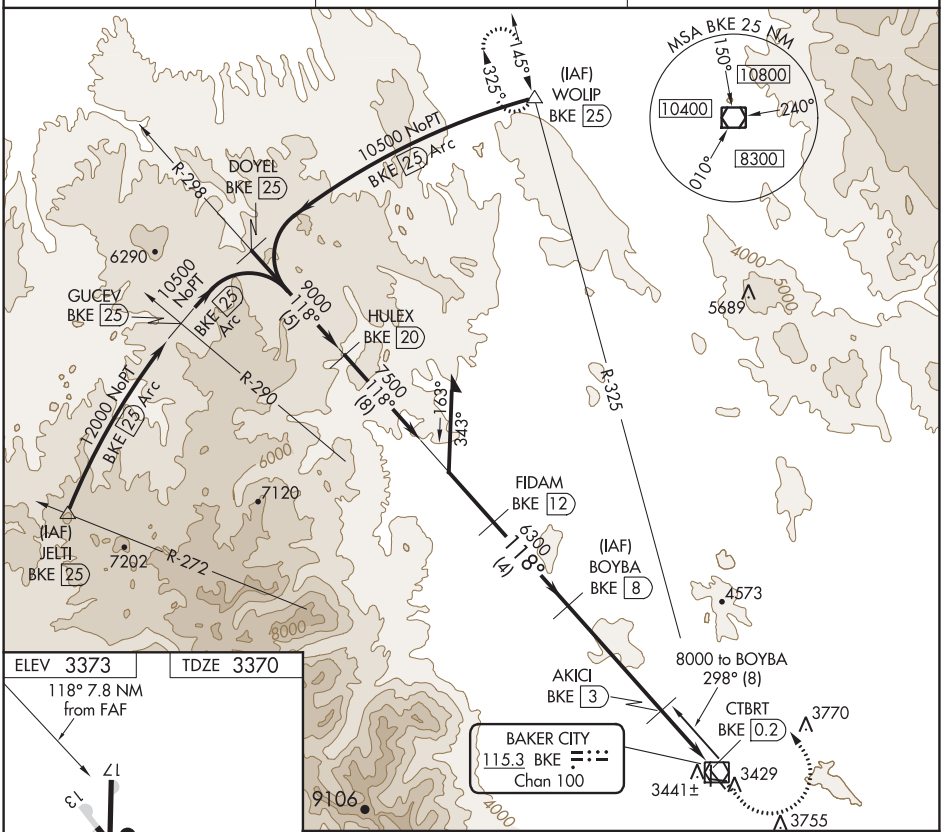
# VOR/DME RWY 13
## BAKER CITY MUNI (BKE)

T A -23°C

Circling to Rwy 8/17/26/35 NA at night.
Helicopter visibility reduction below 1 SM NA.

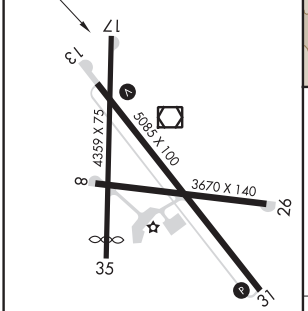
MISSED APPROACH: Climb to 4000 then climbing left turn to 10500 via BKE R-325 to WOLIP and hold.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 134.275 | 128.05 306.95 | 123.0 (CTAF) L |

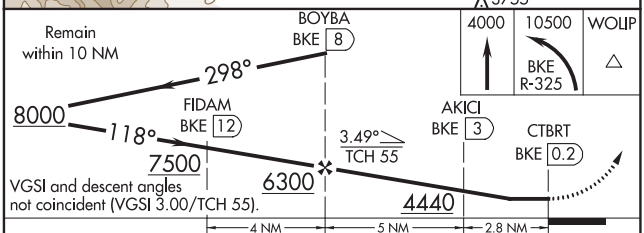



| ELEV 3373 | TDZE 3370 |
|---|---|

118° 7.8 NM from FAF




REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-13 | 4000-1 | 630 (700-1) | 4000-1¾<br>630 (700-1¾) | 4000-2<br>630 (700-2) |
| C CIRCLING | 4000-1 | 627 (700-1) | 4560-3<br>1187 (1200-3) | 4720-3<br>1347 (1400-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| VOR/DME BKE | APP CRS | Rwy ldg | N/A |
|---|---|---|---|
| 115.3 | 135° | TDZE | N/A |
| Chan 100 | | Apt Elev | 3373 |

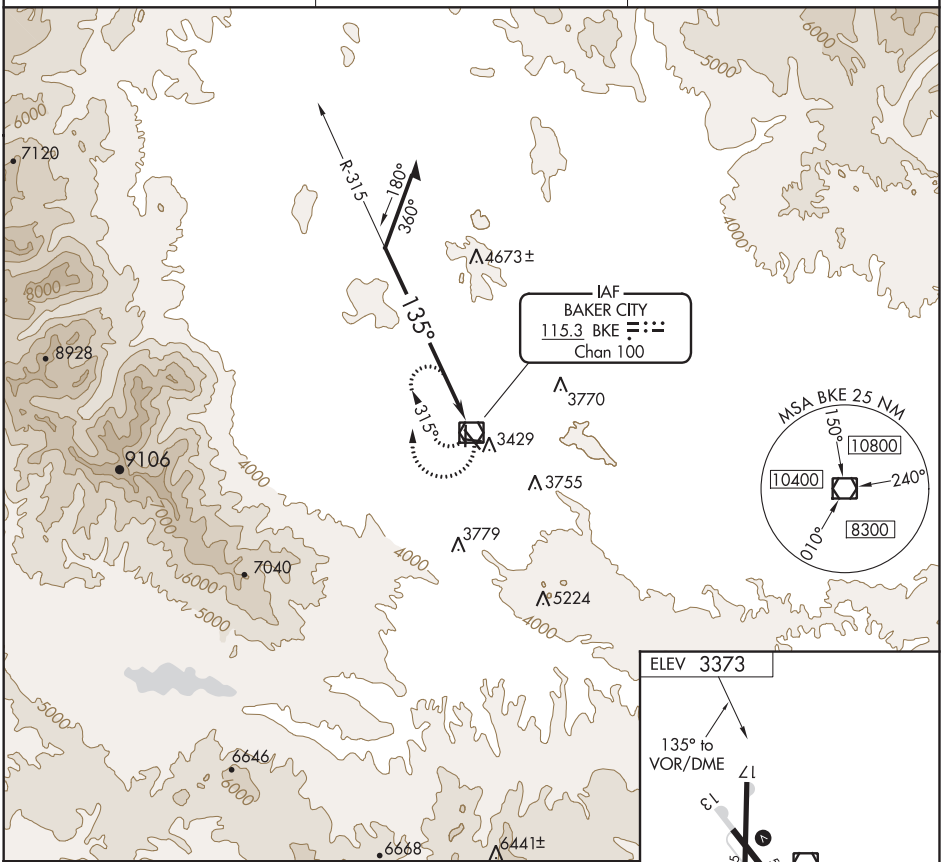
# VOR-A
## BAKER CITY MUNI (BKE)

T A -23°C

Circling to Rwy 8/17/26/35 NA at night.
Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climbing right turn to 6900 in BKE VOR/DME holding pattern.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 134.275 | 128.05 306.95 | 123.0 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 5200-1¼ 1827 (1900-1¼) | 5200-1½ 1827 (1900-1½) | 5200-3 1827 (1900-3) | |

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

BELLINGHAM, WASHINGTON — AL-45 (FAA) — 19227

# ILS or LOC RWY 16
## BELLINGHAM INTL (BLI)

| LOC/DME I-BLI | APP CRS | Rwy ldg | 6700 |
|---|---|---|---|
| 108.5 | 164° | TDZE | 163 |
| Chan 22 | | Apt Elev | 171 |

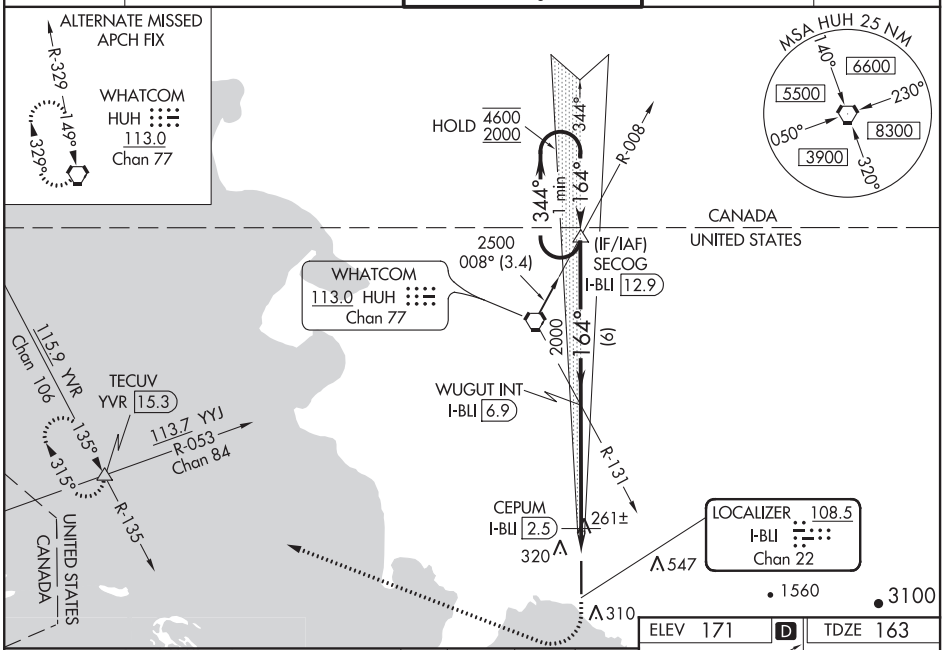
DME or RADAR required.

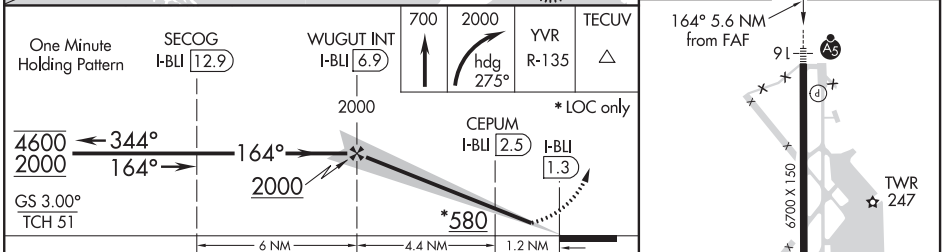
For inop ALS, increase S-LOC Cat C/D visibility to RVR 6000 and CEPUM fix minimums S-LOC 16 Cat C/D to RVR 5500.
# RVR 1800 authorized with use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 700 then climbing right turn to 2000 on heading 275° and on YVR VOR/DME R-135 to TECUV INT/YVR 15.3 DME and hold.

| ATIS | VICTORIA TERMINAL APP CON | BELLINGHAM TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 134.45 | 132.7 290.8 | 124.9 (CTAF) 379.3 | 127.4 379.3 | 122.95 |







| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 16 # | 363/24 200 (200-½) | | | |
| S-LOC 16 | 580/24 417 (500-½) | | 580/40 417 (500-¾) | |
| C CIRCLING | 640-1 469 (500-1) | | 900-2 729 (800-2) | 1160-3 989 (1000-3) |
| CEPUM FIX MINIMUMS (DME REQUIRED) | | | | |
| S-LOC 16 | 520/24 357 (400-½) | | 520/30 357 (400-⅝) | |
| C CIRCLING | 640-1 469 (500-1) | | 900-2 729 (800-2) | 1160-3 989 (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 |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# ILS RWY 16 (SA CAT I)
## BELLINGHAM INTL (BLI)

| LOC/DME I-BLI | APP CRS | Rwy ldg | 6700 |
|---|---|---|---|
| 108.5 | 164° | TDZE | 163 |
| Chan 22 | | Apt Elev | 171 |

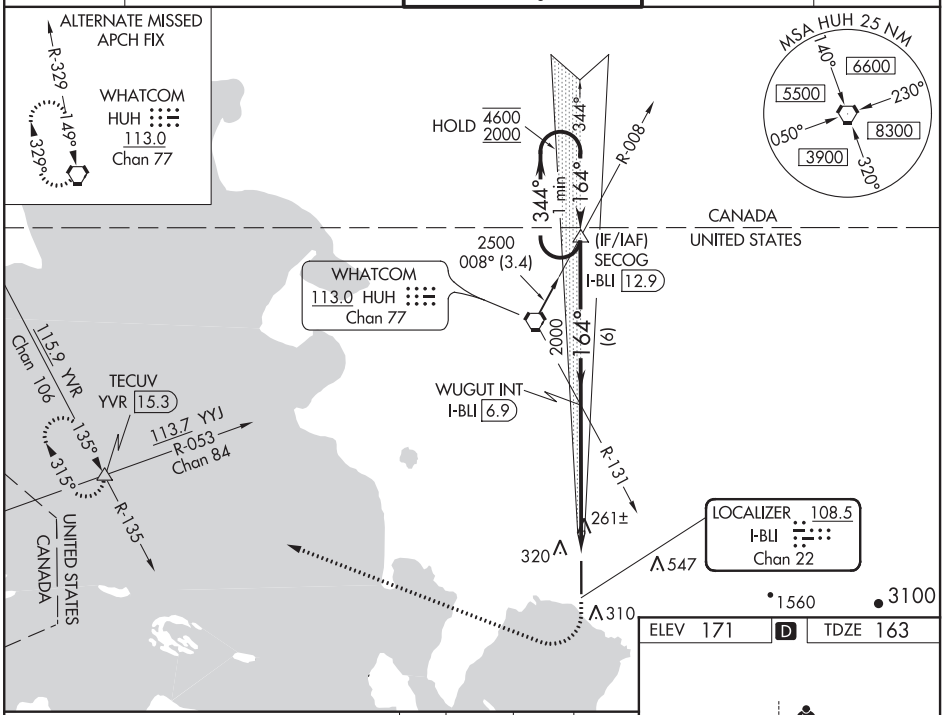
DME or RADAR required.

Requires specific OPSPEC, MSPEC or LOA approval and use of HUD to DH.

MALSR

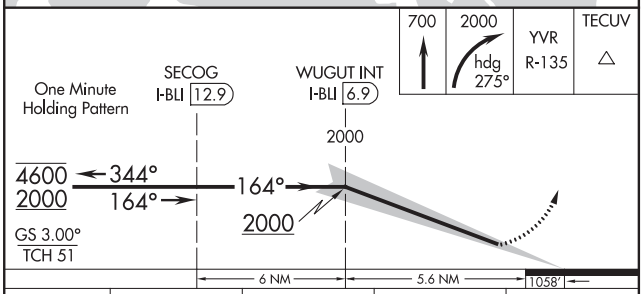
MISSED APPROACH: Climb to 700 then climbing right turn to 2000 on heading 275° and on YVR VOR/DME R-135 to TECUV INT/YVR 15.3 DME and hold.

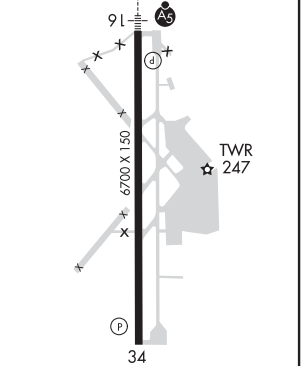
| ATIS | VICTORIA TERMINAL APP CON | BELLINGHAM TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 134.45 | 132.7 290.8 | 124.9 (CTAF) L 379.3 | 127.4 379.3 | 122.95 |




NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 171 D TDZE 163




REIL Rwy 34 L
HIRL Rwy 16-34 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 16 | RA 244/14 150 DA 313 | | | |

**SA CATEGORY I ILS-SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**

BELLINGHAM, WASHINGTON | AL-45 (FAA) | 19227

# RNAV (RNP) Z RWY 16

BELLINGHAM INTL (BLI)

| APP CRS | Rwy ldg | 6700 |
|---|---|---|
| 164° | TDZE | 163 |
| | Apt Elev | 171 |

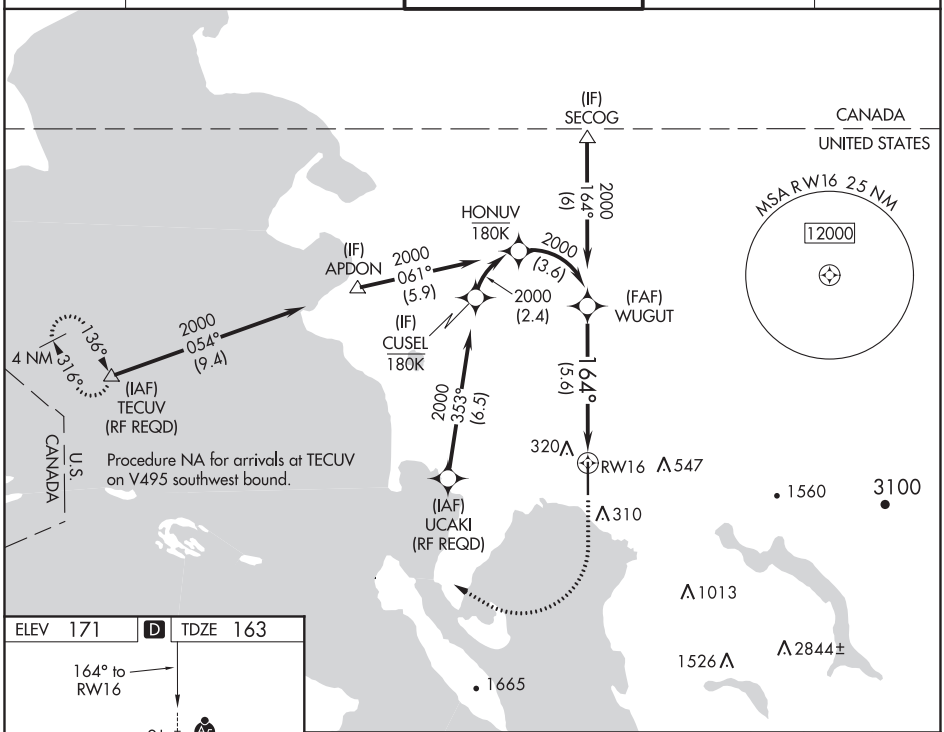
RNP AR APCH

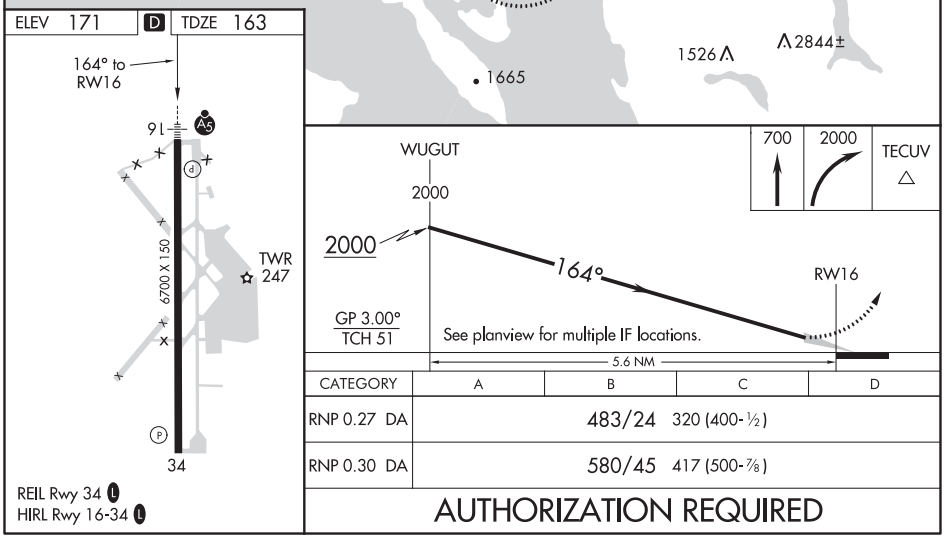
For uncompensated Baro-VNAV systems, procedure NA below -10°C or above 54°C. For inop ALS, increase RNP 0.27 all Cats visibility to RVR 4500, increase RNP 0.30 all Cats visibility to RVR 6000.

MALSR

MISSED APPROACH: Climb to 700 then climbing right turn to 2000 direct TECUV and hold.

| ATIS | VICTORIA TERMINAL APP CON | BELLINGHAM TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 134.45 | 132.7 290.8 | 124.9 (CTAF) L 379.3 | 127.4 379.3 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.27 DA | 483/24 320 (400-½) | | | |
| RNP 0.30 DA | 580/45 417 (500-⅞) | | | |

AUTHORIZATION REQUIRED

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 6700 |
|---|---|---|
| 344° | TDZE | 171 |
| | Apt Elev | 171 |

# RNAV (RNP) Z RWY 34

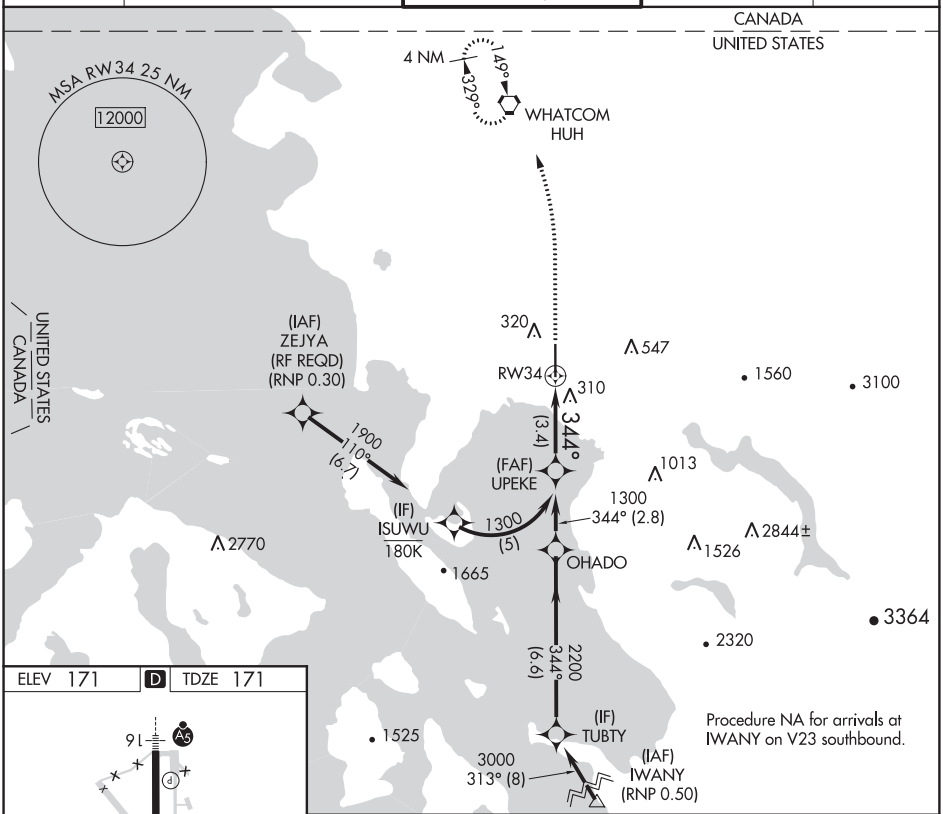
## BELLINGHAM INTL (BLI)

RNP AR APCH.

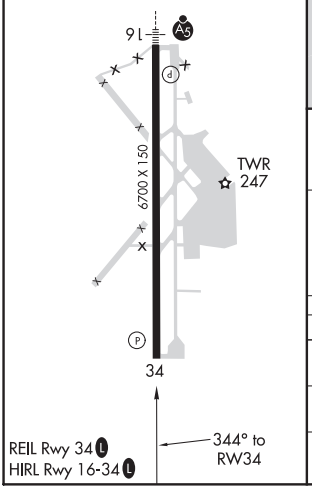
For uncompensated Baro-VNAV systems, procedure NA below -10°C or above 54°C.

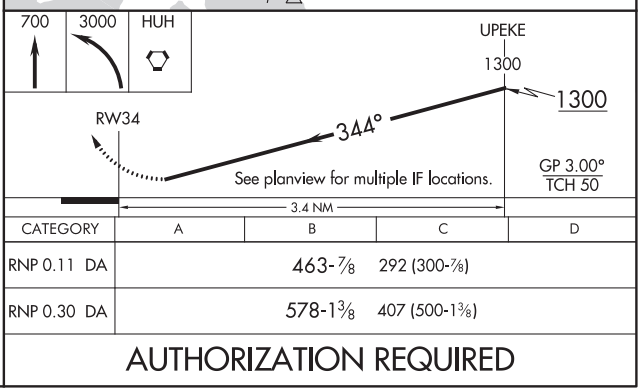
MISSED APPROACH: Climb to 700 then climbing left turn to 3000 direct WHATCOM VORTAC and hold, continue climb-in-hold to 3000.

| ATIS | VICTORIA TERMINAL APP CON | BELLINGHAM TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 134.45 | 132.7 290.8 | 124.9 (CTAF) L 379.3 | 127.4 379.3 | 122.95 |




ELEV 171 D TDZE 171




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.11 DA | 463-⅞ 292 (300-⅞) | | | |
| RNP 0.30 DA | 578-1⅜ 407 (500-1⅜) | | | |

**AUTHORIZATION REQUIRED**



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

BELLINGHAM, WASHINGTON AL-45 (FAA) 19227

# RNAV (GPS) Y RWY 16

BELLINGHAM INTL (BLI)

| WAAS CH 45999 W16A | APP CRS 164° | Rwy ldg 6700<br>TDZE 163<br>Apt Elev 171 |
|---|---|---|

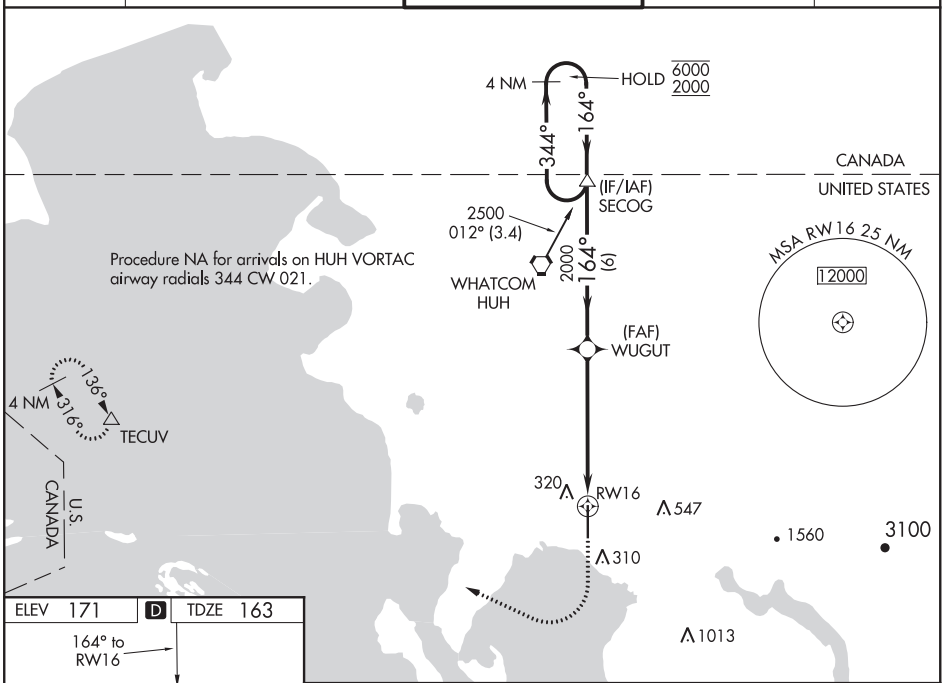
RNP APCH.

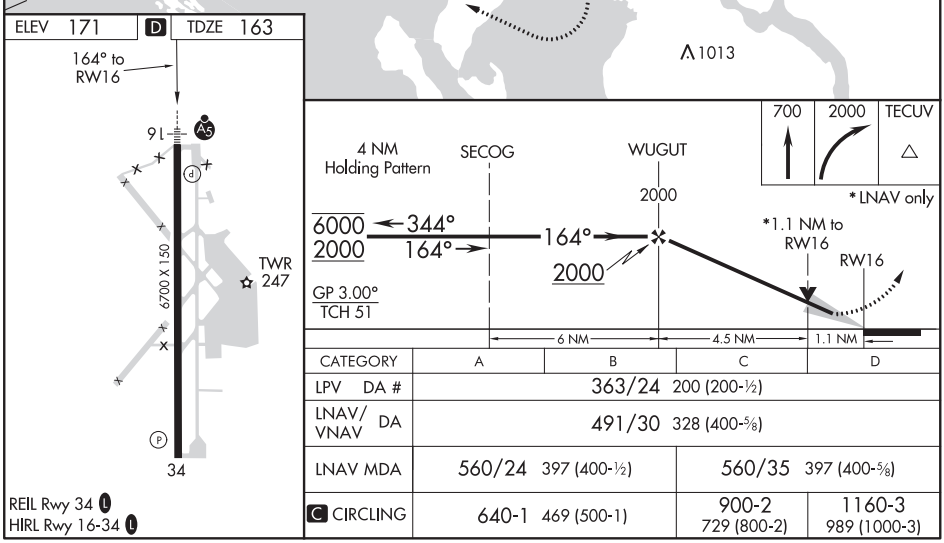
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -10°C or above 54°C .
#RVR 1800 authorized with use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH:
Climb to 700 then climbing right turn to 2000 direct TECUV and hold.

| ATIS | VICTORIA TERMINAL APP CON | BELLINGHAM TOWER * | GND CON | UNICOM |
|---|---|---|---|---|
| 134.45 | 132.7 290.8 | 124.9 (CTAF) L 379.3 | 127.4 379.3 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA # | 363/24 200 (200-½) | | | |
| LNAV/VNAV DA | 491/30 328 (400-⅝) | | | |
| LNAV MDA | 560/24 397 (400-½) | | 560/35 397 (400-⅝) | |
| C CIRCLING | 640-1 469 (500-1) | | 900-2 729 (800-2) | 1160-3 989 (1000-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

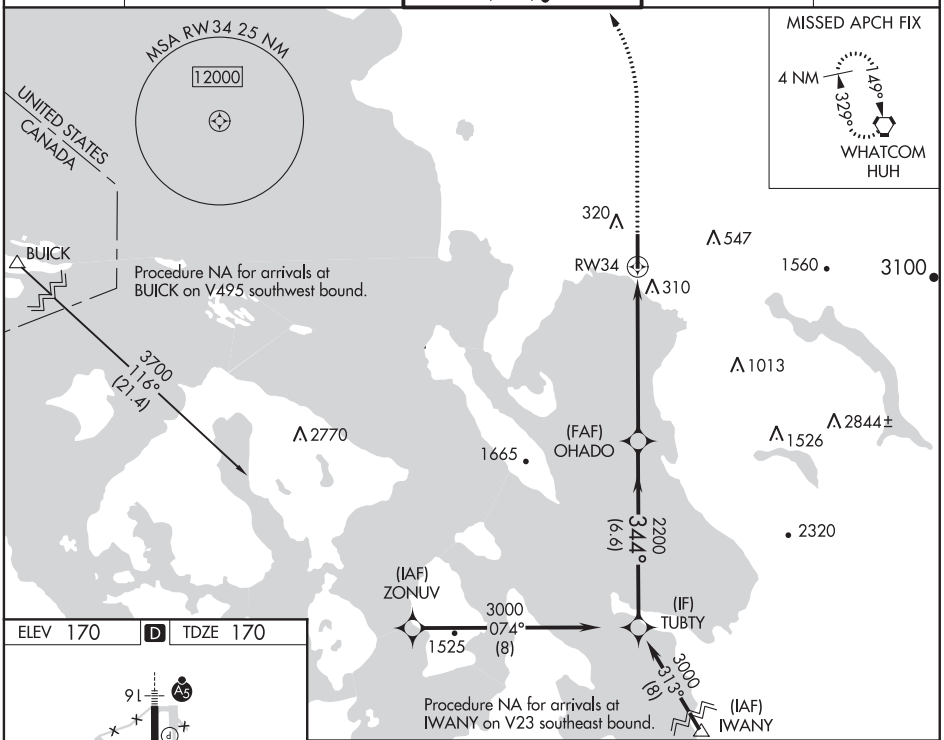
| WAAS CH 86223 W34A | APP CRS 344° | Rwy ldg 6700 TDZE 170 Apt Elev 170 |
|---|---|---|

# RNAV (GPS) Y RWY 34
## BELLINGHAM INTL (BLI)

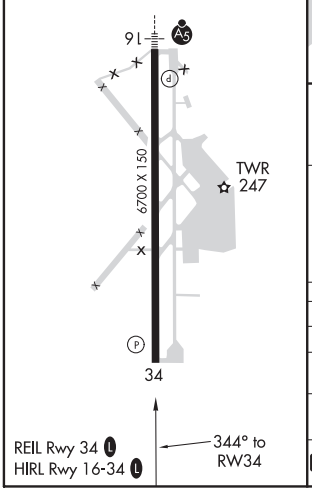
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -10°C (14°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Baro-VNAV and VDP NA when using Friday Harbor altimeter setting. When local altimeter setting not received, use Friday Harbor altimeter setting and increase all DAs 67 feet and all MDA 80 feet; increase LPV all Cats visibility, LNAV/VNAV all Cats visibility, LNAV Cats C/D and Circling Cat C ¼ mile. Helicopter visibility reduction below ¾ SM NA.

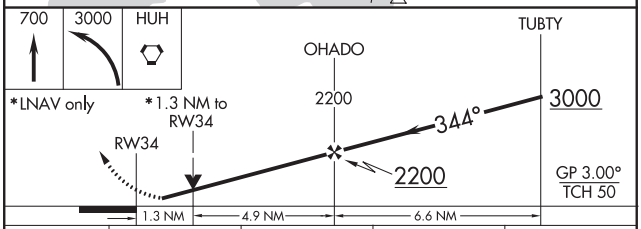
MISSED APPROACH: Climb to 700 then climbing left turn to 3000 direct HUH VORTAC and hold, continue climb-in-hold to 3000.

| ATIS | VICTORIA TERMINAL APP CON | BELLINGHAM TOWER * | GND CON | UNICOM |
|---|---|---|---|---|
| 134.45 | 132.7 290.8 | 124.9 (CTAF) L 379.3 | 127.4 379.3 | 122.95 |




ELEV 170 D TDZE 170




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 420-¾ 250 (300-¾) | | | |
| LNAV/VNAV DA | 502-1⅛ 332 (400-1⅛) | | | |
| LNAV MDA | 640-1 470 (500-1) | | 640-1⅜ 470 (500-1⅜) | |
| C CIRCLING | 640-1 470 (500-1) | | 900-2 730 (800-2) | 1160-3 990 (1000-3) |



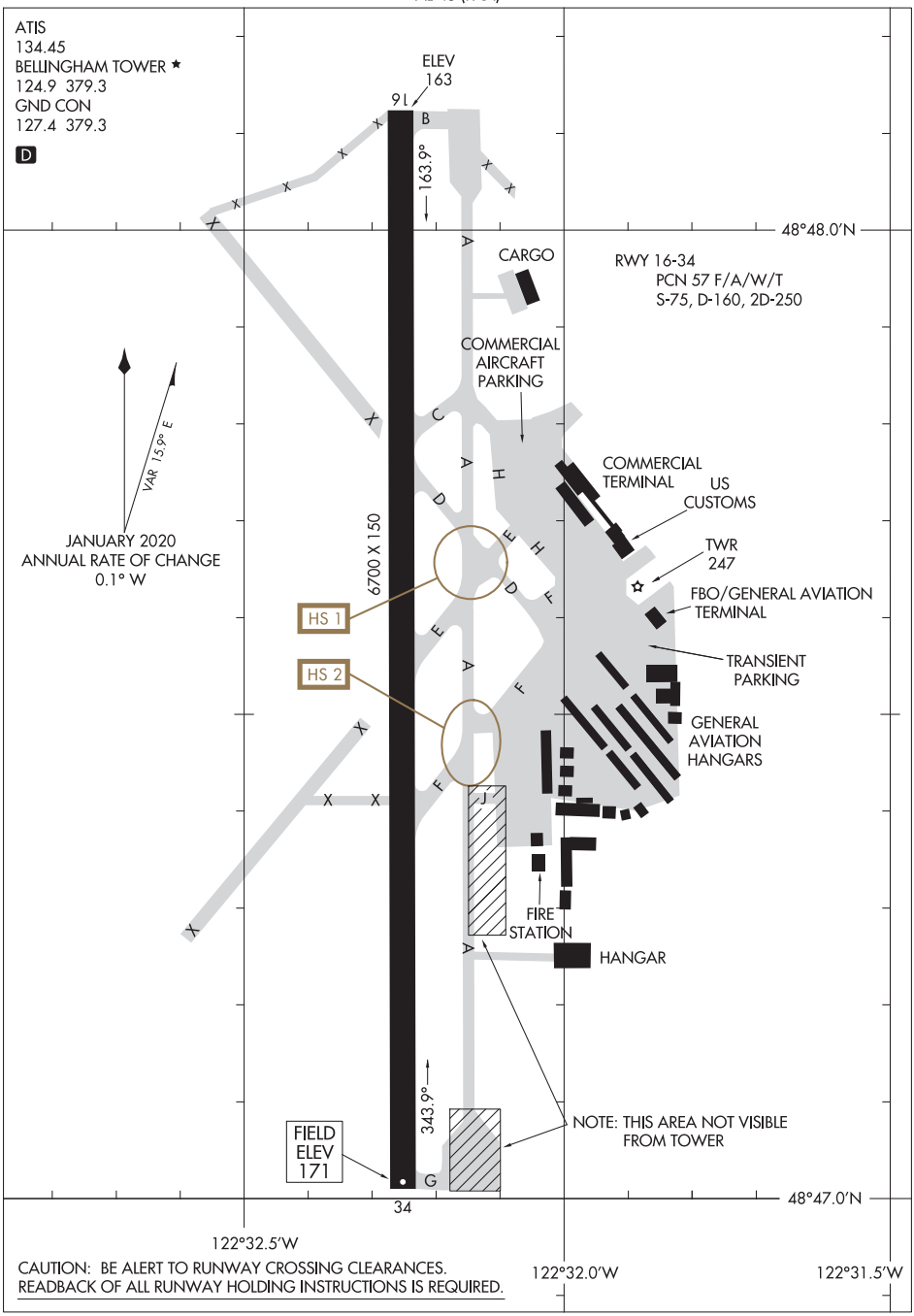
NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

20086

# AIRPORT DIAGRAM

BELLINGHAM INTL (BLI)
BELLINGHAM, WASHINGTON

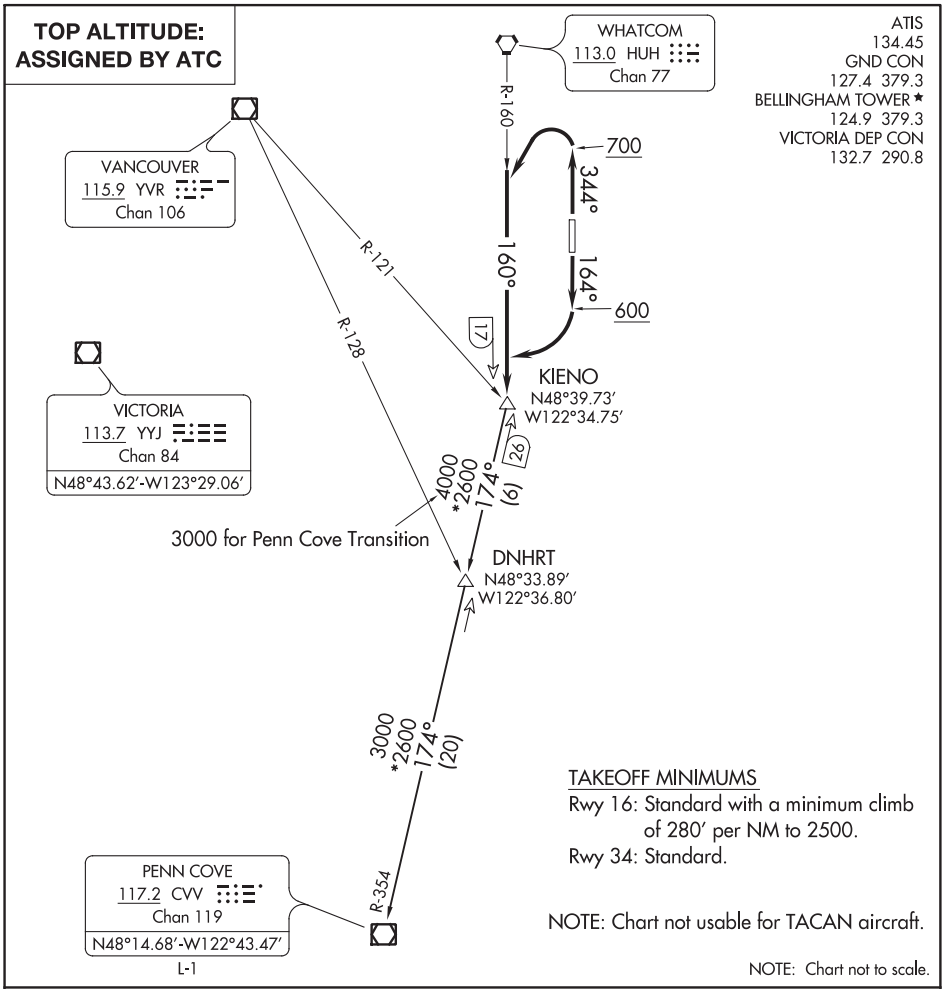
AL-45 (FAA)




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM
20086
BELLINGHAM, WASHINGTON
BELLINGHAM INTL (BLI)





NW-1, 05 NOV 2020 to 31 DEC 2020

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb on heading 164° to 600, then climbing right turn to intercept HUH R-160 to KIENO, thence. . . .
TAKEOFF RUNWAY 34: Climb on heading 344° to 700, then climbing left turn to intercept HUH R-160 to KIENO, thence. . . .

. . . .maintain ATC assigned altitude, expect requested altitude within 10 minutes.

DNHRT TRANSITION (KIENO6.DNHRT): From over KIENO on CVV R-354 to DNHRT.

PENN COVE TRANSITION (KIENO6.CVV): From over KIENO on CVV R-354 to CVV VOR/DME.

BEND, OREGON | AL-5579 (FAA) | 20254

# RNAV (GPS) RWY 34
## BEND MUNI (BDN)

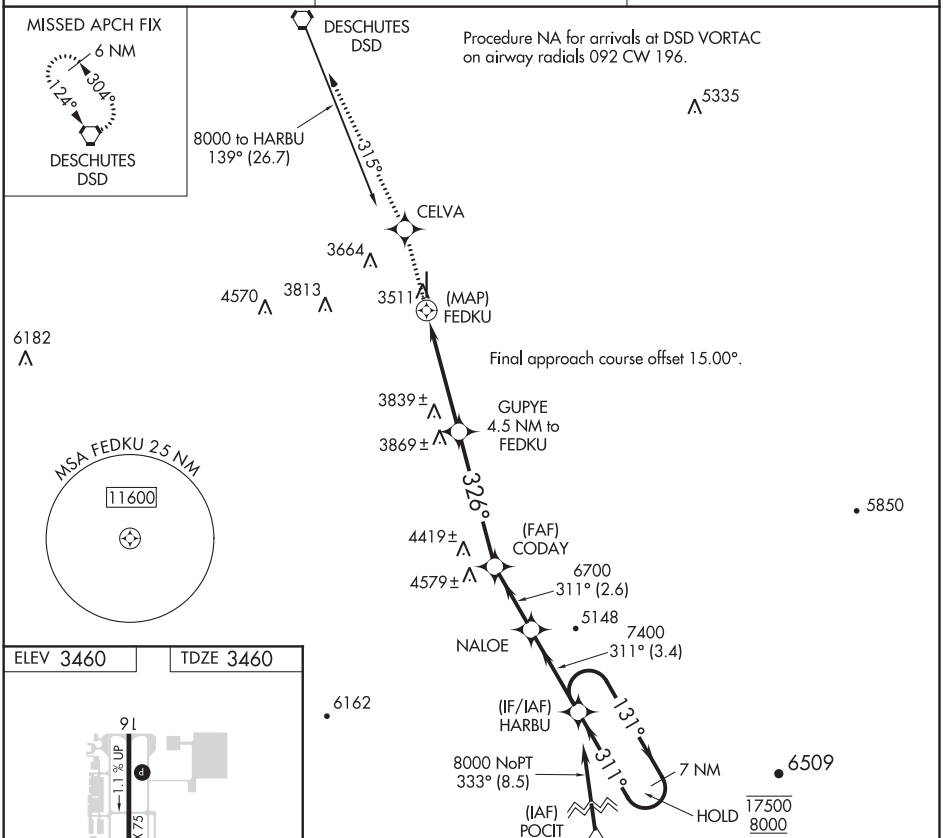
| APP CRS | Rwy Idg | 5201 |
|---|---|---|
| 326° | TDZE | 3460 |
| | Apt Elev | 3460 |

RNP APCH.

NA — Rwy 34 helicopter visibility reduction below 1 SM NA. Straight-in minimums NA at night. When local altimeter setting not received, use Redmond altimeter setting and increase all MDAs 80 feet, LNAV Cats C/D visibility ¼ SM and Circling Cat C/D visibility ¼ SM.

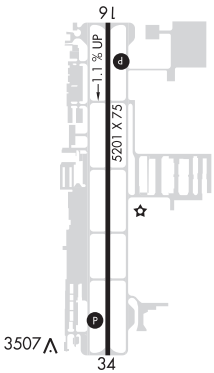
MISSED APPROACH: Climb to 6000 direct CELVA and on track 315° to DSD VORTAC and hold.

| AWOS-3 | SEATTLE CENTER | UNICOM |
|---|---|---|
| 134.425 | 126.15 269.475 | 123.0 (CTAF) L |

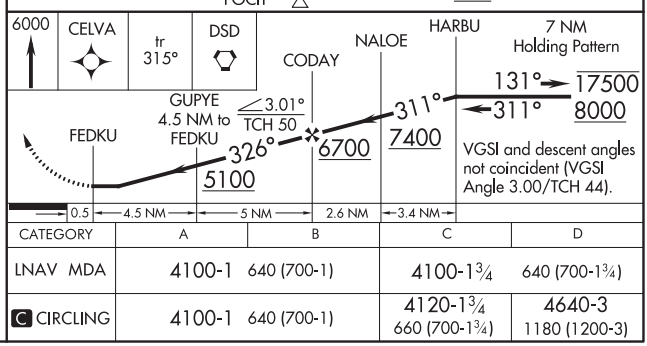



NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 3460 | TDZE 3460




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




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 4100-1 640 (700-1) | | 4100-1¾ | 640 (700-1¾) |
| C CIRCLING | 4100-1 640 (700-1) | | 4120-1¾ 660 (700-1¾) | 4640-3 1180 (1200-3) |

BEND, OREGON
Orig-A 20JUN19

44°06′N-121°12′W

BEND MUNI (BDN)
RNAV (GPS) RWY 34

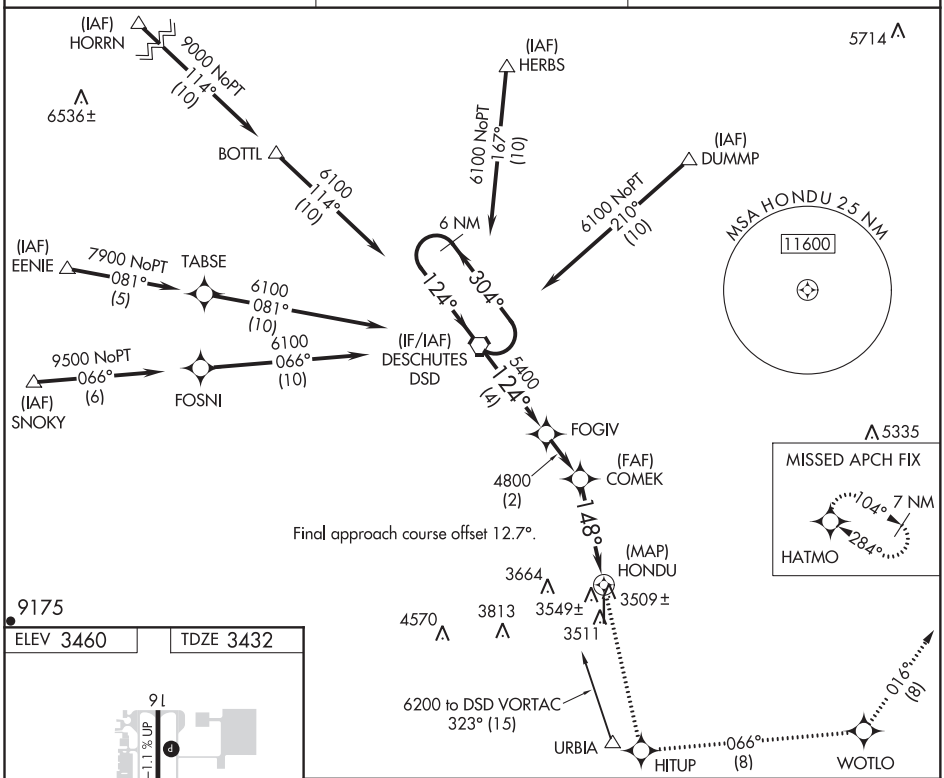
| WAAS CH 90137 W16B | APP CRS 148° | Rwy ldg 5201 TDZE 3432 Apt Elev 3460 |
|---|---|---|

# RNAV (GPS) Y RWY 16
## BEND MUNI (BDN)

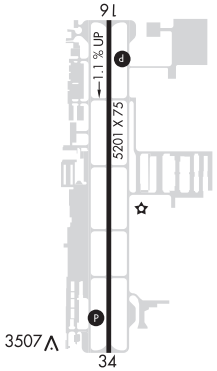
DME/DME RNP -0.3 NA. When local altimeter setting not received, use Redmond altimeter setting and increase all MDA 80 feet, and LP and LNAV Cats C/D visibility ¼ mile, and Circling Cat C visibility ½ mile. Helicopter visibility reduction below 1 SM NA. Night landing: Rwy 16 NA.

MISSED APPROACH: Climb to 7600 direct HITUP and on track 066° to WOTLO and on track 016° to HATMO and hold, continue climb-in-hold to 7600.

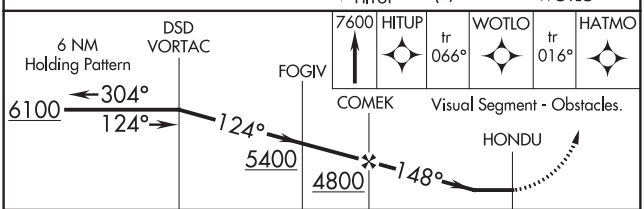
| AWOS-3 | SEATTLE CENTER | UNICOM |
|---|---|---|
| 134.425 | 126.15 269.475 | 123.0 (CTAF) L |




| ELEV 3460 | TDZE 3432 |
|---|---|




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




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LP MDA | 3760-1 328 (300-1) | | | |
| LNAV MDA | 3800-1 368 (400-1) | | 3800-1⅛ 368 (400-1⅛) | |
| C CIRCLING | 3940-1 480 (500-1) | 4000-1 540 (600-1) | 4120-1¾ 660 (700-1¾) | 4640-3 1180 (1200-3) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

BEND, OREGON AL-5579 (FAA) 20254

| WAAS CH 81906 W16A | APP CRS 161° | Rwy ldg 5201 TDZE 3432 Apt Elev 3460 |
|---|---|---|

# RNAV (GPS) Z RWY 16
## BEND MUNI (BDN)

RNP APCH.

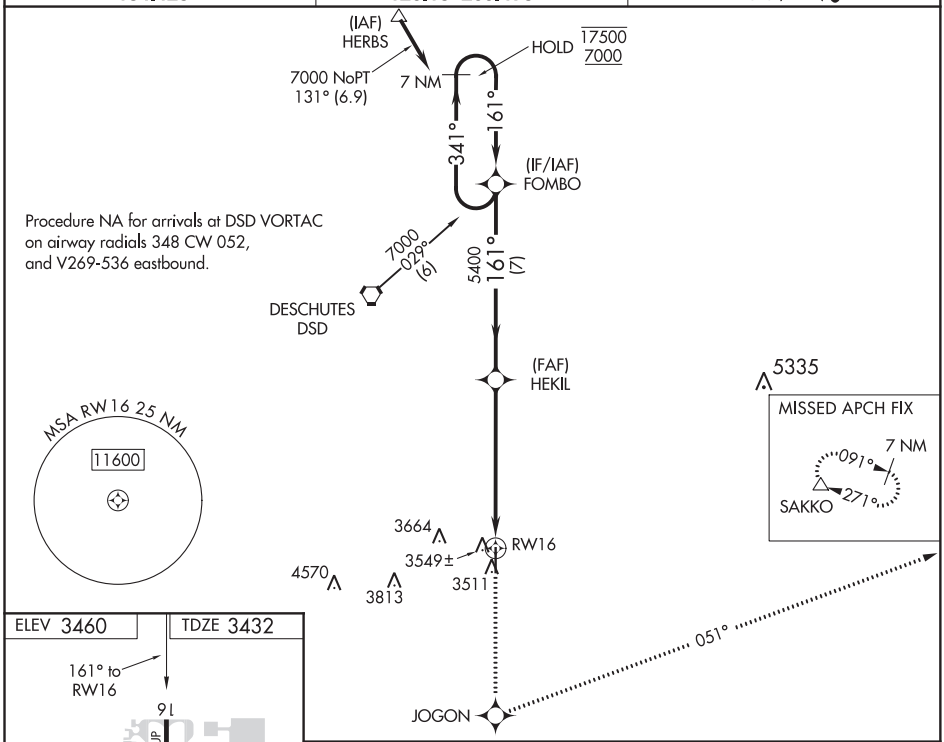
T

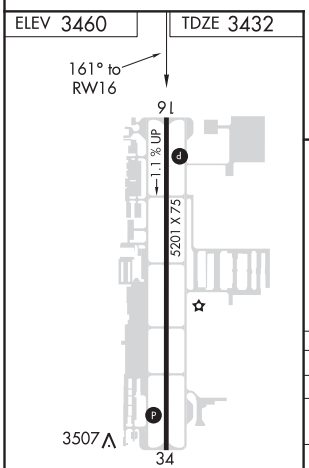
A NA

Rwy 16 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, procedure NA below -21°C or above 42°C. When local altimeter setting not received, use Redmond altimeter setting and increase all DA/MDAs by 80 feet, LPV visibilities ¼ SM all Cats, LNAV/VNAV visibilities ¼ SM all Cats, LNAV Cat D visibility ¼ SM, and Circling Cat C visibility ¼ SM.

MISSED APPROACH: Climb to 9500 direct JOGON and left turn on track 051° to SAKKO and hold, continue climb-in-hold to 9500.

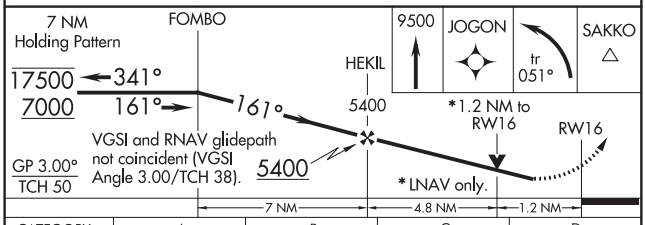
| AWOS-3 | SEATTLE CENTER | UNICOM |
|---|---|---|
| 134.425 | 126.15 269.475 | 123.0 (CTAF) L |




REIL Rwys 16 and 34 L

MIRL Rwy 16-34 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 3682-1 250 (300-1) | | | |
| LNAV/VNAV DA | 3809-1½ 377 (400-1½) | | | |
| LNAV MDA | 3840-1 408 (400-1) | | 3840-1¼ 408 (400-1¼) | |
| C CIRCLING | 3940-1 480 (500-1) | 4000-1 540 (600-1) | 4120-1¾ 660 (700-1¾) | 4640-3 1180 (1200-3) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

| VORTAC DSD 117.6 Chan 123 | APP CRS 136° | Rwy ldg 5201 TDZE 3432 Apt Elev 3460 |
|---|---|---|

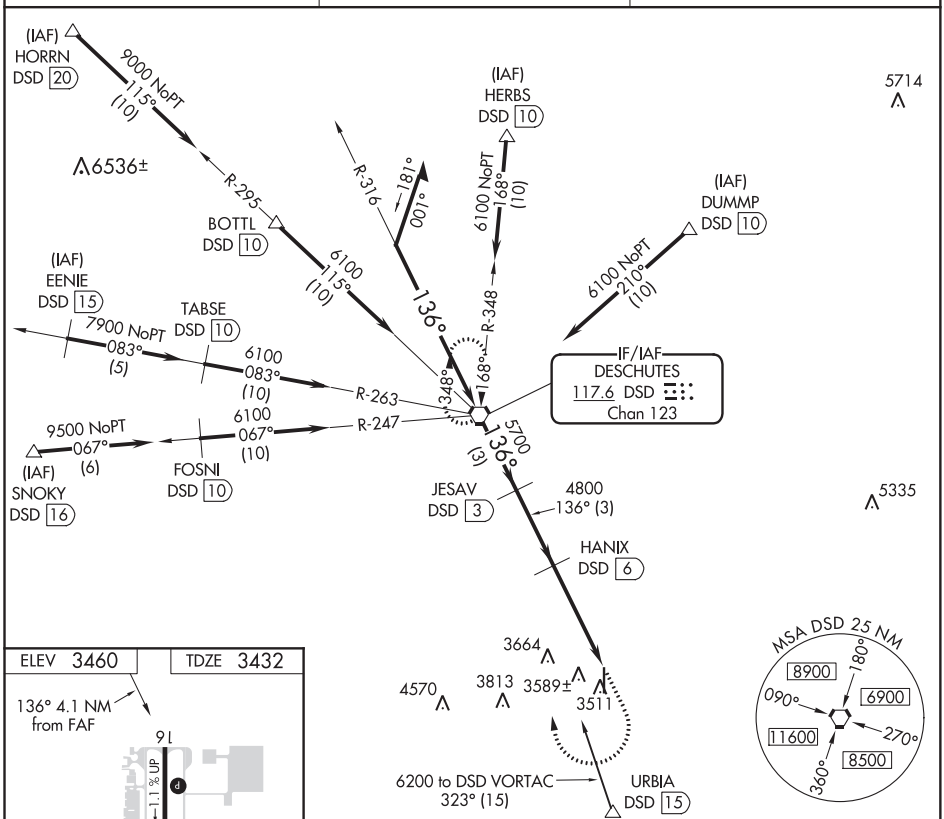
# VOR/DME RWY 16
## BEND MUNI (BDN)

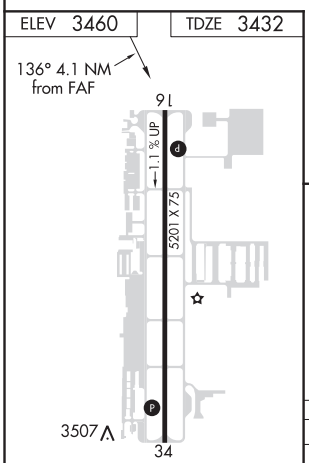
When local altimeter setting not received, use Redmond altimeter setting and increase all MDAs 80 feet, increase S-16 Cat C/D visibility ⅛ mile, and Circling Cat C visibility ¼ mile. Helicopter visibility reduction below 1 SM NA. Night landing: Rwy 16 NA.

MISSED APPROACH: Climb to 4700 then climbing right turn to 7000 direct DSD VORTAC and hold.

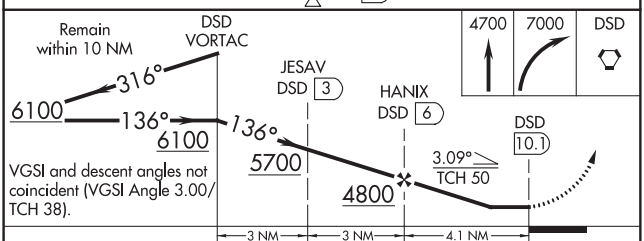
| AWOS-3 | SEATTLE CENTER | UNICOM |
|---|---|---|
| 134.425 | 126.15 269.475 | 123.0 (CTAF) L |






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




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-16 | 3840-1 408 (400-1) | | 3840-1¼ 408 (400-1¼) | |
| C CIRCLING | 3940-1 480 (500-1) | 4000-1 540 (600-1) | 4120-1¾ 660 (700-1¾) | 4640-3 1180 (1200-3) |

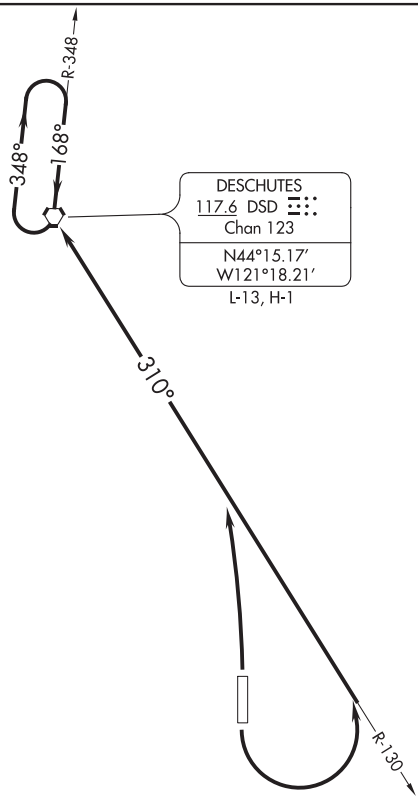
(BDN1.BDN) 19171

# BEND ONE DEPARTURE (OBSTACLE)

AL-5579 (FAA)

BEND MUNI (BDN)
BEND, OREGON

SEATTLE CENTER
126.15 269.475
CTAF
123.0




TAKEOFF MINIMUMS

Rwys 16, 34: Standard.

TAKEOFF OBSTACLE NOTES

Rwy 16: Trees beginning 75′ from DER, 412′ left of centerline, up to 43′ AGL/3572′ MSL.
Trees beginning 432′ from DER, 5′ right of centerline, up to 37′ AGL/3541′ MSL.
Terrain beginning 27′ from DER, 197′ right of centerline, up to 3469′ MSL.
Road 1′ from DER, 414′ left of centerline, 17′ AGL/3466′ MSL.

Rwy 34: Trees beginning 306′ from DER, 178′ left of centerline, up to 25′ AGL/3436′ MSL.
Road beginning 460′ from DER, 414′ left of centerline, up to 17′ AGL/3425′ MSL.
Bush 94′ from DER, 443′ left of centerline, 4′ AGL/3407′ MSL.
Terrain beginning 1′ from DER, 147′ left of centerline, up to 3408′ MSL.
Trees beginning 52′ from DER, 252′ right of centerline, up to 39′ AGL/3429′ MSL.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climbing left turn to intercept DSD R-130 to DSD VORTAC, Thence . . . .

TAKEOFF RUNWAY 34: Climbing left turn to intercept the DSD R-130 to DSD VORTAC, Thence . . . .

. . . . Climb in DSD VORTAC holding pattern to cross DSD VORTAC at or above the MEA/MCA for the route of flight.

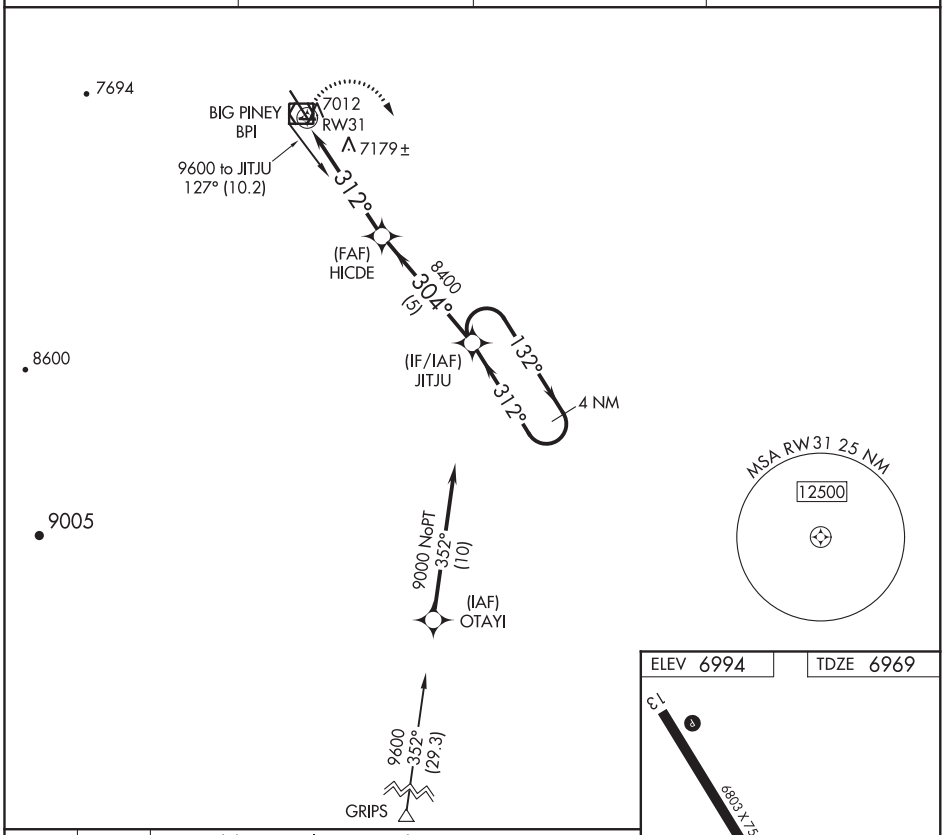

NW-1, 05 NOV 2020 to 31 DEC 2020

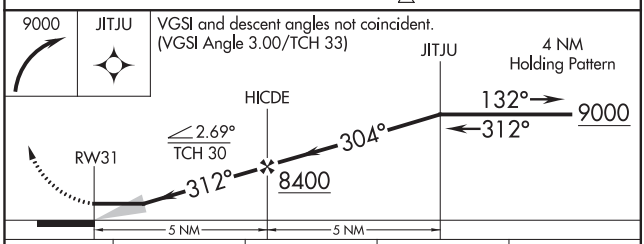
| APP CRS | Rwy ldg | 6803 |
|---|---|---|
| 312° | TDZE | 6969 |
| | Apt Elev | 6994 |

# RNAV (GPS) RWY 31
## MILEY MEMORIAL FIELD (BPI)

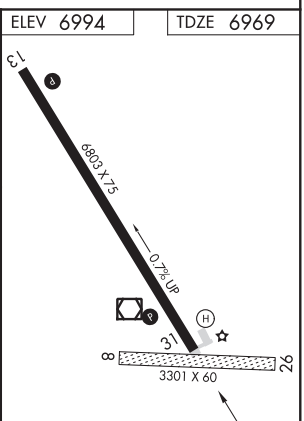
| RNP APCH. | MISSED APPROACH: Climbing right turn to 9000 direct JITJU and hold. |
|---|---|
| Circling NA to Rwys 8 and 26. | |

| ASOS | SALT LAKE CENTER | UNICOM | 122.7 L |
|---|---|---|---|
| 135.225 | 128.35 239.25 | 122.8 (CTAF) | |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 7440-1 471 (500-1) | | 7440-1¼ 471 (500-1¼) | 7440-1½ 471 (500-1½) |
| CIRCLING | 7460-1 466 (500-1) | 7560-1 566 (600-1) | 7560-1½ 566 (600-1½) | 7560-2 566 (600-2) |




MIRL Rwy 13-31 L
REIL Rwys 13 and 31 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

BIG PINEY, WYOMING AL-5790 (FAA) 20310

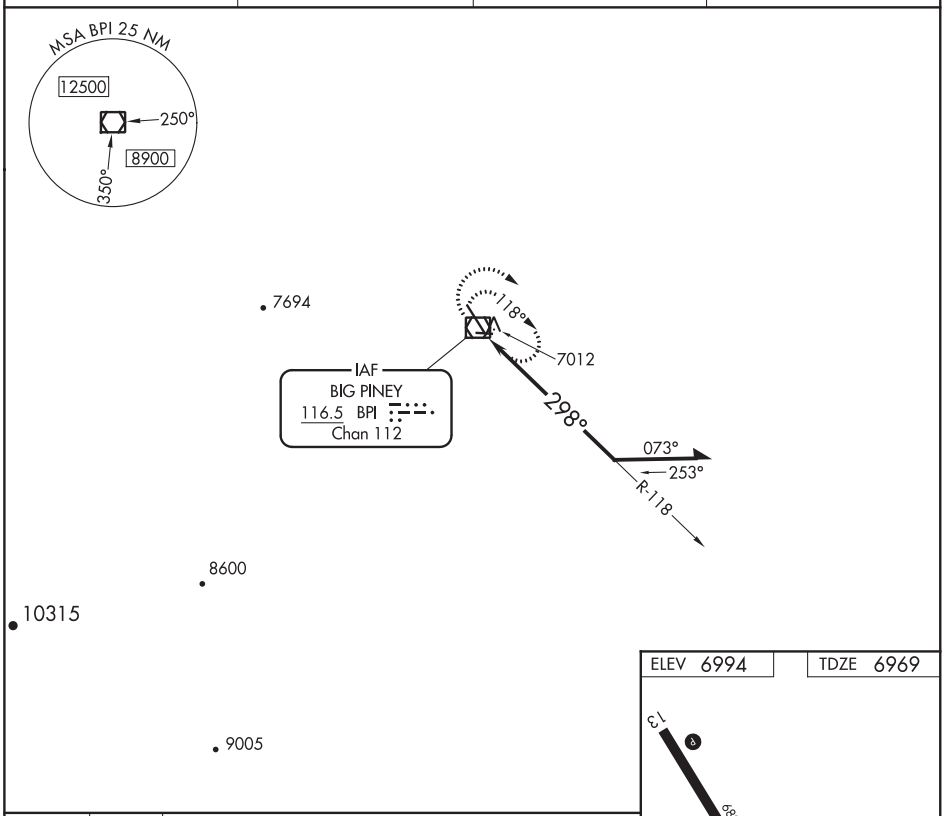
| VOR/DME BPI | APP CRS | Rwy ldg | 6803 |
|---|---|---|---|
| 116.5 | 298° | TDZE | 6969 |
| Chan 112 | | Apt Elev | 6994 |

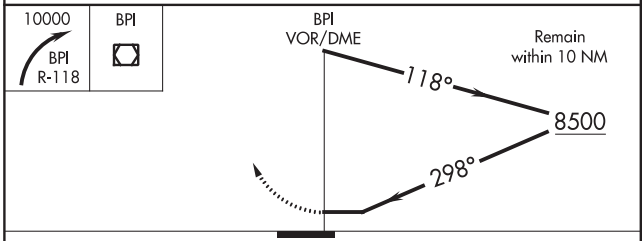
# VOR RWY 31
## MILEY MEMORIAL FIELD (BPI)

Circling NA to Rwys 8 and 26.

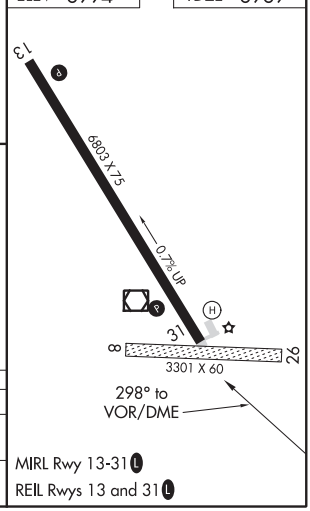
MISSED APPROACH: Climbing right turn to 10000 on BPI R-118, then return to BPI VOR/DME and hold.

| ASOS | SALT LAKE CENTER | UNICOM | |
|---|---|---|---|
| 135.225 | 128.35 239.25 | 122.8 (CTAF) | 122.7 L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-31 | 7680-1 | 711 (700-1) | 7680-2<br>711 (700-2) | 7680-2¼<br>711 (700-2¼) |
| CIRCLING | 7680-1 | 686 (700-1) | 7680-2<br>686 (700-2) | 7680-2¼<br>686 (700-2¼) |




BIG PINEY, WYOMING
Amdt 3E 28FEB19

42°35′N-110°07′W

MILEY MEMORIAL FIELD (BPI)
VOR RWY 31


NW-1, 05 NOV 2020 to 31 DEC 2020

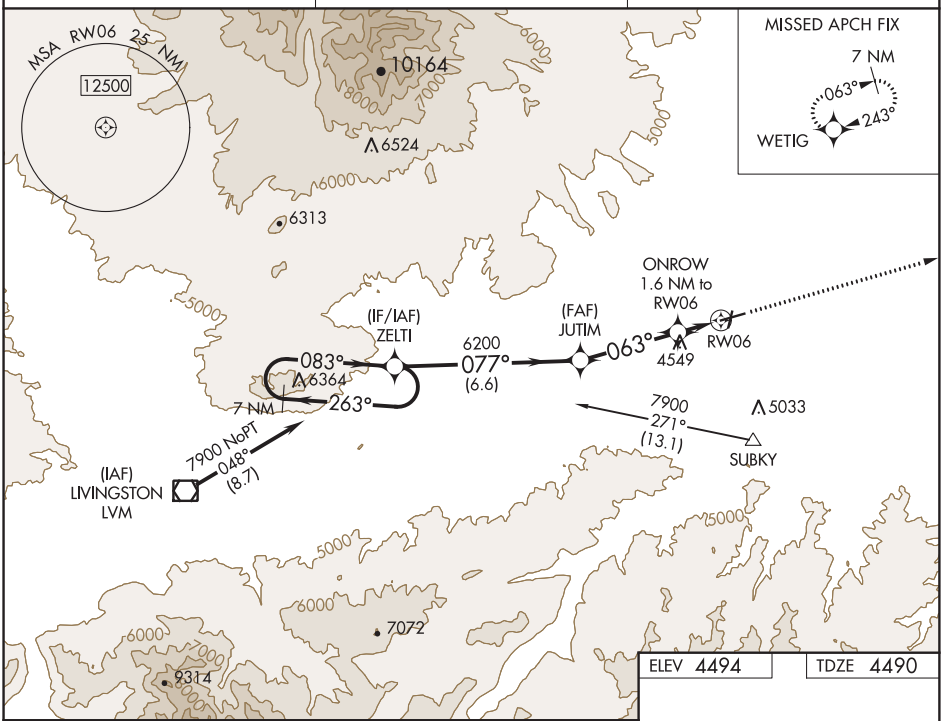
| WAAS CH 65642 W06A | APP CRS 063° | Rwy ldg 5285<br>TDZE 4490<br>Apt Elev 4494 |
|---|---|---|

# RNAV (GPS) RWY 6
## BIG TIMBER (6SØ)

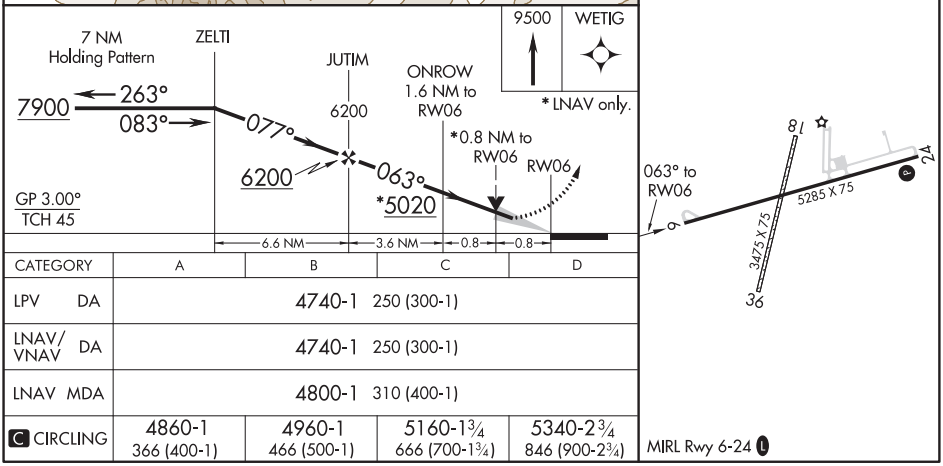
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C (-9°F) or above 51°C (124°F). Circling Rwy 18, 36 NA at night. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 9500 direct WETIG and hold, continue climb-in-hold to 9500.

| AWOS-3 | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 132.05 | 127.75 351.9 | 122.8 (CTAF) L |




ELEV 4494 TDZE 4490




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4740-1 250 (300-1) | | | |
| LNAV/VNAV DA | 4740-1 250 (300-1) | | | |
| LNAV MDA | 4800-1 310 (400-1) | | | |
| C CIRCLING | 4860-1 366 (400-1) | 4960-1 466 (500-1) | 5160-1¾ 666 (700-1¾) | 5340-2¾ 846 (900-2¾) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

BIG TIMBER, MONTANA AL-10488 (FAA) 20310

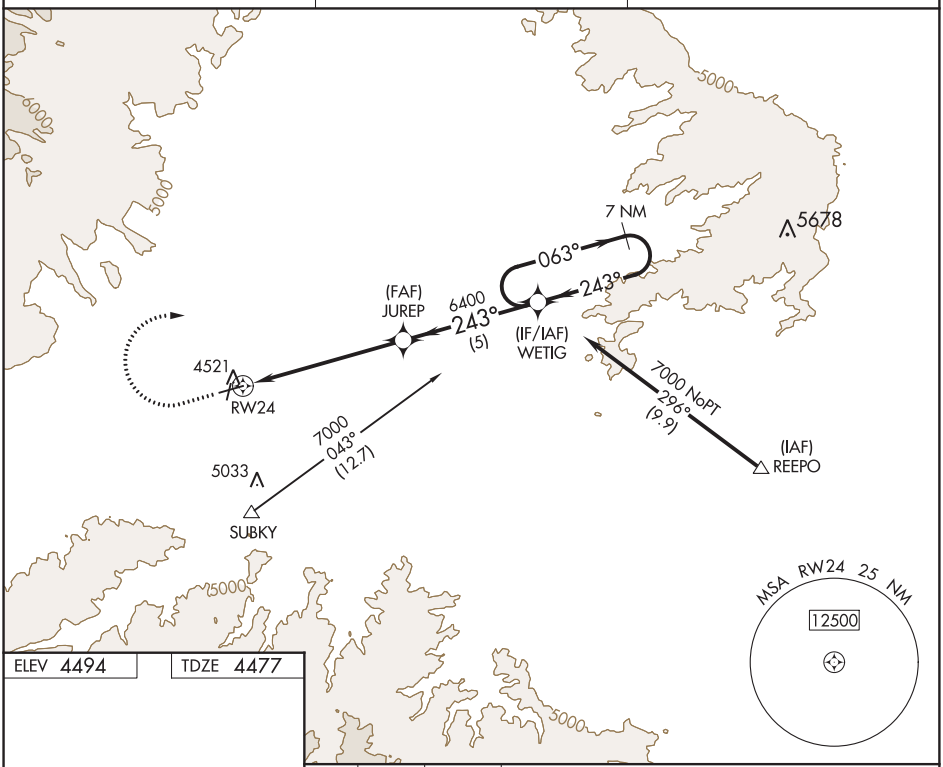
# RNAV (GPS) RWY 24
BIG TIMBER (6SØ)

| WAAS CH 70640 W24A | APP CRS 243° | Rwy ldg 5285<br>TDZE 4477<br>Apt Elev 4494 |
|---|---|---|

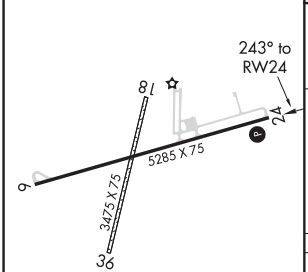
Circling Rwy 18, 36 NA at night.
DME/DME RNP- 0.3 NA.

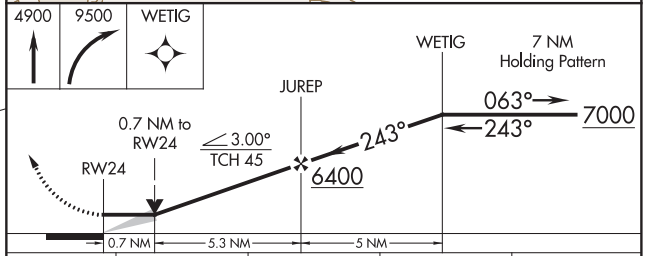
MISSED APPROACH: Climb to 4900 then climbing right turn to 9500 direct WETIG and hold, continue climb-in-hold to 9500.

| AWOS-3 | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 132.05 | 127.75 351.9 | 122.8 (CTAF) L |




ELEV 4494 TDZE 4477




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LP MDA | 4740-1 263 (300-1) | | | |
| LNAV MDA | 4780-1 303 (300-1) | | | |
| C CIRCLING | 4860-1 366 (400-1) | 4960-1 466 (500-1) | 5160-1¾ 666 (700-1¾) | 5340-2¾ 846 (900-2¾) |

MIRL Rwy 6-24 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC/DME I-BMO | APP CRS | Rwy ldg | 10518 |
|---|---|---|---|
| 111.5 | 282° | TDZE | 3517 |
| Chan 52 | | Apt Elev | 3652 |

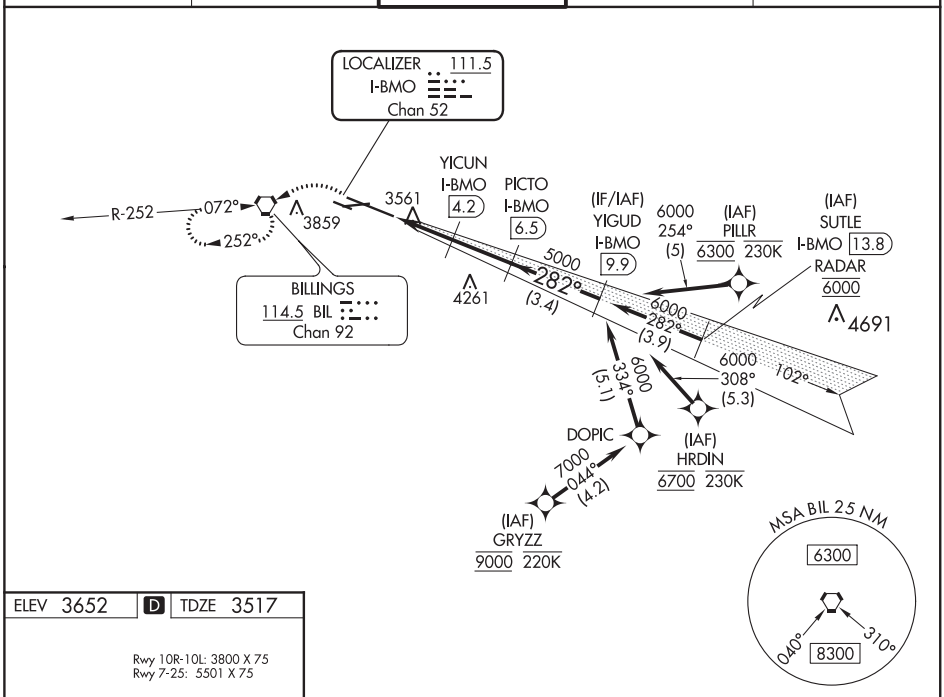
# ILS or LOC RWY 28R
## BILLINGS LOGAN INTL (BIL)

RNAV 1.
RNAV 1-GPS or RADAR required for procedure entry.
DME required.
From PILLR, GRYZZ, HRDIN: RNAV 1-GPS required.

T A Rwy 28R helicopter visibility reduction below ¾ SM NA.

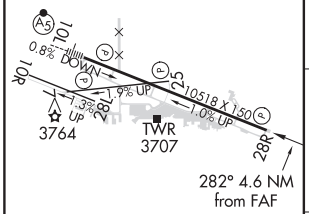
MISSED APPROACH: Climb to 4000 then climbing left turn to 6000 direct BIL VORTAC and hold, continue climb-in-hold to 6000.

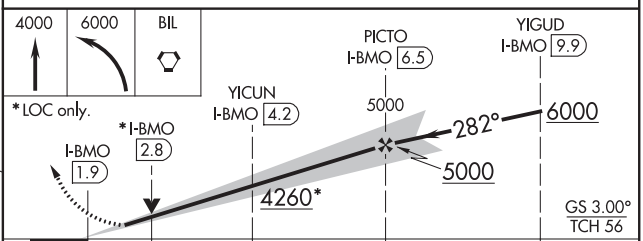
| ATIS | BILLINGS APP CON | BILLINGS TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 126.3 | 120.5 284.6 | 127.2 257.8 | 121.9 | 121.9 |




ELEV 3652 D TDZE 3517

Rwy 10R-10L: 3800 X 75
Rwy 7-25: 5501 X 75




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 28R | 3767-¾ 250 (200-¾) | | | |
| S-LOC 28R | 3840-1 323 (200-1) | | | |
| C CIRCLING | 4100-1 448 (500-1) | 4160-1 508 (600-1) | 4180-1½ 528 (600-1½) | 4580-3 928 (1000-3) |

HIRL Rwy 10L-28R
REIL Rwys 25 and 28R
MIRL Rwys 7-25 and 10R-28L


NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC/DME I-BIL | APP CRS | Rwy ldg | 10518 |
|---|---|---|---|
| 111.5 | 102° | TDZE | 3585 |
| Chan 52 | | Apt Elev | 3662 |

# ILS Y or LOC Y RWY 10L

## BILLINGS LOGAN INTL (BIL)

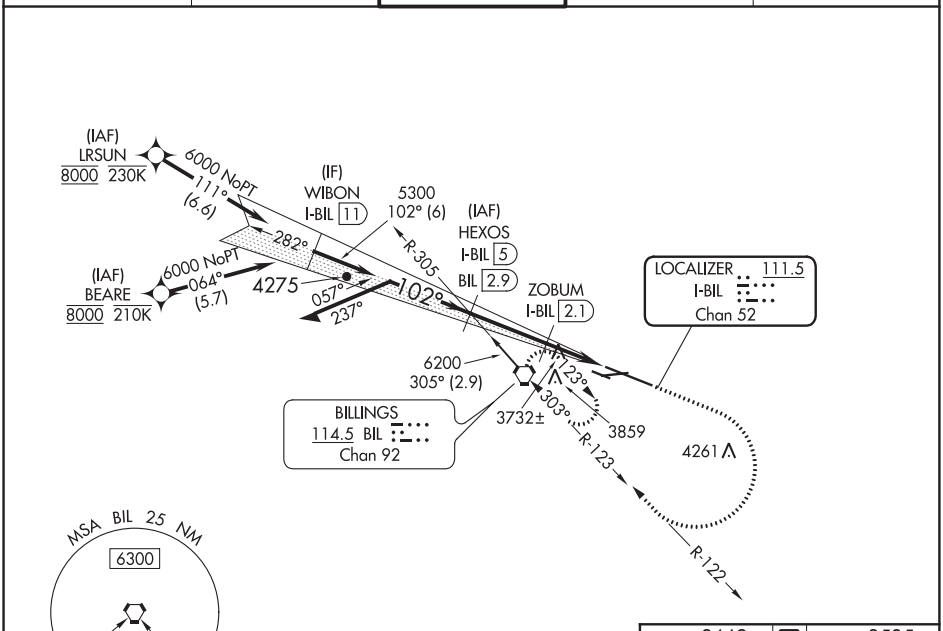
DME required.
From BEARE, LRSUN: RNAV 1-GPS required.

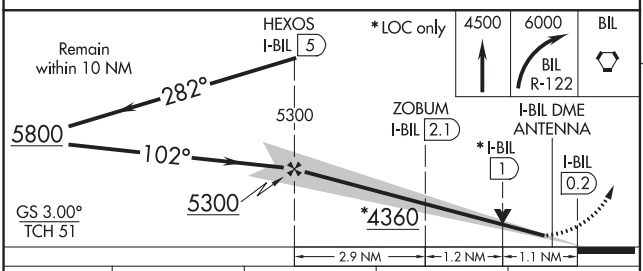
For inop ALS, increase S-LOC 10L Cat C/D visibility to RVR 6000.
# RVR 1800 authorized with use of FD or AP or HUD to DA.

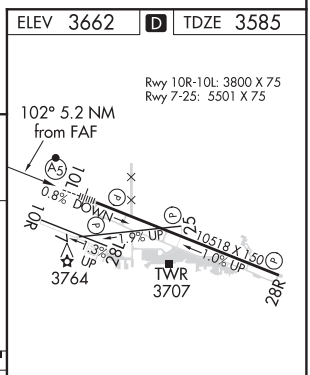
MALSR

MISSED APPROACH: Climb to 4500 then climbing right turn to 6000 on BIL VORTAC R-122 to BIL VORTAC and hold.

| ATIS | BILLINGS APP CON | BILLINGS TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 126.3 | 120.5 284.6 | 127.2 257.8 | 121.9 | 121.9 |




REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 10L # | 3785/24 200 (200-½) | | | |
| S-LOC 10L | 4000/24 415 (400-½) | | 4000/40 415 (400-¾) | |
| C CIRCLING | 4100-1 438 (500-1) | 4160-1 498 (500-1) | 4180-1½ 518 (600-1½) | 4580-3 918 (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 |




NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 10518 |
|---|---|---|
| 282° | TDZE | 3517 |
| | Apt Elev | 3652 |

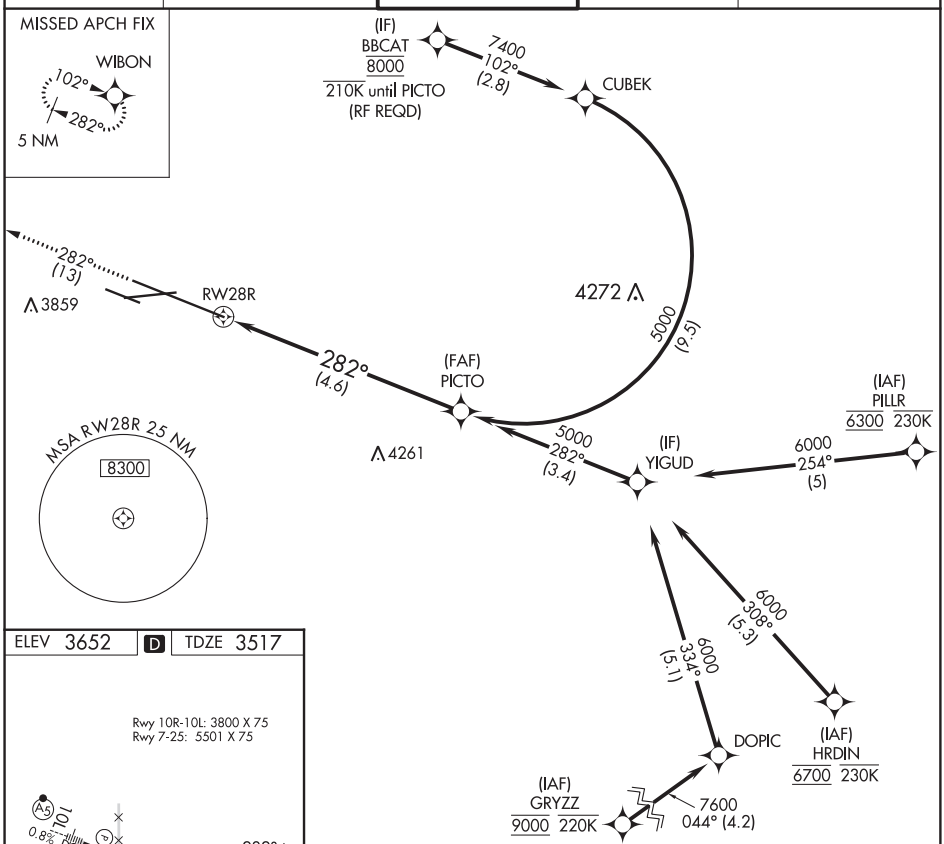
# RNAV (RNP) Z RWY 28R
## BILLINGS LOGAN INTL (BIL)

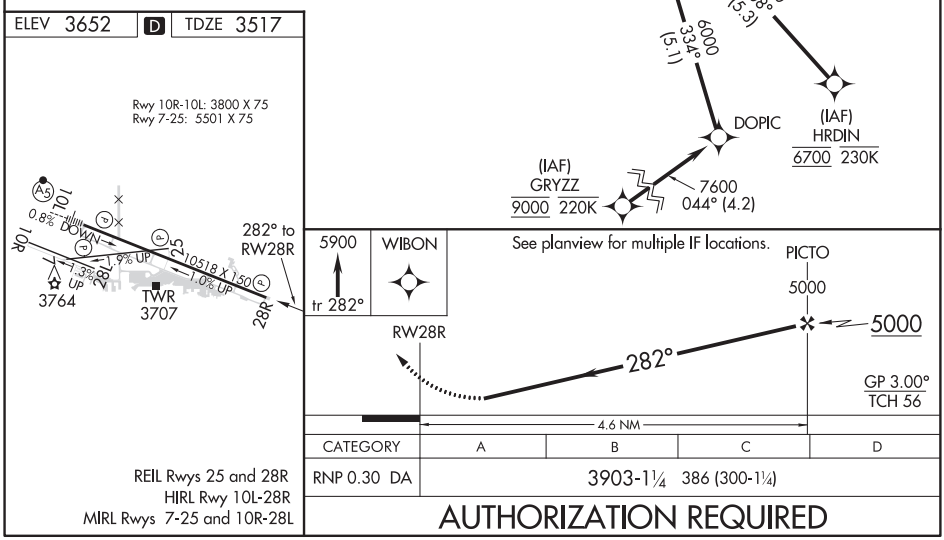
RNP AR APCH.

For uncompensated Baro-VNAV systems, procedure NA below -24°C (-11°F) or above 50°C (123°F). GPS required.

MISSED APPROACH: Climb to 5900 on track 282° to WIBON and hold.

| ATIS | BILLINGS APP CON | BILLINGS TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 126.3 | 120.5 284.6 | 127.2 257.8 | 121.9 | 121.9 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.30 DA | 3903-1¼ 386 (300-1¼) | | | |

AUTHORIZATION REQUIRED

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

BILLINGS, MONTANA

AL-48 (FAA)

18032

| WAAS CH 87127 W07A | APP CRS 074° | Rwy ldg 5501<br>TDZE 3636<br>Apt Elev 3652 |
|---|---|---|

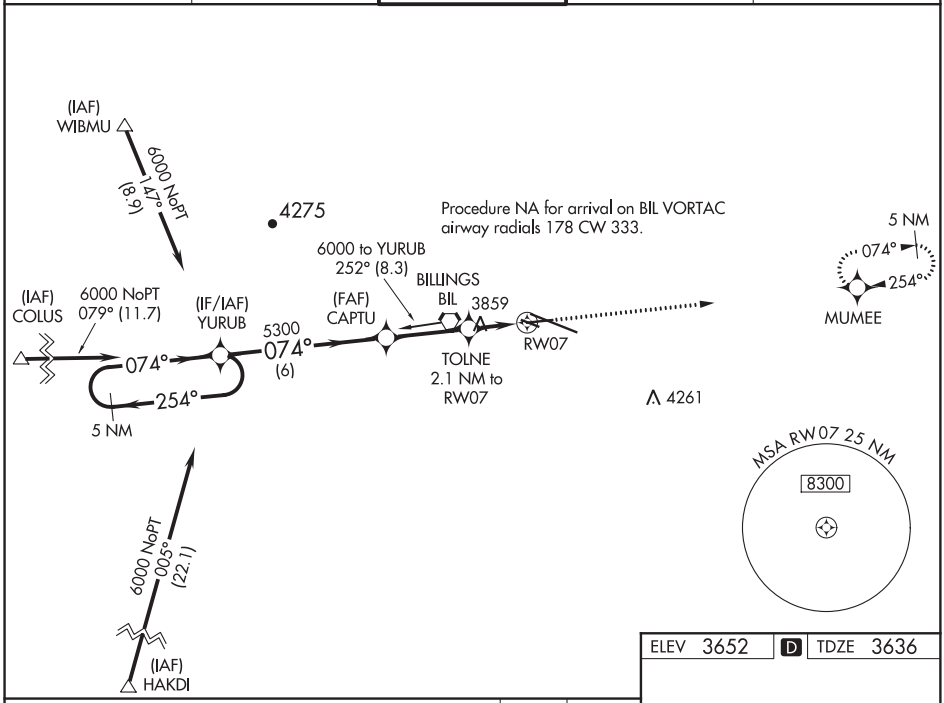
# RNAV (GPS) RWY 7

## BILLINGS LOGAN INTL (BIL)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 53°C (127°F). Rwy 7 helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 6000 direct MUMEE and hold.

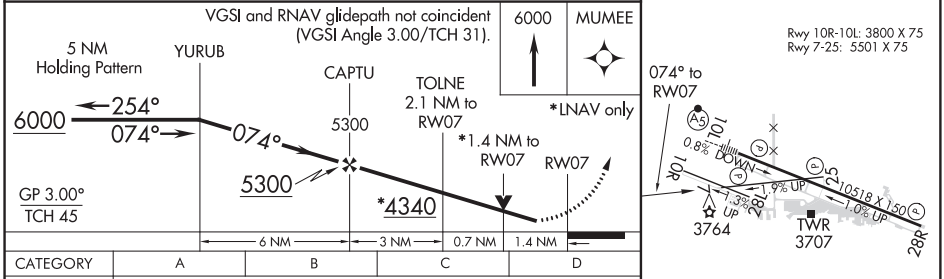
| ATIS | BILLINGS APP CON | BILLINGS TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 126.3 | 120.5 284.6 | 127.2 257.8 | 121.9 | 121.9 |




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 31).




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 3886-¾ 250 (300-¾) | | | |
| LNAV/VNAV DA | 3950-1 314 (300-1) | | | |
| LNAV MDA | 4120-1 484 (500-1) | | 4120-1⅜ 484 (500-1⅜) | |
| C CIRCLING | 4120-1 468 (500-1) | 4160-1 508 (600-1) | 4180-1½ 528 (600-1½) | 4580-3 928 (1000-3) |

ELEV 3652 | D | TDZE 3636

Rwy 10R-10L: 3800 X 75
Rwy 7-25: 5501 X 75




REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

| WAAS CH 50122 W10A | APP CRS 102° | Rwy ldg 10518<br>TDZE 3585<br>Apt Elev 3652 |
|---|---|---|

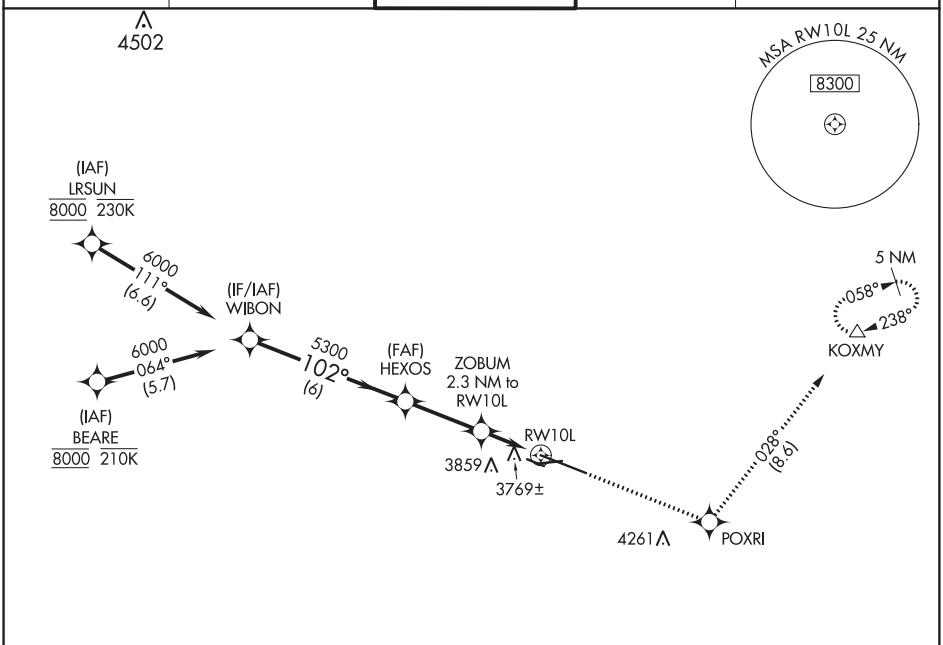
# RNAV (GPS) RWY 10L
## BILLINGS LOGAN INTL (BIL)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C (-11°F) or above 50°C (123°F). DME/DME RNP-0.3 NA. #RVR 1800 authorized with use of FD or AP or HUD to DA.

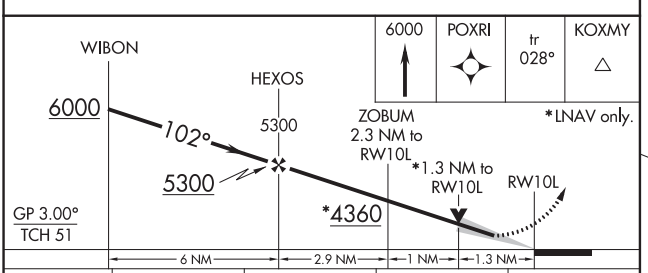
MALSR

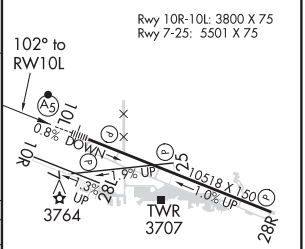
MISSED APPROACH: Climb to 6000 direct POXRI and on track 028° to KOXMY and hold.

| ATIS | BILLINGS APP CON | BILLINGS TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 126.3 | 120.5 284.6 | 127.2 257.8 | 121.9 | 121.9 |




ELEV 3652 D TDZE 3585




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA# | 3785/24 200 (200-½) | | | |
| LNAV/VNAV DA | 4041/60 456 (400-1¼) | | | |
| LNAV MDA | 4020/24 435 (400-½) | | 4020/40 435 (400-¾) | |
| C CIRCLING | 4100-1 448 (500-1) | 4160-1 508 (600-1) | 4180-1½ 528 (600-1½) | 4580-3 928 (1000-3) |

REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

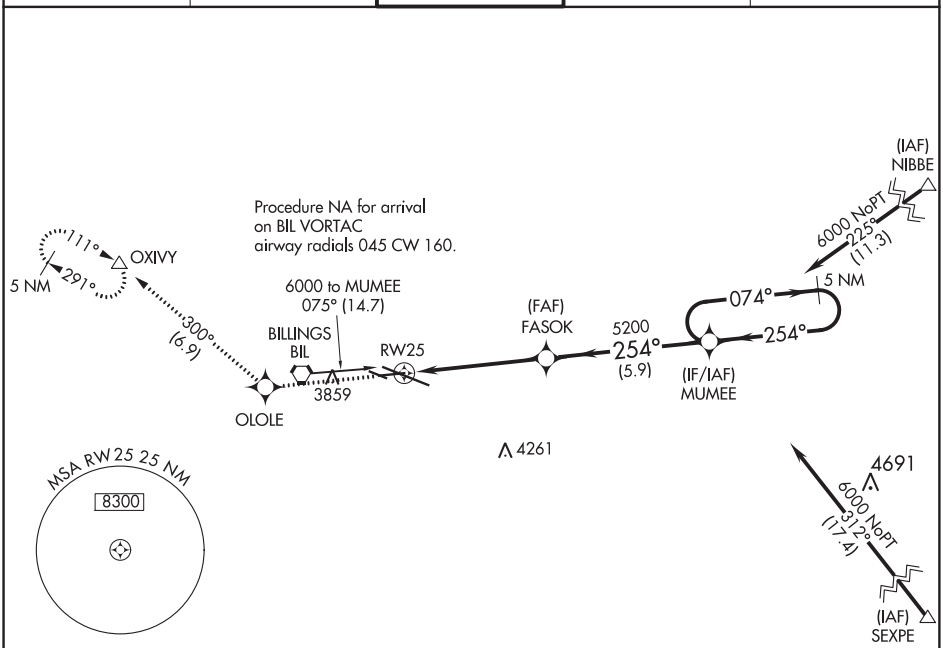
| WAAS CH 78028 W25A | APP CRS 254° | Rwy ldg 5501 TDZE 3586 Apt Elev 3652 |
|---|---|---|

# RNAV (GPS) RWY 25
## BILLINGS LOGAN INTL (BIL)

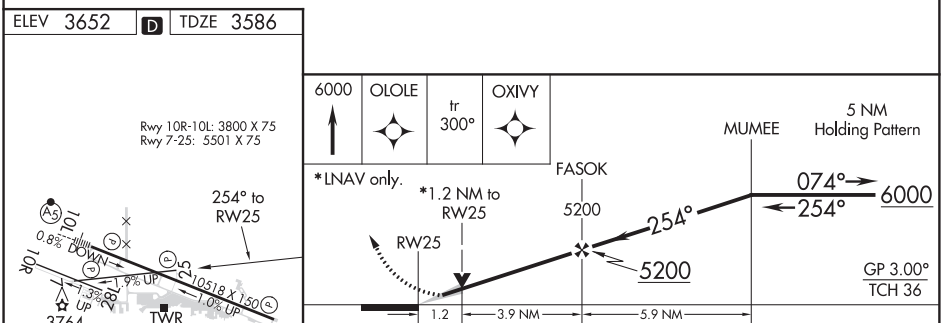
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 54°C (130°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 6000 direct OLOLE and on track 300° to OXIVY and hold.

| ATIS | BILLINGS APP CON | BILLINGS TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 126.3 | 120.5 284.6 | 127.2 257.8 | 121.9 | 121.9 |




ELEV 3652 D TDZE 3586




REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 3836-1 250 (200-1) | | | |
| LNAV/VNAV DA | 3920-1⅜ 334 (300-1⅜) | | | |
| LNAV MDA | 3960-1 374 (400-1) | | | |
| C CIRCLING | 4100-1 448 (500-1) | 4160-1 508 (600-1) | 4180-1½ 528 (600-1½) | 4580-3 928 (1000-3) |




NW-1, 05 NOV 2020 to 31 DEC 2020

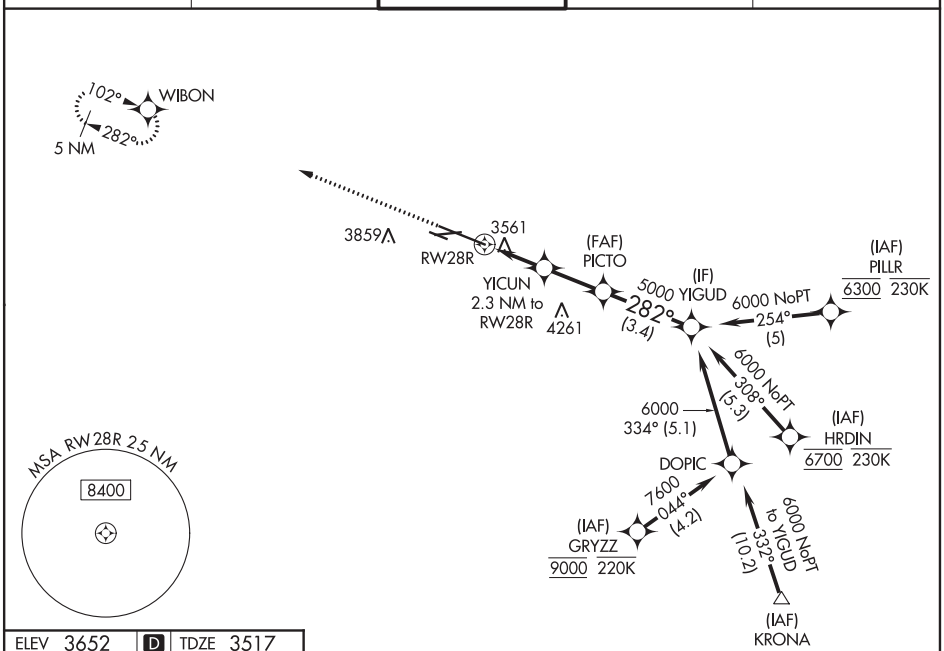
| WAAS CH 56222 W28A | APP CRS 282° | Rwy ldg 10518<br>TDZE 3517<br>Apt Elev 3652 |
|---|---|---|

# RNAV (GPS) Y RWY 28R
## BILLINGS LOGAN INTL (BIL)

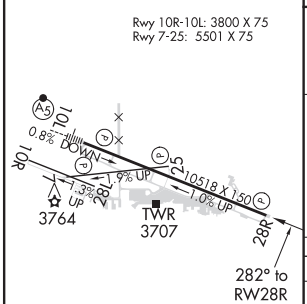
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C (-11°F) or above 50°C (123°F). Rwy 28R helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA.

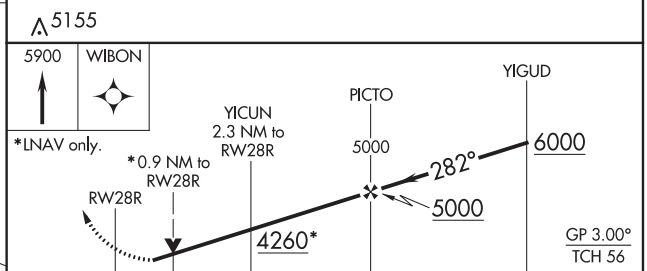
MISSED APPROACH: Climb to 5900 direct WIBON and hold.

| ATIS | BILLINGS APP CON | BILLINGS TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 126.3 | 120.5 284.6 | 127.2 257.8 | 121.9 | 121.9 |




| ELEV 3652 | D | TDZE 3517 |
|---|---|---|




| CATEGORY | | A | B | C | D |
|---|---|---|---|---|---|
| LPV | DA | 3767-¾ 250 (200-¾) | | | |
| LNAV/VNAV | DA | 3786-⅞ 269 (200-⅞) | | | |
| LNAV | MDA | 3820-1 303 (200-1) | | | |
| C CIRCLING | | 4100-1 448 (500-1) | 4160-1 508 (600-1) | 4180-1½ 528 (600-1½) | 4580-3 928 (1000-3) |

HIRL Rwy 10L-28R
REIL Rwys 25 and 28R
MIRL Rwys 7-25 and 10R-28L



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NW-1, 05 NOV 2020 to 31 DEC 2020

BILLINGS, MONTANA

AL-48 (FAA)

20002

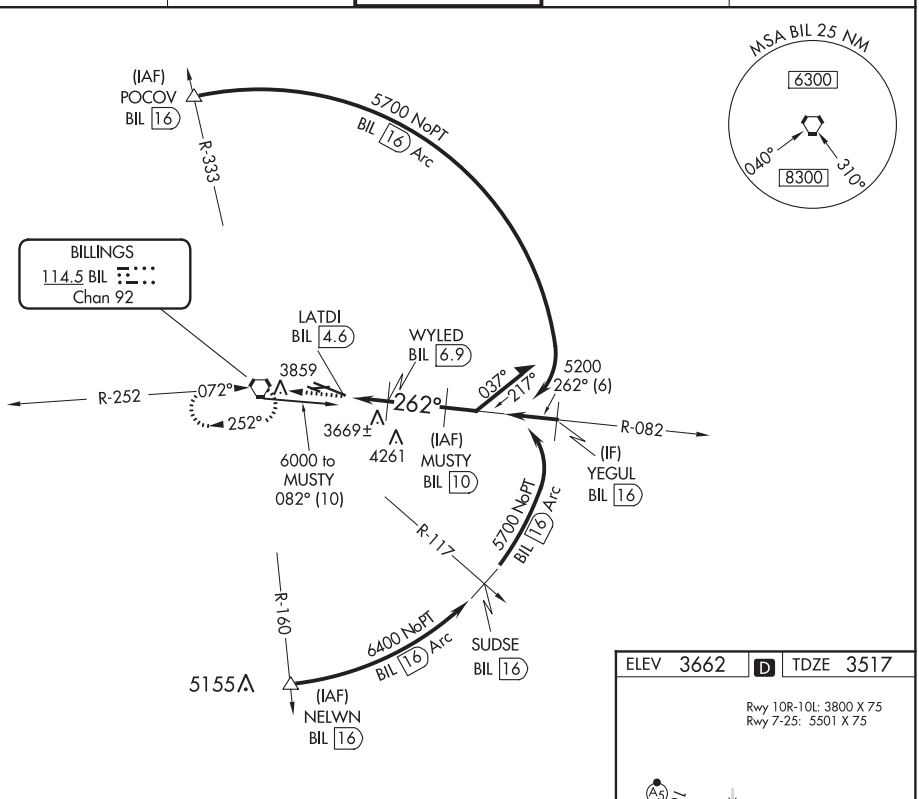
| VORTAC BIL 114.5 Chan 92 | APP CRS 262° | Rwy ldg 10518 TDZE 3517 Apt Elev 3662 |
|---|---|---|

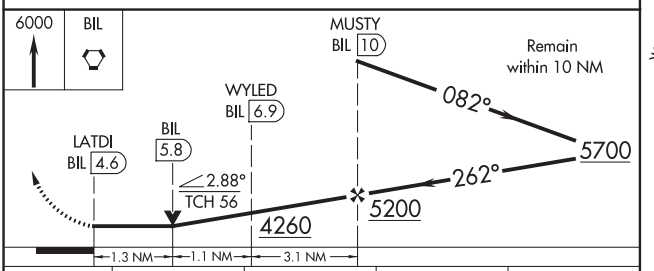
# VOR/DME RWY 28R
## BILLINGS LOGAN INTL (BIL)

Helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 6000 direct BIL VORTAC and hold, continue climb-in-hold to 6000.

| ATIS | BILLINGS APP CON | BILLINGS TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 126.3 | 120.5 284.6 | 127.2 257.8 | 121.9 | 121.9 |

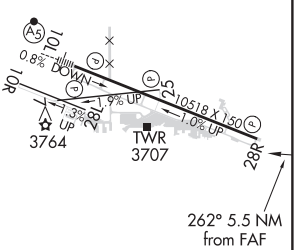



| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-28R | 3940-1 423 (300-1) | | 3940-1⅜ 423 (300-1⅜) | |
| C CIRCLING | 4160-1 498 (500-1) | 4180-1 518 (600-1) | 4180-1½ 518 (600-1½) | 4580-3 918 (1000-3) |

ELEV 3662 | D | TDZE 3517

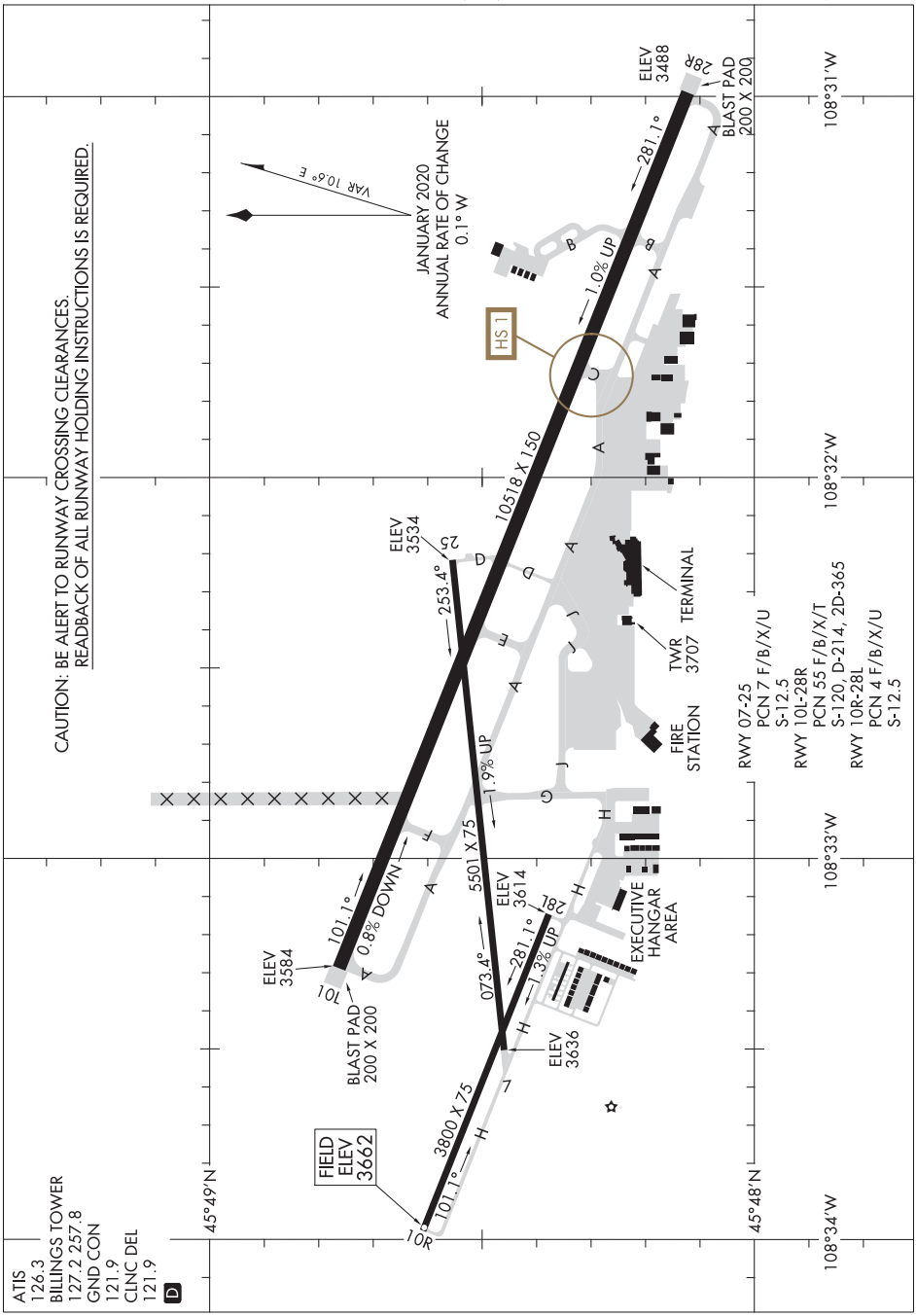
Rwy 10R-10L: 3800 X 75
Rwy 7-25: 5501 X 75




REIL Rwys 25 and 28R
HIRL Rwy 10L-28R
MIRL Rwys 7-25 and 10R-28L

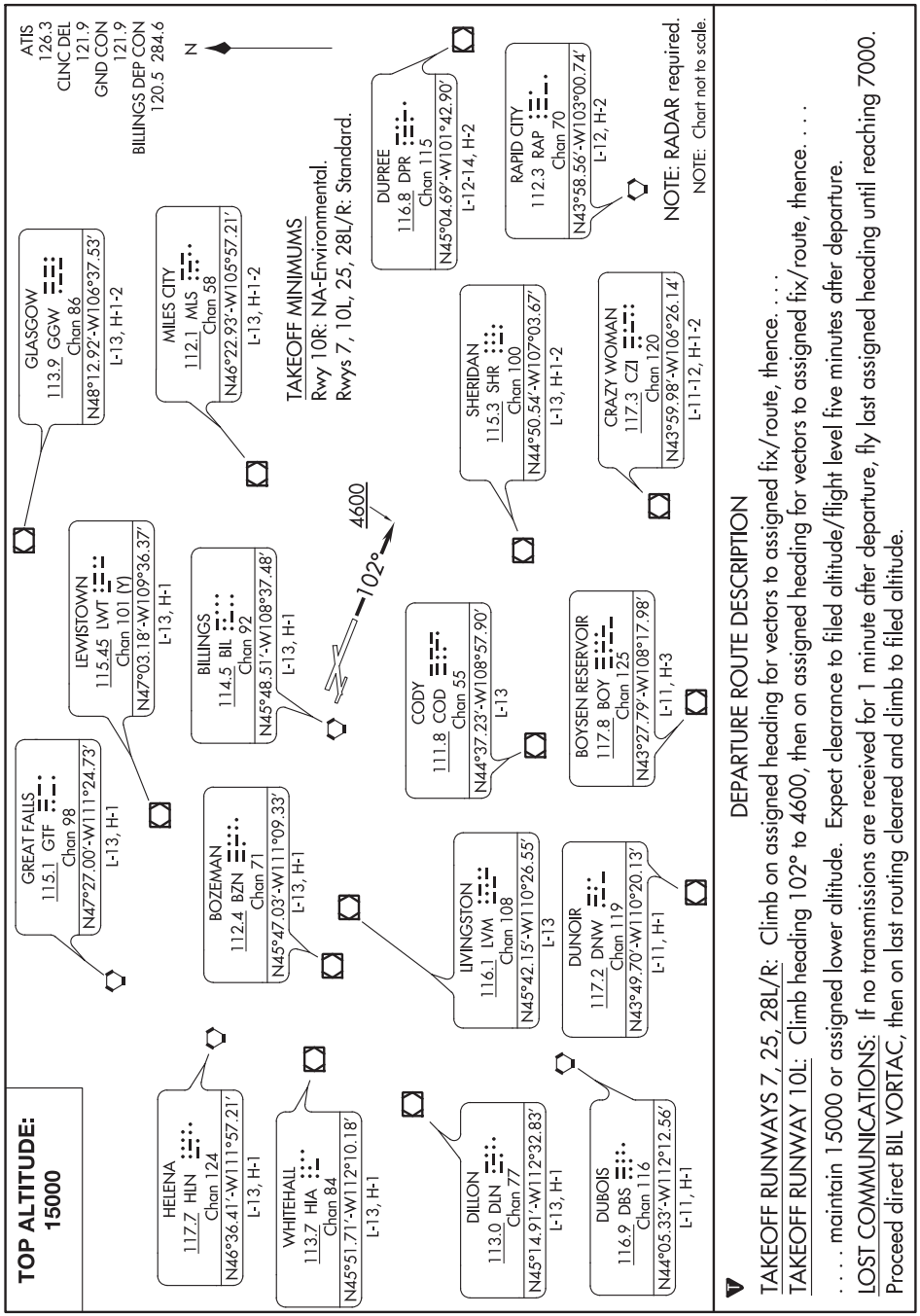
NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020


CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
VAR 10.5° E
JANUARY 2020
ANNUAL RATE OF CHANGE
0.1° W
HS 1
ELEV 3488
28R
BLAST PAD
200 X 200
281.1°
1.0% UP
10518 X 150
ELEV 3534
25
253.4°
1.9% UP
5501 X 75
ELEV 3614
281.1°
1.3% UP
073.4°
ELEV 3636
3800 X 75
101.1°
10R
FIELD
ELEV
3662
101.1°
0.8% DOWN
ELEV 3584
10L
BLAST PAD
200 X 200
TERMINAL
TWR
3707
FIRE
STATION
EXECUTIVE
HANGAR
AREA
RWY 07-25
PCN 7 F/B/X/U
S-12.5
RWY 10L-28R
PCN 55 F/B/X/T
S-120, D-214, 2D-365
RWY 10R-28L
PCN 4 F/B/X/U
S-12.5
ATIS
126.3
BILLINGS TOWER
127.2 257.8
GND CON
121.9
CLNC DEL
121.9
D
45°49'N
45°48'N
108°34'W
108°33'W
108°32'W
108°31'W
NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

# BILLINGS FIVE DEPARTURE

AL-48 (FAA)



| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 189° | TDZE | N/A |
| | Apt Elev | 4492 |

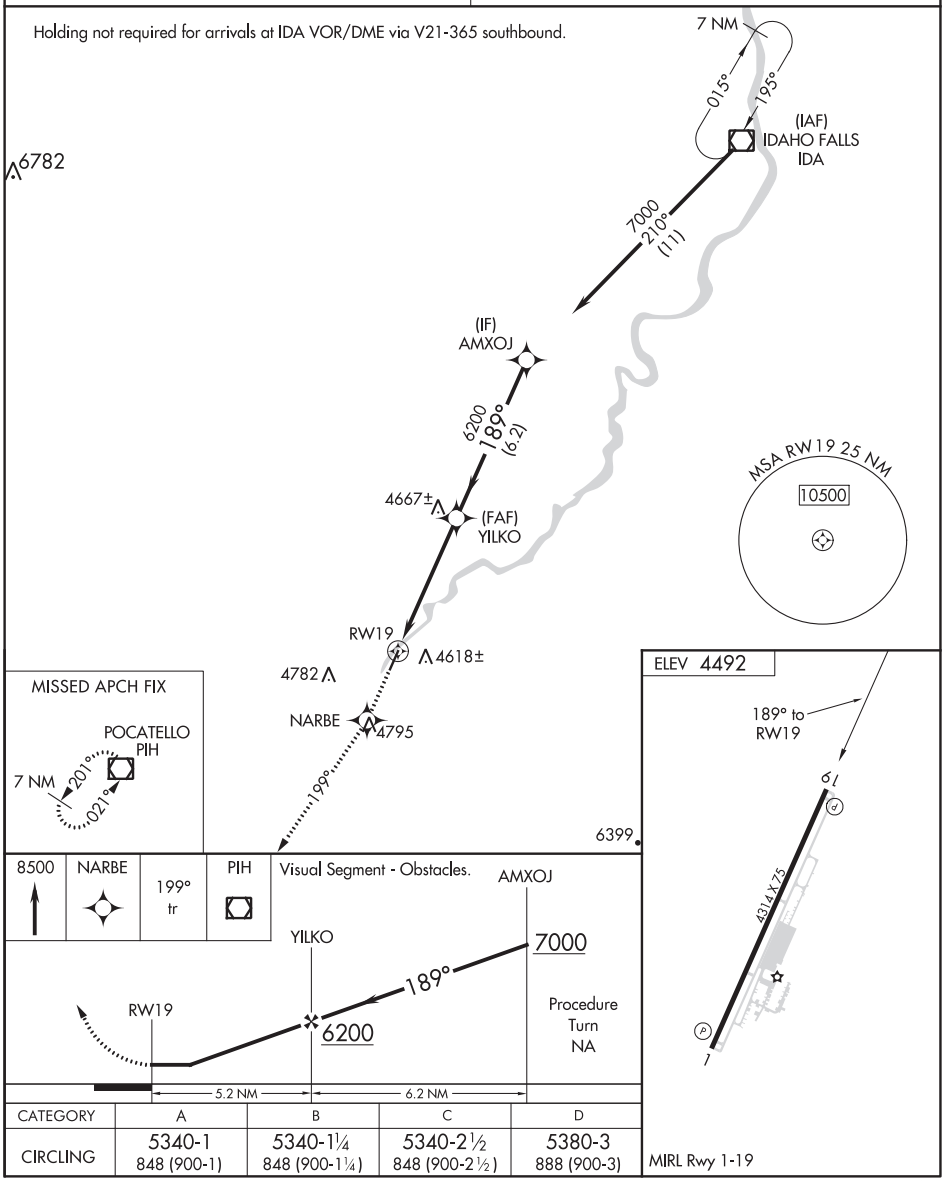
# RNAV (GPS)-A
## MCCARLEY FIELD (UØ2)

RNP APCH.

Use Pocatello altimeter setting, when not received use Idaho Falls altimeter setting. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 8500 direct NARBE and on 199° track to PIH VOR/DME and hold.

| SALT LAKE CITY CENTER | UNICOM |
|---|---|
| 128.35 239.25 | 122.8 (CTAF) |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 5340-1<br>848 (900-1) | 5340-1¼<br>848 (900-1¼) | 5340-2½<br>848 (900-2½) | 5380-3<br>888 (900-3) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

BLACKFOOT, IDAHO | AL-9351 (FAA) | 20142

| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 009° | TDZE | N/A |
| | Apt Elev | 4492 |

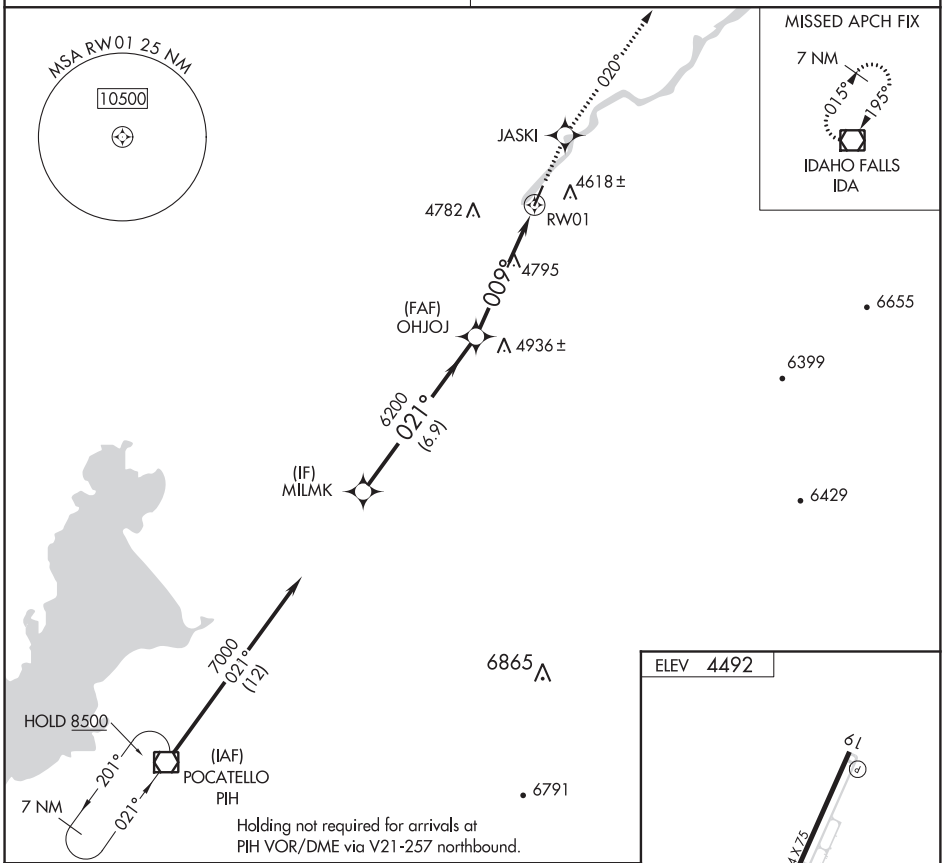
# RNAV (GPS)-B
## MCCARLEY FIELD (UØ2)

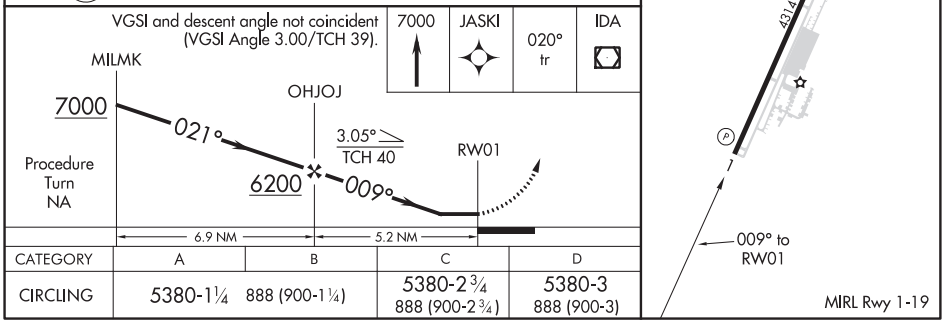
RNP APCH.

Use Pocatello altimeter setting, when not received use Idaho Falls altimeter setting. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 7000 direct JASKI and on 020° track to IDA VOR/DME and hold.

| SALT LAKE CITY CENTER | UNICOM |
|---|---|
| 128.35 239.25 | 122.8 (CTAF) |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 5380-1¼ 888 (900-1¼) | | 5380-2¾ 888 (900-2¾) | 5380-3 888 (900-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| VOR/DME PIH 112.6 Chan 73 | APP CRS 016° | Rwy ldg N/A TDZE N/A Apt Elev 4492 |
|---|---|---|

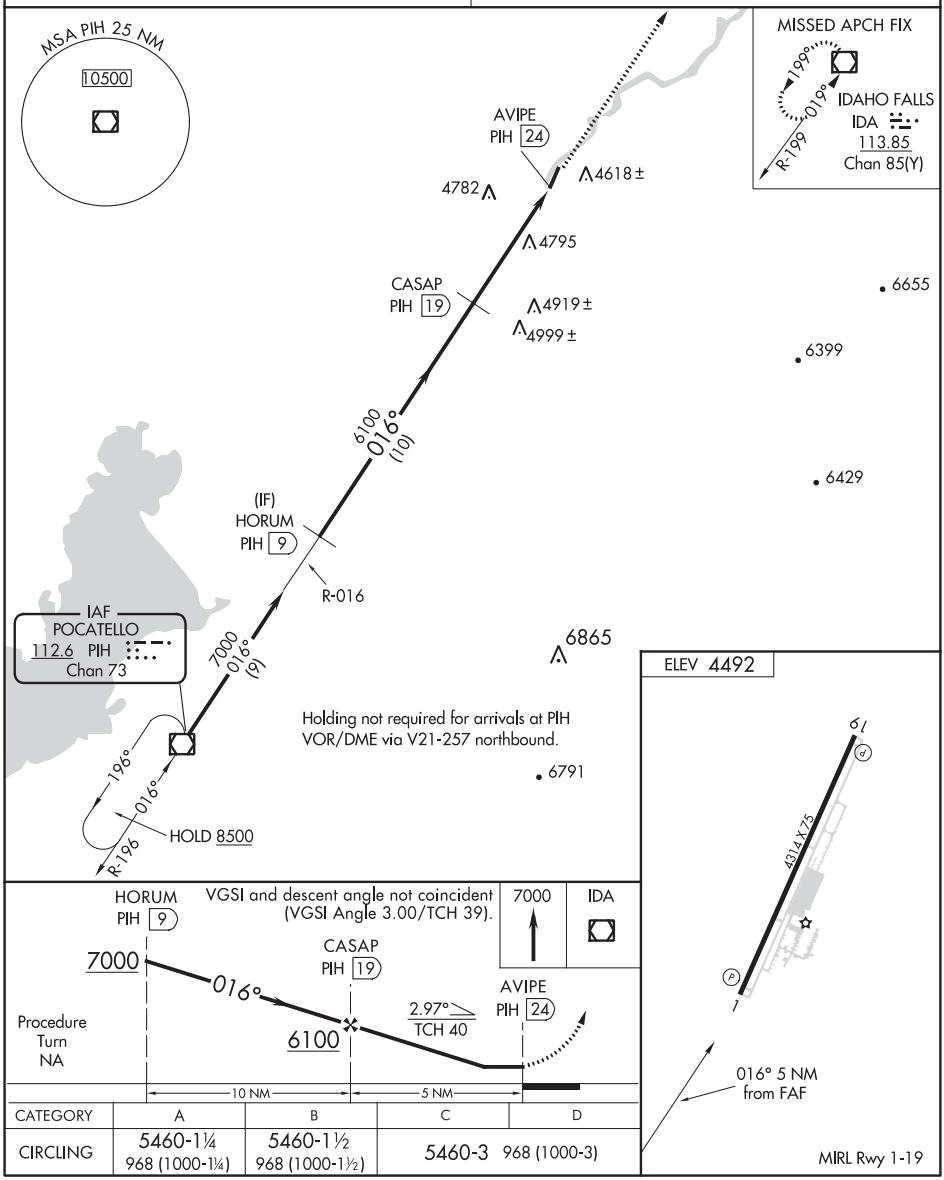
# VOR/DME-C
## MCCARLEY FIELD (UØ2)

T NA

Use Pocatello altimeter setting, when not received use Idaho Falls altimeter setting. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 7000 direct IDA VOR/DME and hold.

| SALT LAKE CITY CENTER | UNICOM |
|---|---|
| 128.35 239.25 | 122.8 (CTAF) |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 5460-1¼ 968 (1000-1¼) | 5460-1½ 968 (1000-1½) | 5460-3 968 (1000-3) | |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

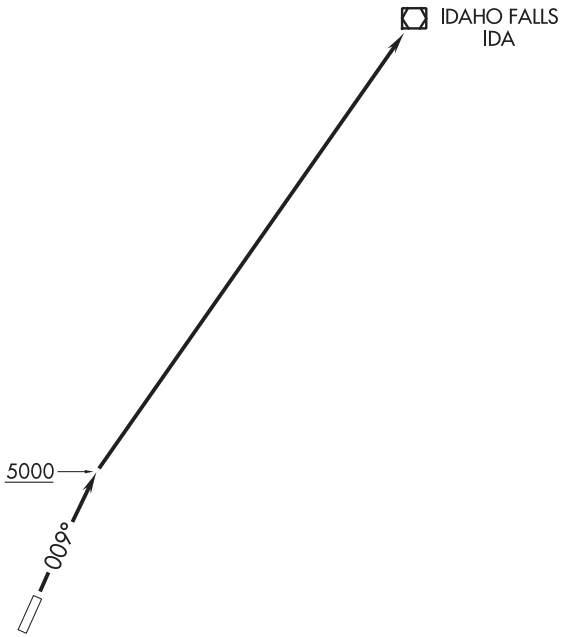
(IDA3.IDA) 18312

# IDAHO FALLS THREE DEPARTURE (RNAV)

AL-9351 (FAA)

MCCARLEY FIELD (U02)
BLACKFOOT, IDAHO

SALT LAKE CITY CENTER
128.35 239.25
CTAF
122.8




TAKEOFF MINIMUMS
Rwy 1: Standard
Rwy 19: NA- obstacles.

NOTE: GPS required.
NOTE: RNAV-1.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 1: Climb heading 009° to 5000, continue climb to 7000 direct IDA VOR/DME.

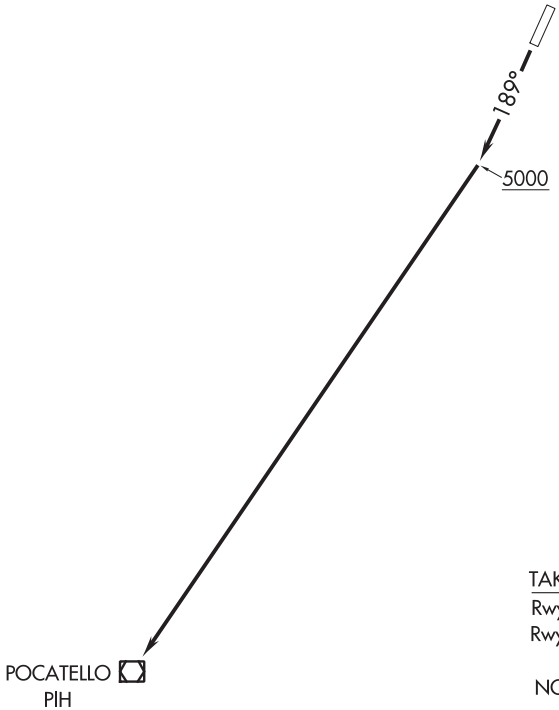

NW-1, 05 NOV 2020 to 31 DEC 2020

# POCATELLO FOUR DEPARTURE (RNAV) AL-9351 (FAA)



SALT LAKE CITY CENTER
128.35 239.25
CTAF
122.8

**TOP ALTITUDE: 7000**




TAKEOFF MINIMUMS
Rwy 1: NA- obstacles.
Rwy 19: Standard.

NOTE: GPS required.
NOTE: RNAV 1.

NOTE: Chart not to scale.



NW-1, 05 NOV 2020 to 31 DEC 2020

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 19: Climb heading 189° to 5000, continue climb to 7000 direct PIH VOR/DME.

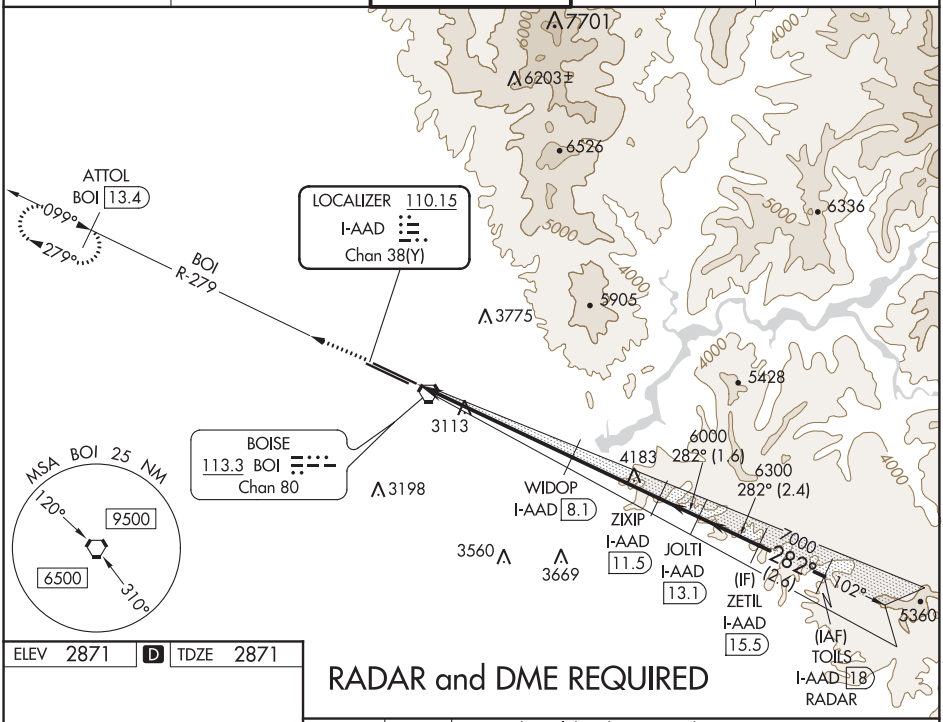
# ILS or LOC RWY 28R
## BOISE AIR TERMINAL/GOWEN FIELD (BOI)

| LOC/DME I-AAD | APP CRS | Rwy ldg | 10000 |
|---|---|---|---|
| 110.15 | 282° | TDZE | 2871 |
| Chan 38 (Y) | | Apt Elev | 2871 |

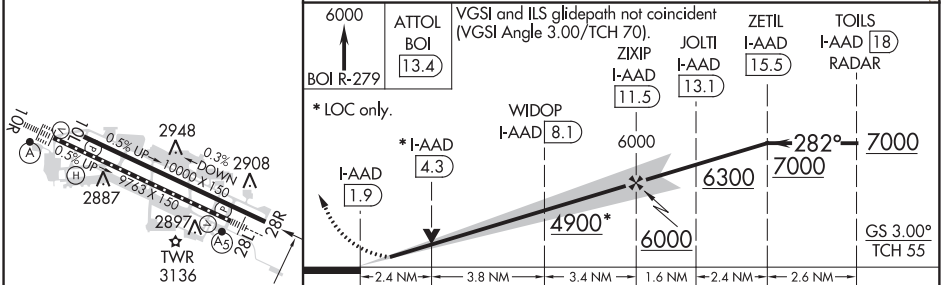
Circling NA north of Rwy 10L-28R. DME required.

MISSED APPROACH: Climb to 6000 on BOI VORTAC R-279 to ATTOL/BOI 13.4 DME and hold.

| D-ATIS | BIG SKY APP CON | BOISE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 123.9 290.4 | 119.6 269.4 | 118.1 257.8 | 121.7 348.6 | 125.9 323.2 |




| ELEV 2871 | D | TDZE 2871 |
|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 28R | 3121-¾ 250 (300-¾) | | | |
| S-LOC 28R | 3700-1 829 (900-1) | 3700-1¼ 829 (900-1¼) | 3700-2½ 829 (900-2½) | |
| C CIRCLING | 3700-1¼ 829 (900-1¼) | | 3740-2½ 869 (900-2½) | 3820-3 949 (1000-3) |

REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L




NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC/DME I-BOI | APP CRS | Rwy ldg | 10R | 10L |
|---|---|---|---|---|
| 111.1 | 102° | TDZE | 9763 | 10000 |
| Chan 48 | | Apt Elev | 2836 | 2844 |
| | | | 2871 | 2871 |

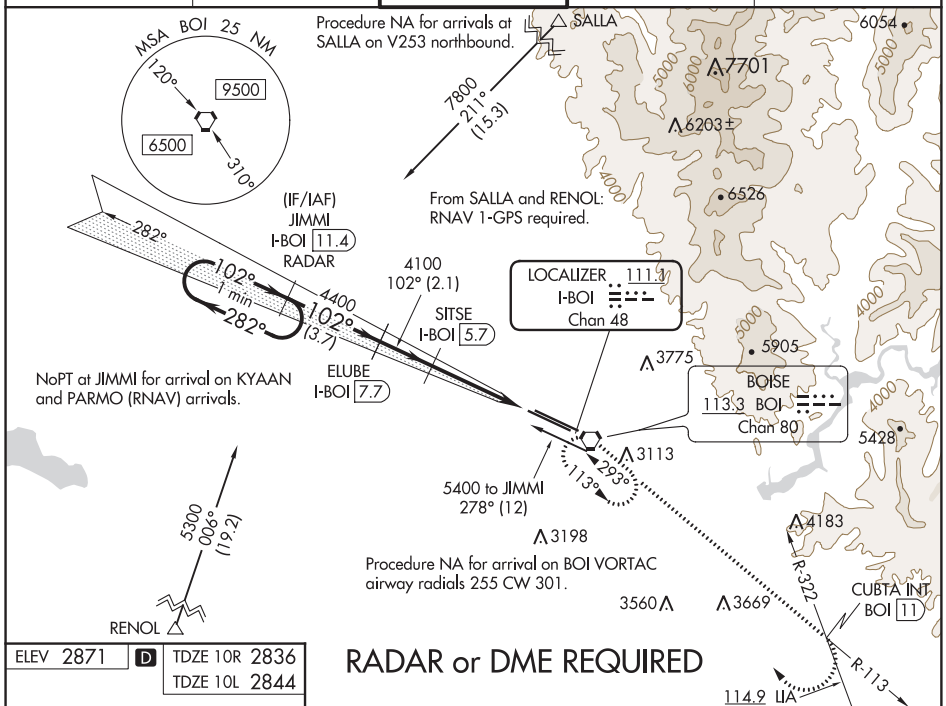
# ILS Y or LOC Y RWY 10R
## BOISE AIR TERMINAL/GOWEN FIELD (BOI)

Circling NA north of Rwy 10L-28R.
DME required.
For inop ALS, increase S-LOC 10R Cats C/D visibility to RVR 5500.

ALSF-2 Rwy 10R

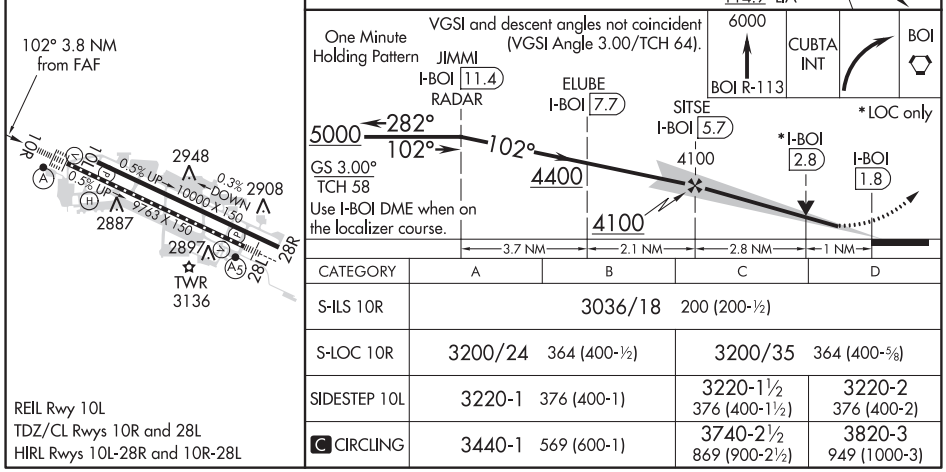
MISSED APPROACH: Climb to 6000 on BOI VORTAC R-113 to CUBTA INT/BOI VORTAC 11 DME and right turn direct BOI VORTAC and hold.

| D-ATIS | BIG SKY APP CON | BOISE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 123.9 290.4 | 119.6 269.4 | 118.1 257.8 | 121.7 348.6 | 125.9 323.2 |




ELEV 2871 D TDZE 10R 2836 TDZE 10L 2844

## RADAR or DME REQUIRED




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 10R | 3036/18 200 (200-½) | | | |
| S-LOC 10R | 3200/24 364 (400-½) | | 3200/35 364 (400-⅝) | |
| SIDESTEP 10L | 3220-1 376 (400-1) | | 3220-1½ 376 (400-1½) | 3220-2 376 (400-2) |
| C CIRCLING | 3440-1 569 (600-1) | | 3740-2½ 869 (900-2½) | 3820-3 949 (1000-3) |

REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC/DME I-BOI | APP CRS | Rwy ldg | 9763 |
|---|---|---|---|
| 111.1 | 102° | TDZE | 2836 |
| Chan 48 | | Apt Elev | 2871 |

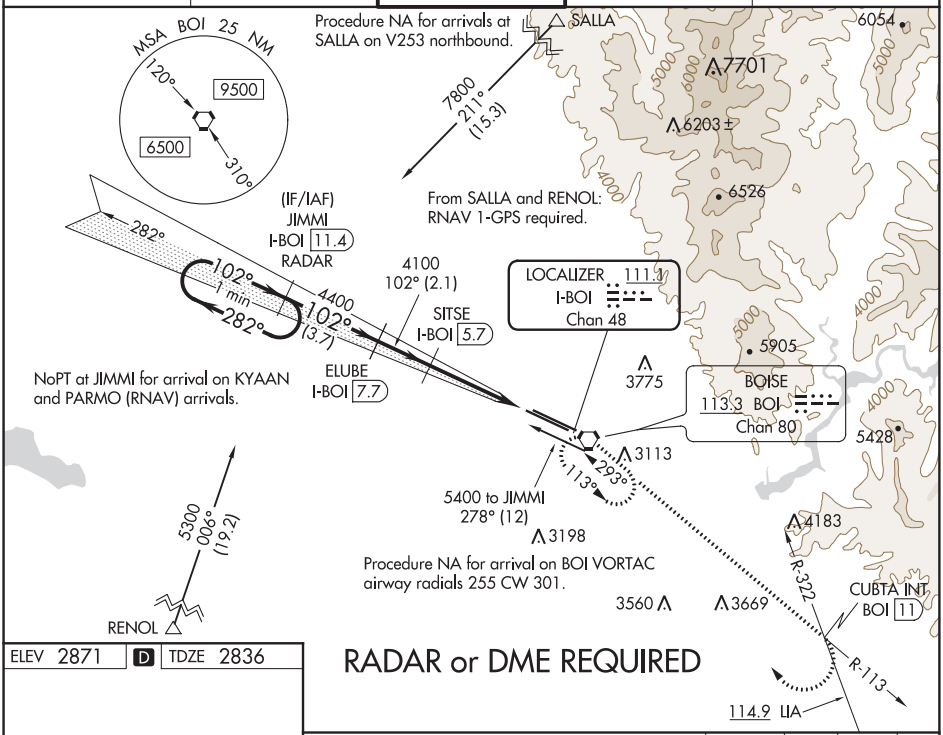
# ILS Y RWY 10R (SA CAT I)
## BOISE AIR TERMINAL/GOWEN FIELD (BOI)

DME required.
Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH.

ALSF-2
Rwy 10R

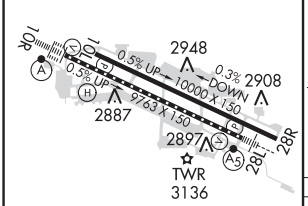
MISSED APPROACH: Climb to 6000 on BOI VORTAC R-113 to CUBTA INT/BOI VORTAC 11 DME and right turn direct BOI VORTAC and hold.

| D-ATIS | BIG SKY APP CON | BOISE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 123.9 290.4 | 119.6 269.4 | 118.1 257.8 | 121.7 348.6 | 125.9 323.2 |




RADAR or DME REQUIRED

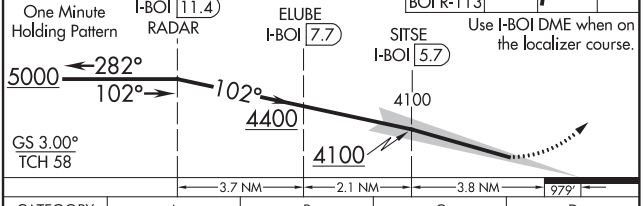
| ELEV 2871 | D | TDZE 2836 |
|---|---|---|




VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 64).

| 6000 | CUBTA INT | | BOI |
|---|---|---|---|
| BOI R-113 | | | |

Use I-BOI DME when on the localizer course.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 10R | RA 170/14 150 DA 2986 | | | |

REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

**SA CATEGORY I ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**




NW-1, 05 NOV 2020 to 31 DEC 2020

# ILS Y RWY 10R (CAT II & III)
## BOISE AIR TERMINAL/GOWEN FIELD (BOI)

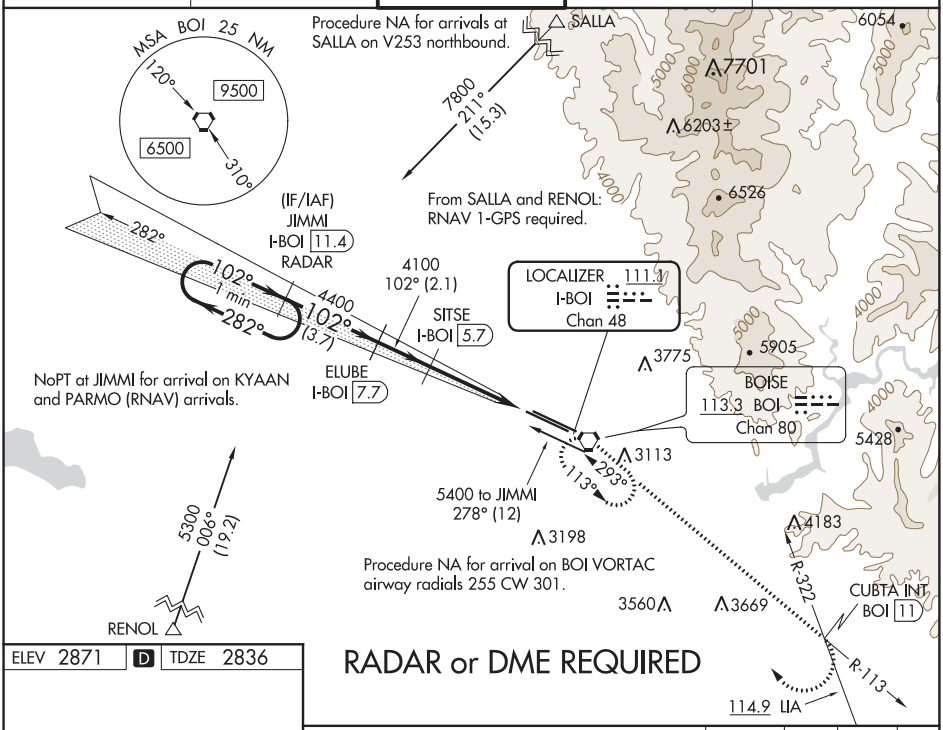
| LOC/DME I-BOI | APP CRS | Rwy ldg | 9763 |
|---|---|---|---|
| 111.1 Chan 48 | 102° | TDZE | 2836 |
| | | Apt Elev | 2871 |

T DME required.
A 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 6000 on BOI VORTAC R-113 to CUBTA INT/BOI VORTAC 11 DME and right turn direct BOI VORTAC and hold.

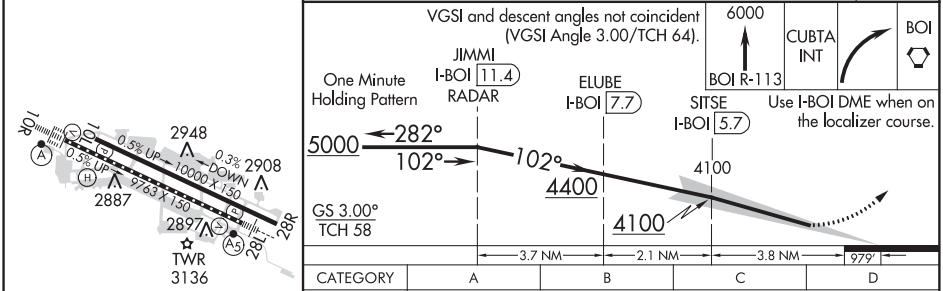
| D-ATIS | BIG SKY APP CON | BOISE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 123.9 290.4 | 119.6 269.4 | 118.1 257.8 | 121.7 348.6 | 125.9 323.2 |




NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 2871 D TDZE 2836

## RADAR or DME REQUIRED




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 10R | CAT II RA 102/12 100 DA 2936 | | | |
| S-ILS 10R | CAT III RVR 03 | | | |

REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

## CATEGORY II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

| APP CRS | Rwy ldg | 9763 |
|---|---|---|
| 282° | TDZE | 2858 |
| | Apt Elev | 2871 |

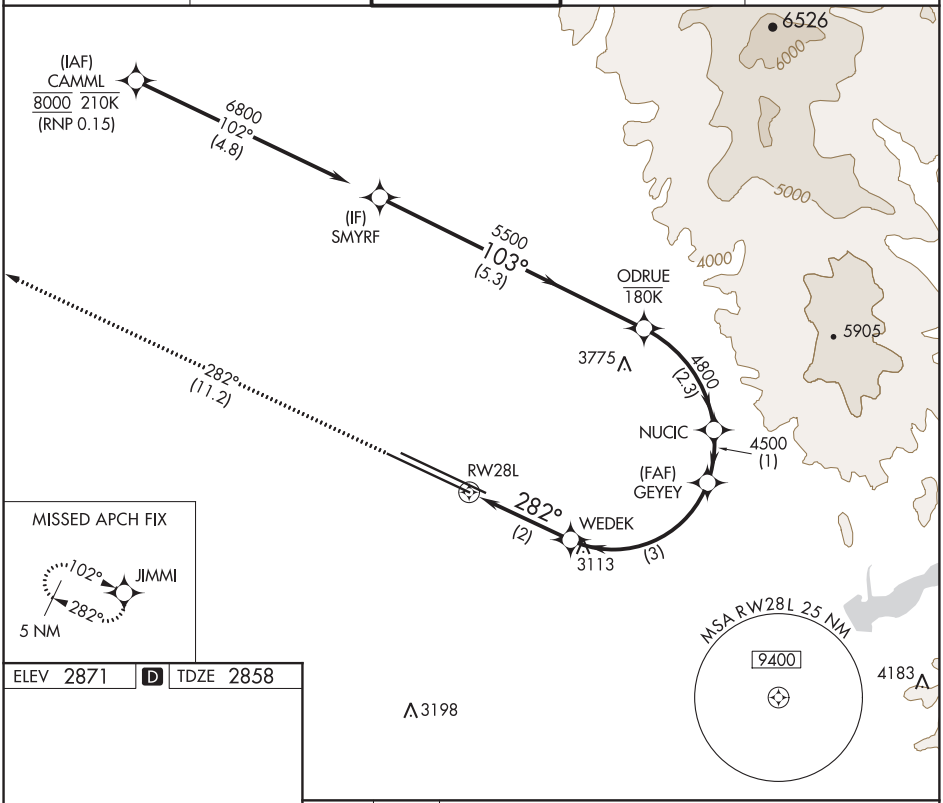
# RNAV (RNP) X RWY 28L
## BOISE AIR TERMINAL/GOWEN FIELD (BOI)

T A NA — For uncompensated Baro-VNAV systems, procedure NA below -14°C (7°F) or above 53°C (128°F). RF required. GPS required.

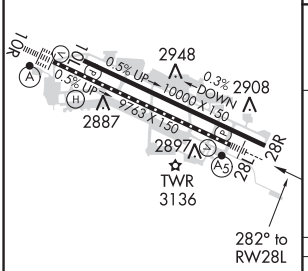
MALSR A5

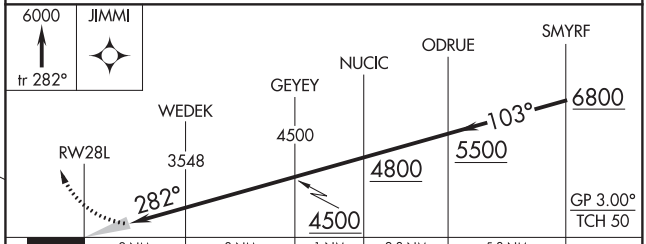
MISSED APPROACH: Climb to 6000 on track 282° to JIMMI and hold, continue climb-in-hold to 6000.

| D-ATIS | BIG SKY APP CON | BOISE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 123.9 290.4 | 119.6 269.4 | 118.1 257.8 | 121.7 348.6 | 125.9 323.2 |




ELEV 2871 D TDZE 2858




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.15 DA | 3276/47 418 (500-1) | | | |

REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

**AUTHORIZATION REQUIRED**

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 10000 |
|---|---|---|
| 282° | TDZE | 2871 |
| | Apt Elev | 2871 |

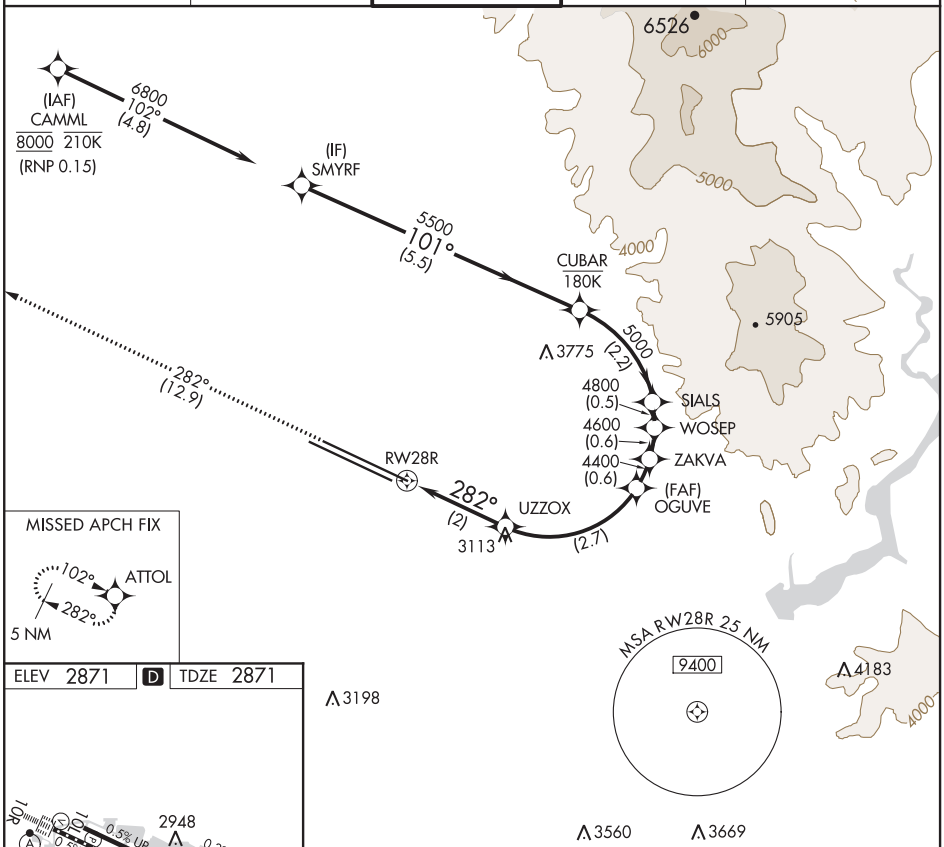
# RNAV (RNP) X RWY 28R
## BOISE AIR TERMINAL/GOWEN FIELD (BOI)

T A NA

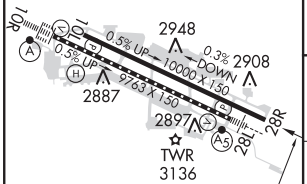
For uncompensated Baro-VNAV systems, procedure NA below -14°C (7°F) or above 52°C (126°F). RF required. GPS required.

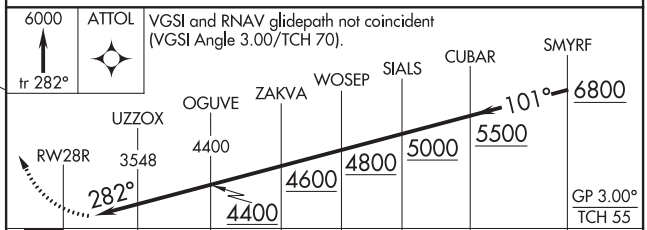
MISSED APPROACH: Climb to 6000 on track 282° to ATTOL and hold.

| D-ATIS | BIG SKY APP CON | BOISE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 123.9 290.4 | 119.6 269.4 | 118.1 257.8 | 121.7 348.6 | 125.9 323.2 |




ELEV 2871 D TDZE 2871




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.15 DA | 3288-1⅜ 417 (500-1⅜) | | | |

REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

**AUTHORIZATION REQUIRED**

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 10000 |
|---|---|---|
| 102° | TDZE | 2844 |
| | Apt Elev | 2872 |

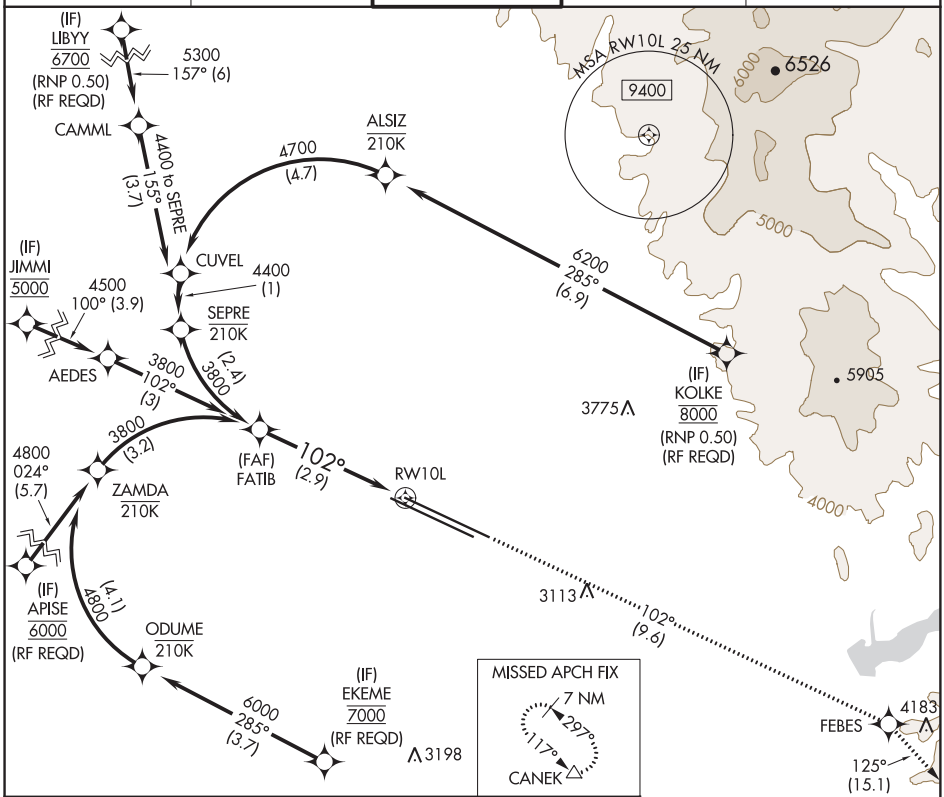
# RNAV (RNP) Z RWY 10L
## BOISE AIR TERMINAL/GOWEN FIELD (BOI)

RNP AR APCH.

For uncompensated Baro-VNAV systems, procedure NA below -14°C or above 54°C .

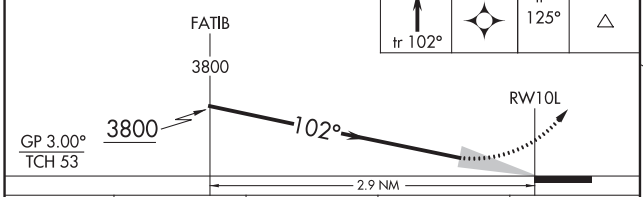
MISSED APPROACH: Climb to 7300 on track 102° to FEBES and on track 125° to CANEK and hold.

| D-ATIS | BIG SKY APP CON | BOISE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 123.9 290.4 | 119.6 269.4 | 118.1 257.8 | 121.7 348.6 | 125.9 323.2 |




See planview for multiple IF locations.

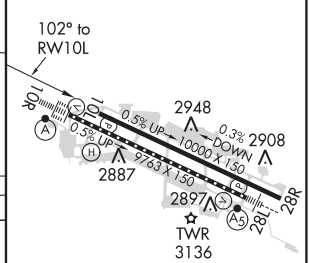
| 7300 | FEBES | tr 125° | CANEK |
|---|---|---|---|
| tr 102° | | | |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.15 DA | 3167-1⅛ 323 (300-1⅛) | | | |
| RNP 0.30 DA | 3219-1¼ 375 (400-1¼) | | | |

AUTHORIZATION REQUIRED

ELEV 2872 D TDZE 2844




REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 9763 |
|---|---|---|
| 102° | TDZE | 2836 |
| | Apt Elev | 2871 |

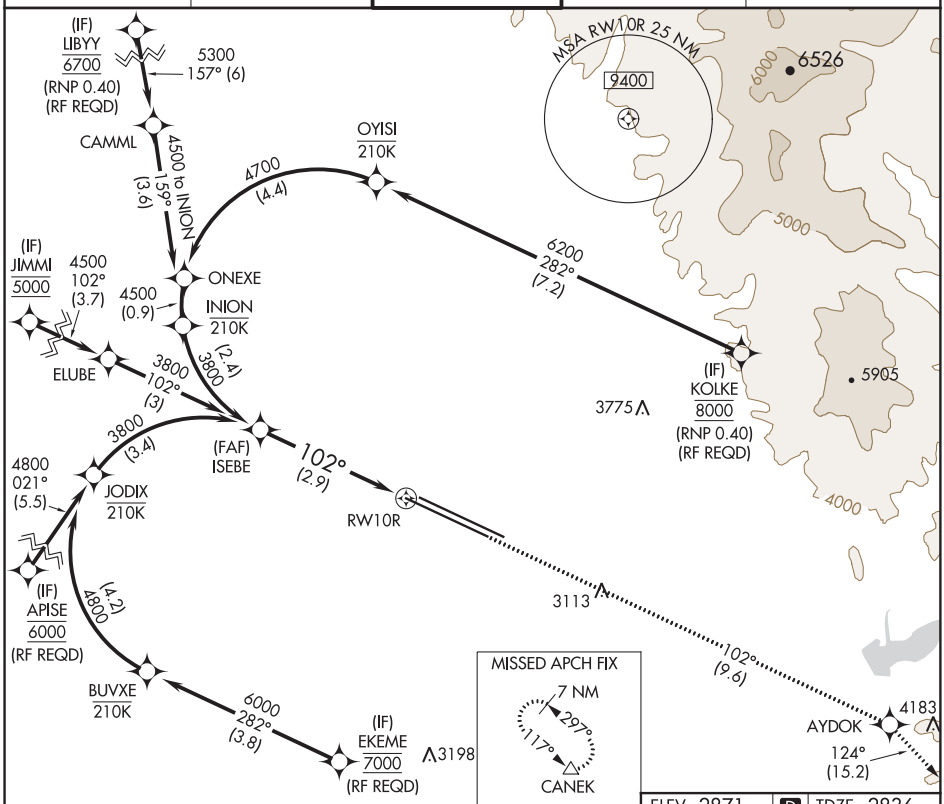
# RNAV (RNP) Z RWY 10R
## BOISE AIR TERMINAL/GOWEN FIELD (BOI)

For uncompensated Baro-VNAV systems, procedure NA below -14°C (7°F) or above 51°C (124°F). GPS required.

ALSF-2

MISSED APPROACH: Climb to 7300 on track 102° to AYDOK and on track 124° to CANEK and hold.

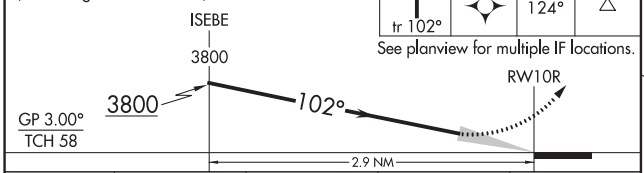
| D-ATIS | BIG SKY APP CON | BOISE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 123.9 290.4 | 119.6 269.4 | 118.1 257.8 | 121.7 348.6 | 125.9 323.2 |




VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 64).

| 7300 tr 102° | AYDOK | tr 124° | CANEK |
|---|---|---|---|

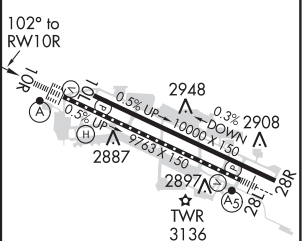
See planview for multiple IF locations.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.15 DA | 3163/30 327 (300-⅝) | | | |
| RNP 0.30 DA | 3199/40 363 (400-¾) | | | |

**AUTHORIZATION REQUIRED**

ELEV 2871 | D | TDZE 2836




REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 9763 |
|---|---|---|
| 282° | TDZE | 2858 |
| | Apt Elev | 2872 |

# RNAV (RNP) Z RWY 28L

## BOISE AIR TERMINAL/GOWEN FIELD (BOI)

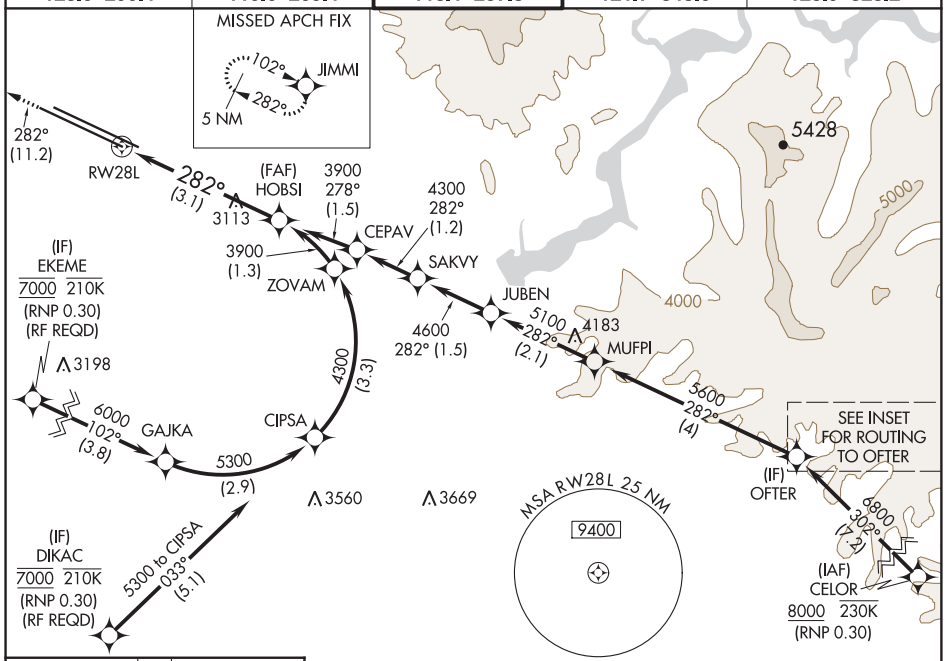
RNP AR APCH.

For uncompensated Baro-VNAV systems, procedure NA below -15°C or above 54°C. For inop ALS, increase RNP 0.15 all Cats visibility to RVR 5500 and increase RNP 0.30 all Cats visibility to 1⅜ SM.

MALSR

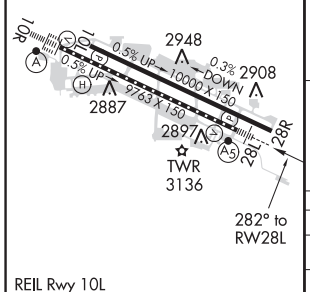
MISSED APPROACH: Climb to 6000 on track 282° to JIMMI and hold, continue climb-in-hold to 6000.

| D-ATIS | BIG SKY APP CON | BOISE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 123.9 290.4 | 119.6 269.4 | 118.1 257.8 | 121.7 348.6 | 125.9 323.2 |



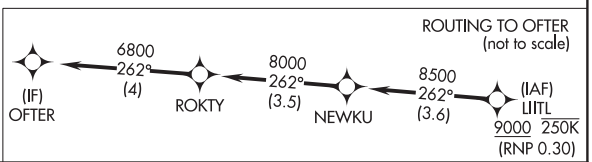

NW-1, 05 NOV 2020 to 31 DEC 2020

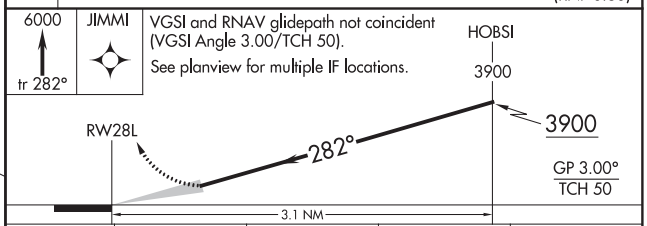
ELEV 2872 D TDZE 2858




REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

ROUTING TO OFTER
(not to scale)




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.15 DA | 3227/35 | 369 (400-⅝) | | |
| RNP 0.30 DA | 3319/50 | 461 (500-1) | | |

**AUTHORIZATION REQUIRED**



NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 10000 |
|---|---|---|
| 282° | TDZE | 2872 |
| | Apt Elev | 2872 |

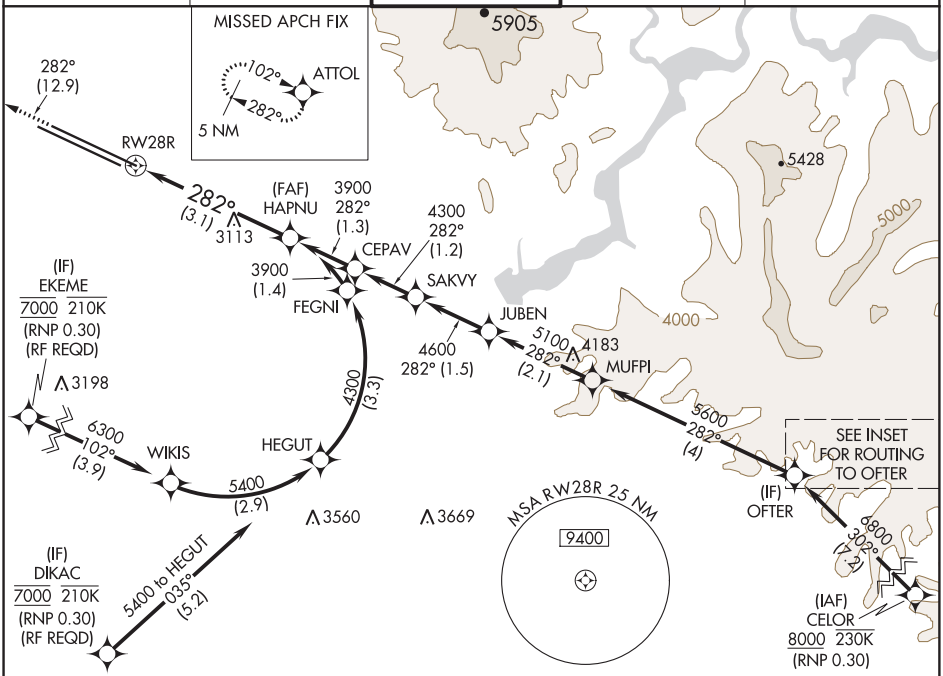
# RNAV (RNP) Z RWY 28R
## BOISE AIR TERMINAL/GOWEN FIELD (BOI)

RNP AR APCH.

For uncompensated Baro-VNAV systems, procedure NA below -15°C or above 54°C.

MISSED APPROACH: Climb to 6000 on track 282° to ATTOL and hold, continue climb-in-hold to 6000.

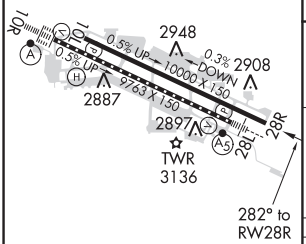
| D-ATIS | BIG SKY APP CON | BOISE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 123.9 290.4 | 119.6 269.4 | 118.1 257.8 | 121.7 348.6 | 125.9 323.2 |




NW-1, 05 NOV 2020 to 31 DEC 2020

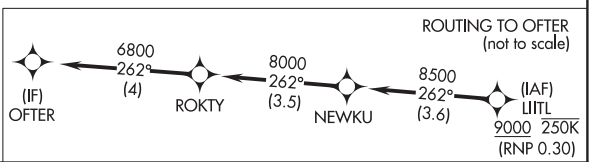
NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 2872 D TDZE 2872




REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

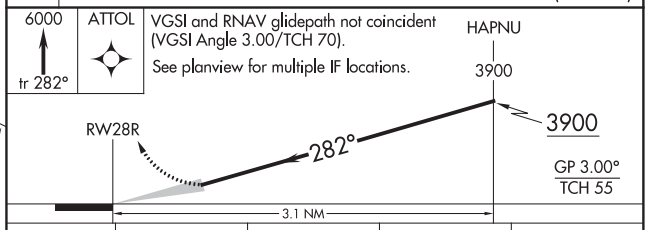
ROUTING TO OFTER
(not to scale)




6000 ATTOL
tr 282°

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 70).

See planview for multiple IF locations.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.15 DA | 3204-1 332 (400-1) | | | |
| RNP 0.30 DA | 3303-1¼ 431 (500-1¼) | | | |

**AUTHORIZATION REQUIRED**

| WAAS CH 78102 W10A | APP CRS 102° | Rwy ldg 10000<br>TDZE 2844<br>Apt Elev 2872 |
|---|---|---|

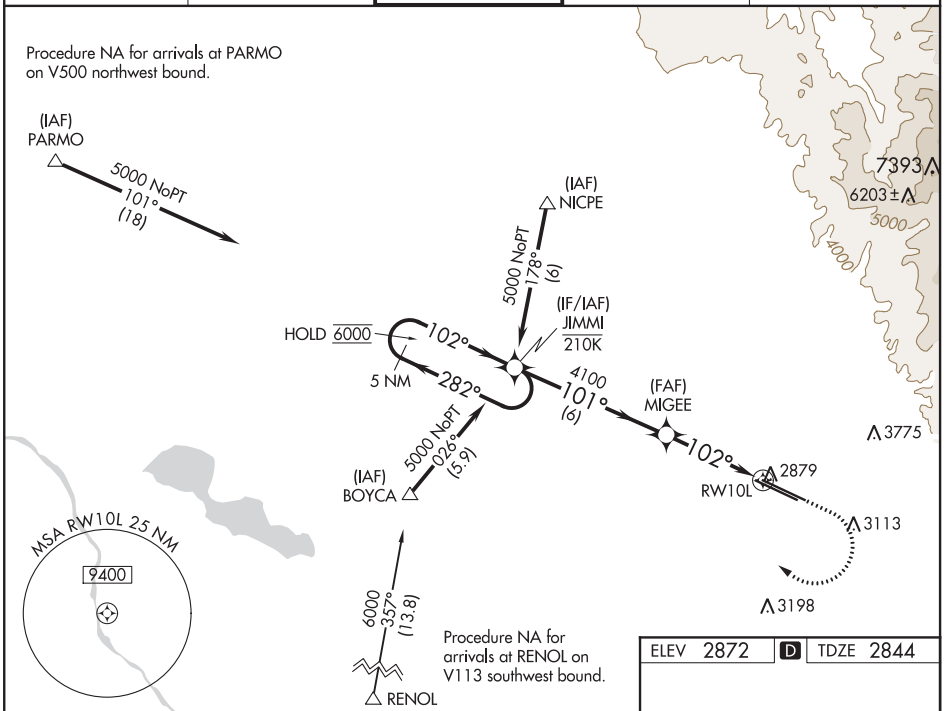
# RNAV (GPS) Y RWY 10L
## BOISE AIR TERMINAL/GOWEN FIELD (BOI)

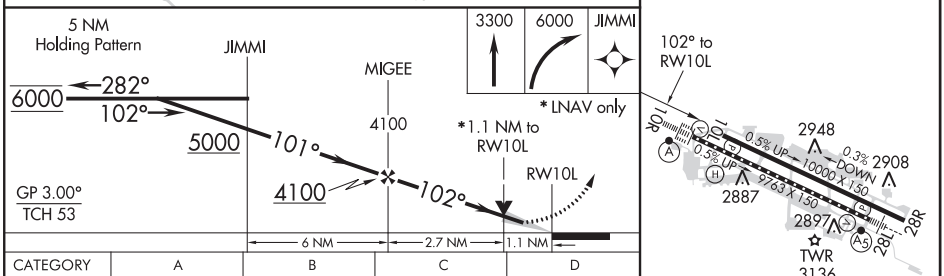
RNP APCH.

Circling NA north of Rwy 10L-28R.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -12°C or above 54°C.

MISSED APPROACH: Climb to 3300 then climbing right turn to 6000 direct JIMMI and hold, continue climb-in-hold to 6000.

| D-ATIS | BIG SKY APP CON | BOISE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 123.9 290.4 | 119.6 269.4 | 118.1 257.8 | 121.7 348.6 | 125.9 323.2 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 3094-⅞ 250 (300-⅞) | | | |
| LNAV/VNAV DA | 3135-1 291 (300-1) | | | |
| LNAV MDA | 3240-1 396 (400-1) | | 3240-1⅛ 396 (400-1⅛) | |
| C CIRCLING | 3440-1 568 (600-1) | | 3740-2½ 868 (900-2½) | 3820-3 948 (1000-3) |




NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 40203 W10B | APP CRS 102° | Rwy ldg 9763<br>TDZE 2836<br>Apt Elev 2871 |
|---|---|---|

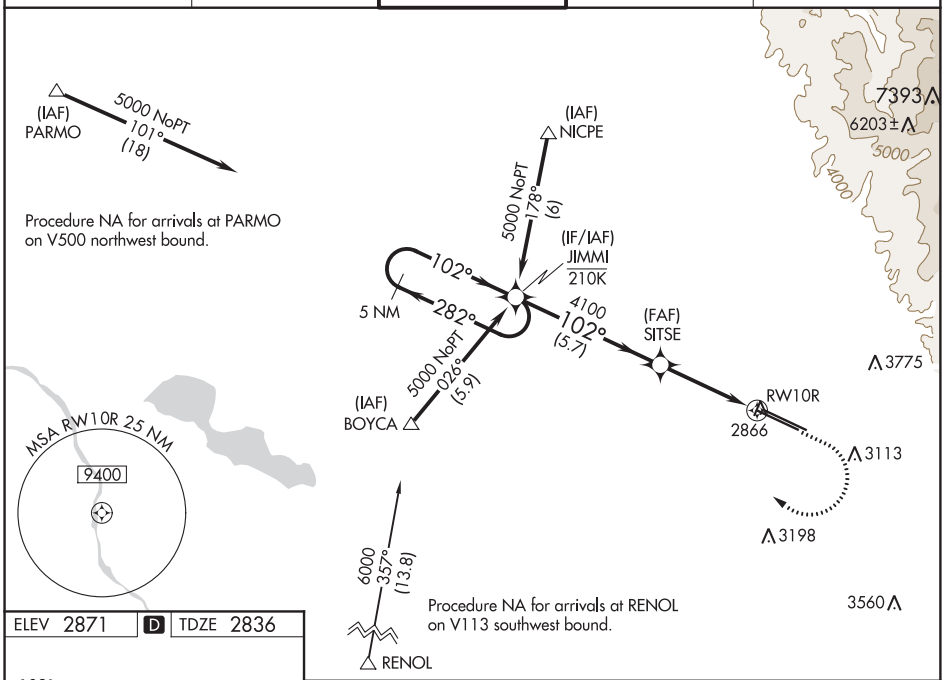
# RNAV (GPS) Y RWY 10R
## BOISE AIR TERMINAL/GOWEN FIELD (BOI)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -12°C (11°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Circling NA north of Rwy 10L-28R. For inop ALS, increase LPV Cat E visibility to RVR 4000, LNAV/VNAV all Cats and LNAV Cats C/D/E visibility to RVR 6000.

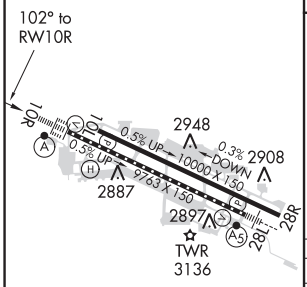
ALSF-2

MISSED APPROACH: Climb to 3300 then climbing right turn to 6000 direct JIMMI and hold, continue climb-in-hold to 6000.

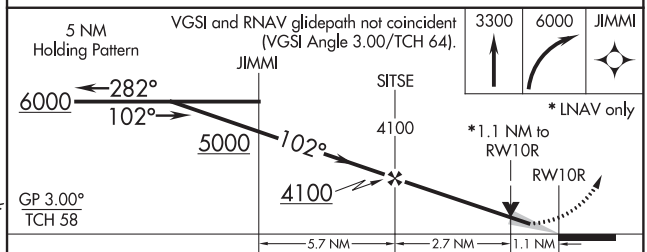
| D-ATIS | BIG SKY APP CON | BOISE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 123.9 290.4 | 119.6 269.4 | 118.1 257.8 | 121.7 348.6 | 125.9 323.2 |




ELEV 2871 | D | TDZE 2836




REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| LPV DA | 3036/18 200 (200-½) | | | | |
| LNAV/VNAV DA | 3182/40 346 (400-¾) | | | | |
| LNAV MDA | 3240/24 404 (400-½) | | 3240/40 404 (400-¾) | | |
| C CIRCLING | 3440-1 569 (600-1) | | 3740-2½ 869 (900-2½) | 3820-3 949 (1000-3) | 3880-3 1009 (1100-3) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

BOISE, IDAHO | AL-57 (FAA) | 20198

| WAAS CH 77702 W28A | APP CRS 282° | Rwy ldg 9763<br>TDZE 2858<br>Apt Elev 2871 |
|---|---|---|

# RNAV (GPS) Y RWY 28L

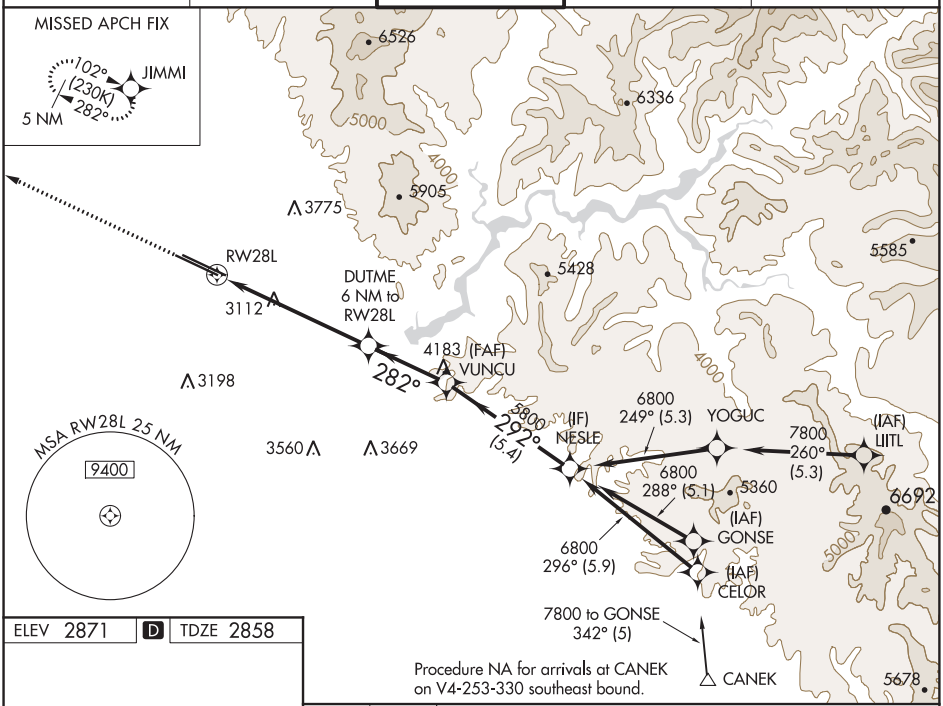
## BOISE AIR TERMINAL/GOWEN FIELD (BOI)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -12°C (11°F) or above 52°C (126°F). Circling NA north of Rwy 10L-28R. DME/DME RNP-0.3 NA. For inop ALS, increase LPV all Cats visibility to RVR 5000, LNAV/VNAV Cat E visibility to 1⅜ SM, and LNAV Cat C/D/E visibility to 1¾ SM.

MALSR

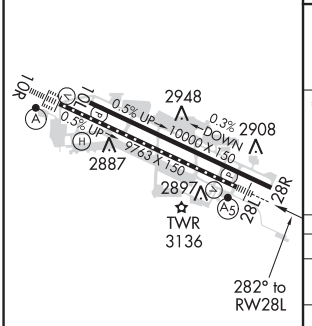
MISSED APPROACH: Climb to 6000 direct JIMMI and hold, continue climb-in-hold to 6000.

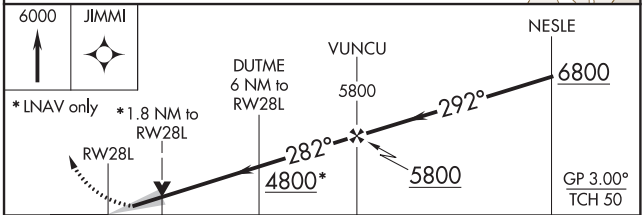
| D-ATIS | BIG SKY APP CON | BOISE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 123.9 290.4 | 119.6 269.4 | 118.1 257.8 | 121.7 348.6 | 125.9 323.2 |




Procedure NA for arrivals at CANEK on V4-253-330 southeast bound.

ELEV 2871 | D | TDZE 2858




| CATEGORY | | A | B | C | D | E |
|---|---|---|---|---|---|---|
| LPV | DA | 3183/30 325 (400-⅝) | | | | |
| LNAV/VNAV | DA | 3274/45 416 (500-⅞) | | | | |
| LNAV | MDA | 3480/24 622 (700-½) | | 3480-1⅜ 622 (700-1⅜) | | |
| C CIRCLING | | 3480-1 609 (700-1) | | 3740-2½ 869 (900-2½) | 3820-3 949 (1000-3) | 3880-3 1009 (1100-3) |

REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 65803 W28B | APP CRS 282° | Rwy ldg 10000<br>TDZE 2871<br>Apt Elev 2871 |
|---|---|---|

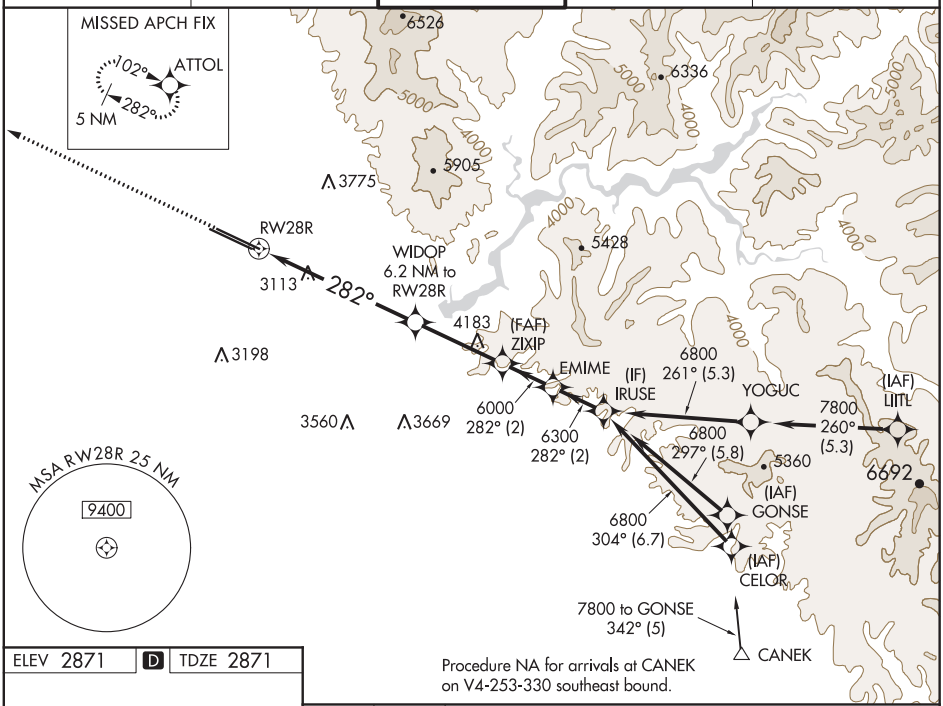
# RNAV (GPS) Y RWY 28R

## BOISE AIR TERMINAL/GOWEN FIELD (BOI)

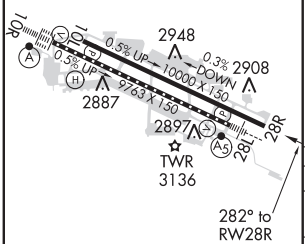
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -12°C (11°F) or above 52°C (126°F).
Circling NA north of Rwy 10L-28R. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 6000 direct ATTOL and hold, continue climb-in-hold to 6000.

| D-ATIS | BIG SKY APP CON | BOISE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 123.9 290.4 | 119.6 269.4 | 118.1 257.8 | 121.7 348.6 | 125.9 323.2 |



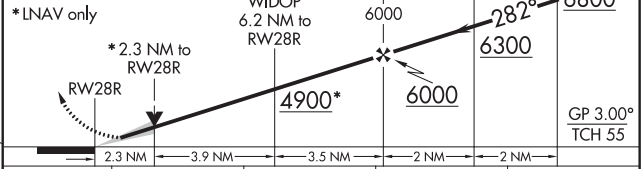

| ELEV 2871 | D | TDZE 2871 |
|---|---|---|




REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

6000 | ATTOL

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 70).




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 3121-¾ 250 (300-¾) | | | |
| LNAV/VNAV DA | 3199-1 328 (400-1) | | | |
| LNAV MDA | 3660-1¼ 789 (800-1¼) | | 3660-2½ 789 (800-2½) | |
| C CIRCLING | 3660-1¼ 789 (800-1¼) | | 3740-2½ 869 (900-2½) | 3820-3 949 (1000-3) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

BOISE, IDAHO | AL-57 (FAA) | 20198

# VOR/DME or TACAN RWY 10L

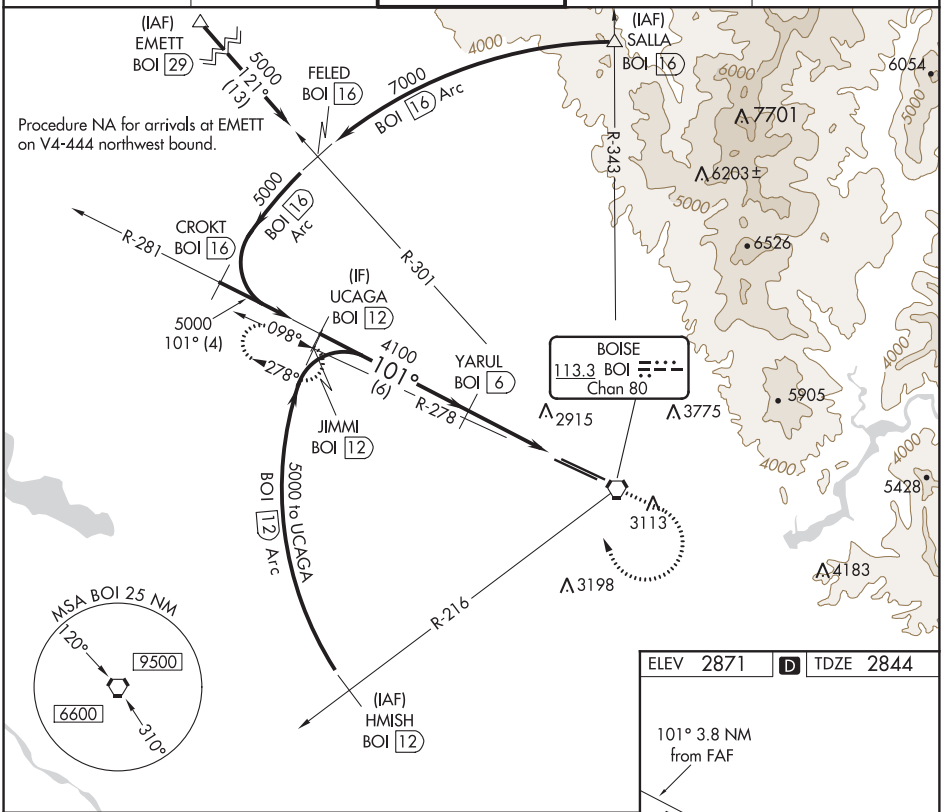
## BOISE AIR TERMINAL/GOWEN FIELD (BOI)

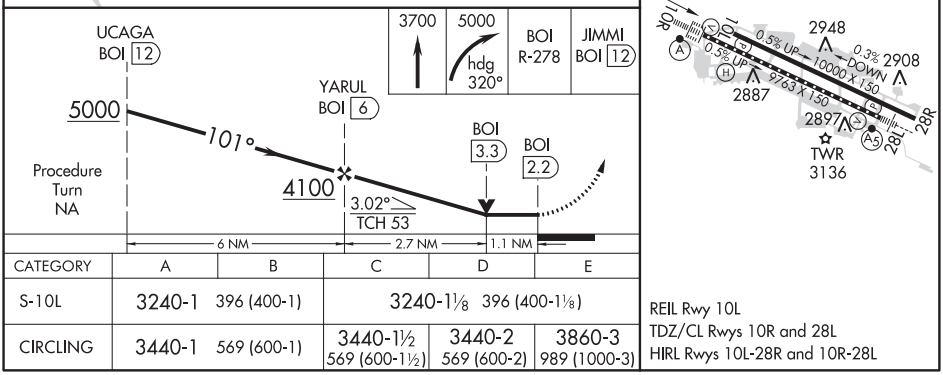
| VORTAC BOI 113.3 Chan 80 | APP CRS 101° | Rwy ldg 10000<br>TDZE 2844<br>Apt Elev 2871 |
|---|---|---|

Circling NA north of Rwy 10L-28R.
Helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3700 then climbing right turn to 5000 on heading 320° and BOI VORTAC R-278 to JIMMI/BOI 12 DME and hold.

| D-ATIS | BIG SKY APP CON | BOISE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 123.9 290.4 | 119.6 269.4 | 118.1 257.8 | 121.7 348.6 | 125.9 323.2 |




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-10L | 3240-1 | 396 (400-1) | 3240-1⅛ 396 (400-1⅛) | | |
| CIRCLING | 3440-1 | 569 (600-1) | 3440-1½ 569 (600-1½) | 3440-2 569 (600-2) | 3860-3 989 (1000-3) |

REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# VOR/DME or TACAN RWY 28L

## BOISE AIR TERMINAL/GOWEN FIELD (BOI)

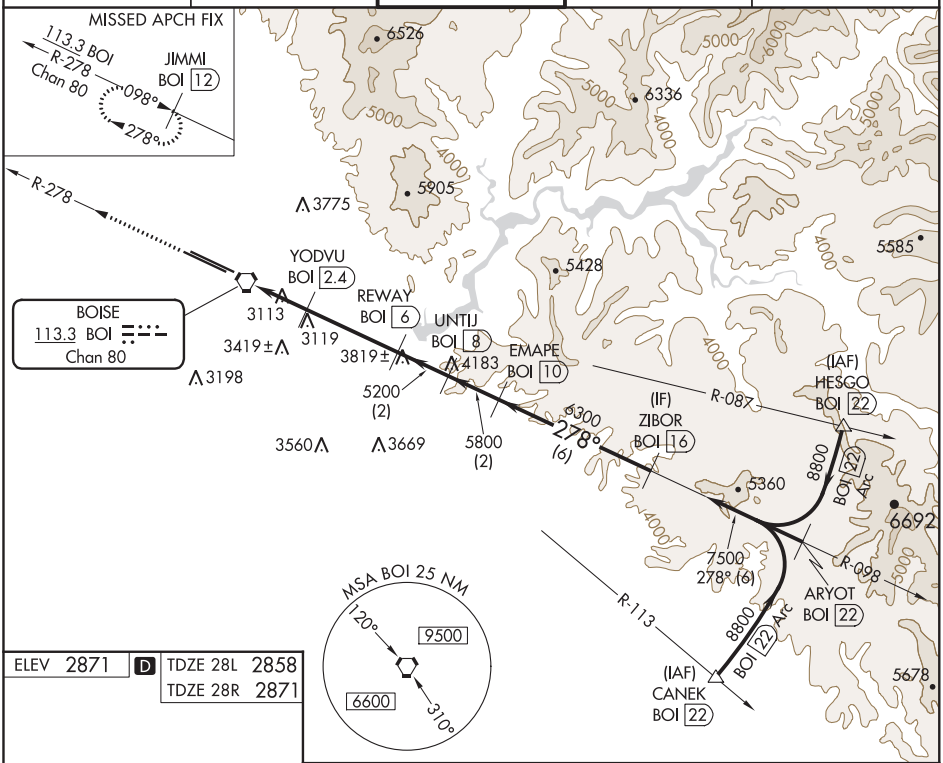
| VORTAC BOI | APP CRS | | 28L | 28R |
|---|---|---|---|---|
| 113.3 | 278° | Rwy ldg | 9763 | 10000 |
| Chan 80 | | TDZE | 2853 | 2871 |
| | | Apt Elev | 2871 | 2871 |

Circling NA north of Rwy 10L-28R. For inoperative MALSR increase S-28L Cat E visibility ½ mile.

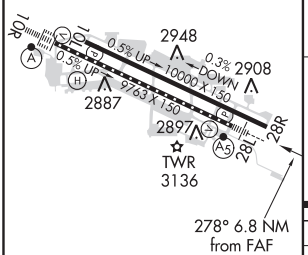
MALSR Rwy 28L (A5)

MISSED APPROACH: Climb to 4500 via BOI VORTAC R-278 to JIMMI/12 DME and hold.

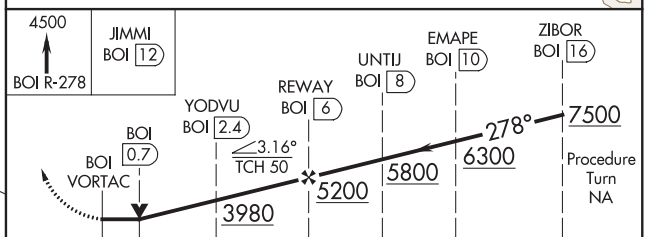
| D-ATIS | BIG SKY APP CON | BOISE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 123.9 290.4 | 119.6 269.4 | 118.1 257.8 | 121.7 348.6 | 125.9 323.2 |




| ELEV 2871 | D | TDZE 28L 2858 |
|---|---|---|
| | | TDZE 28R 2871 |




278° 6.8 NM from FAF




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-28L | 3380/24 522 (600-½) | | 3380/50 522 (600-1) | 3380/60 522 (600-1¼) | |
| SIDESTEP RWY 28R | 3380/60 509 (600-1¼) | | 3380-1¾ 509 (600-1¾) | 3380-2¼ 509 (600-2¼) | |
| CIRCLING | 3440-1 569 (600-1) | | 3440-1½ 569 (600-1½) | 3440-2 569 (600-2) | 3820-3 949 (1000-3) |

REIL Rwy 10L
TDZ/CL Rwys 10R and 28L
HIRL Rwys 10L-28R and 10R-28L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

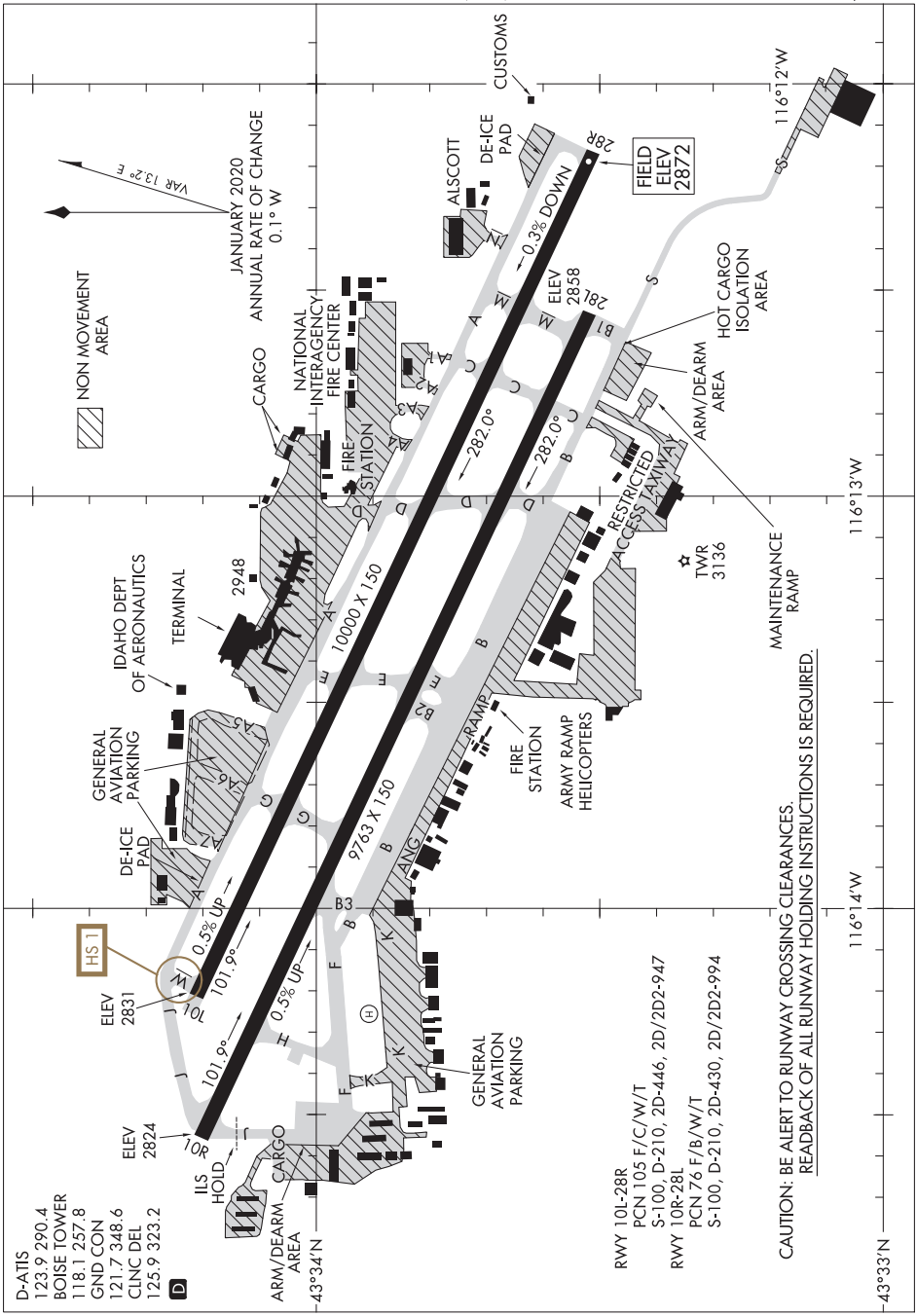
20086

# AIRPORT DIAGRAM

BOISE AIR TERMINAL/GOWEN FIELD (BOI)

AL-57 (FAA)

BOISE, IDAHO




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

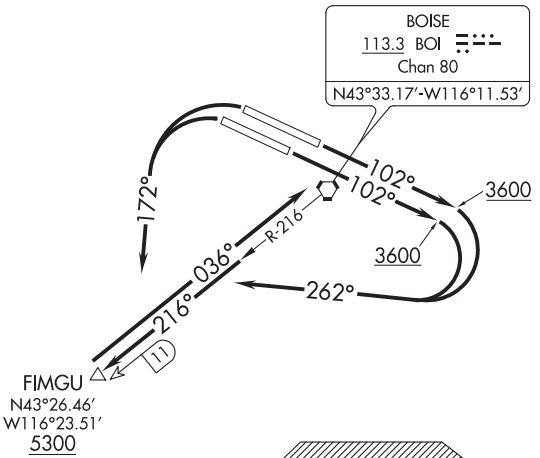
AIRPORT DIAGRAM

BOISE, IDAHO

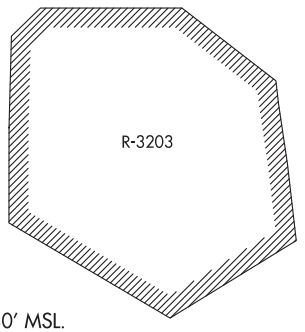
BOISE AIR TERMINAL/GOWEN FIELD (BOI)

20086

D-ATIS
123.9 290.4
CLNC DEL
125.9 323.2
GND CON
121.7 348.6
BOISE TOWER
118.1 257.8
BIG SKY DEP CON
126.9 351.85 (279°-097°)
119.6 269.4 (098°-278°)




NOTE: DME required.




TAKEOFF MINIMUMS

Rwys 28L/R: Standard.
Rwy 10L: Standard with a minimum climb of 208′ per NM to 4300, or 5500-3 for VCOA.
Rwy 10R: Standard with a minimum climb of 205′ per NM to 4300, or 5500-3 for VCOA.

TAKEOFF OBSTACLE NOTES

Rwy 10L: Navaid 5′ from DER, 415′ right of centerline, 16′ AGL/2880′ MSL.
Building and general utility beginning 270′ from DER, 444′ left of centerline, up to 15′ AGL/2888′ MSL.
Rwy 10R: Vehicles on taxiway beginning at DER, 455′ right of centerline, up to 10′ AGL/2869′ MSL.
Rwy 28L: Tree 2048′ from DER, 508′ left of centerline, 100′ AGL/2909′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 10L/R: Climb heading 102° to 3600 then climbing right turn heading 262°, thence . . . .
TAKEOFF RUNWAYS 28L/R: Climbing left turn heading 172°, thence . . . .

. . . . intercept and climb on BOI R-216 outbound to cross FIMGU/BOI 11 DME fix at or above 5300 then on BOI R-216 inbound to cross BOI VORTAC at or above MEA/MCA for assigned route of flight.

VCOA RUNWAYS 10L/R: Obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross Boise Air Terminal/Gowen Field Airport at or above BOI VORTAC MEA/MCA before proceeding on assigned route of flight.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

(BOI3.BOI) 18312

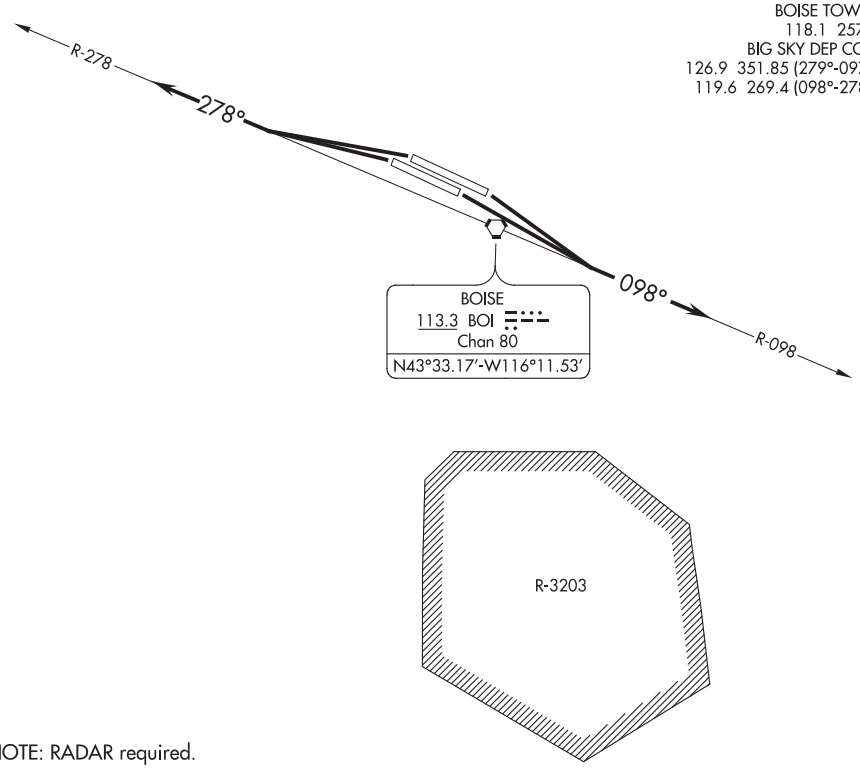
# BOISE THREE DEPARTURE

AL-57 (FAA)

BOISE AIR TERMINAL/GOWEN FIELD (BOI)
BOISE, IDAHO

**TOP ALTITUDE: 16000**

D-ATIS
123.9 290.4
CLNC DEL
125.9 323.2
GND CON
121.7 348.6
BOISE TOWER
118.1 257.8
BIG SKY DEP CON
126.9 351.85 (279°-097°)
119.6 269.4 (098°-278°)




NOTE: RADAR required.

TAKEOFF MINIMUMS
Rwys 28L/R: Standard.
Rwys 10L/R: Standard with minimum climb of 240′ per NM to 5700.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 10L/R: Climb to 16000 or lower assigned altitude on BOI VORTAC R-098, thence. . . .
TAKEOFF RUNWAY 28L/R: Climb to 16000 or lower assigned altitude on BOI VORTAC R-278, thence. . . .

. . . .Expect RADAR vectors to assigned route, expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: If not in contact with Boise Departure Control at 10000 or assigned altitude if lower, continue climb to assigned altitude and thence on assigned route.


NW-1, 05 NOV 2020 to 31 DEC 2020

BOISE THREE DEPARTURE
BOISE, IDAHO
BOISE AIR TERMINAL/GOWEN FIELD (BOI)
(BOI3.BOI) 26MAY16

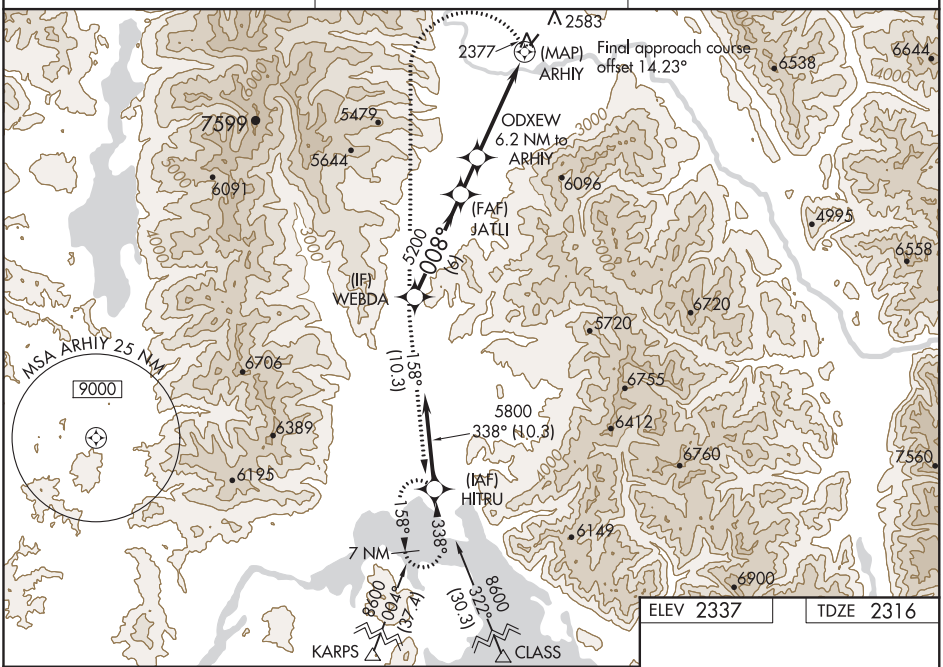
| APP CRS | Rwy ldg | 4002 |
|---|---|---|
| 008° | TDZE | 2316 |
| | Apt Elev | 2337 |

# RNAV (GPS) RWY 2
## BOUNDARY COUNTY (65S)

When local altimeter setting not received, procedure NA.
NA DME/DME RNP-0.3 NA.
-7°C Helicopter visibility reduction below ¾ SM NA.
* Missed approach requires minimum climb of 400 feet per NM to 6600.
# Missed approach requires minimum climb of 300 feet per NM to 6400.

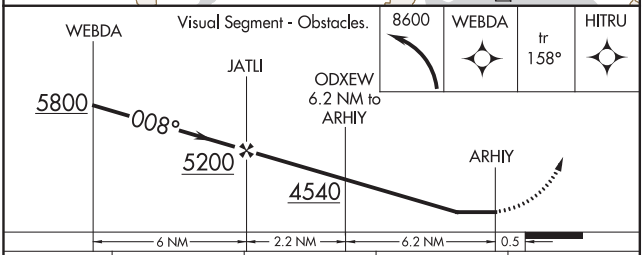
MISSED APPROACH: Climbing left turn to 8600 direct WEBDA and on track 158° to HITRU, continue climb-in-hold to 8600.

| AWOS-3PT | SEATTLE CENTER | UNICOM |
|---|---|---|
| 132.575 | 123.95 290.55 | 123.0 (CTAF) L |

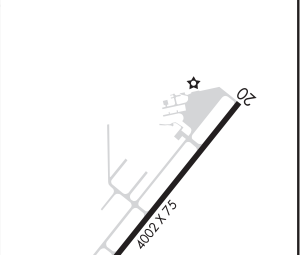



NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 2337 TDZE 2316




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA* | 3260-1¼ 944 (1000-1¼) | | 3260-2¾ 944 (1000-2¾) | NA |
| LNAV MDA# | 3880-1¼ 1564 (1600-1¼) | 3880-1½ 1564 (1600-1½) | 3880-3 1564 (1600-3) | NA |
| LNAV MDA | 4480-1¼ 2164 (2200-1¼) | 4480-1½ 2164 (2200-1½) | 4480-3 2164 (2200-3) | NA |
| C CIRCLING | 4480-1¼ 2143 (2200-1¼) | 4480-1½ 2143 (2200-1½) | 4480-3 2143 (2200-3) | NA |




MIRL Rwy 2-20 L

(KARPS2.KARPS) 19003

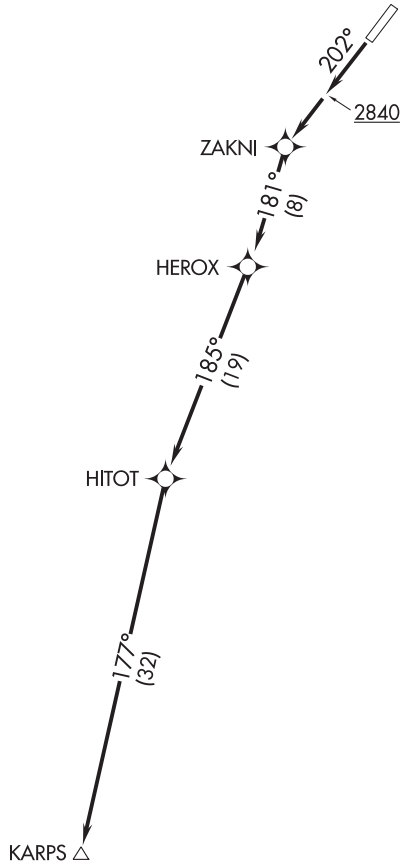
BOUNDARY COUNTY (65S)

# KARPS TWO DEPARTURE (OBSTACLE) (RNAV)

AL-9976 (FAA)

BONNERS FERRY, IDAHO

SEATTLE CENTER
123.95 290.55
CTAF
123.0




NOTE: RNAV 1.

NOTE: GPS required.

TAKEOFF MINIMUMS

Rwy 2: NA- Terrain.
Rwy 20: Standard with minimum climb of 245′ per NM to 5500.

TAKEOFF OBSTACLE NOTES

Rwy 20: Trees and pole beginning 741′ from DER, 684′ left of centerline, up to 111′ AGL/2417′ MSL.
Terrain 138′ from DER, 357′ right of centerline, 2324′ MSL.
Building 583′ from DER, 523′ right of centerline, 52′ AGL/2362′ MSL.
Crane 855′ from DER, 586′ right of centerline, 61′ AGL/2368′ MSL.
Crane 861′ from DER, 713′ right of centerline, 72′ AGL/2377′ MSL.
Tree 931′ from DER, 460′ right of centerline, 92′ AGL/2397′ MSL.
Tree 2024′ from DER, 2′ right of centerline, 107′ AGL/2399′ MSL.
Tree 2175′ from DER, 182′ right of centerline, 113′ AGL/2403′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 20: Climb heading 202° to 2840, then direct ZAKNI, then on depicted route to KARPS, cross KARPS at or above MEA for assigned route of flight.



NW-1, 05 NOV 2020 to 31 DEC 2020

KARPS TWO DEPARTURE (OBSTACLE) (RNAV)

BONNERS FERRY, IDAHO

BOUNDARY COUNTY (65S)

(KARPS2.KARPS) 03JAN19

| LOC I-BZN | APP CRS | Rwy ldg | 8994 |
|---|---|---|---|
| 109.3 | 123° | TDZE | 4443 |
| | | Apt Elev | 4473 |

# ILS or LOC RWY 12

## BOZEMAN YELLOWSTONE INTL (BZN)

RADAR required for procedure entry at BRIGR.

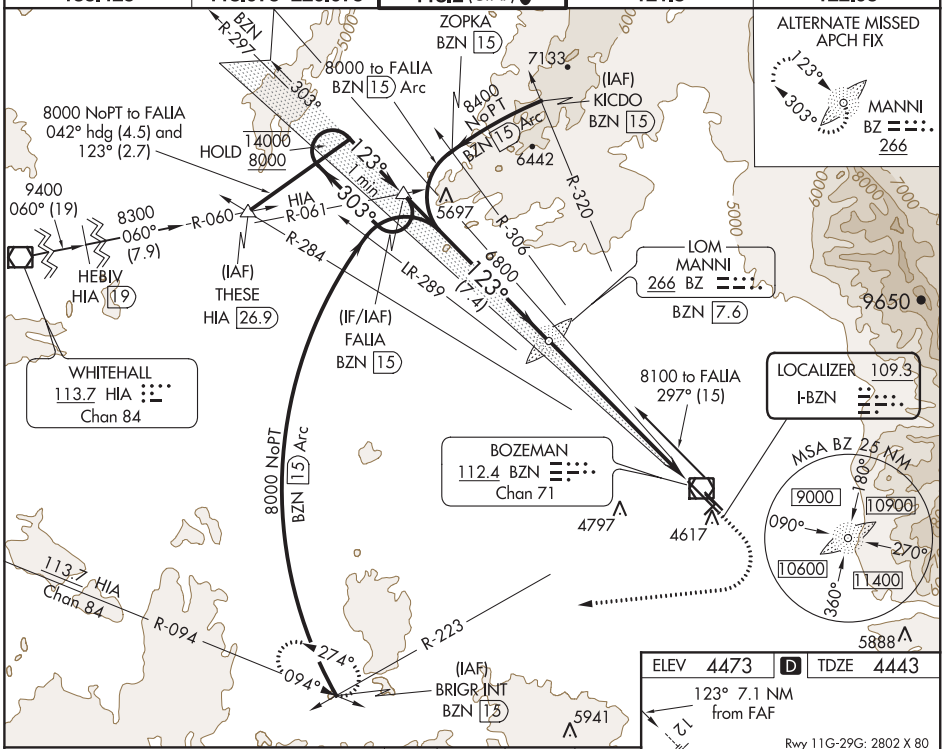
Circling NA to Rwys 3-21 and 11-29.

-31°C

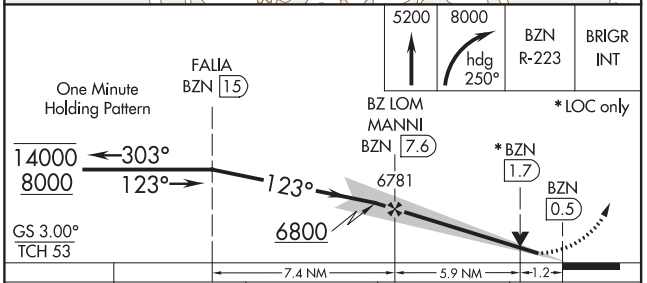
MALSR

MISSED APPROACH: Climb to 5200 then climbing right turn to 8000 on heading 250° and on BZN VOR/DME R-223 to BRIGR INT/BZN 15 DME and hold.

| ATIS | BIG SKY APP CON★ | BOZEMAN TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 135.425 | 118.975 226.675 | 118.2 (CTAF) L | 121.8 | 122.95 |

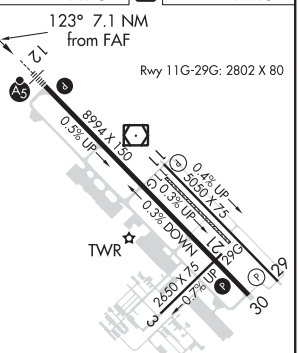



| 5200 | 8000 hdg 250° | BZN R-223 | BRIGR INT |
|---|---|---|---|




* LOC only

| ELEV 4473 | D | TDZE 4443 |
|---|---|---|




REIL Rwy 30 L
HIRL Rwy 12-30 L
MIRL Rwy 11-29 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 12 | 4643-½ 200 (200-½) | | | |
| S-LOC 12 | 4860-½ 417 (400-½) | | 4860-¾ 417 (400-¾) | |
| C CIRCLING | 4940-1 467 (500-1) | | 5160-2 687 (700-2) | 5360-3 887 (900-3) |

| FAF to MAP 7.1 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 7:06 | 4:44 | 3:33 | 2:50 | 2:22 |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

BOZEMAN, MONTANA | AL-59 (FAA) | 20310

# RNAV (RNP) RWY 30
## BOZEMAN YELLOWSTONE INTL (BZN)

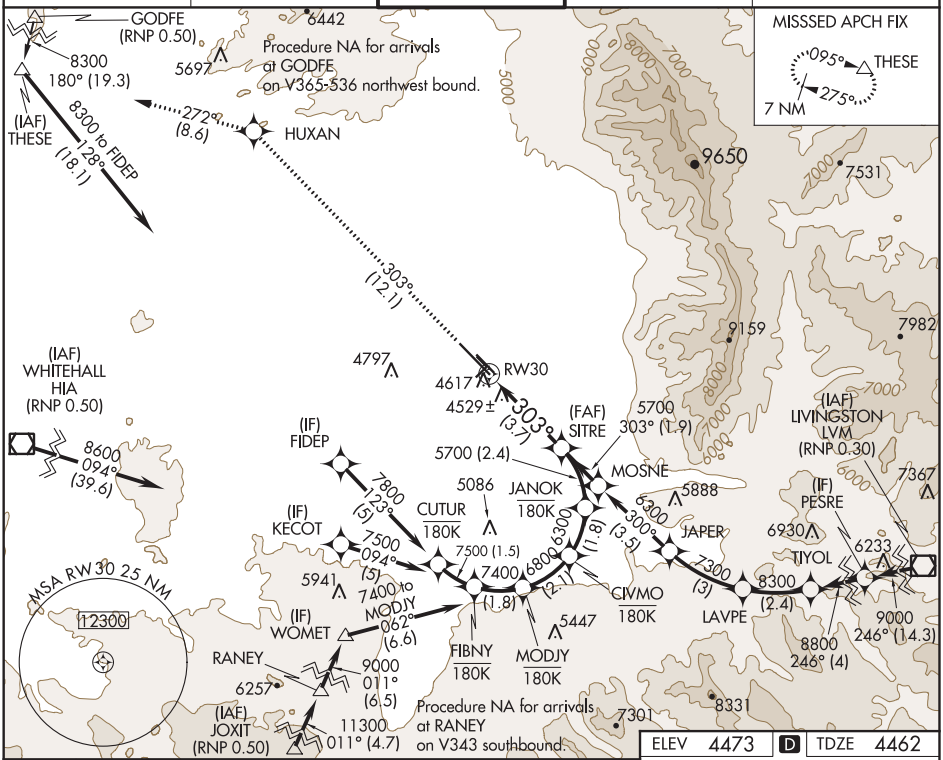
| APP CRS | Rwy ldg | 8994 |
|---|---|---|
| 303° | TDZE | 4462 |
| | Apt Elev | 4473 |

-31°C

For uncompensated Baro-VNAV systems, procedure NA below -24°C (-11°F) or above 51°C (124°F). When VGSI inoperative, procedure NA at night. RF Required. GPS required. *Missed approach requires minimum climb of 350 feet per NM to 6000.

MISSED APPROACH: Climb to 8300 on track 303° to HUXAN and on track 272° to THESE and hold, continue climb-in-hold to 8300.

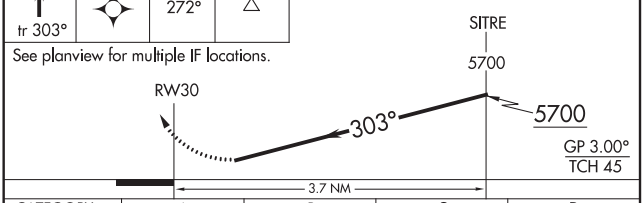
| ATIS | BIG SKY APP CON* | BOZEMAN TOWER* | GND CON | UNICOM |
|---|---|---|---|---|
| 135.425 | 118.975 226.675 | 118.2 (CTAF) L | 121.8 | 122.95 |




ELEV 4473 | D | TDZE 4462

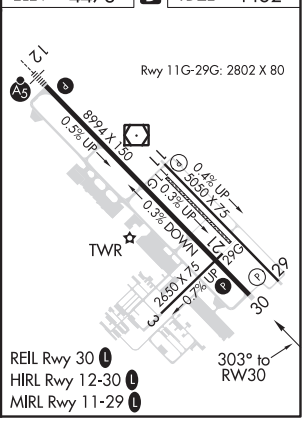
| 8300 | HUXAN | tr 272° | THESE |
|---|---|---|---|
| tr 303° | | | |

See planview for multiple IF locations.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.11* DA | 4742-1 280 (300-1) | | | |
| RNP 0.20 DA | 4824-1¼ 362 (400-1¼) | | | |
| RNP 0.30 DA | 4881-1½ 419 (500-1½) | | | |

**AUTHORIZATION REQUIRED**






NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 8994 |
|---|---|---|
| 123° | TDZE | 4443 |
| | Apt Elev | 4473 |

# RNAV (RNP) Z RWY 12

## BOZEMAN YELLOWSTONE INTL (BZN)

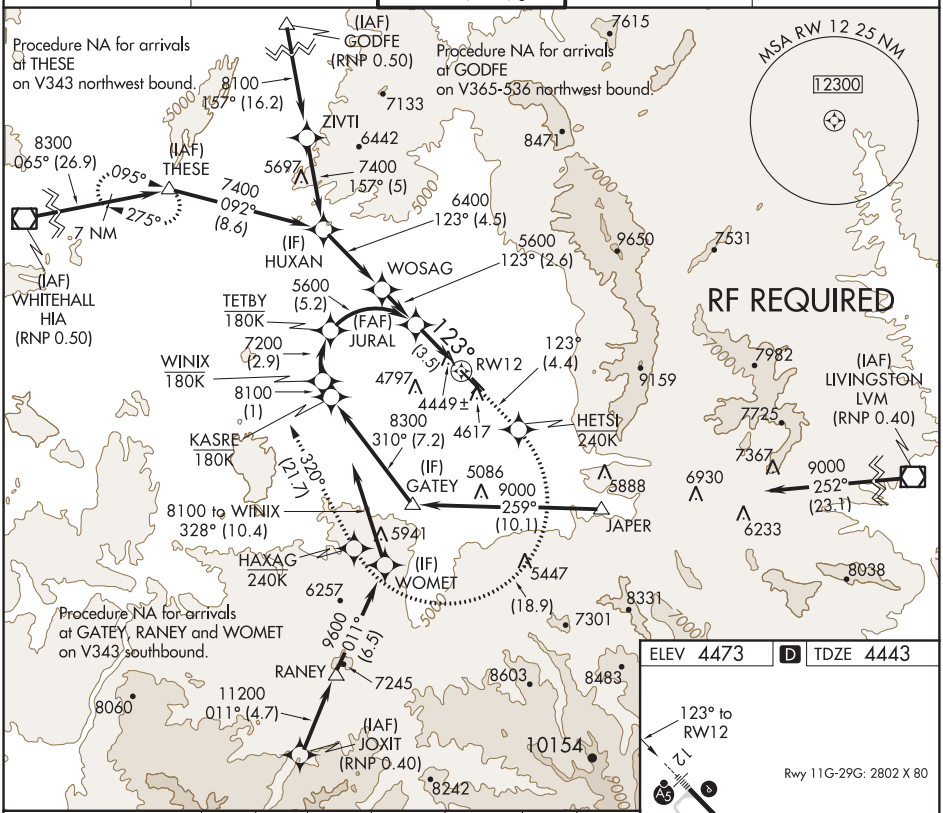
T -31°C

GPS required. For uncompensated Baro-VNAV systems, procedure NA below -23°C (-11°F) or above 49°C (121°F). When VGSI inop, procedure NA at night. For inoperative MALSR increase RNP 0.30 visibility to 1¼ all Cats.

MALSR

MISSED APPROACH: Climb to 8300 on track 123° to HETSI, and right turn to HAXAG, and on track 320° to THESE and hold.

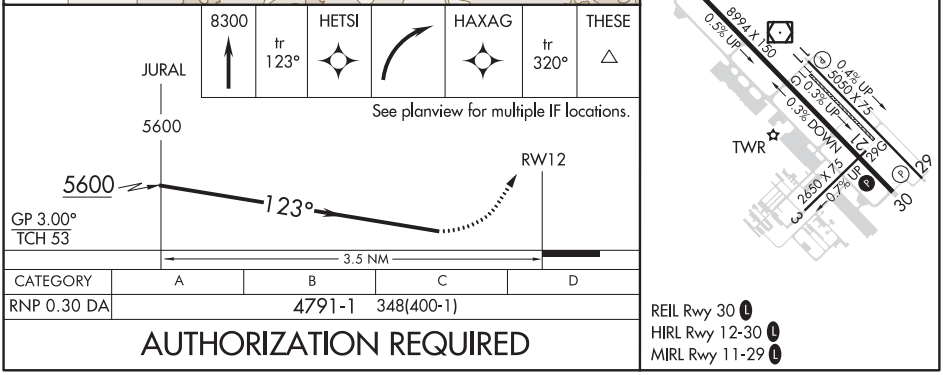
| ATIS | BIG SKY APP CON ★ | BOZEMAN TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 135.425 | 118.975 226.675 | 118.2 (CTAF) L | 121.8 | 122.95 |




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 4473 | D | TDZE 4443




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.30 DA | 4791-1 | 348(400-1) | | |

**AUTHORIZATION REQUIRED**

| WAAS CH 72816 W12A | APP CRS 123° | Rwy ldg 8994 TDZE 4443 Apt Elev 4473 |
|---|---|---|

# RNAV (GPS) Y RWY 12
## BOZEMAN YELLOWSTONE INTL (BZN)

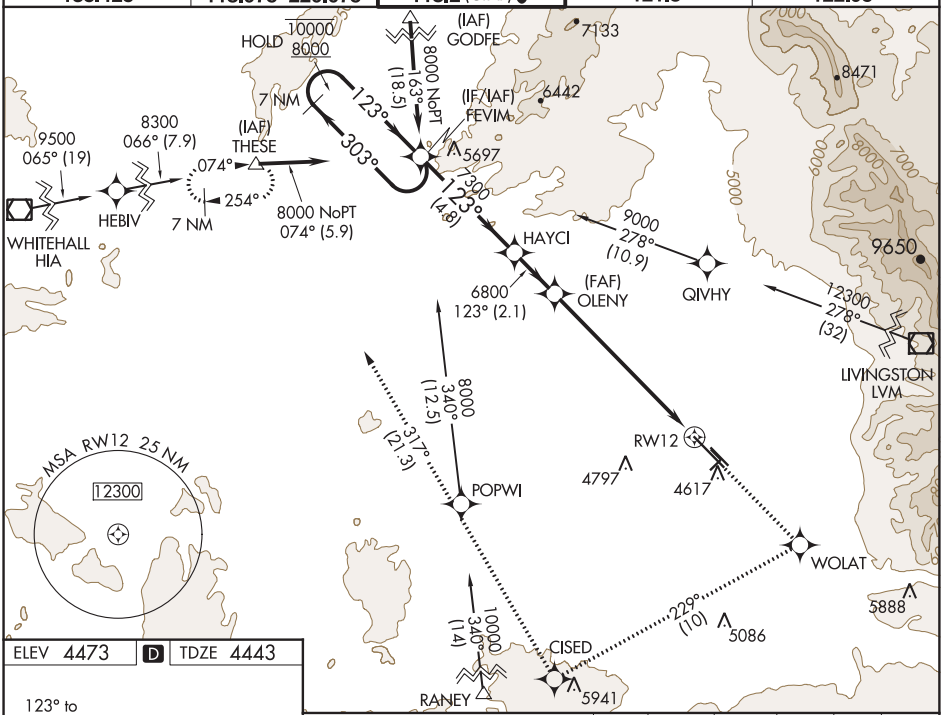
RNP APCH.

Circling NA to Rwys 3-21 and 11-29. For uncompensated Baro-VNAV systems, procedure NA below -23°C or above 49°C. For inop ALS, increase -31°C LNAV/VNAV visibility to 1⅞ SM and LNAV visibility Cats C and D to 1⅜ SM.

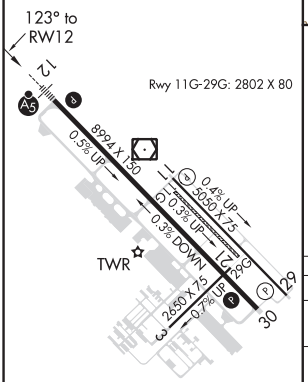
MALSR

MISSED APPROACH: Climb to 8300 direct WOLAT and right turn on track 229° to CISED and on track 317° to THESE and hold.

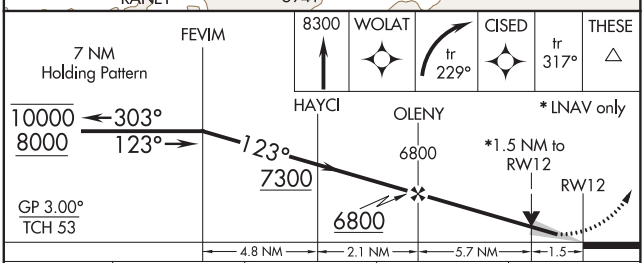
| ATIS | BIG SKY APP CON ★ | BOZEMAN TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 135.425 | 118.975 226.675 | 118.2 (CTAF) L | 121.8 | 122.95 |




ELEV 4473 | D | TDZE 4443




REIL Rwy 30 L
HIRL Rwy 12-30 L
MIRL Rwy 11-29 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4693-½ 250 (300-½) | | | |
| LNAV/VNAV DA | 5094-1¾ 651 (700-1¾) | | | |
| LNAV MDA | 4960-½ 517 (500-½) | | 4960-1 517 (500-1) | 4960-1¼ 517 (500-1¼) |
| C CIRCLING | 4960-1 487 (500-1) | | 5160-2 687 (700-2) | 5360-3 887 (900-3) |




NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 303° | TDZE | N/A |
| | Apt Elev | 4473 |

# RNAV (GPS)-A

## BOZEMAN YELLOWSTONE INTL (BZN)

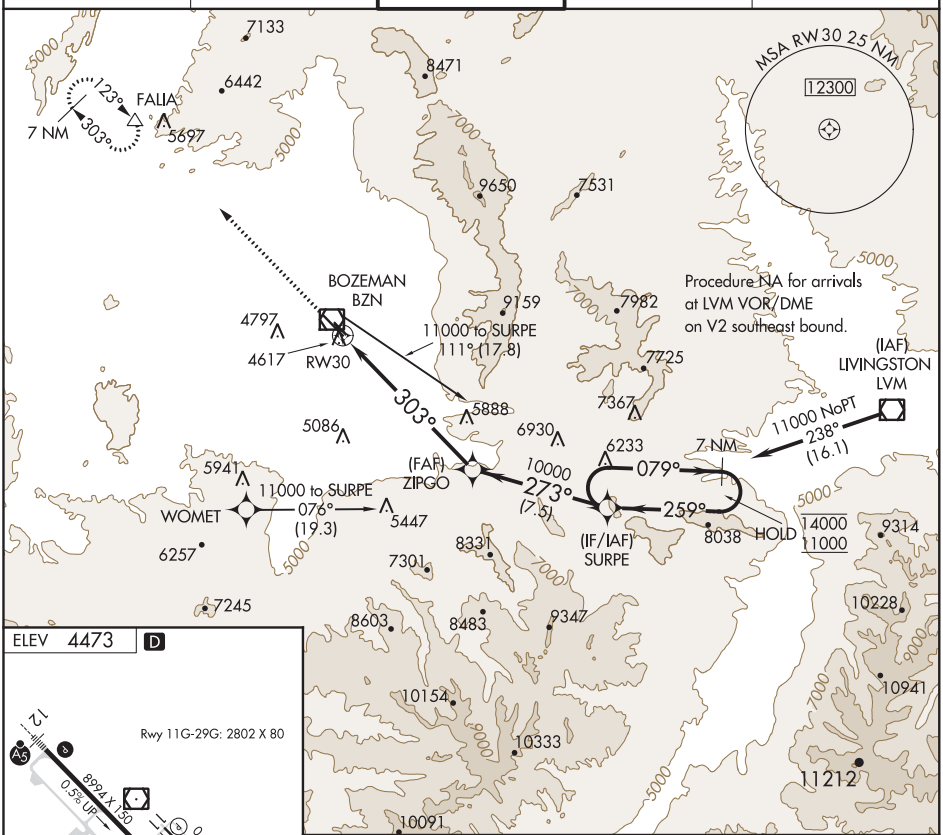
RNP APCH.

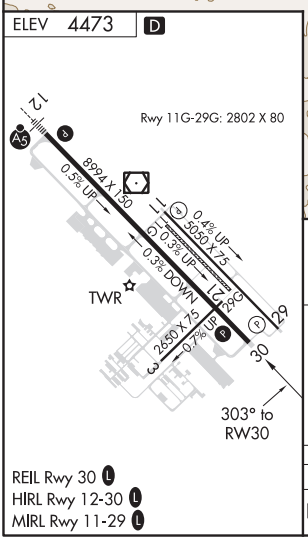
Circling NA to Rwys 3-21 and 11-29.

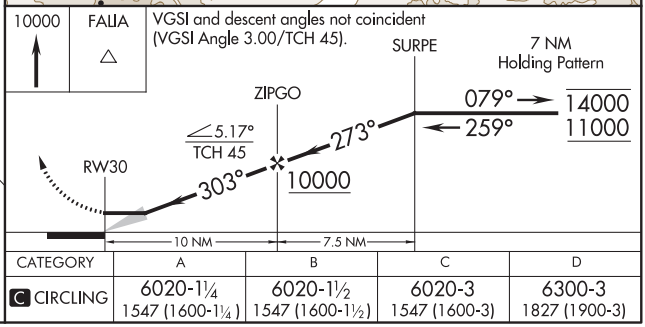
-31°C

MISSED APPROACH: Climb to 10000 direct FALIA and hold, continue climb-in-hold to 10000.

| ATIS | BIG SKY APP CON ★ | BOZEMAN TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 135.425 | 118.975 226.675 | 118.2 (CTAF) L | 121.8 | 122.95 |




REIL Rwy 30 L
HIRL Rwy 12-30 L
MIRL Rwy 11-29 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 6020-1¼ 1547 (1600-1¼) | 6020-1½ 1547 (1600-1½) | 6020-3 1547 (1600-3) | 6300-3 1827 (1900-3) |



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| VOR/DME BZN | APP CRS | Rwy ldg | 8994 |
|---|---|---|---|
| 112.4 | 104° | TDZE | 4443 |
| Chan 71 | | Apt Elev | 4473 |

# VOR RWY 12

## BOZEMAN YELLOWSTONE INTL (BZN)

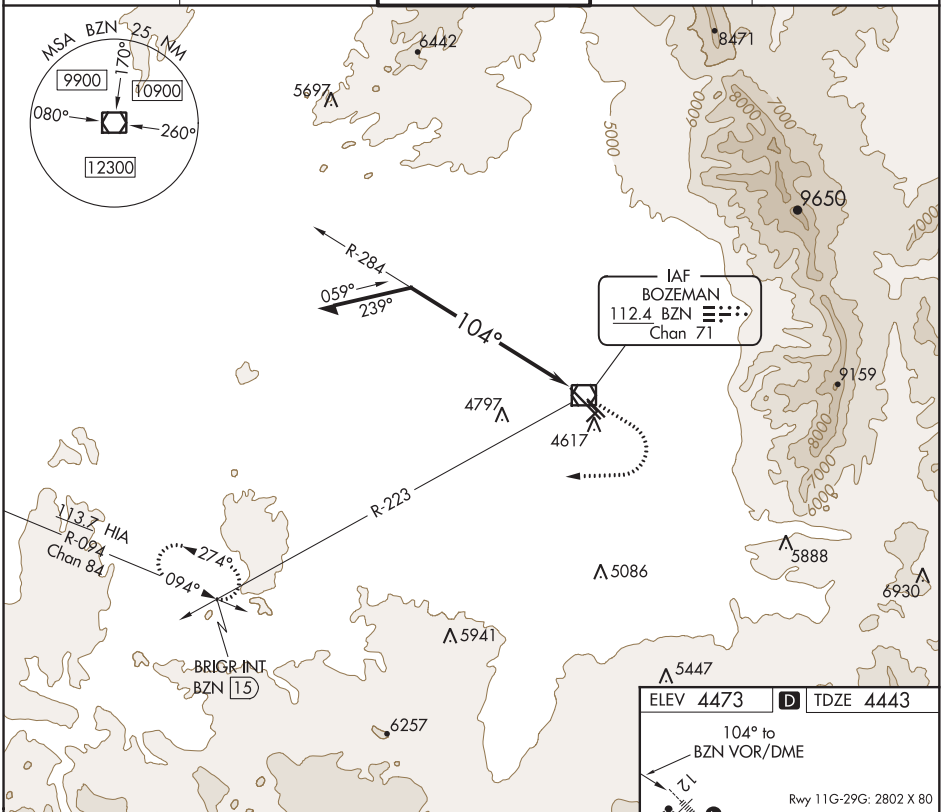
T A -31°C

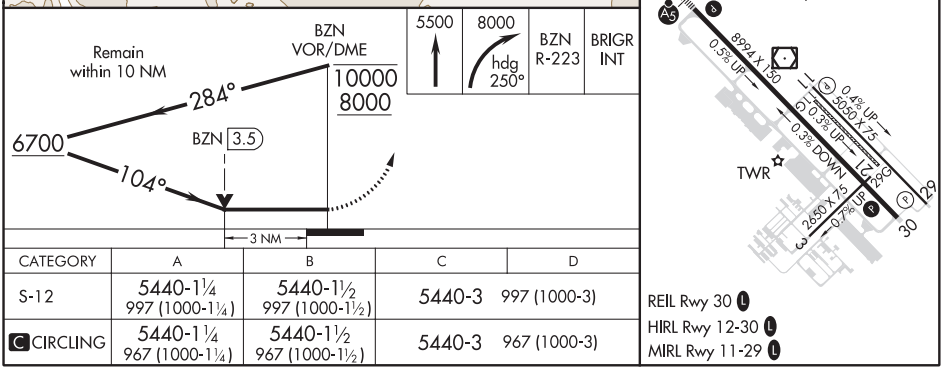
Circling NA to Rwys 3-21 and 11-29. Inop table does not apply.

MALSR A5

MISSED APPROACH: Climb to 5500 then climbing right turn to 8000 on heading 250° and BZN VOR/DME R-223 to BRIGR INT/15 DME and hold.

| ATIS | BIG SKY APP CON ★ | BOZEMAN TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 135.425 | 118.975 226.675 | 118.2 (CTAF) L | 121.8 | 122.95 |

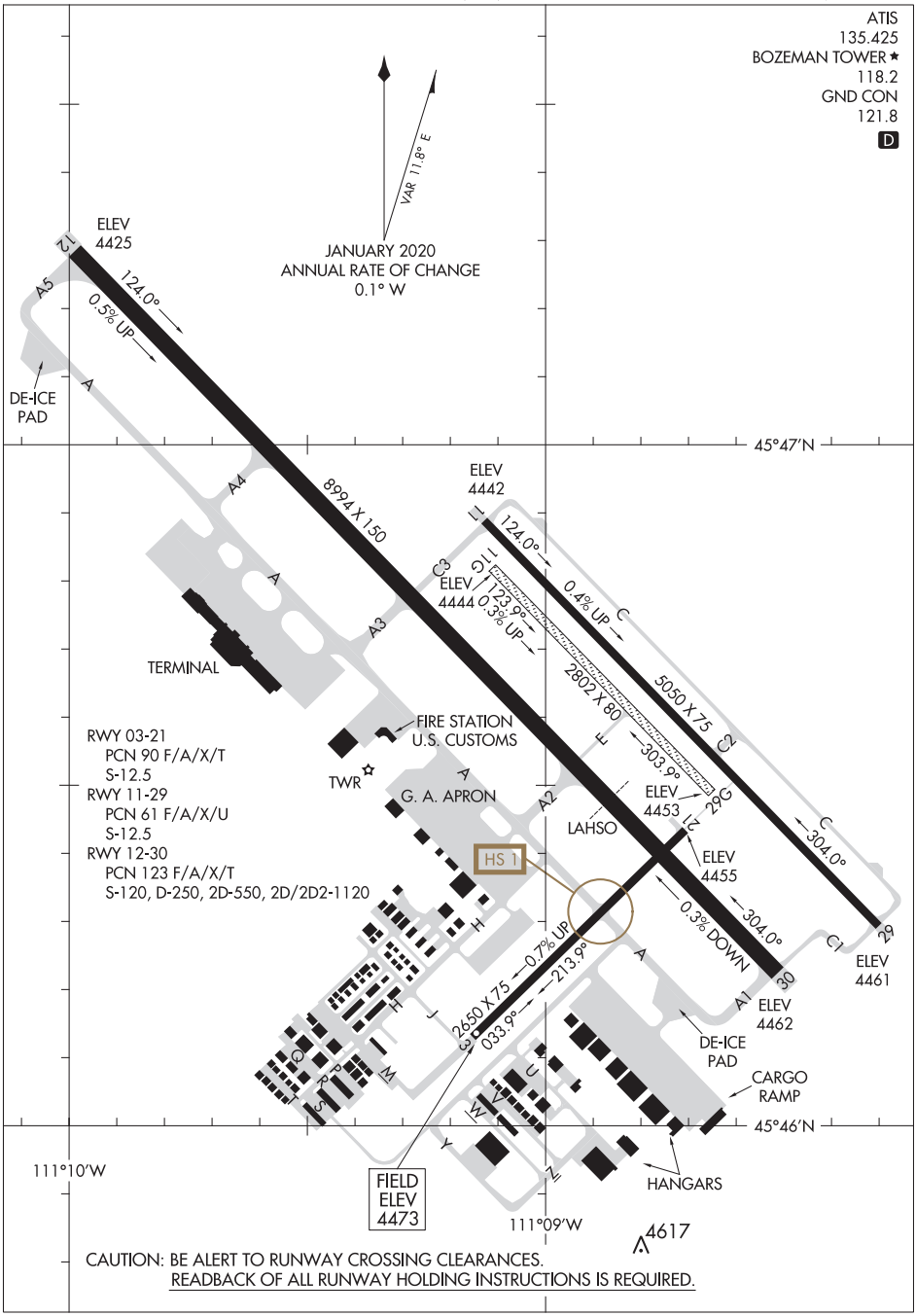



| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-12 | 5440-1¼ 997 (1000-1¼) | 5440-1½ 997 (1000-1½) | 5440-3 | 997 (1000-3) |
| C CIRCLING | 5440-1¼ 967 (1000-1¼) | 5440-1½ 967 (1000-1½) | 5440-3 | 967 (1000-3) |



NW-1, 05 NOV 2020 to 31 DEC 2020




CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

NW-1, 05 NOV 2020 to 31 DEC 2020

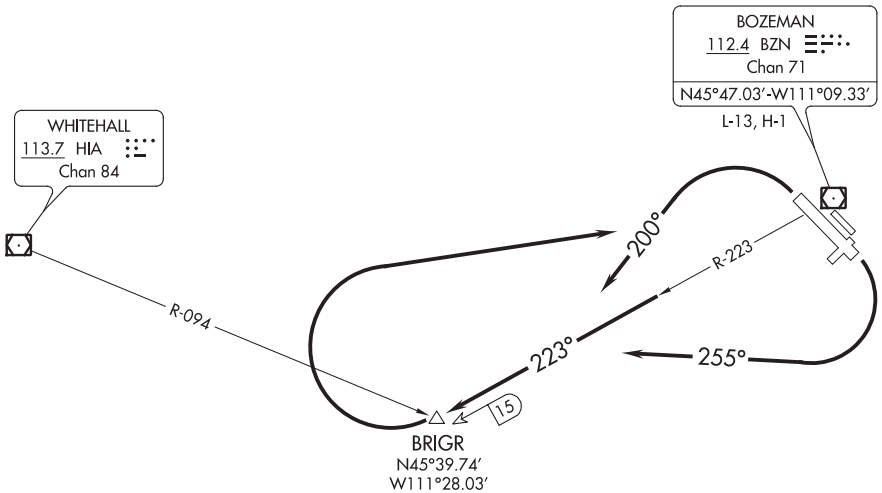
NW-1, 05 NOV 2020 to 31 DEC 2020

(BZN6.BZN) 18144

# BOZEMAN SIX DEPARTURE (OBSTACLE)

BOZEMAN YELLOWSTONE INTL (BZN)
AL-59 (FAA)
BOZEMAN, MONTANA

ATIS
135.425
GND CON
121.8
BOZEMAN TOWER★
118.2 (CTAF)
BIG SKY DEP CON★
118.975 226.675
GREAT FALLS RADIO
122.5




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

TAKEOFF MINIMUMS
Rwys 3, 11, 21, 29: NA - ATC.
Rwys 12, 30: Standard

TAKEOFF OBSTACLE NOTES
Rwy 30: Pole 641′ from DER, 622′ left of centerline, 35′ AGL/4452′ MSL.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 12: Climbing right turn heading 255° to intercept BZN R-223 to BRIGR, then continue climbing right turn direct BZN VOR/DME, cross BZN VOR/DME at or above MCA or MEA for route of flight.

TAKEOFF RUNWAY 30: Climbing left turn heading 200° to intercept BZN R-223 to BRIGR, then continue climbing right turn direct BZN VOR/DME, cross BZN VOR/DME at or above MCA or MEA for route of flight.

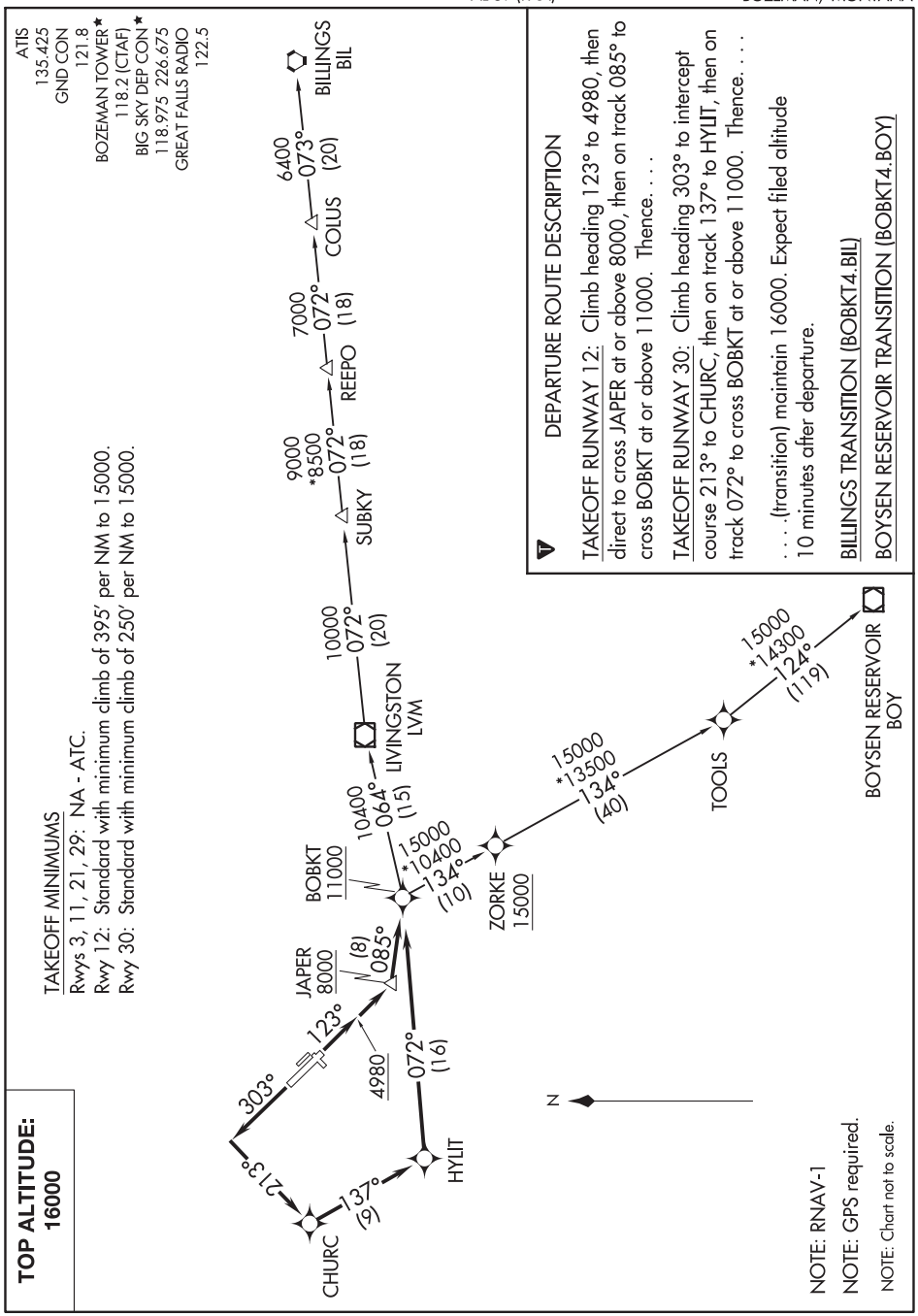
BOZEMAN SIX DEPARTURE (OBSTACLE)

BOZEMAN, MONTANA
BOZEMAN YELLOWSTONE INTL (BZN)

(BZN6.BZN) 24MAY18

# BOBKT FOUR DEPARTURE (RNAV)

AL-59 (FAA)

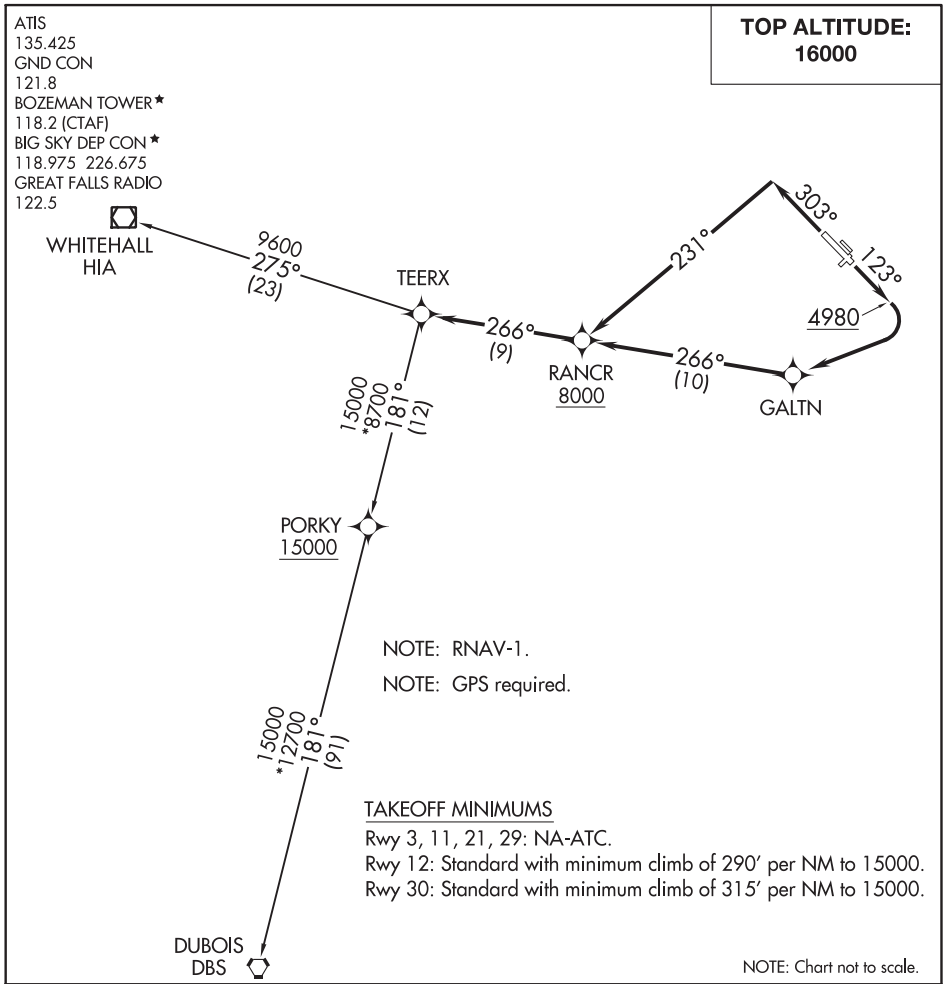


(TEERX4.TEERX) 18144

# TEERX FOUR DEPARTURE (RNAV)

AL-59 (FAA)

BOZEMAN YELLOWSTONE INTL (BZN)
BOZEMAN, MONTANA




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 12: Climb heading 123° to 4980, then climbing right turn direct GALTN, then on track 266° to cross RANCR at or above 8000, then on track 266° to TEERX, thence. . . .

TAKEOFF RUNWAY 30: Climb heading 303° to intercept course 231° to cross RANCR at or above 8000, then on track 266° to TEERX, thence. . . .

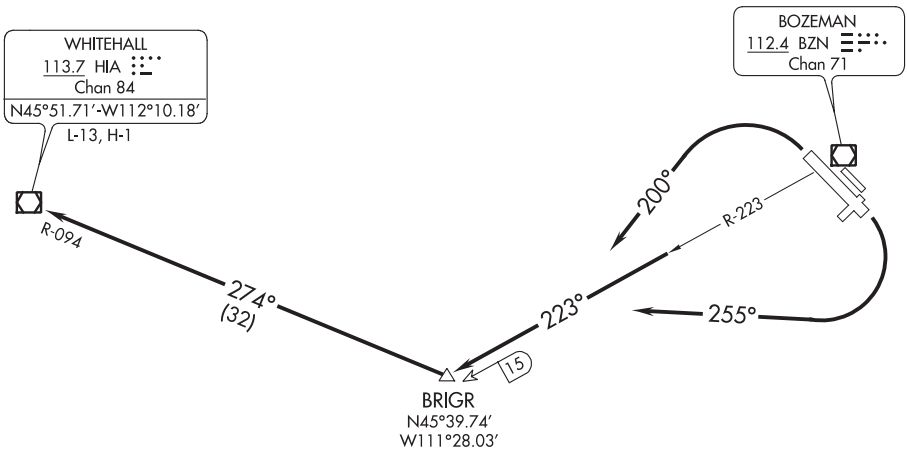
. . . .(transition). Maintain 16000, expect filed altitude 10 minutes after departure.

DUBOIS TRANSITION (TEERX4.DBS)

WHITEHALL TRANSITION (TEERX4.HIA)

ATIS
135.425
GND CON
121.8
BOZEMAN TOWER★
118.2 (CTAF)
BIG SKY DEP CON★
118.975 226.675
GREAT FALLS RADIO
122.5

**TOP ALTITUDE: 16000**




TAKEOFF MINIMUMS
Rwys 3, 11, 21, 29: NA- ATC.
Rwys 12, 30: Standard.

NOTE: Chart not to scale.

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 12: Climbing right turn heading 255° to intercept BZN R-223 to BRIGR, then continue climbing on HIA R-094 to HIA VOR/DME, cross HIA VOR/DME at or above MCA or MEA for route of flight.

TAKEOFF RUNWAY 30: Climbing left turn heading 200° to intercept BZN R-223 to BRIGR, then continue climbing on HIA R-094 to HIA VOR/DME, cross HIA VOR/DME at or above MCA or MEA for route of flight.

BREMERTON, WASHINGTON AL-5107 (FAA) 20086

| LOC I-PWT | APP CRS | Rwy ldg | 6000 |
|---|---|---|---|
| 111.1 | 197° | TDZE | 442 |
| | | Apt Elev | 444 |

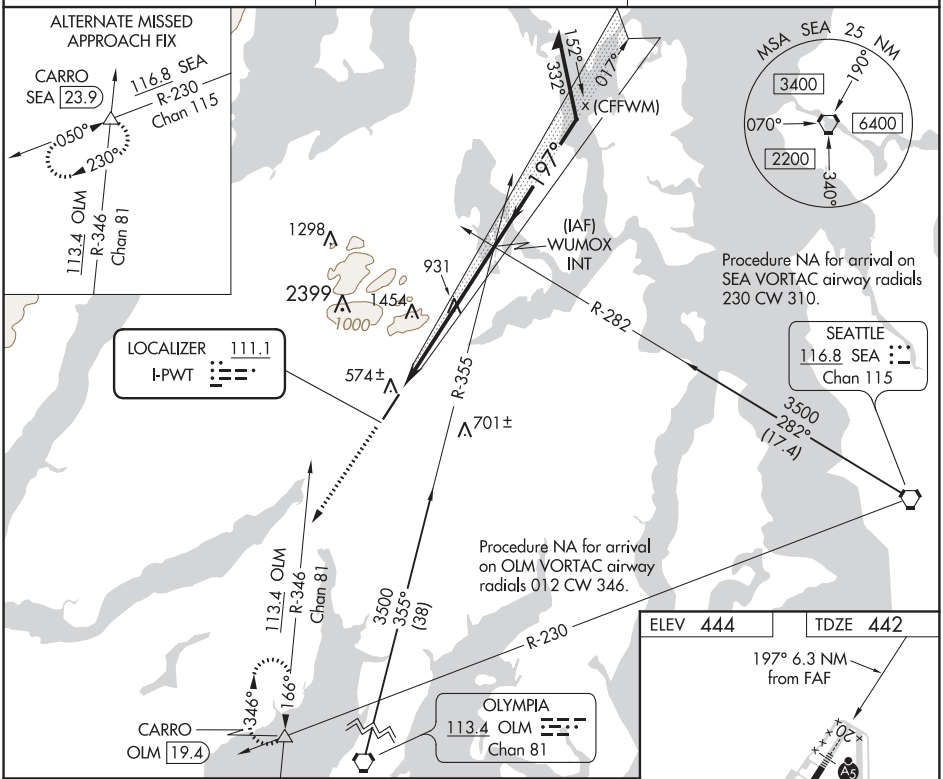
# ILS or LOC RWY 20
## BREMERTON NATIONAL (PWT)

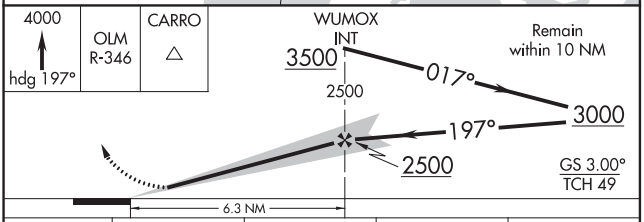
Circling NA for Cats C and D west of Rwy 2-20. When local altimeter setting not received, use Seattle-Tacoma Intl altimeter setting and increase all DA 45 feet, all MDA 60 feet and increase S-LOC 20 Cat C and D visibility ⅛ SM, Circling Cat A, C and D visibility ¼ SM. For inop ALS, increase S-LOC 20 Cat C and D visibility to 2 SM. For inop ALS, when using Seattle-Tacoma Intl altimeter setting, increase S-LOC 20 Cat C and D visibility to 2½ SM.

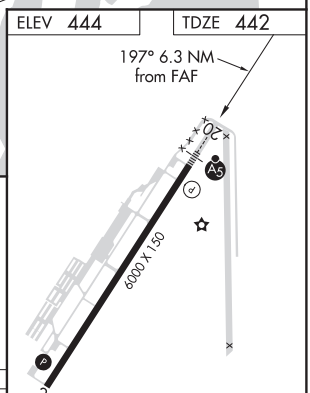
MALSR

MISSED APPROACH: Climb to 4000 on heading 197° and OLM VORTAC R-346 to CARRO INT/OLM 19.4 DME and hold, continue climb-in-hold to 4000.

| AWOS-3PT | SEATTLE APP CON | UNICOM |
|---|---|---|
| 121.2 | 127.1 254.4 269.125 | 123.05 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 20 | 642-½ 200 (200-½) | | | |
| S-LOC 20 | 1200-½ 758 (800-½) | 1200-¾ 758 (800-¾) | 1200-1¾ 758 (800-1¾) | |
| C CIRCLING | 1200-1 756 (800-1) | 1200-1¼ 756 (800-1¼) | 1200-2¼ 756 (800-2¼) | 1240-2½ 796 (800-2½) |

| FAF to MAP 6.3 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 6:18 | 4:12 | 3:09 | 2:31 | 2:06 |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

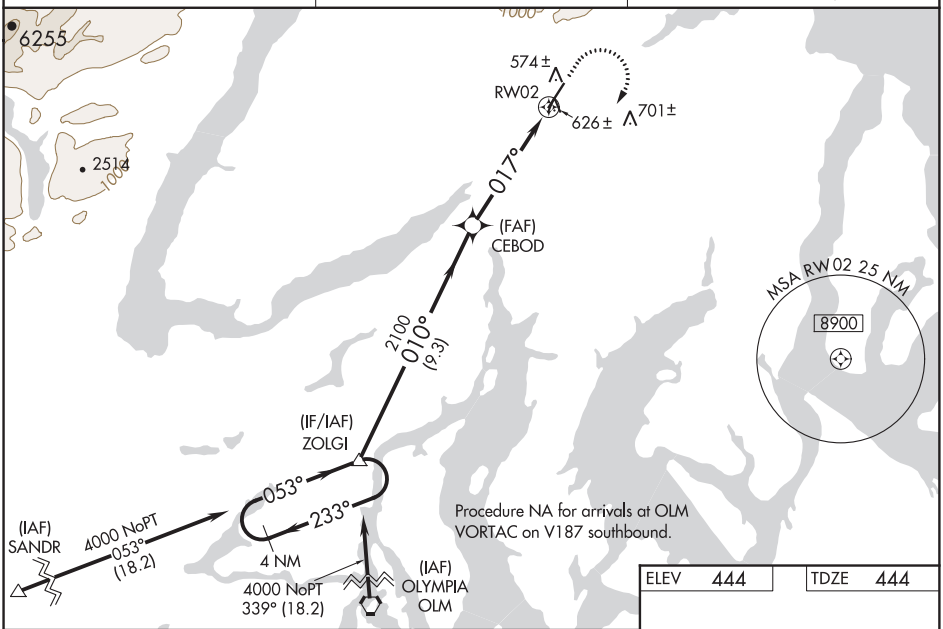
| WAAS CH 49232 W02A | APP CRS 017° | Rwy ldg 6000<br>TDZE 444<br>Apt Elev 444 |
|---|---|---|

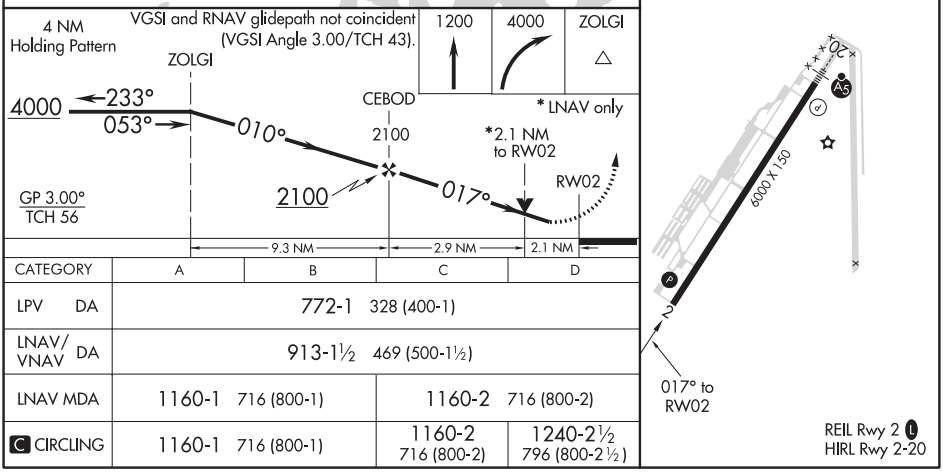
# RNAV (GPS) RWY 2
## BREMERTON NATIONAL (PWT)

Circling NA for Cats C and D west of Rwy 2-20. DME/DME RNP-0.3 NA. VDP and Baro-VNAV NA when using Seattle-Tacoma Intl altimeter setting. When local altimeter setting not received, use Seattle-Tacoma Intl altimeter setting and increase LPV DA to 817 and all visibilities ¼ SM; increase all LNAV/VNAV DA to 958 and all visibilities ¼ SM; increase all MDA 60 feet and LNAV/Circling Cats B, C and D ½ SM. Rwy 2 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 1200 then climbing right turn to 4000 direct ZOLGI and hold, continue climb-in-hold to 4000.

| AWOS-3PT | SEATTLE APP CON | UNICOM |
|---|---|---|
| 121.2 | 127.1 254.4 269.125 | 123.05 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 772-1 328 (400-1) | | | |
| LNAV/VNAV DA | 913-1½ 469 (500-1½) | | | |
| LNAV MDA | 1160-1 716 (800-1) | | 1160-2 716 (800-2) | |
| C CIRCLING | 1160-1 716 (800-1) | | 1160-2 716 (800-2) | 1240-2½ 796 (800-2½) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

BREMERTON, WASHINGTON | AL-5107 (FAA) | 20086

| WAAS CH 61106 W20A | APP CRS 197° | Rwy ldg 6000<br>TDZE 442<br>Apt Elev 444 |
|---|---|---|

# RNAV (GPS) RWY 20
## BREMERTON NATIONAL (PWT)

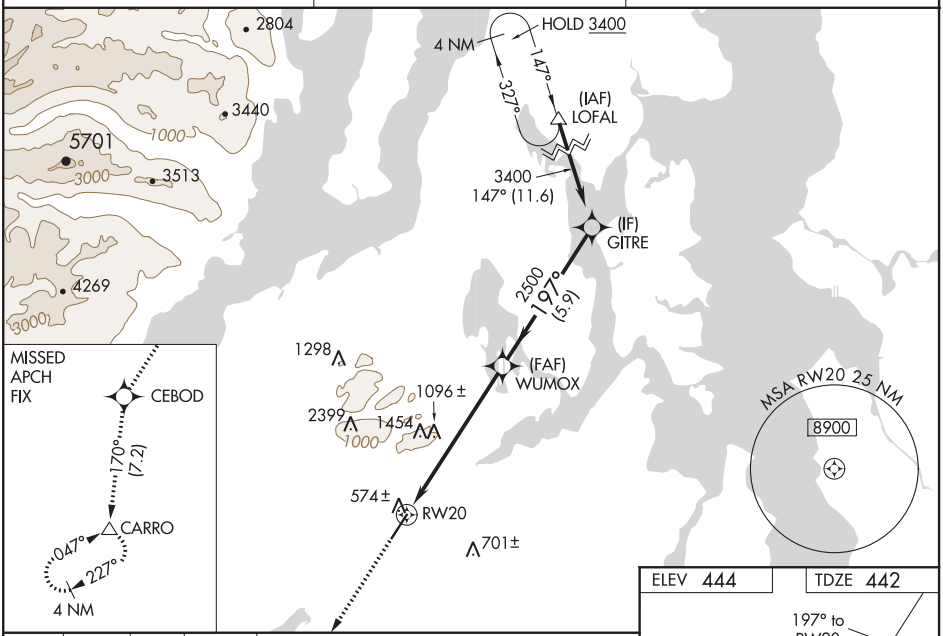
RNP APCH.

Circling NA for Cats C and D west of Rwy 2-20. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. Baro-VNAV and VDP NA when using Seattle-Tacoma Intl altimeter setting. When local altimeter setting not received, use Seattle-Tacoma Intl altimeter setting and increase all DA 45 feet and all MDA 60 feet; increase LNAV Cat A and increase Circling Cats C/D visibility ¼ SM. Inop table does not apply to LNAV/VNAV all Cats.

MALSR

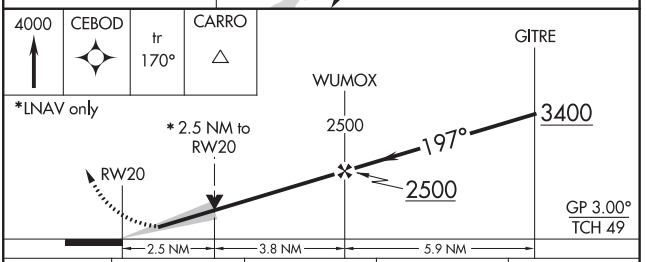
MISSED APPROACH: Climb to 4000 direct CEBOD and on track 170° to CARRO and hold, continue climb-in-hold to 4000.

| AWOS-3PT | SEATTLE APP CON | UNICOM |
|---|---|---|
| 121.2 | 127.1 254.4 269.125 | 123.05 (CTAF) L |

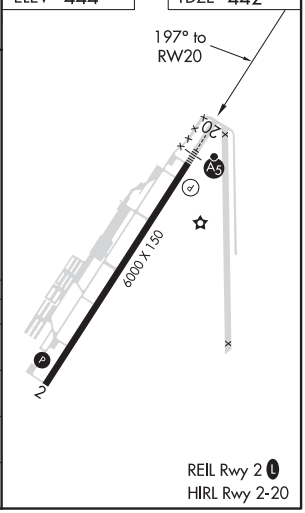



| 4000 | CEBOD | tr 170° | CARRO |
|---|---|---|---|

*LNAV only




ELEV 444 | TDZE 442




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 642-½ 200 (200-½) | | | |
| LNAV/VNAV DA | 1396-4 954 (1000-4) | | | |
| LNAV MDA | 1300-½ 858 (900-½) | 1300-¾ 858 (900-¾) | 1300-2 858 (900-2) | |
| C CIRCLING | 1300-1¼ 856 (900-1¼) | | 1300-2½ 856 (900-2½) | 1300-2¾ 856 (900-2¾) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

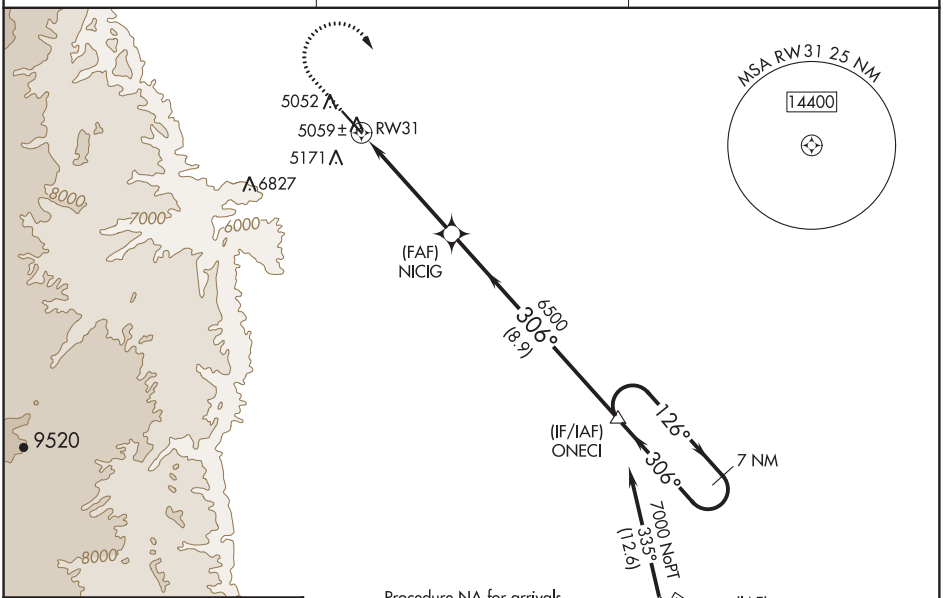
| WAAS CH 48835 W31A | APP CRS 306° | Rwy ldg 6143 TDZE 4940 Apt Elev 4970 |
|---|---|---|

# RNAV (GPS) RWY 31
## JOHNSON COUNTY (BYG)

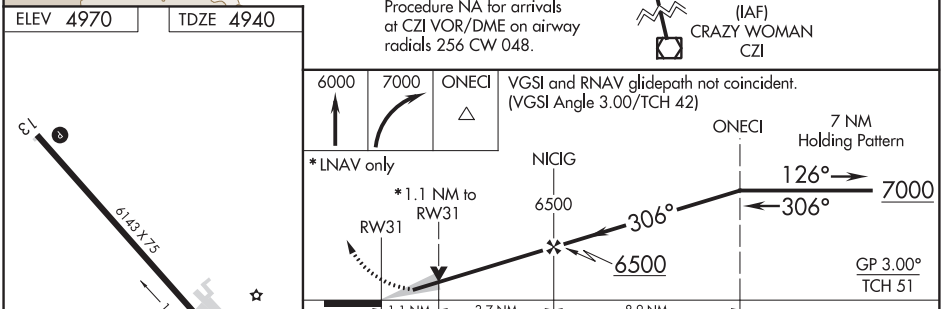
When Rwy 13 VGSI inop, Circling Rwy 13 NA at night. Baro-VNAV and VDP NA when using Sheridan altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -27°C (-16°F) or above 48°C (120°F). Circling NA southwest of Rwy 13-31. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Sheridan altimeter setting and increase all DA/MDA 200 feet; increase all LPV, LNAV/VNAV, and all LNAV and Circling Cat C/D visibilities ¾ mile.

MISSED APPROACH: Climb to 6000, then climbing right turn to 7000 direct ONECI and hold.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.425 | 127.75 351.9 | 122.8 (CTAF) L |




ELEV 4970 TDZE 4940




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 5190-¾ 250 (300-¾) | | | |
| LNAV/VNAV DA | 5275-1⅛ 335 (400-1⅛) | | | |
| LNAV MDA | 5320-1 380 (400-1) | | 5320-1⅛ 380 (400-1⅛) | |
| C CIRCLING | 5440-1 470 (500-1) | | 5460-1½ 490 (500-1½) | 5600-2 630 (700-2) |

REIL Rwy 31 L
MIRL Rwy 13-31 L



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

BUFFALO, WYOMING | AL-5705 (FAA) | 20086

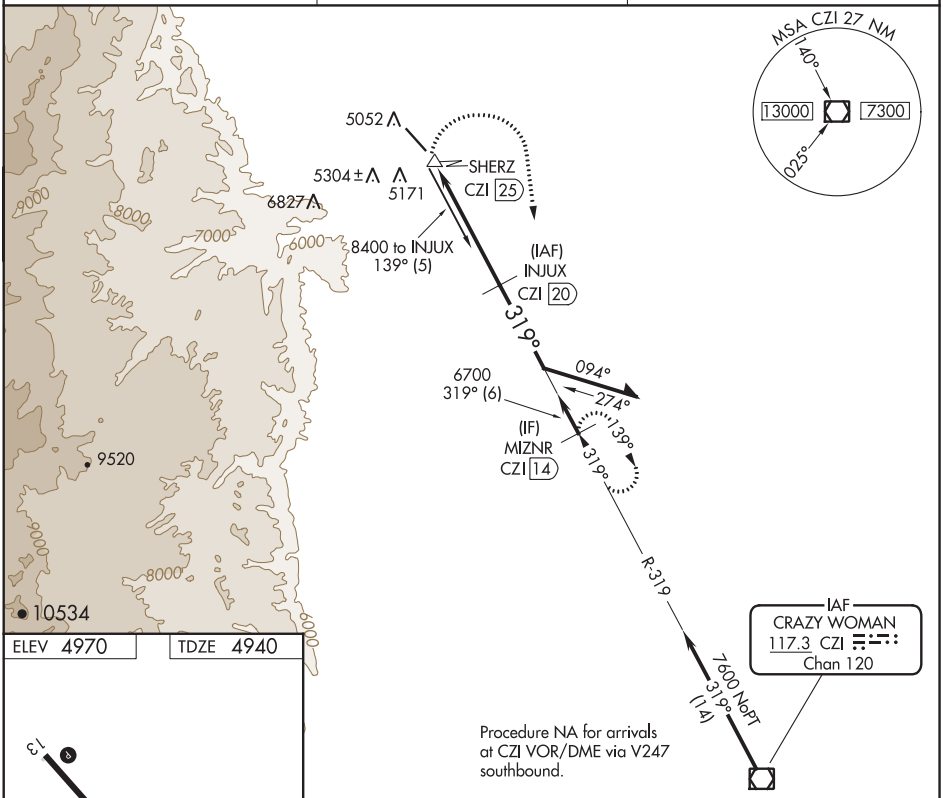
| VOR/DME CZI 117.3 Chan 120 | APP CRS 319° | Rwy ldg 6143 TDZE 4940 Apt Elev 4970 |
|---|---|---|

# VOR/DME RWY 31
## JOHNSON COUNTY (BYG)

Visibility reduction by helicopters NA. If local altimeter setting not received, use Sheridan altimeter setting and increase all MDAs 600 feet. When VGSI inoperative, procedure NA at night. Circling NA southwest of Rwy 13-31.

MISSED APPROACH: Climbing right turn to 7600 via heading 160° and CZI VOR/DME R-319 to MIZNR/14 DME and hold.

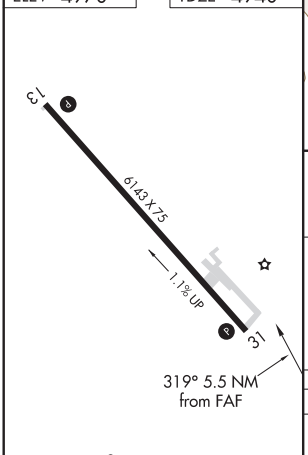
| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.425 | 127.75 351.9 | 122.8 (CTAF) L |



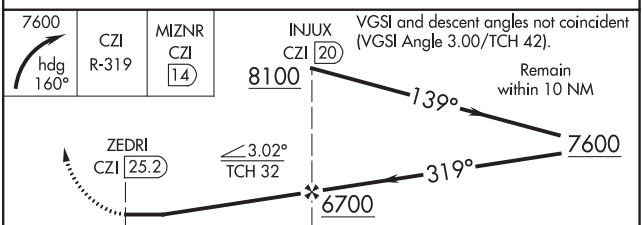

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 4970 | TDZE 4940




REIL Rwy 31 L
MIRL Rwy 13-31 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-31 | 5680-1<br>740 (800-1) | 5680-1¼<br>740 (800-1¼) | 5680-2¼<br>740 (800-2¼) | 5680-2½<br>740 (800-2½) |
| C CIRCLING | 5680-1<br>710 (800-1) | 5680-1¼<br>710 (800-1¼) | 5680-2¼<br>710 (800-2¼) | 5680-2½<br>710 (800-2½) |

BUFFALO, WYOMING
Amdt 6B 02JAN20

44°23′N-106°43′W

JOHNSON COUNTY (BYG)
VOR/DME RWY 31

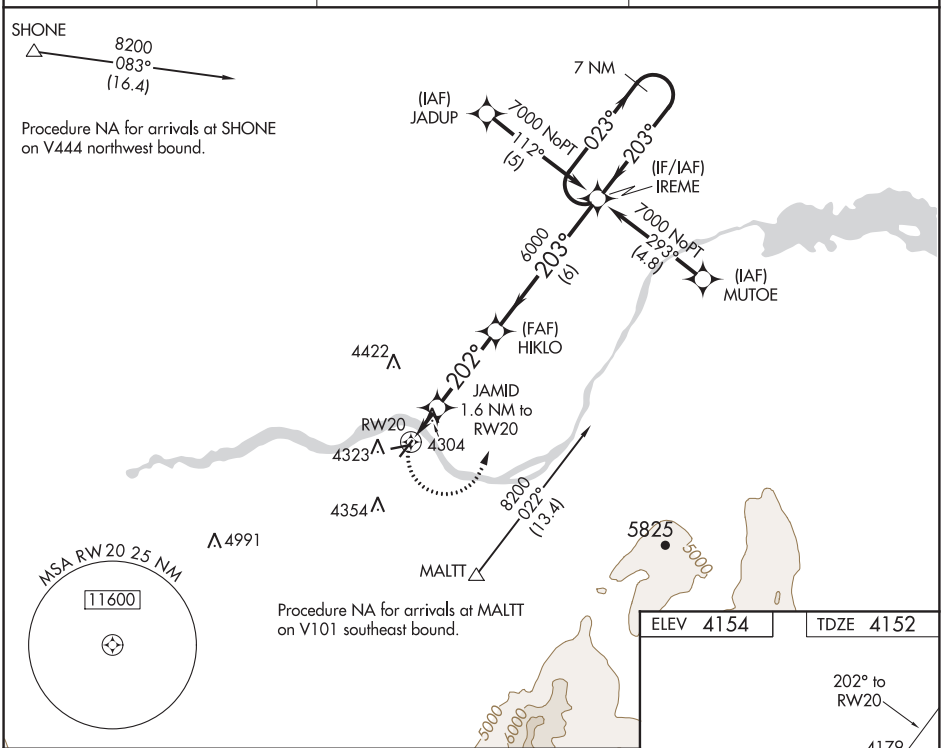
| APP CRS | Rwy ldg | 3787 |
|---|---|---|
| 202° | TDZE | 4152 |
| | Apt Elev | 4154 |

# RNAV (GPS) RWY 20
## BURLEY MUNI (BYI)

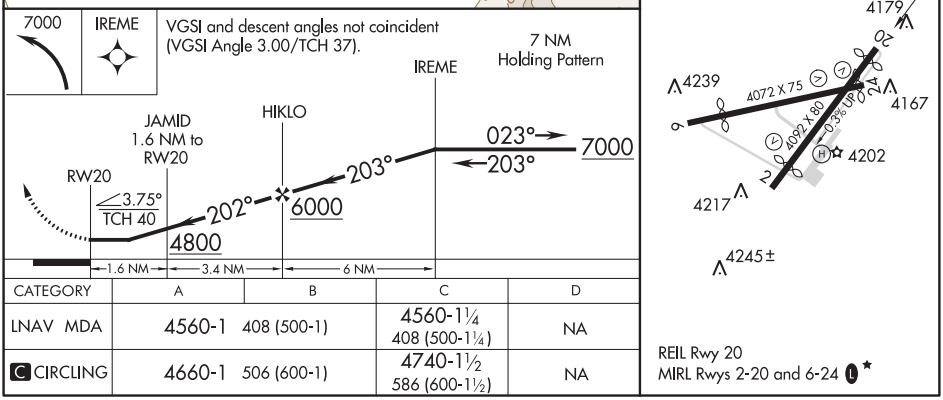
T A DME/DME RNP-0.3 NA. When local altimeter setting not received, use Twin Falls altimeter setting and increase all MDA 80 feet. Procedure NA at night. Helicopter visibility reduction below 1 SM not authorized.

MISSED APPROACH: Climbing left turn to 7000 direct IREME and hold.

| ASOS | TWIN FALLS APP CON ★ | CTAF |
|---|---|---|
| 135.575 | 126.7 353.75 | 122.9 L ★ |




| ELEV 4154 | TDZE 4152 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 4560-1 408 (500-1) | | 4560-1¼ 408 (500-1¼) | NA |
| C CIRCLING | 4660-1 506 (600-1) | | 4740-1½ 586 (600-1½) | NA |

BURLEY, IDAHO | AL-68 (FAA) | 20310

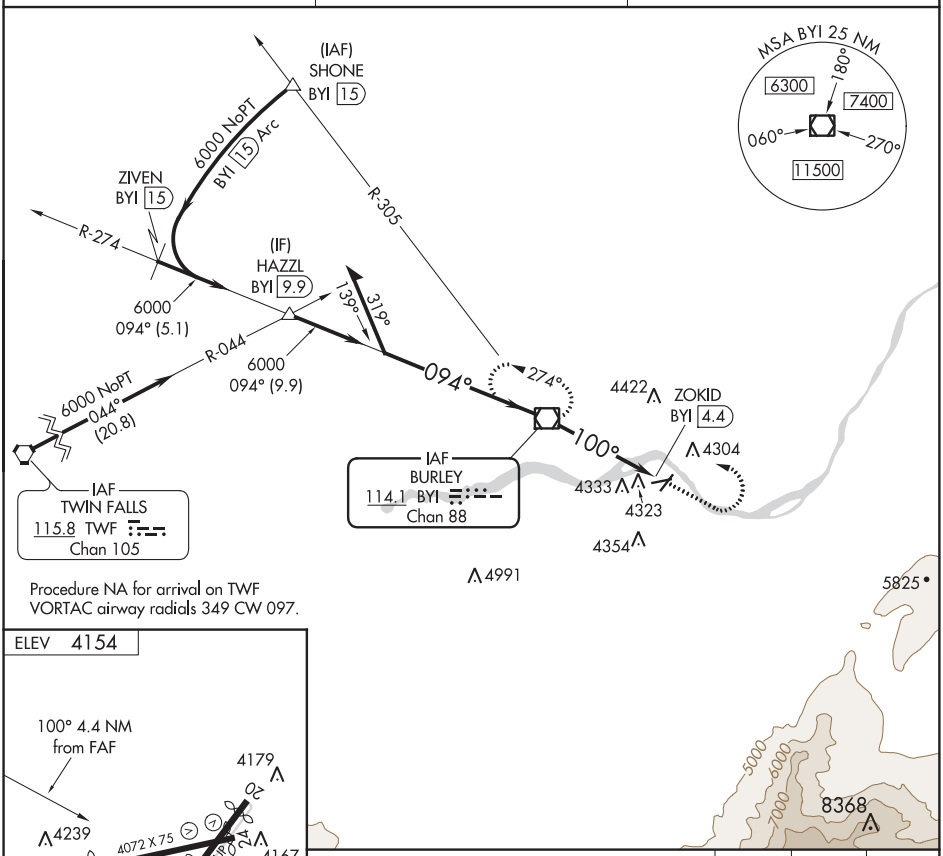
# VOR-A
## BURLEY MUNI (BYI)

| VOR/DME BYI 114.1 Chan 88 | APP CRS 100° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 4154 |
|---|---|---|

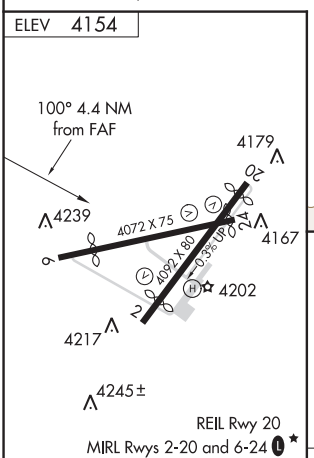
Circling Rwy 2, 20, 24 NA at night. Rwy 2, 20, 24 helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use Twin Falls altimeter setting and increase all MDAs 80 feet and visibility Cats C and D ¼ SM.

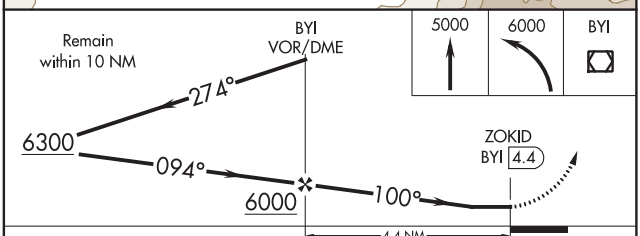
MISSED APPROACH: Climb to 5000 then climbing left turn to 6000 direct BYI VOR/DME and hold.

| ASOS | TWIN FALLS APP CON ★ | CTAF |
|---|---|---|
| 135.575 | 126.7 353.75 | 122.9 L ★ |




Procedure NA for arrival on TWF VORTAC airway radials 349 CW 097.




| 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 |
|---|---|---|---|---|
| C CIRCLING | 4640-1<br>486 (500-1) | 4660-1<br>506 (600-1) | 4740-1½<br>586 (600-1½) | 4780-2<br>626 (700-2) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

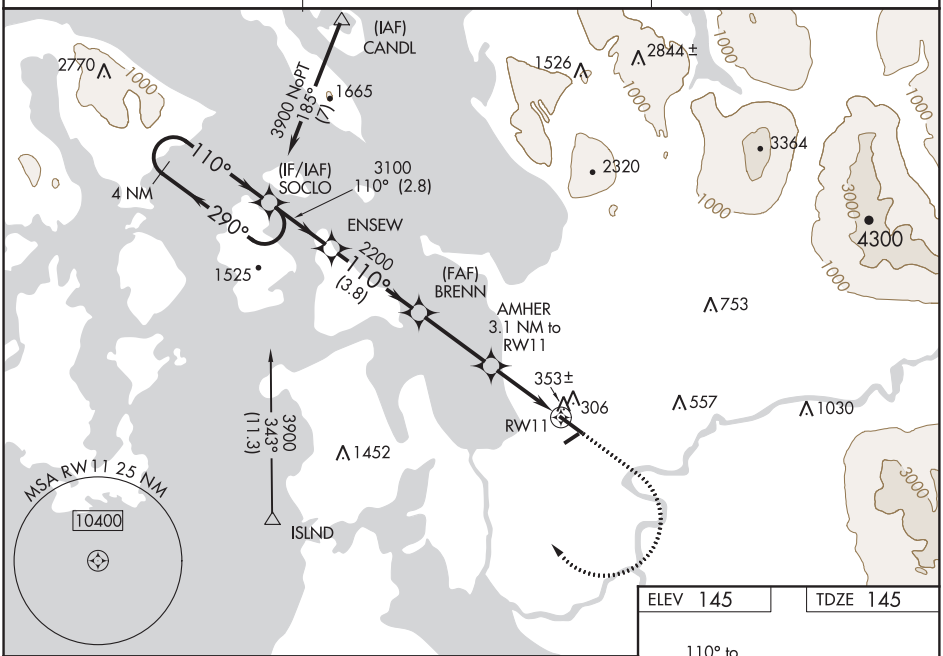
| WAAS CH 53500 W11A | APP CRS 110° | Rwy ldg 5480<br>TDZE 145<br>Apt Elev 145 |
|---|---|---|

# RNAV (GPS) RWY 11
## SKAGIT RGNL (BVS)

Circling to Rwy 04 NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). Baro-VNAV and VDP NA when using Friday Harbor altimeter setting. DME/DME RNP-0.3 NA. When local altimeter setting not received use Friday Harbor altimeter setting: increase LPV DA to 561 feet, LNAV/VNAV DA to 710 feet and all Cats visibilities ¼ SM; increase all MDA 60 feet and Cats C and D visibility ¼ SM. Helicopter visibility reduction below ¾ SM NA.

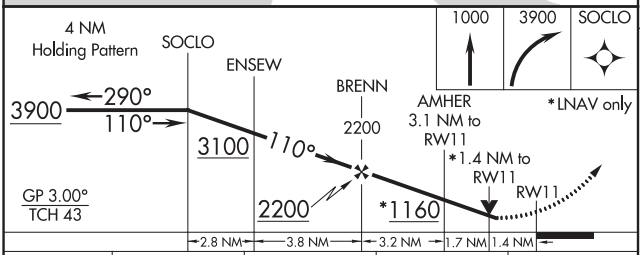
MISSED APPROACH: Climb to 1000 then climbing right turn to 3900 direct SOCLO and hold, continue climb-in-hold to 3900.

| AWOS-3 | WHIDBEY APP CON | UNICOM |
|---|---|---|
| 121.125 | 120.7 270.8 | 123.075 (CTAF) L |



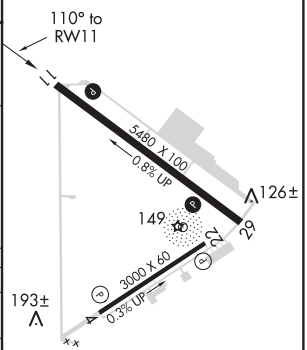

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 500-1¼ 355 (400-1¼) | | | |
| LNAV/VNAV DA | 649-1¾ 504 (600-1¾) | | | |
| LNAV MDA | 620-1 475 (500-1) | | 620-1⅜ 475 (500-1⅜) | 700-1⅝ 555 (600-1⅝) |
| CIRCLING | 680-1 535 (600-1) | 700-1 555 (600-1) | 700-1½ 555 (600-1½) | 1000-2¾ 855 (900-2¾) |

ELEV 145 TDZE 145




LIRL Rwy 4-22 L
REIL Rwys 11 and 29 L
MIRL Rwy 11-29 L

BURLINGTON/MOUNT VERNON, WASHINGTON AL-6147 (FAA) 20254

# RNAV (GPS) RWY 29
SKAGIT RGNL (BVS)

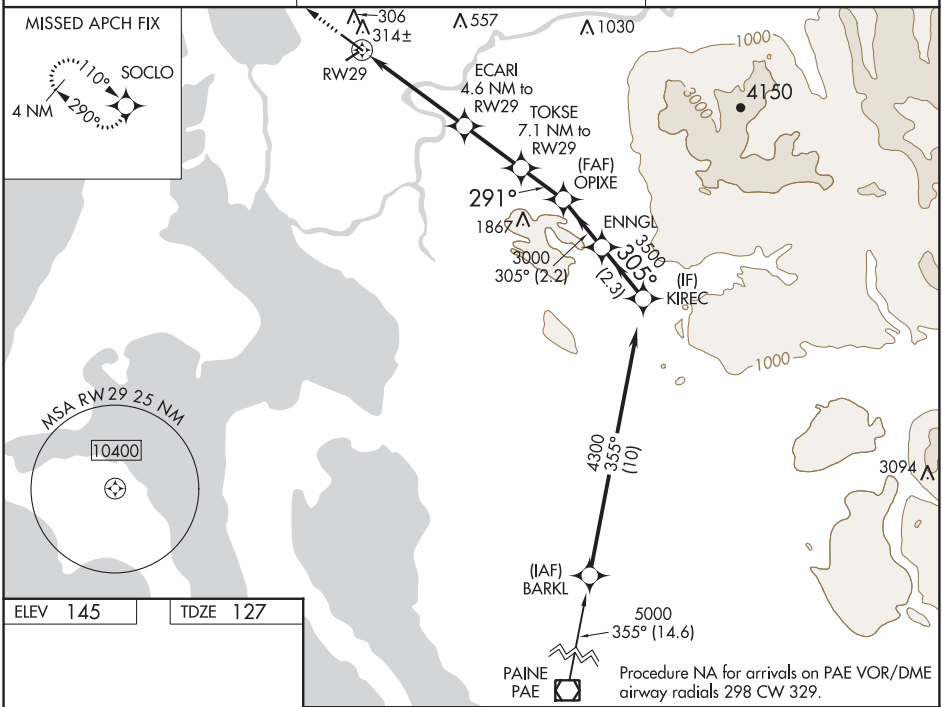
| WAAS CH 70407 W29A | APP CRS 291° | Rwy ldg 5480 TDZE 127 Apt Elev 145 |
|---|---|---|

RNP APCH.

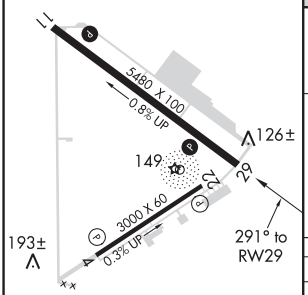
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C. Baro-VNAV and VDP NA when using Friday Harbor altimeter setting. When local altimeter setting not received use Friday Harbor altimeter setting; increase LPV DA to 438 feet, LNAV/VNAV DA to 536 feet and all Cats visibility ¼ SM; increase all MDA 60 feet.

MISSED APPROACH: Climb to 4000 direct SOCLO and hold, continue climb-in-hold to 4000.

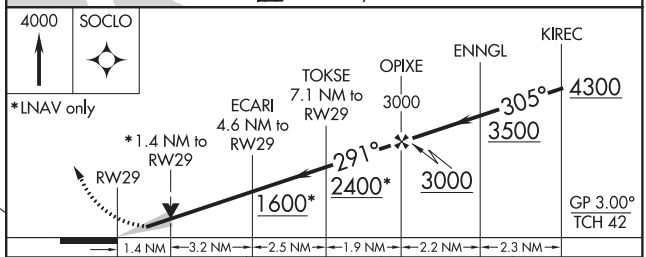
| AWOS-3 | WHIDBEY APP CON | UNICOM |
|---|---|---|
| 121.125 | 120.7 270.8 | 123.075 (CTAF) L |




| ELEV 145 | TDZE 127 |
|---|---|




LIRL Rwy 4-22 L
REIL Rwys 11 and 29 L
MIRL Rwy 11-29 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 377-⅞ 250 (300-⅞) | | | |
| LNAV/VNAV DA | 475-1¼ 348 (400-1¼) | | | |
| LNAV MDA | 580-1 453 (500-1) | | 580-1⅜ 453 (500-1⅜) | |

BURLINGTON/MOUNT VERNON, WASHINGTON SKAGIT RGNL (BVS)
Amdt 2A 18JUL19 48°28'N-122°25'W RNAV (GPS) RWY 29

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

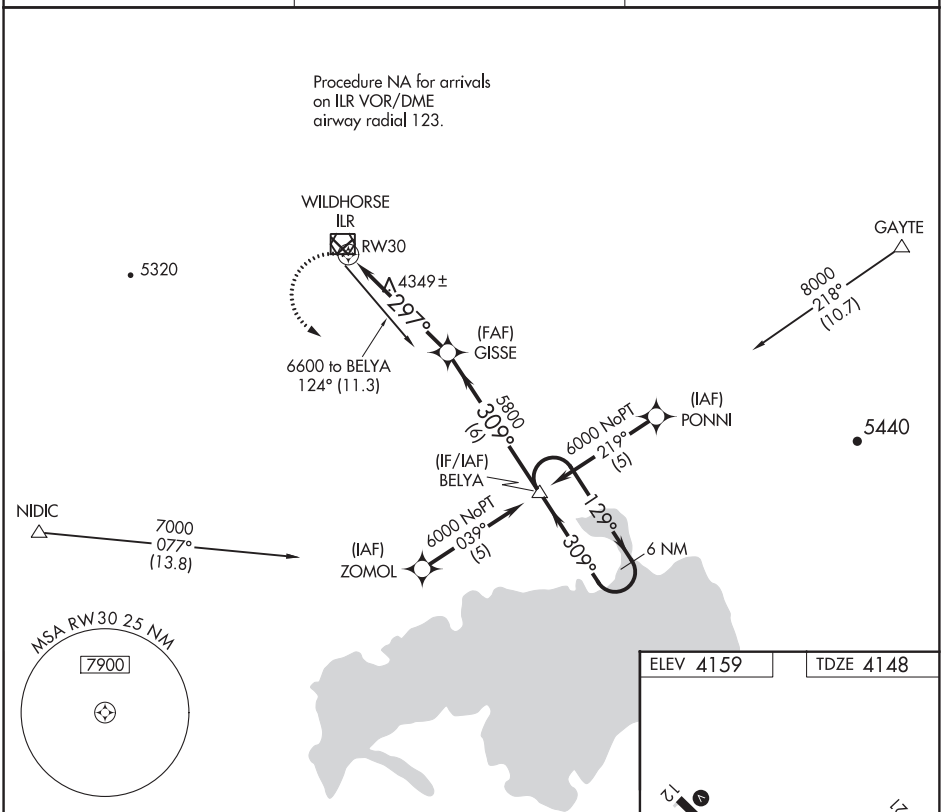
| APP CRS | Rwy ldg | 5100 |
|---|---|---|
| 297° | TDZE | 4148 |
| | Apt Elev | 4159 |

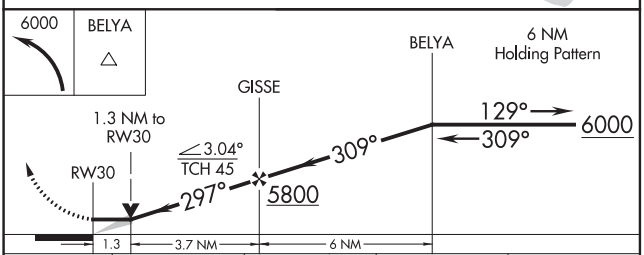
# RNAV (GPS) RWY 30
## BURNS MUNI (BNO)

DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climbing left turn to 6000 direct BELYA and hold.

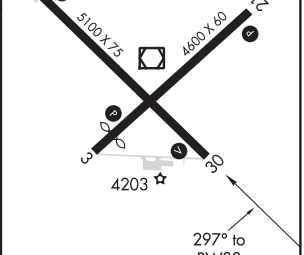
| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.575 | 128.05 306.95 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 4600-1 452 (500-1) | | 4600-1¼ 452 (500-1¼) | 4600-1½ 452 (500-1½) |
| CIRCLING | 4600-1 441 (500-1) | 4680-1 521 (600-1) | 4680-1½ 521 (600-1½) | 4720-2 561 (600-2) |

| ELEV 4159 | TDZE 4148 |
|---|---|




REIL Rwys 3, 12, 21 and 30 L
MIRL Rwys 3-21 and 12-30 L

NW-1, 05 NOV 2020 to 31 DEC 2020

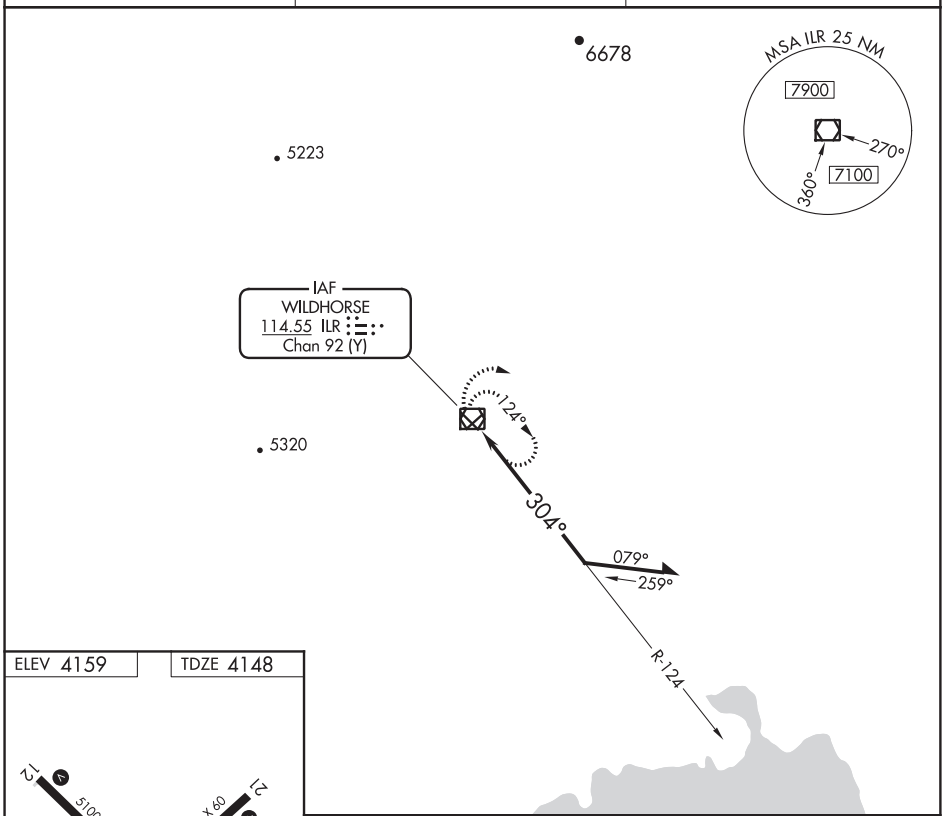
NW-1, 05 NOV 2020 to 31 DEC 2020

| VOR/DME ILR | APP CRS | Rwy ldg | 5100 |
|---|---|---|---|
| 114.55 | 304° | TDZE | 4148 |
| Chan 92 (Y) | | Apt Elev | 4159 |

# VOR RWY 30
## BURNS MUNI (BNO)

MISSED APPROACH: Climbing right turn to 8000 in ILR VOR/DME holding pattern.

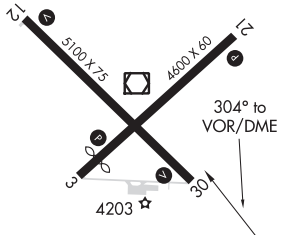
| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.575 | 128.05 306.95 | 122.8 (CTAF) L |

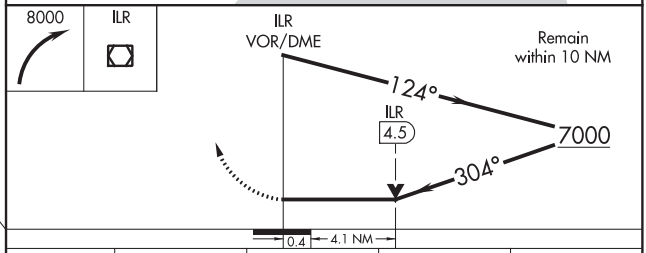





NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 4159 TDZE 4148




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-30 | 5500-1¼ 1352 (1400-1¼) | 5500-1½ 1352 (1400-1½) | 5500-3 1352 (1400-3) | |
| CIRCLING | 5500-1¼ 1341 (1400-1¼) | 5500-1½ 1341 (1400-1½) | 5500-3 1341 (1400-3) | |

REIL Rwys 3, 12, 21 and 30 L
MIRL Rwys 3-21 and 12-30 L

| LOC/DME I-BEY | APP CRS | Rwy ldg | 9000 |
|---|---|---|---|
| 110.9 | 155° | TDZE | 5523 |
| Chan 46 | | Apt Elev | 5551 |

# ILS or LOC RWY 15
## BERT MOONEY (BTM)

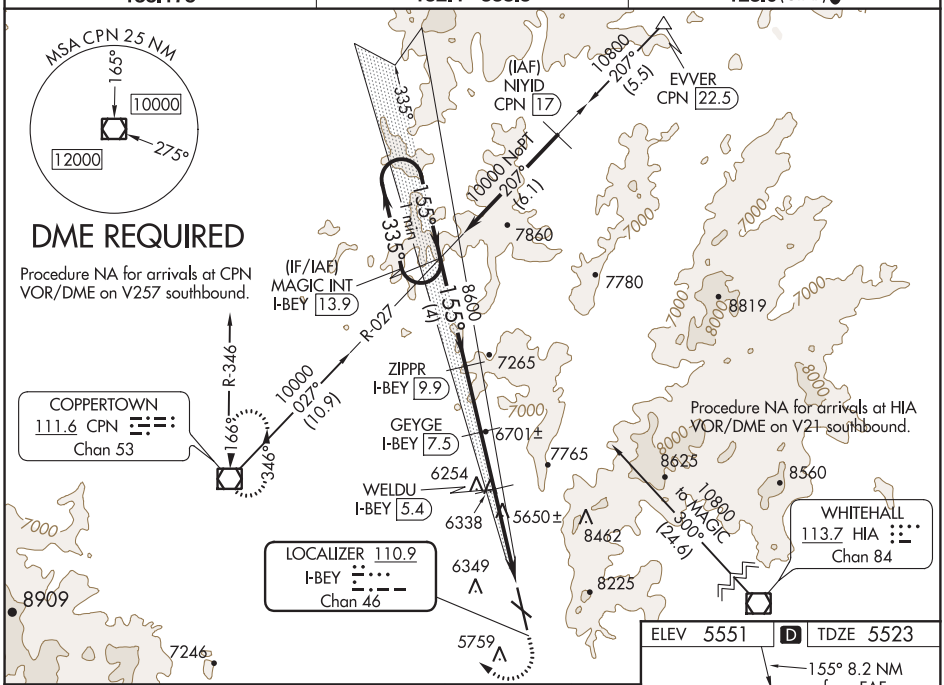
Circling NA northeast of Rwy 15-33. DME required.
S-ILS 15 for inop ALS, increase all Cats visibility to 2½ SM.
#S-ILS 15 for inop ALS, increase Cat C/D visibility to 1 SM.
#S-LOC 15 for inop ALS, increase Cat C/D visibility to 1⅜ SM.

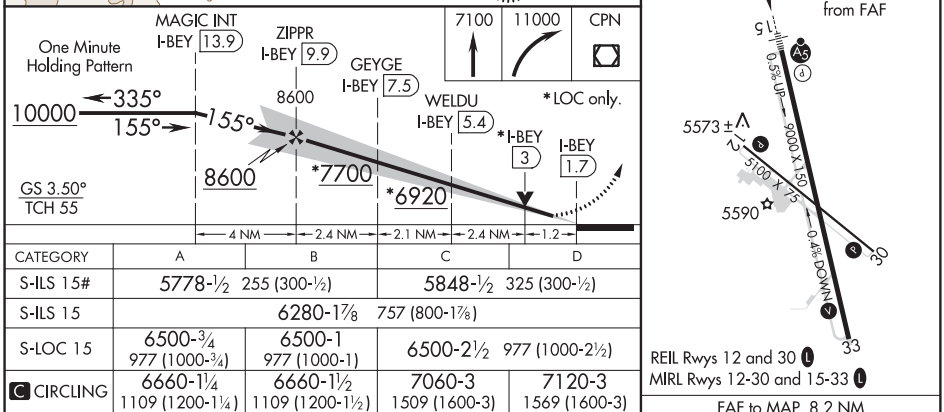
NA
-25°C

MALSR

MISSED APPROACH: (Do not exceed 190K until 7100) Climb to 7100 then climbing right turn to 11000 direct CPN VOR/DME and hold, continue climb-in-hold to 11000. #Missed approach requires minimum climb of 365 feet per NM to 8700.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.175 | 132.4 338.3 | 123.0 (CTAF) |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 15# | 5778-½ 255 (300-½) | | 5848-½ 325 (300-½) | |
| S-ILS 15 | 6280-1⅞ 757 (800-1⅞) | | | |
| S-LOC 15 | 6500-¾ 977 (1000-¾) | 6500-1 977 (1000-1) | 6500-2½ 977 (1000-2½) | |
| C CIRCLING | 6660-1¼ 1109 (1200-1¼) | 6660-1½ 1109 (1200-1½) | 7060-3 1509 (1600-3) | 7120-3 1569 (1600-3) |
| WELDU FIX MINIMUMS | | | | |
| S-LOC 15# | 6020-½ 497 (500-½) | | 6020-1 497 (500-1) | |

| FAF to MAP 8.2 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 8:12 | 5:28 | 4:06 | 3:17 | 2:44 |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

BUTTE, MONTANA | AL-588 (FAA) | 20254

| WAAS CH 56341 W15A | APP CRS 155° | Rwy ldg 9000<br>TDZE 5523<br>Apt Elev 5551 |
|---|---|---|

# RNAV (GPS) RWY 15

BERT MOONEY (BTM)

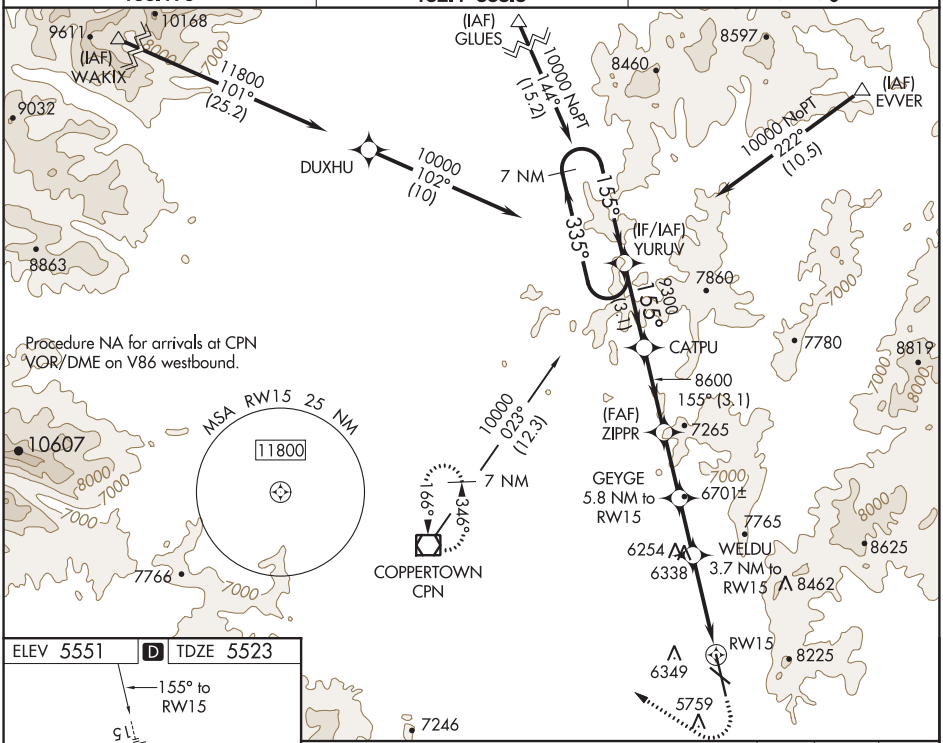
Circling NA northeast of Rwy 15-33. DME/DME RNP- 0.3 NA. For inop ALS, increase LPV all Cats visibility to 2½ SM, increase LPV# Cat C/D visibility to ⅞ SM. Inop table does not apply to LNAV Cats C/D.

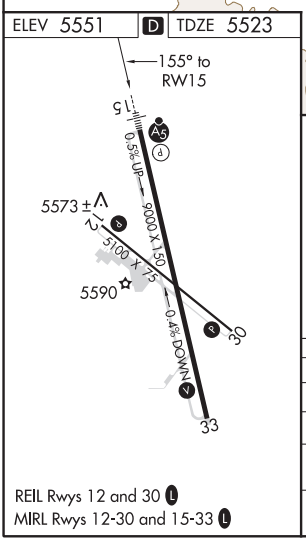
-25°C

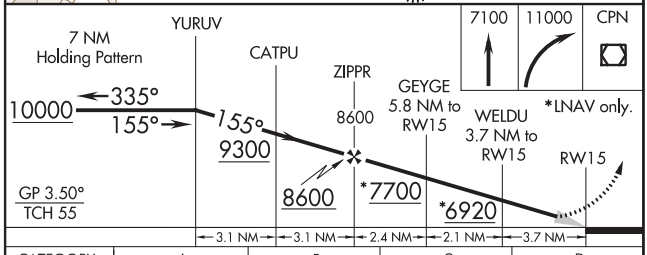
MALSR

MISSED APPROACH: (Do not exceed 190K until 7100) Climb to 7100 then climbing right turn to 11000 direct CPN VOR/DME and hold, continue climb-in-hold to 11000. #Missed approach requires minimum climb of 365 feet per NM to 8700.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.175 | 132.4 338.3 | 123.0 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 6281-1⅞ 758 (800-1⅞) | | | |
| LPV DA# | 5825-½ 302 (300-½) | | | |
| LNAV MDA | 6780-¾ 1257 (1300-¾) | 6780-1 1257 (1300-1) | 6780-3 1257 (1300-3) | |
| C CIRCLING | 6780-1¼ 1229 (1300-1¼) | | 7060-3 1509 (1600-3) | 7120-3 1569 (1600-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

BUTTE, MONTANA
Orig 07DEC17

45°57'N-112°30'W

BERT MOONEY (BTM)
RNAV (GPS) RWY 15

| VOR/DME CPN | APP CRS | Rwy ldg | N/A |
|---|---|---|---|
| 111.6 | 098° | TDZE | N/A |
| Chan 53 | | Apt Elev | 5551 |

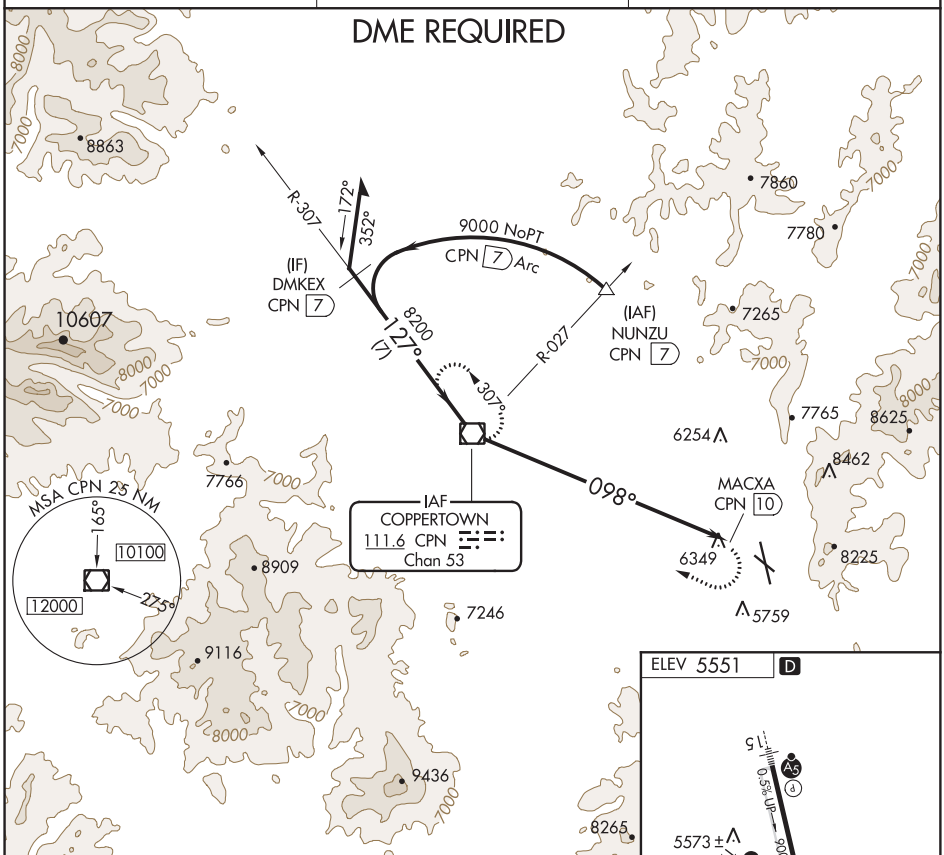
# VOR-A
## BERT MOONEY (BTM)

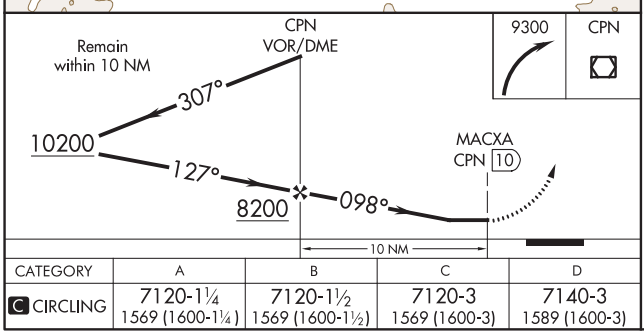
T A -25°C

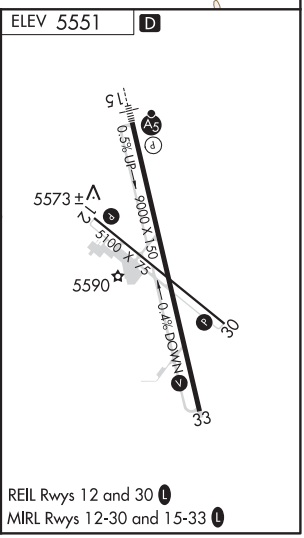
DME required.
Circling NA northeast of Rwy 15-33.

MISSED APPROACH: Climbing right turn to 9300 direct CPN VOR/DME and hold.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.175 | 132.4 338.3 | 123.0 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 7120-1¼<br>1569 (1600-1¼) | 7120-1½<br>1569 (1600-1½) | 7120-3<br>1569 (1600-3) | 7140-3<br>1589 (1600-3) |

REIL Rwys 12 and 30 L
MIRL Rwys 12-30 and 15-33 L

NW-1, 05 NOV 2020 to 31 DEC 2020

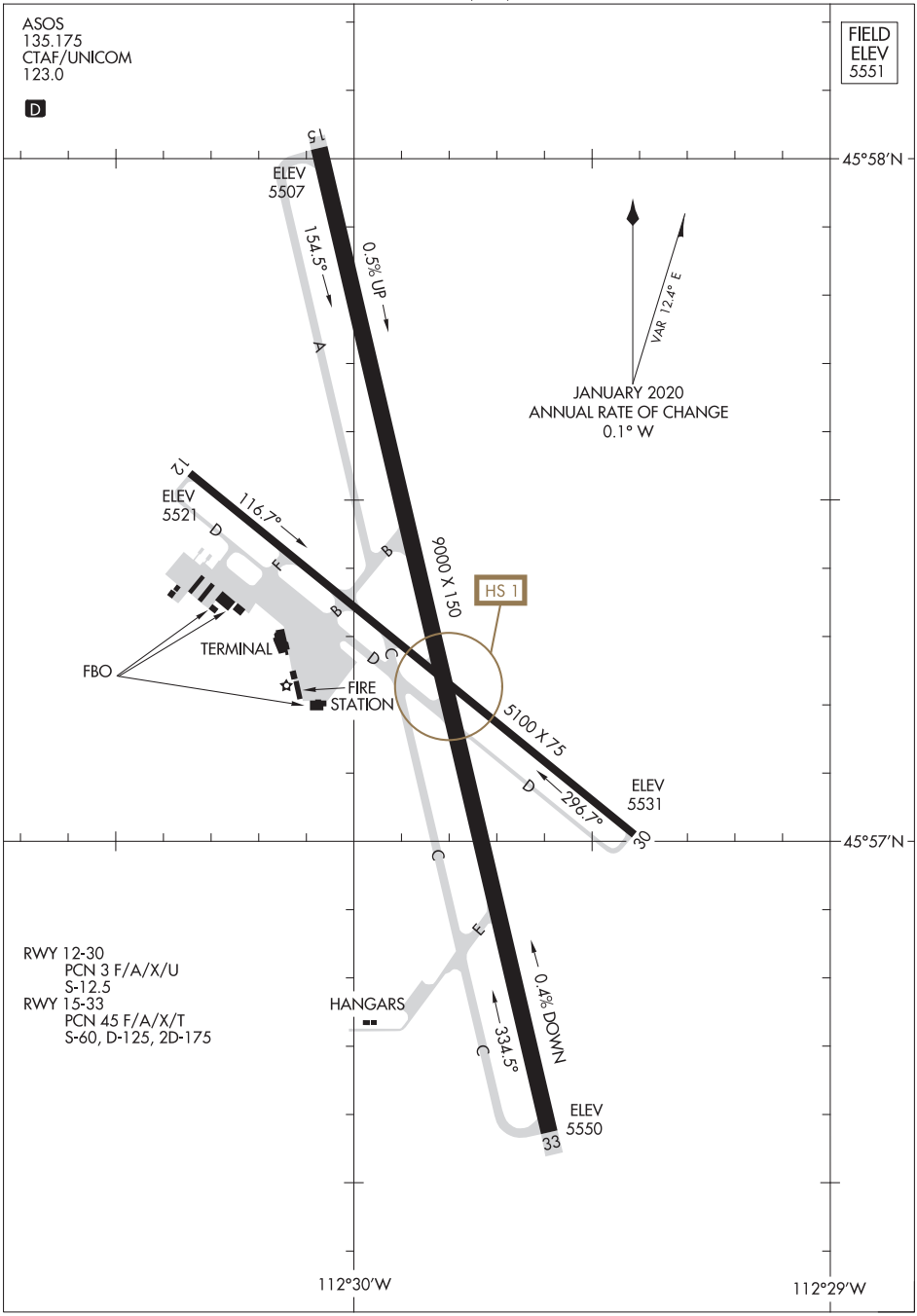
NW-1, 05 NOV 2020 to 31 DEC 2020

20086

# AIRPORT DIAGRAM

BERT MOONEY (BTM)
BUTTE, MONTANA

AL-588 (FAA)




RWY 12-30
PCN 3 F/A/X/U
S-12.5
RWY 15-33
PCN 45 F/A/X/T
S-60, D-125, 2D-175

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM
20086
BUTTE, MONTANA
BERT MOONEY (BTM)

| WAAS CH 97707 W12A | APP CRS 119° | Rwy ldg 5500<br>TDZE 2431<br>Apt Elev 2432 |
|---|---|---|

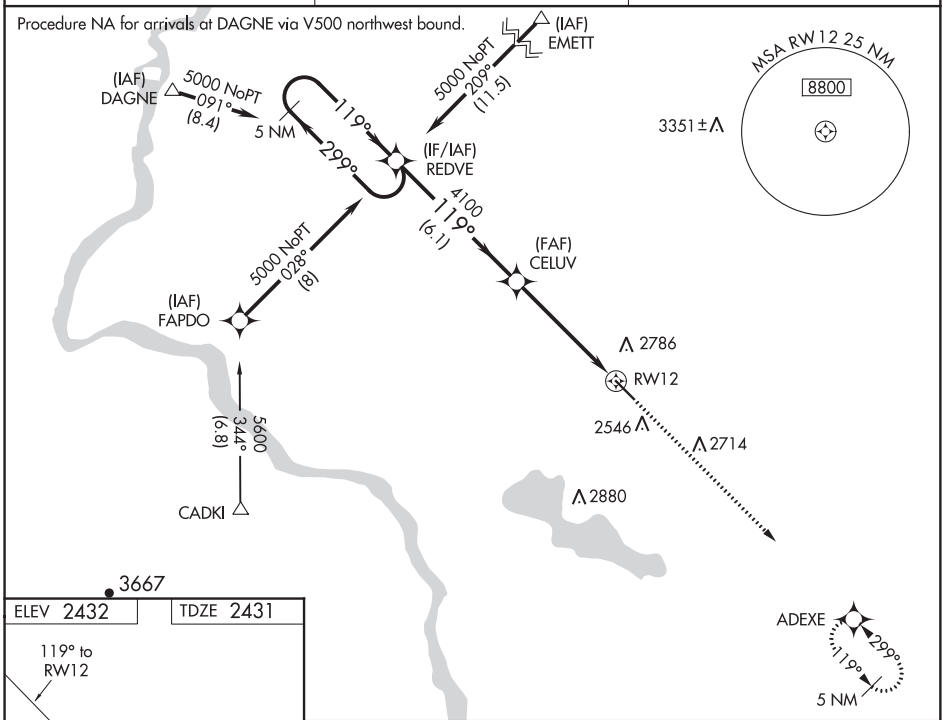
# RNAV (GPS) RWY 12
## CALDWELL INDUSTRIAL (EUL)

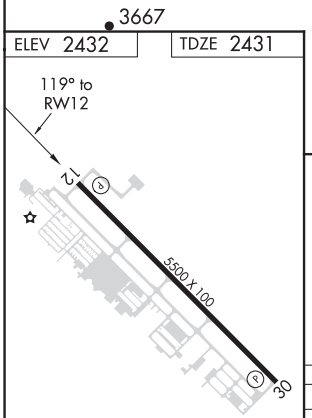
RNP APCH.

Rwy 12 helicopter visibility reduction below ¾ SM NA. Baro-VNAV NA when using Boise altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C or above 44°C. When local altimeter setting not received, use Boise altimeter setting and increase all DA/MDA 120 feet and all visibilities ½ mile.

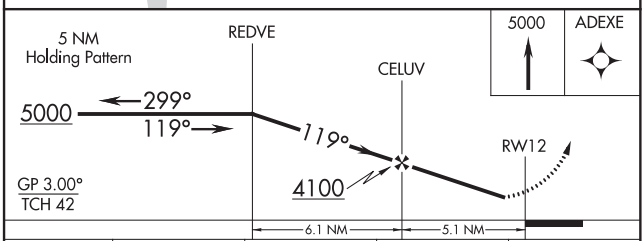
MISSED APPROACH: Climb to 5000 direct ADEXE and hold.

| AWOS-3PT | BIG SKY APP CON | UNICOM |
|---|---|---|
| 135.075 | 119.6 269.4 | 122.7 (CTAF) L |




MIRL Rwy 12-30 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2700-1 269 (300-1) | | | |
| LNAV/VNAV DA | 2994-2 563 (600-2) | | | |
| LNAV MDA | 2840-1 409 (500-1) | | 2840-1¼ 409 (500-1¼) | |




NW-1, 05 NOV 2020 to 31 DEC 2020

CALDWELL, IDAHO | AL-6806 (FAA) | 19199

| WAAS CH 73007 W30A | APP CRS 299° | Rwy ldg 5500<br>TDZE 2432<br>Apt Elev 2432 |
|---|---|---|

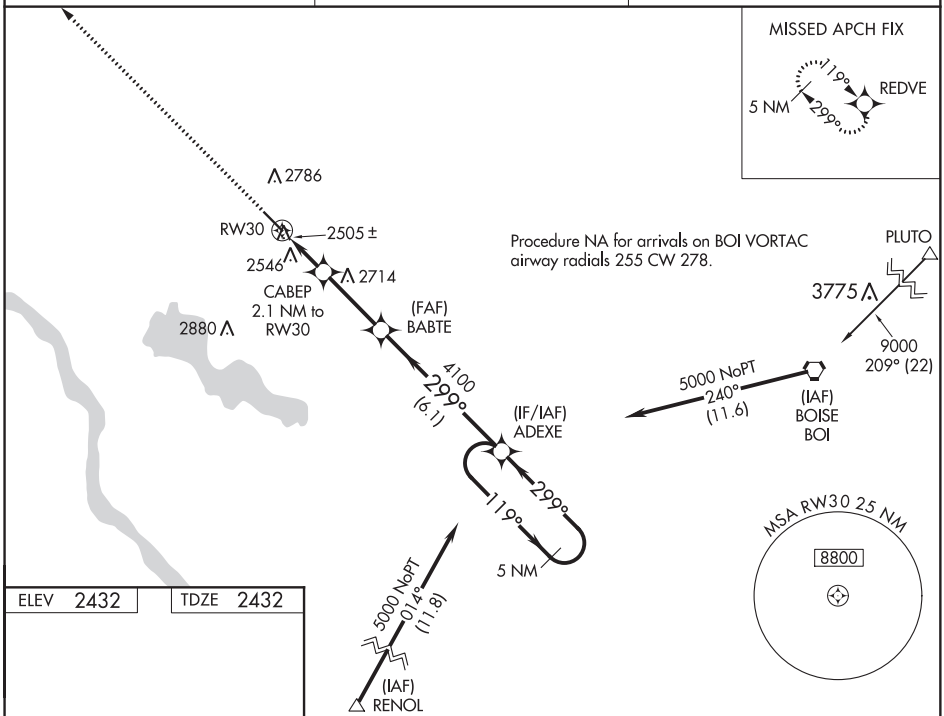
# RNAV (GPS) RWY 30
## CALDWELL INDUSTRIAL (EUL)

RNP APCH.

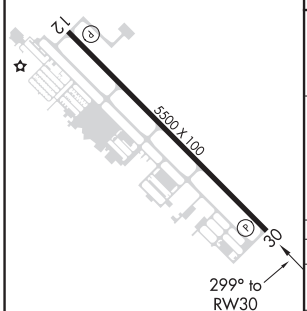
Rwy 30 helicopter visibility reduction below ¾ SM NA. Baro-VNAV NA when using Boise altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C or above 44°C. When local altimeter setting not received, use Boise altimeter setting and increase all DA/MDA 120 feet and all visibilities ½ mile.

MISSED APPROACH: Climb to 5000 direct REDVE and hold.

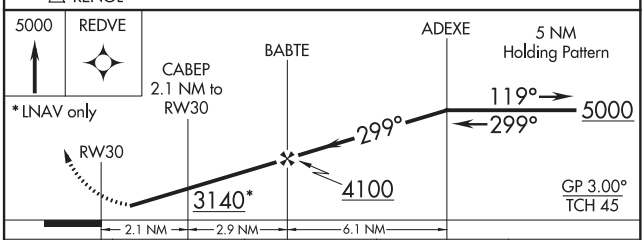
| AWOS-3PT | BIG SKY APP CON | UNICOM |
|---|---|---|
| 135.075 | 119.6 269.4 | 122.7 (CTAF) L |




| ELEV 2432 | TDZE 2432 |
|---|---|




MIRL Rwy 12-30 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2687-1 255 (300-1) | | | |
| LNAV/VNAV DA | 2822-1¼ 390 (400-1¼) | | | |
| LNAV MDA | 2880-1 448 (500-1) | | 2880-1⅜ 448 (500-1⅜) | 2880-1½ 448 (500-1½) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC I-SYD | APP CRS | Rwy ldg | 10165 |
|---|---|---|---|
| 111.3 | 032° | TDZE | 5328 |
| | | Apt Elev | 5344 |

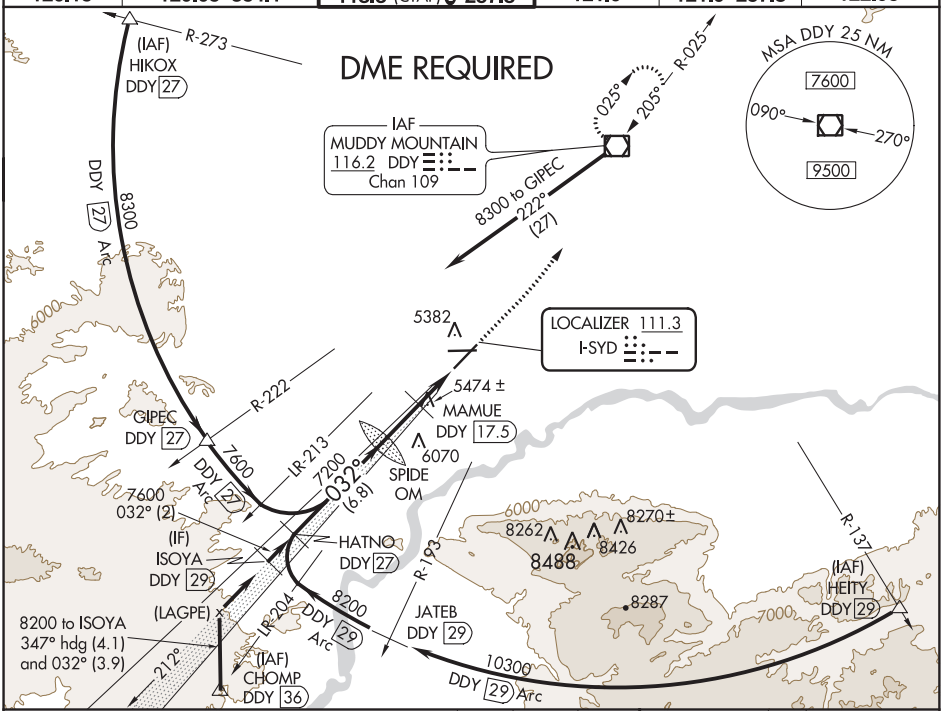
# ILS or LOC RWY 3
## CASPER/NATRONA COUNTY INTL (CPR)

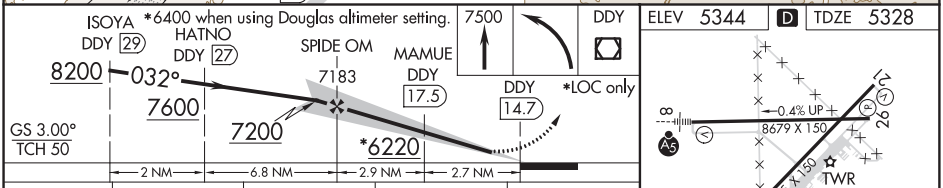
DME from DDY VOR/DME. Simultaneous reception of I-SYD and DDY DME required. When local altimeter setting not received, use Douglas altimeter setting; increase DA to 5697 feet and all MDAs 180 feet, increase S-ILS visibility all Cats ¼ mile and S-LOC visibility Cats B, C, and D ½ mile, increase Circling visibility Cats B, C, and D ½ mile. For inoperative MALSR when using Douglas altimeter setting increase S-ILS visibility all Cats to 1¼ mile. MAMUE FIX MINIMUMS: For inoperative MALSR, increase S-LOC visibility Cats C, and D to 1⅛ mile. #RVR 1800 authorized with use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 7500 then left turn direct DDY VOR/DME and hold.

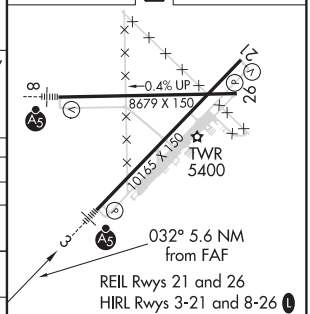
| ATIS | CASPER APP CON ★ | CASPER TOWER ★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 126.15 | 120.65 354.1 | 118.3 (CTAF) L 257.8 | 121.9 | 121.9 257.8 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 3 | #5528/24 200 (200-½) | | | |
| S-LOC 3 | 6220/40 892 (900-¾) | | 6220-2 892 (900-2) | |
| CIRCLING | 6220-1¼ 876 (900-1¼) | | 6220-2½ 876 (900-2½) | 6220-2¾ 876 (900-2¾) |
| MAMUE FIX MINIMUMS | | | | |
| S-LOC 3 | 5740/24 412 (400-½) | | 5740/40 412 (400-¾) | |
| CIRCLING | 5740-1 396 (400-1) | 5800-1 456 (500-1) | 5800-1½ 456 (500-1½) | 5900-2 556 (600-2) |

ELEV 5344 D TDZE 5328




| FAF to MAP 5.6 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 5:36 | 3:44 | 2:48 | 2:14 | 1:52 |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 73006 W03A | APP CRS 032° | Rwy ldg 10165<br>TDZE 5328<br>Apt Elev 5350 |
|---|---|---|

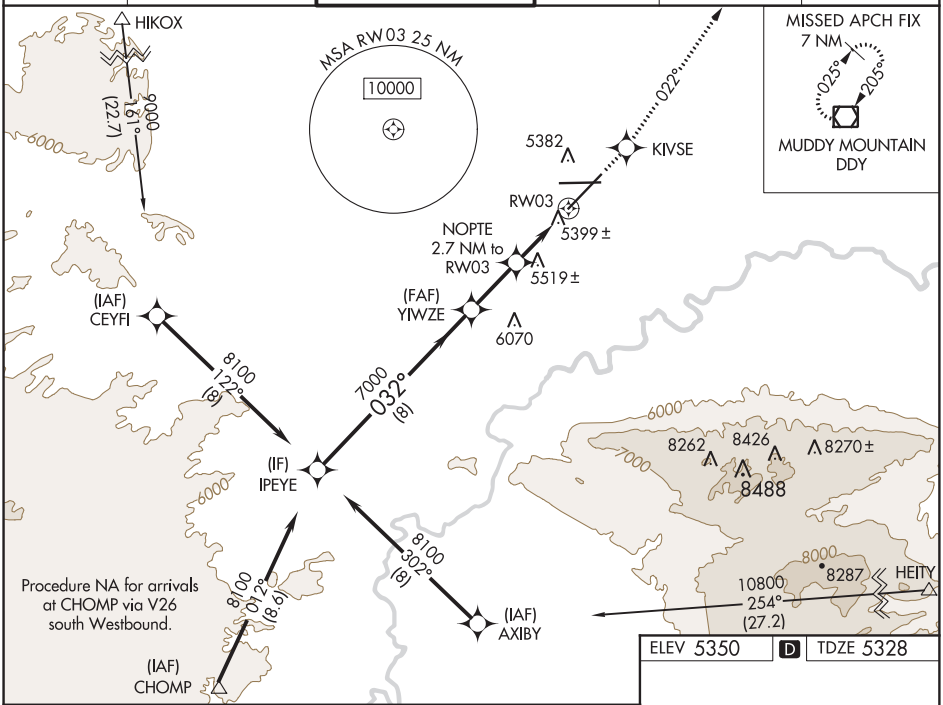
# RNAV (GPS) RWY 3
## CASPER/NATRONA COUNTY INTL (CPR)

For inoperative MALSR, increase LPV all Cats visibility to 1 mile. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 38°C (100°F). DME/DME RNP-0.3 NA.

MALSR

MISSED APPROACH: Climb to 7500 direct KIVSE and via track 022° to DDY VOR/DME and hold.

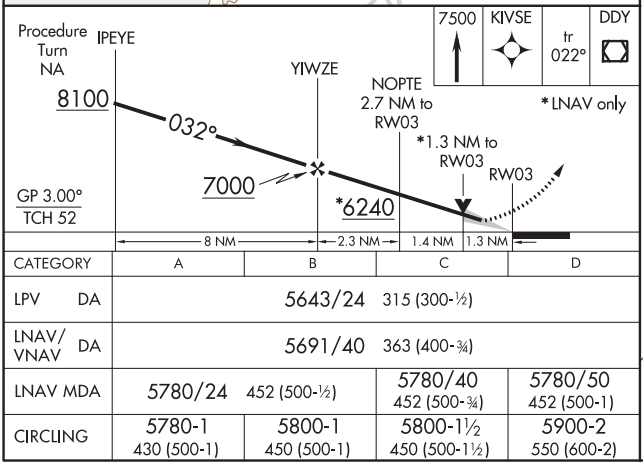
| ATIS | CASPER APP CON ★ | CASPER TOWER ★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 126.15 | 120.65 354.1 | 118.3 (CTAF) L 257.8 | 121.9 | 121.9 257.8 | 122.95 |



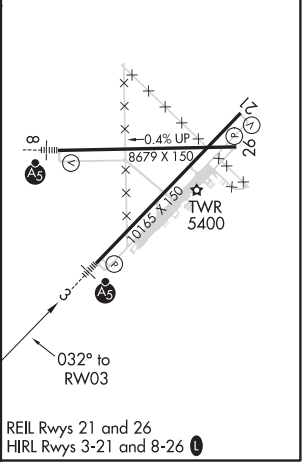

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 5350 D TDZE 5328




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 5643/24 315 (300-½) | | | |
| LNAV/VNAV DA | 5691/40 363 (400-¾) | | | |
| LNAV MDA | 5780/24 452 (500-½) | | 5780/40 452 (500-¾) | 5780/50 452 (500-1) |
| CIRCLING | 5780-1 430 (500-1) | 5800-1 450 (500-1) | 5800-1½ 450 (500-1½) | 5900-2 550 (600-2) |




REIL Rwys 21 and 26
HIRL Rwys 3-21 and 8-26 L

| WAAS CH 86306 W08A | APP CRS 077° | Rwy ldg 8679 TDZE 5344 Apt Elev 5350 |
|---|---|---|

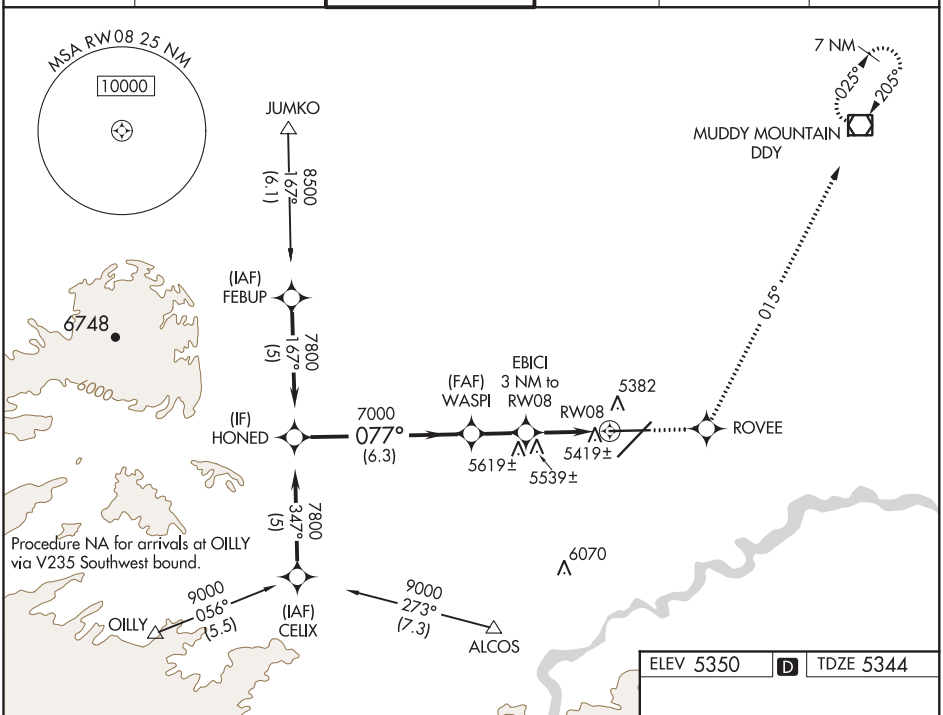
# RNAV (GPS) RWY 8
## CASPER/NATRONA COUNTY INTL (CPR)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 38°C (100°F). DME/DME RNP-0.3 NA.

MALSR

MISSED APPROACH: Climb to 7700 direct ROVEE and via track 015° to DDY VOR/DME and hold.

| ATIS | CASPER APP CON ★ | CASPER TOWER ★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 126.15 | 120.65 354.1 | 118.3 (CTAF) L 257.8 | 121.9 | 121.9 257.8 | 122.95 |

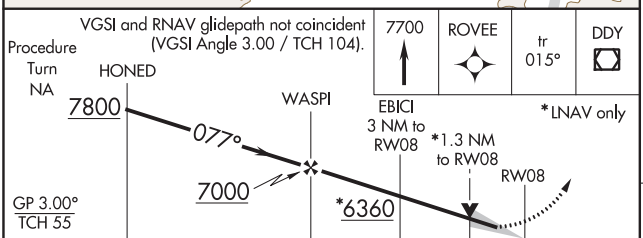



NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00 / TCH 104).

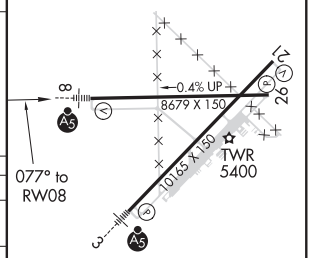
| 7700 | ROVEE | tr 015° | DDY |
|---|---|---|---|




*LNAV only

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 5594/24 250 (300-½) | | | |
| LNAV/VNAV DA | 5689/40 345 (400-¾) | | | |
| LNAV MDA | 5800/24 456 (500-½) | | 5800/40 456 (500-¾) | 5800/50 456 (500-1) |
| CIRCLING | 5800-1 450 (500-1) | | 5800-1½ 450 (500-1½) | 5900-2 550 (600-2) |

ELEV 5350 D TDZE 5344




REIL Rwys 21 and 26
HIRL Rwys 3-21 and 8-26 L

CASPER, WYOMING — AL-72 (FAA) — 20030

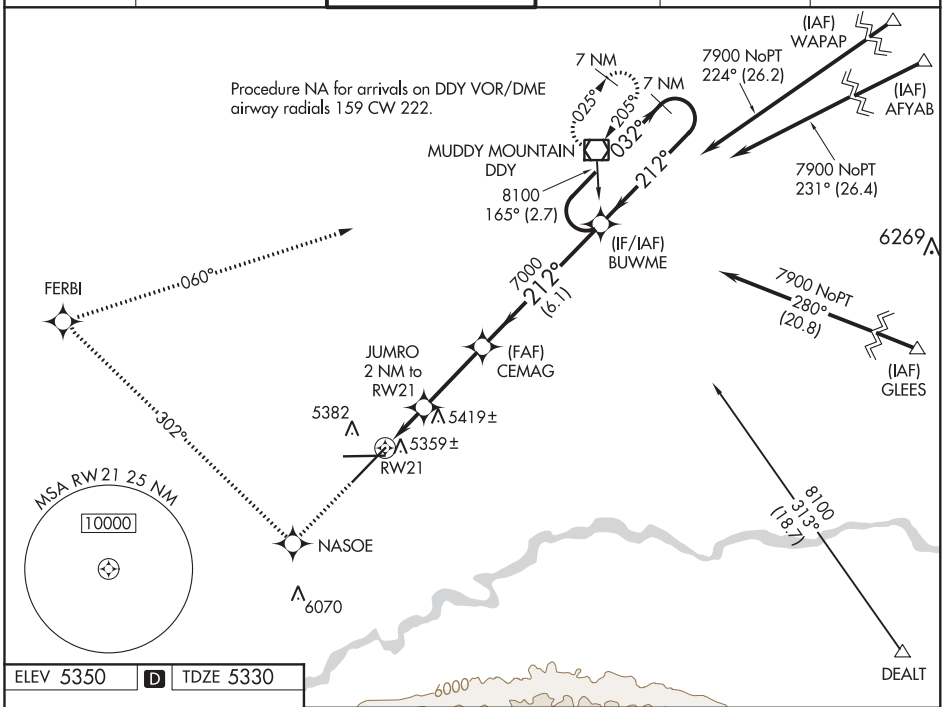
# RNAV (GPS) RWY 21
## CASPER/NATRONA COUNTY INTL (CPR)

| WAAS CH 63012 W21A | APP CRS 212° | Rwy ldg 10165 TDZE 5330 Apt Elev 5350 |
|---|---|---|

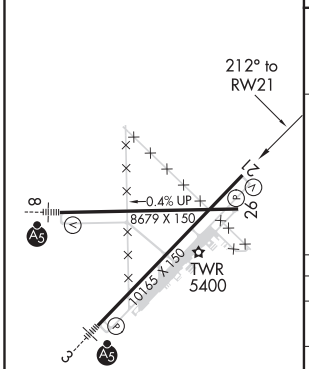
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 38°C (100°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 8100 direct NASOE and right turn via track 302° to FERBI and via track 060° to DDY VOR/DME and hold.

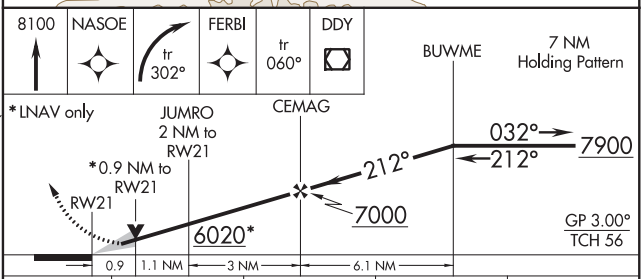
| ATIS | CASPER APP CON ★ | CASPER TOWER ★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 126.15 | 120.65 354.1 | 118.3 (CTAF) L 257.8 | 121.9 | 121.9 257.8 | 122.95 |




ELEV 5350 | D | TDZE 5330




REIL Rwys 21 and 26
HIRL Rwys 3-21 and 8-26 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 5580-¾ 250 (300-¾) | | | |
| LNAV/VNAV DA | 5629-1 299 (300-1) | | | |
| LNAV MDA | 5680-1 350 (400-1) | | | 5680-1¼ 350 (400-1¼) |
| CIRCLING | 5780-1 430 (500-1) | 5800-1 450 (500-1) | 5800-1½ 450 (500-1½) | 5900-2 550 (600-2) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

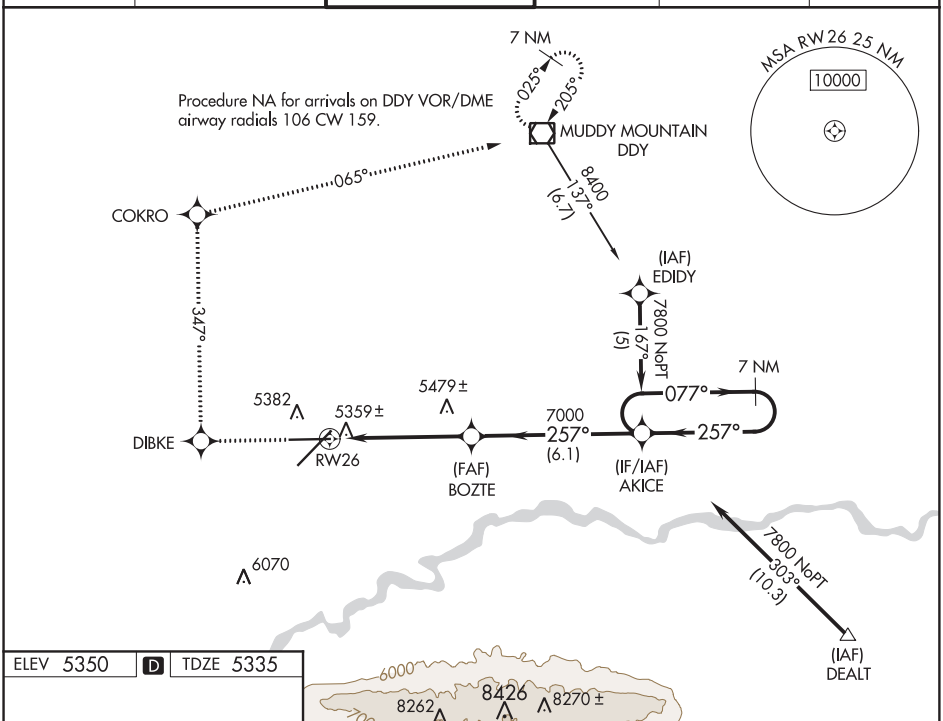
| WAAS CH 78112 W26A | APP CRS 257° | Rwy ldg 8679 TDZE 5335 Apt Elev 5350 |
|---|---|---|

# RNAV (GPS) RWY 26
## CASPER/NATRONA COUNTY INTL (CPR)

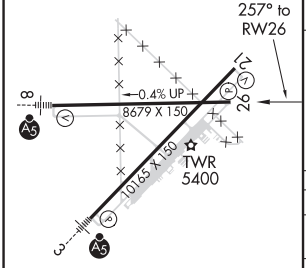
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 38°C (100°F). DME/DME RNP-0.3 NA.

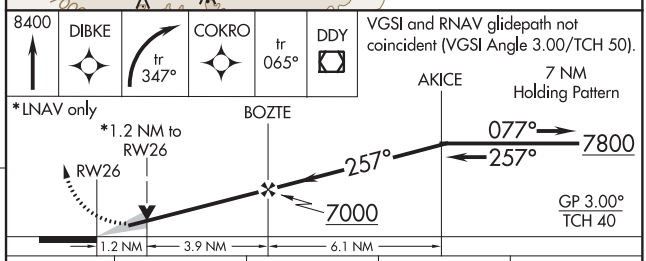
MISSED APPROACH: Climb to 8400 direct DIBKE and right turn via track 347° to COKRO and via track 065° to DDY VOR/DME and hold.

| ATIS | CASPER APP CON ★ | CASPER TOWER ★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 126.15 | 120.65 354.1 | 118.3 (CTAF) L 257.8 | 121.9 | 121.9 257.8 | 122.95 |




ELEV 5350 | D | TDZE 5335




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 5585-1 250 (300-1) | | | |
| LNAV/VNAV DA | 5629-1 294 (300-1) | | | |
| LNAV MDA | 5740-1 405 (400-1) | | 5740-1¼ 405 (400-1¼) | |
| CIRCLING | 5780-1 430 (500-1) | 5800-1 450 (500-1) | 5800-1½ 450 (500-1½) | 5900-2 550 (600-2) |

REIL Rwys 21 and 26
HIRL Rwys 3-21 and 8-26 L

CASPER, WYOMING | AL-72 (FAA) | 20030

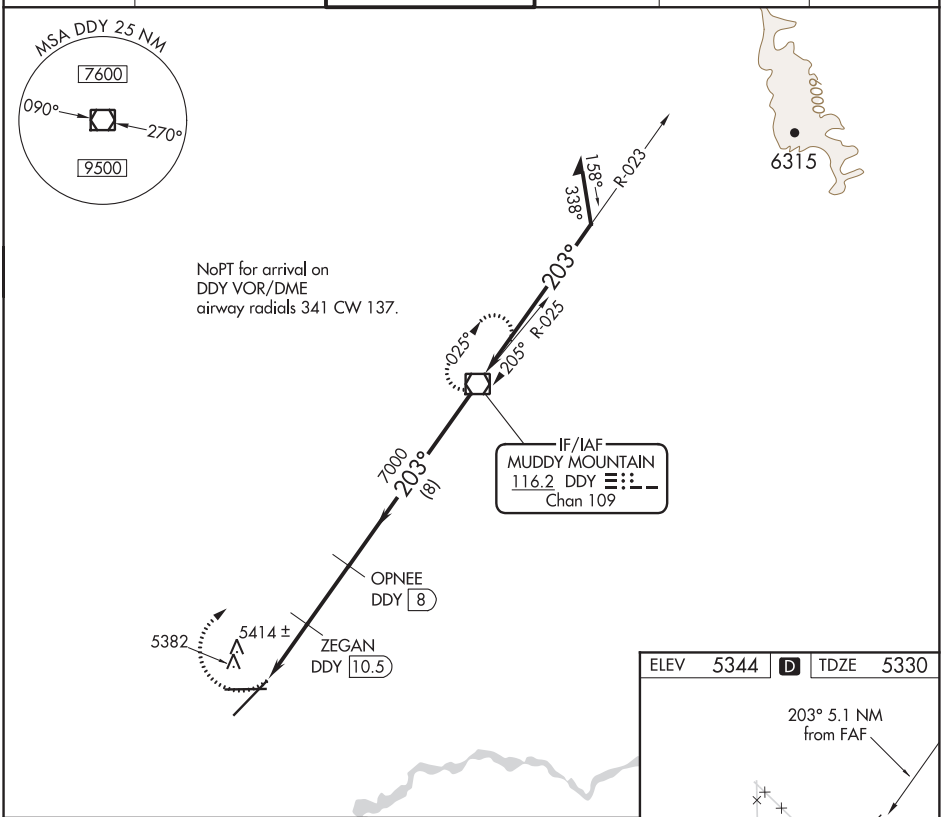
# VOR/DME RWY 21
## CASPER/NATRONA COUNTY INTL (CPR)

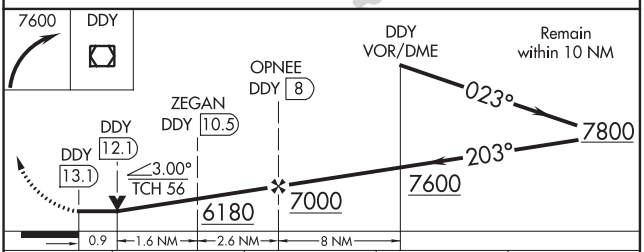
| VOR/DME DDY | APP CRS | Rwy ldg | 10165 |
|---|---|---|---|
| 116.2 | 203° | TDZE | 5330 |
| Chan 109 | | Apt Elev | 5344 |

T A VDP NA with Douglas altimeter setting. When local altimeter setting not received, use Douglas altimeter setting: Increase all MDAs 180 feet and S-21 visibility Cats C and D ½ mile, Circling visibility Cats C and D ¼ mile.

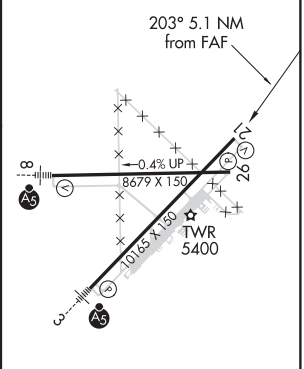
MISSED APPROACH: Climbing right turn to 7600 direct DDY VOR/DME and hold.

| ATIS | CASPER APP CON ★ | CASPER TOWER ★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 126.15 | 120.65 354.1 | 118.3 (CTAF) L 257.8 | 121.9 | 121.9 257.8 | 122.95 |




ELEV 5344 D TDZE 5330




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-21 | 5680-1 350 (400-1) | | | |
| CIRCLING | 5720-1 376 (400-1) | 5800-1 456 (500-1) | 5800-1½ 456 (500-1½) | 5900-2 556 (600-2) |

REIL Rwys 21 and 26
HIRL Rwys 3-21 and 8-26 L

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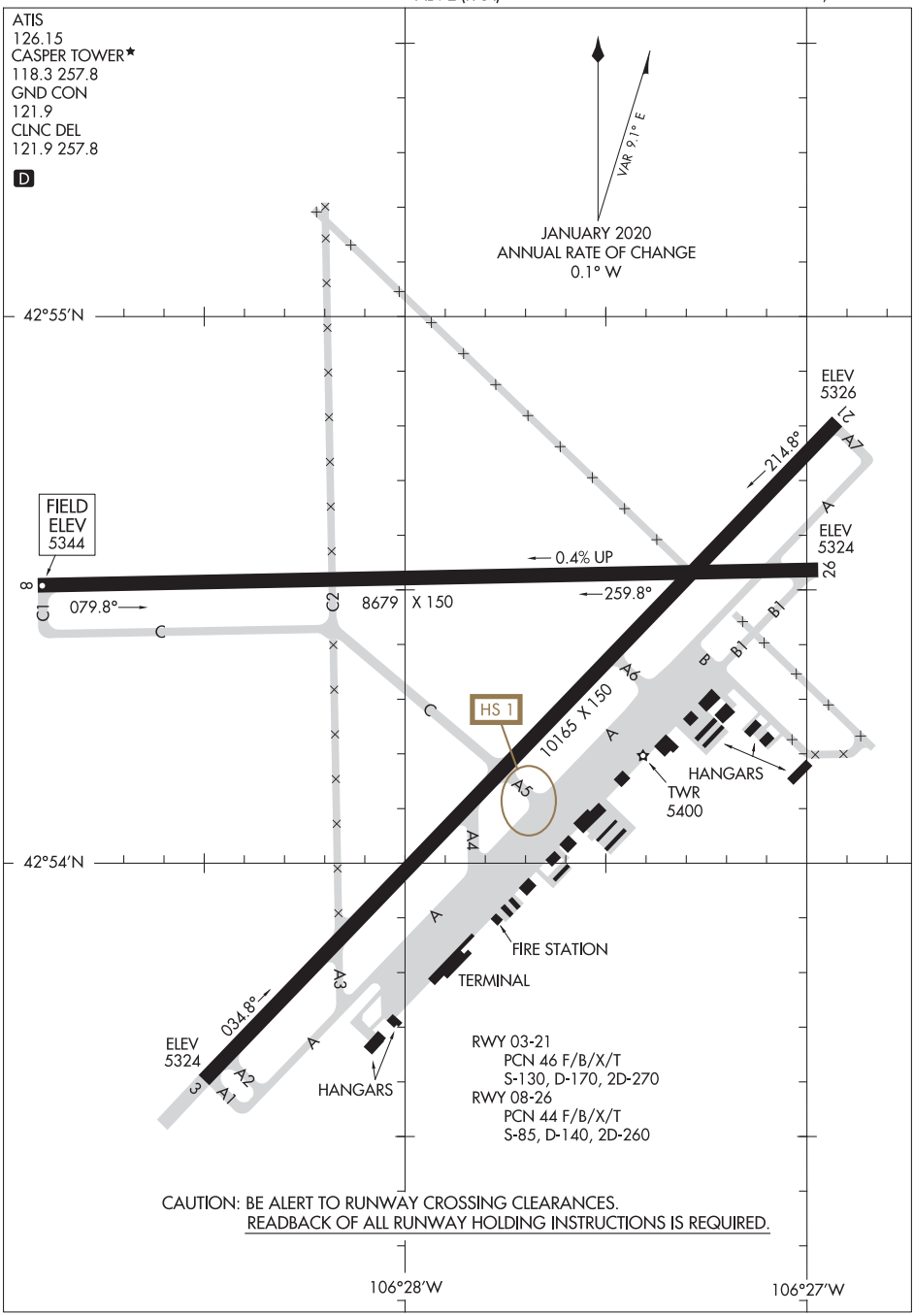
NW-1, 05 NOV 2020 to 31 DEC 2020




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

(ALCOS6.ALCOS) 18032

# ALCOS SIX DEPARTURE

SL-72 (FAA)

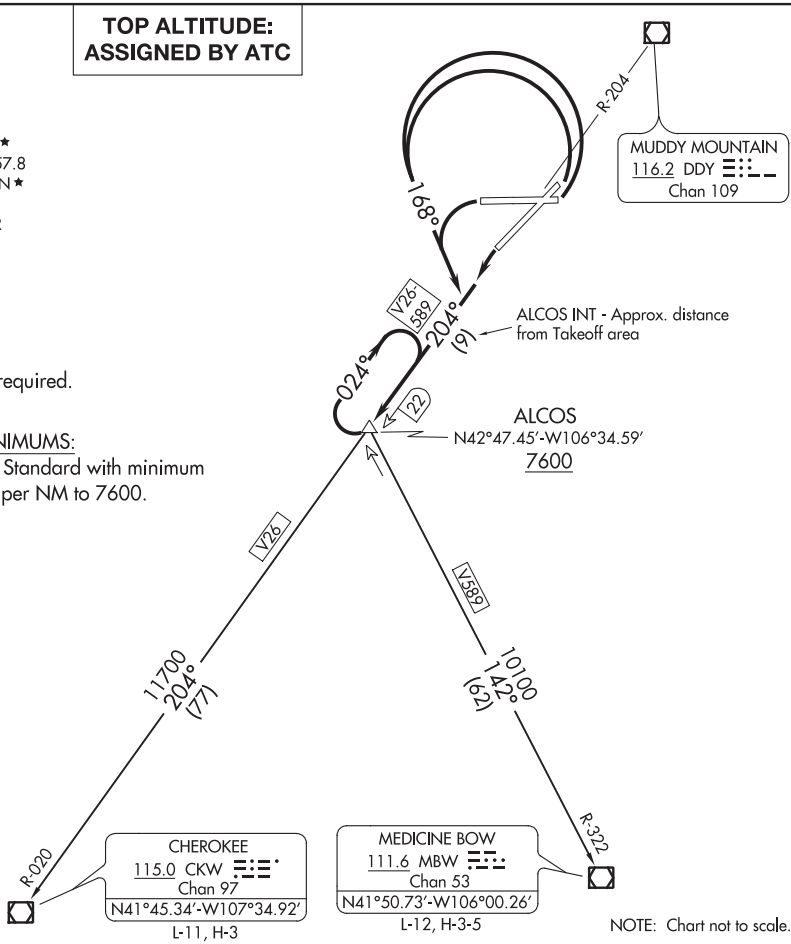
CASPER/NATRONA COUNTY INTL (CPR)
CASPER, WYOMING

ATIS
126.15
CLNC DEL
121.9 257.8
GND CON
121.9
CASPER TOWER ★
118.3 (CTAF) 257.8
CASPER DEP CON ★
120.65 354.1
DENVER CENTER
135.6 363.025

**TOP ALTITUDE: ASSIGNED BY ATC**

NOTE: DME required.

TAKEOFF MINIMUMS:
All Runways: Standard with minimum climb of 300′ per NM to 7600.




## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 3, 8, 26: Turn left heading 168°, thence. . . .

TAKEOFF RUNWAY 21: Turn left, thence. . . .

. . . .climb on DDY VOR/DME R-204 to cross ALCOS INT 22 DME at or above 7600, climb-in-hold to MEA for direction of flight, then via (transition) or (assigned route).

CHEROKEE TRANSITION (ALCOS6.CKW): From over ALCOS on DDY R-204 and CKW R-020 to CKW VOR/DME.

MEDICINE BOW TRANSITION (ALCOS6.MBW): From over ALCOS on MBW R-322 to MBW VOR/DME.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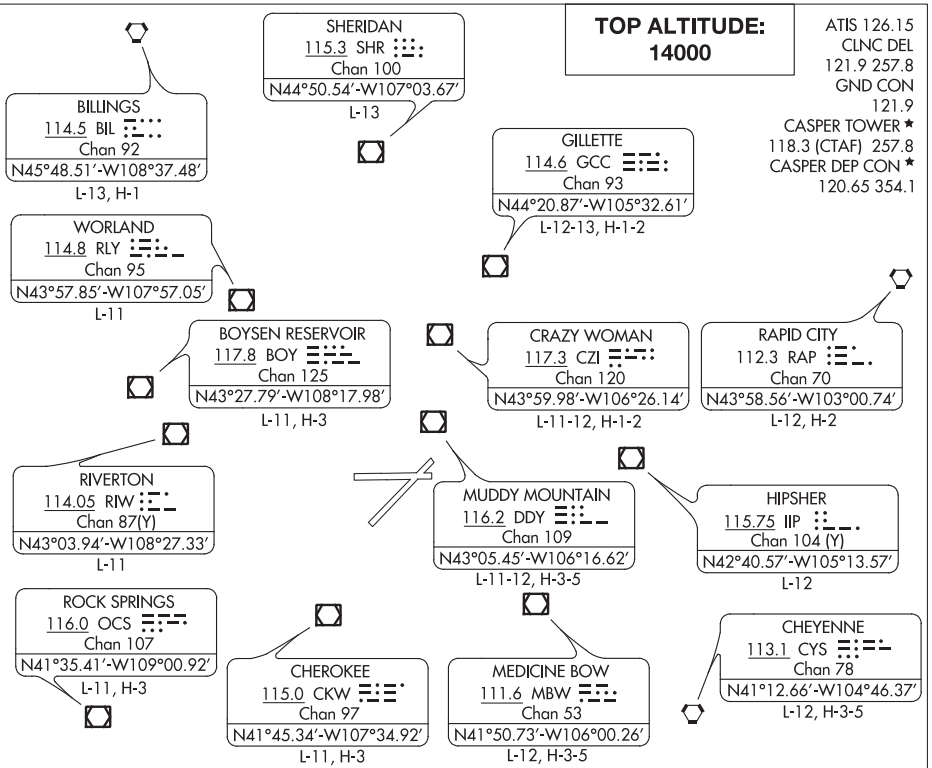
# CASPER THREE DEPARTURE AL-72 (FAA)



**TOP ALTITUDE: 14000**

ATIS 126.15
CLNC DEL 121.9 257.8
GND CON 121.9
CASPER TOWER ★ 118.3 (CTAF) 257.8
CASPER DEP CON ★ 120.65 354.1




TAKE-OFF MINIMUMS
Rwy 12, 17, 30, 35, NA- Environmental.
Rwy 3, 8, 26, Standard.
Rwy 21, Standard with a minimum climb of 235 feet per NM to 6700.

NOTE: RADAR required.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 3: Climb on a heading between 212° CW 094° from DER as assigned by ATC thence . . .
TAKE-OFF RUNWAY 8: Climb on a heading between 257° CW 094° from DER as assigned by ATC thence . . .
TAKE-OFF RUNWAY 21: Climb on a heading between 195° CW 032° from DER as assigned by ATC thence . . .
TAKE-OFF RUNWAY 26: Climb on a heading between 190° CW 077° from DER as assigned by ATC thence . . .

. . . Maintain 14000′ or assigned lower altitude. Expect RADAR vectors to filed/assigned fix/route. Expect further clearance to filed altitude ten minutes after departure.

LOST COMMUNICATIONS
If no transmissions are received for one minute after departure, maintain assigned heading until 7,000 feet, then climb to filed altitude via direct DDY VOR/DME, then via assigned route. Runways 3 and 8 turn left to DDY VOR/DME, runways 21 and 26 turn right to DDY VOR/DME.



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NW-1, 05 NOV 2020 to 31 DEC 2020

CHEHALIS, WASHINGTON AL-749 (FAA) 20310

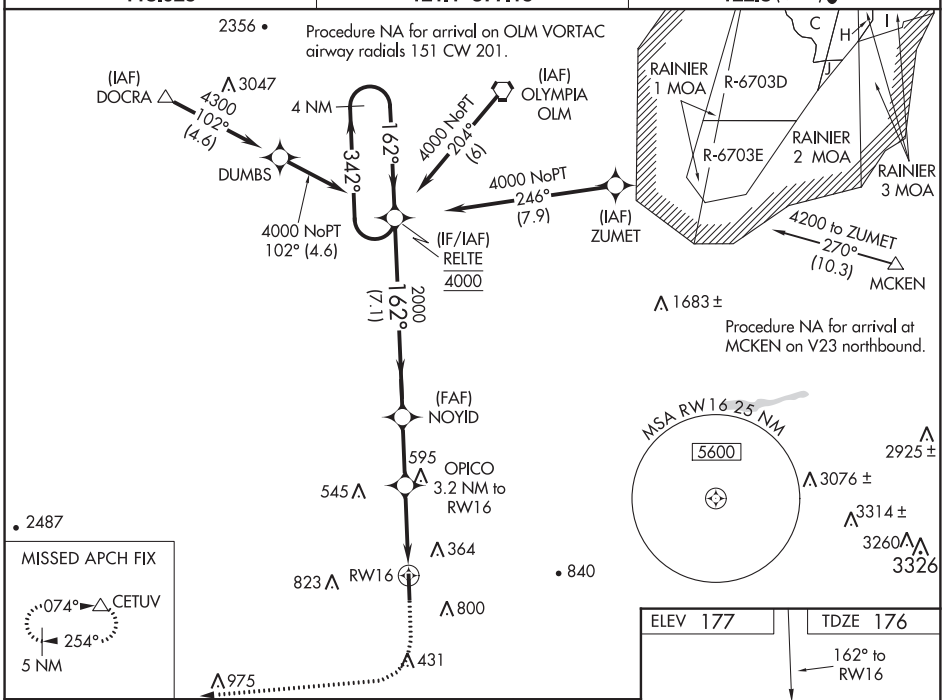
| WAAS CH 82129 W16A | APP CRS 162° | Rwy ldg 5000 TDZE 176 Apt Elev 177 |
|---|---|---|

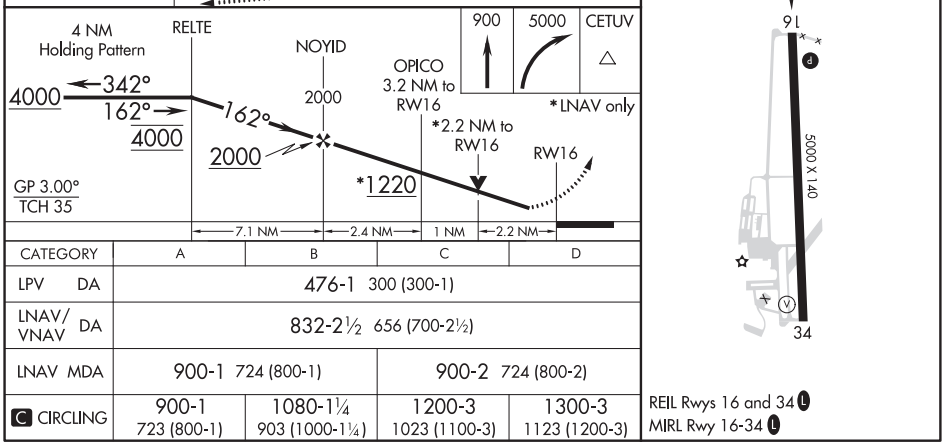
# RNAV (GPS) RWY 16
## CHEHALIS-CENTRALIA (CLS)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). Circling NA northeast of Rwy 16-34. DME/DME RNP-0.3 NA. Baro-VNAV and VDP NA when using Olympia altimeter setting. When local altimeter setting not received, use Olympia altimeter setting: increase LPV DA to 522 feet, LNAV/VNAV DA to 878 feet and all MDA 60 feet; increase LPV all Cats visibility ¼ SM, LNAV Cat B ¼ SM, LNAV Cats C/D ½ SM and Circling Cat B ¼ SM. Rwy 16 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 900 then climbing right turn to 5000 direct CETUV and hold, continue climb-in-hold to 5000.

| AWOS-3 | SEATTLE APP CON | UNICOM |
|---|---|---|
| 118.025 | 121.1 377.15 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 476-1 300 (300-1) | | | |
| LNAV/VNAV DA | 832-2½ 656 (700-2½) | | | |
| LNAV MDA | 900-1 724 (800-1) | | 900-2 724 (800-2) | |
| C CIRCLING | 900-1 723 (800-1) | 1080-1¼ 903 (1000-1¼) | 1200-3 1023 (1100-3) | 1300-3 1123 (1200-3) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC/DME I-CYS | APP CRS | Rwy ldg | 7985 |
|---|---|---|---|
| 110.1 | 265° | TDZE | 6121 |
| Chan 38 | | Apt Elev | 6160 |

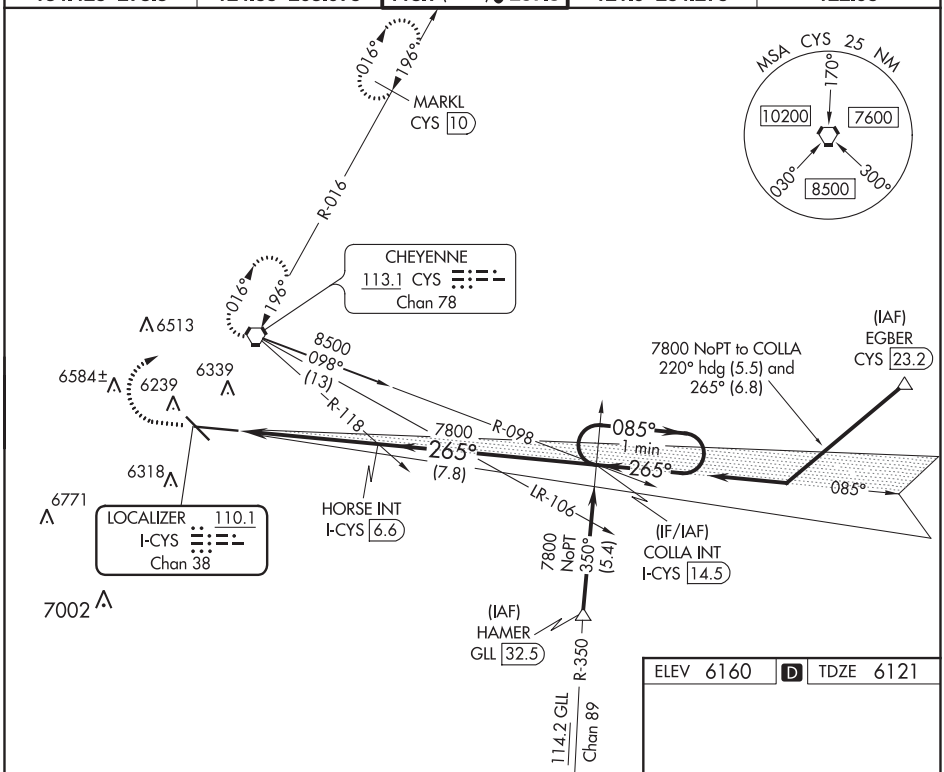
# ILS or LOC RWY 27
## CHEYENNE RGNL/JERRY OLSON FIELD (CYS)

ASR/PAR: # RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 6800, then climbing right turn to 8000 direct CYS VORTAC and hold, continue climb-in-hold to 8000 (TACAN aircraft continue on CYS VORTAC R-016 to MARKL/CYS 10 DME and hold N, RT, 196° inbound).

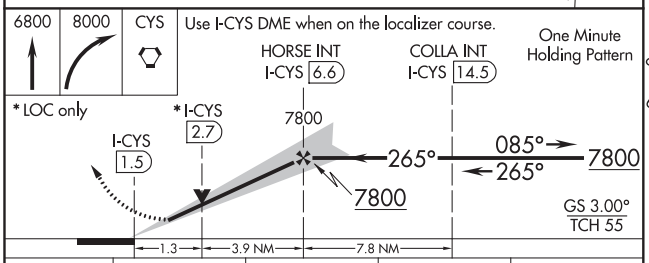
| ATIS | CHEYENNE APP CON★ | CHEYENNE TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 134.425 278.3 | 124.55 263.075 | 118.7 (CTAF) L 257.8 | 121.9 254.275 | 122.95 |



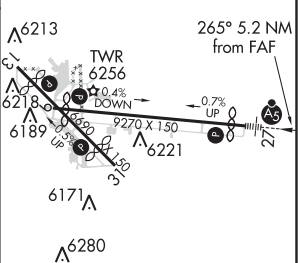

| 6800 | 8000 | CYS |
|---|---|---|

Use I-CYS DME when on the localizer course.

One Minute Holding Pattern




ELEV 6160 D TDZE 6121




REIL Rwys 9, 13, and 31 L
HIRL Rwy 9-27 L
MIRL Rwy 13-31 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 27 # | 6321/24 200 (200-½) | | | |
| S-LOC 27 | 6560/24 439 (400-½) | | 6560/40 439 (400-¾) | |
| C CIRCLING | 6640-1 480 (500-1) | | 6900-2 740 (800-2) | 6920-2½ 760 (800-2½) |

| FAF to MAP 5.2 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 5:12 | 3:28 | 2:36 | 2:05 | 1:44 |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 73009 W09A | APP CRS 085° | Rwy ldg 7985<br>TDZE 6144<br>Apt Elev 6160 |
|---|---|---|

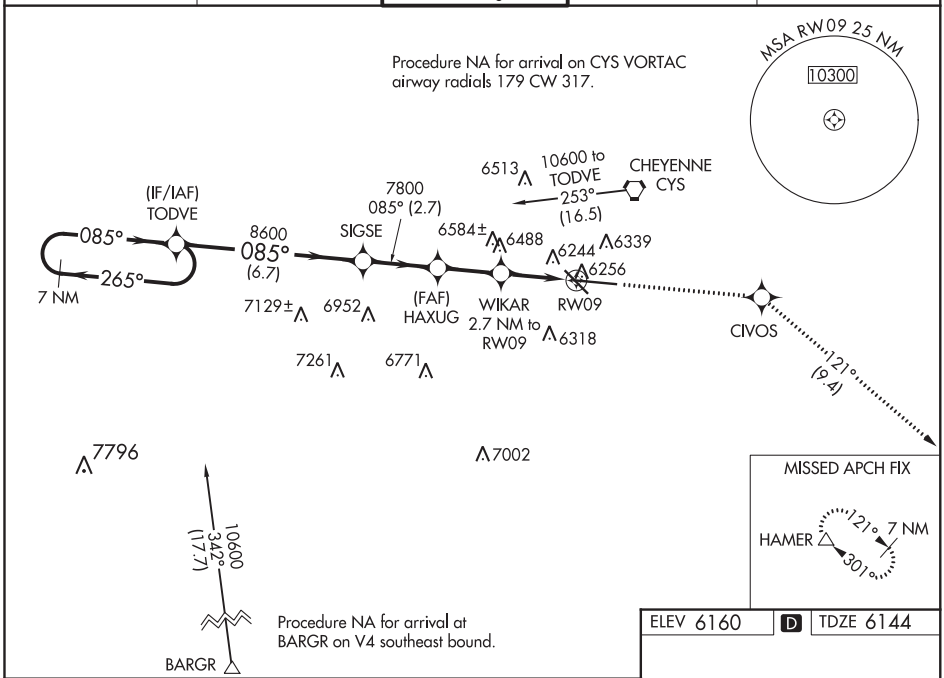
# RNAV (GPS) RWY 9
## CHEYENNE RGNL/JERRY OLSON FIELD (CYS)

ASR/PAR

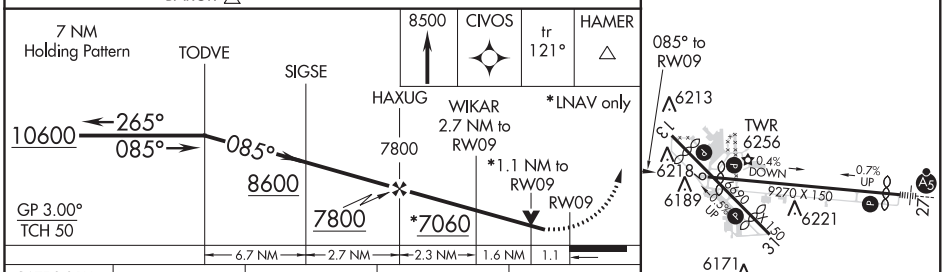
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -27°C (-16°F) or above 36°C (96°F). DME/DME RNP-0.3 NA. Rwy 9 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 8500 direct CIVOS and on track 121° to HAMER and hold.

| ATIS | CHEYENNE APP CON★ | CHEYENNE TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 134.425 278.3 | 124.55 263.075 | 118.7 (CTAF) L 257.8 | 121.9 254.275 | 122.95 |




ELEV 6160 | D | TDZE 6144




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 6473-1¼ 329 (400-1¼) | | | |
| LNAV/VNAV DA | 6543-1½ 399 (400-1½) | | | |
| LNAV MDA | 6540-1 396 (400-1) | | | 6540-1¼ 396 (400-1¼) |
| C CIRCLING | 6640-1 480 (500-1) | | 6900-2 740 (800-2) | 6940-2½ 780 (800-2½) |

REIL Rwys 9, 13, and 31 L
HIRL Rwy 9-27 L
MIRL Rwy 13-31 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 56609 W13A | APP CRS 125° | Rwy ldg 4830<br>TDZE 6155<br>Apt Elev 6160 |
|---|---|---|

# RNAV (GPS) RWY 13
## CHEYENNE RGNL/JERRY OLSON FIELD (CYS)

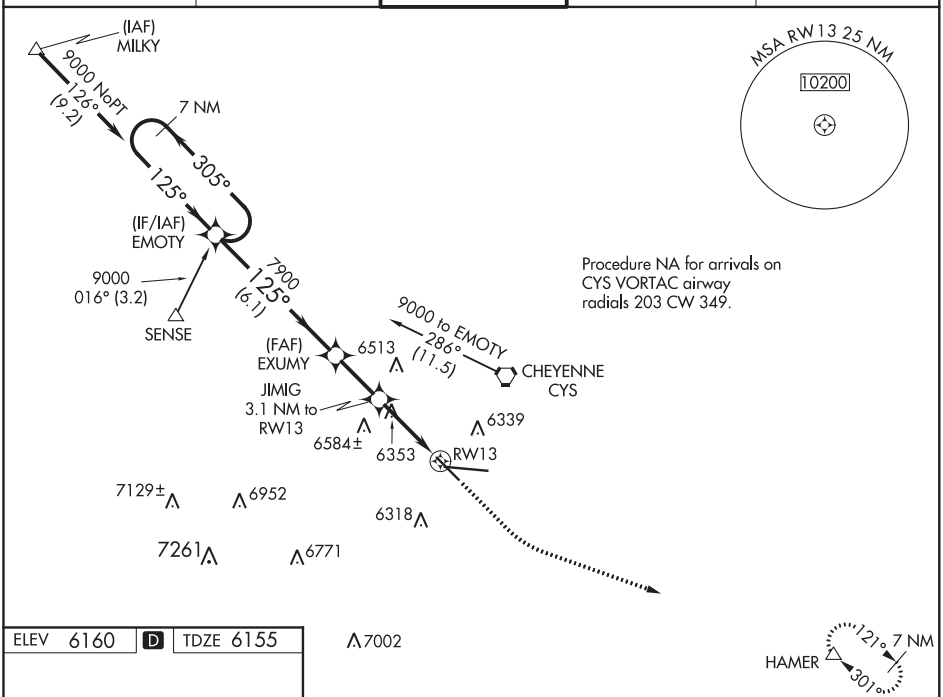
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C or above 45°C. Rwy 13 helicopter visibility reduction below ¾ SM NA.

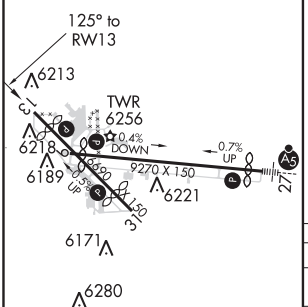
ASR/PAR

MISSED APPROACH: Climb to 6600, then climbing left turn to 8500 direct HAMER and hold.

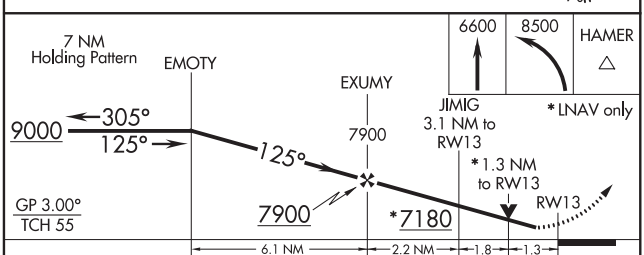
| ATIS | CHEYENNE APP CON★ | CHEYENNE TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 134.425 278.3 | 124.55 263.075 | 118.7 (CTAF) L 257.8 | 121.9 254.275 | 122.95 |




ELEV 6160 D TDZE 6155




REIL Rwys 9, 13 and 31 L
HIRL Rwy 9-27 L
MIRL Rwy 13-31 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 6405-¾ 250 (300-¾) | | | |
| LNAV/VNAV DA | 6419-⅞ 264 (300-⅞) | | | |
| LNAV MDA | 6620-1 465 (500-1) | | 6620-1⅜ 465 (500-1⅜) | |
| C CIRCLING | 6640-1 480 (500-1) | | 6900-2 740 (800-2) | 6920-2½ 760 (800-2½) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

CHEYENNE, WYOMING AL-80 (FAA) 19059

| WAAS CH 70307 W27A | APP CRS 265° | Rwy ldg 7985<br>TDZE 6121<br>Apt Elev 6160 |
|---|---|---|

# RNAV (GPS) RWY 27

## CHEYENNE RGNL/JERRY OLSON FIELD (CYS)

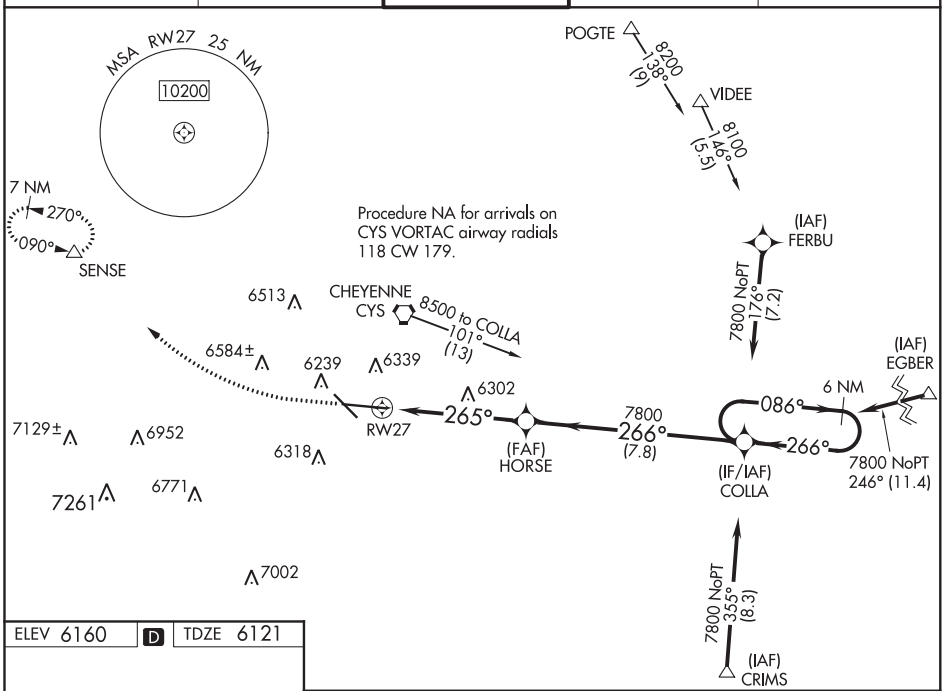
RNP APCH.

T A ASR/PAR — For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C or above 45°C. For inop ALS, increase LNAV/VNAV all Cats visibility to RVR 4000.
# RVR 1800 authorized with use of FD or AP or HUD to DA.

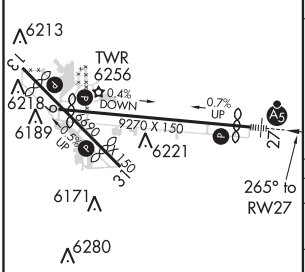
MALSR A5

MISSED APPROACH: Climb to 6600, then climbing right turn to 10400 direct SENSE and hold, continue climb-in-hold to 10400.

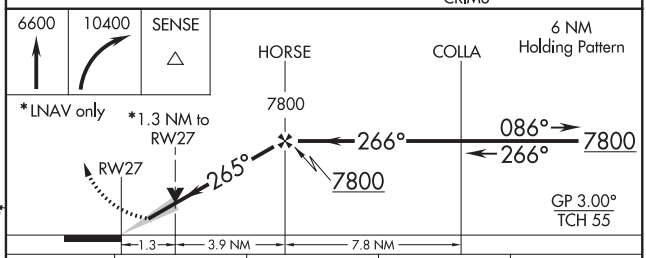
| ATIS | CHEYENNE APP CON★ | CHEYENNE TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 134.425 278.3 | 124.55 263.075 | 118.7 (CTAF) L 257.8 | 121.9 254.275 | 122.95 |




ELEV 6160 D TDZE 6121




REIL Rwys 9, 13 and 31 L
HIRL Rwy 9-27 L
MIRL Rwy 13-31 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA# | 6321/24 200 (200-½) | | | |
| LNAV/VNAV DA | 6376/24 255 (300-½) | | | |
| LNAV MDA | 6560/24 439 (400-½) | | 6560/40 439 (400-¾) | |
| C CIRCLING | 6640-1 480 (500-1) | | 6900-2 740 (800-2) | 6920-2½ 760 (800-2½) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

CHEYENNE, WYOMING
Amdt 1A 28FEB19

CHEYENNE RGNL/JERRY OLSON FIELD (CYS)
41°09'N-104°49'W
RNAV (GPS) RWY 27

| WAAS CH 99609 W31A | APP CRS 305° | Rwy ldg 4880<br>TDZE 6147<br>Apt Elev 6160 |
|---|---|---|

# RNAV (GPS) RWY 31
## CHEYENNE RGNL/JERRY OLSON FIELD (CYS)

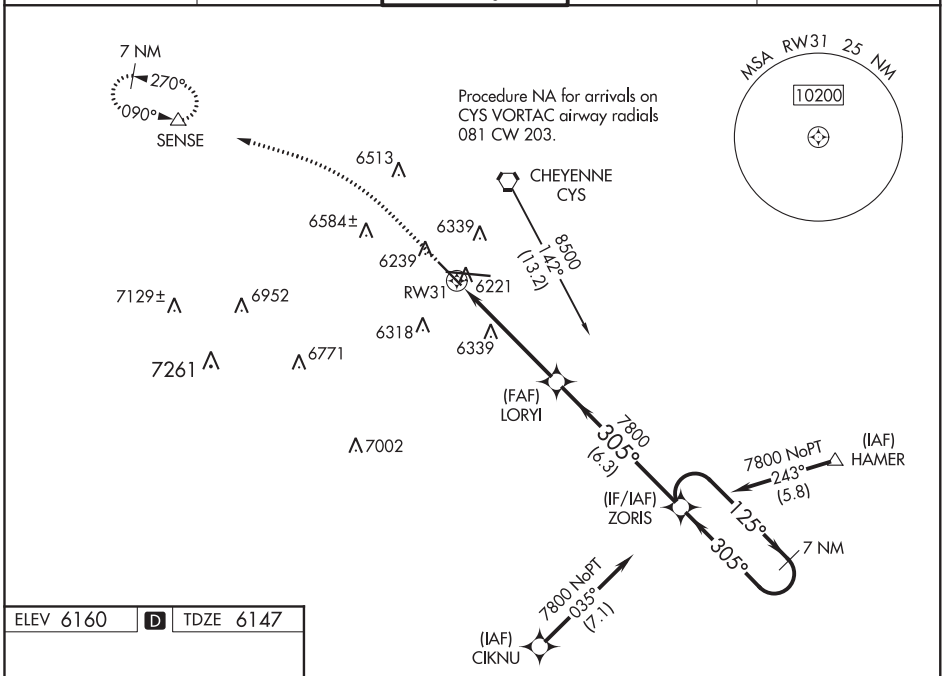
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C or above 45°C.

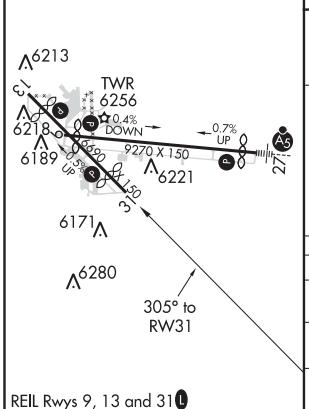
ASR/PAR

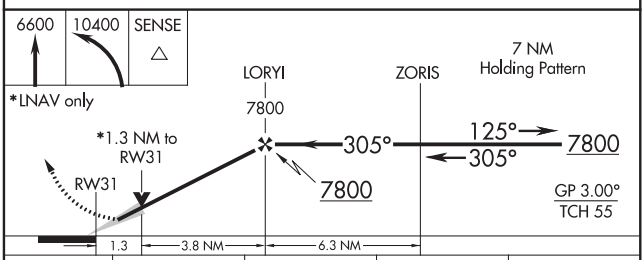
MISSED APPROACH: Climb to 6600, then climbing left turn to 10400 direct SENSE and hold, continue climb-in-hold to 10400.

| ATIS | CHEYENNE APP CON★ | CHEYENNE TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 134.425 278.3 | 124.55 263.075 | 118.7 (CTAF) L 257.8 | 121.9 254.275 | 122.95 |




ELEV 6160 D TDZE 6147




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 6397-¾ 250 (300-¾) | | | |
| LNAV/VNAV DA | 6458-⅞ 311 (300-⅞) | | | |
| LNAV MDA | 6600-1 453 (500-1) | | 6600-1⅜ 453 (500-1⅜) | |
| C CIRCLING | 6640-1 480 (500-1) | | 6900-2 740 (800-2) | 6920-2½ 760 (800-2½) |

REIL Rwys 9, 13 and 31 L
HIRL Rwy 9-27 L
MIRL Rwy 13-31 L

| VORTAC CYS 113.1 Chan 78 | APP CRS 196° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 6160 |
|---|---|---|

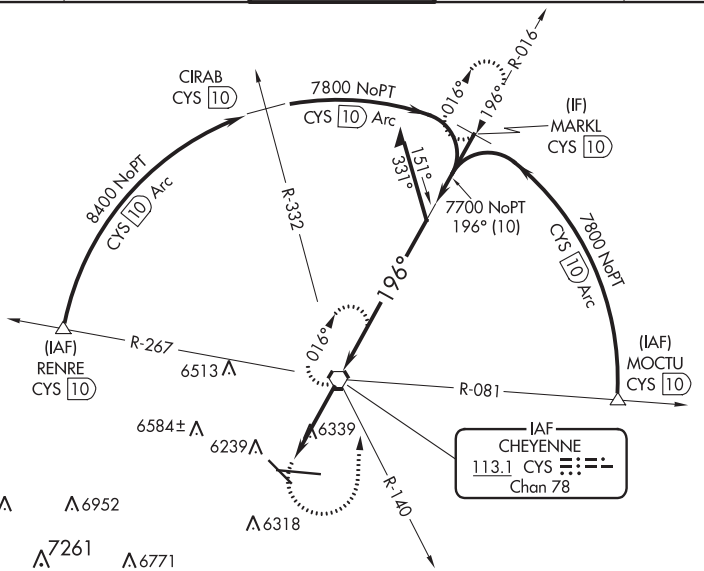
# VOR or TACAN-A

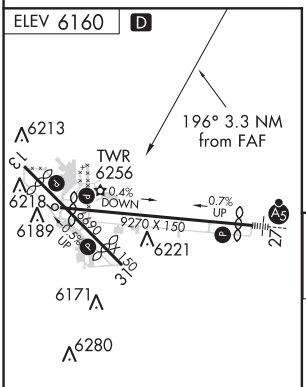
## CHEYENNE RGNL/JERRY OLSON FIELD (CYS)

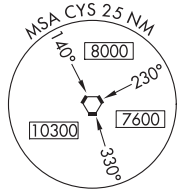
T
A
ASR/PAR

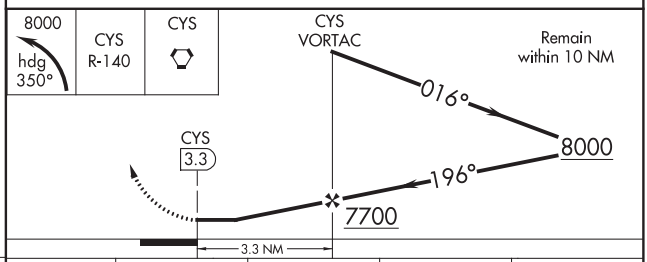
MISSED APPROACH: Climbing left turn to 8000 on heading 350° and on CYS VORTAC R-140 to CYS VORTAC and hold, continue climb-in-hold to 8000 (TACAN aircraft continue on CYS VORTAC R-016 to MARKL/10 DME and hold north, right turn, 196° inbound.)

| ATIS | CHEYENNE APP CON★ | CHEYENNE TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 134.425 278.3 | 124.55 263.075 | 118.7 (CTAF) L 257.8 | 121.9 254.275 | 122.95 |



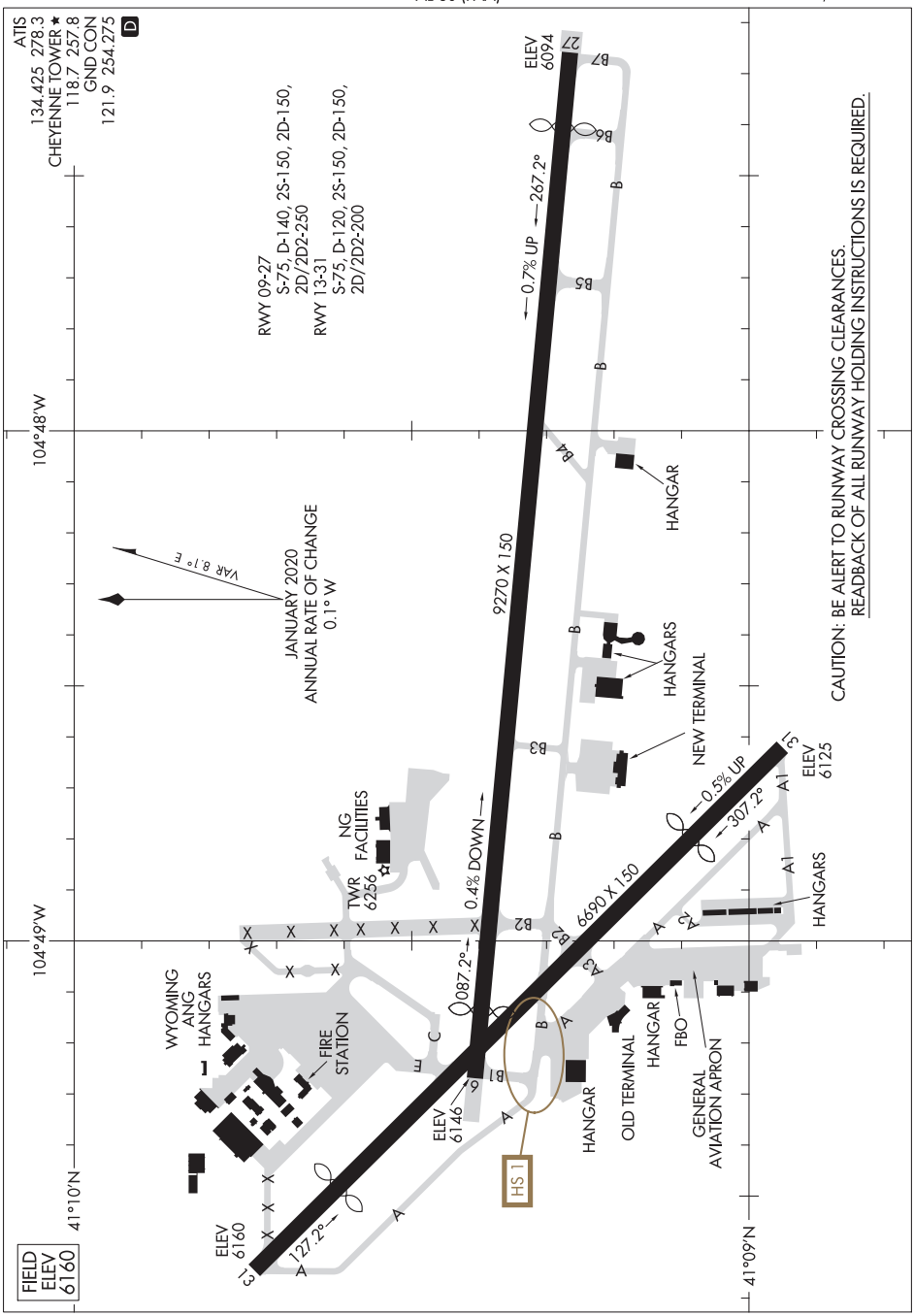




| FAF to MAP 3.3 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 3:18 | 2:12 | 1:39 | 1:19 | 1:06 |

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 6640-1 480 (500-1) | | 6900-2 740 (800-2) | 6940-2½ 780 (800-2½) |




NW-1, 05 NOV 2020 to 31 DEC 2020


ATIS
134.425 278.3
CHEYENNE TOWER ★
118.7 257.8
GND CON
121.9 254.275
D
RWY 09-27
S-75, D-140, 2S-150, 2D-150, 2D/2D2-250
RWY 13-31
S-75, D-120, 2S-150, 2D-150, 2D/2D2-200
ELEV 6094
27
B7
B6
B5
B4
B3
B2
B1
0.7% UP
267.2°
9270 X 150
104°48'W
104°49'W
41°10'N
41°09'N
VAR 8.1° E
JANUARY 2020
ANNUAL RATE OF CHANGE
0.1° W
HANGAR
HANGARS
NEW TERMINAL
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
NG FACILITIES
TWR 6256
0.4% DOWN
087.2°
6690 X 150
0.5% UP
307.2°
ELEV 6125
5
A1
A2
A3
HANGARS
WYOMING ANG HANGARS
FIRE STATION
ELEV 6146
6
ELEV 6160
3
127.2°
HS 1
HANGAR
OLD TERMINAL
HANGAR
FBO
GENERAL AVIATION APRON
FIELD ELEV 6160
NW-1, 05 NOV 2020 to 31 DEC 2020

CHOTEAU, MONTANA | AL-6814 (FAA) | 20030

# RNAV (GPS) RWY 15
## CHOTEAU (CII)

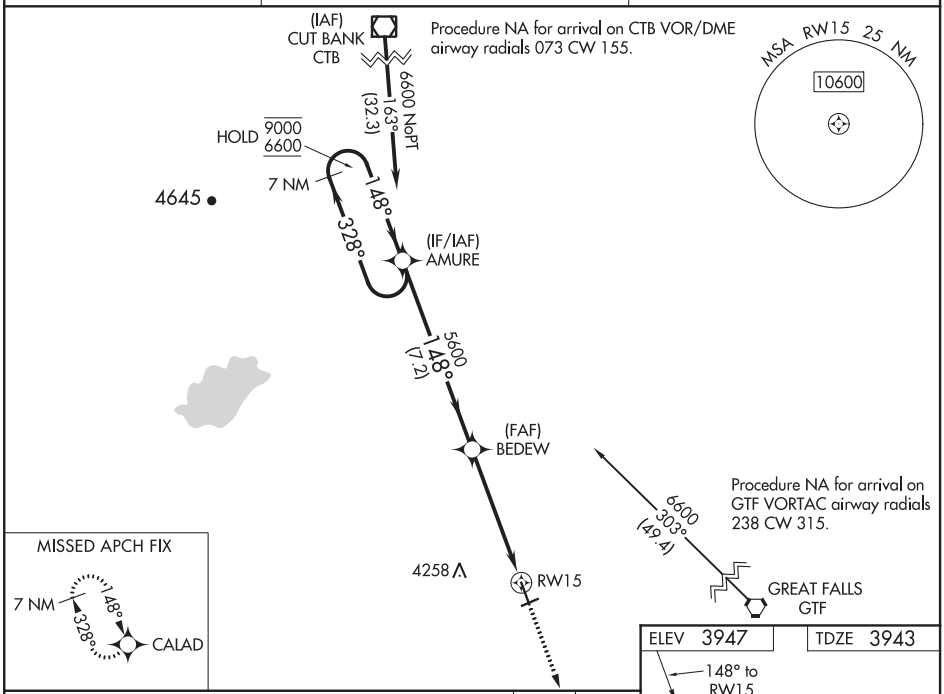
| WAAS CH 70443 W15A | APP CRS 148° | Rwy ldg 5001 TDZE 3943 Apt Elev 3947 |
|---|---|---|

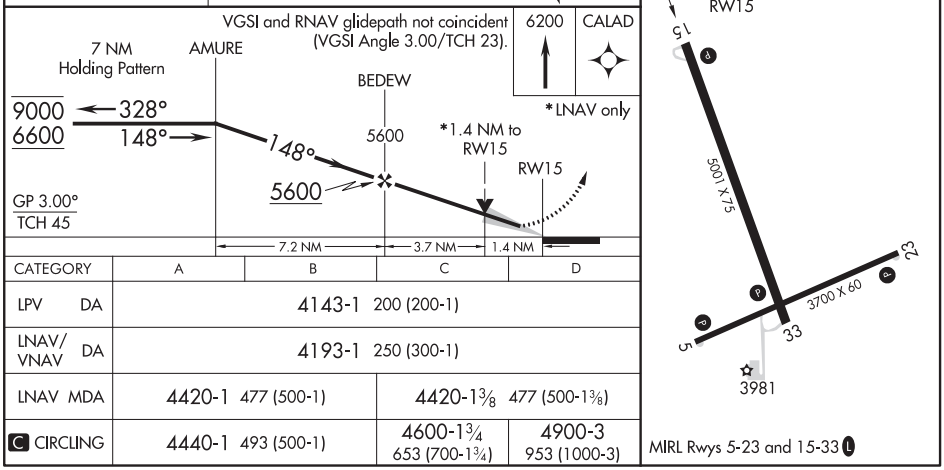
RNP APCH.

NA For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22° C or above 54° C.

MISSED APPROACH: Climb to 6200 direct CALAD and hold.

| AWOS-2 | SALT LAKE CITY CENTER | UNICOM |
|---|---|---|
| 119.275 | 133.4 285.4 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4143-1 200 (200-1) | | | |
| LNAV/VNAV DA | 4193-1 250 (300-1) | | | |
| LNAV MDA | 4420-1 477 (500-1) | | 4420-1⅜ 477 (500-1⅜) | |
| C CIRCLING | 4440-1 493 (500-1) | | 4600-1¾ 653 (700-1¾) | 4900-3 953 (1000-3) |

MIRL Rwys 5-23 and 15-33 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# RNAV (GPS) RWY 33
## CHOTEAU (CII)

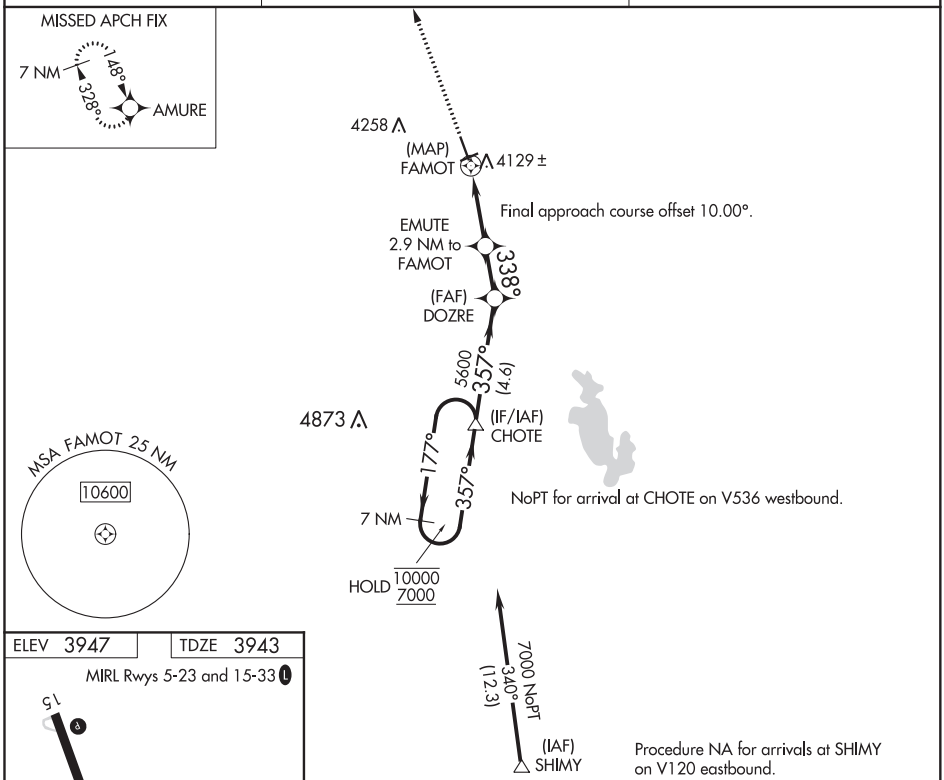
| APP CRS | Rwy ldg | 5001 |
|---|---|---|
| 338° | TDZE | 3943 |
| | Apt Elev | 3947 |

RNP APCH.

NA Rwy 33 helicopter visibility reduction below ¾ SM NA.

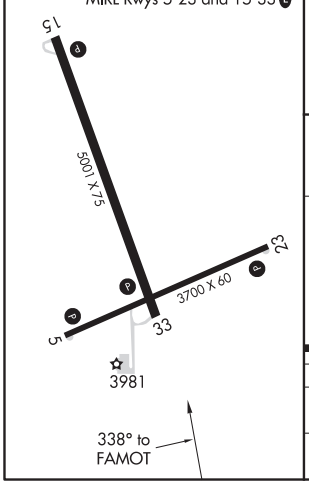
MISSED APPROACH: Climb to 6600 direct to AMURE and hold.

| AWOS-2 | SALT LAKE CITY CENTER | UNICOM |
|---|---|---|
| 119.275 | 133.4 285.4 | 122.8 (CTAF) L |




ELEV 3947 TDZE 3943

MIRL Rwys 5-23 and 15-33 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 4380-1 437 (500-1) | | 4380-1¼ 437 (500-1¼) | |
| C CIRCLING | 4440-1 493 (500-1) | | 4600-1¾ 653 (700-1¾) | 4900-3 953 (1000-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

CIRCLE, MONTANA AL-10493 (FAA) 20030

# RNAV (GPS) RWY 12
## CIRCLE TOWN COUNTY (4U6)

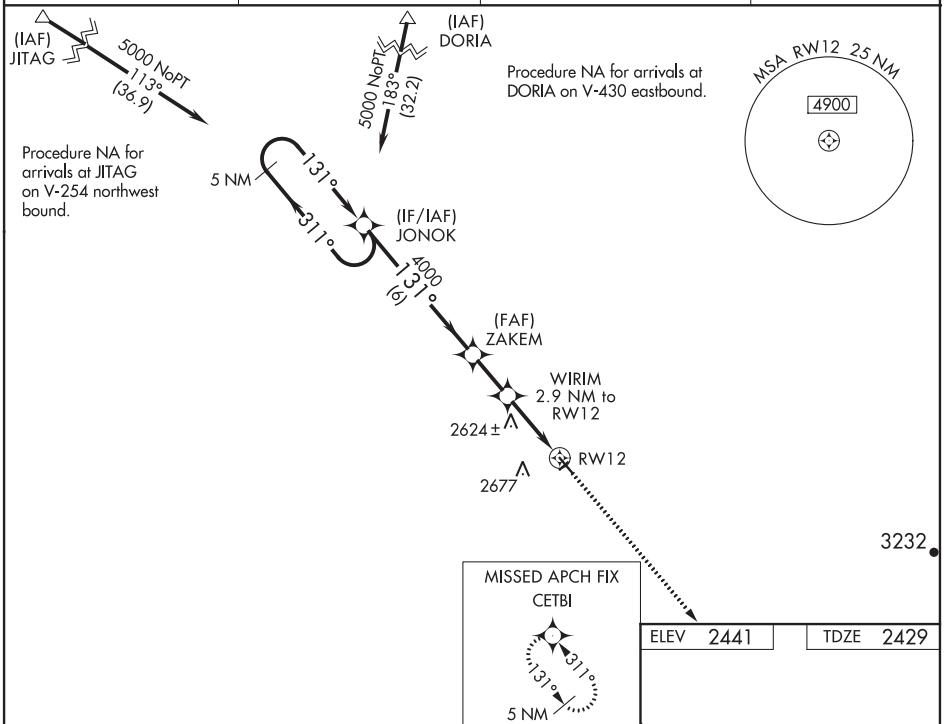
| WAAS CH 86930 W12A | APP CRS 131° | Rwy ldg 4100<br>TDZE 2429<br>Apt Elev 2441 |
|---|---|---|

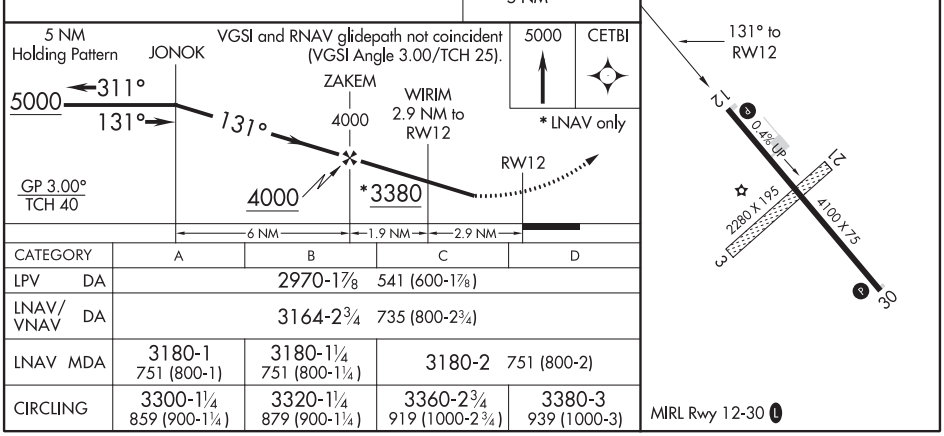
RNP APCH.

Baro-VNAV NA when using Glendive altimeter setting. When local altimeter setting not received, use Glendive altimeter setting. Rwy 12 helicopter visibility reduction below ¾ SM NA. Circling NA to Rwys 3 and 21. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C or above 54°C.

MISSED APPROACH: Climb to 5000 direct CETBI and hold.

| AWOS-2 | GDV AWOS 3-PT | SALT LAKE CENTER | UNICOM |
|---|---|---|---|
| 119.025 | 135.075 | 126.85 305.2 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2970-1⅞ 541 (600-1⅞) | | | |
| LNAV/VNAV DA | 3164-2¾ 735 (800-2¾) | | | |
| LNAV MDA | 3180-1 751 (800-1) | 3180-1¼ 751 (800-1¼) | 3180-2 751 (800-2) | |
| CIRCLING | 3300-1¼ 859 (900-1¼) | 3320-1¼ 879 (900-1¼) | 3360-2¾ 919 (1000-2¾) | 3380-3 939 (1000-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 49030 W30A | APP CRS 311° | Rwy ldg 4100<br>TDZE 2441<br>Apt Elev 2441 |
|---|---|---|

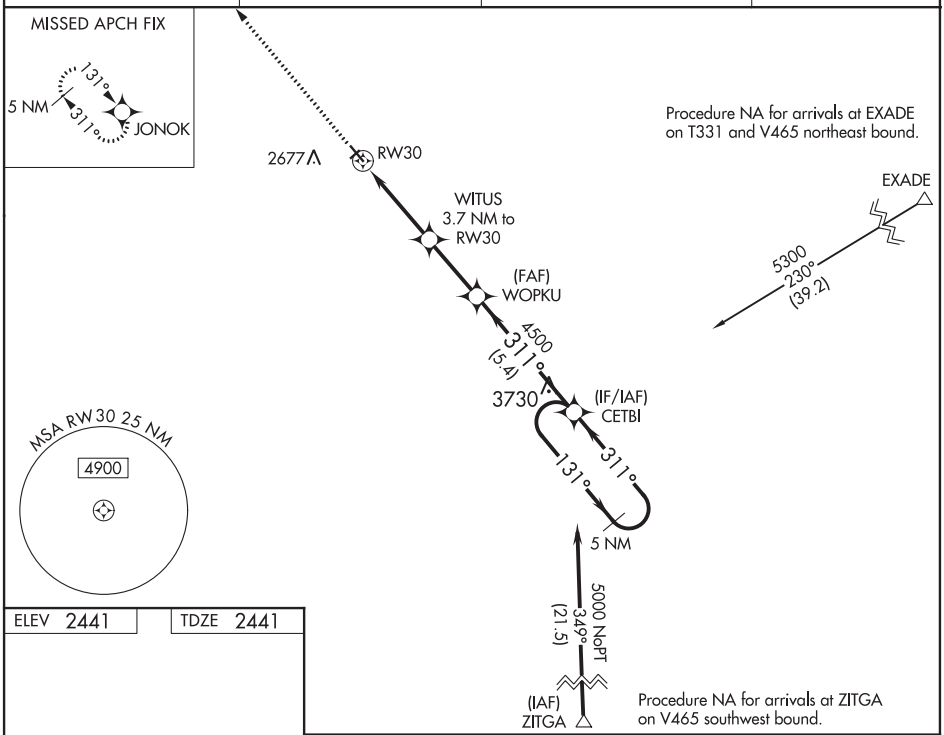
# RNAV (GPS) RWY 30
## CIRCLE TOWN COUNTY (4U6)

RNP APCH.

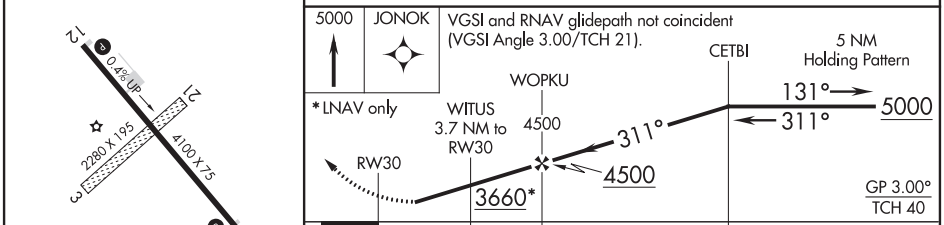
T A NA Baro-VNAV NA when using Glendive altimeter setting. Rwy 30 helicopter visibility reduction below ¾ SM NA. When local altimeter not received, use Glendive altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C or above 54°C.

MISSED APPROACH: Climb to 5000 direct JONOK and hold.

| AWOS-2 | GDV AWOS 3-PT | SALT LAKE CENTER | UNICOM |
|---|---|---|---|
| 119.025 | 135.075 | 126.85 305.2 | 122.8 (CTAF) L |




| ELEV 2441 | TDZE 2441 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2982-1⅞ 541 (600-1⅞) | | | |
| LNAV/VNAV DA | 3335-4 894 (900-4) | | | |
| LNAV MDA | 3540-1¼ 1099 (1100-1¼) | 3540-1½ 1099 (1100-1½) | 3540-3 1099 (1100-3) | |

MIRL Rwy 12-30 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

CODY, WYOMING

AL-5243 (FAA)

20086

# RNAV (GPS) RWY 4

## YELLOWSTONE RGNL (COD)

| WAAS CH 56244 W04A | APP CRS 038° | Rwy ldg 7178<br>TDZE 5097<br>Apt Elev 5102 |
|---|---|---|

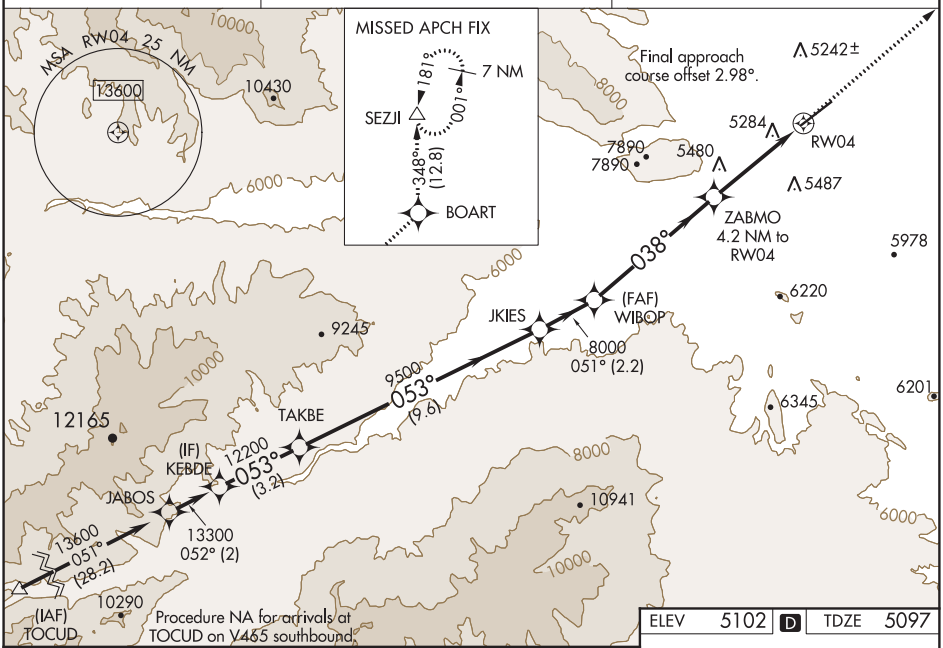
RNP APCH.

Rwy 4 helicopter visibility reduction below ¾ SM NA.
Baro-VNAV NA.

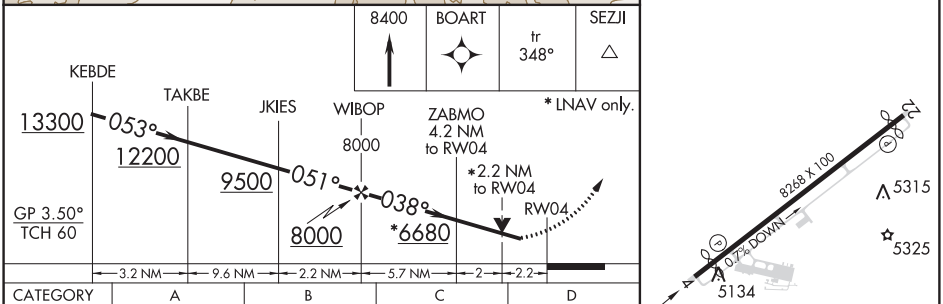
-31°C

MISSED APPROACH: Climb to 8400 direct BOART and on track 348° to SEZJI and hold.

| AWOS-3PT | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.075 | 127.75 351.9 | 122.8 (CTAF) L |




| ELEV | 5102 | D | TDZE | 5097 |
|---|---|---|---|---|







| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 5794-2 697 (700-2) | | | |
| LNAV/VNAV DA | 5862-2½ 765 (800-2½) | | | |
| LNAV MDA | 5980-1¼ 883 (900-1¼) | | 5980-2½ 883 (900-2½) | |
| C CIRCLING | 5980-1¼ 878 (900-1¼) | | 5980-2½ 878 (900-2½) | 6940-3 1838 (1900-3) |

HIRL Rwy 4-22 L
REIL Rwys 4 and 22 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH **93600** **W22A** | APP CRS **221°** | Rwy ldg **7178** TDZE **5076** Apt Elev **5102** |
|---|---|---|

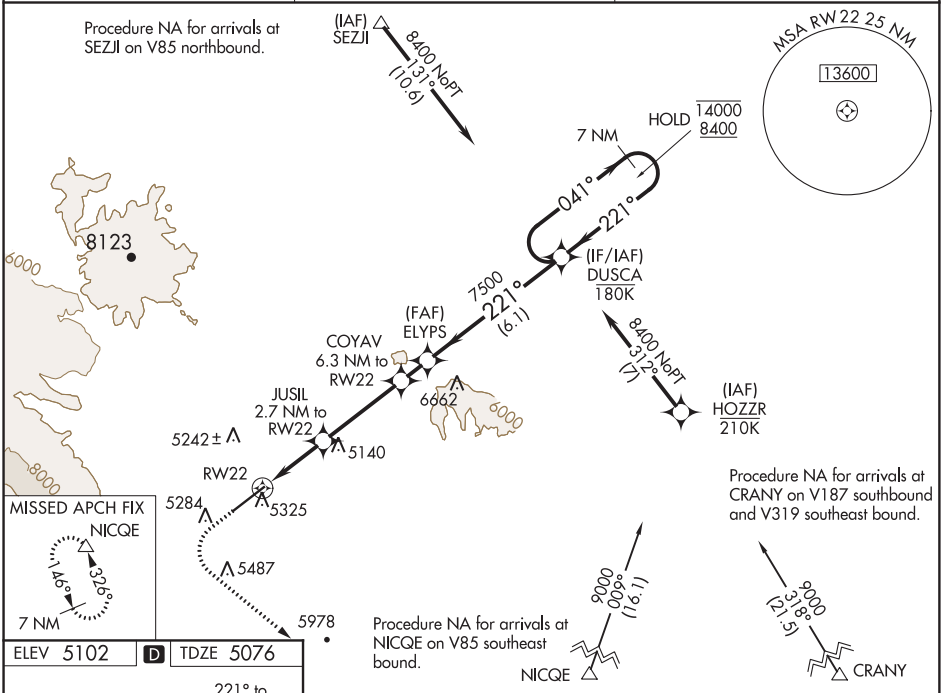
# RNAV (GPS) RWY 22
## YELLOWSTONE RGNL (COD)

RNP APCH.

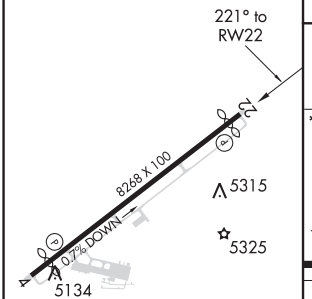
T A -31°C

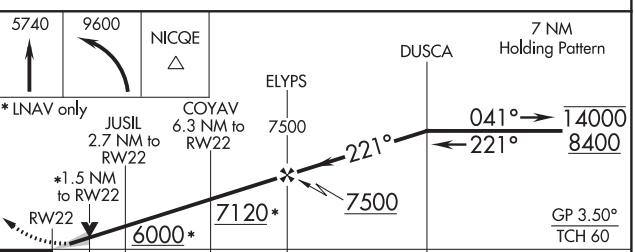
MISSED APPROACH: (Do not exceed 185K until NICQE) Climb to 5740 then climbing left turn to 9600 direct NICQE and hold, continue climb-in-hold to 9600.
# Missed approach requires minimum climb of 227 feet per NM to 6900.

| AWOS-3PT | SALT LAKE CENTER | UNICOM |
|---|---|---|
| **135.075** | **127.75 351.9** | **122.8** (CTAF) L |




ELEV 5102 D TDZE 5076




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA # | 5397-1 321 (300-1) | | | |
| LPV DA | 5457-1⅛ 381 (400-1⅛) | | | |
| LNAV MDA | 5600-1 524 (500-1) | | 5600-1½ 524 (500-1½) | |
| C CIRCLING | 5780-1 678 (700-1) | 5920-1¼ 818 (900-1¼) | 5940-2½ 838 (900-2½) | 6940-3 1838 (1900-3) |

REIL Rwys 4 and 22 L
HIRL Rwy 4-22 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

CODY, WYOMING | AL-5243 (FAA) | 20310

# RNAV (GPS)-B
## YELLOWSTONE RGNL (COD)

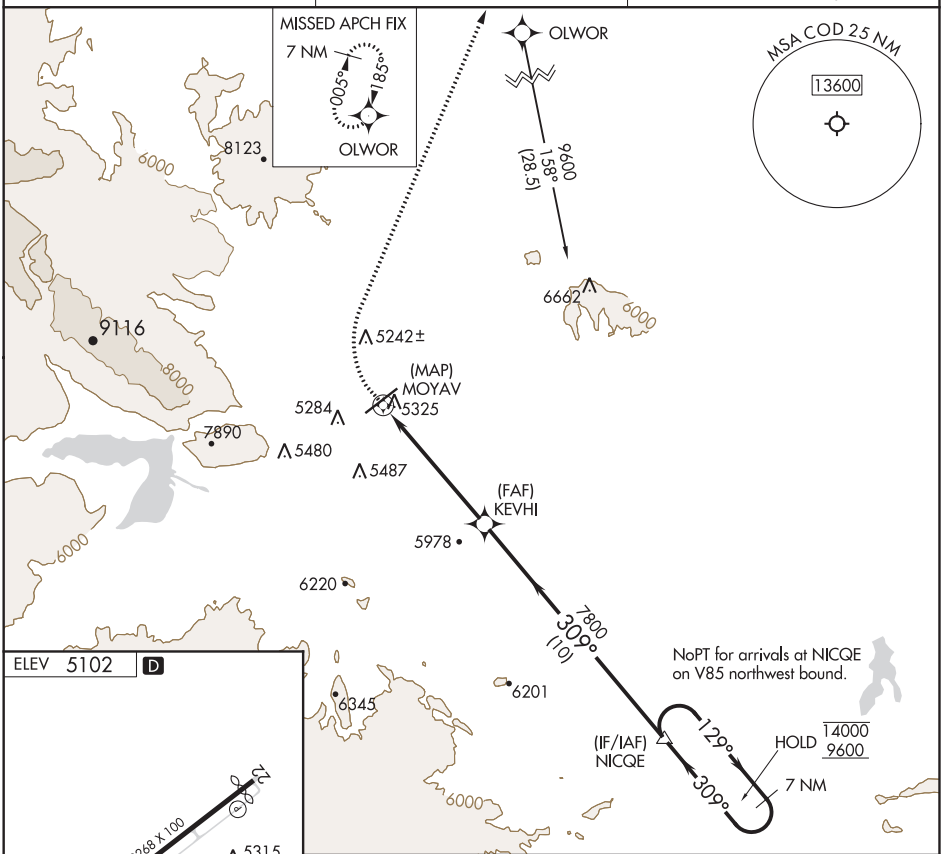
| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 309° | TDZE | N/A |
| | Apt Elev | 5102 |

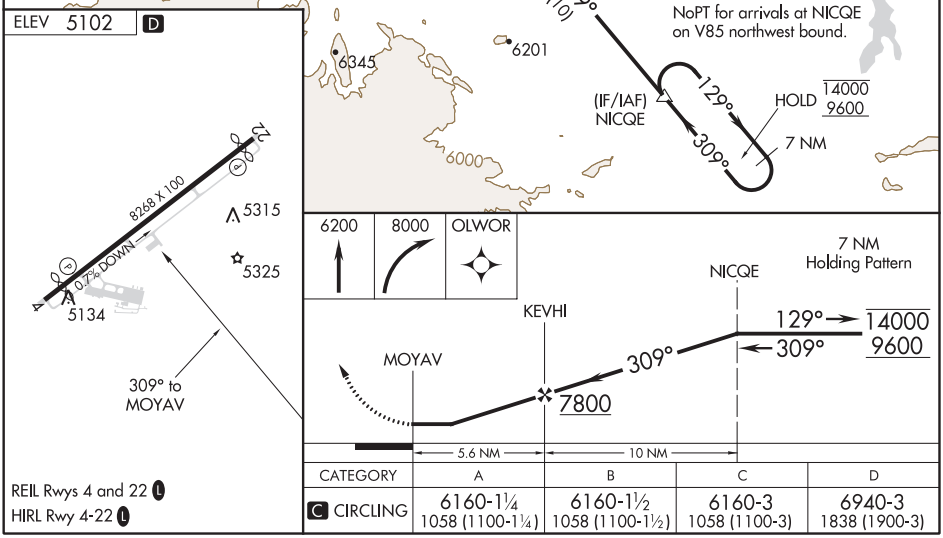
RNP APCH.

T A -31°C

MISSED APPROACH: Climb to 6200 then climbing right turn to 8000 direct OLWOR and hold.

| AWOS-3PT | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.075 | 127.75 351.9 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 6160-1¼ 1058 (1100-1¼) | 6160-1½ 1058 (1100-1½) | 6160-3 1058 (1100-3) | 6940-3 1838 (1900-3) |

REIL Rwys 4 and 22 L
HIRL Rwy 4-22 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

CODY, WYOMING
Amdt 1 26MAR20

44°31′N-109°01′W

YELLOWSTONE RGNL (COD)
RNAV (GPS)-B

| VOR/DME COD | APP CRS | Rwy ldg | N/A |
|---|---|---|---|
| 111.8 | 191° | TDZE | N/A |
| Chan 55 | | Apt Elev | 5102 |

# VOR-A
## YELLOWSTONE RGNL (COD)

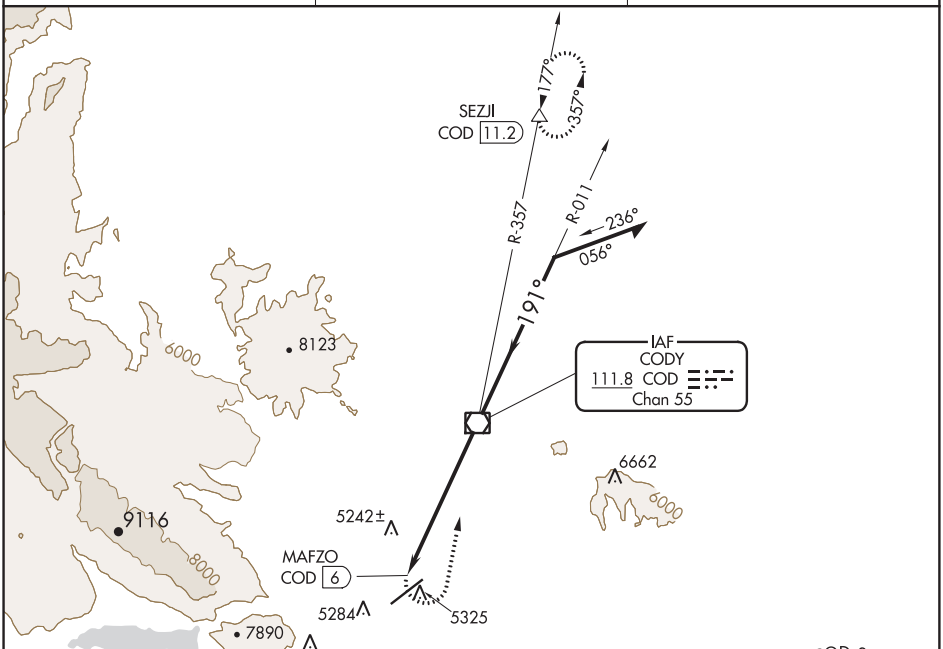
DME required.

-31°C

MISSED APPROACH: Climbing left turn to 8400 direct COD VOR/DME and on COD VOR/DME R-357 to SEZJI/COD 11.2 DME and hold.

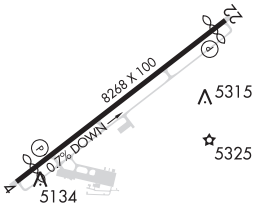
| AWOS-3PT | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.075 | 127.75 351.9 | 122.8 (CTAF) L |

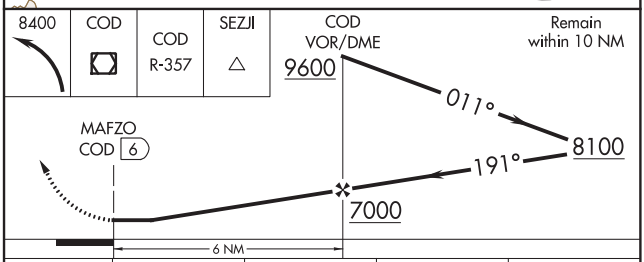





ELEV 5102 D

191° 6 NM from FAF




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 5780-1<br>678 (700-1) | 5920-1¼<br>818 (900-1¼) | 5940-2½<br>838 (900-2½) | 6940-3<br>1838 (1900-3) |

REIL Rwys 4 and 22 L
HIRL Rwy 4-22 L

| LOC I-COE | APP CRS | Rwy ldg / TDZE / Apt Elev |
|---|---|---|
| 110.7 | 051° | 7400 / 2290 / 2320 |

# ILS or LOC/DME RWY 6

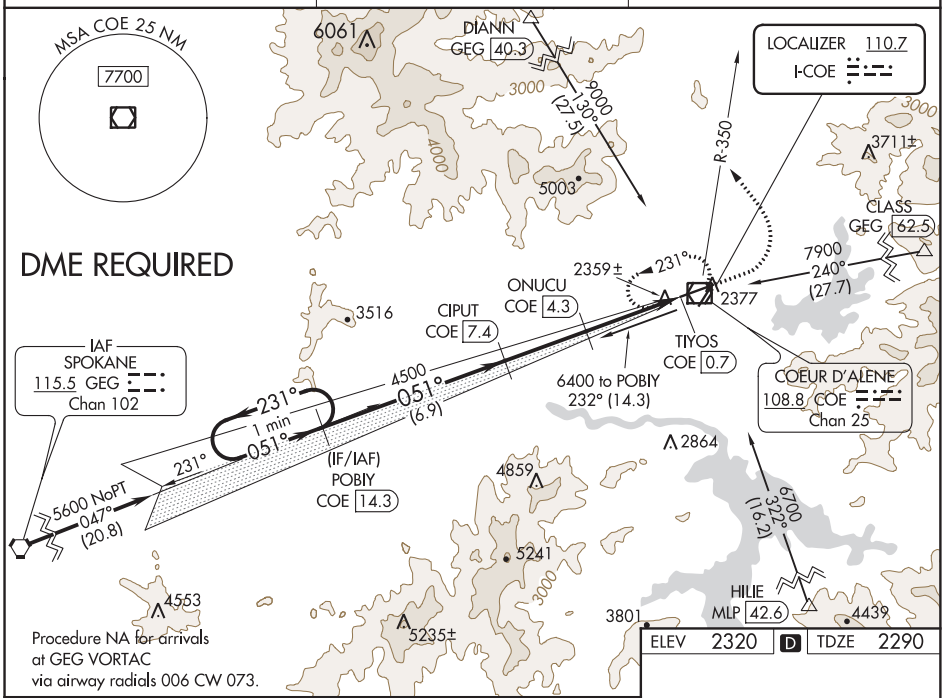
## COEUR D'ALENE-PAPPY BOYINGTON FIELD (COE)

DME from COE VOR/DME. Simultaneous reception of I-COE and COE DME required. Autopilot coupled approach NA below 2840. When local altimeter setting not received, use Spokane Intl altimeter setting and increase all DA/MDA 80 feet and all visibilities ¼ mile. Circling Rwy 2, NA at night.

MALSR

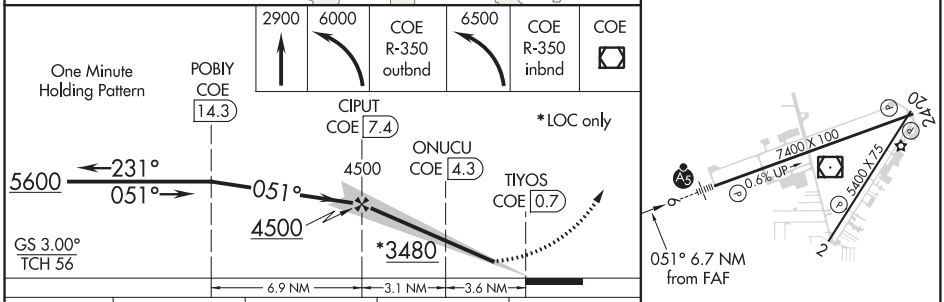
MISSED APPROACH: Climb to 2900 then climbing left turn to 6000 via COE R-350 outbound then climbing left turn to 6500 via COE R-350 inbound to COE VOR/DME and hold.

| AWOS-3PT | SPOKANE APP CON | UNICOM |
|---|---|---|
| 135.075 | 132.1 263.0 | 122.8 (CTAF) L |




Procedure NA for arrivals at GEG VORTAC via airway radials 006 CW 073.

ELEV 2320 D TDZE 2290







| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 6 | 2490-½ 200 (200-½) | | | |
| S-LOC 6 | 2860-½ 570 (600-½) | | 2860-1 570 (600-1) | 2860-1¼ 570 (600-1¼) |
| CIRCLING | 2860-1 540 (600-1) | | 2880-1½ 560 (600-1½) | 2880-2 560 (600-2) |

MIRL Rwy 2-20 L
HIRL Rwy 6-24 L
REIL Rwys 2 and 24 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 70608 W06A | APP CRS 051° | Rwy ldg 7400 TDZE 2291 Apt Elev 2320 |
|---|---|---|

# RNAV (GPS) RWY 6

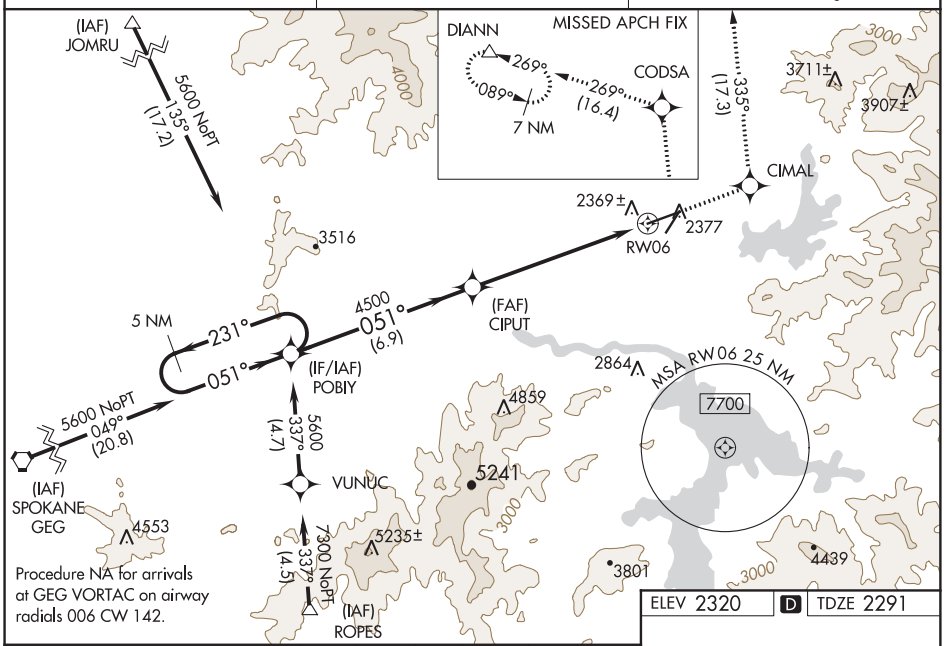
## COEUR D'ALENE-PAPPY BOYINGTON FIELD (COE)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C (-5°F) or above 53°C (127°F). DME/DME RNP- 0.3 NA. When local altimeter setting not received, use Spokane Intl altimeter setting and increase all DA/MDA 80 feet. Increase LNAV/VNAV all Cats visibility ¼ mile, LNAV Cat C/D visibility ⅛ mile, and Circling Cat C visibility ¼ mile. Baro-VNAV and VDP NA when using Spokane Intl altimeter setting. Night landing: Rwy 2 NA.

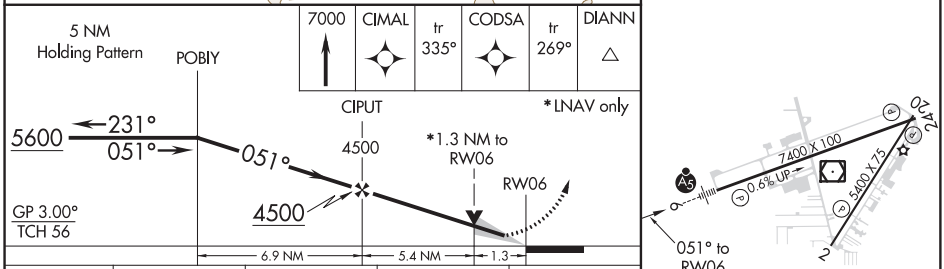
MALSR

MISSED APPROACH: Climb to 7000 direct CIMAL and on track 335° to CODSA and on track 269° to DIANN and hold.

| AWOS-3PT | SPOKANE APP CON | UNICOM |
|---|---|---|
| 135.075 | 132.1 263.0 | 122.8 (CTAF) L |




ELEV 2320 D TDZE 2291




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2491-½ 200 (200-½) | | | |
| LNAV/VNAV DA | 2654-¾ 363 (400-¾) | | | |
| LNAV MDA | 2740-½ 449 (500-½) | | 2740-1 449 (500-1) | |
| CIRCLING | 2740-1 420 (500-1) | 2860-1 540 (600-1) | 2880-1½ 560 (600-1½) | 2880-2 560 (600-2) |




MIRL Rwy 2-20 L
HIRL Rwy 6-24 L
REIL Rwys 2 and 24 L

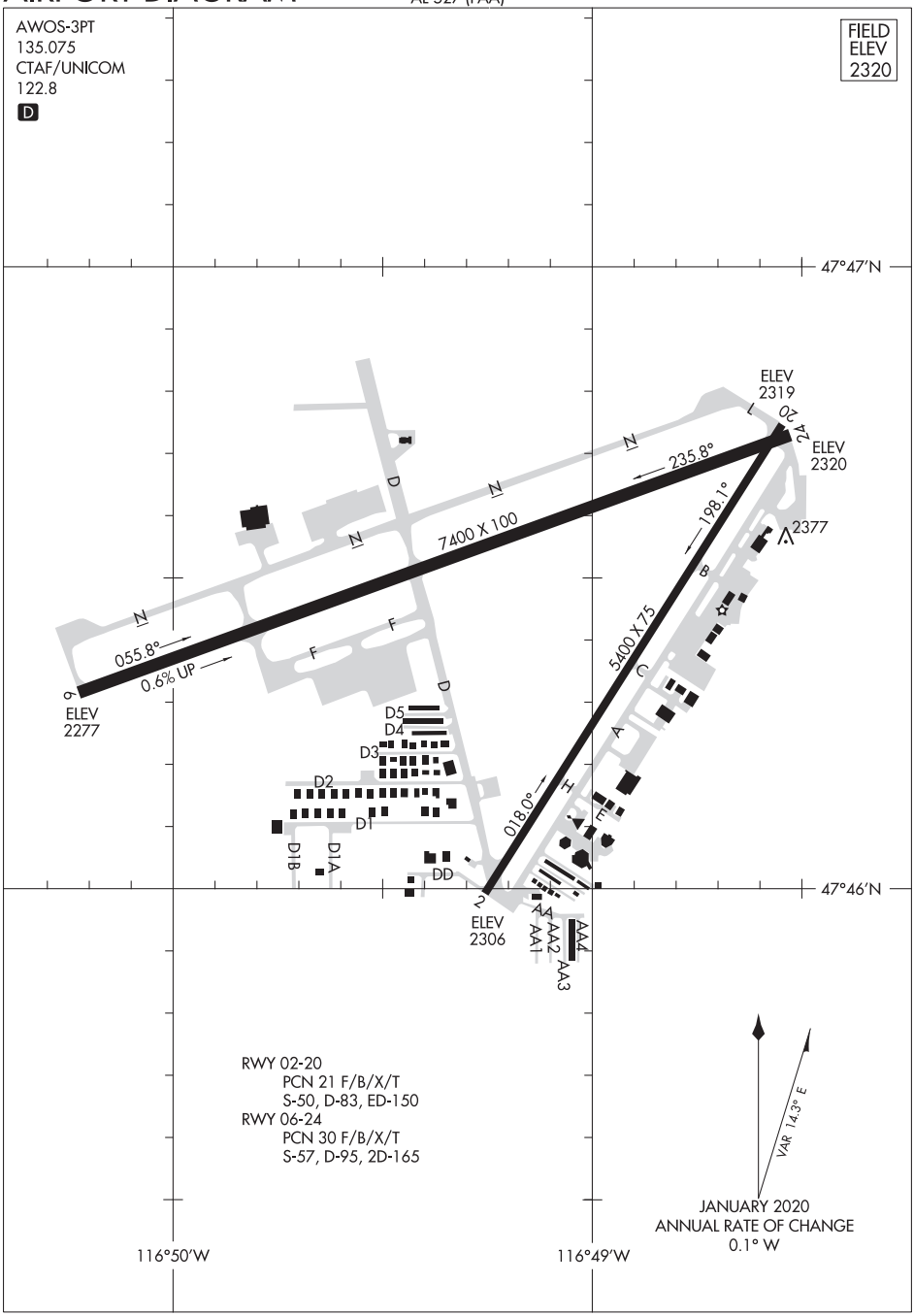
NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

20254

# AIRPORT DIAGRAM

COEUR D'ALENE-PAPPY BOYINGTON FIELD (COE)
COEUR D'ALENE, IDAHO
AL-527 (FAA)




NW-1, 05 NOV 2020 to 31 DEC 2020

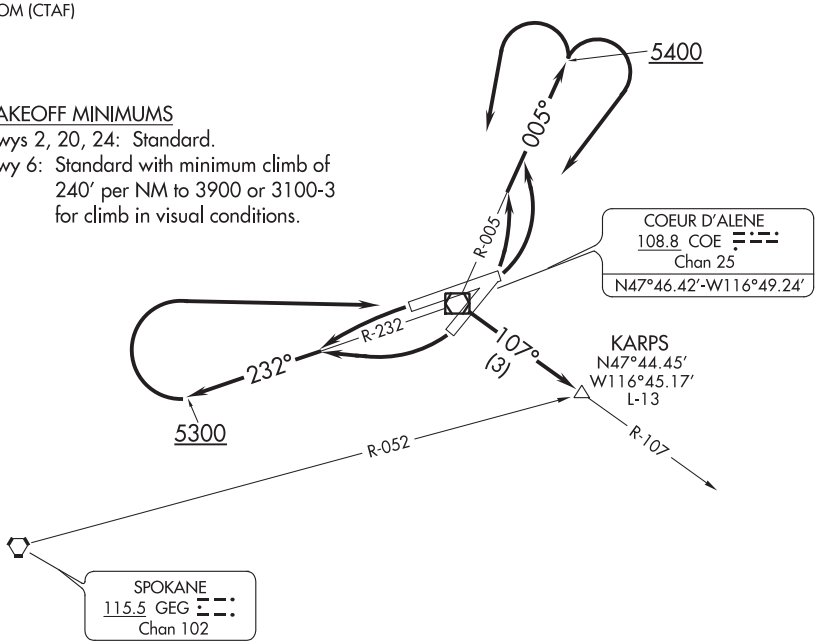
NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM
20254
COEUR D'ALENE, IDAHO
COEUR D'ALENE-PAPPY BOYINGTON FIELD (COE)

# COEUR D'ALENE TWO DEPARTURE (OBSTACLE)

SL-527 (FAA) COEUR D'ALENE, IDAHO

AWOS-3PT
135.075
SPOKANE DEP CON
132.1 263.0
UNICOM (CTAF)
122.8




TAKEOFF MINIMUMS
Rwys 2, 20, 24: Standard.
Rwy 6: Standard with minimum climb of 240' per NM to 3900 or 3100-3 for climb in visual conditions.

TAKEOFF OBSTACLE NOTES
Rwy 20: Trees beginning 165' from DER, 276' right of centerline, up to 109' AGL/2399' MSL.
Tree 2914' from DER, 425' left of centerline, 38' AGL/2383' MSL.
Rwy 6: Poles beginning 895' from DER, 690' right of centerline, up to 44' AGL/2354' MSL.
Trees beginning 1149' from DER, 720' right of centerline, up to 103' AGL/2563' MSL.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 2: Climbing left turn to 5400 on COE R-005, then left or right turn direct COE VOR/DME, then on COE R-107 to KARPS INT to MEA for route of flight.
TAKEOFF RUNWAY 6: Climbing left turn to 5400 on COE R-005, then left or right turn direct COE VOR/DME, then on COE R-107 to KARPS INT to MEA for route of flight or climb in visual conditions to cross Coeur D'Alene-Pappy Boyington Field Airport at or above 5300 before proceeding on course. When executing VCOA, notify ATC prior to departure.
TAKEOFF RUNWAY 20: Climbing right turn, thence . . . .
TAKEOFF RUNWAY 24: Climbing left turn, thence . . . .

. . . . climb on COE R-232 to 5300, then right direct COE VOR/DME, then on COE R-107 to KARPS INT to MEA for route of flight.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

COLSTRIP, MONTANA | AL-9401 (FAA) | 20310

| APP CRS | Rwy ldg | 5100 |
|---|---|---|
| 061° | TDZE | 3426 |
| | Apt Elev | 3426 |

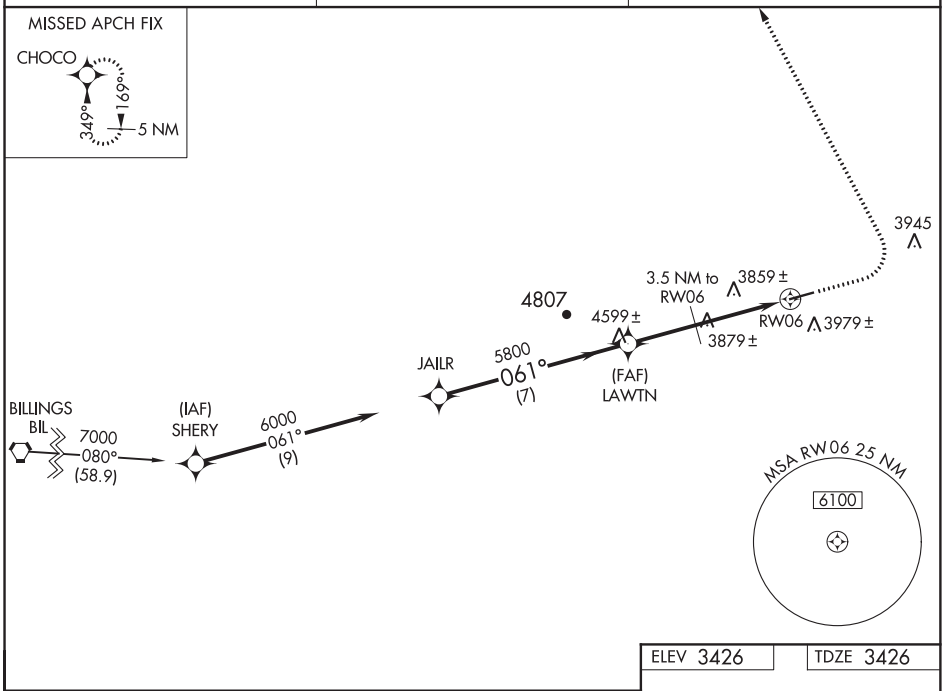
# GPS RWY 6
## COLSTRIP (M46)

NA
-32°C

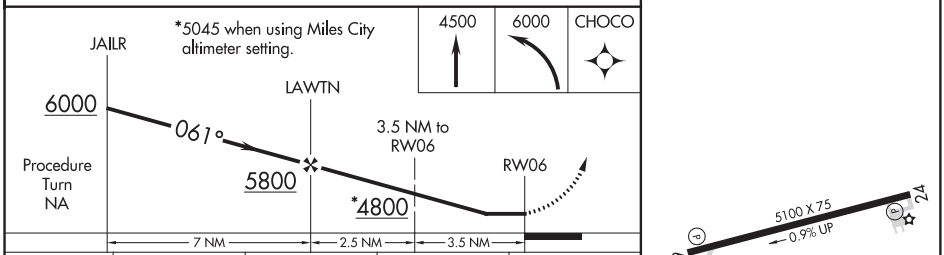
When local altimeter not received use Miles City altimeter setting. Helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 4500 then climbing left turn to 6000 direct CHOCO WP and hold.

| AWOS-AV | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 122.7 | 126.85 305.2 | 122.7 (CTAF) L |




ELEV 3426 | TDZE 3426




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-6 | 4220-1<br>794 (800-1) | 4220-1¼<br>794 (800-1¼) | 4220-2¼<br>794 (800-2¼) | NA |
| CIRCLING | 4340-1¼ 914 (1000-1¼) | | 4340-2¾<br>914 (1000-2¾) | NA |
| MILES CITY ALTIMETER SETTING | | | | |
| S-6 | NA | | | |
| CIRCLING | 4580-1¼<br>1154 (1200-1¼) | 4580-1½<br>1154 (1200-1½) | 4580-3<br>1154 (1200-3) | NA |

MIRL Rwy 6-24 L


NW-1, 05 NOV 2020 to 31 DEC 2020

COLSTRIP, MONTANA
Orig-D 02APR15

45°51′N-106°43′W

COLSTRIP (M46)
GPS RWY 6

| APP CRS | Rwy ldg | 5100 |
|---|---|---|
| 242° | TDZE | 3411 |
| | Apt Elev | 3426 |

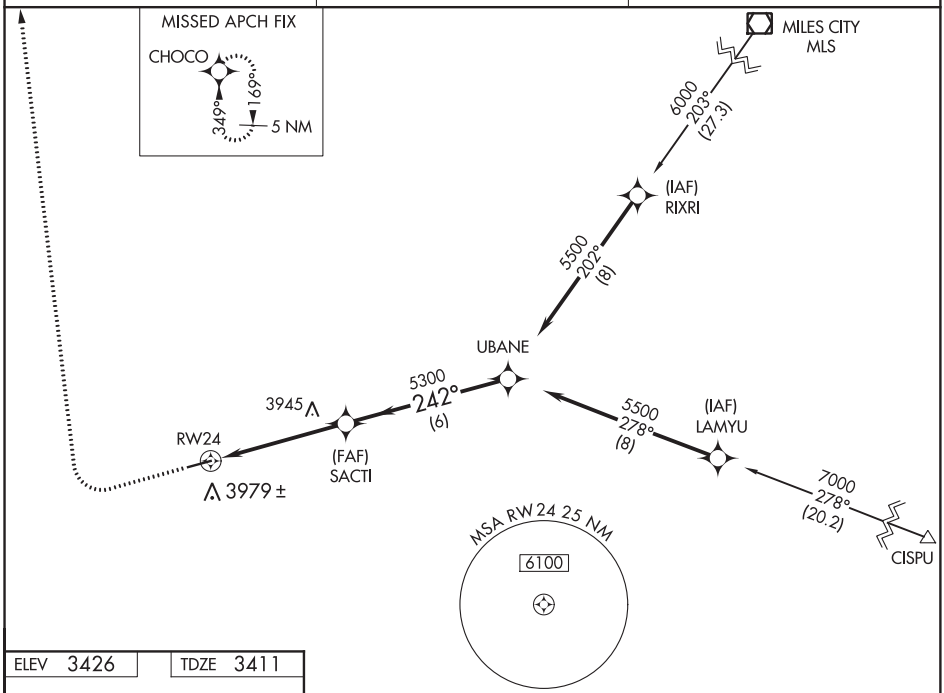
# GPS RWY 24
## COLSTRIP (M46)

NA
-32°C

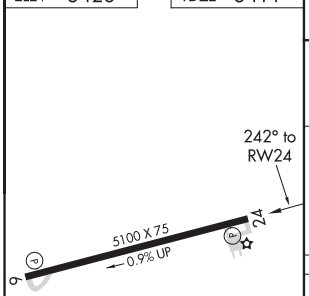
When local altimeter not received use Miles City altimeter setting. Helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 4500 then climbing right turn to 6000 direct CHOCO WP and hold.

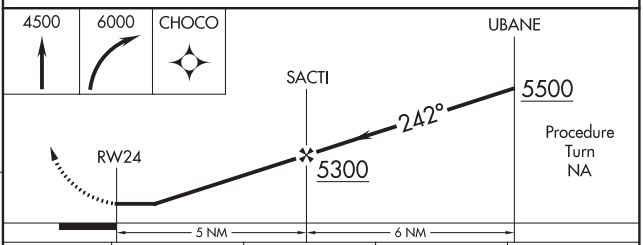
| AWOS-AV | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 122.7 | 126.85 305.2 | 122.7 (CTAF) |




ELEV 3426 TDZE 3411




MIRL Rwy 6-24




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-24 | 4200-1<br>789 (800-1) | 4200-1¼<br>789 (800-1¼) | 4200-2¼<br>789 (800-2¼) | NA |
| CIRCLING | 4340-1¼ 914 (1000-1¼) | | 4340-2¾<br>914 (1000-2¾) | NA |
| MILES CITY ALTIMETER SETTING | | | | |
| S-24 | 4440-1¼<br>1029 (1100-1¼) | 4440-1½<br>1029 (1100-1½) | 4440-2¾<br>1029 (1100-2¾) | NA |
| CIRCLING | 4580-1¼<br>1154 (1200-1¼) | 4580-1½<br>1154 (1200-1½) | 4580-3<br>1154 (1200-3) | NA |

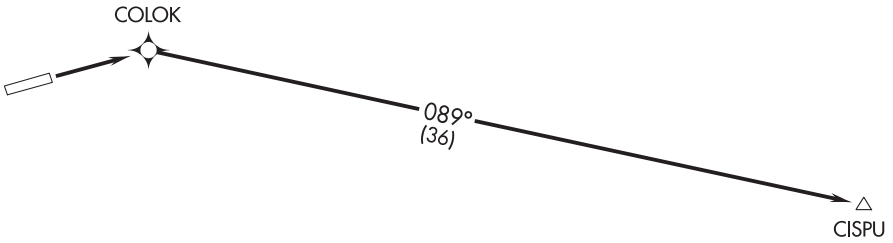
(CISPU1.CISPU) 20198

# CISPU ONE DEPARTURE (OBSTACLE) (RNAV)

AL-9401 (FAA)

COLSTRIP (M46)
COLSTRIP, MONTANA

SALT LAKE CENTER
126.85 305.2




TAKEOFF MINIMUMS

Rwy 6: Standard.
Rwy 24: NA - ATC.

TAKEOFF OBSTACLE NOTES

Rwy 6: Tree 1492′ from DER, 620′ right of centerline, 20′ AGL/3499′ MSL.
Tree 507′ from DER, 598′ left of centerline, 20′ AGL/3419′ MSL.

NOTE: GPS required.

NOTE: RNAV 1

NOTE: Chart not to scale.

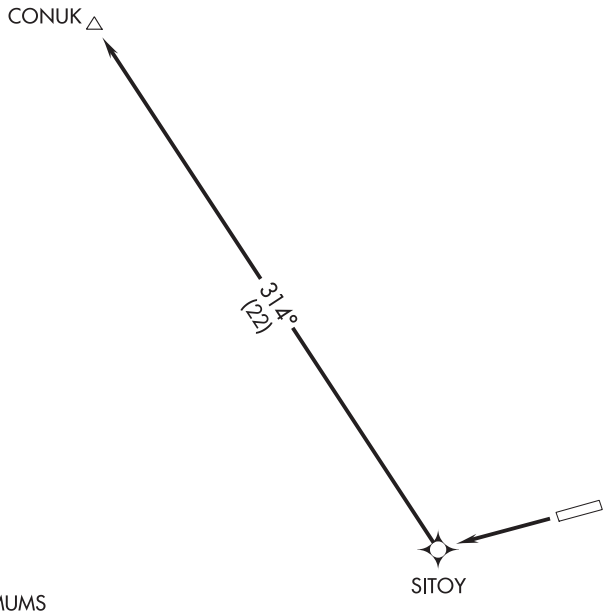
DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 6: Climb direct COLOK then via 089° track to CISPU, thence. . . .

. . . .Maintain 9000, expect filed altitude 10 minutes after departure.


NW-1, 05 NOV 2020 to 31 DEC 2020

SALT LAKE CENTER
126.85 305.2




TAKEOFF MINIMUMS
Rwy 6: NA - ATC.
Rwy 24: 600-3 or standard with minimum climb of 365′ per NM to 4200.

TAKEOFF OBSTACLE NOTE
Rwy 24: Dragline 11510′ from DER, 3559′ right of centerline, 225′ AGL/3964′ MSL.

NOTE: GPS required.
NOTE: RNAV 1

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 24: Climb direct SITOY then via 314° track to CONUK, thence. . . .

. . . .Maintain 6000, expect filed altitude 10 minutes after departure.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

CONRAD, MONTANA | AL-6090 (FAA) | 19059

| WAAS CH 58342 W06A | APP CRS 058° | Rwy ldg 4602<br>TDZE 3548<br>Apt Elev 3548 |
|---|---|---|

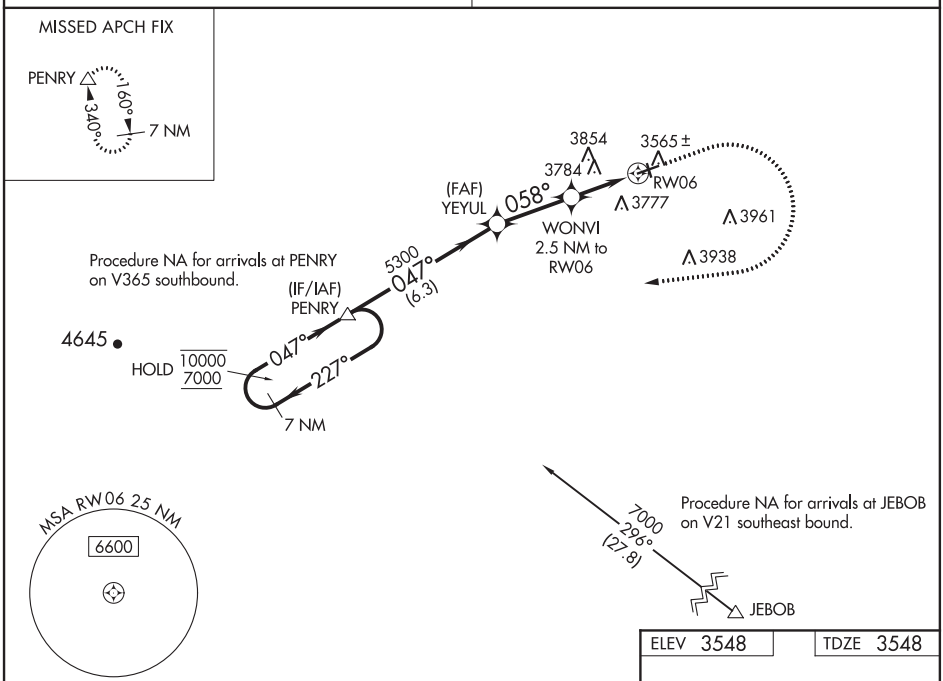
# RNAV (GPS) RWY 6
## CONRAD (SØ1)

RNP APCH.

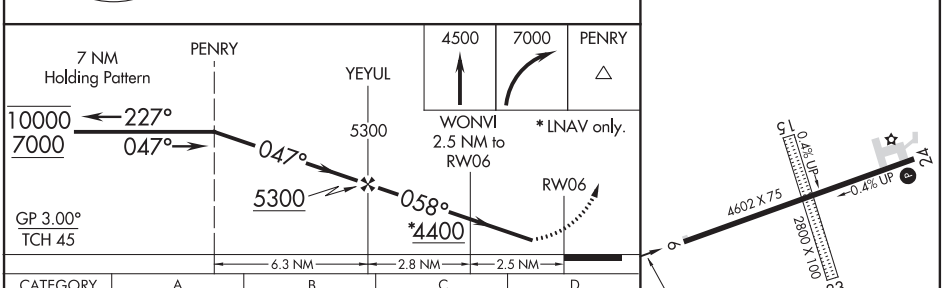
T A NA — Circling NA to Rwys 15 and 33. Rwy 6 helicopter visibility reduction below ¾ SM NA. Baro-VNAV NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C or above 53°C. Use Cut Bank altimeter setting.

MISSED APPROACH: Climb to 4500, then climbing right turn to 7000 direct PENRY and hold, continue climb in hold to 7000.

| SALT LAKE CITY CENTER | AUNICOM |
|---|---|
| 133.4 285.4 | 122.8 (CTAF) L |




| ELEV 3548 | TDZE 3548 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 3915-1 367 (400-1) | | | |
| LNAV/VNAV DA | 4266-2 718 (800-2) | | | |
| LNAV MDA | 4220-1 672 (700-1) | | 4220-1⅞ 672 (700-1⅞) | |
| C CIRCLING | 4220-1 672 (700-1) | 4340-1 792 (800-1) | 4460-2¾ 912 (1000-2¾) | 4620-3 1072 (1100-3) |

MIRL Rwy 6-24 L
REIL Rwy 24 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 69642 W24A | APP CRS 238° | Rwy ldg 4602<br>TDZE 3538<br>Apt Elev 3548 |
|---|---|---|

# RNAV (GPS) RWY 24
## CONRAD (SØ1)

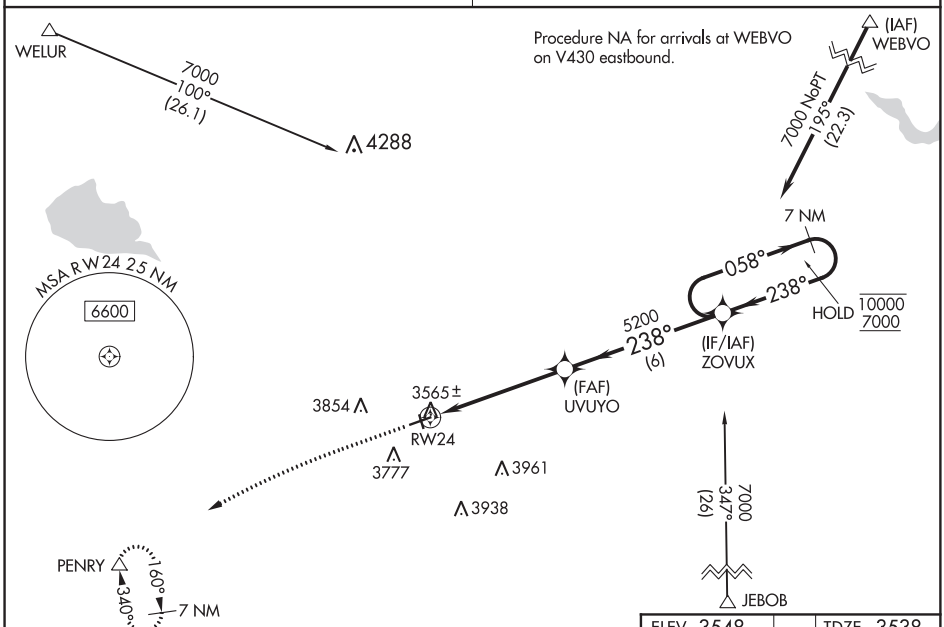
RNP APCH.

T
A NA

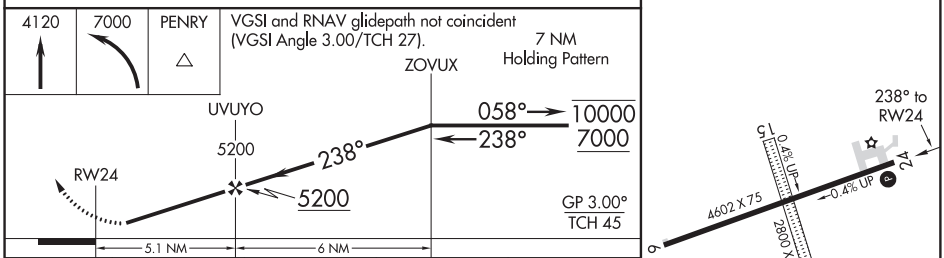
Circling NA to Rwys 15 and 33. Rwy 24 helicopter visibility reduction below ¾ SM NA. Baro-VNAV NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C or above 53°C. Use Cut Bank altimeter setting.

MISSED APPROACH: Climb to 4120 then climbing left turn to 7000 direct PENRY and hold, continue climb-in-hold to 7000.

| SALT LAKE CITY CENTER | AUNICOM |
|---|---|
| 133.4 285.4 | 122.8 (CTAF) L |




ELEV 3548 TDZE 3538




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 3905-1 367 (400-1) | | | |
| LNAV/VNAV DA | 3949-1⅛ 411 (500-1⅛) | | | |
| LNAV MDA | 4060-1 522 (600-1) | | 4060-1½ 522 (600-1½) | |
| C CIRCLING | 4140-1 592 (600-1) | 4340-1 792 (800-1) | 4460-2¾ 912 (1000-2¾) | 4620-3 1072 (1100-3) |

MIRL Rwy 6-24 L
REIL Rwy 24 L



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC I-CVO | APP CRS | Rwy ldg | 5900 |
|---|---|---|---|
| 111.9 | 172° | TDZE | 248 |
| | | Apt Elev | 250 |

# ILS or LOC RWY 17
## CORVALLIS MUNI (CVO)

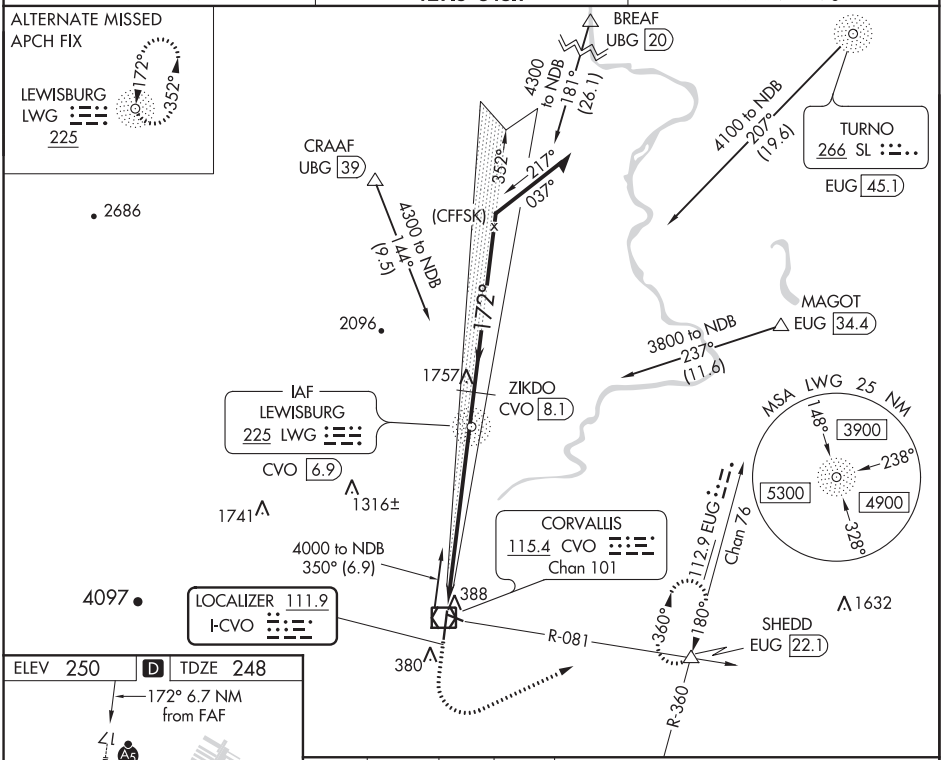
ADF required for procedure entry. ADF required for LOC only.

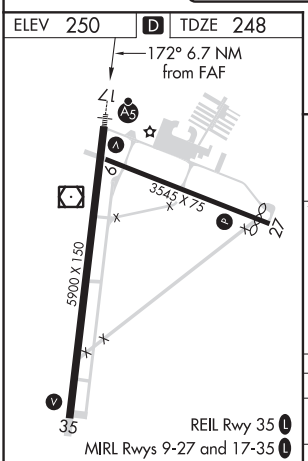
When local altimeter setting not received, procedure NA.
For inop ALS, increase S-LOC 17 Cat C/D visibility to 2 SM.

MALSR

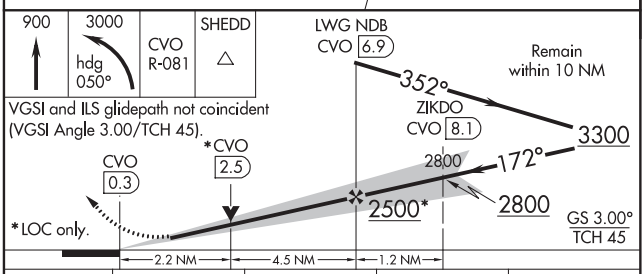
MISSED APPROACH: Climb to 900 then climbing left turn to 3000 on heading 050° and on CVO VOR/DME R-081 to SHEDD INT/EUG 22.1 DME and hold, continue climb-in-hold to 3000.

| AWOS-3PT | CASCADE APP CON ★ | UNICOM |
|---|---|---|
| 135.775 | 127.5 348.7 | 123.075 (CTAF) L |




| FAF to MAP 6.7 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 6:42 | 4:28 | 3:21 | 2:41 | 2:14 |




VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 45).

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 17 | 448-½ 200 (200-½) | | | |
| S-LOC 17 | 1000-½ 752 (800-½) | 1000-¾ 752 (800-¾) | 1000-1¾ 752 (800-1¾) | |
| C CIRCLING | 1000-1 750 (800-1) | 1000-1¼ 750 (800-1¼) | 1000-2¼ 750 (800-2¼) | 1080-2¾ 830 (900-2¾) |




NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 78311 W17A | APP CRS 172° | Rwy ldg 5900<br>TDZE 248<br>Apt Elev 250 |
|---|---|---|

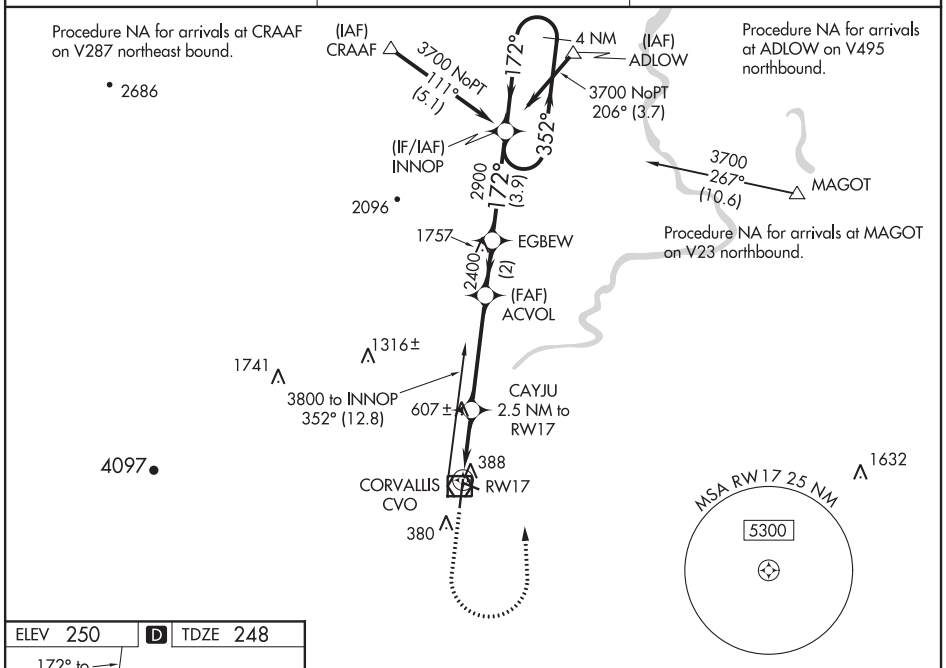
# RNAV (GPS) RWY 17
## CORVALLIS MUNI (CVO)

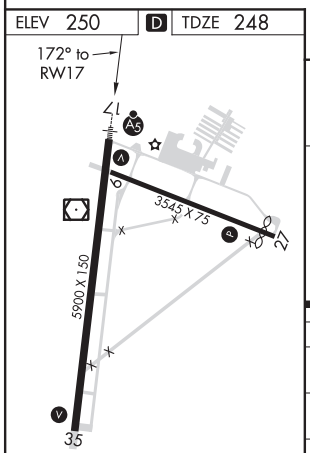
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. For inop ALS, increase LNAV/VNAV all Cats visibility to 1 SM and increase LNAV Cat C/D visibility to 1¾ mile.

MALSR

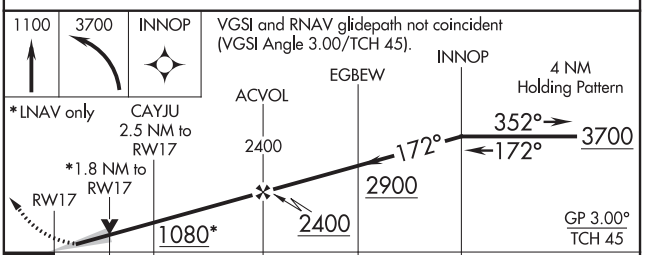
MISSED APPROACH: Climb to 1100 then climbing left turn to 3700 direct INNOP and hold, continue climb-in-hold to 3700.

| AWOS-3PT | CASCADE APP CON ★ | UNICOM |
|---|---|---|
| 135.775 | 127.5 348.7 | 123.075 (CTAF) L |




REIL Rwy 35 L
MIRL Rwys 9-27 and 17-35 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 448-½ 200 (200-½) | | | |
| LNAV/VNAV DA | 571-⅝ 323 (400-⅝) | | | |
| LNAV MDA | 860-½ 612 (700-½) | | 860-1⅜ 612 (700-1⅜) | |
| C CIRCLING | 860-1 610 (700-1) | | 920-1¾ 670 (700-1¾) | 1080-2¾ 830 (900-2¾) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

CORVALLIS, OREGON — AL-782 (FAA) — 19339

# RNAV (GPS) RWY 35
## CORVALLIS MUNI (CVO)

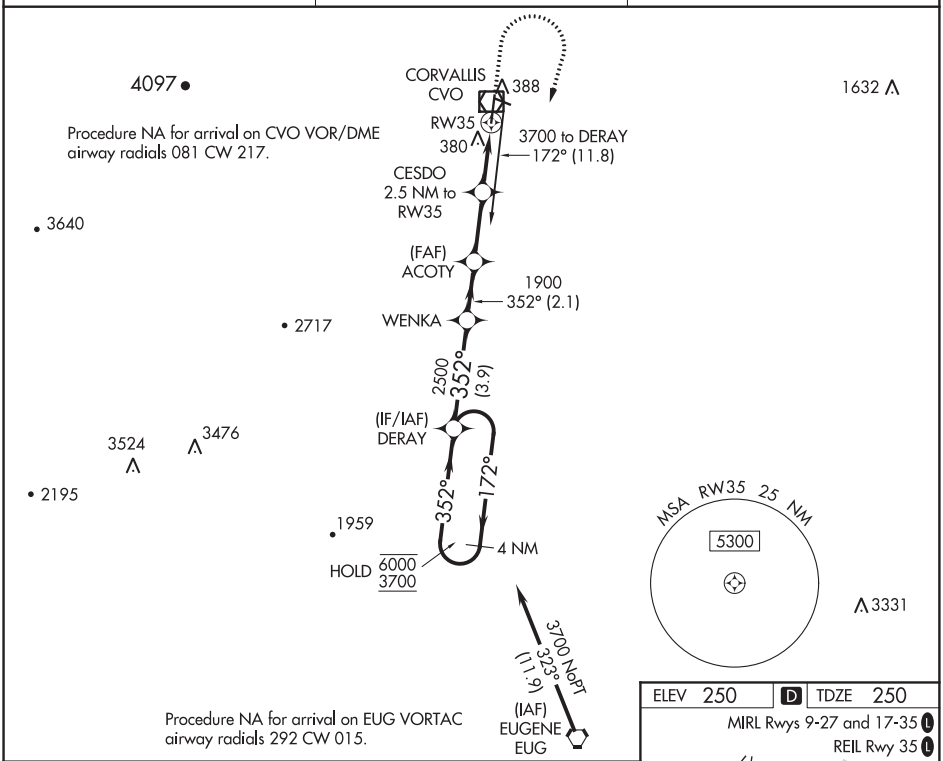
| WAAS CH 69517 W35A | APP CRS 352° | Rwy ldg 5900 | TDZE 250 | Apt Elev 250 |
|---|---|---|---|---|

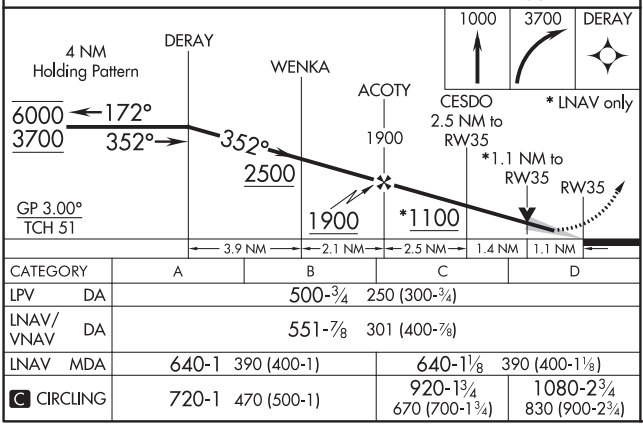
RNP APCH.

NA — For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C . When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 1000 then climbing right turn to 3700 direct DERAY and hold, continue climb-in-hold to 3700.

| AWOS-3PT | CASCADE APP CON * | UNICOM |
|---|---|---|
| 135.775 | 127.5 348.7 | 123.075 (CTAF) L |



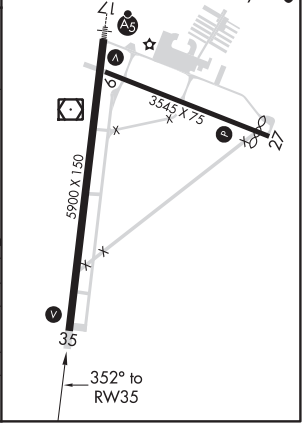




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 500-¾ 250 (300-¾) | | | |
| LNAV/VNAV DA | 551-⅞ 301 (400-⅞) | | | |
| LNAV MDA | 640-1 390 (400-1) | | 640-1⅛ 390 (400-1⅛) | |
| C CIRCLING | 720-1 470 (500-1) | | 920-1¾ 670 (700-1¾) | 1080-2¾ 830 (900-2¾) |

ELEV 250 — D — TDZE 250

MIRL Rwys 9-27 and 17-35 L

REIL Rwy 35 L




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# VOR RWY 17
## CORVALLIS MUNI (CVO)

| VOR/DME CVO | APP CRS | Rwy ldg | 5900 |
|---|---|---|---|
| 115.4 | 177° | TDZE | 248 |
| Chan 101 | | Apt Elev | 250 |

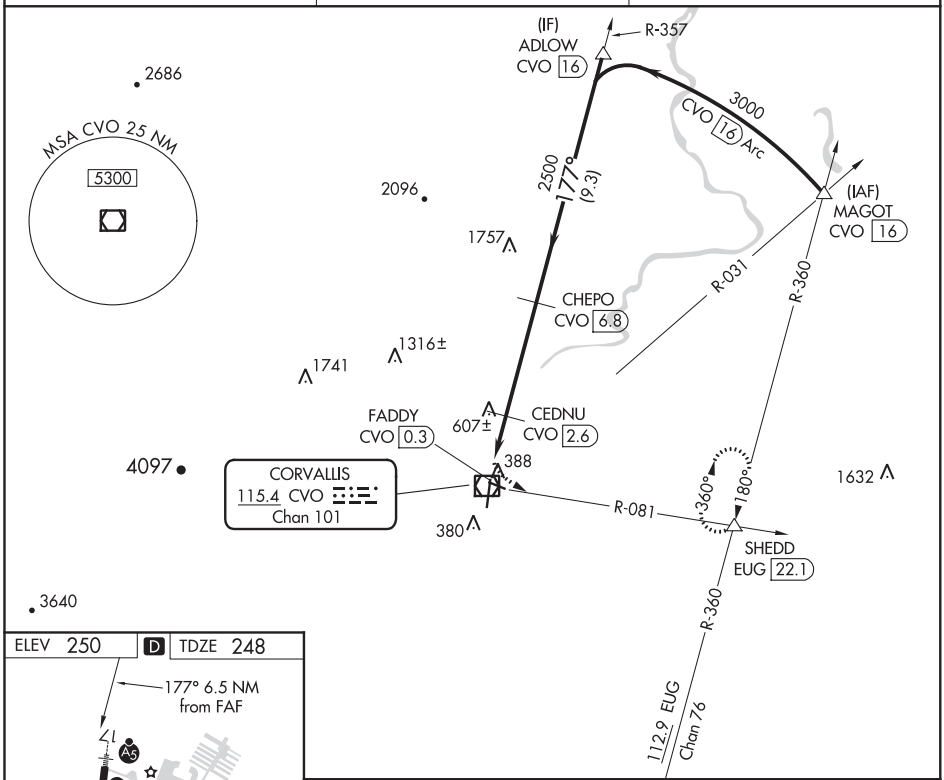
DME required

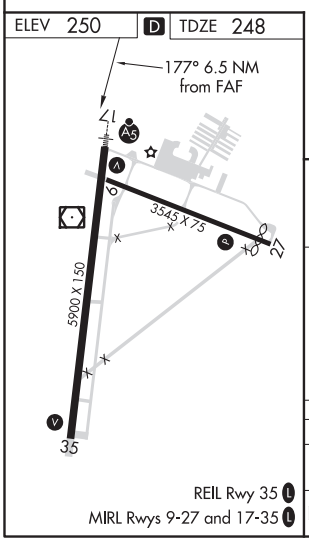
When local altimeter setting not received, procedure NA.
For inop ALS, increase Cat C/D visibility to 1¾ SM.

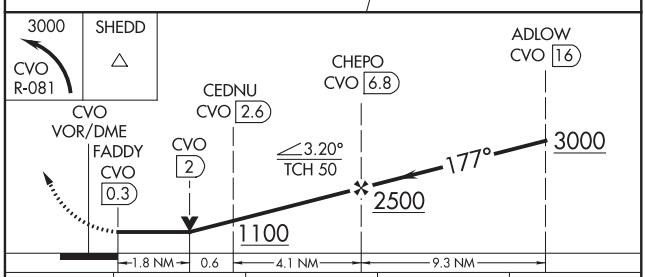
MALSR

MISSED APPROACH: Climbing left turn to 3000 on CVO VOR/DME R-081 to SHEDD INT/EUG 22.1 DME and hold, continue climb-in-hold to 3000.

| AWOS-3PT | CASCADE APP CON ★ | UNICOM |
|---|---|---|
| 135.775 | 127.5 348.7 | 123.075 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-17 | 860-½ 612 (700-½) | | 860-1⅜ 612 (700-1⅜) | |
| C CIRCLING | 860-1 610 (700-1) | | 920-1¾ 670 (700-1¾) | 1080-2¾ 830 (900-2¾) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

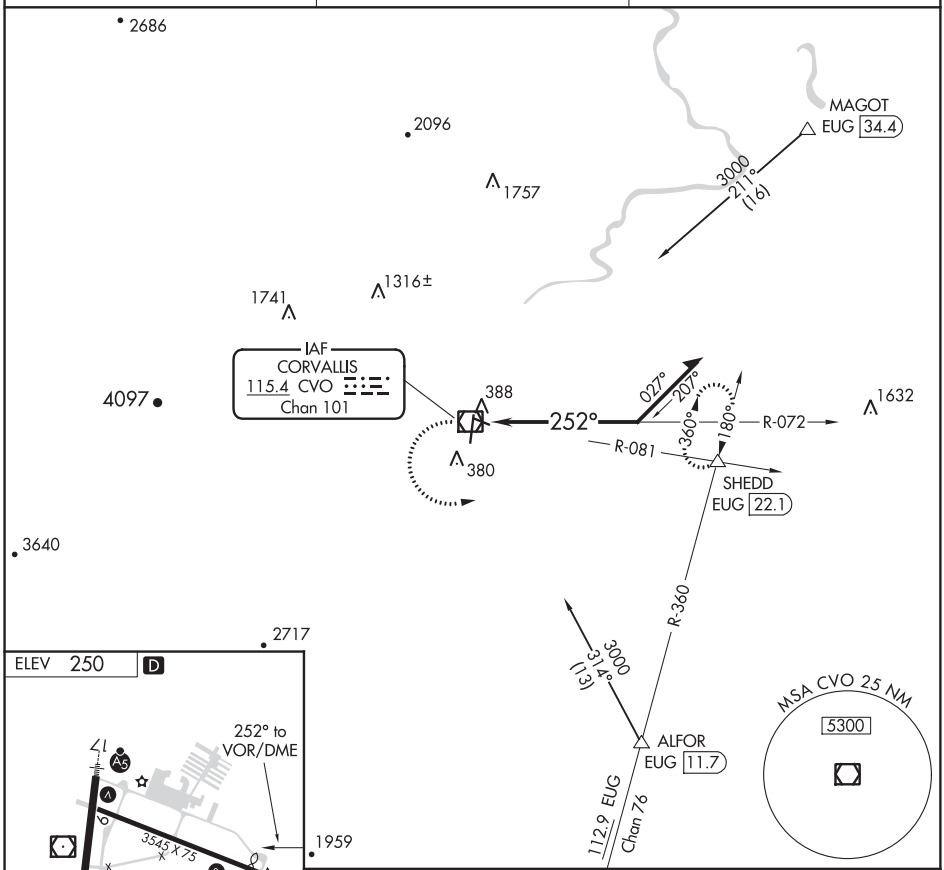
| VOR/DME CVO 115.4 Chan 101 | APP CRS 252° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 250 |
|---|---|---|

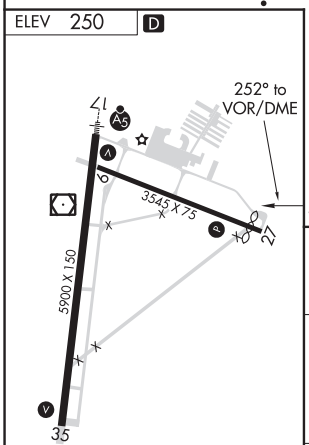
# VOR-A
## CORVALLIS MUNI (CVO)

When local altimeter setting not received, procedure NA.

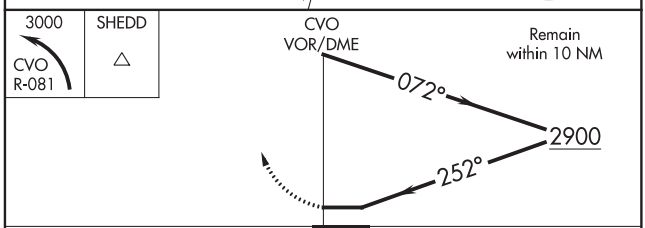
MISSED APPROACH: Climbing left turn to 3000 on CVO VOR/DME R-081 to SHEDD INT/EUG 22.1 DME and hold, continue climb-in-hold to 3000.

| AWOS-3PT | CASCADE APP CON ★ | UNICOM |
|---|---|---|
| 135.775 | 127.5 348.7 | 123.075 (CTAF) |




REIL Rwy 35 L
MIRL Rwys 9-27 and 17-35 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 1400-1¼<br>1150 (1200-1¼) | 1400-1½<br>1150 (1200-1½) | 1400-3 1150 (1200-3) | |



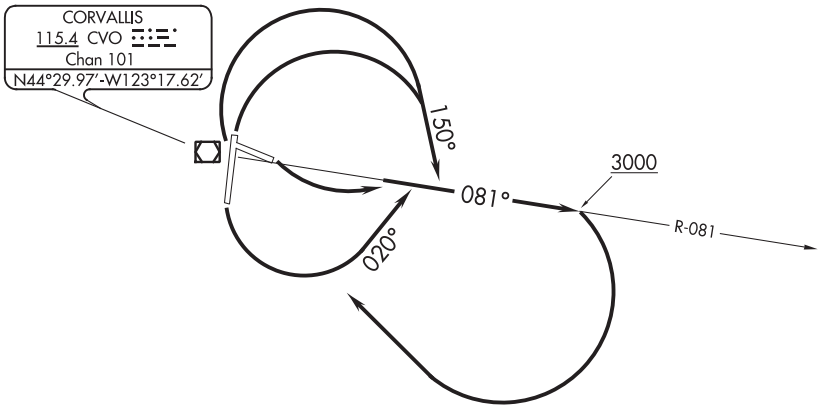

NW-1, 05 NOV 2020 to 31 DEC 2020

# CORVALLIS TWO DEPARTURE

AL-782 (FAA)

**TOP ALTITUDE: 4000**

AWOS-3PT 135.775
CASCADE DEP CON ★
127.5 348.7
CTAF 123.075
SEATTLE CENTER
125.8 291.7




TAKEOFF MINIMUMS

Rwys 9, 17: Standard.
Rwy 27: Standard with minimum climb of 345′ per NM to 3100.
Rwy 35: 400-2¾ or standard with minimum climb of 205′ per NM to 800.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climbing left turn to 3000 on CVO R-081, thence. . . .

TAKEOFF RUNWAY 17: Climbing left turn to 3000 heading 020° and on CVO R-081, thence. . . .

TAKEOFF RUNWAYS 27 and 35: Climbing right turn to 3000 heading 150° and on CVO R-081, thence. . . .

. . . . climbing right turn to 4000 direct CVO VOR/DME. Continue climb on course to MEA for route of flight.

LOST COMMUNICATIONS:

If not in contact with ATC upon reaching 3000′, continue climb to assigned altitude direct CVO VOR/DME. Thence on assigned route of flight.

(SHEDD3.SHEDD) 18256

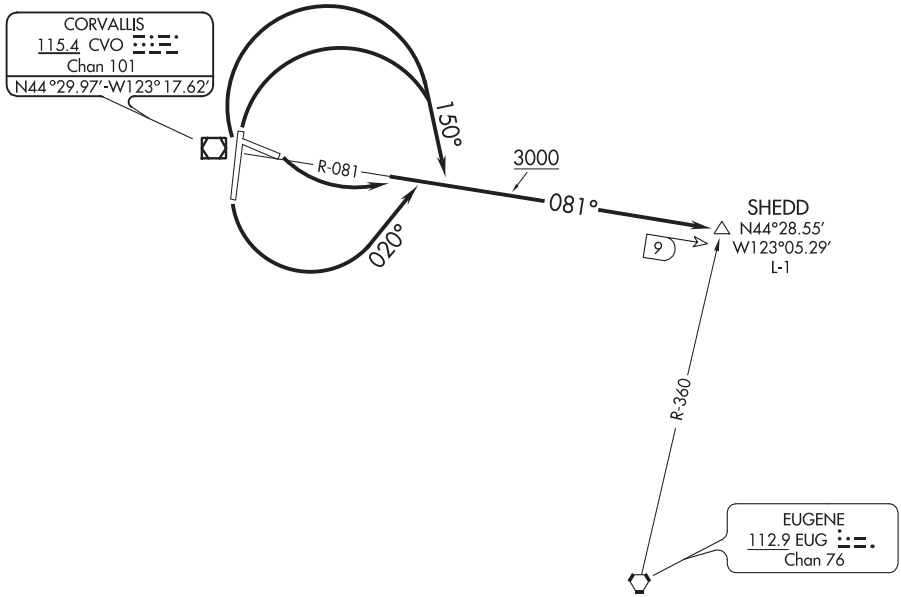
# SHEDD THREE DEPARTURE

AL-782 (FAA)

CORVALLIS MUNI (CVO)
CORVALLIS, OREGON

**TOP ALTITUDE: 3000**

AWOS-3PT 135.775
CASCADE DEP CON ★
127.5 348.7
CTAF 123.075
SEATTLE CENTER
125.8 291.7




TAKEOFF MINUMUMS

Rwys 9, 17: Standard.
Rwy 27: Standard with minimum climb of 345′ per NM to 3100.
Rwy 35: 400-2¾ or standard with minimum climb of 205′ per NM to 800.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climbing left turn to 3000 on CVO R-081 to SHEDD INT, thence. . . .

TAKEOFF RUNWAY 17: Climbing left turn to 3000 heading 020° and on CVO R-081 to SHEDD INT, thence. . . .

TAKEOFF RUNWAYS 27, 35: Climbing right turn to 3000 heading 150° and on CVO R-081 to SHEDD INT, thence. . . .

. . . .on assigned route of flight.

LOST COMMUNICATIONS:

If not in contact with air traffic control upon reaching 3000′, continue climb to assigned altitude direct CVO VOR/DME. Thence on assigned route of flight.


NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 86333 W09A | APP CRS 095° | Rwy ldg 5200<br>TDZE 4086<br>Apt Elev 4094 |
|---|---|---|

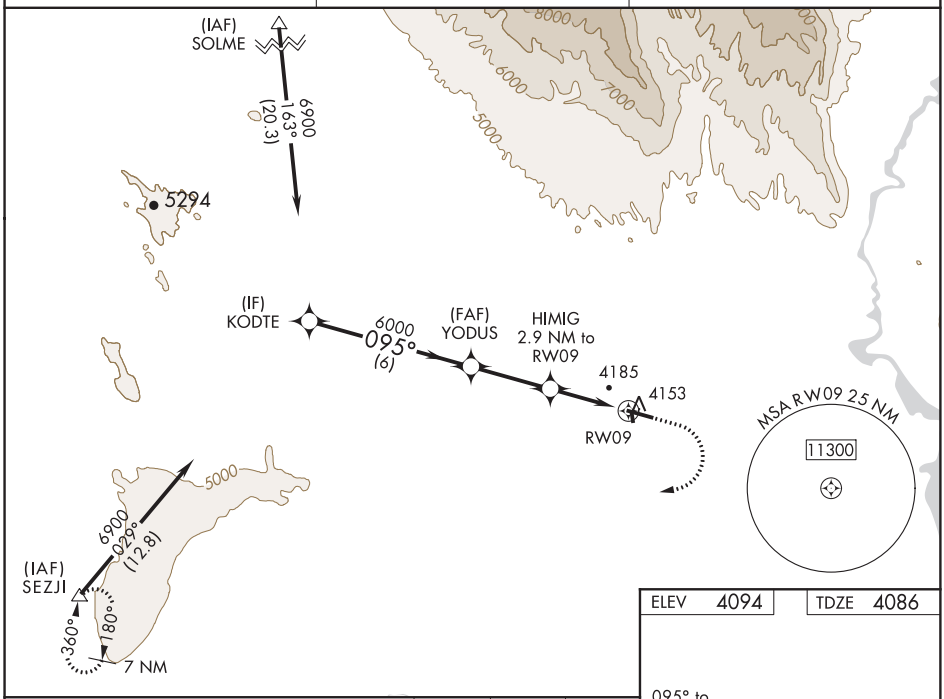
# RNAV (GPS) RWY 9
## NORTH BIG HORN COUNTY (U68)

Baro-VNAV NA when using Greybull altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C (-9°F) or above 49°C (121°F). DME/DME RNP-0.3 NA. When Rwy 9 VGSI inop, Straight-in and Circling minimums NA at night. Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use Greybull altimeter setting and increase all DA 87 feet and all LPV and LNAV/VNAV visibility ⅛ mile, increase all MDA 100 feet and LNAV Cats C/D visibility ⅜ mile and increase Circling Cat C visibility ¼ mile.

NA

MISSED APPROACH: Climb to 4600 then climbing right turn to 8500 direct SEZJI and hold.

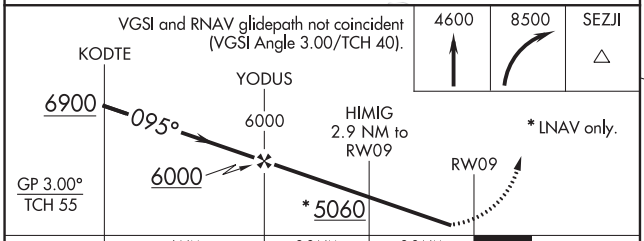
| AWOS-3 | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 119.925 | 133.25 285.6 | 122.8 (CTAF) L |



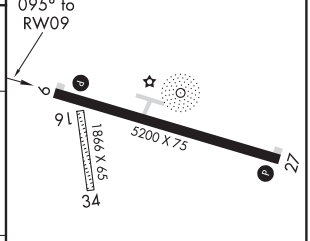

| ELEV 4094 | TDZE 4086 |
|---|---|

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 40).

| 4600 | 8500 | SEZJI |
|---|---|---|
| ↑ | ↱ | △ |




* LNAV only.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4336-1 | | 250 (300-1) | |
| LNAV/VNAV DA | 4344-1 | | 258 (300-1) | |
| LNAV MDA | 4440-1 | | 354 (400-1) | |
| C CIRCLING | 4520-1<br>426 (500-1) | 4680-1<br>586 (600-1) | 4940-2½<br>846 (900-2½) | 5260-3<br>1166 (1200-3) |

REIL Rwys 9 and 27 L
MIRL Rwy 9-27 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

COWLEY/LOVELL/BYRON, WYOMING AL-6856 (FAA) 20310

# NDB RWY 9

## NORTH BIG HORN COUNTY (U68)

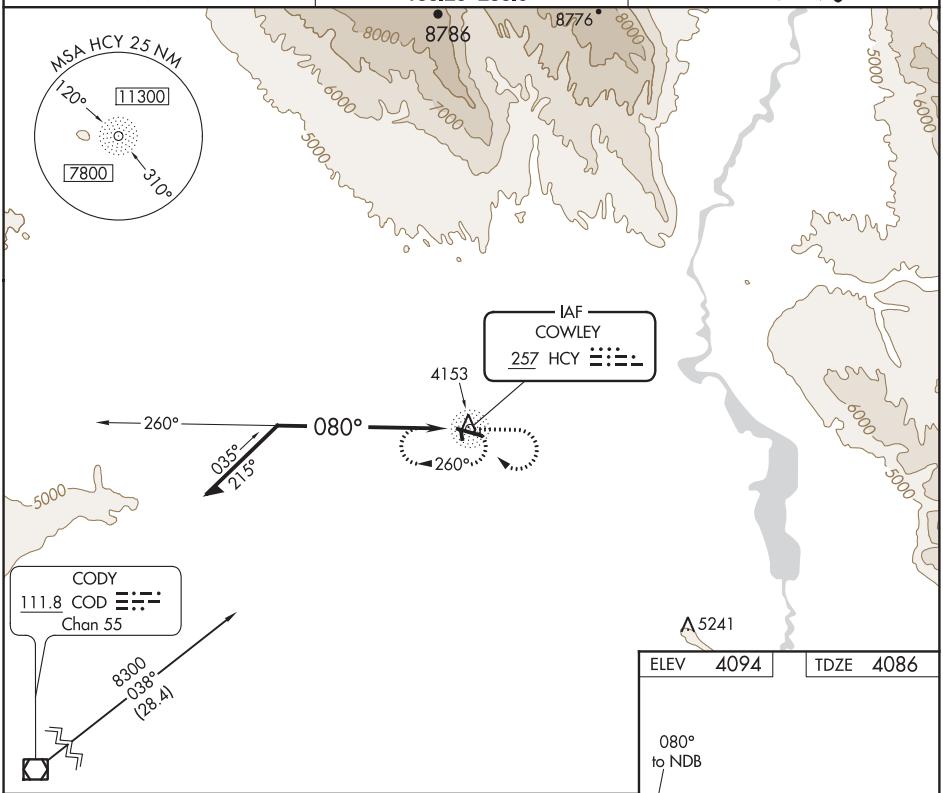
| NDB HCY | APP CRS | Rwy ldg / TDZE / Apt Elev |
|---|---|---|
| 257 | 080° | 5200 / 4086 / 4094 |

When Rwy 9 VGSI inoperative, Straight-in and Circling Rwy 9 minimums NA at night. When local altimeter setting not received, use Greybull altimeter setting and increase Circling Cats A/B/C MDA 80 feet and Circling Cat D MDA 100 feet. Helicopter visibility reduction below 1 SM not authorized.

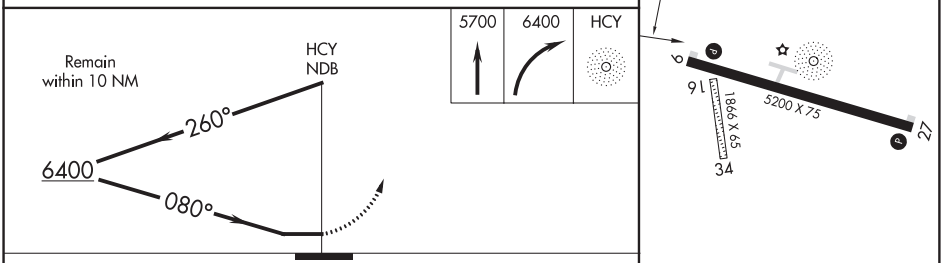
NA

MISSED APPROACH: Climb to 5700 then climbing right turn to 6400 direct HCY NDB and hold.

| AWOS-3 | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 119.925 | 133.25 285.6 | 122.8 (CTAF) L |




| ELEV | 4094 | TDZE | 4086 |
|---|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-9 | 5200-1¼ 1114 (1200-1¼) | 5200-1½ 1114 (1200-1½) | 5200-3 | 1114 (1200-3) |
| C CIRCLING | 5200-1¼ 1106 (1200-1¼) | 5200-1½ 1106 (1200-1½) | 5200-3 1106 (1200-3) | 5260-3 1166 (1200-3) |

REIL Rwys 9 and 27 L
MIRL Rwy 9-27 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 78341 W16A | APP CRS 159° | Rwy ldg 3102 TDZE 541 Apt Elev 541 |
|---|---|---|

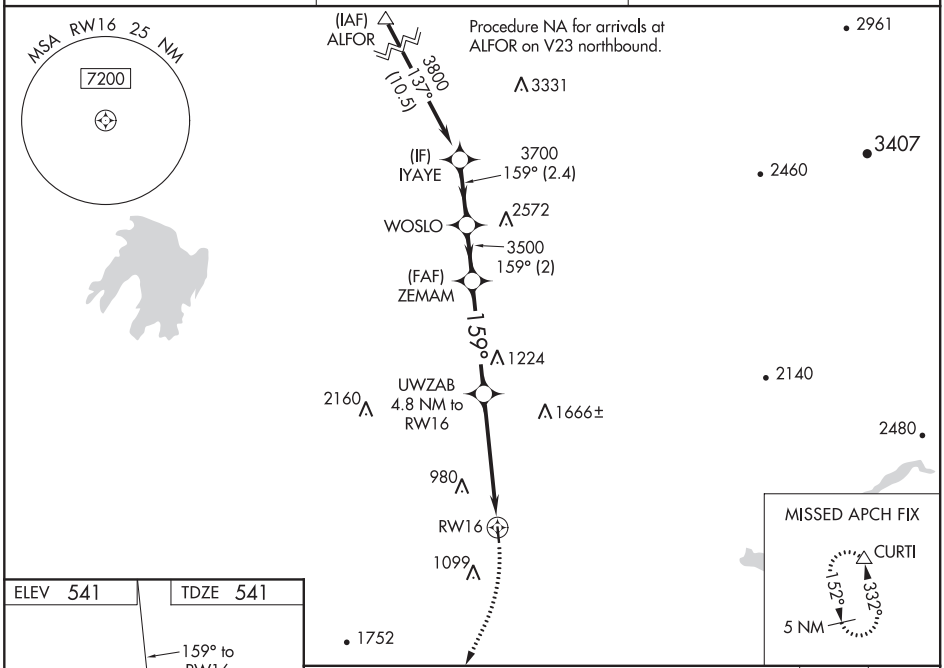
# RNAV (GPS) RWY 16
## HOBBY FIELD (77S)

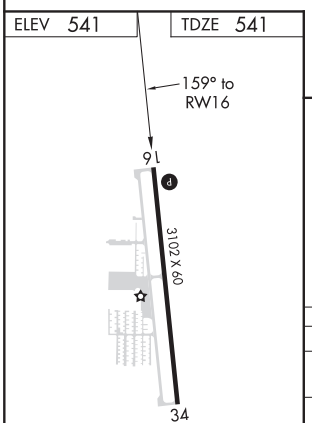
RNP APCH.

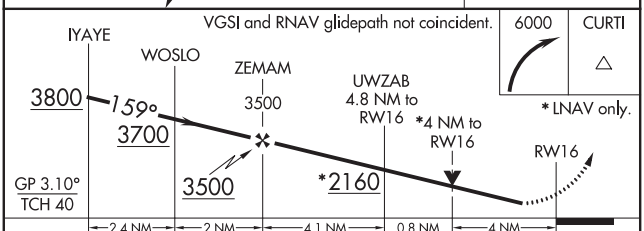
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 54°C. Circling Rwy 34 NA at night. When local altimeter setting not received, use Eugene altimeter setting and increase LPV DA to 1102 feet and all LPV visibilities ¼ SM, and increase LNAV/VNAV DA to 1474; increase all MDAs 80 feet. Baro-VNAV and VDP NA when using Eugene altimeter setting. Rwy 16 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climbing right turn to 6000 direct CURTI and hold, continue climb-in-hold to 6000.

| AWOS-3 | CASCADE APP CON ★ | UNICOM |
|---|---|---|
| 119.275 | 119.6 | 122.7 (CTAF) |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 1041-1⅜ 500 (500-1⅜) | | | |
| LNAV/VNAV DA | 1413-2½ 872 (900-2½) | | | |
| LNAV MDA | 1820-1¼ 1279 (1300-1¼) | 1820-1½ 1279 (1300-1½) | 1820-3 1279 (1300-3) | |
| C CIRCLING | 1820-1¼ 1279 (1300-1¼) | 1820-1½ 1279 (1300-1½) | 2260-3 1719 (1800-3) | 2740-3 2199 (2200-3) |

MIRL Rwy 16-34

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

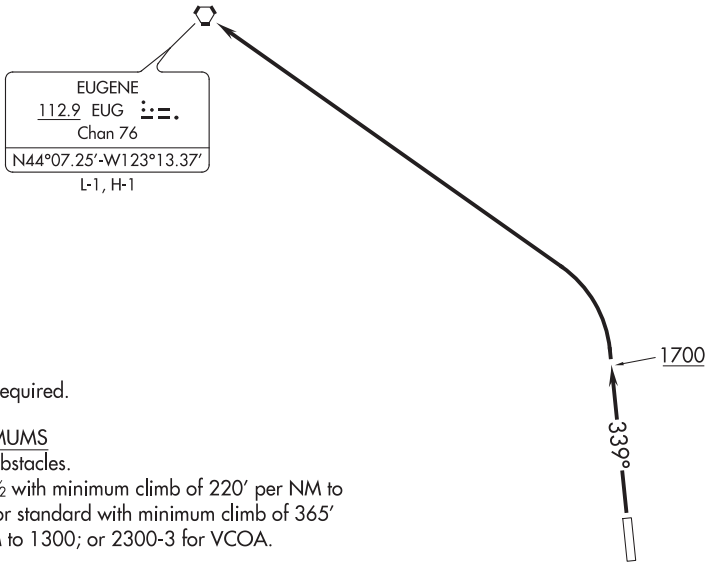
(77S2.EUG) 19003

# HOBBY TWO DEPARTURE(OBSTACLE)

AL-10215 (FAA)

HOBBY FIELD (77S)
CRESWELL, OREGON

AWOS-3
119.275
CASCADE APP CON ★
119.6
CTAF
122.7




NOTE: RADAR required.

TAKEOFF MINIMUMS
Rwy 16: NA - Obstacles.
Rwy 34: 600-2½ with minimum climb of 220′ per NM to 1700, or standard with minimum climb of 365′ per NM to 1300; or 2300-3 for VCOA.

TAKEOFF OBSTACLE NOTES
Rwy 34: Vegetation 79′ from DER, 268′ right of centerline, 548′ MSL.
Fence 197′ from DER, 278′ right of centerline, 8′ AGL/550′ MSL.
Tree 269′ from DER, 287′ right of centerline, 562′ MSL.
Traverse way beginning 438′ from DER, 593′ left of centerline, up to 557′ MSL.
Tree, transmission line beginning 879′ from DER, 434′ left of centerline, up to 573′ MSL.
Pole 1061′ from DER, 374′ right of centerline, up to 586′ MSL.
Pole 1122′ from DER, 172′ left of centerline, 36′ AGL/580′ MSL.
Pole, traverse way beginning 1134′ from DER, 334′ left of centerline, up to 61′ AGL/605′ MSL.
Pole, tree beginning 1214′ from DER, 322′ left of centerline, up to 616′ MSL.
Trees beginning 2367′ from DER, 960′ right of centerline, up to 629′ MSL.
Trees beginning 2448′ from DER, 473′ left of centerline, up to 643′ MSL.
Trees 3232′ from DER, 1009′ left of centerline, 657′ MSL.
Trees beginning 1.7 NM from DER, 2451′ right of centerline, up to 1000′ MSL.
Trees beginning 1.8 NM from DER, 2877′ right of centerline, up to 1040′ MSL.
Trees beginning 1.9 NM from DER, 1338′ right of centerline, up to 98′ AGL/1047′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 34: Climb heading 339° to 1700, then climbing left turn to 4000 direct EUG VORTAC.
VCOA RUNWAY 34: Obtain ATC approval for VCOA when requesting IFR clearance. Cross Hobby Field at or above 2700 before preceeding on course.

HOBBY TWO DEPARTURE(OBSTACLE)

(77S2.EUG) 03JAN19

CRESWELL, OREGON
HOBBY FIELD (77S)


NW-1, 05 NOV 2020 to 31 DEC 2020

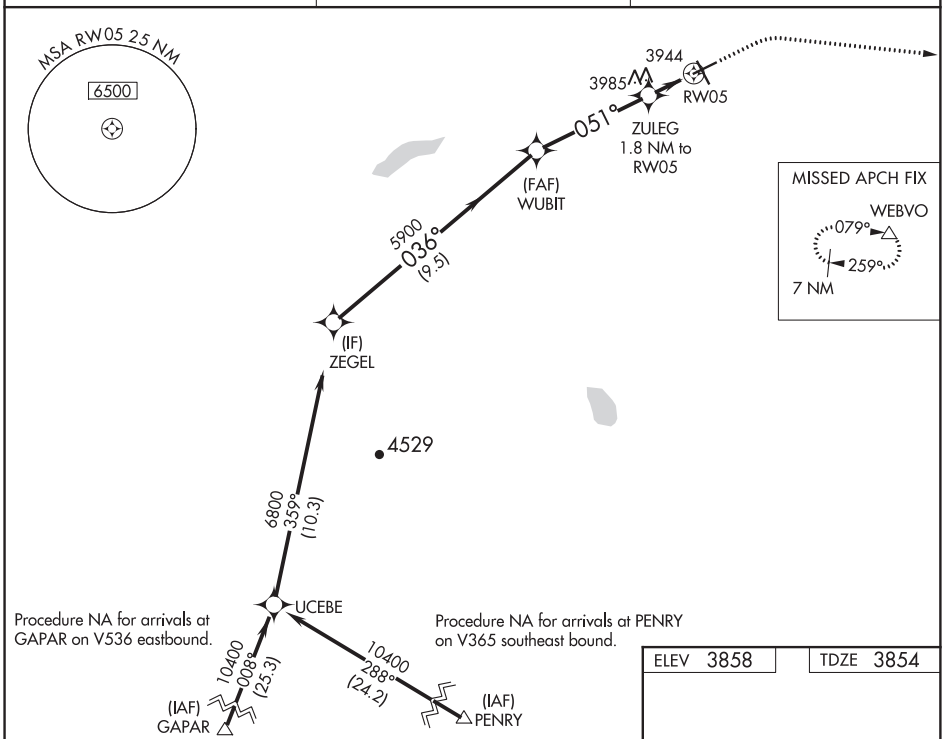
| WAAS CH 86737 W05A | APP CRS 051° | Rwy ldg 5300<br>TDZE 3854<br>Apt Elev 3858 |
|---|---|---|

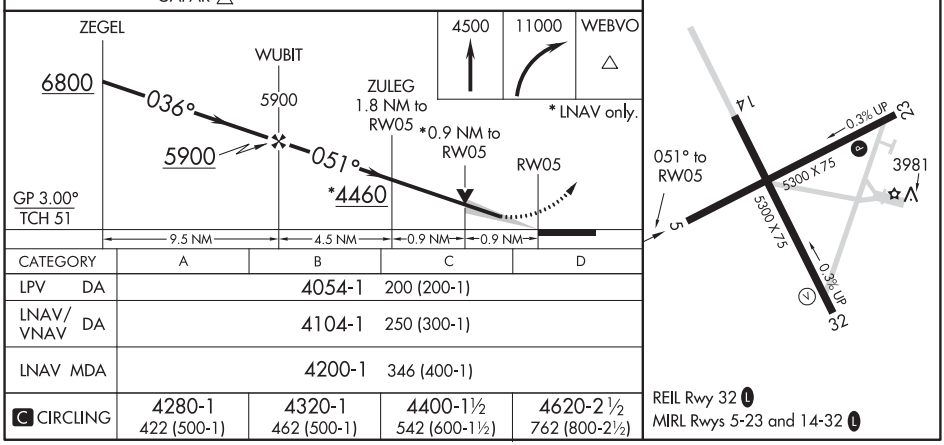
# RNAV (GPS) RWY 5
## CUT BANK INTL (CTB)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 51°C (124°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 4500 then climbing right turn to 11000 direct WEBVO and hold.

| ASOS | SALT LAKE CITY CENTER | UNICOM |
|---|---|---|
| 119.025 | 133.4 285.4 | 123.0 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4054-1 200 (200-1) | | | |
| LNAV/VNAV DA | 4104-1 250 (300-1) | | | |
| LNAV MDA | 4200-1 346 (400-1) | | | |
| C CIRCLING | 4280-1 422 (500-1) | 4320-1 462 (500-1) | 4400-1½ 542 (600-1½) | 4620-2½ 762 (800-2½) |

REIL Rwy 32 L
MIRL Rwys 5-23 and 14-32 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

CUT BANK, MONTANA — AL-484 (FAA) — 20198

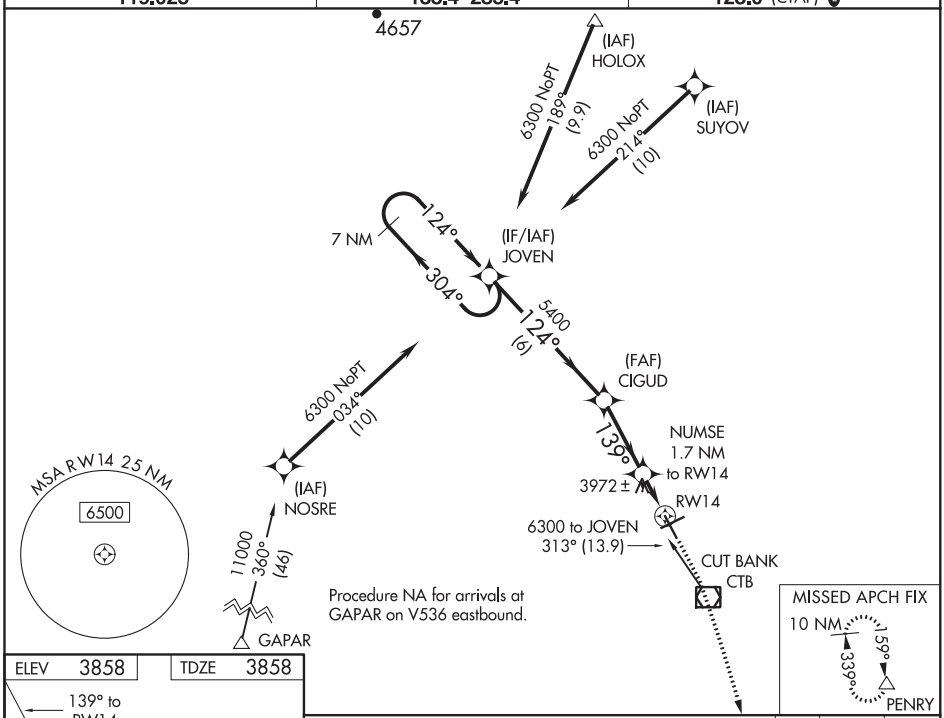
# RNAV (GPS) RWY 14
## CUT BANK INTL (CTB)

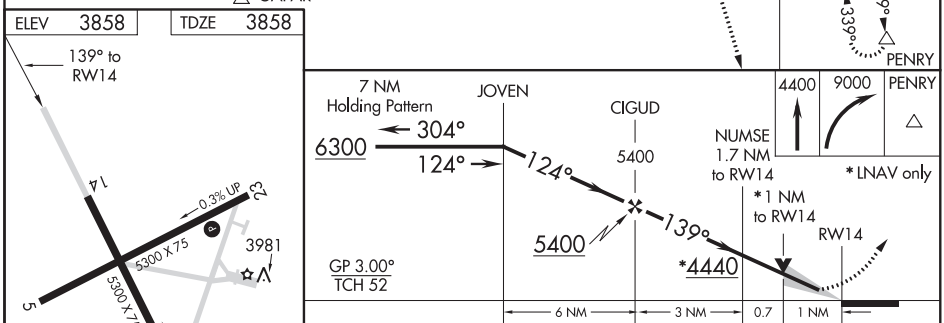
| WAAS CH 93537 W14A | APP CRS 139° | Rwy ldg 5300 / TDZE 3858 / Apt Elev 3858 |
|---|---|---|

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 51°C (124°F).
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 4400 then climbing right turn to 9000 direct PENRY and hold.

| ASOS | SALT LAKE CITY CENTER | UNICOM |
|---|---|---|
| 119.025 | 133.4 285.4 | 123.0 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4058-1 200 (200-1) | | | |
| LNAV/VNAV DA | 4108-1 250 (300-1) | | | |
| LNAV MDA | 4240-1 382 (400-1) | | 4240-1⅛ 382 (400-1⅛) | |
| C CIRCLING | 4280-1 422 (500-1) | 4320-1 462 (500-1) | 4400-1½ 542 (600-1½) | 4620-2½ 762 (800-2½) |

REIL Rwy 32 L
MIRL Rwys 5-23 and 14-32 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

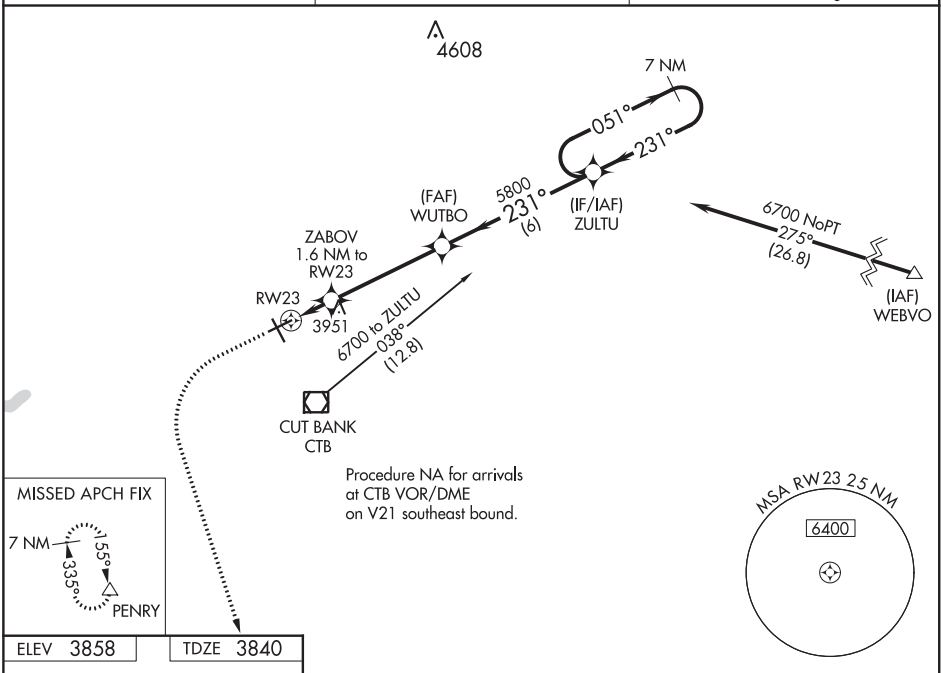
| WAAS CH 53337 W23A | APP CRS 231° | Rwy ldg 5300<br>TDZE 3840<br>Apt Elev 3858 |
|---|---|---|

# RNAV (GPS) RWY 23
## CUT BANK INTL (CTB)

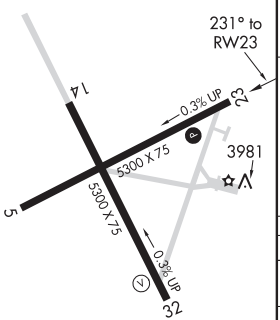
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 51°C (124°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 4400 then climbing left turn to 9000 direct PENRY and hold.

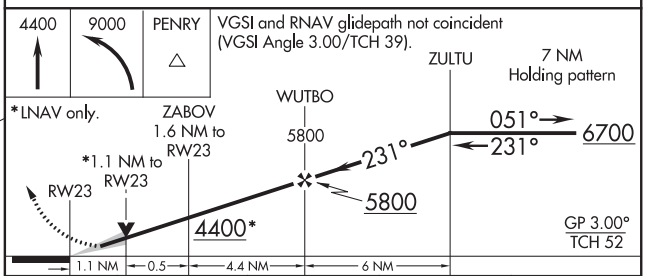
| ASOS | SALT LAKE CITY CENTER | UNICOM |
|---|---|---|
| 119.025 | 133.4 285.4 | 123.0 (CTAF) L |




| ELEV 3858 | TDZE 3840 |
|---|---|




REIL Rwy 32 L
MIRL Rwys 5-23 and 14-32 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4040-1 200 (200-1) | | | |
| LNAV/VNAV DA | 4090-1 250 (300-1) | | | |
| LNAV MDA | 4220-1 380 (400-1) | | | |
| C CIRCLING | 4280-1 422 (500-1) | 4320-1 462 (500-1) | 4400-1½ 542 (600-1½) | 4620-2½ 762 (800-2½) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

CUT BANK, MONTANA — AL-484 (FAA) — 20198

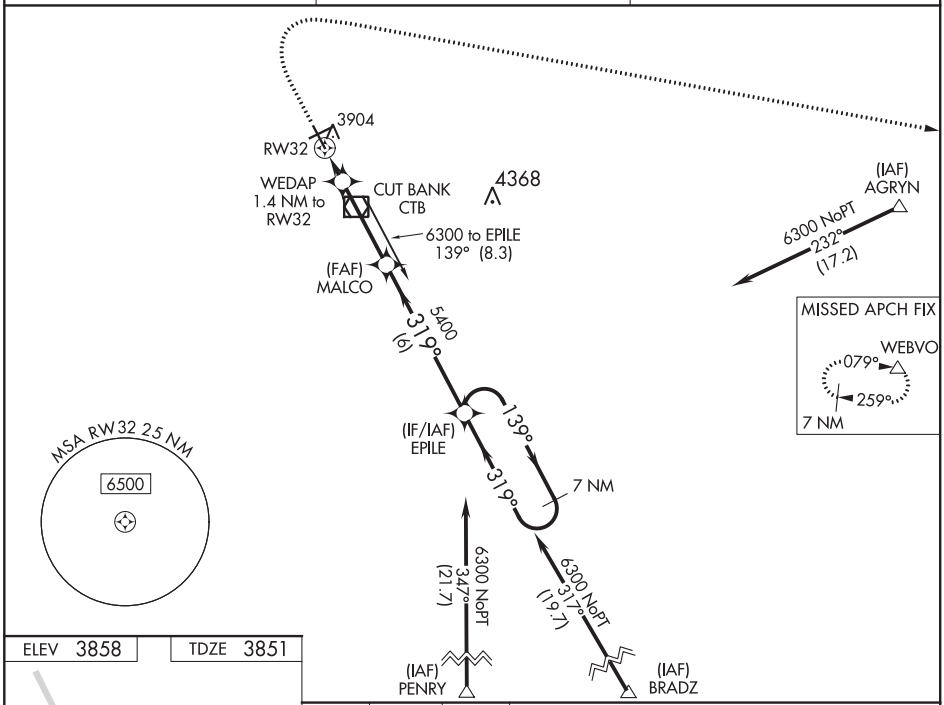
| WAAS CH 99337 W32A | APP CRS 319° | Rwy ldg 5300 TDZE 3851 Apt Elev 3858 |
|---|---|---|

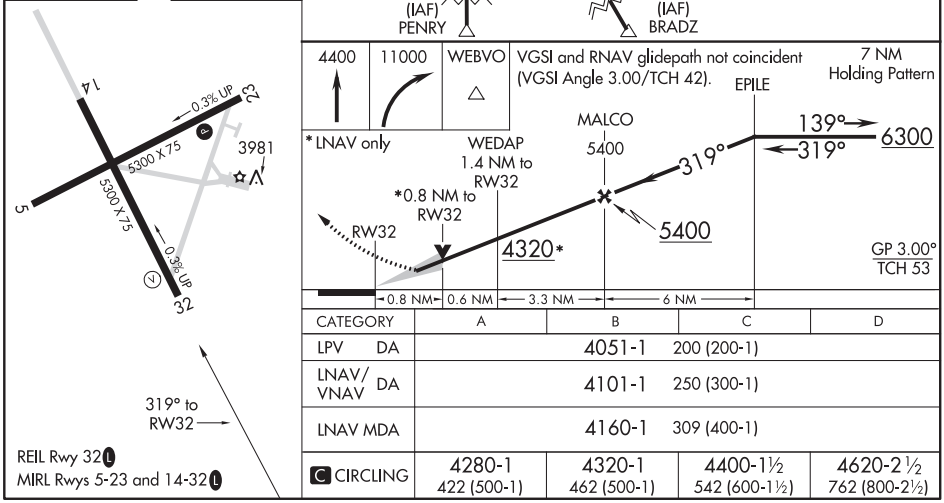
# RNAV (GPS) RWY 32
## CUT BANK INTL (CTB)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 51°C (124°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 4400 then climbing right turn to 11000 direct WEBVO and hold.

| ASOS | SALT LAKE CITY CENTER | UNICOM |
|---|---|---|
| 119.025 | 133.4 285.4 | 123.0 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4051-1 | 200 (200-1) | | |
| LNAV/VNAV DA | 4101-1 | 250 (300-1) | | |
| LNAV MDA | 4160-1 | 309 (400-1) | | |
| C CIRCLING | 4280-1 422 (500-1) | 4320-1 462 (500-1) | 4400-1½ 542 (600-1½) | 4620-2½ 762 (800-2½) |

NW-1, 05 NOV 2020 to 31 DEC 2020

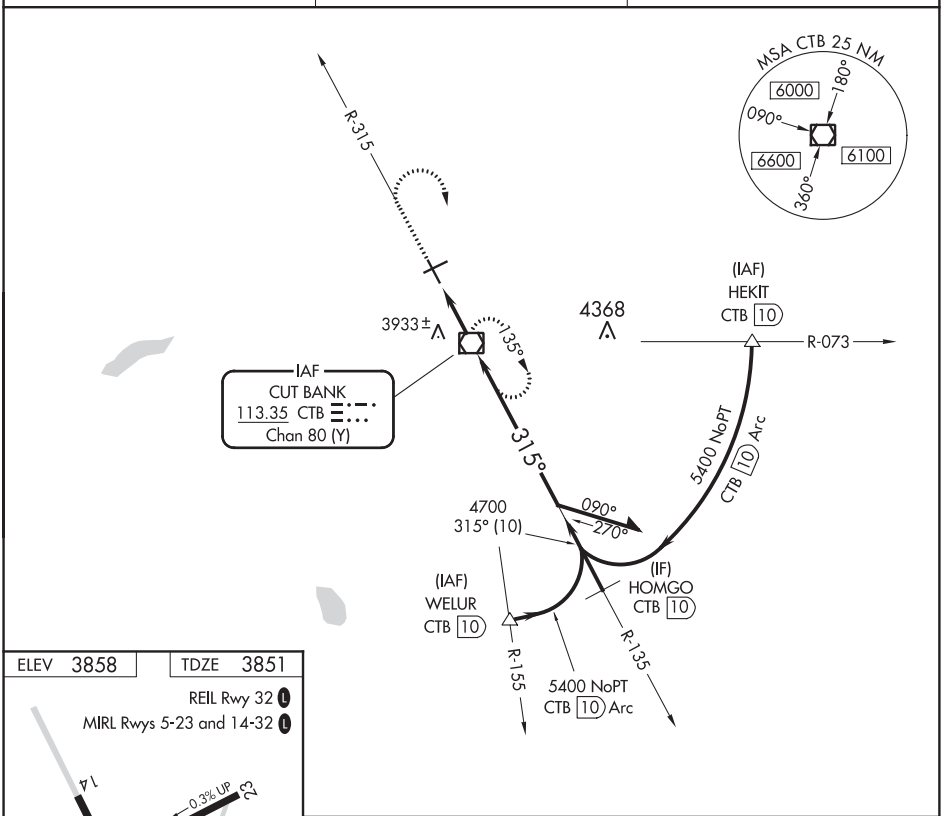
NW-1, 05 NOV 2020 to 31 DEC 2020

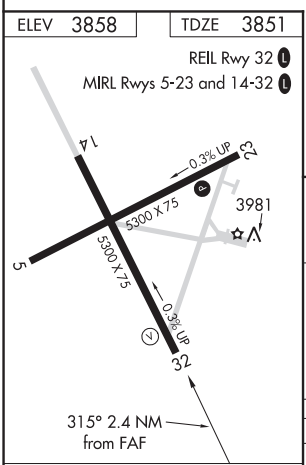
| VOR/DME CTB 113.35 Chan 80 (Y) | APP CRS 315° | Rwy ldg 5300 TDZE 3851 Apt Elev 3858 |
|---|---|---|

# VOR RWY 32
## CUT BANK INTL (CTB)

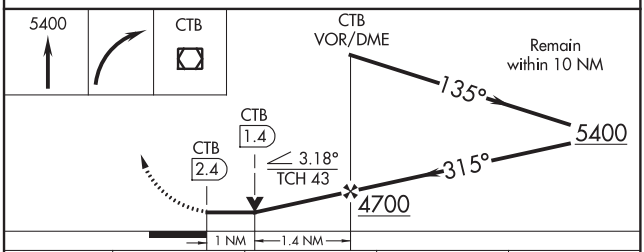
MISSED APPROACH: Climb to 5400 then right turn direct CTB VOR/DME and hold.

| ASOS | SALT LAKE CITY CENTER | UNICOM |
|---|---|---|
| 119.025 | 133.4 285.4 | 123.0 (CTAF) L |




| FAF to MAP 2.4 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 2:24 | 1:36 | 1:12 | 0:58 | 0:48 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-32 | 4200-1 349 (400-1) | | | |
| C CIRCLING | 4280-1 422 (500-1) | 4320-1 462 (500-1) | 4400-1½ 542 (600-1½) | 4620-2½ 762 (800-2½) |

(MRIAS3.MRIAS) 17341

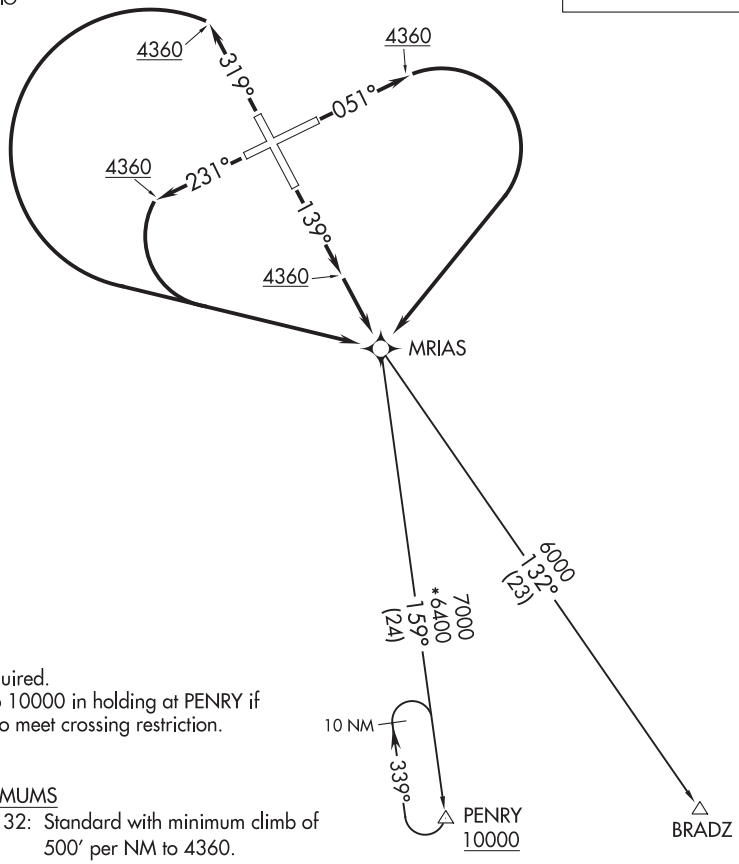
# MRIAS THREE DEPARTURE (RNAV)

AL-484 (FAA)

CUT BANK INTL (CTB)
CUT BANK, MONTANA

**TOP ALTITUDE: ASSIGNED BY ATC**

SALT LAKE CITY CENTER
133.4 285.4
GREAT FALLS RADIO
122.2
CTAF
123.0




NOTE: GPS required.
NOTE: Climb to 10000 in holding at PENRY if unable to meet crossing restriction.
NOTE: RNAV 1

TAKEOFF MINIMUMS
Rwy 5, 14, 23, 32: Standard with minimum climb of 500′ per NM to 4360.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 5: Climb heading 051° to 4360, then right turn direct MRIAS. Thence. . .
TAKEOFF RUNWAY 14: Climb heading 139° to 4360, then direct MRIAS. Thence. . .
TAKEOFF RUNWAY 23: Climb heading 231° to 4360, then left turn direct MRIAS. Thence. . .
TAKEOFF RUNWAY 32: Climb heading 319° to 4360, then left turn direct MRIAS. Thence. . .
. . . via transition.

BRADZ TRANSITION (MRIAS3.BRADZ)
PENRY TRANSITION (MRIAS3. PENRY)


NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 347° | TDZE | N/A |
| | Apt Elev | 4693 |

# RNAV (GPS)-A
## DEER LODGE-CITY-COUNTY (38S)

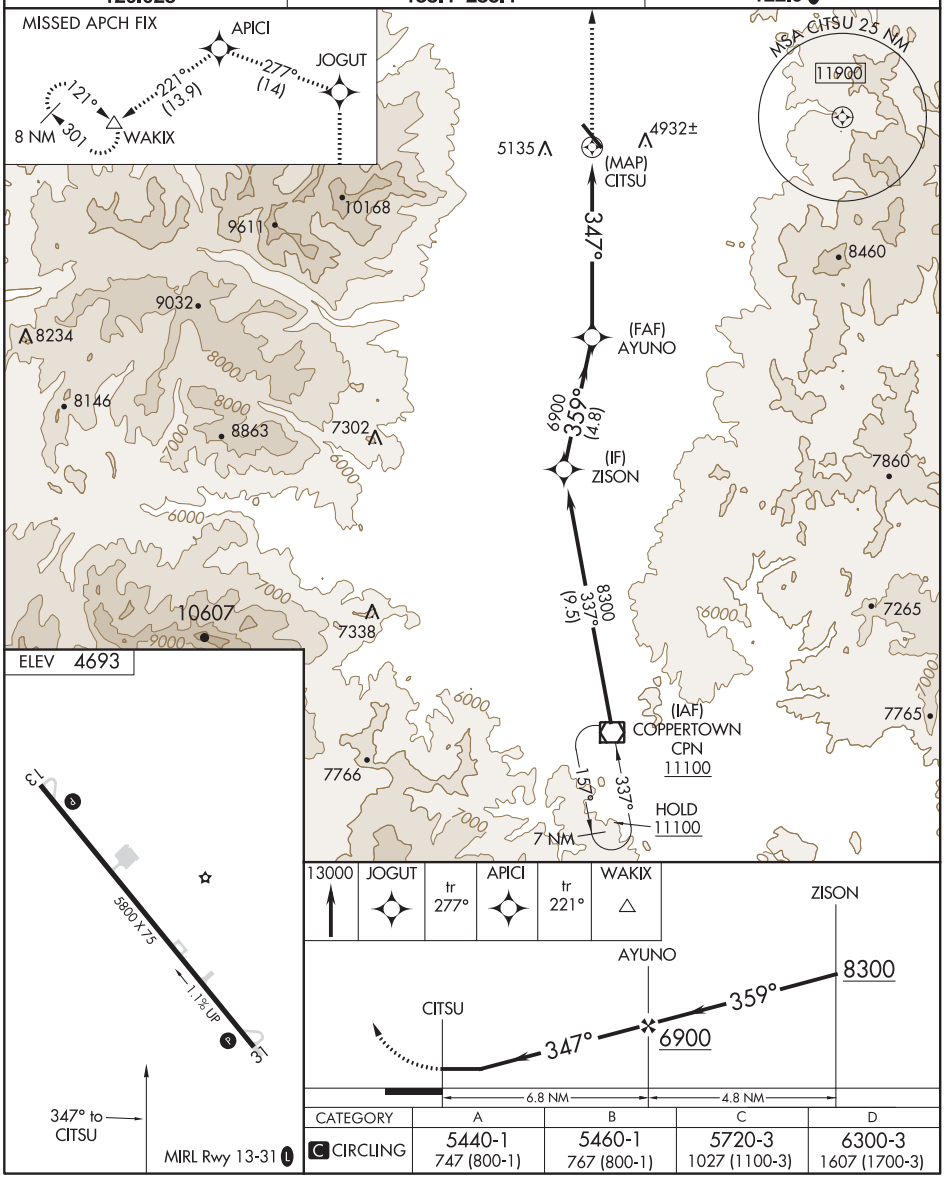
Circling Rwy 13 NA at night. DME/DME RNP-0.3 NA. Rwy 13 helicopter visibility reduction below 1 SM NA. When local altimeter setting not received use Anaconda altimeter setting and increase all MDA 100 feet; increase Cat B visibility ¼ SM.

NA

-23°C

MISSED APPROACH: Climb to 13000 direct JOGUT and on track 277° to APICI and on track 221° to WAKIX and hold, continue climb-in-hold to 13000.

| AWOS-AV | SALT LAKE CENTER | CTAF |
|---|---|---|
| 120.025 | 133.4 285.4 | 122.9 L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 5440-1<br>747 (800-1) | 5460-1<br>767 (800-1) | 5720-3<br>1027 (1100-3) | 6300-3<br>1607 (1700-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

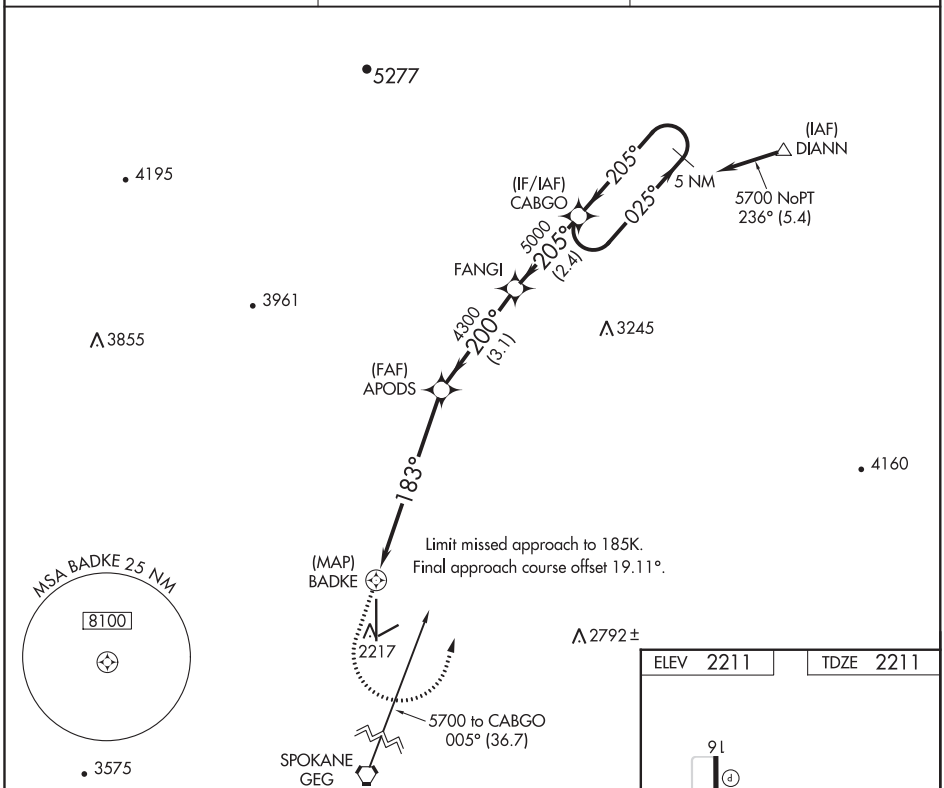
| APP CRS | Rwy ldg | 6100 |
|---|---|---|
| 183° | TDZE | 2211 |
| | Apt Elev | 2211 |

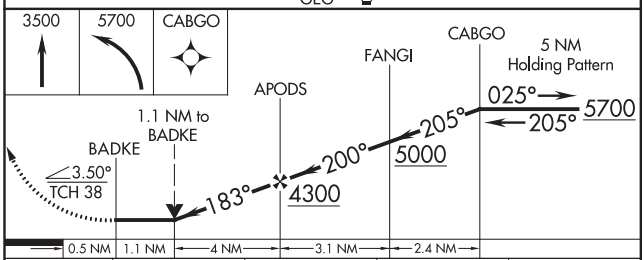
# RNAV (GPS) RWY 16
## DEER PARK (DEW)

When local altimeter setting not received, procedure NA.
DME/DME RNP-0.3 NA.
Helicopter visibility reduction below ¾ SM NA.
Circling NA west of Rwy 16-34.

MISSED APPROACH: Climb to 3500 then climbing left turn to 5700 direct CABGO and hold.

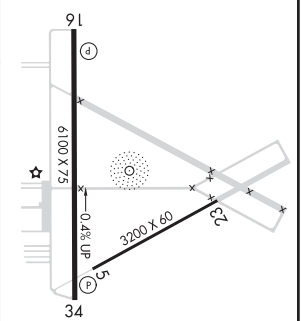
| ASOS | SPOKANE APP CON | UNICOM |
|---|---|---|
| 135.175 | 123.75 282.25 | 123.0 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 2640-1 429 (500-1) | | 2640-1¼ 429 (500-1¼) | |
| C CIRCLING | 2700-1 489 (500-1) | | 2700-1½ 489 (500-1½) | 2860-2 649 (700-2) |

| ELEV 2211 | TDZE 2211 |
|---|---|




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




NW-1, 05 NOV 2020 to 31 DEC 2020

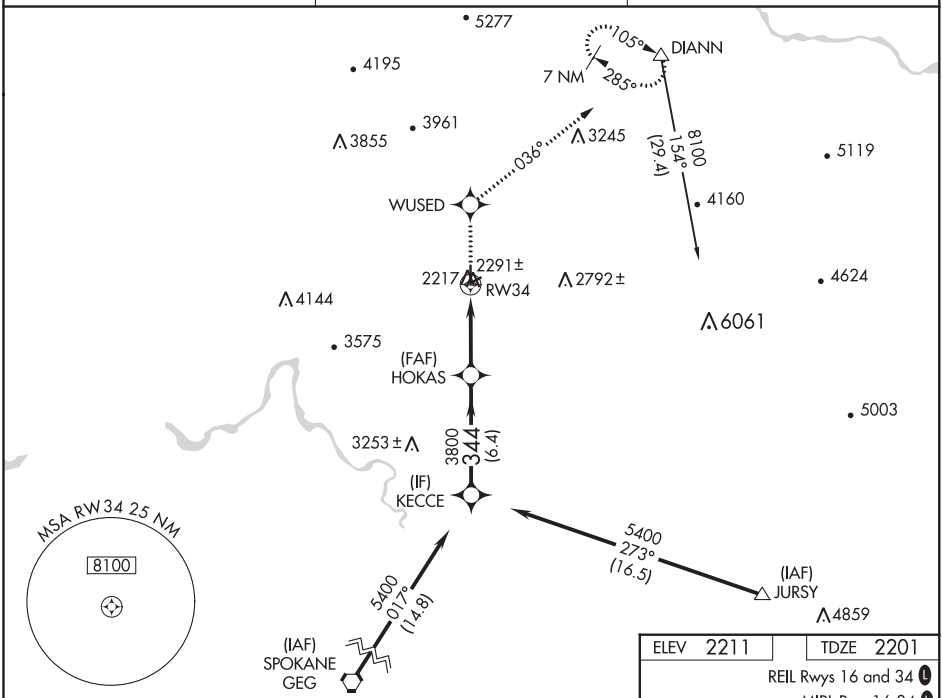
| WAAS CH 61306 W34A | APP CRS 344° | Rwy ldg 6100<br>TDZE 2201<br>Apt Elev 2211 |
|---|---|---|

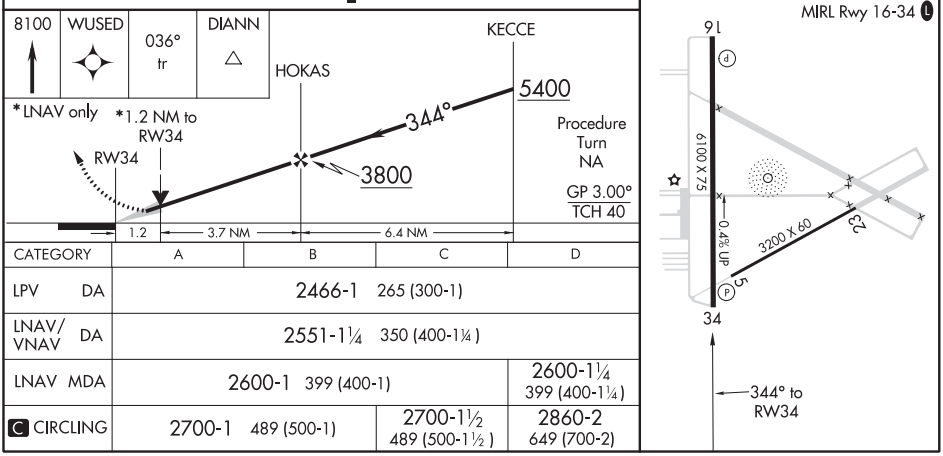
# RNAV (GPS) RWY 34
## DEER PARK (DEW)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C (-2°F) or above 44°C (111°F). When local altimeter setting not received, use Spokane Intl altimeter setting and increase all DA/MDA 80 feet and all visibilities ¼ SM. Circling NA west of Rwy 16-34. DME/DME RNP- 0.3 NA. VDP and Baro-VNAV NA when using Spokane Intl altimeter setting.

MISSED APPROACH: Climb to 8100 direct WUSED and via 036° track to DIANN and hold, continue climb-in-hold to 8100.

| ASOS | SPOKANE APP CON | UNICOM |
|---|---|---|
| 135.175 | 123.75 282.25 | 123.0 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2466-1 265 (300-1) | | | |
| LNAV/VNAV DA | 2551-1¼ 350 (400-1¼) | | | |
| LNAV MDA | 2600-1 399 (400-1) | | | 2600-1¼ 399 (400-1¼) |
| C CIRCLING | 2700-1 489 (500-1) | | 2700-1½ 489 (500-1½) | 2860-2 649 (700-2) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

DILLON, MONTANA — AL-121 (FAA) — 17341

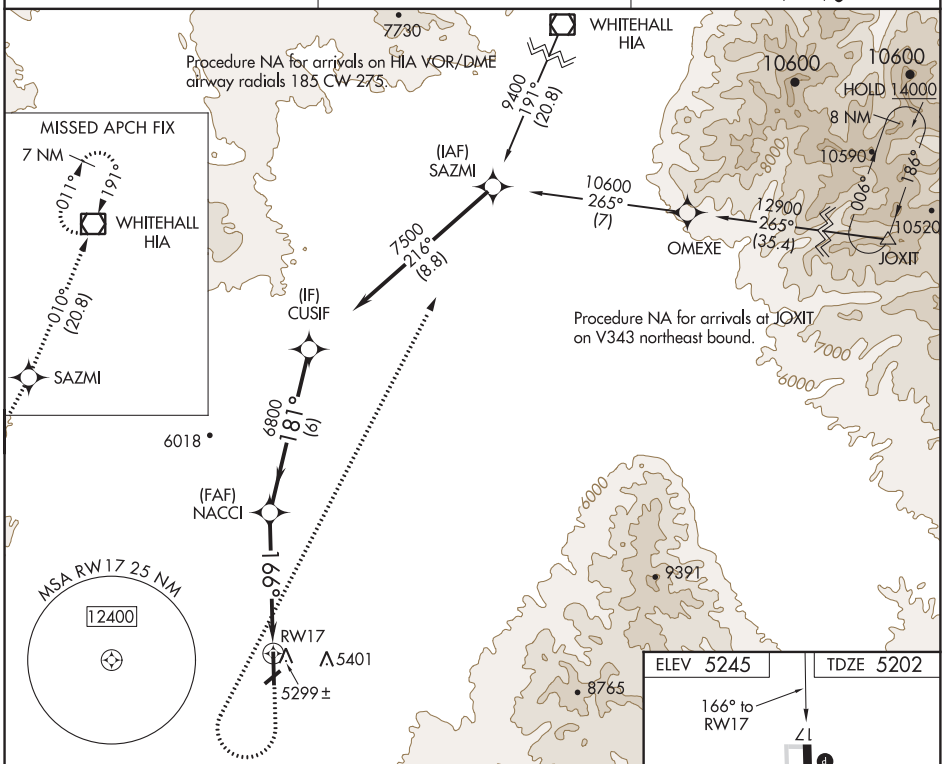
# RNAV (GPS) RWY 17
## DILLON (DLN)

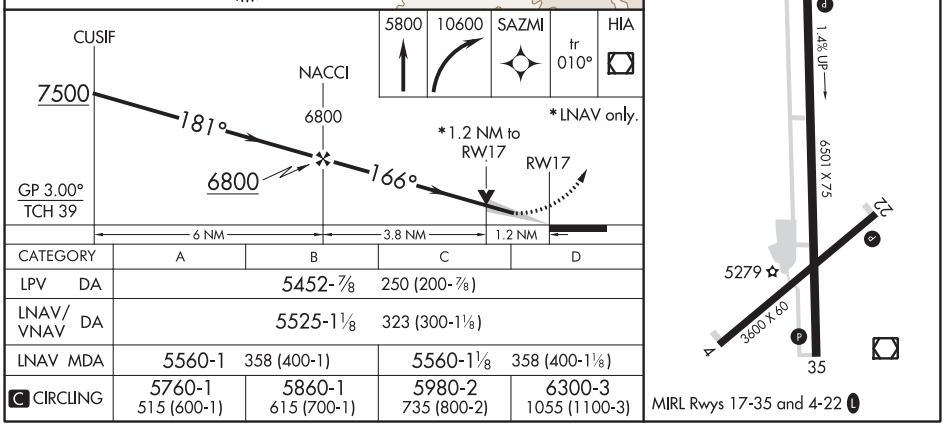
| WAAS CH 93927 W17A | APP CRS 166° | Rwy ldg 6501<br>TDZE 5202<br>Apt Elev 5245 |
|---|---|---|

When local altimeter setting not received, procedure NA.
DME/DME RNP-0.3 NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -27°C (-16°F) or above 51°C (124°F).
Night Landing: Rwy 4, 22, 35 NA.

MISSED APPROACH: Climb to 5800 then climbing right turn to 10600 direct SAZMI and on track 010° to HIA VOR/DME and hold.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.225 | 132.4 338.3 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 5452-⅞ 250 (200-⅞) | | | |
| LNAV/VNAV DA | 5525-1⅛ 323 (300-1⅛) | | | |
| LNAV MDA | 5560-1 358 (400-1) | | 5560-1⅛ 358 (400-1⅛) | |
| C CIRCLING | 5760-1 515 (600-1) | 5860-1 615 (700-1) | 5980-2 735 (800-2) | 6300-3 1055 (1100-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

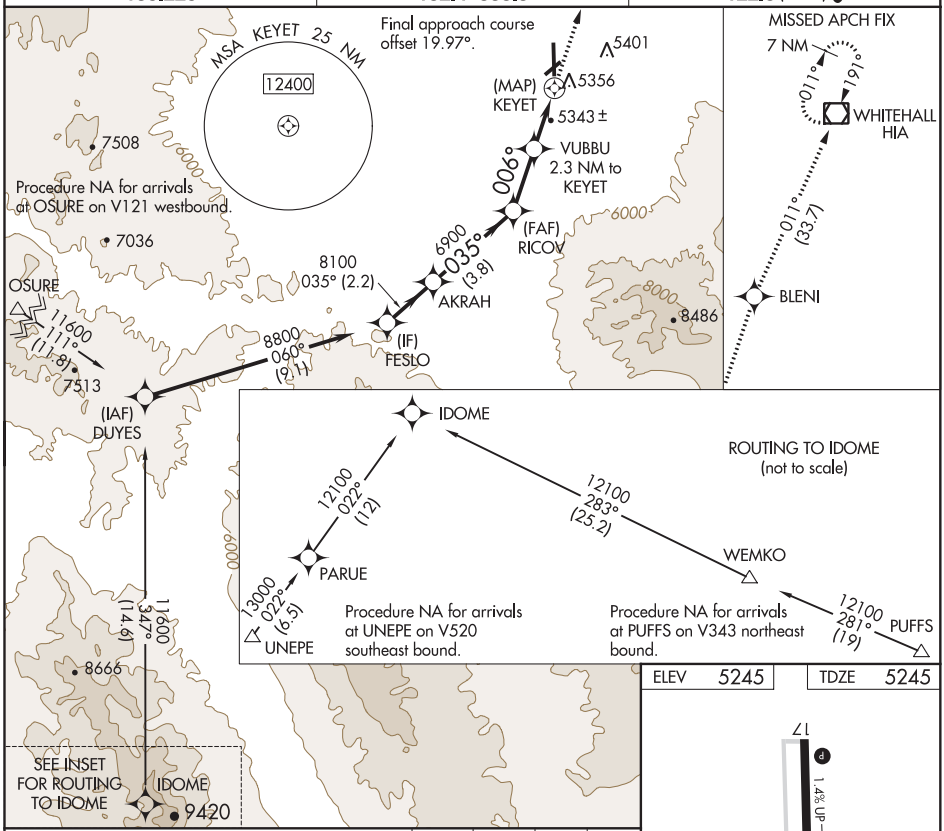
# RNAV (GPS) RWY 35
## DILLON (DLN)

| WAAS CH 49227 W35A | APP CRS 006° | Rwy ldg 6501<br>TDZE 5245<br>Apt Elev 5245 |
|---|---|---|

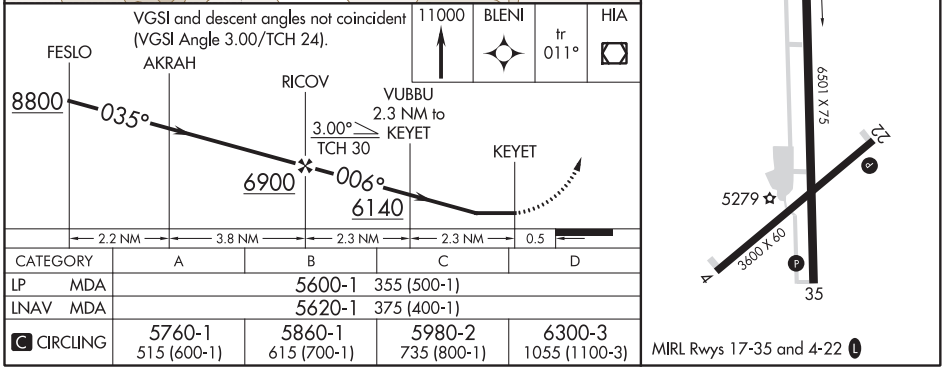
When local altimeter setting not received, procedure NA. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA. Night landing: Rwy 4, 22, 35 NA.

MISSED APPROACH: Climb to 11000 direct BLENI and on track 011° to HIA VOR/DME and hold.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.225 | 132.4 338.3 | 122.8 (CTAF) L |




| ELEV | 5245 | TDZE | 5245 |
|---|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LP MDA | 5600-1 355 (500-1) | | | |
| LNAV MDA | 5620-1 375 (400-1) | | | |
| C CIRCLING | 5760-1 515 (600-1) | 5860-1 615 (700-1) | 5980-2 735 (800-1) | 6300-3 1055 (1100-3) |

MIRL Rwys 17-35 and 4-22 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

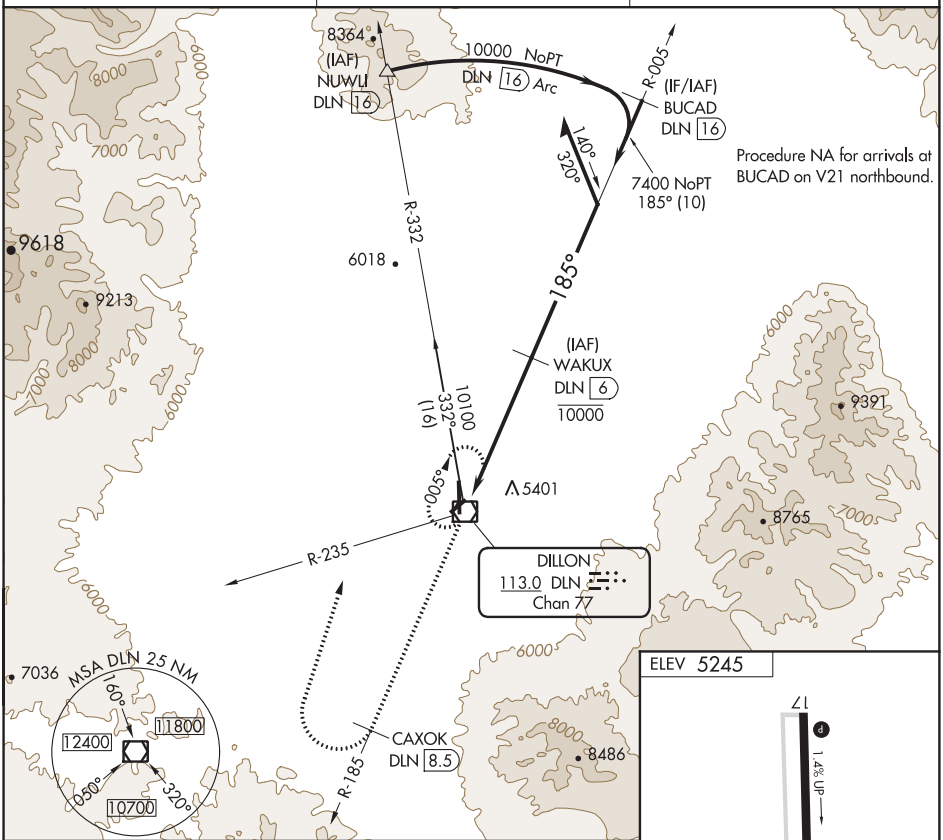
| VOR/DME DLN 113.0 Chan 77 | APP CRS 185° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 5245 |
|---|---|---|

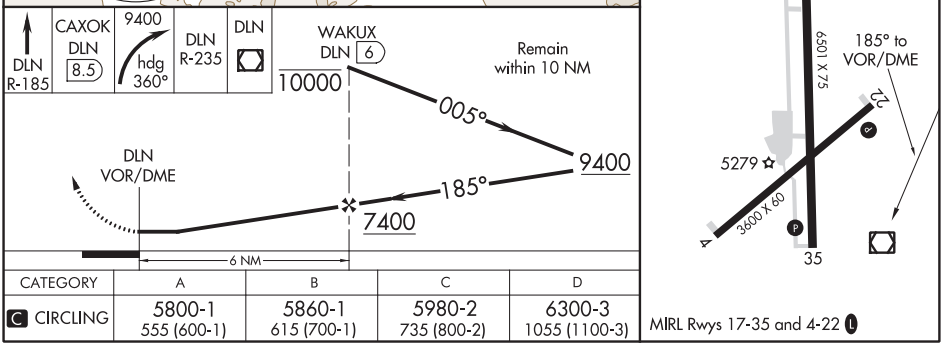
# VOR/DME-B
## DILLON (DLN)

When local altimeter setting not received, procedure NA.
Night Landing: Rwy 4, 22, 35 NA. Helicopter visibility reduction below 1 SM not authorized.

MISSED APPROACH: Climb on DLN VOR/DME R-185 to CAXOK/8.5 DME then climbing right turn to 9400 on heading 360° and on DLN VOR/DME R-235 to DLN VOR/DME and hold.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.225 | 132.4 338.3 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 5800-1<br>555 (600-1) | 5860-1<br>615 (700-1) | 5980-2<br>735 (800-2) | 6300-3<br>1055 (1100-3) |

MIRL Rwys 17-35 and 4-22 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

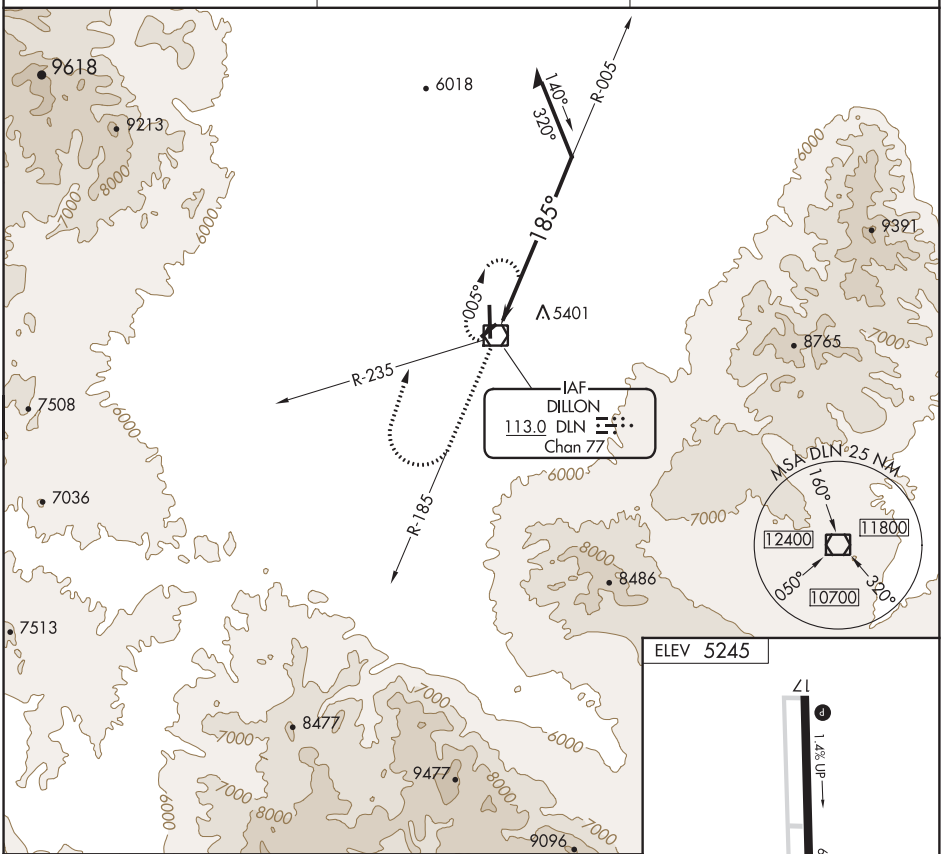
| VOR/DME DLN 113.0 Chan 77 | APP CRS 185° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 5245 |
|---|---|---|

# VOR-A
## DILLON (DLN)

When local altimeter setting not received, procedure NA.
Night Landing: Rwy 4, 22, 35 NA. Helicopter visibility reduction below 1 SM not authorized.

MISSED APPROACH: Climb to 9000 on DLN VOR/DME R-185 then climbing right turn to 9600 on heading 360° and DLN VOR/DME R-235 to DLN VOR/DME and hold.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.225 | 132.4 338.3 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 8100-1¼ 2855 (2900-1¼) | 8100-1½ 2855 (2900-1½) | 8100-3 2855 (2900-3) | |

MIRL Rwys 17-35 and 4-22 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

DIXON, WYOMING

AL-11441 (FAA)

19171

# RNAV (GPS) RWY 24

DIXON (DWX)

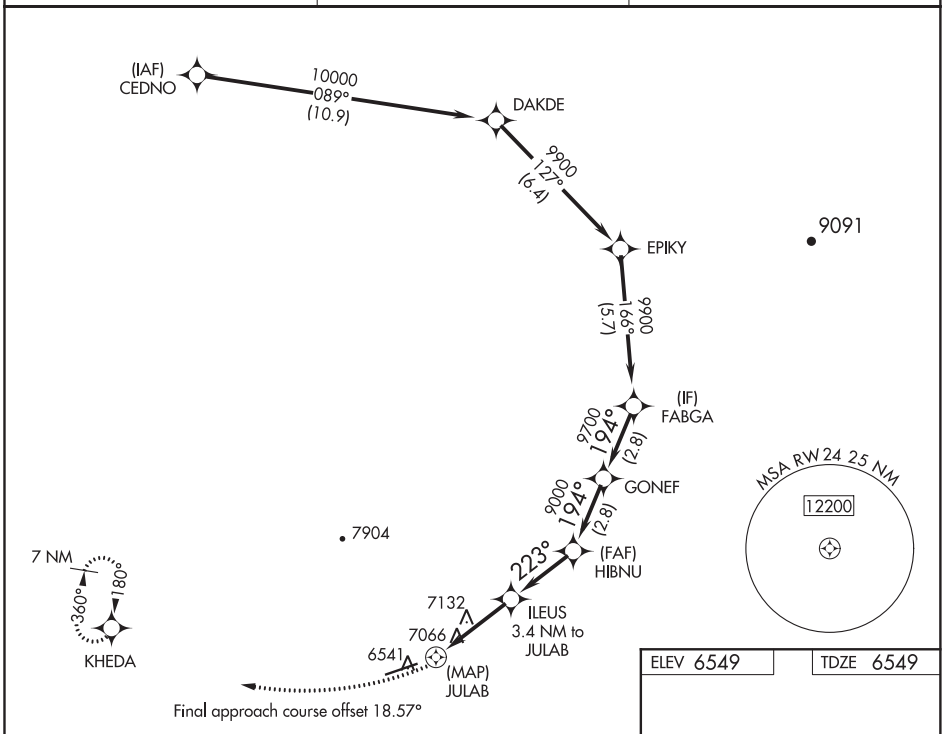
| WAAS CH 60942 W24A | APP CRS 223° | Rwy ldg 7000<br>TDZE 6549<br>Apt Elev 6549 |
|---|---|---|

T
A
-38°C

Rwy 24 helicopter visibility reduction below 1 SM NA. DME/DME RNP-0.3 NA. Straight-in Rwy 24 NA at night, Circling Rwy 24 NA at night.

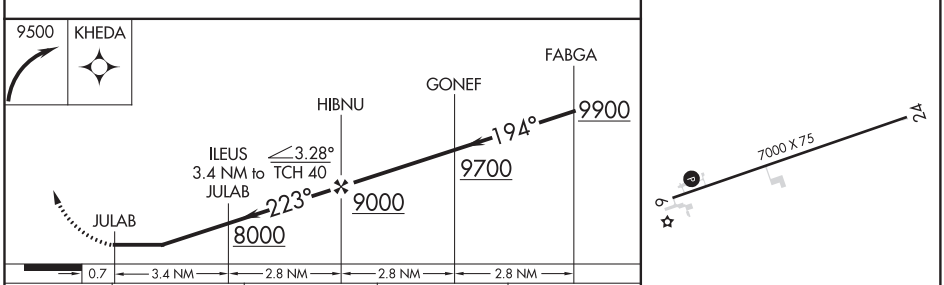
MISSED APPROACH: Climbing right turn to 9500 direct KHEDA and hold, continue climb-in-hold to 9500.

| AWOS-3PT | DENVER CENTER | CTAF |
|---|---|---|
| 119.425 | 120.475 235.975 | 122.9 L |




NW-1, 05 NOV 2020 to 31 DEC 2020

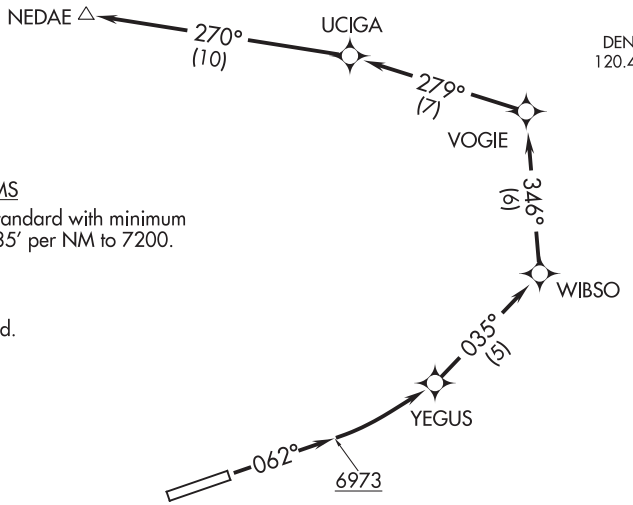
NW-1, 05 NOV 2020 to 31 DEC 2020




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LP MDA | 7400-1<br>851 (900-1) | 7400-1¼<br>851 (900-1¼) | 7400-2½ 851 (900-2½) | |
| LNAV MDA | 7420-1<br>871 (900-1) | 7420-1¼<br>871 (900-1¼) | 7420-2½ 871 (900-2½) | |
| C CIRCLING | 7420-1¼ 871 (900-1¼) | | 7440-2¾<br>891 (900-2¾) | 7900-3<br>1351 (1400-3) |

MIRL Rwy 6-24 L
REIL Rwys 6 and 24 L

AWOS-3PT
119.425
CTAF
122.9
DENVER CENTER
120.475 235.975




TAKEOFF MINIMUMS

RWY 6: 600-3 or standard with minimum climb of 485′ per NM to 7200.

NOTE: RNAV 1.
NOTE: GPS required.

TAKEOFF OBSTACLE NOTES

Rwy 6: Fence and terrain beginning 47′ from DER, 70′ left of centerline, up to 6570′ MSL.
REILS beginning 49′ from DER, 77′ left and right of centerline, 6553 MSL.
Vehicle on road, terrain and fence beginning 125′ from DER, 2′ right of centerline, up to 6570′ MSL.
Vehicle on road, 339′ from DER, 415′ right of centerline, 6574′ MSL.
Vehicle on road and terrain beginning 414′ from DER, 68′ right of centerline, up to 6576′ MSL.
Vehicle on road, 448′ from DER, 106′ right of centerline, up to 6577′ MSL.
Vehicle on road, terrain and fence beginning 480′ from DER, 15′ right of centerline, up to 6579′ MSL.
Vehicle on road and terrain beginning 520′ from DER, 97′ left of centerline, up to 6581′ MSL.
Vehicle on road and terrain beginning 547′ from DER, 92′ left of centerline, up to 6582′ MSL.
Vehicle on road and terrain beginning 697′ from DER, 13′ left of centerline, up to 6590′ MSL.
Terrain beginning 1466′ from DER, 439′ left of centerline, up to 6597′ MSL.
Terrain and fence, beginning 1711′ from DER, 155′ left of centerline, up to 6601′ MSL.
Terrain beginning 1923′ from DER, 639′ left of centerline, up to 6604′ MSL.
Terrain 2128′ from DER, 680′ left of centerline, 6606′ MSL.
Terrain beginning 2182′ from DER, 584′ left of centerline, up to 6610′ MSL.

(NOTES CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 6: Climb heading 062° to 6973, then left turn direct YEGUS then on depicted route to NEDAE, thence. . . .

. . . .expect filed altitude 10 minutes after departure.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

(CRBN1.NEDAE) 17285

# CARBON ONE DEPARTURE (OBSTACLE) (RNAV)

AL-11441 (FAA)

DIXON (DWX)
DIXON, WYOMING

TAKEOFF OBSTACLE NOTES

Rwy 6: Terrain beginning 2366′ from DER, 815′ left of centerline, up to 6614′ MSL.
Terrain beginning 2571′ from DER, 959′ left of centerline, up to 6622′ MSL.
Terrain beginning 2958′ from DER, 539′ left of centerline, up to 6624′ MSL.
Terrain 3171′ from DER, 598′ left of centerline, 6630′ MSL.
Terrain beginning 3208′ from DER, 557′ left of centerline, up to 6641′ MSL.
Terrain beginning 3406′ from DER, 327′ left of centerline, up to 6655′ MSL.
Terrain 3803′ from DER, 100′ right of centerline, 6644′ MSL.
Terrain 3806′ from DER, 532′ right of centerline, 6645′ MSL.
Terrain beginning 3816′ from DER, 316′ right of centerline, up to 6649′ MSL.
Terrain 3622′ from DER, 1059′ left of centerline, 6659′ MSL.
Terrain beginning 3624′ from DER, 564′ left of centerline, up to 6660′ MSL.
Terrain beginning 3806′ from DER, 398′ left of centerline, up to 6665′ MSL.
Terrain beginning 3838′ from DER, 184′ left of centerline, up to 6666′ MSL.
Terrain 3999′ from DER, 553′ left of centerline, 6668′ MSL.
Terrain 4024′ from DER, 766′ left of centerline, 6673′ MSL.
Terrain beginning 4026′ from DER, 28′ right of centerline, up to 6659′ MSL.
Terrain beginning 4133′ from DER, 720′ right of centerline, up to 6660′ MSL.
Terrain beginning 4232′ from DER, 89′ right of centerline, up to 6670′ MSL.
Terrain and tree beginning 4028′ from DER, 155′ left of centerline, up to 6680′ MSL.
Terrain beginning 4236′ from DER, 126′ left of centerline, up to 6695′ MSL.
Terrain beginning 4391′ from DER, 1327′ left of centerline, up to 6712′ MSL.
Terrain beginning 4445′ from DER, 159′ left of centerline, up to 6714′ MSL.
Terrain 4452′ from DER, 305′ right of centerline, 6683′ MSL.
Terrain 4495′ from DER, 535′ right of centerline, 6685′ MSL.
Terrain beginning 4508′ from DER, 79′ right of centerline, up to 6687′ MSL.
Terrain beginning 4627′ from DER, 459′ left of centerline, up to 6745′ MSL.
Terrain 4676′ from DER, 275′ right of centerline, 6696′ MSL.
Terrain beginning 4696′ from DER, 492′ right of centerline, up to 6697′ MSL.
Terrain and fence beginning 4741′ from DER, 26′ right of centerline, up to 6703′ MSL.
Terrain beginning 4756′ from DER, 19′ left of centerline, up to 6762′ MSL.
Terrain beginning 4883′ from DER, 355′ right of centerline, up to 6709′ MSL.
Terrain and fence beginning 4929′ from DER, 127′ right of centerline, up to 6713′ MSL.
Terrain beginning 5108′ from DER, 425′ right of centerline, up to 6726′ MSL.
Terrain beginning 5149′ from DER, 206′ right of centerline, up to 6731′ MSL.
Terrain 5313′ from DER, 546′ right of centerline, 6744′ MSL.
Terrain beginning 5330′ from DER, 139′ left of centerline, up to 6770′ MSL.
Terrain beginning 5332′ from DER, 313′ right of centerline, up to 6750′ MSL.
Terrain and vehicle on road beginning 5358′ from DER, 94′ right of centerline, up to 6754′ MSL.
Terrain 5545′ from DER, 253′ left of centerline, 6785′ MSL.
Terrain 5546′ from DER, 512′ right of centerline, 6771′ MSL.
Terrain beginning 5550′ from DER, 494′ left of centerline, up to 6790′ MSL.
Terrain and vehicle on road beginning 5551′ from DER, 18′ right of centerline, up to 6781′ MSL.
Vehicle on road 5708′ from DER, 1061′ right of centerline, 6782′ MSL.
Terrain 5724′ from DER, 312′ left of centerline, 6799′ MSL.
Terrain and vehicle on road beginning 5731′ from DER, 406′ right of centerline, up to 6796′ MSL.
Terrain beginning 5749′ from DER, 84′ left of centerline, up to 6806′ MSL.
Terrain and vehicle on road beginning 5751′ from DER, 159′ right of centerline, up to 6819′ MSL.
Terrain and vehicle on road beginning 5831′ from DER, 697′ right of centerline, up to 6822′ MSL.
Terrain, vehicle on road and fence beginning 5862′ from DER, 127′ right of centerline, up to 6830′ MSL.

(NOTES CONTINUED ON FOLLOWING PAGE)



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

TAKEOFF OBSTACLE NOTES

Rwy 6: Terrain beginning 5936′ from DER, 124′ left of centerline, up to 6825′ MSL.
Vehicle on road, 5988′ from DER, 232′ right of centerline, 6832′ MSL.
Terrain, vehicle on road and fence beginning 5993′ from DER, 193′ right of centerline, up to 6842′ MSL.
Terrain and vehicle on road beginning 6044′ from DER, 67′ right of centerline, up to 6845′ MSL.
Terrain and vehicle on road beginning 1 NM from DER, 63′ left of centerline, up to 6847′ MSL.
Terrain beginning 1 NM from DER, 263′ right of centerline, up to 6872′ MSL.
Terrain and vehicle on road 1 NM from DER, 210′ left of centerline, up to 6867′ MSL.
Terrain beginning 1 NM from DER, 759′ right of centerline, up to 6873′ MSL.
Terrain beginning 1 NM from DER, 66′ right of centerline, up to 6878′ MSL.
Terrain beginning 1 NM from DER, 160′ left of centerline, up to 6879′ MSL.
Terrain beginning 1 NM from DER, 142′ right of centerline, up to 6934′ MSL.
Terrain beginning 1 NM from DER, 80′ left of centerline, up to 6915′ MSL.
Terrain beginning 1 NM from DER, 399′ right of centerline, up to 6938′ MSL.
Terrain and vehicle on road beginning 1.1 NM from DER, 24′ right of centerline, up to 6955′ MSL.
Terrain beginning 1.1 NM from DER, 100′ left of centerline, up to 6929′ MSL.
Terrain and vehicle on road beginning 1.1 NM from DER, 207′ right of centerline, up to 6956′ MSL.
Terrain beginning 1.1 NM from DER, 10′ left of centerline up to 6942′ MSL.
Terrain and vehicles on road beginning 1.1 NM from DER, 82′ right of centerline, up to 6957′ MSL.
Terrain and vehicles on road beginning 1.2 NM from DER, 448′ right of centerline, up to 6958′ MSL.
Terrain beginning 1.2 NM from DER, 69′ left of centerline, up to 6960′ MSL.
Terrain and vehicle on road beginning 1.2 NM from DER, 156′ right of centerline, up to 6966′ MSL.
Terrain beginning 1.2 NM from DER, 529′ left of centerline, up to 6978′ MSL.
Terrain beginning 1.2 NM from DER, 173′ left of centerline, up to 6982′ MSL.
Terrain and vehicle on road beginning 1.2 NM from DER, 65′ right of centerline, up to 6979′ MSL.
Terrain beginning 1.2 NM from DER, 6′ left of centerline, up to 6986′ MSL.
Terrain and vehicle on road beginning 1.3 NM from DER, 80′ right of centerline, up to 6981′ MSL.
Terrain and vehicle on road 1.4 NM from DER, 127′ right of centerline, up to 6984′ MSL.
Terrain beginning 1.4 NM from DER, 108′ left of centerline, up to 6987′ MSL.
Terrain beginning 1.4 NM from DER, 69′ left of centerline, up to 6991′ MSL.
Terrain beginning 1.4 NM from DER, 57′ left of centerline, up to 6996′ MSL.
Terrain and vehicle on road beginning 1.5 NM from DER, 165′ right of centerline, up to 6985′ MSL.
Terrain beginning 1.5 NM from DER, 10′ left of centerline, up to 7006′ MSL.
Terrain and vehicle on road beginning 1.5 NM from DER, 177′ right of centerline, up to 6989′ MSL.
Terrain, vehicle on road and building beginning 1.5 NM from DER, 324′ right of centerline, up to 6999′ MSL.
Terrain, vehicle on road, transmission line towers and tree beginning 1.5 NM from DER, 4′ right of centerline, up to 7002′ MSL.
Terrain and tree beginning 1.6 NM from DER, 916′ left of centerline, up to 7007′ MSL.
Terrain and tree beginning 1.6 NM from DER, 239′ left of centerline, up to 7028′ MSL.
Terrain beginning 1.6 NM from DER, 13′ left of centerline, up to 7038′ MSL.
Fence, tree and terrain beginning 1.6 NM from DER, 669′ left of centerline, up to 7066′ MSL.
Terrain and trees beginning 1.6 NM from DER, 58′ left of centerline, up to 7070′ MSL.
Terrain beginning 1.7 NM from DER, 263′ left of centerline, up to 7079′ MSL.
Trees, terrain, building and vehicle on road beginning 1.8 NM from DER, 193′ left of centerline, up to 7097′ MSL.
Vehicle on road 2 NM from DER, 2162′ left of centerline, 7099′ MSL.
Vehicle on road 2 NM from DER, 2350′ left of centerline, 7104′ MSL.
Vehicle on road and terrain beginning 2 NM from DER, 80′ left of centerline, up to 7117′ MSL.
Terrain beginning 2.3 NM from DER, 1040′ left of centerline, up to 7123′ MSL.
Terrain beginning 2.4 NM from DER, 2327′ left of centerline, up to 7100′ MSL.

NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

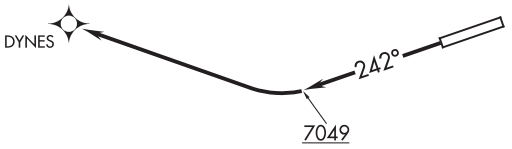
(DIXON1.DYNES) 17285

# DIXON ONE DEPARTURE (OBSTACLE) (RNAV)

AL-11441 (FAA)

DIXON(DWX)
DIXON, WYOMING

AWOS-3PT
119.425
CTAF
122.9
DENVER CENTER
120.475 235.975




NOTE: RNAV 1.
NOTE: GPS required.

TAKEOFF MINIMUMS

Rwy 24: 300-1¾ or standard with minimum climb of 228′ per NM to 6800, or alternatively with standard takeoff minimums and a normal 200′ per NM climb gradient. Takeoff must occur no later than 1800′ prior to DER.

TAKEOFF OBSTACLE NOTES

Rwy 24: Vehicle on road, 11′ from DER, 289′ left of centerline, 6489′ MSL.
REILS 26′ from DER, 113′ left and right of centerline, 6475′ MSL.
Sign, buildings, fence and vehicle on road beginning 63′ from DER, 291′ left of centerline, up to 32′ AGL/6507′ MSL.
Vehicle on road beginning 77′ from DER, 301′ right of centerline, up to 6479′ MSL.
Transmission line towers beginning 410′ from DER, 309′ left of centerline, up to 41′ AGL/6509′ MSL.
Vehicle on road on ridgeline beginning 1.3 NM from DER, 2528′ left of centerline, up to 6703′ MSL.
Tree on ridgeline 1.3 NM from DER, 2441′ left of centerline, 6688′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 24: Climb heading 242° to 7049, then right turn direct DYNES, thence. . . .

. . . .expect filed altitude 10 minutes after departure.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 58018 W11A | APP CRS 107° | Rwy ldg 6534<br>TDZE 4921<br>Apt Elev 4933 |
|---|---|---|

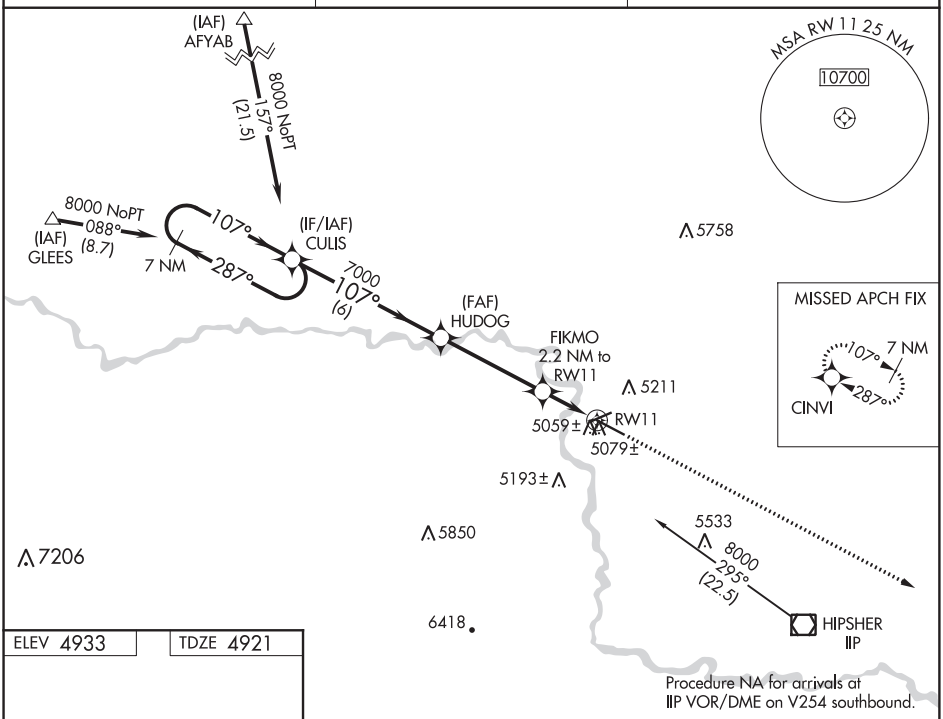
# RNAV (GPS) RWY 11
## CONVERSE COUNTY (DGW)

RNP APCH.

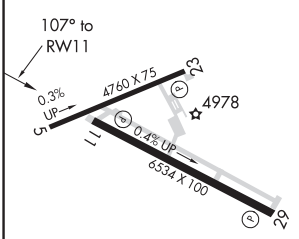
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C (-11°F) or above 39°C (102°F).

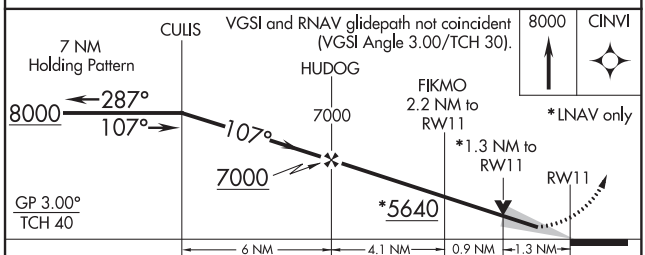
MISSED APPROACH: Climb to 8000 direct CINVI and hold.

| ASOS | DENVER CENTER | UNICOM |
|---|---|---|
| 135.225 | 135.6 363.025 | 122.8 (CTAF) L |




| ELEV 4933 | TDZE 4921 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 5121-¾ 200 (200-¾) | | | |
| LNAV/VNAV DA | 5329-1½ 408 (400-1½) | | | |
| LNAV MDA | 5340-1 419 (500-1) | | 5340-1¼ 419 (500-1¼) | |

REIL Rwy 11 and 29 L
MIRL Rwys 11-29 and 5-23 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

DOUGLAS, WYOMING

AL-6870 (FAA)

20254

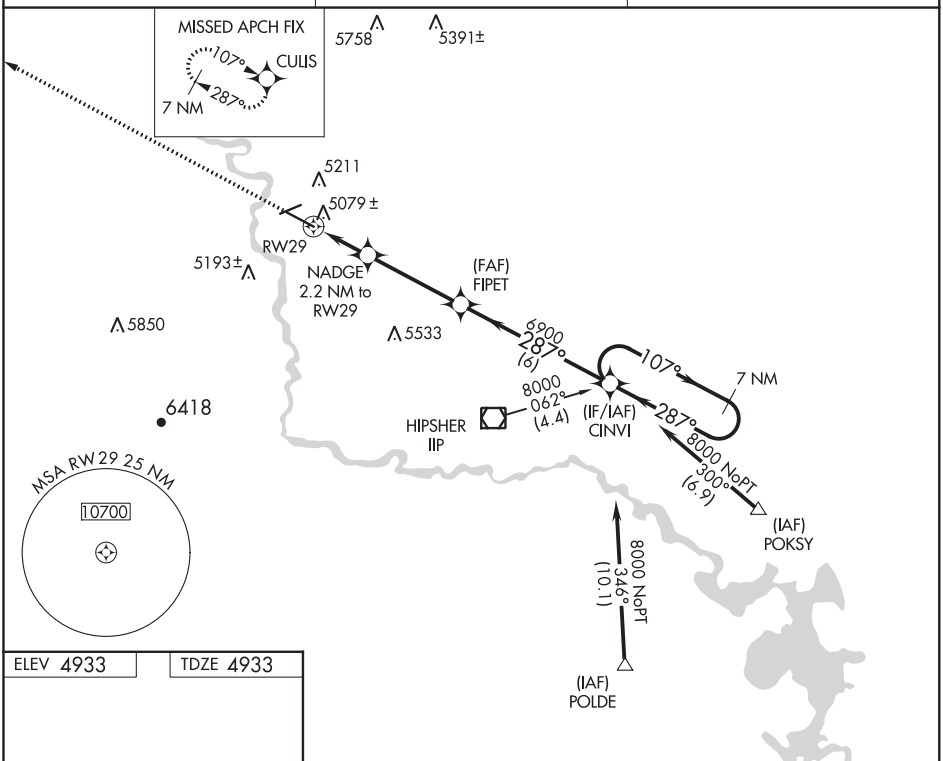
# RNAV (GPS) RWY 29
## CONVERSE COUNTY (DGW)

| WAAS CH 61018 W29A | APP CRS 287° | Rwy ldg 6534<br>TDZE 4933<br>Apt Elev 4933 |
|---|---|---|

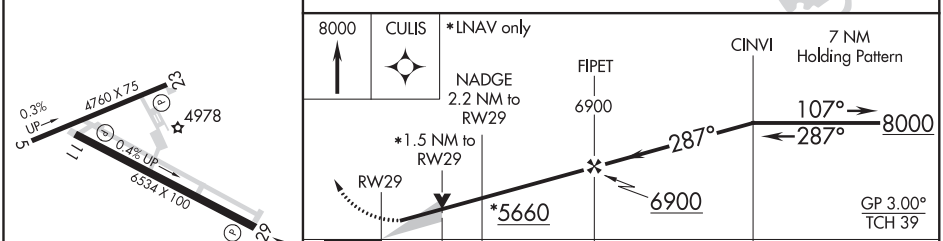
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C (-11°F) or above 39°C (102°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 8000 direct CULIS and hold.

| ASOS | DENVER CENTER | UNICOM |
|---|---|---|
| 135.225 | 135.6 363.025 | 122.8 (CTAF) L |




ELEV 4933 | TDZE 4933




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 5133-¾ 200 (200-¾) | | | |
| LNAV/VNAV DA | 5369-1½ 436 (500-1½) | | | |
| LNAV MDA | 5440-1 507 (600-1) | | 5440-1½ 507 (600-1½) | |
| CIRCLING | 5520-1 587 (600-1) | | 5520-1½ 587 (600-1½) | 5560-2 627 (700-2) |

REIL Rwy 11 and 29 L
MIRL Rwys 11-29 and 5-23 L

NW-1, 05 NOV 2020 to 31 DEC 2020

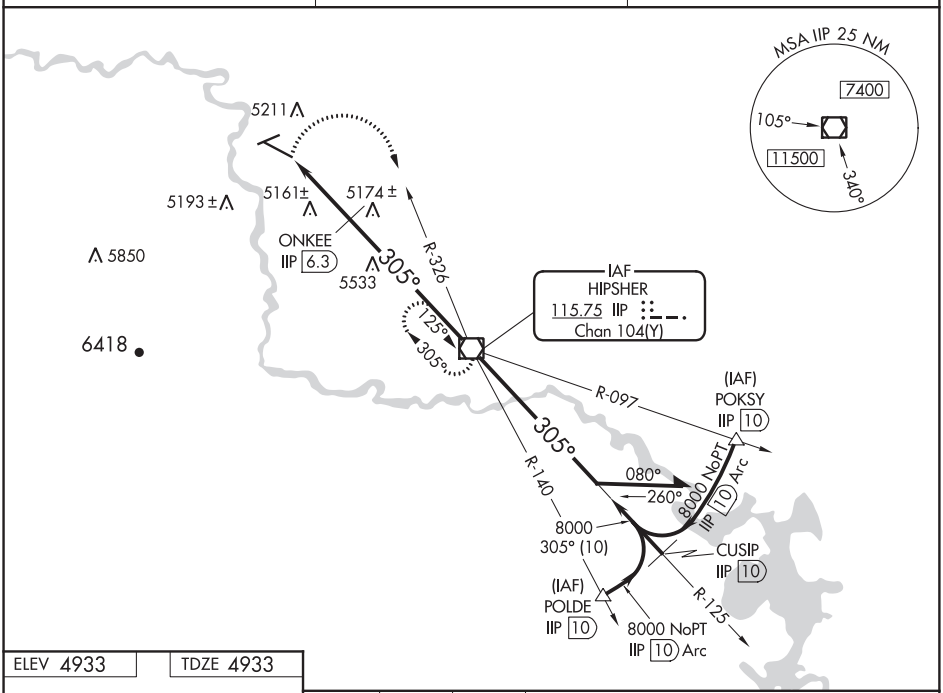
NW-1, 05 NOV 2020 to 31 DEC 2020

| VOR/DME IIP 115.75 Chan 104(Y) | APP CRS 305° | Rwy ldg 6534 TDZE 4933 Apt Elev 4933 |
|---|---|---|

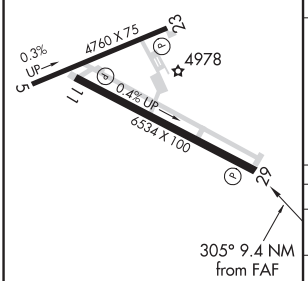
# VOR RWY 29
## CONVERSE COUNTY (DGW)

MISSED APPROACH: Climbing right turn to 8000 via heading 160° and IIP VOR/DME R-326 to IIP VOR/DME and hold, continue climb-in-hold to 8000.

| ASOS | DENVER CENTER | UNICOM |
|---|---|---|
| 135.225 | 135.6 363.025 | 122.8 (CTAF) L |

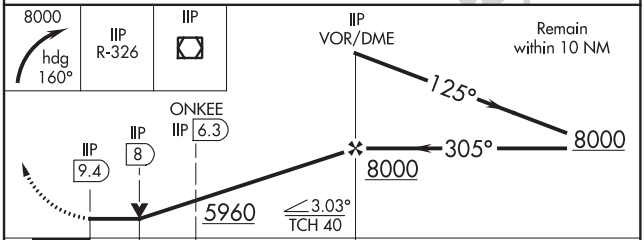



ELEV 4933 TDZE 4933




REIL Rwy 11 and 29 L
MIRL Rwys 11-29 and 5-23 L

| FAF to MAP 9.4 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 9:24 | 6:16 | 4:42 | 3:46 | 3:08 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-29 | 5960-1¼ 1027 (1100-1¼) | 5960-1½ 1027 (1100-1½) | 5960-3 1027 (1100-3) | |
| CIRCLING | 5960-1¼ 1027 (1100-1¼) | 5960-1½ 1027 (1100-1½) | 5960-3 1027 (1100-3) | |
| ONKEE FIX MINIMUMS | | | | |
| S-29 | 5420-1 487 (500-1) | | 5420-1¼ 487 (500-1¼) | 5420-1½ 487 (500-1½) |
| CIRCLING | 5520-1 587 (600-1) | | 5520-1½ 587 (600-1½) | 5540-2 607 (700-2) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

DRIGGS, IDAHO

AL-9117 (FAA)

19227

# RNAV (GPS) RWY 4
## DRIGGS-REED MEMORIAL (DIJ)

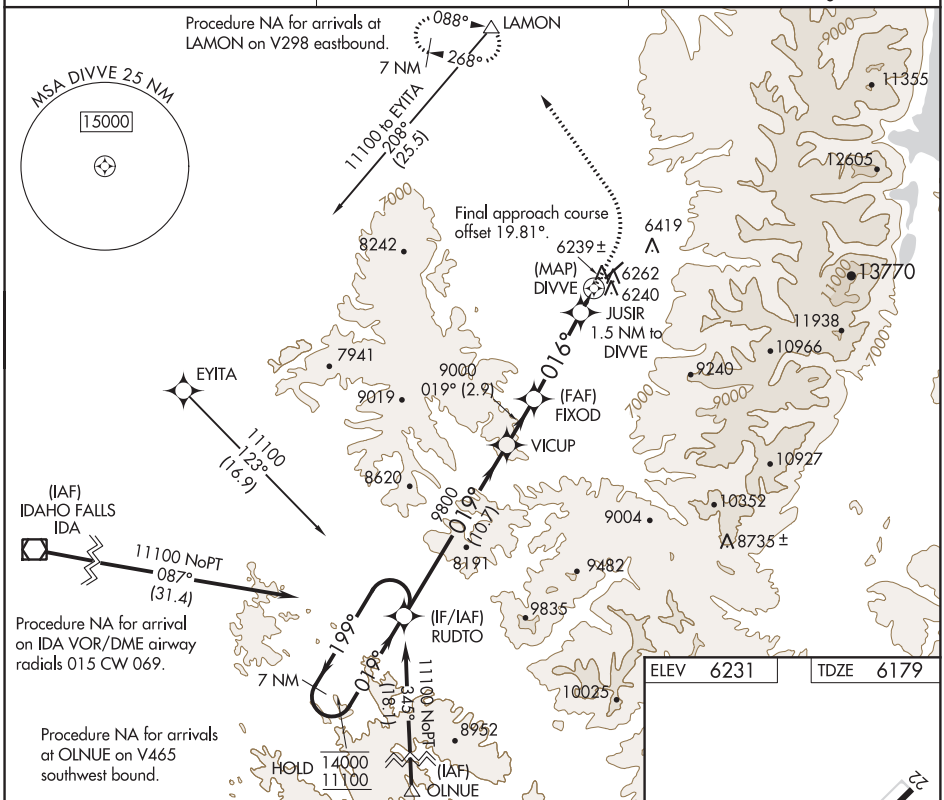
| WAAS CH 48827 W04A | APP CRS 016° | Rwy ldg 7300<br>TDZE 6179<br>Apt Elev 6231 |
|---|---|---|

RNP APCH.

T A Circling NA for Cats C and D southeast of Rwy 4-22.

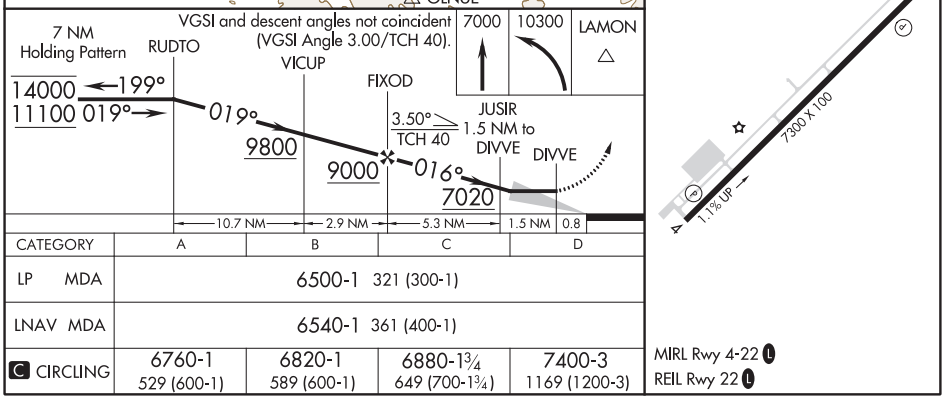
MISSED APPROACH: Climb to 7000 then climbing left turn to 10300 direct LAMON and hold, continue climb-in-hold to 10300.

| AWOS-3PT | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 120.775 | 128.35 239.25 | 122.7 (CTAF) L |




NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 6231 | TDZE 6179




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LP MDA | 6500-1 321 (300-1) | | | |
| LNAV MDA | 6540-1 361 (400-1) | | | |
| C CIRCLING | 6760-1 529 (600-1) | 6820-1 589 (600-1) | 6880-1¾ 649 (700-1¾) | 7400-3 1169 (1200-3) |

MIRL Rwy 4-22 L
REIL Rwy 22 L

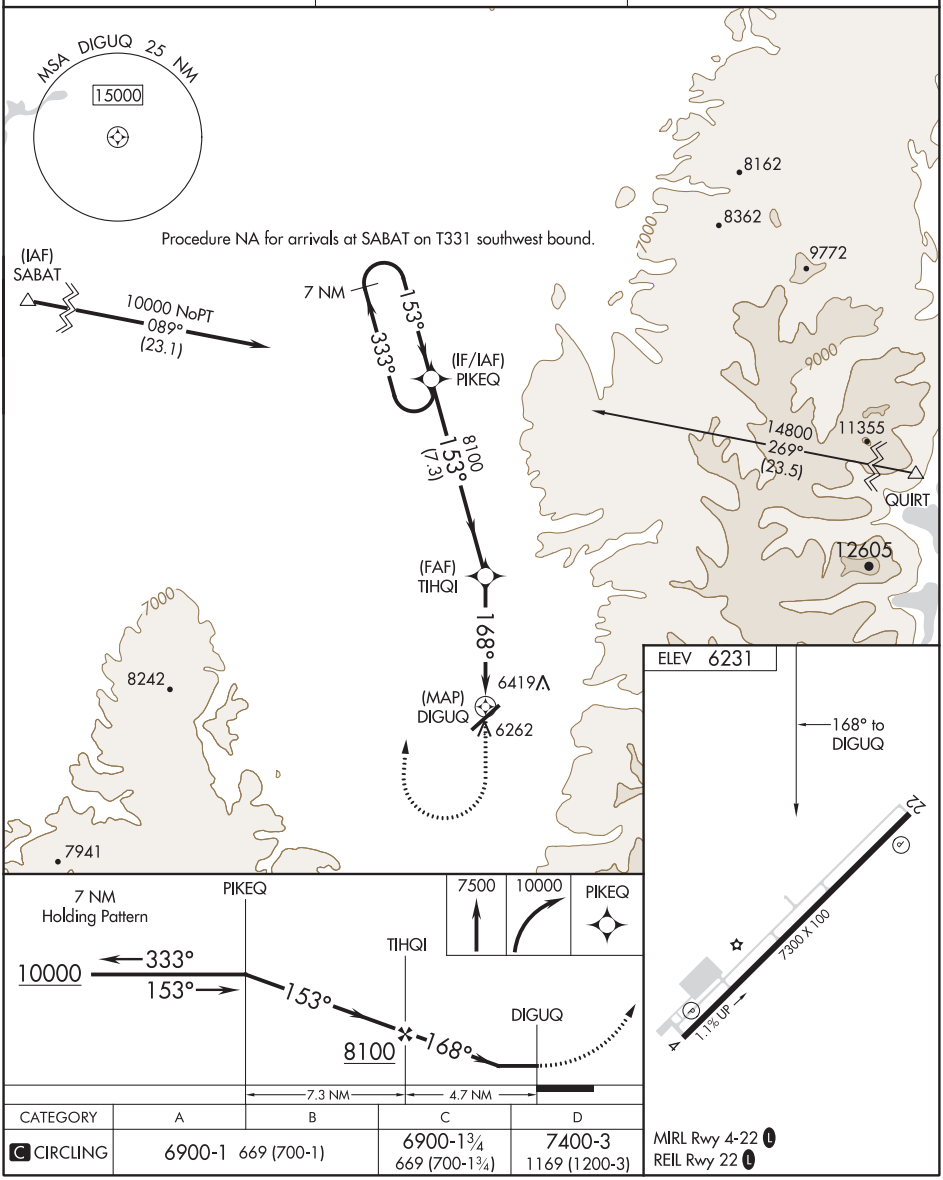
| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 168° | TDZE | N/A |
| | Apt Elev | 6231 |

# RNAV (GPS)-A
## DRIGGS-REED MEMORIAL (DIJ)

Circling NA for Cats C and D southeast of Rwy 4-22.
DME/DME RNP-0.3 NA.

MISSED APPROACH: (Do not exceed 185K until established direct PIKEQ) Climb to 7500 then climbing right turn to 10000 direct PIKEQ and hold.

| AWOS-3PT | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 120.775 | 128.35 239.25 | 122.7 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 6900-1 669 (700-1) | | 6900-1¾ 669 (700-1¾) | 7400-3 1169 (1200-3) |

MIRL Rwy 4-22 L
REIL Rwy 22 L

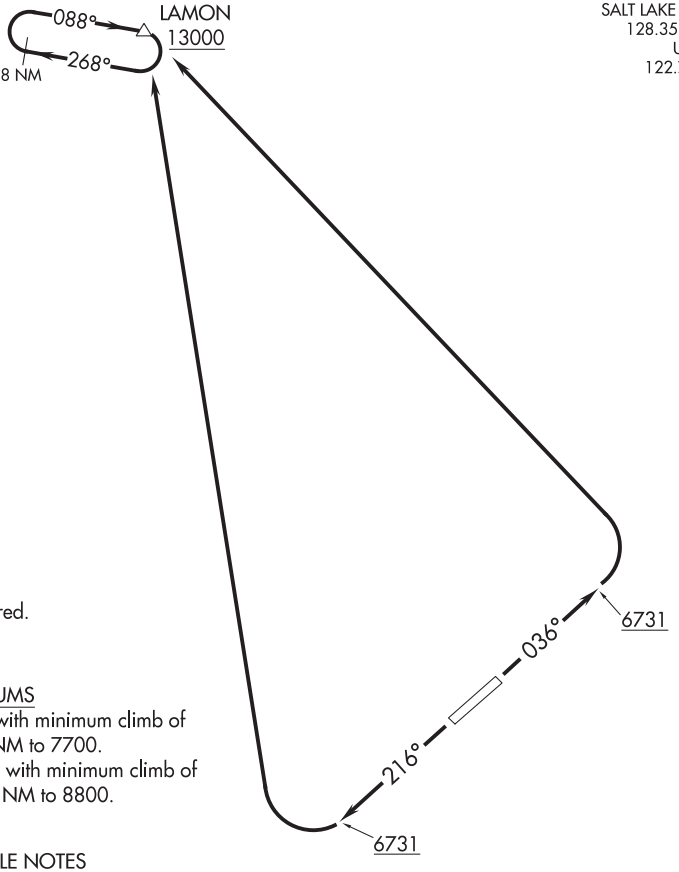
NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

(LAMON2.LAMON) 16315 SL-9117 (FAA)

# LAMON TWO DEPARTURE (OBSTACLE) (RNAV)

DRIGGS-REED MEMORIAL (DIJ)
DRIGGS, IDAHO




NOTE: GPS required.

NOTE: RNAV 1.

TAKEOFF MINIMUMS

Rwy 4: Standard with minimum climb of 236′ per NM to 7700.

Rwy 22: Standard with minimum climb of 253′ per NM to 8800.

TAKEOFF OBSTACLE NOTES

Rwy 4: Fence 35′ from DER, 288′ right of centerline, 5′ AGL/6238′ MSL.
Tree 498′ from DER, 266′ right of centerline, 6246′ MSL.
Tree 1029′ from DER, 402′ left of centerline, 6266′ MSL.
Vehicle on road 1320′ from DER, 17′ left of centerline, 15′ AGL/6264′ MSL.
Vehicle on road 1355′ from DER, 264′ right of centerline, 15′ AGL/6267′ MSL.
Tree 1908′ from DER, 409′ right of centerline, 6282′ MSL.

Rwy 22: Multiple buildings beginning 73′ from DER, 463′ right of centerline, up to 50′ AGL/6167′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 4: Climb heading 036° to 6731, then climbing left turn direct LAMON. Thence. . . .

TAKEOFF RUNWAY 22: Climb heading 216° to 6731, then climbing right turn direct LAMON. Thence. . . .

. . . .continue climb in LAMON holding pattern to cross LAMON at or above 13000 before proceeding on course.




NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 40038 W16A | APP CRS 193° | Rwy ldg 2901<br>TDZE 35<br>Apt Elev 35 |
|---|---|---|

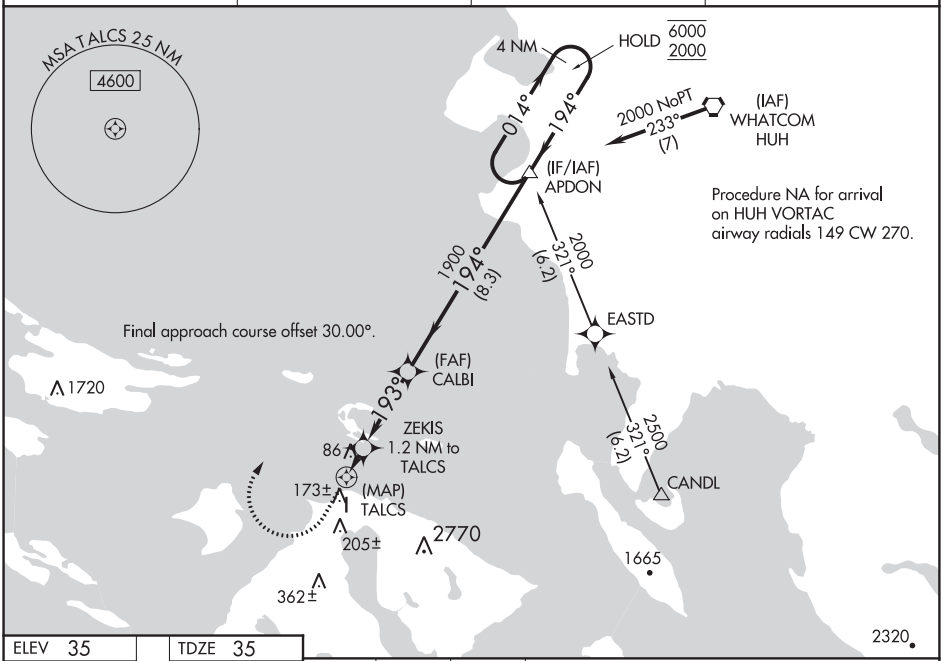
# RNAV (GPS) RWY 16
## ORCAS ISLAND (ORS)

RNP APCH.

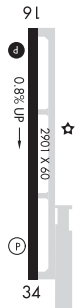
Circling to Rwy 34 NA at night. Rwy 16 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Friday Harbor altimeter setting and increase all MDA 40 feet.

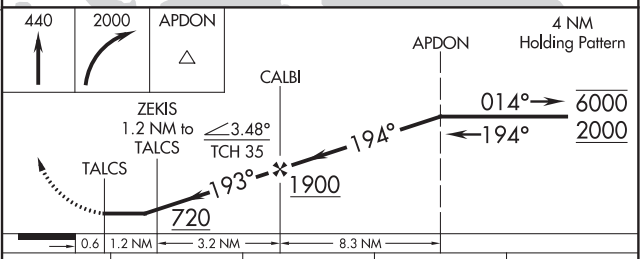
MISSED APPROACH: Climb to 440 then climbing right turn to 2000 direct APDON and hold.
# Missed approach requires minimum climb of 385 feet per NM to 980.

| AWOS-3 | WHIDBEY APP CON | VICTORIA APP CON | CTAF |
|---|---|---|---|
| 135.425 | 118.2 285.65 (SOUTH) | 132.7 290.8 (NORTH) | 128.25 L |




| ELEV 35 | TDZE 35 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LP MDA # | 340-1 | 305 (400-1) | NA | |
| LP MDA | 400-1 | 365 (400-1) | NA | |
| LNAV MDA # | 440-1 | 405 (500-1) | NA | |
| LNAV MDA | 700-1 | 665 (700-1) | NA | |
| C CIRCLING | 1120-1¼<br>1085 (1100-1¼) | 1820-1½<br>1785 (1800-1½) | NA | |

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

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

EASTSOUND, WASHINGTON

AL-10384 (FAA)

20198

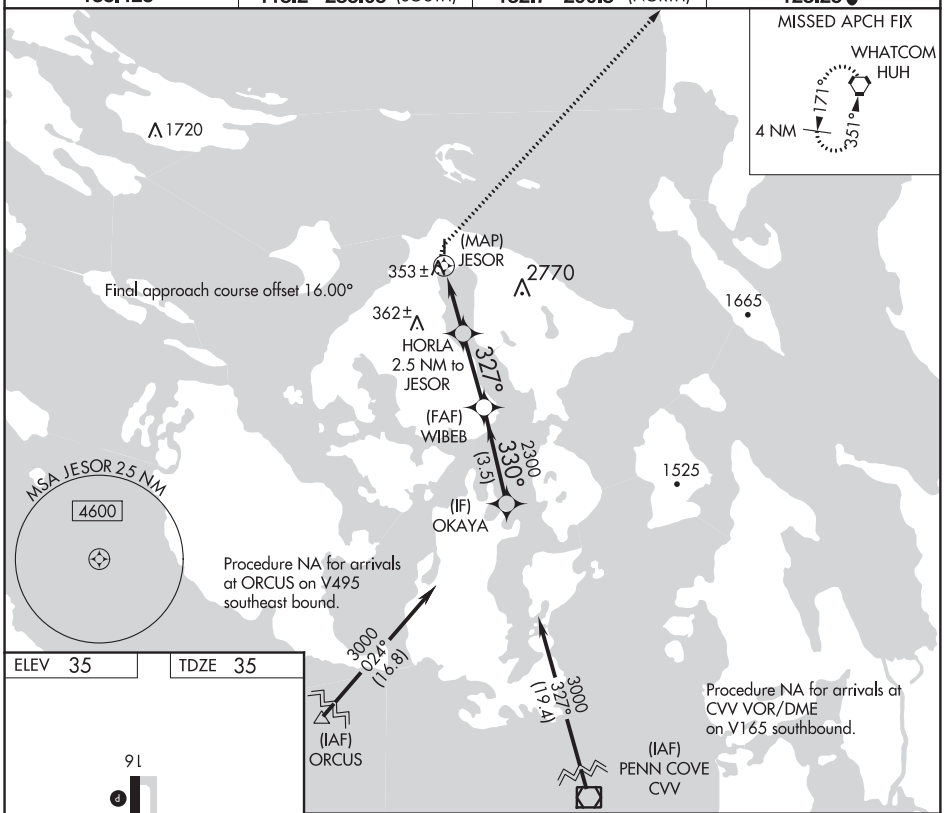
# RNAV (GPS) RWY 34
## ORCAS ISLAND (ORS)

| WAAS CH 99538 W34A | APP CRS 327° | Rwy ldg 2901<br>TDZE 35<br>Apt Elev 35 |
|---|---|---|

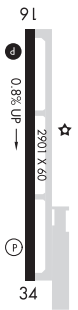
DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA. WAAS required, if unable see RNAV GPS-A. When local altimeter setting not received, use Friday Harbor altimeter setting and increase all MDA 40 feet and LP Cat B visibility ¼ mile. Night landing: Rwy 34 NA.

MISSED APPROACH: Climbing right turn to 2000 direct HUH VORTAC and hold.

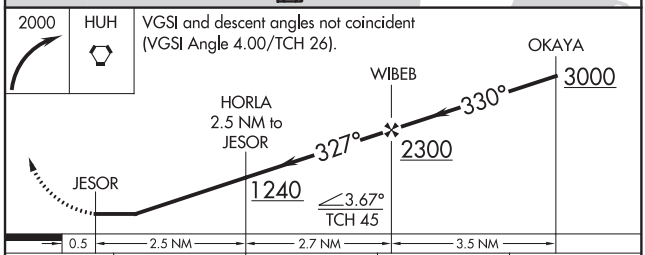
| AWOS-3 | WHIDBEY APP CON | VICTORIA APP CON | CTAF |
|---|---|---|---|
| 135.425 | 118.2 285.65 (SOUTH) | 132.7 290.8 (NORTH) | 128.25 L |




| ELEV 35 | TDZE 35 |
|---|---|




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




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LP MDA | 760-1 | 725 (800-1) | NA | |
| C CIRCLING | 1120-1¼<br>1085 (1100-1¼) | 1820-1½<br>1785 (1800-1½) | NA | |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

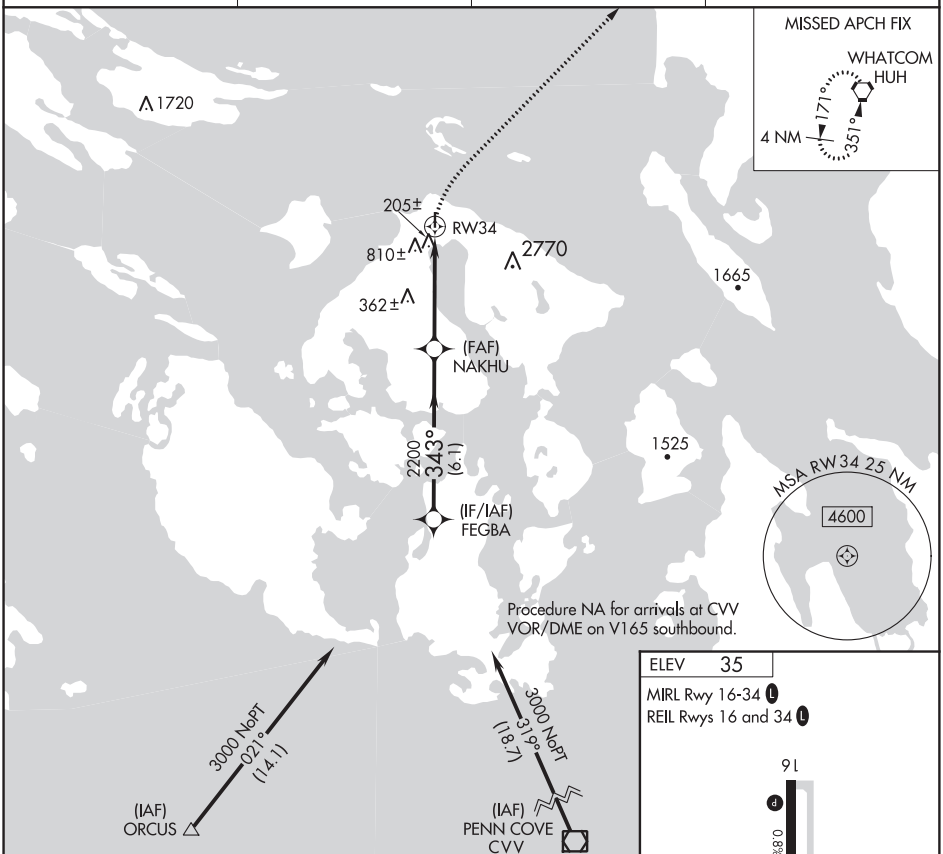
# RNAV (GPS)-A
## ORCAS ISLAND (ORS)

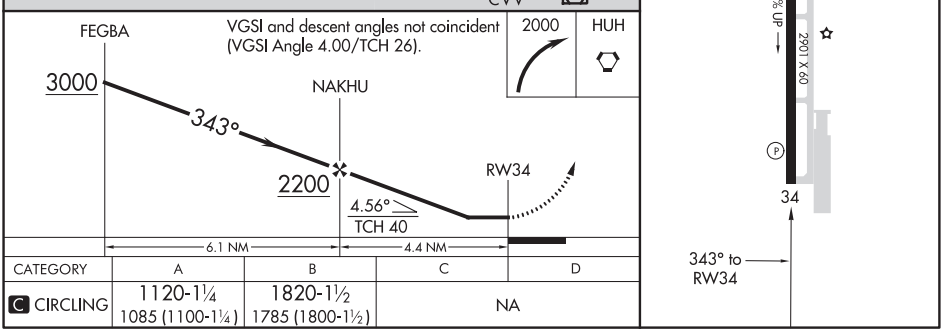
| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 343° | TDZE | N/A |
| | Apt Elev | 35 |

DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use Friday Harbor altimeter setting and increase MDA 40 feet. Night landing: Rwy 34 NA.

MISSED APPROACH: Climbing right turn to 2000 direct HUH VORTAC and hold.

| AWOS-3 | WHIDBEY APP CON | VICTORIA APP CON | CTAF |
|---|---|---|---|
| 135.425 | 118.2 285.65 (SOUTH) | 132.7 290.8 (NORTH) | 128.25 L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 1120-1¼ 1085 (1100-1¼) | 1820-1½ 1785 (1800-1½) | NA | |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

(FEGBA2.FEGBA) 17341

# FEGBA TWO DEPARTURE (RNAV)

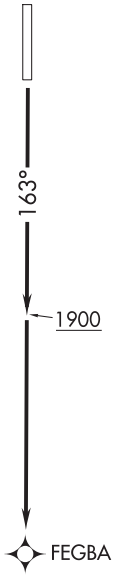
AL-10384 (FAA)

ORCAS ISLAND (ORS)
EASTSOUND, WASHINGTON

**TOP ALTITUDE: 3000**

AWOS-3
135.425
WHIDBEY DEP CON
118.2 285.65 (SOUTH)
VICTORIA DEP CON
132.7 290.8 (NORTH)
CTAF
128.25

NOTE: GPS required.
NOTE: RADAR required.
NOTE: RNAV 1.




TAKEOFF MINIMUMS

Rwy 16: 400-1 with minimum climb of 500′ per NM to 1900 or standard with minimum climb of 901′ per NM to 600.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb heading 163° to 1900 then direct FEGBA. Expect RADAR vectors on assigned route.


NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 4300 |
|---|---|---|
| 297° | TDZE | 1759 |
| | Apt Elev | 1764 |

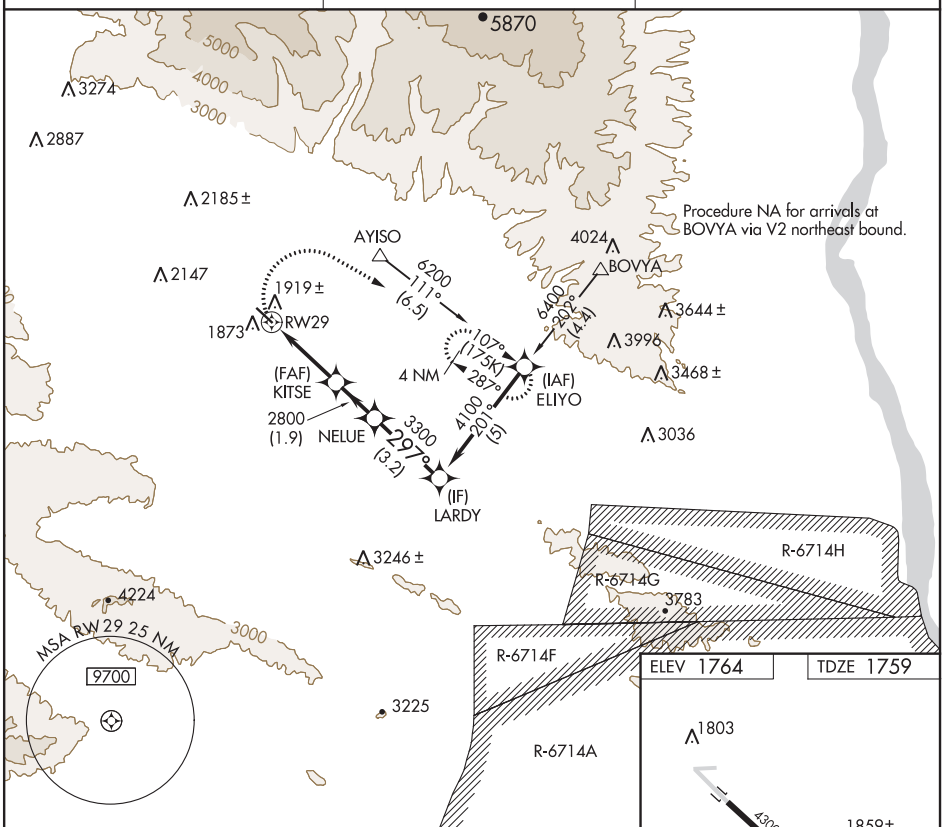
# RNAV (GPS) RWY 29
## BOWERS FIELD (ELN)

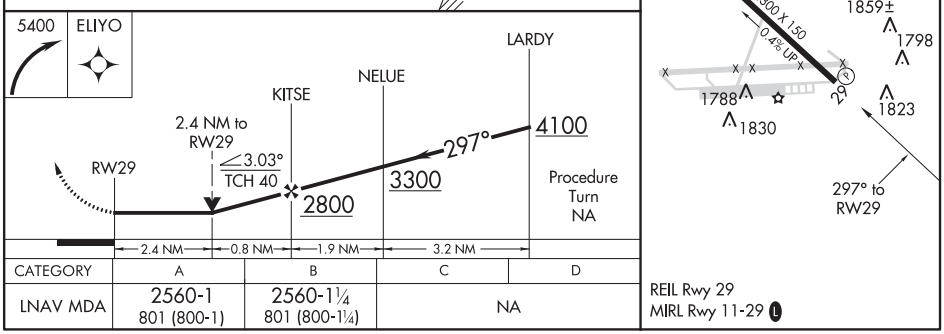
RNP APCH.

Rwy 29 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Wenatchee altimeter setting and increase all MDA 140 feet and Cat A visibility ¼ SM. VDP NA when using Wenatchee altimeter setting.

MISSED APPROACH: Climbing right turn to 5400 direct ELIYO and hold, continue climb-in hold to 5400.

| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 118.375 | 132.6 269.35 | 123.0 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 2560-1<br>801 (800-1) | 2560-1¼<br>801 (800-1¼) | NA | |

REIL Rwy 29
MIRL Rwy 11-29 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

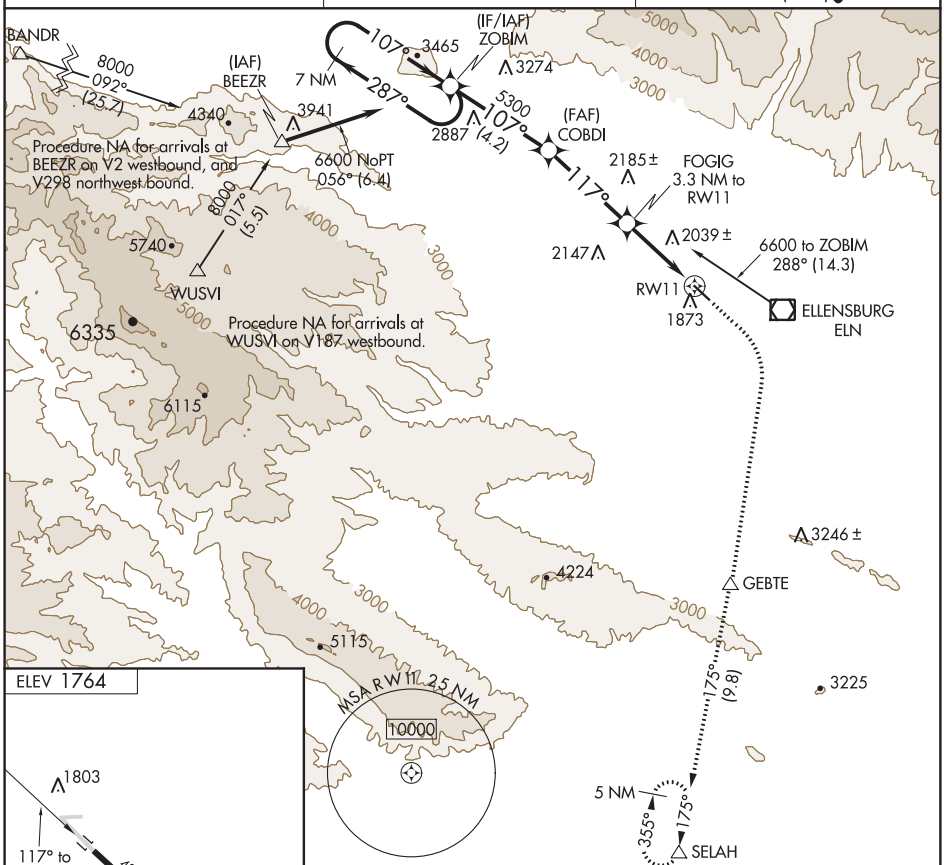
| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 117° | TDZE | N/A |
| | Apt Elev | 1764 |

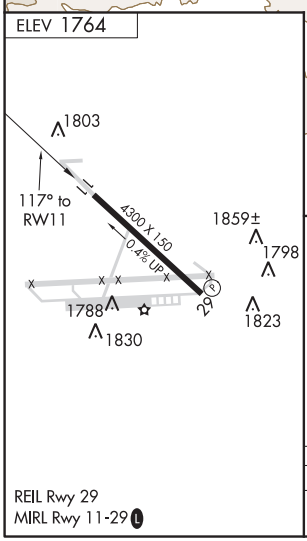
# RNAV (GPS)-C
## BOWERS FIELD (ELN)

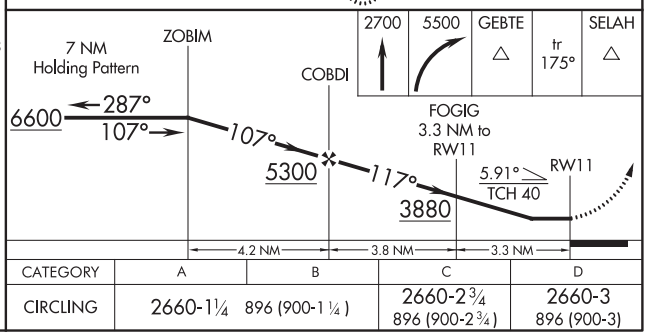
DME/DME RNP-0.3 NA. When local altimeter setting not received, use Pangborn Memorial altimeter setting: Increase all MDA 140 feet; increase Cats B/C visibility ¼ SM.

MISSED APPROACH: Climb to 2700 then climbing right turn to 5500 direct GEBTE and on track 175° to SELAH and hold.

| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 118.375 | 132.6 269.35 | 123.0 (CTAF) L |




REIL Rwy 29
MIRL Rwy 11-29 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 2660-1¼ 896 (900-1¼) | | 2660-2¾ 896 (900-2¾) | 2660-3 896 (900-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| VOR/DME ELN 117.9 Chan 126 | APP CRS 260° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 1764 |
|---|---|---|

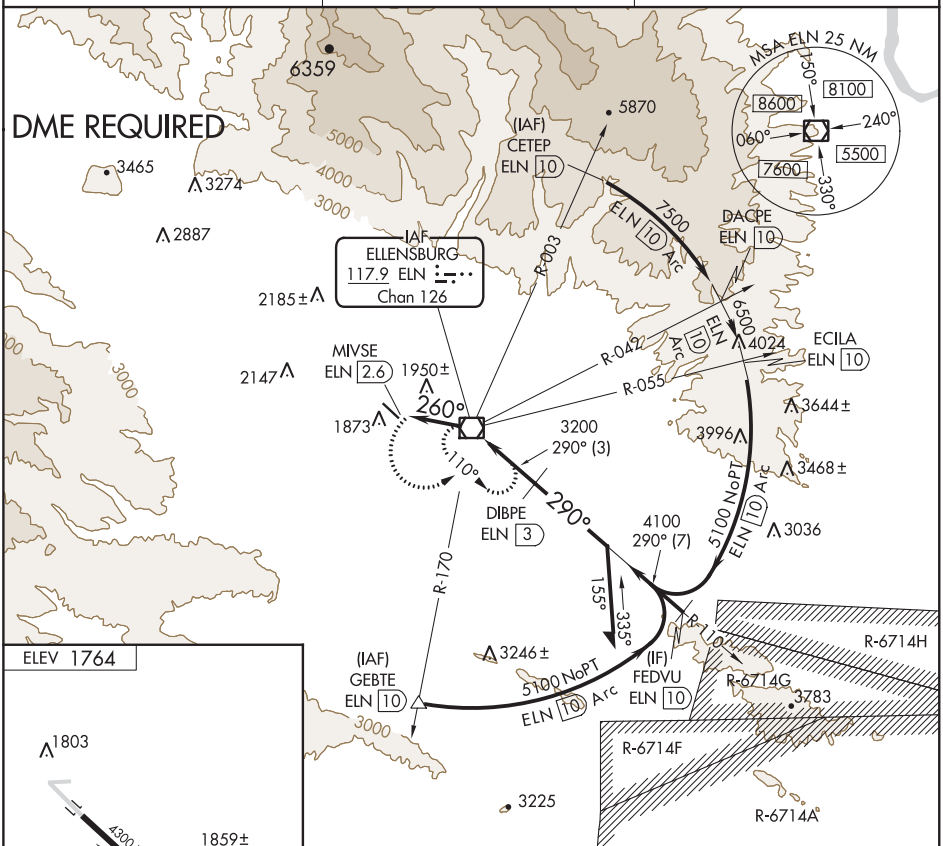
# VOR-A
## BOWERS FIELD (ELN)

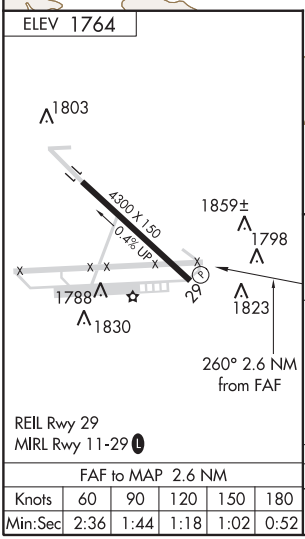
T NA

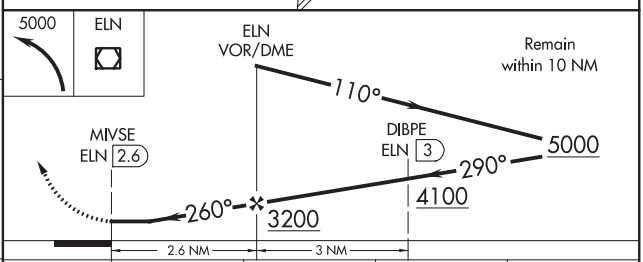
Procedure NA when R-6714A, F, G, H are in operation. DME required.

MISSED APPROACH: Climbing left turn to 5000 direct ELN VOR/DME and hold.

| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 118.375 | 132.6 269.35 | 123.0 (CTAF) L |




| FAF to MAP 2.6 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 2:36 | 1:44 | 1:18 | 1:02 | 0:52 |

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 2280-1<br>516 (600-1) | 2340-1<br>576 (600-1) | NA | |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

ELLENSBURG, WASHINGTON | AL-130 (FAA) | 20310

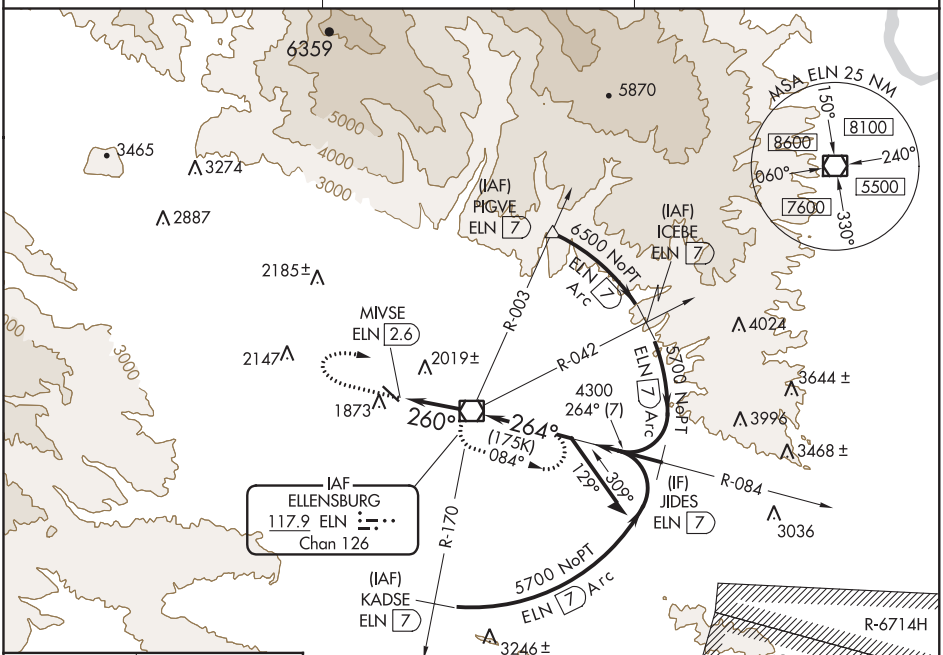
# VOR-B
## BOWERS FIELD (ELN)

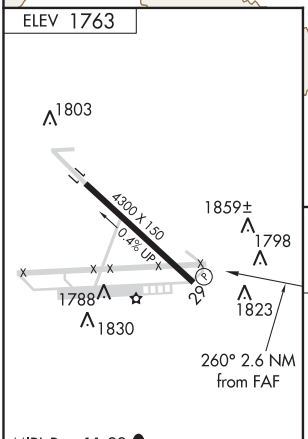
| VOR/DME ELN 117.9 Chan 126 | APP CRS 260° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 1763 |
|---|---|---|

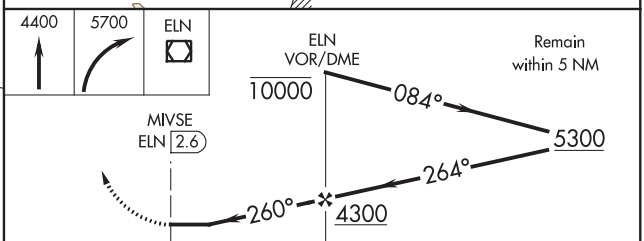
When local altimeter setting not received, use Wentachee altimeter setting.

MISSED APPROACH: Climb to 4400 then climbing right turn to 5700 direct ELN VOR/DME and hold, continue climb-in-hold to 5700.

| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 118.375 | 132.6 269.35 | 123.0 (CTAF) L |




| FAF to MAP 2.6 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 2:36 | 1:44 | 1:18 | 1:02 | 0:52 |

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 3260-1¼<br>1497 (1500-1¼) | NA | | |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

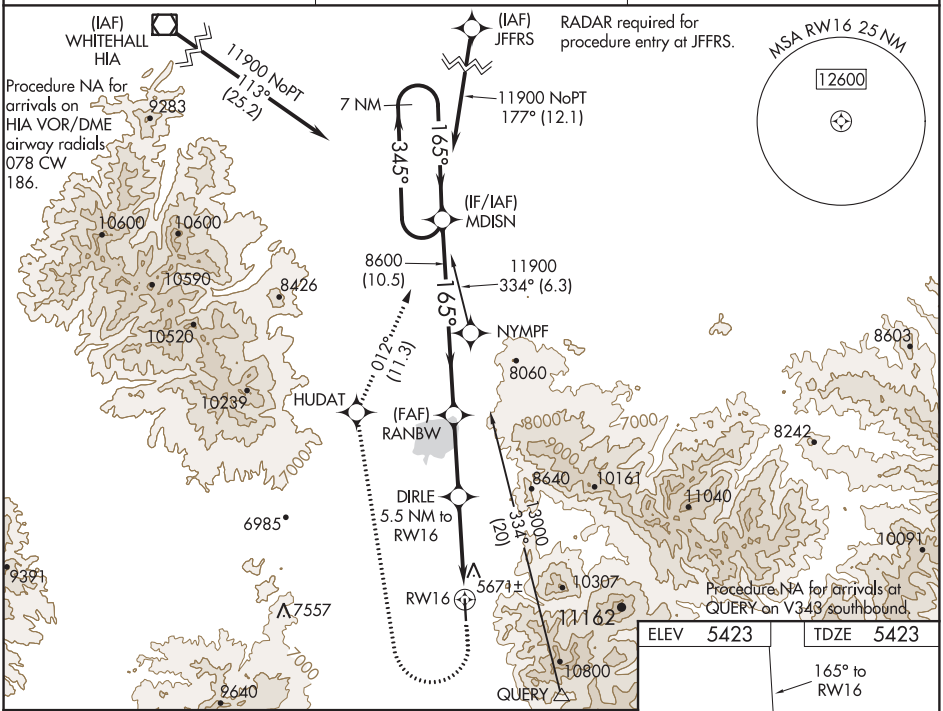
| WAAS CH 65735 W16A | APP CRS 165° | Rwy ldg 6601 TDZE 5423 Apt Elev 5423 |
|---|---|---|

# RNAV (GPS) RWY 16
## ENNIS-BIG SKY (EKS)

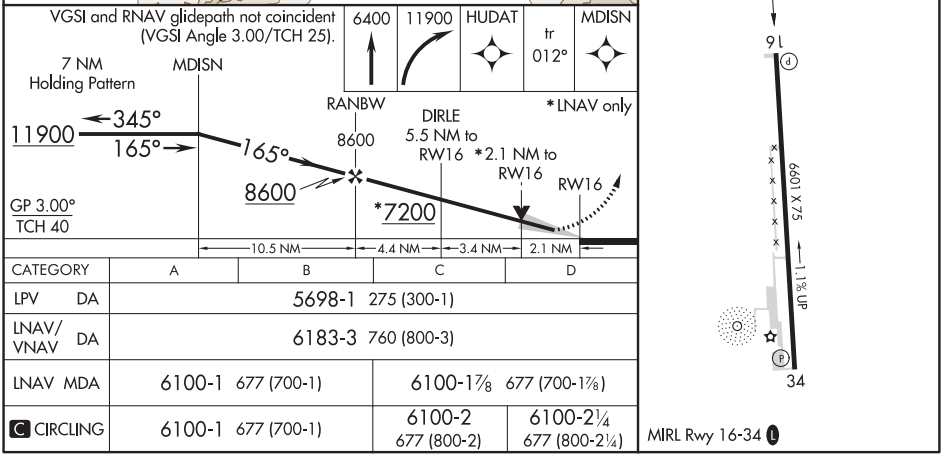
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 53°C (127°F). Circling NA east of Rwys 16 and 34. DME/DME RNP-0.3 NA. Limit missed approach to 185K until MDISN.

MISSED APPROACH: Climb to 6400 then climbing right turn to 11900 direct HUDAT and on track 012° to MDISN and hold, continue climb-in-hold to 11900.

| AWOS-3P | BIG SKY APP CON ★ | UNICOM |
|---|---|---|
| 119.85 | 118.975 226.675 | 122.8 (CTAF) L |




| ELEV 5423 | TDZE 5423 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 5698-1 275 (300-1) | | | |
| LNAV/VNAV DA | 6183-3 760 (800-3) | | | |
| LNAV MDA | 6100-1 677 (700-1) | | 6100-1⅞ 677 (700-1⅞) | |
| C CIRCLING | 6100-1 677 (700-1) | | 6100-2 677 (800-2) | 6100-2¼ 677 (800-2¼) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

ENNIS, MONTANA

AL-9491 (FAA)

20198

# RNAV (GPS) RWY 34

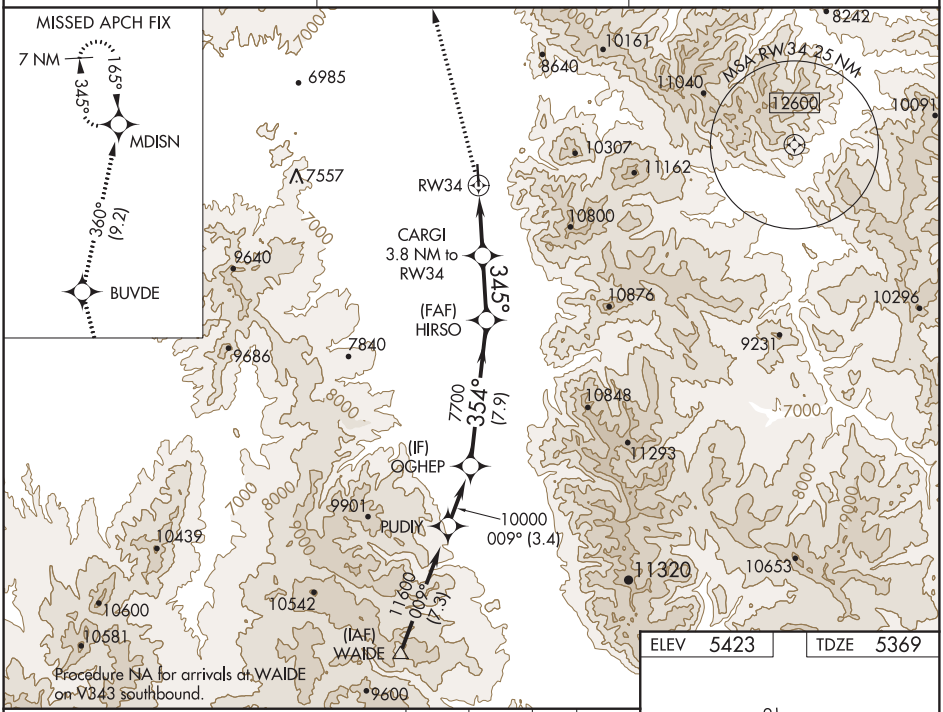
ENNIS-BIG SKY (EKS)

| WAAS CH 45539 W34A | APP CRS 345° | Rwy ldg 6601<br>TDZE 5369<br>Apt Elev 5423 |
|---|---|---|

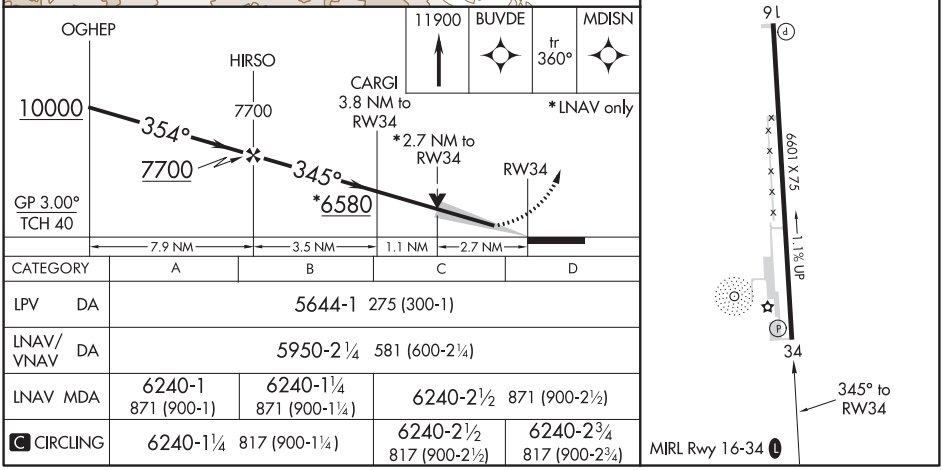
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 54°C (130°F). Circling NA east of Rwy 16-34. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 11900 direct BUVDE and on track 360° to MDISN and hold, continue climb-in-hold 11900.

| AWOS-3P | BIG SKY APP CON * | UNICOM |
|---|---|---|
| 119.85 | 118.975 226.675 | 122.8 (CTAF) L |




| ELEV 5423 | TDZE 5369 |
|---|---|

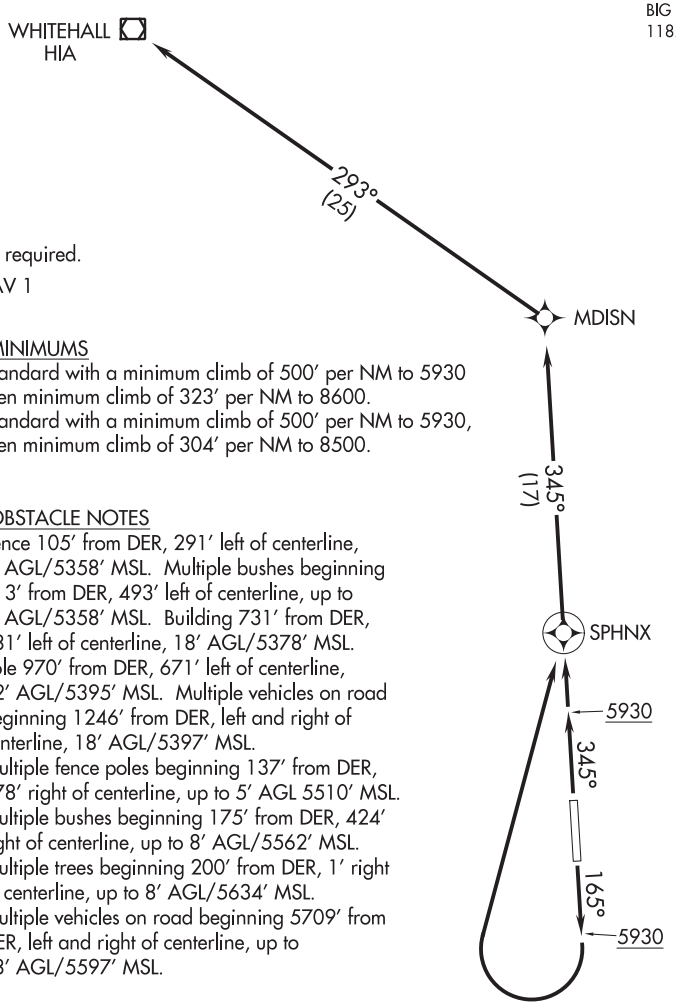



| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 5644-1 275 (300-1) | | | |
| LNAV/VNAV DA | 5950-2¼ 581 (600-2¼) | | | |
| LNAV MDA | 6240-1 871 (900-1) | 6240-1¼ 871 (900-1¼) | 6240-2½ 871 (900-2½) | |
| C CIRCLING | 6240-1¼ 817 (900-1¼) | | 6240-2½ 817 (900-2½) | 6240-2¾ 817 (900-2¾) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

BIG SKY APP CON *
118.975 226.675




NOTE: GPS required.

NOTE: RNAV 1

TAKEOFF MINIMUMS

Rwy 16: Standard with a minimum climb of 500′ per NM to 5930 then minimum climb of 323′ per NM to 8600.

Rwy 34: Standard with a minimum climb of 500′ per NM to 5930, then minimum climb of 304′ per NM to 8500.

TAKEOFF OBSTACLE NOTES

Rwy 16: Fence 105′ from DER, 291′ left of centerline, 5′ AGL/5358′ MSL. Multiple bushes beginning 113′ from DER, 493′ left of centerline, up to 8′ AGL/5358′ MSL. Building 731′ from DER, 481′ left of centerline, 18′ AGL/5378′ MSL. Pole 970′ from DER, 671′ left of centerline, 32′ AGL/5395′ MSL. Multiple vehicles on road beginning 1246′ from DER, left and right of centerline, 18′ AGL/5397′ MSL.

Rwy 34: Multiple fence poles beginning 137′ from DER, 378′ right of centerline, up to 5′ AGL 5510′ MSL. Multiple bushes beginning 175′ from DER, 424′ right of centerline, up to 8′ AGL/5562′ MSL. Multiple trees beginning 200′ from DER, 1′ right of centerline, up to 8′ AGL/5634′ MSL. Multiple vehicles on road beginning 5709′ from DER, left and right of centerline, up to 18′ AGL/5597′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb heading 165° to 5930, then climbing right turn direct SPHNX, then on track 345° to MDISN, then on track 293° to HIA VOR/DME. Thence . . . .

TAKEOFF RUNWAY 34: Climb heading 345° to 5930 then direct SPHNX, then on track 345° to MDISN, then on track 293° to HIA VOR/DME. Thence . . . .

. . . . on assigned route. Expect filed altitude 10 minutes after departure.



NW-1, 05 NOV 2020 to 31 DEC 2020
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EPHRATA, WASHINGTON AL-138 (FAA) 19199

| WAAS CH 50208 W03A | APP CRS 027° | Rwy ldg 5500<br>TDZE 1269<br>Apt Elev 1276 |
|---|---|---|

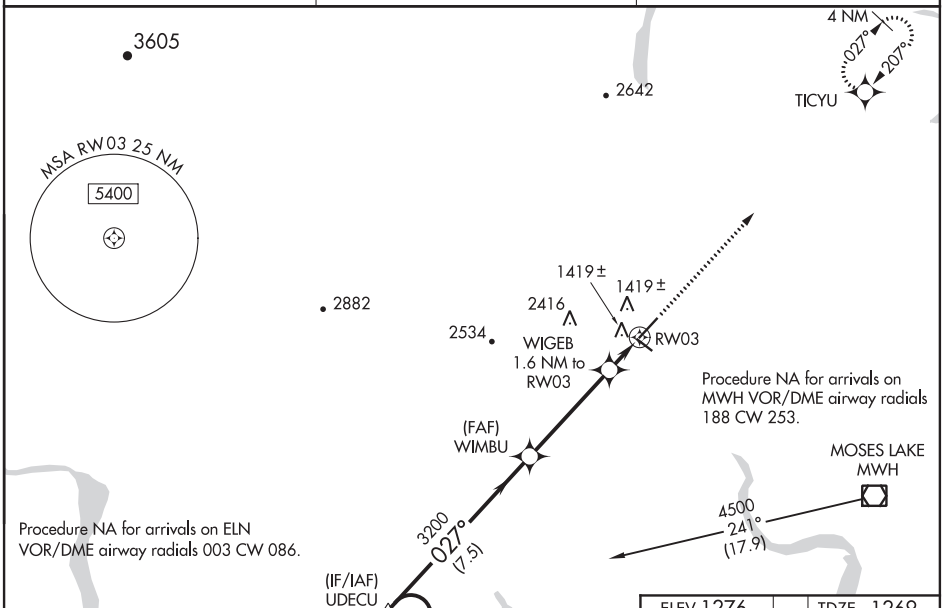
# RNAV (GPS) RWY 3
## EPHRATA MUNI (EPH)

RNP APCH.

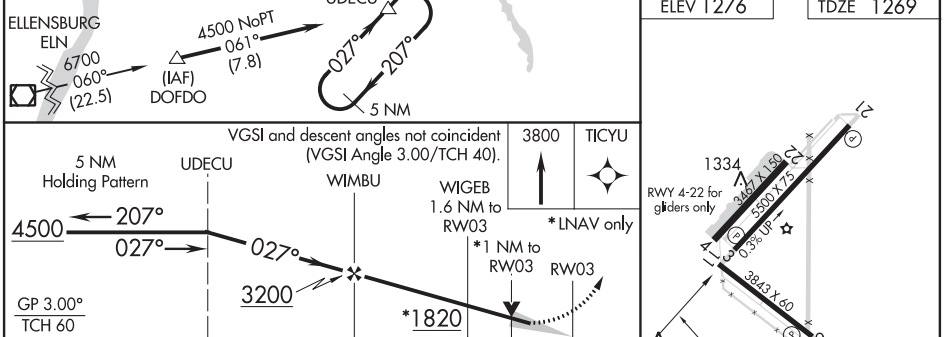
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 46°C. VDP and Baro-VNAV NA when using Moses Lake/Grant County Intl altimeter setting. When local altimeter setting not received, use Moses Lake/Grant County Intl altimeter setting and increase all DA/MDA 40 feet and LNAV Cat C and D visibility ¼ SM.

MISSED APPROACH: Climb to 3800 direct TICYU and hold.

| ASOS | GRANT COUNTY APP CON * | UNICOM |
|---|---|---|
| 135.775 | 126.4 379.95 | 122.8 (CTAF) L |




| ELEV 1276 | TDZE 1269 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 1519-1 250 (300-1) | | | |
| LNAV/VNAV DA | 1689-1½ 420 (500-1½) | | | |
| LNAV MDA | 1680-1 411 (500-1) | | 1680-1¼ 411 (500-1¼) | |

REIL Rwys 3, 11, 21 and 29 L
MIRL Rwys 11-29 and 3-21 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 82308 W21A | APP CRS 207° | Rwy ldg 5500<br>TDZE 1276<br>Apt Elev 1276 |
|---|---|---|

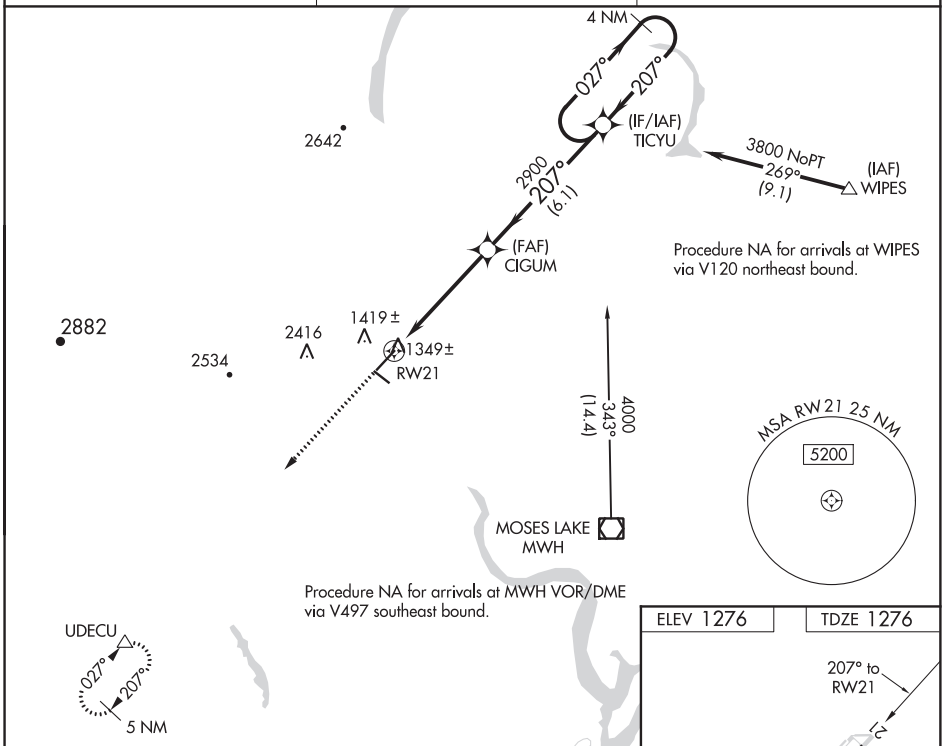
# RNAV (GPS) RWY 21
## EPHRATA MUNI (EPH)

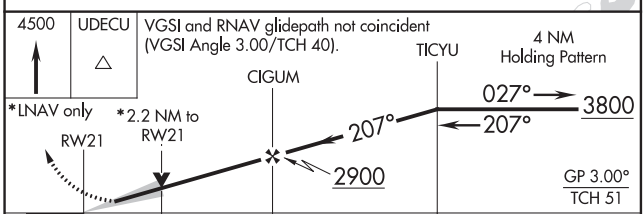
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 46°C . VDP and Baro-VNAV NA when using Moses Lake/Grant County Intl altimeter setting. When local altimeter setting not received, use Moses Lake/Grant County Intl altimeter setting and increase all DA/MDA 40 feet; increase visibility LPV all Cats, and LNAV Cats C and D ¼ SM.

MISSED APPROACH: Climb to 4500 direct UDECU and hold.

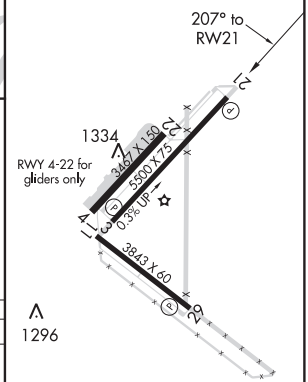
| ASOS | GRANT COUNTY APP CON * | UNICOM |
|---|---|---|
| 135.775 | 126.4 379.95 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 1526-¾ 250 (300-¾) | | | |
| LNAV/VNAV DA | 2171-4 895 (900-4) | | | |
| LNAV MDA | 2020-1 744 (800-1) | 2020-1¼ 744 (800-1¼) | 2020-2¼ 744 (800-2¼) | 2020-2½ 744 (800-2½) |

ELEV 1276 TDZE 1276




REIL Rwys 3, 11, 21 and 29 L
MIRL Rwys 11-29 and 3-21 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

EPHRATA, WASHINGTON

AL-138 (FAA)

18144

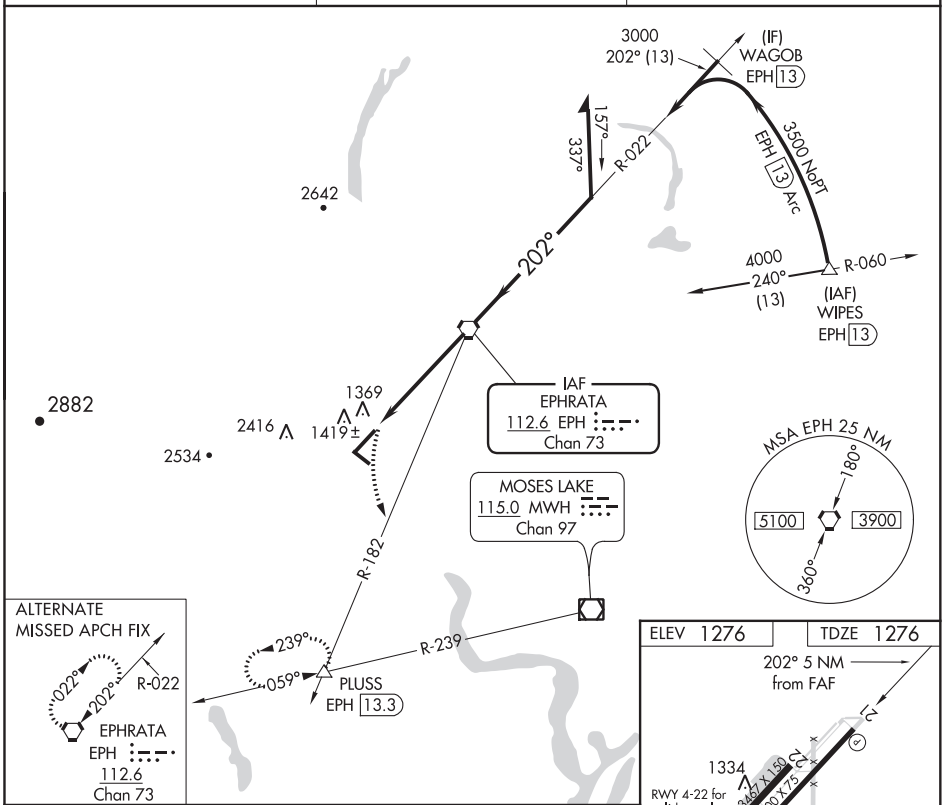
# VOR RWY 21
## EPHRATA MUNI (EPH)

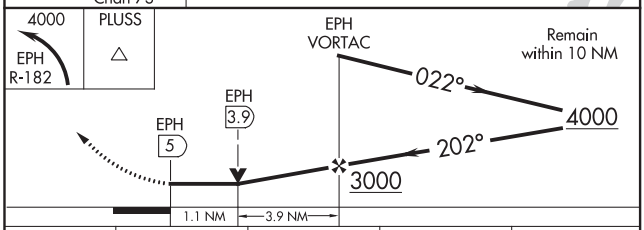
| VORTAC EPH | APP CRS | Rwy ldg | 5500 |
|---|---|---|---|
| 112.6 | 202° | TDZE | 1276 |
| Chan 73 | | Apt Elev | 1276 |

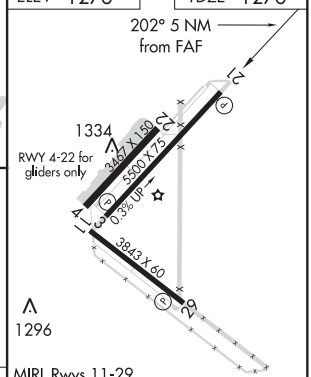
When local altimeter setting not received, use Moses Lake/Grant County Intl altimeter setting and increase all MDA 40 feet, increase S-21 Cat D visibility ¼ mile. VDP NA when using Moses Lake/Grant County Intl altimeter setting. Final approach from EPH VORTAC holding pattern not authorized. Procedure turn required.

MISSED APPROACH: Climbing left turn to 4000 via EPH R-182 to PLUSS INT/EPH 13.3 DME and hold. Continue climb-in-hold to 4000.

| ASOS | GRANT COUNTY APP CON* | UNICOM |
|---|---|---|
| 135.775 | 126.4 379.95 | 122.8 (CTAF) L |




MIRL Rwys 11-29 and 3-21 L
REIL Rwys 3, 11, 21 and 29 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-21 | 1680-1 404 (500-1) | | 1680-1¼ 404 (500-1¼) | |
| CIRCLING | 1720-1 444 (500-1) | 1740-1 464 (500-1) | 1780-1½ 504 (600-1½) | 2500-3 1224 (1300-3) |

| FAF to MAP 5 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 5:00 | 3:20 | 2:30 | 2:00 | 1:40 |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# ILS or LOC RWY 16L
## MAHLON SWEET FIELD (EUG)

| LOC/DME I-ADE | APP CRS | Rwy ldg | 6000 |
|---|---|---|---|
| 111.75 | 164° | TDZE | 369 |
| Chan 54 (Y) | | Apt Elev | 374 |

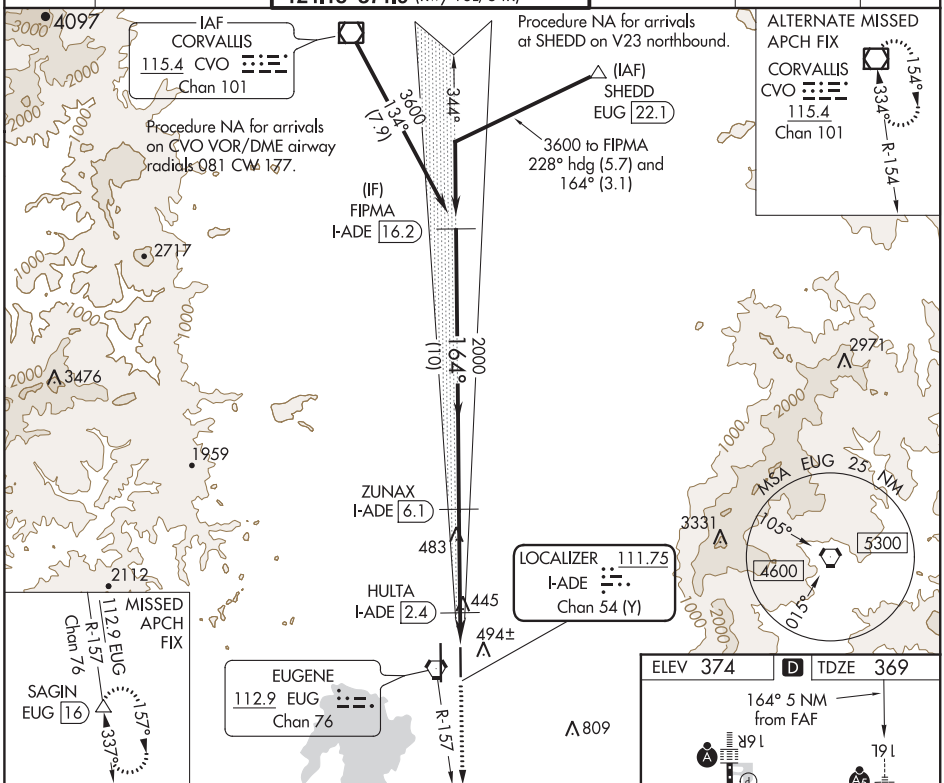
DME required.

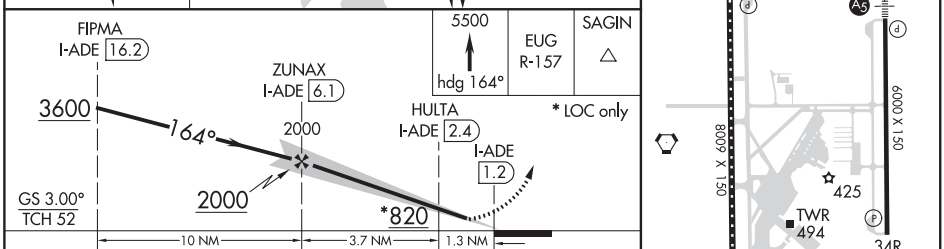
Simultaneous approach authorized.

MALSR

MISSED APPROACH: Climb to 5500 on heading 164° and EUG VORTAC R-157 to SAGIN/EUG 16 DME and hold, continue climb-in-hold to 5500.

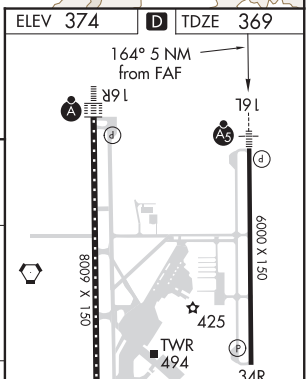
| ATIS | CASCADE APP CON ★ | EUGENE TOWER ★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.225 | 119.6 348.7 | 118.9 (CTAF) L 371.9 (Rwy 16R/34L) 124.15 371.9 (Rwy 16L/34R) | 121.7 269.5 | 121.7 269.5 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 16L | 569-½ 200 (200-½) | | | |
| S-LOC 16L | 700-½ 331 (400-½) | | | |
| C CIRCLING | 820-1 446 (500-1) | 840-1 466 (500-1) | 1000-1¾ 626 (700-1¾) | 1140-2½ 766 (800-2½) |

ELEV 374 D TDZE 369




TDZ/CL Rwy 16R
REIL Rwy 34R L
HIRL Rwys 16L-34R and 16R-34L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

EUGENE, OREGON | AL-140 (FAA) | 20254

# ILS or LOC RWY 16R
## MAHLON SWEET FIELD (EUG)

| LOC/DME I-EUG | APP CRS | Rwy ldg | 8009 |
|---|---|---|---|
| 110.1 | 164° | TDZE | 364 |
| Chan 38 | | Apt Elev | 374 |

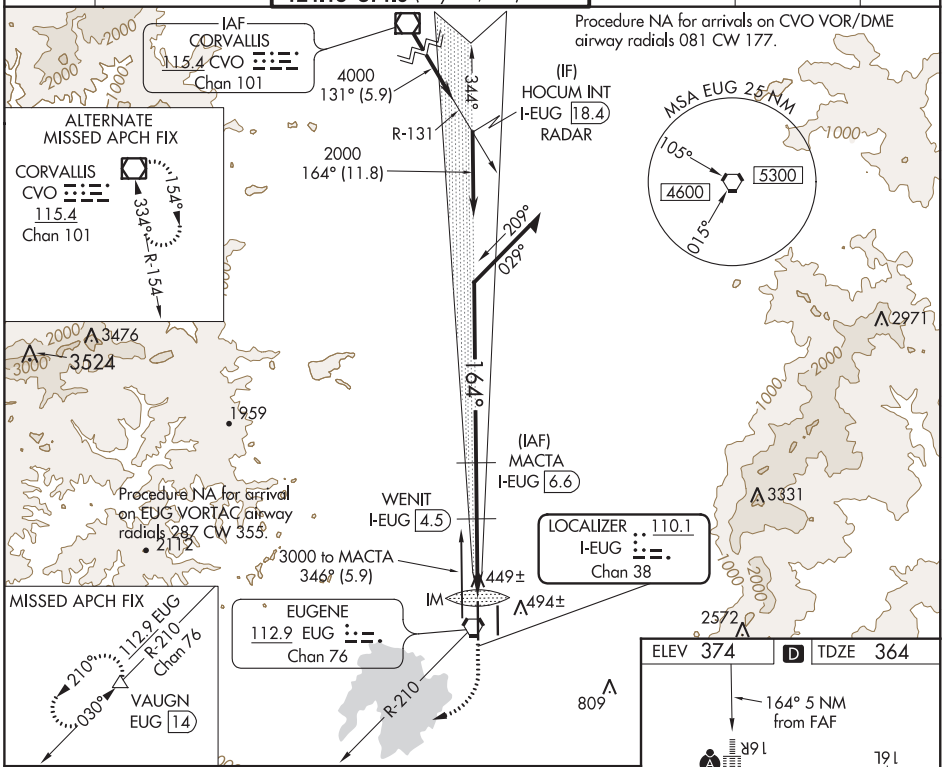
DME required.

Simultaneous approach authorized.

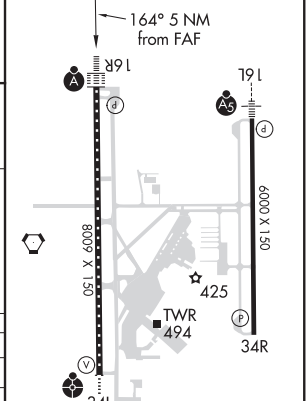
ALSF-2

MISSED APPROACH: Climb to 1000 then climbing right turn to 5000 on heading 230° and on EUG VORTAC R-210 to VAUGN/EUG 14 DME and hold, continue climb-in-hold to 5000.

| ATIS | CASCADE APP CON★ | EUGENE TOWER★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.225 | 119.6 348.7 | 118.9 (CTAF) L 371.9 (Rwy 16R/34L)<br>124.15 371.9 (Rwy 16L/34R) | 121.7 269.5 | 121.7 269.5 | 122.95 |



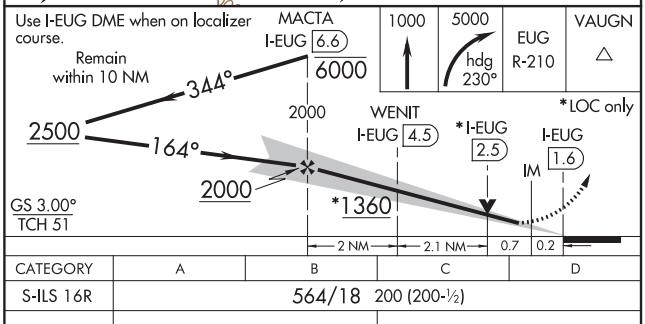

| ELEV 374 | D | TDZE 364 |
|---|---|---|




TDZ/CL Rwy 16R
REIL Rwy 34R L
HIRL Rwys 16L-34R and 16R-34L

Use I-EUG DME when on localizer course.

Remain within 10 NM




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 16R | 564/18 200 (200-½) | | | |
| S-LOC 16R | 700/24 336 (400-½) | | 700/26 336 (400-½) | |
| C CIRCLING | 820-1 446 (500-1) | 840-1 466 (500-1) | 1000-1¾ 626 (700-1¾) | 1140-2½ 766 (800-2½) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC/DME I-EUG 110.1 Chan 38 | APP CRS 164° | Rwy ldg 8009 TDZE 364 Apt Elev 374 |
|---|---|---|

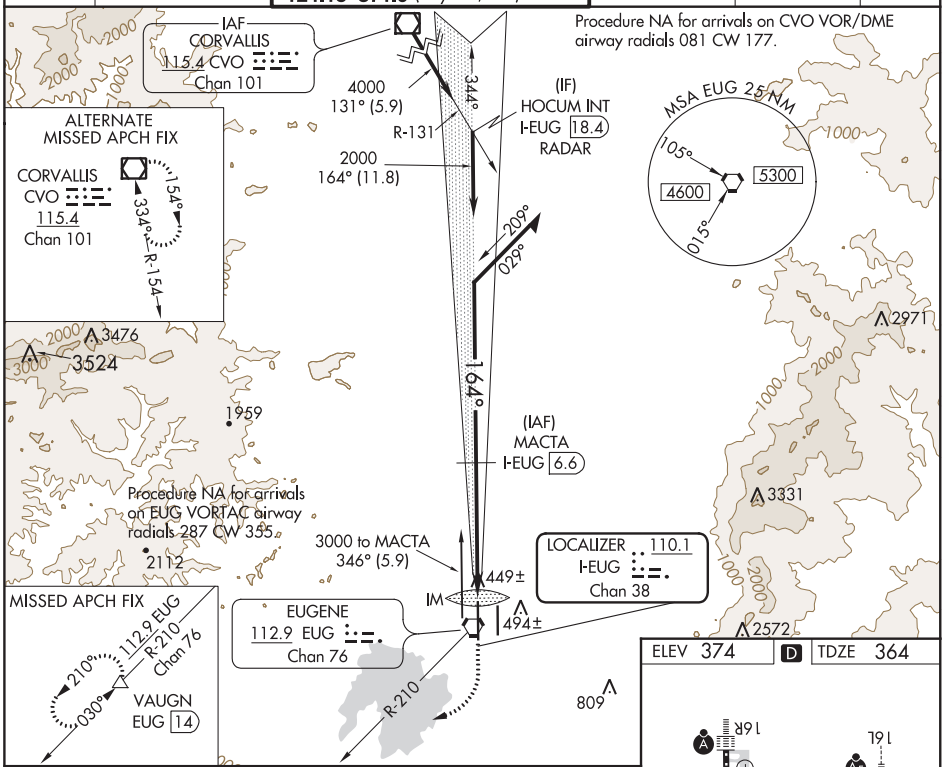
# ILS RWY 16R (SA CAT I)
## MAHLON SWEET FIELD (EUG)

DME required.
Simultaneous approach authorized. Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH. SA Cat I minimums NA when control tower closed.

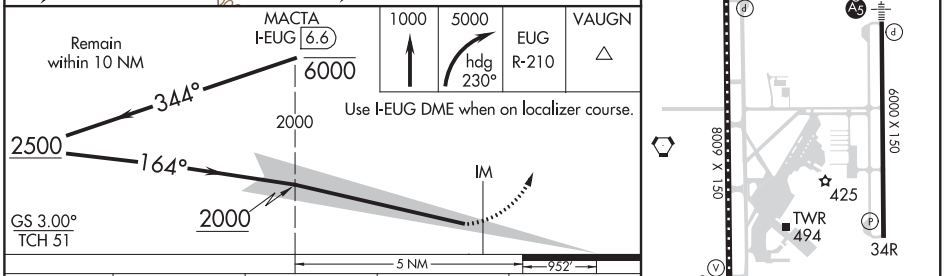
ALSF-2

MISSED APPROACH: Climb to 1000 then climbing right turn to 5000 on heading 230° and on EUG VORTAC R-210 to VAUGN/EUG 14 DME and hold, continue climb-in-hold to 5000.

| ATIS | CASCADE APP CON★ | EUGENE TOWER★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.225 | 119.6 348.7 | 118.9 (CTAF) L 371.9 (Rwy 16R/34L) 124.15 371.9 (Rwy 16L/34R) | 121.7 269.5 | 121.7 269.5 | 122.95 |

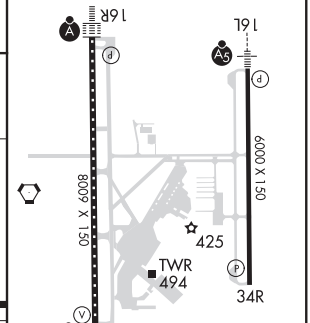



| ELEV 374 | D | TDZE 364 |
|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 16R | RA 164/14 150 DA 514 | | | |

**SA CATEGORY I ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**




TDZ/CL Rwy 16R
REIL Rwy 34R L
HIRL Rwys 16L-34R and 16R-34L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

EUGENE, OREGON | AL-140 (FAA) | 20254

# ILS RWY 16R (CAT II & III)
## MAHLON SWEET FIELD (EUG)

| LOC/DME I-EUG | APP CRS | Rwy ldg | 8009 |
|---|---|---|---|
| 110.1 | 164° | TDZE | 364 |
| Chan 38 | | Apt Elev | 374 |

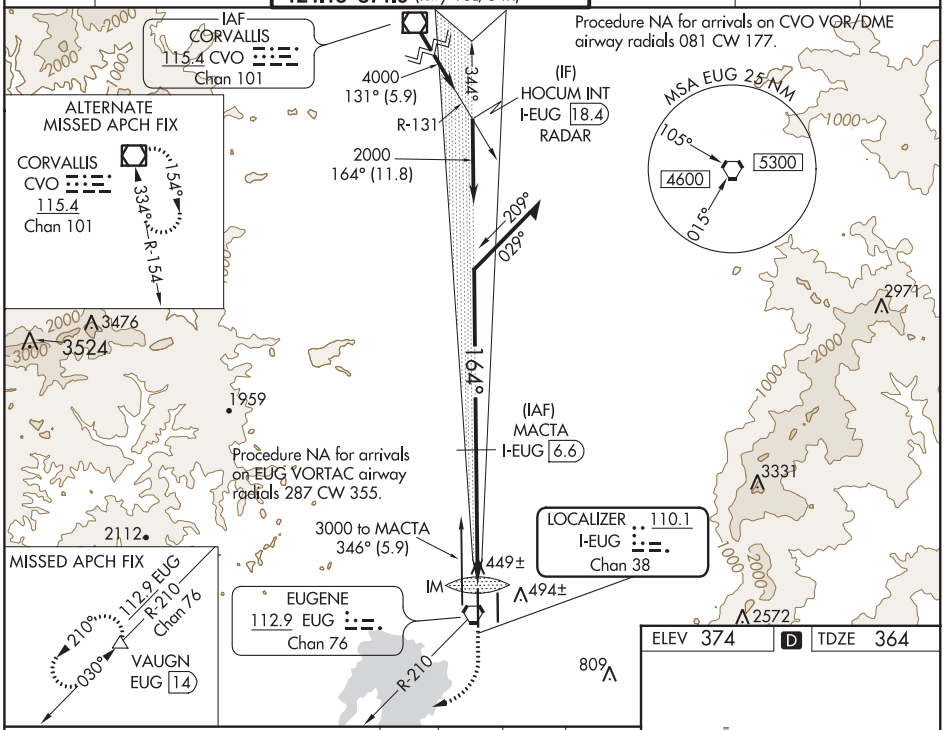
DME required.

Simultaneous approach authorized. Cat II RVR 1000 authorized with specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown. Cat II and III minimums NA when control tower closed.

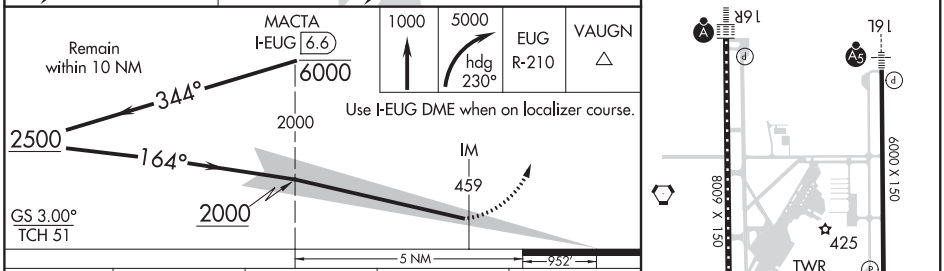
ALSF-2

MISSED APPROACH: Climb to 1000 then climbing right turn to 5000 on heading 230° and on EUG VORTAC R-210 to VAUGN/EUG 14 DME and hold, continue climb-in-hold to 5000.

| ATIS | CASCADE APP CON★ | EUGENE TOWER★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.225 | 119.6 348.7 | 118.9 (CTAF) L 371.9 (Rwy 16R/34L) 124.15 371.9 (Rwy 16L/34R) | 121.7 269.5 | 121.7 269.5 | 122.95 |

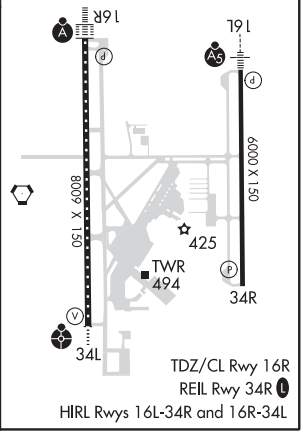



ELEV 374 | D | TDZE 364




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 16R | CAT II RA 108/12 100 DA 464 | | | |
| S-ILS 16R | CAT III RVR 06 | | | |

**CATEGORY II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# RNAV (RNP) Z RWY 16L
## MAHLON SWEET FIELD (EUG)

| APP CRS | Rwy ldg | 6000 |
|---|---|---|
| 164° | TDZE | 369 |
| | Apt Elev | 374 |

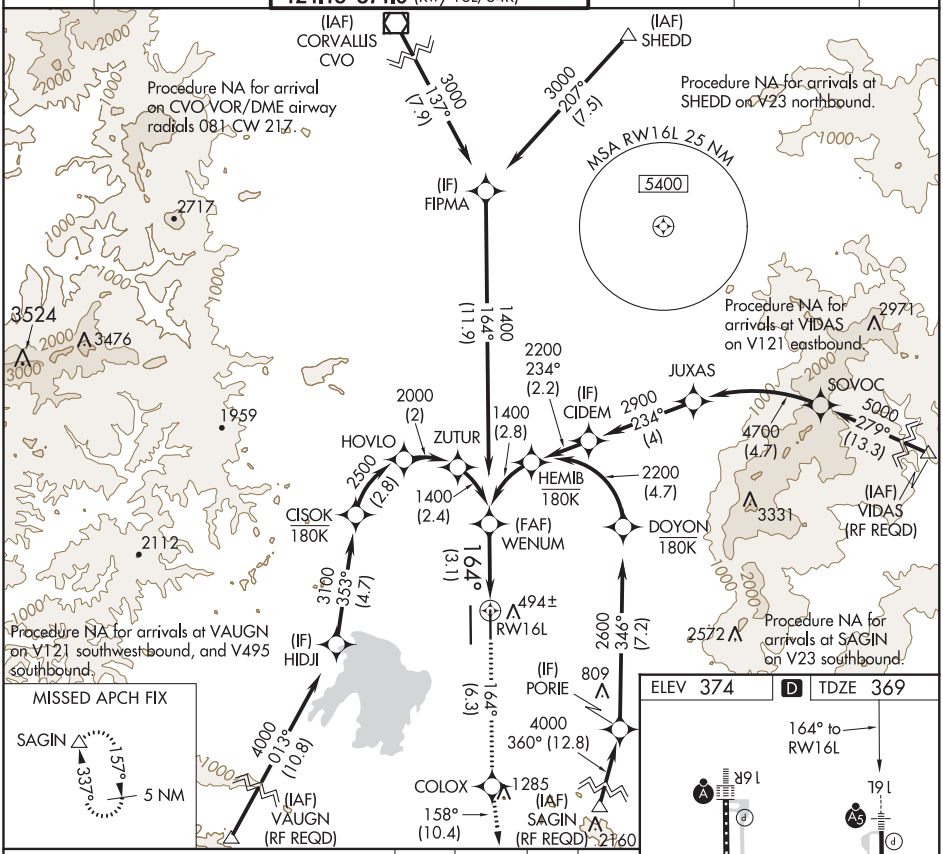
RNP AR APCH.

For uncompensated Baro-VNAV systems, procedure NA below -9°C or above 54°C. Simultaneous approach authorized. For inop ALS, increase RNP 0.30 all Cats visibility to 1 SM.

MALSR

MISSED APPROACH: Climb to 5500 on track 164° to COLOX and on track 158° to SAGIN and hold, continue climb-in-hold to 5500.

| ATIS | CASCADE APP CON ★ | EUGENE TOWER ★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.225 | 119.6 348.7 | 118.9 (CTAF) L 371.9 (Rwy 16R/34L) 124.15 371.9 (Rwy 16L/34R) | 121.7 269.5 | 121.7 269.5 | 122.95 |



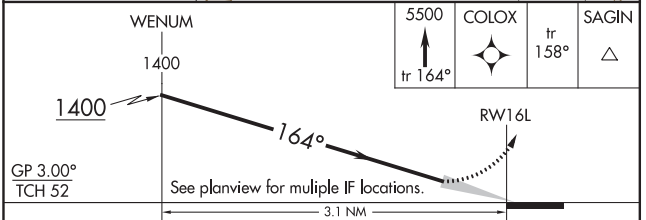

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

MISSED APCH FIX




| 5500 | COLOX | tr 158° | SAGIN |
|---|---|---|---|
| tr 164° | | | |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.10 DA | 699-½ 330 (400-½) | | | |
| RNP 0.30 DA | 749-⅝ 380 (400-⅝) | | | |

AUTHORIZATION REQUIRED

ELEV 374 | D | TDZE 369

TDZ/CL Rwy 16R
REIL Rwy 34R L
HIRL Rwys 16L-34R and Rwy 16R-34L

EUGENE, OREGON | AL-140 (FAA) | 20254

# RNAV (RNP) Z RWY 16R
## MAHLON SWEET FIELD (EUG)

| APP CRS | Rwy ldg | 8009 |
|---|---|---|
| 164° | TDZE | 364 |
| | Apt Elev | 374 |

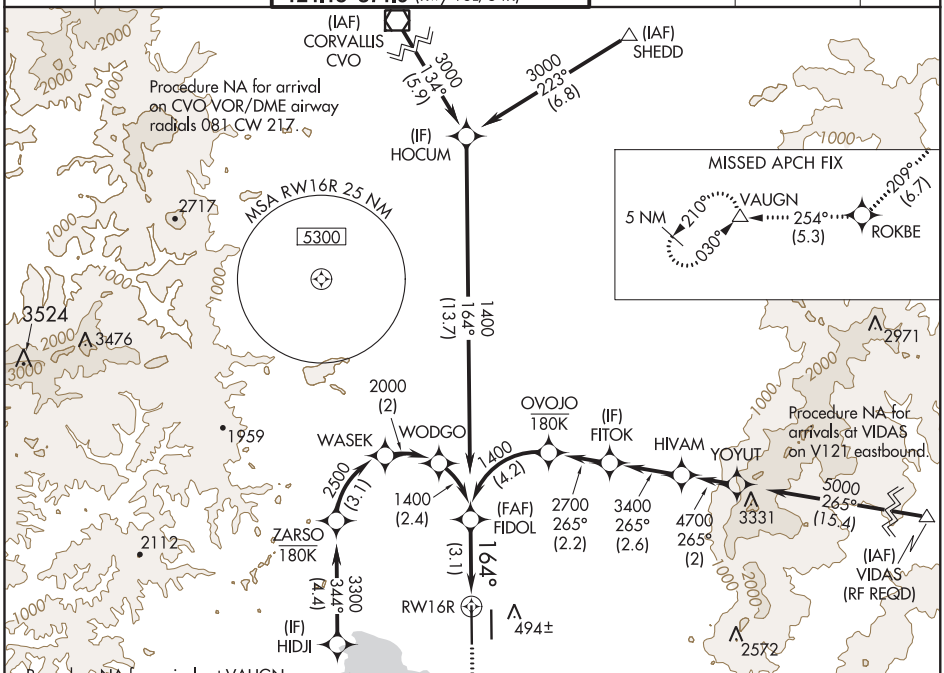
RNP AR APCH.

For uncompensated Baro-VNAV systems, procedure NA below -9°C or above 54°C. Simultaneous approach authorized. For inop ALS, increase RNP 0.17 all Cats visibility to RVR 4000 and RNP 0.30 all Cats visibility to RVR 5500.

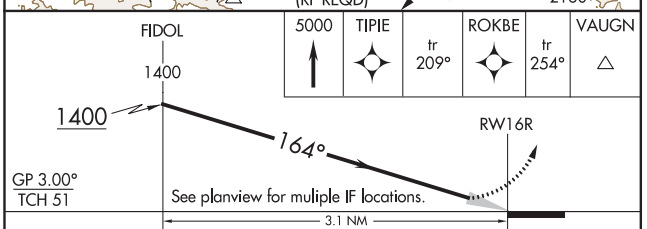
ALSF-2

MISSED APPROACH: Climb to 5000 direct TIPIE, and on track 209° to ROKBE, and track 254° to VAUGN and hold, continue climb-in-hold to 5000.

| ATIS | CASCADE APP CON★ | EUGENE TOWER★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.225 | 119.6 348.7 | 118.9 (CTAF) L 371.9 (Rwy 16R/34L)<br>124.15 371.9 (Rwy 16L/34R) | 121.7 269.5 | 121.7 269.5 | 122.95 |



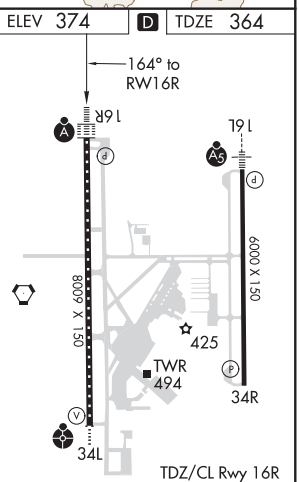

| 5000 | TIPIE | tr 209° | ROKBE | tr 254° | VAUGN |
|---|---|---|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.17 DA | 614/24 250 (300-½) | | | |
| RNP 0.30 DA | 711/30 347 (400-⅝) | | | |

**AUTHORIZATION REQUIRED**

ELEV 374 | D | TDZE 364




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 8009 |
|---|---|---|
| 343° | TDZE | 368 |
| | Apt Elev | 374 |

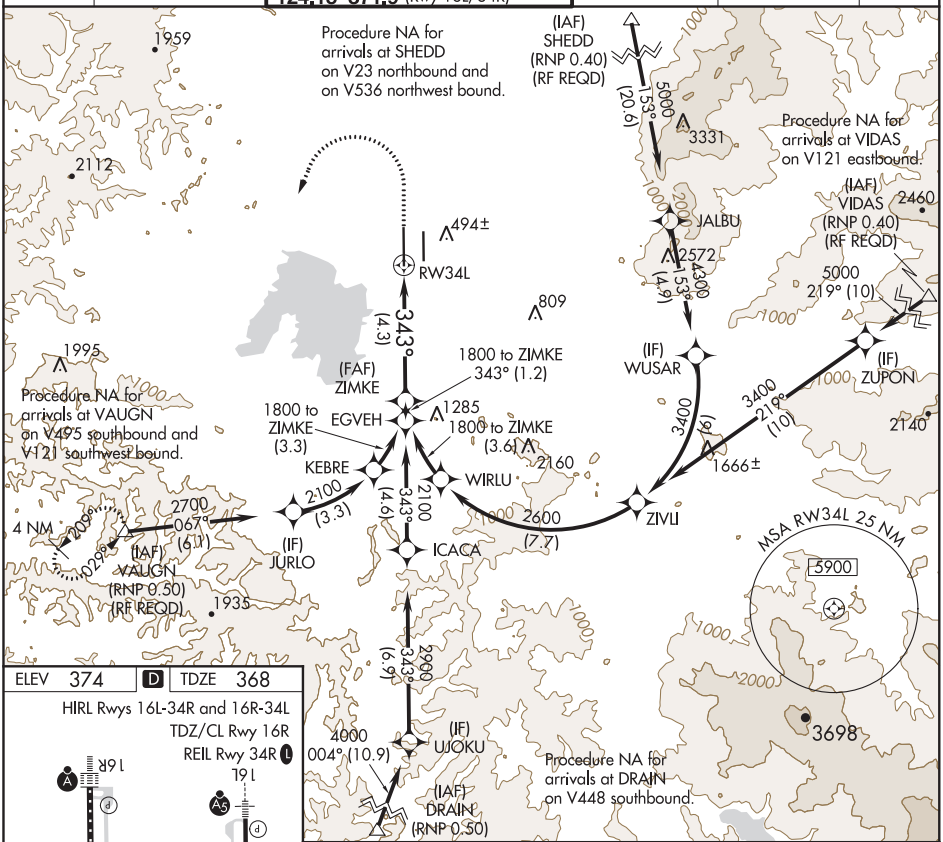
# RNAV (RNP) Z RWY 34L
## MAHLON SWEET FIELD (EUG)

For uncompensated Baro-VNAV systems, procedure NA below -9°C (16°F) or above 54°C (130°F). Simultaneous approach authorized. GPS required.

ODALS

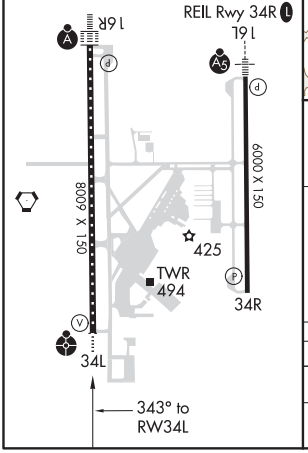
MISSED APPROACH: Climb to 1500, then climbing left turn to 4000 direct VAUGN and hold.

| ATIS | CASCADE APP CON★ | EUGENE TOWER★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.225 | 119.6 348.7 | 118.9 (CTAF) 371.9 (Rwy 16R/34L) 124.15 371.9 (Rwy 16L/34R) | 121.7 269.5 | 121.7 269.5 | 122.95 |



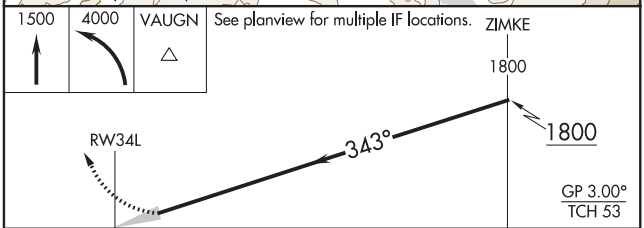

ELEV 374 | D | TDZE 368

HIRL Rwys 16L-34R and 16R-34L
TDZ/CL Rwy 16R
REIL Rwy 34R




| 1500 | 4000 | VAUGN |
|---|---|---|

See planview for multiple IF locations.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.30 DA | 759/50 391 (400-1) | | | |

**AUTHORIZATION REQUIRED**

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

EUGENE, OREGON | AL-140 (FAA) | 20254

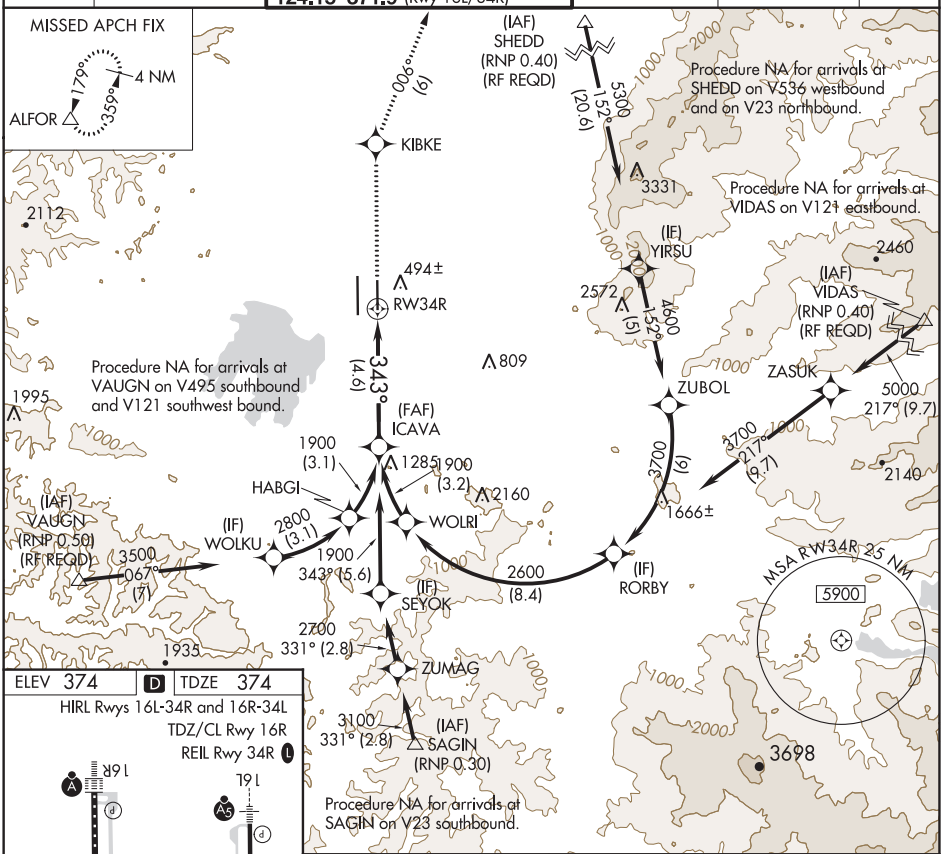
# RNAV (RNP) Z RWY 34R
## MAHLON SWEET FIELD (EUG)

| APP CRS | Rwy ldg | 6000 |
|---|---|---|
| 343° | TDZE | 374 |
| | Apt Elev | 374 |

For uncompensated Baro-VNAV systems, procedure NA below -9°C (16°F) or above 54°C (130°F). Simultaneous approach authorized. GPS required.

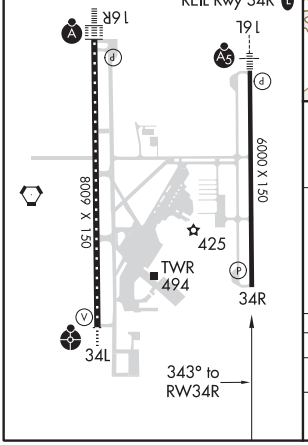
MISSED APPROACH: Climb to 3000 direct KIBKE and on track 006° to ALFOR and hold.

| ATIS | CASCADE APP CON ★ | EUGENE TOWER ★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.225 | 119.6 348.7 | 118.9 (CTAF) 371.9 (Rwy 16R/34L) 124.15 371.9 (Rwy 16L/34R) | 121.7 269.5 | 121.7 269.5 | 122.95 |



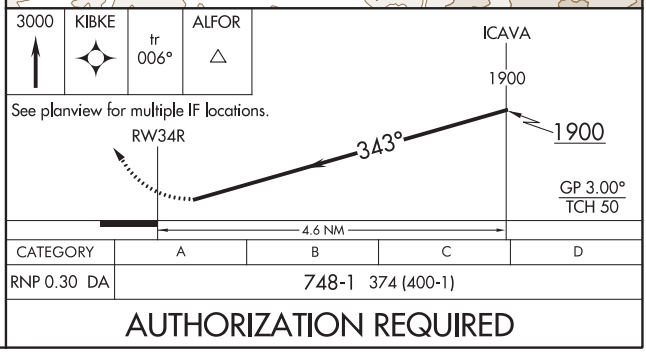

ELEV 374 | D | TDZE 374

HIRL Rwys 16L-34R and 16R-34L
TDZ/CL Rwy 16R
REIL Rwy 34R L




| 3000 | KIBKE | tr 006° | ALFOR |
|---|---|---|---|

See planview for multiple IF locations.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.30 DA | 748-1 374 (400-1) | | | |

**AUTHORIZATION REQUIRED**

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 81827 W16A | APP CRS 164° | Rwy ldg 6000<br>TDZE 369<br>Apt Elev 374 |
|---|---|---|

# RNAV (GPS) Y RWY 16L
## MAHLON SWEET FIELD (EUG)

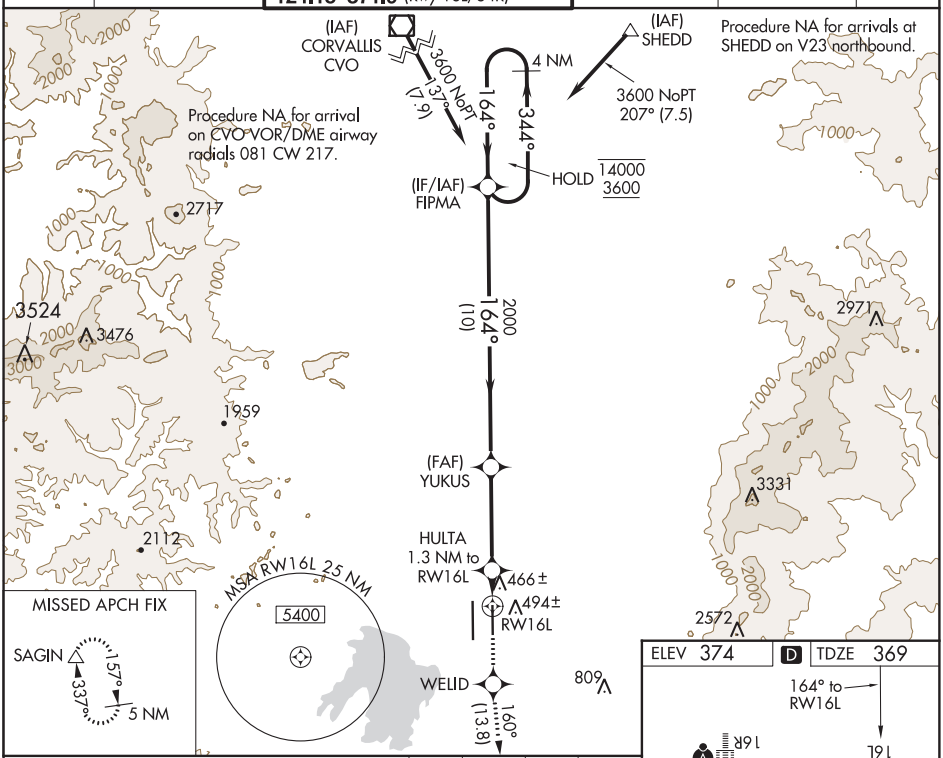
RNP APCH.

Simultaneous approach authorized. LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -10°C or above 54°C. For Inop ALS, increase LNAV/VNAV all Cats visibility to ⅞ SM, increase LNAV Cat C/D visibility to 1 SM.

MALSR

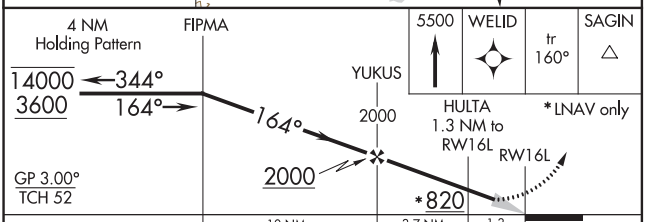
MISSED APPROACH: Climb to 5500 direct WELID and on track 160° to SAGIN and hold, continue climb-in-hold to 5500.

| ATIS | CASCADE APP CON★ | EUGENE TOWER ★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.225 | 119.6 348.7 | 118.9 (CTAF) L 371.9 (Rwy 16R/34L)<br>124.15 371.9 (Rwy 16L/34R) | 121.7 269.5 | 121.7 269.5 | 122.95 |

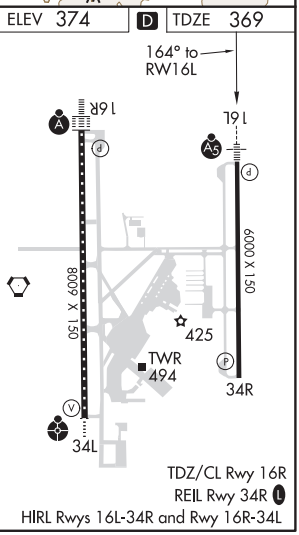



NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 569-½ 200 (200-½) | | | |
| LNAV/VNAV DA | 632-½ 263 (300-½) | | | |
| LNAV MDA | 720-½ 351 (400-½) | | 720-⅝ 351 (400-⅝) | |
| C CIRCLING | 820-1 446 (500-1) | 840-1 466 (500-1) | 1000-1¾ 626 (700-1¾) | 1140-2½ 766 (800-2½) |



EUGENE, OREGON AL-140 (FAA) 20254

| WAAS CH 86518 W16B | APP CRS 164° | Rwy ldg 8009<br>TDZE 364<br>Apt Elev 374 |
|---|---|---|

# RNAV (GPS) Y RWY 16R
## MAHLON SWEET FIELD (EUG)

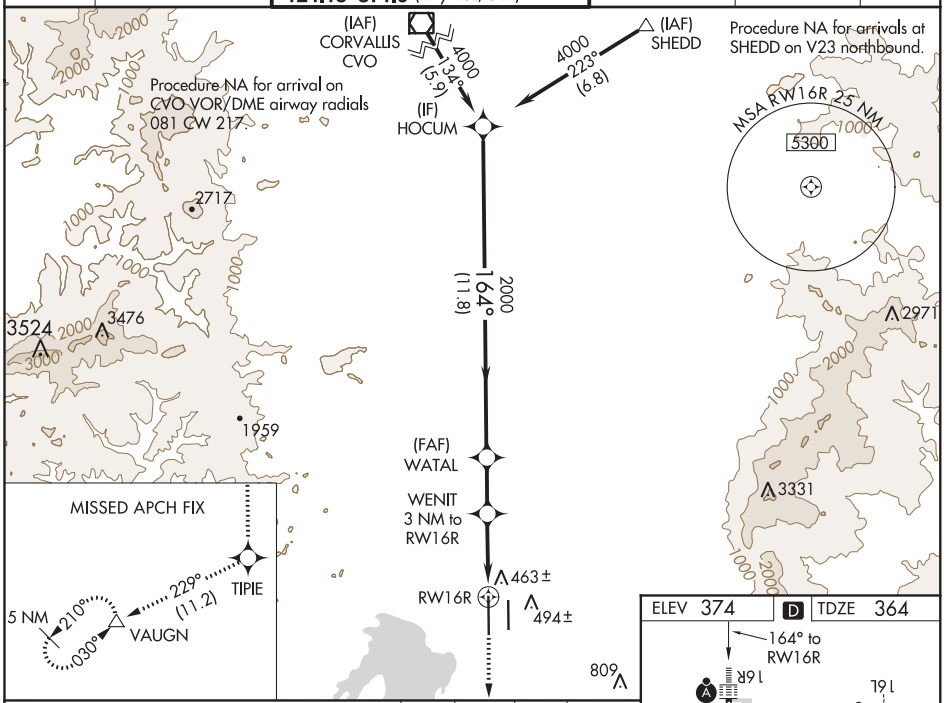
RNP APCH.

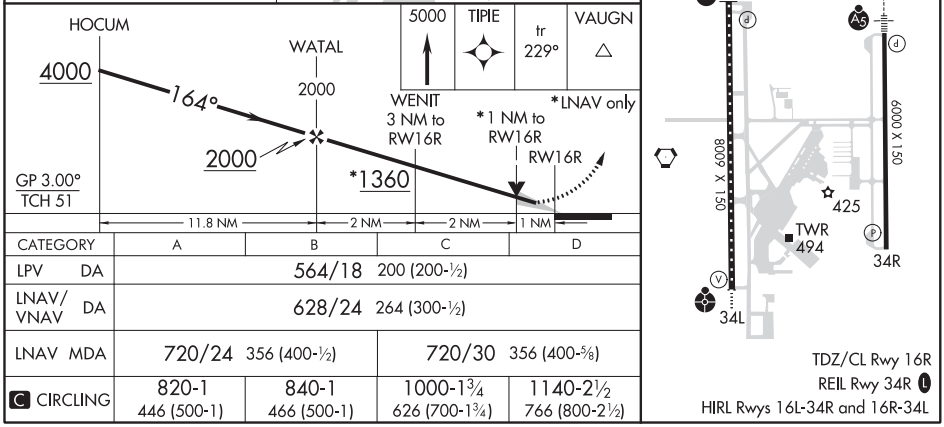
Simultaneous approach authorized. LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -10°C or above 54°C. For inop ALS, increase LNAV/VNAV all Cats visibility to RVR 4500, increase LNAV Cat C/D visibility to RVR 5500.

ALSF-2

MISSED APPROACH: Climb to 5000 direct TIPIE and on track 229° to VAUGN and hold, continue climb-in-hold to 5000.

| ATIS | CASCADE APP CON★ | EUGENE TOWER★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.225 | 119.6 348.7 | 118.9 (CTAF) L 371.9 (Rwy 16R/34L)<br>124.15 371.9 (Rwy 16L/34R) | 121.7 269.5 | 121.7 269.5 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 564/18 200 (200-½) | | | |
| LNAV/VNAV DA | 628/24 264 (300-½) | | | |
| LNAV MDA | 720/24 356 (400-½) | | 720/30 356 (400-⅝) | |
| C CIRCLING | 820-1 446 (500-1) | 840-1 466 (500-1) | 1000-1¾ 626 (700-1¾) | 1140-2½ 766 (800-2½) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 45600 W34A | APP CRS 344° | Rwy ldg 8009<br>TDZE 368<br>Apt Elev 374 |
|---|---|---|

# RNAV (GPS) Y RWY 34L
## MAHLON SWEET FIELD (EUG)

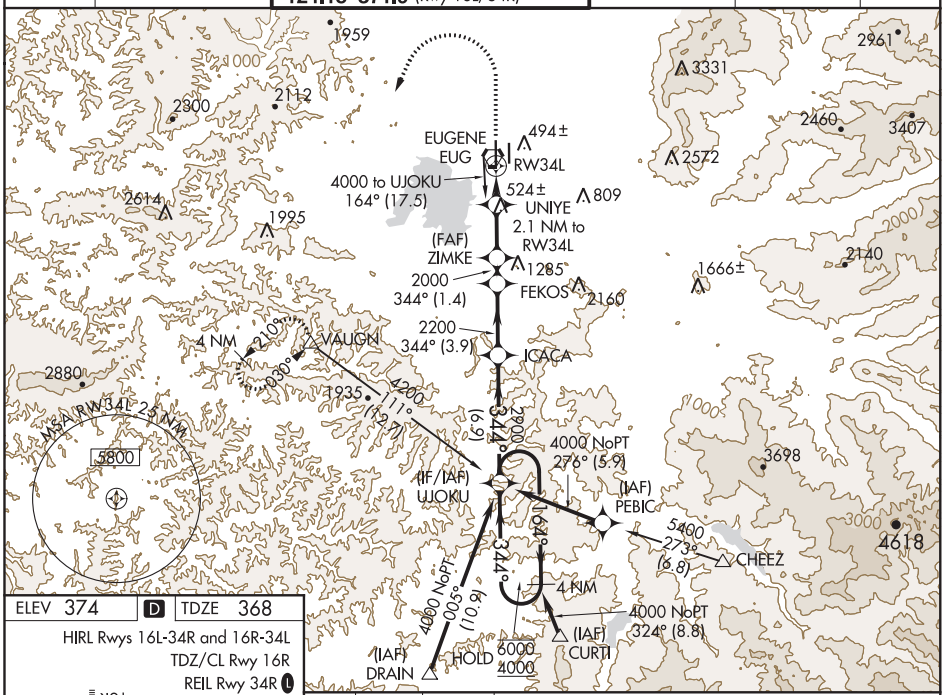
RNP APCH.

Simultaneous approach authorized. LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -10°C or above 54°C. For inop ALS increase LNAV/VNAV visibility Cats A-B to RVR 4500. Inop table does not apply to LPV minimums.

ODALS

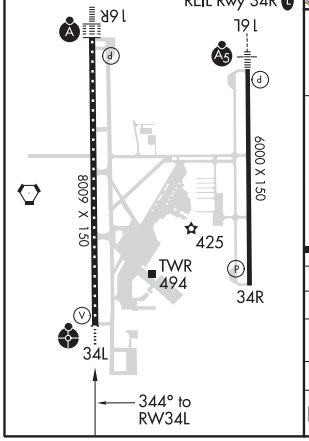
MISSED APPROACH: Climb to 1500, then climbing left turn to 4000 direct VAUGN and hold.

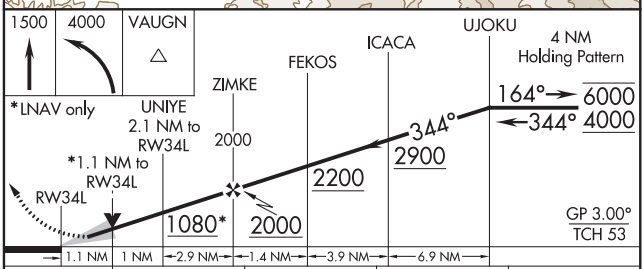
| ATIS | CASCADE APP CON★ | EUGENE TOWER★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.225 | 119.6 348.7 | 118.9 (CTAF) L 371.9 (Rwy 16R/34L)<br>124.15 371.9 (Rwy 16L/34R) | 121.7 269.5 | 121.7 269.5 | 122.95 |




ELEV 374 | D | TDZE 368

HIRL Rwys 16L-34R and 16R-34L
TDZ/CL Rwy 16R
REIL Rwy 34R L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 568/40 200 (200-¾) | | | |
| LNAV/VNAV DA | 657/40 289 (300-¾) | | | |
| LNAV MDA | 760/40 392 (400-¾) | | 760/50 392 (400-1) | |
| C CIRCLING | 820-1 446 (500-1) | 840-1 466 (500-1) | 1000-1¾ 626 (700-1¾) | 1140-2½ 766 (800-2½) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

EUGENE, OREGON | AL-140 (FAA) | 20254

| WAAS CH 81900 W34B | APP CRS 344° | Rwy ldg 6000<br>TDZE 374<br>Apt Elev 374 |
|---|---|---|

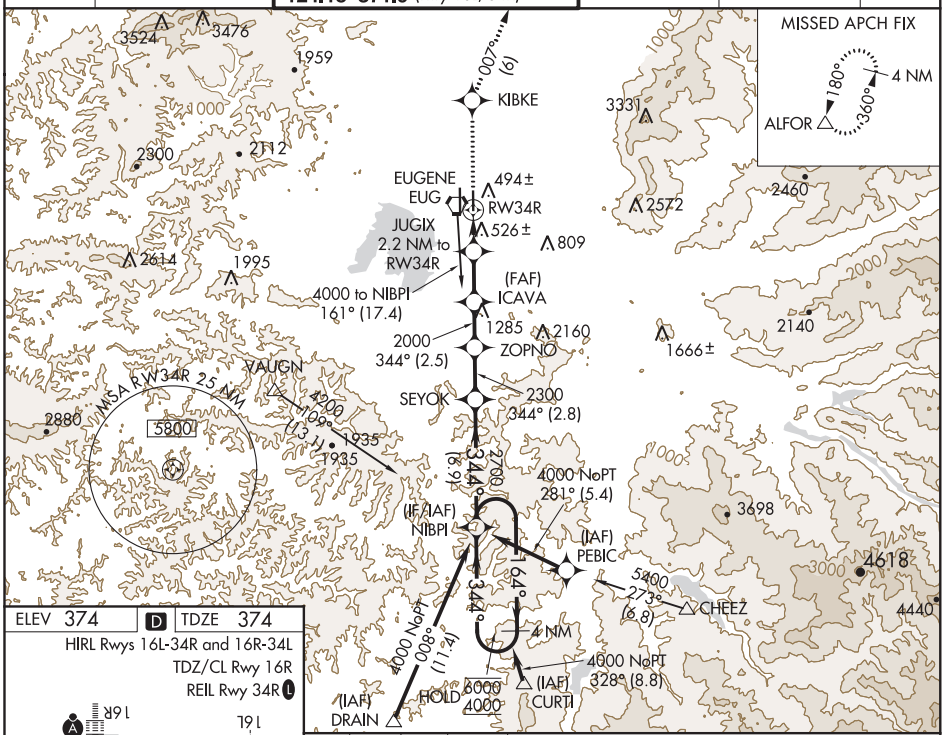
# RNAV (GPS) Y RWY 34R
## MAHLON SWEET FIELD (EUG)

RNP APCH.

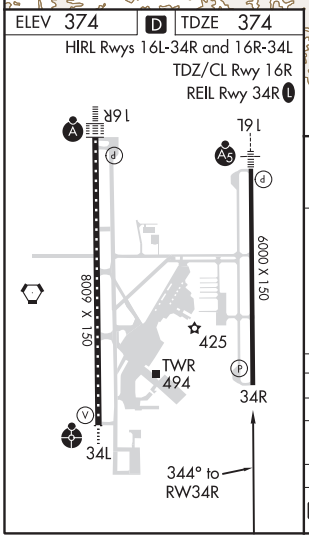
Simultaneous approach authorized. LNAV procedure NA during simultaneous operations.
Use of FD or AP providing RNAV track guidance required during simultaneous operations. Rwy 34R helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -10°C or above 54°C.

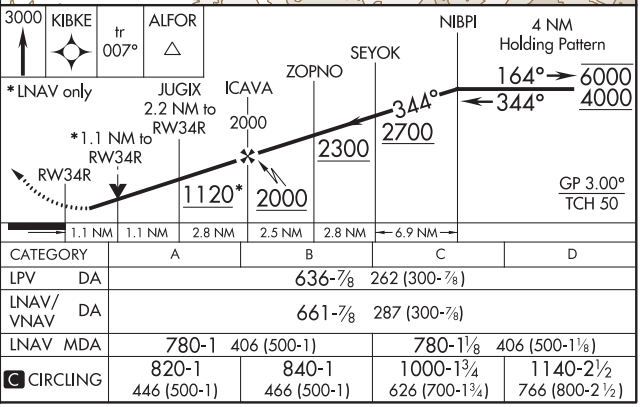
MISSED APPROACH: Climb to 3000 direct KIBKE then on track 007° to ALFOR and hold.

| ATIS | CASCADE APP CON ★ | EUGENE TOWER ★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.225 | 119.6 348.7 | 118.9 (CTAF) L 371.9 (Rwy 16R/34L)<br>124.15 371.9 (Rwy 16L/34R) | 121.7 269.5 | 121.7 269.5 | 122.95 |




NW-1, 05 NOV 2020 to 31 DEC 2020




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 636-⅞ 262 (300-⅞) | | | |
| LNAV/VNAV DA | 661-⅞ 287 (300-⅞) | | | |
| LNAV MDA | 780-1 406 (500-1) | | 780-1⅛ 406 (500-1⅛) | |
| C CIRCLING | 820-1 446 (500-1) | 840-1 466 (500-1) | 1000-1¾ 626 (700-1¾) | 1140-2½ 766 (800-2½) |

# VOR or TACAN RWY 34L
## MAHLON SWEET FIELD (EUG)

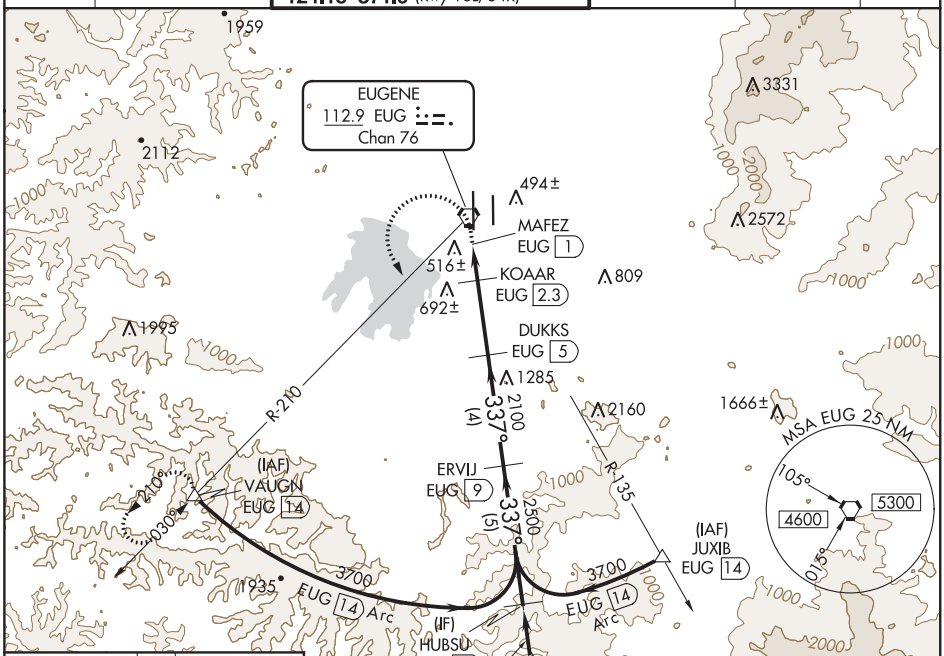
| VORTAC EUG | APP CRS | Rwy ldg | 8009 |
|---|---|---|---|
| 112.9 | 337° | TDZE | 368 |
| Chan 76 | | Apt Elev | 374 |

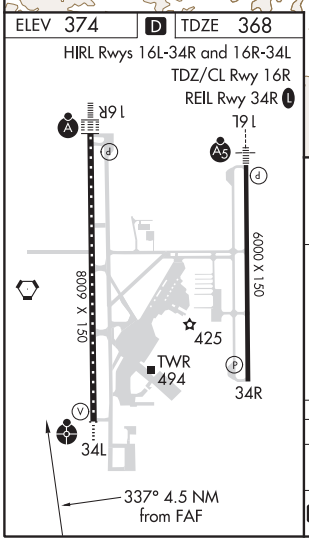
DME required for procedure entry. DME required.

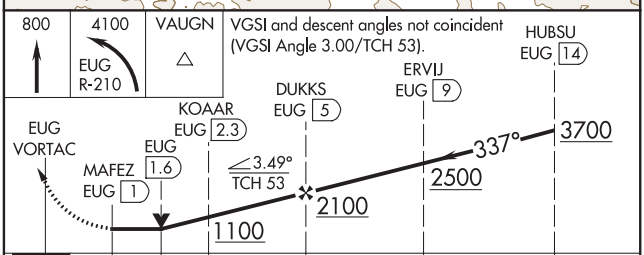
ODALS

MISSED APPROACH: Climb to 800 then climbing left turn to 4100 on EUG VORTAC R-210 to VAUGN/EUG 14 DME and hold, continue climb-in-hold to 4100.

| ATIS | CASCADE APP CON★ | EUGENE TOWER★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.225 | 119.6 348.7 | 118.9 (CTAF) L 371.9 (Rwy 16R/34L)<br>124.15 371.9 (Rwy 16L/34R) | 121.7 269.5 | 121.7 269.5 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-34L | 780/40 412 (500-¾) | | 780/55 412 (500-1) | |
| C CIRCLING | 820-1 446 (500-1) | 840-1 466 (500-1) | 1000-1¾ 626 (700-1¾) | 1140-2½ 766 (800-2½) |

NW-1, 05 NOV 2020 to 31 DEC 2020

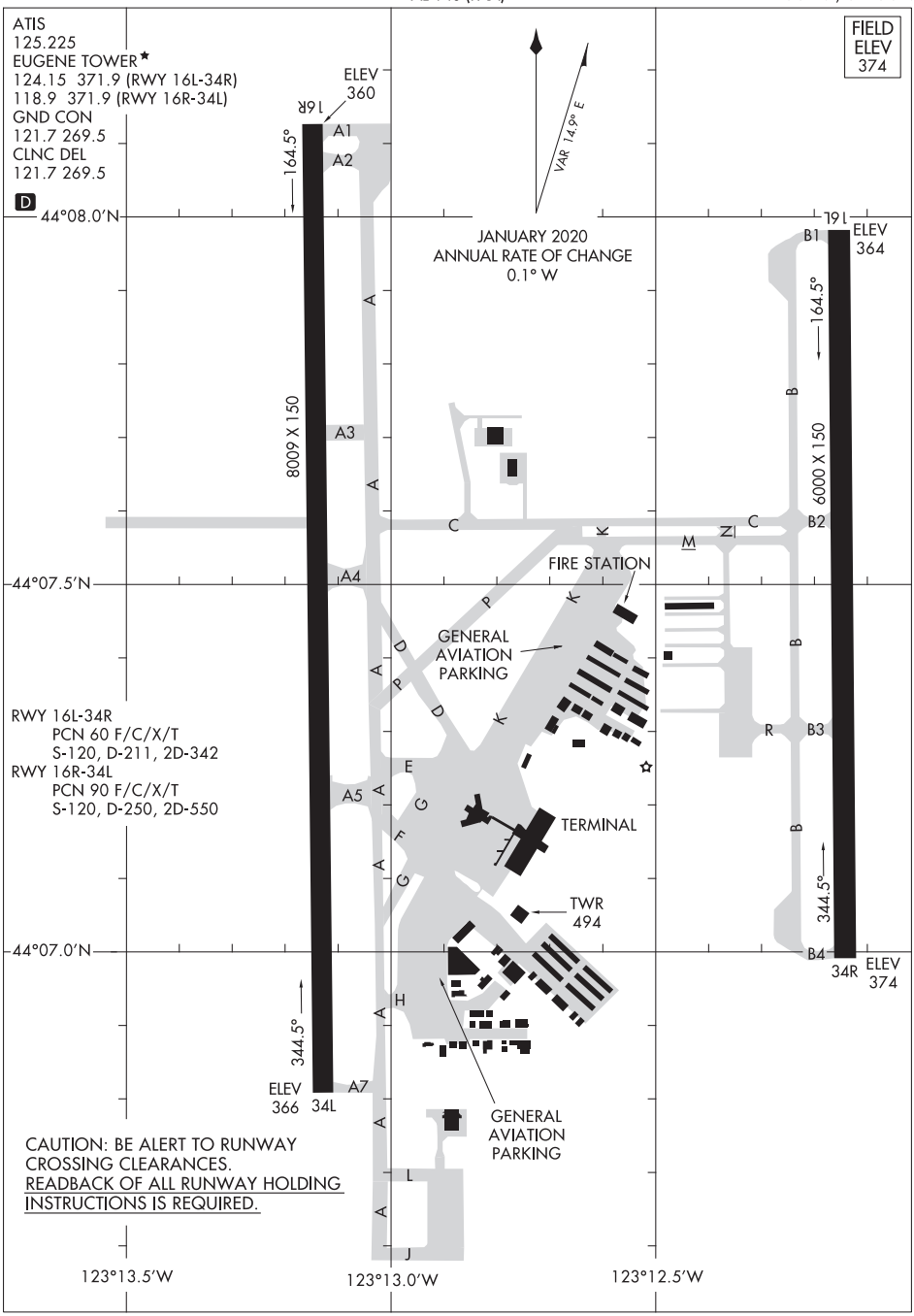
NW-1, 05 NOV 2020 to 31 DEC 2020

20254

# AIRPORT DIAGRAM

MAHLON SWEET FIELD (EUG)
EUGENE, OREGON

AL-140 (FAA)




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM
20254
EUGENE, OREGON
MAHLON SWEET FIELD (EUG)

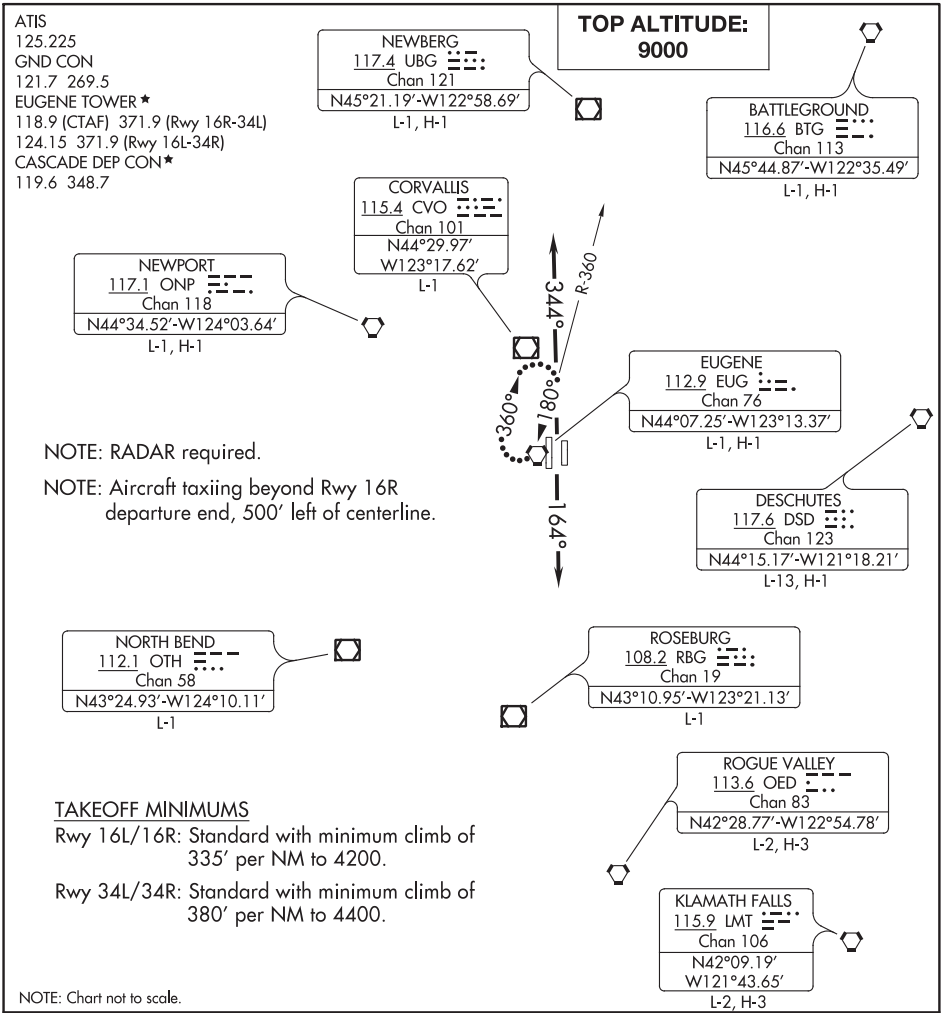
# EUGENE ONE DEPARTURE

AL-140 (FAA)

MAHLON SWEET FIELD (EUG)
EUGENE, OREGON

ATIS
125.225
GND CON
121.7 269.5
EUGENE TOWER ★
118.9 (CTAF) 371.9 (Rwy 16R-34L)
124.15 371.9 (Rwy 16L-34R)
CASCADE DEP CON ★
119.6 348.7

**TOP ALTITUDE: 9000**




NOTE: RADAR required.

NOTE: Aircraft taxiing beyond Rwy 16R departure end, 500′ left of centerline.

TAKEOFF MINIMUMS

Rwy 16L/16R: Standard with minimum climb of 335′ per NM to 4200.

Rwy 34L/34R: Standard with minimum climb of 380′ per NM to 4400.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 16L/16R: Climb heading 164° (or ATC assigned heading) for vectors to assigned route/fix. . . .

TAKEOFF RUNWAYS 34L/34R: Climb heading 344° (or ATC assigned heading) for vectors to assigned route/fix. . . .

. . . .maintain 9000 or assigned altitude, expect filed altitude/flight level five minutes after departure.

LOST COMMUNICATIONS: If not in contact with ATC after reaching 3000′, continue climb to assigned altitude direct EUG VORTAC, climb in EUG VORTAC holding pattern to cross EUG VORTAC at or above MEA before proceeding enroute.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

EVANSTON, WYOMING | AL-6858 (FAA) | 19115

# ILS or LOC/DME RWY 23
## EVANSTON-UINTA COUNTY BURNS FIELD (EVW)

| LOC/DME I-EVW | APP CRS | Rwy ldg | 7300 |
|---|---|---|---|
| 108.9 | 234° | TDZE | 7143 |
| Chan 26 | | Apt Elev | 7143 |

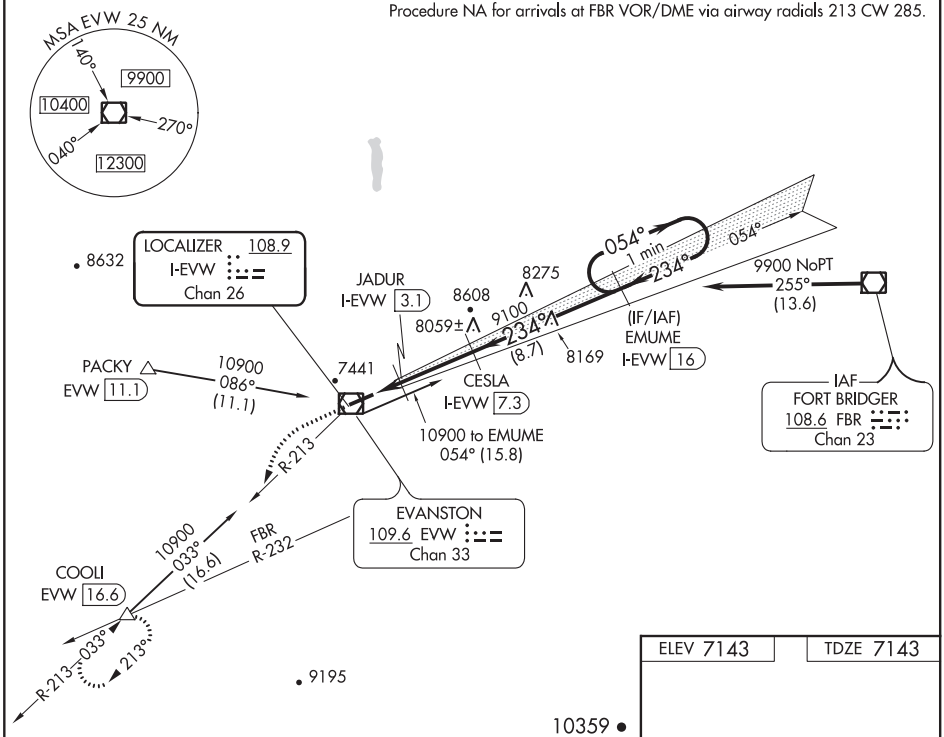
For inoperative MALSR, increase S-LOC 23 Cat D visibility to 1 mile. When local altimeter setting not received, procedure NA.

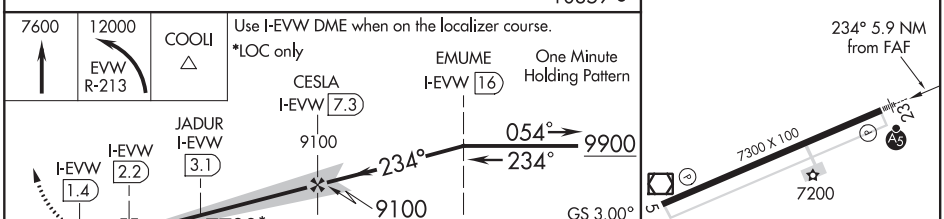
MALSR

MISSED APPROACH: Climb to 7600 then climbing left turn to 12000 via EVW VOR/DME R-213 to COOLI/EVW VOR/DME 16.6 DME and hold, continue climb-in-hold to 12000.

| ASOS | SALT LAKE CENTER | GCO | UNICOM |
|---|---|---|---|
| 120.0 | 127.7 354.125 | 121.72 | 123.0 (CTAF) |

Procedure NA for arrivals at FBR VOR/DME via airway radials 213 CW 285.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 23 | 7343-½ 200 (200-½) | | | |
| S-LOC 23 | 7440-½ 297 (300-½) | | | 7440-¾ 297 (300-¾) |
| CIRCLING | 7580-1 437 (500-1) | 7720-1 577 (600-1) | 7760-1¾ 617 (700-1¾) | 7760-2 617 (700-2) |




REIL Rwy 5
HIRL Rwy 5-23

| WAAS CH 78302 W05A | APP CRS 054° | Rwy ldg 7300<br>TDZE 7141<br>Apt Elev 7143 |
|---|---|---|

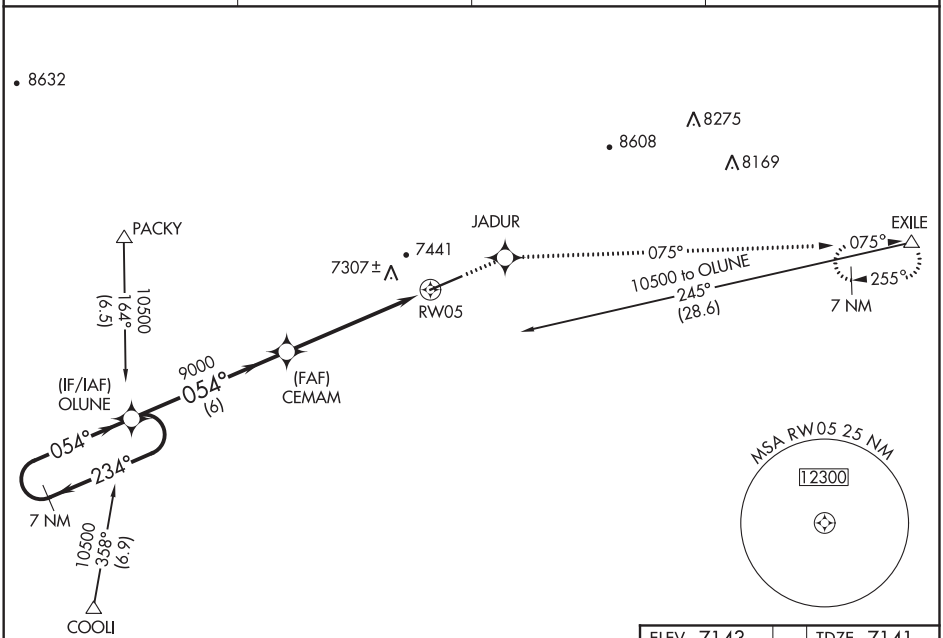
# RNAV (GPS) RWY 5
## EVANSTON-UINTA COUNTY BURNS FIELD (EVW)

RNP APCH.

T If local altimeter setting not received, procedure NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -29°C (-20°F) or above 34°C (94°F).

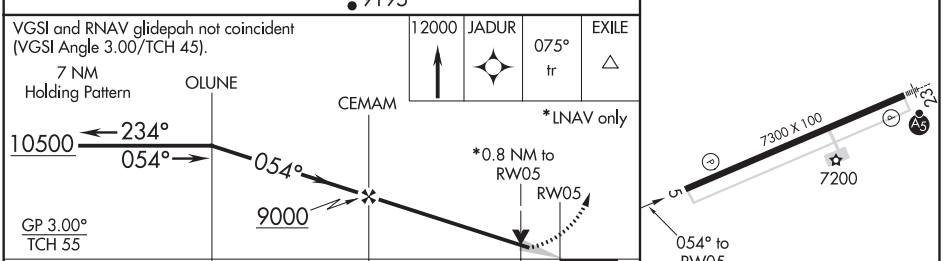
MISSED APPROACH: Climb to 12000 direct JADUR and via 075° track to EXILE and hold, continue climb-in-hold to 12000.

| ASOS | SALT LAKE CENTER | GCO | UNICOM |
|---|---|---|---|
| 120.0 | 127.7 354.125 | 121.72 | 123.0 (CTAF) L |




ELEV 7143 TDZE 7141

VGSI and RNAV glidepah not coincident (VGSI Angle 3.00/TCH 45).




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 7391-¾ 250 (300-¾) | | | |
| LNAV/VNAV DA | 7643-1¾ 502 (500-1¾) | | | |
| LNAV MDA | 7440-1 299 (300-1) | | | |

REIL Rwy 5 L
HIRL Rwy 5-23 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

EVANSTON, WYOMING | AL-6858 (FAA) | 19115

| WAAS CH 77905 W23A | APP CRS 234° | Rwy ldg 7300<br>TDZE 7143<br>Apt Elev 7143 |
|---|---|---|

# RNAV (GPS) RWY 23
## EVANSTON-UINTA COUNTY BURNS FIELD (EVW)

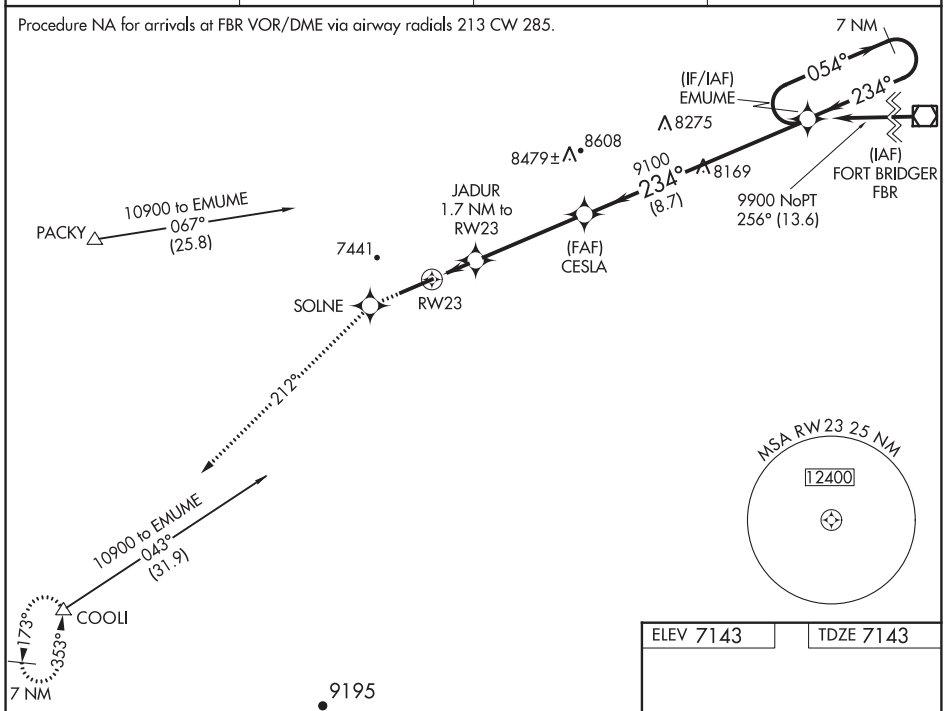
For inoperative MALSR, increase LPV all Cats visibility to 1, LNAV/VNAV Cat D to 1 and LNAV Cat D to 1¼.
When local altimeter setting not received, procedure NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -29°C (-20°F) or above 34°C (93°F). DME/DME RNP- 0.3 NA.

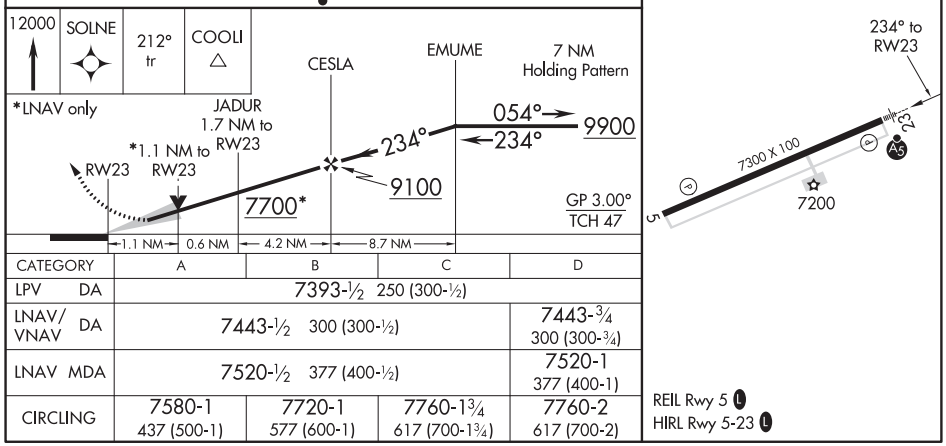
MALSR

MISSED APPROACH: Climb to 12000 direct SOLNE and via 212° track to COOLI and hold, continue climb-in-hold to 12000.

| ASOS | SALT LAKE CENTER | GCO | UNICOM |
|---|---|---|---|
| 120.0 | 127.7 354.125 | 121.72 | 123.0 (CTAF) L |

Procedure NA for arrivals at FBR VOR/DME via airway radials 213 CW 285.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 7393-½ 250 (300-½) | | | |
| LNAV/VNAV DA | 7443-½ 300 (300-½) | | | 7443-¾ 300 (300-¾) |
| LNAV MDA | 7520-½ 377 (400-½) | | | 7520-1 377 (400-1) |
| CIRCLING | 7580-1 437 (500-1) | 7720-1 577 (600-1) | 7760-1¾ 617 (700-1¾) | 7760-2 617 (700-2) |




NW-1, 05 NOV 2020 to 31 DEC 2020

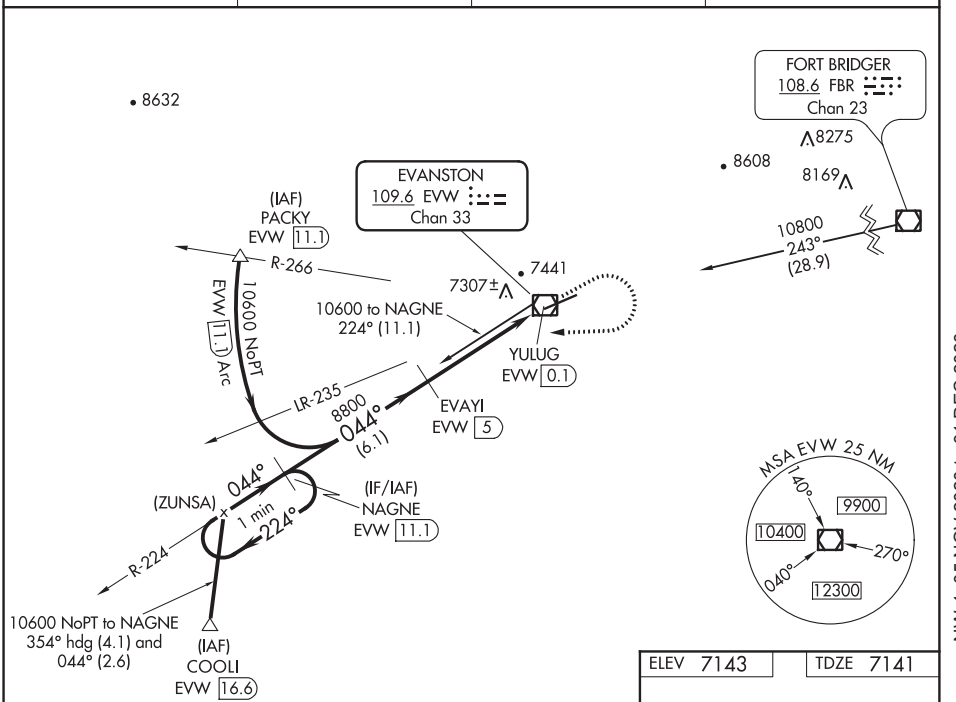
| VOR/DME EVW 109.6 Chan 33 | APP CRS 044° | Rwy ldg 7300 TDZE 7141 Apt Elev 7143 |
|---|---|---|

# VOR/DME RWY 5
## EVANSTON-UINTA COUNTY BURNS FIELD (EVW)

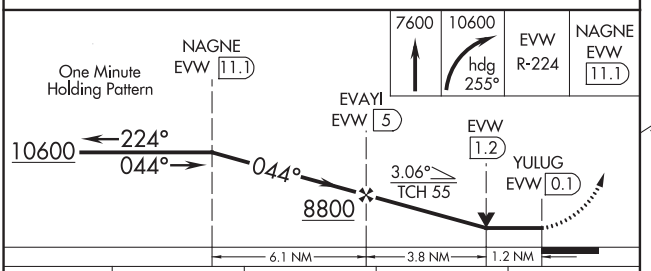
T If local altimeter setting not received, procedure NA.

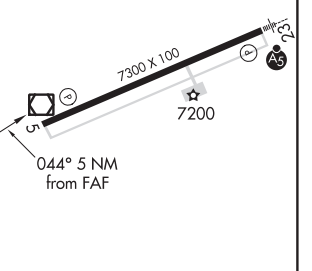
MISSED APPROACH: Climb to 7600, then climbing right turn to 10600 via heading 255° and EVW VOR/DME R-224 to NAGNE/11.1 DME and hold, continue climb-in-hold to 10600.

| ASOS | SALT LAKE CENTER | GCO | UNICOM |
|---|---|---|---|
| 120.0 | 127.7 354.125 | 121.72 | 123.0 (CTAF) L |




| ELEV 7143 | TDZE 7141 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-5 | 7560-1 419 (500-1) | | 7560-1¼ 419 (500-1¼) | |
| CIRCLING | 7580-1 437 (500-1) | 7720-1 577 (600-1) | 7760-1¾ 617 (700-1¾) | 7760-2 617 (700-2) |

REIL Rwy 5 L
HIRL Rwy 5-23 L

NW-1, 05 NOV 2020 to 31 DEC 2020

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EVERETT, WASHINGTON

AL-142 (FAA)

20310

# ILS Y or LOC Y RWY 16R
## SNOHOMISH COUNTY (PAINE FIELD) (PAE)

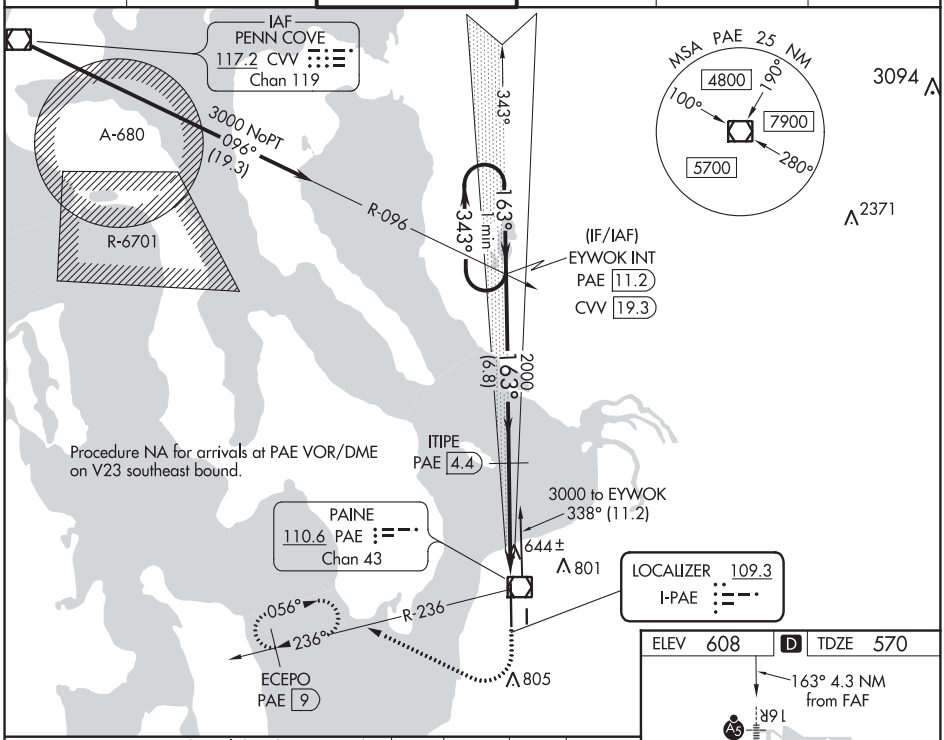
| LOC I-PAE | APP CRS | Rwy ldg | 9010 |
|---|---|---|---|
| 109.3 | 163° | TDZE | 570 |
| | | Apt Elev | 608 |

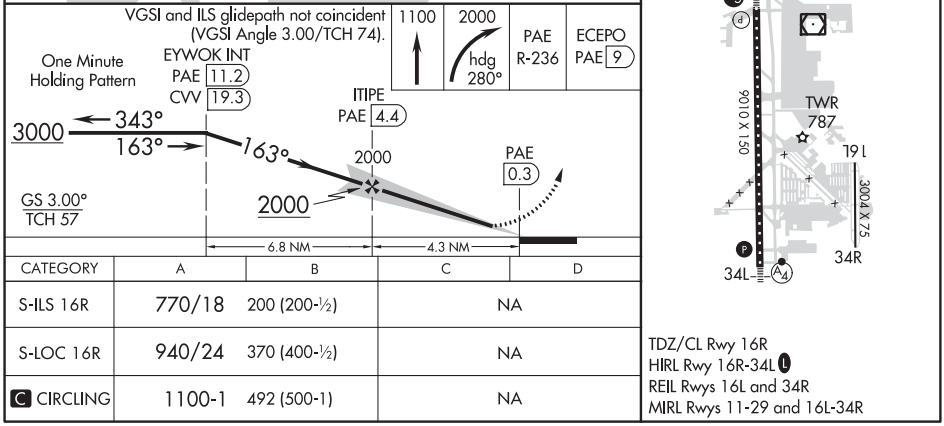
T A Circling Rwy 34R NA at night. DME required. DME from PAE VOR/DME. Simultaneous reception of I-PAE and PAE DME required.

MALSR A5

MISSED APPROACH: Climb to 1100 then climbing right turn to 2000 on heading 280° and PAE VOR/DME R-236 to ECEPO/PAE 9 DME and hold.

| ATIS | SEATTLE APP CON | PAINE TOWER ★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 128.65 | 128.5 306.9 | 132.95 (CTAF) L 256.7 | 121.8 339.8 | 127.175 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 16R | 770/18 | 200 (200-½) | NA | |
| S-LOC 16R | 940/24 | 370 (400-½) | NA | |
| C CIRCLING | 1100-1 | 492 (500-1) | NA | |

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| LOC I-PAE | APP CRS | Rwy ldg | 9010 |
|---|---|---|---|
| 109.3 | 163° | TDZE | 570 |
| | | Apt Elev | 608 |

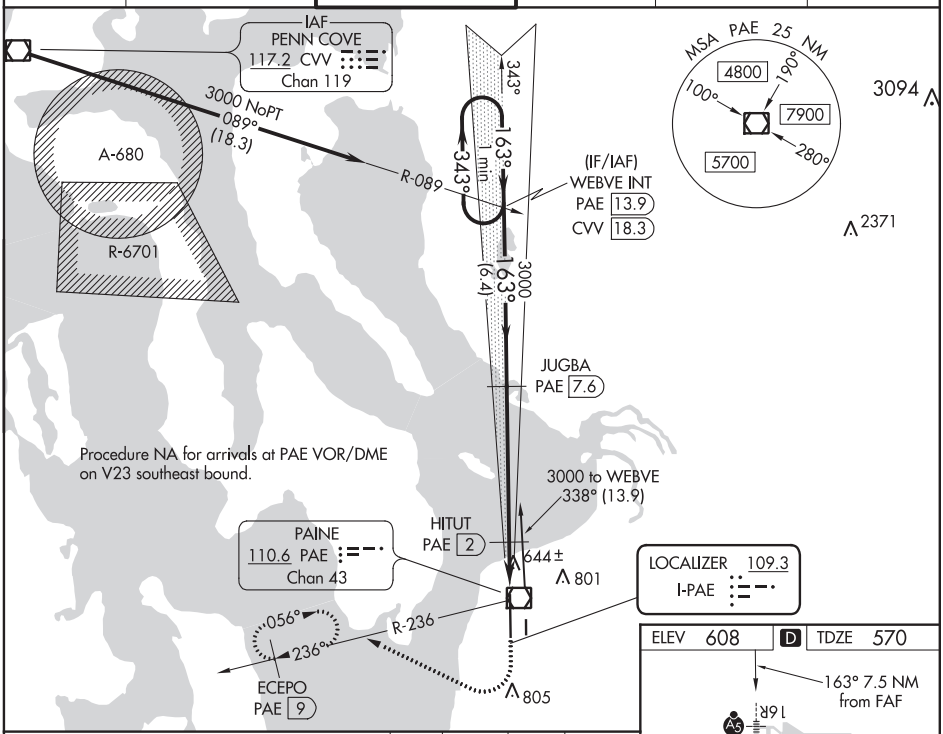
# ILS Z or LOC Z RWY 16R
## SNOHOMISH COUNTY (PAINE FIELD) (PAE)

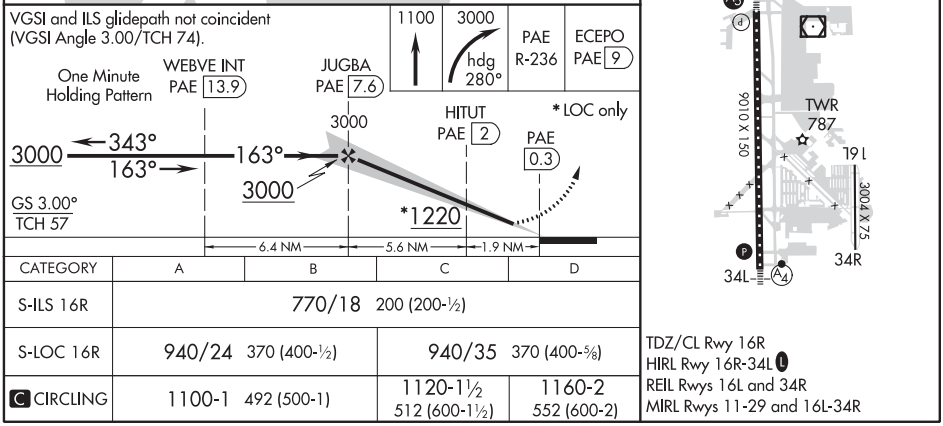
Circling Rwy 34R NA at night. DME required. For inop ALS, increase S-LOC 16R Cats C/D visibility to RVR 5500. DME from PAE VOR/DME. Simultaneous reception of I-PAE and PAE DME required.

MALSR

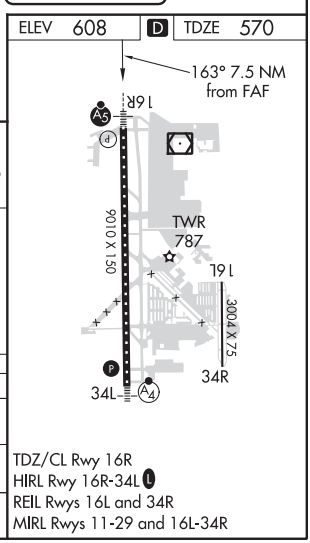
MISSED APPROACH: Climb to 1100 then climbing right turn to 3000 on heading 280° and PAE VOR/DME R-236 to ECEPO/PAE 9 DME and hold, continue climb-in-hold to 3000.

| ATIS | SEATTLE APP CON | PAINE TOWER * | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 128.65 | 128.5 306.9 | 132.95 (CTAF) L 256.7 | 121.8 339.8 | 127.175 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 16R | 770/18 200 (200-½) | | | |
| S-LOC 16R | 940/24 370 (400-½) | | 940/35 370 (400-⅝) | |
| C CIRCLING | 1100-1 492 (500-1) | | 1120-1½ 512 (600-1½) | 1160-2 552 (600-2) |




TDZ/CL Rwy 16R
HIRL Rwy 16R-34L L
REIL Rwys 16L and 34R
MIRL Rwys 11-29 and 16L-34R

NW-1, 05 NOV 2020 to 31 DEC 2020

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| LOC I-PAE | APP CRS | Rwy ldg | 9010 |
|---|---|---|---|
| 109.3 | 163° | TDZE | 570 |
| | | Apt Elev | 608 |

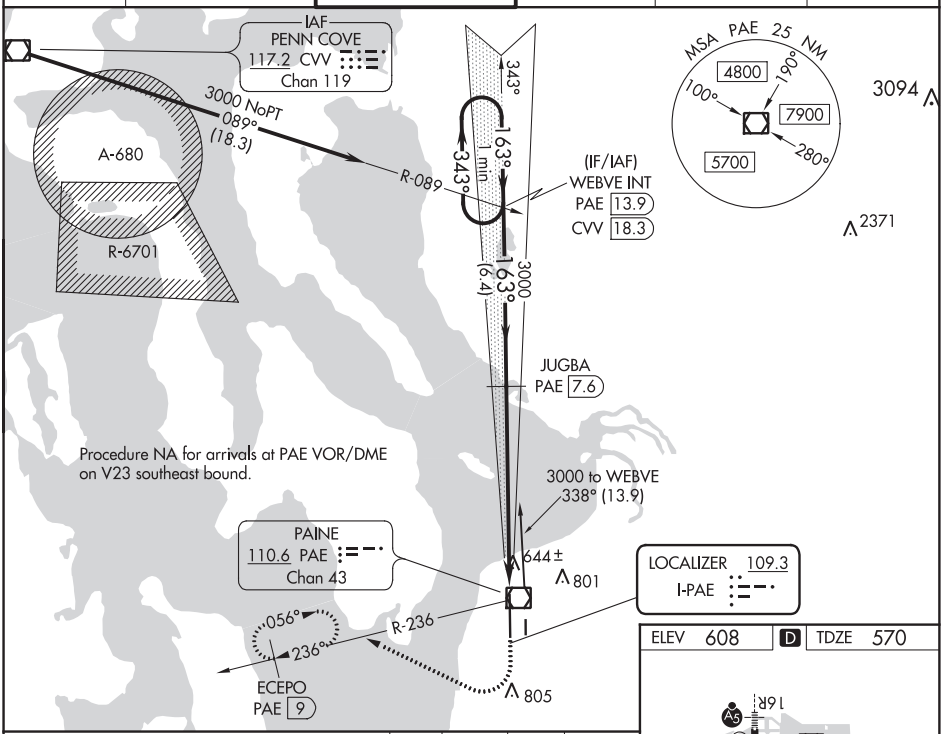
# ILS Z RWY 16R (SA CAT II)
## SNOHOMISH COUNTY (PAINE FIELD) (PAE)

T A DME required. Reduced Lighting: Requires specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown. DME from PAE VOR/DME. Simultaneous reception of I-PAE and PAE DME required. Procedure NA when control tower closed.

MALSR A5

MISSED APPROACH: Climb to 1100 then climbing right turn to 3000 on heading 280° and PAE VOR/DME R-236 to ECEPO/PAE 9 DME and hold, continue climb-in-hold to 3000.

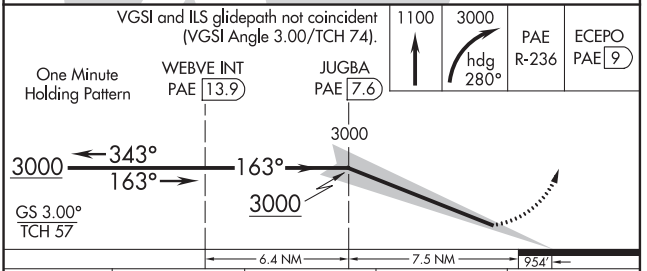
| ATIS | SEATTLE APP CON | PAINE TOWER ★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 128.65 | 128.5 306.9 | 132.95 (CTAF) L 256.7 | 121.8 339.8 | 127.175 | 122.95 |

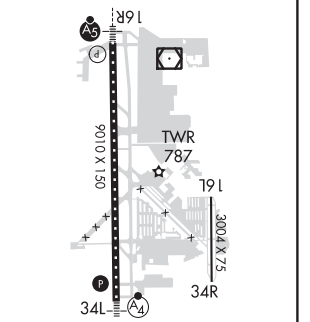



| ELEV 608 | D | TDZE 570 |
|---|---|---|

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 74).

| 1100 | 3000 hdg 280° | PAE R-236 | ECEPO PAE 9 |
|---|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 16R | RA 116/12 100 DA 670 | | | |

**SA CATEGORY II ILS-SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**

TDZ/CL Rwy 16R
HIRL Rwy 16R-34L L
REIL Rwys 16L and 34R
MIRL Rwys 11-29 and 16L-34R

NW-1, 05 NOV 2020 to 31 DEC 2020

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| APP CRS | Rwy ldg | 9010 |
|---|---|---|
| 343° | TDZE | 584 |
| | Apt Elev | 608 |

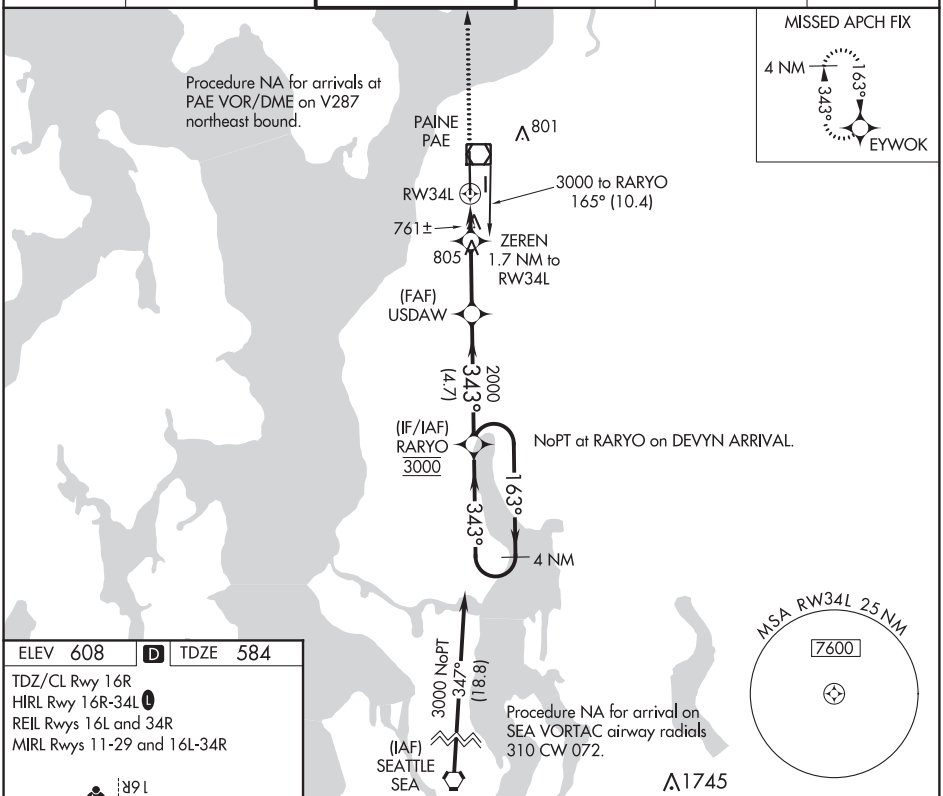
# RNAV (GPS) RWY 34L
## SNOHOMISH COUNTY (PAINE FIELD) (PAE)

Circling Rwy 34R NA at night.
Rwy 34L helicopter visibility reduction below ¾ SM NA.
DME/DME RNP-0.3 NA.

MALSF

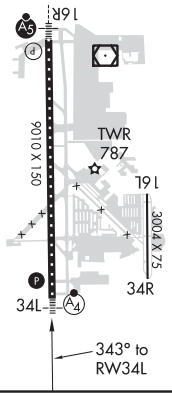
MISSED APPROACH: Climb to 3000 direct EYWOK and hold.

| ATIS | SEATTLE APP CON | PAINE TOWER ★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 128.65 | 128.5 306.9 | 132.95 (CTAF) L 256.7 | 121.8 339.8 | 127.175 | 122.95 |



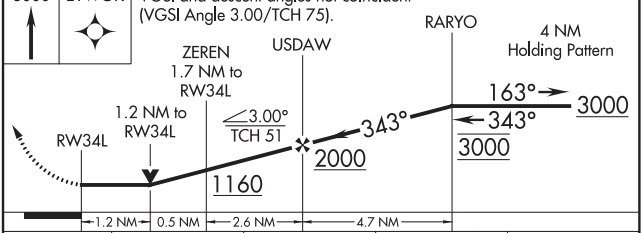

ELEV 608 | D | TDZE 584

TDZ/CL Rwy 16R
HIRL Rwy 16R-34L L
REIL Rwys 16L and 34R
MIRL Rwys 11-29 and 16L-34R




3000 | EYWOK

VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 75).




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 1020-¾ 436 (500-¾) | | 1020-1 436 (500-1) | |
| C CIRCLING | 1100-1 492 (500-1) | | 1120-1½ 512 (600-1½) | 1160-2 552 (600-2) |

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| WAAS CH 60911 W16B | APP CRS 163° | Rwy ldg 9010<br>TDZE 570<br>Apt Elev 608 |
|---|---|---|

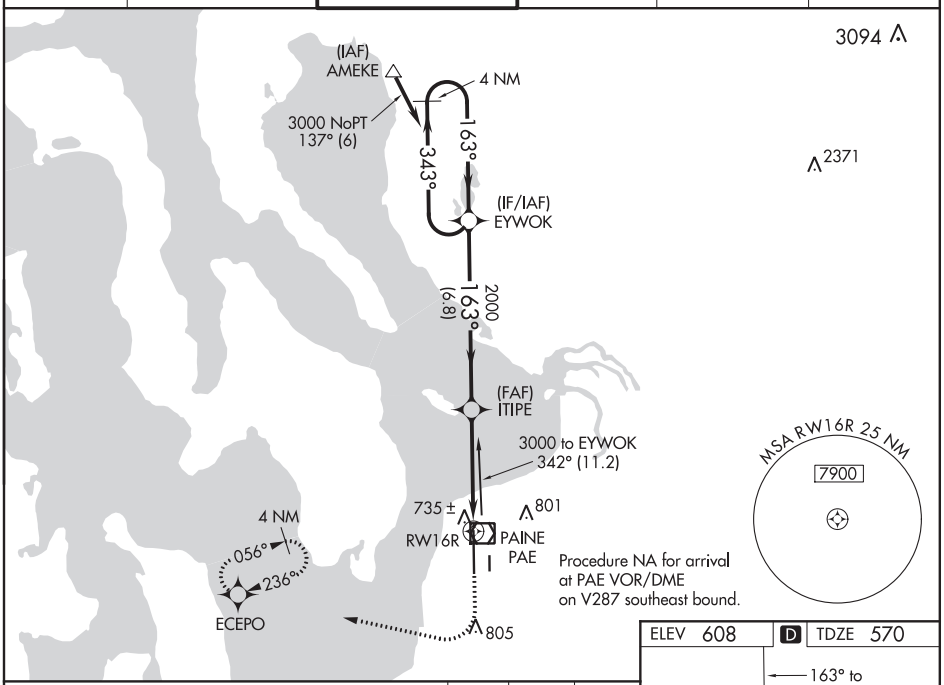
# RNAV (GPS) Y RWY 16R
## SNOHOMISH COUNTY (PAINE FIELD) (PAE)

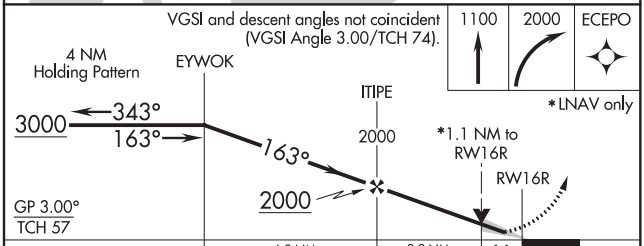
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -5°C (23°F) or above 54°C (130°F). Circling Rwy 34R NA at night. DME/DME RNP-0.3 NA. For inop ALS, increase LNAV/VNAV Cats A/B visibility to RVR 5000.

MALSR

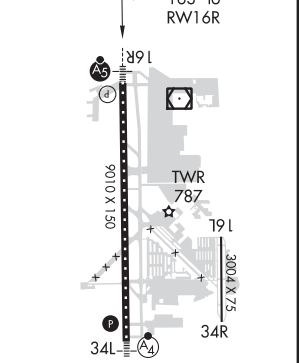
MISSED APPROACH: Climb to 1100 then climbing right turn to 2000 direct ECEPO and hold.

| ATIS | SEATTLE APP CON | PAINE TOWER * | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 128.65 | 128.5 306.9 | 132.95 (CTAF) L 256.7 | 121.8 339.8 | 127.175 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 770/18 200 (200-½) | | NA | |
| LNAV/VNAV DA | 894/30 324 (300-⅝) | | NA | |
| LNAV MDA | 1000/24 430 (400-½) | | NA | |
| C CIRCLING | 1100-1 492 (500-1) | | NA | |




TDZ/CL Rwy 16R
HIRL Rwy 16R-34L L
REIL Rwys 16L and 34R
MIRL Rwys 11-29 and 16L-34R

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 61129 W16A | APP CRS 163° | Rwy ldg 9010 TDZE 570 Apt Elev 608 |
|---|---|---|

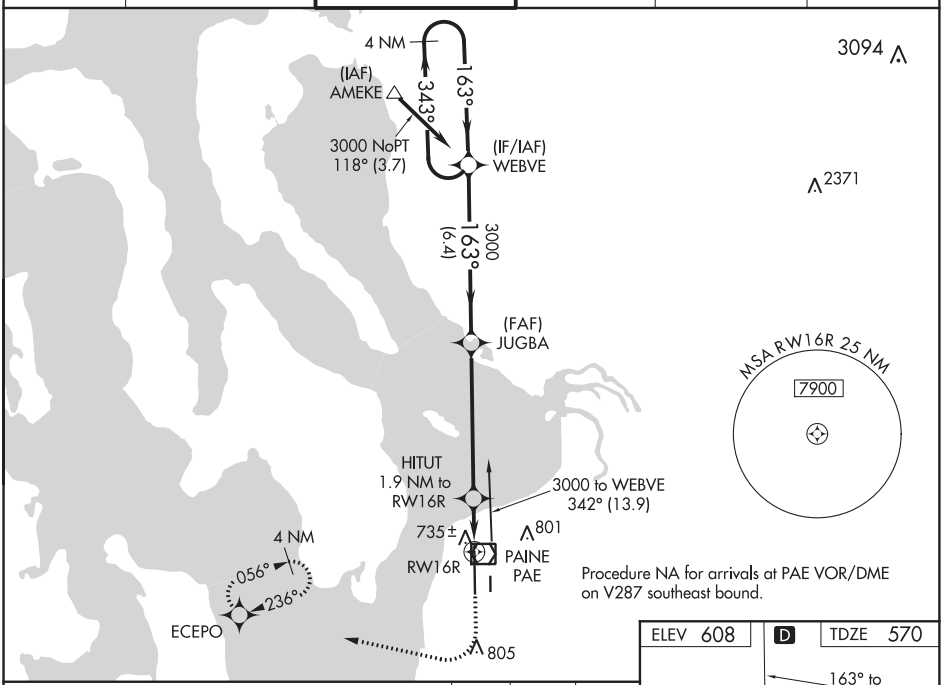
# RNAV (GPS) Z RWY 16R
## SNOHOMISH COUNTY (PAINE FIELD) (PAE)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -5°C (23°F) or above 54°C (130°F). Circling Rwy 34R NA at night. DME/DME RNP-0.3 NA.

MALSR

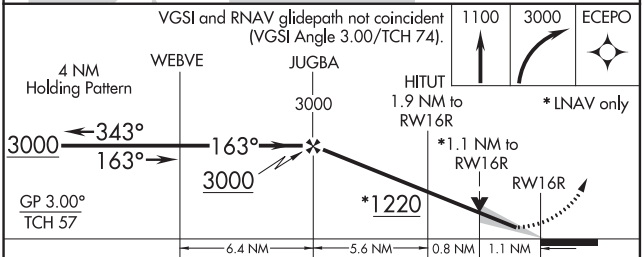
MISSED APPROACH: (Do not exceed 240K until ECEPO) Climb to 1100 then climbing right turn to 3000 direct ECEPO and hold, continue climb-in-hold to 3000.

| ATIS | SEATTLE APP CON | PAINE TOWER * | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 128.65 | 128.5 306.9 | 132.95 (CTAF) L 256.7 | 121.8 339.8 | 127.175 | 122.95 |



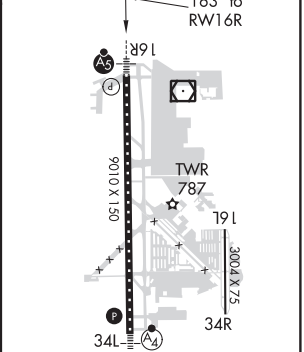

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 74).

| 1100 | 3000 | ECEPO |
|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 770/18 200 (200-½) | | | |
| LNAV/VNAV DA | 913/30 343 (400-⅝) | | | |
| LNAV MDA | 1000/24 430 (400-½) | | 1000/40 430 (400-¾) | |
| C CIRCLING | 1100-1 492 (500-1) | | 1120-1½ 512 (600-1½) | 1160-2 552 (600-2) |

ELEV 608 D TDZE 570




TDZ/CL Rwy 16R
HIRL Rwy 16R-34L L
REIL Rwys 16L and 34R
MIRL Rwys 11-29 and 16L-34R

NW-1, 05 NOV 2020 to 31 DEC 2020

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EVERETT, WASHINGTON AL-142 (FAA) 20310

# VOR-A

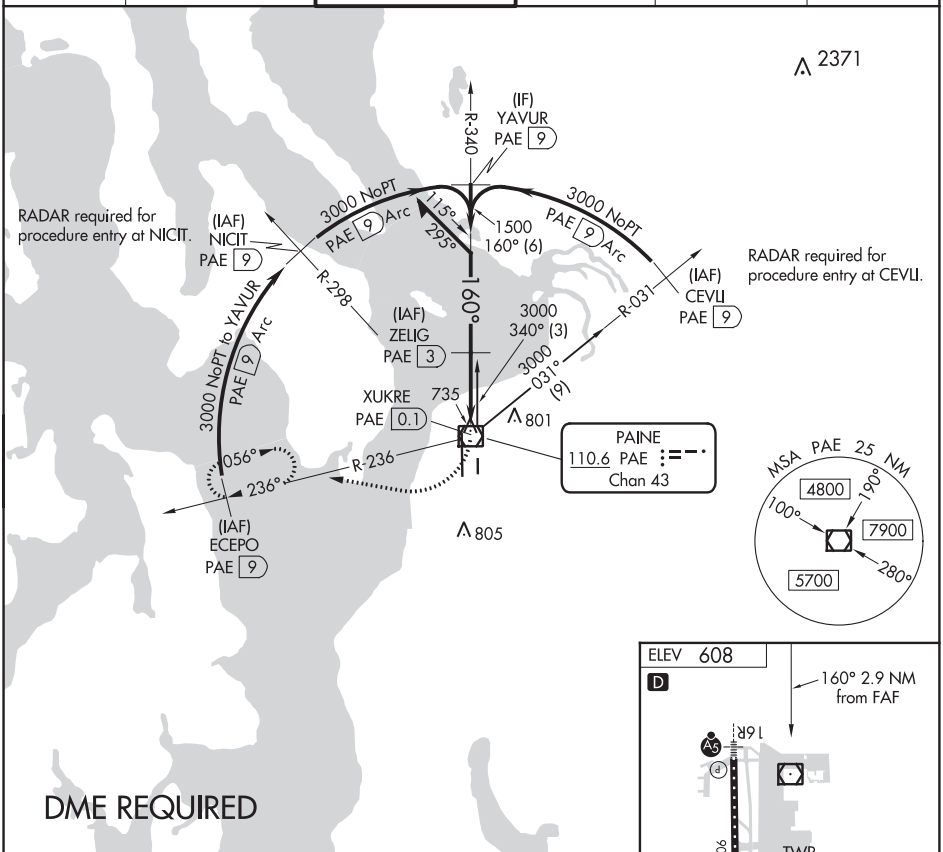
## SNOHOMISH COUNTY (PAINE FIELD) (PAE)

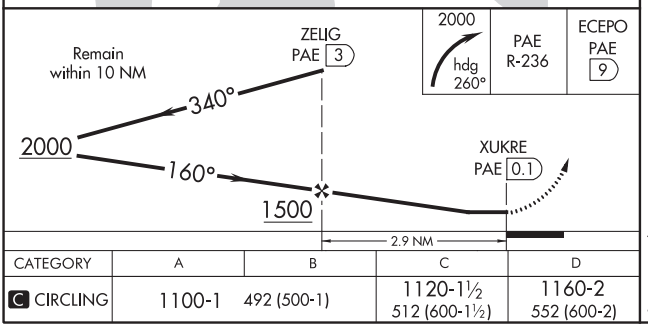
| VOR/DME PAE 110.6 Chan 43 | APP CRS 160° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 608 |
|---|---|---|

Circling Rwy 34R NA at night.
DME required.

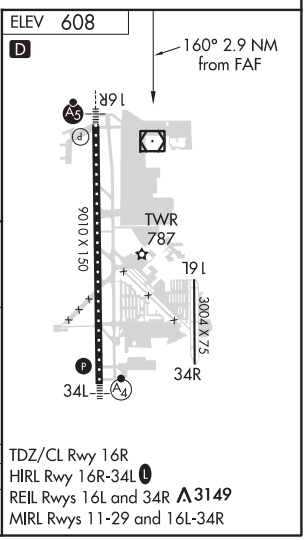
MISSED APPROACH: Climbing right turn to 2000 on heading 260° and PAE VOR/DME R-236 to ECEPO/PAE 9 DME and hold.

| ATIS | SEATTLE APP CON | PAINE TOWER ★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 128.65 | 128.5 306.9 | 132.95 (CTAF) L 256.7 | 121.8 339.8 | 127.175 | 122.95 |



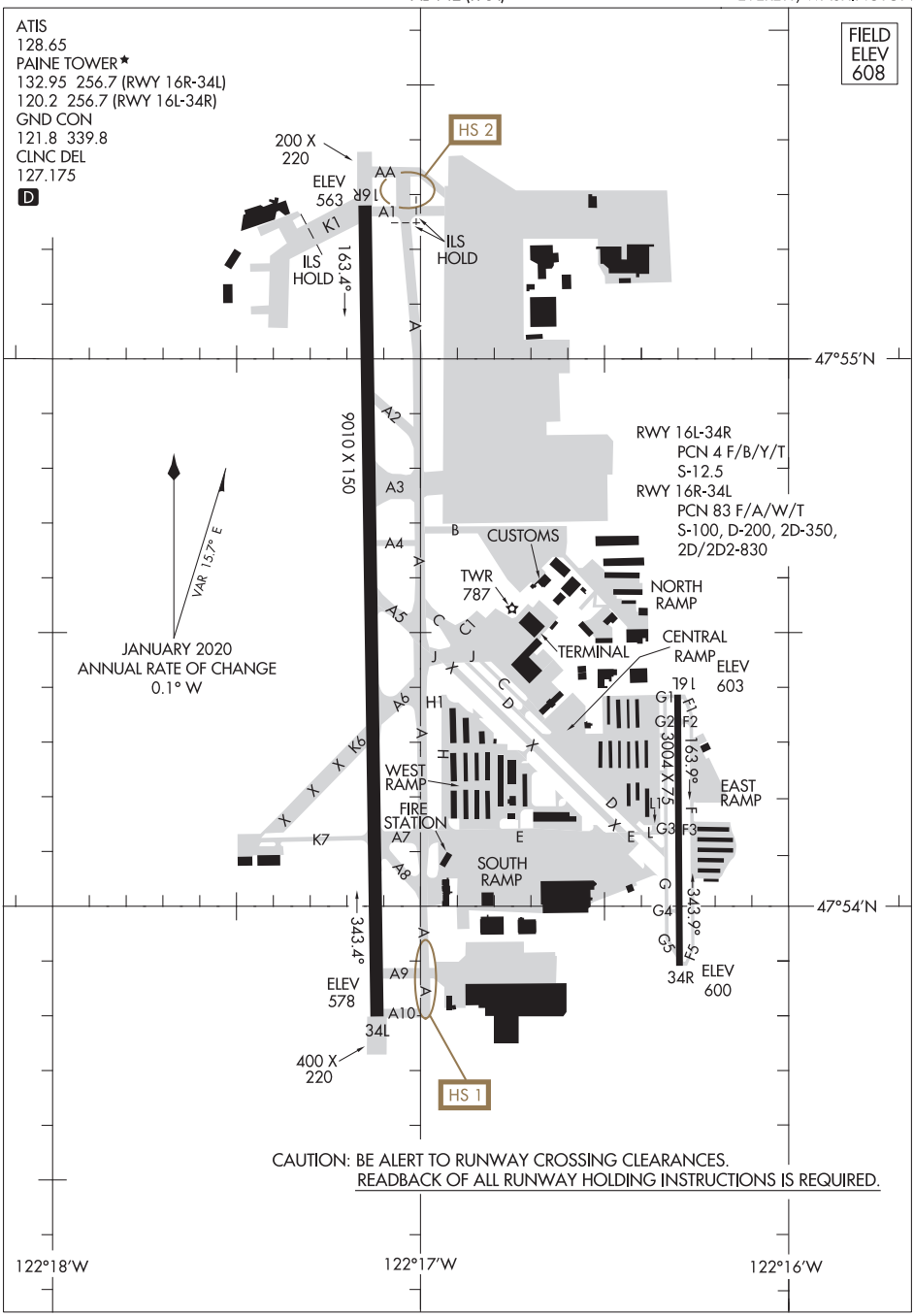

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 1100-1 492 (500-1) | | 1120-1½ 512 (600-1½) | 1160-2 552 (600-2) |




TDZ/CL Rwy 16R
HIRL Rwy 16R-34L L
REIL Rwys 16L and 34R 3149
MIRL Rwys 11-29 and 16L-34R

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

(PAINE6.PAINE) 19339

# PAINE SIX DEPARTURE

AL-142 (FAA)

SNOHOMISH COUNTY (PAINE FIELD) (PAE)
EVERETT, WASHINGTON

**TOP ALTITUDE: ASSIGNED BY ATC**

ATIS 128.65
CLNC DEL 127.175
GND CON 121.8 339.8
PAINE TOWER ★ 132.95 (CTAF) 256.7
SEATTLE DEP CON 128.5 306.9

WHIDBEY ISLAND
Chan 85
NUW
(113.8)
N48°21.30′-W122°39.71′
L-1, H-1

343° 344° 163° 164°

PAINE
110.6 PAE
Chan 43
N47°55.19′-W122°16.67′
L-1, H-1

SEATTLE
116.8 SEA
Chan 115
N47°26.12′-W122°18.58′
L-1, H-1

WENATCHEE
111.0 EAT
Chan 47
N47°23.98′-W120°12.65′
L-13

ELLENSBURG
117.9 ELN
Chan 126
N47°01.46′-W120°27.50′
L-13, H-1

OLYMPIA
113.4 OLM
Chan 81
N46°58.30′-W122°54.11′
L-1, H-1

HOQUIAM
117.7 HQM
Chan 124
N46°56.82′-W124°08.96′
L-1, H-1

YAKIMA
116.0 YKM
Chan 107
N46°34.21′-W120°26.68′
L-13, H-1

TAKEOFF MINIMUMS

Rwys 16L/R, 34L/R: Standard.

NOTE: RADAR required.

NOTE: ATC may assign initial heading to be flown and vector departures in all quadrants within 10 miles of the Paine Airport provided no altitude restrictions imposed prior to reaching MVA.

NOTE: Chart not to scale.

NW-1, 05 NOV 2020 to 31 DEC 2020

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## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16L: Climb heading 164°. . . .
TAKEOFF RUNWAY 16R: Climb heading 163°. . . .
TAKEOFF RUNWAY 34L: Climb heading 343°. . . .
TAKEOFF RUNWAY 34R: Climb heading 344°. . . .

. . . .or as assigned for RADAR vectors to join assigned route. Maintain assigned altitude: expect filed altitude flight level five minutes after departure.

LOST COMMUNICATIONS: If not in contact with Seattle approach upon reaching 2000, continue climb to assigned altitude and proceed direct to PAE VOR/DME. Thence via assigned route.

SPOKANE, WASHINGTON

# ILS or LOC RWY 5

FAIRCHILD AFB (KSKA)

| LOC I-FRC | APCH CRS | Rwy ldg 13,899 TDZE 2462 Arpt Elev 2462 |
|---|---|---|
| 110.3 | 051° | |

AL-553 [USAF]

* When ALS inop, increase RVR to 40, vis to ¾ mile. When TDZL/CL lights inop, increase CAT ABCDE RVR to 24.

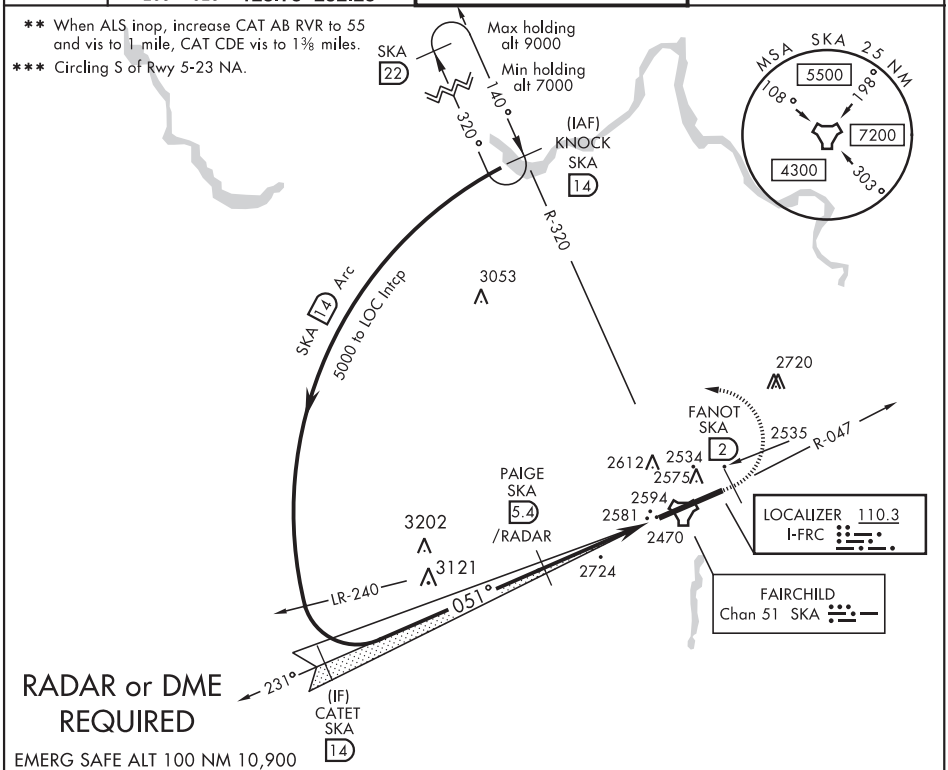
ALSF-2

MISSED APPROACH: Climb to 7000 via SKA TACAN R-047. At SKA 2 DME turn left hdg 280° to intcp SKA R-320 to KNOCK and hold, continue climb in hold to 7000.

| ATIS | SPOKANE APP CON | FAIRCHILD TOWER | GND CON |
|---|---|---|---|
| 257.625 | 029°- 207° 133.35 263.0<br>208°- 028° 123.75 282.25 | 120.35 233.7 | 123.6 275.8 |

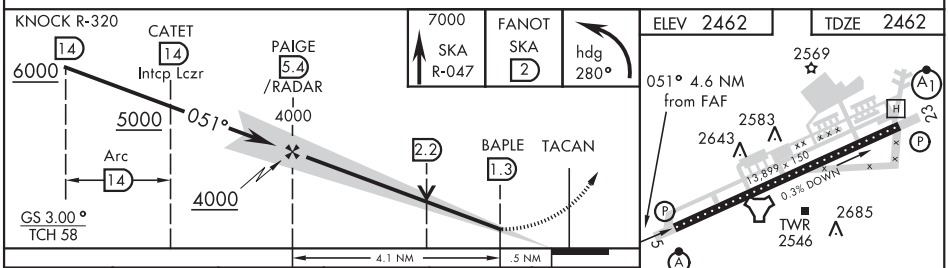
** When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile, CAT CDE vis to 1⅜ miles.

*** Circling S of Rwy 5-23 NA.




RADAR or DME REQUIRED

EMERG SAFE ALT 100 NM 10,900




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-ILS 5 * | 2662/18 200 (200-½) | | | | |
| S-LOC 5 ** | 2960/24 498 (500-½) | | 2960/50 498 (500-1) | | |
| *** C CIRCLING | 2960-1 498 (500-1) | | 3040-1½ 578 (600-1½) | 3040-2 578 (600-2) | 3500-3 1038 (1100-3) |

HIRL Rwy 5-23
TDZL/CL Rwy 5

| FAF to MAP 4.1 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 4:06 | 2:44 | 2:03 | 1:38 | 1:22 |

SPOKANE, WASHINGTON 47°37'N-117°39'W FAIRCHILD AFB (KSKA)

Amdt 5 24MAY18

ILS or LOC RWY 5



NW-1, 05 NOV 2020 to 31 DEC 2020

19339

SPOKANE, WASHINGTON

# ILS or LOC RWY 23

| LOC I-SKA | APCH CRS | Rwy ldg 13,899 TDZE 2423 Arpt Elev 2462 |
|---|---|---|
| 110.3 | 231° | |

AL-553 [USAF]

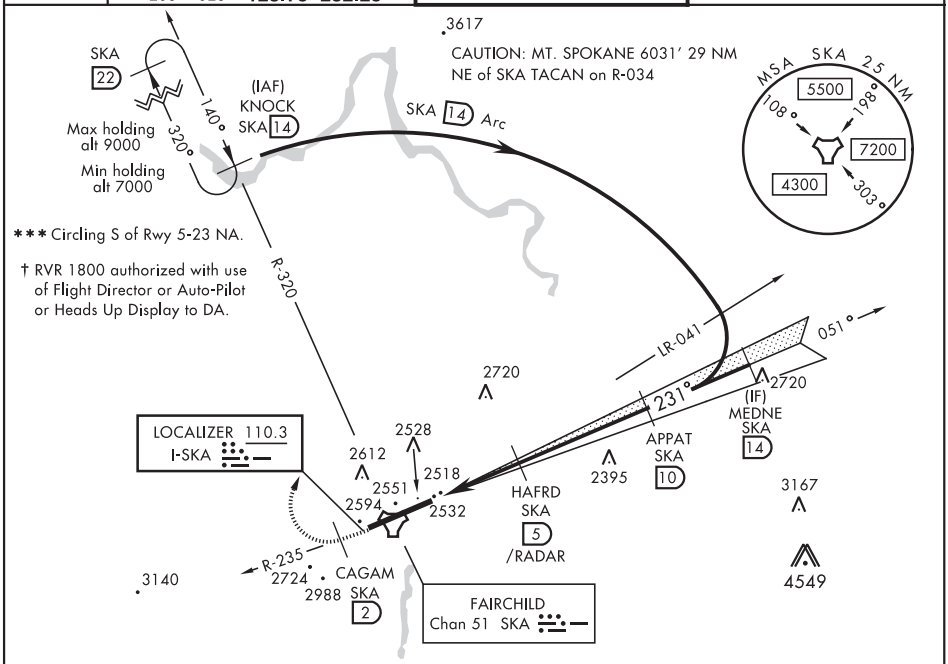
FAIRCHILD AFB (KSKA)

T * When ALS inop, increase RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT ABCDE RVR to 55 and vis to 1 mile.

ALSF-1 A1

MISSED APPROACH: Climb to 7000 via SKA R-235. At SKA 2 DME, turn right heading 340° to intcp SKA R-320 to KNOCK and hold, continue climb in hold to 7000.

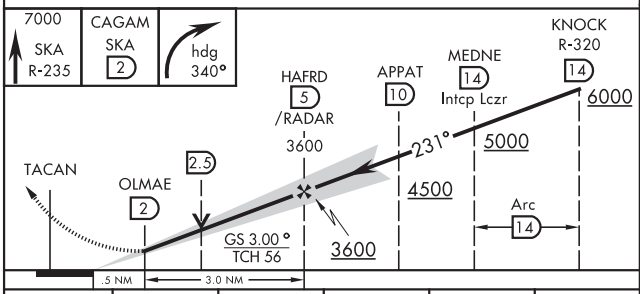
| ATIS | SPOKANE APP CON | FAIRCHILD TOWER | GND CON |
|---|---|---|---|
| 257.625 | 029°- 207° 133.35 263.0<br>208°- 028° 123.75 282.25 | 120.35 233.7 | 123.6 275.8 |



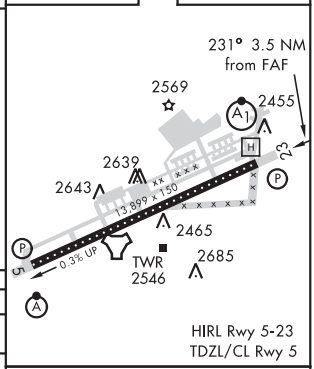

## RADAR or DME REQUIRED

EMERG SAFE ALT 100 NM 10,900

| 7000 SKA R-235 | CAGAM SKA 2 | hdg 340° |
|---|---|---|




ELEV 2462 TDZE 2423




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-ILS 23 * † | 2623/24 200 (200-½) | | | | |
| S-LOC 23 ** | 2800/24 377 (400-½) | | 2800/35 377 (400-⅝) | | |
| C CIRCLING *** | 2900-1 438 (500-1) | 2920-1 458 (500-1) | 3040-1½ 578 (600-1½) | 3040-2 578 (600-2) | 3500-3 1038(1100-3) |

| FAF to MAP 3.0 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 3:00 | 2:00 | 1:30 | 1:12 | 1:00 |

SPOKANE, WASHINGTON 47°37′N-117°39′W FAIRCHILD AFB (KSKA)

Amdt 3 24MAY18

ILS or LOC RWY 23


NW-1, 05 NOV 2020 to 31 DEC 2020

SPOKANE, WASHINGTON

# ILS RWY 5 (CAT II)

| LOC I-FRC | APCH CRS | Rwy ldg 13,899 TDZE 2462 Arpt Elev 2462 |
|---|---|---|
| 110.3 | 051° | |

AL-553 [USAF]

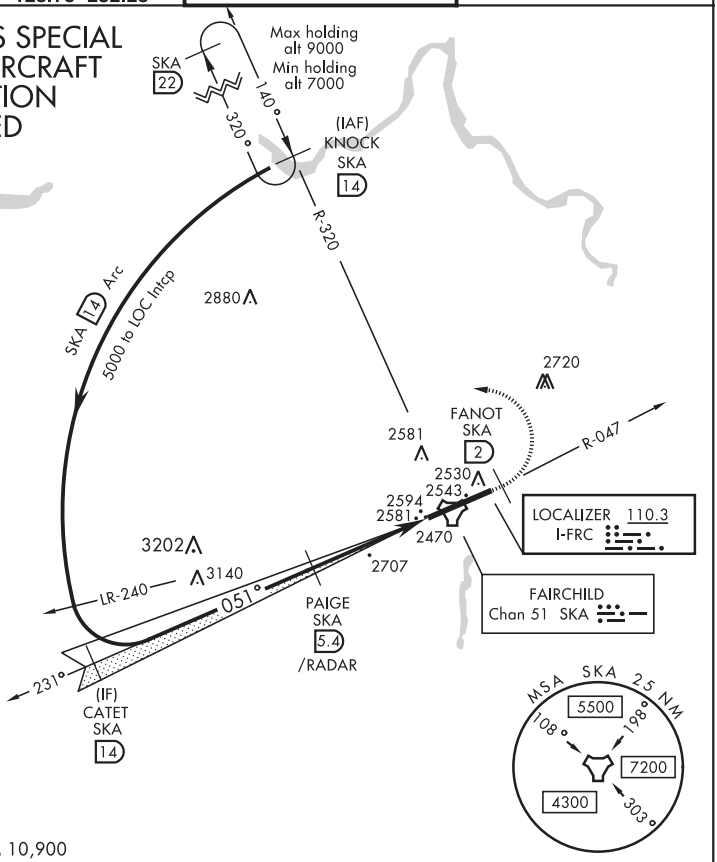
FAIRCHILD AFB (KSKA)

ALSF-2

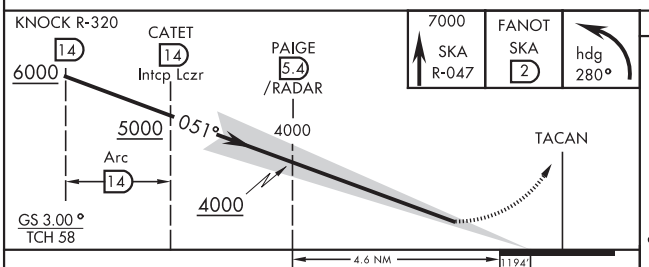
MISSED APPROACH: Climb to 7000 via SKA TACAN R-047. At SKA 2 DME turn left hdg 280° to intcp SKA R-320 to KNOCK and hold, continue climb in hold to 7000.

| ATIS | SPOKANE APP CON | FAIRCHILD TOWER | GND CON |
|---|---|---|---|
| 257.625 | 029°- 207° 133.35 263.0<br>208°- 028° 123.75 282.25 | 120.35 233.7 | 123.6 275.8 |

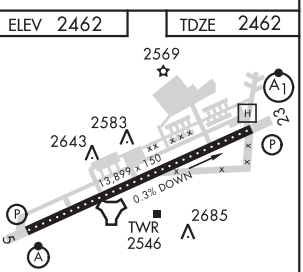
CATEGORY II ILS SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED




EMERG SAFE ALT 100 NM 10,900




ELEV 2462 TDZE 2462




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-ILS 5 | RA 107/12 | 108 | DA 2570 | | |

HIRL Rwy 5-23
TDZL/CL Rwy 5

SPOKANE, WASHINGTON 47°37'N-117°39'W FAIRCHILD AFB (KSKA)

Amdt 1 24MAY18

ILS RWY 5 (CAT II)

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

18144

SPOKANE, WASHINGTON

# RNAV (GPS) RWY 5

| APCH CRS | Rwy ldg | 13,899 |
|---|---|---|
| 051° | TDZE | 2462 |
| | Arpt Elev | 2462 |

AL-553 (USAF)

FAIRCHILD AFB (KSKA)

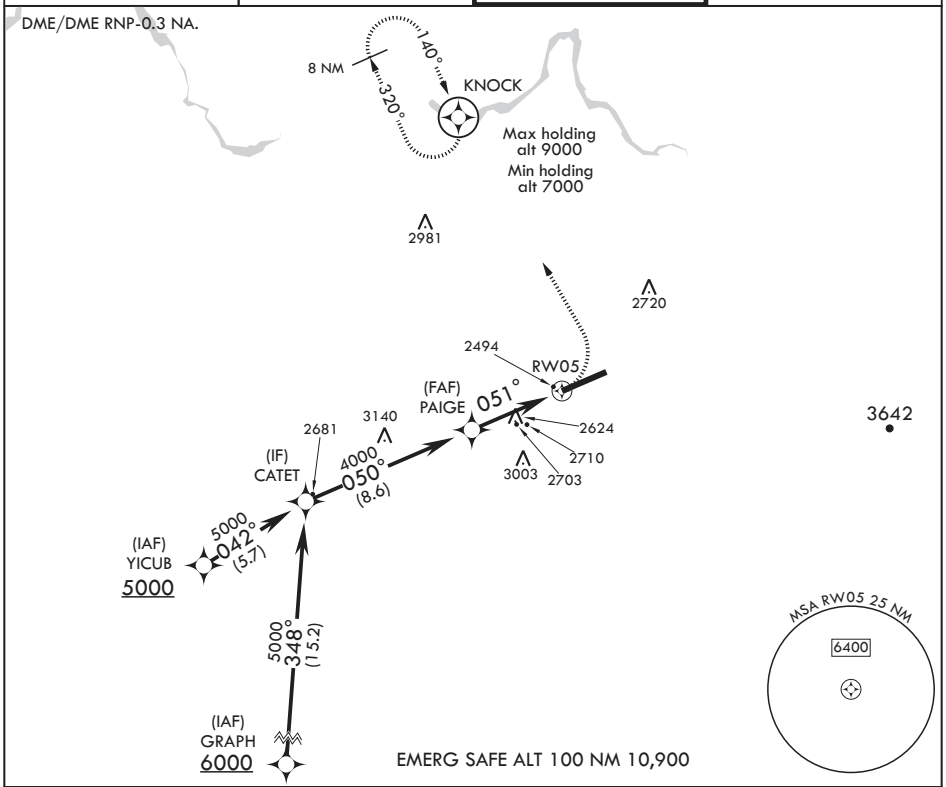
* When ALS inop, increase CAT A RVR to 55, vis to 1 mile, CAT B RVR to 60, vis to 1 1/4 miles, and CAT CDE vis to 2 1/2 miles.
** Circling not authorized S of Rwy 5-23.

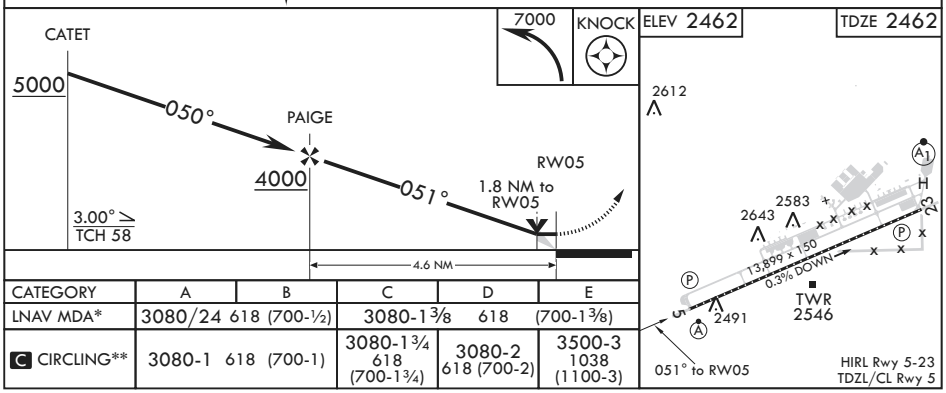
ALSF-2

MISSED APPROACH: Climb to 7000 via left turn direct KNOCK and hold, continue climb in hold to 7000.

| ATIS | SPOKANE APP CON | TOWER | GND CON |
|---|---|---|---|
| 257.625 | 123.75 282.25 208°-028°<br>133.35 263.0 029°-207° | 120.35 233.7 | 123.6 275.8 |

DME/DME RNP-0.3 NA.




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| LNAV MDA* | 3080/24 618 (700-½) | | 3080-1⅜ 618 (700-1⅜) | | |
| C CIRCLING** | 3080-1 618 (700-1) | | 3080-1¾ 618 (700-1¾) | 3080-2 618 (700-2) | 3500-3 1038 (1100-3) |




NW-1, 05 NOV 2020 to 31 DEC 2020

SPOKANE, WASHINGTON

# RNAV (GPS) RWY 23

| APCH CRS | Rwy ldg | 13,899 |
|---|---|---|
| 231° | TDZE | 2423 |
| | Arpt Elev | 2462 |

AL-553 (USAF)

FAIRCHILD AFB (KSKA)

* When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile, CAT CDE vis to 1 1/4 miles.
** Circling S of Rwy 5-23 NA.

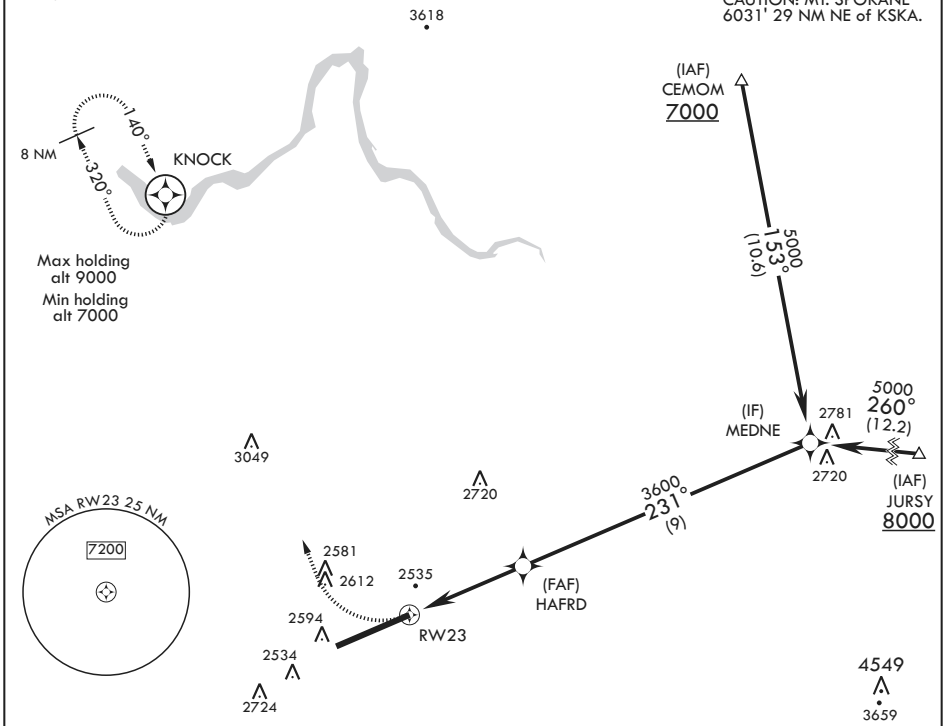
ALSF-1

MISSED APPROACH: Climb to 7000 via right turn direct to KNOCK and hold, continue climb in hold to 7000.

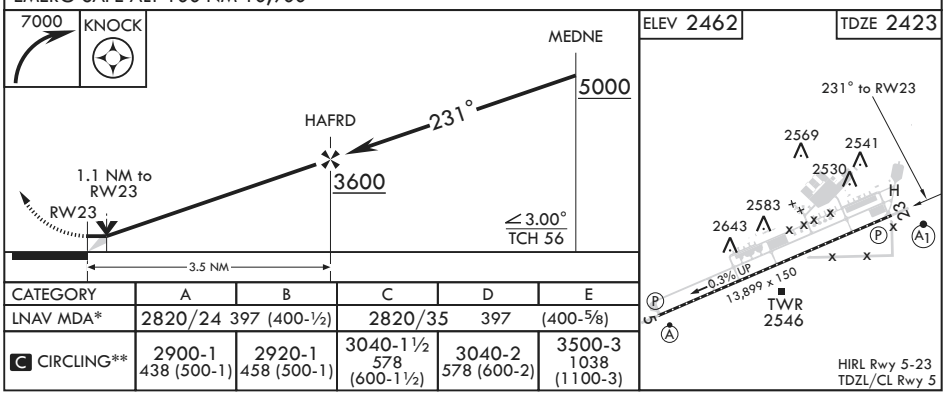
| ATIS | SPOKANE APP CON | TOWER | GND CON |
|---|---|---|---|
| 257.625 | 123.75 282.25 208°-028°<br>133.35 263.0 029°-207° | 120.35 233.7 | 123.6 275.8 |

DME/DME RNP-0.3 NA.

CAUTION: MT. SPOKANE 6031' 29 NM NE of KSKA.




EMERG SAFE ALT 100 NM 10,900




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| LNAV MDA* | 2820/24 397 (400-½) | | 2820/35 397 (400-⅝) | | |
| C CIRCLING** | 2900-1 438 (500-1) | 2920-1 458 (500-1) | 3040-1½ 578 (600-1½) | 3040-2 578 (600-2) | 3500-3 1038 (1100-3) |

SPOKANE, WASHINGTON

47°37'N - 117°39'W

FAIRCHILD AFB (KSKA)

Amdt 1 24MAY18

RNAV (GPS) RWY 23



NW-1, 05 NOV 2020 to 31 DEC 2020

19339

SPOKANE, WASHINGTON

# TACAN RWY 5

| TACAN SKA Chan 51 | APCH CRS 060° | Rwy ldg 13,899 TDZE 2462 Arpt Elev 2462 |
|---|---|---|

AL-553 [USAF]

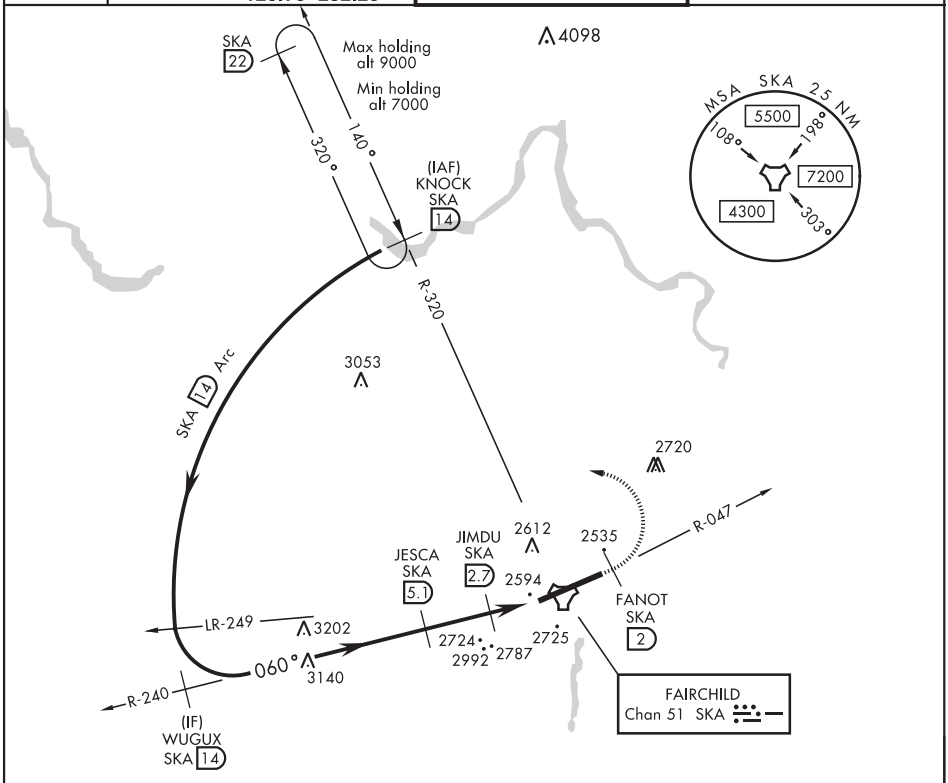
FAIRCHILD AFB (KSKA)

T * When ALS inop, increase CAT AB RVR to 55, vis to 1 mile, CAT CDE vis to 1⅝ miles.
** Circling S of Rwy 5-23 NA.

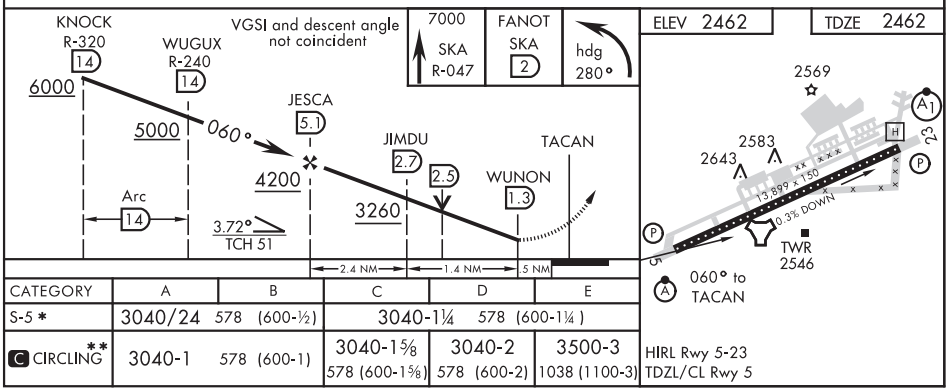
ALSF-2

MISSED APPROACH: Climb to 7000 via SKA TACAN R-047. At SKA 2 DME turn left hdg 280° to intcp SKA R-320 to KNOCK and hold, continue climb in hold to 7000.

| ATIS | SPOKANE APP CON | FAIRCHILD TOWER | GND CON |
|---|---|---|---|
| 257.625 | 029°- 207° 133.35 263.0<br>208°- 028° 123.75 282.25 | 120.35 233.7 | 123.6 275.8 |




EMERG SAFE ALT 100 NM 10,900




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-5 * | 3040/24 578 (600-½) | | 3040-1¼ 578 (600-1¼) | | |
| C CIRCLING ** | 3040-1 578 (600-1) | | 3040-1⅝ 578 (600-1⅝) | 3040-2 578 (600-2) | 3500-3 1038 (1100-3) |

HIRL Rwy 5-23
TDZL/CL Rwy 5

SPOKANE, WASHINGTON 47°37'N-117°39'W FAIRCHILD AFB (KSKA)

Amdt 4 24MAY18

# TACAN RWY 5


NW-1, 05 NOV 2020 to 31 DEC 2020

SPOKANE, WASHINGTON

# TACAN RWY 23

| TACAN SKA Chan 51 | APCH CRS 228° | Rwy ldg 13,899<br>TDZE 2423<br>Arpt Elev 2462 |
|---|---|---|

AL-553 [USAF]

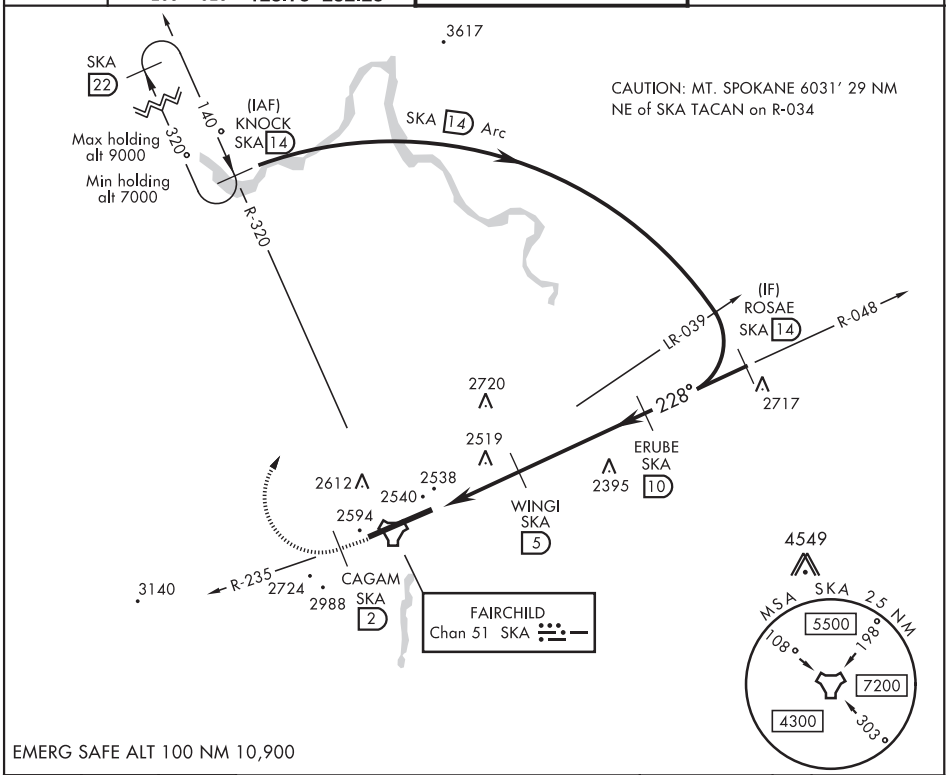
FAIRCHILD AFB (KSKA)

T * When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile, CAT CDE RVR to 60, vis to 1⅛ miles.
** Circling S of Rwy 5-23 NA.

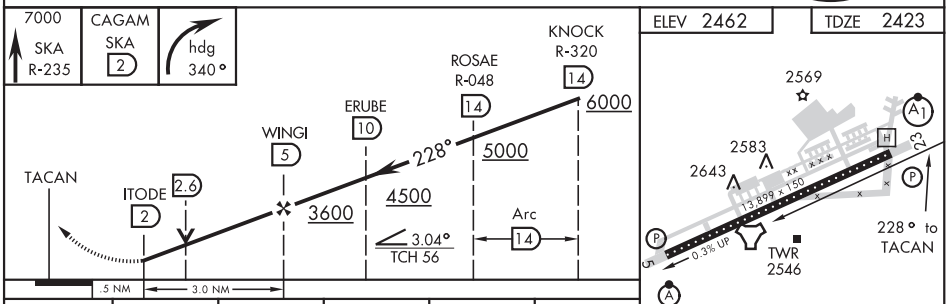
ALSF-1 (A1)

MISSED APPROACH: Climb to 7000 via SKA TACAN R-235. At SKA 2 DME, turn right heading 340° to intcp SKA R-320 to KNOCK and hold, continue climb in hold to 7000.

| ATIS | SPOKANE APP CON | FAIRCHILD TOWER | GND CON |
|---|---|---|---|
| 257.625 | 029°- 207° 133.35 263.0<br>208°- 028° 123.75 282.25 | 120.35 233.7 | 123.6 275.8 |




EMERG SAFE ALT 100 NM 10,900




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-23 * | 2820/24 397 (400-½) | | 2820/35 397 (400-⅝) | | |
| C CIRCLING ** | 2900-1<br>438 (500-1) | 2920-1<br>458 (500-1) | 3040-1½<br>578 (600-1½) | 3040-2<br>578 (600-2) | 3500-3<br>1038(1100-3) |

HIRL Rwy 5-23
TDZL/CL Rwy 5

SPOKANE, WASHINGTON 47°37′N-117°39′W FAIRCHILD AFB (KSKA)

Amdt 3 24MAY18

TACAN RWY 23



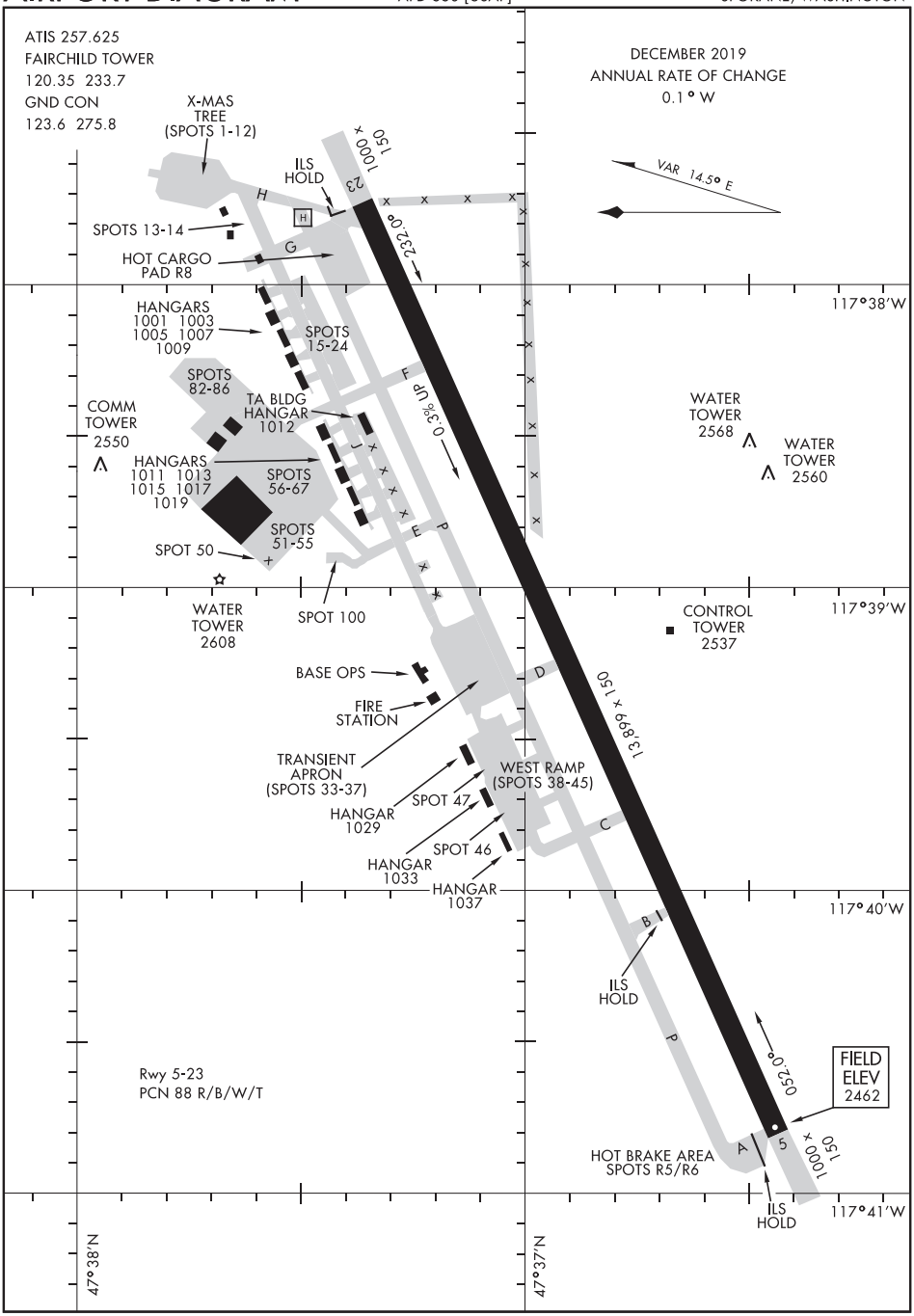
NW-1, 05 NOV 2020 to 31 DEC 2020

19339

# AIRPORT DIAGRAM

AFD-553 [USAF]

FAIRCHILD AFB (KSKA)
SPOKANE, WASHINGTON




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM

SPOKANE, WASHINGTON
FAIRCHILD AFB (KSKA)

| WAAS CH 78125 W27A | APP CRS 268° | Rwy ldg 4799<br>TDZE 2728<br>Apt Elev 2729 |
|---|---|---|

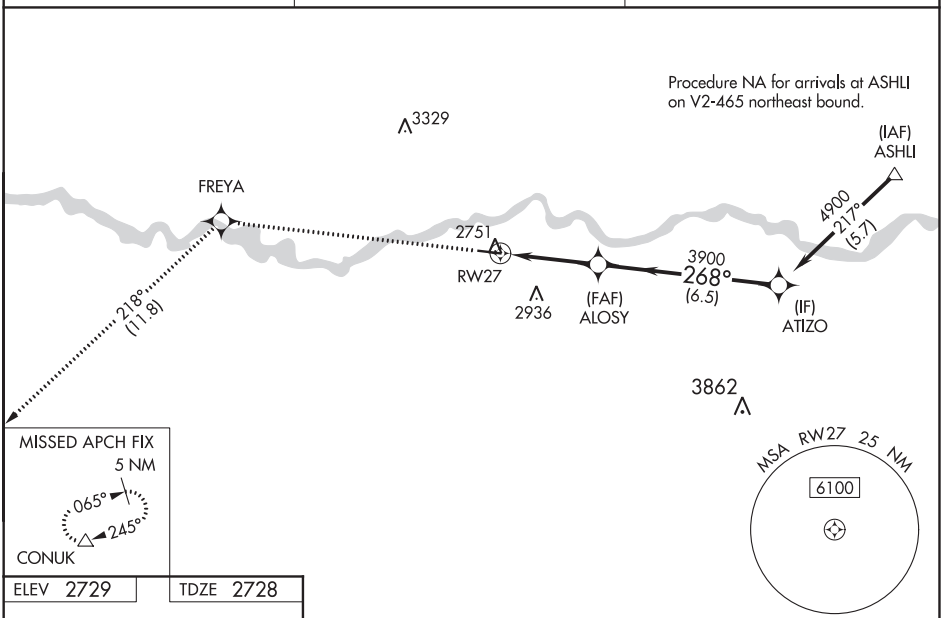
# RNAV (GPS) RWY 27
## TILLITT FIELD (1S3)

T NA

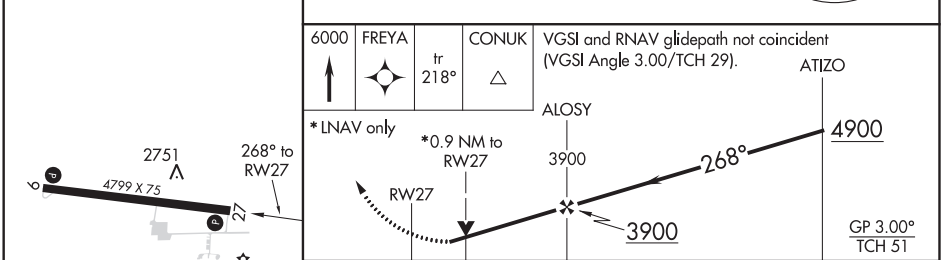
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 53°C (128°F). DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Miles City altimeter setting: increase LPV and LNAV/VNAV DA to 3066 and all visibilities ⅛ mile. Increase all MDA 100 feet and all Cat C and D visibilities ¼ mile. VDP and Baro-VNAV NA when using Miles City altimeter setting.

MISSED APPROACH: Climb to 6000 direct FREYA and on track 218° to CONUK and hold.

| AWOS-AV | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 122.8 | 126.85 305.2 | 122.8 (CTAF) L |




| ELEV 2729 | TDZE 2728 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2978-1 250 (300-1) | | | |
| LNAV/VNAV DA | 2978-1 250 (300-1) | | | |
| LNAV MDA | 3040-1 312 (400-1) | | | |
| C CIRCLING | 3160-1 431 (500-1) | 3320-1 591 (600-1) | 3340-1¾ 611 (700-1¾) | 3700-3 971 (1000-3) |

MIRL Rwy 9-27 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

FORT BENTON, MONTANA

AL-10260 (FAA)

18256

# RNAV (GPS) RWY 23

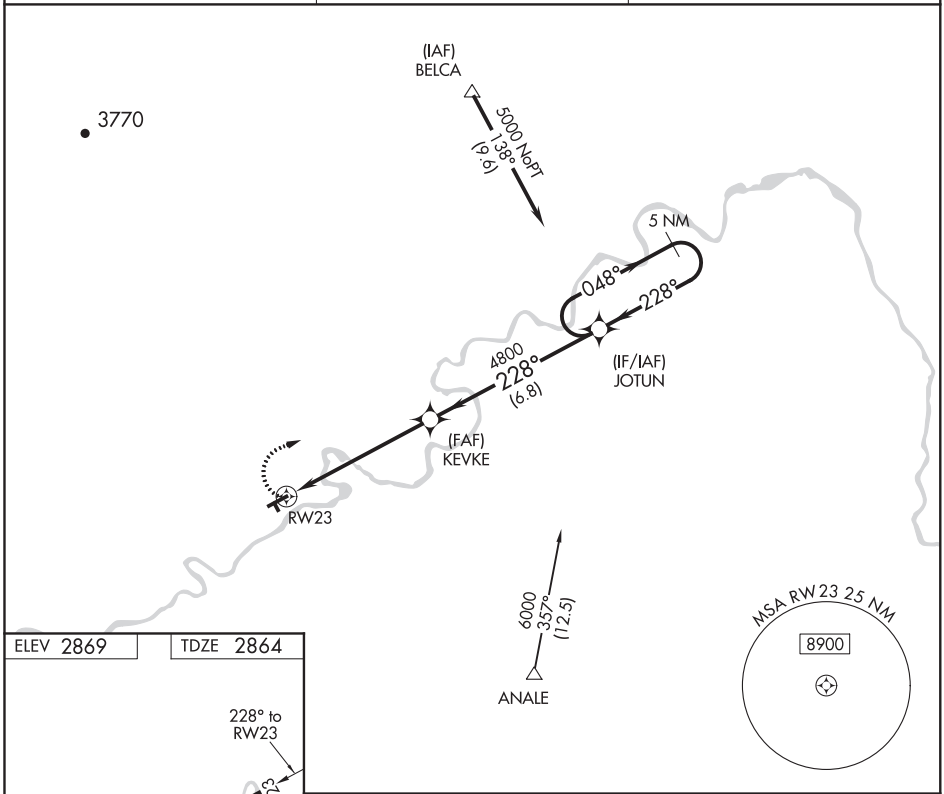
## FORT BENTON (79S)

| APP CRS | Rwy ldg | 4300 |
|---|---|---|
| 228° | TDZE | 2864 |
| | Apt Elev | 2869 |

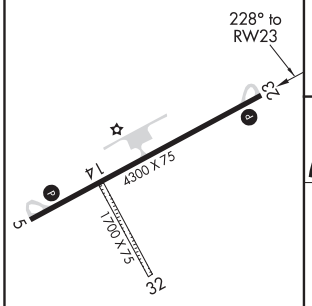
DME/DME RNP-0.3 NA. Procedure NA at night.
When local altimeter setting not received, use Great Falls altimeter setting and increase all MDA 280 feet and all Cat B and C visibilities 1 mile.

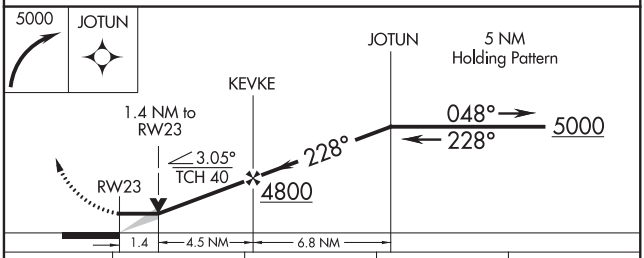
MISSED APPROACH: Climbing right turn to 5000 direct JOTUN and hold.

| AWOS-A | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 122.8 | 133.4 285.4 | 122.8 (CTAF) L |




ELEV 2869 | TDZE 2864




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 3340-1 476 (500-1) | | 3340-1¼ 476 (500-1¼) | NA |
| CIRCLING | 3340-1 471 (500-1) | | 3340-1½ 471 (500-1½) | NA |

MIRL Rwy 5-23 L

| WAAS CH 78234 W22A | APP CRS 224° | Rwy ldg 6404 TDZE 7023 Apt Elev 7038 |
|---|---|---|

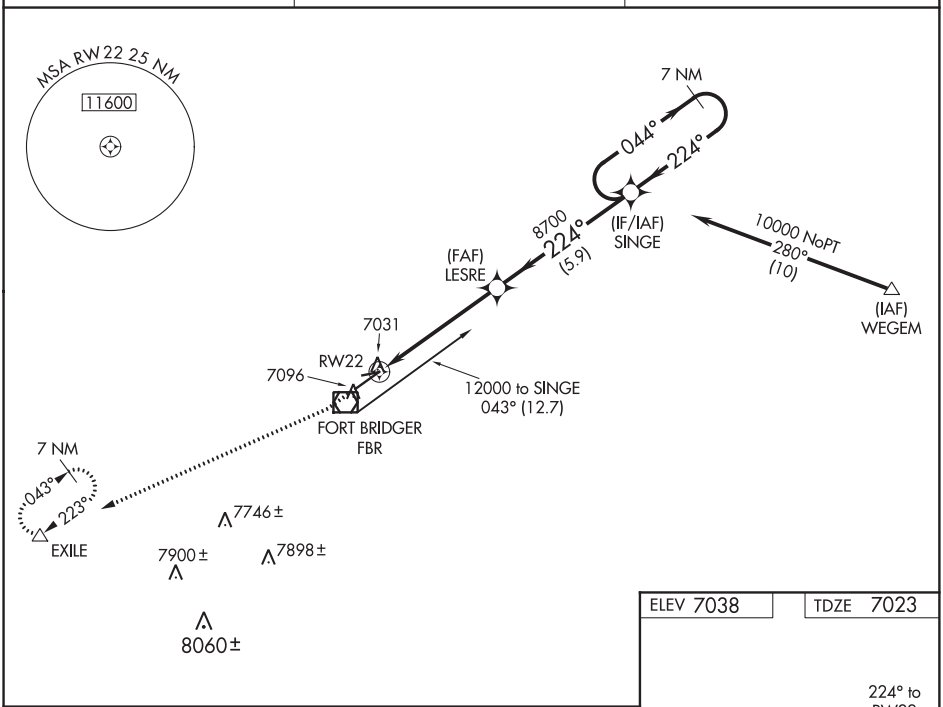
# RNAV (GPS) RWY 22
## FORT BRIDGER (FBR)

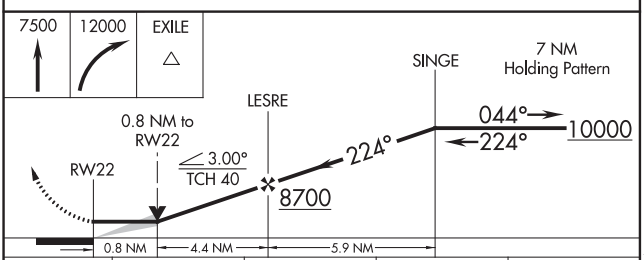
RNP APCH.

T ANA Circling NA to Rwys 7 and 25. When local altimeter setting not received, use Evanston altimeter setting and increase all MDAs 100 feet, increase LNAV Cats C and D visibility ⅛ SM, Circling Cat C visibility ¼ SM and Cat D visibility ½ SM.

MISSED APPROACH: Climb to 7500, then climbing right turn to 12000 direct EXILE and hold, continue climb-in-hold to 12000.

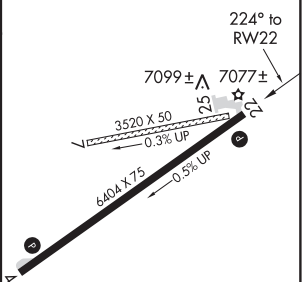
| AWOS-3PT | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 118.8 | 124.35 353.5 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LP MDA | 7300-1 277 (300-1) | | | |
| LNAV MDA | 7340-1 317 (400-1) | | | |
| C CIRCLING | 7400-1 362 (400-1) | 7500-1 462 (500-1) | 7660-1¾ 622 (700-1¾) | 7680-2 642 (700-2) |

ELEV 7038 TDZE 7023




REIL Rwys 4 and 22 L
MIRL Rwy 4-22 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

FORT BRIDGER, WYOMING — AL-148 (FAA) — 20310

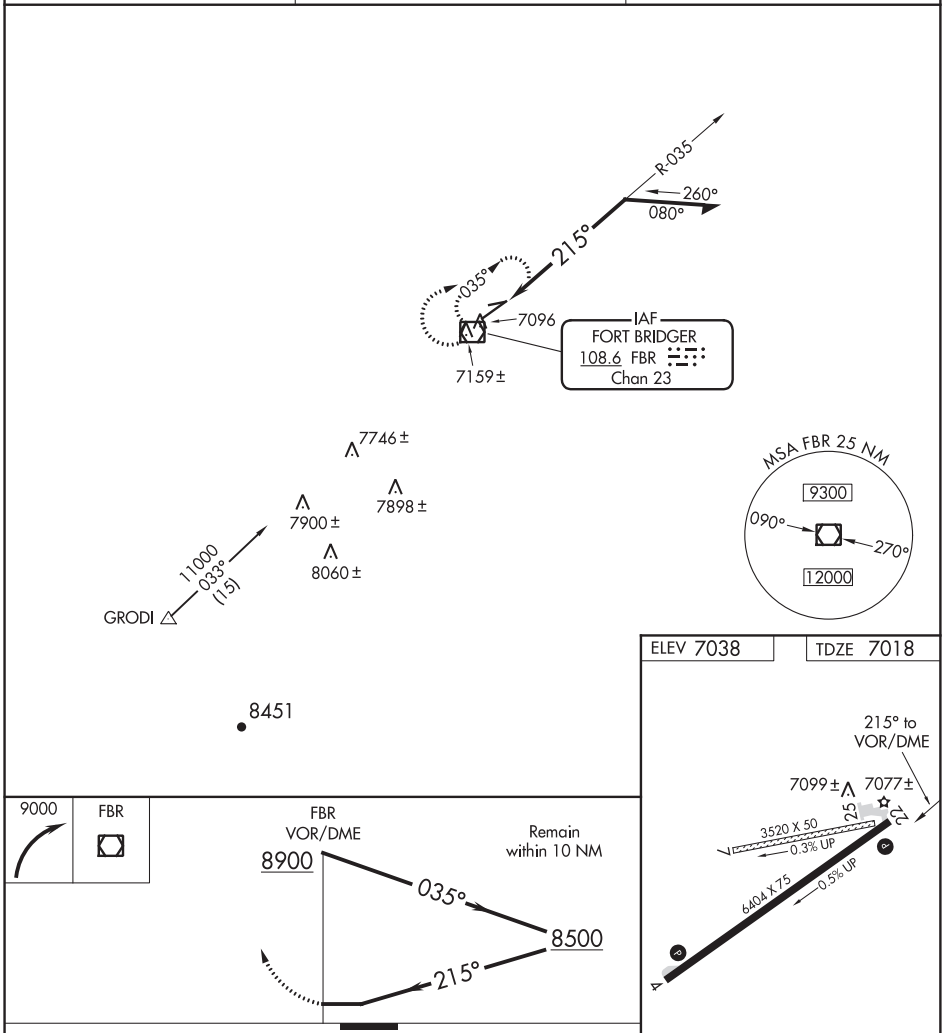
# VOR RWY 22
## FORT BRIDGER (FBR)

| VOR/DME FBR | APP CRS | Rwy ldg | 6404 |
|---|---|---|---|
| 108.6 | 215° | TDZE | 7018 |
| Chan 23 | | Apt Elev | 7038 |

T A NA — Circling NA to Rwys 7 and 25. When local altimeter setting not received, use Evanston altimeter setting and increase all MDAs 100 feet, increase S-22 Cats C and D and Circling Cat C visibility ¼ SM, and Circling Cat D visibility ½ SM.

MISSED APPROACH: Climbing right turn to 9000 in FBR VOR/DME holding pattern.

| AWOS-3PT | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 118.8 | 124.35 353.5 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-22 | 7440-1 422 (500-1) | | 7440-1¼ 422 (500-1¼) | |
| C CIRCLING | 7480-1 442 (500-1) | 7500-1 462 (500-1) | 7660-1¾ 622 (700-1¾) | 7680-2 642 (700-2) |

REIL Rwys 4 and 22 L
MIRL Rwy 4-22 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

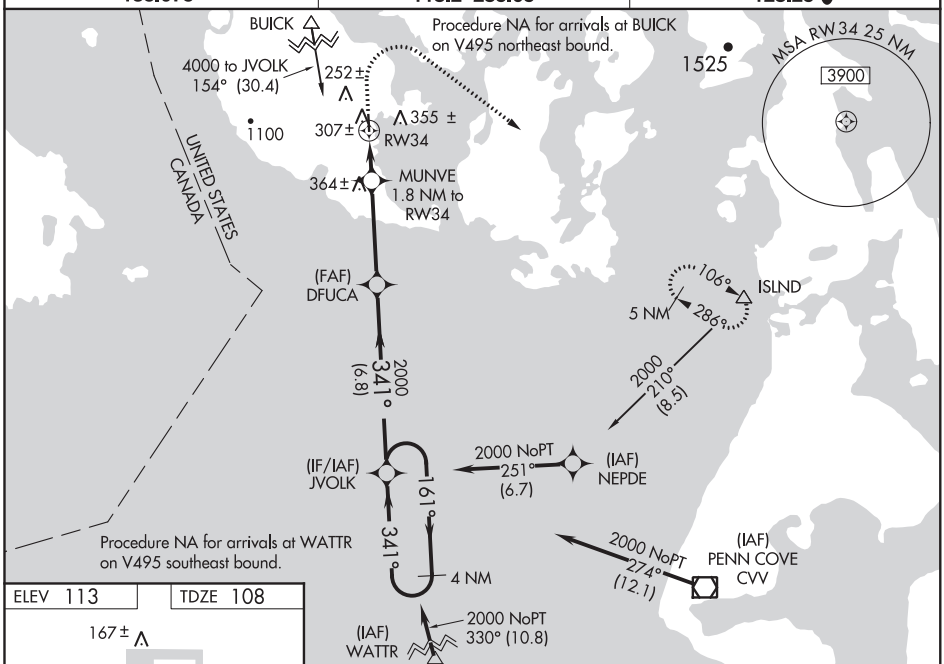
| WAAS CH 40024 W34A | APP CRS 341° | Rwy ldg 3402 TDZE 108 Apt Elev 113 |
|---|---|---|

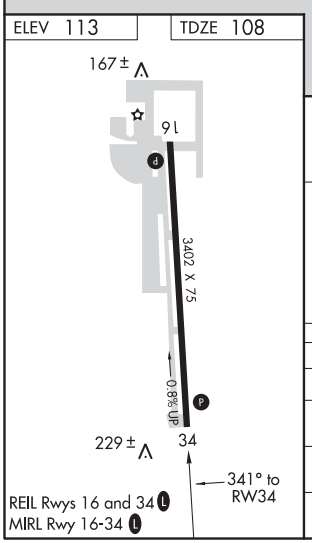
# RNAV (GPS) RWY 34
## FRIDAY HARBOR (FHR)

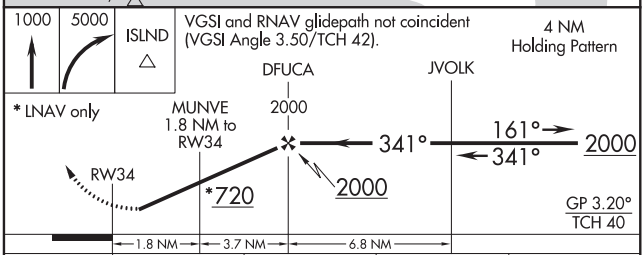
When VGSI inop, Circling Rwy 16 NA at night. Baro-VNAV NA when using Burlington/Mount Vernon altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 43°C (109°F). When VGSI inop, Straight-in/Circling Rwy 34 procedure NA at night. Circling NA west of Rwy 16-34. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use Burlington/Mount Vernon altimeter setting; increase all DA 61 feet and all MDA 80 feet; increase LPV visibility all Cats ¼ mile, LNAV/VNAV visibility all Cats ¼ mile, LNAV visibility Cat C ¼ mile, and Circling visibility Cat C ¼ mile.

MISSED APPROACH: Climb to 1000, then climbing right turn to 5000 direct ISLND and hold, continue climb-in-hold to 5000.

| ASOS | WHIDBEY APP CON | CTAF |
|---|---|---|
| 135.675 | 118.2 285.65 | 128.25 L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 467-1⅛ 359 (400-1⅛) | | | NA |
| LNAV/VNAV DA | 513-1¼ 405 (400-1¼) | | | NA |
| LNAV MDA | 620-1 512 (600-1) | | 620-1½ 512 (600-1½) | NA |
| CIRCLING | 720-1 607 (700-1) | | 820-2 707 (800-2) | NA |


NW-1, 05 NOV 2020 to 31 DEC 2020

FRIDAY HARBOR, WASHINGTON AL-6598 (FAA) 20310

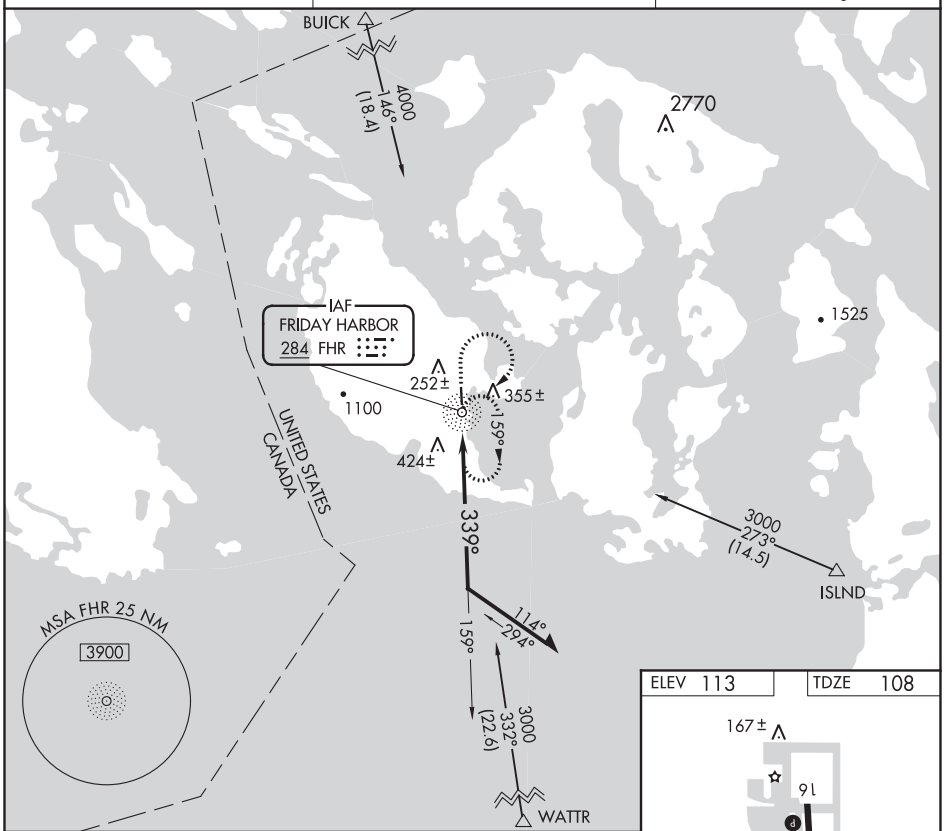
# NDB RWY 34
## FRIDAY HARBOR (FHR)

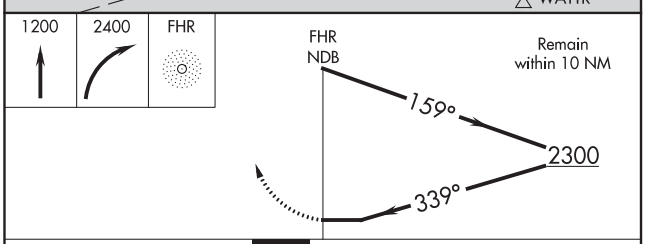
| NDB FHR | APP CRS | Rwy ldg | 3402 |
|---|---|---|---|
| 284 | 339° | TDZE | 108 |
| | | Apt Elev | 113 |

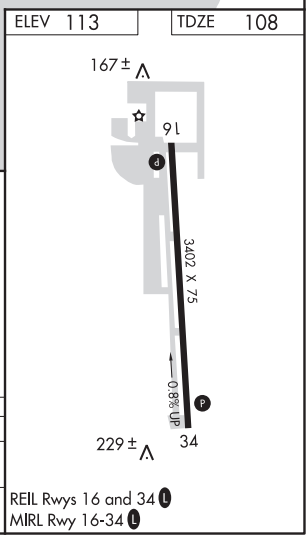
Circling NA west of Rwy 16-34.
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 1200 then climbing right turn to 2400 direct FHR NDB and hold, continue climb-in-hold to 2400.

| ASOS | WHIDBEY APP CON | CTAF |
|---|---|---|
| 135.675 | 118.2 285.65 | 128.25 L |




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

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-34 | 800-1 | 692 (700-1) | 800-2<br>692 (700-2) | NA |
| CIRCLING | 800-1 | 687 (700-1) | 820-2<br>707 (800-2) | NA |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC/DME I-LLT | APP CRS | Rwy ldg | 7500 |
|---|---|---|---|
| 110.1 | 341° | TDZE | 4364 |
| Chan 38 | | Apt Elev | 4364 |

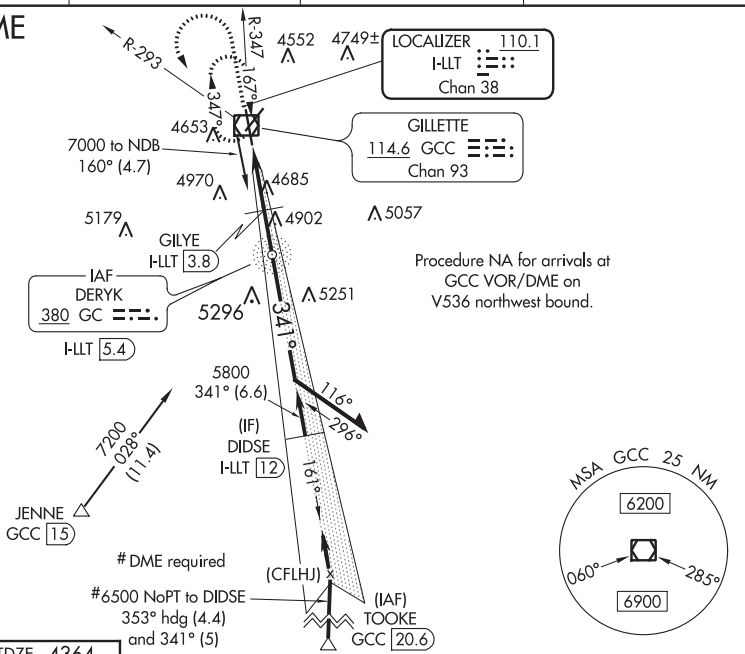
# ILS or LOC RWY 34
## NORTHEAST WYOMING RGNL (GCC)

Circling to Rwy 3 NA at night. ADF or DME required. For inop ALS, increase S-LOC Cat A visibility to 1 SM.

MALSR

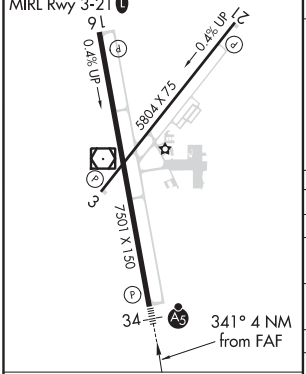
MISSED APPROACH: Climb to 5700 then climbing left turn to 7000 on heading 150° and on GCC VOR/DME R-293 to GCC VOR/DME and hold, continue climb-in-hold to 7000.

| ASOS | DENVER CENTER | UNICOM | CTAF |
|---|---|---|---|
| 124.175 | 135.6 363.025 | 122.95 | 118.5 L |

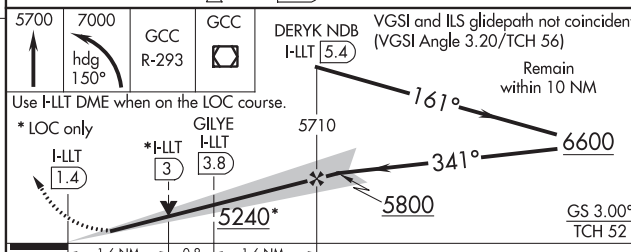



| ELEV 4364 | D | TDZE 4364 |
|---|---|---|

HIRL Rwy 16-34 L
REIL Rwys 3, 16, and 21
MIRL Rwy 3-21 L




| FAF to MAP 4 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 4:00 | 2:40 | 2:00 | 1:36 | 1:20 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 34 | 4564-½ 200 (200-½) | | | |
| S-LOC 34 | 5240-½ 876 (900-½) | 5240-¾ 876 (900-¾) | 5240-2 | 876 (900-2) |
| C CIRCLING | 5240-1¼ | 876 (900-1¼) | 5400-3 | 1036 (1100-3) |
| GILYE FIX MINIMUMS | | | | |
| S-LOC 34 | 4940-½ 576 (600-½) | | 4940-1¼ | 576 (600-1¼) |
| C CIRCLING | 5040-1 676 (700-1) | 5240-1¼ 876 (900-1¼) | 5400-3 | 1036 (1100-3) |


NW-1, 05 NOV 2020 to 31 DEC 2020

GILLETE, WYOMING | AL-5728 (FAA) | 20310

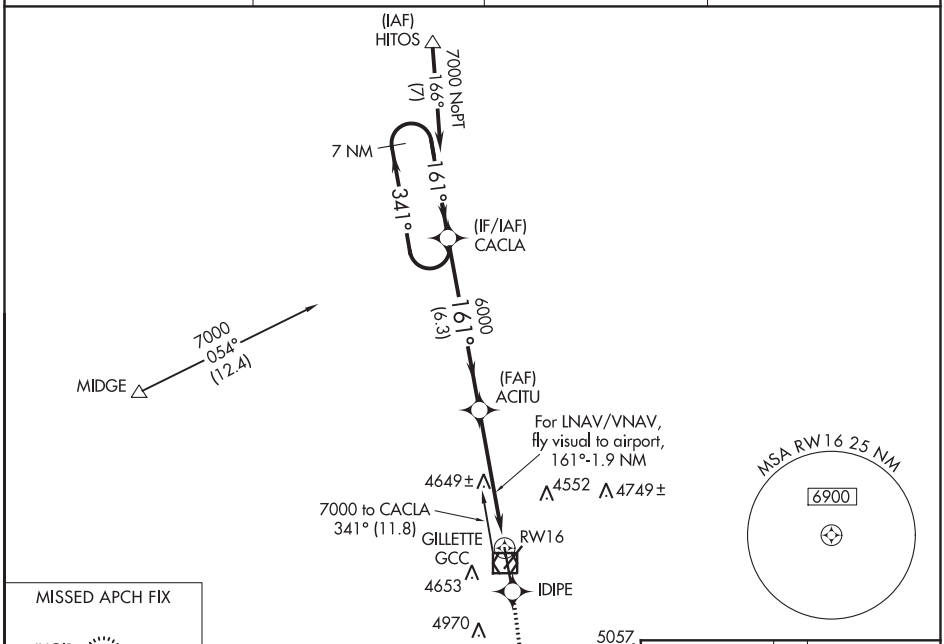
| WAAS CH 86221 W16A | APP CRS 161° | Rwy ldg 7500<br>TDZE 4337<br>Apt Elev 4364 |
|---|---|---|

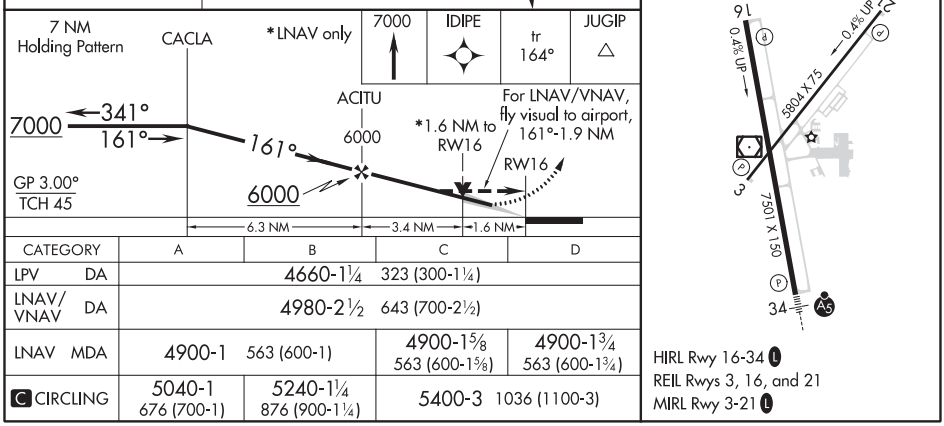
# RNAV (GPS) RWY 16
## NORTHEAST WYOMING RGNL (GCC)

Circling to Rwy 3 NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C (-9°F) or above 54°C (130°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 7000 direct IDIPE and on track 164° to JUGIP and hold.

| ASOS | DENVER CENTER | UNICOM | CTAF |
|---|---|---|---|
| 124.175 | 135.6 363.025 | 122.95 | 118.5 L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4660-1¼ 323 (300-1¼) | | | |
| LNAV/VNAV DA | 4980-2½ 643 (700-2½) | | | |
| LNAV MDA | 4900-1 563 (600-1) | | 4900-1⅝ 563 (600-1⅝) | 4900-1¾ 563 (600-1¾) |
| C CIRCLING | 5040-1 676 (700-1) | 5240-1¼ 876 (900-1¼) | 5400-3 1036 (1100-3) | |

HIRL Rwy 16-34 L
REIL Rwys 3, 16, and 21
MIRL Rwy 3-21 L




NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 86204 W34A | APP CRS 341° | Rwy ldg 7500 TDZE 4364 Apt Elev 4364 |
|---|---|---|

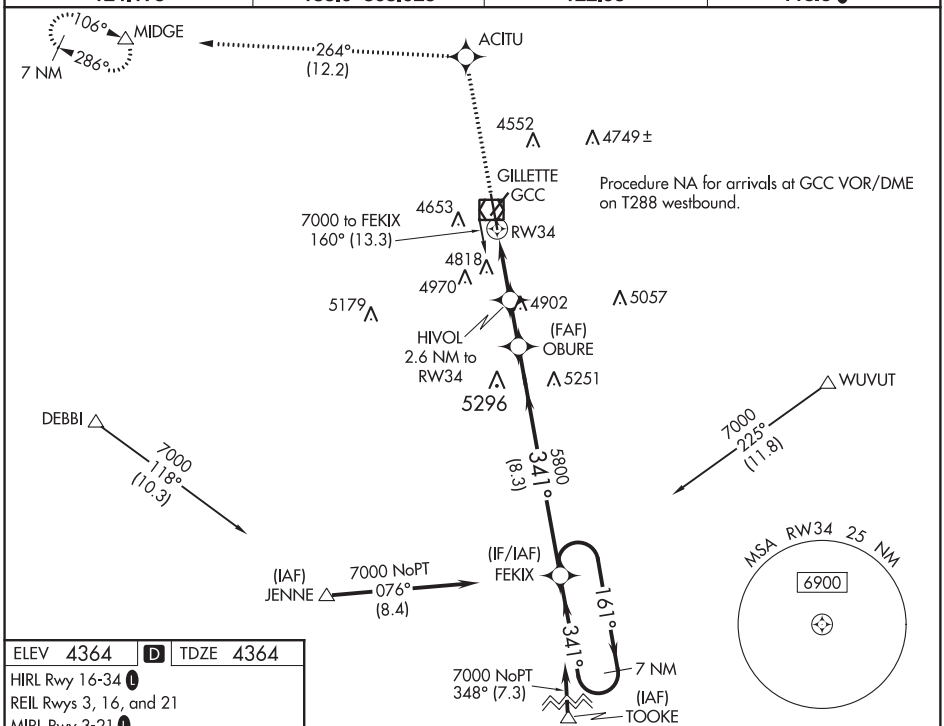
# RNAV (GPS) RWY 34
## NORTHEAST WYOMING RGNL (GCC)

Circling to Rwy 3 NA at night. Inop table does not apply to LPV and LNAV/VNAV. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C (-9°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. For inop ALS, increase LNAV Cat A visibility to 1 SM, Cat C to 2 SM. Rwy 34 helicopter visibility reduction below ¾ SM NA.

MALSR

MISSED APPROACH: Climb to 7000 direct ACITU and on track 264° to MIDGE and hold.

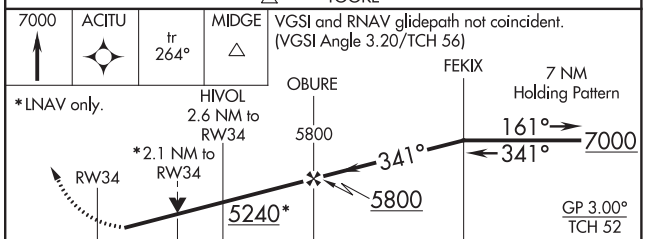
| ASOS | DENVER CENTER | UNICOM | CTAF |
|---|---|---|---|
| 124.175 | 135.6 363.025 | 122.95 | 118.5 L |




| 7000 | ACITU | tr 264° | MIDGE |
|---|---|---|---|

VGSI and RNAV glidepath not coincident. (VGSI Angle 3.20/TCH 56)

*LNAV only.

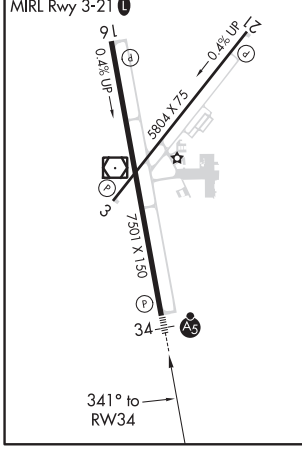



ELEV 4364 | D | TDZE 4364

HIRL Rwy 16-34 L

REIL Rwys 3, 16, and 21

MIRL Rwy 3-21 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4619-¾ 255 (300-¾) | | | |
| LNAV/VNAV DA | 5479-4 1115 (1200-4) | | | |
| LNAV MDA | 5120-¾ 756 (800-¾) | | 5120-1¾ 756 (800-1¾) | 5120-2 756 (800-2) |
| C CIRCLING | 5120-1 756 (800-1) | 5240-1¼ 876 (900-1¼) | 5400-3 1036 (1100-3) | |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

GILLETTE, WYOMING | AL-5728 (FAA) | 20310

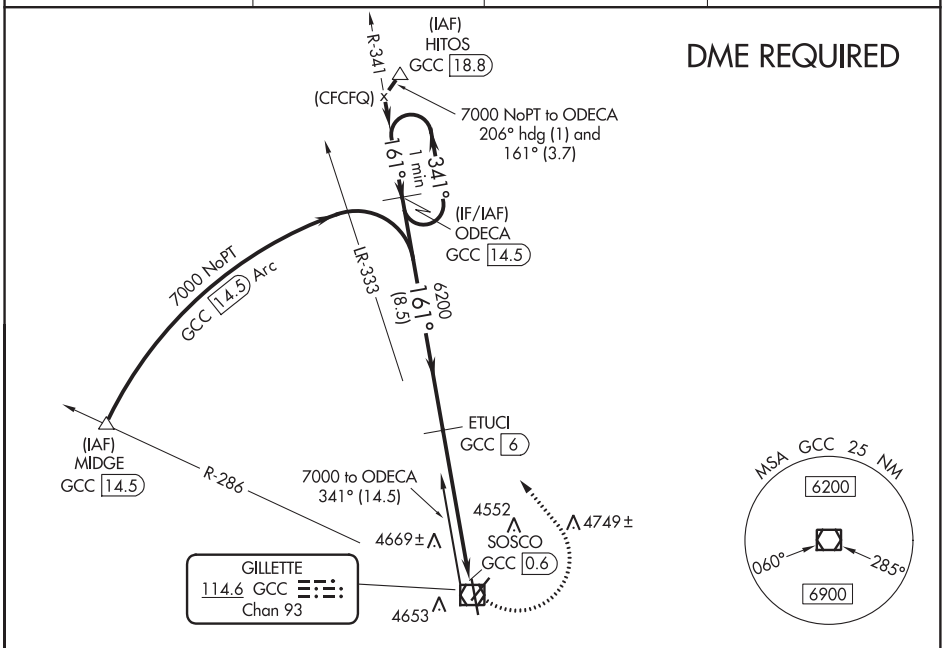
# VOR RWY 16
## NORTHEAST WYOMING RGNL (GCC)

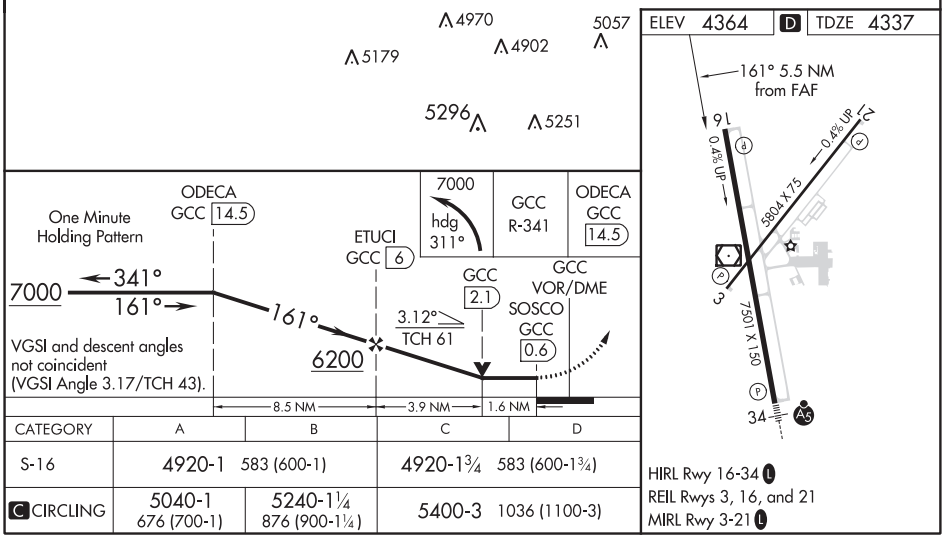
| VOR/DME GCC | APP CRS | Rwy ldg | 7500 |
|---|---|---|---|
| 114.6 | 161° | TDZE | 4337 |
| Chan 93 | | Apt Elev | 4364 |

T A Circling to Rwy 3 NA at night. DME required.
Rwy 16 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climbing left turn to 7000 on heading 311° and GCC R-341 to ODECA/14.5 DME and hold.

| ASOS | DENVER CENTER | UNICOM | CTAF |
|---|---|---|---|
| 124.175 | 135.6 363.025 | 122.95 | 118.5 L |



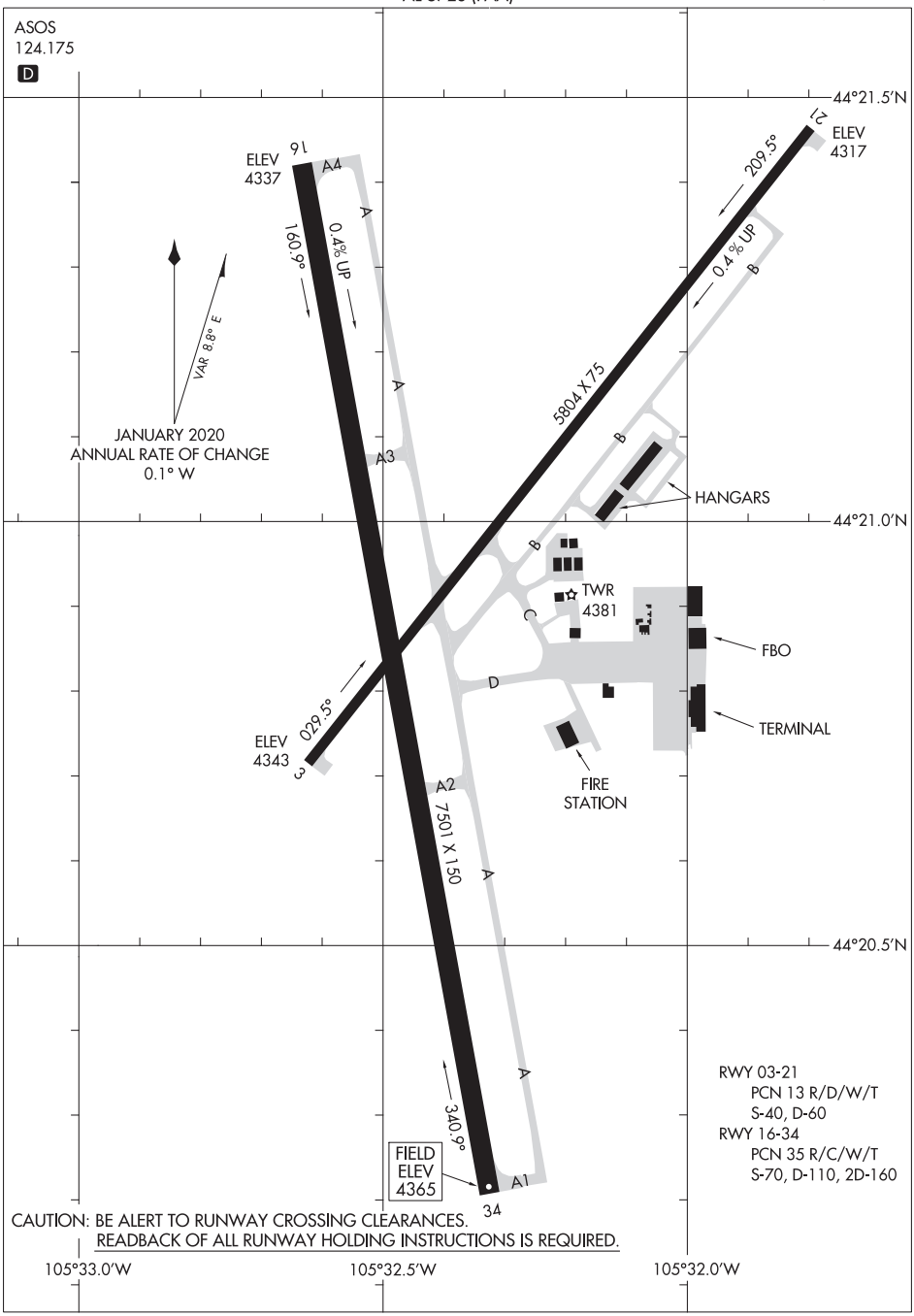

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-16 | 4920-1 583 (600-1) | | 4920-1¾ 583 (600-1¾) | |
| C CIRCLING | 5040-1 676 (700-1) | 5240-1¼ 876 (900-1¼) | 5400-3 1036 (1100-3) | |

HIRL Rwy 16-34 L
REIL Rwys 3, 16, and 21
MIRL Rwy 3-21 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

AL-5728 (FAA)




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

GLASGOW, MONTANA AL-5382 (FAA) 19227

| WAAS CH 93620 W12A | APP CRS 123° | Rwy ldg 5001<br>TDZE 2294<br>Apt Elev 2296 |
|---|---|---|

# RNAV (GPS) RWY 12

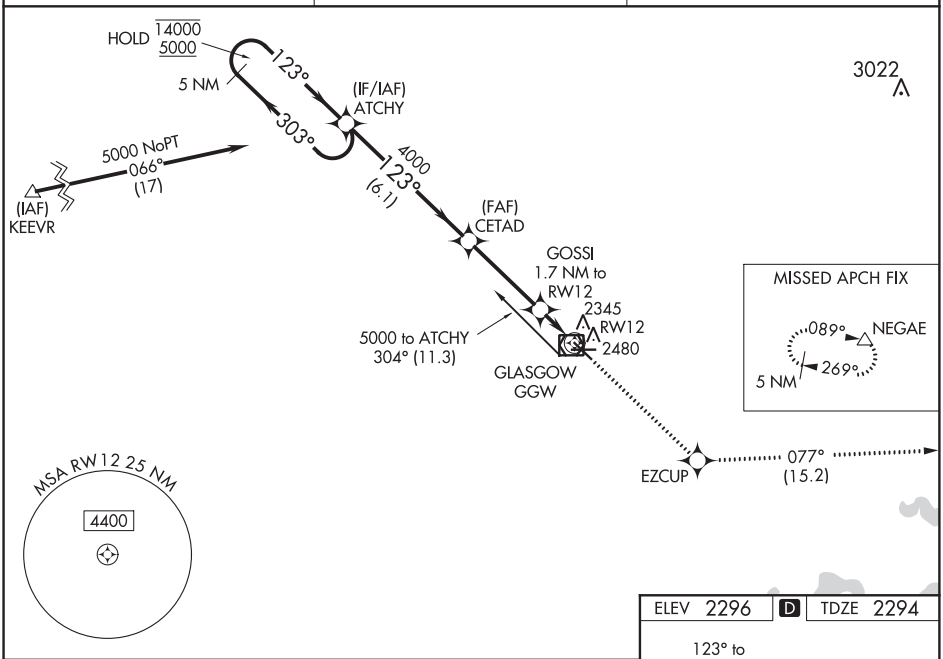
## WOKAL FIELD/GLASGOW-VALLEY COUNTY (GGW)

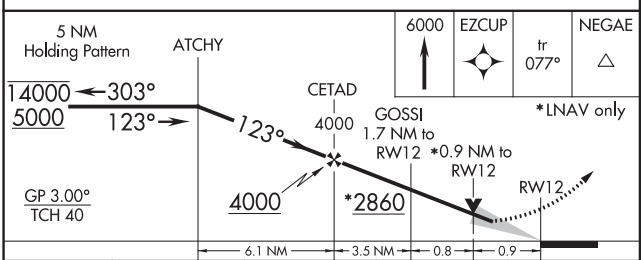
RNP APCH.

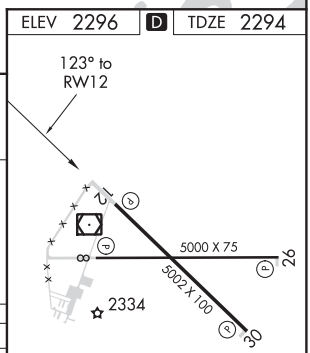
T A For uncompensated Baro-VNAV systems, LNAV-VNAV NA below -14°C or above 54°C. When local altimeter setting not received, use Wolf Point altimeter setting and increase all DA 141 feet and all MDA 160 feet and increase LPV visibility all Cats ½ SM, LNAV/VNAV visibility all Cats ½ SM, LNAV visibility Cats C and D ½ SM, and Circling visibility Cats C and D ¼ SM. Baro-VNAV and VDP NA when using Wolf Point altimeter setting.

MISSED APPROACH: Climb to 6000 direct EZCUP and on track 077° to NEGAE and hold.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.175 | 126.85 305.2 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2544-⅞ 250 (300-⅞) | | | |
| LNAV/VNAV DA | 2587-1 293 (300-1) | | | |
| LNAV MDA | 2600-1 306 (400-1) | | 2600-⅞ 306 (400-⅞) | |
| CIRCLING | 2780-1 484 (500-1) | | 2780-1½ 484 (500-1½) | 2860-2 564 (600-2) |

REIL Rwys 8, 12, 26 and 30 L
MIRL Rwys 8-26 and 12-30 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

GLASGOW, MONTANA
Orig-B 15AUG19

WOKAL FIELD/GLASGOW-VALLEY COUNTY (GGW)
48°13'N-106°37'W
RNAV (GPS) RWY 12

| WAAS CH 99620 W30A | APP CRS 303° | Rwy ldg 5001<br>TDZE 2294<br>Apt Elev 2296 |
|---|---|---|

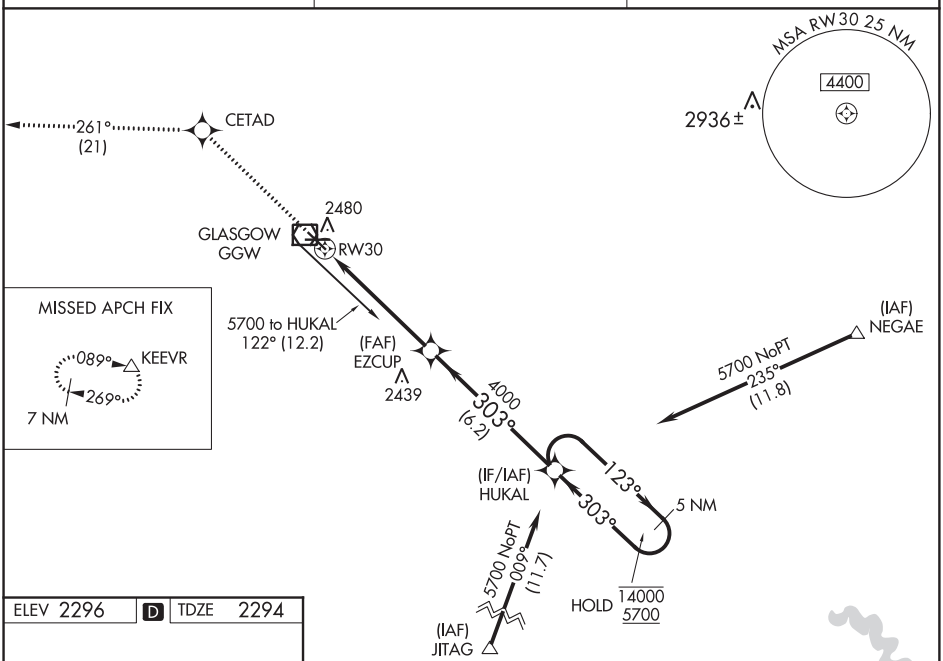
# RNAV (GPS) RWY 30
## WOKAL FIELD/GLASGOW-VALLEY COUNTY (GGW)

RNP APCH.

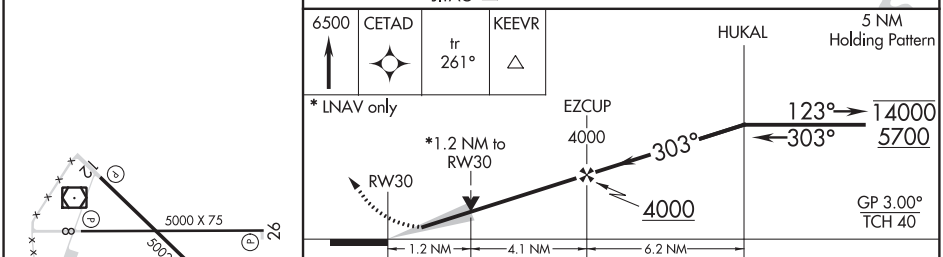
For uncompensated Baro-VNAV systems, LNAV-VNAV NA below -14°C or above 54°C. When local altimeter setting not received, use Wolf Point altimeter setting and increase all DA 141 feet and all MDA 160 feet and increase LPV visibility all Cats ⅜ SM, LNAV/VNAV visibility all Cats ½ SM, LNAV visibility Cats C and D ½ mile, and Circling visibility Cats C and D ¼ SM. Baro-VNAV and VDP NA when using Wolf Point altimeter setting.

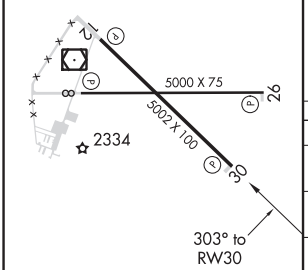
MISSED APPROACH: Climb to 6500 direct CETAD and on track 261° to KEEVR and hold.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.175 | 126.85 305.2 | 122.8 (CTAF) L |




ELEV 2296 | D | TDZE 2294




REIL Rwys 8, 12, 26 and 30 L
MIRL Rwys 8-26 and 12-30 L

| CATEGORY | | A | B | C | D |
|---|---|---|---|---|---|
| LPV | DA | 2494-¾ 200 (200-¾) | | | |
| LNAV/VNAV | DA | 2587-1 293 (300-1) | | | |
| LNAV | MDA | 2700-1 406 (500-1) | | 2700-1⅛ 406 (500-1⅛) | |
| CIRCLING | | 2780-1 484 (500-1) | | 2780-1½ 484 (500-1½) | 2860-2 564 (600-2) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

GLASGOW, MONTANA | AL-5382 (FAA) | 20310

| VOR/DME GGW 113.9 Chan 86 | APP CRS 133° | Rwy ldg 5001<br>TDZE 2294<br>Apt Elev 2296 |
|---|---|---|

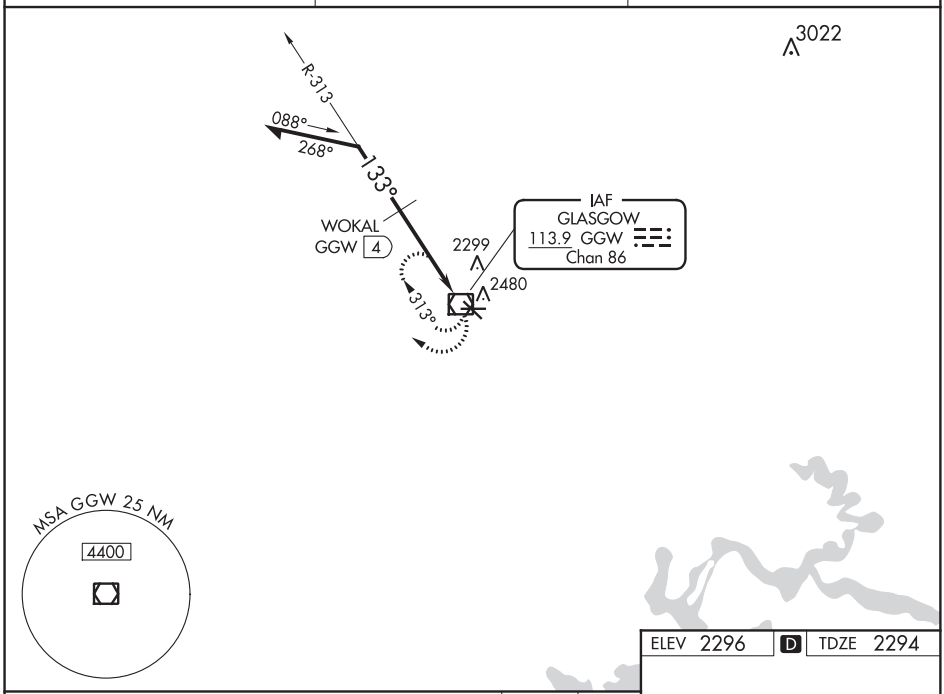
# VOR RWY 12

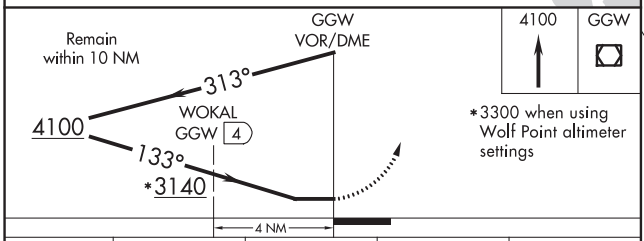
## WOKAL FIELD/GLASGOW-VALLEY COUNTY (GGW)

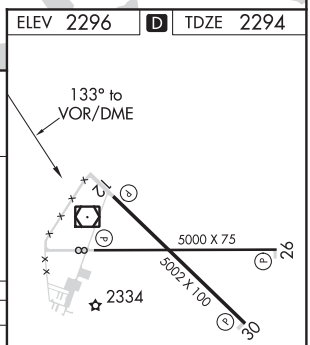
When local altimeter setting not received, use Wolf Point altimeter setting and increase all MDA 160 feet and increase S-12 and Circling visibility Cats A/B/D ¼ SM, Cat C ½ SM and WOKAL fix mins increase all MDAs 160 feet and increase visibility Cats C/D ⅛ SM and Circling Cats C/D ¼ SM.

MISSED APPROACH: Climb to 4100 in GGW VOR/DME holding pattern.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.175 | 126.85 305.2 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-12 | 3140-1<br>846 (900-1) | 3140-1¼<br>846 (900-1¼) | 3140-2½<br>846 (900-2½) | 3140-2¾<br>846 (900-2¾) |
| CIRCLING | 3140-1<br>844 (900-1) | 3140-1¼<br>844 (900-1¼) | 3140-2½<br>844 (900-2½) | 3140-2¾<br>844 (900-2¾) |

| WOKAL FIX MINIMUMS | | | |
|---|---|---|---|
| S-12 | 2700-1 406 (500-1) | 2700-1¼ 406 (500-1¼) | |
| CIRCLING | 2780-1 484 (500-1) | 2780-1½<br>484 (500-1½) | 2860-2<br>564 (600-2) |

REIL Rwys 8, 12, 26 and 30 L
MIRL Rwys 8-26 and 12-30 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

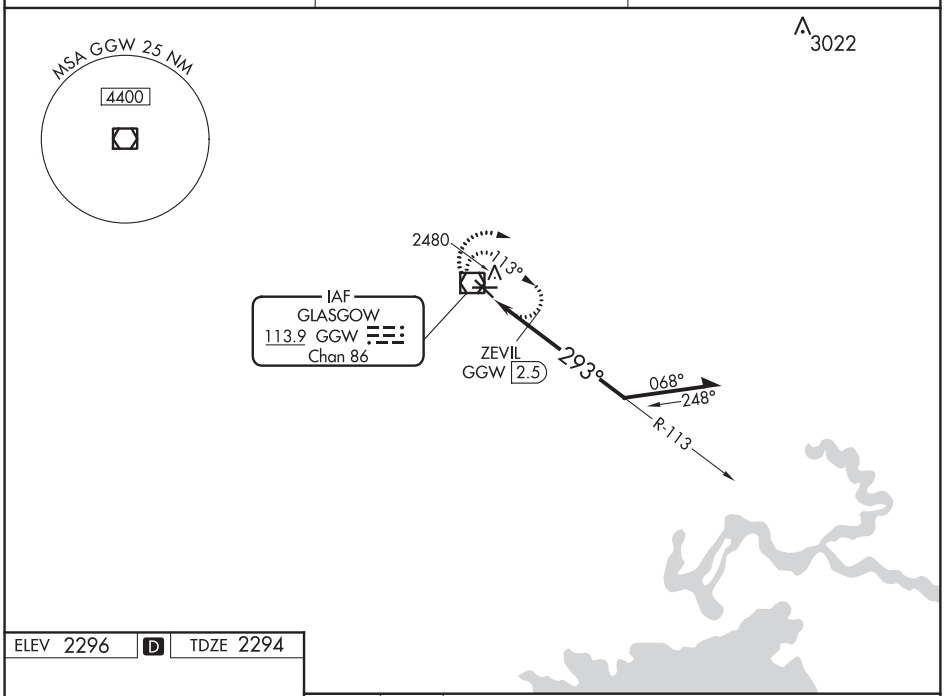
| VOR/DME GGW 113.9 Chan 86 | APP CRS 293° | Rwy ldg 5001<br>TDZE 2294<br>Apt Elev 2296 |
|---|---|---|

# VOR RWY 30
## WOKAL FIELD/GLASGOW-VALLEY COUNTY (GGW)

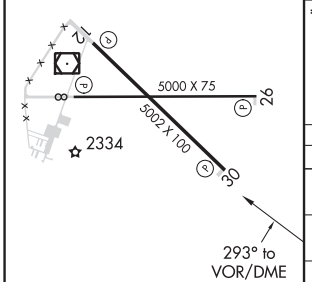
ZEVIL fix Straight-in minimums NA when using Wolf Point altimeter setting. When local altimeter setting not received, use Wolf Point altimeter setting and increase all MDA 160 feet and increase visibilities all Cats ½ SM.

MISSED APPROACH: Climb to 4000 in GGW VOR/DME holding pattern.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.175 | 126.85 305.2 | 122.8 (CTAF) L |



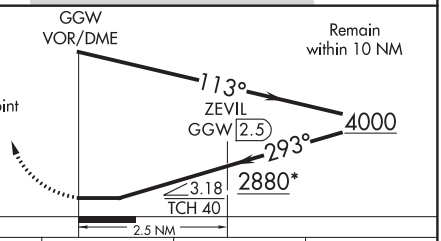

ELEV 2296 D TDZE 2294




REIL Rwys 8, 12, 26 and 30 L
MIRL Rwys 8-26 and 12-30 L

4000 GGW

* 3040 when using Wolf Point altimeter setting.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-30 | 2880-1 | 586 (600-1) | 2880-1¾ | 586 (600-1¾) |
| CIRCLING | 2880-1 | 584 (600-1) | 2880-1¾<br>584 (600-1¾) | 2880-2<br>584 (600-2) |
| ZEVIL FIX MINIMUMS | | | | |
| S-30 | 2740-1 | 446 (500-1) | 2740-1⅜ | 446 (500-1⅜) |
| CIRCLING | 2780-1 | 484 (500-1) | 2780-1½<br>484 (500-1½) | 2860-2<br>564 (600-2) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

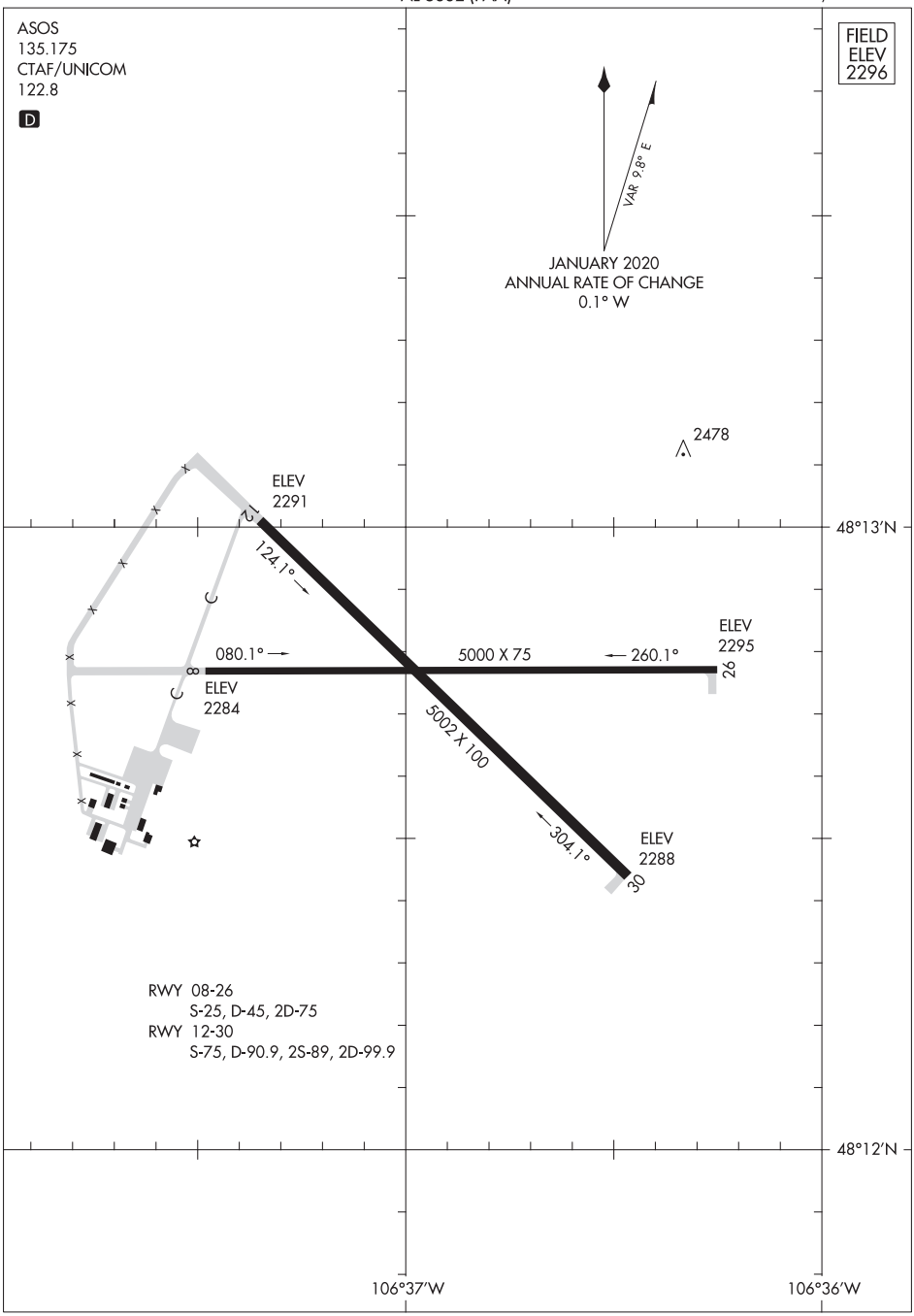
20086

# AIRPORT DIAGRAM

## WOKAL FIELD/GLASGOW-VALLEY COUNTY (GGW)

AL-5382 (FAA)

GLASGOW, MONTANA




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM
20086
WOKAL FIELD/GLASGOW-VALLEY COUNTY (GGW)
GLASGOW, MONTANA

| WAAS CH 40423 W12A | APP CRS 126° | Rwy ldg 5704<br>TDZE 2458<br>Apt Elev 2458 |
|---|---|---|

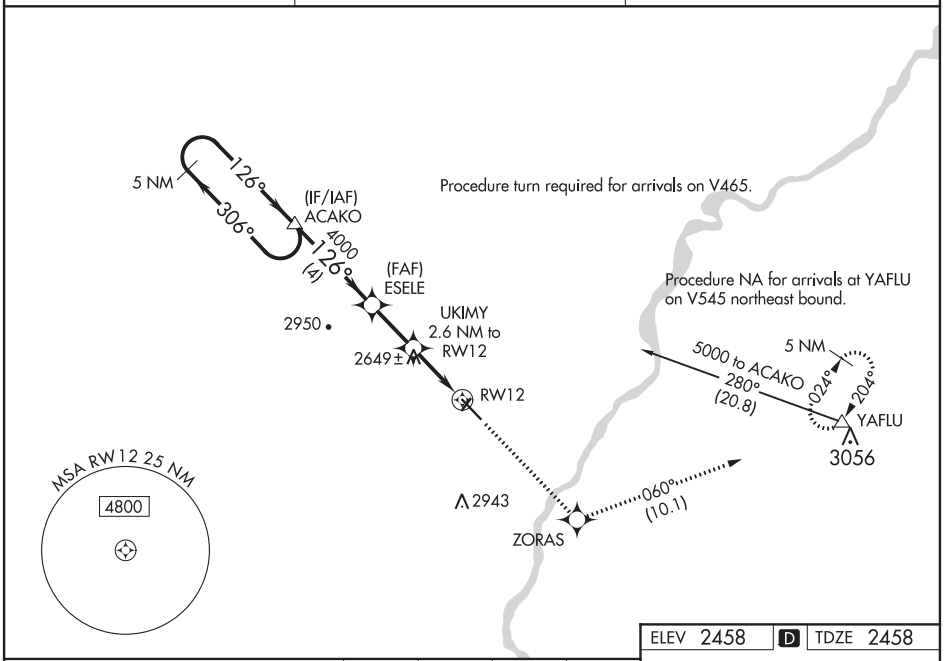
# RNAV (GPS) RWY 12
## DAWSON COMMUNITY (GDV)

RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C or above 28°C. When local altimeter setting not received, procedure NA. Rwy 12 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 6000 direct ZORAS and on track 060° to YAFLU and hold, continue climb-in-hold to 6000.

| AWOS-3PT | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.075 | 126.85 305.2 | 122.8 (CTAF) L |

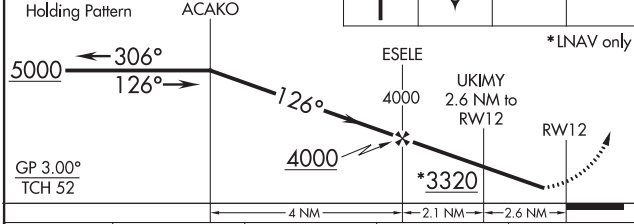


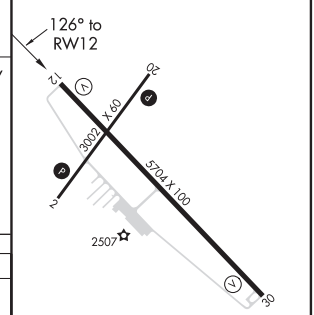

ELEV 2458 D TDZE 2458

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 37).

| 6000 | ZORAS | tr 060° | YAFLU |
|---|---|---|---|

*LNAV only




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2708-1 250 (300-1) | | | |
| LNAV/VNAV DA | 2708-1 250 (300-1) | | | |
| LNAV MDA | 2900-1 442 (500-1) | | 2900-1⅜ 442 (500-1⅜) | |
| CIRCLING | 2900-1 442 (500-1) | 2920-1 462 (500-1) | 2920-1½ 462 (500-1½) | 3020-2 562 (600-2) |

REIL Rwys 12 and 30 L
MIRL Rwys 2-20 and 12-30 L



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

GLENDIVE, MONTANA AL-6078 (FAA) 20086

| WAAS CH 86623 W30A | APP CRS 306° | Rwy ldg 5704<br>TDZE 2456<br>Apt Elev 2458 |
|---|---|---|

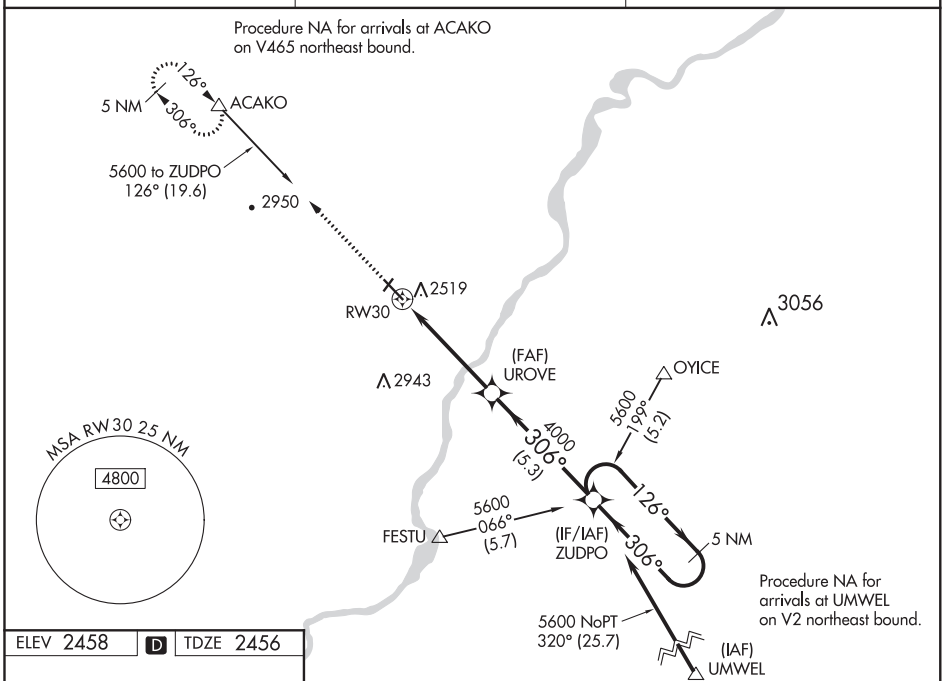
# RNAV (GPS) RWY 30
## DAWSON COMMUNITY (GDV)

RNP APCH.

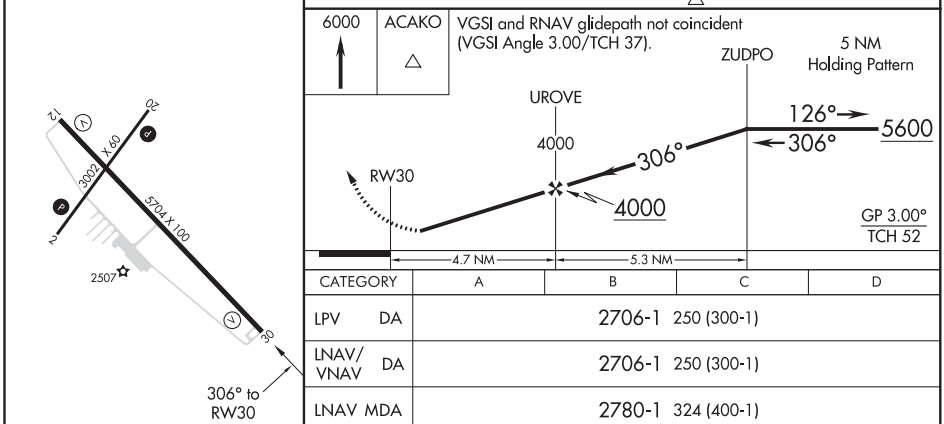
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C or above 28°C. When local altimeter setting not received, procedure NA. Rwy 30 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 6000 direct ACAKO and hold, continue climb-in-hold to 6000.

| AWOS-3PT | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.075 | 126.85 305.2 | 122.8 (CTAF) L |




ELEV 2458 D TDZE 2456

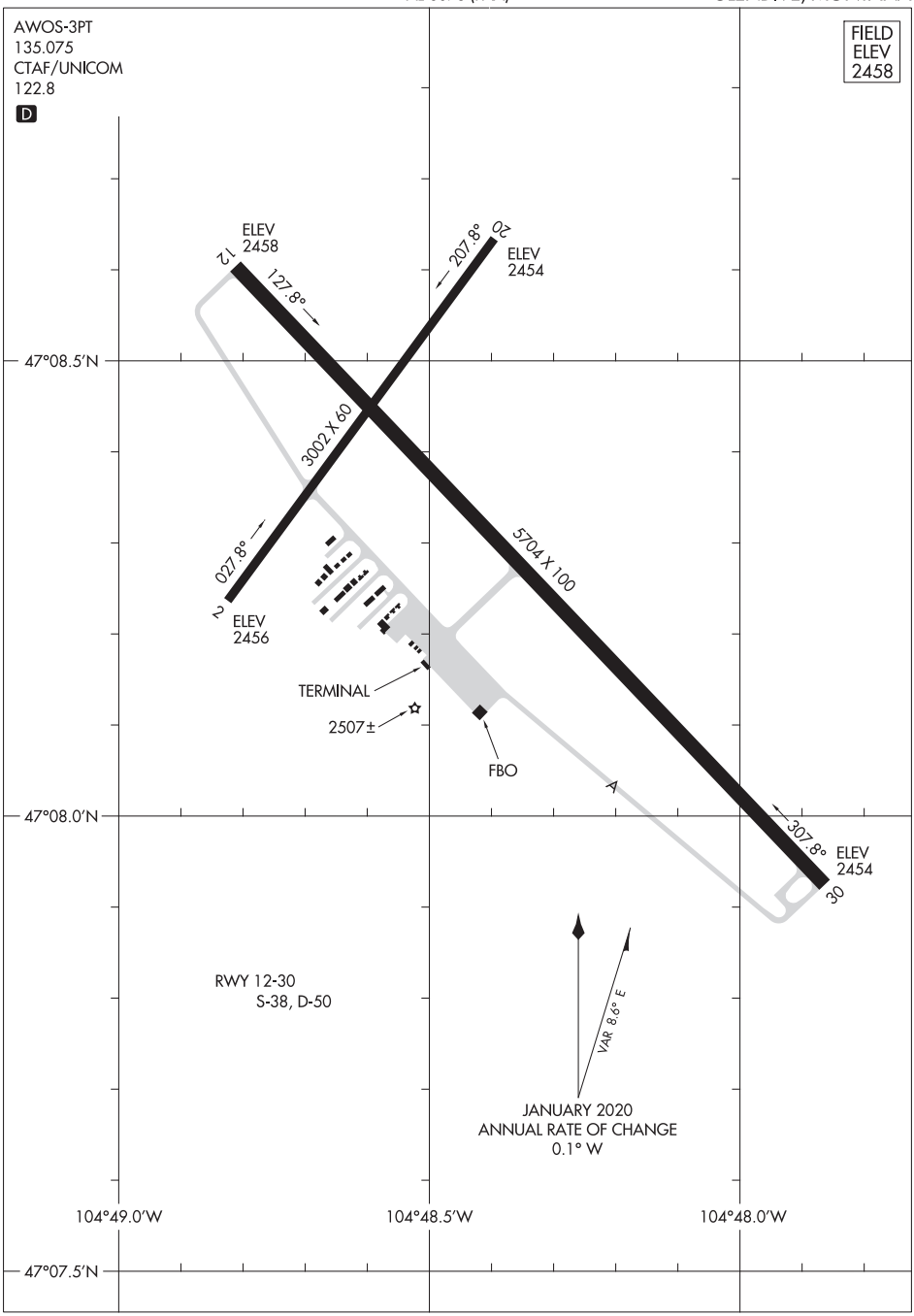



REIL Rwys 12 and 30 L
MIRL Rwys 2-20 and 12-30 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2706-1 250 (300-1) | | | |
| LNAV/VNAV DA | 2706-1 250 (300-1) | | | |
| LNAV MDA | 2780-1 324 (400-1) | | | |
| CIRCLING | 2840-1 382 (400-1) | 2920-1 462 (500-1) | 2920-1½ 462 (500-1½) | 3020-2 562 (600-2) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020


AWOS-3PT
135.075
CTAF/UNICOM
122.8
D
FIELD
ELEV
2458
ELEV
2458
12
127.8°
207.8°
20
ELEV
2454
47°08.5′N
3002 X 60
027.8°
2
ELEV
2456
5704 X 100
TERMINAL
2507±
FBO
A
47°08.0′N
307.8°
ELEV
2454
30
RWY 12-30
S-38, D-50
VAR 8.6° E
JANUARY 2020
ANNUAL RATE OF CHANGE
0.1° W
104°49.0′W
104°48.5′W
104°48.0′W
47°07.5′N

GOODING, IDAHO | AL-657 (FAA) | 19199

# RNAV (GPS) RWY 7
## GOODING MUNI (GNG)

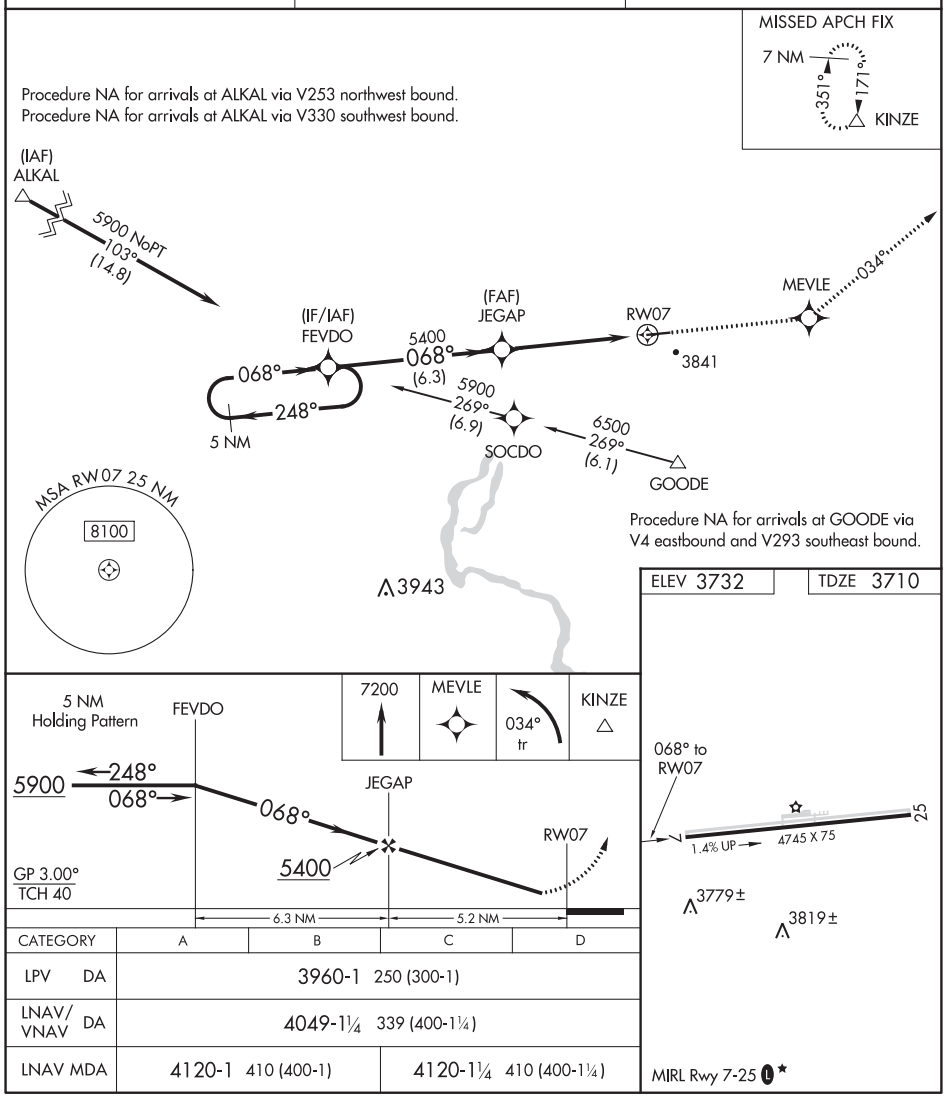
| WAAS CH 53709 W07A | APP CRS 068° | Rwy ldg 4745<br>TDZE 3710<br>Apt Elev 3732 |
|---|---|---|

RNP APCH.

Rwy 7 helicopter visibility reduction below ¾ SM NA. Baro-VNAV NA when using Jerome County altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C or above 41°C. Obtain local altimeter setting on CTAF; when not received, use Jerome County altimeter setting and increase all DA 86 feet and all MDA 100 feet. Increase LPV visibility ¼ SM all Cats, LNAV/VNAV visibility ½ SM all Cats, LNAV visibility Cat C and D ¼ SM.

MISSED APPROACH: Climb to 7200 direct MEVLE and left turn via 034° track to KINZE and hold.

| AWOS-3PT | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 124.175 | 118.05 363.0 | 122.8 (CTAF) L★ |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 3960-1 250 (300-1) | | | |
| LNAV/VNAV DA | 4049-1¼ 339 (400-1¼) | | | |
| LNAV MDA | 4120-1 410 (400-1) | | 4120-1¼ 410 (400-1¼) | |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 45909 W25A | APP CRS 248° | Rwy ldg 4745 TDZE 3732 Apt Elev 3732 |
|---|---|---|

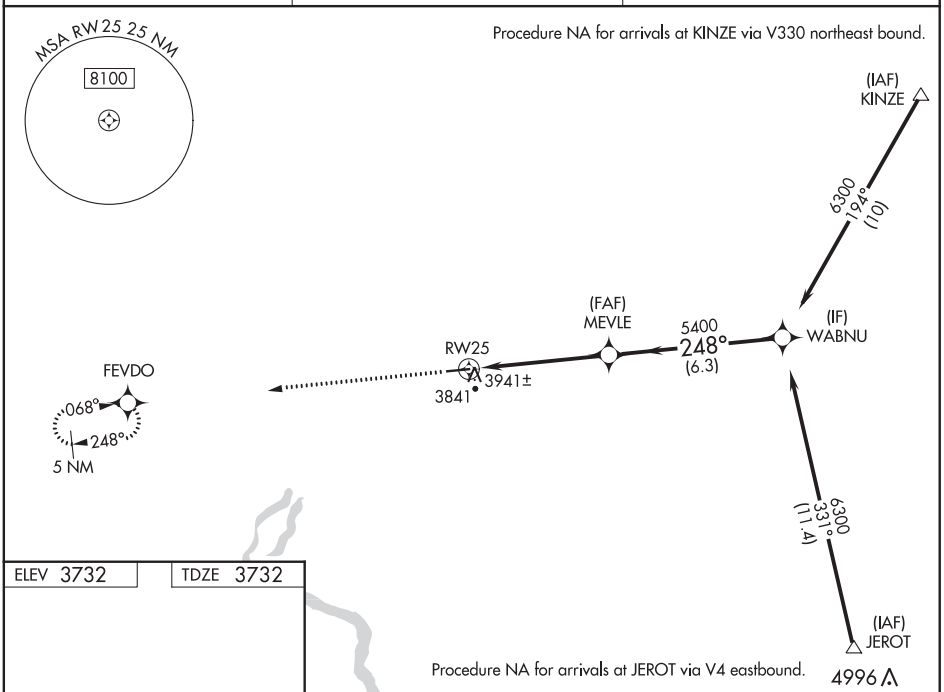
# RNAV (GPS) RWY 25
## GOODING MUNI (GNG)

RNP APCH.

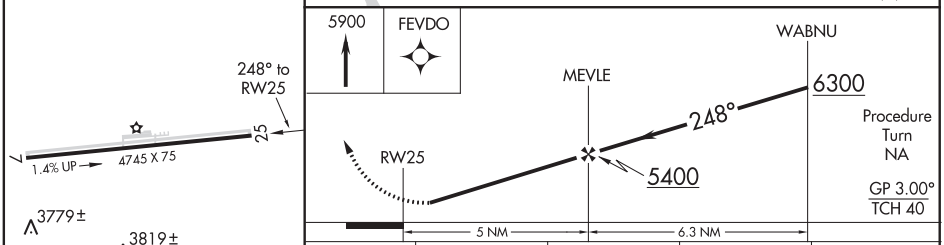
Rwy 25 helicopter visibility reduction below ¾ SM NA. Baro-VNAV NA when using Jerome County altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C or above 41°C. Obtain local altimeter setting on CTAF; when not received, use Jerome County altimeter setting and increase all DA 86 feet and all MDA 100 feet. Increase LPV visibility ¼ mile all Cats, LNAV/VNAV visibility ¼ mile all Cats, LNAV visibility Cat C and D ¼ mile. Night landing Rwy 25 NA for Cat C and D aircraft.

MISSED APPROACH: Climb to 5900 direct FEVDO and hold.

| AWOS-3PT | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 124.175 | 118.05 363.0 | 122.8 (CTAF) L★ |




ELEV 3732 TDZE 3732




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4006-1 274 (300-1) | | | |
| LNAV/VNAV DA | 4211-1¾ 479 (500-1¾) | | | |
| LNAV MDA | 4200-1 468 (500-1) | | 4200-1¼ 468 (500-1¼) | 4200-1½ 468 (500-1½) |

MIRL Rwy 7-25 L★



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

GRANGEVILLE, IDAHO

AL-9060 (FAA)

18088

| APP CRS | Rwy ldg | 5101 |
|---|---|---|
| 076° | TDZE | 3305 |
| | Apt Elev | 3313 |

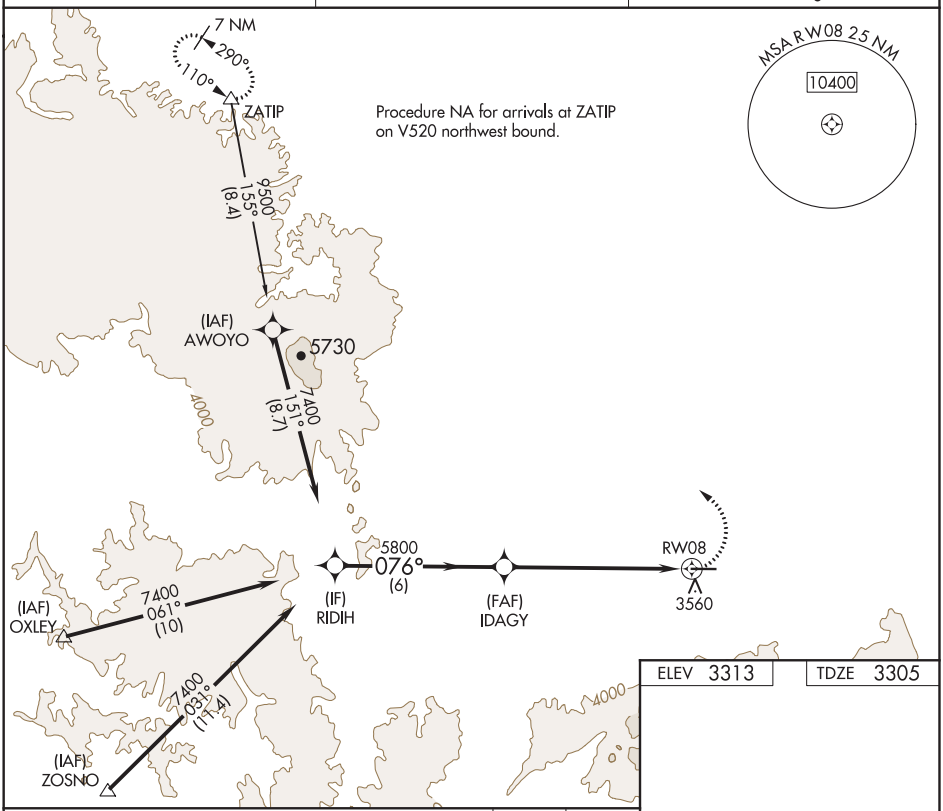
# RNAV (GPS) RWY 8

IDAHO COUNTY (GIC)

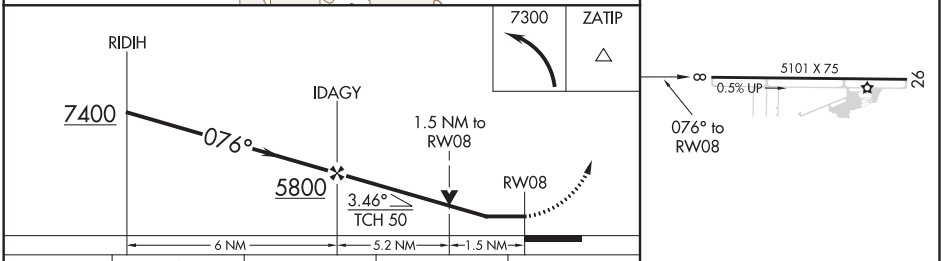
Circling NA south of Rwy 8-26. Rwy 8 Helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing left turn to 7300 direct ZATIP and hold.

| AWOS-3 | SEATTLE CENTER | CTAF |
|---|---|---|
| 118.175 | 123.95 290.55 | 122.8 L |




ELEV 3313 | TDZE 3305




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 3900-1 595 (600-1) | | 3900-1¾ 595 (600-1¾) | |
| C CIRCLING | 3900-1 587 (600-1) | | 3900-1¾ 587 (600-1¾) | 3900-2 587 (600-2) |

MIRL Rwy 8-26
REIL Rwy 8 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

GRANGEVILLE, IDAHO
ORIG 10NOV16

45°57′N-116°07′W

IDAHO COUNTY (GIC)
RNAV (GPS) RWY 8

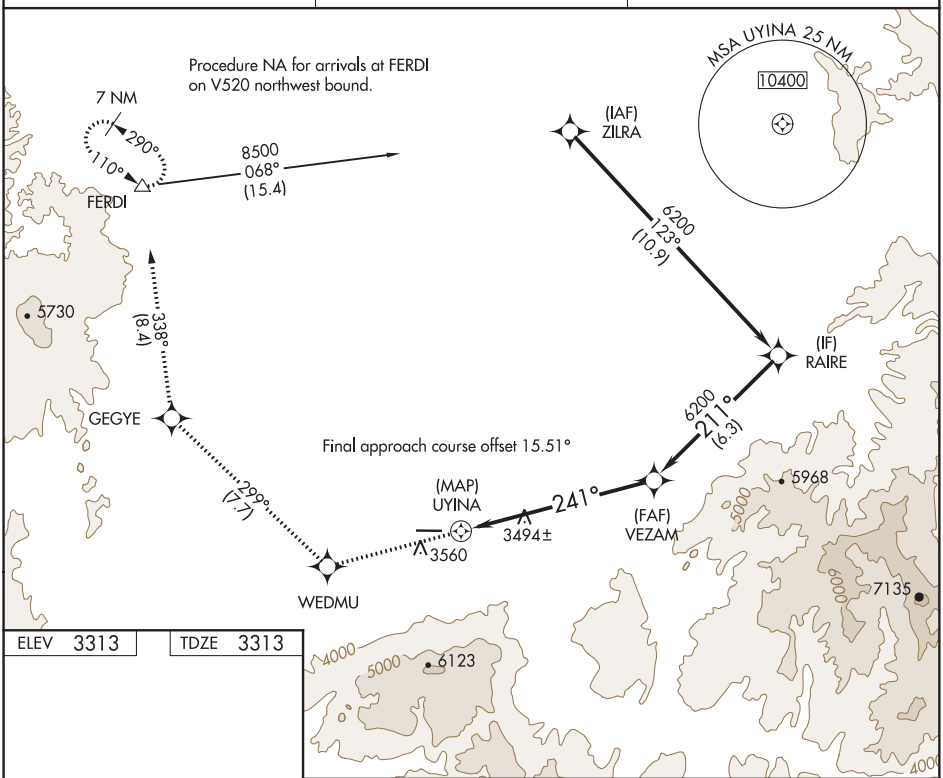
# RNAV (GPS) RWY 26
## IDAHO COUNTY (GIC)

| APP CRS | Rwy ldg | 5101 |
|---|---|---|
| 241° | TDZE | 3313 |
| | Apt Elev | 3313 |

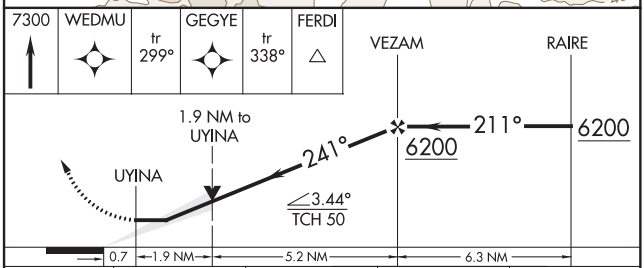
Circling NA south of Rwy 8-26.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 7300 direct WEDMU and on track 299° to GEGYE and on track 338° to FERDI and hold, continue climb-in-hold to 7300.

| AWOS-3 | SEATTLE CENTER | CTAF |
|---|---|---|
| 118.175 | 123.95 290.55 | 122.8 L |




| ELEV 3313 | TDZE 3313 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 4060-1<br>747 (800-1) | 4060-1¼<br>747 (800-1¼) | 4060-2 | 747 (800-2) |
| C CIRCLING | 4060-1<br>747 (800-1) | 4060-1¼<br>747 (800-1¼) | 4060-2¼<br>747 (800-2¼) | 4060-2½<br>747 (800-2½) |

MIRL Rwy 8-26
REIL Rwy 8 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

(MELLR1.MELLR) 17061

# MELLR ONE DEPARTURE (OBSTACLE) (RNAV)

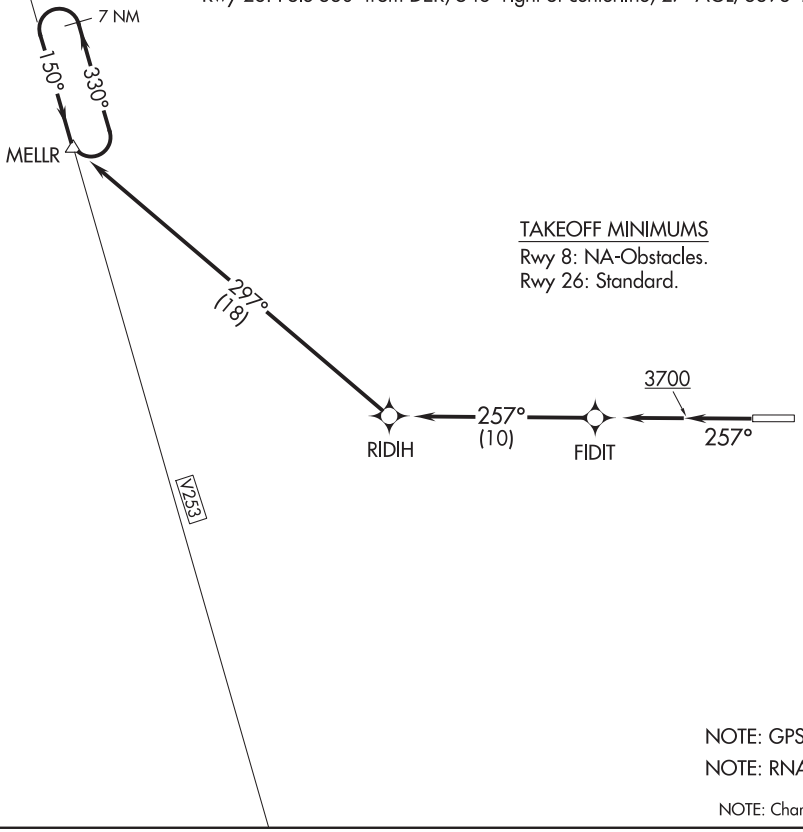
SL-9060 (FAA)

IDAHO COUNTY (GIC)
GRANGEVILLE, IDAHO

SEATTLE CENTER
123.95 290.55

TAKEOFF OBSTACLE NOTES

Rwy 26: Pole 330′ from DER, 546′ right of centerline, 27′ AGL/3398′ MSL.




TAKEOFF MINIMUMS

Rwy 8: NA-Obstacles.
Rwy 26: Standard.

NOTE: GPS required.
NOTE: RNAV-1

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 26: Climb on heading 257° to 3700 then direct FIDIT, then on depicted route to MELLR, maintain 7400 or assigned altitude, aircraft southeast bound on V253 continue climb in MELLR holding pattern to MEA before proceeding enroute.


NW-1, 05 NOV 2020 to 31 DEC 2020

MELLR ONE DEPARTURE (OBSTACLE) (RNAV)
(MELLR1.MELLR) 10NOV16

GRANGEVILLE, IDAHO
IDAHO COUNTY (GIC)

| WAAS CH 56242 W13A | APP CRS 143° | Rwy ldg 4001 TDZE 1115 Apt Elev 1130 |
|---|---|---|

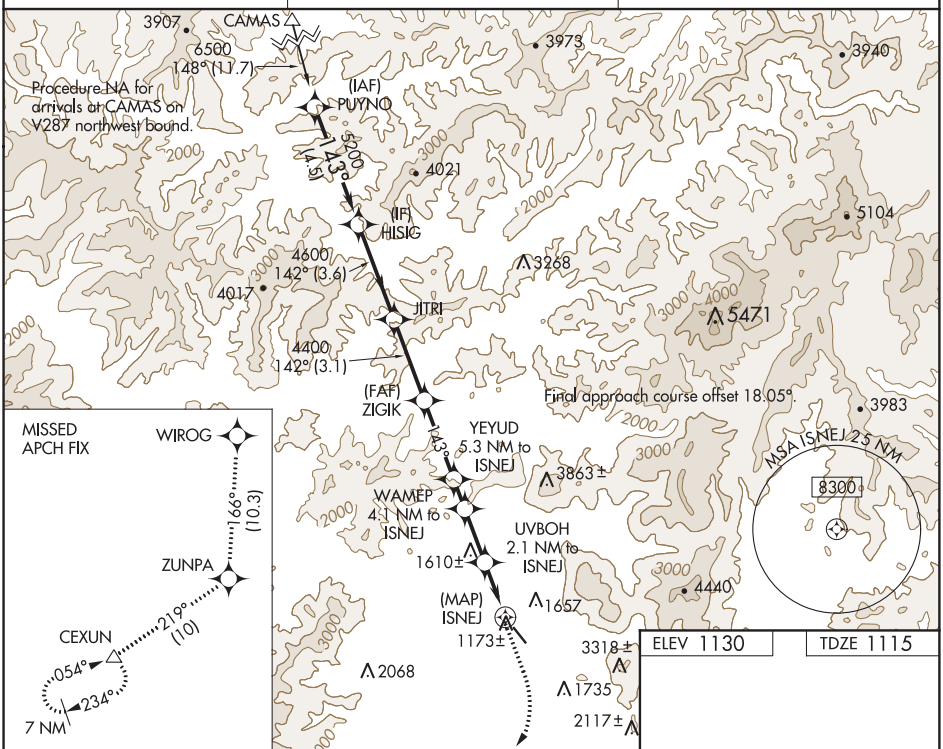
# RNAV (GPS) RWY 13
## GRANTS PASS (3S8)

RNP APCH.

Circling NA northeast of Rwy 13-31. Rwy 13 helicopter visibility reduction below 1 SM NA. Straight-in Rwy 13 NA at night, Circling Rwy 13 NA at night.

MISSED APPROACH: Climb to 2000 then climbing right turn to 8000 direct WIROG and track 166° to ZUNPA and track 219° to CEXUN and hold.

| AWOS-3PT | CASCADE APP CON ★ | UNICOM |
|---|---|---|
| 120.0 | 124.3 379.9 | 122.8 (CTAF) L |




ELEV 1130 TDZE 1115

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LP MDA | 1720-1 605 (600-1) | | 1720-1¾ 605 (600-1¾) | |
| C CIRCLING | 1840-1 710 (800-1) | 2080-1¼ 950 (1000-1¼) | 2220-3 1090 (1100-3) | 2340-3 1210 (1300-3) |

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

GRANTS PASS, OREGON | AL-9081 (FAA) | 20086

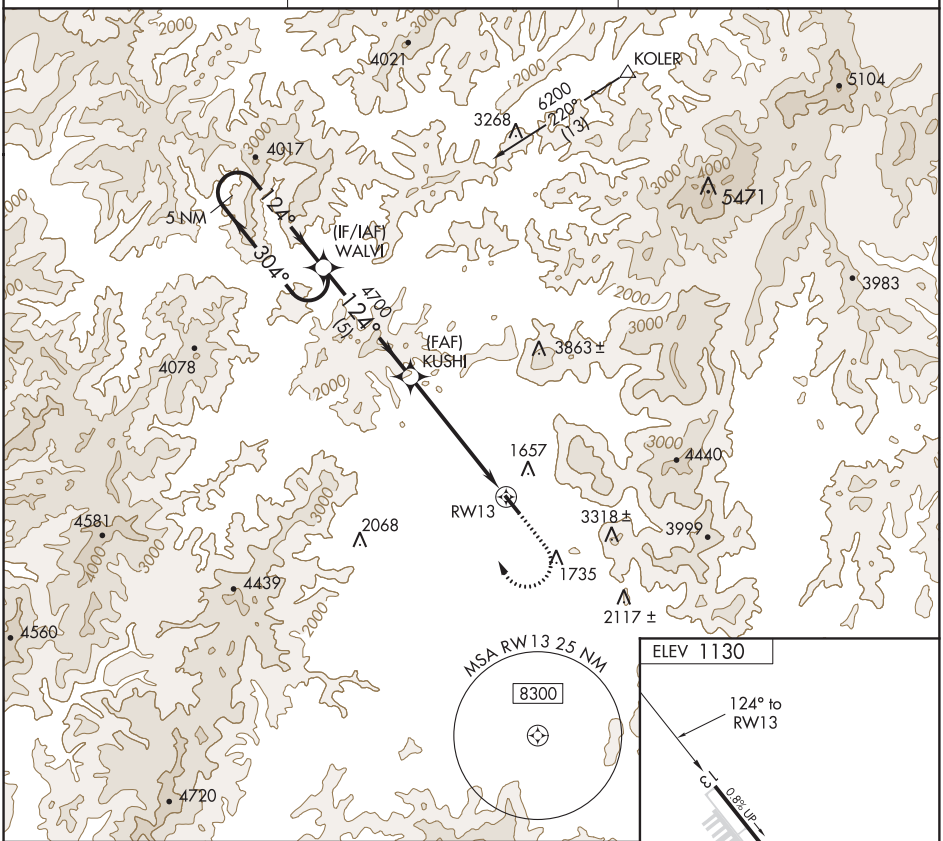
# RNAV (GPS)-A
## GRANTS PASS (3S8)

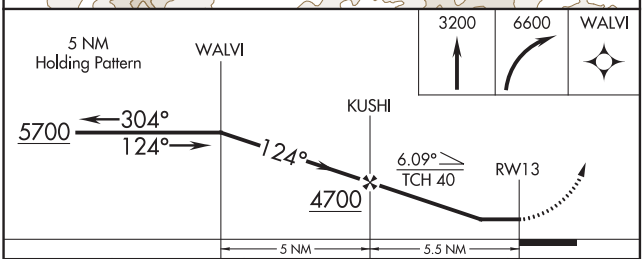
| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 124° | TDZE | N/A |
| | Apt Elev | 1130 |

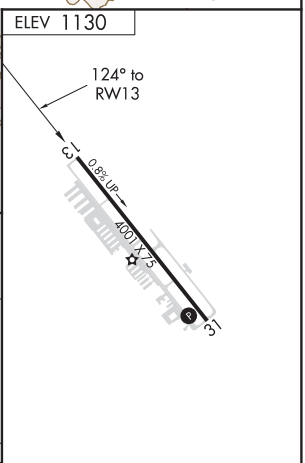
T A NA — Circling NA northeast of Rwy 13-31. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 3200 then climbing right turn to 6600 direct WALVI and hold, continue climb-in-hold to 6600.

| AWOS-3PT | CASCADE APP CON ★ | UNICOM |
|---|---|---|
| 120.0 | 124.3 379.9 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 2920-1¼<br>1790 (1800-1¼) | 2920-1½<br>1790 (1800-1½) | NA | |

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

JOINT BASE LEWIS MCCHORD, WASHINGTON

# ILS or LOC RWY 15

| LOC I-GRF 108.3 Chan 20 | APCH CRS 151° | Rwy ldg 6124 TDZE 300 Arpt Elev 301 | AL-413 [USA] | GRAY AAF (KGRF) |
|---|---|---|---|---|

RNAV1 - GPS from SEA VORTAC.

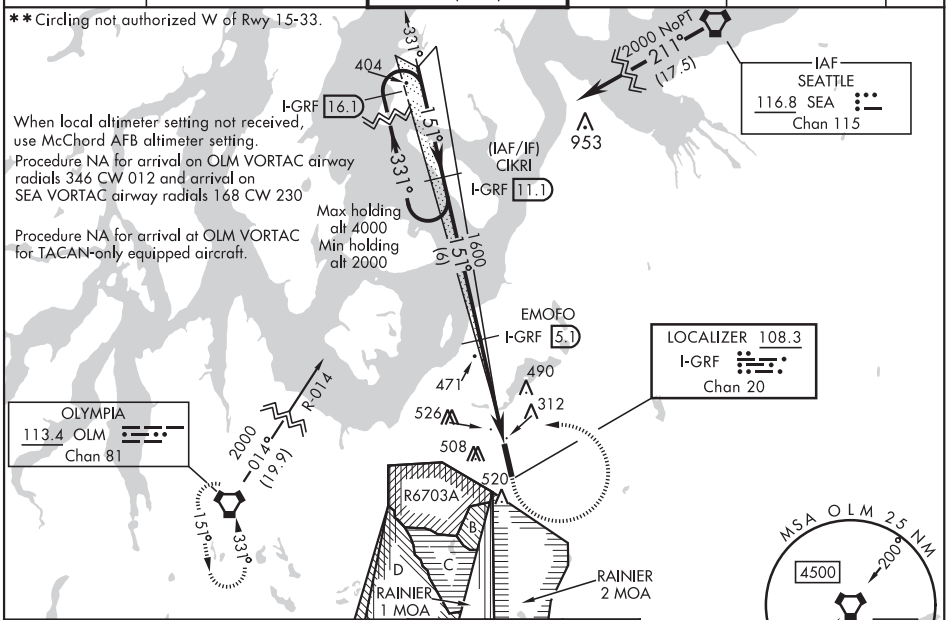
DME required for civil use. For non-RNAV aircraft, RADAR required from SEA VORTAC.

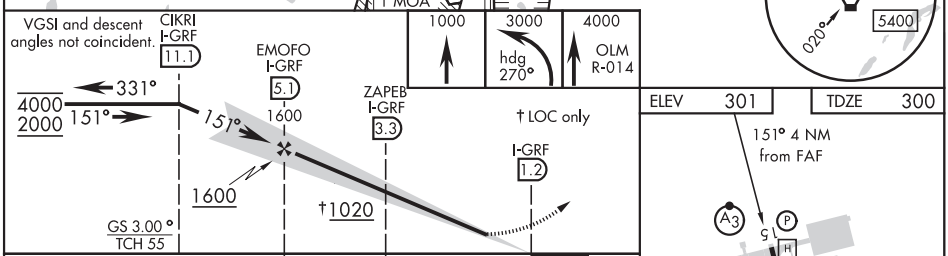
*When ALS inop when using McChord AFB altimeter setting, increase LOC CAT C/D vis to RVR 55.

SSALR A3

MISSED APPROACH: Climb to 1000, then climbing left turn to 3000 on hdg 270° and OLM VORTAC R-014, then continue climb to 4000 on OLM R-014 to OLM and hold.

| ATIS | SEATTLE APP CON | GRAY TOWER * | GND CON | CLNC DEL | PAR |
|---|---|---|---|---|---|
| 124.65 306.2 | 120.1 290.9 | 119.325 (CTAF) 256.8 | 121.9 290.2 | 121.9 290.2 | |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 15 | 500/24 200 (200-½) | | | |
| S-LOC 15 | 640/24 340 (400-½) | | 640/26 340 (400-½) | |
| C CIRCLING** | 840-1 539 (600-1) | | 840-1½ 539 (600-1½) | 920-2 619 (700-2) |
| McCHORD FLD ALTIMETER SETTING MINIMUMS | | | | |
| S-ILS 15 | 516/24 216 (300-½) | | | |
| S-LOC 15* | 660/24 360 (400-½) | | 660/35 360 (400-¾) | |
| C CIRCLING** | 860-1 559 (600-1) | | 860-1½ 559 (600-1½) | 940-2 639 (700-2) |

| FAF to MAP 4.0 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 4:00 | 2:40 | 2:00 | 1:36 | 1:20 |

JOINT BASE LEWIS MCCHORD, WASHINGTON 47°05'N-122°35'W GRAY AAF (KGRF)

Amdt 8A 05DEC19

ILS or LOC RWY 15

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

20310

FORT LEWIS, WASHINGTON

# RNAV (GPS) RWY 15

| APCH CRS 151° | Rwy ldg 6124<br>TDZE 300<br>Arpt Elev 301 |
|---|---|

AL-413 (USA)

GRAY AAF (KGRF)

* Circling not authorized W of Rwy 15-33.

SSALR (A3)

MISSED APPROACH: Climbing left turn to 2000 direct CIKRI and hold.

| ATIS | SEATTLE APP CON/DEP CON | TOWER★ | GND CON | CLNC DEL | PAR |
|---|---|---|---|---|---|
| 124.65 306.2 | 120.1 290.9 | 119.325 (CTAF) 256.8 | 121.9 290.2 | 121.9 290.2 | |

RNP APCH

When local altimeter setting not received, use McChord Fld altimeter setting.

(IAF) SEATTLE SEA

2000 NoPT 214° (17.5)

(IAF) CARRO

2000 NoPT 091° (9.4)

5 NM

151°

331°

723

953

368

417

(IAF/IF) CIKRI

1600 151° (6)

Procedure NA for arrivals at CARRO on V165-287 northbound and for arrivals on OLM VORTAC airway R-012 CW R-095 and arrivals on SEA VORTAC airway R-168 CW R-178.

(FAF) EMOFO

ZAPEB

490

539

526

RW15

RAINIER 1 MOA

R6703A

2000 017° (19.9)

OLYMPIA OLM

MSA RW15 25 NM

6700

955

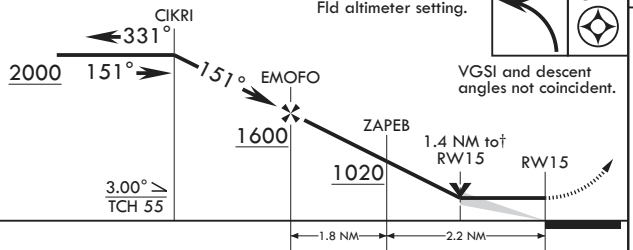
† VDP NA with McChord Fld altimeter setting.

2000

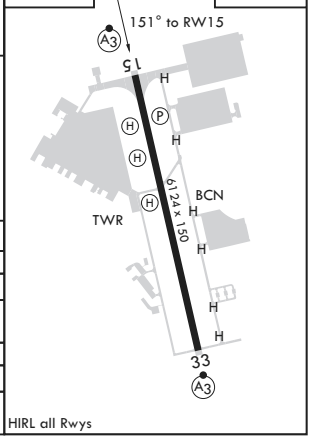
CIKRI

ELEV 301

TDZE 300




VGSI and descent angles not coincident.




HIRL all Rwys

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 800/24 500 (500-½) | | 800/50 500 (500-1) | |
| C CIRCLING* | 840-1 539 (600-1) | | 840-1½ 539 (600-1½) | 920-2 619 (700-2) |
| MC CHORD FLD ALTIMETER SETTING MINIMUMS | | | | |
| LNAV MDA | 820/24 520 (600-½) | | | |
| C CIRCLING* | 860-1 559 (600-1) | | 860-1½ 559 (600-1½) | 940-2 639 (700-2) |

FORT LEWIS, WASHINGTON

47°05'N - 122°35'W

GRAY AAF (KGRF)

Amdt 2 10OCT19

RNAV (GPS) RWY 15



NW-1, 05 NOV 2020 to 31 DEC 2020

FORT LEWIS, WASHINGTON

# RNAV (GPS) RWY 33

| APCH CRS | Rwy ldg | 6124 |
|---|---|---|
| 331° | TDZE | 301 |
| | Arpt Elev | 301 |

AL-413 (USA)

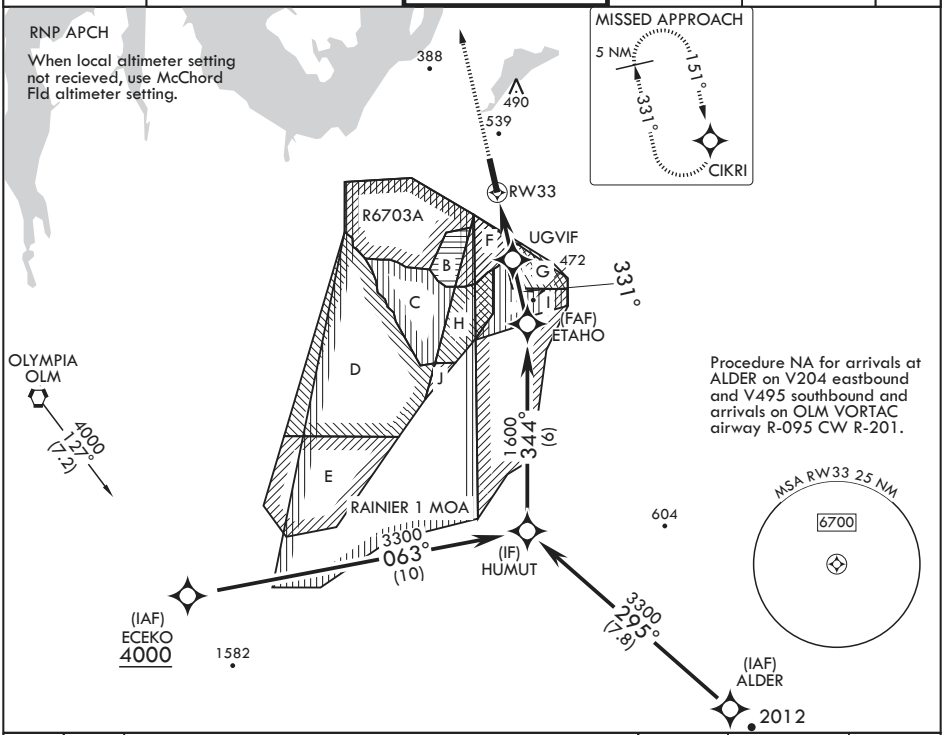
GRAY AAF (KGRF)

T * Circling not authorized W of Rwy 15-33.
A

SSALR A3

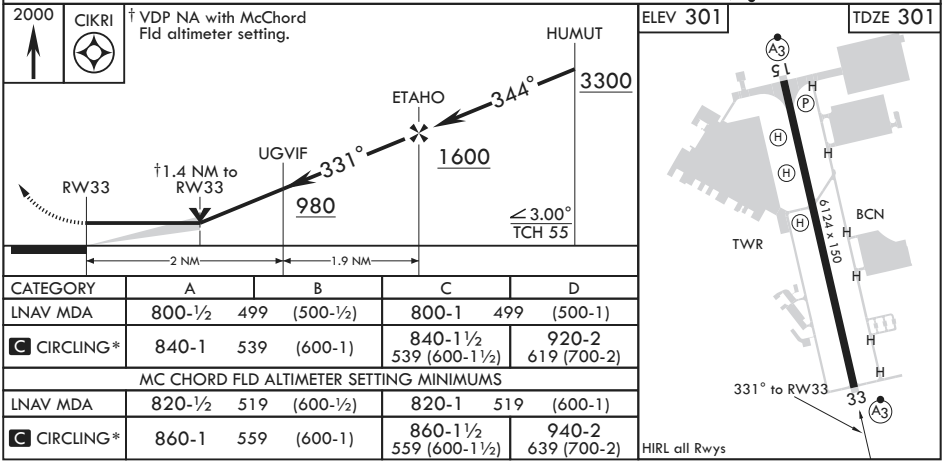
MISSED APPROACH: Climb to 2000 direct CIKRI and hold.

| ATIS | SEATTLE APP CON/DEP CON | TOWER★ | GND CON | CLNC DEL | PAR |
|---|---|---|---|---|---|
| 124.65 306.2 | 120.1 290.9 | 119.325 (CTAF) 256.8 | 121.9 290.2 | 121.9 290.2 | |




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020




| CATEGORY | A | | B | | C | | D | |
|---|---|---|---|---|---|---|---|---|
| LNAV MDA | 800-½ | 499 | (500-½) | | 800-1 | 499 | (500-1) | |
| C CIRCLING* | 840-1 | 539 | (600-1) | | 840-1½ 539 (600-1½) | | 920-2 619 (700-2) | |
| MC CHORD FLD ALTIMETER SETTING MINIMUMS | | | | | | | | |
| LNAV MDA | 820-½ | 519 | (600-½) | | 820-1 | 519 | (600-1) | |
| C CIRCLING* | 860-1 | 559 | (600-1) | | 860-1½ 559 (600-1½) | | 940-2 639 (700-2) | |

HIRL all Rwys

FORT LEWIS, WASHINGTON

47°05'N - 122°35'W

GRAY AAF (KGRF)

Amdt 2 10OCT19

RNAV (GPS) RWY 33

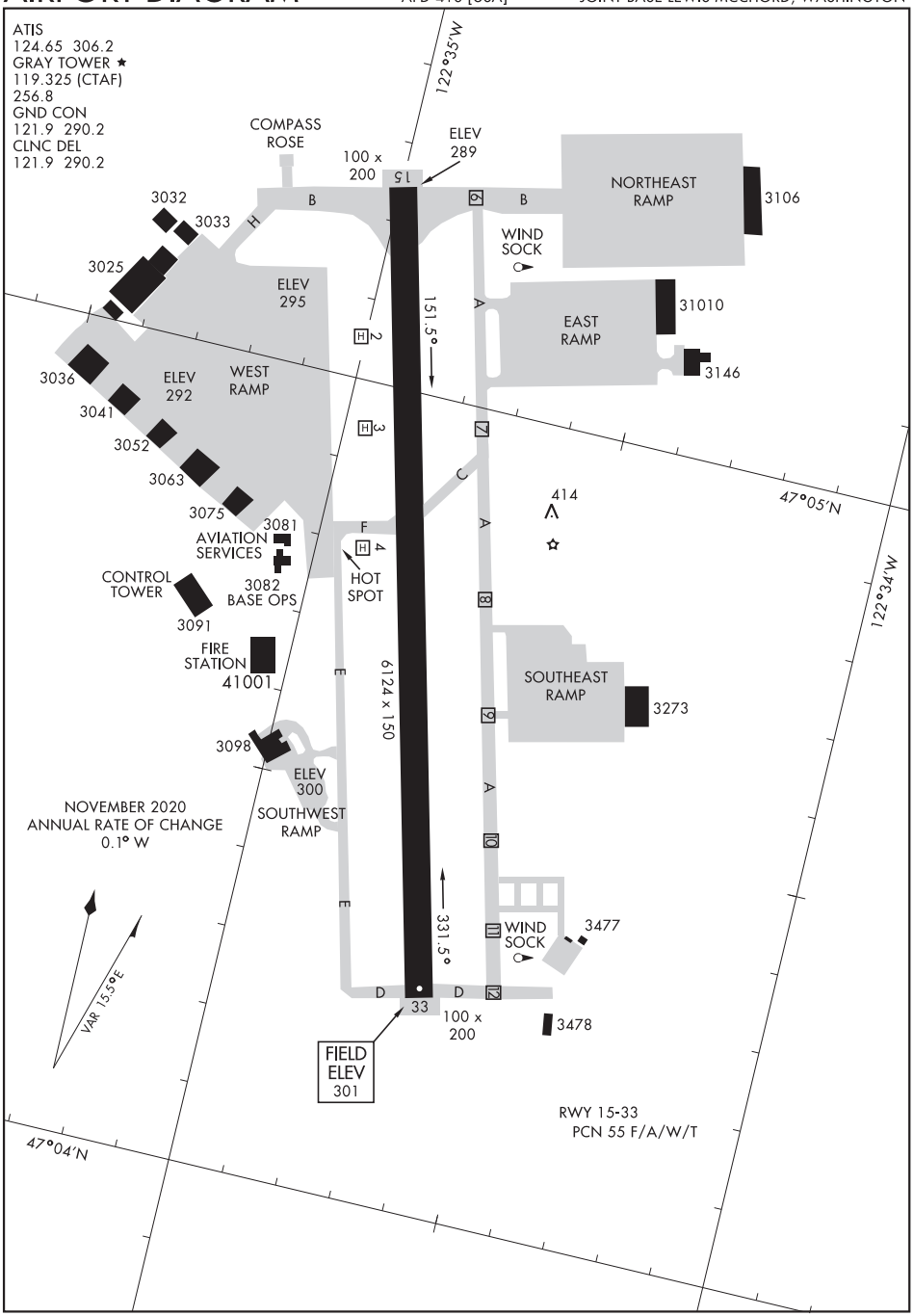
20310

# AIRPORT DIAGRAM

GRAY AAF (KGRF)

AFD-413 [USA]

JOINT BASE LEWIS MCCHORD, WASHINGTON




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM

JOINT BASE LEWIS MCCHORD, WASHINGTON

GRAY AAF (KGRF)

# LEWIS THREE DEPARTURE (GRAY3 • GRAY)

JOINT BASE LEWIS MCCHORD, WASHINGTON

ATIS 124.65 306.2
CLNC DEL
121.9 290.2
GND CON
121.9 290.2
GRAY TOWER ★
119.325 (CTAF) 256.8
SEATTLE DEP CON
120.1 290.9

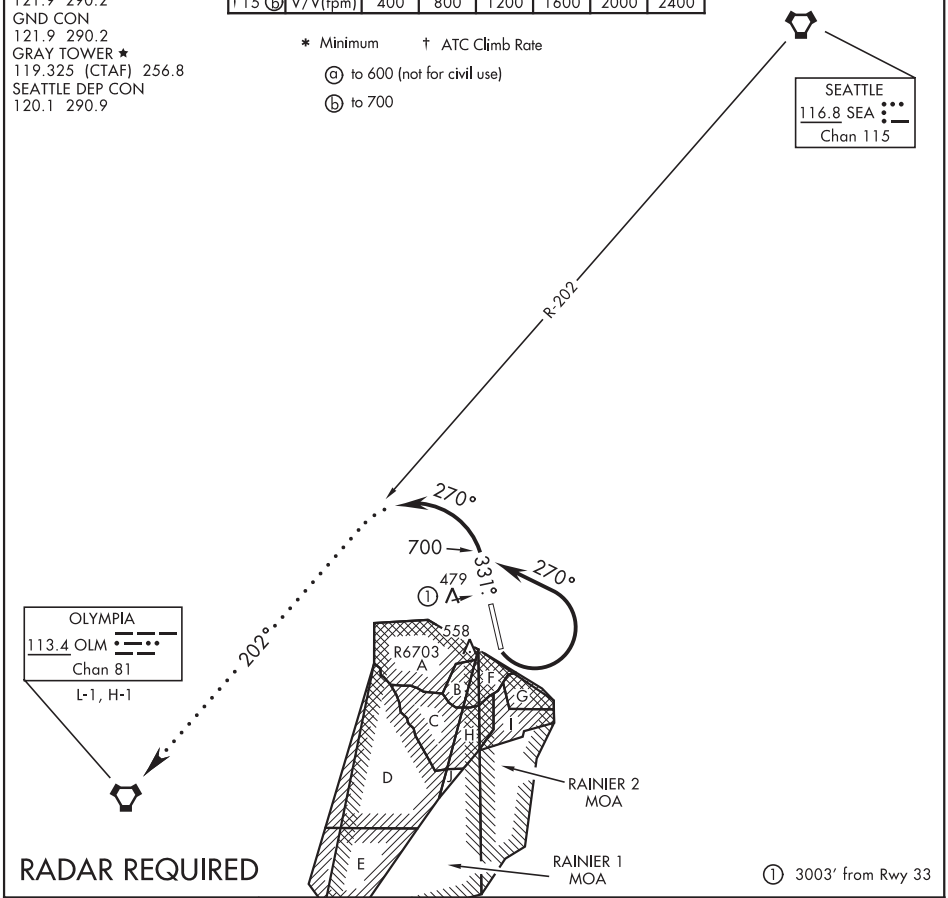
| Rwy | Knots | 60 | 120 | 180 | 240 | 300 | 360 |
|---|---|---|---|---|---|---|---|
| ✱33 ⓐ | V/V(fpm) | 469 | 938 | 1407 | 1876 | 2345 | 2814 |
| †15 ⓑ | V/V(fpm) | 400 | 800 | 1200 | 1600 | 2000 | 2400 |

✱ Minimum † ATC Climb Rate

ⓐ to 600 (not for civil use)

ⓑ to 700

SL-413 [USA]




RADAR REQUIRED

## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 15: Turn left as soon as practical (departing 700), thence . . .

TAKE-OFF RWY 33: Climb heading 331° to 700, thence . . .

Turn left (unless otherwise directed by ATC) heading 270° for RADAR vectors to assigned route. Maintain altitude as assigned by ATC. Expect filed altitude within 5 min after departure.

LOST COMMUNICATIONS: If no transmissions are received within three minutes after departure, continue climb to assigned altitude, intercept and proceed via SEA VORTAC R-202 to the OLM VORTAC, then via assigned route.

GREAT FALLS, MONTANA — AL-177 (FAA) — 19115

# ILS or LOC RWY 3
## GREAT FALLS INTL (GTF)

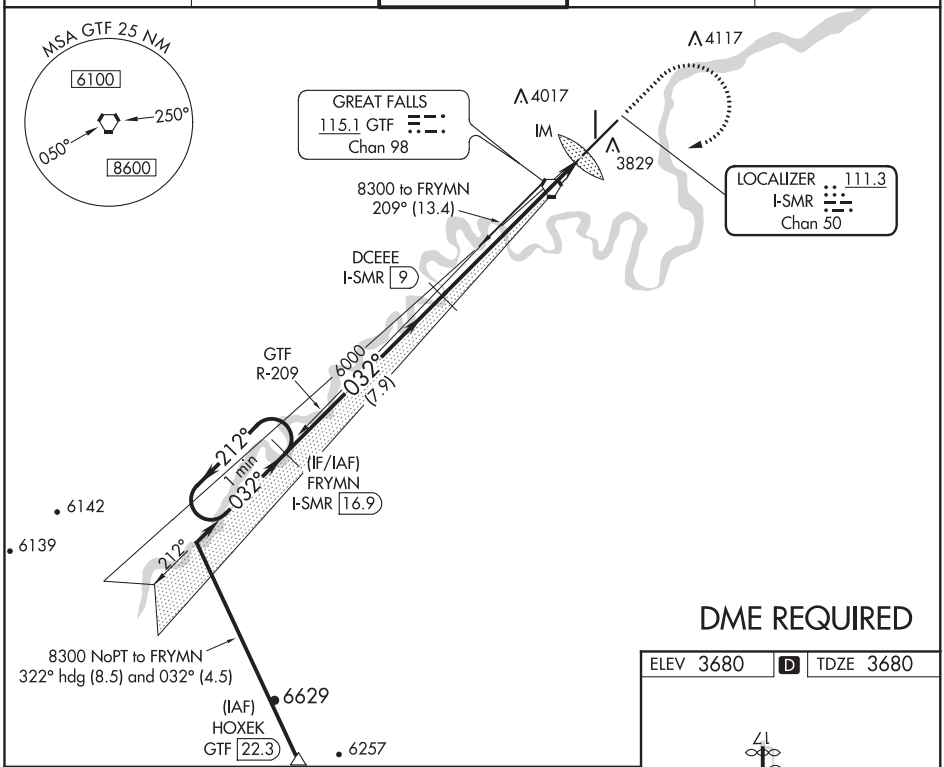
| LOC/DME I-SMR | APP CRS | Rwy ldg | 10502 |
|---|---|---|---|
| 111.3 | 032° | TDZE | 3680 |
| Chan 50 | | Apt Elev | 3680 |

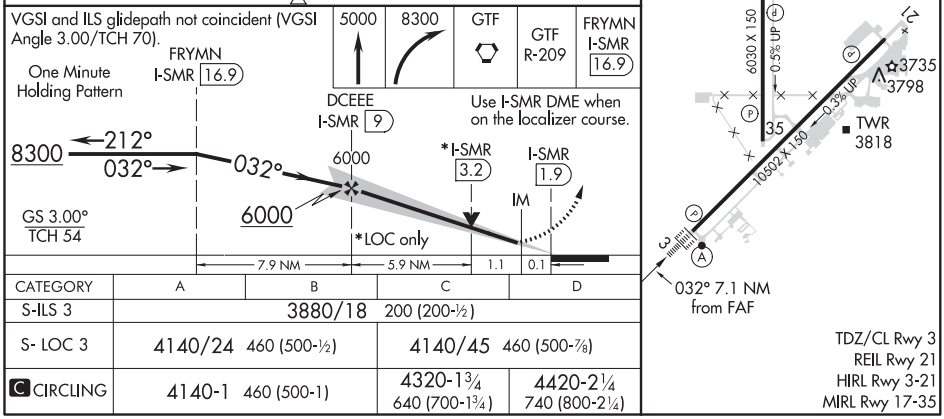
DME required. -33°C

ALSF-2

MISSED APPROACH: Climb to 5000 then climbing right turn to 8300 direct GTF VORTAC then on GTF VORTAC R-209 to FRYMN/I-SMR 16.9 DME and hold.

| ATIS | GREAT FALLS APP CON | GREAT FALLS TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 126.6 269.0 | 128.6 379.175 | 118.7 282.2 | 121.7 348.6 | 121.7 348.6 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 3 | 3880/18 | | 200 (200-½) | |
| S- LOC 3 | 4140/24 460 (500-½) | | 4140/45 460 (500-⅞) | |
| C CIRCLING | 4140-1 460 (500-1) | | 4320-1¾ 640 (700-1¾) | 4420-2¼ 740 (800-2¼) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC/DME I-SMR 111.3 Chan 50 | APP CRS 032° | Rwy ldg 10502 TDZE 3680 Apt Elev 3680 |
|---|---|---|

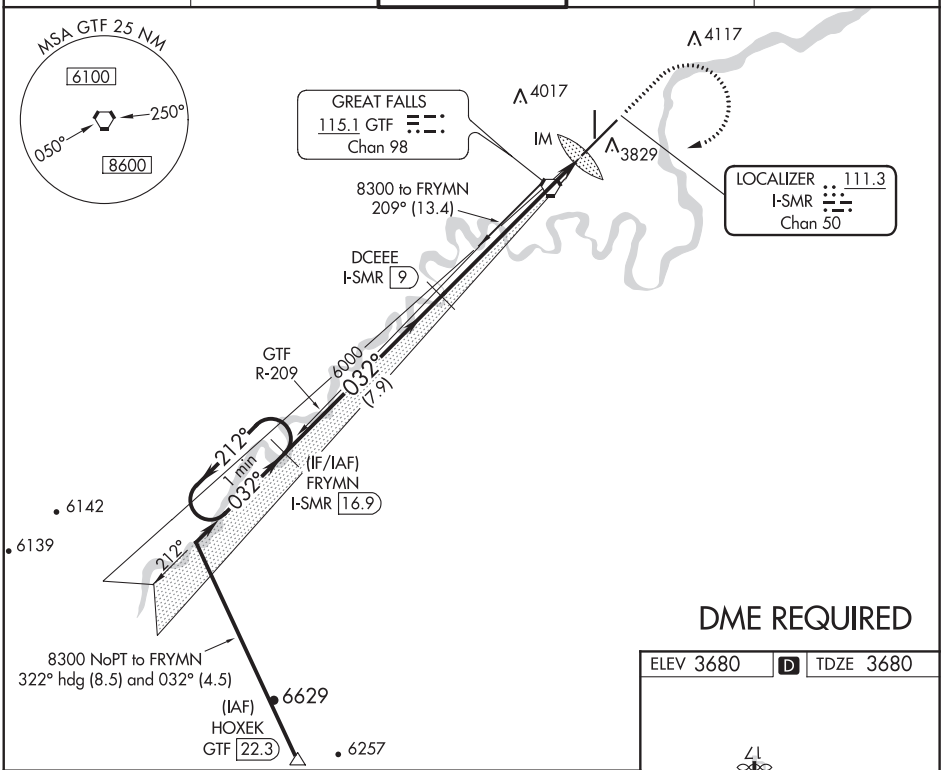
# ILS RWY 3 (SA CAT I)
## GREAT FALLS INTL (GTF)

Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH. DME required. -33°C

ALSF-2

MISSED APPROACH: Climb to 5000 then climbing right turn to 8300 direct GTF VORTAC then on GTF VORTAC R-209 to FRYMN/I-SMR 16.9 DME and hold.

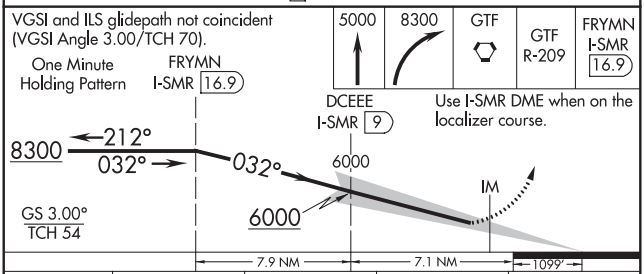
| ATIS | GREAT FALLS APP CON | GREAT FALLS TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 126.6 269.0 | 128.6 379.175 | 118.7 282.2 | 121.7 348.6 | 121.7 348.6 |




DME REQUIRED

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 70).

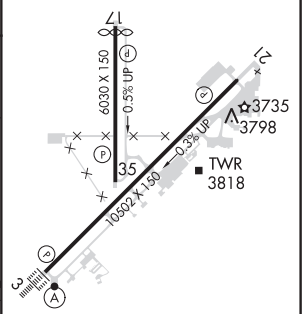
One Minute Holding Pattern




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 3 | RA 140/14 150 DA 3830 | | | |

**SA CATEGORY I ILS-SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**

ELEV 3680 | D | TDZE 3680




TDZ/CL Rwy 3
REIL Rwy 21
HIRL Rwy 3-21
MIRL Rwy 17-35

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC/DME I-SMR | APP CRS | Rwy ldg | 10502 |
|---|---|---|---|
| 111.3 | 032° | TDZE | 3680 |
| Chan 50 | | Apt Elev | 3680 |

# ILS RWY 3 (CAT II & III)
## GREAT FALLS INTL (GTF)

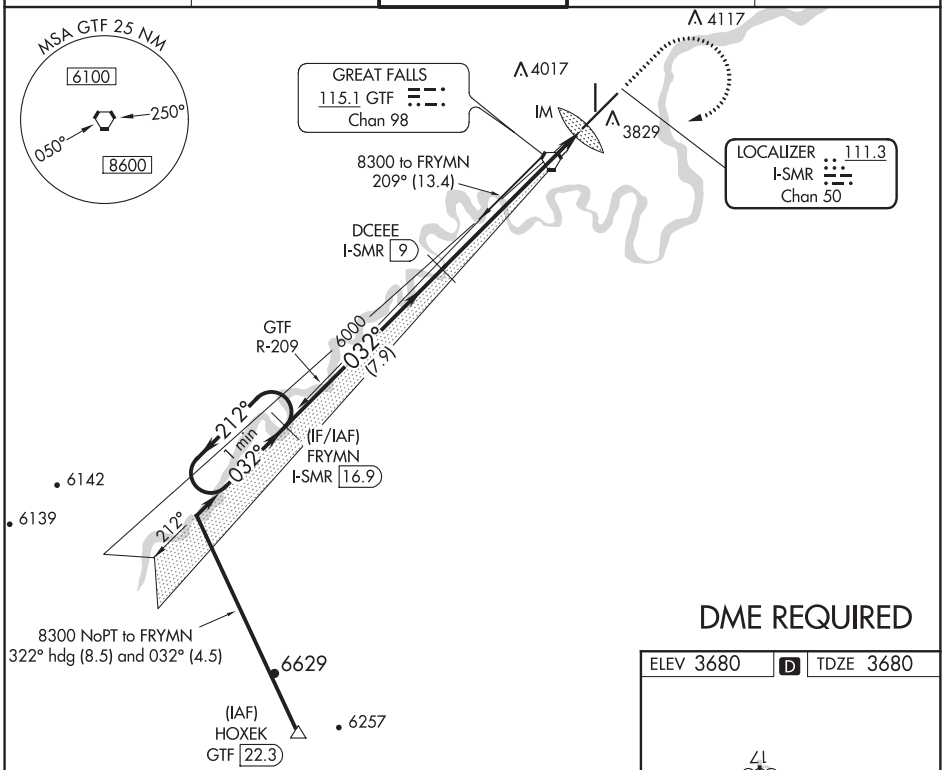
CAT II: RVR 1000 authorized with specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown. DME required.

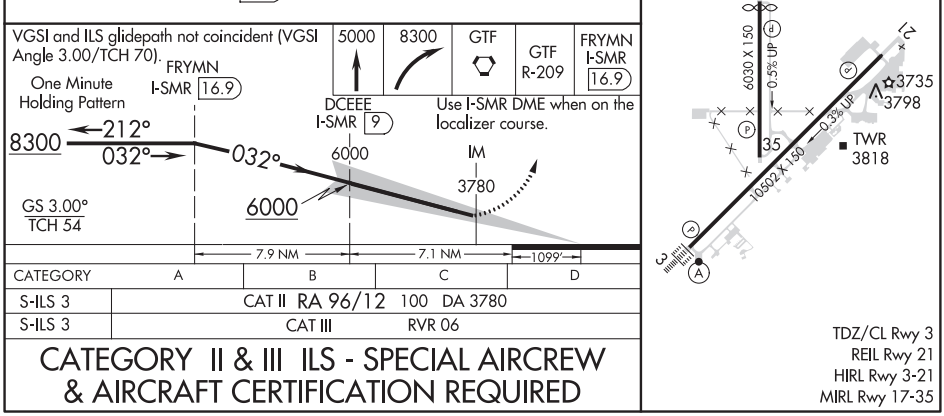
-33°C

ALSF-2

MISSED APPROACH: Climb to 5000 then climbing right turn to 8300 direct GTF VORTAC then on GTF VORTAC R-209 to FRYMN/I-SMR 16.9 DME and hold.

| ATIS | GREAT FALLS APP CON | GREAT FALLS TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 126.6 269.0 | 128.6 379.175 | 118.7 282.2 | 121.7 348.6 | 121.7 348.6 |






NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 10502 |
|---|---|---|
| 032° | TDZE | 3680 |
| | Apt Elev | 3680 |

# RNAV (RNP) Z RWY 3
## GREAT FALLS INTL (GTF)

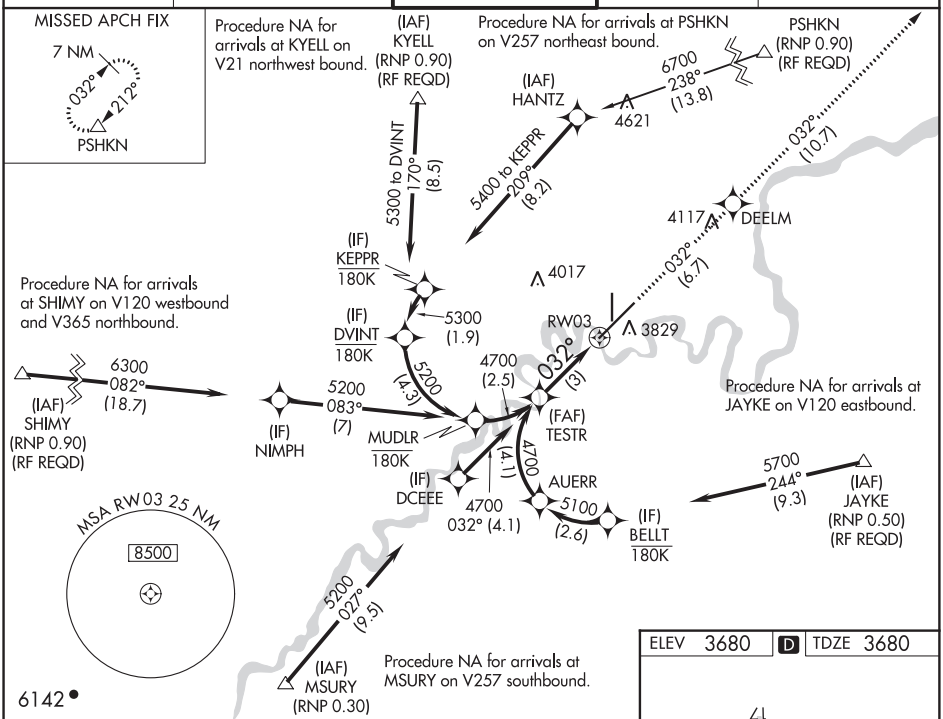
GPS required. For uncompensated Baro-VNAV systems, procedure NA below -22°C (-8°F) or above 40°C (105°F). For inoperative ALS increase RNP 0.10 DA visibility all Cats to RVR 4500, increase RNP 0.30 DA visibility all Cats to RVR 6000.

-33°C

ALSF-2

MISSED APPROACH: Climb to 6200 on track 032° to DEELM and on track 032° to PSHKN and hold.

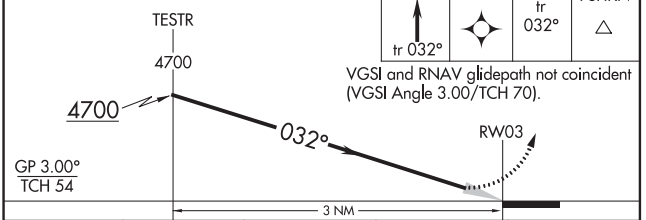
| ATIS | GREAT FALLS APP CON | GREAT FALLS TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 126.6 269.0 | 128.6 379.175 | 118.7 282.2 | 121.7 348.6 | 121.7 348.6 |




See planview for multiple IF locations.

| 6200 | DEELM | tr 032° | PSHKN |
|---|---|---|---|
| tr 032° | | | |

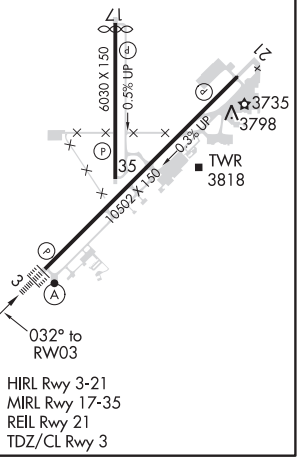
VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 70).




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.10 DA | 3973/24 | 293 (300-½) | | |
| RNP 0.30 DA | 4079/45 | 399 (400-⅞) | | |

AUTHORIZATION REQUIRED

ELEV 3680 D TDZE 3680




HIRL Rwy 3-21
MIRL Rwy 17-35
REIL Rwy 21
TDZ/CL Rwy 3

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

GREAT FALLS, MONTANA

AL-177 (FAA)

19115

# RNAV (RNP) Z RWY 21

GREAT FALLS INTL (GTF)

| APP CRS | Rwy ldg | 10502 |
|---|---|---|
| 212° | TDZE | 3669 |
| | Apt Elev | 3680 |

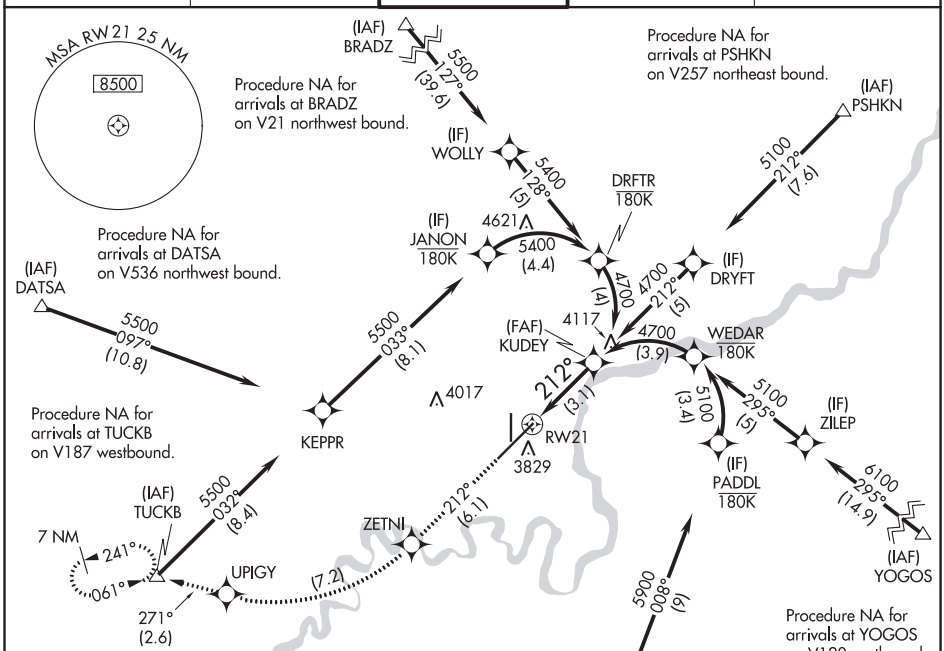
T

-33°C

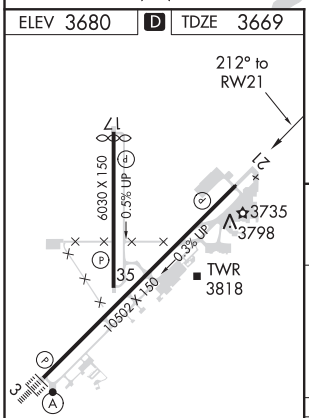
RF required. GPS required. For uncompensated Baro-VNAV systems, procedure NA below -24°C (-11°F) or above 49°C (121°F).

MISSED APPROACH: Climb to 8000 on track 212° to ZETNI, right turn to UPIGY and on track 271° to TUCKB and hold, continue climb-in-hold to 8000.

| ATIS | GREAT FALLS APP CON | GREAT FALLS TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 126.6 269.0 | 128.6 379.175 | 118.7 282.2 | 121.7 348.6 | 121.7 348.6 |

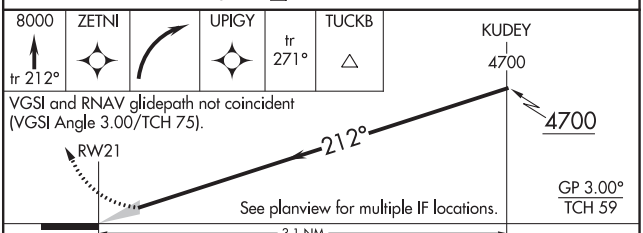



ELEV 3680 | D | TDZE 3669




| 8000 | ZETNI | | UPIGY | TUCKB |
|---|---|---|---|---|
| tr 212° | | | tr 271° | |

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 75).




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.10 DA | 3942/45 273 (300-⅞) | | | |
| RNP 0.30 DA | 3992/50 323 (400-1) | | | |

TDZ/CL Rwy 3
REIL Rwy 21
HIRL Rwy 3-21
MIRL Rwy 17-35

AUTHORIZATION REQUIRED

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

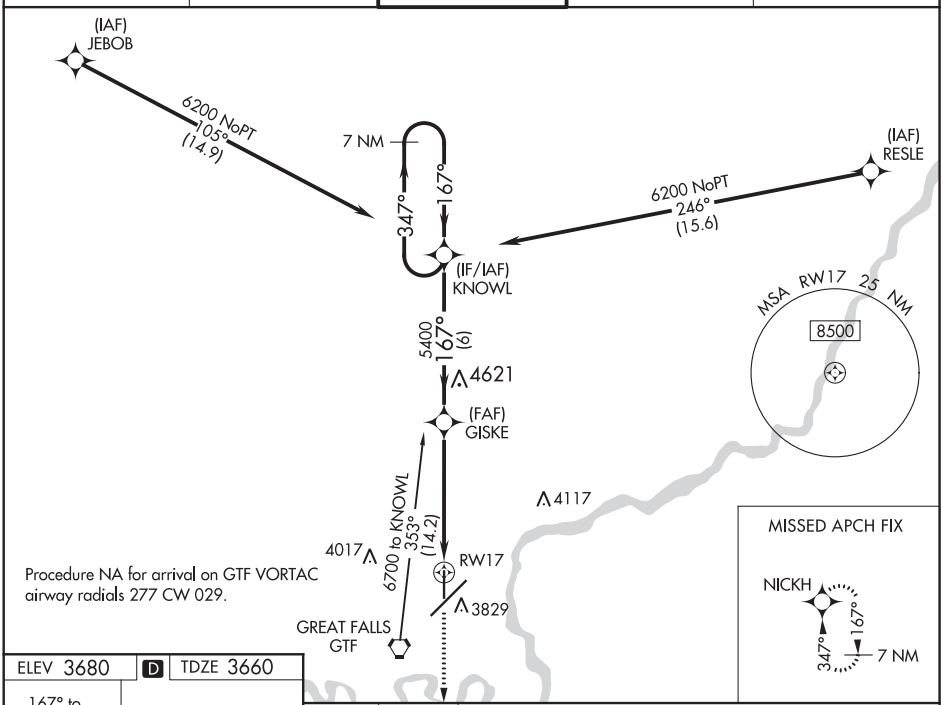
# RNAV (GPS) RWY 17
## GREAT FALLS INTL (GTF)

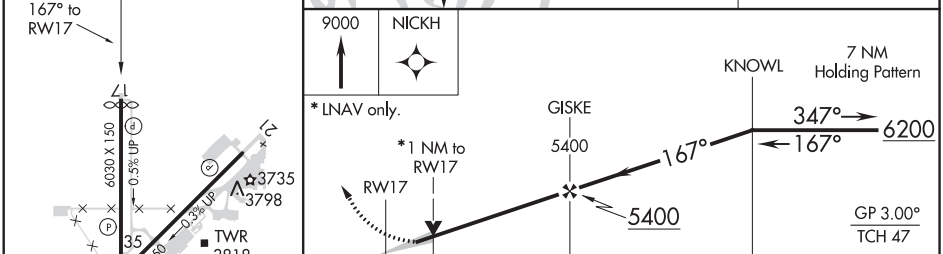
| WAAS CH 49240 W17A | APP CRS 167° | Rwy ldg 5800<br>TDZE 3660<br>Apt Elev 3680 |
|---|---|---|

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -26°C (-14°F) or above 52°C (126°F). DME/DME RNP -0.3 NA. -33°C

MISSED APPROACH: Climb to 9000 direct NICKH and hold, continue climb-in-hold to 9000.

| ATIS | GREAT FALLS APP CON | GREAT FALLS TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 126.6 269.0 | 128.6 379.175 | 118.7 282.2 | 121.7 348.6 | 121.7 348.6 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 3910-⅞ 250 (300-⅞) | | | |
| LNAV/VNAV DA | 3910-⅞ 250 (300-⅞) | | | |
| LNAV MDA | 4000-1 340 (400-1) | | | |
| C CIRCLING | 4120-1 440 (500-1) | 4140-1 460 (500-1) | 4320-1¾ 640 (700-1¾) | 4420-2¼ 740 (800-2¼) |

TDZ/CL Rwy 3
REIL Rwy 21
HIRL Rwy 3-21
MIRL Rwy 17-35

GREAT FALLS, MONTANA — AL-177 (FAA) — 19115

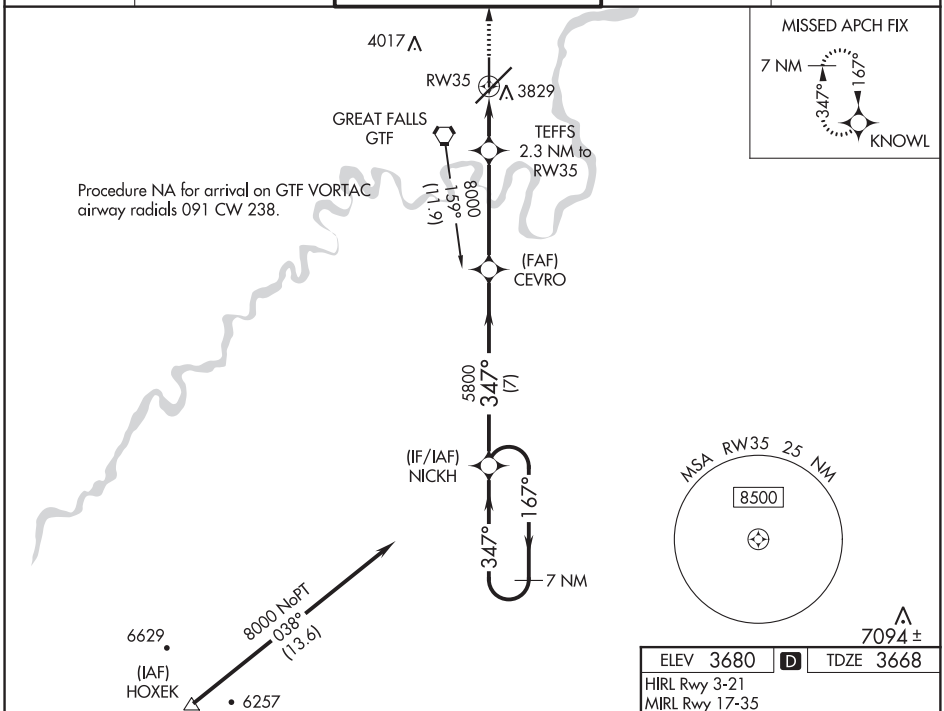
# RNAV (GPS) RWY 35
## GREAT FALLS INTL (GTF)

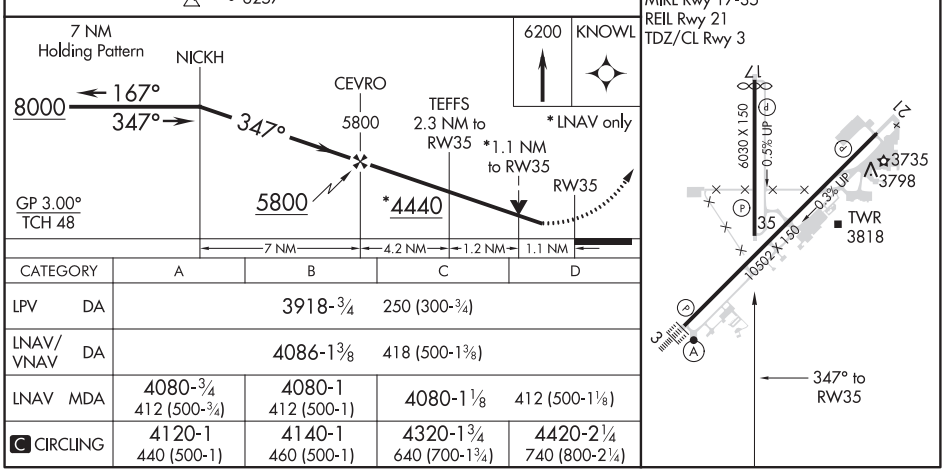
| WAAS | APP CRS | Rwy ldg | 5400 |
|---|---|---|---|
| CH 82240 | 347° | TDZE | 3668 |
| W35A | | Apt Elev | 3680 |

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -26°C (-14°F) or above 52°C (126°F).
DME/DME RNP-0.3 NA.
Rwy 35 helicopter visibility reduction below ¾ SM NA.
-33°C

MISSED APPROACH: Climb to 6200 direct KNOWL and hold.

| ATIS | GREAT FALLS APP CON | GREAT FALLS TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 126.6 269.0 | 128.6 379.175 | 118.7 282.2 | 121.7 348.6 | 121.7 348.6 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 3918-¾ 250 (300-¾) | | | |
| LNAV/VNAV DA | 4086-1⅜ 418 (500-1⅜) | | | |
| LNAV MDA | 4080-¾ 412 (500-¾) | 4080-1 412 (500-1) | 4080-1⅛ 412 (500-1⅛) | |
| C CIRCLING | 4120-1 440 (500-1) | 4140-1 460 (500-1) | 4320-1¾ 640 (700-1¾) | 4420-2¼ 740 (800-2¼) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 70602 W03A | APP CRS 032° | Rwy ldg 10502 TDZE 3680 Apt Elev 3680 |
|---|---|---|

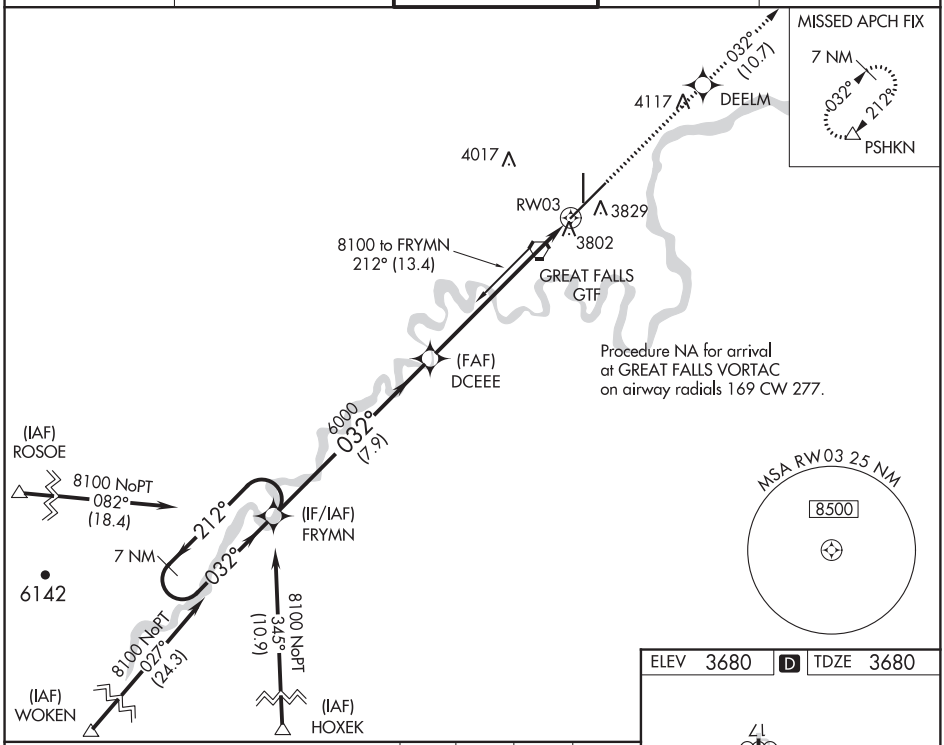
# RNAV (GPS) Y RWY 3
## GREAT FALLS INTL (GTF)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 50°C (123°F). DME/DME RNP-0.3 NA. For inop ALS, increase LNAV/VNAV all Cats visibility to RVR 4500. -33°C

ALSF-2

MISSED APPROACH: Climb to 6200 direct DEELM and on track 032° to PSHKN and hold.

| ATIS | GREAT FALLS APP CON | GREAT FALLS TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 126.6 269.0 | 128.6 379.175 | 118.7 282.2 | 121.7 348.6 | 121.7 348.6 |

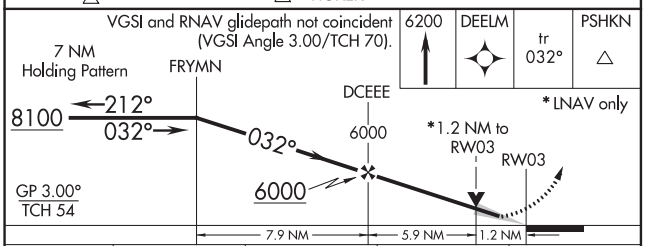



NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

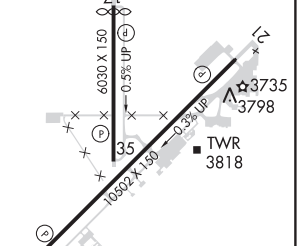
VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 70).

| 6200 | DEELM | tr 032° | PSHKN |
|---|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 3880/18 200 (200-½) | | | |
| LNAV/VNAV DA | 3963/24 283 (300-½) | | | |
| LNAV MDA | 4140/24 460 (500-½) | | 4140/45 460 (500-⅞) | |
| C CIRCLING | 4140-1 460 (500-1) | | 4320-1¾ 640 (700-1¾) | 4420-2¼ 740 (800-2¼) |

ELEV 3680 D TDZE 3680




HIRL Rwy 3-21
MIRL Rwy 17-35
REIL Rwy 21
TDZ/CL Rwy 3

GREAT FALLS, MONTANA

AL-177 (FAA)

19115

# RNAV (GPS) Y RWY 21

GREAT FALLS INTL (GTF)

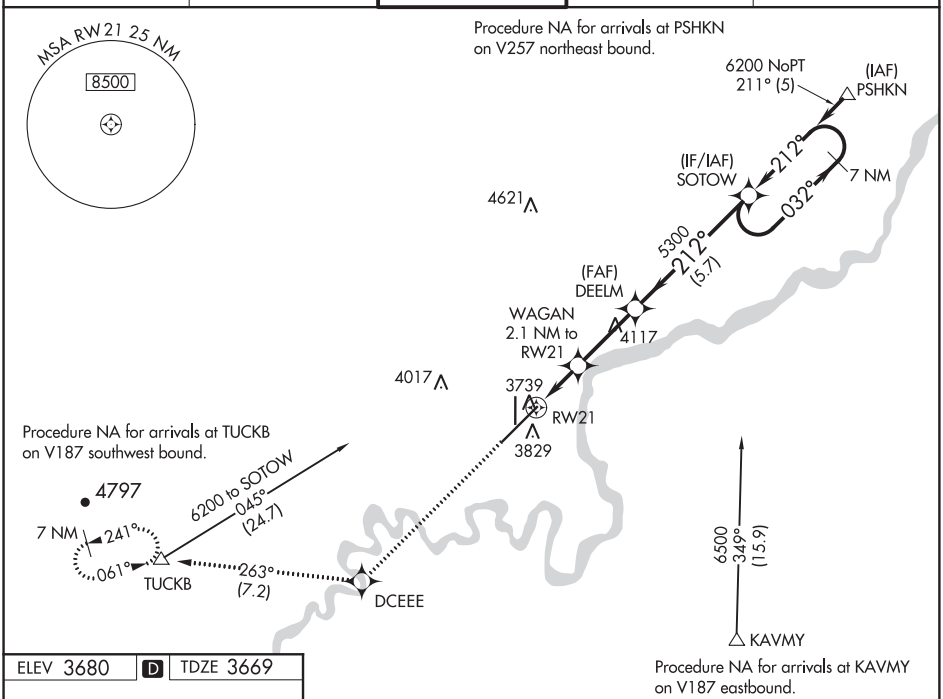
| WAAS CH 90221 W21A | APP CRS 212° | Rwy ldg 10502<br>TDZE 3669<br>Apt Elev 3680 |
|---|---|---|

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C (-11°F) or above 49°C (121°F). DME/DME RNP-0.3 NA.

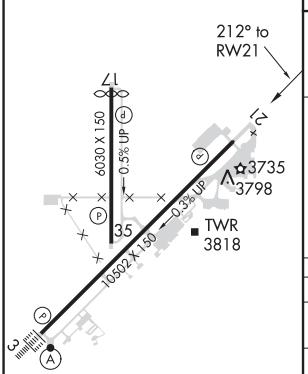
-33°C

MISSED APPROACH: Climb to 8000 direct DCEEE and on track 263° to TUCKB and hold, continue climb-in-hold to 8000.

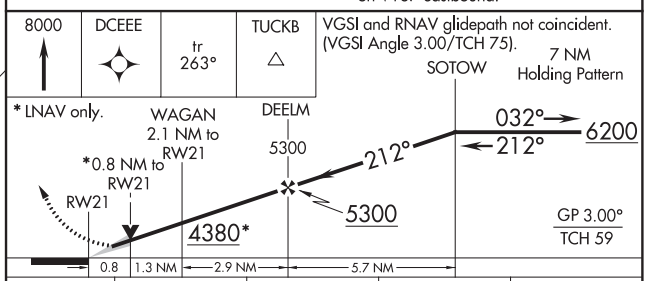
| ATIS | GREAT FALLS APP CON | GREAT FALLS TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 126.6 269.0 | 128.6 379.175 | 118.7 282.2 | 121.7 348.6 | 121.7 348.6 |




ELEV 3680 | D | TDZE 3669




HIRL Rwy 3-21
MIRL Rwy 17-35
REIL Rwy 21
TDZ/CL Rwy 3




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 3869/40 200 (200-¾) | | | |
| LNAV/VNAV DA | 3927/45 258 (300-⅞) | | | |
| LNAV MDA | 4000/55 331 (400-1) | | 4000/50 331 (400-1) | |
| C CIRCLING | 4120-1 440 (500-1) | 4140-1 460 (500-1) | 4320-1¾ 640 (700-1¾) | 4420-2¼ 740 (600-2¼) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| VORTAC GTF 115.1 Chan 98 | APP CRS 029° | Rwy ldg 10502 TDZE 3680 Apt Elev 3680 |
|---|---|---|

# VOR/DME RWY 3
## GREAT FALLS INTL (GTF)

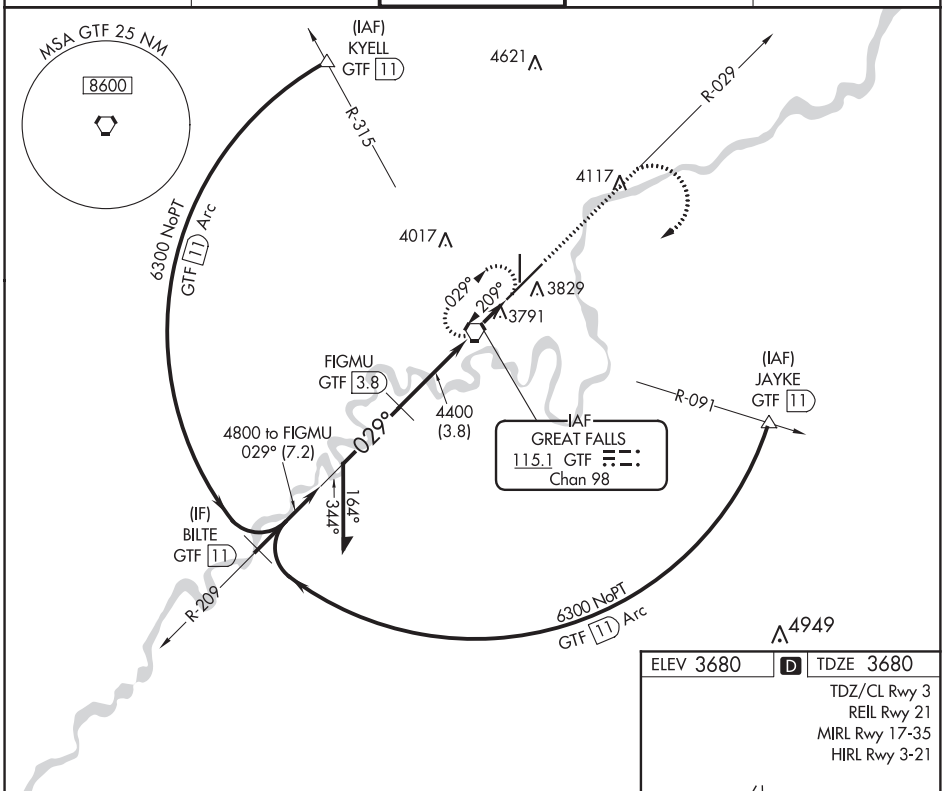
T
-33°C

For inoperative ALSF-2, increase S-3 Cat D visibility to RVR 6000.

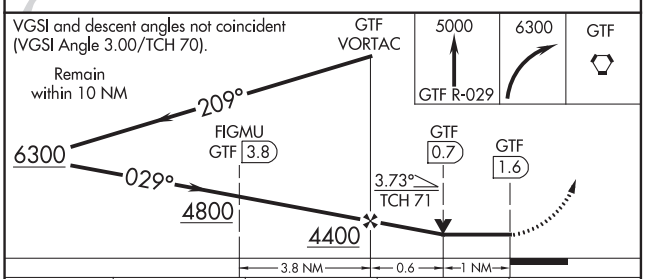
ALSF-2

MISSED APPROACH: Climb to 5000 via GTF VORTAC R-029 then climbing right turn to 6300 direct GTF VORTAC and hold, continue climb-in-hold to 6300.

| ATIS | GREAT FALLS APP CON | GREAT FALLS TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 126.6 269.0 | 128.6 379.175 | 118.7 282.2 | 121.7 348.6 | 121.7 348.6 |



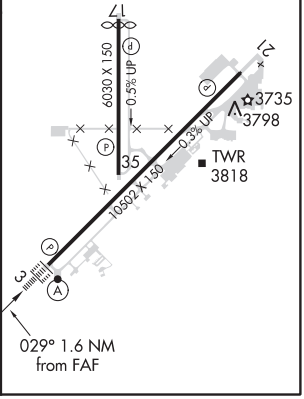

NW-1, 05 NOV 2020 to 31 DEC 2020




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-3 | 4060/24 380 (400-½) | | | NA |
| C CIRCLING | 4180-1 500 (500-1) | | 4320-1¾ 640 (700-1¾) | 4420-2¼ 740 (800-2¼) |

| ELEV 3680 | D | TDZE 3680 |
|---|---|---|

TDZ/CL Rwy 3
REIL Rwy 21
MIRL Rwy 17-35
HIRL Rwy 3-21



| VORTAC GTF | APP CRS | Rwy ldg | 10502 |
|---|---|---|---|
| 115.1 | 209° | TDZE | 3669 |
| Chan 98 | | Apt Elev | 3680 |

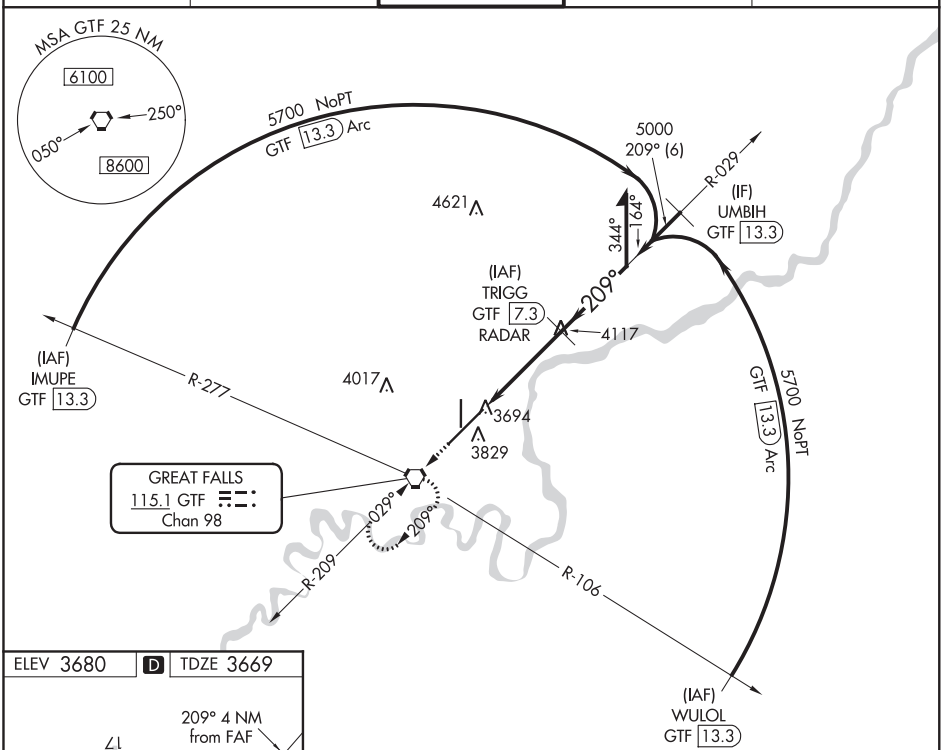
# VOR RWY 21
## GREAT FALLS INTL (GTF)

-33°C

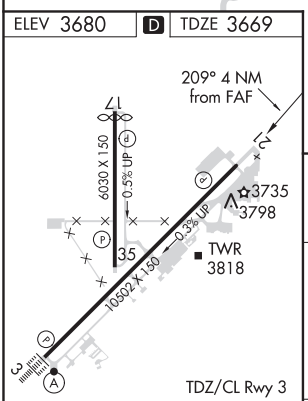
DME or RADAR required.

MISSED APPROACH: Climb to 8000 direct GTF VORTAC, continue climb-in-hold to 8000.

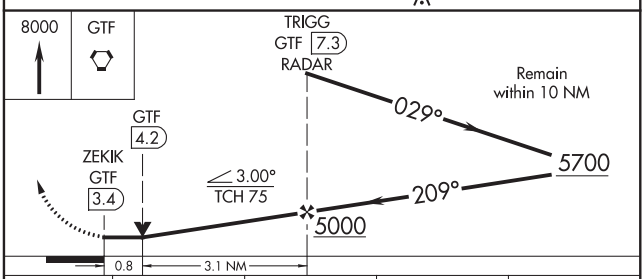
| ATIS | GREAT FALLS APP CON | GREAT FALLS TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 126.6 269.0 | 128.6 379.175 | 118.7 282.2 | 121.7 348.6 | 121.7 348.6 |




DME or RADAR REQUIRED




TDZ/CL Rwy 3
REIL Rwy 21
HIRL Rwy 3-21
MIRL Rwy 17-35

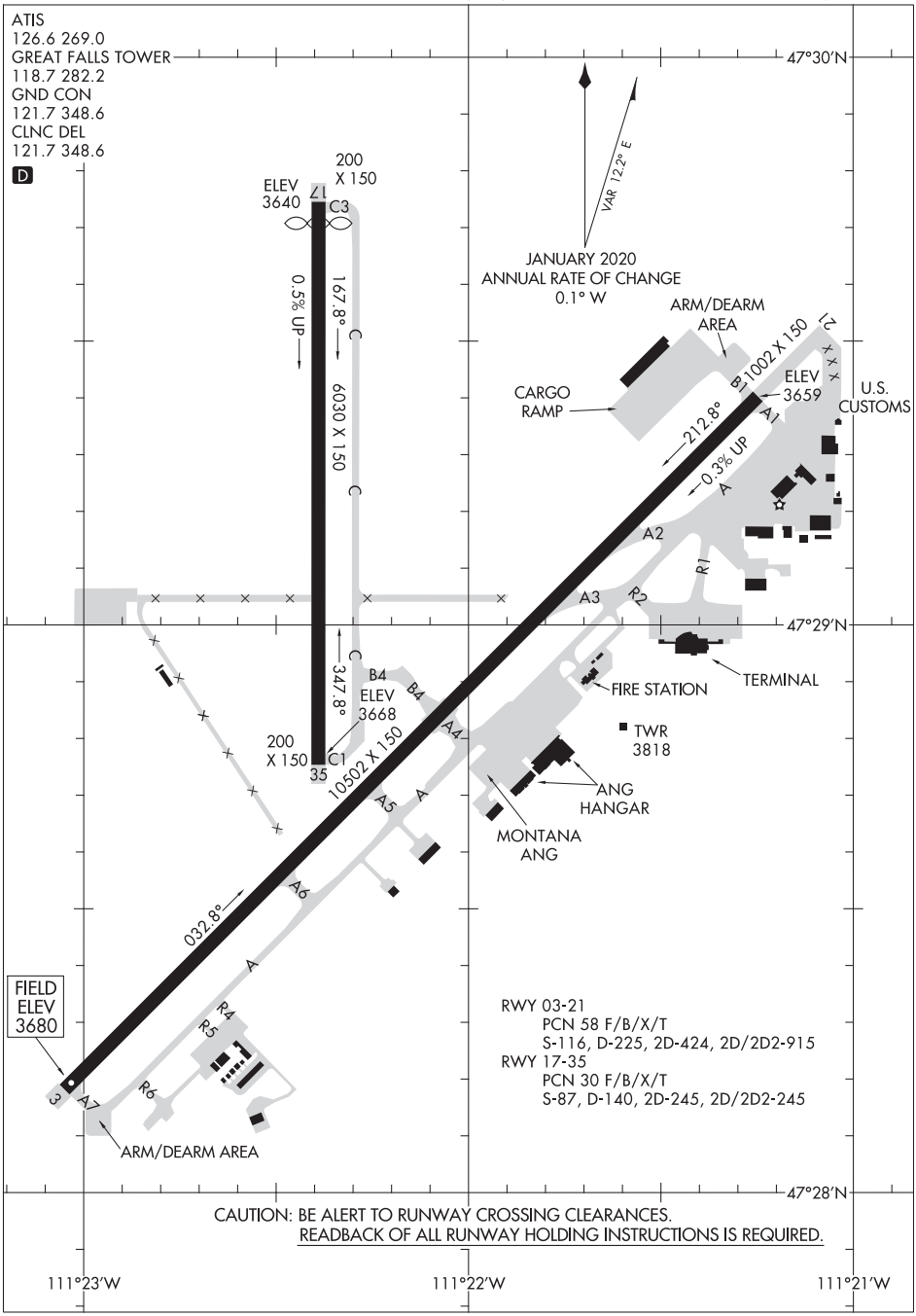



| FAF to MAP 4 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 4:00 | 2:40 | 2:00 | 1:36 | 1:20 |

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-21 | 4000/55 331 (400-1) | | | |
| C CIRCLING | 4120-1 440 (500-1) | 4140-1 460 (500-1) | 4320-1¾ 640 (700-1¾) | 4420-2¼ 740 (800-2¼) |




NW-1, 05 NOV 2020 to 31 DEC 2020




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

GREYBULL, WYOMING | AL-531 (FAA) | 20198

| WAAS CH 56530 W08A | APP CRS 076° | Rwy ldg 3953<br>TDZE 3942<br>Apt Elev 3942 |
|---|---|---|

# RNAV (GPS) RWY 8
## SOUTH BIG HORN COUNTY (GEY)

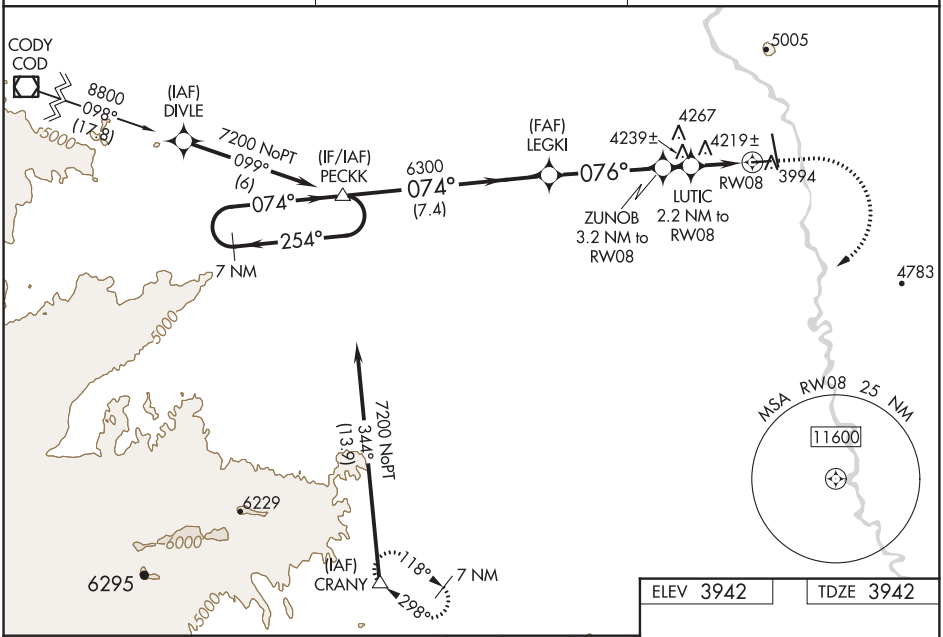
T
A
-33°C

DME/DME RNP-0.3 NA. Straight-in minimums NA at night. When local altimeter setting not received use Cowley/Lovell/Byron altimeter setting: increase LPV DA to 4279 feet and LNAV/VNAV DA to 4654 feet. Increase LPV visibility, all Cats ⅛ SM; increase all MDA 100 feet and LNAV Cats C/D visibility ¼ SM. Rwy 8 helicopter visibility reduction below ¾ SM NA. Baro-VNAV and VDP NA when using Cowley/Lovell/Byron altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -26°C (-14°F) or above 51°C (124°F).

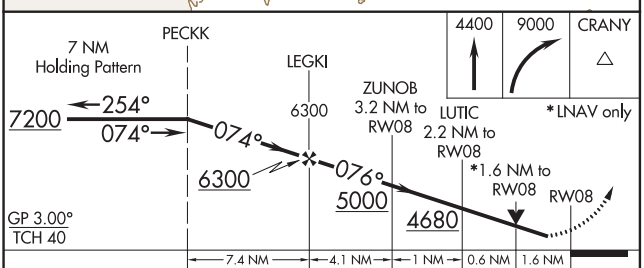
MISSED APPROACH: Climb to 4400 then climbing right turn to 9000 direct CRANY and hold, continue climb-in-hold to 9000.

| ASOS | SALT LAKE CENTER | CTAF |
|---|---|---|
| 135.325 | 127.75 351.9 | 122.9 L |

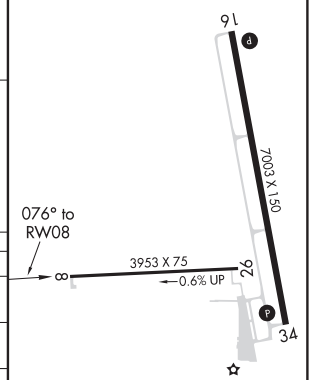





| ELEV 3942 | TDZE 3942 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4192-1 250 (300-1) | | | |
| LNAV/VNAV DA | 4567-2½ 625 (700-2½) | | | |
| LNAV MDA | 4480-1 538 (600-1) | | 4480-1½ 538 (600-1½) | |
| C CIRCLING | 4680-1 738 (800-1) | 4700-1 758 (800-1) | 5320-3 1378 (1400-3) | 5460-3 1518 (1600-3) |




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

| WAAS CH 77542 W34A | APP CRS 339° | Rwy ldg 7003 TDZE 3916 Apt Elev 3942 |
|---|---|---|

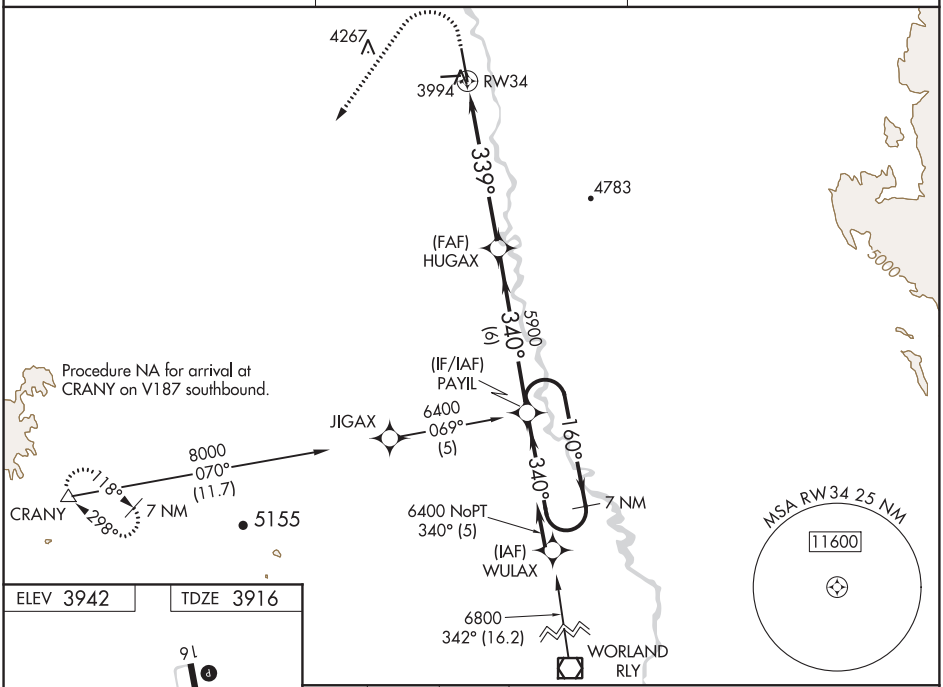
# RNAV (GPS) RWY 34
## SOUTH BIG HORN COUNTY (GEY)

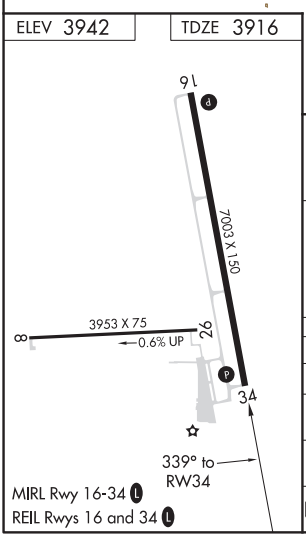
Baro-VNAV NA when using Cowley/Lovell/Byron altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -26°C (-14°F) or above 51°C (124°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Cowley/Lovell/Byron altimeter setting and increase LPV DA to 4253 feet and LNAV/VNAV DA to 4327 feet. Increase LPV and LNAV/VNAV visibility all Cats ⅜ SM. Increase all MDAs 100 feet and LNAV visibility Cat B ¼ SM, Cats C/D ½ SM and Circling Cat B ¼ SM. VDP NA with Cowley/Lovell/Byron altimeter setting.

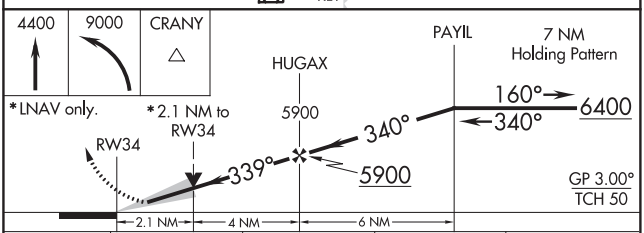
-33°C

MISSED APPROACH: Climb to 4400 then climbing left turn to 9000 direct CRANY and hold, continue climb-in-hold 9000.

| ASOS | SALT LAKE CENTER | CTAF |
|---|---|---|
| 135.325 | 127.75 351.9 | 122.9 L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4166-¾ 250 (300-¾) | | | |
| LNAV/VNAV DA | 4240-1 324 (300-1) | | | |
| LNAV MDA | 4640-1 724 (700-1) | | 4640-2 724 (700-2) | |
| C CIRCLING | 4640-1 698 (700-1) | 4700-1¼ 758 (800-1¼) | 5320-3 1378 (1400-3) | 5460-3 1518 (1600-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| NDB GEY | APP CRS | Rwy ldg | 7003 |
|---|---|---|---|
| 275 | 324° | TDZE | 3916 |
| | | Apt Elev | 3942 |

# NDB RWY 34

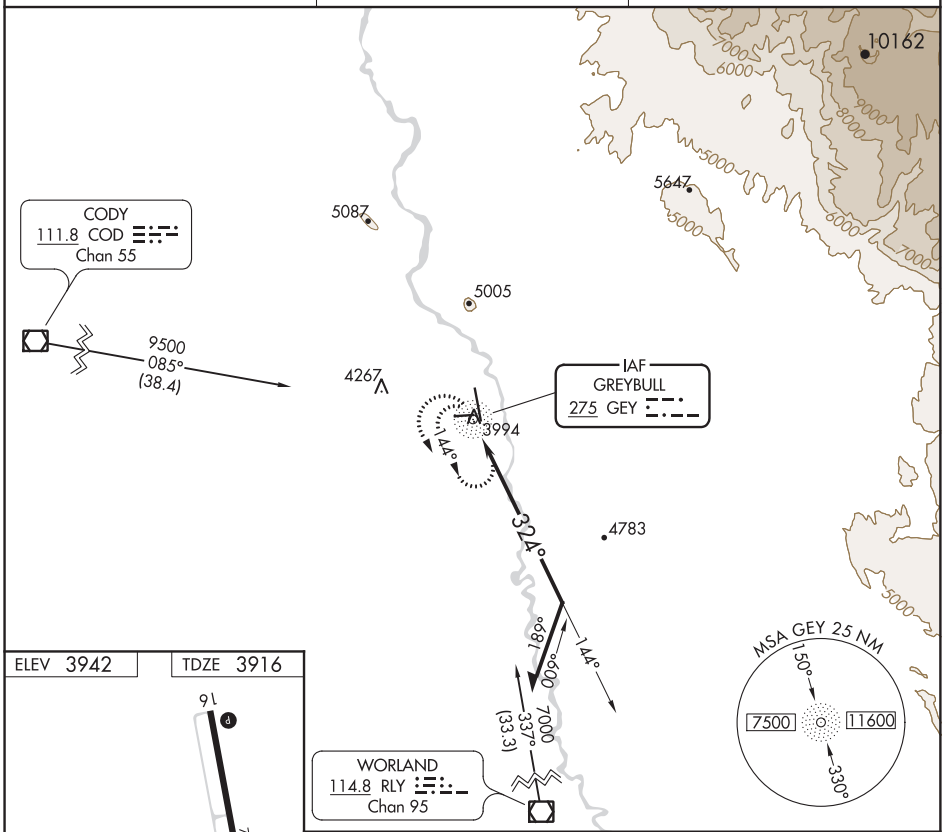
## SOUTH BIG HORN COUNTY (GEY)

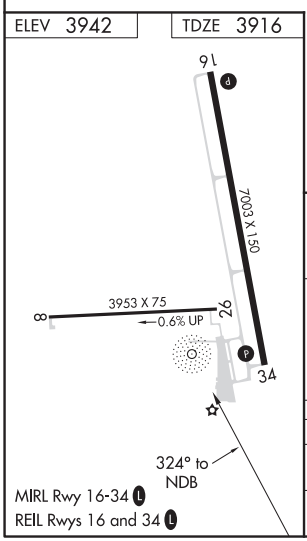
NA
-33°C

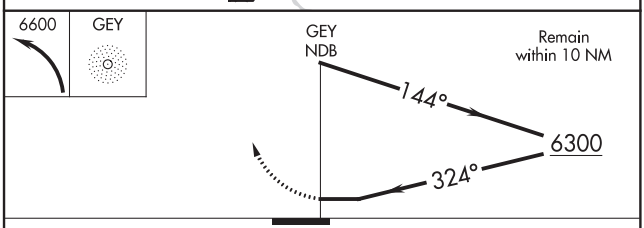
When local altimeter setting not received, use Cowley/Lovell/Byron altimeter setting and increase all MDAs 100 feet.

MISSED APPROACH: Climbing left turn to 6600 in GEY NDB holding pattern.

| ASOS | SALT LAKE CENTER | CTAF |
|---|---|---|
| 135.325 | 127.75 351.9 | 122.9 L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-34 | 5240-1¼ 1324 (1400-1¼) | 5240-1½ 1324 (1400-1½) | 5240-3 1324 (1400-3) | |
| C CIRCLING | 5240-1¼ 1298 (1300-1¼) | 5240-1½ 1298 (1300-1½) | 5320-3 1378 (1400-3) | 5460-3 1518 (1600-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

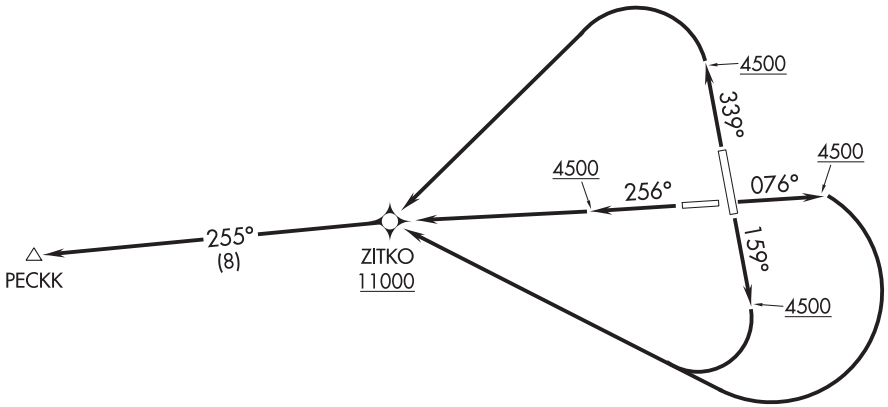
# PECKK TWO DEPARTURE (RNAV)

AL-531 (FAA)



ASOS
135.325
CTAF
122.9
SALT LAKE CENTER
127.75 351.9

**TOP ALTITUDE: ASSIGNED BY ATC**




TAKEOFF MINIMUMS
Rwys 8, 16, 26, 34: Standard with minimum climb of 500′ per NM to 4500.

NOTE: RNAV 1.
NOTE: GPS required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 8: Climb heading 076° to 4500, then climbing right turn to 11000 direct ZITKO, thence. . . .
TAKEOFF RUNWAY 16: Climb heading 159° to 4500, then climbing right turn to 11000 direct ZITKO, thence. . . .
TAKEOFF RUNWAY 26: Climb heading 256° to 4500, then continue climb to 11000 direct ZITKO, thence. . . .
TAKEOFF RUNWAY 34: Climb heading 339° to 4500, then climbing left turn to 11000 direct ZITKO, thence. . . .

. . . .on track 255° to PECKK. Maintain ATC assigned altitude.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 69426 W32A | APP CRS 321° | Rwy ldg 5060 TDZE 4380 Apt Elev 4402 |
|---|---|---|

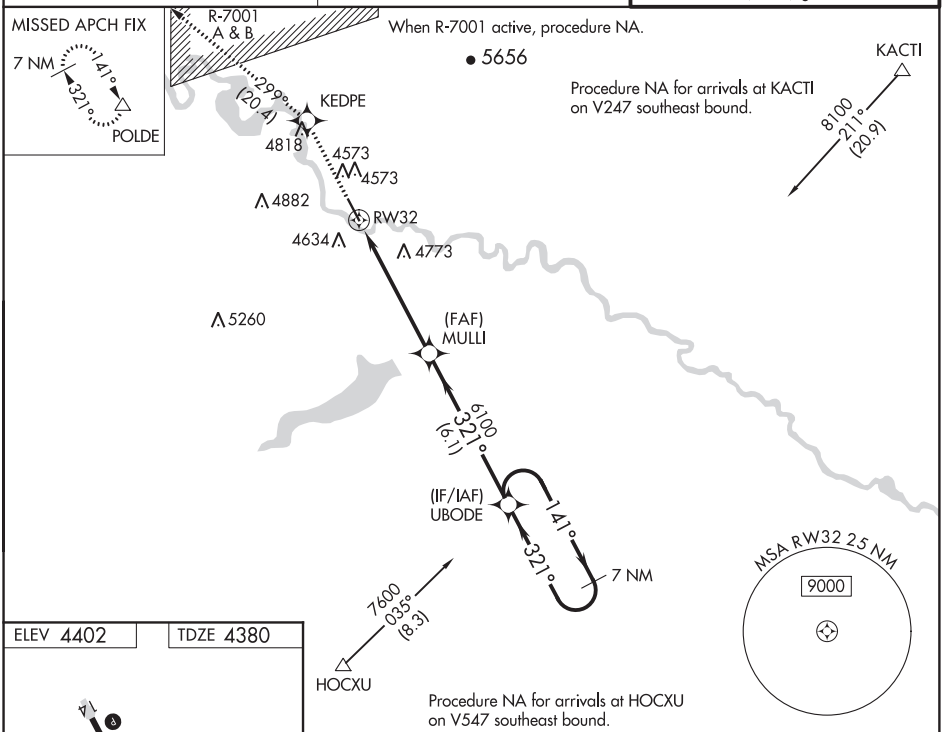
# RNAV (GPS) RWY 32
## CAMP GUERNSEY (GUR)

T NA

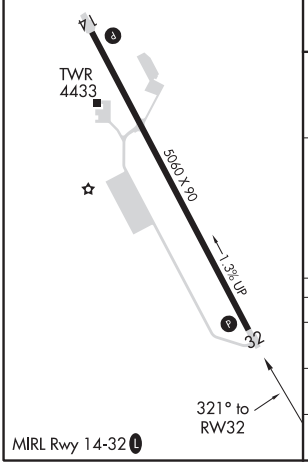
DME/DME RNP- 0.3 NA. When local altimeter setting not received, use Torrington altimeter setting and increase all MDA 100 feet and increase LP Cat B and Circling Cat B visibility ¼ mile and all Cat C and D visibility ½ mile. Helicopter visiblity reduction below ¾ SM NA. When Rwy 32 VGSI inop, Straight-In and Circling minimums NA at night. When Rwy 14 VGSI inop, Circling to Rwy 14 NA at night.

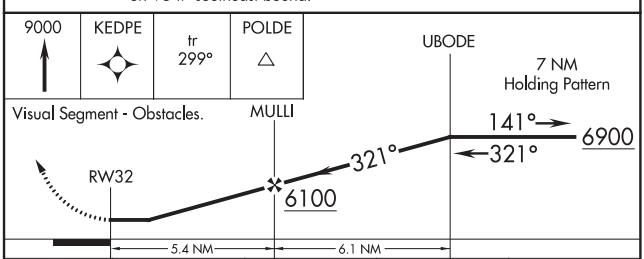
MISSED APPROACH: Climb to 9000 direct KEDPE and on track 299° to POLDE and hold.

| ATIS | DENVER CENTER | GUERNSEY TOWER★ |
|---|---|---|
| 119.825 | 135.6 363.025 | 126.2 (CTAF) L 233.3 |




| ELEV 4402 | TDZE 4380 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LP MDA | 5040-1 660 (700-1) | | 5040-2 660 (700-2) | |
| LNAV MDA | 5080-1 700 (700-1) | 5080-1¼ 700 (700-1¼) | 5080-2 700 (700-2) | |
| CIRCLING | 5200-1 798 (800-1) | 5200-1¼ 798 (800-1¼) | 5260-2½ 858 (900-2½) | 5560-3 1158 (1200-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

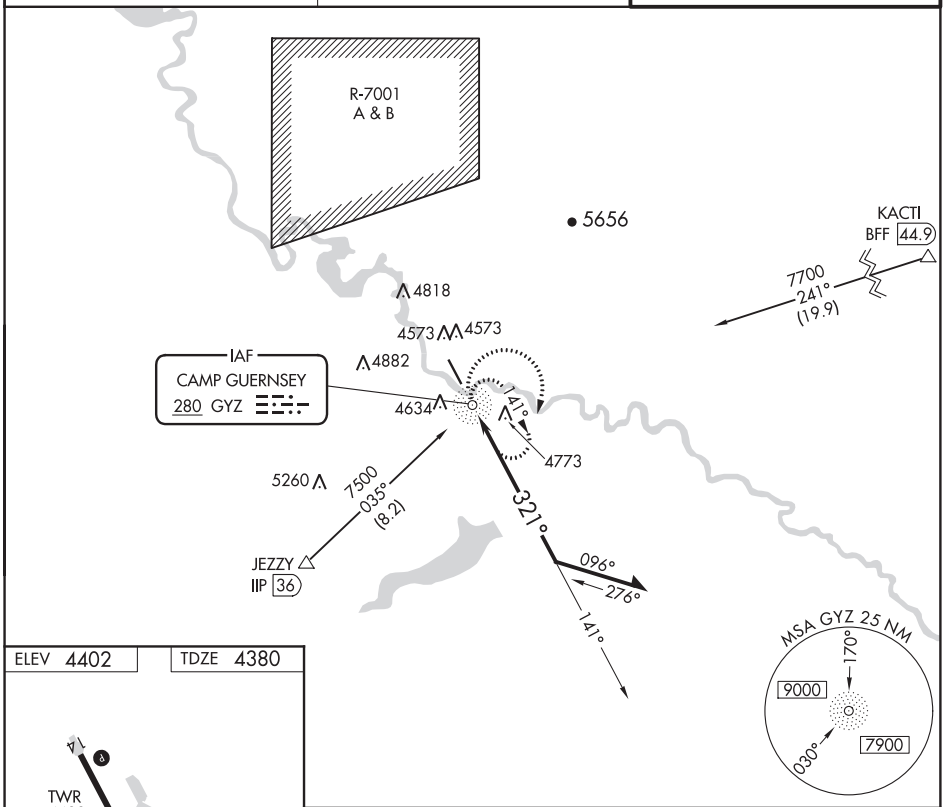
| NDB GYZ | APP CRS | Rwy ldg | 5060 |
|---|---|---|---|
| 280 | 321° | TDZE | 4380 |
| | | Apt Elev | 4402 |

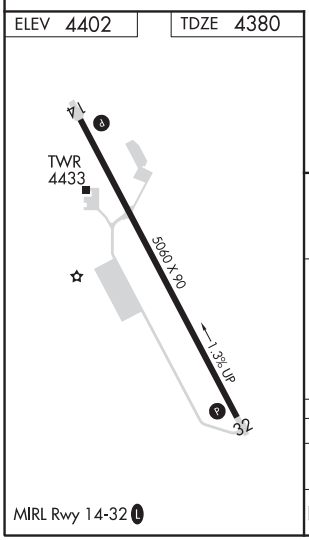
# NDB RWY 32
## CAMP GUERNSEY (GUR)

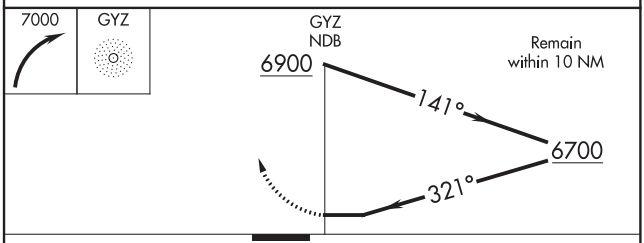
T
A NA Rwy 32 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climbing right turn to 7000 in GYZ NDB holding pattern.

| ATIS | DENVER CENTER | GUERNSEY TOWER★ |
|---|---|---|
| 119.825 | 135.6 363.025 | 126.2 (CTAF) L 233.3 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-32 | 5660-1¼<br>1280 (1300-1¼) | 5660-1½<br>1280 (1300-1½) | 5660-3 1280 (1300-3) | |
| C CIRCLING | 5660-1¼<br>1258 (1300-1¼) | 5660-1½<br>1258 (1300-1½) | 5660-3<br>1258 (1300-3) | 5740-3<br>1338 (1400-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

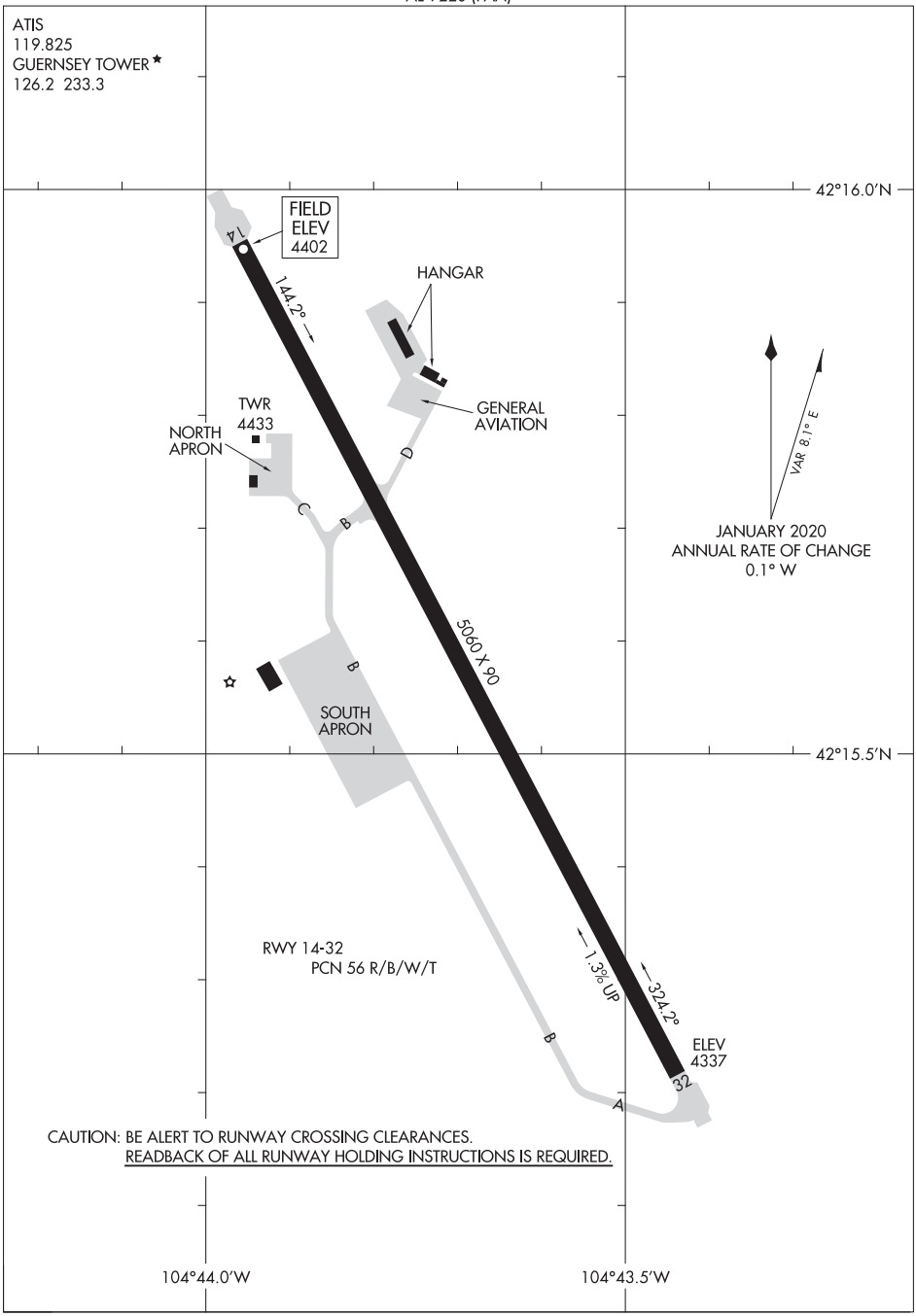
NW-1, 05 NOV 2020 to 31 DEC 2020

20086

# AIRPORT DIAGRAM

CAMP GUERNSEY (GUR)
GUERNSEY, WYOMING

AL-9220 (FAA)




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM
20086
GUERNSEY, WYOMING
CAMP GUERNSEY (GUR)

| WAAS CH 77639 W31A | APP CRS 320° | Rwy ldg 6631<br>TDZE 5289<br>Apt Elev 5320 |
|---|---|---|

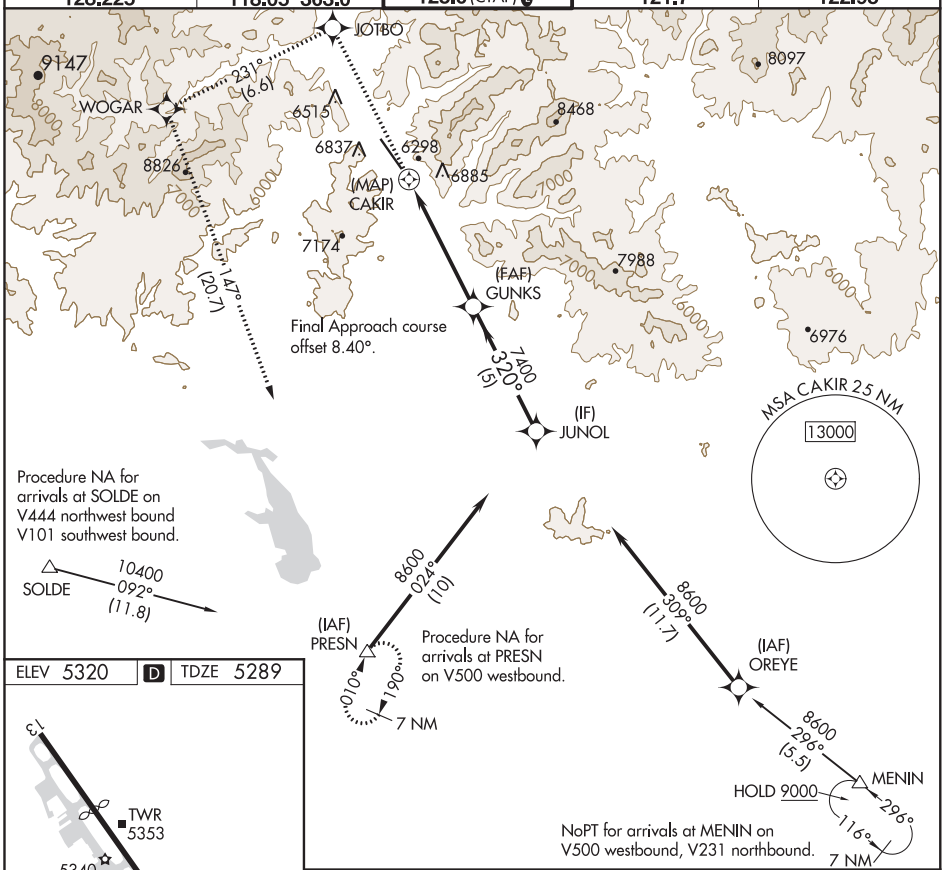
# RNAV (GPS) X RWY 31
## FRIEDMAN MEMORIAL (SUN)

T
A
-14°C

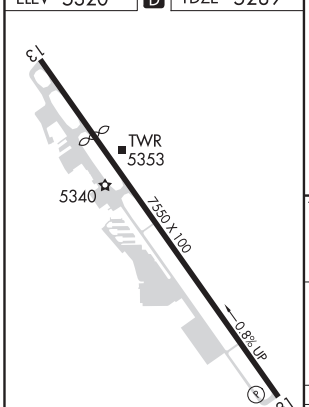
DME/DME RNP-0.3 NA. Rwy 31 helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: (Do not exceed 185 KIAS until WOGAR) Climb to 10500 direct JOTBO and on track 231° to WOGAR and on track 147° to PRESN and hold. *Missed approach requires minimum climb of 420 feet per NM to 9500; if unable to meet climb gradient, see RNAV (GPS) Y RWY 31.

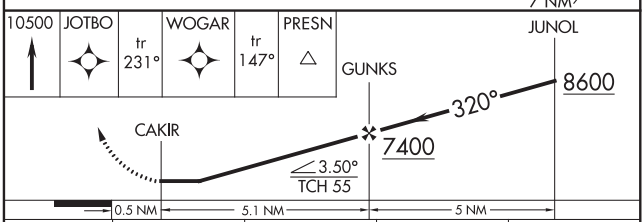
| ATIS | SALT LAKE CENTER | HAILEY TOWER* | GND CON | UNICOM |
|---|---|---|---|---|
| 128.225 | 118.05 363.0 | 125.6 (CTAF) L | 121.7 | 122.95 |




ELEV 5320 | D | TDZE 5289




HIRL Rwy 13-31 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LP MDA* | 6180-1¼ 891 (900-1¼) | | 6180-2½ 891 (900-2½) | |
| LNAV MDA* | 6920-1¼ 1631 (1600-1¼) | 6920-1½ 1631 (1600-1½) | 6920-3 1631 (1600-3) | |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

HAILEY, IDAHO

AL-6239 (FAA)

20254

# RNAV (GPS) Y RWY 31

## FRIEDMAN MEMORIAL (SUN)

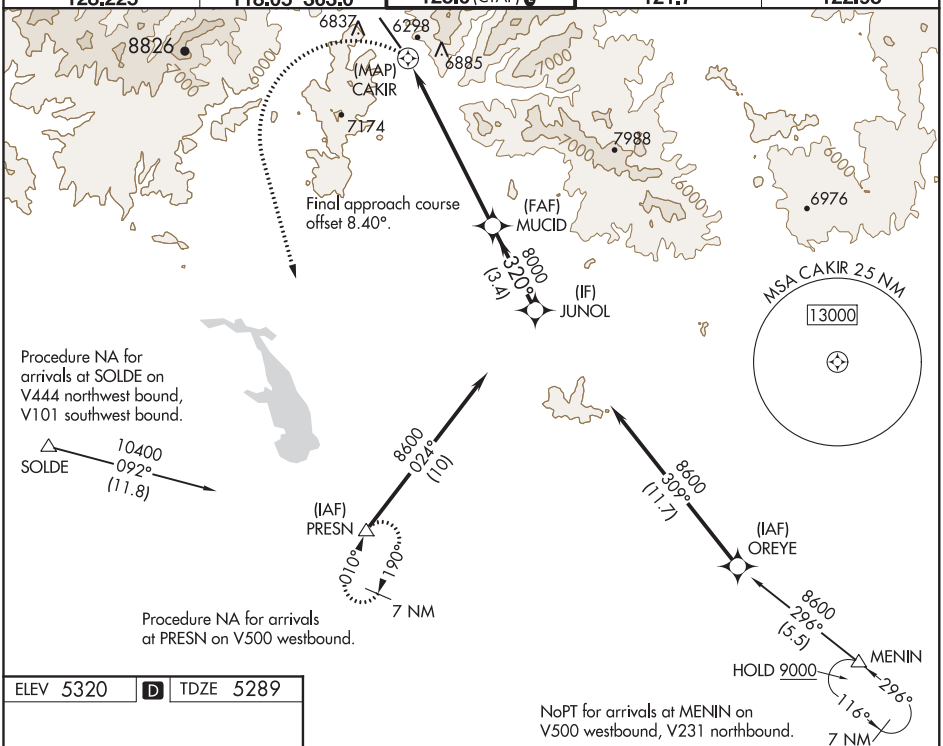
| WAAS CH 62939 W31B | APP CRS 320° | Rwy ldg 6631<br>TDZE 5289<br>Apt Elev 5320 |
|---|---|---|

Circling NA northeast of Rwy 13-31. DME/DME RNP-0.3 NA. Rwy 31 helicopter visibility reduction below 1 SM NA.

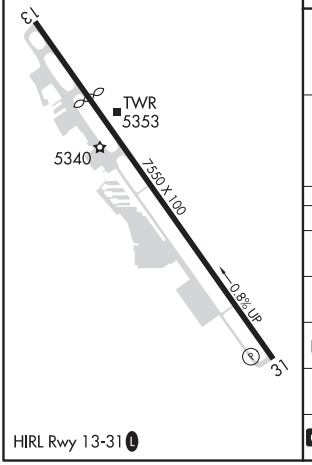
-14°C

MISSED APPROACH: (Do not exceed 185 KIAS until PRESN) Climbing left turn to 8700 direct PRESN and hold.*Missed approach requires minimum climb of 410 feet per NM to 7600.

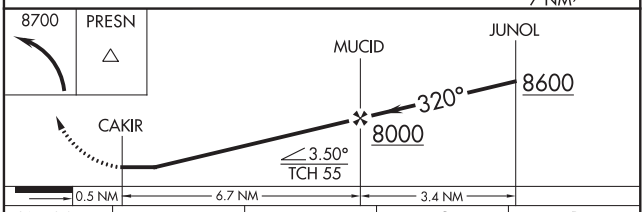
| ATIS | SALT LAKE CENTER | HAILEY TOWER* | GND CON | UNICOM |
|---|---|---|---|---|
| 128.225 | 118.05 363.0 | 125.6 (CTAF) L | 121.7 | 122.95 |




ELEV 5320 | D | TDZE 5289




HIRL Rwy 13-31 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LP MDA* | 6900-1¼ 1611 (1600-1¼) | 6900-1½ 1611 (1600-1½) | 6900-3 1611 (1600-3) | |
| LP MDA | 7220-1¼ 1931 (1900-1¼) | 7220-1½ 1931 (1900-1½) | 7220-3 1931 (1900-3) | |
| LNAV MDA* | 7100-1¼ 1811 (1800-1¼) | 7100-1½ 1811 (1800-1½) | 7100-3 1811 (1800-3) | |
| LNAV MDA | 7340-1¼ 2051 (2100-1¼) | 7340-1½ 2051 (2100-1½) | 7340-3 2051 (2100-3) | |
| C CIRCLING | 7340-1¼ 2020 (2100-1¼) | 7360-1½ 2040 (2100-1½) | 7580-3 2260 (2300-3) | 7940-3 2620 (2700-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| NDB/DME HLE | APP CRS | Rwy ldg | N/A |
|---|---|---|---|
| 220 | 335° | TDZE | N/A |
| Chan 25 (108.8) | | Apt Elev | 5320 |

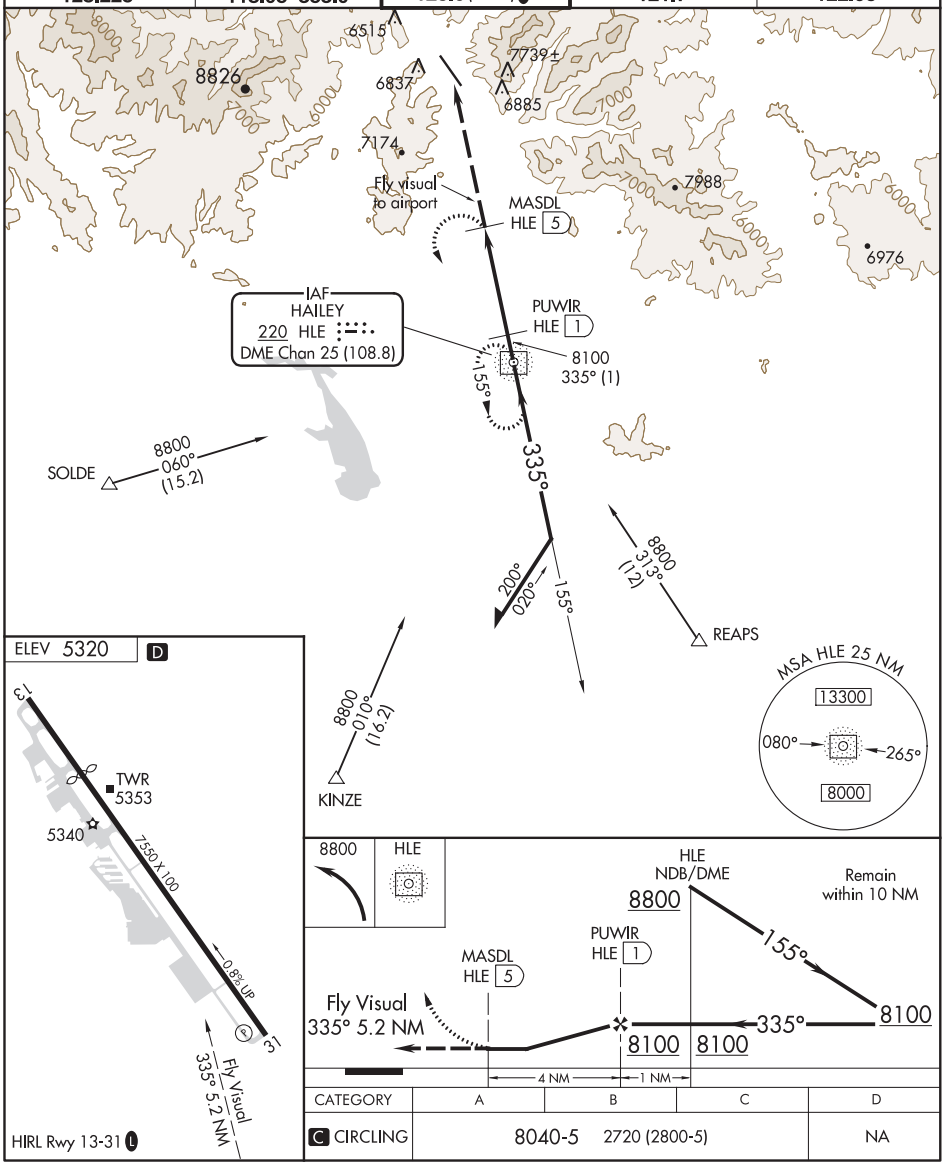
# NDB/DME-A
## FRIEDMAN MEMORIAL (SUN)

NA
-14°C

Circling NA NE of Rwy 13-31. Visibility reduction by helicopters NA. When control tower closed, procedure not authorized. Occasional ADF needle swings away from the final approach course are to be expected north of missed approach point. Procedure NA at night.

MISSED APPROACH: Climbing left turn to 8800 direct HLE NDB and hold.

| ATIS | SALT LAKE CENTER | HAILEY TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 128.225 | 118.05 353.0 | 125.6 (CTAF) L | 121.7 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 8040-5 | 2720 (2800-5) | | NA |

NW-1, 05 NOV 2020 to 31 DEC 2020

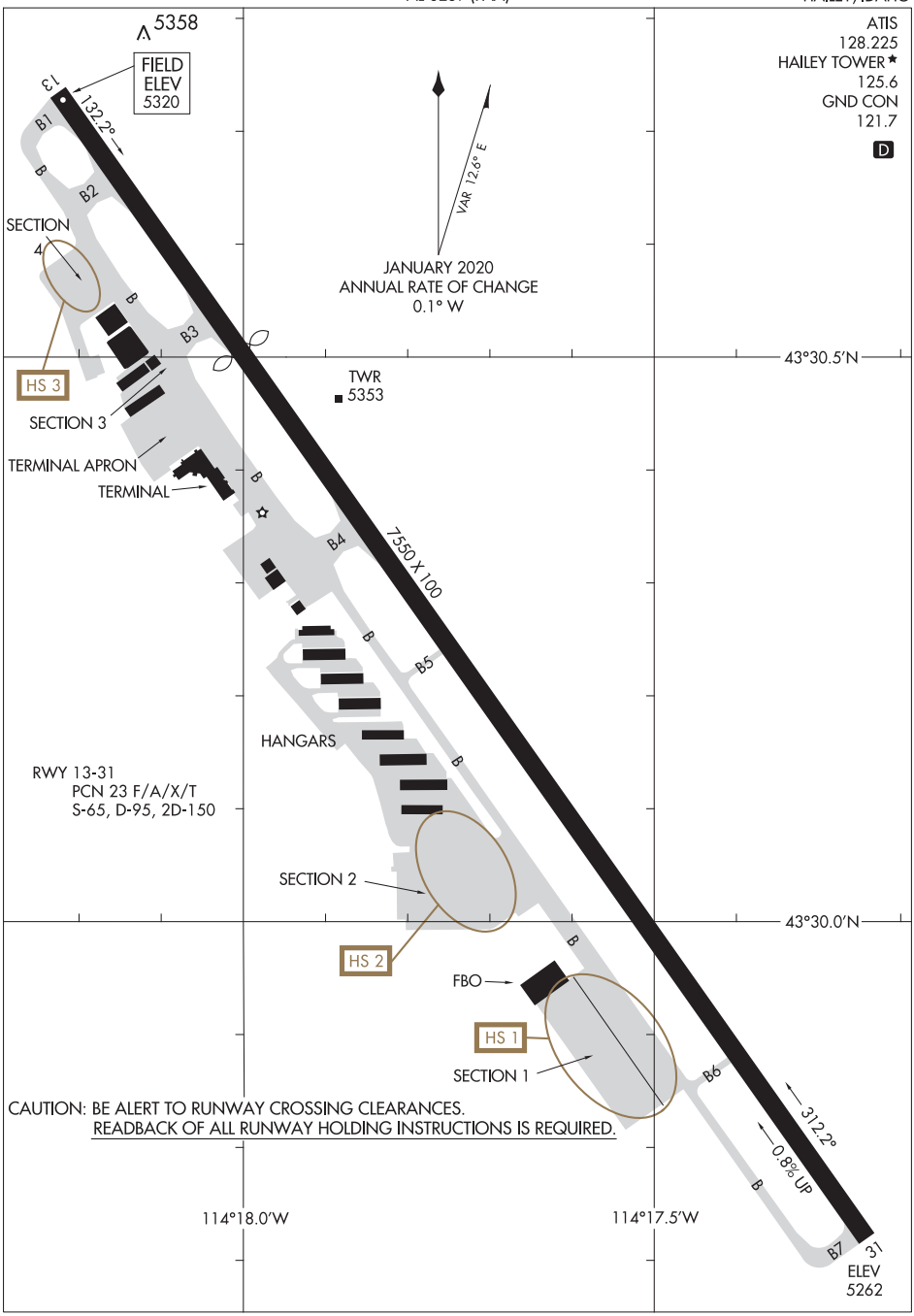
NW-1, 05 NOV 2020 to 31 DEC 2020

20086

# AIRPORT DIAGRAM

AL-6239 (FAA)

FRIEDMAN MEMORIAL (SUN)
HAILEY, IDAHO



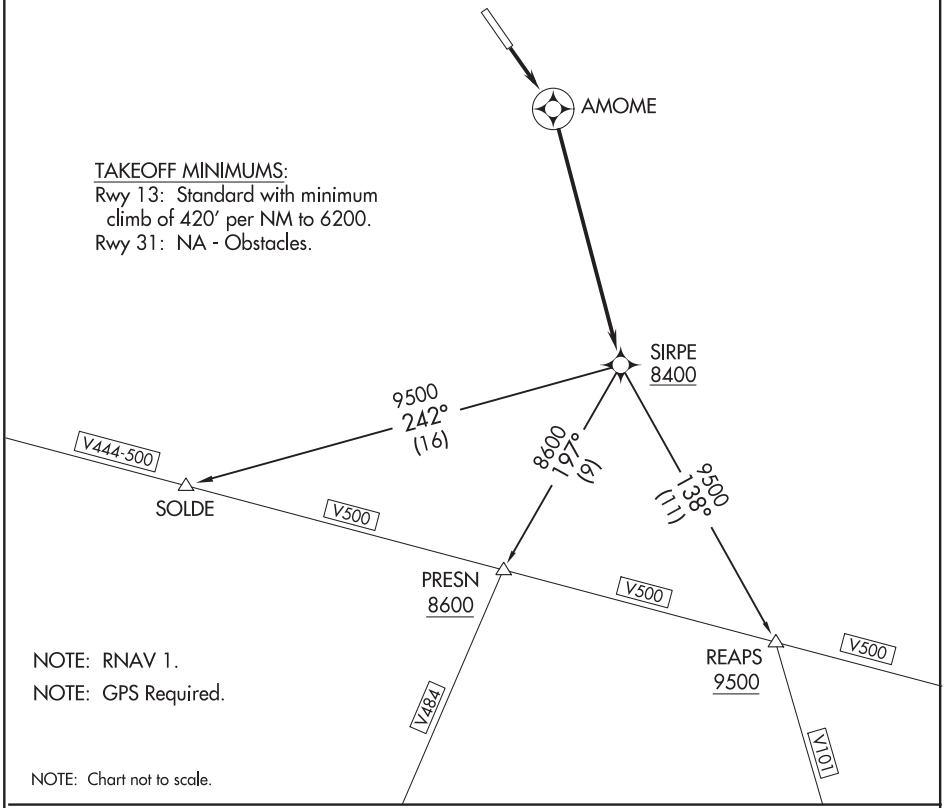

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM
20086
HAILEY, IDAHO
FRIEDMAN MEMORIAL (SUN)

**TOP ALTITUDE:**
**PRESN AND REAPS TRANSITIONS: 10000;**
**SOLDE TRANSITION: ASSIGNED BY ATC**

GND CON
121.7
HAILEY TOWER ★
125.6
SALT LAKE CENTER
118.05 363.0
UNICOM 122.95




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 13: Climb direct AMOME, then climbing right turn direct SIRPE; cross SIRPE at or above 8400, thence. . . .

. . . .on (Transition).

PRESN TRANSITION (AUREL3.PRESN)
REAPS TRANSITION (AUREL3.REAPS)
SOLDE TRANSITION (AUREL3.SOLDE)

HAMILTON, MONTANA | AL-9473 (FAA) | 19115

# RNAV (GPS)-A
## RAVALLI COUNTY (6S5)

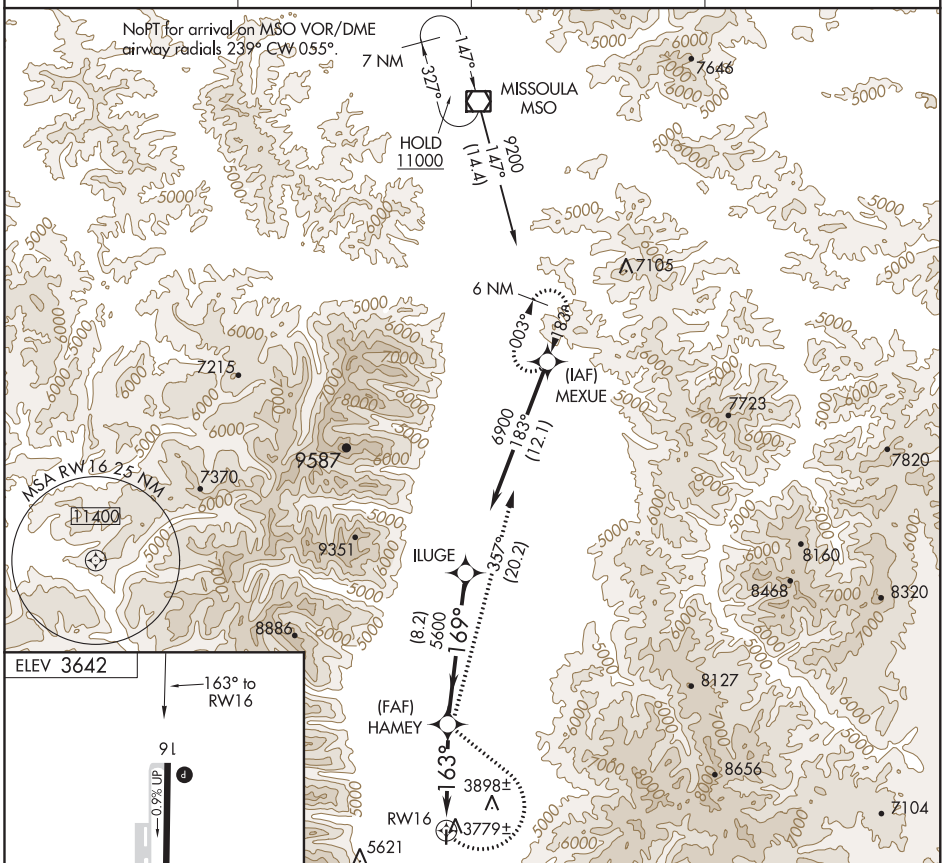
| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 163° | TDZE | N/A |
| | Apt Elev | 3642 |

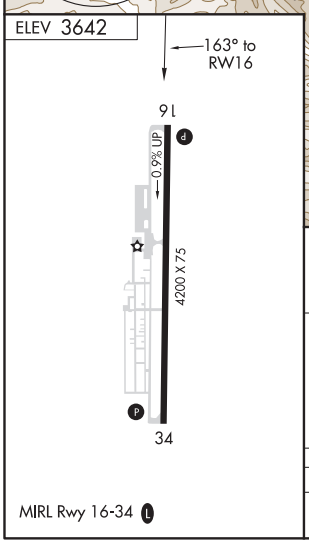
NA
-23°C

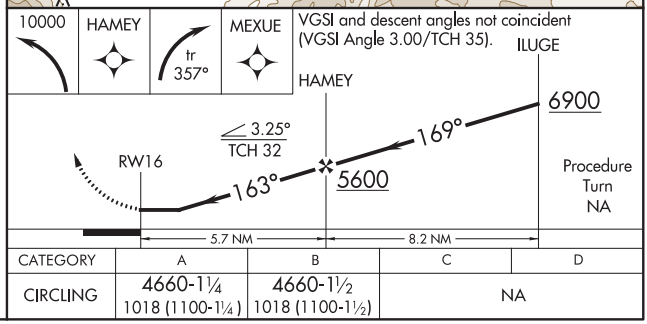
DME/DME RNP-0.3 NA.
When local altimeter setting not received, procedure NA.
Procedure NA at night.

MISSED APPROACH: Climbing left turn to 10000 direct HAMEY WP and right turn via 357° track to MEXUE WP and hold.

| AWOS-3P | SPOKANE APP CON★ | SALT LAKE CITY CENTER | UNICOM |
|---|---|---|---|
| 119.825 | 124.9 298.95 | 133.4 285.4 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 4660-1¼ 1018 (1100-1¼) | 4660-1½ 1018 (1100-1½) | NA | |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

HAMILTON, MONTANA
Orig-A 08APR10

46°15′N-114°08′W

RAVALLI COUNTY (6S5)
RNAV (GPS)-A

| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 001° | TDZE | N/A |
| | Apt Elev | 3642 |

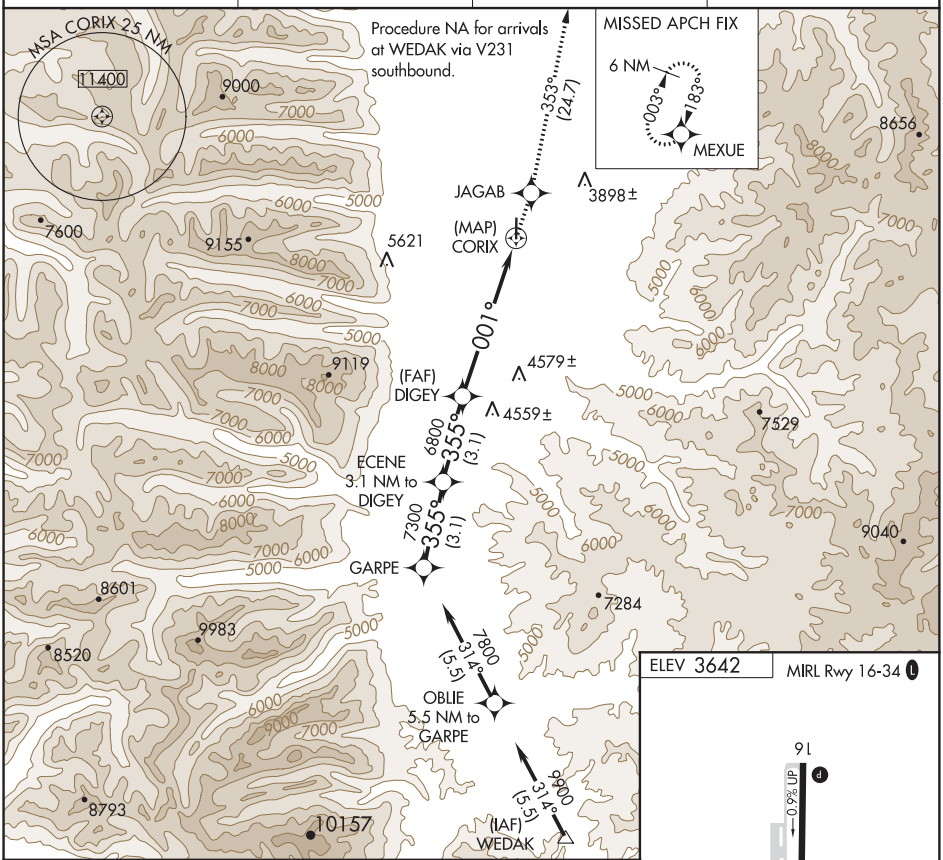
# RNAV (GPS)-B
## RAVALLI COUNTY (6S5)

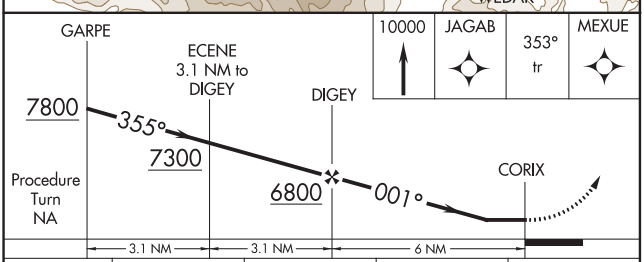
T
NA
-23°C

DME/DME RNP-0.3 NA.
When local altimeter setting not received, procedure NA.
Procedure NA at night.

MISSED APPROACH: Climb to 10000 direct JAGAB WP and via 353° track to MEXUE WP and hold.

| AWOS-3P | SPOKANE APP CON ★ | SALT LAKE CITY CENTER | UNICOM |
|---|---|---|---|
| 119.825 | 124.9 298.95 | 132.4 338.3 | 122.8 (CTAF) L |

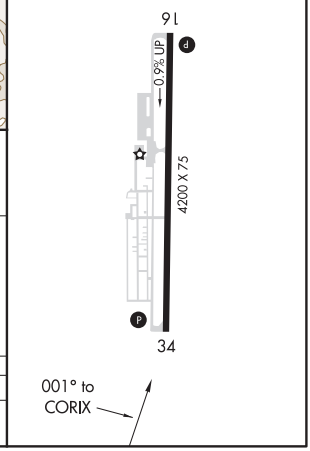



| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 4740-1¼ 1098 (1100-1¼) | 4740-1½ 1098 (1100-1½) | NA | |

ELEV 3642

MIRL Rwy 16-34 L




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

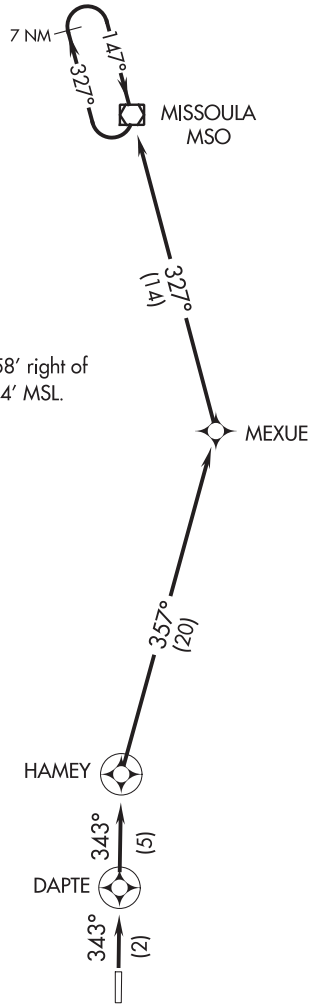
(HAMEY1.HAMEY) 16147

# HAMEY ONE DEPARTURE (OBSTACLE) (RNAV)

SL-9473 (FAA)

RAVALLI COUNTY (6S5)
HAMILTON, MONTANA

SPOKANE DEP CON
124.9 298.95
SALT LAKE CITY CENTER
133.4 285.4




TAKEOFF MINIMUMS
Rwy 16: NA, Obstacles.
Rwy 34: Standard.

TAKEOFF OBSTACLE NOTES
Rwy 34: Tree 1044′ from DER, 258′ right of centerline, 80′ AGL/3714′ MSL.
Rwy 16: NA, Obstacles.

NOTE: GPS required.
NOTE: RNAV 1

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Not authorized, Obstacles.

TAKEOFF RUNWAY 34: Climb to 9000 direct DAPTE WP, direct HAMEY WP, then via depicted route to MSO VOR/DME, Thence. . . .

. . . .all aircraft climb in MSO VOR/DME holding pattern (hold NW, RT, 147° inbound) to cross MSO VOR/DME at or above MEA/MCA for direction of flight before proceeding on course.


NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 65644 W26A | APP CRS 260° | Rwy ldg 4491 TDZE 3015 Apt Elev 3025 |
|---|---|---|

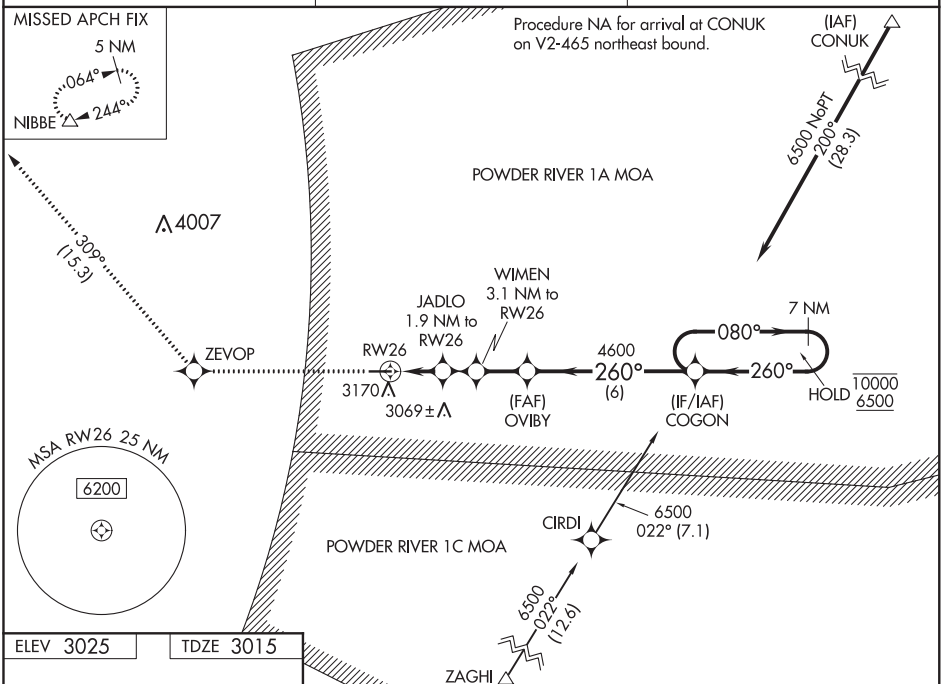
# RNAV (GPS) RWY 26
## BIG HORN COUNTY (ØØU)

RNP APCH.

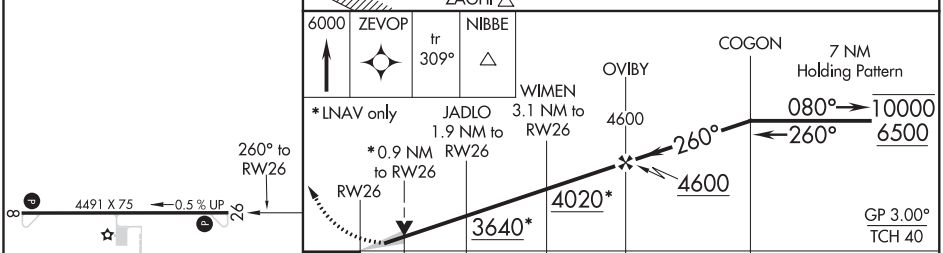
For unccompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C or above 54°C.

MISSED APPROACH: Climb to 6000 direct ZEVOP and on track 309° to NIBBE and hold.

| AWOS-3 | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 118.325 | 132.425 317.45 | 122.8 (CTAF) L |




ELEV 3025 TDZE 3015




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 3215-1 200 (200-1) | | NA | |
| LNAV/VNAV DA | 3265-1 250 (300-1) | | NA | |
| LNAV MDA | 3320-1 305 (300-1) | | NA | |
| C CIRCLING | 3480-1 455 (500-1) | 3500-1 475 (500-1) | NA | |

REIL Rwys 8 and 26 L
MIRL Rwy 8-26 L




NW-1, 05 NOV 2020 to 31 DEC 2020

HARLOWTON, MONTANA | AL-10507 (FAA) | 20030

| WAAS CH 99443 W09A | APP CRS 088° | Rwy ldg 4200<br>TDZE 4312<br>Apt Elev 4312 |
|---|---|---|

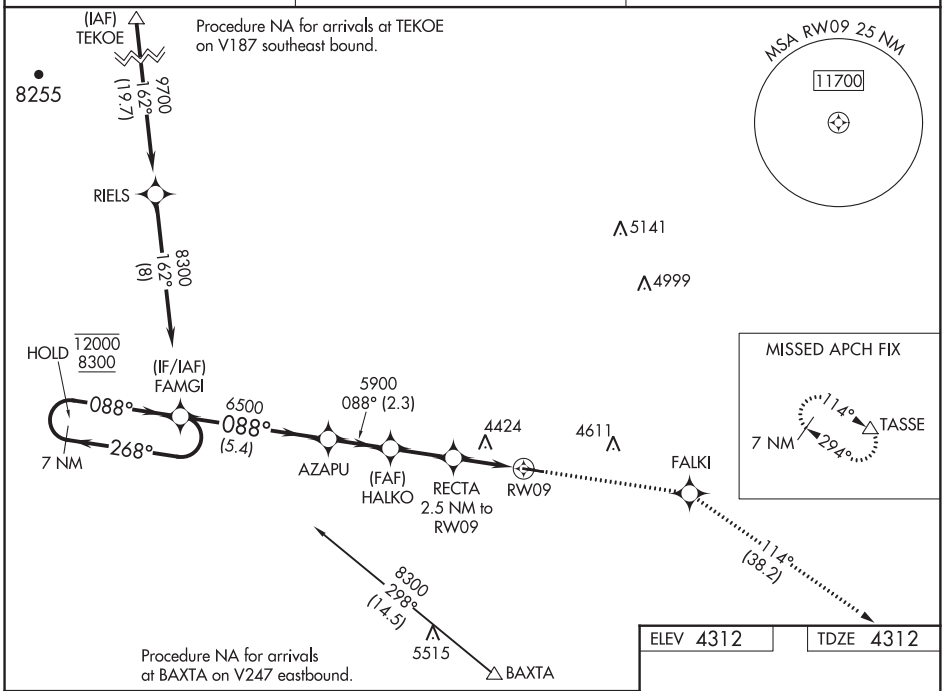
# RNAV (GPS) RWY 9
## WHEATLAND COUNTY AT HARLOWTON (HWQ)

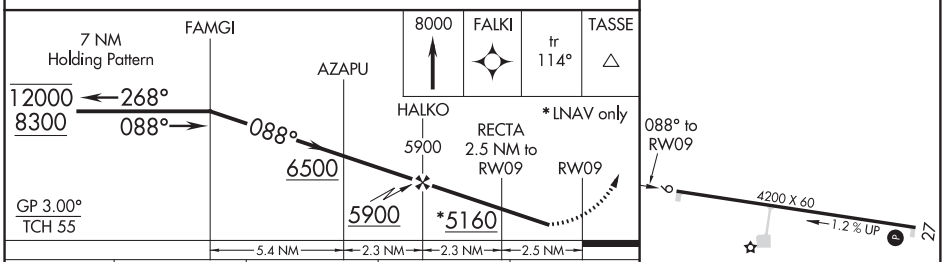
RNP APCH.

T A NA — Rwy 9 helicopter visibility reduction below 1 SM NA. Baro-VNAV NA. Use Lewistown altimeter setting. Straight-in Rwy 9 NA at night, Circling Rwy 9 NA at night.

MISSED APPROACH: Climb to 8000 direct FALKI and on track 114° to TASSE and hold.

| LWT ASOS | SALT LAKE CENTER | CTAF |
|---|---|---|
| 118.375 | 127.75 351.9 | 122.9 L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4673-1 361 (400-1) | | NA | |
| LNAV/VNAV DA | 4673-1 361 (400-1) | | NA | |
| LNAV MDA | 4800-1 488 (500-1) | | NA | |
| C CIRCLING | 4940-1 628 (700-1) | 5000-1 688 (700-1) | NA | |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 62943 W27A | APP CRS 268° | Rwy ldg 4200<br>TDZE 4295<br>Apt Elev 4312 |
|---|---|---|

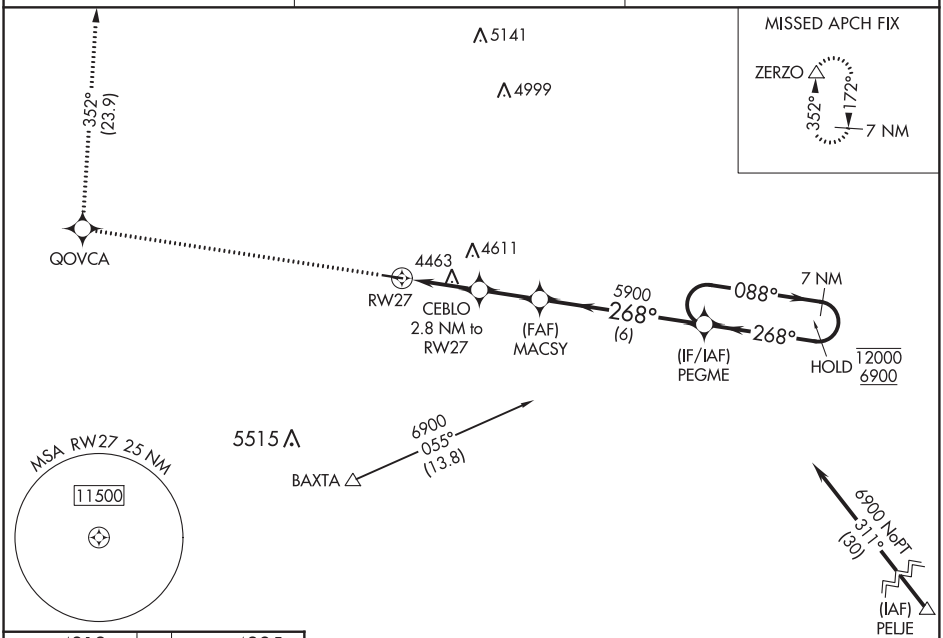
# RNAV (GPS) RWY 27
## WHEATLAND COUNTY AT HARLOWTON (HWQ)

RNP APCH.

T A NA Circling Rwy 9 NA at night. Baro-VNAV NA. Use Lewistown altimeter setting.

MISSED APPROACH: Climb to 9600 direct QOVCA and on track 352° to ZERZO and hold.
#Missed approach requires minimum climb of 220 feet per NM to 9200.

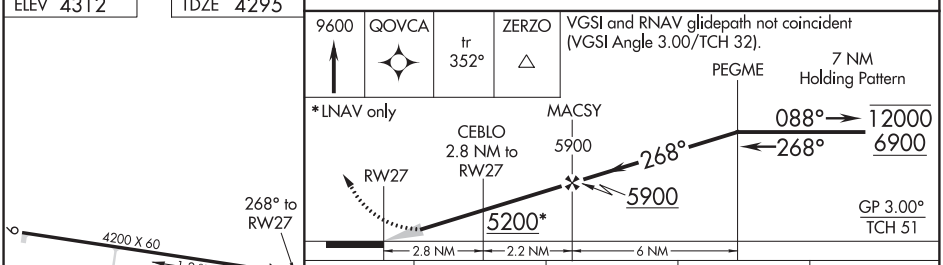
| LWT ASOS | SALT LAKE CENTER | CTAF |
|---|---|---|
| 118.375 | 127.75 351.9 | 122.9 L |




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 4312 TDZE 4295




| CATEGORY | | A | B | C | D |
|---|---|---|---|---|---|
| LPV | DA# | 4606-1 | 311 (300-1) | NA | |
| LPV | DA | 4950-1⅞ | 655 (700-1⅞) | NA | |
| LNAV/VNAV | DA | 4999-2 | 704 (700-2) | NA | |
| LNAV | MDA | 5140-1<br>845 (900-1) | 5140-1¼<br>845 (900-1¼) | NA | |
| CIRCLING | | 5140-1¼ | 828 (900-1¼) | NA | |

MIRL Rwy 9-27 L

HAVRE, MONTANA | AL-5575 (FAA) | 20086

# RNAV (GPS) RWY 8
## HAVRE CITY-COUNTY (HVR)

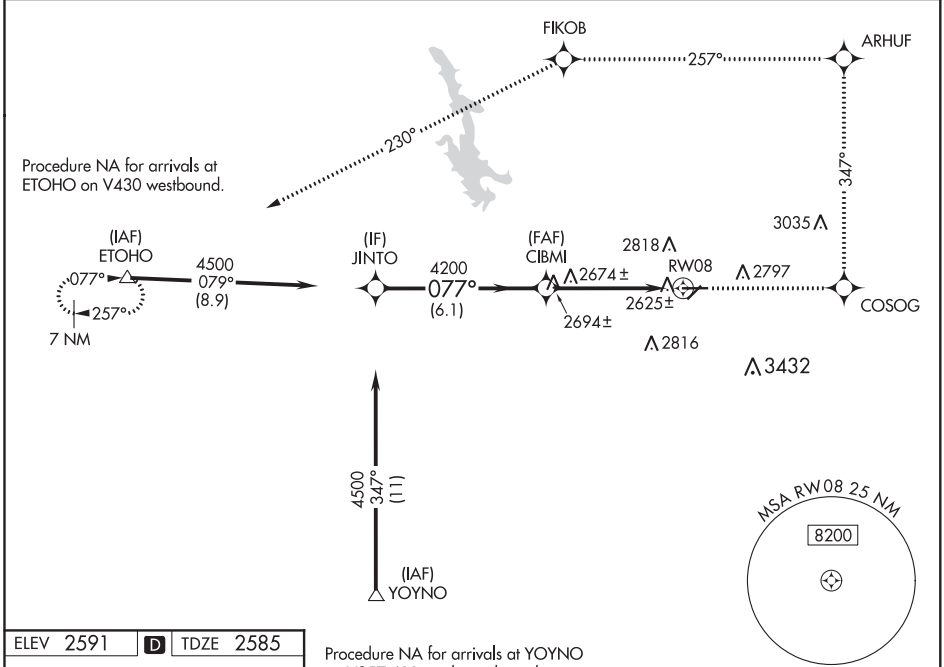
| WAAS CH 99316 W08A | APP CRS 077° | Rwy ldg 5205 TDZE 2585 Apt Elev 2591 |
|---|---|---|

RNP APCH.

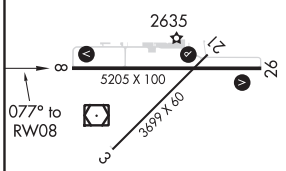
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C or above 54°C. (-30°C)

MISSED APPROACH: Climb to 8000 direct COSOG and left on track 347° to ARHUF and left turn on track 257° to FIKOB and on track 230° to ETOHO and hold.

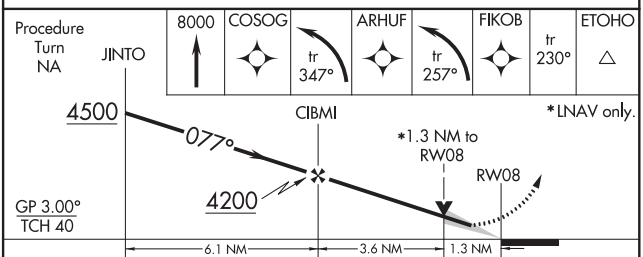
| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.225 | 133.4 285.4 | 122.8 (CTAF) L |




ELEV 2591 | D | TDZE 2585




REIL Rwys 8 and 26 L
MIRL Rwy 8-26
MIRL Rwy 3-21 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2835-1 250 (300-1) | | | |
| LNAV/VNAV DA | 2906-1¼ 321 (400-1¼) | | | |
| LNAV MDA | 3020-1 435 (500-1) | | 3020-1¼ 435 (500-1¼) | 3020-1½ 435 (500-1½) |
| CIRCLING | 3080-1 489 (500-1) | 3120-1 529 (600-1) | 3120-1½ 529 (600-1½) | 3180-2 589 (600-2) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 48816 W26A | APP CRS 257° | Rwy ldg 5205<br>TDZE 2586<br>Apt Elev 2591 |
|---|---|---|

# RNAV (GPS) RWY 26
## HAVRE CITY-COUNTY (HVR)

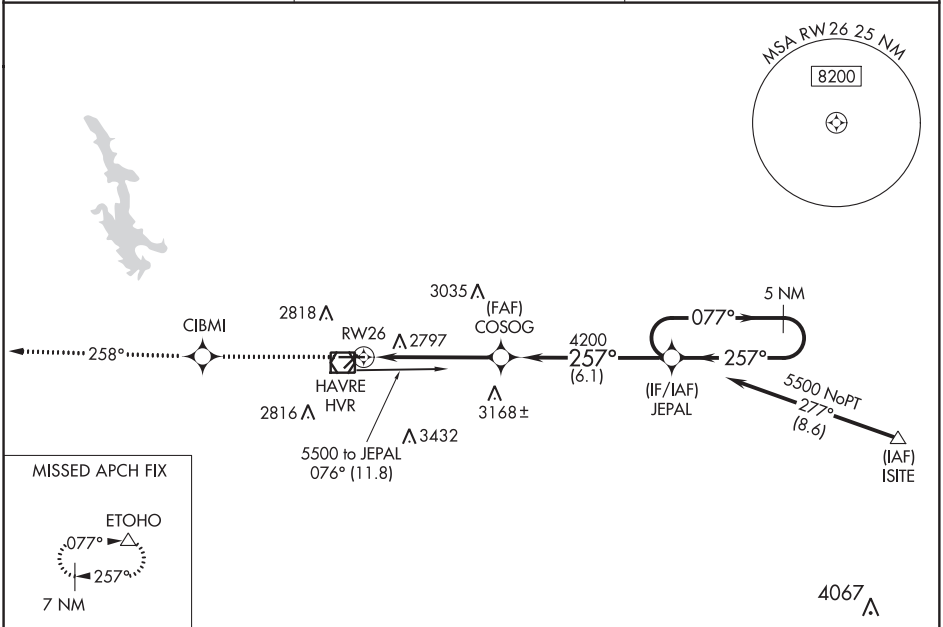
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C or above 54°C.

-30°C

MISSED APPROACH: Climb to 8000 direct CIBMI and on track 258° to ETOHO and hold, continue climb-in-hold to 8000.

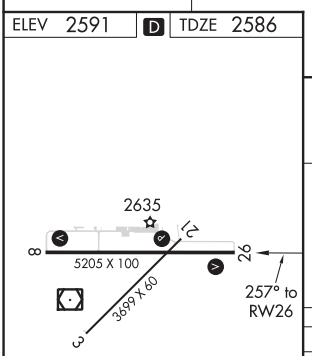
| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.225 | 133.4 285.4 | 122.8 (CTAF) L |

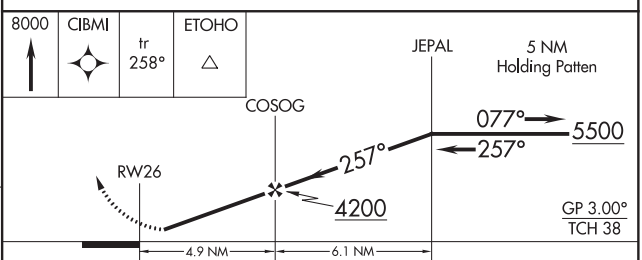






ELEV 2591 D TDZE 2586




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2836-¾ 250 (300-¾) | | | |
| LNAV/VNAV DA | 3097-1¾ 511 (600-1¾) | | | |
| LNAV MDA | 3060-1 474 (500-1) | | 3060-1¼ 474 (500-1¼) | 3060-1½ 474 (500-1½) |
| CIRCLING | 3080-1 489 (500-1) | 3120-1 529 (600-1) | 3120-1½ 529 (600-1½) | 3180-2 589 (600-2) |

REIL Rwys 8 and 26 L
MIRL Rwy 8-26
MIRL Rwy 3-21 L



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

HAVRE, MONTANA | AL-5575 (FAA) | 20086

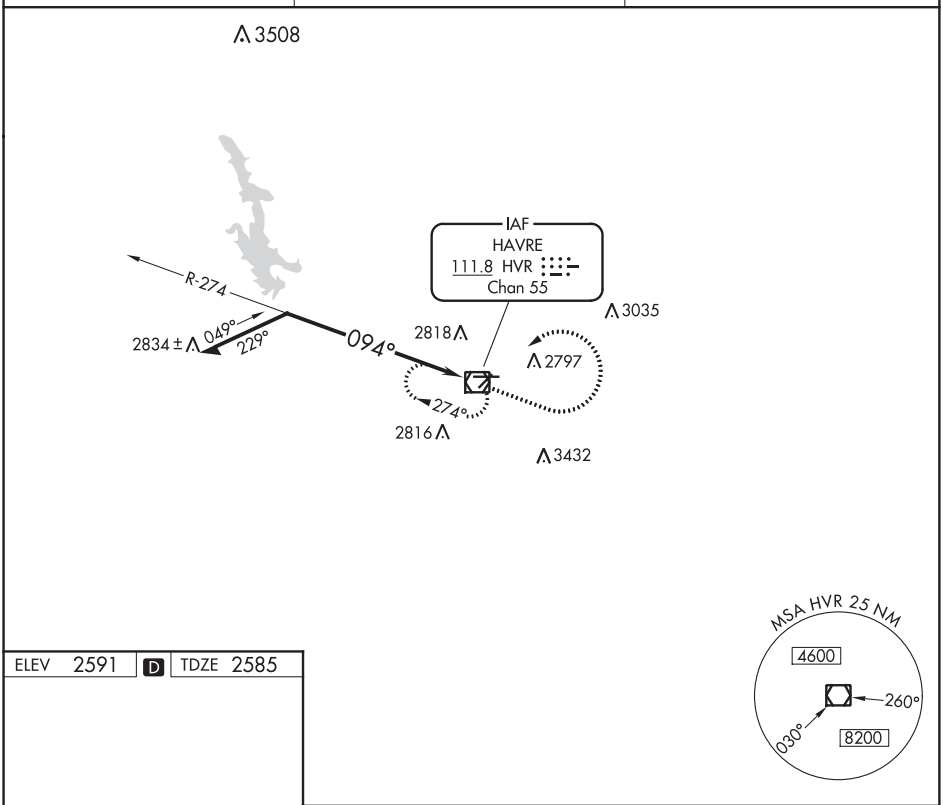
# VOR RWY 8
## HAVRE CITY-COUNTY (HVR)

| VOR/DME HVR | APP CRS | Rwy ldg | 5205 |
|---|---|---|---|
| 111.8 | 094° | TDZE | 2585 |
| Chan 55 | | Apt Elev | 2591 |

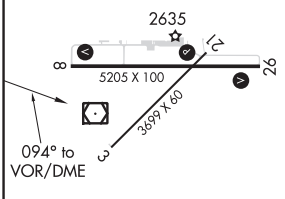
T
-30°C

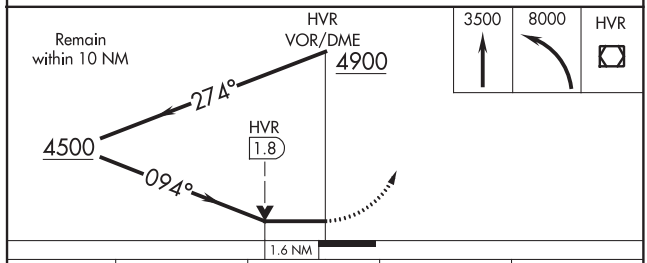
MISSED APPROACH: Climb to 3500 then climbing left turn to 8000 direct HVR VOR/DME and hold, continue climb-in-hold to 8000.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.225 | 133.4 285.4 | 122.8 (CTAF) L |




| ELEV 2591 | D | TDZE 2585 |
|---|---|---|




REIL Rwys 8 and 26 L
MIRL Rwy 8-26
MIRL Rwy 3-21 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-8 | 3140-1 555 (600-1) | | 3140-1⅝ 555 (600-1⅝) | |
| CIRCLING | 3140-1 549 (600-1) | | 3140-1⅝ 549 (600-1⅝) | 3180-2 589 (600-2) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

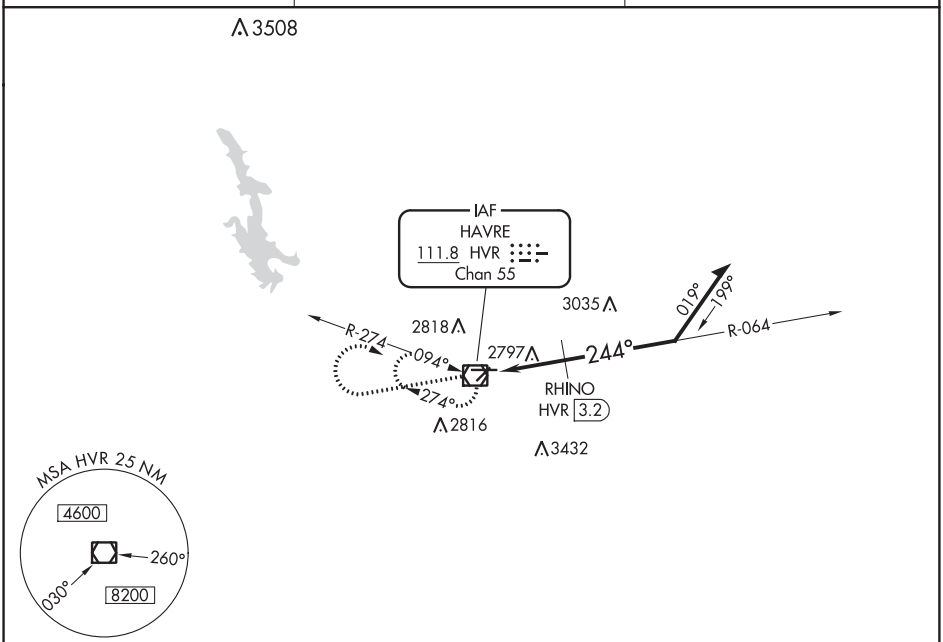
# VOR RWY 26
## HAVRE CITY-COUNTY (HVR)

| VOR/DME HVR | APP CRS | Rwy ldg | 5205 |
|---|---|---|---|
| 111.8 | 244° | TDZE | 2586 |
| Chan 55 | | Apt Elev | 2591 |

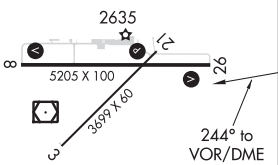
-30°C

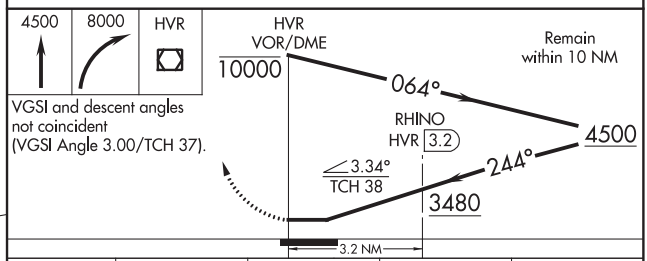
MISSED APPROACH: Climb to 4500 then climbing right turn to 8000 direct HVR VOR/DME and hold, continue climb-in-hold to 8000.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.225 | 133.4 285.4 | 122.8 (CTAF) L |




| ELEV 2591 | D | TDZE 2586 |
|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-26 | 3480-1¼ 894 (900-1¼) | | 3480-2¾ 894 (900-2¾) | 3480-3 894 (900-3) |
| CIRCLING | 3480-1¼ 889 (900-1¼) | | 3480-2¾ 889 (900-2¾) | 3480-3 889 (900-3) |
| RHINO FIX MINIMUMS | | | | |
| S-26 | 3060-1 474 (500-1) | | 3060-1¼ 474 (500-1¼) | 3060-1½ 474 (500-1½) |
| CIRCLING | 3080-1 489 (500-1) | 3120-1 529 (600-1) | 3120-1½ 529 (600-1½) | 3180-2 589 (600-2) |

REIL Rwys 8 and 26 L
MIRL Rwy 8-26
MIRL Rwy 3-21 L



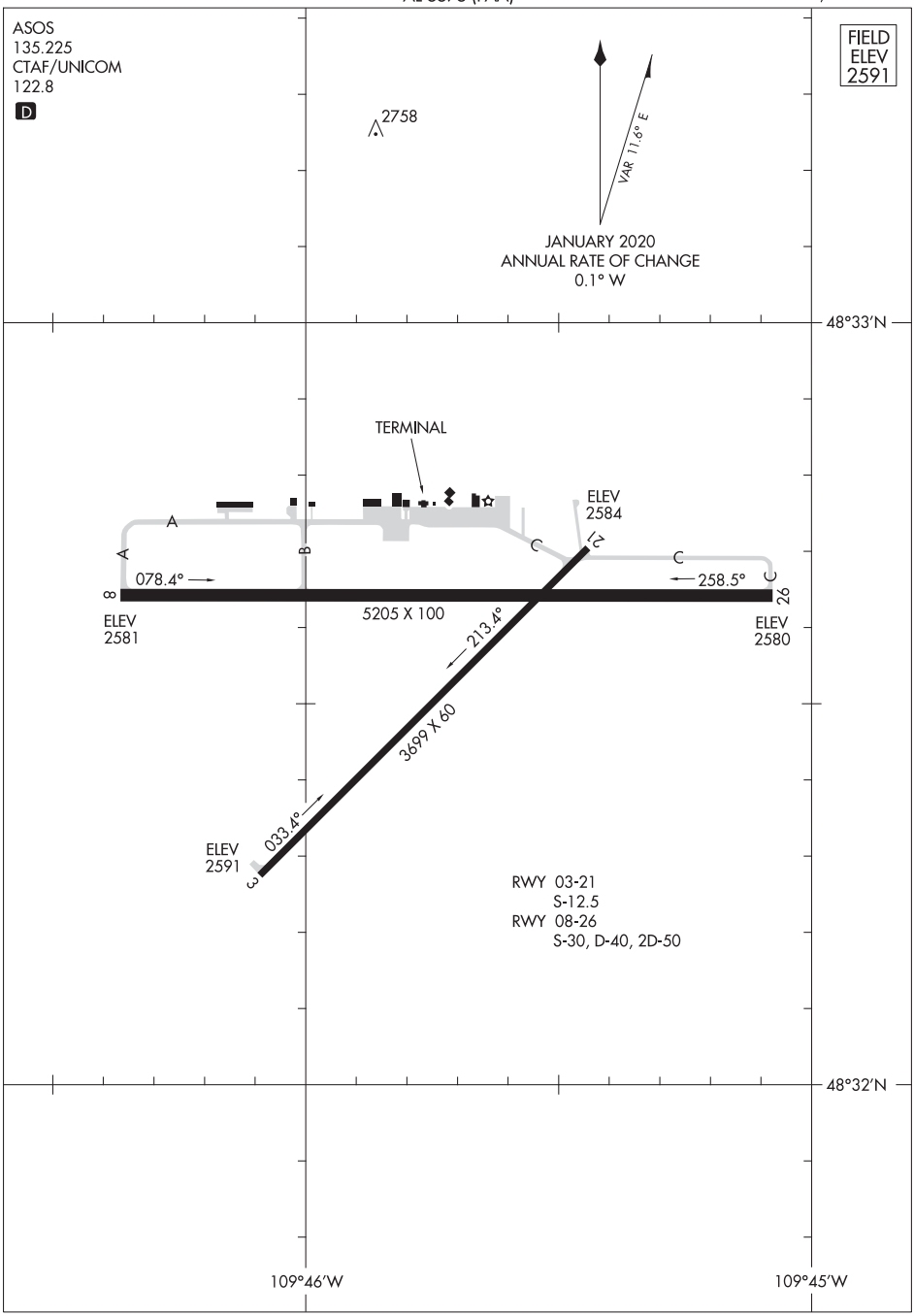
NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

20086

# AIRPORT DIAGRAM

HAVRE CITY-COUNTY (HVR)
HAVRE, MONTANA

AL-5575 (FAA)




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM
20086
HAVRE, MONTANA
HAVRE CITY-COUNTY (HVR)

# ILS or LOC Y RWY 27
## HELENA RGNL (HLN)

| LOC I-HLN | APP CRS | Rwy ldg | 9000 |
|---|---|---|---|
| 110.1 | 267° | TDZE | 3852 |
| | | Apt Elev | 3877 |

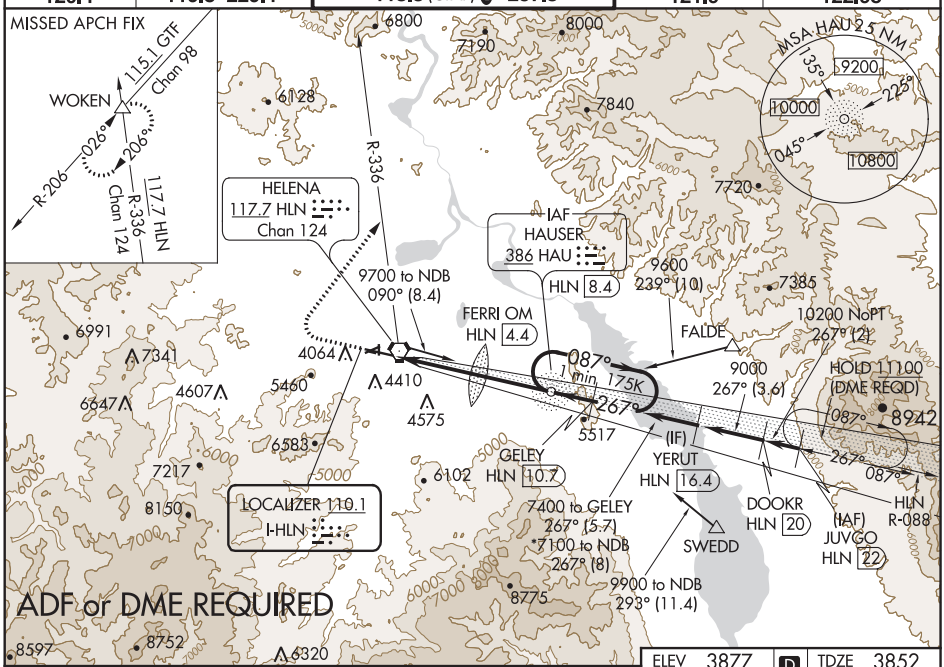
T A -17°C

Inoperative table does not apply to S-LOC 27 all Cats. For inoperative MALSR, increase S-ILS 27 all Cats visibility to 1⅞ miles, FERRI FIX minimums: S-LOC 27 Cat C, D and E visibility to 2 miles. Holding at HAU NDB authorized for Category A and B aircraft only. Circling NA south of Rwy 9-27 for Cats D and E. Circling to Rwy 5, 23, 35 NA at night. DME from HLN VORTAC, simultaneous reception of I-HLN and HLN DME required.

MALSR A5

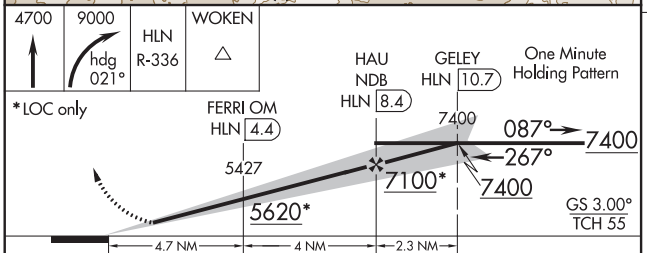
MISSED APPROACH: Climb to 4700 then climbing right turn to 9000 via heading 021° and HLN VORTAC R-336 to WOKEN INT and hold, continue climb-in-hold to 9000.

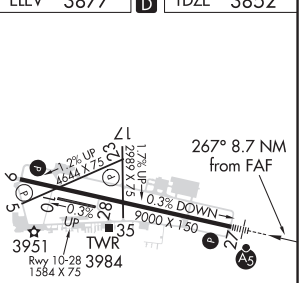
| ATIS | HELENA APP CON * | HELENA TOWER * | GND CON | UNICOM |
|---|---|---|---|---|
| 120.4 | 119.5 229.4 | 118.3 (CTAF) L 257.8 | 121.9 | 122.95 |




NW-1, 05 NOV 2020 to 31 DEC 2020

| ELEV | 3877 | D | TDZE | 3852 |
|---|---|---|---|---|




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-ILS 27 | 4409-1⅜ 557 (600-1⅜) | | | | |
| S-LOC 27 | 5620-1¼ 1768 (1800-1¼) | 5620-1½ 1768 (1800-1½) | 5620-3 1768 (1800-3) | | |
| C CIRCLING | 5620-1¼ 1743 (1800-1¼) | 5620-1½ 1743 (1800-1½) | 5920-3 2043 (2100-3) | | |
| FERRI FIX MINIMUMS* | | | | | |
| S-LOC 27 | 4580-½ 728 (800-½) | | 4580-1⅝ 728 (800-1⅝) | | |
| C CIRCLING | 4640-1 763 (800-1) | 4800-1¼ 923 (1000-1¼) | 5920-3 2043 (2100-3) | | |

REIL Rwys 9, 17 and 35 L
MIRL Rwys 5-23 and 17-35 L
HIRL Rwy 9-27 L

| FAF to MAP 8.7 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 8:42 | 5:48 | 4:21 | 3:29 | 2:54 |

NW-1, 05 NOV 2020 to 31 DEC 2020

HELENA, MONTANA — AL-192 (FAA) — 20198

# ILS or LOC Z RWY 27
## HELENA RGNL (HLN)

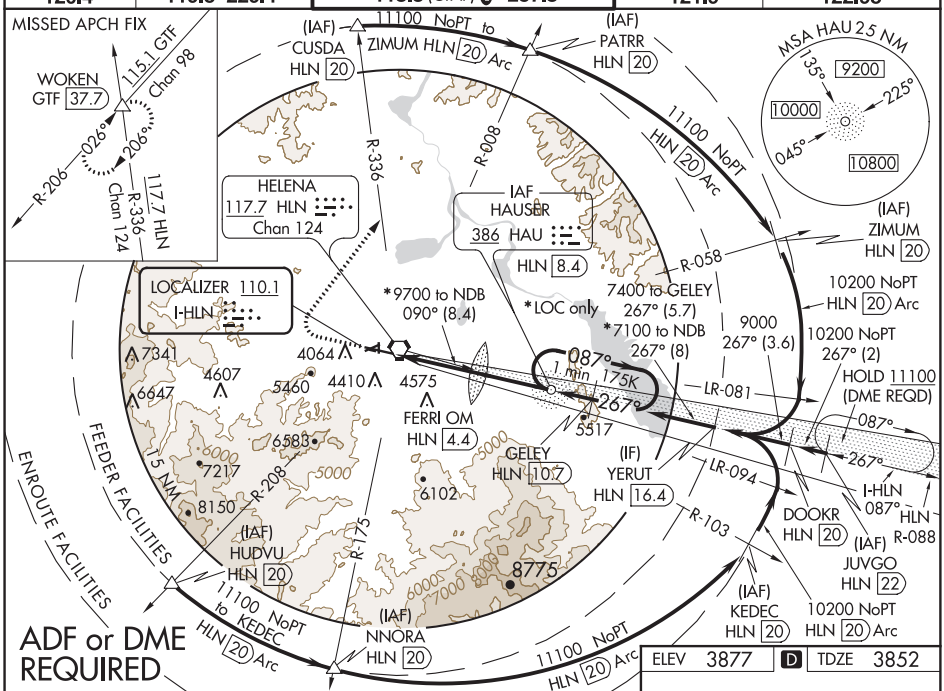
| LOC I-HLN | APP CRS | Rwy ldg | 9000 |
|---|---|---|---|
| 110.1 | 267° | TDZE | 3852 |
| | | Apt Elev | 3877 |

Inoperative table does not apply to S-LOC 27 Cat C/D/E. For inoperative MALSR, increase S-ILS 27 Cat E visibility to ¾ mile, increase FERRI fix minimums: S-LOC 27 Cat C/D/E visibility to 1⅞ miles. Missed approach requires a minimum climb of 300 ft per NM to 6000, if unable to meet climb gradient, see ILS or LOC Y RWY 27. Circling NA south of Rwy 9-27 for Cats D and E. Night Landing: Rwy 5, 23, 35 NA. DME from HLN VORTAC, simultaneous reception of I-HLN and HLN DME required. Holding at HAU NDB authorized for Cat A and B aircraft only. -17°C

MALSR

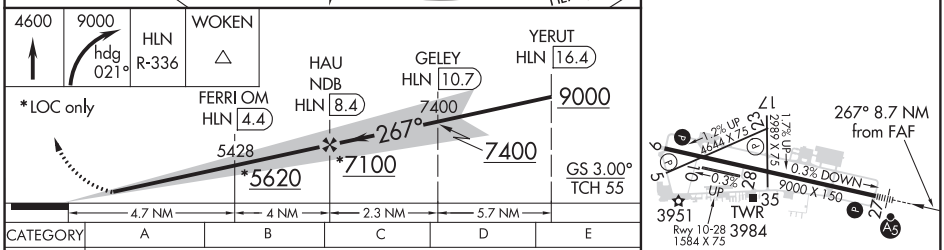
MISSED APPROACH: Climb to 4600 then climbing right turn to 9000 on heading 021° and HLN VORTAC R-336 to WOKEN/ GTF 37.7 DME and hold.

| ATIS | HELENA APP CON ★ | HELENA TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 120.4 | 119.5 229.4 | 118.3 (CTAF) 257.8 | 121.9 | 122.95 |




ADF or DME REQUIRED

| ELEV | 3877 | D | TDZE | 3852 |
|---|---|---|---|---|







| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-ILS 27 | 4052-½ 200 (200-½) | | | | |
| S-LOC 27 | 5620-¾ 1768 (1800-¾) | 5620-1 1768 (1800-1) | 5620-3 1768 (1800-3) | | |
| CIRCLING C | 5620-1¼ 1743 (1800-1¼) | 5620-1½ 1743 (1800-1½) | 5920-3 2043 (2100-3) | | |
| FERRI FIX MINIMUMS* | | | | | |
| S-LOC 27 | 4520-½ 668 (700-½) | | 4520-1½ 668 (700-1½) | | |
| CIRCLING C | 4640-1 763 (800-1) | 4800-1¼ 923 (1000-1¼) | 5920-3 2043 (2100-3) | | |

REIL Rwys 9, 17 and 35 L
MIRL Rwys 5-23 and 17-35 L
HIRL Rwy 9-27 L

| FAF to MAP 8.7 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 8:42 | 5:48 | 4:21 | 3:29 | 2:54 |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# RNAV (RNP) Y RWY 27
## HELENA RGNL (HLN)

| APP CRS | Rwy ldg | 9000 |
|---|---|---|
| 267° | TDZE | 3852 |
| | Apt Elev | 3877 |

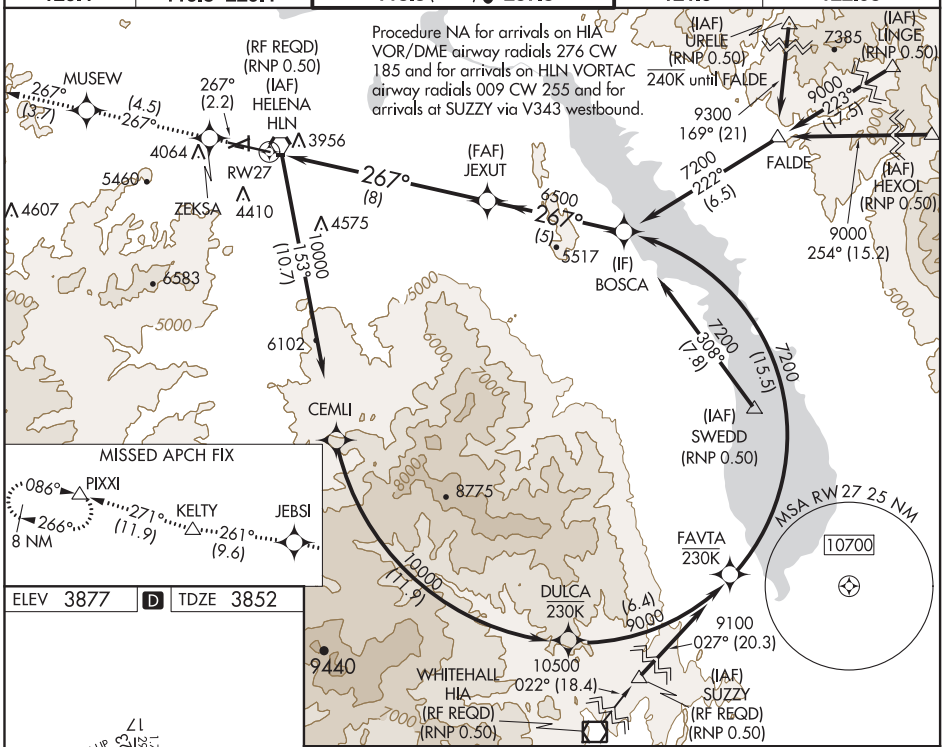
GPS required. For uncompensated Baro-VNAV systems, procedure NA below -22°C (-7°F) or above 41°C (105°F). For inoperative MALSR, increase RNP 0.22* visibility to 1, and RNP 0.30# visibility to 1½. Missed approach requires RNP less than 1.0. *Missed approach requires minimum climb of 290 feet per NM to 7700; if unable, see RNAV (RNP) Z RWY 27. #Missed approach requires minimum climb of 270 feet per NM to 7600; if unable, see RNAV (RNP) Z RWY 27.

-17°C

MALSR

MISSED APPROACH: Climb to 13000 on track 267° to ZEKSA, then on track 267° to MUSEW, then on track 267° to JEBSI, then on track 261° to KELTY, then on track 271° track to PIXXI and hold, continue climb-in-hold to 13000.

| ATIS | HELENA APP CON ★ | HELENA TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 120.4 | 119.5 229.4 | 118.3 (CTAF) L 257.8 | 121.9 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.22 DA* | 4140-½ 288 (300-½) | | | |
| RNP 0.30 DA# | 4294-1 442 (500-1) | | | |

AUTHORIZATION REQUIRED

REIL Rwys 9, 17 and 35 L
MIRL Rwys 5-23 and 17-35 L
HIRL Rwy 9-27 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

HELENA, MONTANA

AL-192 (FAA)

20198

# RNAV (RNP) Z RWY 9

## HELENA RGNL (HLN)

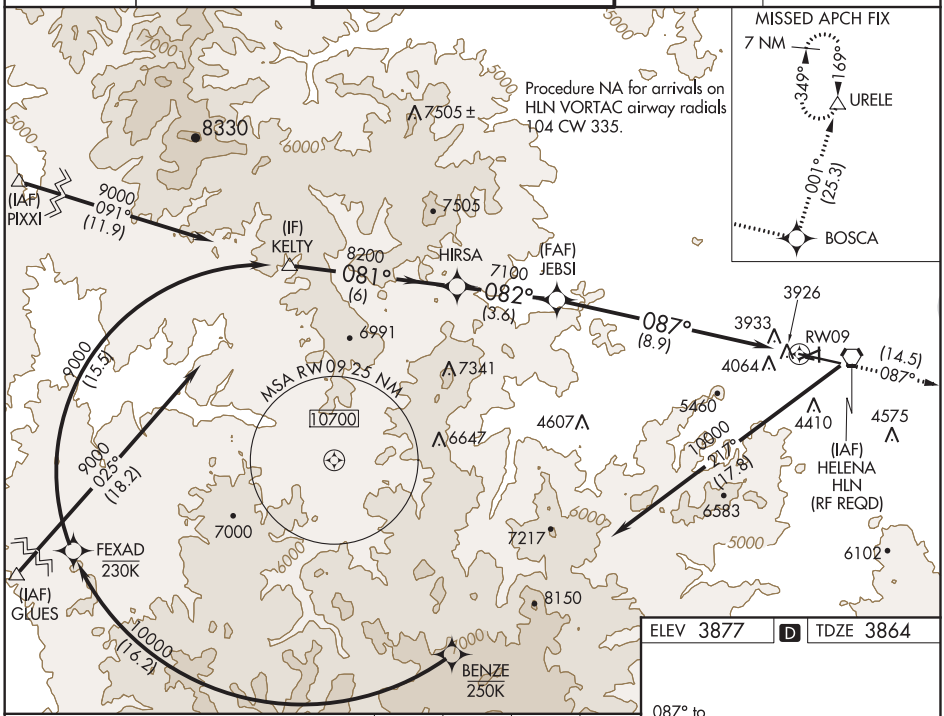
| APP CRS | Rwy ldg | 9000 |
|---|---|---|
| 087° | TDZE | 3864 |
| | Apt Elev | 3877 |

T A -17°C

GPS required. For uncompensated Baro-VNAV systems, procedure NA below -22°C (-7°F) or above 54°C (130°F). When VGSI inoperative, procedure NA at night.
*Missed approach requires minimum climb of 260′ per NM to 4300.

MISSED APPROACH: Climb to 12000 via 087° track to BOSCA and via 001° track to URELE and hold, continue climb-in-hold to 12000.

| ATIS | HELENA APP CON* | HELENA TOWER* | GND CON | UNICOM |
|---|---|---|---|---|
| 120.4 | 119.5 229.4 | 118.3 (CTAF) L 257.8 | 121.9 | 122.95 |

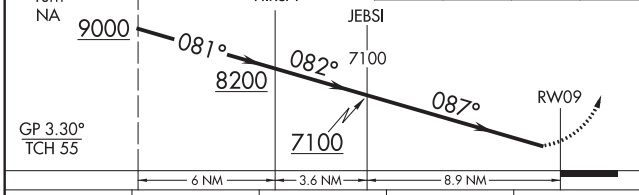



NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

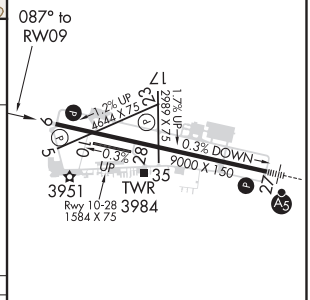
| ELEV 3877 | D | TDZE 3864 |
|---|---|---|

| 12000 | BOSCA | 001° tr | URELE |
|---|---|---|---|
| 087° tr | | | |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.11 DA* | 4220-1 | 356 (400-1) | | NA |
| RNP 0.17 DA | 4258-1¼ | 394 (400-1¼) | | NA |
| RNP 0.30 DA | 4353-1½ | 489 (500-1½) | | NA |

AUTHORIZATION REQUIRED




REIL Rwys 9, 17 and 35 L
MIRL Rwys 5-23 and 17-35 L
HIRL Rwy 9-27 L

HELENA, MONTANA
Orig-B 30JUN11

46°36′N-111°59′W

HELENA RGNL (HLN)
RNAV (RNP) Z RWY 9

# RNAV (RNP) Z RWY 27
## HELENA RGNL (HLN)

| APP CRS | Rwy ldg | 9000 |
|---|---|---|
| 267° | TDZE | 3852 |
| | Apt Elev | 3877 |

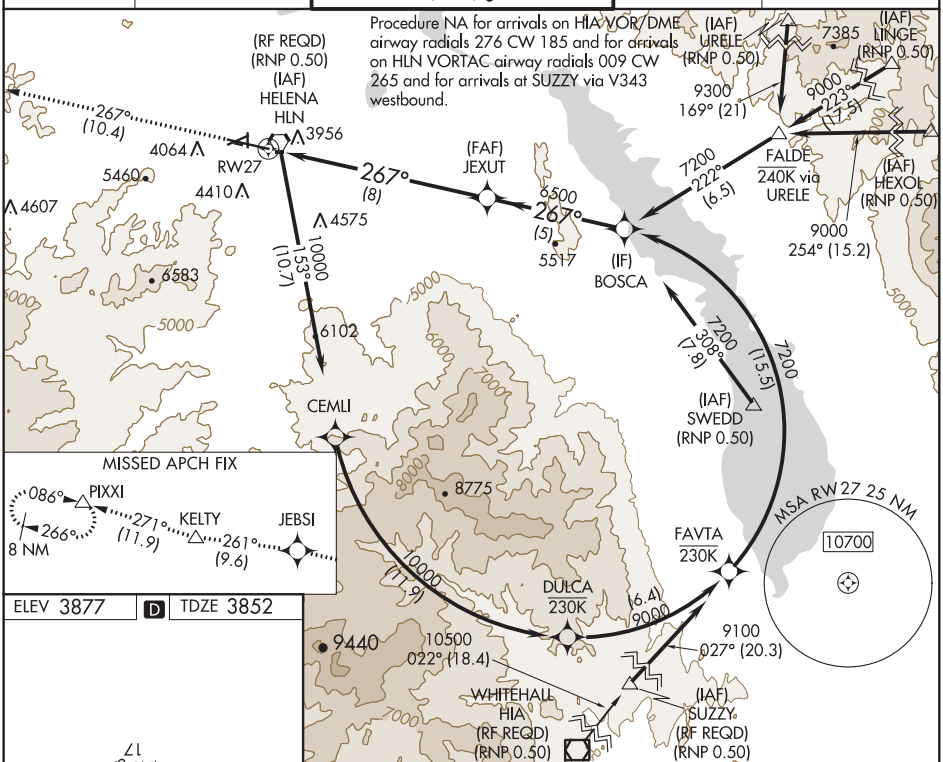
GPS required. For uncompensated Baro-VNAV systems, procedure NA below -22°C (-7°F) or above 41°C (105°F). *Missed approach requires minimum climb of 295 feet per NM to 7900. #Missed approach requires minimum climb of 290 feet per NM to 7300. †Missed approach requires minimum climb of 405 feet per NM to 6300. For inoperative MALSR, increase RNP 0.18* visibility to 1, RNP 0.22# visibility to 1¼, and RNP 0.30† visibility to 1½. Inoperative table does not apply to RNP 0.30.

-17°C

MALSR

MISSED APPROACH: Climb to 13000 via 267° track to JEBSI, and via 261° track to KELTY, and via 271° track to PIXXI and hold, continue climb-in-hold to 13000.

| ATIS | HELENA APP CON * | HELENA TOWER * | GND CON | UNICOM |
|---|---|---|---|---|
| 120.4 | 119.5 229.4 | 118.3 (CTAF) L 257.8 | 121.9 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.18 DA* | 4119-½ 267 (300-½) | | | |
| RNP 0.22 DA# | 4212-¾ 360 (400-¾) | | | |
| RNP 0.30 DA† | 4287-1 435 (500-1) | | | |
| RNP 0.30 DA | 4863-4 1011 (1000-4) | | | |

AUTHORIZATION REQUIRED

REIL Rwys 9, 17 and 35 L
MIRL Rwys 5-23 and 17-35 L
HIRL Rwy 9-27 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# RNAV (GPS) X RWY 27
## HELENA RGNL (HLN)

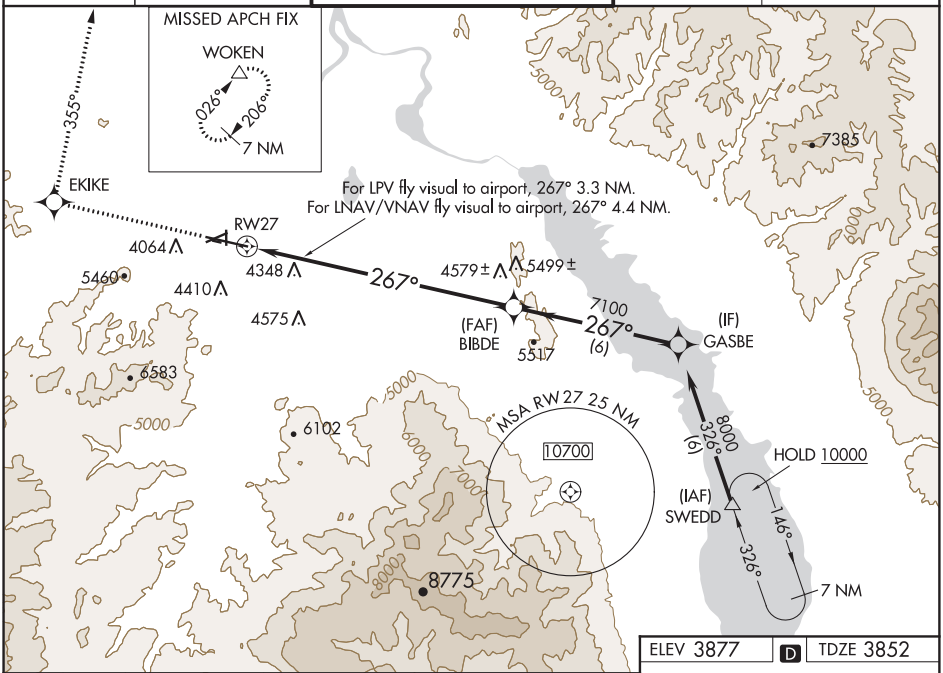
| WAAS CH 69405 W27A | APP CRS 267° | Rwy ldg 9000<br>TDZE 3852<br>Apt Elev 3877 |
|---|---|---|

Circling NA for Cat D south of Rwy 9-27. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C (-7°F) or above 42°C (107°F). DME/DME RNP- 0.3 NA. Inoperative table does not apply to LNAV Cats A-B. Circling to Rwy 5, 23, 35 NA at night. -17°C

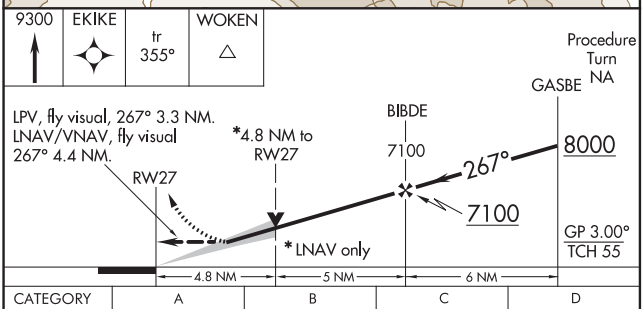
MALSR

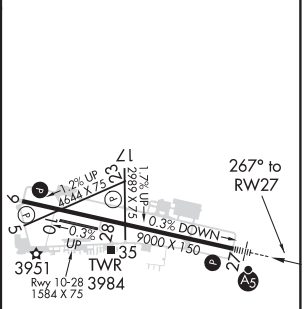
MISSED APPROACH: Climb to 9300 direct EKIKE and on track 355° to WOKEN and hold, continue climb-in-hold to 9300.

| ATIS | HELENA APP CON ★ | HELENA TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 120.4 | 119.5 229.4 | 118.3 (CTAF) L 257.8 | 121.9 | 122.95 |




ELEV 3877 D TDZE 3852




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4965-2 1113 (1100-2) | | 4965-3 1113 (1100-3) | |
| LNAV/VNAV DA | 5289-2 1437 (1500-2) | | 5289-3 1437 (1500-3) | |
| LNAV MDA | 5440-1¼ 1588 (1600-1¼) | 5440-1½ 1588 (1600-1½) | 5440-2½ 1588 (1600-2½) | |
| C CIRCLING | 5440-1¼ 1563 (1600-1¼) | 5440-1½ 1563 (1600-1½) | 5920-3 2043 (2100-3) | |

REIL Rwys 9, 17 and 35 L
MIRL Rwys 5-23 and 17-35 L
HIRL Rwy 9-27 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

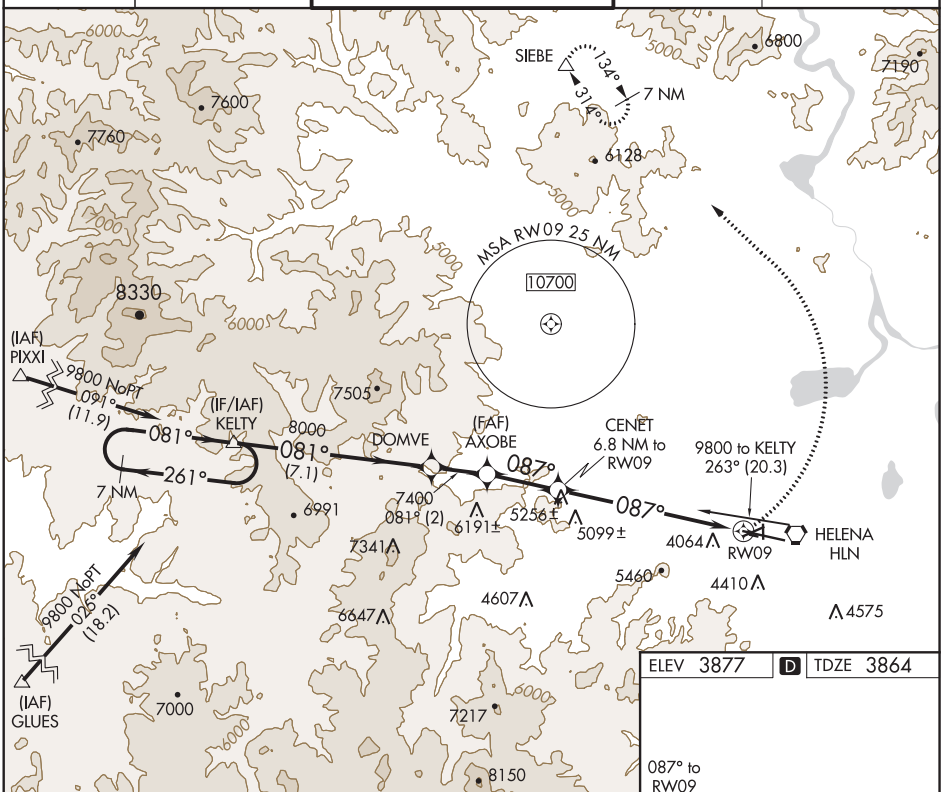
# RNAV (GPS) Y RWY 9
## HELENA RGNL (HLN)

| APP CRS | Rwy ldg | 9000 |
|---|---|---|
| 087° | TDZE | 3864 |
| | Apt Elev | 3877 |

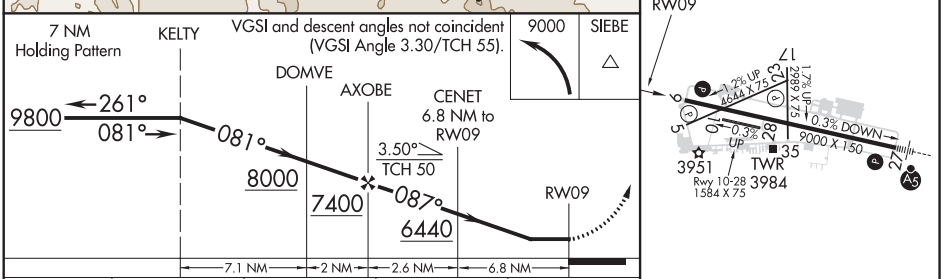
Circling NA for Cat D south of Rwy 9-27.
DME/DME RNP- 0.3 NA.
-17°C Visibility reduction by helicopters NA.

MISSED APPROACH: Climbing left turn to 9000 direct SIEBE and hold.

| ATIS | HELENA APP CON ★ | HELENA TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 120.4 | 119.5 229.4 | 118.3 (CTAF) L 257.8 | 121.9 | 122.95 |




| ELEV 3877 | D | TDZE 3864 |
|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 5440-1¼ 1576 (1600-1¼) | 5440-1½ 1576 (1600-1½) | 5440-3 1576 (1600-3) | |
| C CIRCLING | 5440-1¼ 1563 (1600-1¼) | 5440-1½ 1563 (1600-1½) | 5920-3 2043 (2100-3) | |

REIL Rwys 9, 17 and 35 L
MIRL Rwys 5-23 and 17-35 L
HIRL Rwy 9-27 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

HELENA, MONTANA AL-192 (FAA) 20198

# LOC/DME BC-C
HELENA RGNL (HLN)

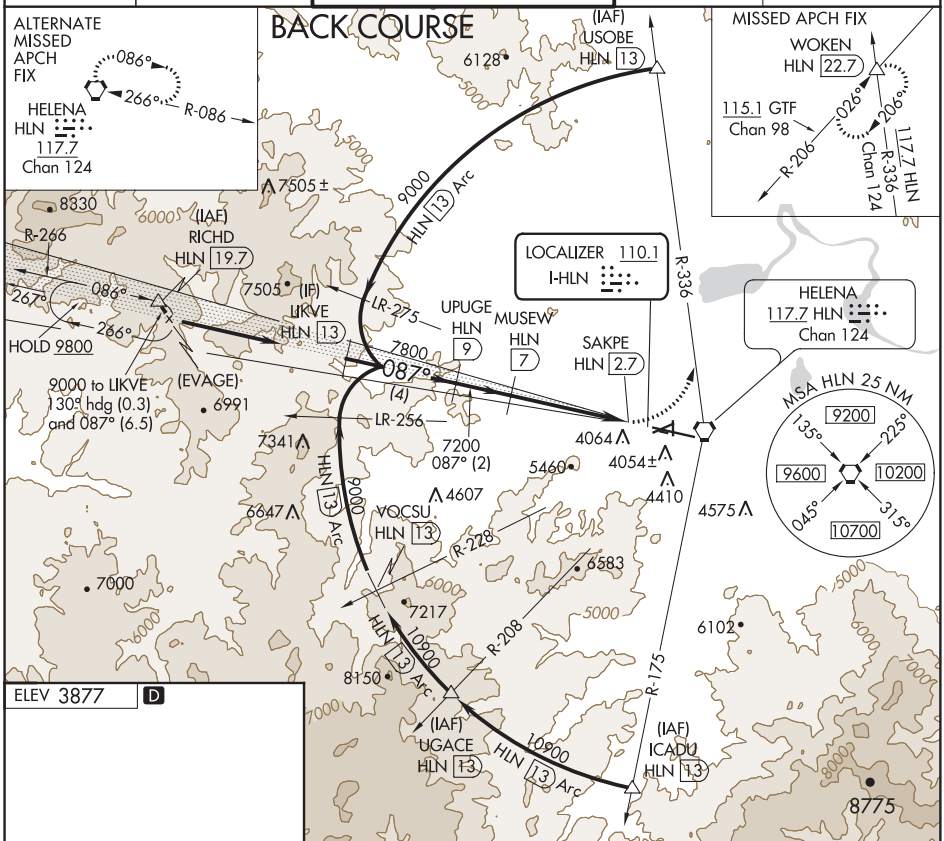
| LOC I-HLN | APP CRS | Rwy ldg | N/A |
|---|---|---|---|
| 110.1 | 087° | TDZE | N/A |
| | | Apt Elev | 3877 |

Circling to Rwy 5, 35 NA at night. When local altimeter setting not received, procedure NA. Visibility reduction by helicopters NA. DME from HLN VORTAC simultaneous reception of I-HLN and HLN DME required. When VGSI inop, Circling to Rwy 9, 23 NA at night.

-17°C

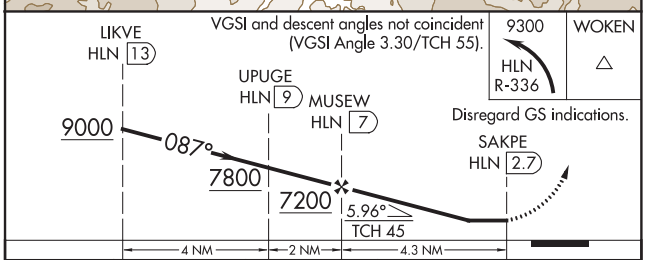
MISSED APPROACH: Climbing left turn to 9300 on HLN VORTAC R-336 to WOKEN INT and hold.

| ATIS | HELENA APP CON ★ | HELENA TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 120.4 | 119.5 229.4 | 118.3 (CTAF) L 257.8 | 121.9 | 122.95 |










REIL Rwys 9, 17 and 35 L
MIRL Rwys 5-23 and 17-35 L
HIRL Rwy 9-27 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 5140-1¼ 1263 (1300-1¼) | 5140-1½ 1263 (1300-1½) | 5920-3 2043 (2100-3) | NA |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

HELENA, MONTANA
Amdt 5A 16JUL20

46°36'N-111°59'W

HELENA RGNL (HLN)
LOC/DME BC-C

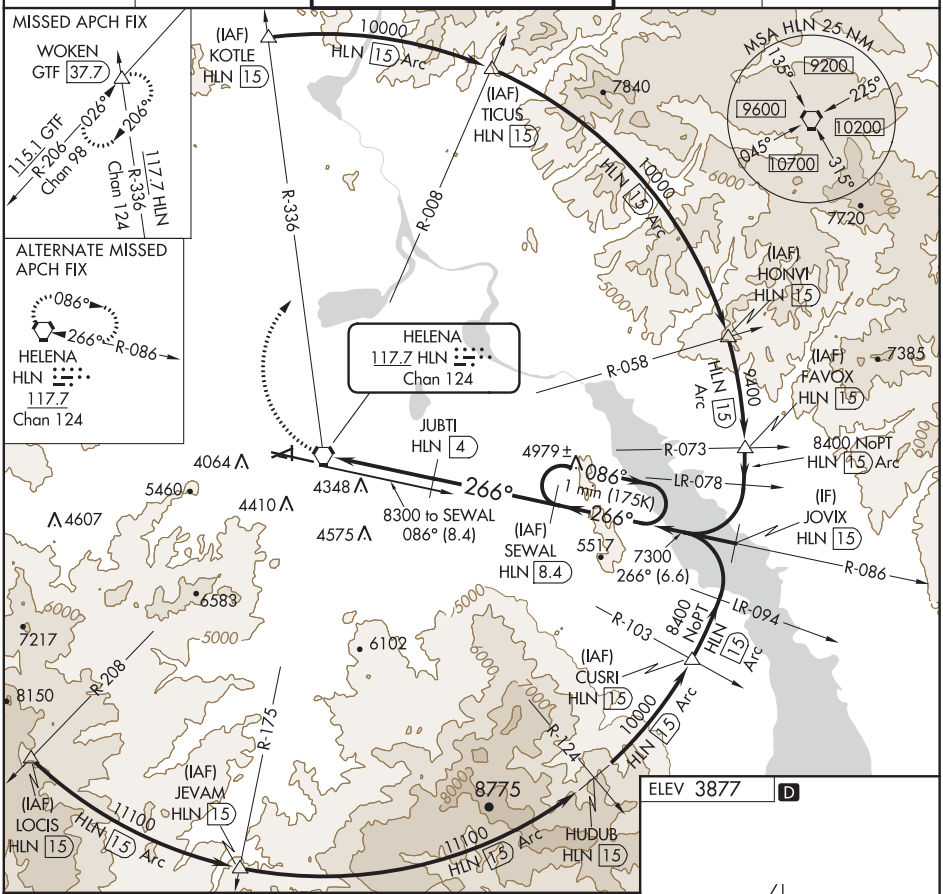
| VORTAC HLN 117.7 Chan 124 | APP CRS 266° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 3877 |
|---|---|---|

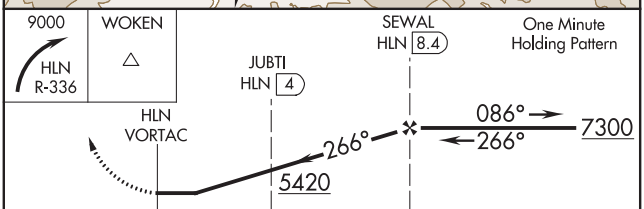
# VOR/DME-B
## HELENA RGNL (HLN)

Circling NA for Cat D south of Rwy 9-27.
DME Arc to final approach course required for turbojet aircraft.
-17°C Holding at SEWAL authorized for Cat A and B aircraft only.

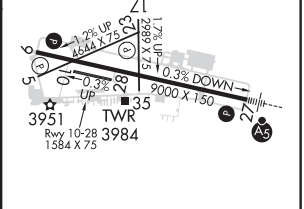
MISSED APPROACH: Climbing right turn to 9000 on HLN VORTAC R-336 to WOKEN INT/GTF 37.7 DME and hold.

| ATIS | HELENA APP CON ★ | HELENA TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 120.4 | 119.5 229.4 | 118.3 (CTAF) L 257.8 | 121.9 | 122.95 |




ELEV 3877 D




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 4760-1¼<br>883 (900-1¼) | 4800-1¼<br>923 (1000-1¼) | 5920-3 | 2043 (2100-3) |

REIL Rwys 9, 17 and 35 L
MIRL Rwys 5-23 and 17-35 L
HIRL Rwy 9-27 L

NW-1, 05 NOV 2020 to 31 DEC 2020

HELENA, MONTANA

AL-192 (FAA)

20310

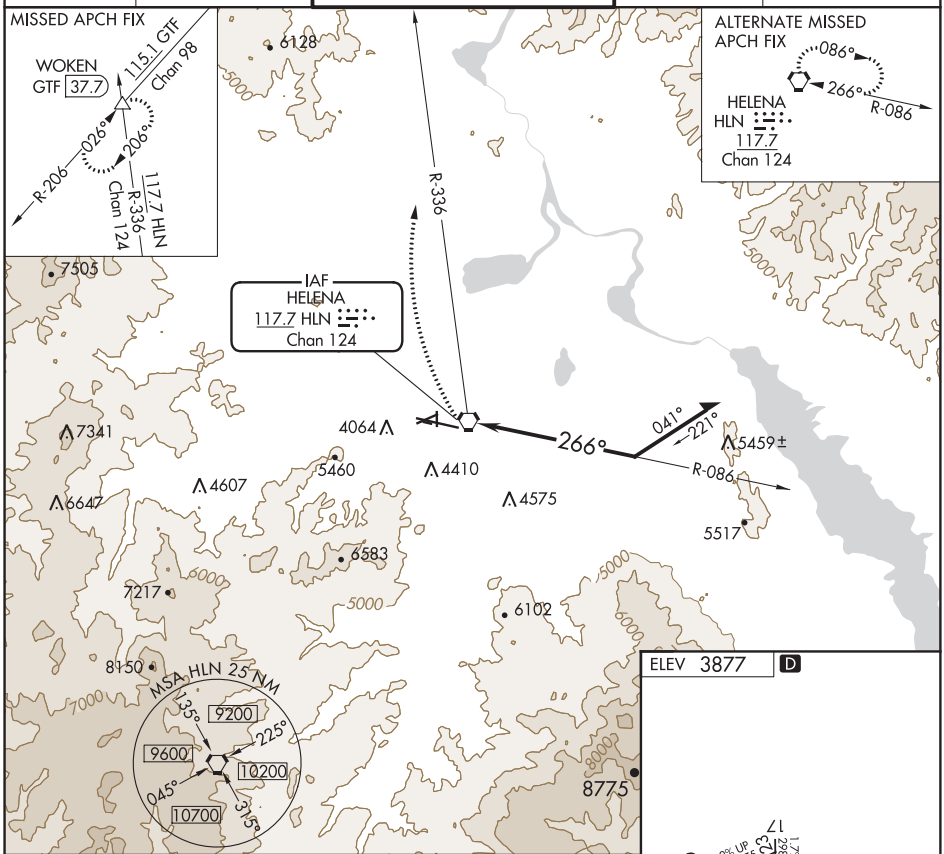
# VOR-A
## HELENA RGNL (HLN)

| VORTAC HLN 117.7 Chan 124 | APP CRS 266° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 3877 |
|---|---|---|

Circling NA for Cat D south of Rwy 9-27.
Night Landing: Rwy 5, 23, 35 NA.
Helicopter visibility reduction below 1 SM NA.
-17°C

MISSED APPROACH: Climbing right turn to 9000 via HLN VORTAC R-336 to WOKEN INT and hold.

| ATIS | HELENA APP CON ★ | HELENA TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 120.4 | 119.5 229.4 | 118.3 (CTAF) L 257.8 | 121.9 | 122.95 |

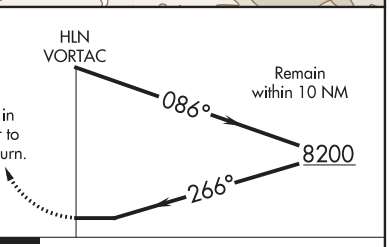



NW-1, 05 NOV 2020 to 31 DEC 2020

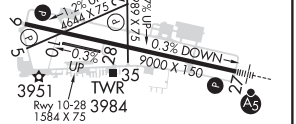
NW-1, 05 NOV 2020 to 31 DEC 2020

| 9000 | WOKEN |
|---|---|
| HLN R-336 | △ |

Procedure Turn: Descend to 10000 in HLN VORTAC holding pattern prior to departing outbound for procedure turn.




ELEV 3877 D




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 6700-1¼<br>2823 (2900-1¼) | 6700-1½<br>2823 (2900-1½) | 6700-3 2823 (2900-3) | |

REIL Rwys 9, 13 and 35 L
MIRL Rwys 5-23 and 17-35 L
HIRL Rwy 9-27 L

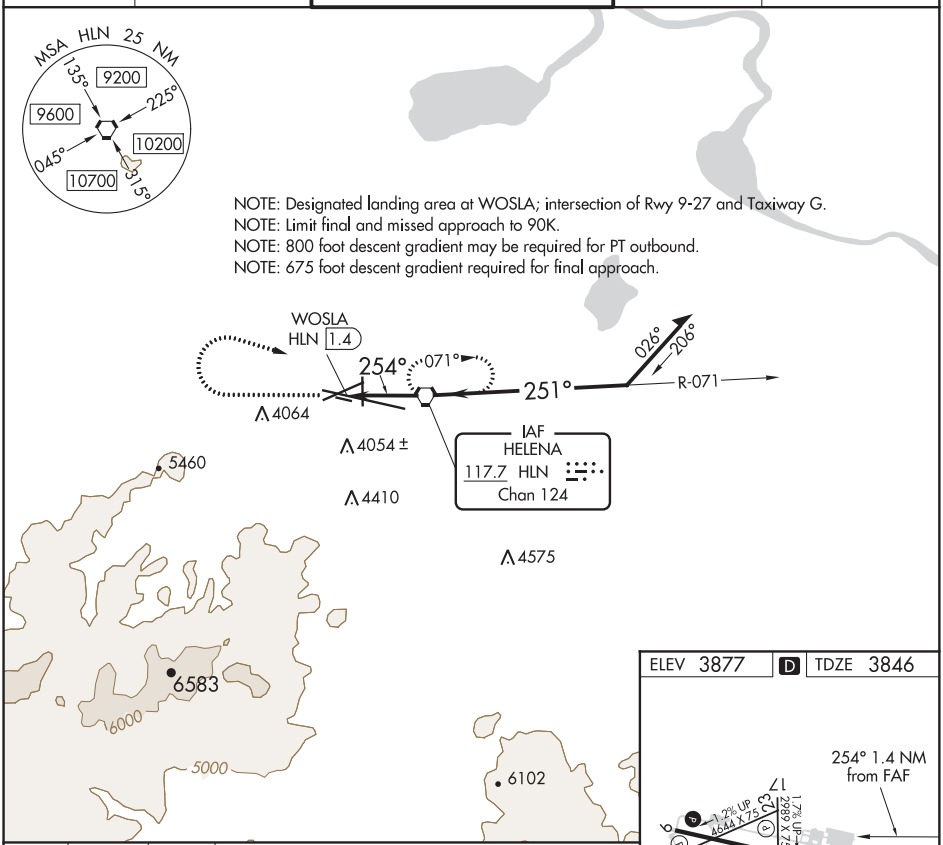
# COPTER VOR 254°
## HELENA RGNL (HLN)

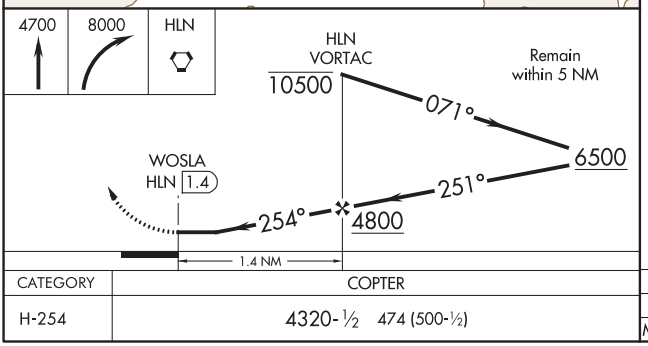
| VORTAC HLN | APP CRS | Rwy ldg | N/A |
|---|---|---|---|
| 117.7 Chan 124 | 254° | TDZE | 3846 |
| | | Apt Elev | 3877 |

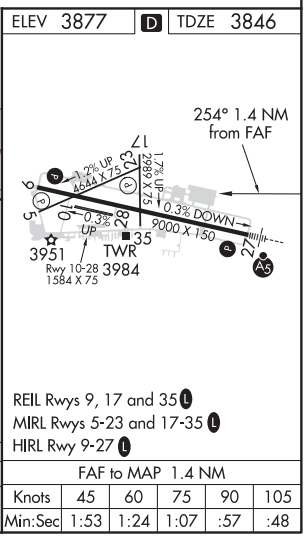
NA When local altimeter setting not received, procedure NA.
-17°C

MISSED APPROACH: Climb to 4700 then climbing right turn to 8000 direct HLN VORTAC and hold, continue climb-in-hold to 8000.

| ATIS | HELENA APP CON ★ | HELENA TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 120.4 | 119.5 229.4 | 118.3 (CTAF) L 257.8 | 121.9 | 122.95 |




| CATEGORY | COPTER |
|---|---|
| H-254 | 4320-½ 474 (500-½) |

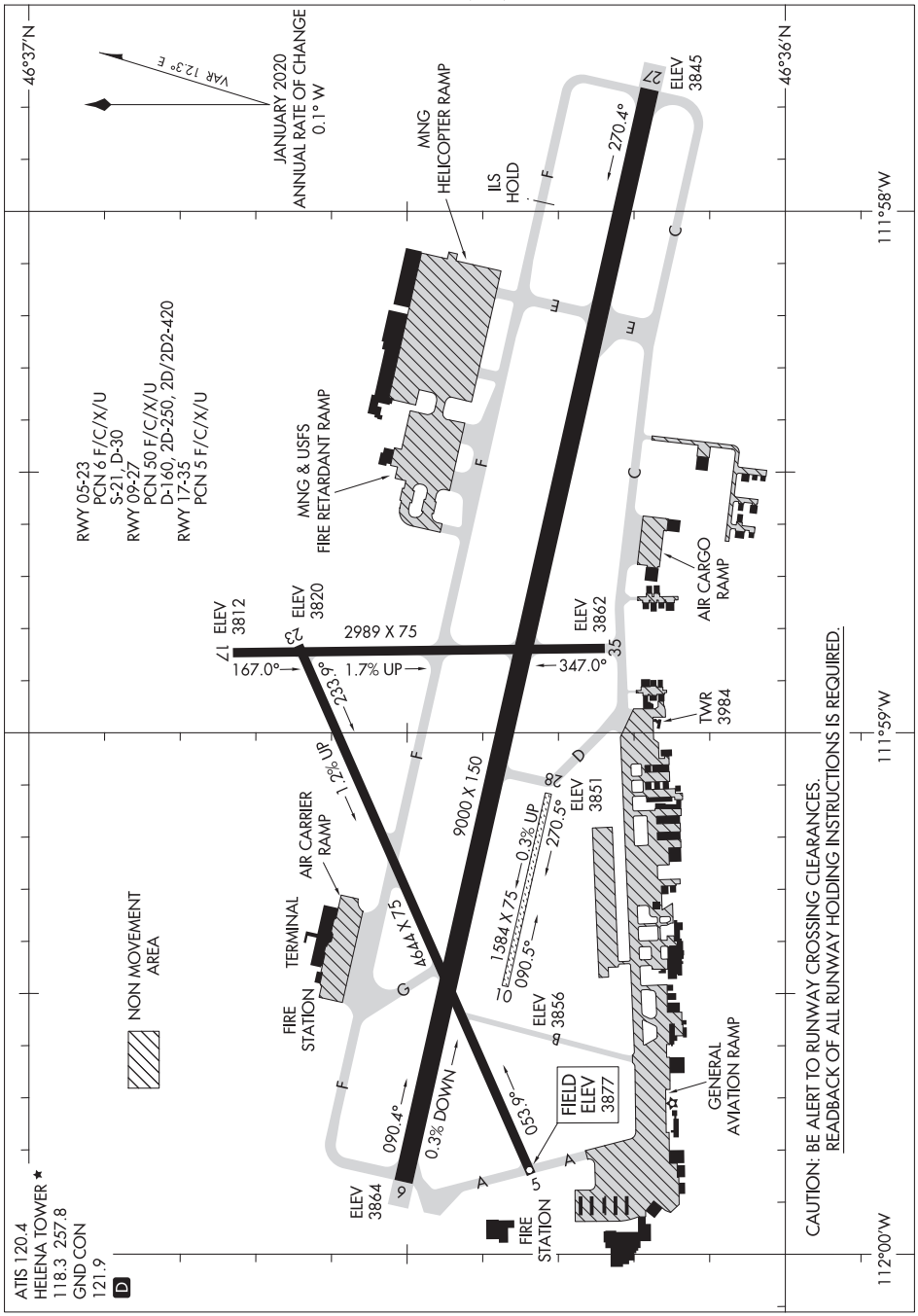
| FAF to MAP 1.4 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 45 | 60 | 75 | 90 | 105 |
| Min:Sec | 1:53 | 1:24 | 1:07 | :57 | :48 |

20086

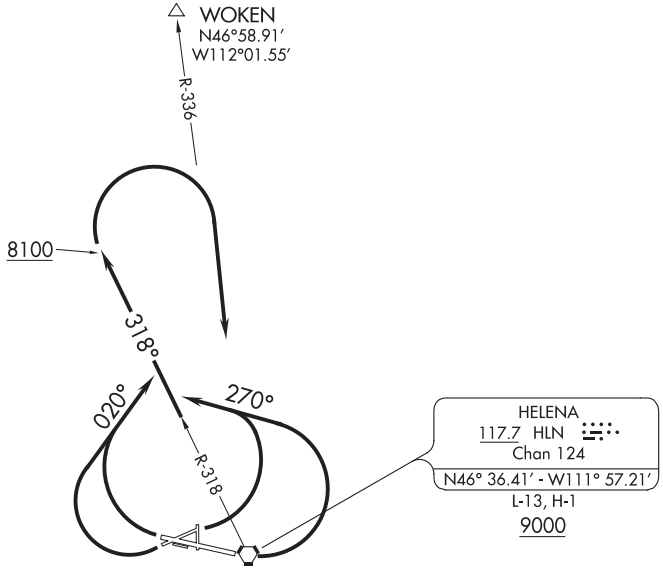
# AIRPORT DIAGRAM

HELENA RGNL (HLN)
HELENA, MONTANA

AL-192 (FAA)



GREAT FALLS RADIO
122.55
HELENA TOWER ★
118.3 (CTAF) 257.8
SALT LAKE CENTER
133.4 285.4




## TAKEOFF MINIMUMS

Rwys 17, 35: NA-Environmental.
Rwy 5: Standard with minimum climb of 250′ per NM to 8100′, or 2200-3 for climb in visual conditions.
Rwy 9: Standard with minimum climb of 240′ per NM to 8100′, or 2200-3 for climb in visual conditions.
Rwy 23: Standard with minimum climb of 450′ per NM to 8100′, or 2200-3 for climb in visual conditions.
Rwy 27: Standard with minimum climb of 390′ per NM to 8100′, or 2200-3 for climb in visual conditions.

## TAKEOFF OBSTACLE NOTES

Rwy 5: Trees beginning 991′ from DER, 630′ right of centerline, up to 100′ AGL/3939′ MSL. Rising terrain beginning 5′ from DER, 495′ right of centerline, up to 3826′ MSL. Fence beginning 423′ from DER, 332′ right of centerline, up to 12′ AGL/3832′ MSL.
Rwy 9: Trees beginning 1391′ from DER, 50′ left of centerline, up to 100′ AGL/3979′ MSL.Trees beginning 2928′ DER, 878′ right of centerline, up to 100′ AGL/3979′ MSL.
Rwy 23: Tower 4448′ from DER, 357′ left of centerline, 131′ AGL/4054′ MSL. Poles beginning 1329′ from DER, 3′ left of centerline, up to 55′ AGL/3996′ MSL. Trees beginning 1011′ from DER, 37′ left of centerline, up to 100′ AGL/4059′ MSL. Rod on bldg 953′ from DER, 321′ left of centerline, 44′ AGL/3943′ MSL. Road (I) 2374′ from DER, 771′ left of centerline, up to 17′ AGL/3972′ MSL. OL on hgr 457′ from DER, 219′ left of centerline, 43′ AGL/3905′ MSL. Trees beginning 1519′ from DER, 142′ right of centerline, up to 52′ AGL/4011′ MSL. Poles beginning 1379′ from DER, 57′ right of centerline, up to 46′ AGL/3965′ MSL. Ant on bldg 316′ from DER, 352′ right of centerline, 34′ AGL/3913′ MSL bldg 584′ from DER, 470′ right of centerline, 49′ AGL/3948′ MSL.
Rwy 27: Trees beginning 1079′ from DER, 616′ left of centerline, up to 100′ AGL/3999′ MSL. Bldg 1593′ from DER, 731′ left of centerline, 18′ AGL/3917′ MSL. Rising terrain beginning 101′ from DER, 347′ left of centerline, up to 3871′ MSL. Trees beginning 333′ from DER, 507′ right of centerline, up to 100′ AGL/3959′ MSL.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 5: Climbing left turn heading 270°, thence. . . .

TAKEOFF RUNWAY 9: Climbing left turn heading 270°, thence. . . .

TAKEOFF RUNWAY 23: Climbing right turn heading 020°, thence. . . .

TAKEOFF RUNWAY 27: Climbing right turn heading 020°, thence. . . .

. . . .Continue climb northwestbound on HLN R-318 to 8100, then climbing right turn direct HLN VORTAC, cross HLN VORTAC at or above 9000 before proceeding on course, or for climb in visual conditions; cross Helena Rgnl Airport northbound at or above 5900 and continue climbing on HLN R-336 to WOKEN INT before proceeding on course.



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(HLN4.HLN) 17341

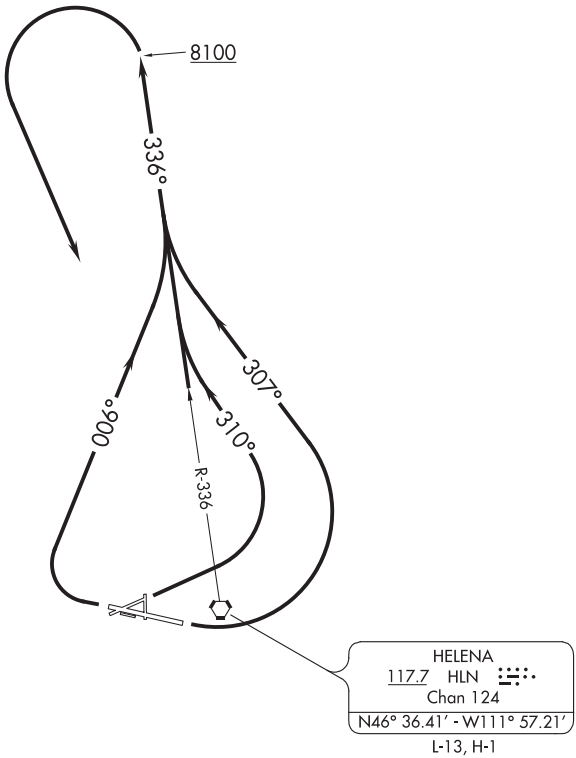
# HELENA FOUR DEPARTURE

AL-192 (FAA)

HELENA RGNL (HLN)
HELENA, MONTANA

HELENA TOWER ★
118.3 (CTAF) 257.8
HELENA DEP CON ★
119.5 229.4
SALT LAKE CENTER
133.4 285.4

**TOP ALTITUDE: 9000**




TAKEOFF MINIMUMS
Rwy 5: Standard with minimum climb of 250′ per NM to 8100.
Rwy 9: Standard with minimum climb of 240′ per NM to 8100.
Rwys 17, 23: NA- Obstacles.
Rwy 27: Standard with minimum climb of 390′ per NM to 8100.
Rwy 35: NA- ATC.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

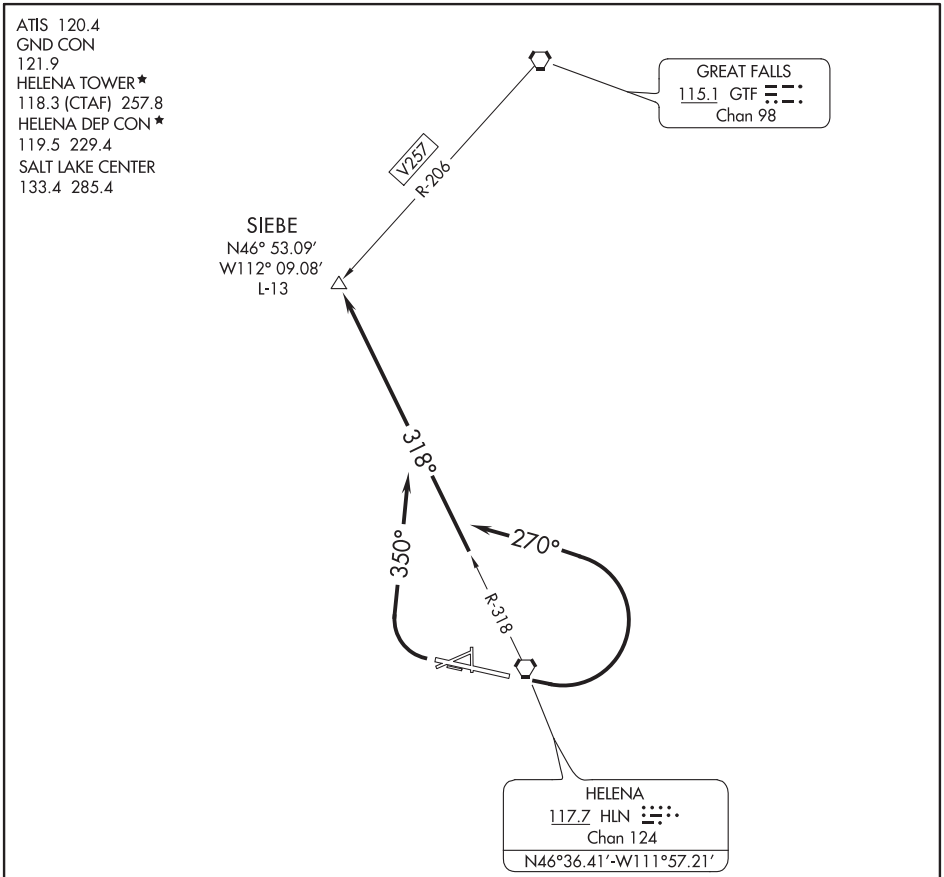
TAKEOFF RUNWAY 5: Climbing left turn heading 310° to intercept HLN VORTAC R-336 to 8100′, then climbing left turn to 9000′ via HLN VORTAC R-336 to HLN VORTAC.

TAKEOFF RUNWAY 9: Climbing left turn heading 307° to intercept HLN VORTAC R-336 to 8100′, then climbing left turn to 9000′ via HLN VORTAC R-336 to HLN VORTAC.

TAKEOFF RUNWAY 27: Climbing right turn heading 006° to intercept HLN VORTAC R-336 to 8100′, then climbing left turn to 9000′ via HLN VORTAC R-336 to HLN VORTAC.


NW-1, 05 NOV 2020 to 31 DEC 2020

# SIEBE THREE DEPARTURE






NW-1, 05 NOV 2020 to 31 DEC 2020

TAKEOFF MINIMUMS

Rwy 17, 35, 05, 23: NA-ATC

Rwy 09: Standard with minimum climb of 270′ per NM to 9000′.

Rwy 27: Standard with minimum climb of 390′ per NM to 7200′.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climbing left turn heading 270°, thence. . . .

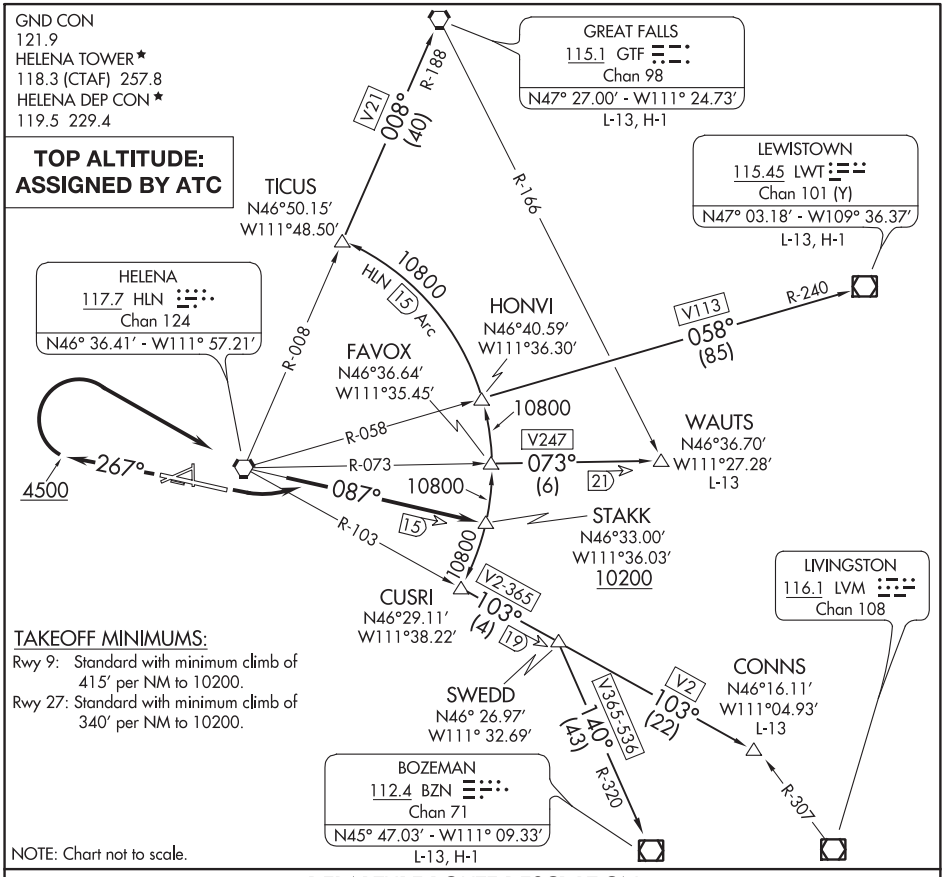
TAKEOFF RUNWAY 27: Climbing right turn heading 350°, thence. . . .

. . . .intercept HLN R-318 to SIEBE INT.

(STAKK4.STAKK) 20086

# STAKK FOUR DEPARTURE

HELENA RGNL (HLN)
HELENA, MONTANA




TAKEOFF MINIMUMS:
Rwy 9: Standard with minimum climb of 415′ per NM to 10200.
Rwy 27: Standard with minimum climb of 340′ per NM to 10200.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climbing left turn to intercept HLN R-087 to cross STAKK at or above 10200. Thence via transition.

TAKEOFF RUNWAY 27: Climb heading 267° to 4500 then climbing right turn direct HLN VORTAC. Continue climb on HLN R-087 to cross STAKK at or above 10200. Thence via transition.

BOZEMAN TRANSITION (STAKK4.BZN): From over STAKK on 15 DME Arc to CUSRI INT, then on HLN R-103 to SWEDD INT, then on BZN R-320 to BZN VOR/DME.

CONNS TRANSITION (STAKK4.CONNS): From over STAKK on 15 DME Arc to CUSRI INT, then on HLN R-103 to SWEDD INT, then on HLN R-103 to CONNS INT.

GREAT FALLS TRANSITION (STAKK4.GTF): From over STAKK on15 DME Arc to FAVOX, then on 15 DME Arc to HONVI, then on 15 DME Arc to TICUS, then on HLN R-008 and GTF R-188 to GTF VORTAC.

LEWISTOWN TRANSITION (STAKK4.LWT): From over STAKK on 15 DME Arc to FAVOX, then on 15 DME Arc to HONVI, then on HLN R-058 and LWT R-240 to LWT VOR/DME.

WAUTS TRANSITION (STAKK4.WAUTS): From over STAKK on 15 DME Arc to FAVOX, then on HLN R-073 to WAUTS INT.


NW-1, 05 NOV 2020 to 31 DEC 2020

STAKK FOUR DEPARTURE
HELENA, MONTANA
HELENA RGNL (HLN)

| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 286° | TDZE | N/A |
| | Apt Elev | 644 |

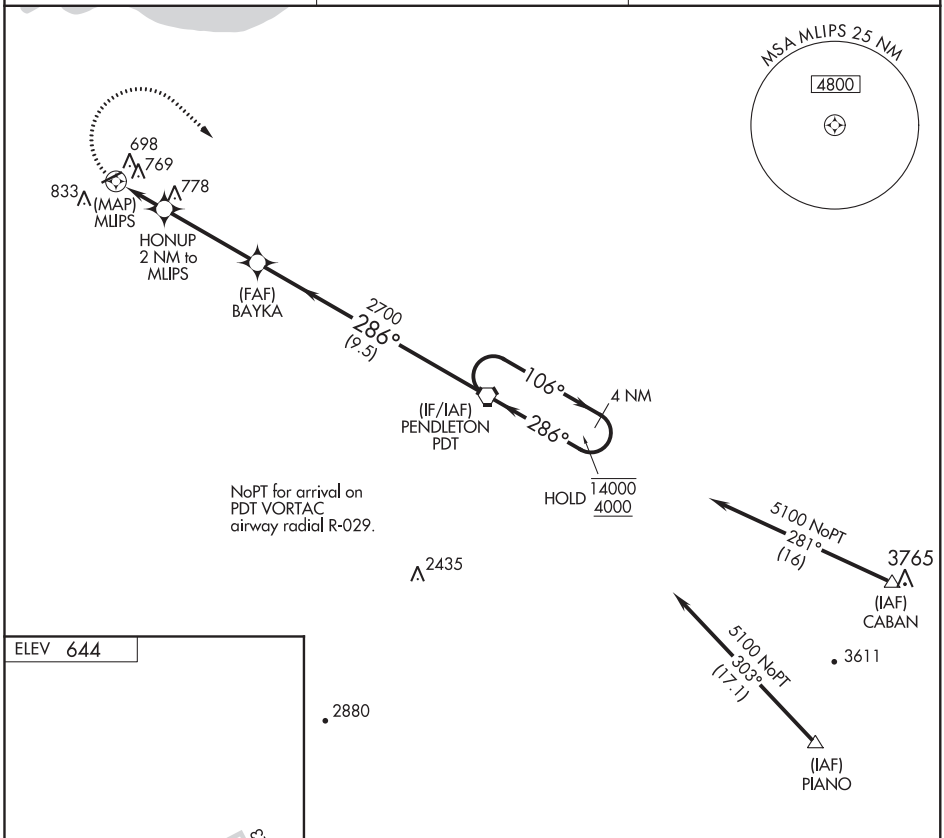
# RNAV (GPS)-B
## HERMISTON MUNI (HRI)

RNP APCH.

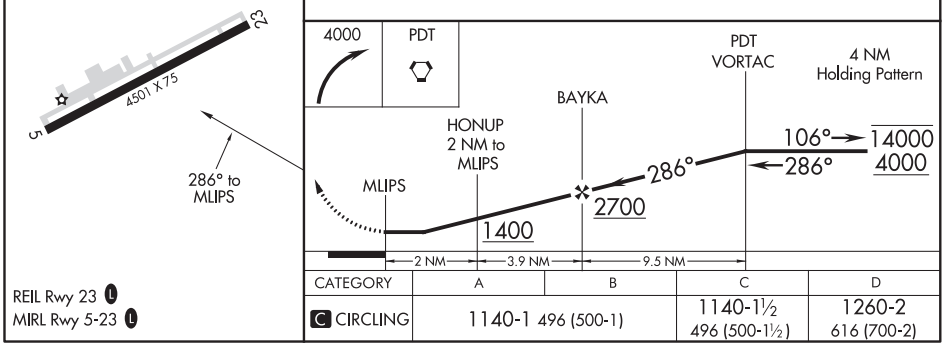
Circling Rwy 5 NA at night.

MISSED APPROACH: Climbing right turn to 4000 direct PDT VORTAC and hold.

| ASOS | CHINOOK APP CON★ | UNICOM |
|---|---|---|
| 135.225 | 133.15 379.15 | 122.8 (CTAF) L |




ELEV 644




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 1140-1 496 (500-1) | | 1140-1½ 496 (500-1½) | 1260-2 616 (700-2) |

REIL Rwy 23 L
MIRL Rwy 5-23 L



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HERMISTON, OREGON AL-6475 (FAA) 20310

| VORTAC PDT 114.7 Chan 94 | APP CRS 286° | Rwy ldg N/A TDZE N/A Apt Elev 644 |
|---|---|---|

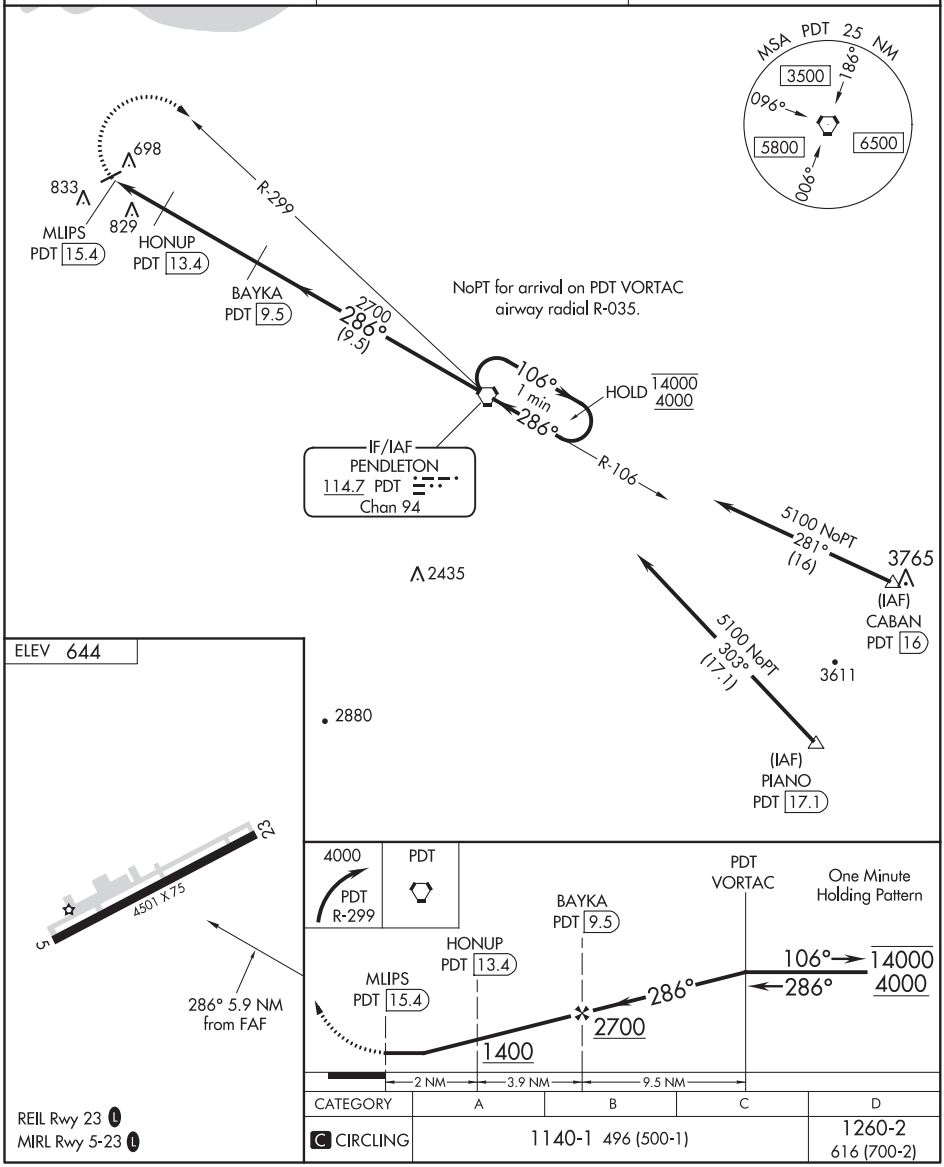
# VOR-A
## HERMISTON MUNI (HRI)

DME required.

Circling Rwy 5 NA at night.

MISSED APPROACH: Climbing right turn to 4000 on PDT VORTAC R-299 to PDT VORTAC and hold.

| ASOS | CHINOOK APP CON ★ | UNICOM |
|---|---|---|
| 135.225 | 133.15 379.15 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 1140-1 496 (500-1) | | | 1260-2 616 (700-2) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# ILS or LOC/DME RWY 24
## BOWERMAN (HQM)

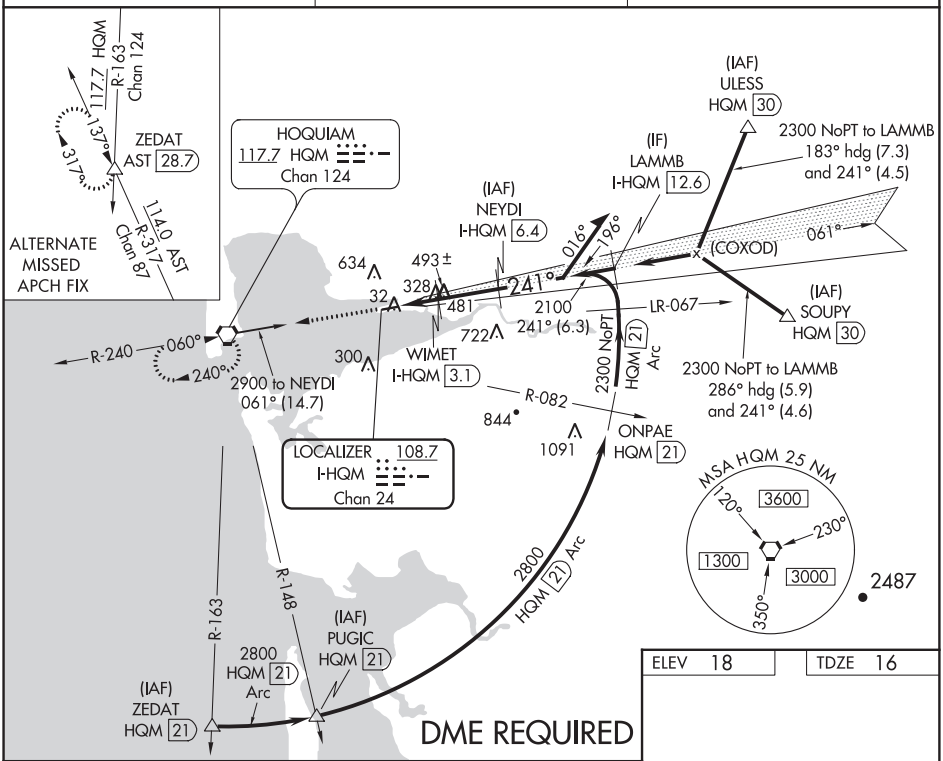
| LOC/DME I-HQM | APP CRS | Rwy ldg | 5000 |
|---|---|---|---|
| 108.7 | 241° | TDZE | 16 |
| Chan 24 | | Apt Elev | 18 |

When local altimeter setting not received, procedure NA. For inop MALSR, increase S-ILS Cat C visibility to ⅞ mile and S-LOC Cat C visibility to 1⅝ mile. Circling NA northwest of Rwy 6-24.

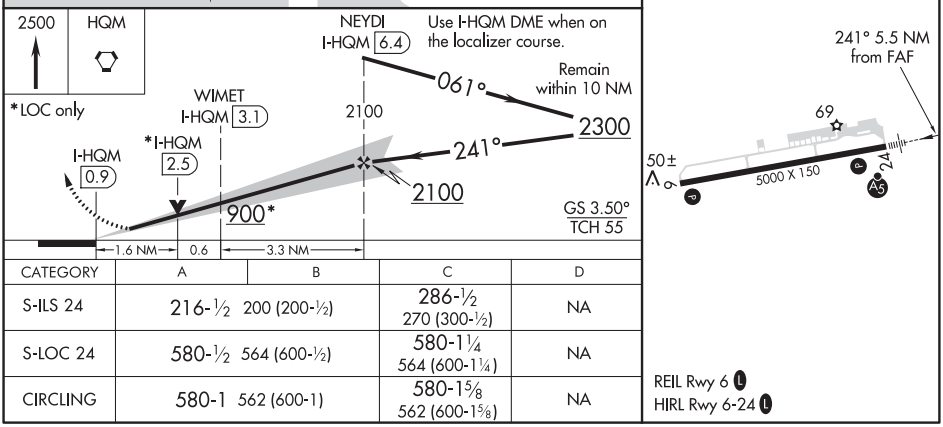
MALSR

MISSED APPROACH: Climb to 2500 direct HQM VORTAC and hold.

| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.775 | 128.3 269.0 | 122.7 (CTAF) L |




NW-1, 05 NOV 2020 to 31 DEC 2020




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 24 | 216-½ 200 (200-½) | | 286-½ 270 (300-½) | NA |
| S-LOC 24 | 580-½ 564 (600-½) | | 580-1¼ 564 (600-1¼) | NA |
| CIRCLING | 580-1 562 (600-1) | | 580-1⅝ 562 (600-1⅝) | NA |

HOQUIAM, WASHINGTON

AL-889 (FAA)

19003

# RNAV (GPS) RWY 6
## BOWERMAN (HQM)

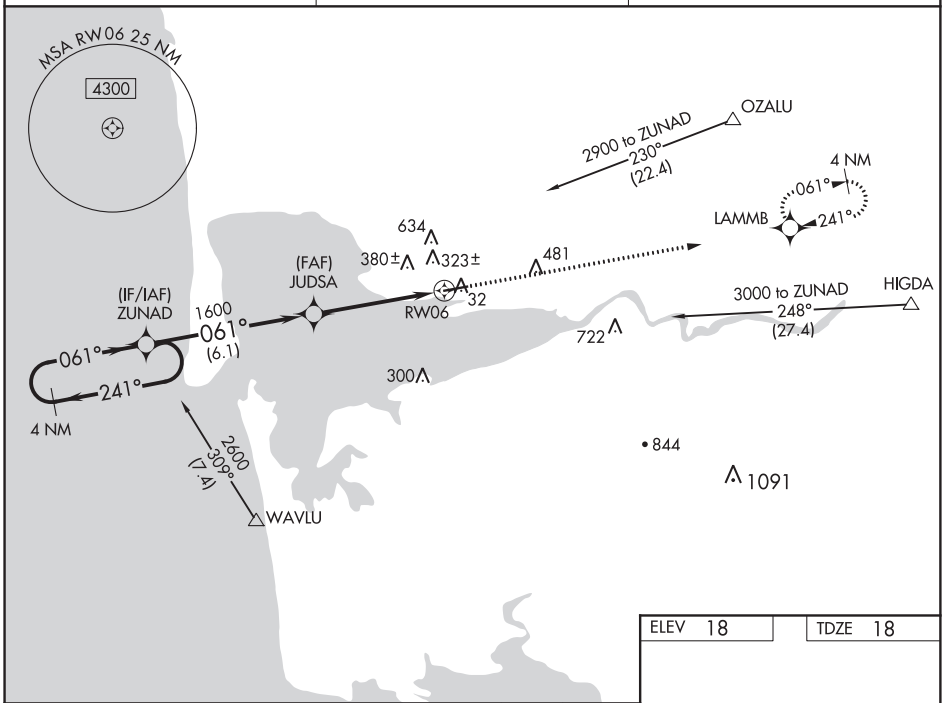
| WAAS CH 82015 W06A | APP CRS 061° | Rwy ldg 5000<br>TDZE 18<br>Apt Elev 18 |
|---|---|---|

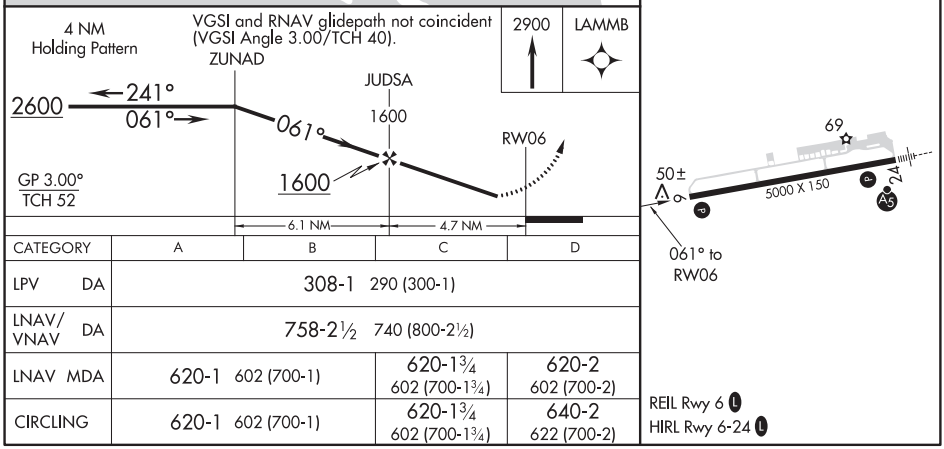
RNP APCH.

Circling NA northwest of Rwy 6-24. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118° F). Rwy 6 helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 2900 direct LAMMB and hold.

| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.775 | 128.3 269.0 | 122.7 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 308-1 290 (300-1) | | | |
| LNAV/VNAV DA | 758-2½ 740 (800-2½) | | | |
| LNAV MDA | 620-1 602 (700-1) | | 620-1¾ 602 (700-1¾) | 620-2 602 (700-2) |
| CIRCLING | 620-1 602 (700-1) | | 620-1¾ 602 (700-1¾) | 640-2 622 (700-2) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# RNAV (GPS) RWY 24
## BOWERMAN (HQM)

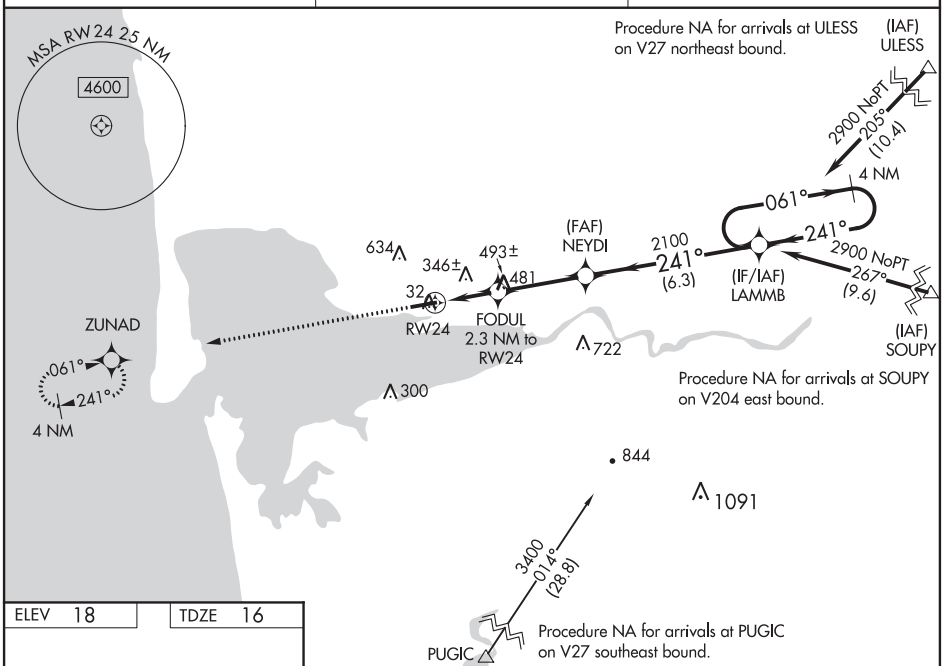
| WAAS CH 86902 W24A | APP CRS 241° | Rwy ldg 5000<br>TDZE 16<br>Apt Elev 18 |
|---|---|---|

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -6°C (22°F) or above 43°C (109°F). When local altimeter setting not received, procedure NA. Circling NA northwest of Rwy 6-24. DME/DME RNP- 0.3 NA. For inoperative MALSR, increase LPV Cat C visibility to ⅞ mile and LNAV Cat C visibility to 2½ miles.

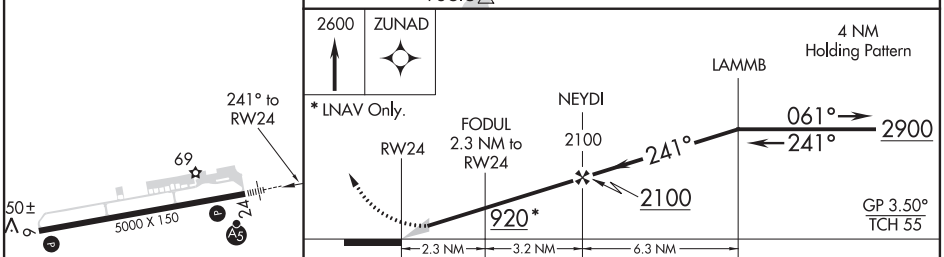
MALSR

MISSED APPROACH: Climb to 2600 direct ZUNAD and hold.

| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.775 | 128.3 269.0 | 122.7 (CTAF) L |




ELEV 18 TDZE 16




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 226-½ 210 (300-½) | | 286-½ 270 (300-½) | NA |
| LNAV/VNAV DA | 676-1½ 660 (700-1½) | | | NA |
| LNAV MDA | 800-½ 784 (800-½) | 800-¾ 784 (800-¾) | 800-1¾ 784 (800-1¾) | NA |
| CIRCLING | 800-1 782 (800-1) | 800-1¼ 782 (800-1¼) | 800-2½ 782 (800-2½) | NA |

REIL Rwy 6 L
HIRL Rwy 6-24 L



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

HOQUIAM, WASHINGTON

AL-889 (FAA)

17341

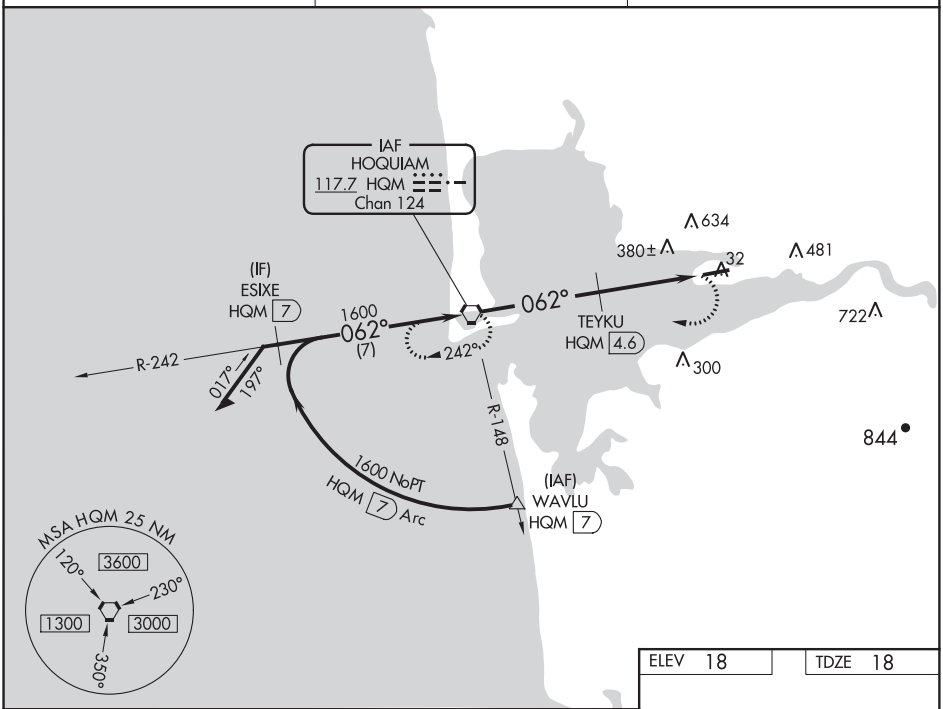
# VOR RWY 6
## BOWERMAN (HQM)

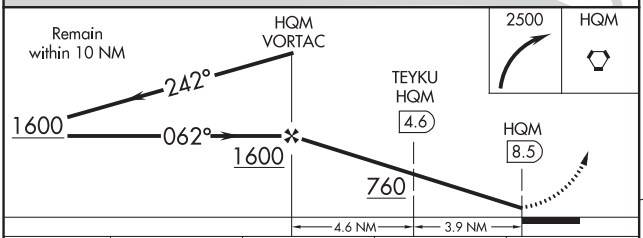
| VORTAC HQM | APP CRS | Rwy ldg | 5000 |
|---|---|---|---|
| 117.7 | 062° | TDZE | 18 |
| Chan 124 | | Apt Elev | 18 |

Visibility reduction by helicopters NA.
Circling NA northwest of Rwy 6 and 24.

MISSED APPROACH: Climbing right turn to 2500 direct HQM VORTAC and hold.

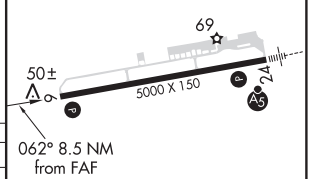
| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.775 | 128.3 269.0 | 122.7 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-6 | 760-1<br>742 (800-1) | 760-1¼<br>742 (800-1¼) | 760-2¼<br>742 (800-2¼) | 760-2½<br>742 (800-2½) |
| CIRCLING | 760-1<br>742 (800-1) | 760-1¼<br>742 (800-1¼) | 760-2¼<br>742 (800-2¼) | 760-2½<br>742 (800-2½) |
| TEYKU FIX MINIMUMS | | | | |
| S-6 | 640-1 622 (700-1) | | 640-1¾<br>622 (700-1¾) | 640-2<br>622 (700-2) |
| CIRCLING | 640-1 622 (700-1) | | 640-1¾<br>622 (700-1¾) | 640-2<br>622 (700-2) |

ELEV 18 TDZE 18




REIL Rwy 6 L
HIRL Rwy 6-24 L

| FAF to MAP 8.5 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 8:30 | 5:40 | 4:15 | 3:24 | 2:50 |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 82039 W13A | APP CRS 132° | Rwy ldg 5500<br>TDZE 4227<br>Apt Elev 4264 |
|---|---|---|

# RNAV (GPS) RWY 13
## HULETT MUNI (W43)

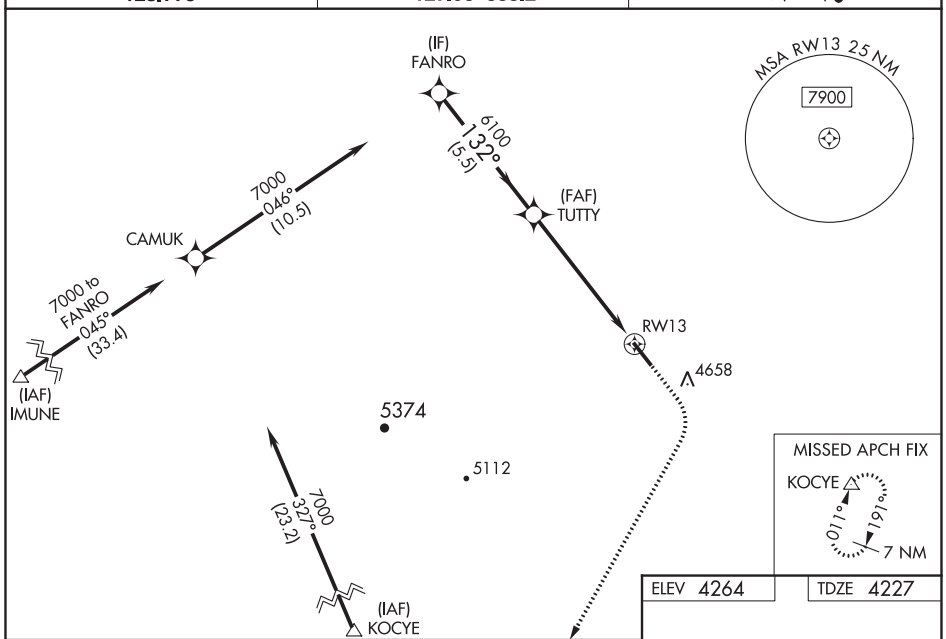
RNP APCH

T
A
-34°C

For uncompensated Baro-VNAV systems, procedure NA below -23°C or above 53°C. Procedure NA at night. Baro-VNAV and VDP NA when using Gillette altimeter setting. When local altimeter setting not received, use Gillette altimeter setting and increase LPV DA to 4662 feet; LNAV/VNAV DA to 4807 feet, and all visibilities ½ mile. Increase all MDA 120 feet and LNAV Cat C/D visibility ½ mile, Circling Cat A/B ¼ mile, and Cat C ½ mile.

MISSED APPROACH: Climb to 4700 then climbing right turn to 7600 direct KOCYE and hold.

| AWOS-3PT | DENVER CENTER | UNICOM |
|---|---|---|
| 128.775 | 127.95 338.2 | 122.8 (CTAF) L |

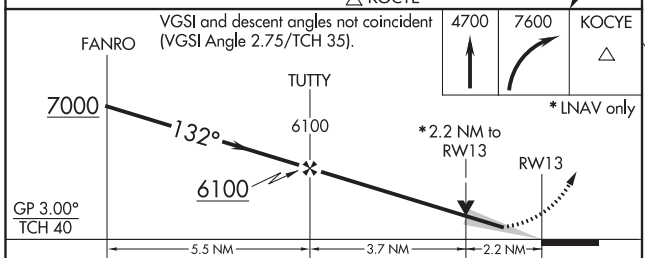


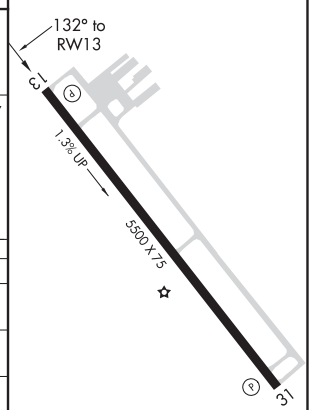

ELEV 4264 TDZE 4227

VGSI and descent angles not coincident (VGSI Angle 2.75/TCH 35).

| 4700 | 7600 | KOCYE |
|---|---|---|

* LNAV only




MIRL Rwy 13-31 L
REIL Rwys 13 and 31 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4542-1⅛ 315 (300-1⅛) | | | |
| LNAV/VNAV DA | 4687-1¾ 460 (500-1¾) | | | |
| LNAV MDA | 5100-1 873 (900-1) | 5100-1¼ 873 (900-1¼) | 5100-2½ 873 (900-2½) | |
| C CIRCLING | 5100-1 836 (900-1) | 5100-1¼ 836 (900-1¼) | 5100-2½ 836 (900-2½) | 5400-3 1136 (1200-3) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

HULETT, WYOMING | AL-10288 (FAA) | 20310

# RNAV (GPS)-A

## HULETT MUNI (W43)

| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 011° | TDZE | N/A |
| | Apt Elev | 4264 |

RNP APCH

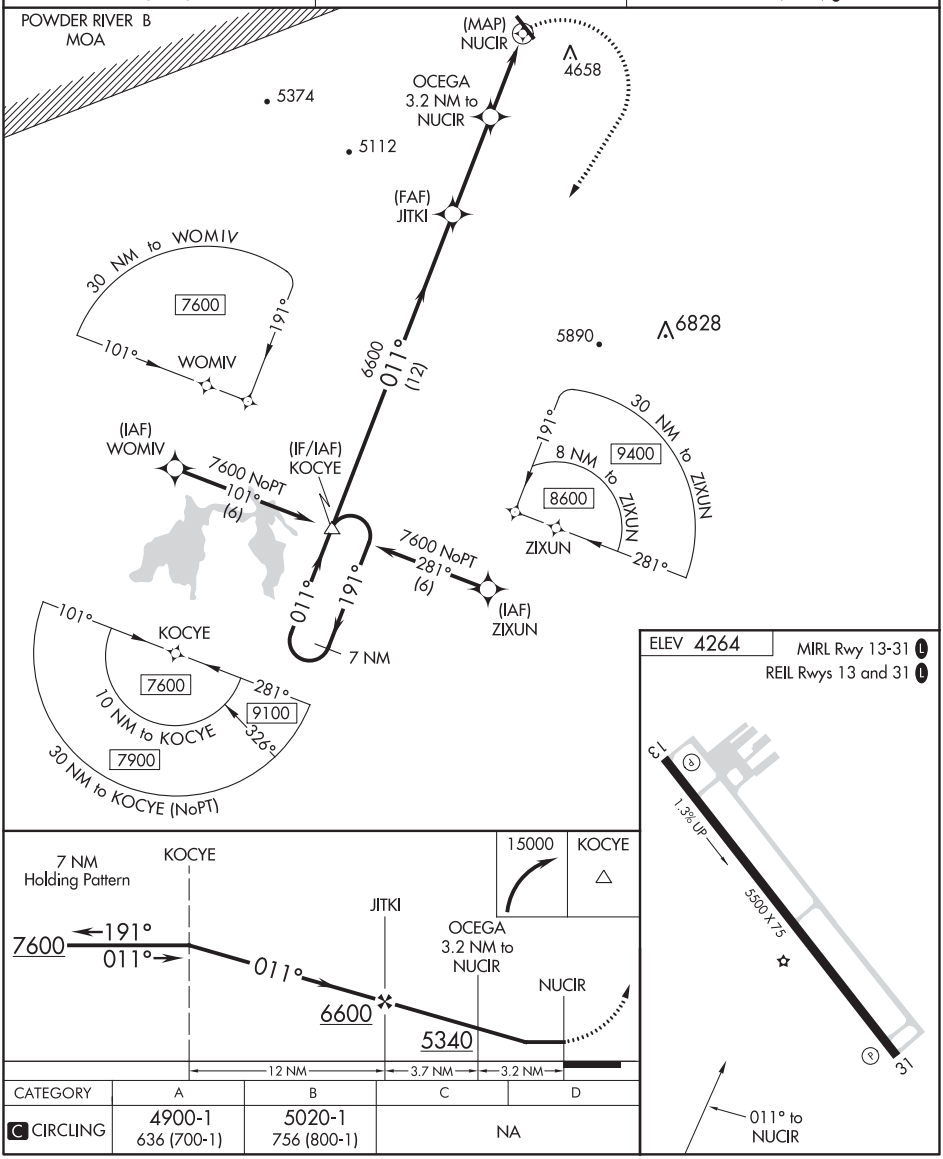
NA

-34°C

Procedure NA at night. When local altimeter setting is not received use Northeast Wyoming Rgnl altimeter setting and increase all MDA 120 feet and visibility Cat B ¼ mile.

MISSED APPROACH: Climbing right turn to 15000 direct KOCYE and hold, continue climb-in-hold to 15000.

| AWOS-3PT | DENVER CENTER | UNICOM |
|---|---|---|
| 128.775 | 127.95 338.2 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 4900-1<br>636 (700-1) | 5020-1<br>756 (800-1) | NA | |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# LLADN ONE DEPARTURE (RNAV)

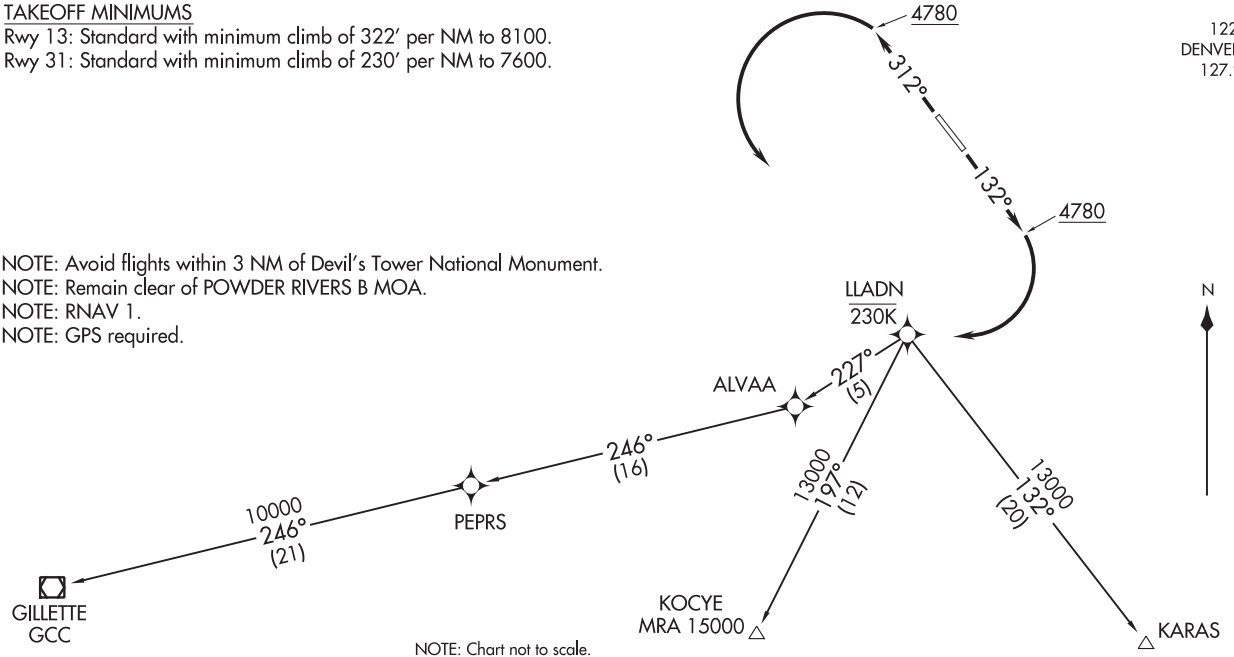
(LLADN1.LLADN) 03APR14

HULETT, WYOMING
HULETT MUNI (W43)

TAKEOFF MINIMUMS
Rwy 13: Standard with minimum climb of 322′ per NM to 8100.
Rwy 31: Standard with minimum climb of 230′ per NM to 7600.

UNICOM
122.8 (CTAF)
DENVER CENTER
127.95 338.2

NOTE: Avoid flights within 3 NM of Devil's Tower National Monument.
NOTE: Remain clear of POWDER RIVERS B MOA.
NOTE: RNAV 1.
NOTE: GPS required.




NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTON

TAKEOFF RUNWAY 13: Climb heading 132° to 4780, then right turn direct LLADN, cross LLADN at/below 230K. Thence . . . .
TAKEOFF RUNWAY 31: Climb heading 312° to 4780, then left turn direct LLADN, cross LLADN at/below 230K. Thence . . . .
. . . . Expect further clearance to filed altitude 10 minutes after departure.

LOST COMMUNICATIONS: Alternate frequency 135.6 / 363.025.

GILLETTE TRANSITION (LLADN1.GCC)
KARAS TRANSITION (LLADN1.KARAS)
KOCYE TRANSITION (LLADN1.KOCYE)

LLADN ONE DEPARTURE (RNAV)

(LLADN1.LLADN) 17341

AL-10288 (FAA)

HULETT, WYOMING
HULETT MUNI (W43)

IDAHO FALLS, IDAHO | AL-590 (FAA) | 20310

# ILS or LOC RWY 21
## IDAHO FALLS RGNL (IDA)

| LOC/DME I-IDA | APP CRS | Rwy ldg | 9002 |
|---|---|---|---|
| 111.1 | 206° | TDZE | 4735 |
| Chan 48 | | Apt Elev | 4744 |

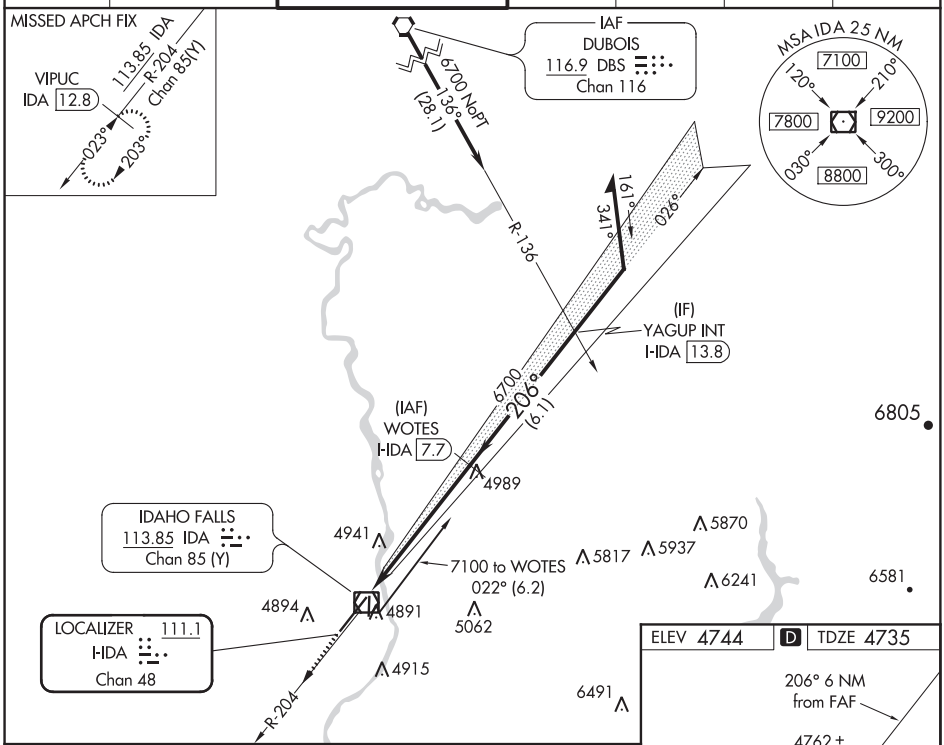
DME required.

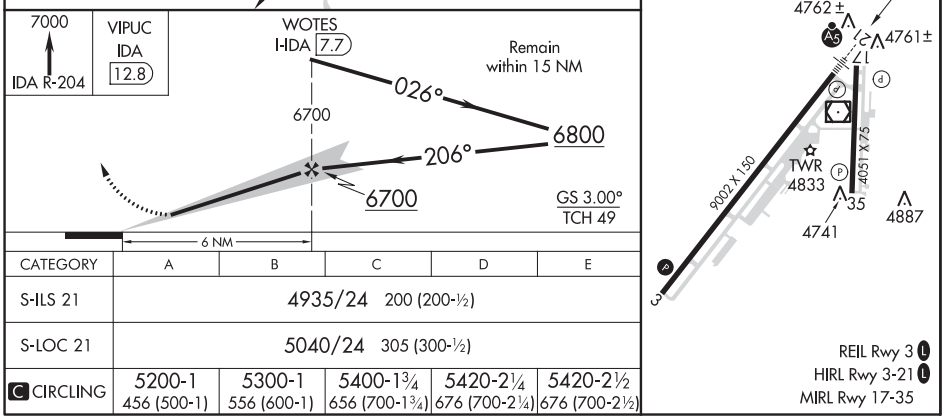
For inop ALS, increase S-ILS 21 all Cats visibility to RVR 4000 and S-LOC 21 all Cats visibility to RVR 5500.
*RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 7000 on IDA VOR/DME R-204 to VIPUC/12.8 DME and hold.

| ATIS | SALT LAKE CENTER | IDAHO FALLS TOWER* | GND CON | CLNC DEL | GCO | UNICOM |
|---|---|---|---|---|---|---|
| 135.325 | 128.35 239.25 | 118.5 (CTAF) L 257.8 | 121.7 | 121.7 | 121.725 | 122.95 |




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-ILS 21 | 4935/24 200 (200-½) | | | | |
| S-LOC 21 | 5040/24 305 (300-½) | | | | |
| C CIRCLING | 5200-1 456 (500-1) | 5300-1 556 (600-1) | 5400-1¾ 656 (700-1¾) | 5420-2¼ 676 (700-2¼) | 5420-2½ 676 (700-2½) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 9002 |
|---|---|---|
| 026° | TDZE | 4744 |
| | Apt Elev | 4744 |

# RNAV (RNP) Z RWY 3

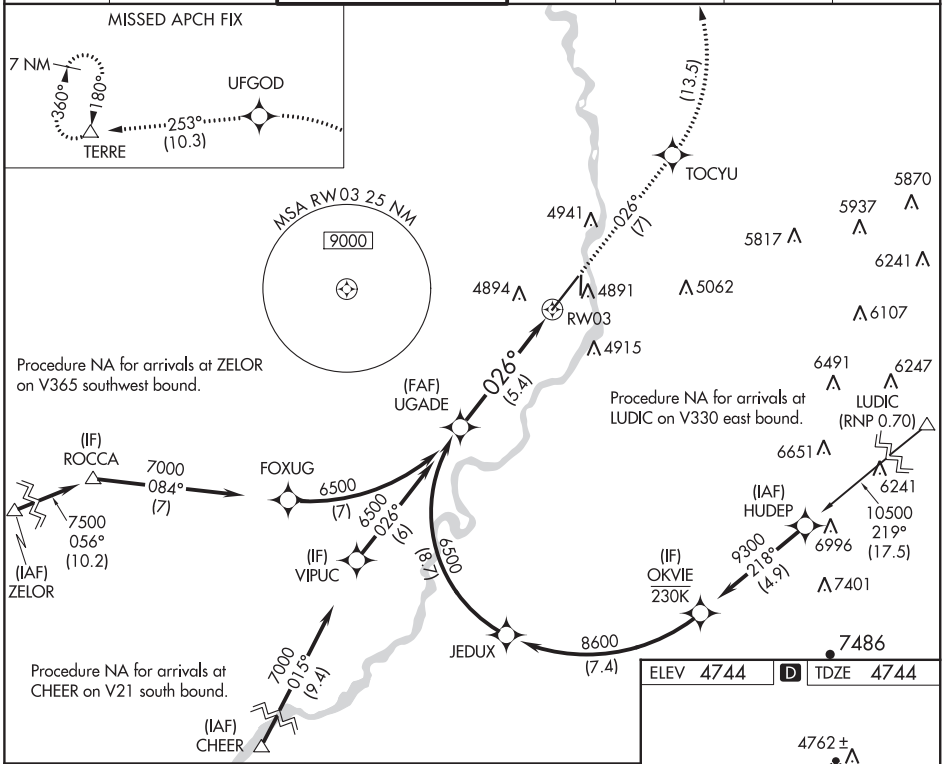
## IDAHO FALLS RGNL (IDA)

RNP AR APCH. RF required.

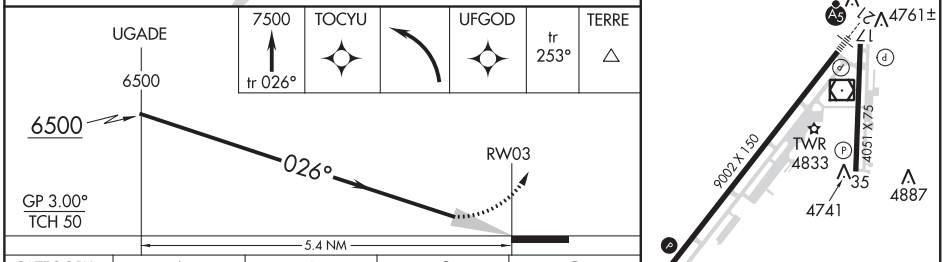
For uncompensated Baro-VNAV systems, procedure NA below -27°C or above 49°C.

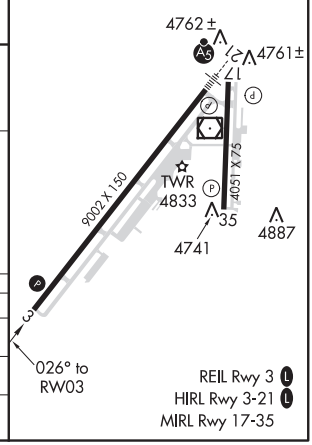
MISSED APPROACH: Climb to 7500 on track 026° to TOCYU left turn to UFGOD, then track 253° to TERRE and hold.

| ATIS | SALT LAKE CENTER | IDAHO FALLS TOWER★ | GND CON | CLNC DEL | GCO | UNICOM |
|---|---|---|---|---|---|---|
| 135.325 | 128.35 239.25 | 118.5 (CTAF) L 257.8 | 121.7 | 121.7 | 121.725 | 122.95 |




ELEV 4744 D TDZE 4744




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.11 DA | 5013-⅞ 269 (300-⅞) | | | |
| RNP 0.30 DA | 5071-1 327 (400-1) | | | |

**AUTHORIZATION REQUIRED**

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

IDAHO FALLS, IDAHO | AL-590 (FAA) | 20310

# RNAV (RNP) Z RWY 21

IDAHO FALLS RGNL (IDA)

| APP CRS | Rwy ldg | 9002 |
|---|---|---|
| 206° | TDZE | 4735 |
| | Apt Elev | 4744 |

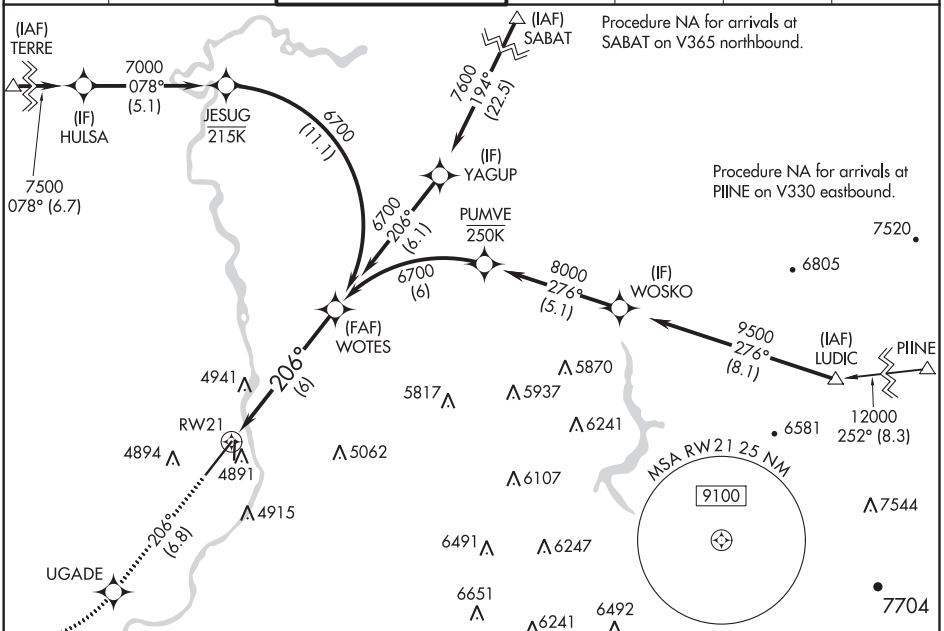
RNP AR APCH. RF required.

For uncompensated Baro-VNAV systems, procedure NA below -27°C or above 49°C. For inop ALS increase RNP 0.11 visibility all Cats to RVR 4500, increase RNP 0.30 visibility all Cats to RVR 5000.

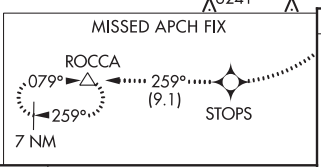
MALSR

MISSED APPROACH: Climb to 7500 on track 206° to UGADE right turn to STOPS then on track 259° to ROCCA and hold.

| ATIS | SALT LAKE CENTER | IDAHO FALLS TOWER★ | GND CON | CLNC DEL | GCO | UNICOM |
|---|---|---|---|---|---|---|
| 135.325 | 128.35 239.25 | 118.5 (CTAF) L 257.8 | 121.7 | 121.7 | 121.725 | 122.95 |

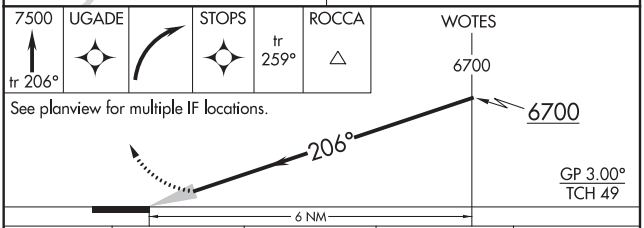



MISSED APCH FIX




| 7500 | UGADE | | STOPS | tr 259° | ROCCA |
|---|---|---|---|---|---|
| tr 206° | | | | | |

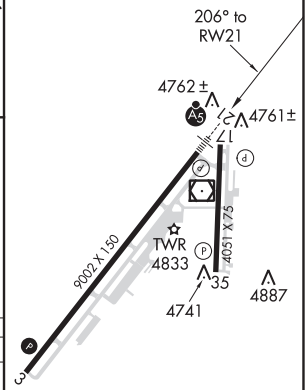
See planview for multiple IF locations.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.11 DA | 5011/24 276 (300-½) | | | |
| RNP 0.30 DA | 5064/24 329 (400-½) | | | |

AUTHORIZATION REQUIRED

ELEV 4744 | D | TDZE 4735




REIL Rwy 3 L
HIRL Rwy 3-21 L
MIRL Rwy 17-35

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 97501 W03A | APP CRS 026° | Rwy ldg 9002<br>TDZE 4744<br>Apt Elev 4744 |
|---|---|---|

# RNAV (GPS) Y RWY 3

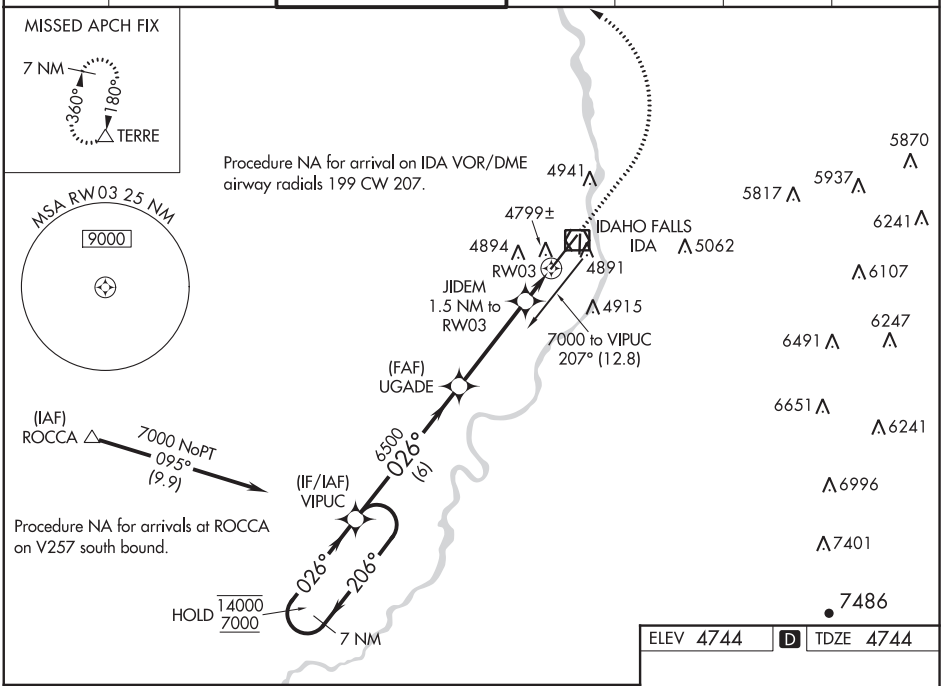
## IDAHO FALLS RGNL (IDA)

RNP APCH.

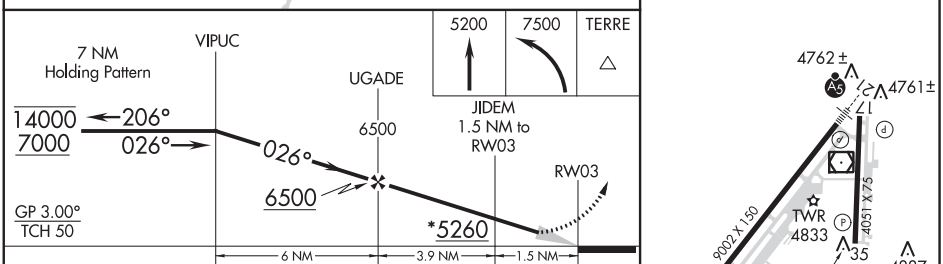
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -27°C (-16°F) or above 49°C (121°F).

MISSED APPROACH: Climb to 5200 then climbing left turn to 7500 direct TERRE and hold.

| ATIS | SALT LAKE CENTER | IDAHO FALLS TOWER* | GND CON | CLNC DEL | GCO | UNICOM |
|---|---|---|---|---|---|---|
| 135.325 | 128.35 239.25 | 118.5 (CTAF) 257.8 | 121.7 | 121.7 | 121.725 | 122.95 |




ELEV 4744 D TDZE 4744




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4944-¾ 200 (200-¾) | | | |
| LNAV/VNAV DA | 4994-¾ 250 (300-¾) | | | |
| LNAV MDA | 5060-1 316 (400-1) | | | |
| C CIRCLING | 5200-1 456 (500-1) | 5300-1 556 (600-1) | 5400-1¾ 656 (700-1¾) | 5420-2¼ 676 (700-2¼) |




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

IDAHO FALLS, IDAHO | AL-590 (FAA) | 20310

# RNAV (GPS) Y RWY 21
## IDAHO FALLS RGNL (IDA)

| WAAS CH 40111 W21A | APP CRS 206° | Rwy ldg 9002 / TDZE 4735 / Apt Elev 4744 |
|---|---|---|

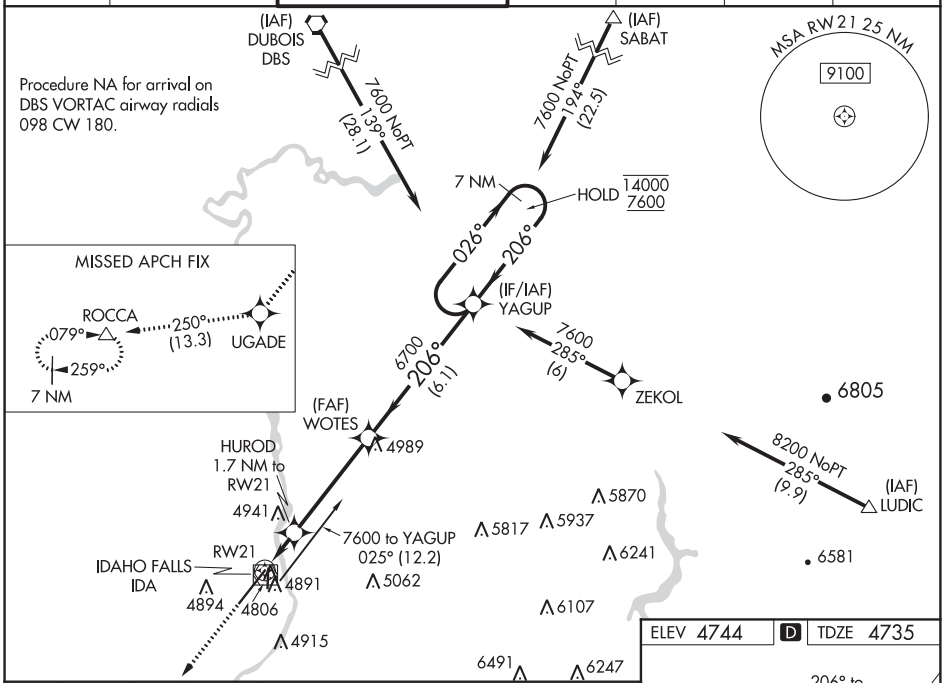
RNP APCH.

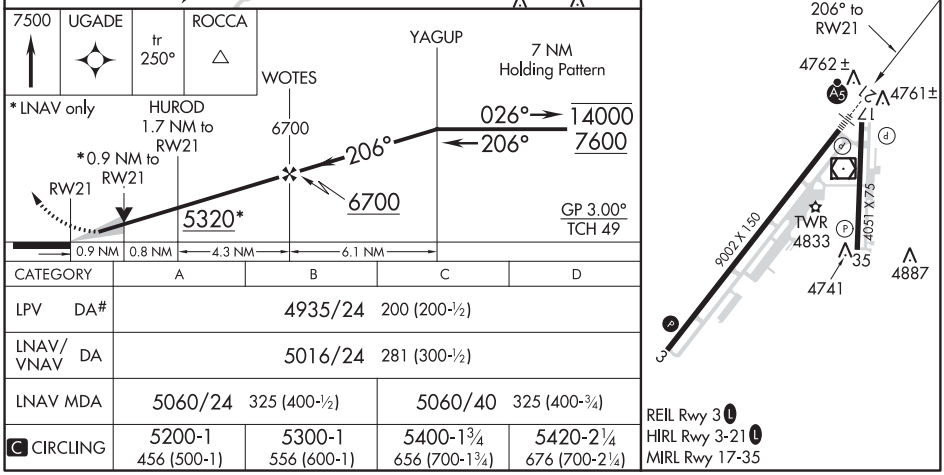
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -27°C or above 49°C . For inop ALS increase LNAV/VNAV visibility all Cats to RVR 4500, LNAV visibility Cats C/D to RVR 5500.
#RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 7500 direct UGADE and on track 250° to ROCCA and hold.

| ATIS | SALT LAKE CENTER | IDAHO FALLS TOWER* | GND CON | CLNC DEL | GCO | UNICOM |
|---|---|---|---|---|---|---|
| 135.325 | 128.35 239.25 | 118.5 (CTAF) L 257.8 | 121.7 | 121.7 | 121.725 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA# | 4935/24 200 (200-½) | | | |
| LNAV/VNAV DA | 5016/24 281 (300-½) | | | |
| LNAV MDA | 5060/24 325 (400-½) | | 5060/40 325 (400-¾) | |
| C CIRCLING | 5200-1 456 (500-1) | 5300-1 556 (600-1) | 5400-1¾ 656 (700-1¾) | 5420-2¼ 676 (700-2¼) |

NW-1, 05 NOV 2020 to 31 DEC 2020

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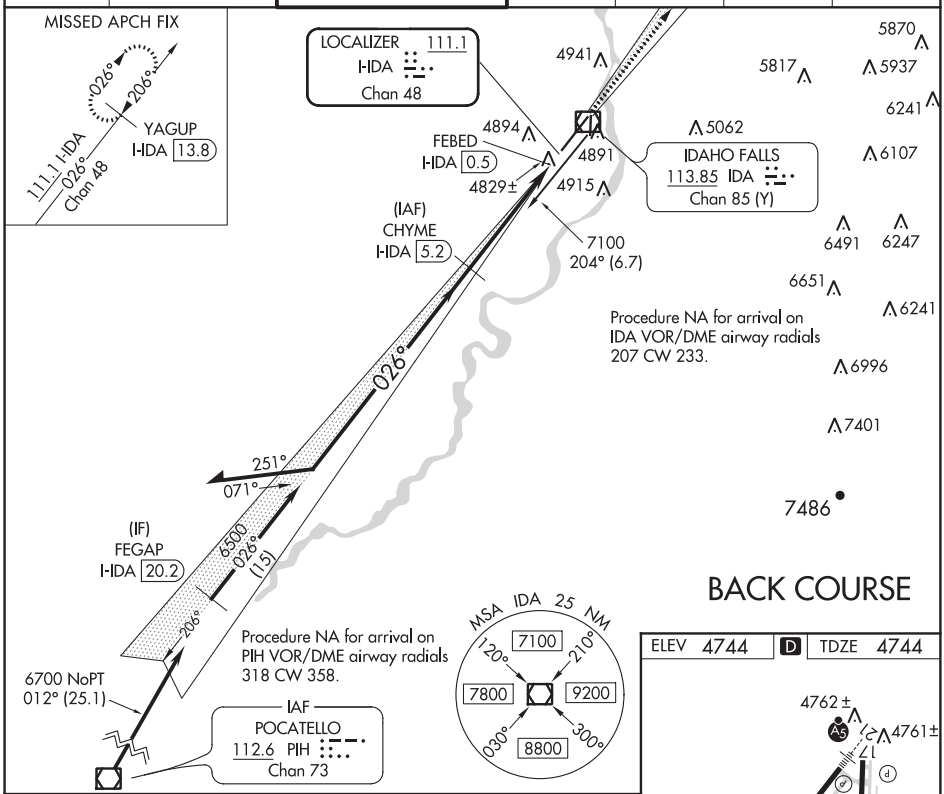
# LOC BC RWY 3
## IDAHO FALLS RGNL (IDA)

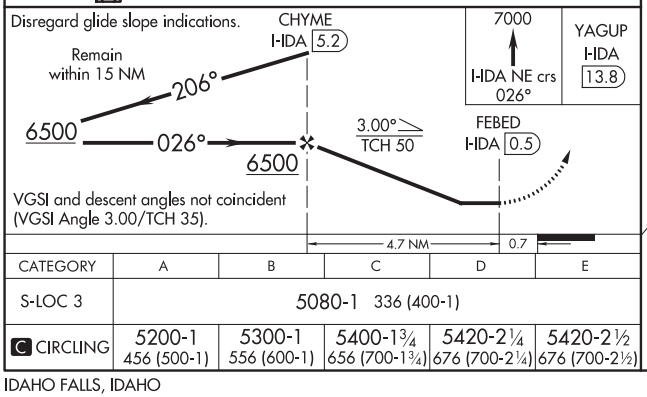
| LOC/DME I-IDA | APP CRS | Rwy ldg | 9002 |
|---|---|---|---|
| 111.1 | 026° | TDZE | 4744 |
| Chan 48 | | Apt Elev | 4744 |

DME required.

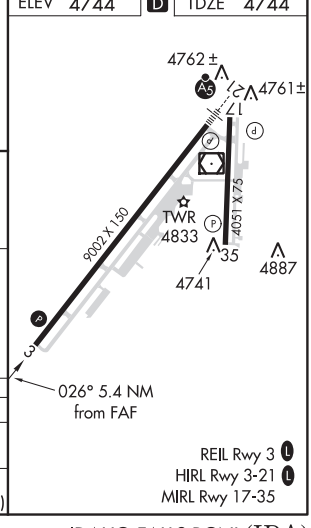
MISSED APPROACH: Climb to 7000 on I-IDA localizer NE course 026° to YAGUP/I-IDA 13.8 DME and hold.

| ATIS | SALT LAKE CENTER | IDAHO FALLS TOWER★ | GND CON | CLNC DEL | GCO | UNICOM |
|---|---|---|---|---|---|---|
| 135.325 | 128.35 239.25 | 118.5 (CTAF) L 257.8 | 121.7 | 121.7 | 121.725 | 122.95 |




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-LOC 3 | 5080-1 336 (400-1) | | | | |
| C CIRCLING | 5200-1 456 (500-1) | 5300-1 556 (600-1) | 5400-1¾ 656 (700-1¾) | 5420-2¼ 676 (700-2¼) | 5420-2½ 676 (700-2½) |






NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

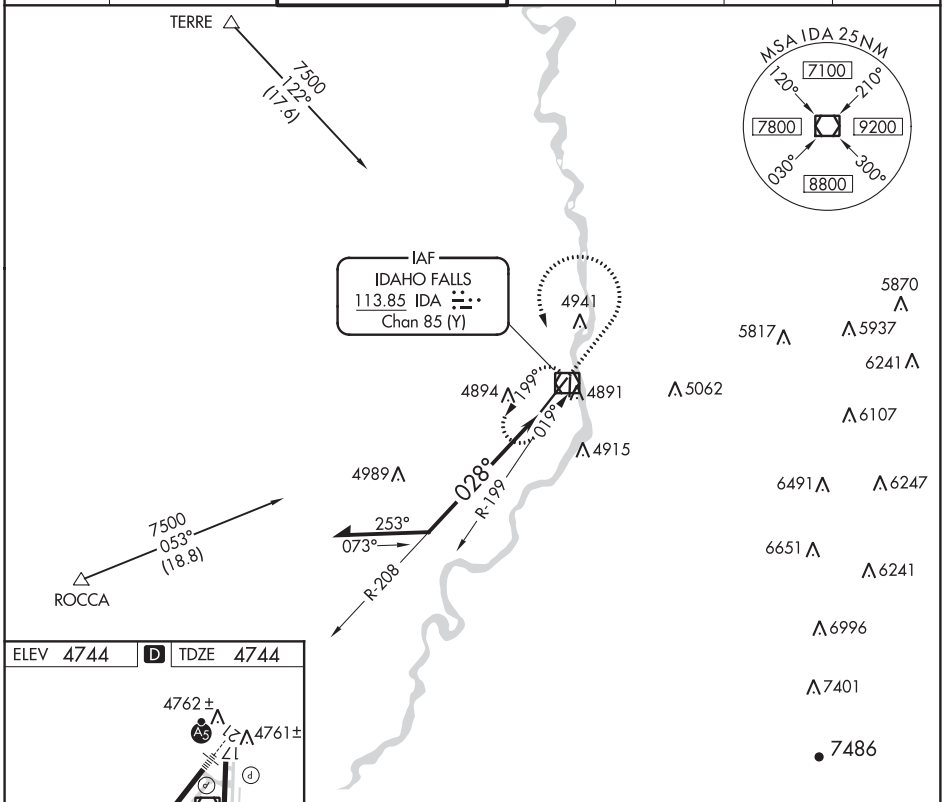
IDAHO FALLS, IDAHO | AL-590 (FAA) | 20310

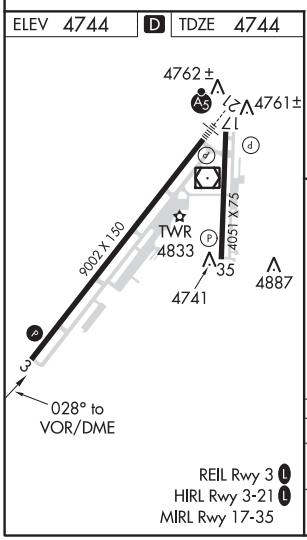
| VOR/DME IDA | APP CRS | Rwy ldg | 9002 |
|---|---|---|---|
| 113.85 | 028° | TDZE | 4744 |
| Chan 85 (Y) | | Apt Elev | 4744 |

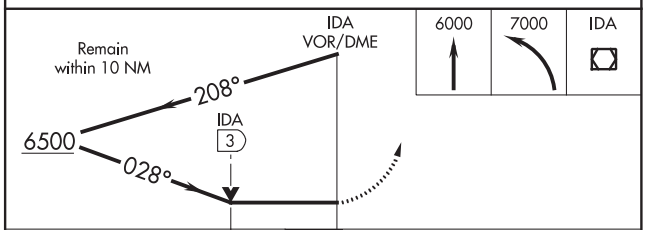
# VOR RWY 3
## IDAHO FALLS RGNL (IDA)

MISSED APPROACH: Climb to 6000 then climbing left turn to 7000 direct IDA VOR/DME and hold.

| ATIS | SALT LAKE CENTER | IDAHO FALLS TOWER★ | GND CON | CLNC DEL | GCO | UNICOM |
|---|---|---|---|---|---|---|
| 135.325 | 128.35 239.25 | 118.5 (CTAF) L 257.8 | 121.7 | 121.7 | 121.725 | 122.95 |




REIL Rwy 3 L
HIRL Rwy 3-21 L
MIRL Rwy 17-35

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-3 | 5300-1 | 556 (600-1) | 5300-1⅝ | 556 (600-1⅝) |
| C CIRCLING | 5300-1 | 556 (600-1) | 5400-1¾ 656 (700-1¾) | 5420-2¼ 676 (700-2¼) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# VOR RWY 21
## IDAHO FALLS RGNL (IDA)

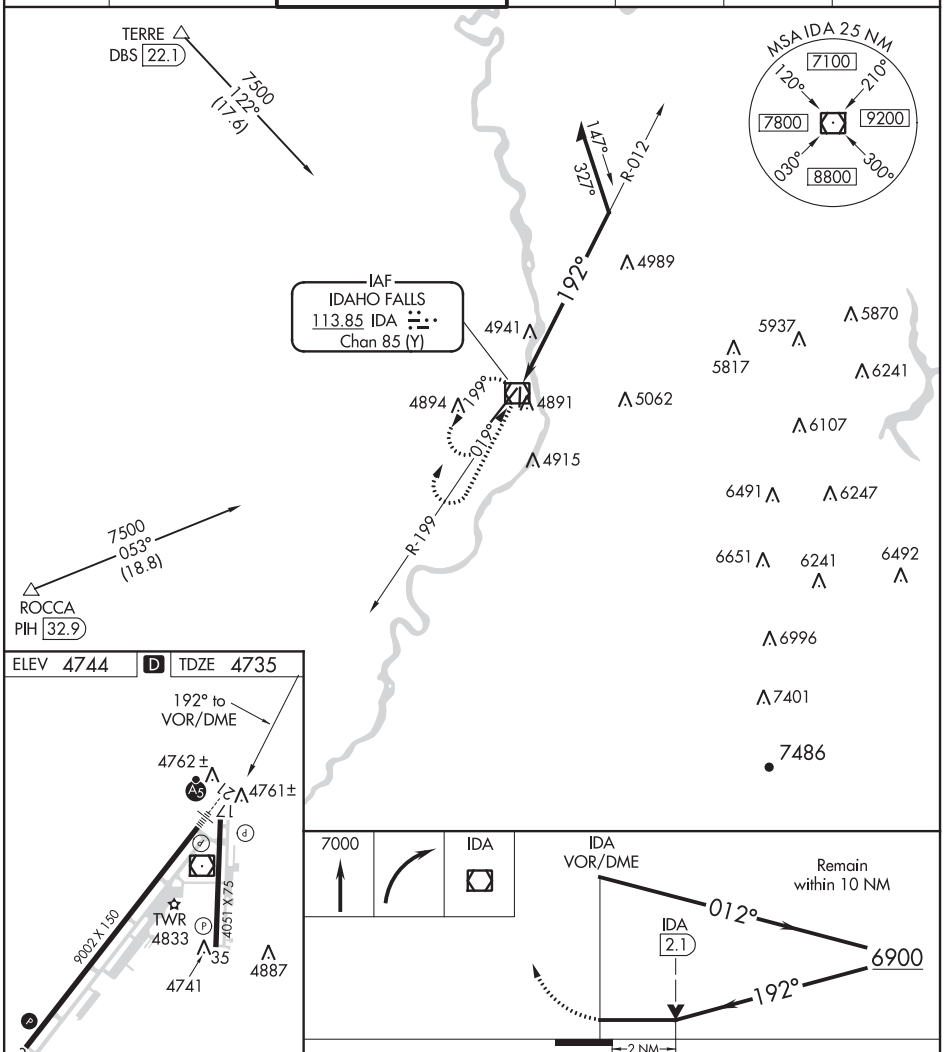
| VOR/DME IDA | APP CRS | Rwy ldg | 9002 |
|---|---|---|---|
| 113.85 | 192° | TDZE | 4735 |
| Chan 85 (Y) | | Apt Elev | 4744 |

T A For inop ALS increase S-21 Cats C/D visibility to 1⅞ SM.

MALSR A5

MISSED APPROACH: Climb to 7000 then right turn direct IDA VOR/DME and hold.

| ATIS | SALT LAKE CENTER | IDAHO FALLS TOWER★ | GND CON | CLNC DEL | GCO | UNICOM |
|---|---|---|---|---|---|---|
| 135.325 | 128.35 239.25 | 118.5 (CTAF) L 257.8 | 121.7 | 121.7 | 121.725 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-21 | 5400/24 665 (700-½) | | 5400-1½ 665 (700-1½) | |
| C CIRCLING | 5400-1 656 (700-1) | | 5400-1⅞ 656 (700-1⅞) | 5420-2¼ 676 (700-2¼) |

REIL Rwy 3 L
HIRL Rwy 3-21 L
MIRL Rwy 17-35

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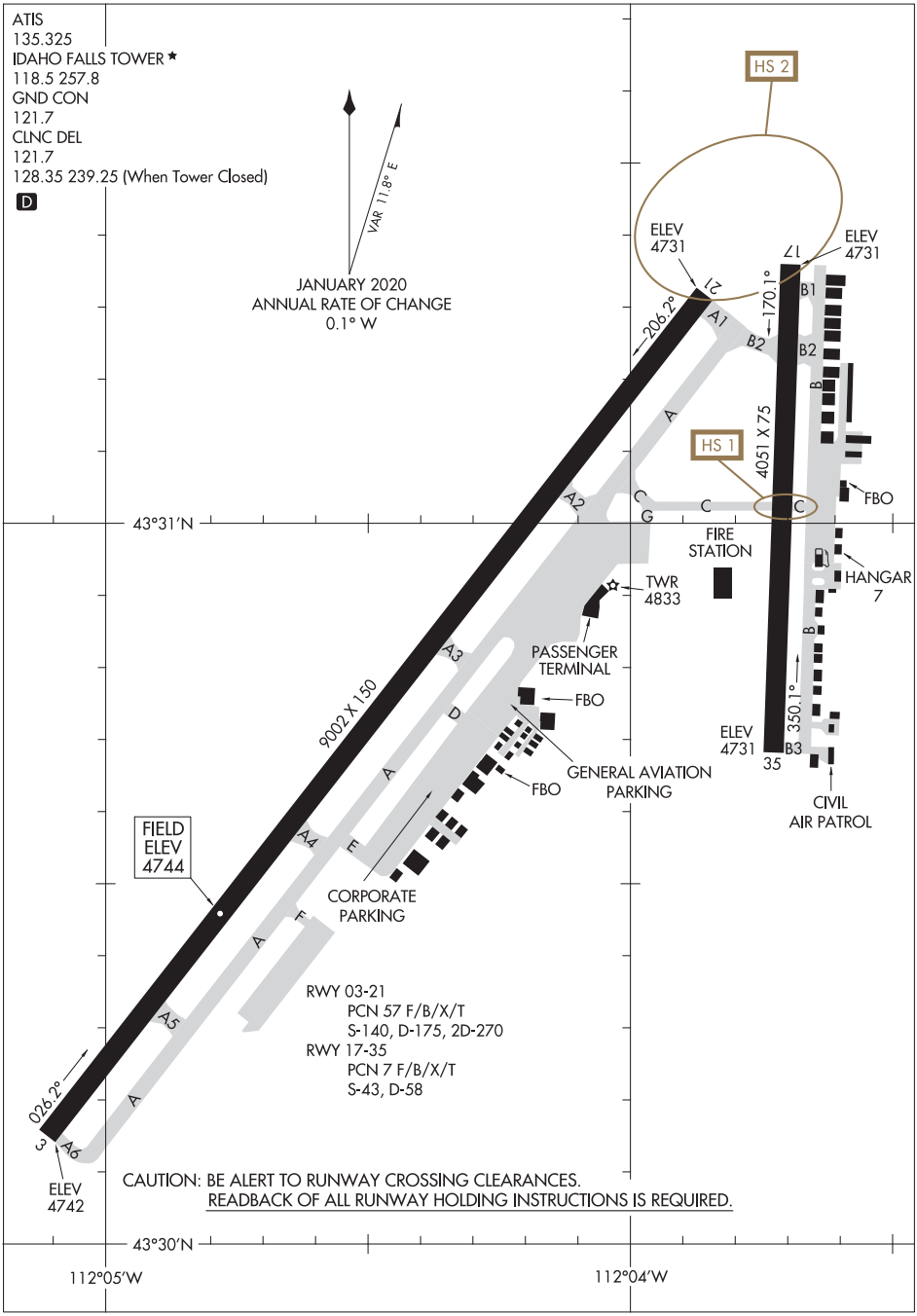
NW-1, 05 NOV 2020 to 31 DEC 2020

20310

# AIRPORT DIAGRAM

AL-590 (FAA)

IDAHO FALLS RGNL (IDA)
IDAHO FALLS, IDAHO




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM
20310
IDAHO FALLS, IDAHO
IDAHO FALLS RGNL (IDA)

| LOC/DME I-JAC 109.1 Chan 28 | APP CRS 187° | Rwy ldg 6300 TDZE 6451 Apt Elev 6451 |
|---|---|---|

# ILS Y or LOC RWY 19
## JACKSON HOLE (JAC)

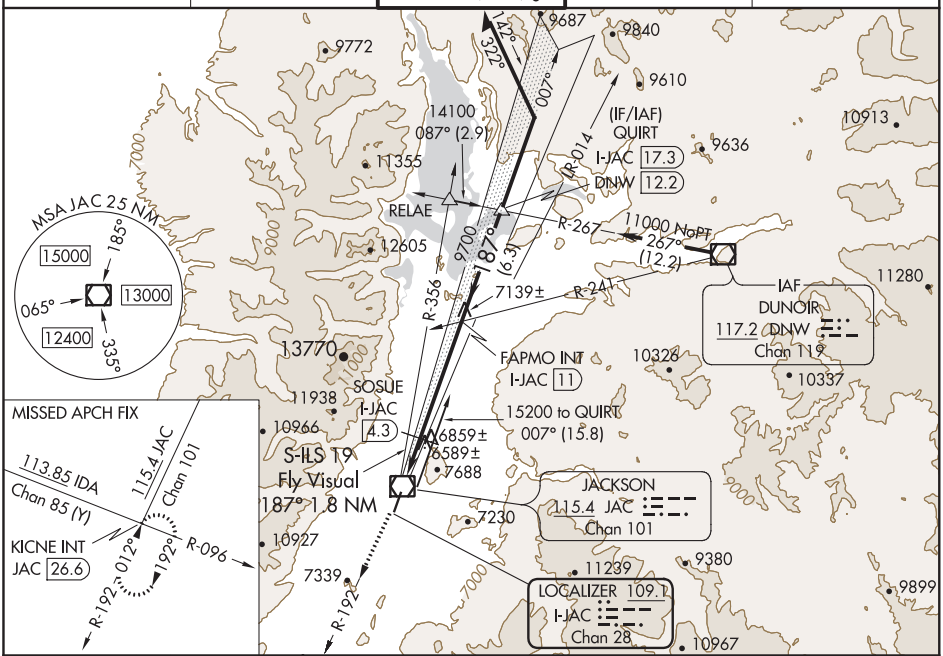
NA
-21°C

Inoperative table does not apply. Circling NA E of Rwy 1-19.

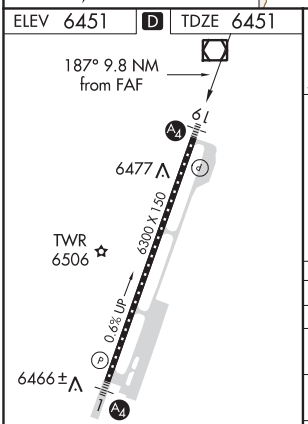
MALS

MISSED APPROACH: Climb to 14000 on JAC VOR/DME R-192 to KICNE INT/JAC VOR/DME 26.6 DME and hold, continue climb-in-hold to 14000.

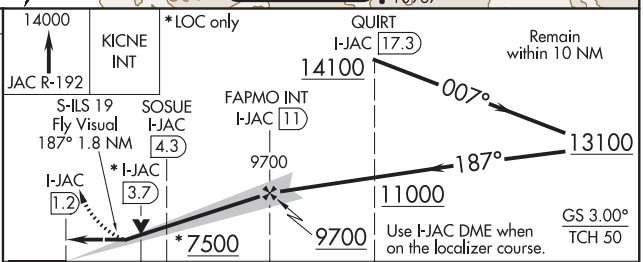
| ATIS ★ | SALT LAKE CENTER | JACKSON TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 120.625 | 133.25 285.6 | 118.075 (CTAF) | 124.55 | 122.95 |




| ELEV 6451 | D | TDZE 6451 |
|---|---|---|




| FAF to MAP 9.8 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 9:48 | 6:32 | 4:54 | 3:55 | 3:16 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 19 | 7063-2 612 (700-2) | | | |
| S-LOC 19 | 7500-1¼ 1049 (1100-1¼) | 7500-1½ 1049 (1100-1½) | 7500-3 1049 (1100-3) | |
| CIRCLING | 7500-1¼ 1049 (1100-1¼) | 7500-1½ 1049 (1100-1½) | 7500-3 1049 (1100-3) | |
| SOSUE FIX MINIMUMS (DME REQUIRED) | | | | |
| S-LOC 19 | 7300-1 849 (900-1) | 7300-1¼ 849 (900-1¼) | 7300-2½ 849 (900-2½) | 7300-2¾ 849 (900-2¾) |
| CIRCLING | 7300-1 849 (900-1) | 7300-1¼ 849 (900-1¼) | 7300-2½ 849 (900-2½) | 7300-2¾ 849 (900-2¾) |



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NW-1, 05 NOV 2020 to 31 DEC 2020

# ILS Z or LOC Z RWY 19
## JACKSON HOLE (JAC)

| LOC/DME I-JAC | APP CRS | Rwy ldg | 6300 |
|---|---|---|---|
| 109.1 | 187° | TDZE | 6451 |
| Chan 28 | | Apt Elev | 6451 |

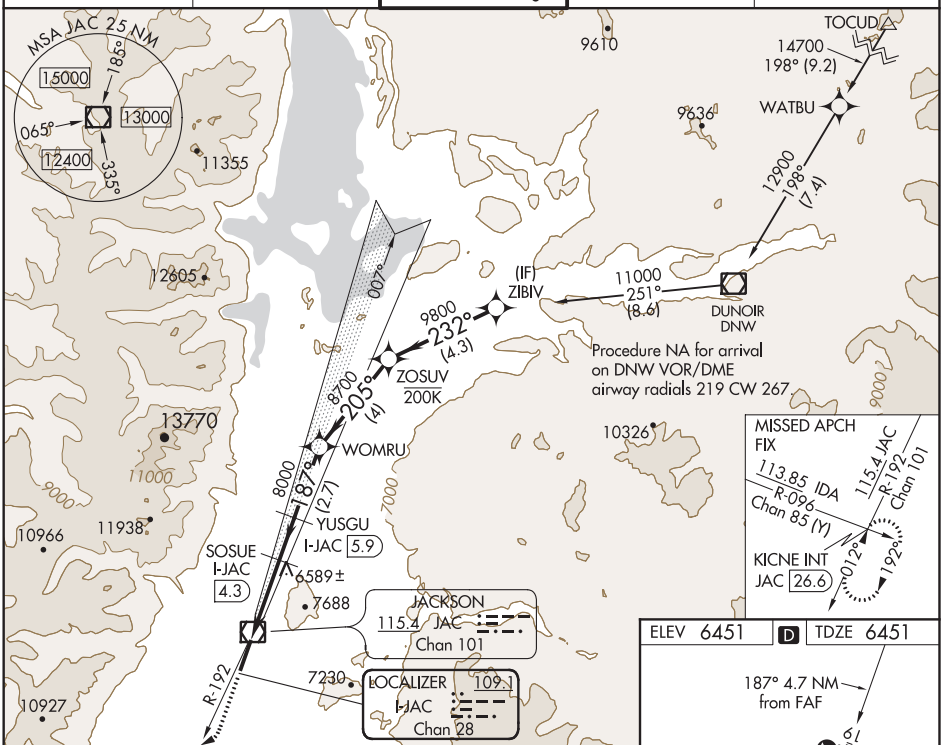
RNAV 1-GPS Required. DME required for LOC only.

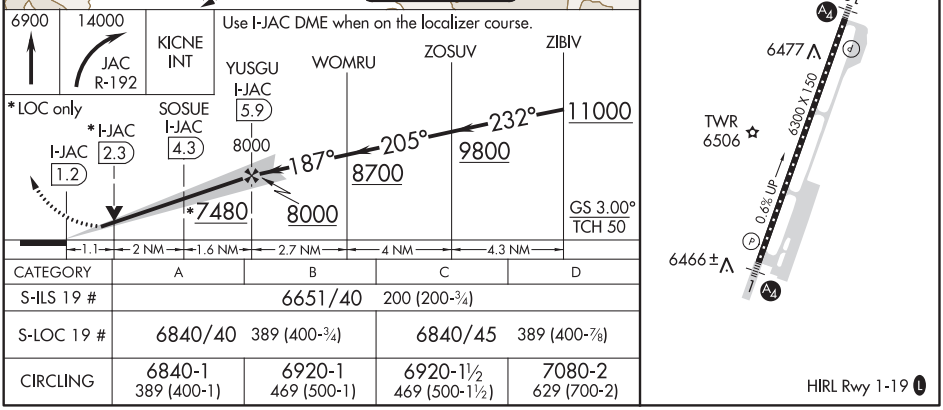
Circling NA east of Rwy 1-19.
NA
-21°C
For inop ALS, increase S-LOC 19# Cat A/B RVR to 5500 and Cat C/D RVR to 6000.
Inop table does not apply to S-ILS 19#.

MALS

MISSED APPROACH: Climb to 6900 then climbing right turn to 14000 on JAC VOR/DME R-192 to KICNE INT/JAC 26.6 DME and hold, continue climb-in-hold to 14000. #Missed approach requires minimum climb of 235 feet per NM to 10600.

| ATIS★ | SALT LAKE CENTER | JACKSON TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 120.625 | 133.25 285.6 | 118.075 (CTAF) L | 124.55 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 19 # | 6651/40 | | 200 (200-¾) | |
| S-LOC 19 # | 6840/40 | 389 (400-¾) | 6840/45 | 389 (400-⅞) |
| CIRCLING | 6840-1<br>389 (400-1) | 6920-1<br>469 (500-1) | 6920-1½<br>469 (500-1½) | 7080-2<br>629 (700-2) |

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| APP CRS | Rwy ldg | 6300 |
|---|---|---|
| 006° | TDZE | 6431 |
| | Apt Elev | 6451 |

# RNAV (RNP) Y RWY 1
## JACKSON HOLE (JAC)

RNP AR APCH.

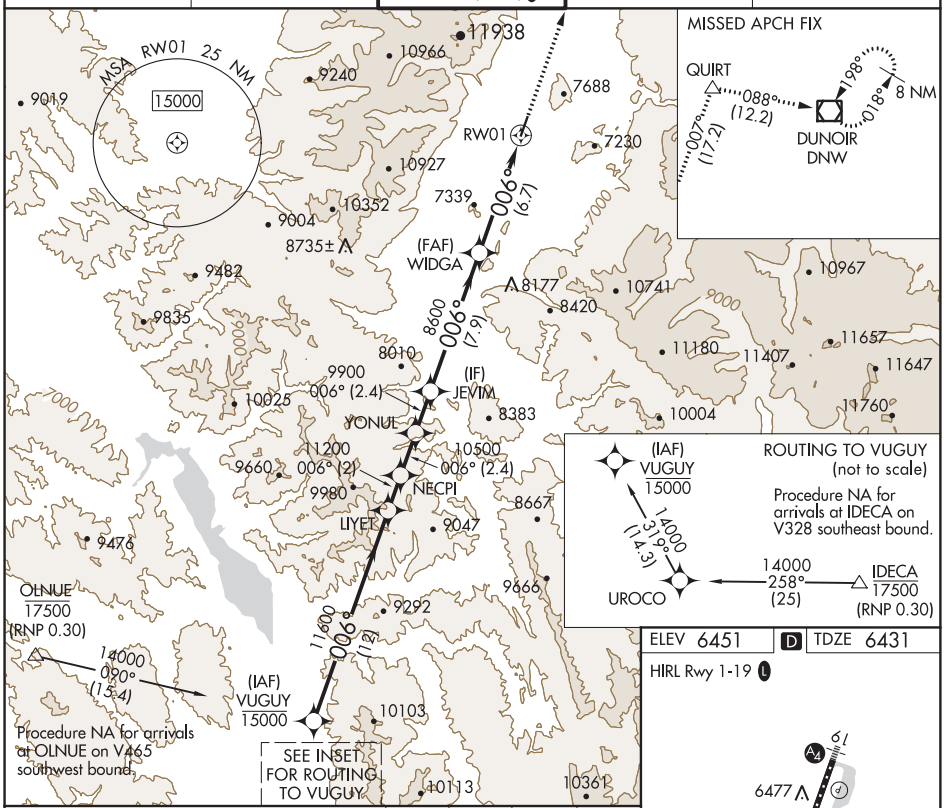
Inop table does not apply.
For uncompensated Baro-VNAV systems, procedure NA below -27°C or above 54°C .

-21°C

MALS

MISSED APPROACH: Climb to 14000 on track 007° to QUIRT and track 088° to DNW VOR/DME and hold, continue climb-in-hold to 14000.

| ATIS★ | SALT LAKE CENTER | JACKSON TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 120.625 | 133.25 285.6 | 118.075 (CTAF) L | 124.55 | 122.95 |

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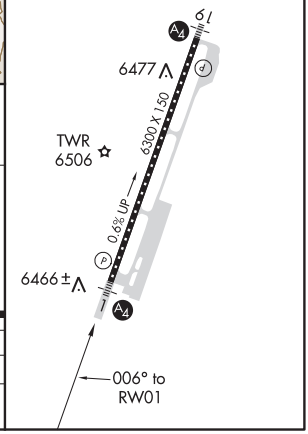
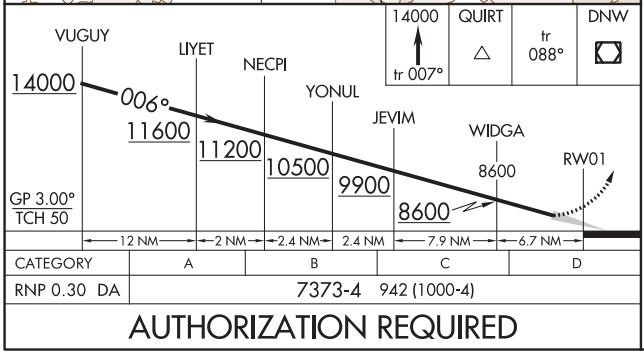
ELEV 6451 D TDZE 6431

HIRL Rwy 1-19 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.30 DA | 7373-4 942 (1000-4) | | | |

**AUTHORIZATION REQUIRED**

JACKSON, WYOMING | AL-504 (FAA) | 20198

# RNAV (RNP) Y RWY 19

## JACKSON HOLE (JAC)

| APP CRS | Rwy ldg | 6300 |
|---|---|---|
| 187° | TDZE | 6451 |
| | Apt Elev | 6451 |

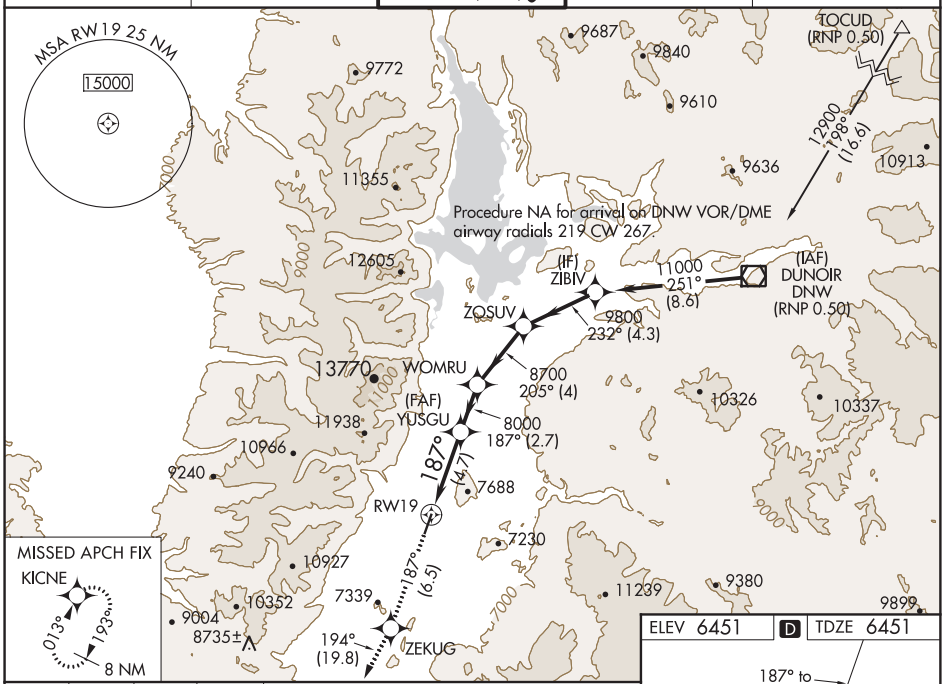
RNP AR APCH.

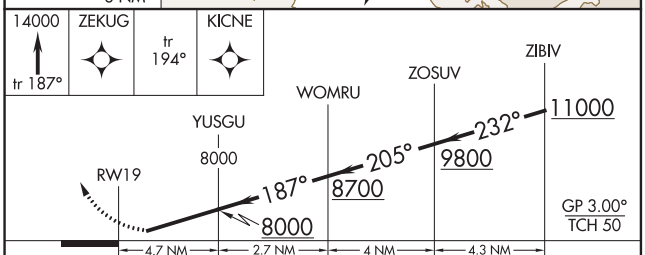
For uncompensated Baro-VNAV systems, procedure NA below -27°C or above 54°C. For inop ALS, increase RNP 0.30 all Cats visibility to 1⅜ SM. For inop ALS, increase RNP 0.11* all Cats visibility to RVR 4500.

MALS

MISSED APPROACH: Climb to 14000 on track 187° to ZEKUG and on track 194° to KICNE and hold, continue climb-in-hold to 14000.
* Missed approach requires minimum climb of 250 feet per NM to 8200.
# Missed approach requires minimum climb of 330 feet per NM to 8200.

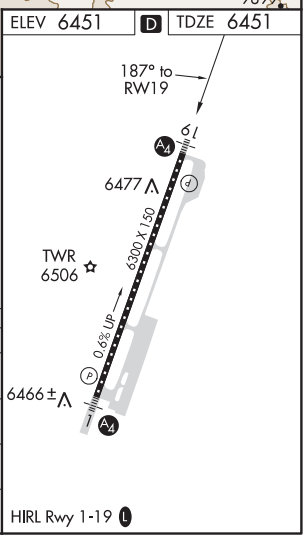
| ATIS* | SALT LAKE CENTER | JACKSON TOWER* | GND CON | UNICOM |
|---|---|---|---|---|
| 120.625 | 133.25 285.6 | 118.075 (CTAF) L | 124.55 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.11 DA* | 6750/40 | 299 (300-¾) | | |
| RNP 0.30 DA# | 6826/40 | 375 (400-¾) | | |
| RNP 0.30 DA | 6911/55 | 460 (500-1) | | |

**AUTHORIZATION REQUIRED**




NW-1, 05 NOV 2020 to 31 DEC 2020

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| APP CRS | Rwy ldg | 6300 |
|---|---|---|
| 006° | TDZE | 6431 |
| | Apt Elev | 6451 |

# RNAV (RNP) Z RWY 1

## JACKSON HOLE (JAC)

RNP AR APCH.

For uncompensated Baro-VNAV systems, procedure NA below -27°C or above 54°C.
Inop table does not apply to RNP 0.11* all Cats visibility.
For inop ALS, increase RNP 0.30* all Cats visibility to ⅞ SM.
Missed approach requires RNP less than 1.0.

-21°C

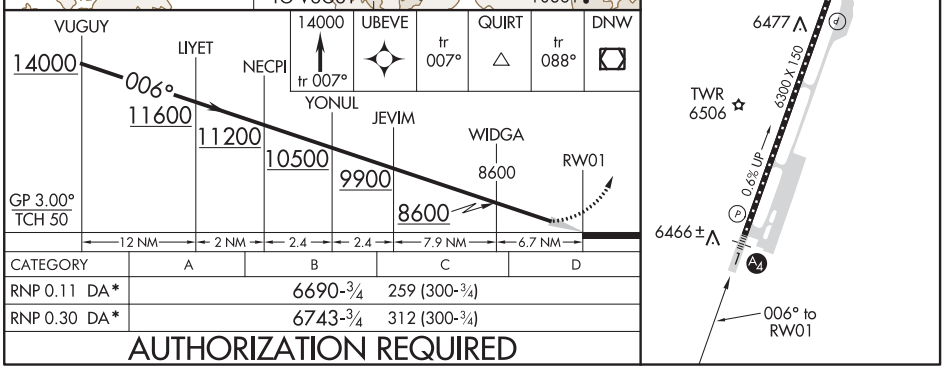
MALS

MISSED APPROACH: Climb to 14000 on track 007° to UBEVE and track 007° to QUIRT and track 088° to DNW VOR/DME and hold, continue climb-in-hold to 14000.
* Missed approach requires minimum climb of 330 feet per NM to 8200; if unable to meet climb gradient, see RNAV (RNP) Y RWY 1.

| ATIS★ | SALT LAKE CENTER | JACKSON TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 120.625 | 133.25 285.6 | 118.075 (CTAF) L | 124.55 | 122.95 |

ELEV 6451 D TDZE 6431

HIRL Rwy 1-19 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.11 DA* | 6690-¾ 259 (300-¾) | | | |
| RNP 0.30 DA* | 6743-¾ 312 (300-¾) | | | |

**AUTHORIZATION REQUIRED**

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JACKSON, WYOMING | AL-504 (FAA) | 20198

# RNAV (GPS) X RWY 1
## JACKSON HOLE (JAC)

| WAAS CH 58299 W01A | APP CRS 006° | Rwy ldg 6300 TDZE 6431 Apt Elev 6451 |
|---|---|---|

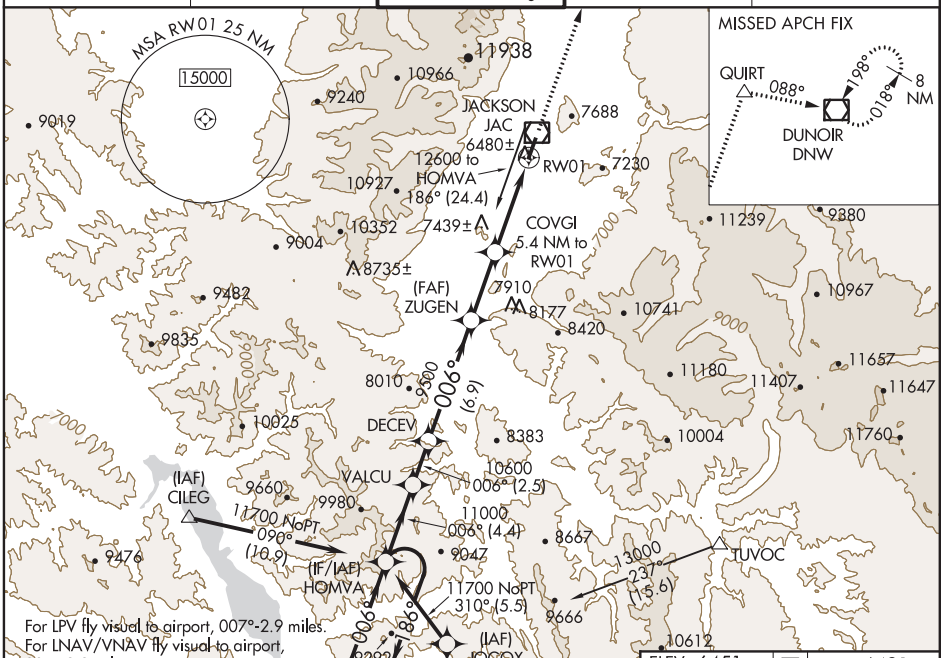
Circling NA east of Rwy 1-19. Inoperative table does not apply. If local altimeter setting not received, procedure NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -27°C (-16°F) or above 46°C (114°F). DME/DME RNP- 0.3 NA.

-21°C

MALS

MISSED APPROACH: Climb to 14000 direct QUIRT and via 088° track to DNW VOR/DME and hold, continue climb-in-hold to 14000.

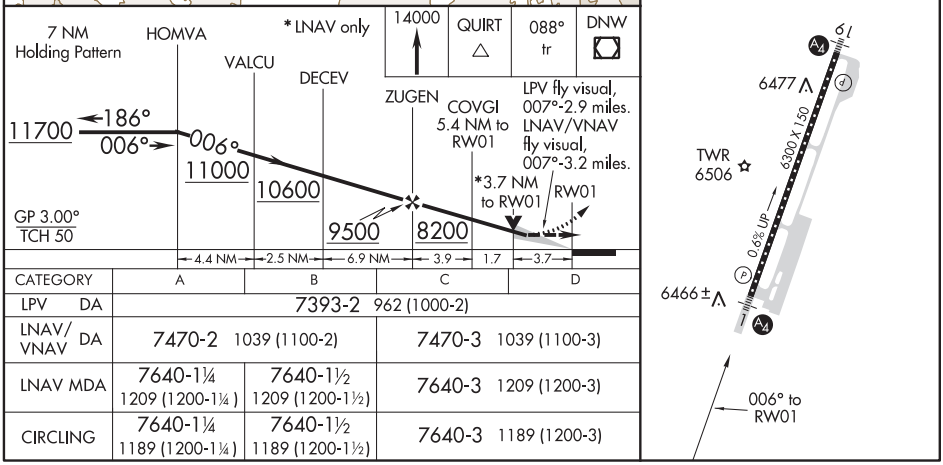
| ATIS★ | SALT LAKE CENTER | JACKSON TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 120.625 | 133.25 285.6 | 118.075 (CTAF) L | 124.55 | 122.95 |




For LPV fly visual to airport, 007°-2.9 miles.
For LNAV/VNAV fly visual to airport, 007°-3.2 miles.

ELEV 6451 | D | TDZE 6431

HIRL Rwy 1-19 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 7393-2 962 (1000-2) | | | |
| LNAV/VNAV DA | 7470-2 1039 (1100-2) | | 7470-3 1039 (1100-3) | |
| LNAV MDA | 7640-1¼ 1209 (1200-1¼) | 7640-1½ 1209 (1200-1½) | 7640-3 1209 (1200-3) | |
| CIRCLING | 7640-1¼ 1189 (1200-1¼) | 7640-1½ 1189 (1200-1½) | 7640-3 1189 (1200-3) | |

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NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 90232 W19A | APP CRS 187° | Rwy ldg 6300<br>TDZE 6451<br>Apt Elev 6451 |
|---|---|---|

# RNAV (GPS) Z RWY 19
## JACKSON HOLE (JAC)

RNP APCH.

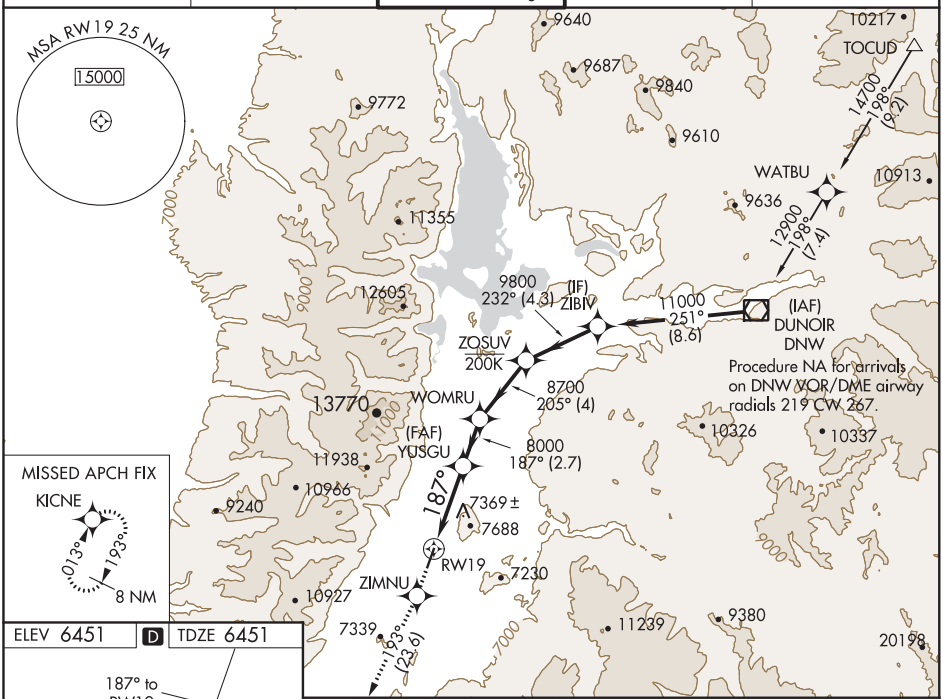
Inop table does not apply to # LPV all Cats and LNAV Cats C and D. When local altimeter setting not received, procedure NA. For inop ALS, increase LPV visibility to 1⅜ SM. Circling NA east of Rwy 1-19.
# Missed approach requires a minimum climb of 235 feet per NM to 9200.

-21°C

MALS

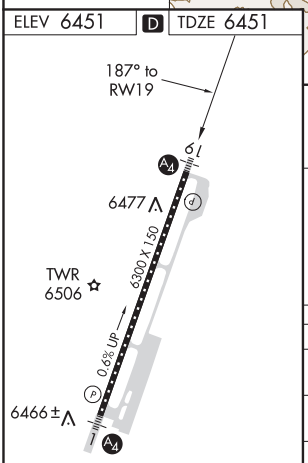
MISSED APPROACH: Climb to 14000 direct ZIMNU and on track 193° to KICNE and hold, continue climb-in-hold to 14000.

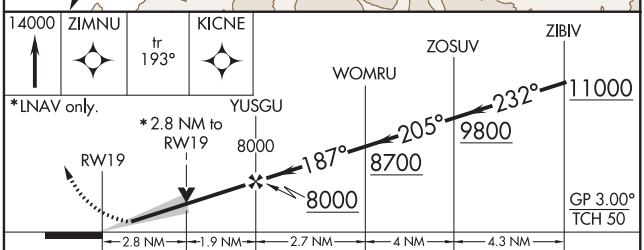
| ATIS★ | SALT LAKE CENTER | JACKSON TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 120.625 | 133.25 285.6 | 118.075 (CTAF) L | 124.55 | 122.95 |










| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA# | 6651/40 200 (200-¾) | | | |
| LPV DA | 6908/55 457 (500-1) | | | |
| LNAV MDA | 7380/55 929 (1000-1) | | 7380-2½ 929 (1000-2½) | |
| CIRCLING | 7380-1¼ 929 (1000-1¼) | | 7380-2¾ 929 (1000-2¾) | 7380-3 929 (1000-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

JACKSON, WYOMING | AL-504 (FAA) | 20198

# VOR/DME RWY 1
## JACKSON HOLE (JAC)

| VOR/DME JAC | APP CRS | Rwy ldg | 6300 |
|---|---|---|---|
| 115.4 | 008° | TDZE | 6431 |
| Chan 101 | | Apt Elev | 6451 |

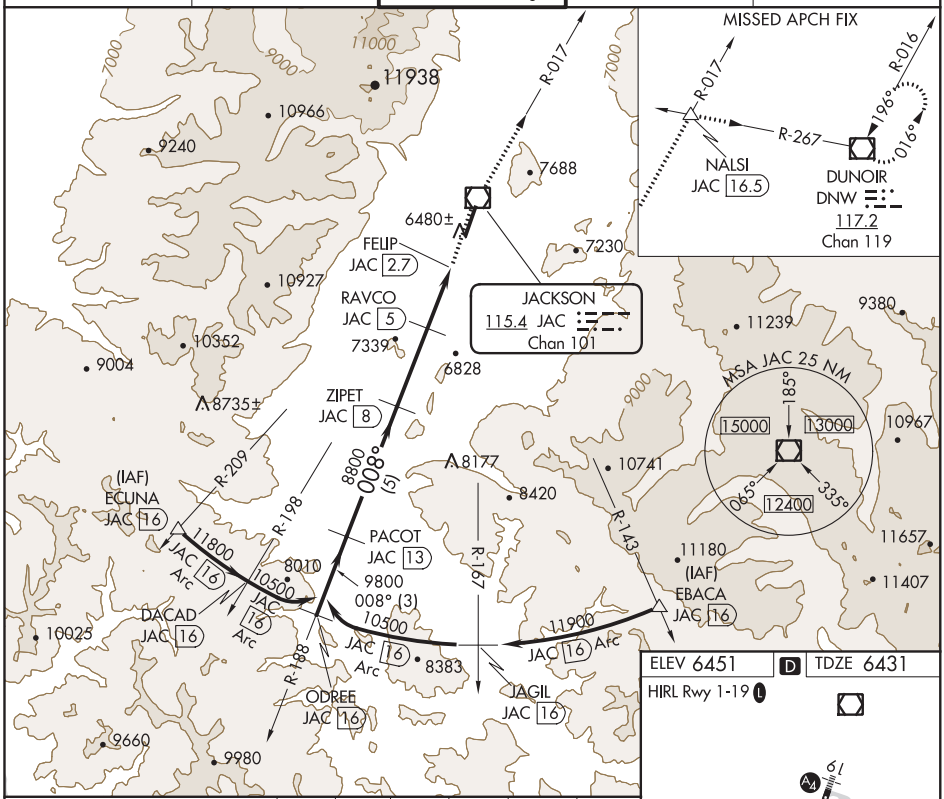
Circling NA east of Rwy 1-19. Inoperative table does not apply. If local altimeter setting not received, procedure NA.

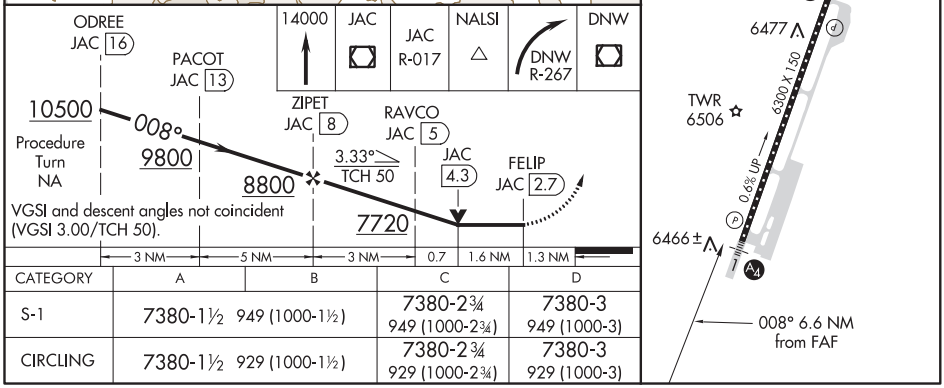
-21°C

MALS

MISSED APPROACH: Climb to 14000 direct JAC VOR/DME, and via JAC R-017 to NALSI Int/JAC 16.5 DME, and right turn via DNW R-267 to DNW VOR/DME and hold.

| ATIS★ | SALT LAKE CENTER | JACKSON TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 120.625 | 133.25 285.6 | 118.075 (CTAF) L | 124.55 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-1 | 7380-1½ 949 (1000-1½) | | 7380-2¾ 949 (1000-2¾) | 7380-3 949 (1000-3) |
| CIRCLING | 7380-1½ 929 (1000-1½) | | 7380-2¾ 929 (1000-2¾) | 7380-3 929 (1000-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# VOR/DME RWY 19
## JACKSON HOLE (JAC)

| VOR/DME JAC 115.4 Chan 101 | APP CRS 193° | Rwy ldg 6300 TDZE 6451 Apt Elev 6451 |
|---|---|---|

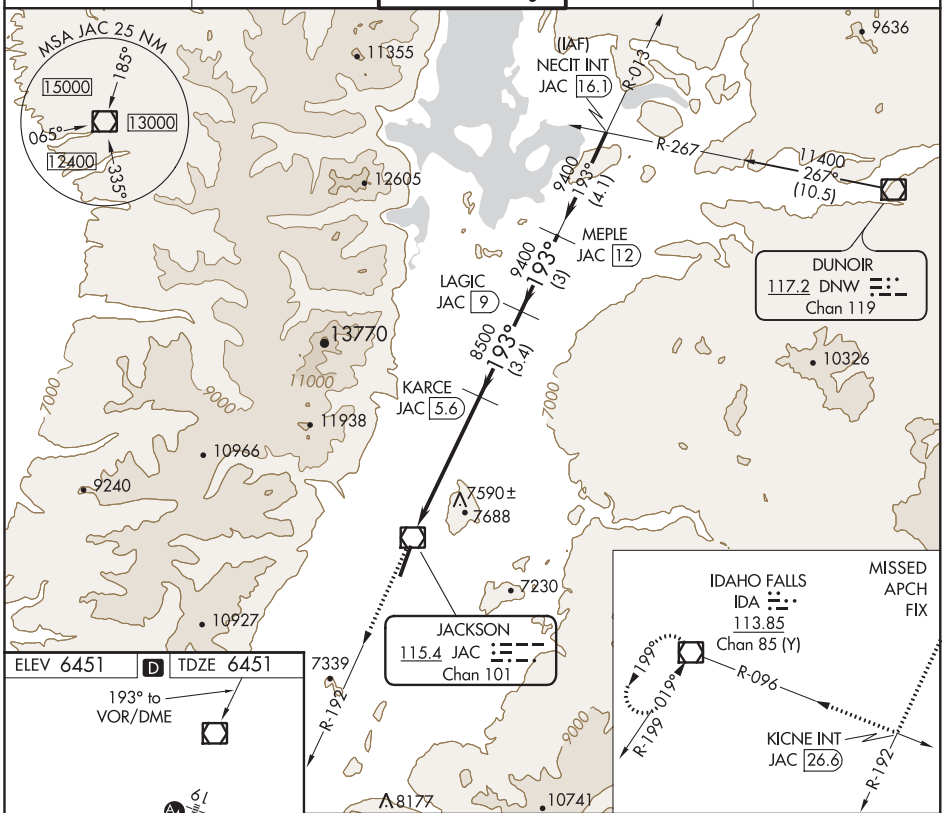
T A -21°C

Circling NA east of Rwy 1-19. Inop table does not apply. If local altimeter setting not received, procedure NA.

MALS

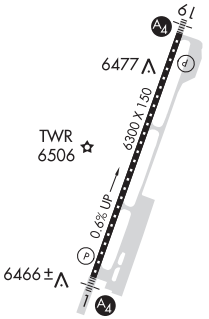
MISSED APPROACH: Climb to 14000 via JAC R-192 to KICNE INT/JAC 26.6 DME, and right turn via IDA R-096 to IDA VOR/DME and hold.

| ATIS★ | SALT LAKE CENTER | JACKSON TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 120.625 | 133.25 285.6 | 118.075 (CTAF) L | 124.55 | 122.95 |

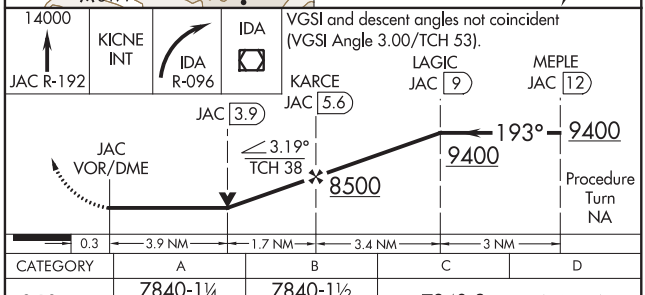



ELEV 6451 D TDZE 6451

193° to VOR/DME




HIRL Rwy 1-19 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-19 | 7840-1¼ 1389 (1400-1¼) | 7840-1½ 1389 (1400-1½) | 7840-3 1389 (1400-3) | |
| CIRCLING | 7840-1¼ 1389 (1400-1¼) | 7840-1½ 1389 (1400-1½) | 7840-3 1389 (1400-3) | |

NW-1, 05 NOV 2020 to 31 DEC 2020

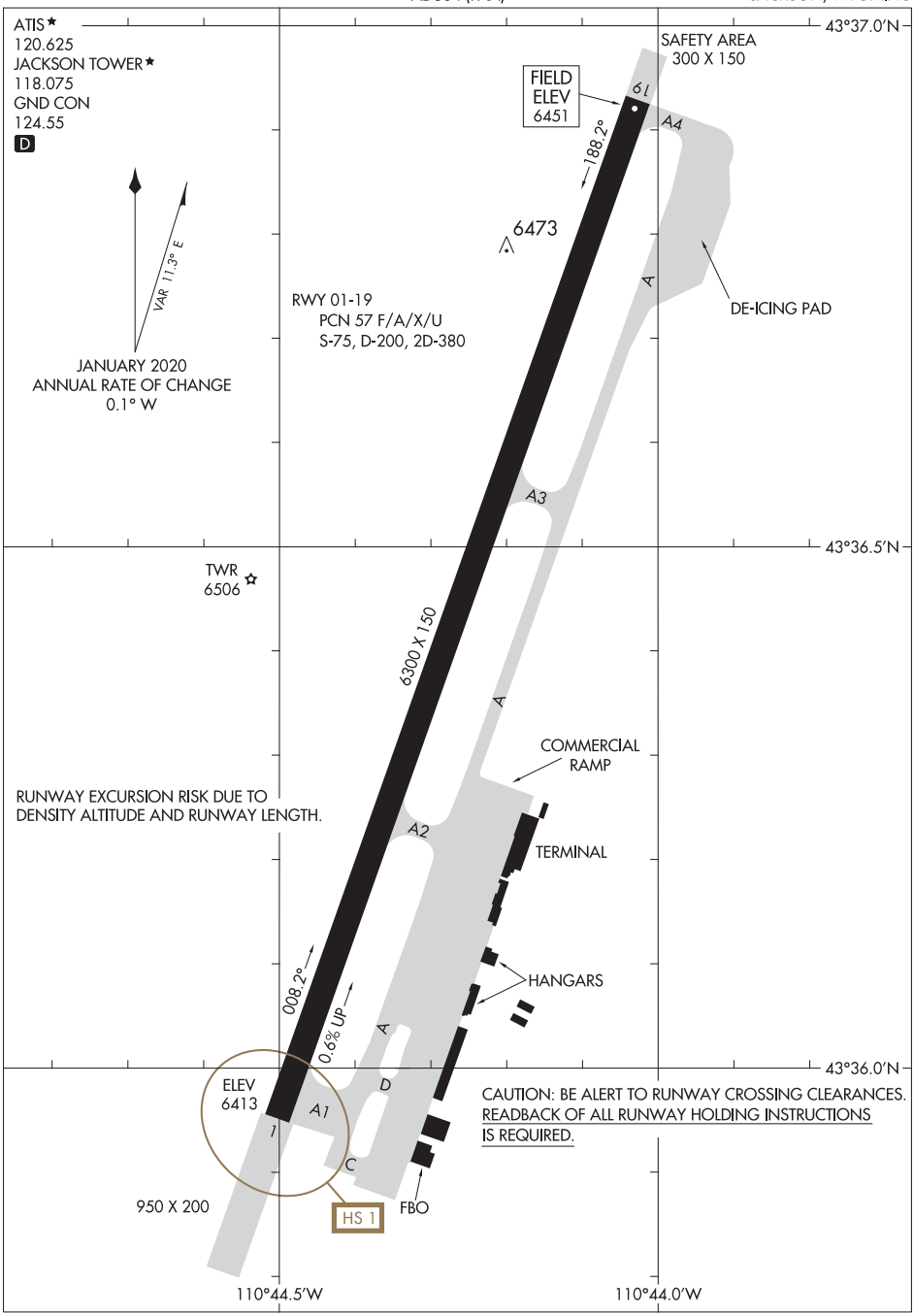
NW-1, 05 NOV 2020 to 31 DEC 2020

20086

# AIRPORT DIAGRAM

JACKSON HOLE (JAC)
JACKSON, WYOMING

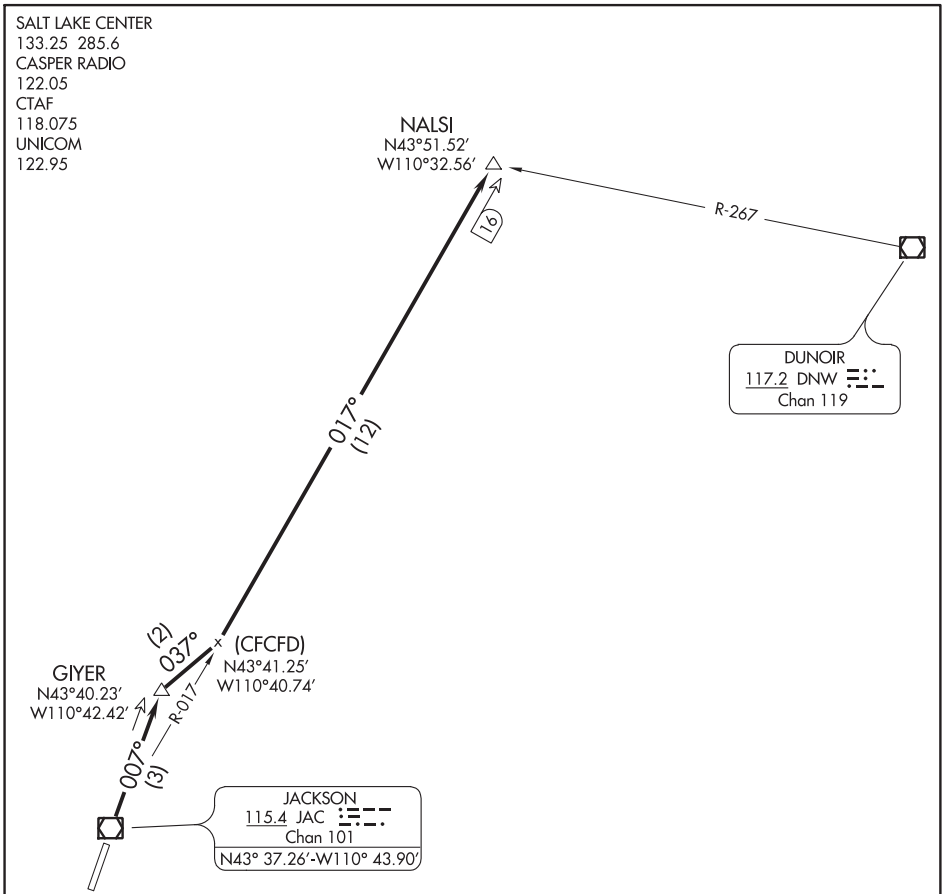
AL-504 (FAA)





NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM
20086
JACKSON, WYOMING
JACKSON HOLE (JAC)




TAKEOFF MINIMUMS

Rwy 1: Standard with minimum climb of 450′ per NM to 14000, or 4500-3 for climb in visual conditions.

Rwy 19: NA - ATC.

NOTE: DME required

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 1: Climb to 14000 on JAC R-007 to GIYER/JAC 3 DME, and right turn heading 037° to intercept JAC R-017 to NALSI INT/JAC 16 DME; or for climb in visual conditions obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross JAC VOR/DME northbound at or above 10800, then climb to 14000 on JAC R-017 to NALSI INT/JAC 16 DME.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

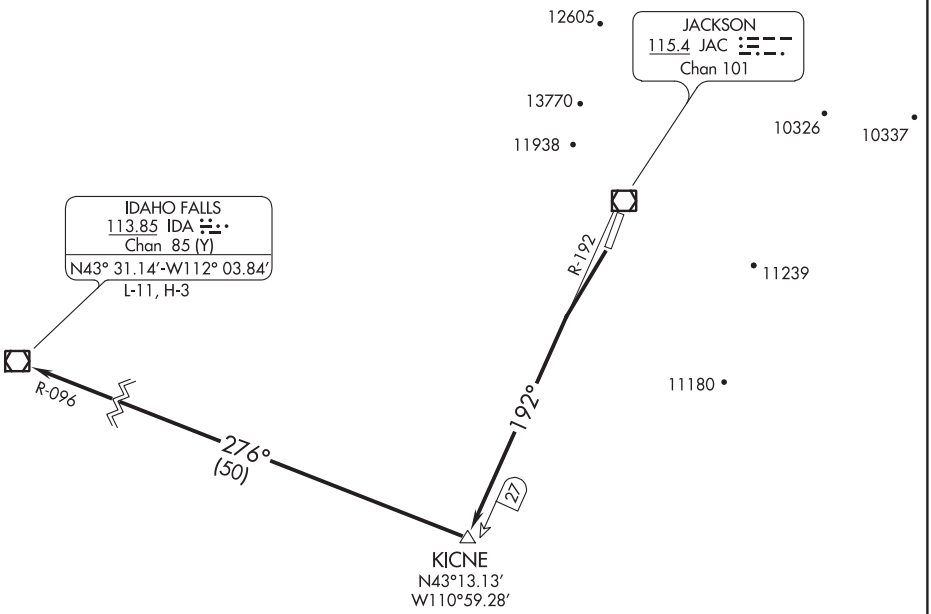
(TETON3.KICNE) 16147

# TETON THREE DEPARTURE (OBSTACLE)

SL-504 (FAA)

JACKSON HOLE (JAC)
JACKSON, WYOMING

SALT LAKE CENTER
133.25 285.6
CASPER RADIO
122.05
CTAF
118.075
UNICOM
122.95




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

TAKEOFF MINIMUMS

Rwy 19: Standard with a minimum climb of 335′ per NM to 14000 or 4400-3 for climb in visual conditions.
Rwy 1: Not authorized - ATC.

TAKEOFF OBSTACLE NOTES

Rwy 19: Bush 485′ from DER, 513′ right of centerline, 6428′ MSL.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 19: Climb to 14000 via JAC R-192 to KICNE INT/JAC 27 DME, then right turn via IDA R-096 to IDA VOR/DME; or for climb in visual conditions: cross JAC VOR/DME southbound at or above 10800, then climb to 14000 via JAC R-192 to KICNE INT/JAC 27 DME, then right turn via IDA R-096 to IDA VOR/DME.

**TOP ALTITUDE: ASSIGNED BY ATC**

SALT LAKE CENTER
133.25 285.6
CTAF
118.075
UNICOM
122.95

JACKSON
115.4 JAC
Chan 101

IDAHO FALLS
113.85 IDA
Chan 85 (Y)
N43° 31.14′-W112° 03.84′
L-11, H-3

R-192
192°
27
R-096
15000
*12200
276°
(50)
KICNE
N43° 13.13′
W110° 59.28′
15000
15000
119°
(55)
BIG PINEY
116.5 BPI
Chan 112
N42° 34.77′-W110° 06.55′
R-299
15000
080°
(74)
SWEAT
N42° 26.58′
W108° 27.17′
L-11
57
R-013
ROCK SPRINGS
116.0 OCS
Chan 107

TAKEOFF MINIMUMS
Rwy 1: NA - ATC request.
Rwy 19: Standard with minimum climb of 341′ per NM to 15000.

NOTE: Chart not to scale.

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 19: Climb via JAC R-192 to cross KICNE INT/JAC 27 DME at or above 15000. Thence. . . .

. . . .via (transition) or (assigned route). Expect further clearance to filed altitude 10 minutes after departure.

IDAHO FALLS TRANSITION (ALPIN2.IDA): From over KICNE INT via IDA R-096 to IDA VOR/DME.
SWEAT TRANSITION (ALPIN2.SWEAT): From over KICNE INT via BPI R-299 to BPI VOR/DME, then via BPI R-080 to SWEAT INT.

JEROME, IDAHO | AL-6812 (FAA) | 20030

| WAAS | APP CRS | Rwy ldg | 5001 |
|---|---|---|---|
| CH 90144 | 086° | TDZE | 4019 |
| W09A | | Apt Elev | 4053 |

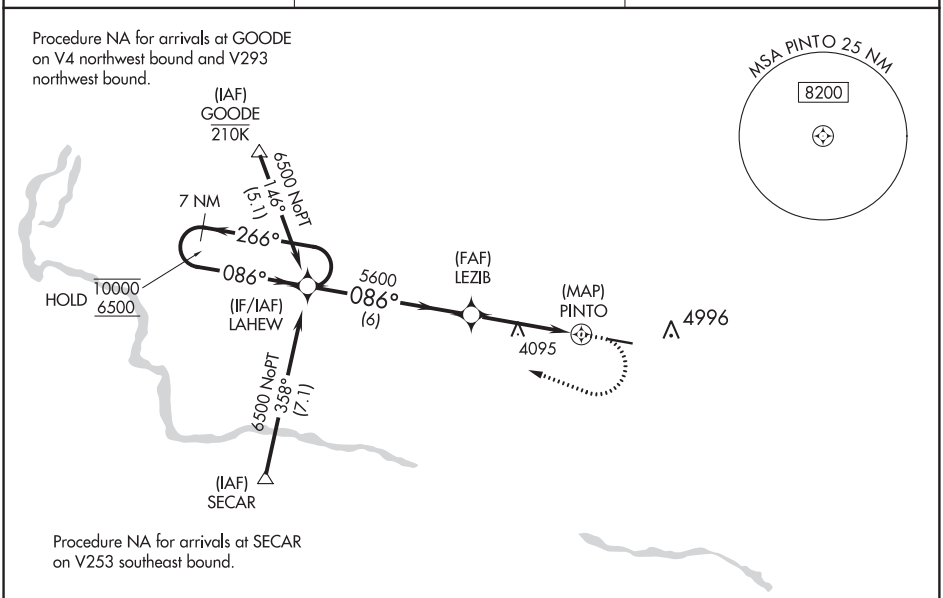
# RNAV (GPS) RWY 9
## JEROME COUNTY (JER)

RNP APCH.

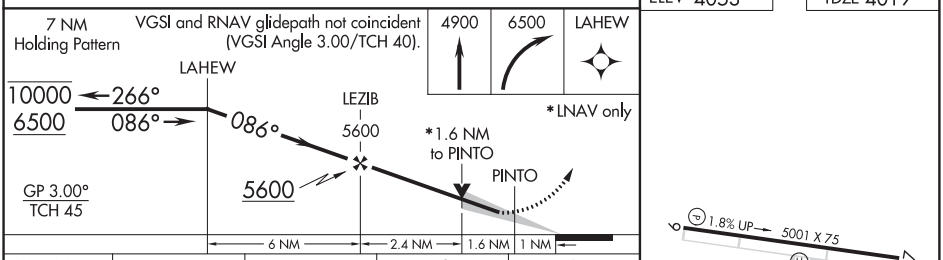
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C or above 54°C. Circling NA north of Rwy 9-27.

MISSED APPROACH: (Do not exceed 185K until LAHEW) Climb to 4900 then climbing right turn to 6500 direct LAHEW and hold. # Missed approach requires minumum climb of 300 feet per NM to 5200.

| ASOS | TWIN FALLS APP CON* | UNICOM |
|---|---|---|
| 135.225 | 126.7 353.75 | 122.8 (CTAF) L |




| ELEV 4053 | TDZE 4019 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA # | 4544-1½ 525 (500-1½) | | | |
| LPV DA | 4624-1¾ 605 (600-1¾) | | | |
| LNAV/VNAV DA | 4674-1⅞ 655 (700-1⅞) | | | |
| LNAV MDA | 4820-1 801 (800-1) | 4820-1¼ 801 (800-1¼) | 4820-2½ 801 (800-2½) | |
| C CIRCLING | 4820-1 767 (800-1) | 4820-1¼ 767 (800-1¼) | 4820-2½ 767 (800-2½) | |

MIRL Rwy 9-27 L

| WAAS CH 90514 W27A | APP CRS 266° | Rwy ldg 5001<br>TDZE 4053<br>Apt Elev 4053 |
|---|---|---|

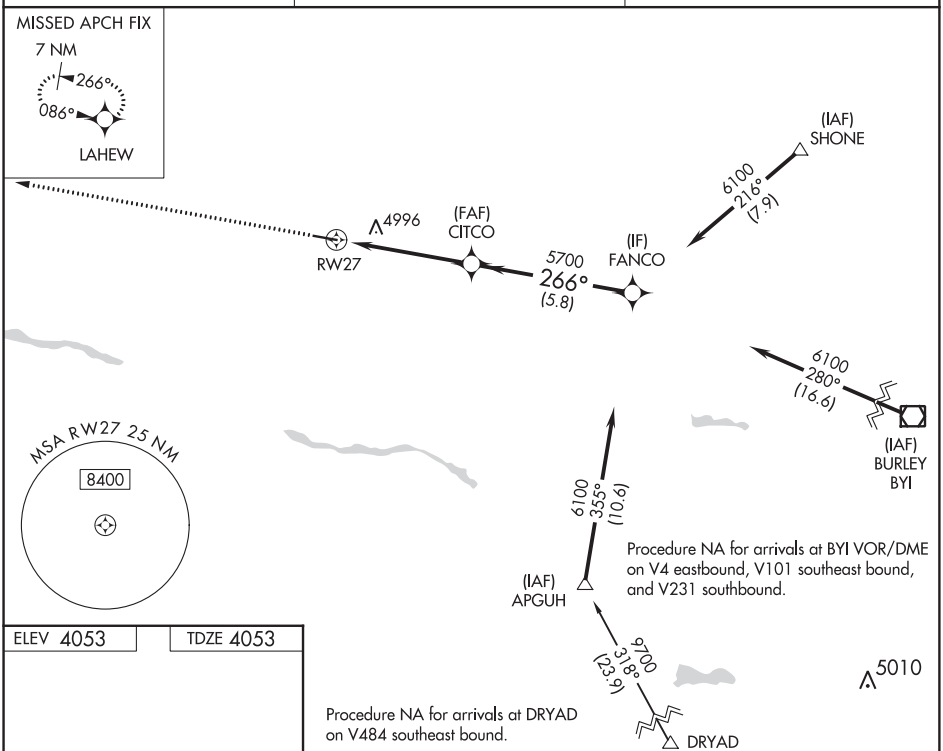
# RNAV (GPS) RWY 27
## JEROME COUNTY (JER)

RNP APCH.

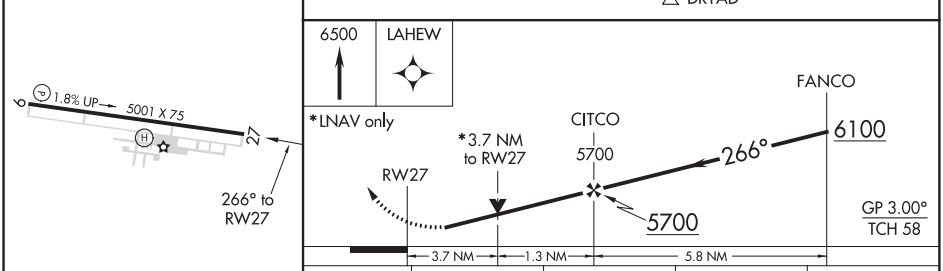
Circling NA north of Rwy 9 and 27.
Rwy 27 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 6500 direct LAHEW and hold.

| ASOS | TWIN FALLS APP CON★ | UNICOM |
|---|---|---|
| 135.225 | 126.7 353.75 | 122.8 (CTAF) L |




| ELEV 4053 | TDZE 4053 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4403-1 350 (400-1) | | | |
| LNAV MDA | 5300-1¼ 1247 (1300-1¼) | 5300-1½ 1247 (1300-1½) | 5300-3 1247 (1300-3) | |
| C CIRCLING | 5300-1¼ 1247 (1300-1¼) | 5300-1½ 1247 (1300-1½) | 5300-3 1247 (1300-3) | |

MIRL Rwy 9-27 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

JEROME, IDAHO | AL-6812 (FAA) | 20310

# VOR-A
## JEROME COUNTY (JER)

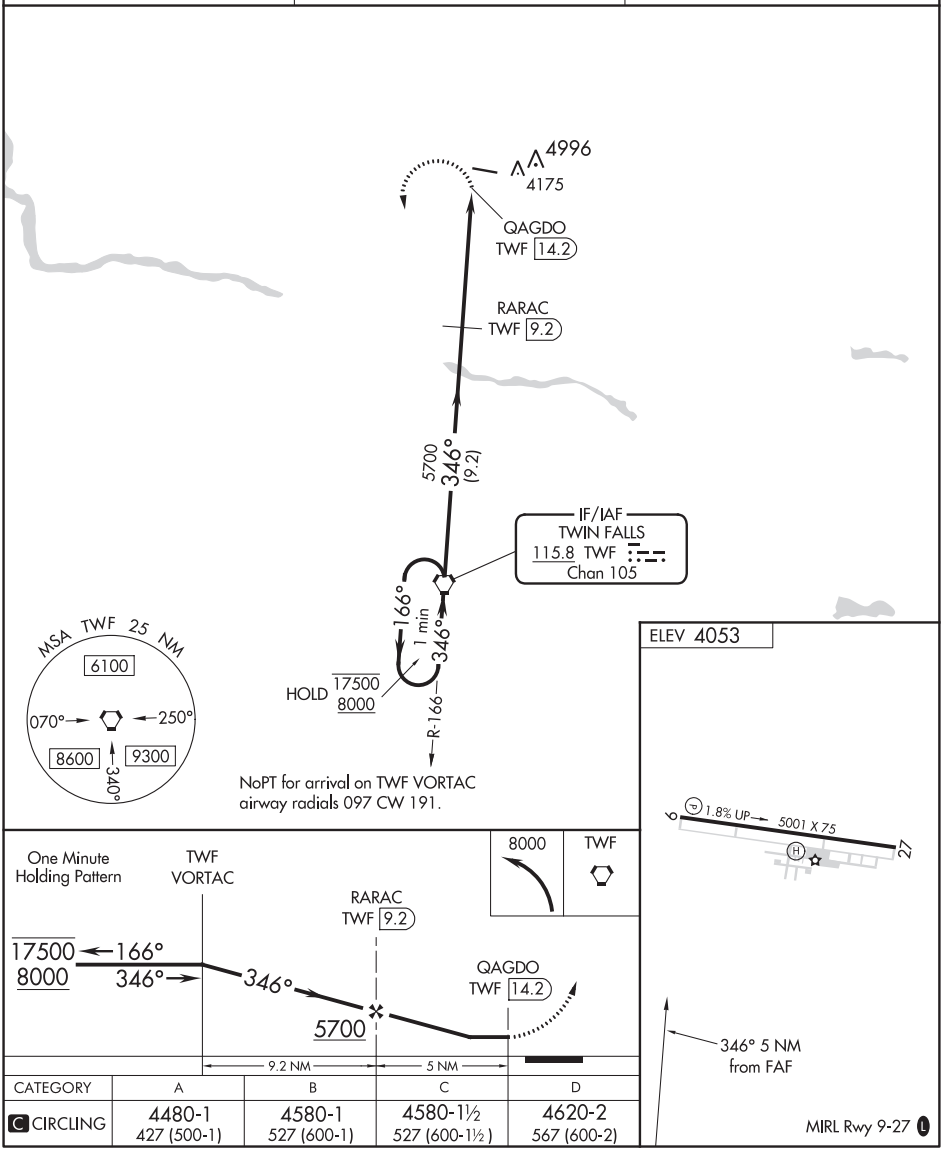
| VORTAC TWF | APP CRS | Rwy ldg | N/A |
|---|---|---|---|
| 115.8 | 346° | TDZE | N/A |
| Chan 105 | | Apt Elev | 4053 |

DME required.

Circling NA north of Rwy 9-27.

MISSED APPROACH: Climbing left turn to 8000 direct TWF VORTAC and hold, continue climb-in-hold to 8000.

| ASOS | TWIN FALLS APP CON★ | UNICOM |
|---|---|---|
| 135.225 | 126.7 353.75 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 4480-1<br>427 (500-1) | 4580-1<br>527 (600-1) | 4580-1½<br>527 (600-1½) | 4620-2<br>567 (600-2) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

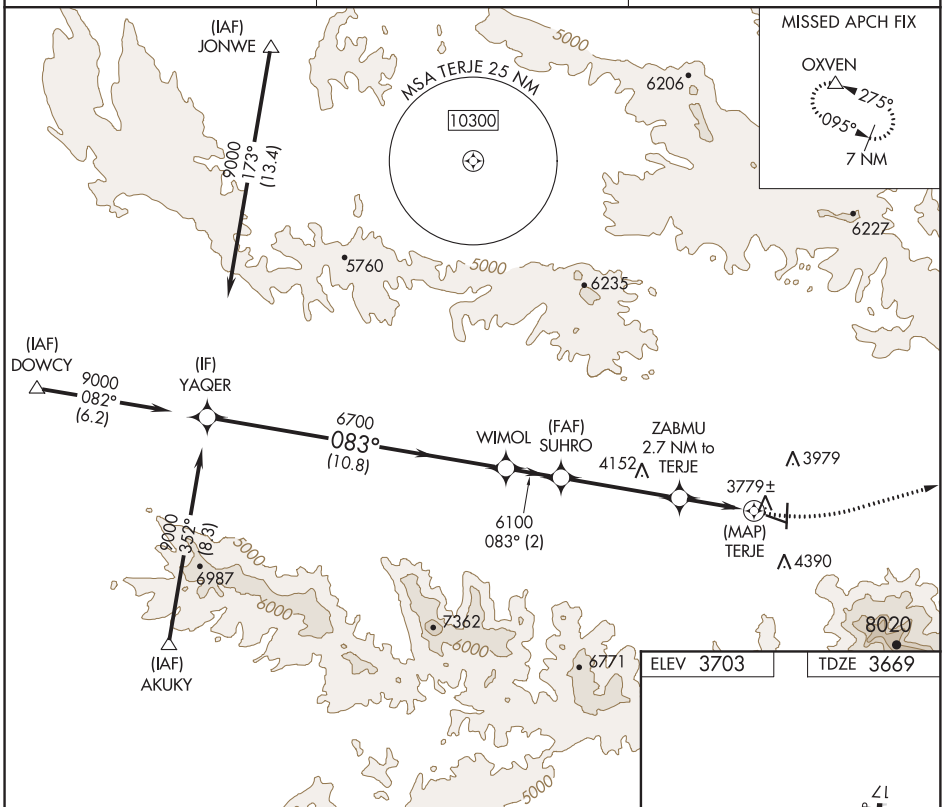
| APP CRS | Rwy ldg | 4471 |
|---|---|---|
| 083° | TDZE | 3669 |
| | Apt Elev | 3703 |

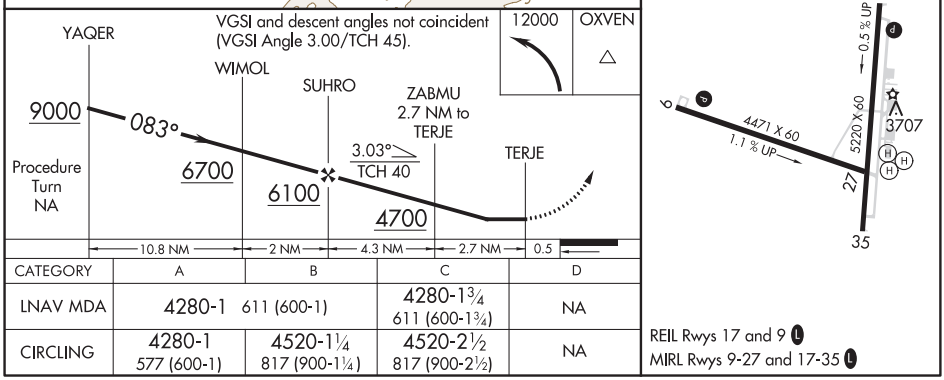
# RNAV (GPS) Y RWY 9
## GRANT COUNTY RGNL/OGILVIE FIELD (GCD)

When local altimeter setting not received, procedure NA.
Circling NA south of Rwy 9-27. DME/DME RNP-0.3 NA.
Helicopter visibility reduction below ¾ SM not authorized.

MISSED APPROACH: Climbing left turn to 12000 direct OXVEN and hold, continue climb-in-hold to 12000.

| AWOS-3 | SEATTLE CENTER | UNICOM |
|---|---|---|
| 118.375 | 128.15 257.75 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 4280-1 611 (600-1) | | 4280-1¾ 611 (600-1¾) | NA |
| CIRCLING | 4280-1 577 (600-1) | 4520-1¼ 817 (900-1¼) | 4520-2½ 817 (900-2½) | NA |

REIL Rwys 17 and 9 L
MIRL Rwys 9-27 and 17-35 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

JOHN DAY, OREGON AL-9264 (FAA) 19339

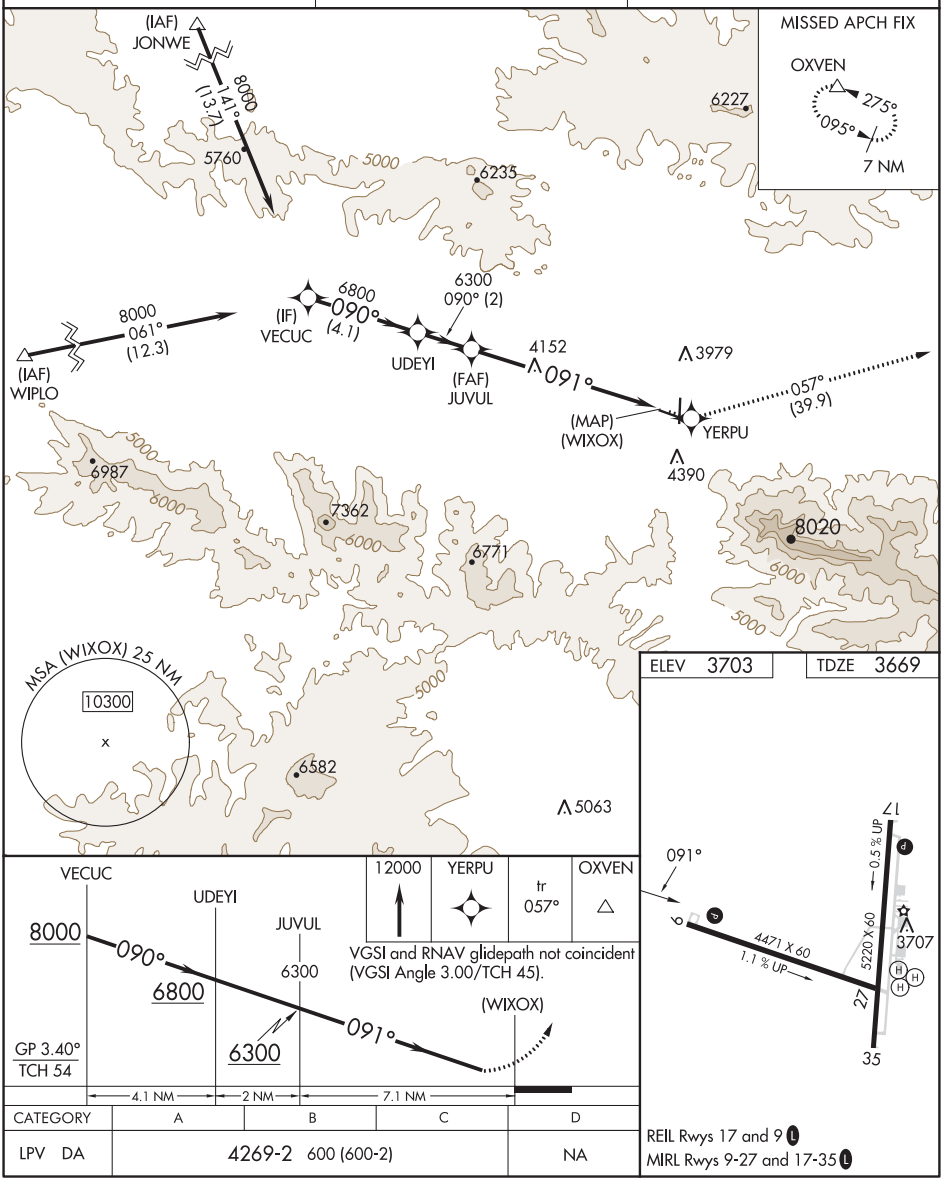
| WAAS CH 73010 W09A | APP CRS 091° | Rwy ldg 4471 TDZE 3669 Apt Elev 3703 |
|---|---|---|

# RNAV (GPS) Z RWY 9
## GRANT COUNTY RGNL/OGILVIE FIELD (GCD)

When local altimeter setting not received, procedure NA. DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 12000 direct YERPU and on track 057° to OXVEN and hold, continue climb-in-hold to 12000.

| AWOS-3 | SEATTLE CENTER | UNICOM |
|---|---|---|
| 118.375 | 128.15 257.75 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4269-2 600 (600-2) | | | NA |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC I-GPI | APP CRS | Rwy ldg | 9007 |
|---|---|---|---|
| 111.5 | 020° | TDZE | 2966 |
| | | Apt Elev | 2977 |

# ILS or LOC RWY 2
## GLACIER PARK INTL (GPI)

DME required. RNAV 1-GPS or RADAR required for procedure entry.

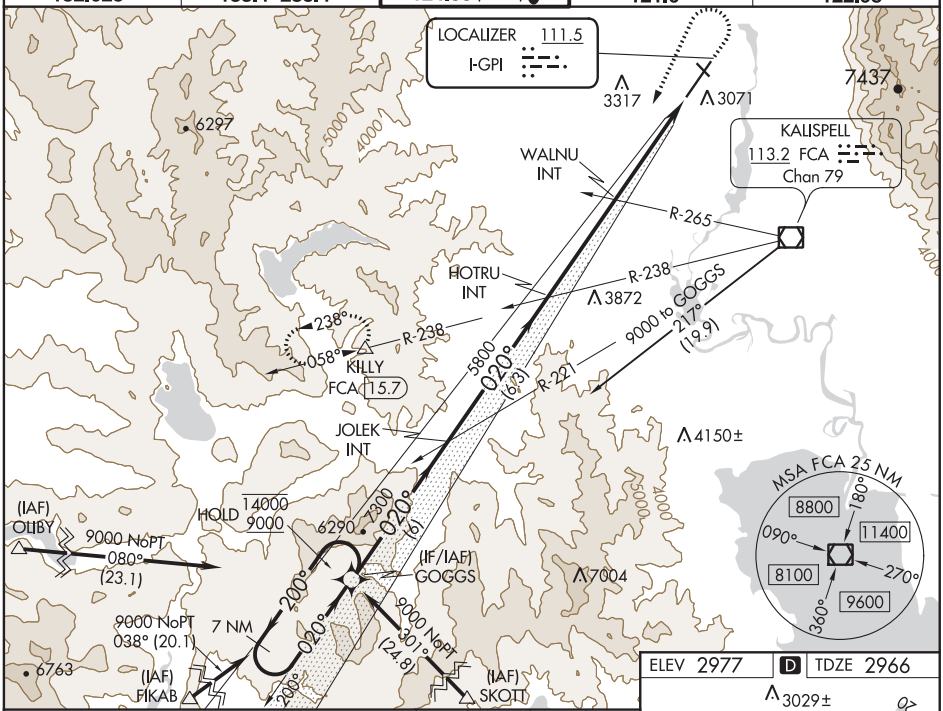
Inop table does not apply to S-LOC 2 Cats C/D.

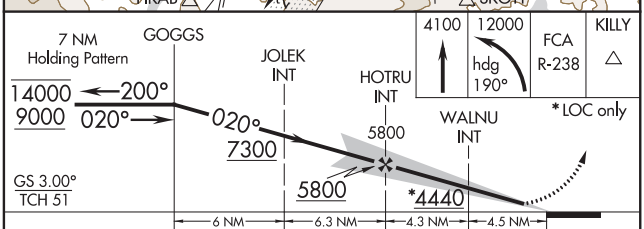
-15°C

MALSR

MISSED APPROACH: Climb to 4100 then climbing left turn to 12000 on heading 190° and FCA VOR/DME R-238 to KILLY/15.7 DME and hold, continue climb-in-hold to 12000.

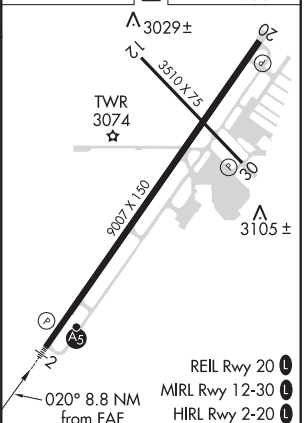
| ATIS | SALT LAKE CENTER | GLACIER TOWER* | GND CON | UNICOM |
|---|---|---|---|---|
| 132.625 | 133.4 285.4 | 124.55 (CTAF) L | 121.6 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 2 | 3166-½ 200 (200-½) | | | |
| S-LOC 2 | 4440-¾ 1474 (1500-¾) | 4440-1 1474 (1500-1) | 4440-3 1474 (1500-3) | |
| C CIRCLING | 4440-1¼ 1463 (1500-1¼) | 4440-1½ 1463 (1500-1½) | 4440-3 1463 (1500-3) | |
| WALNU FIX MINIMUMS (DUAL VOR RECEIVERS REQUIRED) | | | | |
| S-LOC 2 | 3520-½ 554 (600-½) | | 3520-1⅛ 554 (600-1⅛) | |
| C CIRCLING | 3520-1 543 (600-1) | 3580-1 603 (700-1) | 3640-1¾ 663 (700-1¾) | 3760-2½ 783 (800-2½) |

ELEV 2977 D TDZE 2966




REIL Rwy 20 L
MIRL Rwy 12-30 L
HIRL Rwy 20-2 L

| FAF to MAP 8.8 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 8:48 | 5:52 | 4:24 | 3:31 | 2:56 |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

KALISPELL, MONTANA | AL-887 (FAA) | 20198

# RNAV (RNP) RWY 20

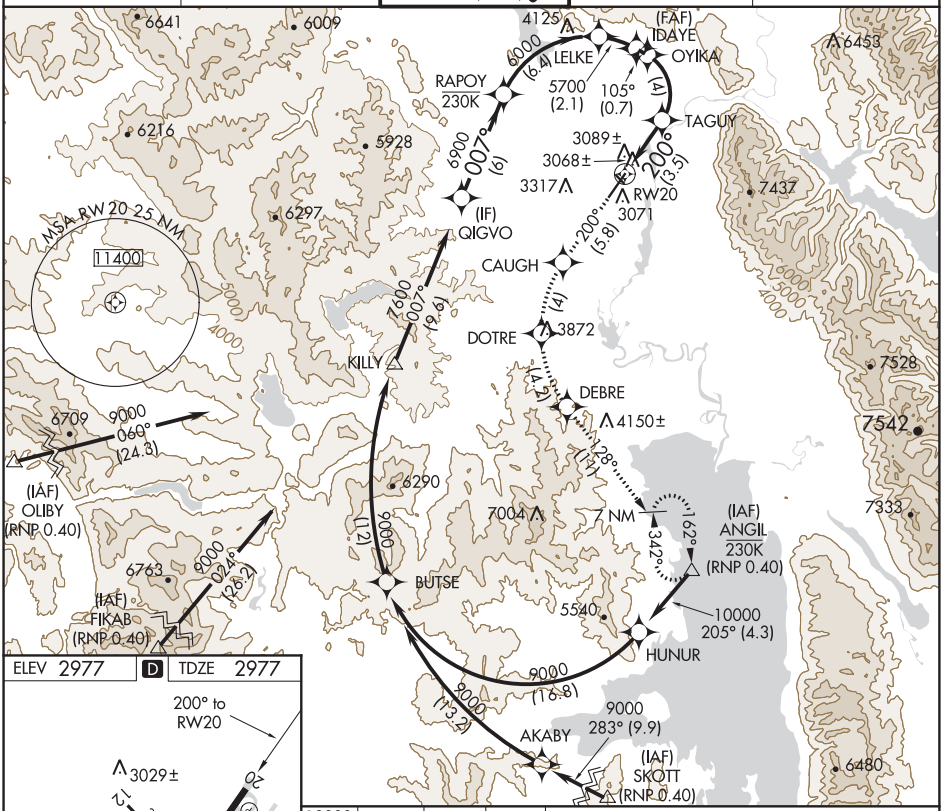
## GLACIER PARK INTL (GPI)

| APP CRS | Rwy ldg | 9007 |
|---|---|---|
| 200° | TDZE | 2977 |
| | Apt Elev | 2977 |

RF and GPS required. For uncompensated Baro-VNAV systems, procedure NA below -21°C (-5°F) or above 43°C (109°F). Visibility reduction by helicopters NA. -15°C *Missed approach requires minimum climb of 235 feet per NM to 6900.

MISSED APPROACH: Climb to 10000 via 200° track to CAUGH and via left turn to DOTRE, and via left turn to DEBRE, and via 128° track to ANGIL and hold, continue climb-in-hold to 10000.

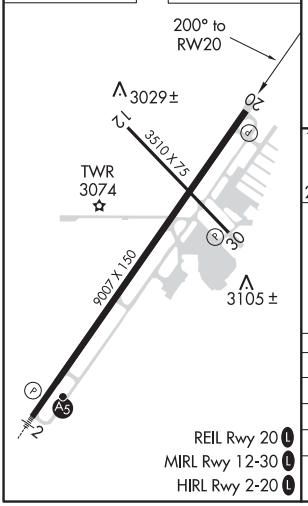
| ATIS | SALT LAKE CENTER | GLACIER TOWER* | GND CON | UNICOM |
|---|---|---|---|---|
| 132.625 | 133.4 285.4 | 124.55 (CTAF) L | 121.6 | 122.95 |



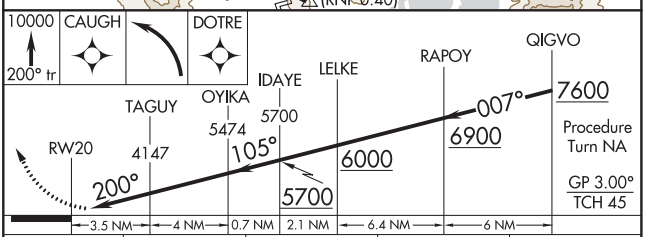

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 2977 | D | TDZE 2977




REIL Rwy 20 L
MIRL Rwy 12-30 L
HIRL Rwy 2-20 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.10 DA* | 3344-1¼ 367 (400-1¼) | | | |
| RNP 0.30 DA* | 3446-1¾ 469 (500-1¾) | | | |
| RNP 0.30 DA | 3662-2½ 685 (700-2½) | | | |

**AUTHORIZATION REQUIRED**

KALISPELL, MONTANA
Orig-A 30JUN11

48°19'N-114°15'W

GLACIER PARK INTL (GPI)

RNAV (RNP) RWY 20

| APP CRS | Rwy ldg | 9007 |
|---|---|---|
| 020° | TDZE | 2966 |
| | Apt Elev | 2977 |

# RNAV (RNP) Y RWY 2

## GLACIER PARK INTL (GPI)

T A -15°C

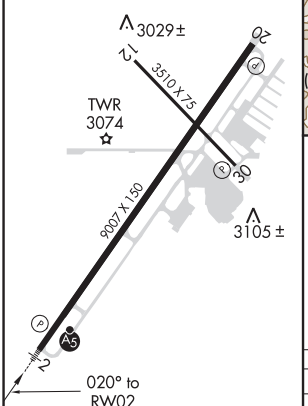
RF and GPS required. Missed approach requires RNP less than 1.0. For uncompensated Baro-VNAV systems, procedure NA below -21°C (-5°F) or above 43°C (109°F). For inoperative MALSR increase RNP 0.10* visibility to 1¼ and RNP 0.30 visibility to 2.
*Missed approach requires minimum climb of 220 feet per NM to 6100.

MALSR A5

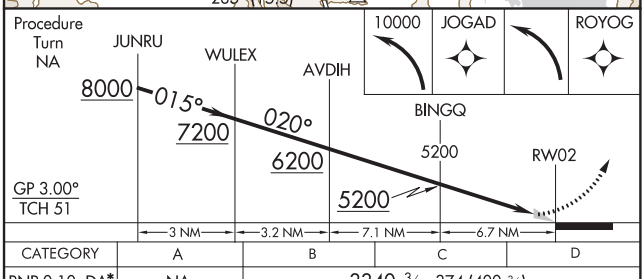
MISSED APPROACH: Climb to 10000 via left turn to JOGAD, and via left turn to ROYOG and via left turn to TONUY, and via 121° track to WILTO and via 129° track to ANGIL and hold.

| ATIS | SALT LAKE CENTER | GLACIER TOWER * | GND CON | UNICOM |
|---|---|---|---|---|
| 132.625 | 133.4 285.4 | 124.55 (CTAF) L | 121.6 | 122.95 |

| ELEV 2977 | D | TDZE 2966 |
|---|---|---|




REIL Rwy 20 L
MIRL Rwy 12-30 L
HIRL Rwy 20-30 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.10 DA* | NA | 3340-¾ 374 (400-¾) | | |
| RNP 0.30 DA | NA | 3522-1½ 556 (600-1½) | | |

**AUTHORIZATION REQUIRED**

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

KALISPELL, MONTANA | AL-887 (FAA) | 20198

# RNAV (GPS) RWY 30
## GLACIER PARK INTL (GPI)

| APP CRS | Rwy ldg | 3510 |
|---|---|---|
| 301° | TDZE | 2974 |
| | Apt Elev | 2977 |

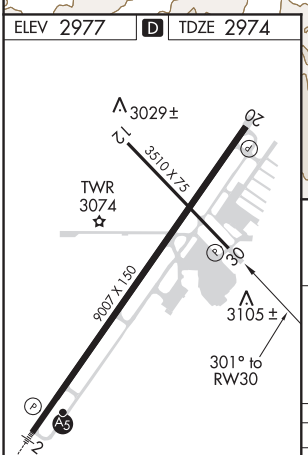
RNP APCH.

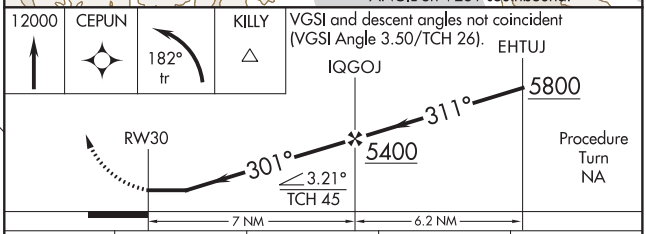
Rwy 30 helicopter visibility reduction below ¾ SM NA.

-15°C

MISSED APPROACH: Climb to 12000 direct CEPUN and left turn via track 182° to KILLY and hold, continue climb-in-hold to 12000.

| ATIS | SALT LAKE CENTER | GLACIER TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 132.625 | 133.4 285.4 | 124.55 (CTAF) L | 121.6 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 3500-1 526 (600-1) | | 3500-1½ 526 (600-1½) | |
| C CIRCLING | 3520-1 543 (600-1) | 3580-1 603 (700-1) | 3640-1¾ 663 (700-1¾) | 3760-2½ 783 (800-2½) |

REIL Rwy 20 L
MIRL Rwy 12-30 L
HIRL Rwy 2-20 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 70799 W02A | APP CRS 020° | Rwy ldg 9007<br>TDZE 2966<br>Apt Elev 2977 |
|---|---|---|

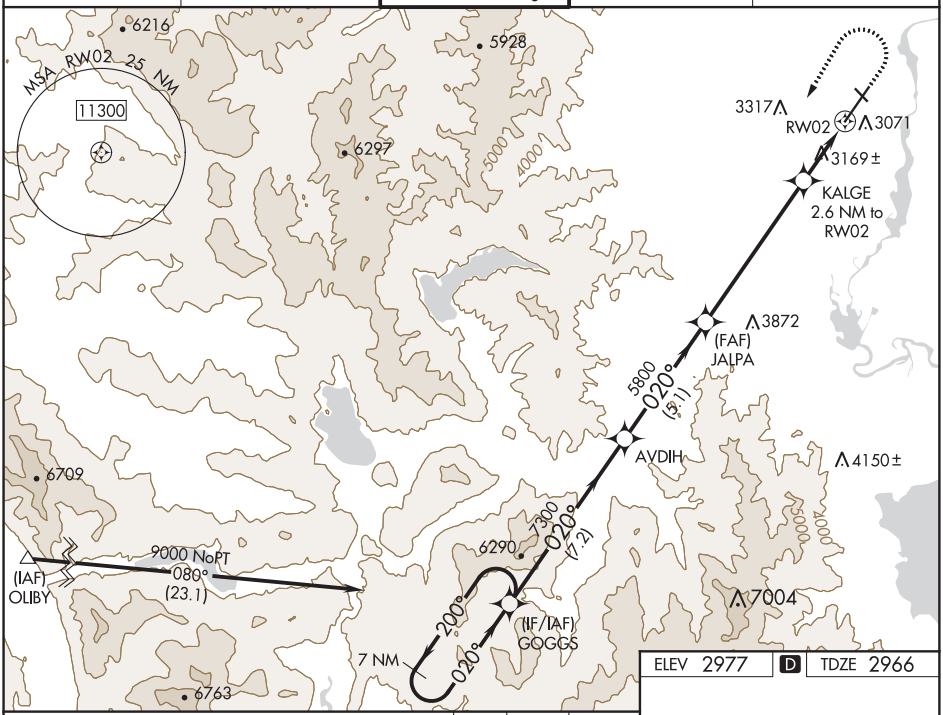
# RNAV (GPS) Z RWY 2
## GLACIER PARK INTL (GPI)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C (-11°F) or above 53°C (128°F). DME/DME RNP-0.3 NA. -15°C

MALSR

MISSED APPROACH: (Do not exceed 185K until GOGGS) Climb to 4200, then climbing left turn to 9000 direct GOGGS and hold, continue climb-in-hold to 9000.

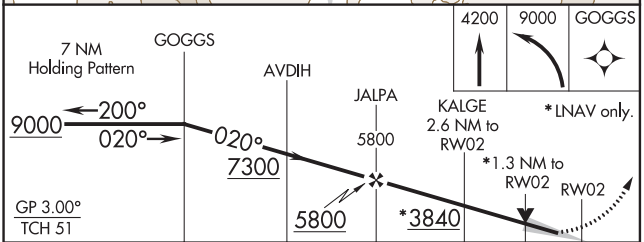
| ATIS | SALT LAKE CENTER | GLACIER TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 132.625 | 133.4 285.4 | 124.55 (CTAF) L | 121.6 | 122.95 |



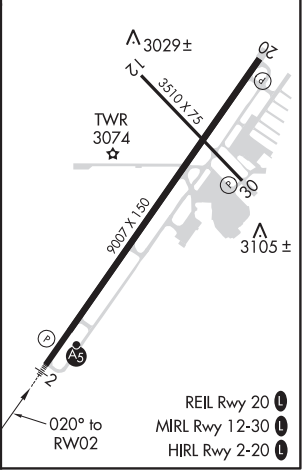

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 2977 D TDZE 2966




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 3290-⅝ 324 (400-⅝) | | | |
| LNAV/VNAV DA | 3468-1¼ 502 (500-1¼) | | | |
| LNAV MDA | 3420-½ 454 (500-½) | | 3420-⅞ 454 (500-⅞) | |
| C CIRCLING | 3480-1 503 (600-1) | 3580-1 603 (700-1) | 3640-1¾ 663 (700-1¾) | 3760-2½ 783 (800-2½) |



# VOR/DME RWY 30
## GLACIER PARK INTL (GPI)

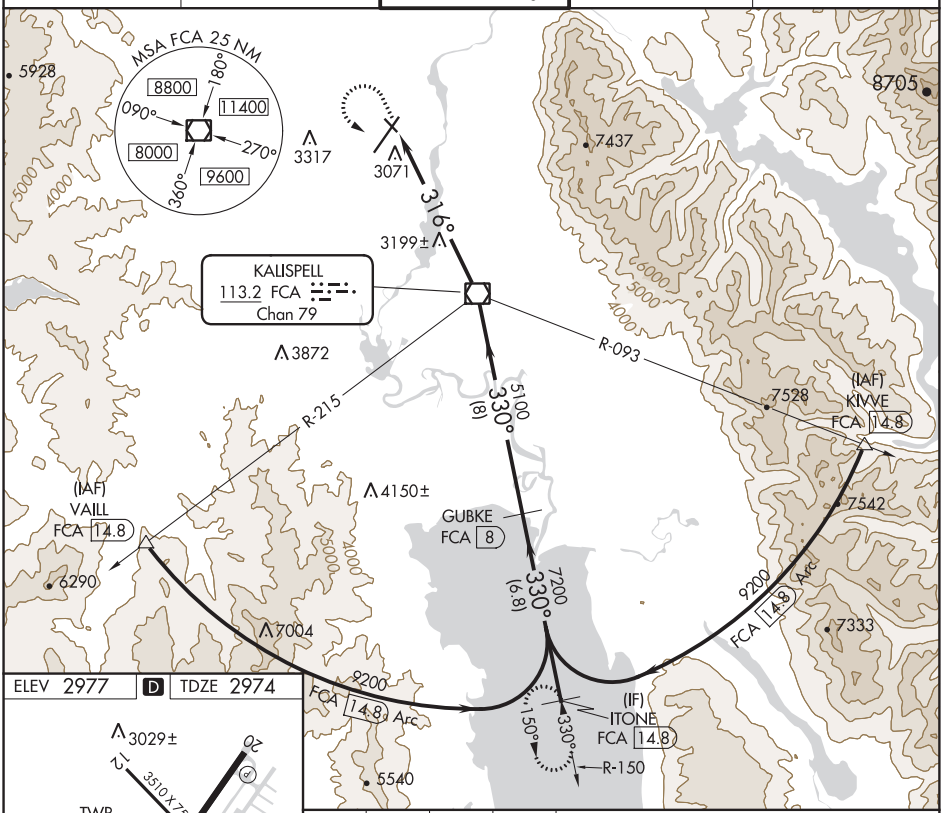
| VOR/DME FCA | APP CRS | Rwy ldg | 3510 |
|---|---|---|---|
| 113.2 | 316° | TDZE | 2974 |
| Chan 79 | | Apt Elev | 2977 |

T A ❄ -15°C

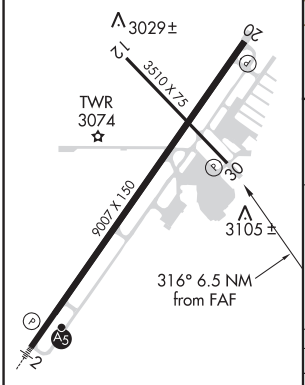
Helicopter visibility reduction below 1 SM not authorized. When VGSI inoperative, straight-in minimums not authorized at night.

MISSED APPROACH: Climb to 4000 then climbing left turn to 9300 via heading 130° and FCA VOR/DME R-150 to ITONE/14.8 DME and hold, continue climb-in-hold to 9300.

| ATIS | SALT LAKE CENTER | GLACIER TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 132.625 | 133.4 285.4 | 124.55 (CTAF) L | 121.6 | 122.95 |

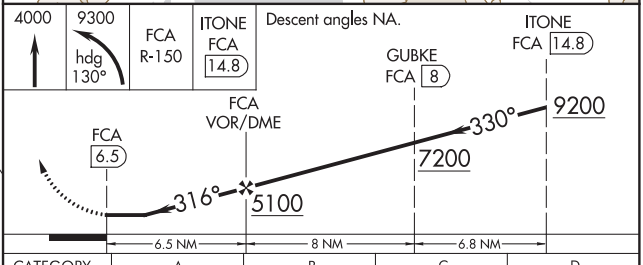



ELEV 2977 D TDZE 2974




REIL Rwy 20 L
MIRL Rwy 12-30 L
HIRL Rwy 2-20

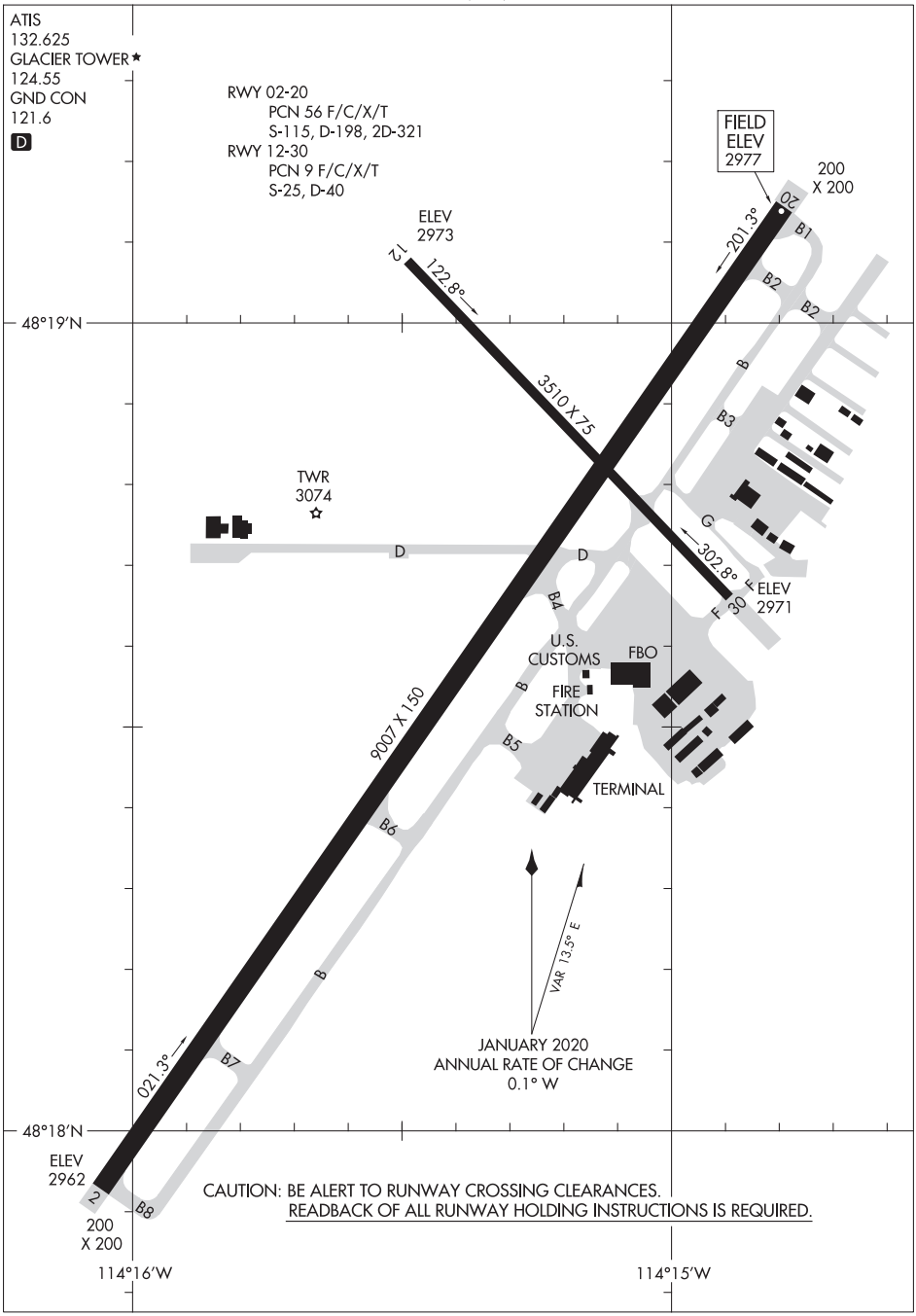
| 4000 | 9300 hdg 130° | FCA R-150 | ITONE FCA 14.8 | Descent angles NA. |
|---|---|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-30 | 3480-1 506 (600-1) | | 3480-1½ 506 (600-1½) | |
| C CIRCLING | 3520-1 543 (600-1) | 3580-1 603 (700-1) | 3640-1¾ 663 (700-1¾) | 3760-2½ 783 (800-2½) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020


ATIS
132.625
GLACIER TOWER
124.55
GND CON
121.6
D
RWY 02-20
PCN 56 F/C/X/T
S-115, D-198, 2D-321
RWY 12-30
PCN 9 F/C/X/T
S-25, D-40
FIELD
ELEV
2977
200
X 200
20
201.3°
B1
B2
B2
ELEV
2973
12
122.8°
48°19'N
3510 X 75
B
B3
TWR
3074
D
D
G
302.8°
H
ELEV
2971
30
F
B4
U.S.
CUSTOMS
FBO
FIRE
STATION
B
9007 X 150
B5
TERMINAL
B6
B
VAR 13.5° E
JANUARY 2020
ANNUAL RATE OF CHANGE
0.1° W
021.3°
B7
48°18'N
ELEV
2962
2
200
X 200
B8
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
114°16'W
114°15'W

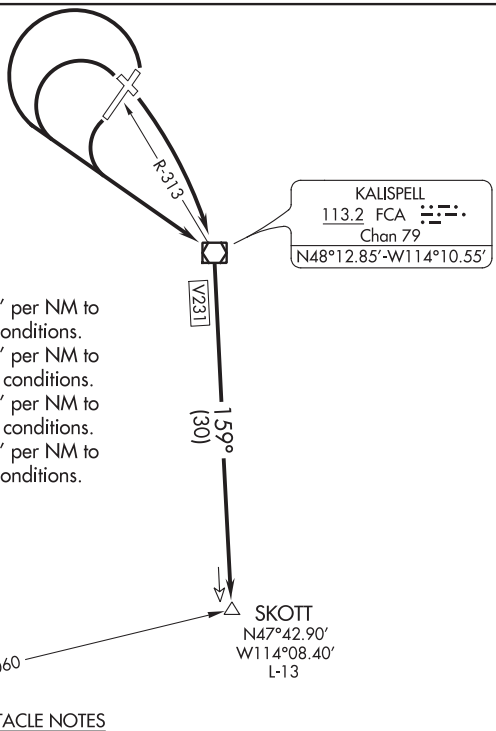
(SKOTT2.SKOTT) 16147

# SKOTT TWO DEPARTURE (OBSTACLE)

SL-887 (FAA)

GLACIER PARK INTL (GPI)
KALISPELL, MONTANA

SALT LAKE CENTER
133.4 285.4
GREAT FALLS RADIO
122.5
GLACIER TOWER ★
124.55




TAKEOFF MINIMUMS

Rwy 2: Standard with minimum climb of 290′ per NM to 7800, or 2700-3 for climb in visual conditions.
Rwy 12: Standard with minimum climb of 250′ per NM to 12000, or 2700-3 for climb in visual conditions.
Rwy 20: Standard with minimum climb of 250′ per NM to 12000, or 2700-3 for climb in visual conditions.
Rwy 30: Standard with minimum climb of 260′ per NM to 8900, or 2700-3 for climb in visual conditions.

TAKEOFF OBSTACLE NOTES

Rwy 2: Trees 1469′ from DER, 675′ right of centerline, 100′ AGL/3065′ MSL.
Rwy 12: Multiple vehicles on roadway, train on track, trees and a pole beginning 542′ from DER, on centerline extending left and right of centerline, up to 129′ AGL/3087′ MSL.
Trees 2325′ from DER, 226′ left of centerline, 94′ AGL/3063′ MSL.
Trees 3114′ from DER, 420′ right of centerline, 117′ AGL/3082′ MSL.
Rwy 20: Trees 2320′ from DER, 1055′ left of centerline, 107′ AGL/3057′ MSL.
Trees 1.1 NM from DER, 1679′ right of centerline, 107′ AGL/3154′ MSL.
Rwy 30: Trees 721′ from DER, 60′ right of centerline, 104′ AGL/3136′ MSL.
Trees 873′ from DER, 86′ left of centerline, 104′ AGL/3149′ MSL.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 2: Climbing left turn direct FCA VOR/DME, thence.... or, climb in visual conditions to cross Glacier Park Intl Airport southeast bound at or above 5600, then on FCA R-313 to FCA VOR/DME, thence. . . .

TAKEOFF RUNWAY 12: Climbing right turn direct FCA VOR/DME, thence.... or, climb in visual conditions to cross Glacier Park Intl Airport southeast bound at or above 5600, then on FCA R-313 to FCA VOR/DME, thence. . . .

TAKEOFF RUNWAY 20: Climbing left turn direct FCA VOR/DME, thence.... or, climb in visual conditions to cross Glacier Park Intl Airport southeast bound at or above 5600, then on FCA R-313 to FCA VOR/DME, thence. . . .

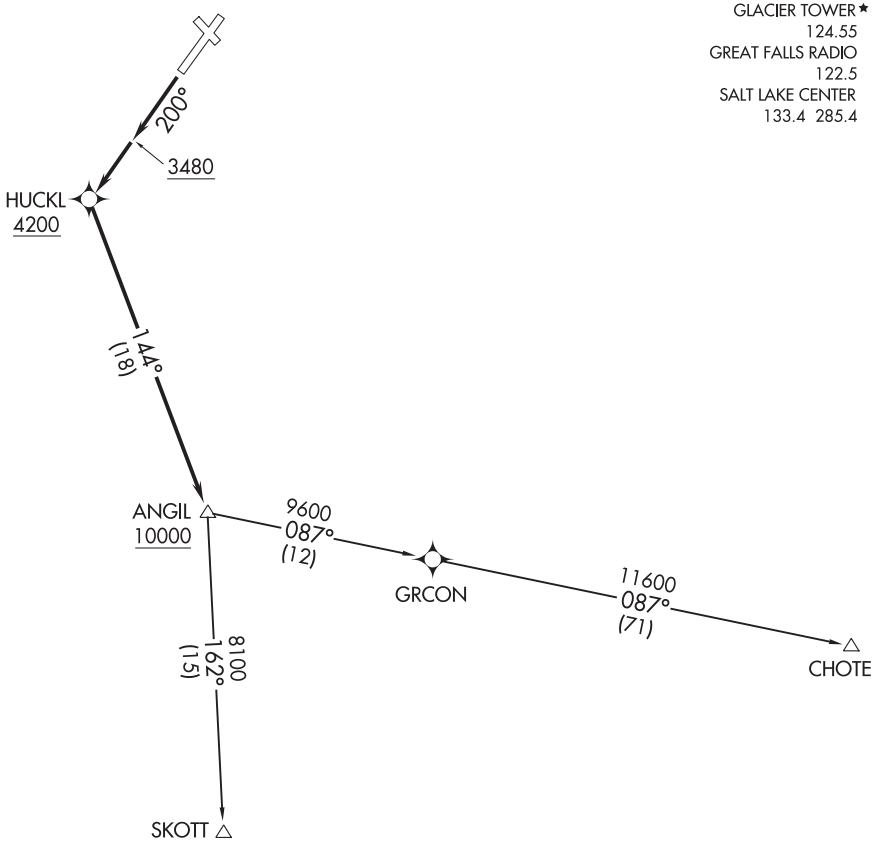
TAKEOFF RUNWAY 30: Climbing left turn direct FCA VOR/DME, thence.... or, climb in visual conditions to cross Glacier Park Intl Airport southeast bound at or above 5600, then on FCA R-313 to FCA VOR/DME, thence. . . .

. . . .continue climb to 12000 via FCA R-159 to SKOTT INT.


NW-1, 05 NOV 2020 to 31 DEC 2020

**TOP ALTITUDE: ASSIGNED BY ATC**

ATIS
132.625
GND CON
121.6
GLACIER TOWER ★
124.55
GREAT FALLS RADIO
122.5
SALT LAKE CENTER
133.4 285.4




NOTE: GPS required.
NOTE: RNAV 1.
NOTE: Chart not to scale.

TAKEOFF MINIMUMS
Rwys 2, 12, 30: NA - ATC.
Rwy 20: Standard with minimum climb of 500′ per NM to 3480.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 20: Climb heading 200° to 3480, then climb direct to cross HUCKL at or above 4200, then on track 144° to cross ANGIL at or above 10000, thence. . . .

. . . .on (transition). Maintain ATC assigned altitude. Expect filed altitude five minutes after departure.

CHOTE TRANSITION (GPI1.CHOTE)

SKOTT TRANSITION (GPI1.SKOTT)



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

**TOP ALTITUDE: ASSIGNED BY ATC**

ATIS
132.625
GND CON
121.6
GLACIER TOWER★
124.55
GREAT FALLS RADIO
122.5
SALT LAKE CENTER
133.4 285.4

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 2: Climb heading 020° to intercept course 290° to cross KECEK at or above 7000 and at or below 230K, then on track 216° to cross EEVEL at or above 9000, then on track 167° to KNEVL, then on track 173° to KILLY, thence . . . .

TAKEOFF RUNWAY 20: Climb heading 200° to 3480, then climbing right turn direct to cross DAACE at or above 6300, then on track 208° to cross PYGMY at or above 8300, then on track 208° to KILLY, thence . . . .

. . . .on (transition). Maintain ATC assigned altitude. Expect filed altitude five minutes after departure.

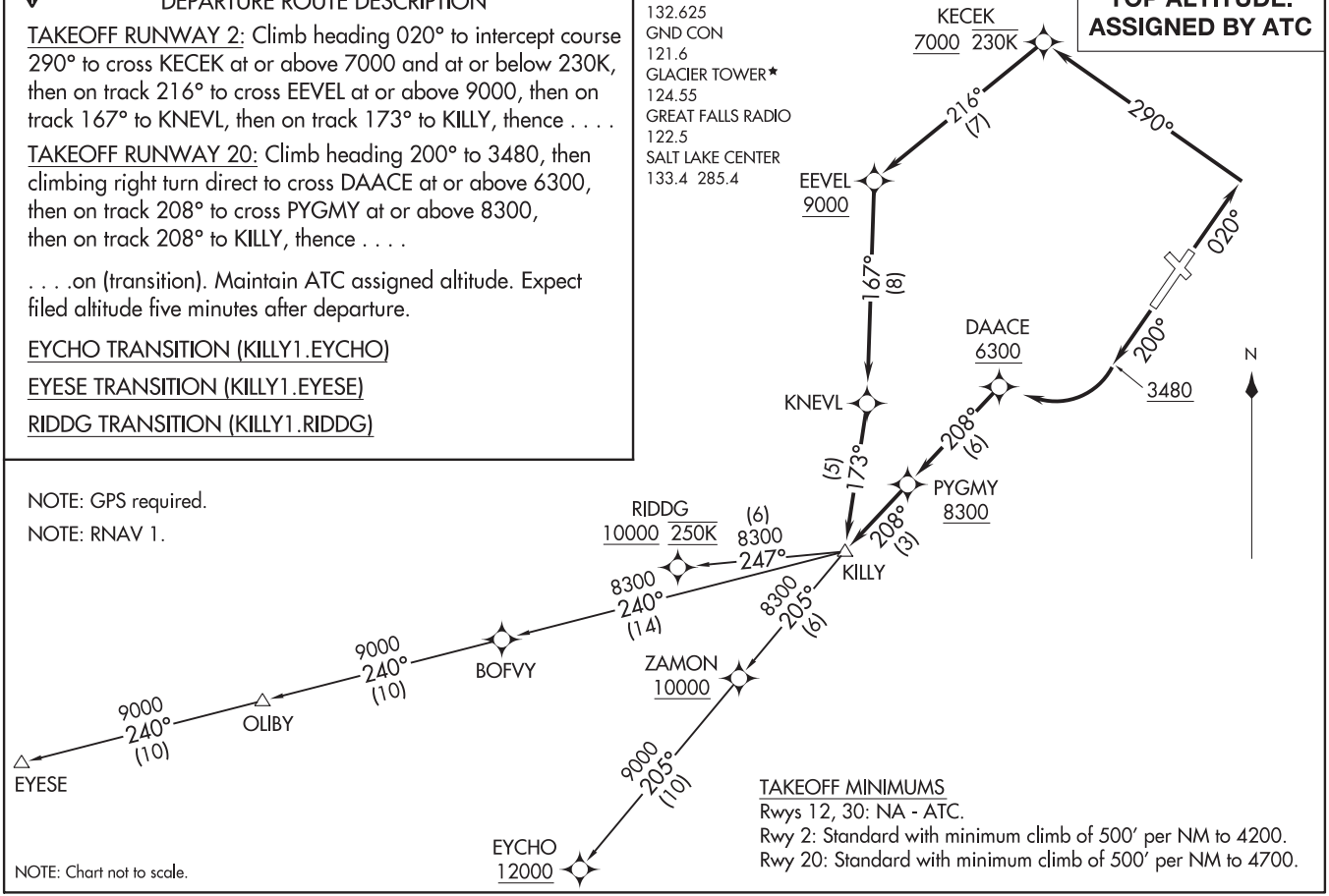
EYCHO TRANSITION (KILLY1.EYCHO)

EYESE TRANSITION (KILLY1.EYESE)

RIDDG TRANSITION (KILLY1.RIDDG)

NOTE: GPS required.

NOTE: RNAV 1.




TAKEOFF MINIMUMS
Rwys 12, 30: NA - ATC.
Rwy 2: Standard with minimum climb of 500′ per NM to 4200.
Rwy 20: Standard with minimum climb of 500′ per NM to 4700.

NOTE: Chart not to scale.

| WAAS CH 65743 W12A | APP CRS 123° | Rwy ldg 4391<br>TDZE 20<br>Apt Elev 20 |
|---|---|---|

# RNAV (GPS) RWY 12

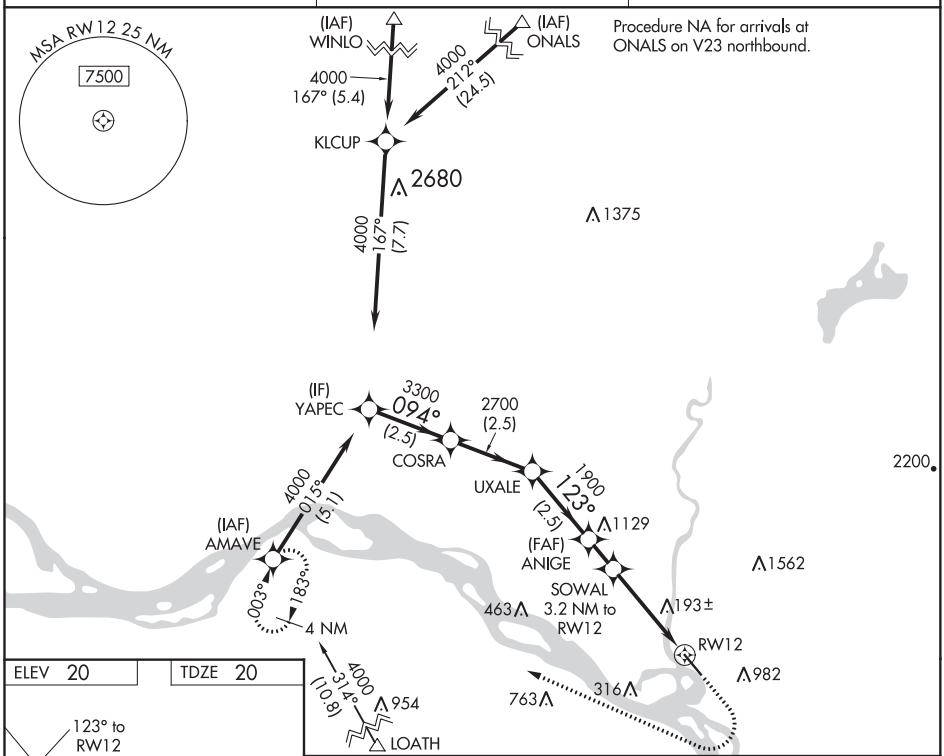
## SOUTHWEST WASHINGTON RGNL (KLS)

RNP APCH.

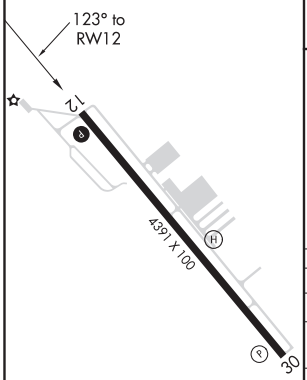
Circling NA northeast of Rwy 12-30. Circling Rwy 30 NA at night. Rwy 12 helicopter reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -6°C or above 54°C.

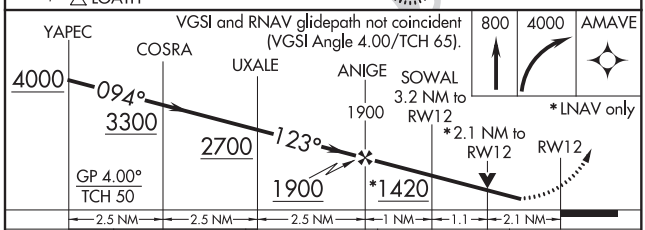
MISSED APPROACH: Climb to 800 then climbing right turn to 4000 direct AMAVE and hold, continue climb-in-hold to 4000.

| AWOS-3PT | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.075 | 124.2 317.6 | 122.8 (CTAF) L |




| ELEV 20 | TDZE 20 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 608-1¾ 588 (600-1¾) | | NA | |
| LNAV/VNAV DA | 766-2 746 (800-2) | | NA | |
| LNAV MDA | 980-1¼ 960 (1000-1¼) | 980-1½ 960 (1000-1½) | NA | |
| C CIRCLING | 980-1¼ 960 (1000-1¼) | 980-1½ 960 (1000-1½) | NA | |

REIL Rwys 12 and 30 L
MIRL Rwy 12-30 L


NW-1, 05 NOV 2020 to 31 DEC 2020

(KELSO2.KELNG) 20310

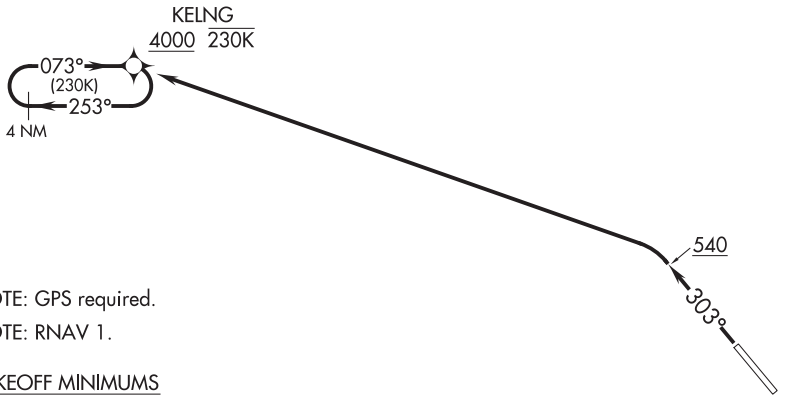
SOUTHWEST WASHINGTON RGNL (KLS)

# KELSO TWO DEPARTURE (OBSTACLE) (RNAV)

AL-5638 (FAA)

KELSO, WASHINGTON

SEATTLE CENTER
124.2 317.6
UNICOM
122.8 (CTAF)
SEATTLE RADIO
122.25




NOTE: GPS required.

NOTE: RNAV 1.

TAKEOFF MINIMUMS

Rwy 12: NA - Terrain.
Rwy 30: 600-3 with minimum climb of 295′ per NM to 1300 or standard with minimum climb of 310′ per NM to 900.

TAKEOFF OBSTACLE NOTES

Rwy 30: Poles 21′ from DER, 299′ right of centerline, 31′ AGL/49′ MSL.
Trees 92′ from DER, 439′ right of centerline, 59′ MSL.
Poles beginning 190′ from DER, 348′ left of centerline, up to 29′ AGL/49′ MSL.
Trees, pole beginning 213′ from DER, 43′ right of centerline, up to 155′ MSL.
Vehicles on road 387′ from DER, 596′ left of centerline, 57′ MSL.
Towers 501′ from DER, 425′ left of centerline, 49′ AGL/70′ MSL.
Trees beginning 531′ from DER, 201′ left of centerline, up to 91′ MSL.
Transmission lines beginning 1648′ from DER, 644′ left of centerline, up to 79′ AGL/100′ MSL.
Trees, transmission line beginning 1737′ from DER, 17′ left of centerline, up to 131′ MSL.
Trees beginning 2235′ from DER, 35′ right of centerline, up to 157′ MSL.
Trees, transmission line beginning 2335′ from DER, 110′ left of centerline, up to 146′ MSL.
Trees 4956′ from DER, 112′ left of centerline, 164′ MSL.
Trees beginning 1.9 NM from DER, 2281′ right of centerline, up to 342′ MSL.
Trees beginning 2 NM from DER, 980′ right of centerline, up to 407′ MSL.
Trees beginning 2.1 NM from DER, 364′ right of centerline, up to 433′ MSL.
Trees beginning 2.2 NM from DER, 2680′ right of centerline, up to 477′ MSL.
Towers, trees beginning 2.3 NM from DER, 2369′ right of centerline, up to 105′ AGL/569′ MSL.
Trees beginning 2.4 NM from DER, 2095′ right of centerline, up to 584′ MSL.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 30: Climb on heading 303° to 540, then climbing left turn to 4000 direct KELNG and hold. Do not exceed 230K when continuing climb in hold to 4000 before proceeding on course.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 82437 W16A | APP CRS 163° | Rwy ldg 8203<br>TDZE 7289<br>Apt Elev 7289 |
|---|---|---|

# RNAV (GPS) RWY 16

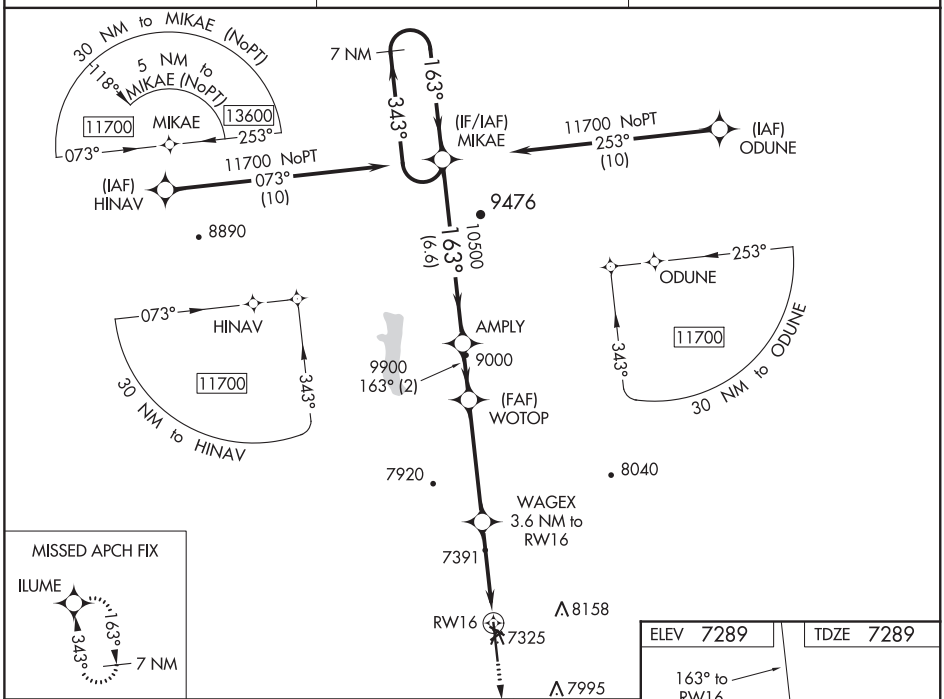
## KEMMERER MUNI (EMM)

Baro-VNAV NA when using Evanston altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -27°C (-16°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. VDP NA when using Evanston altimeter setting. Night landing: Rwy 4, 10, 22, 28 NA. When local altimeter setting not received, use Evanston altimeter setting: Increase all DA 111 feet and visibilities ¼ mile; increase all MDA 120 feet.

-35°C

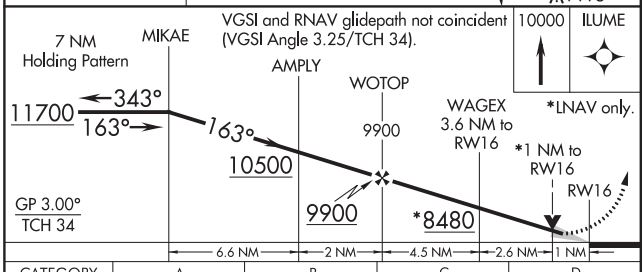
MISSED APPROACH: Climb to 10000 direct ILUME and hold.

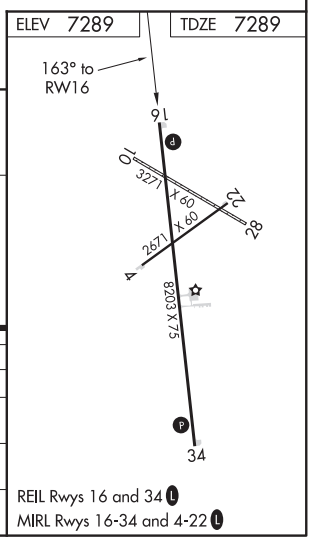
| AWOS-3PT | SALT LAKE CITY CENTER | UNICOM |
|---|---|---|
| 119.675 | 124.35 353.5 | 122.8 (CTAF) L ★ |










| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 7539-1 | 250 (300-1) | NA | |
| LNAV/VNAV DA | 7539-1 | 250 (300-1) | NA | |
| LNAV MDA | 7660-1 | 371 (400-1) | NA | |
| C CIRCLING | 7660-1<br>371 (400-1) | 8240-1½<br>951 (1000-1½) | NA | |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

KEMMERER, WYOMING | AL-507 (FAA) | 19227

# RNAV (GPS) RWY 34

KEMMERER MUNI (EMM)

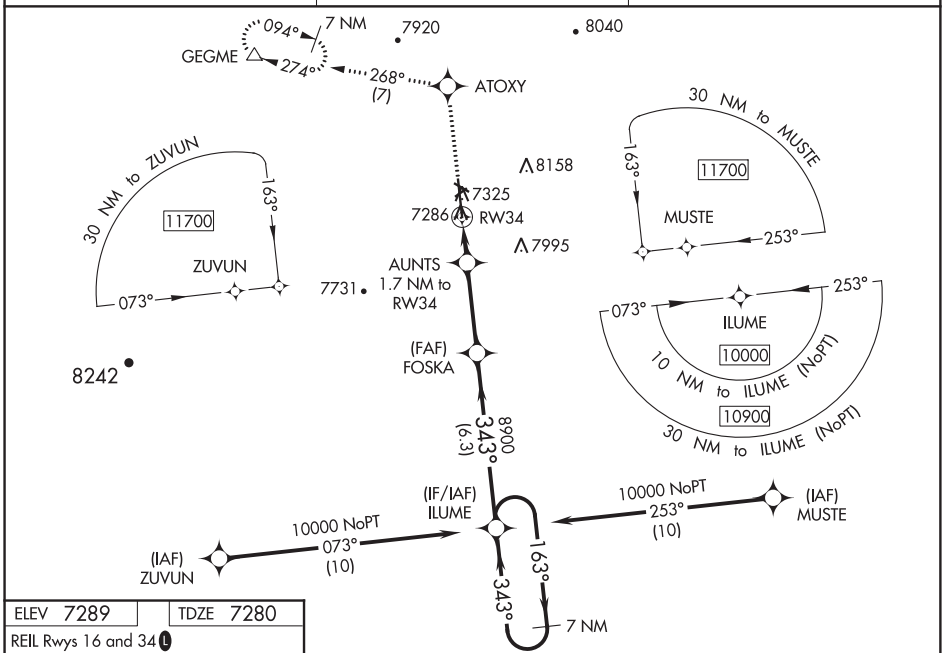
| WAAS CH 90337 W34A | APP CRS 343° | Rwy ldg 8203<br>TDZE 7280<br>Apt Elev 7289 |
|---|---|---|

Baro-VNAV and VDP NA when using Evanston altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -27°C (-16°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Night landing: Rwy 4, 10, 22, 28 NA. When local altimeter setting not received, use Evanston altimeter setting: increase all DA 111 feet and visibilities ⅛ mile; increase all MDA 120 feet.

-35°C

MISSED APPROACH: Climb to 12000 direct ATOXY and on track 268° direct GEGME and hold, continue climb-in-hold to 12000.

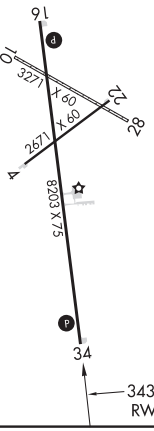
| AWOS-3PT | SALT LAKE CITY CENTER | UNICOM |
|---|---|---|
| 119.675 | 124.35 353.5 | 122.8 (CTAF) L ★ |

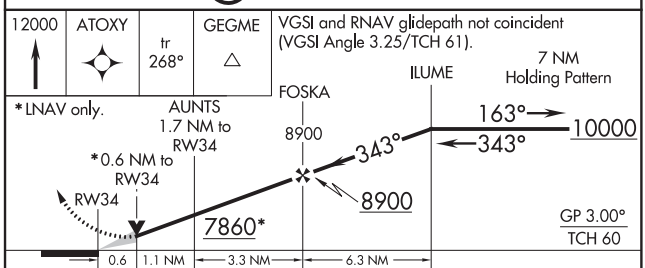



| ELEV 7289 | TDZE 7280 |
|---|---|

REIL Rwys 16 and 34 L

MIRL Rwys 16-34 and 4-22 L




* LNAV only.

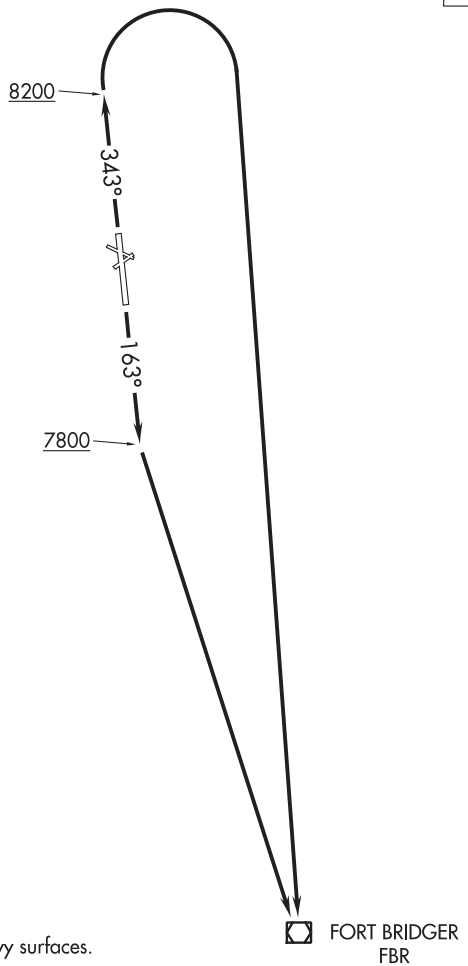
| CATEGORY | | A | B | C | D |
|---|---|---|---|---|---|
| LPV | DA | 7530-1 | 250 (300-1) | NA | |
| LNAV/VNAV | DA | 7530-1 | 250 (300-1) | NA | |
| LNAV MDA | | 7540-1 | 260 (300-1) | NA | |
| C CIRCLING | | 7660-1<br>371 (400-1) | 8240-1½<br>951 (1000-1½) | NA | |

# KEMRR FIVE DEPARTURE (RNAV)

AL-507 (FAA)

SALT LAKE CITY CENTER
124.35 353.5

**TOP ALTITUDE: 12000**




NOTE: RNAV-1.

NOTE: GPS required.

TAKEOFF MINIMUMS
Rwys 4, 10, 22, 28 NA - Rwy surfaces.
Rwys 16, 34: Standard.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb heading 163° to at/above 7800, then climb direct to FBR VOR/DME, thence. . . .
TAKEOFF RUNWAY 34: Climb heading 343° to at/above 8200, then climbing right turn direct to FBR VOR/DME, thence. . . .

. . . .via assigned route/fix. Maintain 12000 or assigned altitude, expect filed altitude 10 minutes after departure.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

KLAMATH FALLS, OREGON — AL-473 (FAA) — 20142

# ILS or LOC/DME RWY 32

## CRATER LAKE-KLAMATH RGNL (LMT)

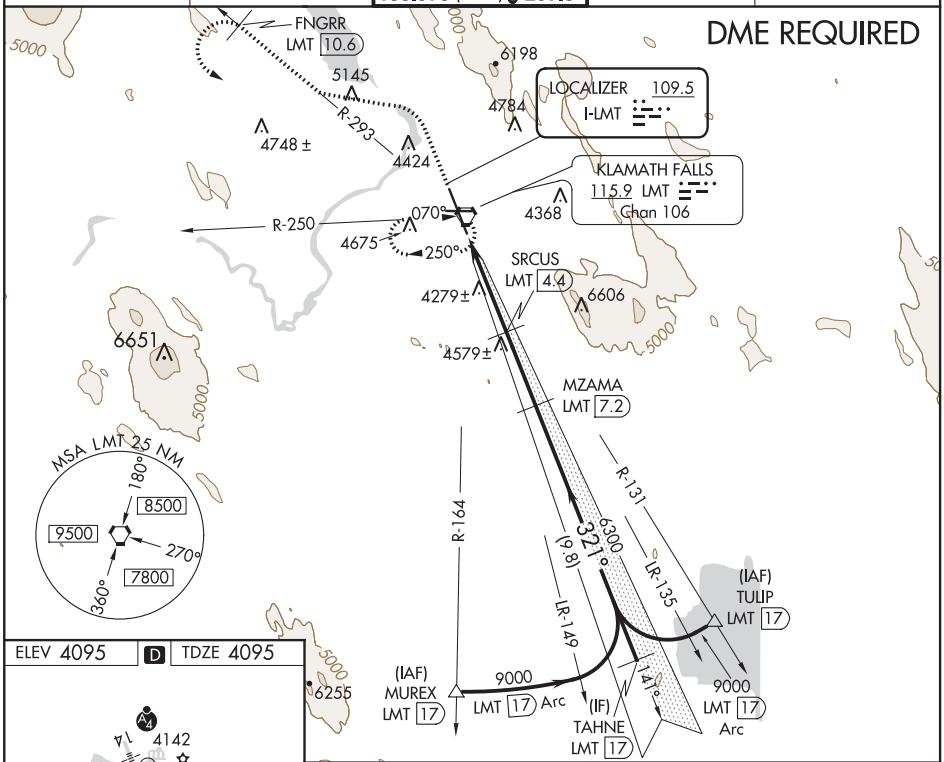
| LOC I-LMT | APP CRS | Rwy ldg / TDZE / Apt Elev |
|---|---|---|
| 109.5 | 321° | 10302 / 4095 / 4095 |

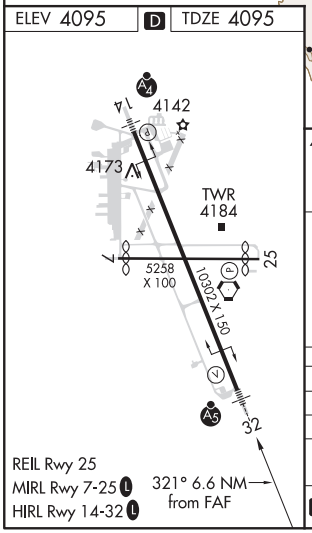
DME from LMT VORTAC. Simultaneous reception of I-LMT and LMT DME required. Circling NA for Cat D east of Rwy 14-32.
## Missed approach requires minimum climb gradient of 217′ per NM to 5600.
** RVR 1800 authorized with use of FD or AP or HUD to DA.

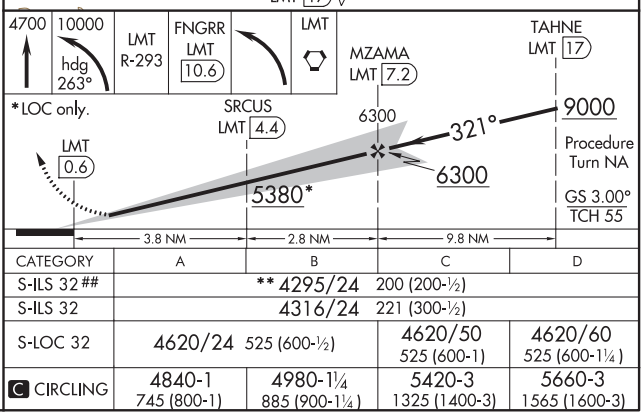
MALSR

MISSED APPROACH: Climb to 4700 then climbing left turn to 10000 via heading 263° and LMT VORTAC R-293 to FNGRR/LMT VORTAC 10.6 DME then left turn direct LMT VORTAC and hold.

| ATIS | KINGSLEY APP CON | KINGSLEY TOWER* | GND CON | UNICOM |
|---|---|---|---|---|
| 126.5 263.0 | 123.675 270.8 | 133.975 (CTAF) L 257.8 | 121.9 348.6 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 32 ## | ** 4295/24 200 (200-½) | | | |
| S-ILS 32 | 4316/24 221 (300-½) | | | |
| S-LOC 32 | 4620/24 525 (600-½) | | 4620/50 525 (600-1) | 4620/60 525 (600-1¼) |
| C CIRCLING | 4840-1 745 (800-1) | 4980-1¼ 885 (900-1¼) | 5420-3 1325 (1400-3) | 5660-3 1565 (1600-3) |

| WAAS CH 58001 W14A | APP CRS 141° | Rwy ldg 10302 TDZE 4091 Apt Elev 4095 |
|---|---|---|

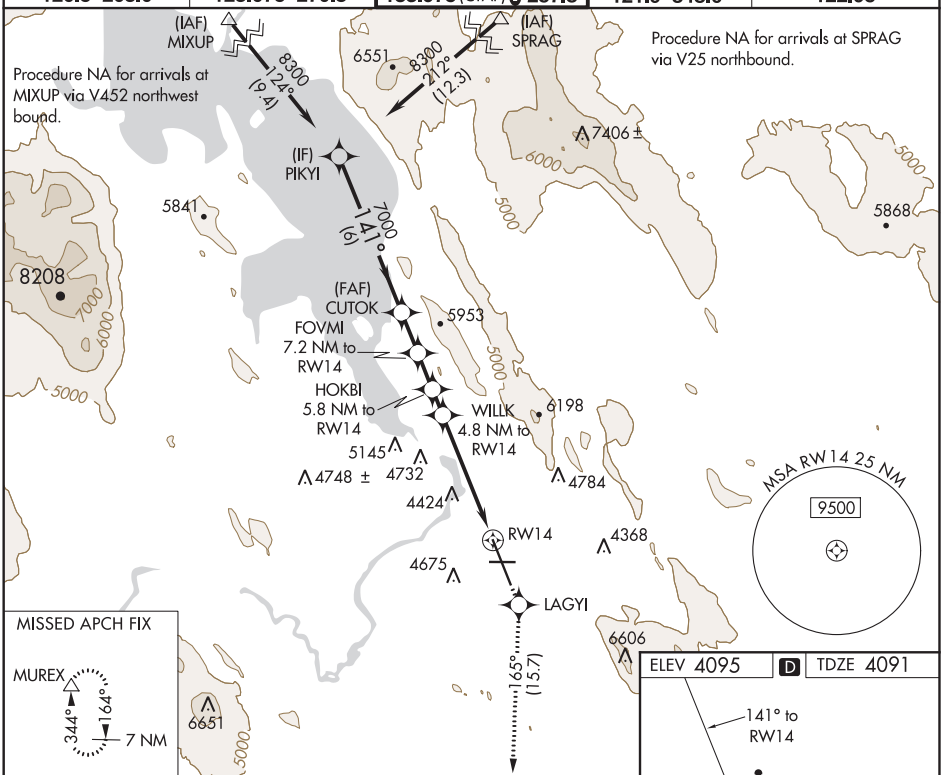
# RNAV (GPS) RWY 14
## CRATER LAKE-KLAMATH RGNL (LMT)

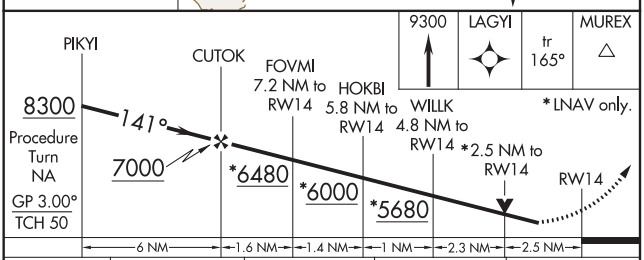
T A Inop table does not apply to LPV all Cats, and LNAV Cats B and C. DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA. Circling NA for Cat D east of Rwy 14-32.

MALSF

MISSED APPROACH: Climb to 9300 direct LAGYI and via track 165° to MUREX and hold, continue climb-in-hold to 9300.

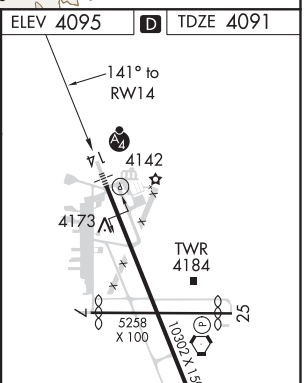
| ATIS | KINGSLEY APP CON | KINGSLEY TOWER* | GND CON | UNICOM |
|---|---|---|---|---|
| 126.5 263.0 | 123.675 270.8 | 133.975 (CTAF) L 257.8 | 121.9 348.6 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4635-2 544 (600-2) | | | |
| LNAV MDA | 4920-¾ 829 (900-¾) | 4920-1¼ 829 (900-1¼) | 4920-2½ 829 (900-2½) | 4920-2¾ 829 (900-2¾) |
| C CIRCLING | 4920-1 825 (900-1) | 4980-1¼ 885 (900-1¼) | 5420-3 1325 (1400-3) | 5660-3 1565 (1600-3) |

ELEV 4095 D TDZE 4091






NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 70702 W32A | APP CRS 321° | Rwy ldg 10302 TDZE 4095 Apt Elev 4095 |
|---|---|---|

# RNAV (GPS) RWY 32
## CRATER LAKE-KLAMATH RGNL (LMT)

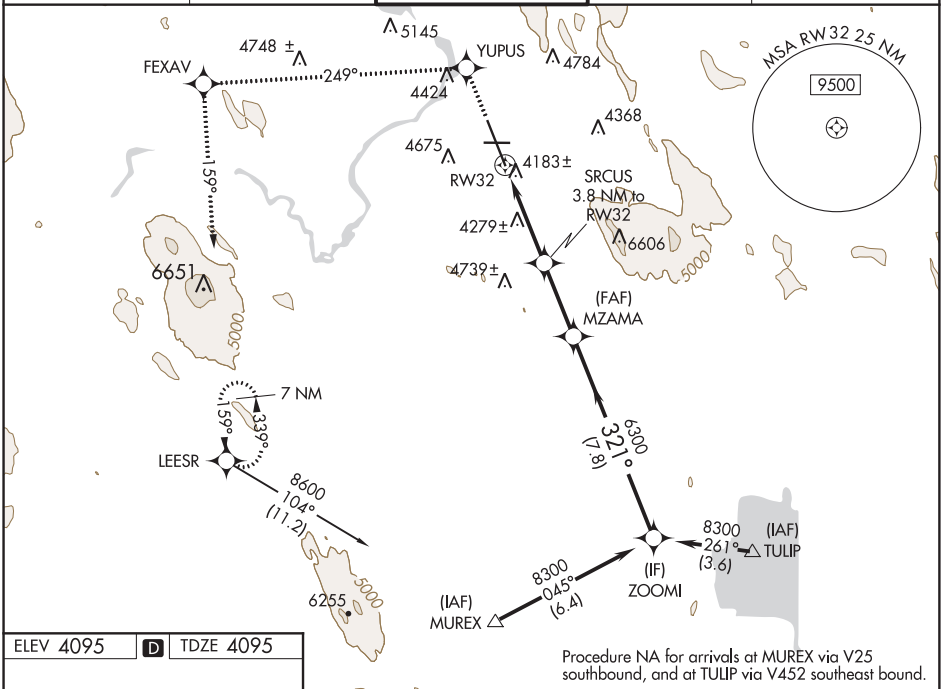
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C or above 41°C. For inop ALS, increase LPV all Cats visibility to RVR 5000. Circling NA for Cat D east of Rwy 14-32.

MALSR

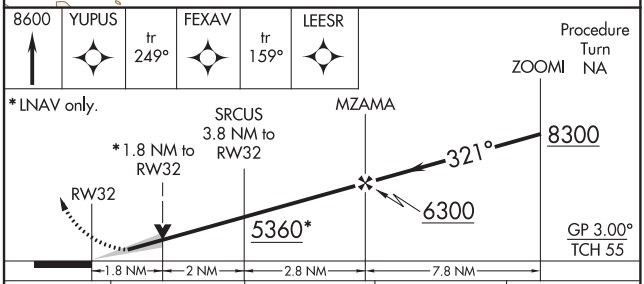
MISSED APPROACH: Climb to 8600 direct YUPUS and via track 249° to FEXAV and via track 159° to LEESR and hold.

| ATIS | KINGSLEY APP CON | KINGSLEY TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 126.5 263.0 | 123.675 270.8 | 133.975 (CTAF) L 257.8 | 121.9 348.6 | 122.95 |

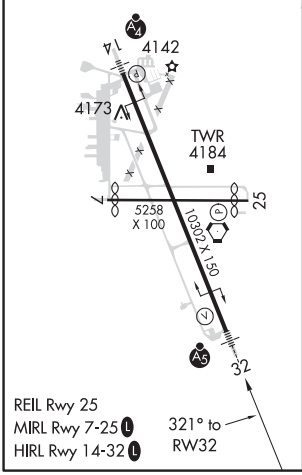



| 8600 | YUPUS | tr 249° | FEXAV | tr 159° | LEESR |
|---|---|---|---|---|---|

Procedure Turn NA




ELEV 4095 | D | TDZE 4095




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4387/24 292 (300-½) | | | |
| LNAV/VNAV DA | 4674-1½ 579 (600-1½) | | | |
| LNAV MDA | 4720/24 625 (700-½) | | 4720/60 625 (700-1¼) | 4720-1½ 625 (700-1½) |
| C CIRCLING | 4840-1 745 (800-1) | 4980-1¼ 885 (900-1¼) | 5420-3 1325 (1400-3) | 5660-3 1565 (1600-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| VORTAC LMT | APP CRS | Rwy ldg 10302 |
|---|---|---|
| 115.9 | 134° | TDZE 4091 |
| Chan 106 | | Apt Elev 4095 |

# VOR/DME or TACAN RWY 14

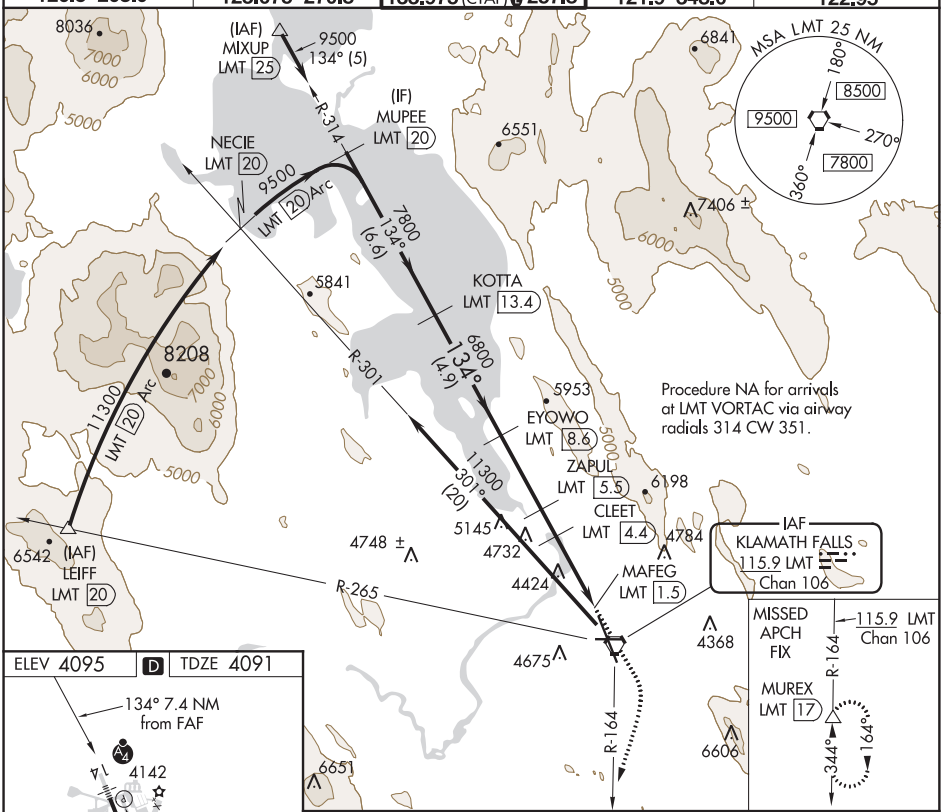
## CRATER LAKE-KLAMATH RGNL (LMT)

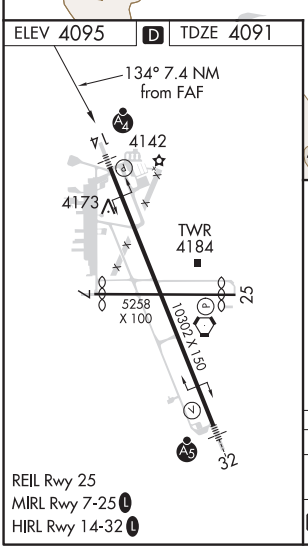
Circling NA for Cat D and E east of Rwy 14-32.
Inop table does not apply to Cats B and C.
Helicopter visibility reduction below ¾ SM NA.

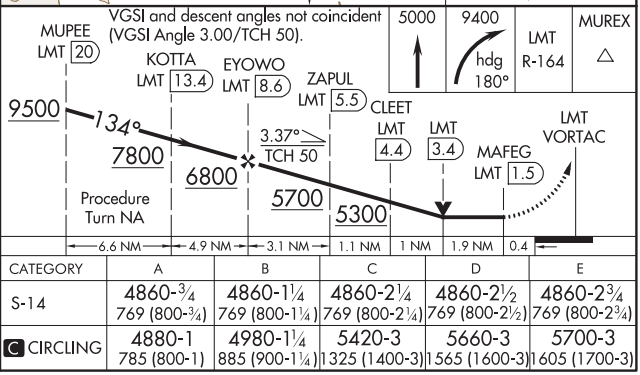
MALSF

MISSED APPROACH: Climb to 5000 then climbing right turn to 9400 via heading 180° and LMT VORTAC R-164 to MUREX/LMT 17 DME and hold, continue climb-in-hold to 9400.

| ATIS | KINGSLEY APP CON | KINGSLEY TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 126.5 263.0 | 123.675 270.8 | 133.975 (CTAF) L 257.8 | 121.9 348.6 | 122.95 |




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-14 | 4860-¾<br>769 (800-¾) | 4860-1¼<br>769 (800-1¼) | 4860-2¼<br>769 (800-2¼) | 4860-2½<br>769 (800-2½) | 4860-2¾<br>769 (800-2¾) |
| C CIRCLING | 4880-1<br>785 (800-1) | 4980-1¼<br>885 (900-1¼) | 5420-3<br>1325 (1400-3) | 5660-3<br>1565 (1600-3) | 5700-3<br>1605 (1700-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

KLAMATH FALLS, OREGON | AL-473 (FAA) | 20086

# VOR/DME or TACAN RWY 32

## CRATER LAKE-KLAMATH RGNL (LMT)

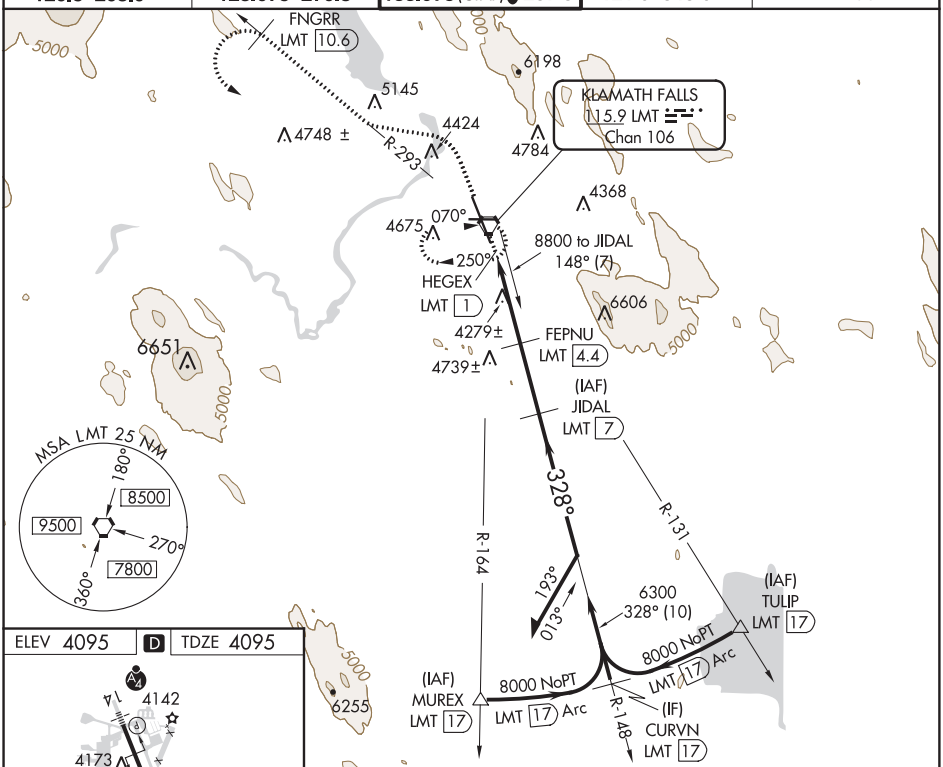
| VORTAC LMT | APP CRS | Rwy ldg | 10302 |
|---|---|---|---|
| 115.9 | 328° | TDZE | 4095 |
| Chan 106 | | Apt Elev | 4095 |

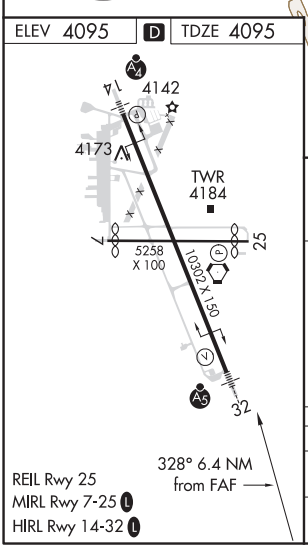
For inop MALSR, increase S-32 Cat E visibility to 1¾ mile. Circling NA for Cat D and E east of Rwy 14-32. Procedure turn NA for Cat E aircraft.

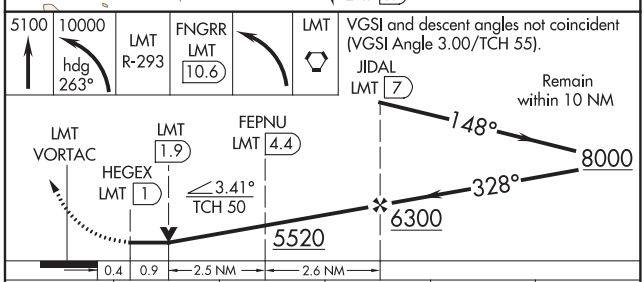
MALSR

MISSED APPROACH: Climb to 5100 then climbing left turn to 10000 via heading 263° and via LMT VORTAC R-293 to FNGRR/LMT 10.6 DME then left turn direct LMT VORTAC and hold. (TACAN aircraft climb to 5000 then climbing left turn to 9000 via heading 230° and LMT VORTAC R-265 to OLEBY/15 DME.)

| ATIS | KINGSLEY APP CON | KINGSLEY TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 126.5 263.0 | 123.675 270.8 | 133.975 (CTAF) L 257.8 | 121.9 348.6 | 122.95 |



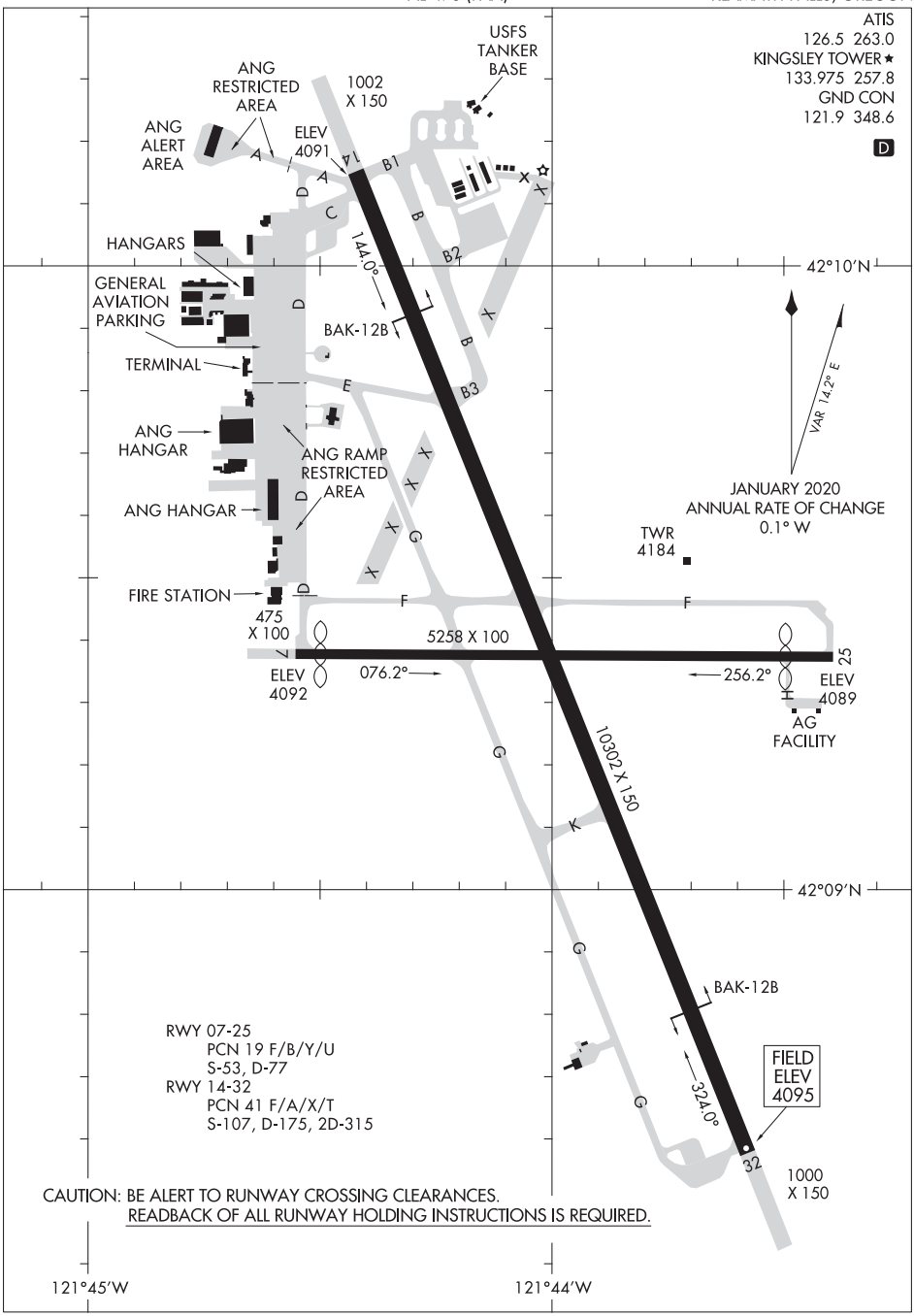




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-32 | 4560/24 465 (500-½) | | 4560/40 465 (500-¾) | 4560/50 465 (500-1) | 4560/60 465 (500-1¼) |
| C CIRCLING | 4840-1 745 (800-1) | 4980-1¼ 885 (900-1¼) | 5420-3 1325 (1400-3) | 5660-3 1565 (1600-3) | 5700-3 1605 (1700-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020




NW-1, 05 NOV 2020 to 31 DEC 2020

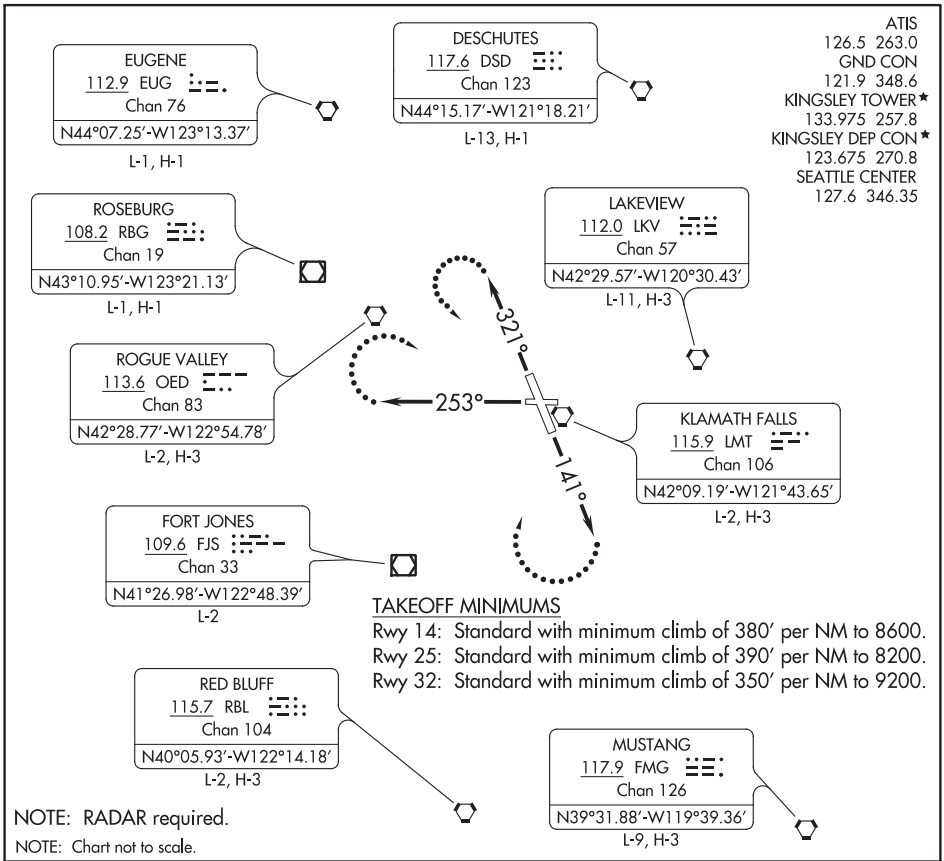
NW-1, 05 NOV 2020 to 31 DEC 2020

(LMT6.LMT) 20254

# KINGSLEY SIX DEPARTURE

AL-473 (FAA)

CRATER LAKE-KLAMATH RGNL (LMT)
KLAMATH FALLS, OREGON




TAKEOFF MINIMUMS

Rwy 14: Standard with minimum climb of 380′ per NM to 8600.
Rwy 25: Standard with minimum climb of 390′ per NM to 8200.
Rwy 32: Standard with minimum climb of 350′ per NM to 9200.

NOTE: RADAR required.

NOTE: Chart not to scale.

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb heading 141° (or ATC assigned heading 140° CW 320°). Thence . . . .
TAKEOFF RUNWAY 25: Climb heading 253°. Thence . . . .
TAKEOFF RUNWAY 32: Climb heading 321°. Thence . . . .

. . . . all aircraft expect vectors to assigned route/fix. Maintain 10000 or assigned altitude. Expect clearance to filed altitude five minutes after departure.

LOST COMMUNICATIONS

If not in contact with Seattle Center/Kingsley Approach Control after passing 10000 or assigned altitude:
TAKEOFF RUNWAY 14: Climbing right turn direct LMT VORTAC. Thence . . . .
TAKEOFF RUNWAY 25: Climbing right turn direct LMT VORTAC. Thence . . . .
TAKEOFF RUNWAY 32: Climbing left turn direct LMT VORTAC. Thence . . . .

. . . . via assigned route.

KINGSLEY SIX DEPARTURE

(LMT6.LMT) 26MAY16

KLAMATH FALLS, OREGON
CRATER LAKE-KLAMATH RGNL (LMT)

| WAAS CH 66000 W16A | APP CRS 163° | Rwy ldg 3399<br>TDZE 2717<br>Apt Elev 2717 |
|---|---|---|

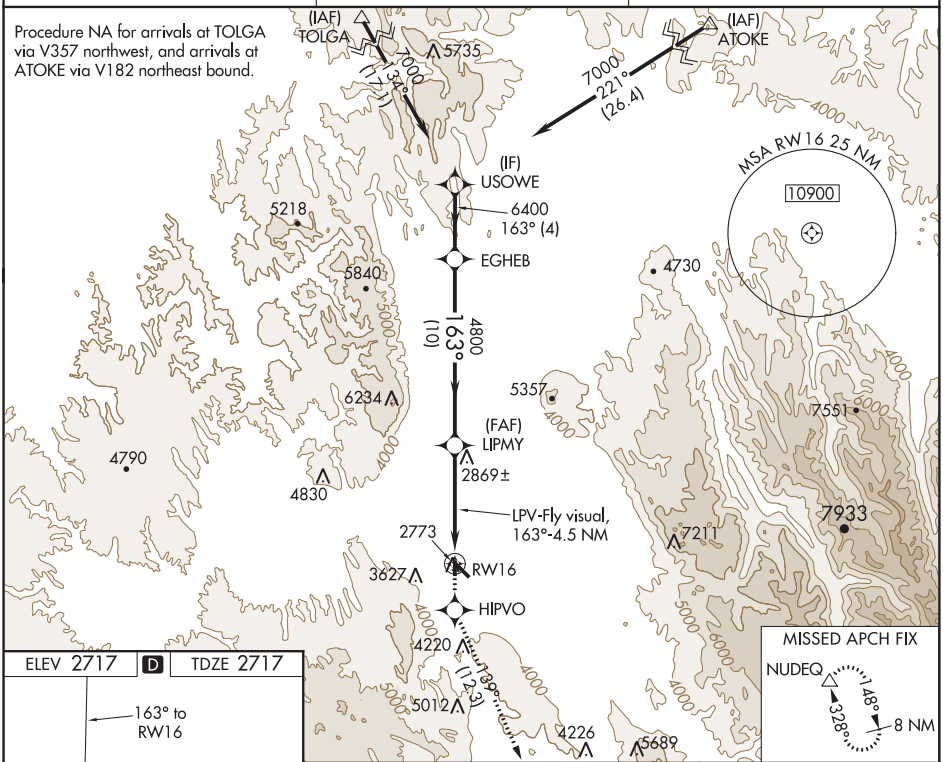
# RNAV (GPS) RWY 16
## LA GRANDE/UNION COUNTY (LGD)

NA
-16°C

DME/DME RNP-0.3 NA.
If local altimeter setting not received procedure NA.

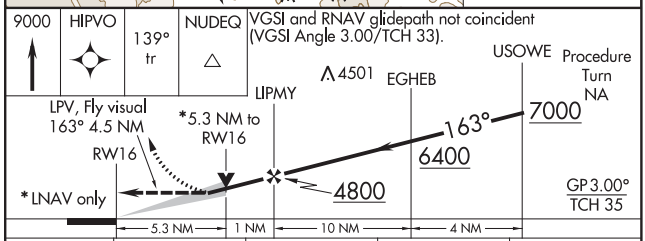
MISSED APPROACH: Climb to 9000 direct HIPVO and via 139° track to NUDEQ and hold, continue climb-in-hold to 9000.

| AWOS-3PT | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.075 | 132.6 269.35 | 122.8 (CTAF) L |

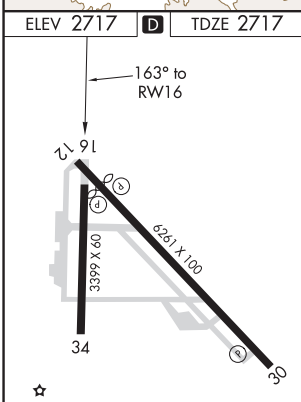



| 9000 | HIPVO | 139° tr | NUDEQ |
|---|---|---|---|

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 33).




ELEV 2717 D TDZE 2717




REIL Rwy 30
MIRL Rwy 12-30 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4176-2 1459 (1500-2) | | 4176-3 1459 (1500-3) | |
| LNAV/VNAV DA | NA | | | |
| LNAV MDA | 4440-1¼ 1723 (1800-1¼) | 4440-1½ 1723 (1800-1½) | 4440-3 1723 (1800-3) | |
| CIRCLING | 4440-1¼ 1723 (1800-1¼) | 4440-1½ 1723 (1800-1½) | 4440-3 1723 (1800-3) | |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| NDB LGD 296 | APP CRS 194° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 2718 |
|---|---|---|

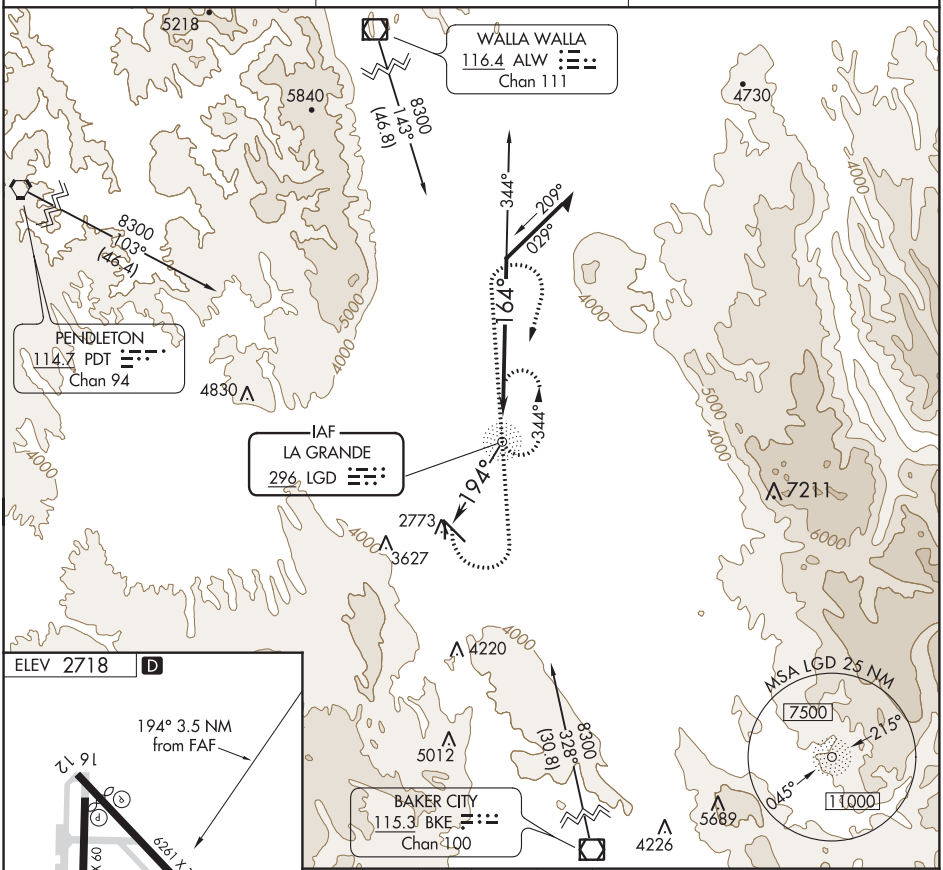
# NDB-B
## LA GRANDE/UNION COUNTY (LGD)

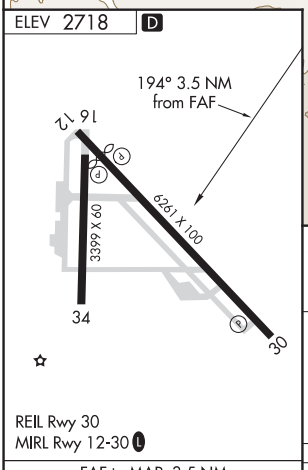
T
A NA
-16°C

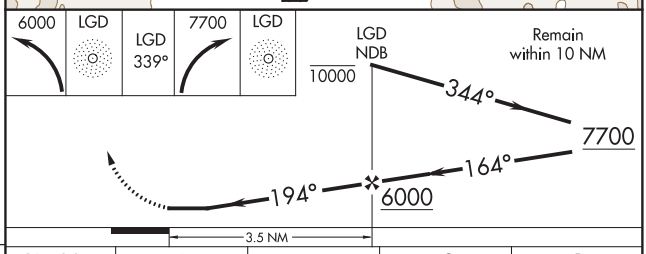
Circling NA for Cat C southwest of Rwy 12-30.

MISSED APPROACH: Climbing left turn to 6000 direct LGD NDB and on 339° bearing from LGD NDB, then climbing right turn to 7700 direct LGD NDB and hold.

| AWOS-3PT | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.075 | 132.6 269.35 | 122.8 (CTAF) L |




| FAF to MAP 3.5 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 3:30 | 2:20 | 1:45 | 1:24 | 1:10 |

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 4860-1¼<br>2142 (2200-1¼) | 4860-1½<br>2142 (2200-1½) | 4860-3<br>2142 (2200-3) | NA |

| WAAS CH 93532 W17A | APP CRS 166° | Rwy ldg 5318 TDZE 4734 Apt Elev 4734 |
|---|---|---|

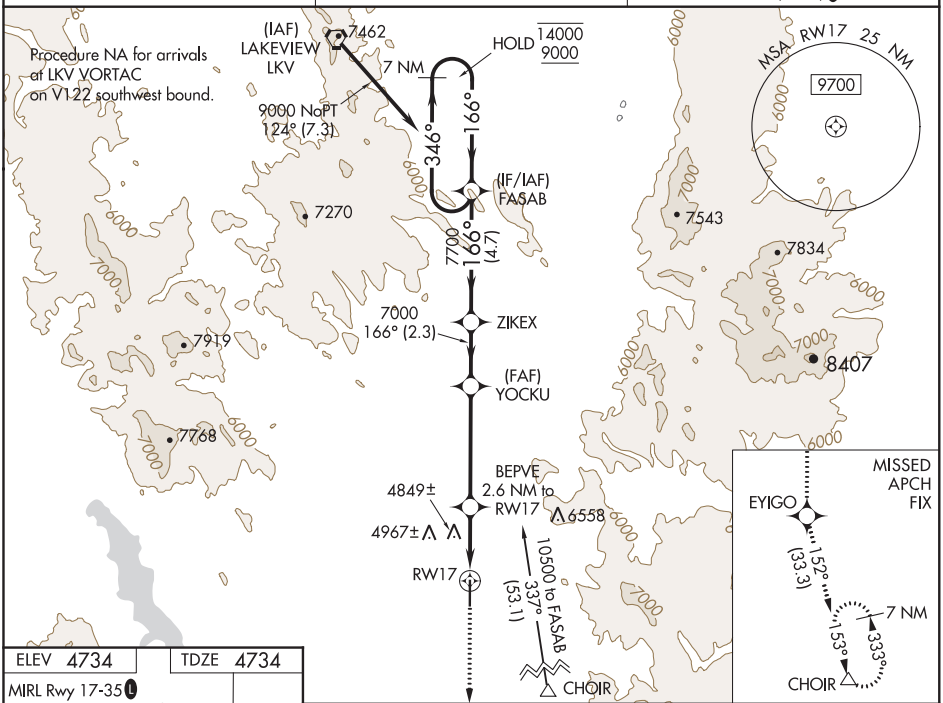
# RNAV (GPS) RWY 17
## LAKE COUNTY (LKV)

RNP APCH.

Circling NA east of Rwy 17-35. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C or above 50°C.

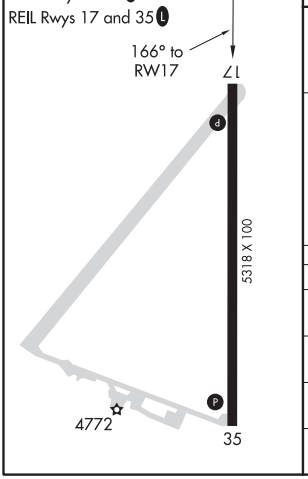
MISSED APPROACH: Climb to 11000 direct EYIGO and on track 152° to CHOIR and hold.

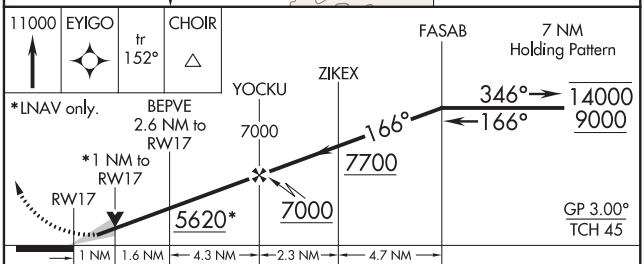
| AWOS-3PT | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.525 | 127.6 346.35 | 122.8 (CTAF) L |




| ELEV 4734 | TDZE 4734 |
|---|---|

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




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4984-1 250 (300-1) | | | |
| LNAV/VNAV DA | 5139-1⅛ 405 (500-1⅛) | | | |
| LNAV MDA | 5100-1 366 (400-1) | | | |
| C CIRCLING | 5160-1 426 (500-1) | 5220-1 486 (500-1) | 5460-2 726 (800-2) | 5500-2½ 766 (800-2½) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

LAKEVIEW, OREGON | AL-5552 (FAA) | 19227

# RNAV (GPS) RWY 35
## LAKE COUNTY (LKV)

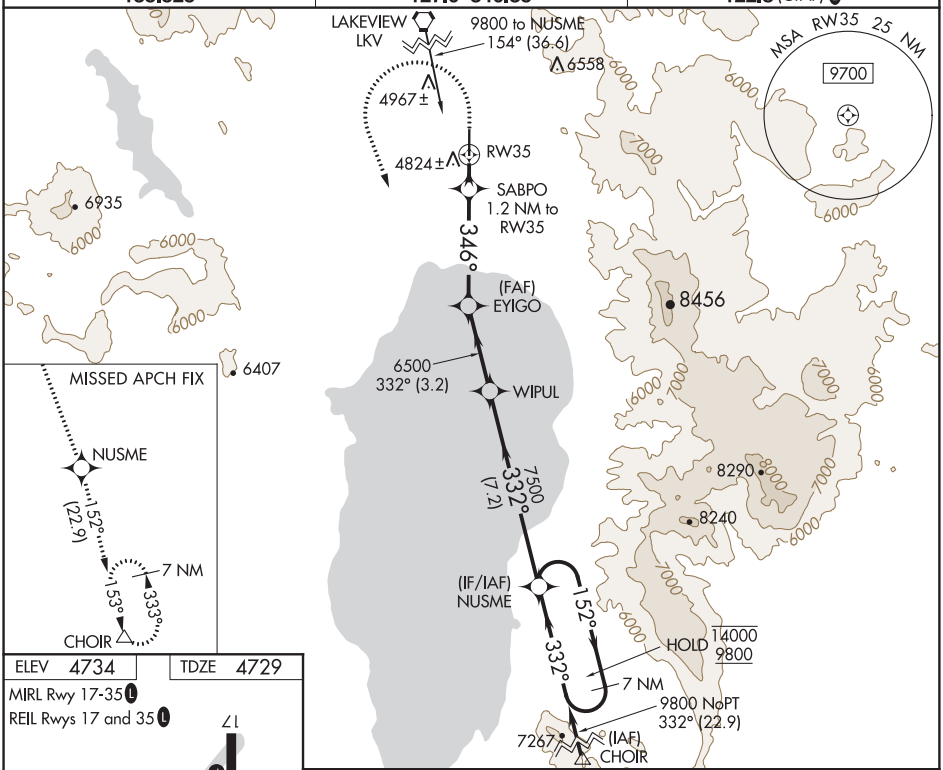
| WAAS CH 99332 W35A | APP CRS 346° | Rwy ldg 5318 TDZE 4729 Apt Elev 4734 |
|---|---|---|

RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C or above 50°C. Circling NA east of Rwy 17-35.

MISSED APPROACH: (Do not exceed 235K until NUSME) Climb to 5200 then climbing left turn to 11000 direct NUSME and on track 152° to CHOIR and hold.

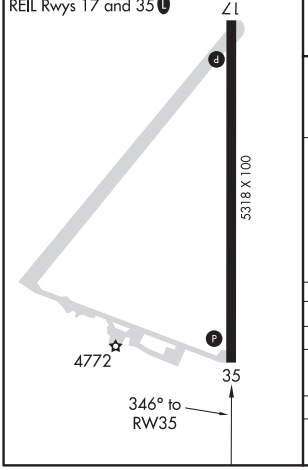
| AWOS-3PT | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.525 | 127.6 346.35 | 122.8 (CTAF) L |

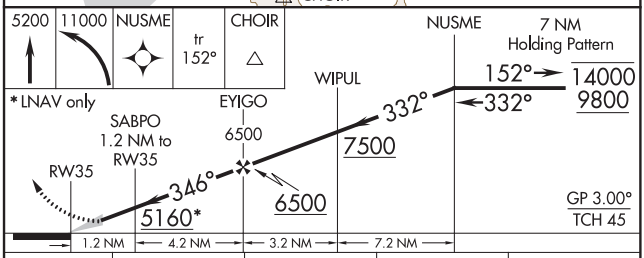



ELEV 4734 | TDZE 4729

MIRL Rwy 17-35 L

REIL Rwys 17 and 35 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4979-1 250 (300-1) | | | |
| LNAV/VNAV DA | 5121-1⅛ 392 (400-1⅛) | | | |
| LNAV MDA | 5080-1 351 (400-1) | | | |
| C CIRCLING | 5160-1 426 (500-1) | 5220-1 486 (500-1) | 5320-2 586 (600-2) | 5480-2½ 746 (800-2½) |

LAKEVIEW, OREGON | LAKE COUNTY (LKV)

Amdt 1 28FEB19 | 42°10′N-120°24′W | RNAV (GPS) RWY 35

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 50343 W22A | APP CRS 220° | Rwy ldg 5000<br>TDZE 5577<br>Apt Elev 5589 |
|---|---|---|

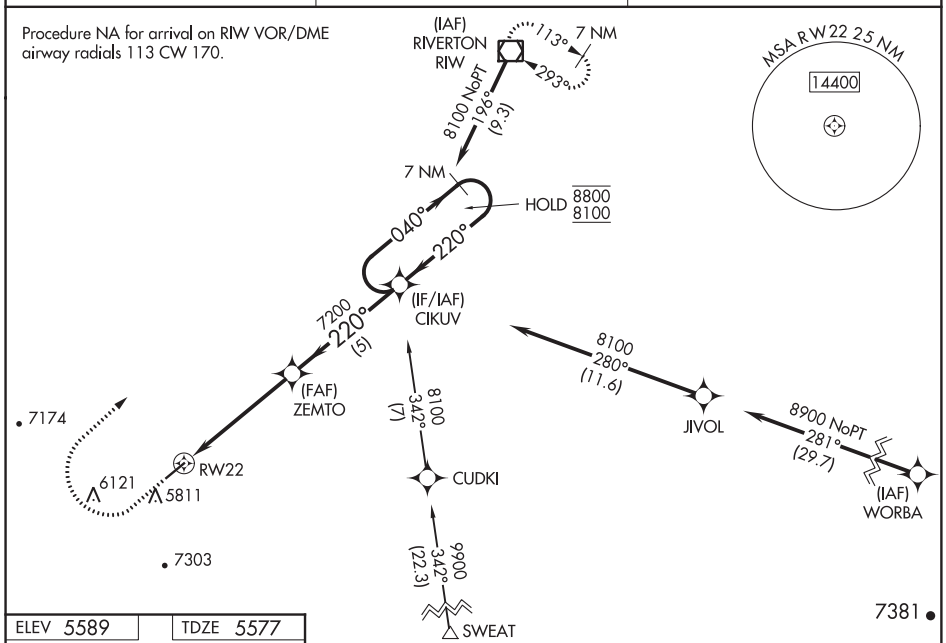
# RNAV (GPS) RWY 22
## HUNT FIELD (LND)

RNP APCH.

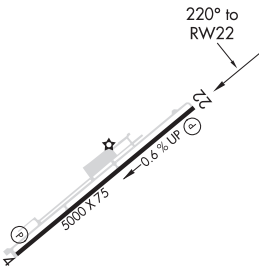
Circling NA southeast of Rwys 4 and 22. Circling Rwy 4 NA at night. Rwy 22 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -26°C or above 54°C.

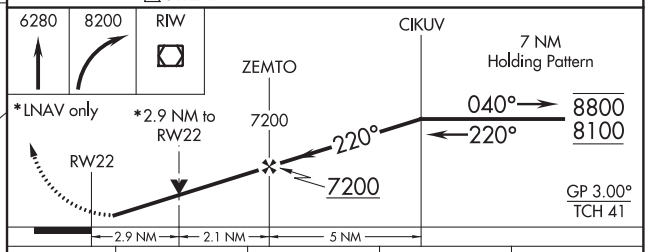
MISSED APPROACH: (Do not exceed 165K until RIW VOR/DME) Climb to 6280 then climbing right turn to 8200 direct RIW VOR/DME and hold.
#Missed approach requires minimum climb of 355 feet per NM to 6700.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 118.15 | 133.25 285.6 | 122.8 (CTAF) L |




| ELEV 5589 | TDZE 5577 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA# | 5827-¾ 250 (300-¾) | | | NA |
| LPV DA | 6060-1⅜ 483 (500-1⅜) | | | NA |
| LNAV/VNAV DA | 6040-1⅜ 463 (500-1⅜) | | | NA |
| LNAV MDA | 6460-1¼ 883 (900-1¼) | | 6460-2½ 883 (900-2½) | NA |
| C CIRCLING | 6460-1¼ 871 (900-1¼) | | 6540-3 951 (1000-3) | NA |

REIL Rwys 4 and 22 L
MIRL Rwy 4-22 L



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

LARAMIE, WYOMING | AL-225 (FAA) | 20198

# RNAV (GPS) RWY 3
## LARAMIE RGNL (LAR)

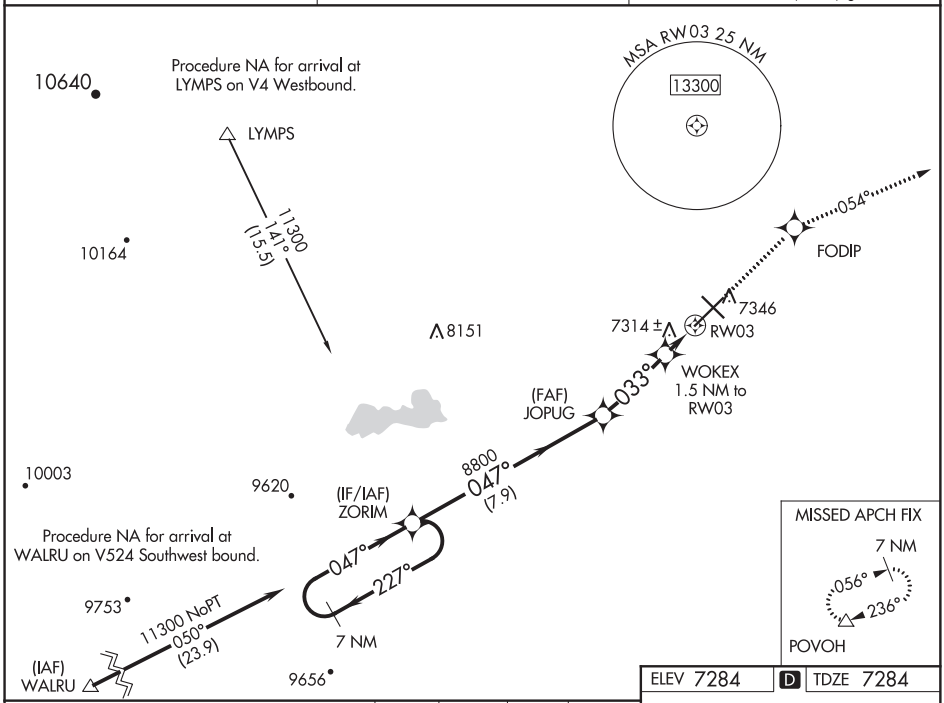
| WAAS CH 86325 W03A | APP CRS 033° | Rwy ldg 8502<br>TDZE 7284<br>Apt Elev 7284 |
|---|---|---|

-35°C

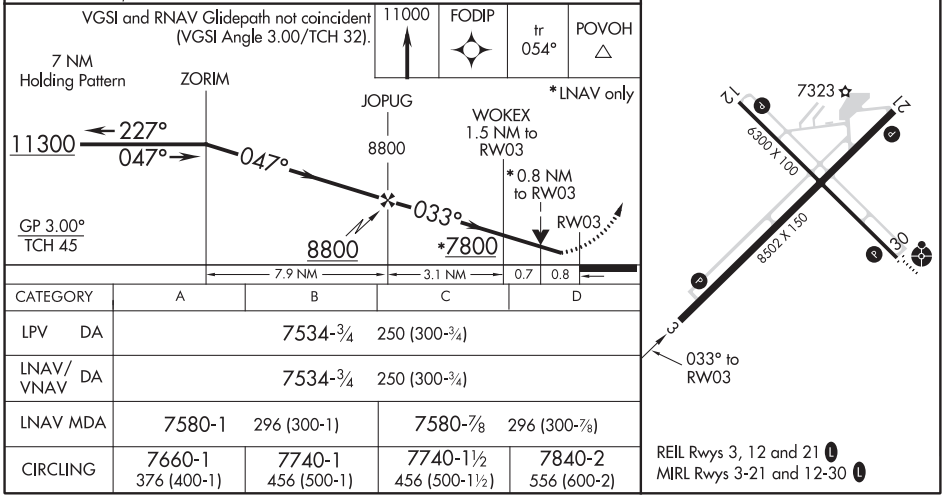
DME/DME RNP-0.3 NA. Circling to Rwy 30 NA at night. Baro-VNAV NA. Helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 11000 direct FODIP and on track 054° to POVOH and hold, continue climb-in-hold to 11000.

| ASOS | DENVER CENTER | UNICOM |
|---|---|---|
| 135.475 | 125.9 284.7 | 123.05 (CTAF) L |




ELEV 7284 | D | TDZE 7284




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 7534-¾ 250 (300-¾) | | | |
| LNAV/VNAV DA | 7534-¾ 250 (300-¾) | | | |
| LNAV MDA | 7580-1 296 (300-1) | | 7580-⅞ 296 (300-⅞) | |
| CIRCLING | 7660-1 376 (400-1) | 7740-1 456 (500-1) | 7740-1½ 456 (500-1½) | 7840-2 556 (600-2) |

REIL Rwys 3, 12 and 21 L
MIRL Rwys 3-21 and 12-30 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# RNAV (GPS) RWY 12
## LARAMIE RGNL (LAR)

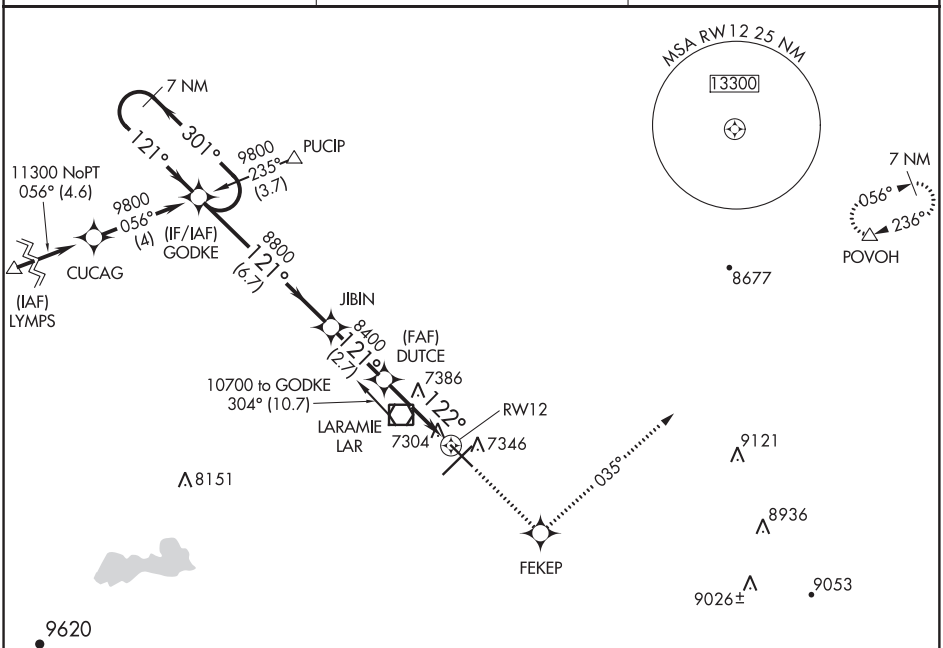
| WAAS CH 70600 W12A | APP CRS 122° | Rwy ldg 6300<br>TDZE 7275<br>Apt Elev 7284 |
|---|---|---|

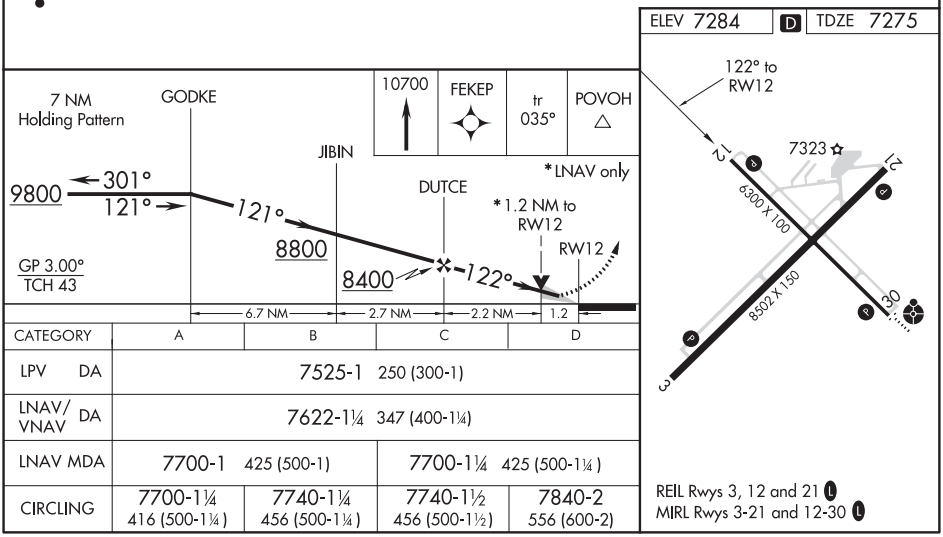
T
-35°C

DME/DME RNP-0.3 NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -29°C (-20°F) or above 34°C (93°F).

MISSED APPROACH: Climb to 10700 direct FEKEP and via 035° track to POVOH and hold.

| ASOS | DENVER CENTER | UNICOM |
|---|---|---|
| 135.475 | 125.9 284.7 | 123.05 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 7525-1 250 (300-1) | | | |
| LNAV/VNAV DA | 7622-1¼ 347 (400-1¼) | | | |
| LNAV MDA | 7700-1 425 (500-1) | | 7700-1¼ 425 (500-1¼) | |
| CIRCLING | 7700-1¼ 416 (500-1¼) | 7740-1¼ 456 (500-1¼) | 7740-1½ 456 (500-1½) | 7840-2 556 (600-2) |

| WAAS CH 72825 W21A | APP CRS 213° | Rwy ldg 8502<br>TDZE 7277<br>Apt Elev 7284 |
|---|---|---|

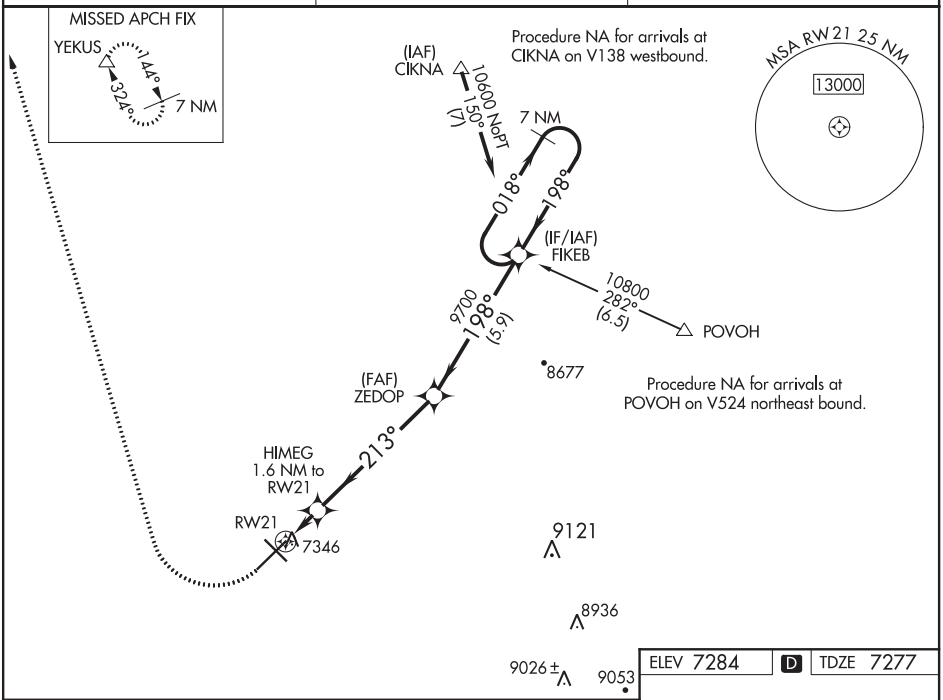
# RNAV (GPS) RWY 21
## LARAMIE RGNL (LAR)

-35°C

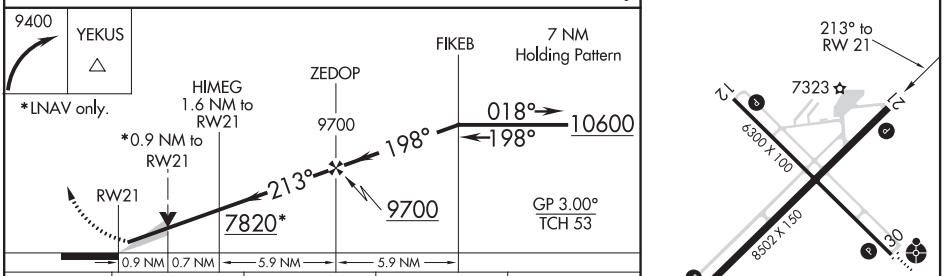
Circling to Rwy 30 NA at night.
Baro-VNAV NA.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing right turn to 9400 direct YEKUS and hold.

| ASOS | DENVER CENTER | UNICOM |
|---|---|---|
| 135.475 | 125.9 284.7 | 123.05 (CTAF) L |




ELEV 7284 D TDZE 7277




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 7527-¾ 250 (300-¾) | | | |
| LNAV/VNAV DA | 7527-¾ 250 (300-¾) | | | |
| LNAV MDA | 7600-1 323 (400-1) | | | |
| CIRCLING | 7660-1 376 (400-1) | 7740-1 456 (500-1) | 7740-1½ 456 (500-1½) | 7840-2 556 (500-2) |

REIL Rwys 3, 12 and 21 L
MIRL Rwys 3-21 and 12-30 L



NW-1, 05 NOV 2020 to 31 DEC 2020

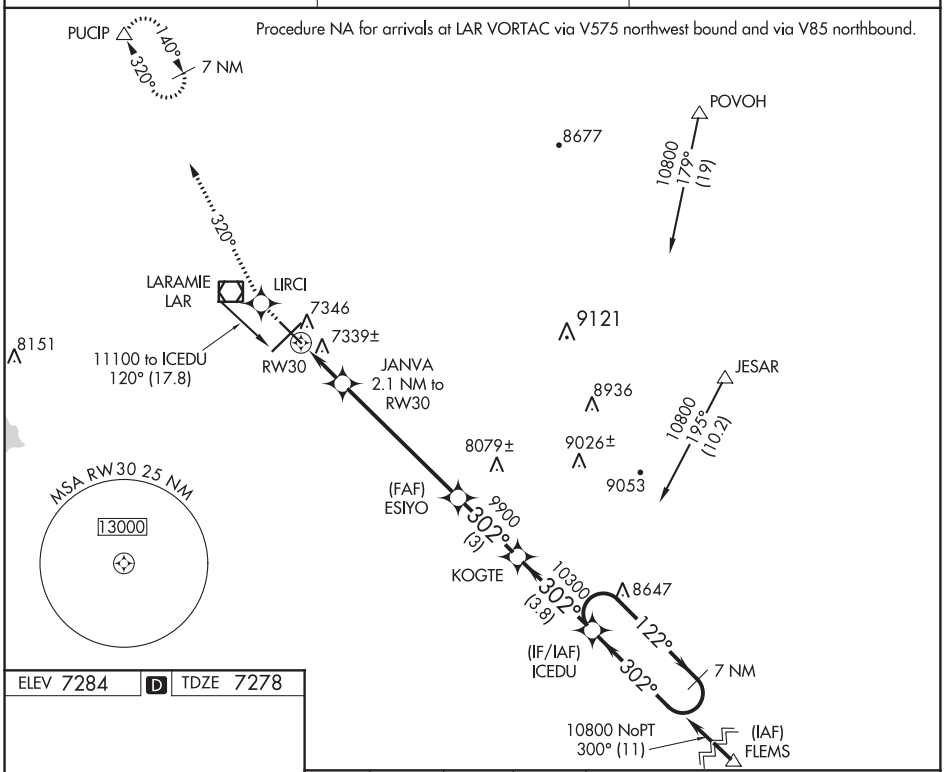
| WAAS CH 53600 W30A | APP CRS 302° | Rwy ldg 6300<br>TDZE 7278<br>Apt Elev 7284 |
|---|---|---|

# RNAV (GPS) RWY 30
## LARAMIE RGNL (LAR)

| | | |
|---|---|---|
| T<br>-35°C | Inop table does not apply. DME/DME RNP-0.3 NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -29°C (-20°F) or above 35°C (95°F). | ODALS<br>MISSED APPROACH: Climb to 9400 direct LIRCI and via 320° track to PUCIP and hold. |

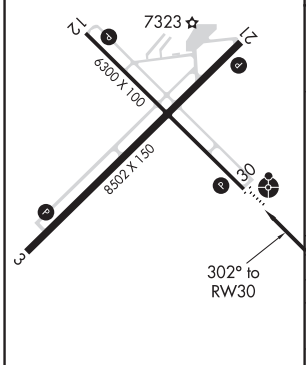
| ASOS | DENVER CENTER | UNICOM |
|---|---|---|
| 135.475 | 125.9 284.7 | 123.05 (CTAF) L |

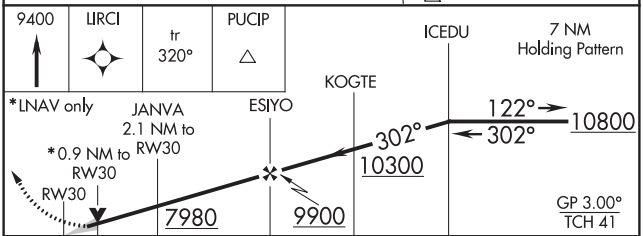
Procedure NA for arrivals at LAR VORTAC via V575 northwest bound and via V85 northbound.




NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 7284 D TDZE 7278




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 7528-1 250 (300-1) | | | |
| LNAV/VNAV DA | 7629-1¼ 351 (400-1¼) | | | |
| LNAV MDA | 7600-1 322 (400-1) | | | |
| CIRCLING | 7660-1¼ 376 (400-1¼) | 7740-1¼ 456 (500-1¼) | 7740-1½ 456 (500-1½) | 7840-2 556 (600-2) |

REIL Rwys 3,12 and 21 L
MIRL Rwys 3-21 and 12-30 L

LARAMIE, WYOMING | AL-225 (FAA) | 20198

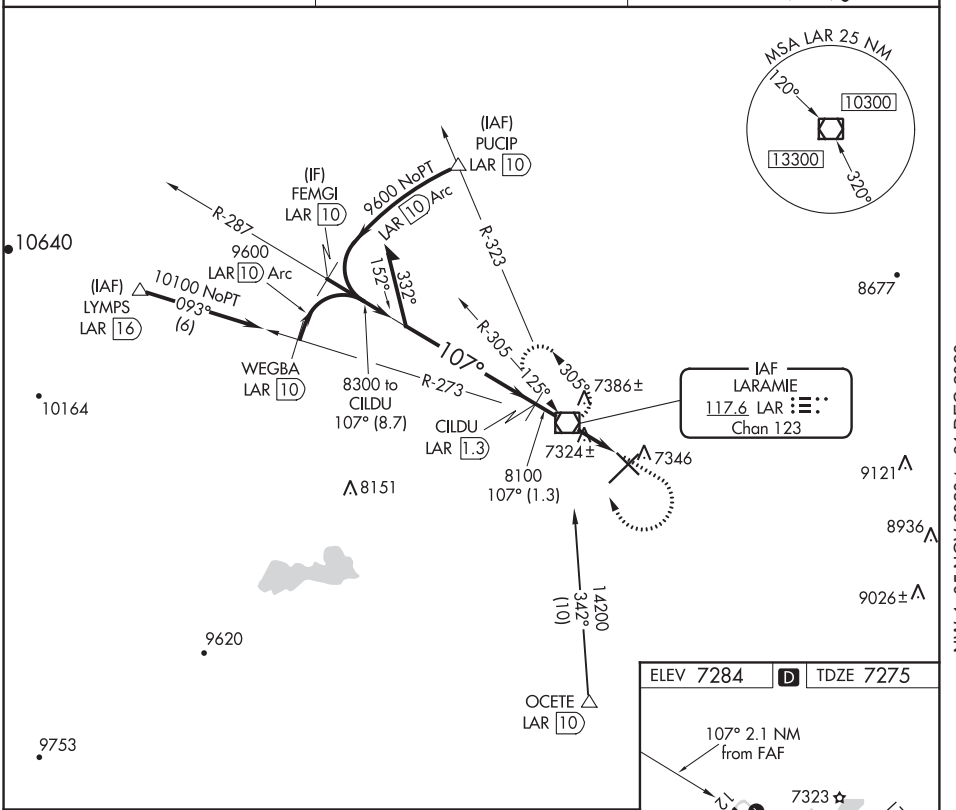
# VOR/DME RWY 12
## LARAMIE RGNL (LAR)

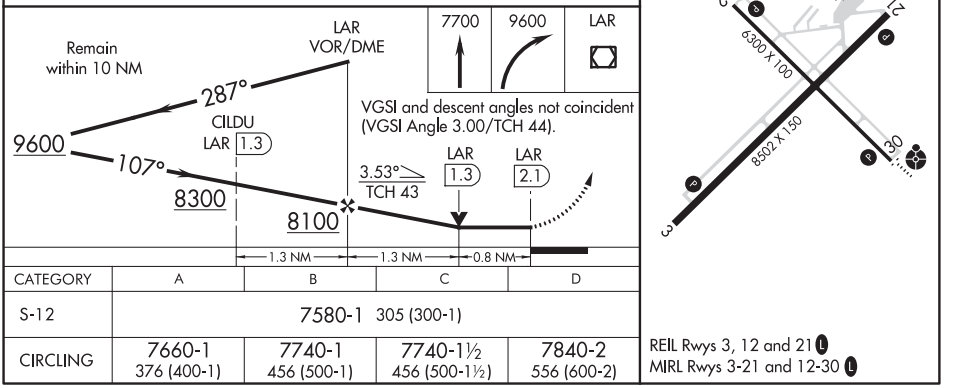
| VOR/DME LAR | APP CRS | Rwy ldg | 6300 |
|---|---|---|---|
| 117.6 | 107° | TDZE | 7275 |
| Chan 123 | | Apt Elev | 7284 |

-35°C

MISSED APPROACH: Climb to 7700 then climbing right turn to 9600 direct LAR VOR/DME and hold, continue climb-in-hold to 9600.

| ASOS | DENVER CENTER | UNICOM |
|---|---|---|
| 135.475 | 125.9 284.7 | 123.05 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-12 | 7580-1 305 (300-1) | | | |
| CIRCLING | 7660-1<br>376 (400-1) | 7740-1<br>456 (500-1) | 7740-1½<br>456 (500-1½) | 7840-2<br>556 (600-2) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# VOR/DME RWY 30
## LARAMIE RGNL (LAR)

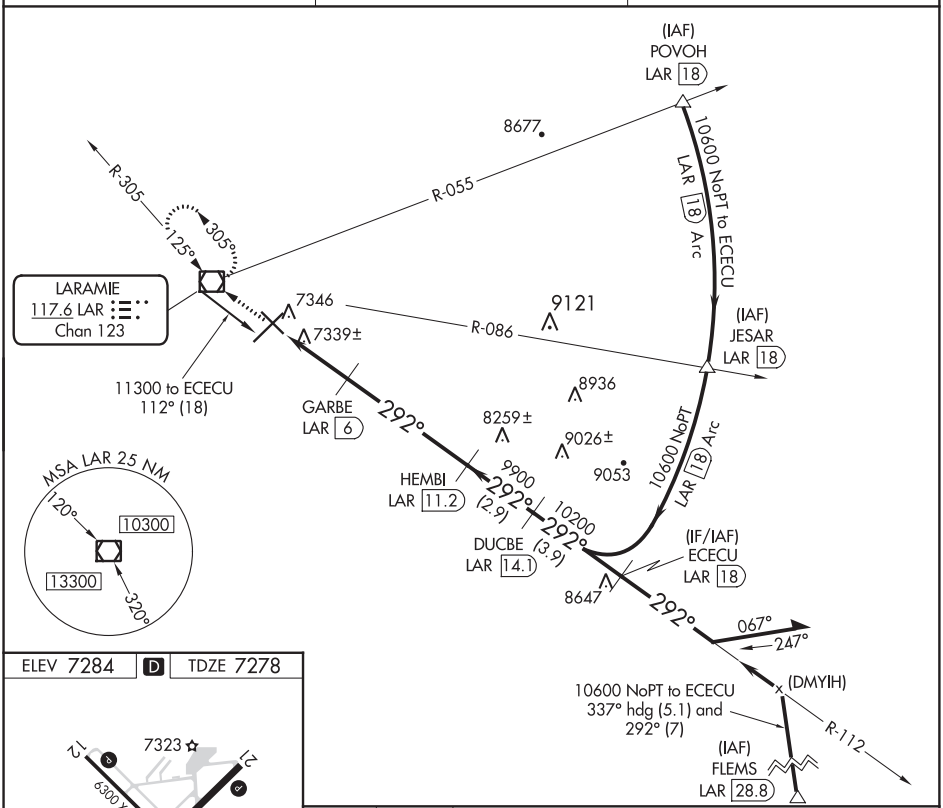
| VOR/DME LAR | APP CRS | Rwy ldg | 6300 |
|---|---|---|---|
| 117.6 | 292° | TDZE | 7278 |
| Chan 123 | | Apt Elev | 7284 |

-35°C

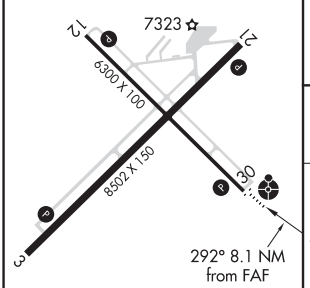
ODALS

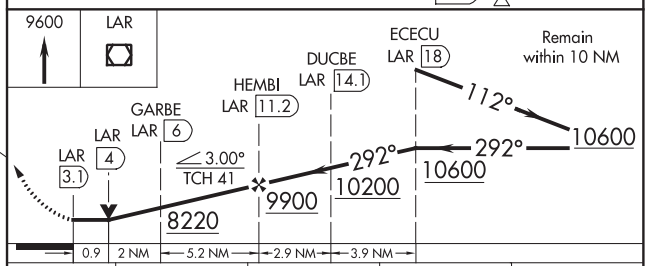
MISSED APPROACH: Climb to 9600 direct LAR VOR/DME and hold, continue climb-in-hold to 9600.

| ASOS | DENVER CENTER | UNICOM |
|---|---|---|
| 135.475 | 125.9 284.7 | 123.05 (CTAF) L |




ELEV 7284 D TDZE 7278




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-30 | 7600-¾ 322 (400-¾) | | | 7600-1 322 (400-1) |
| CIRCLING | 7660-1 376 (400-1) | 7740-1 456 (500-1) | 7740-1½ 456 (500-1½) | 7840-2 556 (600-2) |

REIL Rwys 3, 12 and 21 L
MIRL Rwys 3-21 and 12-30 L

NW-1, 05 NOV 2020 to 31 DEC 2020

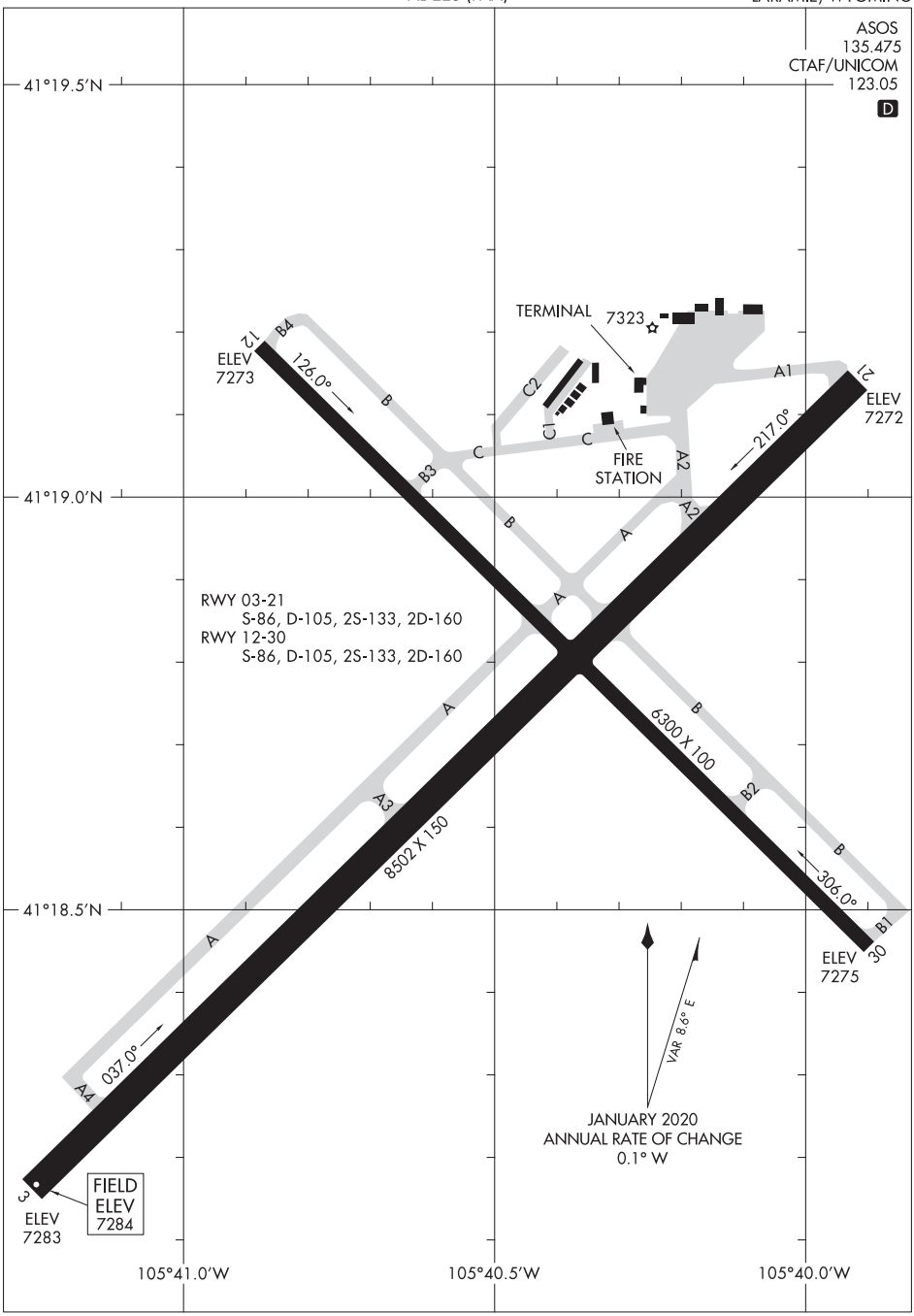
NW-1, 05 NOV 2020 to 31 DEC 2020

20086

# AIRPORT DIAGRAM

AL-225 (FAA)

LARAMIE RGNL (LAR)
LARAMIE, WYOMING




NW-1, 05 NOV 2020 to 31 DEC 2020

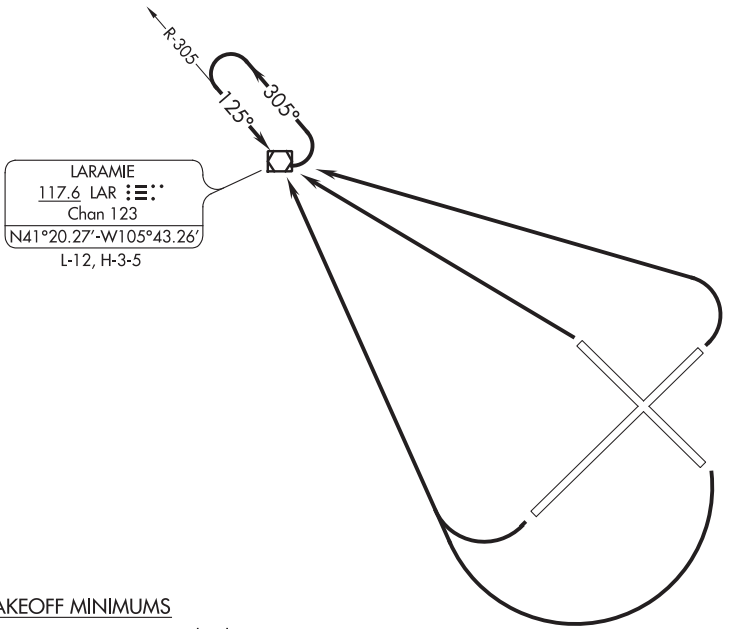
NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM
20086
LARAMIE, WYOMING
LARAMIE RGNL (LAR)

# LARAMIE ONE DEPARTURE (OBSTACLE)

SL-225 (FAA)

DENVER DEP CON
125.9 284.7
CTAF
123.05
ASOS
135.475




TAKEOFF MINIMUMS

Rwy 3, 12, 21, 30: Standard.

TAKEOFF OBSTACLE NOTES

Rwy 3: REILS 23′ from DER, 150′ left of centerline, 7273′ MSL.
Vehicles on roadway beginning 882′ from DER, across centerline, up to 15′ AGL/7310′ MSL.
Rwy 12: Vehicles on roadway 1′ from DER, across centerline, 7290′ MSL.
Vehicles on roadway beginning 844′ from DER, across centerline, up to 15′ AGL/7301′ MSL.
Rwy 21: Vehicles on roadway 142′ from DER, across centerline, up to 15′ AGL/7311′ MSL.
Vehicles on roadway beginning 443′ from DER, across centerline, 7296′ MSL.
Rwy 30: Vehicles on roadway 63′ from DER, across centerline, 7287′ MSL.
Vehicles on roadway beginning 464′ from DER, across centerline, up to 15′ AGL/7302′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 3: Climbing left turn direct LAR VOR/DME, thence. . . .

TAKEOFF RUNWAYS 12, 21: Climbing right turn direct LAR VOR/DME, thence. . . .

TAKEOFF RUNWAY 30: Climb direct LAR VOR/DME, thence. . . .

. . . .Climb in LAR VOR/DME holding pattern, hold NW, LT, 125° inbound, to cross LAR VOR/DME at or above MEA/MCA for route of flight.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

LAUREL, MONTANA AL-6781 (FAA) 20310

| WAAS CH 70422 W04A | APP CRS 036° | Rwy ldg 5199 TDZE 3488 Apt Elev 3543 |
|---|---|---|

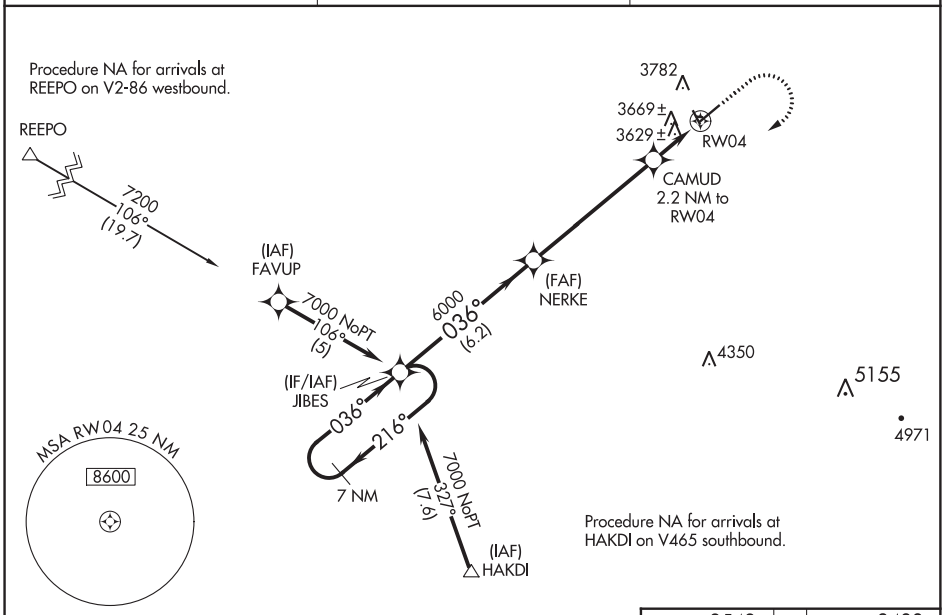
# RNAV (GPS) RWY 4
## LAUREL MUNI (6S8)

RNP APCH.

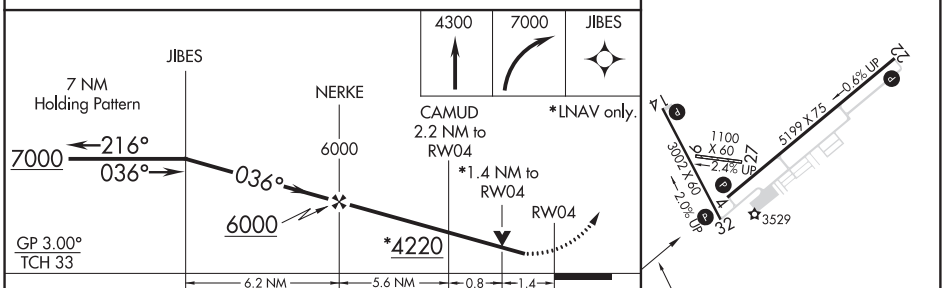
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C or above 54°C. When local altimeter setting not received, use Billings altimeter setting. Baro-VNAV and VDP NA when using Billings altimeter setting. Rwy 4 helicopter visibility reduction below ¾ SM NA. -30°C

MISSED APPROACH: Climb to 4300 then climbing right turn to 7000 direct JIBES and hold.

| AWOS-2 | BILLINGS APP CON | AUNICOM |
|---|---|---|
| 135.05 | 119.2 120.5 284.6 | 123.05 (CTAF) L |




ELEV 3543 TDZE 3488




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 3783-1 295 (300-1) | | | |
| LNAV/VNAV DA | 3981-1¾ 493 (500-1¾) | | | |
| LNAV MDA | 3980-1 492 (500-1) | | 3980-1⅜ 492 (500-1⅜) | |

MIRL Rwys 4-22 and 14-32 L



NW-1, 05 NOV 2020 to 31 DEC 2020

LAUREL, MONTANA
Amdt 1E 02JAN20

45°42′N-108°46′W

LAUREL MUNI (6S8)
RNAV (GPS) RWY 4

| WAAS CH 86822 W22A | APP CRS 216° | Rwy ldg 5199<br>TDZE 3472<br>Apt Elev 3543 |
|---|---|---|

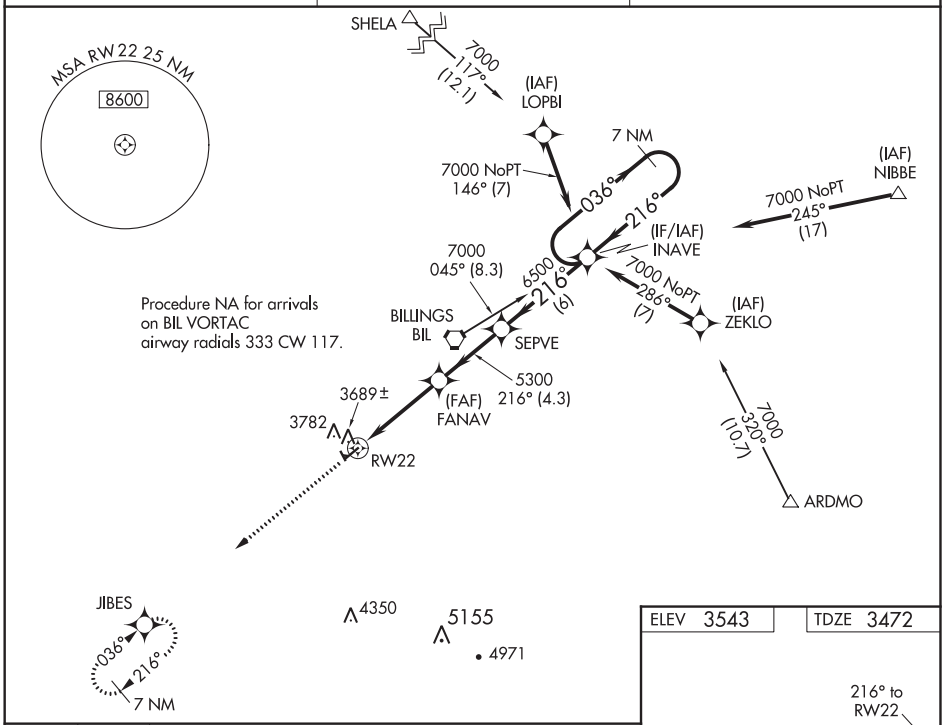
# RNAV (GPS) RWY 22
## LAUREL MUNI (6S8)

RNP APCH.

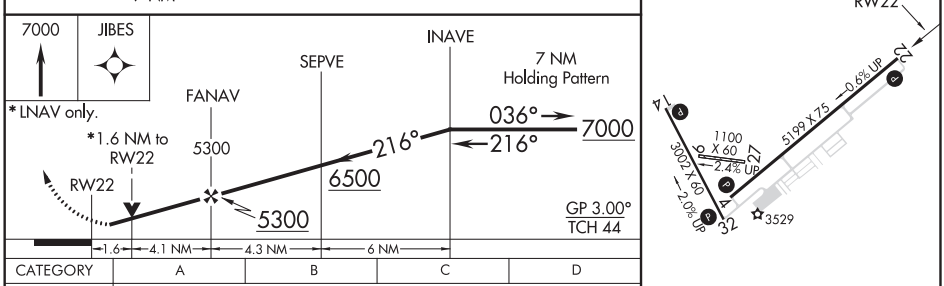
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21°C or above 53°C. When local altimeter setting not received, use Billings altimeter setting. Baro-VNAV and VDP NA when using Billings altimeter setting. Rwy 22 helicopter visibility reduction below ¾ SM NA. -30°C

MISSED APPROACH: Climb to 7000 direct JIBES and hold, continue climb-in-hold to 7000.

| AWOS-2 | BILLINGS APP CON | AUNICOM |
|---|---|---|
| 135.05 | 119.2 120.5 284.6 | 123.05 (CTAF) L |




| ELEV 3543 | TDZE 3472 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 3767-1 295 (300-1) | | | |
| LNAV/VNAV DA | 3965-1⅝ 493 (500-1⅝) | | | |
| LNAV MDA | 4000-1 528 (500-1) | | 4000-1⅝ 528 (500-1⅝) | |

MIRL Rwys 4-22 and 14-32 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

LAUREL, MONTANA | AL-6781 (FAA) | 20310

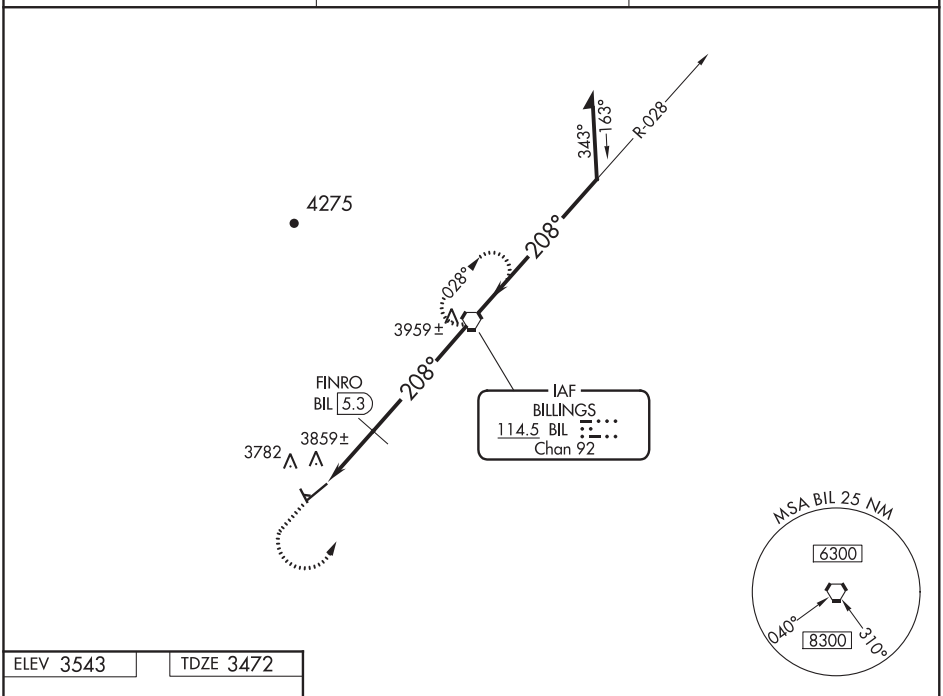
# VOR RWY 22
## LAUREL MUNI (6S8)

| VORTAC BIL 114.5 Chan 92 | APP CRS 208° | Rwy ldg 5199 / TDZE 3472 / Apt Elev 3543 |
|---|---|---|

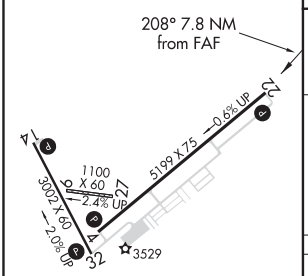
When local altimeter setting not received, use Billings altimeter setting. Rwy 22 helicopter visibility reduction below ¾ SM NA. Circling NA to Rwys 9 and 27. Circling Rwy 14, 32 NA at night. -30°C

MISSED APPROACH: Climb to 4700 then climbing left turn to 6300 direct BIL VORTAC and hold.

| AWOS-2 | BILLINGS APP CON | AUNICOM |
|---|---|---|
| 135.05 | 119.2 120.5 284.6 | 123.05 (CTAF) L |

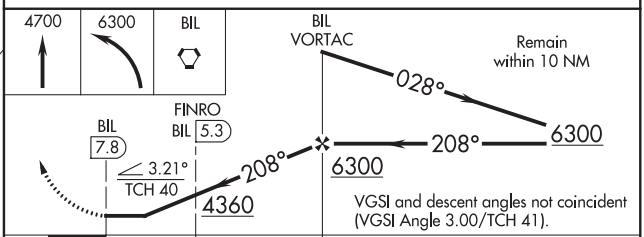



ELEV 3543 | TDZE 3472




MIRL Rwys 4-22 and 14-32 L

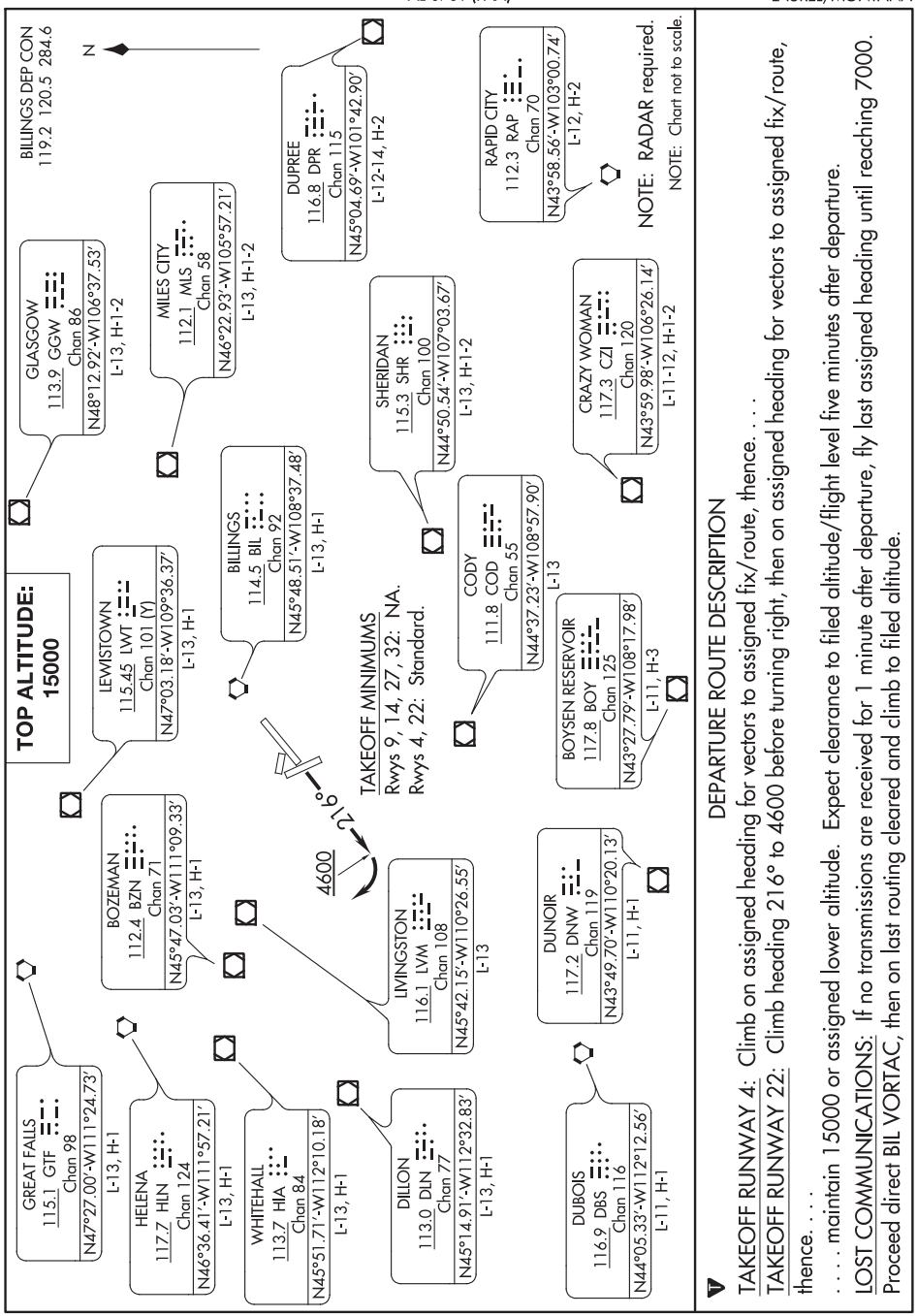
| FAF to MAP 7.8 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 7:48 | 5:12 | 3:54 | 3:07 | 2:36 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-22 | 4360-1¼ 888 (900-1¼) | | 4360-2¾ 888 (900-2¾) | 4360-3 888 (900-3) |
| CIRCLING | 4360-1¼ 817 (900-1¼) | | 4360-2¾ 817 (900-2¾) | 4360-3 817 (900-3) |
| FINRO FIX MINIMUMS | | | | |
| S-22 | 4160-1 688 (700-1) | | 4160-2 688 (700-2) | 4160-2¼ 688 (700-2¼) |
| CIRCLING | 4220-1 677 (700-1) | | 4220-2 677 (700-2) | 4340-2¾ 797 (800-2¾) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

LEWISTON, IDAHO | AL-515 (FAA) | 20310

# ILS RWY 26

## LEWISTON-NEZ PERCE COUNTY (LWS)

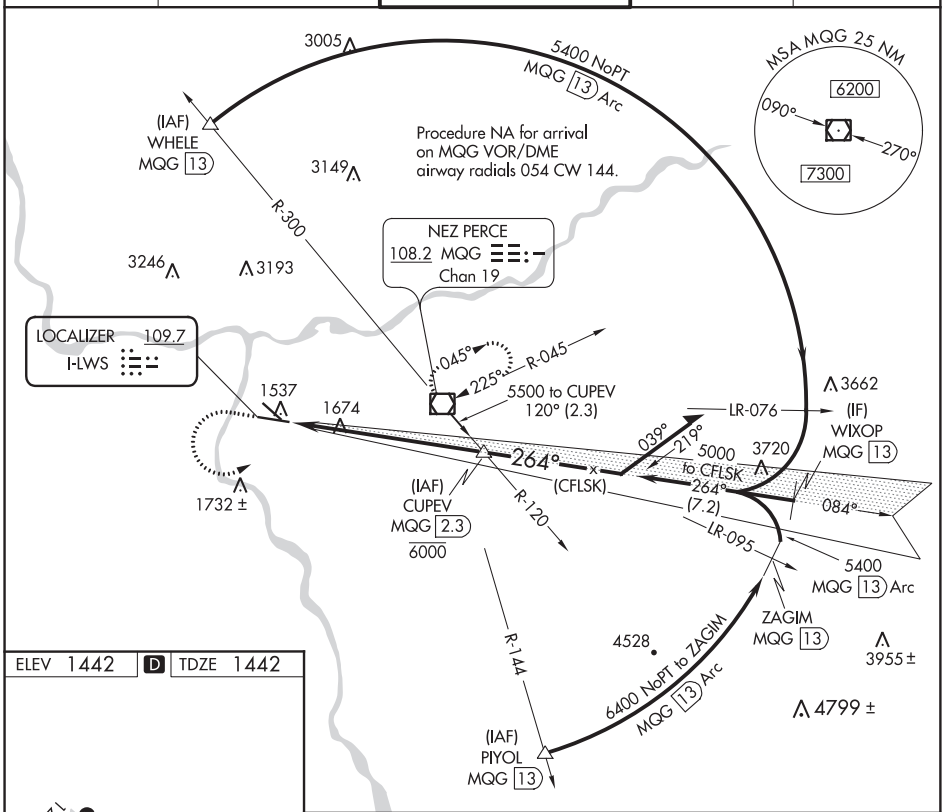
| LOC I-LWS | APP CRS | Rwy ldg | 6511 |
|---|---|---|---|
| 109.7 | 264° | TDZE | 1442 |
| | | Apt Elev | 1442 |

When local altimeter setting not received, procedure NA. Autopilot coupled approach NA below 2500.

MALSR

MISSED APPROACH: Climb to 3000 then climbing left turn to 5300 direct MQG VOR/DME and hold, continue climb-in-hold to 5300.

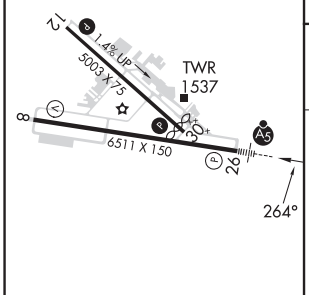
| ASOS | SEATTLE CENTER | LEWISTON TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 135.575 | 123.95 290.55 | 119.4 (CTAF) L 318.8 | 121.9 | 122.95 |

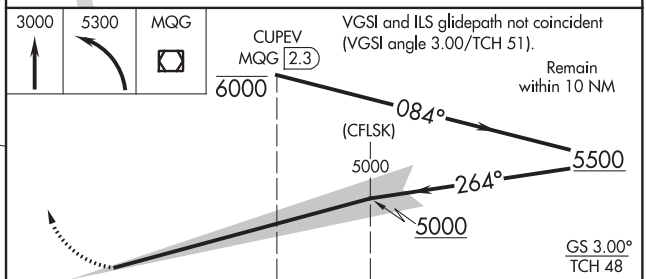



NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 1442 | D | TDZE 1442




REIL Rwy 8 L
REIL RWY 12
HIRL Rwy 8-26
MIRL Rwy 12-30

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 26 | 1642-½ 200 (200-½) | | | |

| APP CRS | Rwy ldg | 4750 |
|---|---|---|
| 297° | TDZE | 1442 |
| | Apt Elev | 1442 |

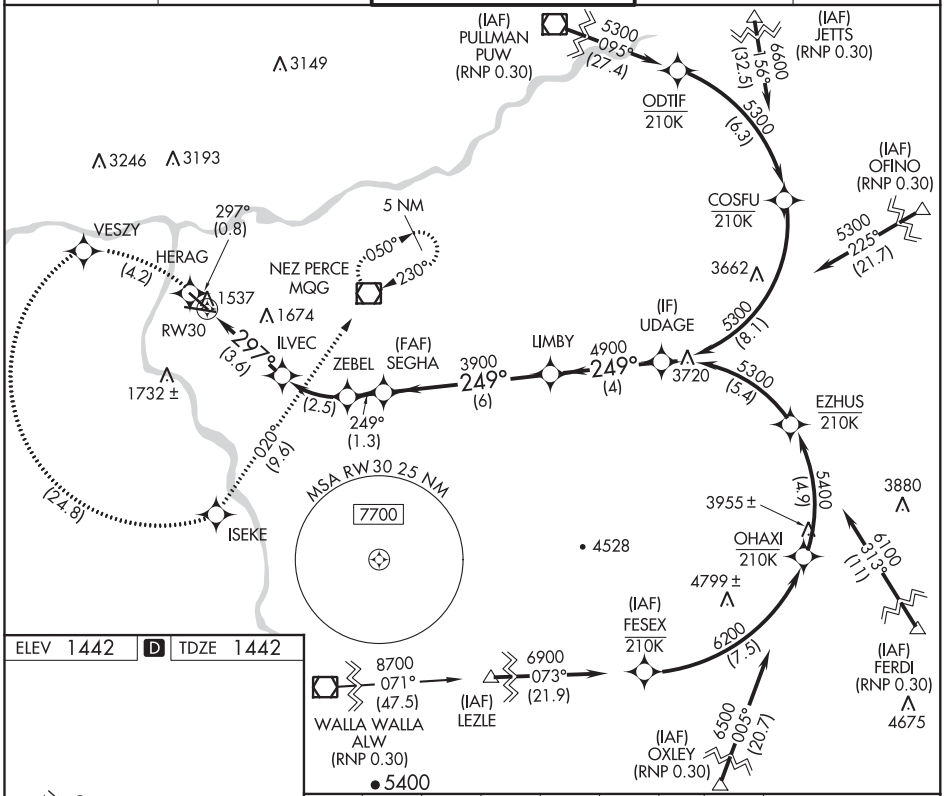
# RNAV (RNP) RWY 30

## LEWISTON-NEZ PERCE COUNTY (LWS)

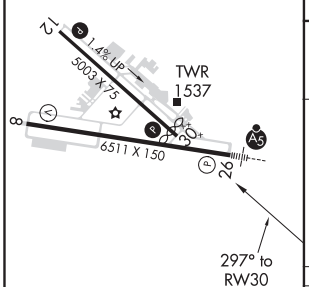
GPS and RF Required. For uncompensated Baro-VNAV systems, procedure NA below -16°C (4°F) or above 46°C (114°F). Missed approach requires RNP less than RNP 1.00.

MISSED APPROACH: Climb to 6000 on track 297° to HERAG, left turn to VESZY, left turn to ISEKE and on track 020° to MQG VOR/DME and hold.

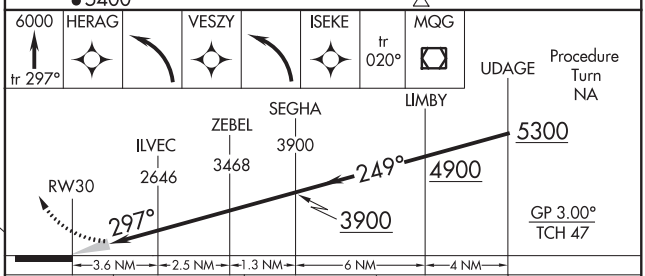
| ASOS | SEATTLE CENTER | LEWISTON TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 135.575 | 123.95 290.55 | 119.4 (CTAF) L 318.8 | 121.9 | 122.95 |




| ELEV 1442 | D | TDZE 1442 |
|---|---|---|




REIL Rwy 8 L
REIL Rwy 12
HIRL Rwy 8-26
MIRL Rwy 12-30




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.30 DA | 1778-1⅛ | | 336 (400-1⅛) | |

**AUTHORIZATION REQUIRED**

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

LEWISTON, IDAHO | AL-515 (FAA) | 20310

| APP CRS | Rwy ldg | 6511 |
|---|---|---|
| 084° | TDZE | 1440 |
| | Apt Elev | 1442 |

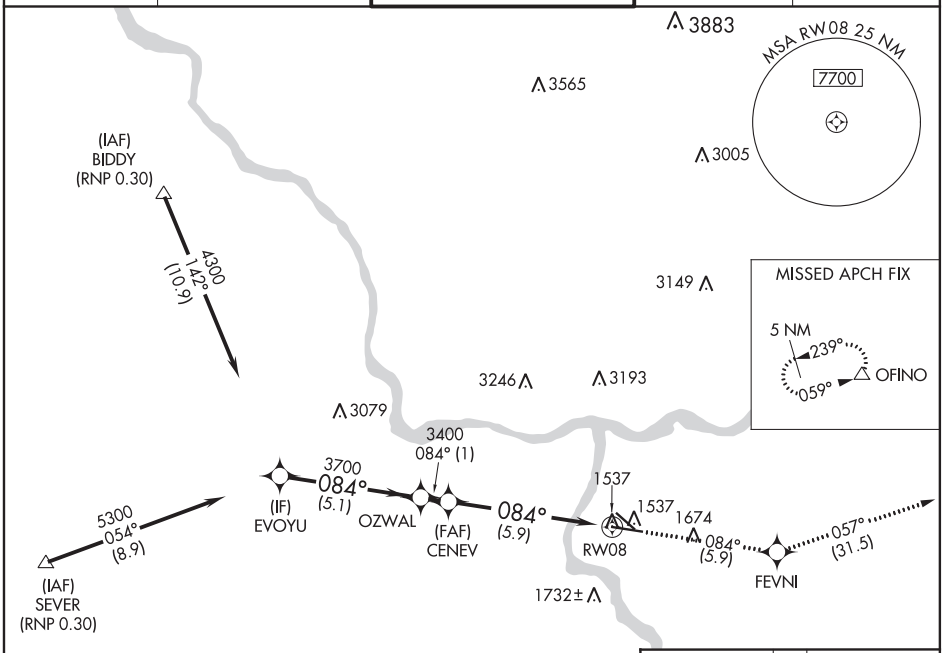
# RNAV (RNP) Z RWY 8

## LEWISTON-NEZ PERCE COUNTY (LWS)

GPS required. For uncompensated Baro-VNAV systems, procedure NA below -16°C (3°F) or above 46°C (115°F). When VGSI inop, procedure NA at night.

MISSED APPROACH: Climb to 6000 via track 084° to FEVNI and via track 057° to OFINO and hold.

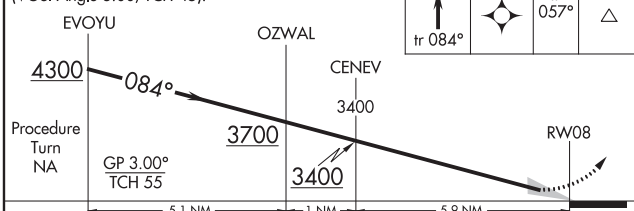
| ASOS | SEATTLE CENTER | LEWISTON TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 135.575 | 123.95 290.55 | 119.4 (CTAF) L 318.8 | 121.9 | 122.95 |




Procedure NA for arrivals at SEVER via V187 westbound.

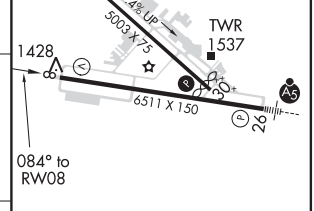
ELEV 1442 | D | TDZE 1440

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 45).




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.30 DA | 1752-1 312 (400-1) | | | |

AUTHORIZATION REQUIRED




REIL Rwy 8 L
REIL Rwy 12
HIRL Rwy 8-26
MIRL Rwy 12-30

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 4750 |
|---|---|---|
| 117° | TDZE | 1415 |
| | Apt Elev | 1442 |

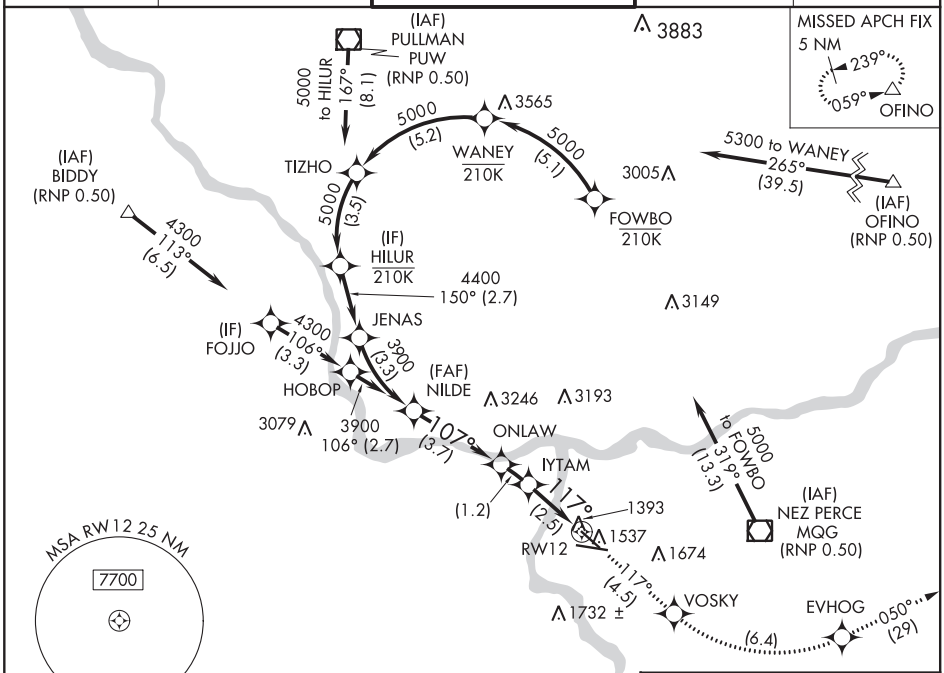
# RNAV (RNP) Z RWY 12

## LEWISTON-NEZ PERCE COUNTY (LWS)

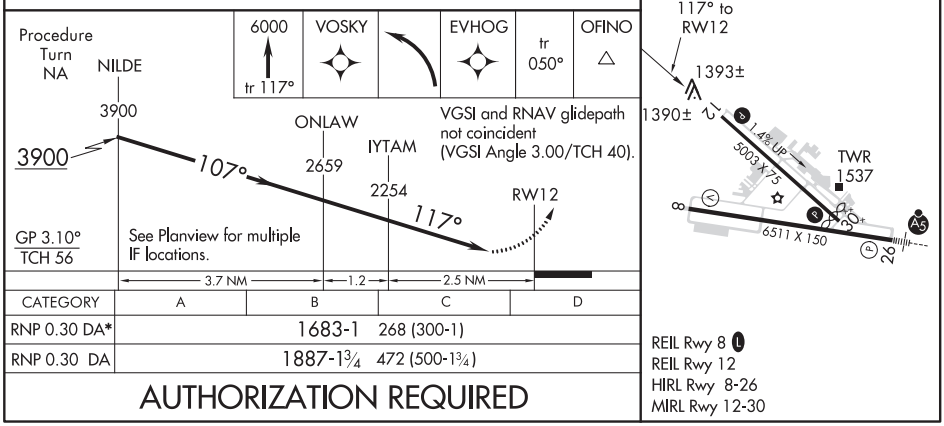
GPS and RF Required. For uncompensated Baro-VNAV systems, procedure NA below -16°C (3°F) or above 36°C (98°F). Procedure NA at night.
* Missed approach requires minimum climb of 260 feet per NM to 3400.

MISSED APPROACH: Climb to 6000 via track 117° to VOSKY and via left turn to EVHOG and via track 050° to OFINO and hold.

| ASOS | SEATTLE CENTER | LEWISTON TOWER * | GND CON | UNICOM |
|---|---|---|---|---|
| 135.575 | 123.95 290.55 | 119.4 (CTAF) L 318.8 | 121.9 | 122.95 |




| ELEV 1442 | D | TDZE 1415 |
|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.30 DA* | 1683-1 268 (300-1) | | | |
| RNP 0.30 DA | 1887-1¾ 472 (500-1¾) | | | |

**AUTHORIZATION REQUIRED**

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

LEWISTON, IDAHO | AL-515 (FAA) | 20310

| APP CRS | Rwy ldg | 6511 |
|---|---|---|
| 264° | TDZE | 1442 |
| | Apt Elev | 1442 |

# RNAV (RNP) Z RWY 26

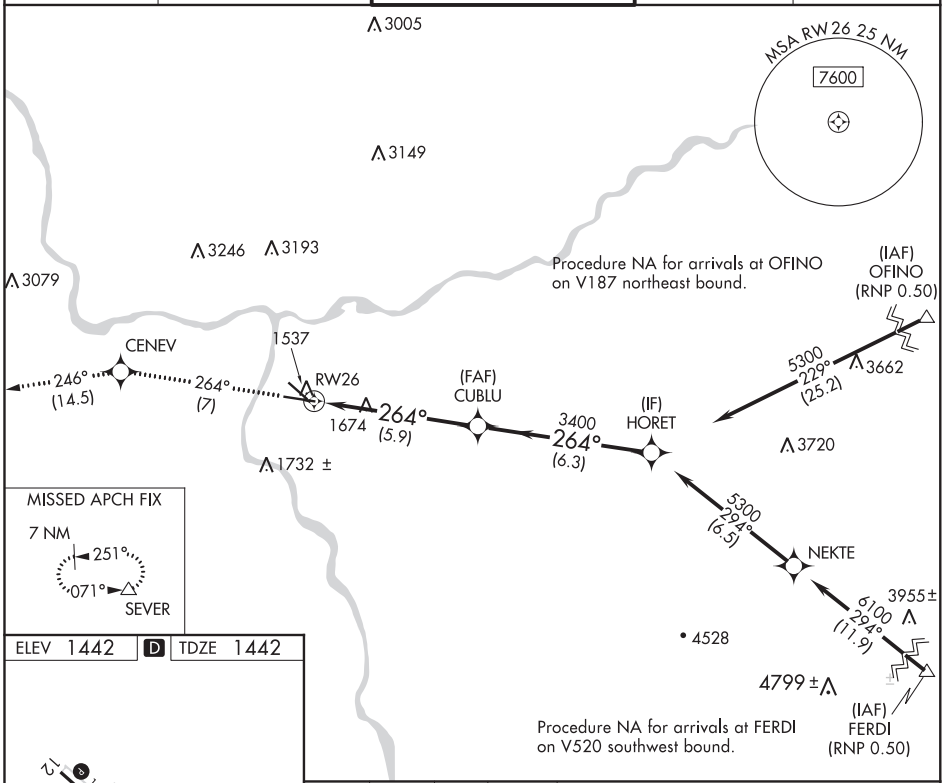
## LEWISTON-NEZ PERCE COUNTY (LWS)

For uncompensated Baro-VNAV systems, procedure NA below -16°C (3°F) or above 46°C (115°F). GPS required. For inoperative MALSR, increase RNP 0.30 visibility all Cats to 1⅞ miles.

MALSR

MISSED APPROACH: Climb to 7000 on track 264° to CENEV and on track 246° to SEVER and hold, continue climb-in-hold to 7000.

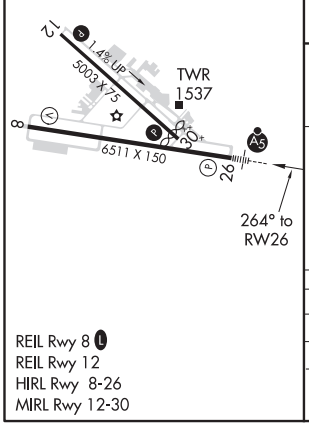
| ASOS | SEATTLE CENTER | LEWISTON TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 135.575 | 123.95 290.55 | 119.4 (CTAF) L 318.8 | 121.9 | 122.95 |




MISSED APCH FIX

7 NM 251° 071° SEVER

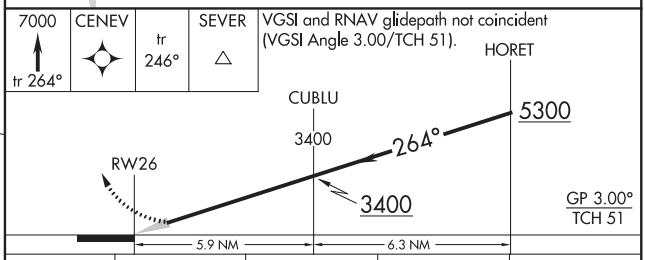
ELEV 1442 | D | TDZE 1442




REIL Rwy 8 L
REIL Rwy 12
HIRL Rwy 8-26
MIRL Rwy 12-30

| 7000 | CENEV | tr 246° | SEVER |
|---|---|---|---|
| tr 264° | | | |

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 51).




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.20 DA | 1806-¾ 364 (400-¾) | | | |
| RNP 0.30 DA | 2003-1½ 561 (600-1½) | | | |

**AUTHORIZATION REQUIRED**

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 97600 W08A | APP CRS 084° | Rwy ldg 6511<br>TDZE 1440<br>Apt Elev 1442 |
|---|---|---|

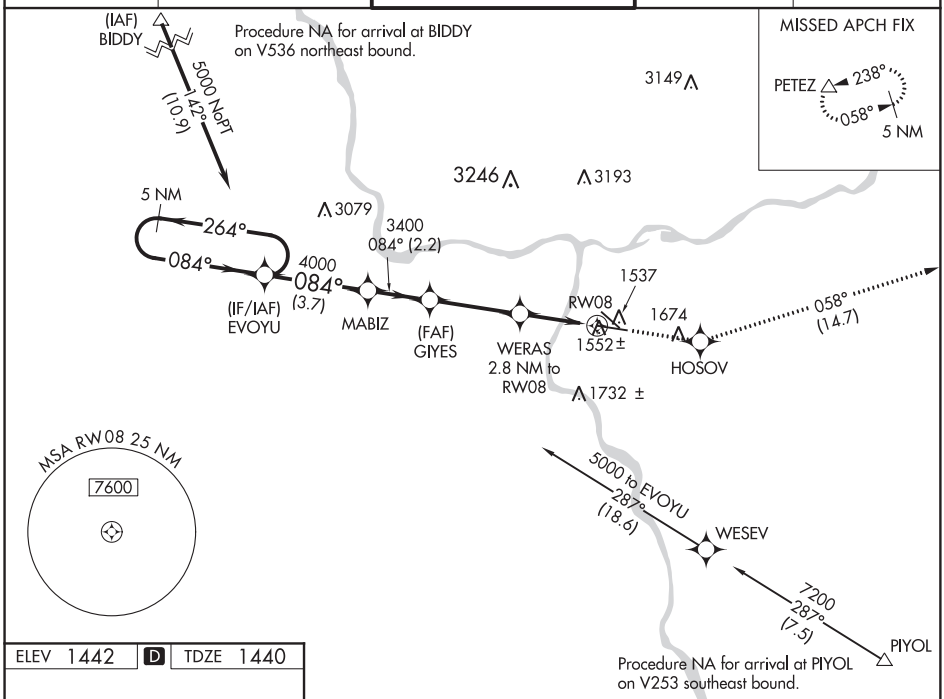
# RNAV (GPS) Y RWY 8

## LEWISTON-NEZ PERCE COUNTY (LWS)

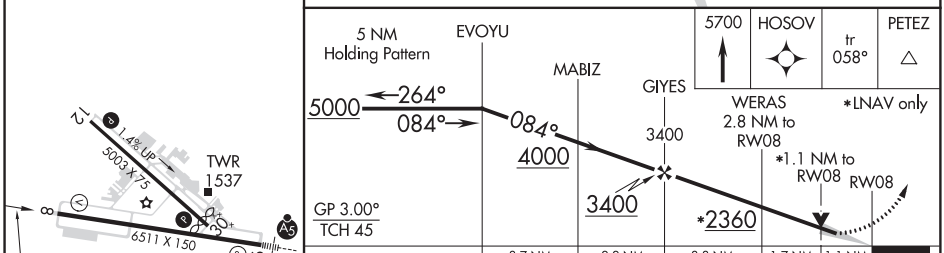
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -14°C (7°F) or above 34°C (93°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 5700 direct HOSOV and on track 058° to PETEZ and hold, continue climb-in-hold to 5700.

| ASOS | SEATTLE CENTER | LEWISTON TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 135.575 | 123.95 290.55 | 119.4 (CTAF) L 318.8 | 121.9 | 122.95 |




| ELEV 1442 | D | TDZE 1440 |
|---|---|---|




REIL Rwy 8 L
REIL Rwy 12
HIRL Rwy 8-26
MIRL Rwy 12-30

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 1690-¾ 250 (300-¾) | | | |
| LNAV/VNAV DA | 1736-1 296 (300-1) | | | |
| LNAV MDA | 1820-1 380 (400-1) | | 1820-1⅛ 380 (400-1⅛) | |
| CIRCLING | 2000-1 558 (600-1) | | 2000-1½ 558 (600-1½) | 2160-2¼ 718 (800-2¼) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

LEWISTON, IDAHO | AL-515 (FAA) | 20310

| WAAS CH 56500 W12A | APP CRS 117° | Rwy ldg 4750<br>TDZE 1415<br>Apt Elev 1442 |
|---|---|---|

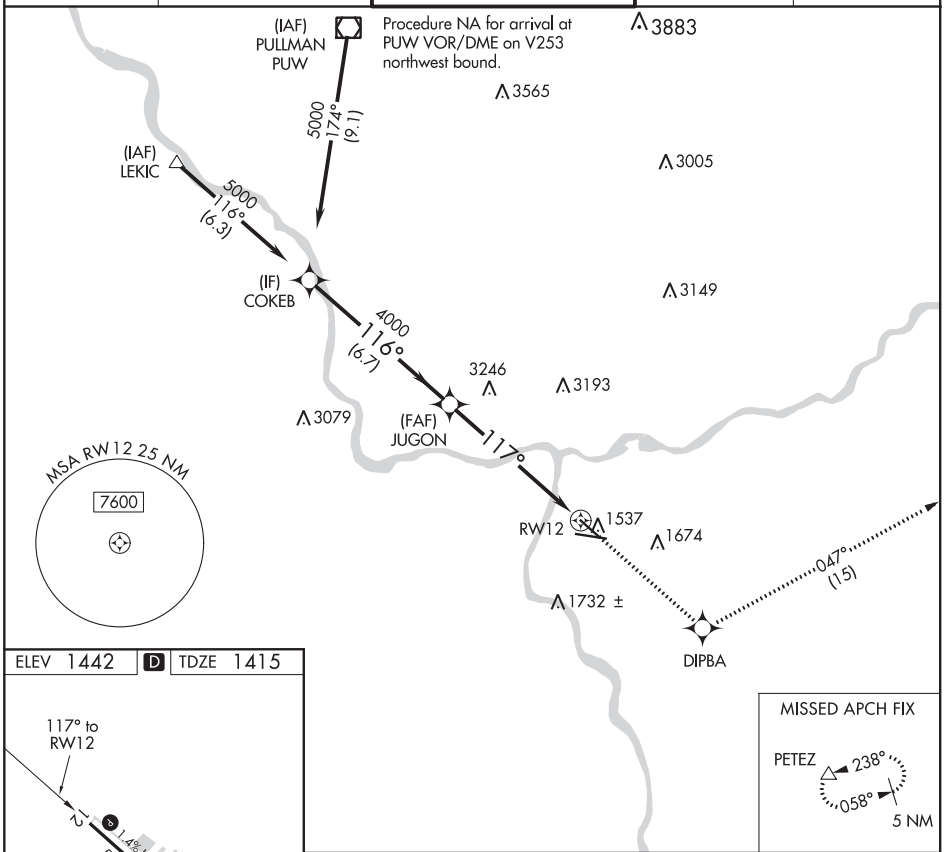
# RNAV (GPS) Y RWY 12
## LEWISTON-NEZ PERCE COUNTY (LWS)

T
A NA

When local altimeter setting not received, procedure NA. DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 5700 direct DIPBA and on track 047° to PETEZ and hold, continue climb-in-hold to 5700.

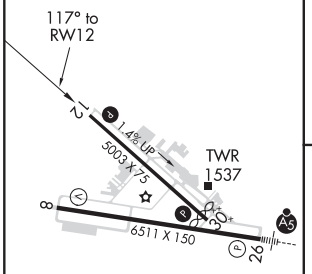
| ASOS | SEATTLE CENTER | LEWISTON TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 135.575 | 123.95 290.55 | 119.4 (CTAF) L 318.8 | 121.9 | 122.95 |




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 1442 | D | TDZE 1415



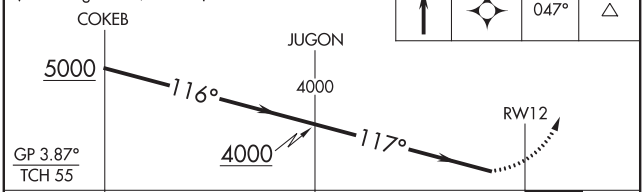

REIL Rwy 8 L
REIL Rwy 12
HIRL Rwy 8-26
MIRL Rwy 12-30

MISSED APCH FIX




VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 40).

| 5700 | DIPBA | tr 047° | PETEZ |
|---|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 1793-1 378 (400-1) | | NA | |

LEWISTON, IDAHO
Amdt 2B 26JUN14

46°22′N-117°01′W

LEWISTON-NEZ PERCE COUNTY (LWS)
RNAV (GPS) Y RWY 12

| WAAS CH 78012 W26A | APP CRS 264° | Rwy ldg 6511<br>TDZE 1442<br>Apt Elev 1442 |
|---|---|---|

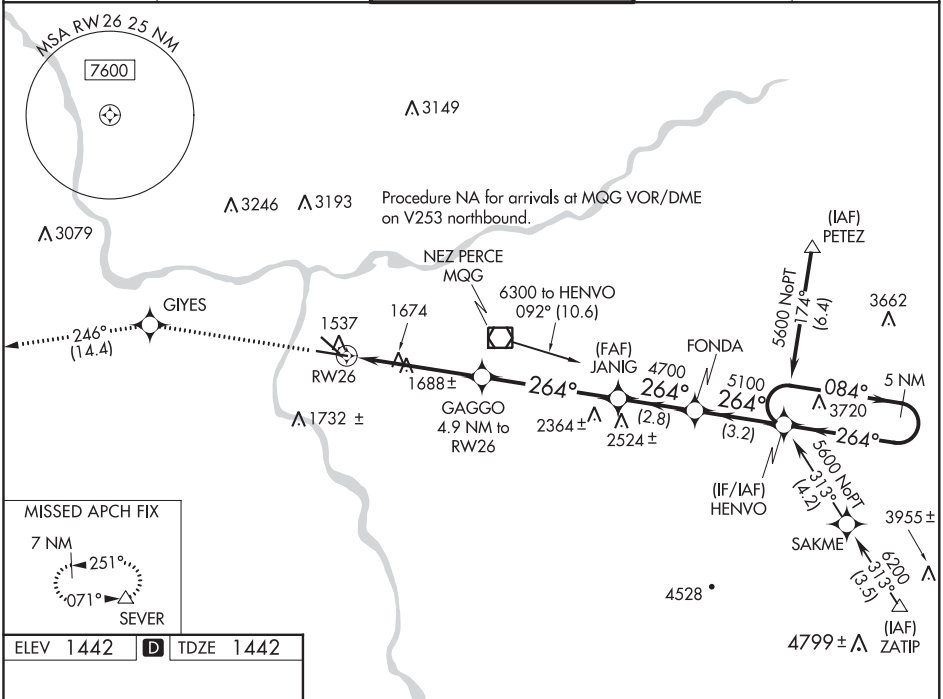
# RNAV (GPS) Y RWY 26
## LEWISTON-NEZ PERCE COUNTY (LWS)

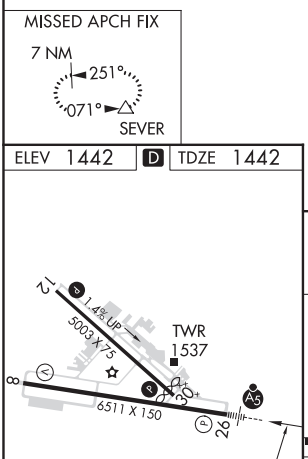
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.

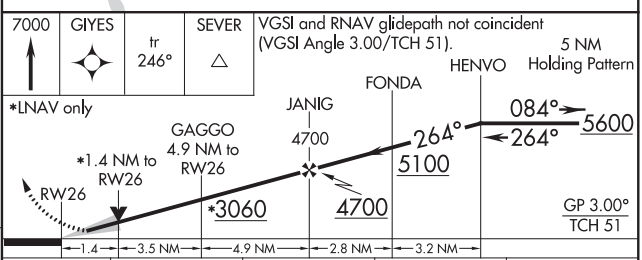
MALSR

MISSED APPROACH: Climb to 7000 direct GIYES and on track 246° to SEVER and hold, continue climb-in-hold to 7000.

| ASOS | SEATTLE CENTER | LEWISTON TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 135.575 | 123.95 290.55 | 119.4 (CTAF) L 318.8 | 121.9 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 1642-½ 200 (200-½) | | | |
| LNAV/VNAV DA | 1962-1¼ 520 (600-1¼) | | | |
| LNAV MDA | 1940-½ 498 (500-½) | | 1940-1 498 (500-1) | |
| CIRCLING | 2000-1 558 (600-1) | | 2000-1½ 558 (600-1½) | 2160-2¼ 718 (800-2¼) |

REIL Rwy 8 L
REIL Rwy 12
HIRL Rwy 8-26
MIRL Rwy 12-30

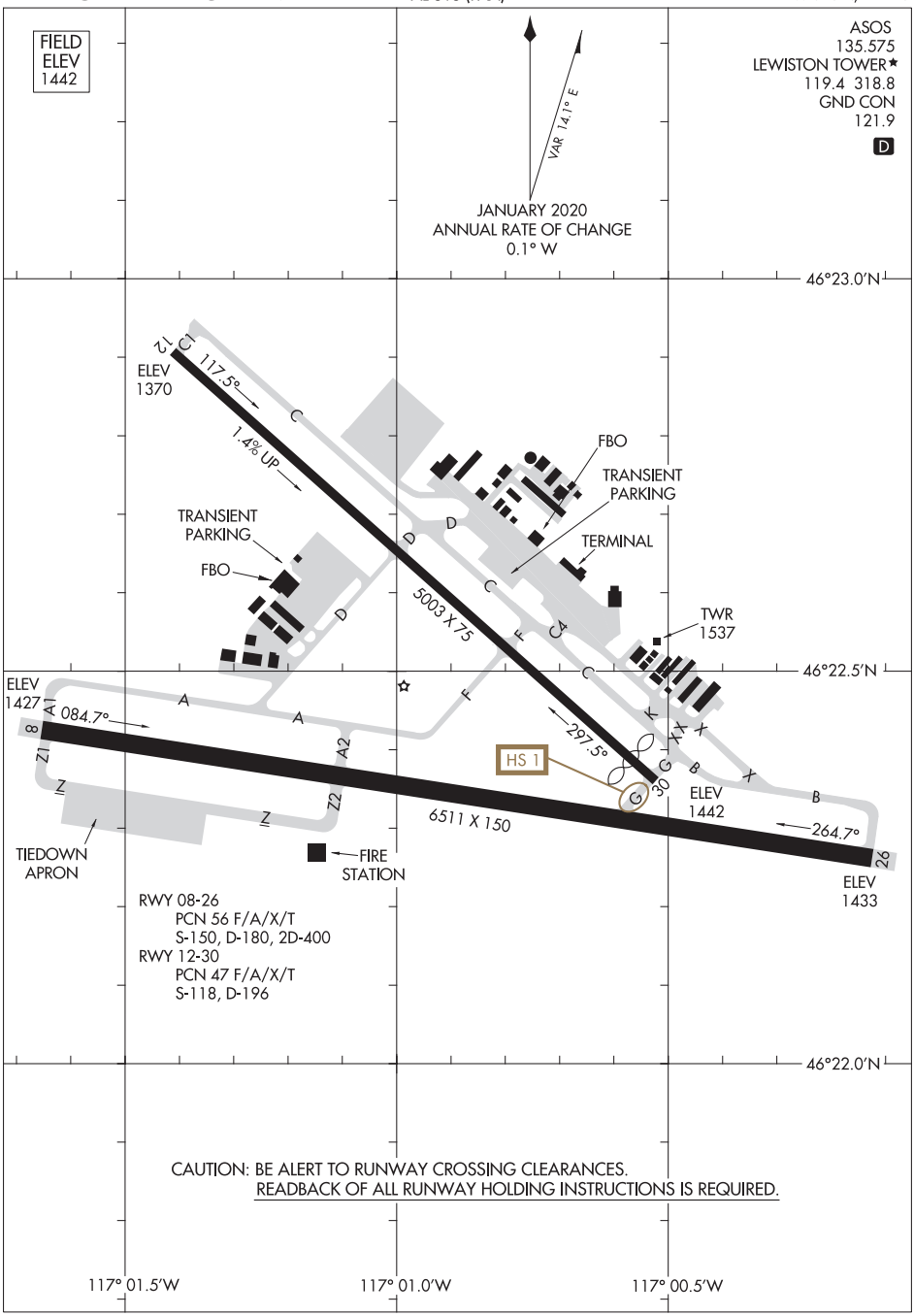

NW-1, 05 NOV 2020 to 31 DEC 2020

20310

# AIRPORT DIAGRAM

LEWISTON-NEZ PERCE COUNTY (LWS)
LEWISTON, IDAHO

AL-515 (FAA)




NW-1, 05 NOV 2020 to 31 DEC 2020

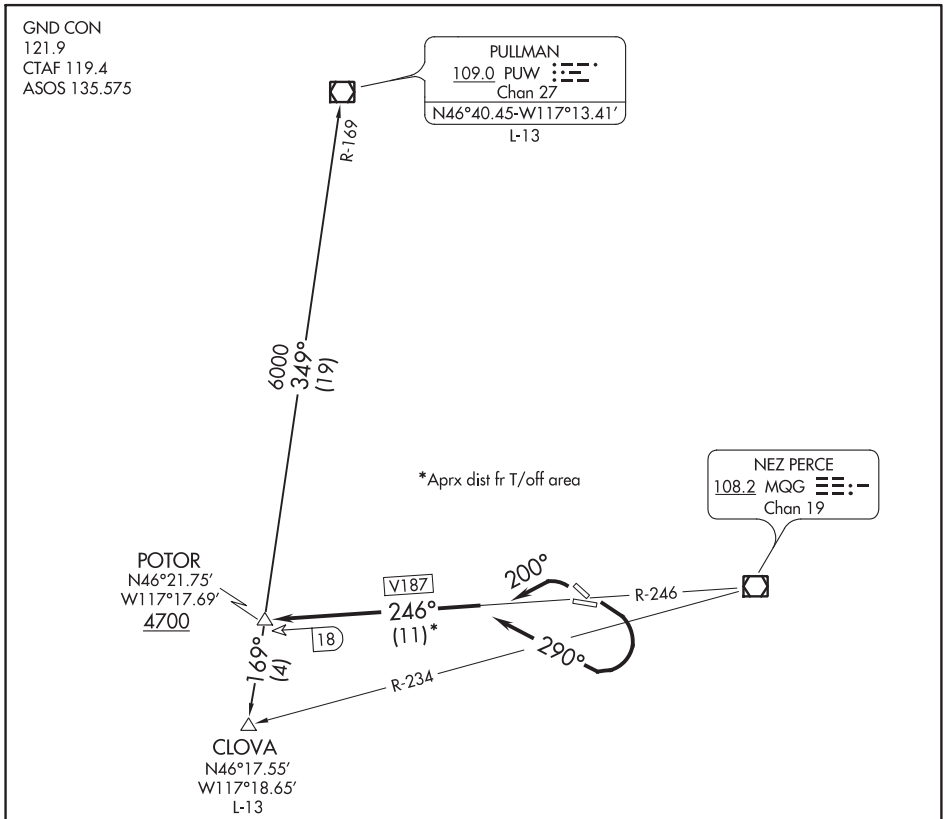
NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM
20310
LEWISTON, IDAHO
LEWISTON-NEZ PERCE COUNTY (LWS)

# POTOR TWO DEPARTURE








NOTE: Departures may be restricted to cross POTOR INT at 5000.

NOTE: Minimum climb required- Rwys 26 and 30-300′/NM to 4700′ (750 FPM/150K IAS, 1000 FPM/200K IAS).
Rwys 8 and 12-270′/NM to 4700′ (675 FPM/150K IAS, 900 FPM/200K IAS) or 4600′ ceiling and three miles visibility.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 8, 12: Turn right heading 290°. Thence....

TAKEOFF RUNWAYS 26, 30: Turn left heading 200°. Thence....

....Intercept and proceed via MQG R-246 (V187) to POTOR INT. Thence via (assigned route) or (transition).

CLOVA TRANSITION (POTOR2.CLOVA): From over POTOR INT on PUW R-169 to CLOVA INT.

PULLMAN TRANSITION (POTOR2.PUW): From over POTOR INT on PUW R-169 to PUW VOR/DME.

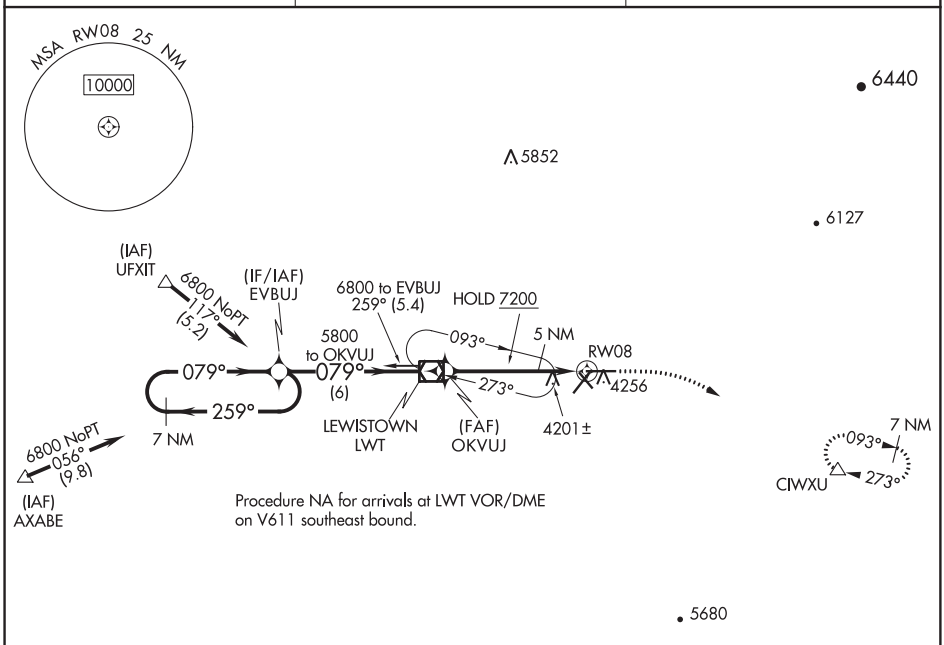
| WAAS CH 86700 W08A | APP CRS 079° | Rwy ldg 6100<br>TDZE 4129<br>Apt Elev 4170 |
|---|---|---|

# RNAV (GPS) RWY 8
## LEWISTOWN MUNI (LWT)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -26°C (-14°F) or above 50°C (123°F). DME/DME RNP- 0.3 NA.

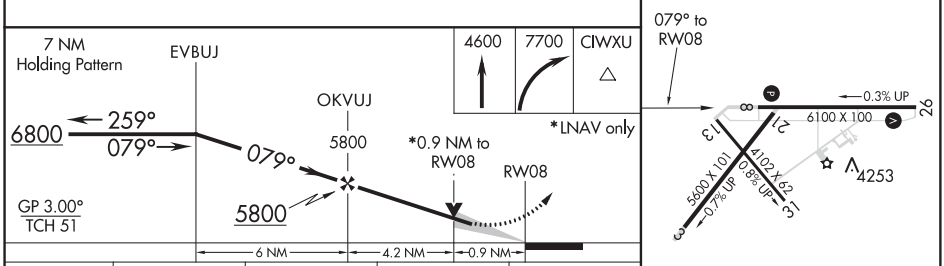
MISSED APPROACH: Climb to 4600, then climbing right turn to 7700 direct CIWXU and hold, continue climb-in-hold to 7700.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 118.375 | 133.4 285.4 | 123.0 (CTAF) L |




Procedure NA for arrivals at LWT VOR/DME on V611 southeast bound.

| ELEV 4170 | D | TDZE 4129 |
|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4379-¾ 250 (300-¾) | | | |
| LNAV/VNAV DA | 4419-⅞ 290 (300-⅞) | | | |
| LNAV MDA | 4460-1 331 (300-1) | | | |
| C CIRCLING | 4680-1 510 (600-1) | 4820-1 650 (700-1) | 4980-2¼ 810 (900-2¼) | 5240-3 1070 (1100-3) |

REIL Rwys 8 and 26 L
MIRL Rwys 3-21, 8-26 and 13-31 L




NW-1, 05 NOV 2020 to 31 DEC 2020

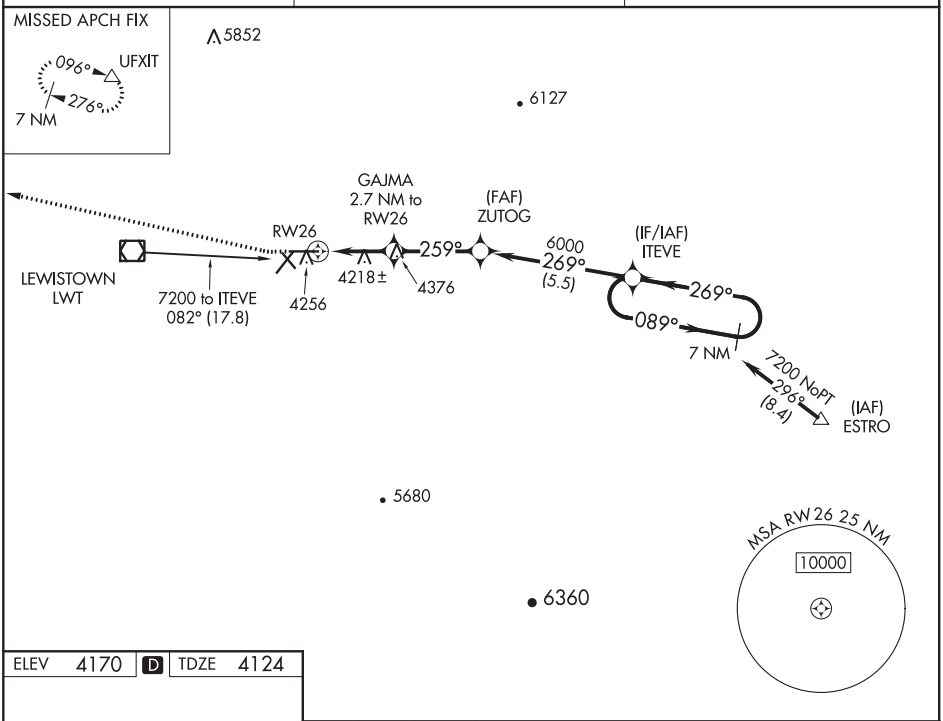
| WAAS CH 50230 W26A | APP CRS 259° | Rwy ldg 6100<br>TDZE 4124<br>Apt Elev 4170 |
|---|---|---|

# RNAV (GPS) RWY 26
## LEWISTOWN MUNI (LWT)

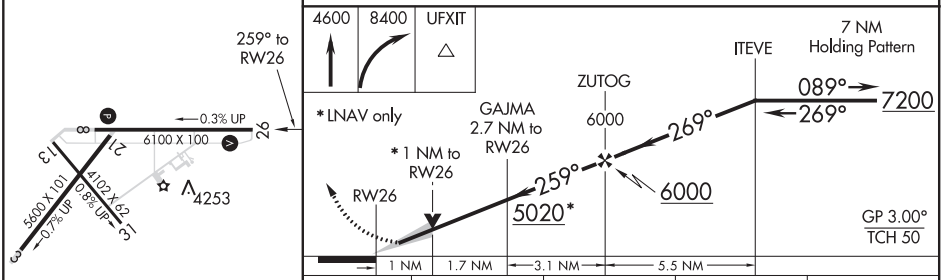
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -26°C (-14°F) or above 50°C (123°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 4600 then climbing right turn to 8400 direct UFXIT and hold, continue climb-in-hold to 8400.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 118.375 | 133.4 285.4 | 123.0 (CTAF) L |




| ELEV 4170 | D | TDZE 4124 |
|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4324-¾ 200 (200-¾) | | | |
| LNAV/VNAV DA | 4389-⅞ 265 (300-⅞) | | | |
| LNAV MDA | 4480-1 356 (400-1) | | | |
| C CIRCLING | 4680-1 510 (600-1) | 4820-1 650 (700-1) | 4980-2¼ 810 (900-2¼) | 5240-3 1070 (1100-3) |

REIL Rwys 8 and 26 L
MIRL Rwys 3-21, 8-26 and 13-31 L



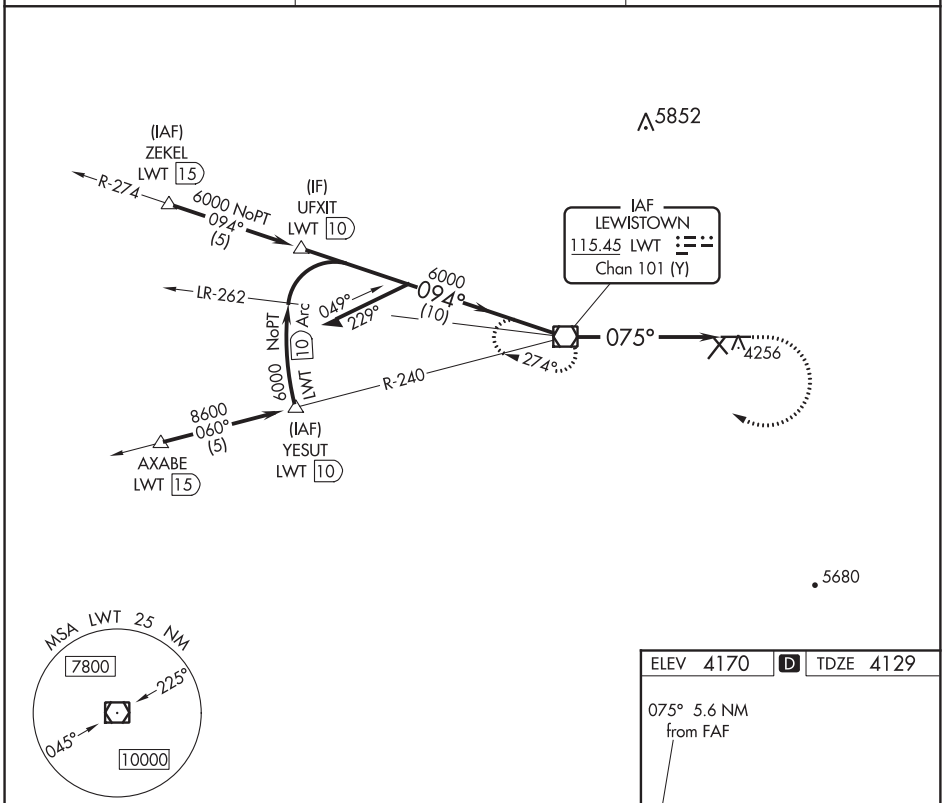
NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

| VOR/DME LWT | APP CRS | Rwy ldg 6100 |
|---|---|---|
| 115.45 | 075° | TDZE 4129 |
| Chan 101 (Y) | | Apt Elev 4170 |

# VOR RWY 8
## LEWISTOWN MUNI (LWT)

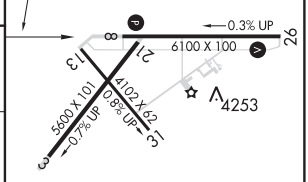
MISSED APPROACH: Climb to 6000 then climbing right turn to 6900 direct LWT VOR/DME and hold.

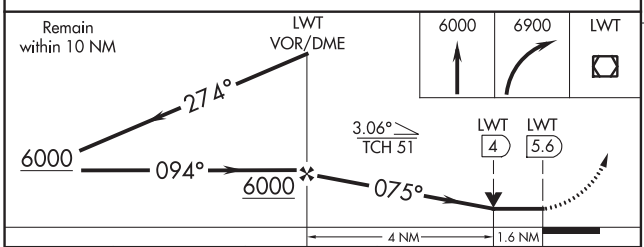
| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 118.375 | 133.4 285.4 | 123.0 (CTAF) L |




| ELEV 4170 | D | TDZE 4129 |
|---|---|---|

075° 5.6 NM from FAF




REIL Rwys 8 and 26 L
MIRL Rwys 3-21, 8-26 and 13-31 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-8 | 4680-1 | 551 (600-1) | 4680-1⅝ | 551 (600-1⅝) |
| C CIRCLING | 4680-1<br>510 (600-1) | 4820-1<br>650 (700-1) | 4980-2¼<br>810 (900-2¼) | 5240-3<br>1070 (1100-3) |

| FAF to MAP 5.6 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 5:36 | 3:44 | 2:48 | 2:14 | 1:52 |




NW-1, 05 NOV 2020 to 31 DEC 2020

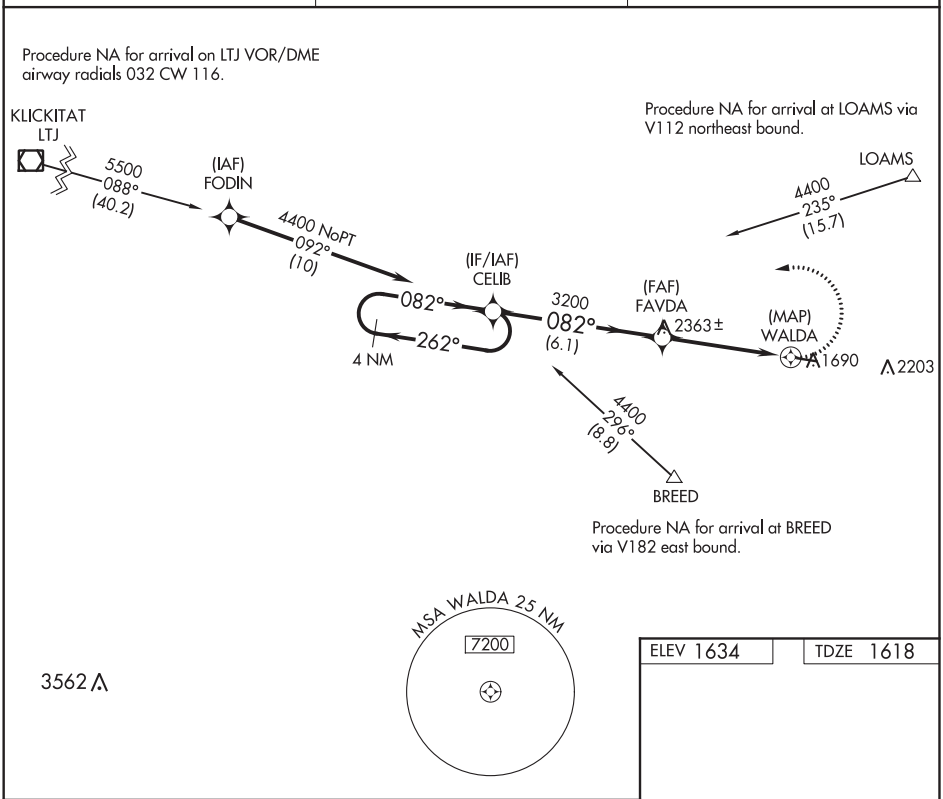
| APP CRS | Rwy ldg | 4156 |
|---|---|---|
| 082° | TDZE | 1618 |
| | Apt Elev | 1634 |

# RNAV (GPS) RWY 8
## LEXINGTON (9S9)

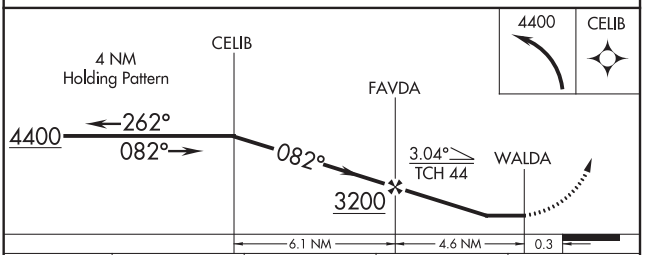
When local altimeter setting not received, use Hermiston altimeter setting and increase all MDA 220 feet, increase Circling Cats A/B ¼ mile, LNAV and Circling Cat C ½ mile, and Circling Cat D ¾ mile. Procedure NA at night. DME/DME RNP- 0.3 NA. Helicopter visibility reduction below 1 SM NA.

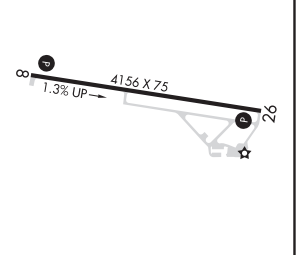
MISSED APPROACH: Climbing left turn to 4400 direct CELIB and hold.

| AWOS-3 | SEATTLE CENTER | CTAF |
|---|---|---|
| 134.475 | 132.6 269.35 | 122.9 L |




| ELEV 1634 | TDZE 1618 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 2120-1 502 (500-1) | | 2120-1½ 502 (500-1½) | |
| CIRCLING | 2380-1 746 (800-1) | 2460-1¼ 826 (900-1¼) | 2480-2½ 846 (900-2½) | 2520-3 886 (900-3) |

MIRL Rwy 8-26 L

LEXINGTON, OREGON | AL-9524 (FAA) | 20310

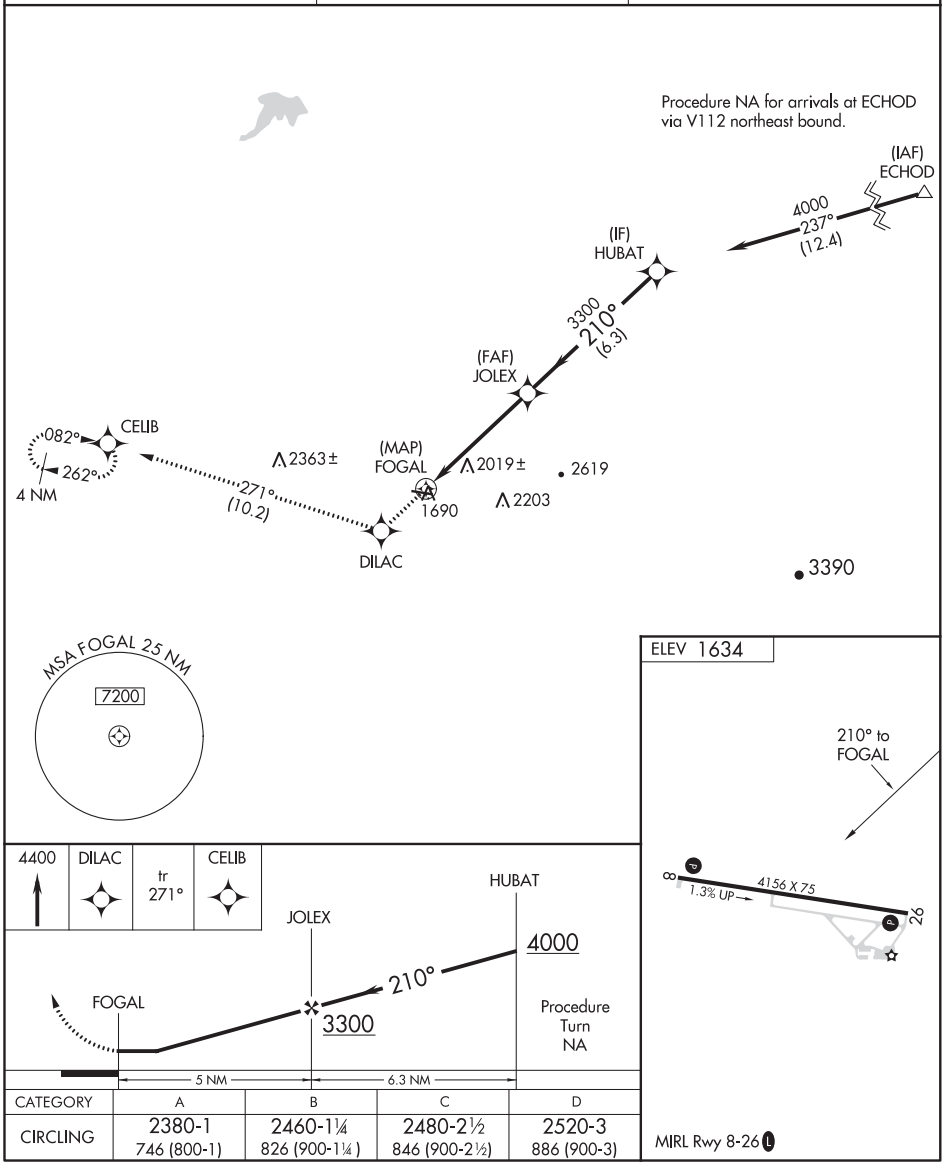
# RNAV (GPS)-A
LEXINGTON (9S9)

| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 210° | TDZE | N/A |
| | Apt Elev | 1634 |

When local altimeter setting not received, use Hermiston altimeter setting and increase all MDA 220 feet, increase Cats A/B visibility ¼ mile, and Cat C visibility ½ mile. Procedure NA at night. DME/DME RNP- 0.3 NA. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 4400 direct DILAC and via 271° track to CELIB and hold.

| AWOS-3 | SEATTLE CENTER | CTAF |
|---|---|---|
| 134.475 | 132.6 269.35 | 122.9 L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 2380-1<br>746 (800-1) | 2460-1¼<br>826 (900-1¼) | 2480-2½<br>846 (900-2½) | 2520-3<br>886 (900-3) |

MIRL Rwy 8-26 L

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NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 148° | TDZE | N/A |
| | Apt Elev | 2605 |

# GPS-A
## LIBBY (S59)

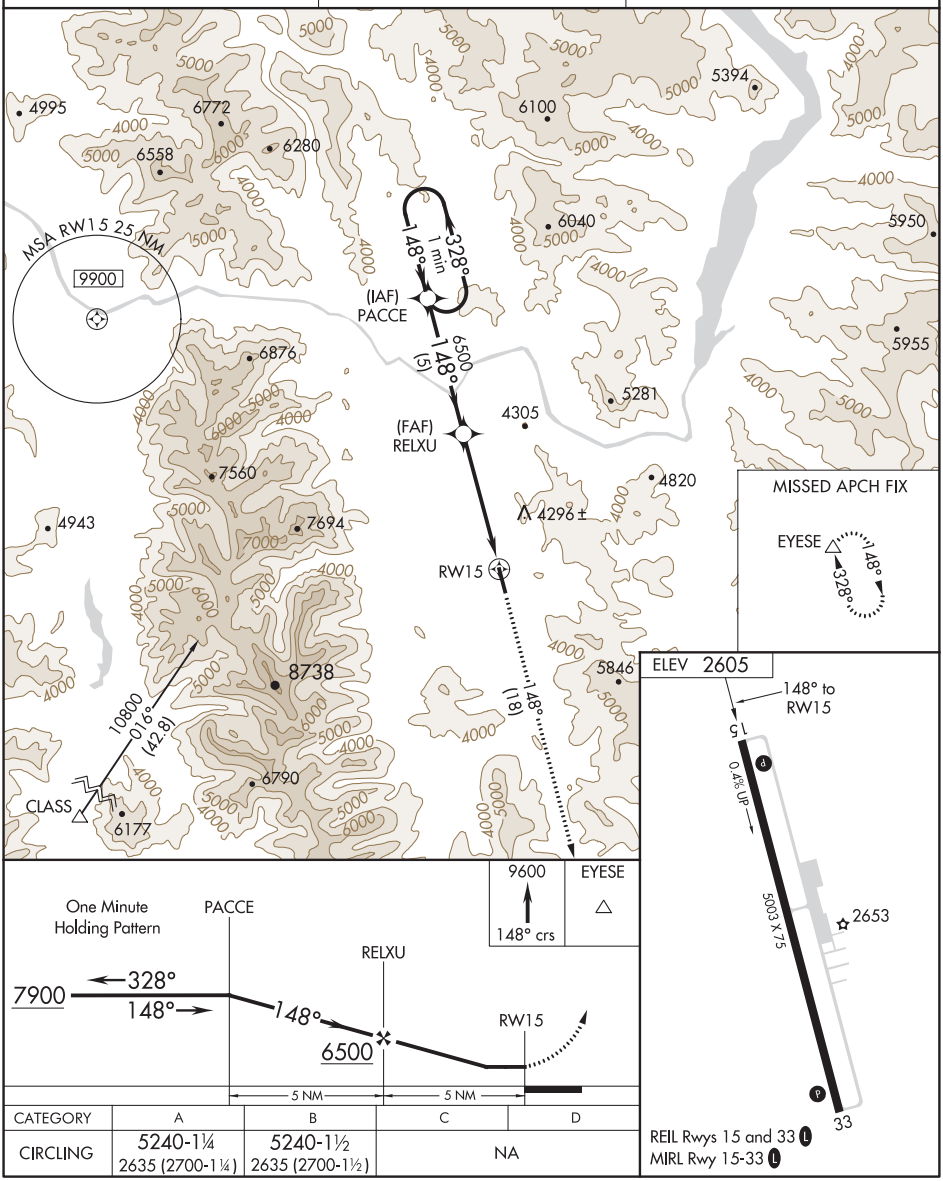
NA

Procedure NA at night. Rwy 15, 33 helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 9600 on 148° course to EYESE and hold.

| AWOS-A | SEATTLE CENTER | UNICOM |
|---|---|---|
| 118.575 | 123.95 290.55 | 122.8 (CTAF) L |






| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 5240-1¼ 2635 (2700-1¼) | 5240-1½ 2635 (2700-1½) | NA | |

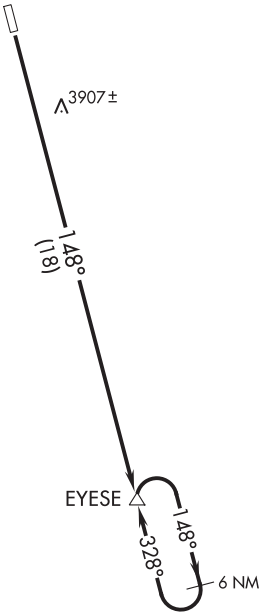
(EYESE1.EYESE) 16147

# EYESE ONE DEPARTURE (OBSTACLE) (RNAV)

SL-6840 (FAA)

LIBBY (S59)
LIBBY, MONTANA

SEATTLE CENTER
123.95 290.55
AWOS-A
118.575




NOTE: GPS required.

NOTE: RNAV 1

TAKEOFF MINIMUMS
Rwy 15: 1400-2 or standard with a minimum climb of 380′ per NM to 9600′.

TAKEOFF OBSTACLE NOTE
Rwy 15: 3907′ terrain 23697′ from runway threshold, 2491′ left of centerline.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 15: Climb via 148° course to 9600′ to EYESE, then continue climb to 12000′ within the EYESE holding pattern.



NW-1, 05 NOV 2020 to 31 DEC 2020

EYESE ONE DEPARTURE (OBSTACLE) (RNAV)

LIBBY, MONTANA
LIBBY (S59)

(EYESE1.EYESE) 10AUG00

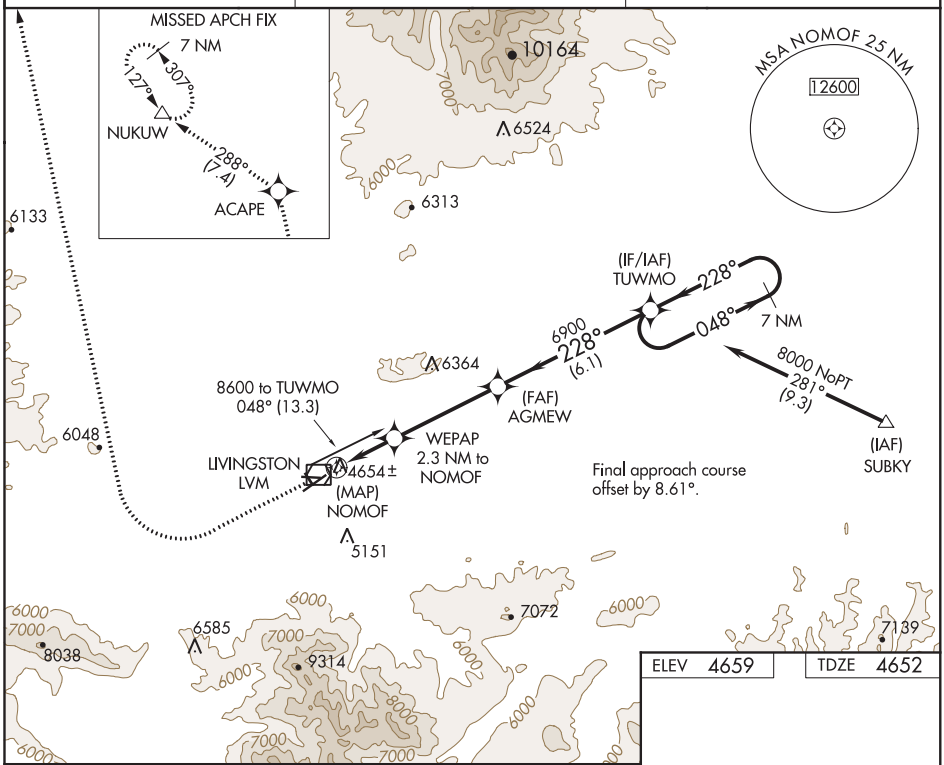
| WAAS CH 48824 W22A | APP CRS 228° | Rwy ldg 5701 TDZE 4652 Apt Elev 4659 |
|---|---|---|

# RNAV (GPS) RWY 22
## MISSION FIELD (LVM)

DME/DME RNP-0.3 NA.
Circling Rwys 8-26 and 13-21 NA at night.

MISSED APPROACH: Climb to 5400 on 228° course then climbing right turn to 10000 direct ACAPE and on track 288° to NUKUW and hold.

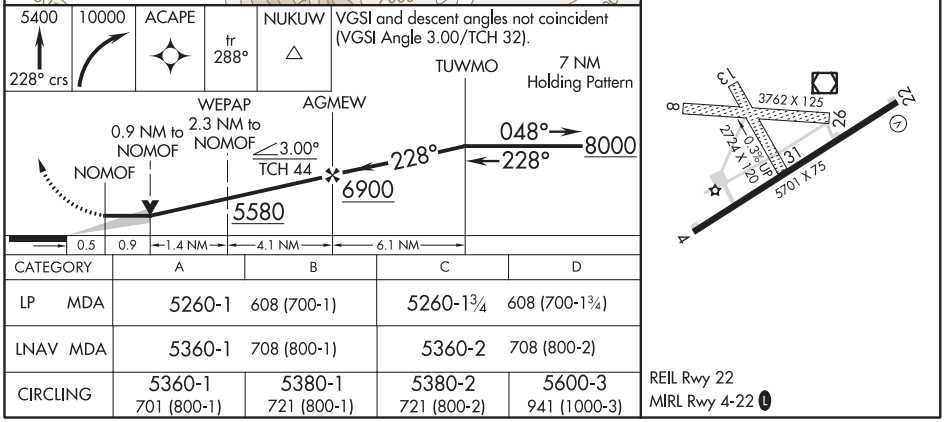
| ASOS | BIG SKY APP CON ★ | UNICOM |
|---|---|---|
| 135.275 | 119.55 235.775 | 123.0 (CTAF) L |




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| ELEV 4659 | TDZE 4652 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LP MDA | 5260-1 608 (700-1) | | 5260-1¾ 608 (700-1¾) | |
| LNAV MDA | 5360-1 708 (800-1) | | 5360-2 708 (800-2) | |
| CIRCLING | 5360-1 701 (800-1) | 5380-1 721 (800-1) | 5380-2 721 (800-2) | 5600-3 941 (1000-3) |

REIL Rwy 22
MIRL Rwy 4-22 L

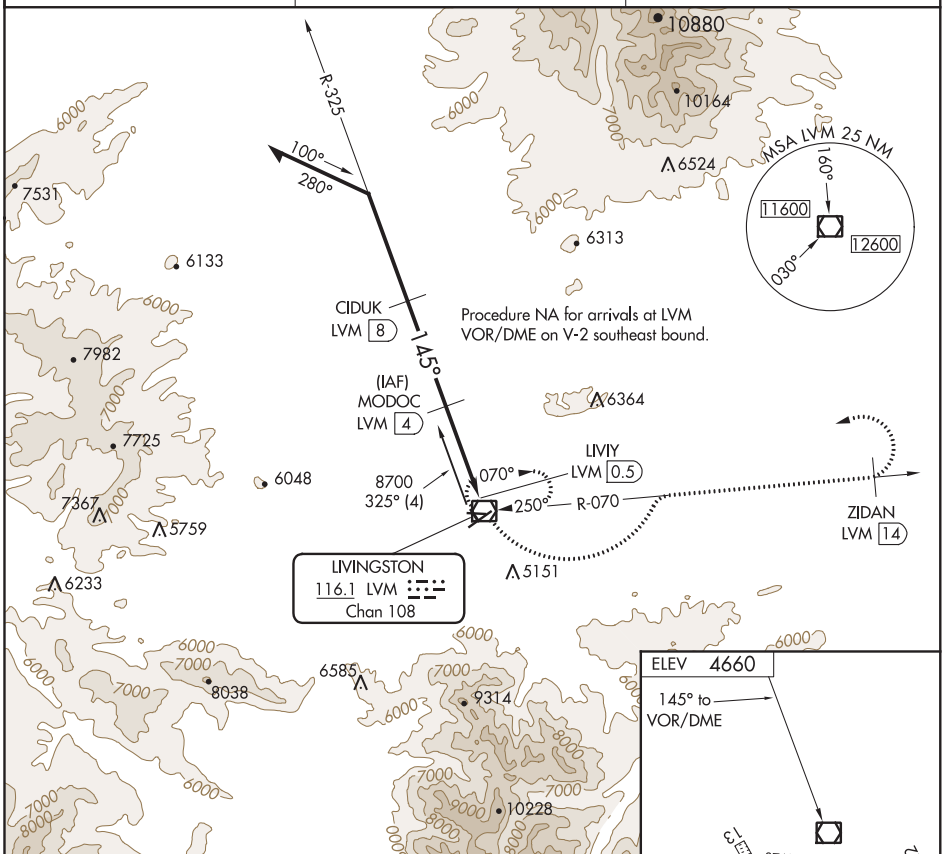
LIVINGSTON, MONTANA | AL-5348 (FAA) | 20310

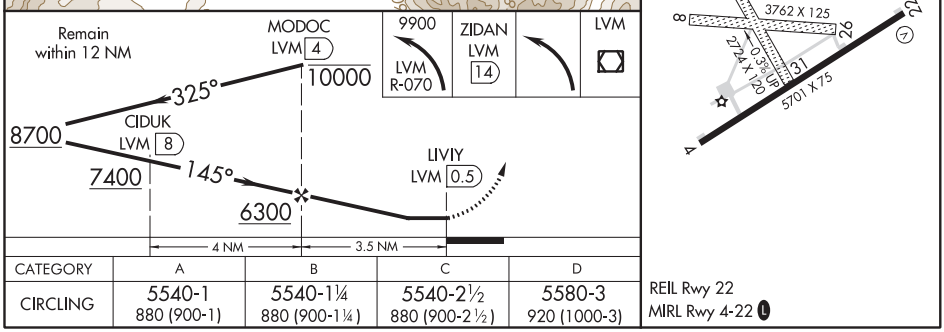
| VOR/DME LVM 116.1 Chan 108 | APP CRS 145° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 4660 |
|---|---|---|

# VOR/DME-B
## MISSION FIELD (LVM)

MISSED APPROACH: Climbing left turn to 9900 via LVM VOR/DME R-070 to ZIDAN/14 DME and left turn direct LVM VOR/DME and hold.

| ASOS | BIG SKY APP CON ★ | UNICOM |
|---|---|---|
| 135.275 | 119.55 235.775 | 123.0 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 5540-1<br>880 (900-1) | 5540-1¼<br>880 (900-1¼) | 5540-2½<br>880 (900-2½) | 5580-3<br>920 (1000-3) |

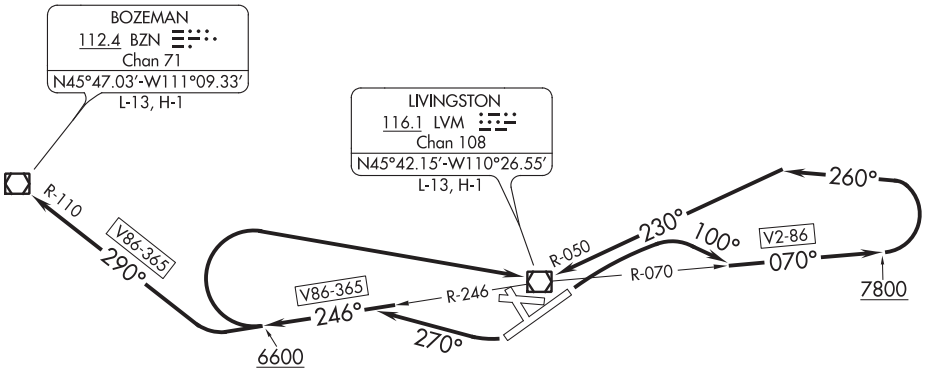
NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

ASOS
135.275
BIG SKY DEP CON ★
119.55 235.775

TAKEOFF MINIMUMS

Rwys 8, 13, 26, 31: NA-Environmental.
Rwy 4: Standard.
Rwy 22: Standard with minimum climb of 300′ per NM to 7200 or 4500-3 for climb in visual conditions.




TAKEOFF OBSTACLE NOTES

Rwy 4: Lighting 21′ from DER, 115′ right of centerline, 4650′ MSL. Lighting 23′ from DER, 78′ left of centerline, 4650′ MSL.

Rwy 22: Terrain 4′ from DER, 7′ right of centerline, 4650′ MSL. Terrain beginning 3794′ from DER, 1371′ left of centerline, up to 4760′ MSL. Terrain 3975′ from DER, 1374′ left of centerline, 4769′ MSL. Terrain 3995′ from DER, 1407′ left of centerline, 4770′ MSL. Terrain beginning 4140′ from DER, 1373′ left of centerline, up to 4774′ MSL. Terrain 4265′ from DER, 1377′ left of centerline, 4775′ MSL. Terrain 4402′ from DER, 1427′ left of centerline, 4780′ MSL. Terrain 4532′ from DER, 1467′ left of centerline, 4781′ MSL. Pole, terrain beginning 4580′ from DER, 1473′ left of centerline, up to 4785′ MSL. Terrain beginning 4939′ from DER, 1568′ left of centerline, up to 4791′ MSL. Terrain beginning 5176′ from DER, 1717′ left of centerline, up to 4793′ MSL. Terrain beginning 5314′ from DER, 1690′ left of centerline, up to 4796′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 4: Climbing right turn heading 100° and LVM VOR/DME R-070 outbound; aircraft departing eastbound, climb via LVM R-070/V2-86 enroute. All others continue climb on LVM R-070 to 7800, then climbing left via heading 260° and LVM R-050 to cross LVM VOR/DME at or above 9000, then climb enroute.

TAKEOFF RUNWAY 22: Climbing right turn heading 270° and LVM VOR/DME R-246 outbound; aircraft departing eastbound, continue climb via LVM R-246 outbound to 6600, then climbing right turn direct LVM VOR/DME, then climb on LVM R-070/V2-86 enroute. All other aircraft continue climb via LVM VOR/DME R-246 and BZN VOR/DME R-110 to BZN. Obtain ATC approval for VCOA when requesting IFR clearance. For climb in visual conditions, cross LVM VOR/DME at or above 9000 before proceeding via filed airway route.



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NW-1, 05 NOV 2020 to 31 DEC 2020

MADRAS, OREGON AL-10307 (FAA) 20198

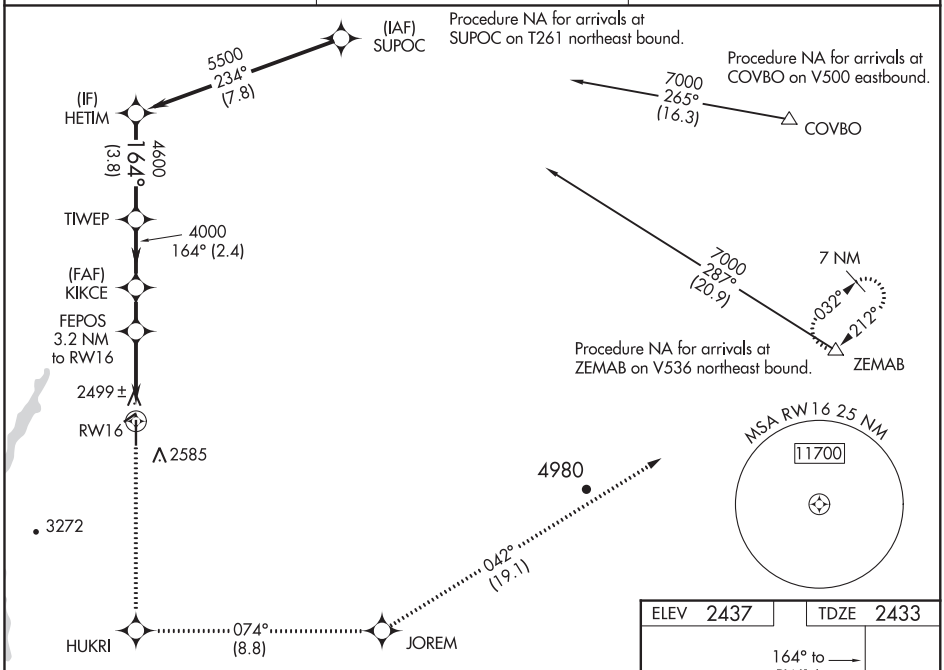
| WAAS CH 93518 W16A | APP CRS 164° | Rwy ldg 5089<br>TDZE 2433<br>Apt Elev 2437 |
|---|---|---|

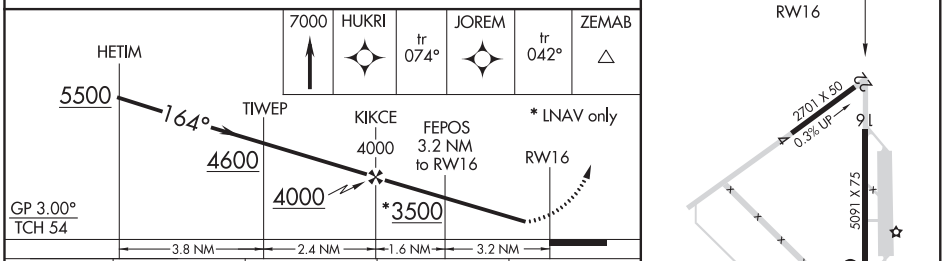
# RNAV (GPS) RWY 16
## MADRAS MUNI (S33)

Baro-VNAV NA when using Redmond altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C (-2°F) or above 54°C (130°F). Rwy 16 helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Redmond altimeter setting and increase all DA and MDA 580 feet; increase LPV all Cats visibility 2⅞ SM, LNAV/VNAV all Cats visibility 2⅝ SM, LNAV and Circling Cat A visibility ¼ SM, LNAV and Circling Cat B visibility ½ SM, and increase LNAV and Circling Cat C visibility 1¼ SM.

MISSED APPROACH: Climb to 7000 direct HUKRI and on track 074° to JOREM and on track 042° to ZEMAB and hold.

| AWOS-3PT | SEATTLE CENTER | UNICOM |
|---|---|---|
| 132.425 | 126.15 269.475 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2783-1⅛ 350 (400-1⅛) | | | NA |
| LNAV/VNAV DA | 2843-1⅜ 410 (500-1⅜) | | | NA |
| LNAV MDA | 3040-1 607 (700-1) | | 3040-1¾ 607 (700-1¾) | NA |
| CIRCLING | 3040-1 603 (700-1) | | 3040-1¾ 603 (700-1¾) | NA |




REIL Rwy 34 L
MIRL Rwy 16-34 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 60930 W34A | APP CRS 344° | Rwy ldg 5089<br>TDZE 2437<br>Apt Elev 2437 |
|---|---|---|

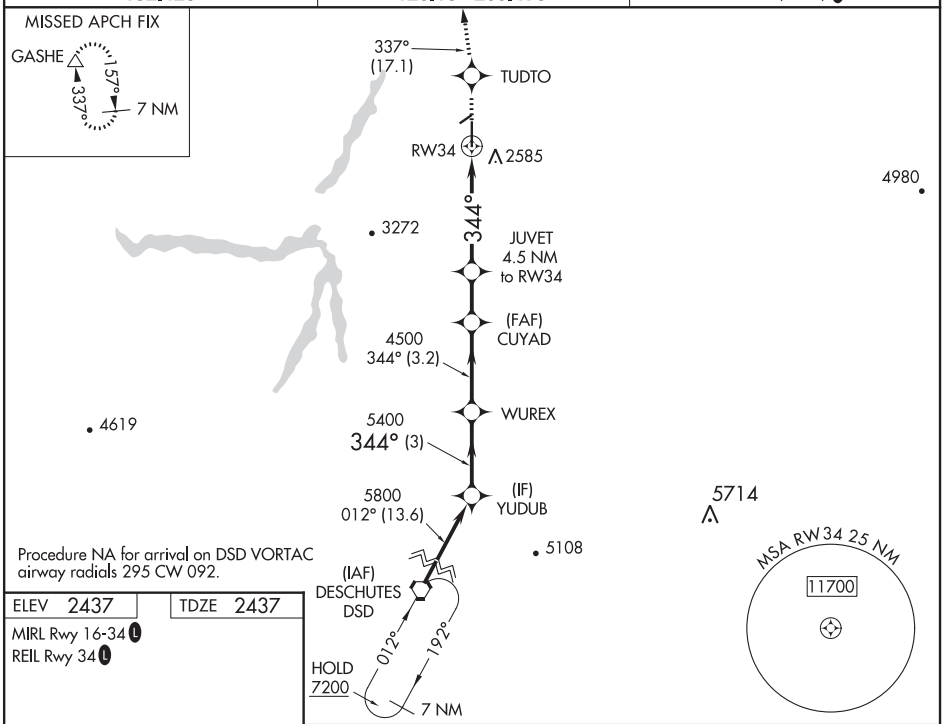
# RNAV (GPS) RWY 34
## MADRAS MUNI (S33)

T A NA

Baro-VNAV NA when using Redmond altimeter setting. 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. When local altimeter setting not received, use Redmond altimeter setting and increase all DA and MDA 580 feet; increase LPV and LNAV/VNAV all Cats visibility 2 miles, increase LNAV and Circling Cat A visibility ¼ mile, Cat B visibility ½ mile, and Cat C visibility 1⅜ mile.

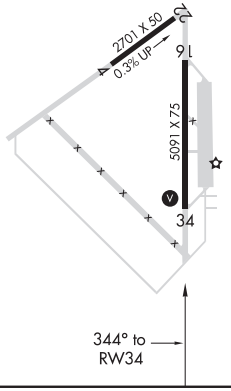
MISSED APPROACH: Climb to 7000 direct TUDTO and on track 337° to GASHE and hold, continue climb-in-hold to 7000.

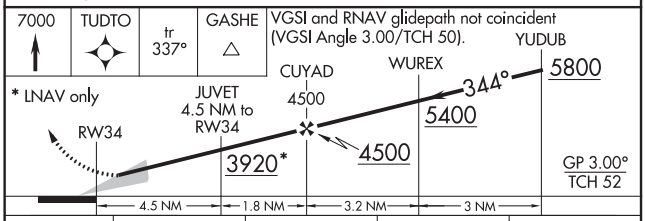
| AWOS-3PT | SEATTLE CENTER | UNICOM |
|---|---|---|
| 132.425 | 126.15 269.475 | 122.8 (CTAF) L |




| ELEV 2437 | TDZE 2437 |
|---|---|

MIRL Rwy 16-34 L
REIL Rwy 34 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2687-1 250 (300-1) | | | NA |
| LNAV/VNAV DA | 2687-1 250 (300-1) | | | NA |
| LNAV MDA | 3000-1 563 (600-1) | | 3000-1⅝ 563 (600-1⅝) | NA |
| CIRCLING | 3000-1 563 (600-1) | | 3020-1⅝ 583 (600-1⅝) | NA |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

MALTA, MONTANA — AL-9493 (FAA) — 19171

# RNAV (GPS) RWY 8
MALTA (M75)

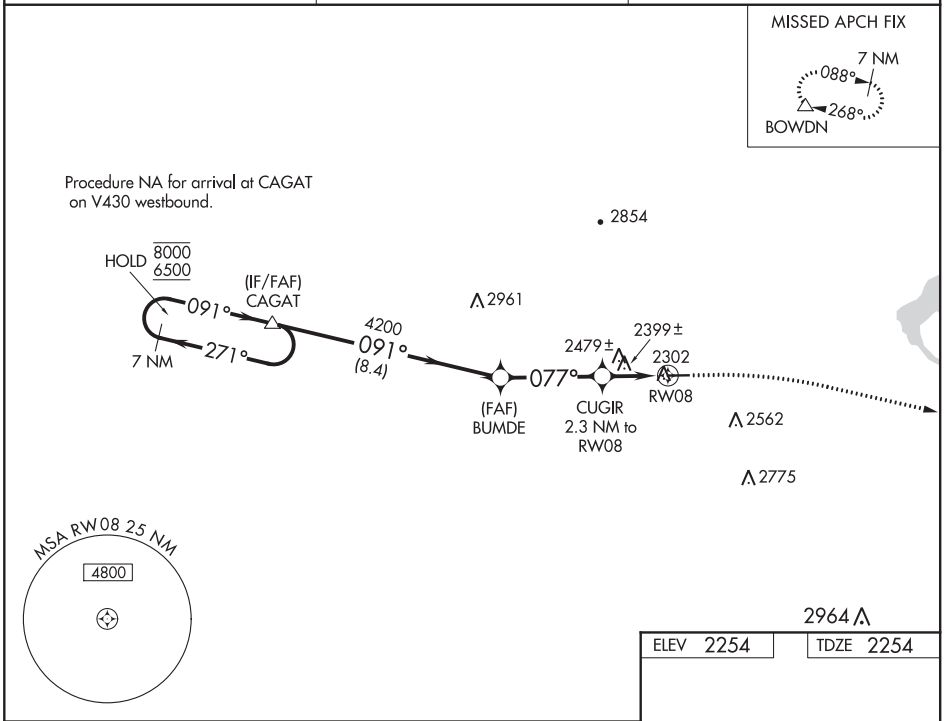
| WAAS CH 86621 W08A | APP CRS 077° | Rwy ldg 4500<br>TDZE 2254<br>Apt Elev 2254 |
|---|---|---|

RNP APCH.

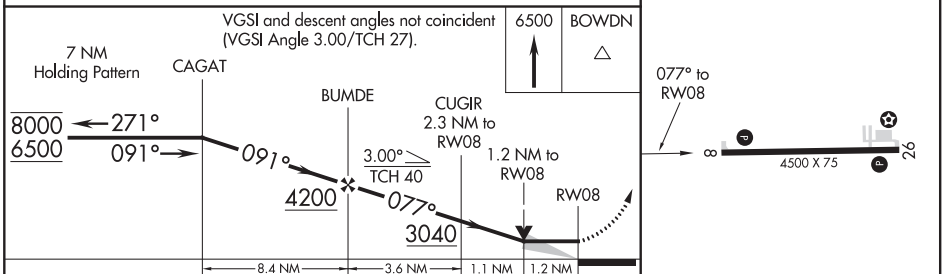
-37°C

MISSED APPROACH: Climb to 6500 direct BOWDN and hold, continue climb-in-hold to 6500.

| AWOS-3 | SALT LAKE CITY CENTER | AUNICOM |
|---|---|---|
| 119.25 | 126.85 305.2 | 122.8 (CTAF) L |




| ELEV 2254 | TDZE 2254 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LP MDA | 2660-1 406 (500-1) | | NA | |
| LNAV MDA | 2740-1 486 (500-1) | | NA | |
| C CIRCLING | 2800-1 546 (600-1) | 2880-1 626 (700-1) | NA | |

MIRL Rwy 8-26 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# RNAV (GPS) RWY 26
MALTA (M75)

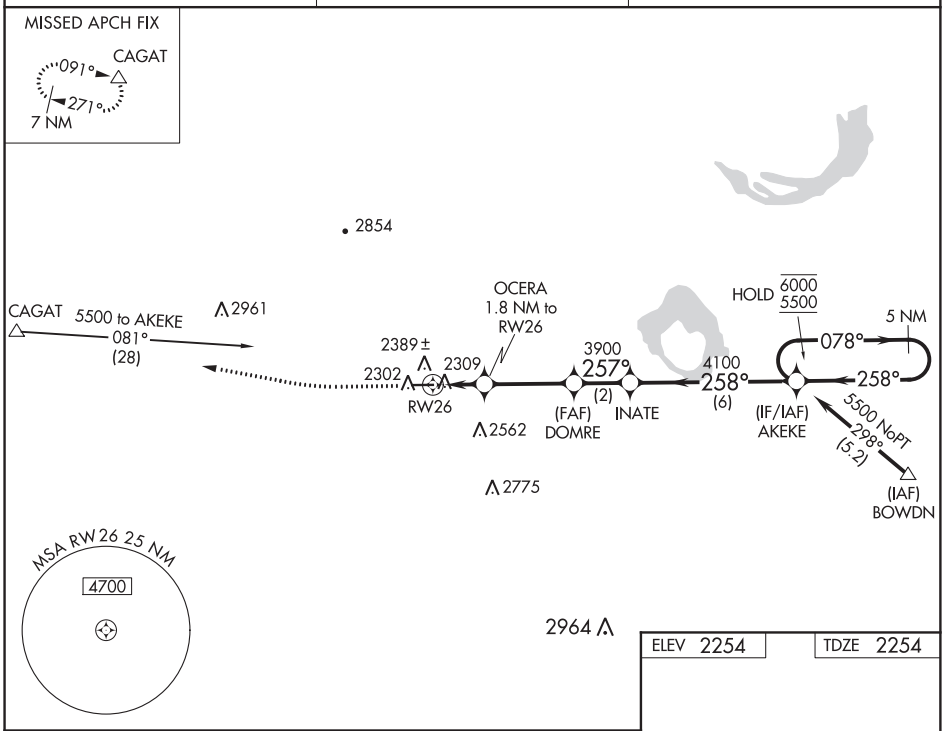
| WAAS CH 97721 W26A | APP CRS 257° | Rwy ldg 4500<br>TDZE 2254<br>Apt Elev 2254 |
|---|---|---|

RNP APCH.

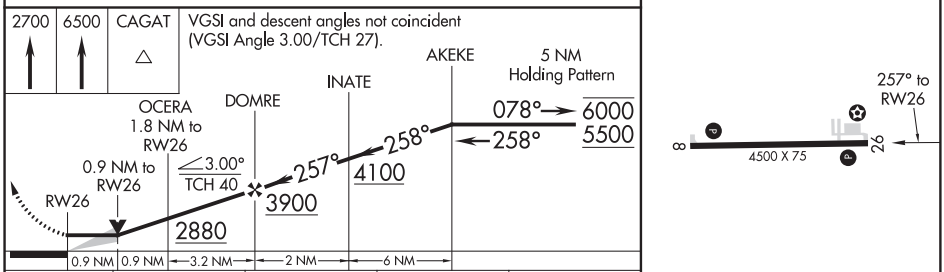
-37°C

MISSED APPROACH: Climb to 2700, then climb to 6500 direct CAGAT and hold, continue climb-in-hold 6500.

| AWOS-3 | SALT LAKE CITY CENTER | AUNICOM |
|---|---|---|
| 119.25 | 126.85 305.2 | 122.8 (CTAF) L |




| ELEV 2254 | TDZE 2254 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LP MDA | 2560-1 306 (400-1) | | NA | |
| LNAV MDA | 2640-1 386 (400-1) | | NA | |
| C CIRCLING | 2800-1 546 (600-1) | 2880-1 626 (700-1) | NA | |

MIRL Rwy 8-26 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

MC CALL, IDAHO | AL-6936 (FAA) | 20254

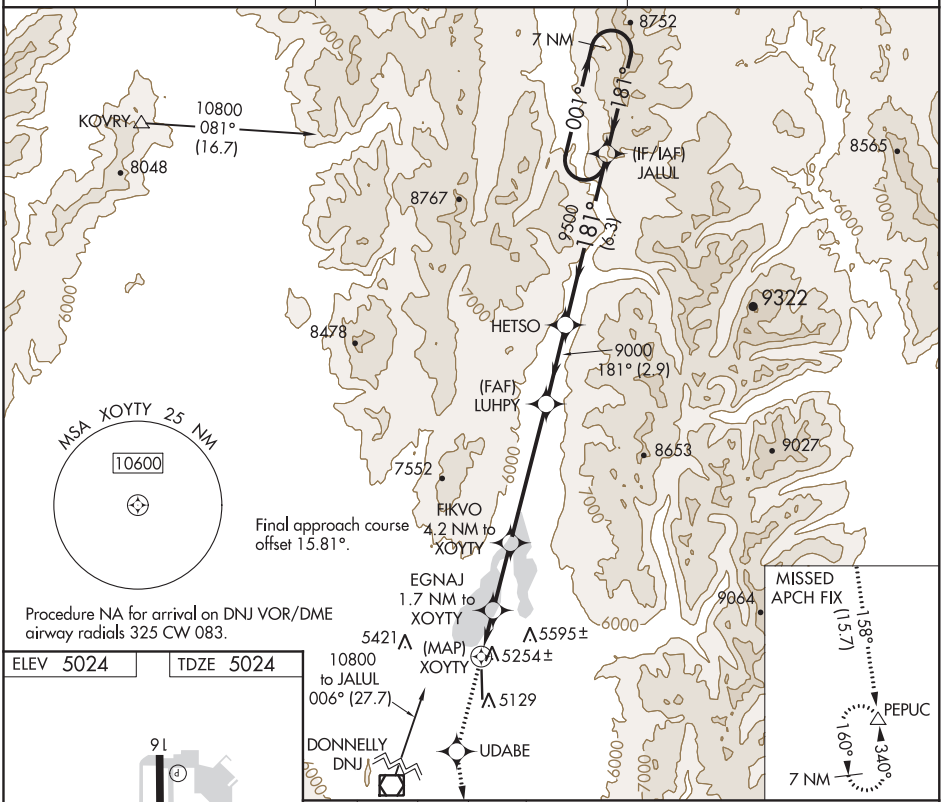
| APP CRS | Rwy ldg | 6108 |
|---|---|---|
| 181° | TDZE | 5024 |
| | Apt Elev | 5024 |

# RNAV (GPS) RWY 16
## MC CALL MUNI (MYL)

Rwy 16 helicopter visibility reduction below 1 SM NA.
DME/DME RNP-0.3 NA.
-20°C Straight-in Rwy 16 NA at night, Circling Rwy 16 NA at night.

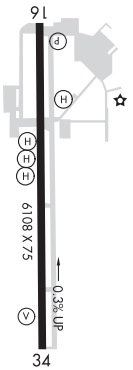
MISSED APPROACH: Climb to 11700 direct UDABE and on track 158° to PEPUC and hold, continue climb-in-hold to 11700.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 119.925 | 128.05 306.95 | 122.8 (CTAF) L |

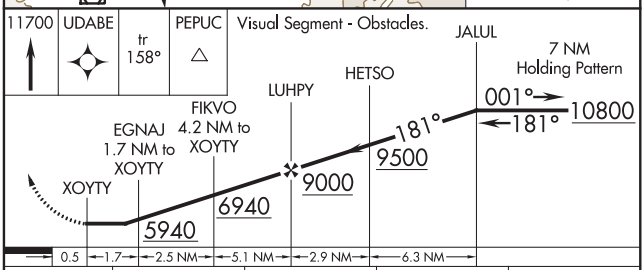



NW-1, 05 NOV 2020 to 31 DEC 2020

| ELEV 5024 | TDZE 5024 |
|---|---|




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




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 5520-1 496 (500-1) | | 5520-1⅜ 496 (500-1⅜) | NA |
| C CIRCLING | 5940-1¼ 916 (1000-1¼) | | 6140-3 1116 (1200-3) | NA |

| WAAS CH 49016 W34A | APP CRS 346° | Rwy ldg 6108 TDZE 5012 Apt Elev 5024 |
|---|---|---|

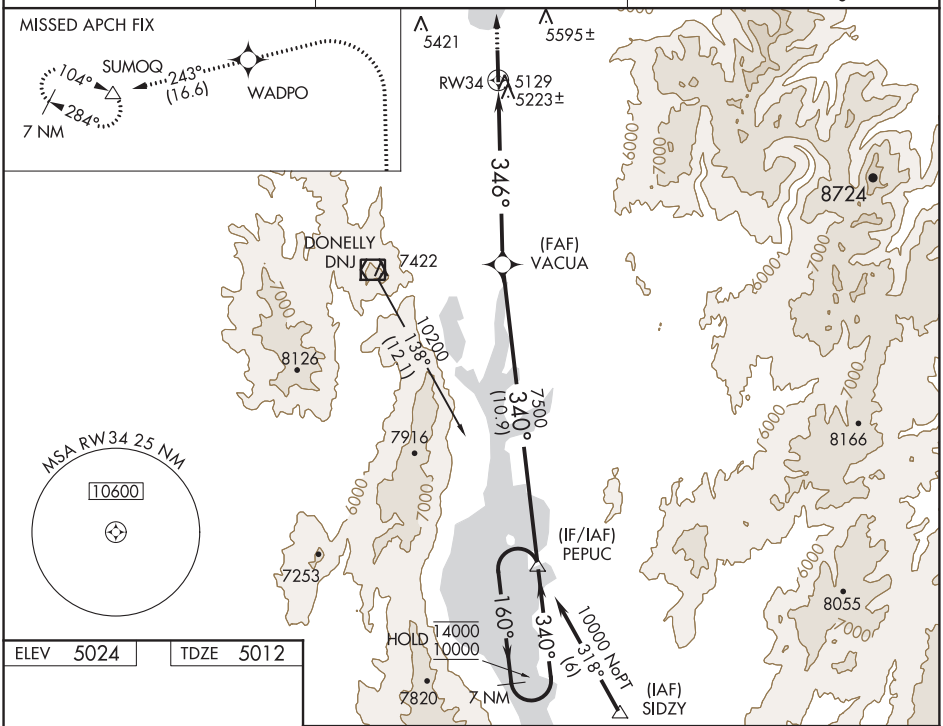
# RNAV (GPS) RWY 34
## MC CALL MUNI (MYL)

RNP APCH.

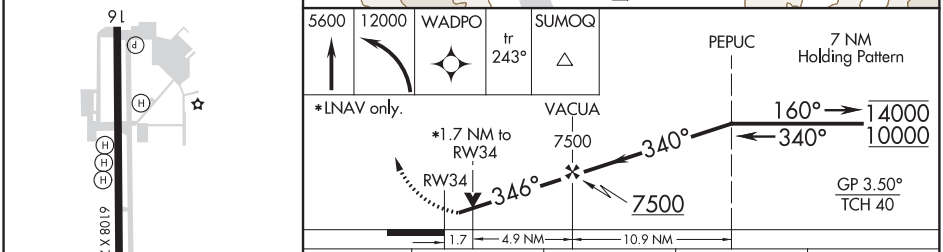
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C or above 40°C. Rwy 34 helicopter visibility reduction below ¾ SM NA. Circling Rwy 16 NA at night. -20°C

MISSED APPROACH: Climb to 5600 then climbing left turn to 12000 direct WADPO and on track 243° to SUMOQ and hold, continue climb-in-hold to 12000. #Missed approach requires minimum climb of 260 feet per NM to 6100.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 119.925 | 128.05 306.95 | 122.8 (CTAF) L |




| ELEV 5024 | TDZE 5012 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 5318-⅞ 306 (300-⅞) | | | |
| LNAV/VNAV DA | 5683-2 671 (700-2) | | | |
| LNAV MDA# | 5520-1 508 (500-1) | | 5520-1⅜ 508 (500-1⅜) | |
| LNAV MDA | 5680-1 668 (700-1) | | 5680-1⅞ 668 (700-1⅞) | |
| C CIRCLING | 5700-1 676 (700-1) | 5920-1¼ 896 (900-1¼) | 6140-3 1116 (1200-3) | 6660-3 1636 (1700-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

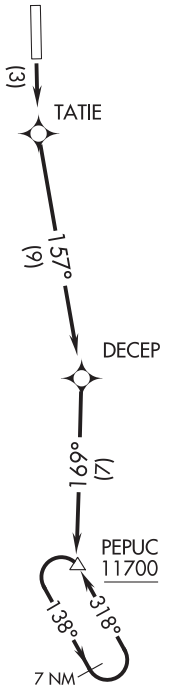
(PEPUC2.PEPUC) 20086 AL-6936 (FAA)

# PEPUC TWO DEPARTURE (OBSTACLE) (RNAV)

MC CALL MUNI (MYL)
MC CALL, IDAHO

ASOS
119.925
SALT LAKE CENTER
128.05 306.95

**TOP ALTITUDE: ASSIGNED BY ATC**




NOTE: RNAV 1.
NOTE: GPS required.

TAKEOFF MINIMUMS
Rwy 16: 300-1, or standard with a minimum climb of 371′ per NM to 5300.
Rwy 34: NA - Obstacles.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb to 11700 direct TATIE and on depicted route to PEPUC, continue climb-in-hold at PEPUC to at/above 11700 before proceeding on course.




NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC I-MMV | APP CRS | Rwy ldg | 5420 |
|---|---|---|---|
| 110.9 | 218° | TDZE | 161 |
| | | Apt Elev | 163 |

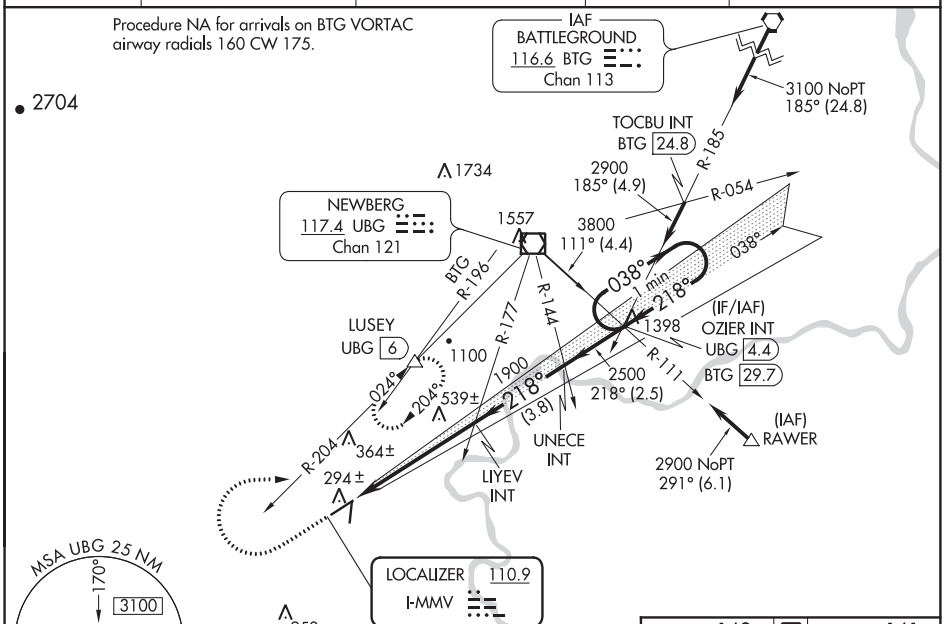
# ILS or LOC RWY 22
## MC MINNVILLE MUNI (MMV)

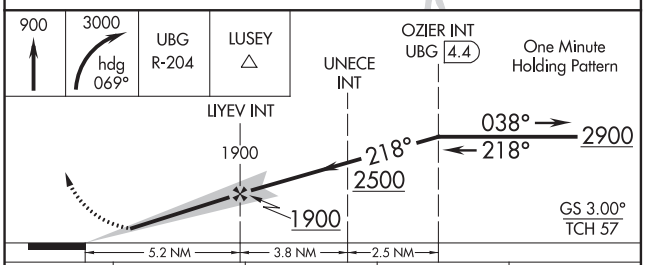
T DME Required.
A When local altimeter setting not received, use Aurora State altimeter setting and increase all DA and MDA 60 feet. Increase all visibility ¼ mile.

MALSR A5

MISSED APPROACH: Climb to 900 then climbing right turn to 3000 via heading 069° and UBG VOR/DME R-204 to LUSEY/UBG VOR/DME 6 DME and hold, continue climb-in-hold to 3000. When authorized by ATC, climb-in-hold to 6000.

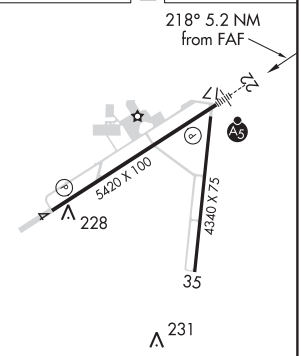
| ASOS | PORTLAND APP CON | SEATTLE CENTER | CLNC DEL | UNICOM |
|---|---|---|---|---|
| 135.675 | 126.0 284.6 (NORTH) | 125.8 291.7 (SOUTH) | 118.35 | 123.0 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 22 | 361-½ 200 (200-½) | | | |
| S-LOC 22 | 600-½ 439 (500-½) | | 600-¾ 439 (500-¾) | 600-1 439 (500-1) |
| CIRCLING | 640-1 477 (500-1) | | 760-1½ 597 (600-1½) | 880-2¼ 717 (800-2¼) |

ELEV 163 D TDZE 161




REIL Rwy 4 L
HIRL Rwy 4-22 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 |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

MC MINNVILLE, OREGON | AL-5626 (FAA) | 20198

# RNAV (GPS) RWY 4

## MC MINNVILLE MUNI (MMV)

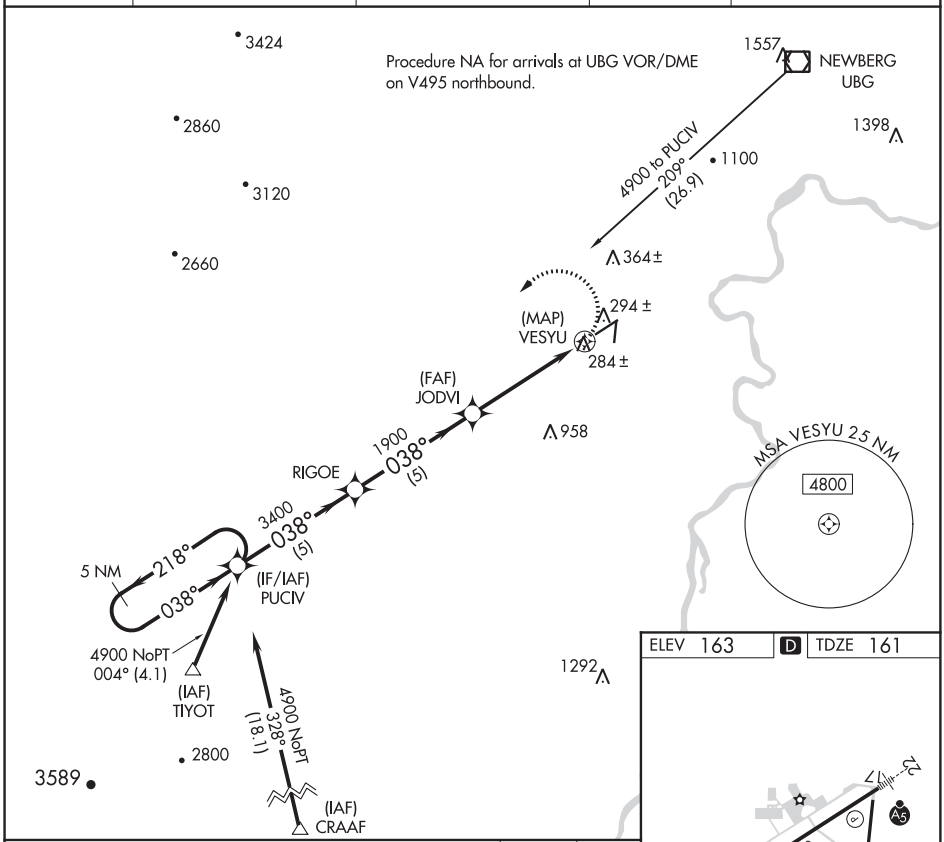
| APP CRS | Rwy ldg | 5320 |
|---|---|---|
| 038° | TDZE | 161 |
| | Apt Elev | 163 |

RNP APCH.

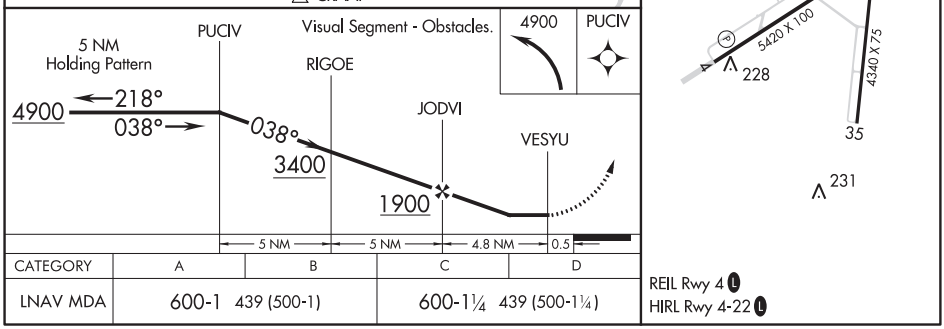
When local altimeter setting not received, use Aurora State altimeter setting and increase all MDA 60 feet and visibility Cats C/D to 1⅜. Rwy 4 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climbing left turn to 4900 direct PUCIV and hold, continue climb-in-hold to 4900.

| ASOS | PORTLAND APP CON | SEATTLE CENTER | CLNC DEL | UNICOM |
|---|---|---|---|---|
| 135.675 | 126.0 284.6 (NORTH) | 125.8 291.7 (SOUTH) | 118.35 | 123.0 (CTAF) L |




| ELEV 163 | D | TDZE 161 |
|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 600-1 439 (500-1) | | 600-1¼ 439 (500-1¼) | |

REIL Rwy 4 L
HIRL Rwy 4-22 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 50309 W22A | APP CRS 218° | Rwy ldg 5420 TDZE 161 Apt Elev 163 |
|---|---|---|

# RNAV (GPS) RWY 22
## MC MINNVILLE MUNI (MMV)

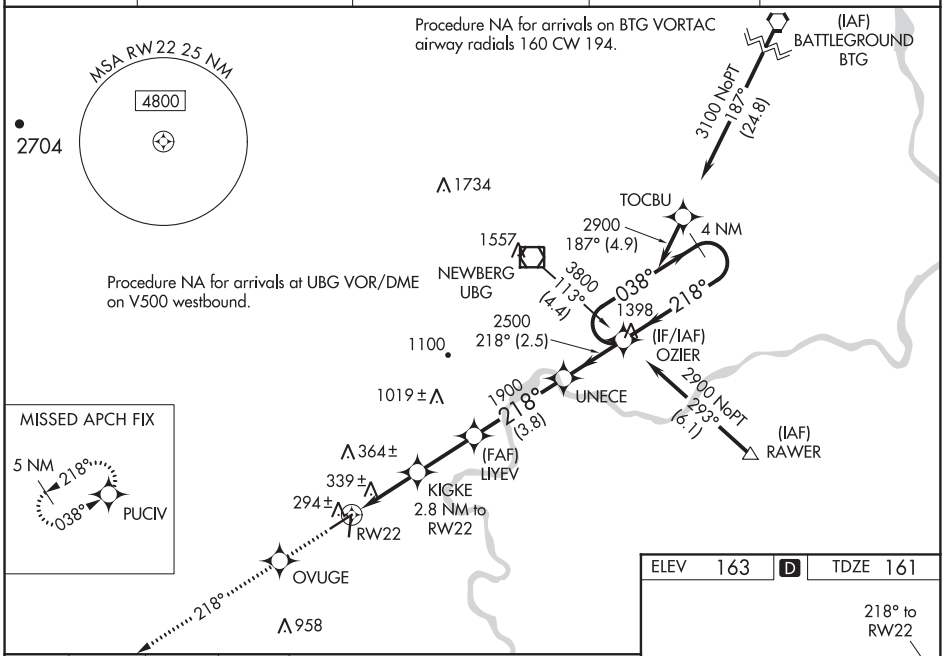
RNP APCH.

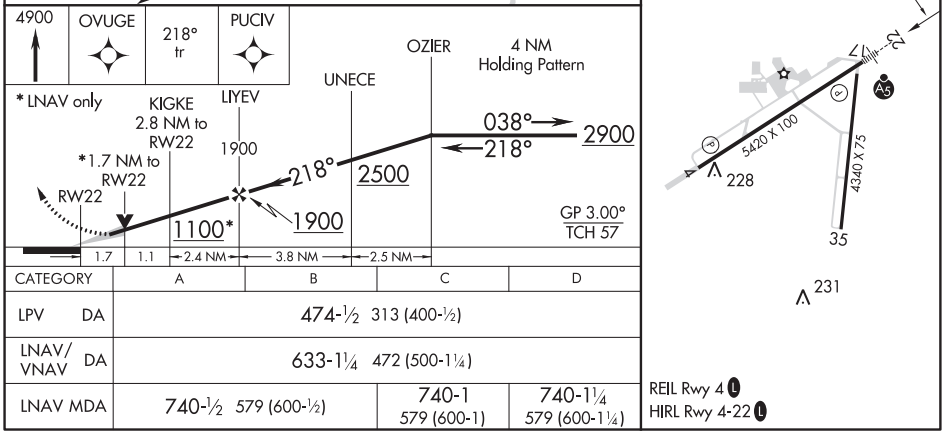
For inop ALS, increase LPV all Cats visibility to 1 SM. Baro-VNAV NA when using Aurora State altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 48°C. For inop ALS when using Aurora State altimeter setting, increase LPV all Cats visibility to 1¼ SM. VDP NA when using Aurora State altimeter setting. When local altimeter setting not received, use Aurora State altimeter setting and increase all DA and MDA 60 feet, increase all visibility ¼ mile.

MALSR

MISSED APPROACH: Climb to 4900 direct OVUGE then on 218° track to PUCIV and hold, continue climb-in-hold to 4900.

| ASOS | PORTLAND APP CON | SEATTLE CENTER | CLNC DEL | UNICOM |
|---|---|---|---|---|
| 135.675 | 126.0 284.6 (NORTH) | 125.8 291.7 (SOUTH) | 118.35 | 123.0 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 474-½ 313 (400-½) | | | |
| LNAV/VNAV DA | 633-1¼ 472 (500-1¼) | | | |
| LNAV MDA | 740-½ 579 (600-½) | | 740-1 579 (600-1) | 740-1¼ 579 (600-1¼) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

MC MINNVILLE, OREGON AL-5626 (FAA) 20310

# VOR/DME-B

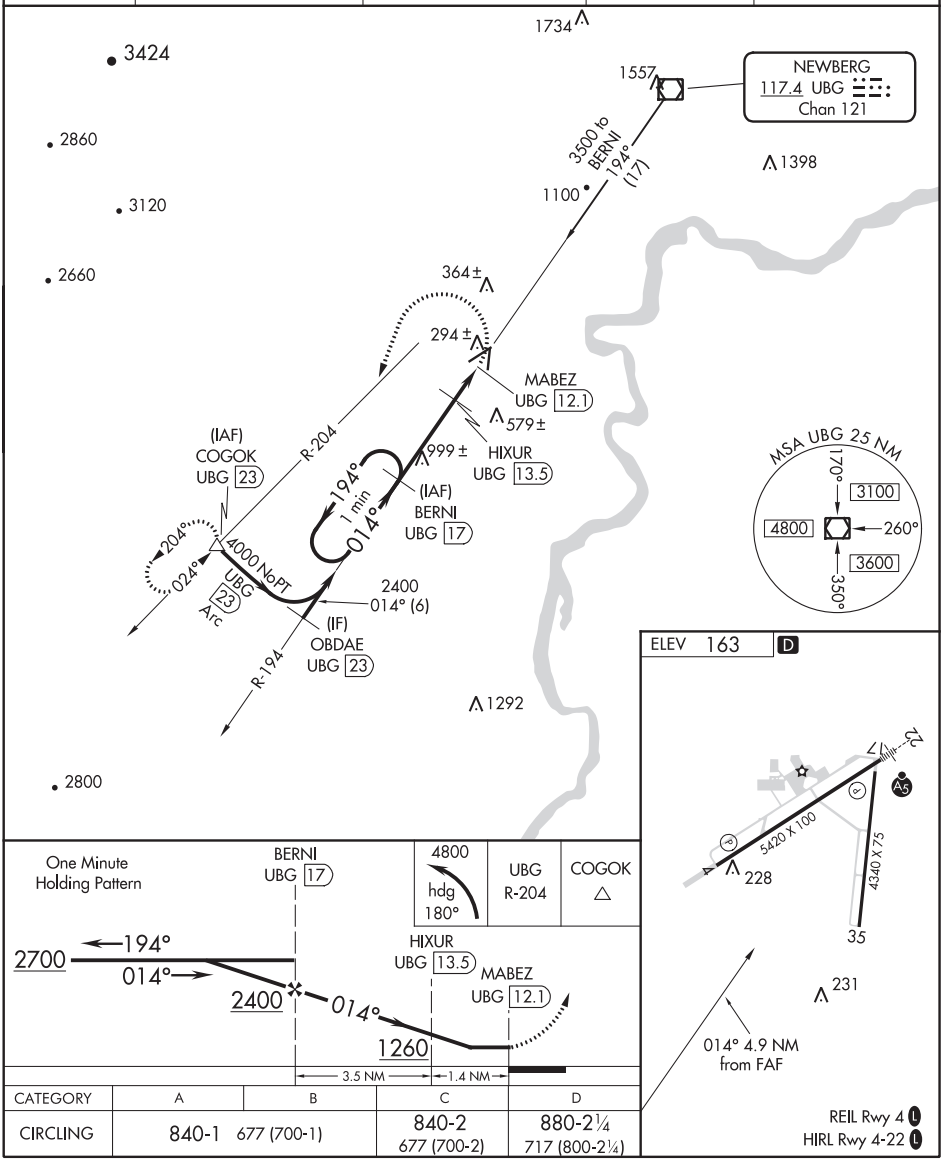
## MC MINNVILLE MUNI (MMV)

| VOR/DME UBG 117.4 Chan 121 | APP CRS 014° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 163 |
|---|---|---|

When local altimeter setting not received use Aurora State altimeter setting and increase all MDA 60 feet and all visibility ¼ mile.

MISSED APPROACH: Climbing left turn to 4800 via heading 180° and UBG VOR/DME R-204 to COGOK/UBG 23 DME and hold, continue climb-in-hold to 4800. When authorized by ATC, climb-in-hold to 6000.

| ASOS | PORTLAND APP CON | SEATTLE CENTER | CLNC DEL | UNICOM |
|---|---|---|---|---|
| 135.675 | 126.0 284.6 (NORTH) | 125.8 291.7 (SOUTH) | 118.35 | 123.0 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 840-1 677 (700-1) | | 840-2 677 (700-2) | 880-2¼ 717 (800-2¼) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

TACOMA, WASHINGTON

# ILS or LOC RWY 16

| LOC I-MAR | APCH CRS | Rwy ldg 10,108 TDZE 286 Arpt Elev 322 |
|---|---|---|
| 109.9 | 165° | |

AL-414 [USAF]

MC CHORD FIELD (KTCM)

RADAR or DME Required.

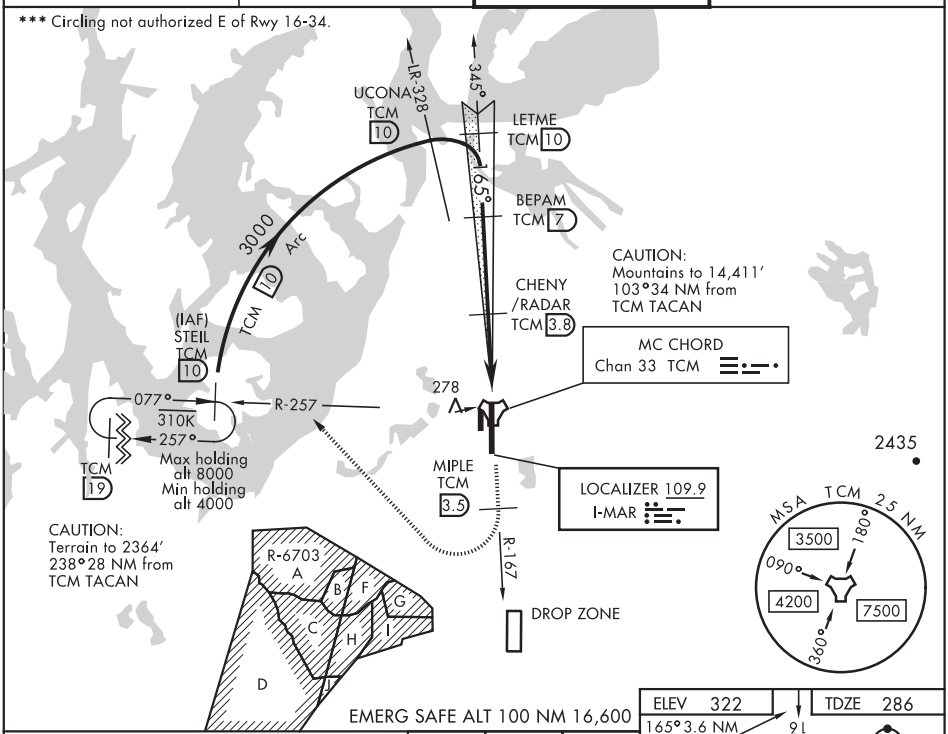
* When ALS inop, increase RVR to 40, vis to ¾ mile.
** When ALS inop, increase CAT AB RVR to 55, vis to 1 mile, CAT CDE vis to 1⅜ miles.

ALSF-1

MISSED APPROACH: Climb to 4000 on TCM TACAN R-167. At 3.5 DME turn right via 295° course to intercept TCM R-257 to STEIL and hold. Continue climb in hold to 4000.

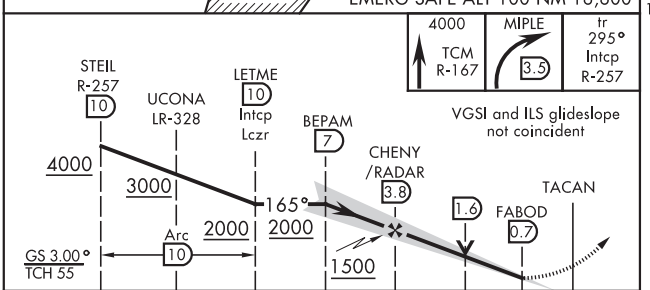
| ATIS | SEATTLE APP CON | MCCHORD TOWER | GND CON |
|---|---|---|---|
| 135.825 270.1 | 126.5 377.15 | 124.8 259.3 | 118.175 279.65 |

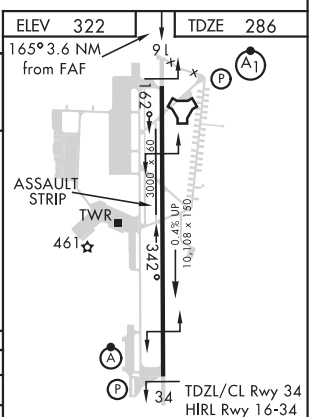
*** Circling not authorized E of Rwy 16-34.




EMERG SAFE ALT 100 NM 16,600

| 4000 | MIPLE | tr 295° Intcp R-257 |
|---|---|---|
| TCM R-167 | 3.5 | |




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-ILS 16 * | 486/24 200 (200-½) | | | | |
| S-LOC 16** | 800/24 514 (500-½) | | 800/55 514 (500-1) | | |
| CIRCLING*** | 940-1 618 (700-1) | | 940-1¾ 618 (700-1¾) | 940-2 618 (700-2) | 1020-2½ 698 (700-2½) |

| FAF to MAP 3.1 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 3:06 | 2:04 | 1:33 | 1:14 | 1:02 |

TACOMA, WASHINGTON 47°08′N-122°29′W MC CHORD FIELD (KTCM)

Amdt 2 10SEP20

ILS or LOC RWY 16

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

20254

TACOMA, WASHINGTON

# ILS or LOC RWY 34

| LOC I-TCM | APCH CRS | Rwy ldg 10,108 |
|---|---|---|
| 108.5 | 345° | TDZE 322 |
| | | Arpt Elev 322 |

AL-414 [USAF]

MC CHORD FIELD (KTCM)

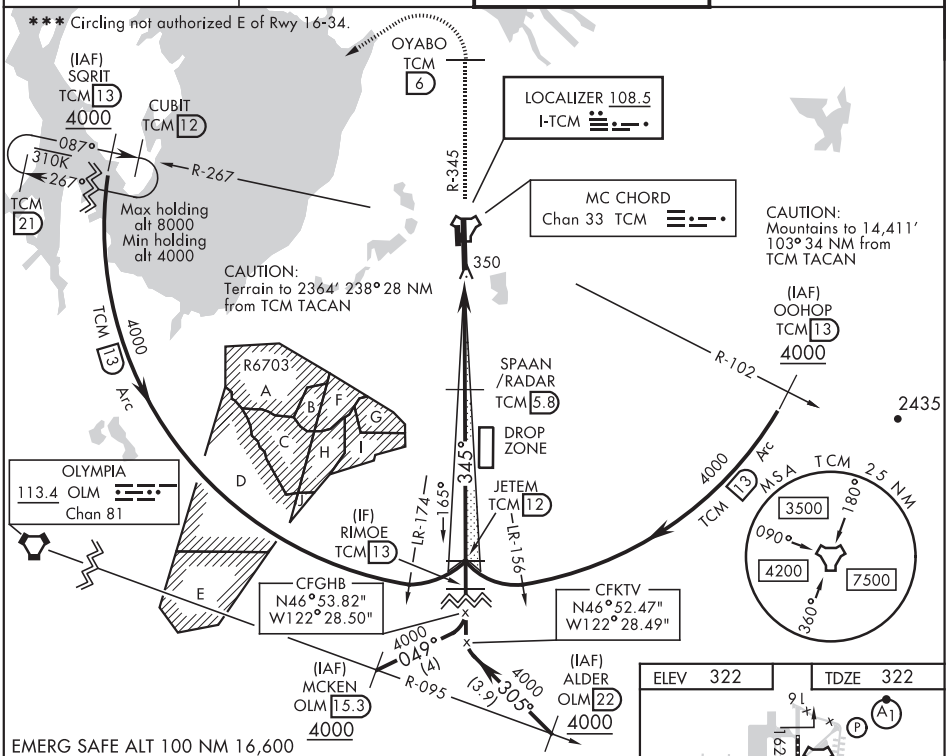
RADAR or DME Required.

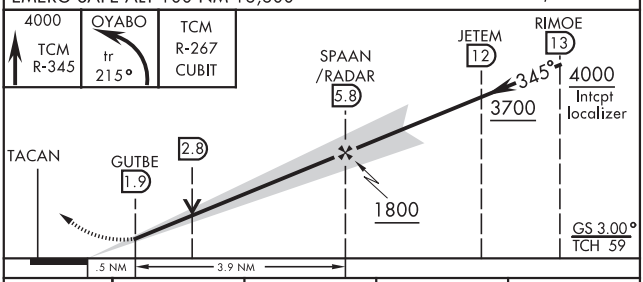
* When ALS inop, increase RVR to 40, vis to ¾ mile.
** When ALS inop, increase CAT AB RVR to 55, vis to 1 mile, CAT CD vis to 1⅜ miles.

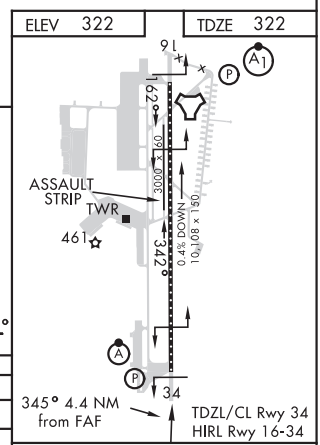
ALSF-2

MISSED APPROACH: Climb to 4000 on TCM TACAN R-345 to OYABO, then turn left via 215° course to intercept TCM R-267 to CUBIT and hold, continue climb in hold to 4000. Cross OYABO at or above 3000.

| ATIS | SEATTLE APP CON | MCCHORD TOWER | GND CON |
|---|---|---|---|
| 135.825 270.1 | 126.5 377.15 | 124.8 259.3 | 118.175 279.65 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 34 * | 522/18 200 (200-½) | | | |
| S-LOC 34 ** | 820/24 498 (500-½) | | 820/50 498 (500-1) | |
| CIRCLING *** | 940-1 618 (700-1) | | 940-1¾ 618 (700-1¾) | 940-2 618 (700-2) |

FAF to MAP 3.9 NM

| Knots | 60 | 90 | 120 | 150 | 180 |
|---|---|---|---|---|---|
| Min:Sec | 3:54 | 2:36 | 1:57 | 1:34 | 1:18 |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

TACOMA, WASHINGTON

47°08'N-122°29'W

MC CHORD FIELD (KTCM)

Amdt 3 10SEP20

ILS or LOC RWY 34

TACOMA, WASHINGTON

# ILS RWY 34 (CAT II)

MC CHORD FIELD (KTCM)

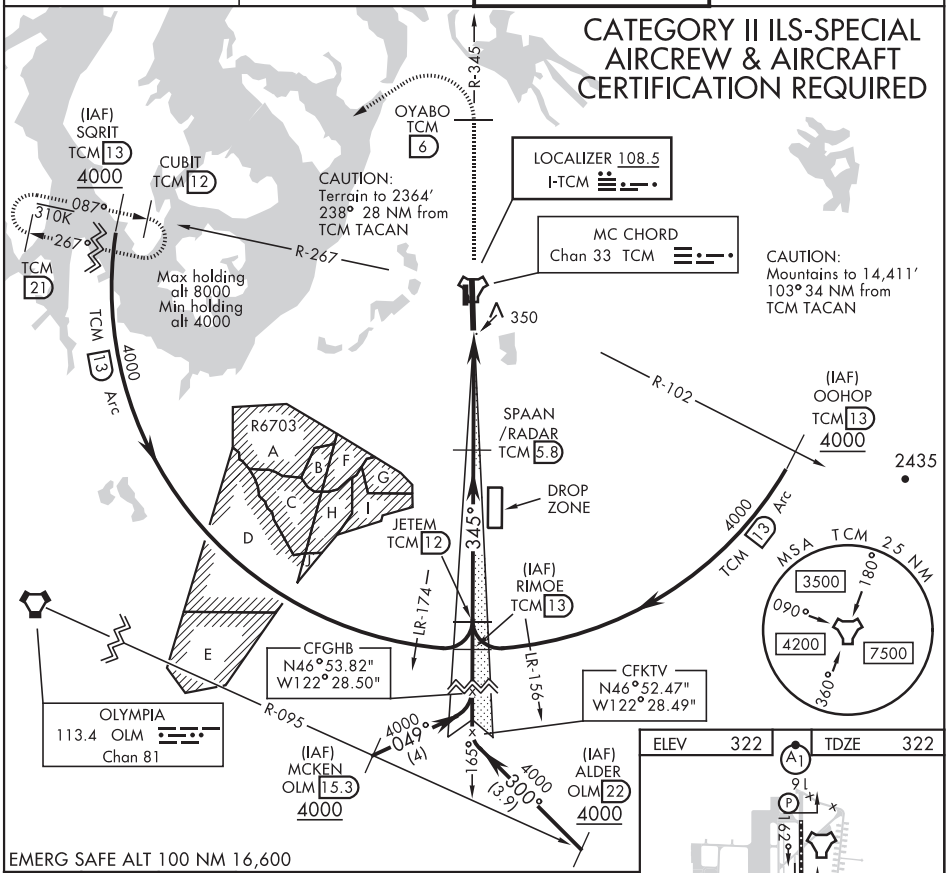
| LOC I-TCM | APCH CRS | Rwy ldg / TDZE / Arpt Elev |
|---|---|---|
| 108.5 | 345° | 10,108 / 322 / 322 |

AL-414 [USAF]

ALSF-2

MISSED APPROACH: Climb to 4000 on TCM TACAN R-345 to OYABO, then turn left via 215° course to intercept TCM R-267 to CUBIT and hold, continue climb in hold to 4000. Cross OYABO at or above 3000.

| ATIS | SEATTLE APP CON | MCCHORD TOWER | GND CON |
|---|---|---|---|
| 135.825 270.1 | 126.5 377.15 | 124.8 259.3 | 118.175 279.65 |




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-ILS 34 | RA 139/12 | | 100 | DA 422 | |

TACOMA, WASHINGTON 47°08'N-122°29'W MC CHORD FIELD (KTCM)

Amdt 4 10SEP20

ILS RWY 34 (CAT II)

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

TACOMA, WASHINGTON

20254

# RNAV (GPS) RWY 16

| APCH CRS | Rwy ldg | 10,108 |
|---|---|---|
| 165° | TDZE | 286 |
| | Arpt Elev | 322 |

AL-414 [USAF]

MC CHORD FIELD (KTCM)

* When ALS inop, increase CAT AB vis to 1 mile, CAT CDE vis to 1⅜ miles.
** Circling not authorized E of rwy 16-34.

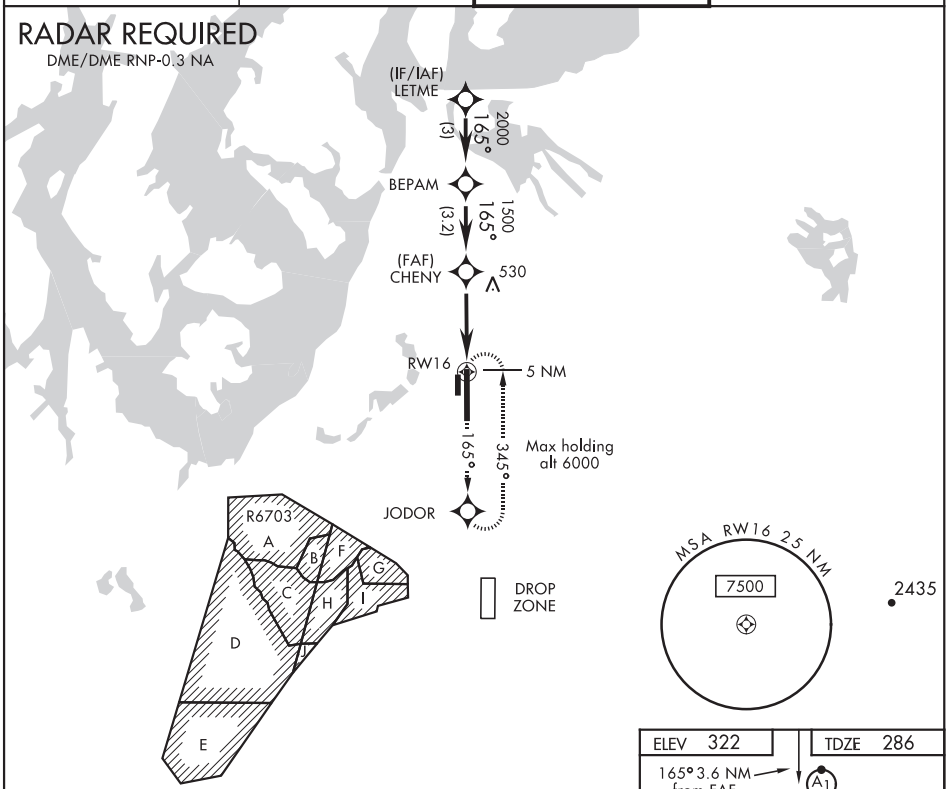
ALSF-1

MISSED APPROACH: Climb to 4000 direct JODOR and hold. Continue climb in hold to 4000.

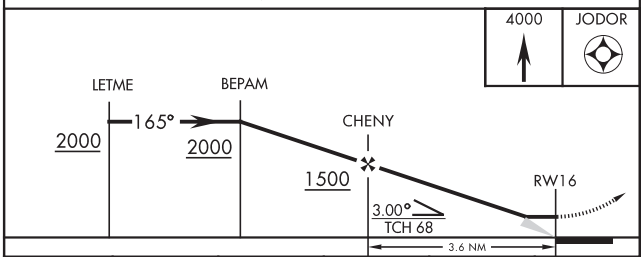
| ATIS | SEATTLE APP CON | MCCHORD TOWER | GND CON |
|---|---|---|---|
| 135.825 270.1 | 126.5 377.15 | 124.8 259.3 | 118.175 279.65 |

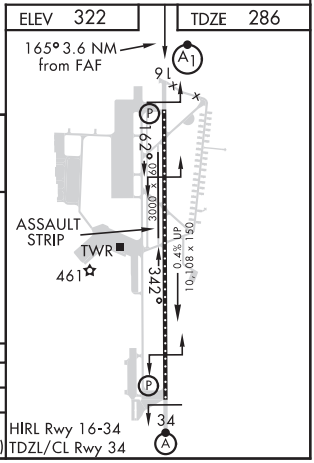
## RADAR REQUIRED

DME/DME RNP-0.3 NA




EMERG SAFE ALT 100 NM 16,600




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| LNAV MDA * | 780/24 494 (500-½) | | 780/50 494 (500-1) | | |
| CIRCLING ** | 940-1 618 (700-1) | | 940-1¾ 618 (700-1¾) | 940-2 618 (700-2) | 1020-2½ 698 (700-2½) |

TACOMA, WASHINGTON

47°08′N-122°29′W

MC CHORD FIELD (KTCM)

Amdt 3 10SEP20

RNAV (GPS) RWY 16



NW-1, 05 NOV 2020 to 31 DEC 2020

TACOMA, WASHINGTON

# RNAV (GPS) RWY 34

| APCH CRS | Rwy ldg | 10,108 |
|---|---|---|
| 345° | TDZE | 322 |
| | Arpt Elev | 322 |

AL-414 [USAF]

MC CHORD FIELD (KTCM)

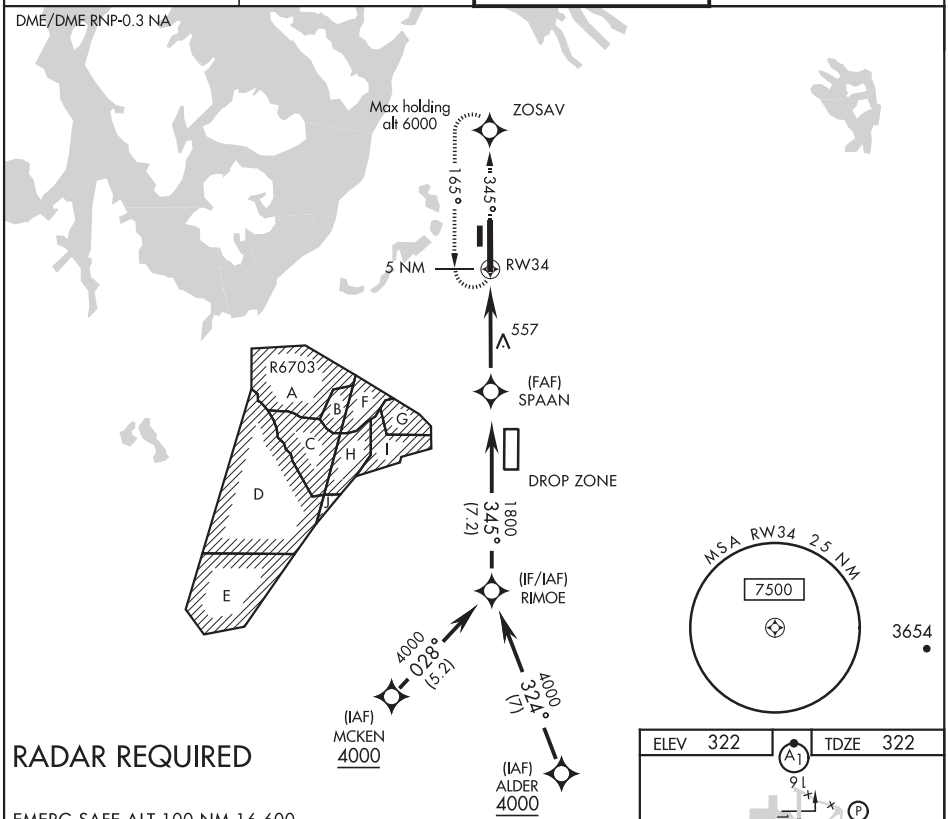
* When ALS inop, increase CAT AB RVR to 55, vis to 1 mile; CAT CDE vis to 1⅜ miles.
** Circling not authorized E of rwy 16-34.

ALSF-2

MISSED APPROACH: Climb to 4000 direct ZOSAV and hold, continue climb in hold to 4000.

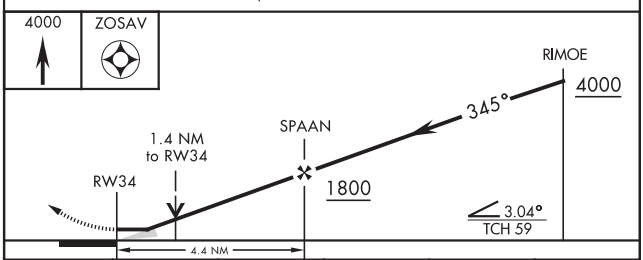
| ATIS | SEATTLE APP CON | MCCHORD TOWER | GND CON |
|---|---|---|---|
| 135.825 270.1 | 126.5 377.15 | 124.8 259.3 | 118.175 279.65 |

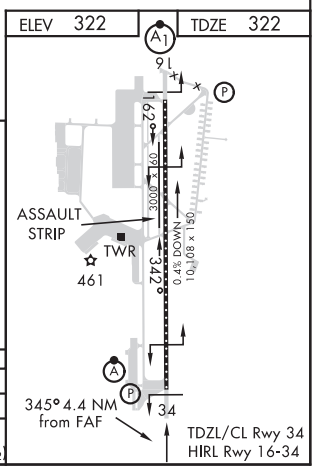
DME/DME RNP-0.3 NA




RADAR REQUIRED

EMERG SAFE ALT 100 NM 16,600




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| LNAV MDA * | 820/24 498 (500-½) | | 820/50 498 (500-1) | | |
| CIRCLING ** | 940-1 618 (700-1) | | 940-1¾ 618 (700-1¾) | 940-2 618 (700-2) | 1020-2½ 698 (700-2½) |

TACOMA, WASHINGTON

47°08′N-122°29′W

MC CHORD FIELD (KTCM)

Amdt 3 10SEP20

RNAV (GPS) RWY 34



NW-1, 05 NOV 2020 to 31 DEC 2020

TACOMA, WASHINGTON

20254

# TACAN RWY 16

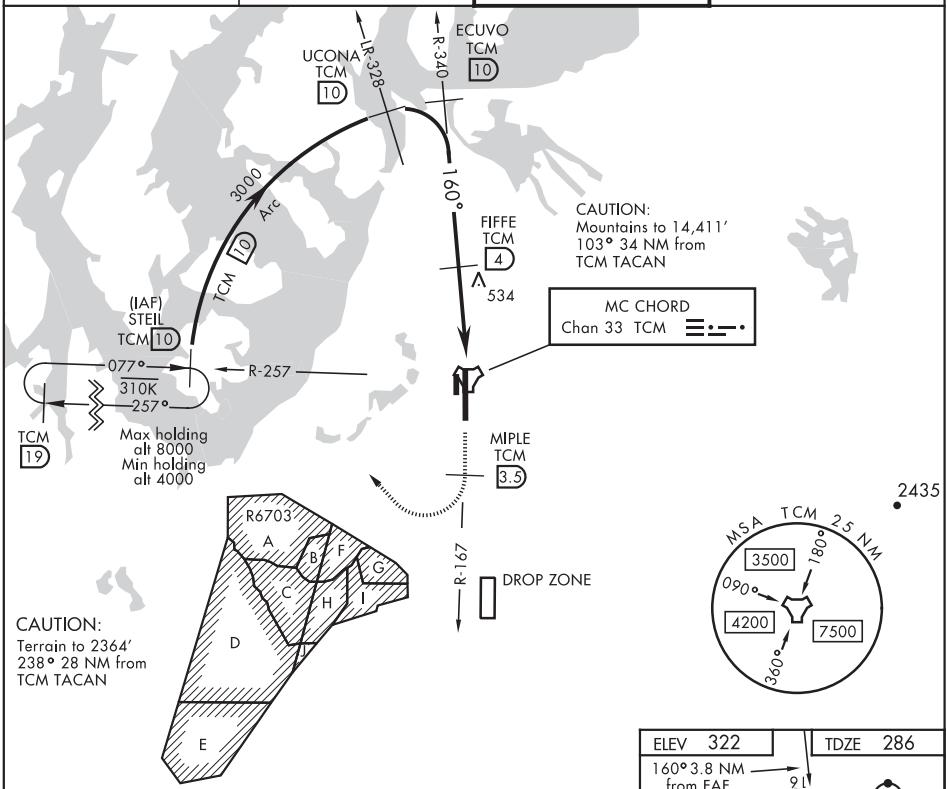
| TACAN TCM Chan 33 | APCH CRS 160° | Rwy ldg 10,108<br>TDZE 286<br>Arpt Elev 322 | AL-414 [USAF] | MC CHORD FIELD (KTCM) |
|---|---|---|---|---|

* When ALS inop, increase CAT AB RVR to 55, vis to 1 mile, CAT CDE vis to 1⅜ miles.
** Circling not authorized E of Rwy 16-34.

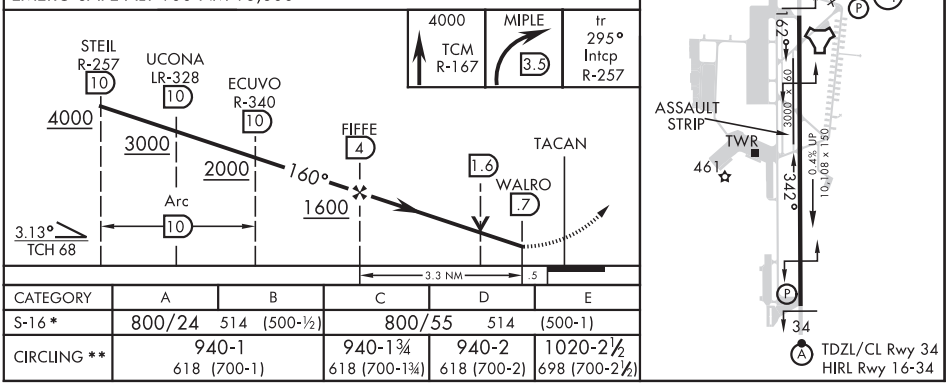
ALSF-1

MISSED APPROACH: Climb to 4000 on TCM TACAN R-167. At TCM 3.5 DME turn right via 295° course to intercept TCM R-257 to STEIL and hold, continue climb in hold to 4000.

| ATIS | SEATTLE APP CON | MCCHORD TOWER | GND CON |
|---|---|---|---|
| 135.825 270.1 | 126.5 377.15 | 124.8 259.3 | 118.175 279.65 |




EMERG SAFE ALT 100 NM 16,600




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-16* | 800/24 514 (500-½) | | 800/55 514 (500-1) | | |
| CIRCLING ** | 940-1 618 (700-1) | | 940-1¾ 618 (700-1¾) | 940-2 618 (700-2) | 1020-2½ 698 (700-2½) |

TACOMA, WASHINGTON 47°08'N-122°29'W MC CHORD FIELD (KTCM)

Amdt 3 10SEP20

TACAN RWY 16

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

TACOMA, WASHINGTON

# TACAN RWY 34

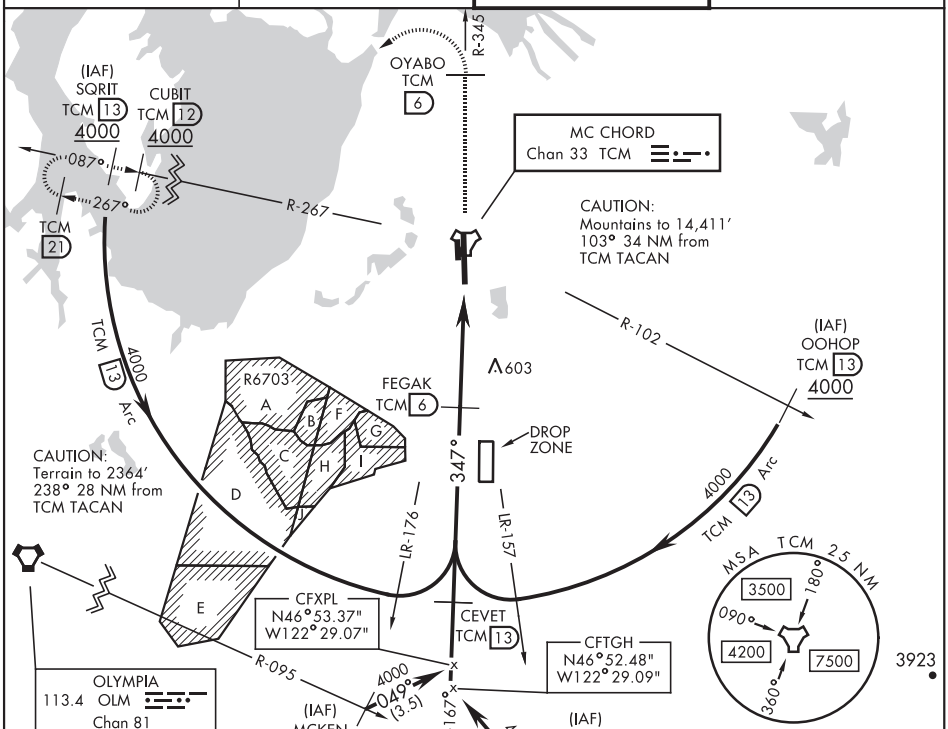
| TACAN Chan | TCM 33 | APCH CRS 347° | Rwy ldg 10,108 TDZE 322 Arpt Elev 322 | AL-414 [USAF] | MC CHORD FIELD (KTCM) |
|---|---|---|---|---|---|

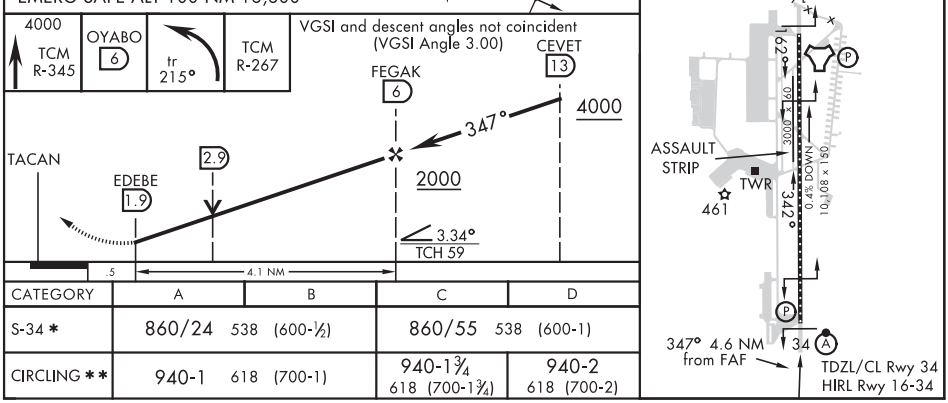
T * When ALS inop, increase CAT AB RVR to 55, vis to 1 mile, CAT CD vis to 1½ miles.
** Circling not authorized E of Rwy 16-34.

ALSF-2

MISSED APPROACH: Climb to 4000 on TCM TACAN R-345 to OYABO, then turn left via 215° course to intercept TCM R-267 to CUBIT and hold. Cross OYABO at or above 3000. Continue climb in hold to 4000.

| ATIS | SEATTLE APP CON | MCCHORD TOWER | GND CON |
|---|---|---|---|
| 135.825 270.1 | 126.5 377.15 | 124.8 259.3 | 118.175 279.65 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-34 * | 860/24 538 (600-½) | | 860/55 538 (600-1) | |
| CIRCLING ** | 940-1 618 (700-1) | | 940-1¾ 618 (700-1¾) | 940-2 618 (700-2) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

TACOMA, WASHINGTON 47°08'N-122°29'W MC CHORD FIELD (KTCM)

Amdt 4 10SEP20

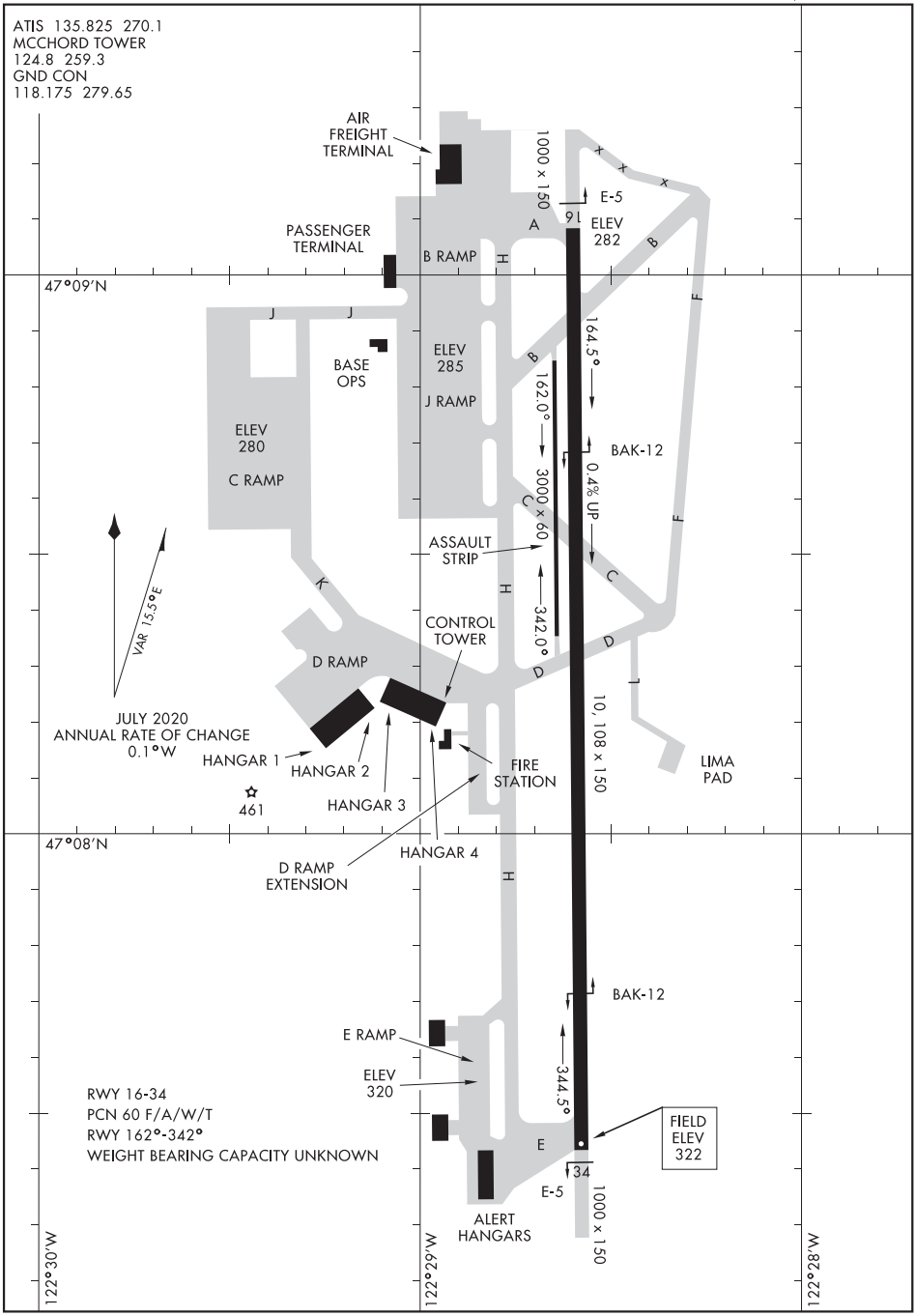
TACAN RWY 34

20198

# AIRPORT DIAGRAM

AFD-414 [USAF]

MC CHORD FIELD (KTCM)
TACOMA, WASHINGTON




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM

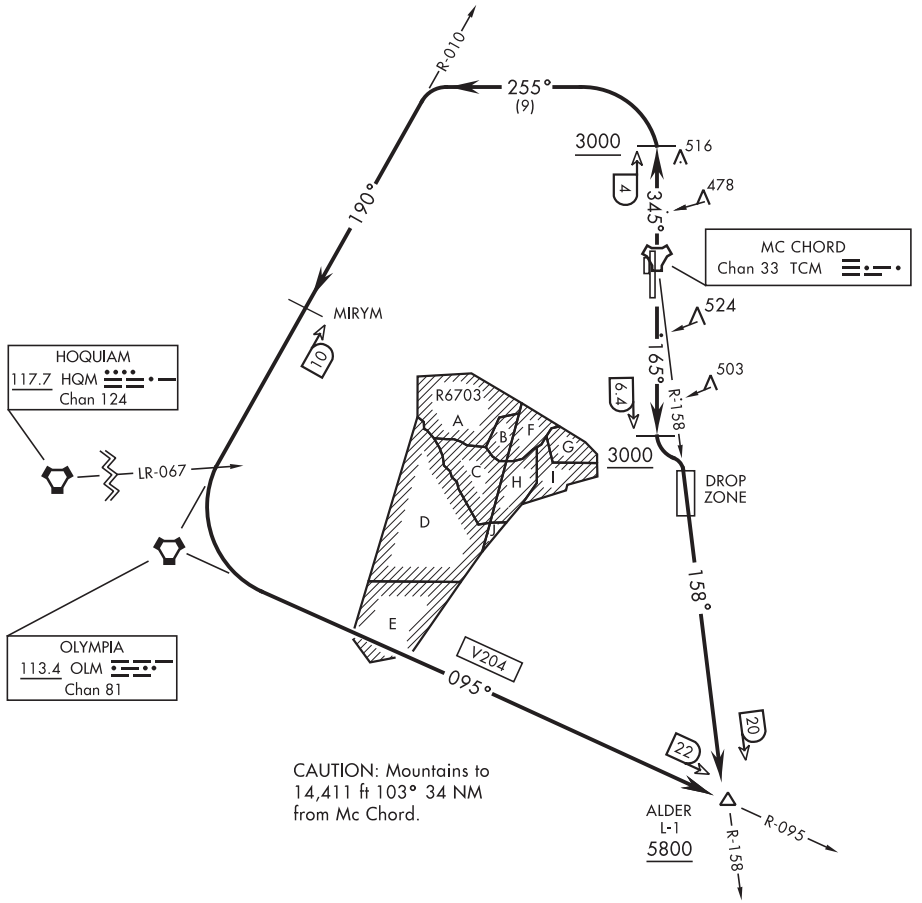
TACOMA, WASHINGTON
MC CHORD FIELD (KTCM)

# ALDER-TWO DEPARTURE (ALDER2 • ALDER)

ATIS
135.825 270.1
GND CON
118.175 279.65
MC CHORD TOWER
124.8 259.3
SEATTLE DEP CON
126.5 377.15

SL-414 [USAF]

If unable to make ATC charted crossing restricitons advise ATC prior to departure.




## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 16: Climb on track 165° to cross TCM TACAN 6.4 DME, at or above 3000. Then turn left to intercept TCM R-158 to cross ALDER at or above 5800.

TAKE-OFF RWY 34: Climb on track 345° to cross TCM TACAN 4 DME at or above 3000. Then turn left heading 255° to intercept OLM VORTAC R-010 MIRYM then OLM. Then via V204 to cross ALDER at or above 5800.

(MOCAA3.MOCAA) 17341

MCCHORD FIELD (JOINT BASE LEWIS-MCCHORD) (KTCM)

# MOCAA THREE DEPARTURE (RNAV)

TACOMA, WASHINGTON

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb heading 165° to 3000, then left turn direct to cross ALDER at or above 5800 and at or below 9000, then on track 111° to MOCAA, thence . . . .

TAKEOFF RUNWAY 34: Climb heading 345° to 3000, then left turn direct NEECE, then on track 188° to cross NISQA at 4000, then on track 129° to cross KUSCE at or above 4000 and at or below 250K, then on track 086° to cross ALDER at or above 5800 and at or below 9000, then on track 111° to MOCAA, thence . . . .

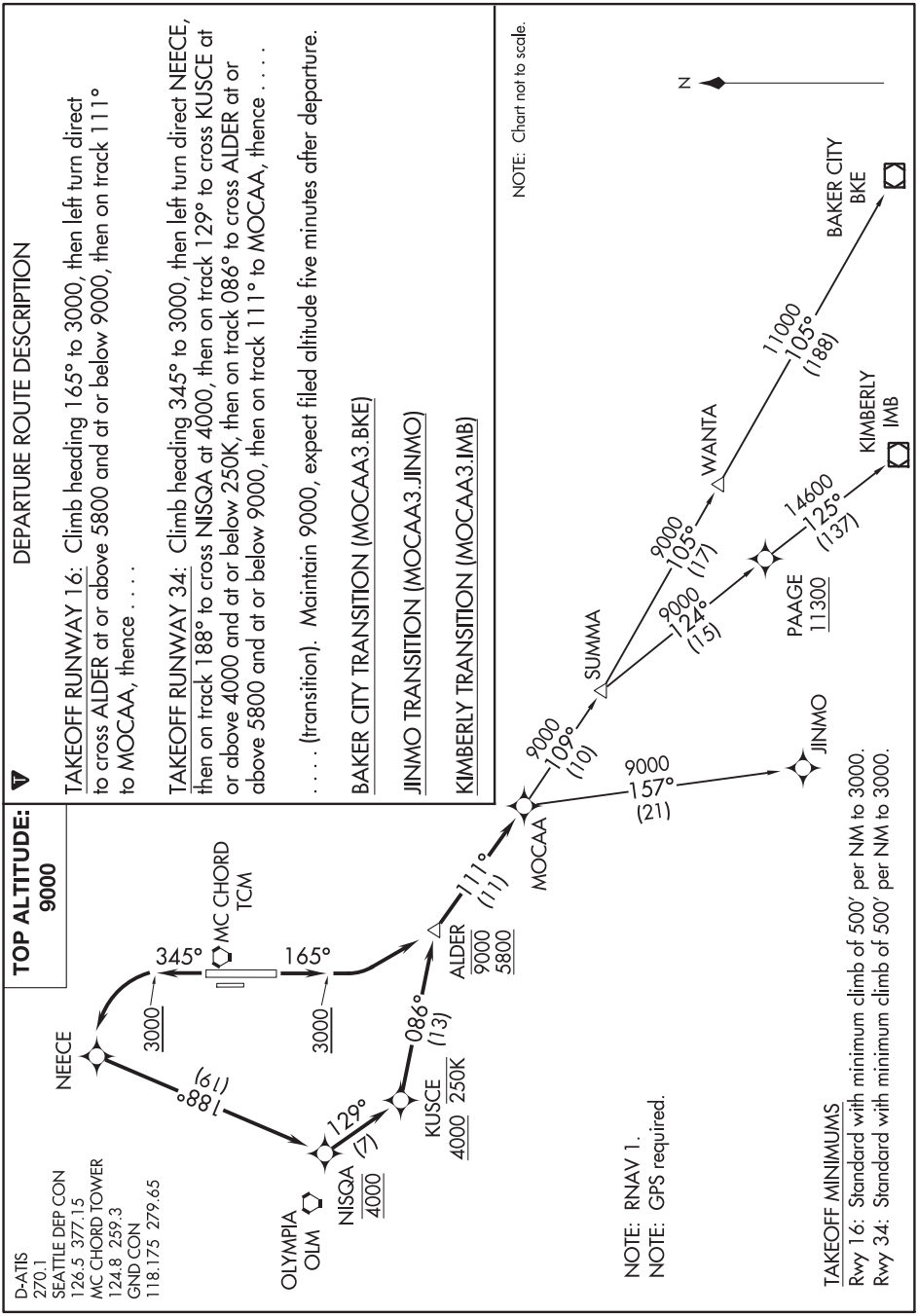
. . . . (transition). Maintain 9000, expect filed altitude five minutes after departure.

BAKER CITY TRANSITION (MOCAA3.BKE)

JINMO TRANSITION (MOCAA3.JINMO)

KIMBERLY TRANSITION (MOCAA3.IMB)

NOTE: Chart not to scale.






NW-1, 05 NOV 2020 to 31 DEC 2020

MOCAA THREE DEPARTURE (RNAV)

TACOMA, WASHINGTON

(MOCAA3.MOCAA) 15OCT15

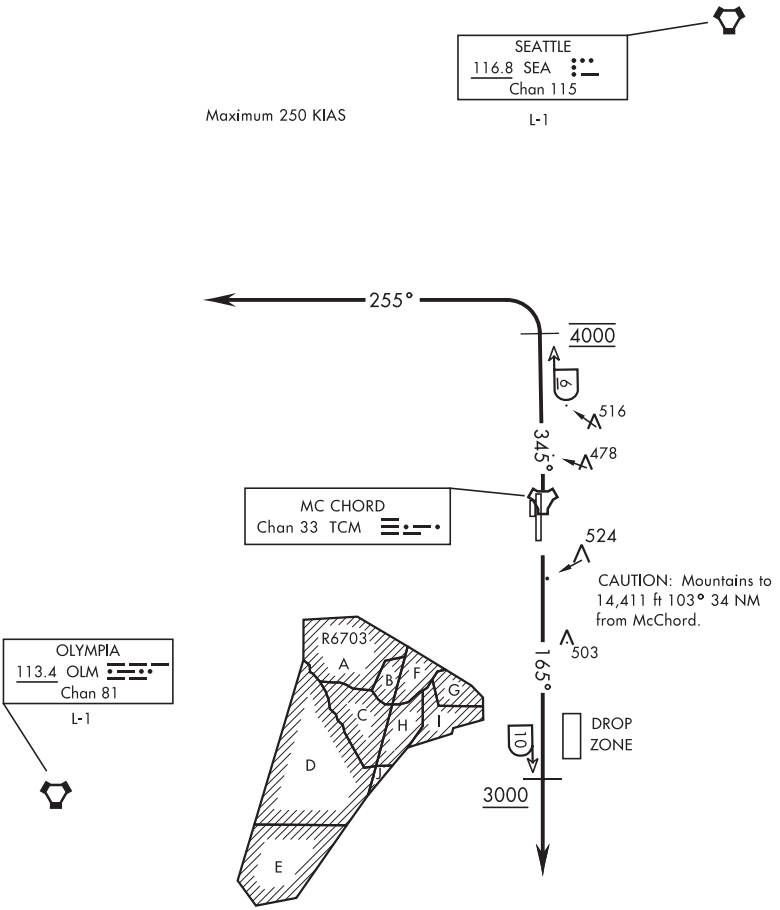
MCCHORD FIELD (JOINT BASE LEWIS-MCCHORD) (KTCM)

# OLYMPIC-FOUR DEPARTURE

SL-414 [USAF]

ATIS
135.825 270.1
GND CON
118.175 279.65
MCCHORD TOWER
124.8 259.3
SEATTLE DEP CON
126.5 377.15

If unable to make ATC charted crossing restrictions advise ATC prior to departure.




RADAR REQUIRED

① 2270′ from Rwy 34

## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 16: Climb on track of 165° to cross TCM TACAN 10 DME at or above 3000. Expect radar vectors within TCM 8 DME. Maintain ATC assigned altitude.

TAKE-OFF RWY 34: Climb on track 345° to cross TCM TACAN 6 DME at 4000. Then turn left tracking 255° to expect radar vectors. Maintain ATC assigned altitude.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

20086

# PUGET-SIX DEPARTURE

SL-414 [USAF]

MC CHORD FIELD (KTCM)
TACOMA, WASHINGTON

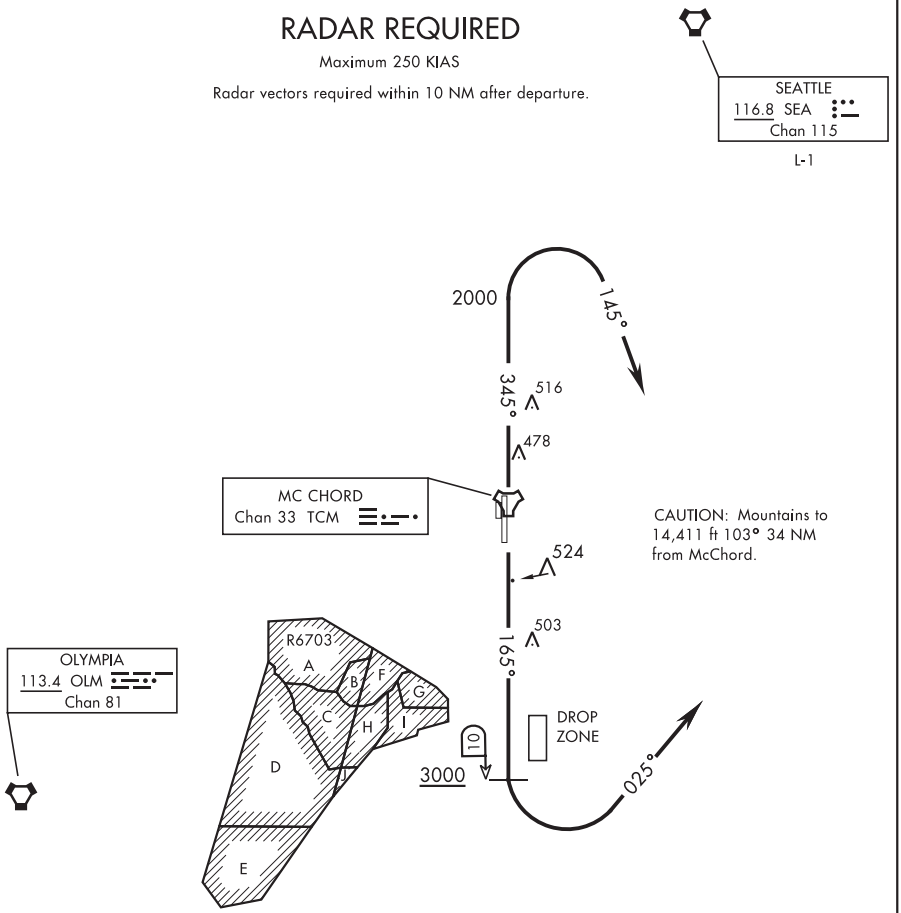
ATIS
135.825 270.1
GND CON
118.175 279.65
MCCHORD TOWER
124.8 259.3
SEATTLE DEP CON
126.5 377.15

If unable to make ATC charted crossing restriction advise ATC prior to departure.

## RADAR REQUIRED

Maximum 250 KIAS

Radar vectors required within 10 NM after departure.




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 16: Climb on track 165° to cross TCM TACAN 10 DME at or above 3000. Then turn left tracking 025° to expect radar vectors. Maintain ATC assigned altitude.

TAKE-OFF RWY 34: Climb on track 345° to 2000, then turn right tracking 145° to expect radar vectors. Maintain ATC assigned altitude.

# ILS or LOC RWY 14
## ROGUE VALLEY INTL-MEDFORD (MFR)

| LOC/DME I-MFR | APP CRS | Rwy ldg | 8800 |
|---|---|---|---|
| 110.3 | 143° | TDZE | 1303 |
| Chan 40 | | Apt Elev | 1335 |

DME required. DME or RADAR required for procedure entry.

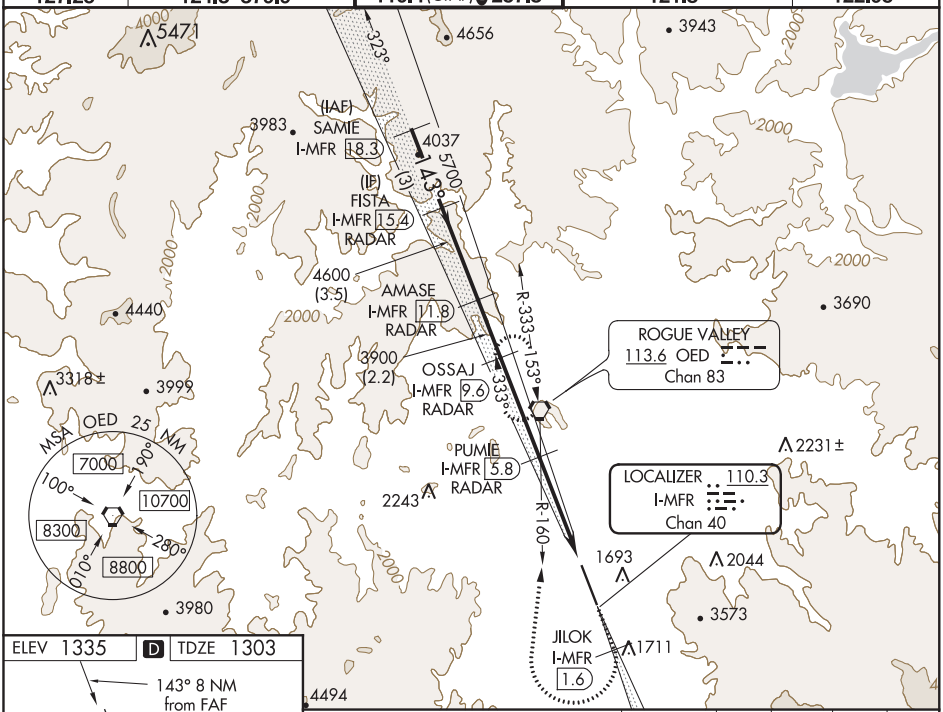
Circling NA for Cats C and D northeast of Rwy 14-32. When Medford altimeter setting not received, procedure NA. For inop ALS, increase S-ILS 14 visibility to 1¾ SM, increase S-LOC 14# Cats C and D visibility to RVR 5500, increase S-LOC 14 Cats C and D visibility to 2½ SM.

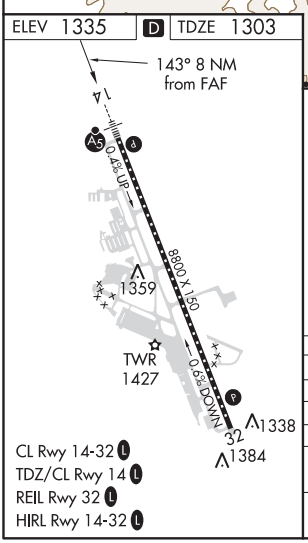
-3°C

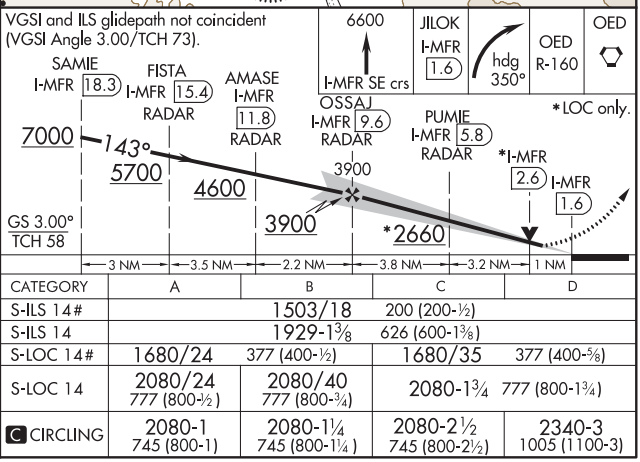
MALSR

MISSED APPROACH: Climb to 6600 on I-MFR SE course to JILOK/I-MFR 1.6 DME and climbing right turn on heading 350° and on OED VORTAC R-160 to OED VORTAC and hold, continue climb-in-hold to 6600. #Missed approach requires minimum climb of 331 feet per NM to 4100.

| ATIS | CASCADE APP CON* | MEDFORD TOWER* | GND CON | UNICOM |
|---|---|---|---|---|
| 127.25 | 124.3 379.9 | 119.4 (CTAF) L 257.8 | 121.8 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 14# | 1503/18 200 (200-½) | | | |
| S-ILS 14 | 1929-1⅜ 626 (600-1⅜) | | | |
| S-LOC 14# | 1680/24 377 (400-½) | | 1680/35 377 (400-⅝) | |
| S-LOC 14 | 2080/24 777 (800-½) | 2080/40 777 (800-¾) | 2080-1¾ 777 (800-1¾) | |
| C CIRCLING | 2080-1 745 (800-1) | 2080-1¼ 745 (800-1¼) | 2080-2½ 745 (800-2½) | 2340-3 1005 (1100-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

MEDFORD, OREGON AL-251 (FAA) 20254

| APP CRS | Rwy ldg | 8800 |
|---|---|---|
| 323° | TDZE | 1335 |
| | Apt Elev | 1335 |

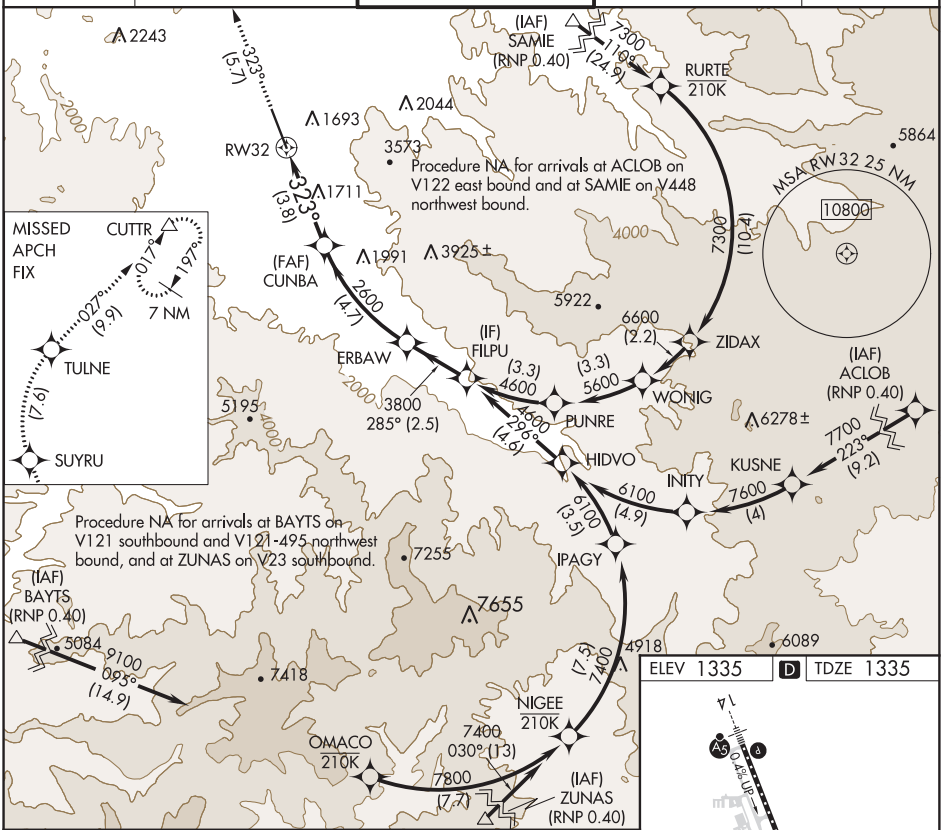
# RNAV (RNP) RWY 32
## ROGUE VALLEY INTL-MEDFORD (MFR)

GPS required. RF required. For uncompensated Baro-VNAV systems, procedure NA below -8°C (17°F) or above 45°C (113°F).

-3°C

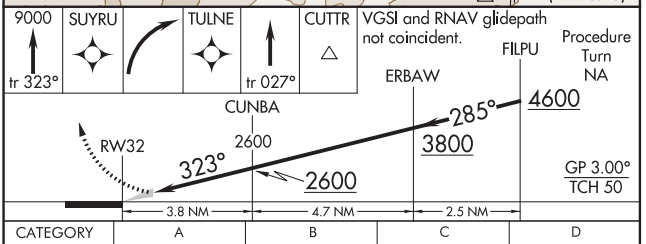
MISSED APPROACH: Climb to 9000 on track 323° to SUYRU, right turn to TULNE, then on track 027° to CUTTR and hold, continue climb-in-hold to 9000.

| ATIS | CASCADE APP CON ★ | MEDFORD TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 127.25 | 124.3 379.9 | 119.4 (CTAF) L 257.8 | 121.8 | 122.95 |




| 9000 | SUYRU | | TULNE | | CUTTR |
|---|---|---|---|---|---|
| tr 323° | | | | tr 027° | |

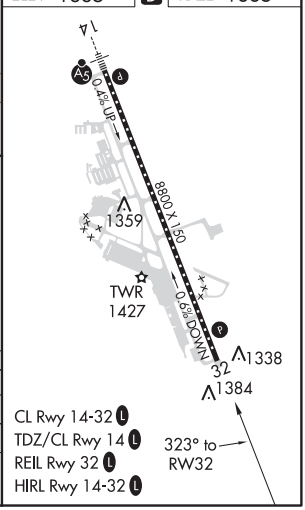
VGSI and RNAV glidepath not coincident.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.15 DA | 1609-1 274 (300-1) | | | |
| RNP 0.30 DA | 1661-1 326 (400-1) | | | |

AUTHORIZATION REQUIRED

ELEV 1335 D TDZE 1335




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 8800 |
|---|---|---|
| 143° | TDZE | 1303 |
| | Apt Elev | 1335 |

# RNAV (RNP) Z RWY 14
## ROGUE VALLEY INTL-MEDFORD (MFR)

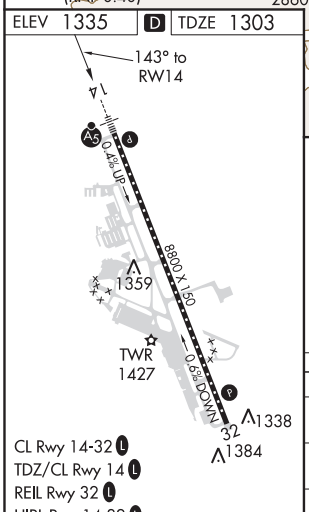
T
-3°C

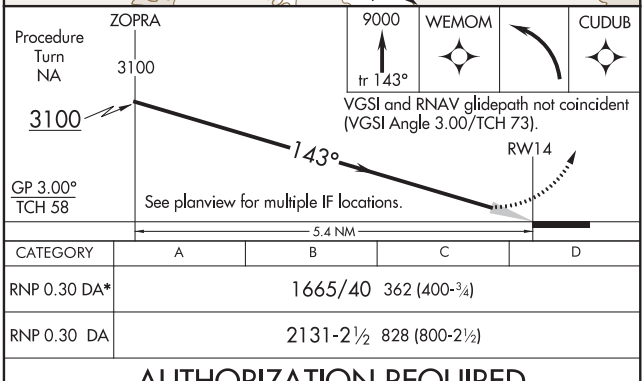
GPS required. RF required. For uncompensated Baro-VNAV systems, procedure NA below -8°C (17°F) or above 46°C (115°F). For inop MALSR, increase RNP 0.30 DA* all Cats visibility to RVR 6000, increase RNP 0.30 DA all Cats visibility to 3.
* Missed approach requires minimum climb of 259 feet per NM to 8300.

MALSR

MISSED APPROACH: Climb to 9000 on track 143° to WEMOM, left turn to CUDUB, right turn to HUBUX, left turn to HORUG, then on track 310° to CUTTR and hold.

| ATIS | CASCADE APP CON* | MEDFORD TOWER* | GND CON | UNICOM |
|---|---|---|---|---|
| 127.25 | 124.3 379.9 | 119.4 (CTAF) L 257.8 | 121.8 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.30 DA* | 1665/40 362 (400-¾) | | | |
| RNP 0.30 DA | 2131-2½ 828 (800-2½) | | | |

**AUTHORIZATION REQUIRED**

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

MEDFORD, OREGON

AL-251 (FAA)

20254

# RNAV (GPS) Y RWY 14
## ROGUE VALLEY INTL-MEDFORD (MFR)

| APP CRS | Rwy ldg | 8800 |
|---|---|---|
| 143° | TDZE | 1303 |
| | Apt Elev | 1335 |

RNP APCH.

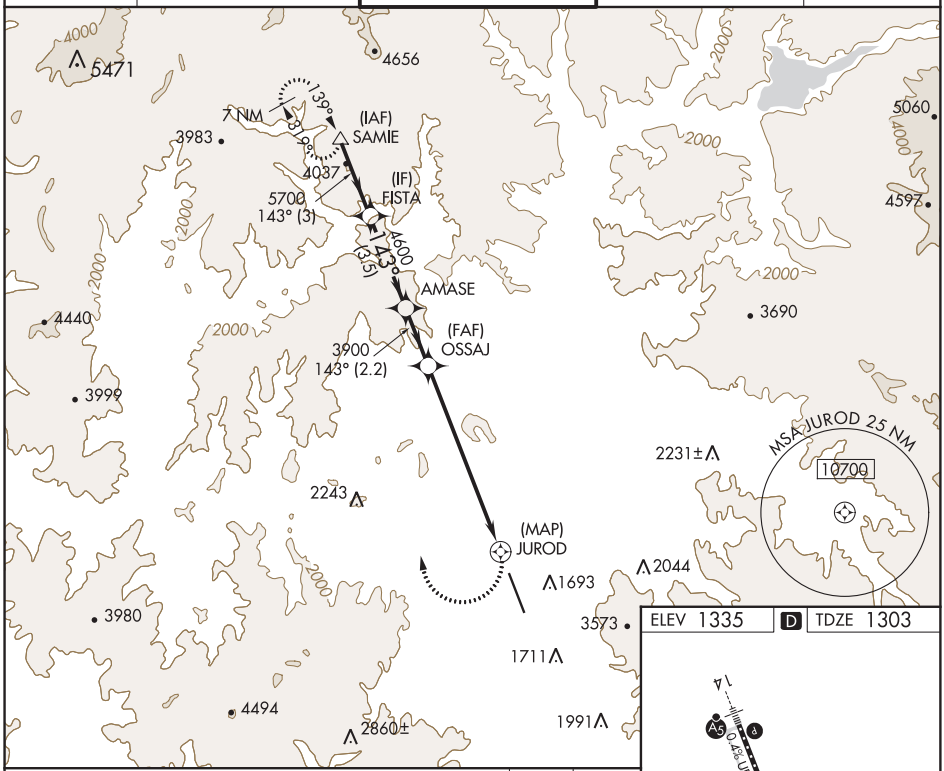
When Medford altimeter setting not received, procedure NA. Inop table does not apply to Cats C and D.

-3°C

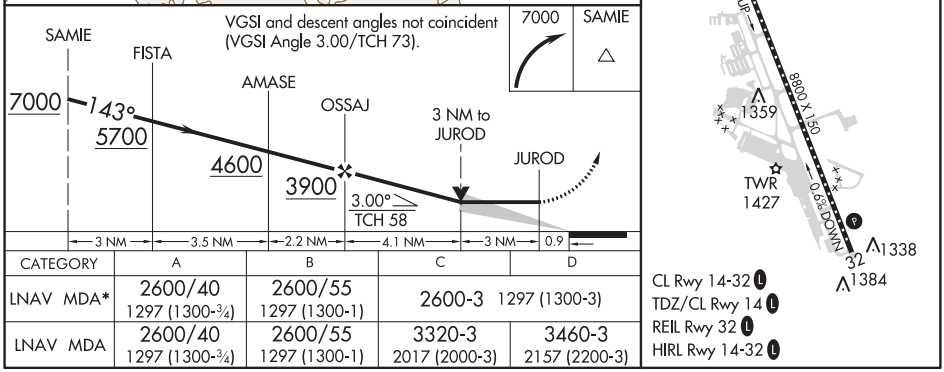
MALSR

MISSED APPROACH: Climbing right turn 7000 direct SAMIE and hold, continue climb-in-hold to 7000.
*Missed approach requires minimum climb of 334 feet per NM to 4800.

| ATIS | CASCADE APP CON ★ | MEDFORD TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 127.25 | 124.3 379.9 | 119.4 (CTAF) L 257.8 | 121.8 | 122.95 |




ELEV 1335 | D | TDZE 1303




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA* | 2600/40 1297 (1300-¾) | 2600/55 1297 (1300-1) | 2600-3 1297 (1300-3) | |
| LNAV MDA | 2600/40 1297 (1300-¾) | 2600/55 1297 (1300-1) | 3320-3 2017 (2000-3) | 3460-3 2157 (2200-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 328° | TDZE | N/A |
| | Apt Elev | 1335 |

# RNAV (GPS)-D

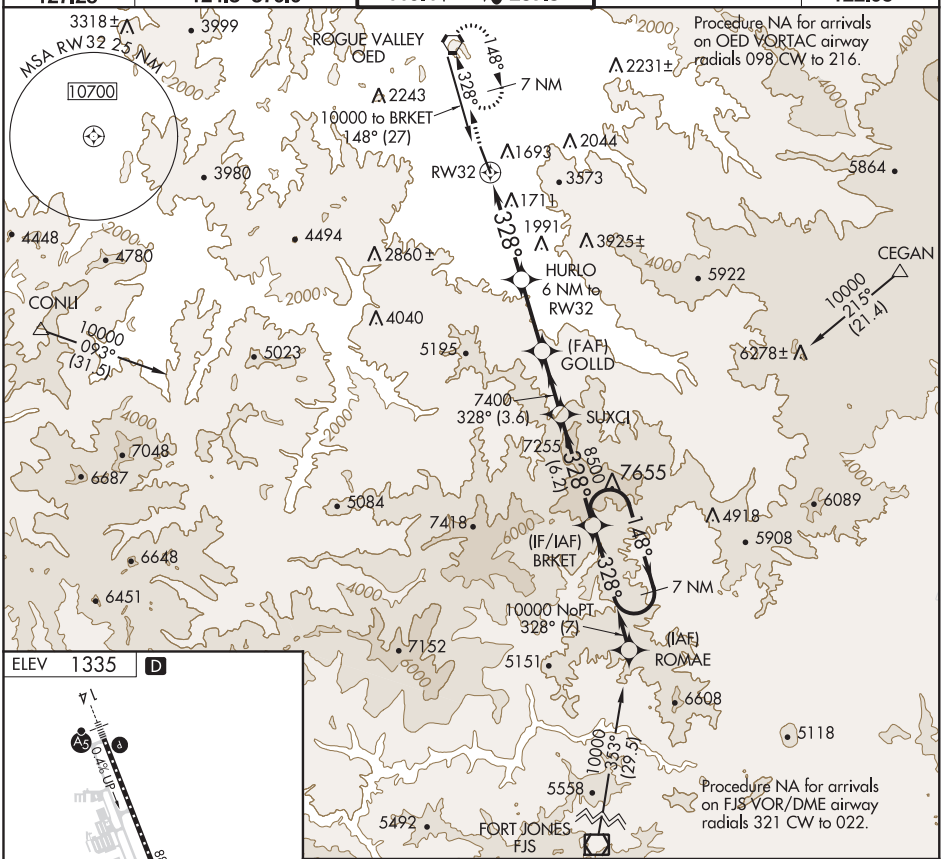
## ROGUE VALLEY INTL-MEDFORD (MFR)

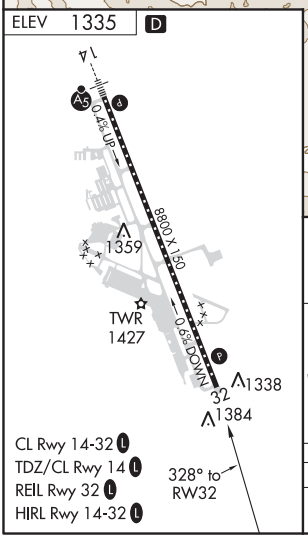
RNP APCH.

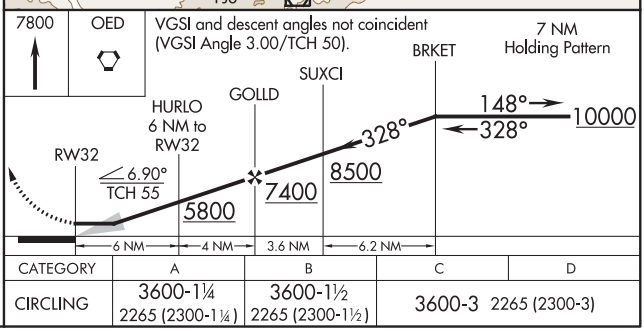
-3°C

MISSED APPROACH: Climb to 7800 direct OED VORTAC and hold, continue climb-in-hold to 7800.

| ATIS | CASCADE APP CON ★ | MEDFORD TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 127.25 | 124.3 379.9 | 119.4 (CTAF) L 257.8 | 121.8 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 3600-1¼ 2265 (2300-1¼) | 3600-1½ 2265 (2300-1½) | 3600-3 2265 (2300-3) | |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC/DME I-MFR 110.3 Chan 40 | APP CRS 323° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 1335 |
|---|---|---|

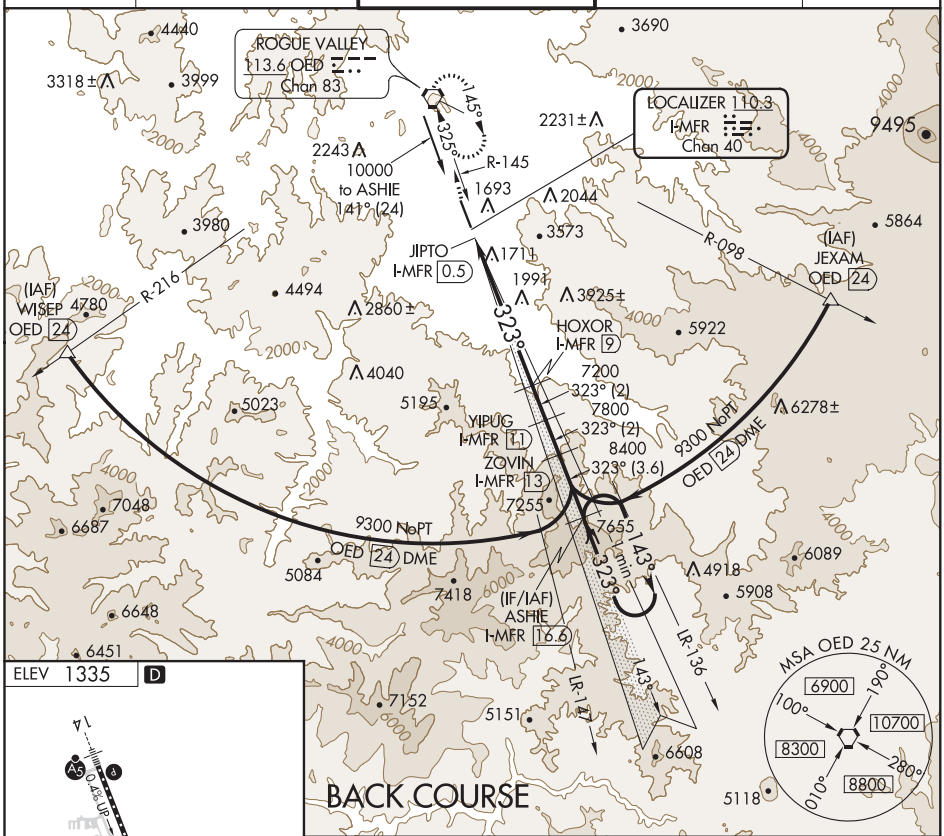
# LOC/DME BC-B

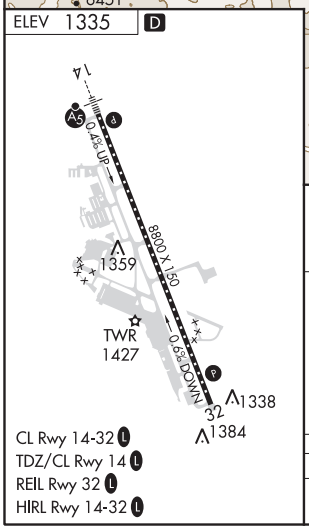
## ROGUE VALLEY INTL-MEDFORD (MFR)

Visibility reduction by helicopters NA.

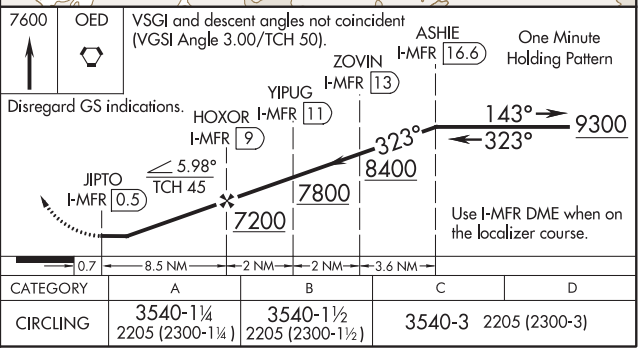
MISSED APPROACH: Climb to 7600 direct OED VORTAC and hold, continue climb-in-hold to 7600.

| ATIS | CASCADE APP CON ★ | MEDFORD TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 127.25 | 124.3 379.9 | 119.4 (CTAF) L 257.8 | 121.8 | 122.95 |




CL Rwy 14-32 L
TDZ/CL Rwy 14 L
REIL Rwy 32 L
HIRL Rwy 14-32 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 3540-1¼<br>2205 (2300-1¼) | 3540-1½<br>2205 (2300-1½) | 3540-3 2205 (2300-3) | |




NW-1, 05 NOV 2020 to 31 DEC 2020

| VORTAC OED | APP CRS | Rwy ldg | 8800 |
|---|---|---|---|
| 113.6 | 146° | TDZE | 1303 |
| Chan 83 | | Apt Elev | 1335 |

# VOR/DME RWY 14

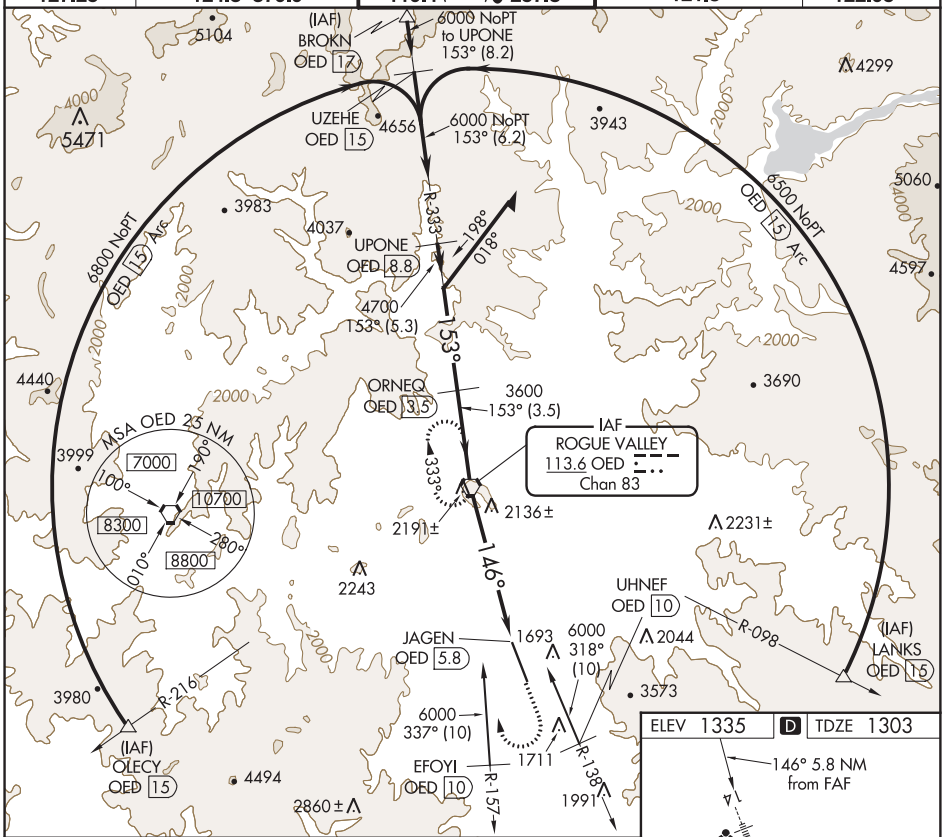
## ROGUE VALLEY INTL-MEDFORD (MFR)

Inoperative table does not apply to S-14 Cat A.
For inoperative MALSR increase S-14 Cat B visibility to 1½.
-3°C

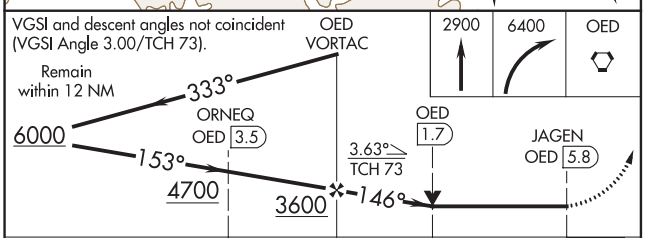
MALSR

MISSED APPROACH: Climb to 2900 then climbing right turn to 6400 direct OED VORTAC and hold, continue climb-in-hold to 6400.

| ATIS | CASCADE APP CON ★ | MEDFORD TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 127.25 | 124.3 379.9 | 119.4 (CTAF) L 257.8 | 121.8 | 122.95 |

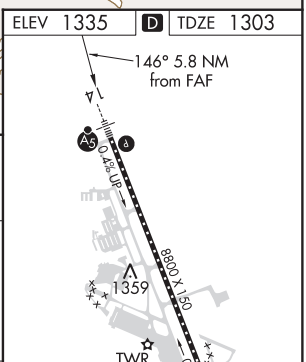



VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 73).




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-14 | 2680/60 1377 (1400-1¼) | | 2680-2½ 1377 (1400-2½) | |
| CIRCLING | 2680-1¼ 1345 (1400-1¼) | 2680-1½ 1345 (1400-1½) | 2680-3 1345 (1400-3) | |

ELEV 1335 D TDZE 1303




CL Rwy 14-32 L
TDZ/CL Rwy 14 L
REIL Rwy 32 L
HIRL Rwy 14-32 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| VORTAC OED 113.6 Chan 83 | APP CRS 325° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 1335 |
|---|---|---|

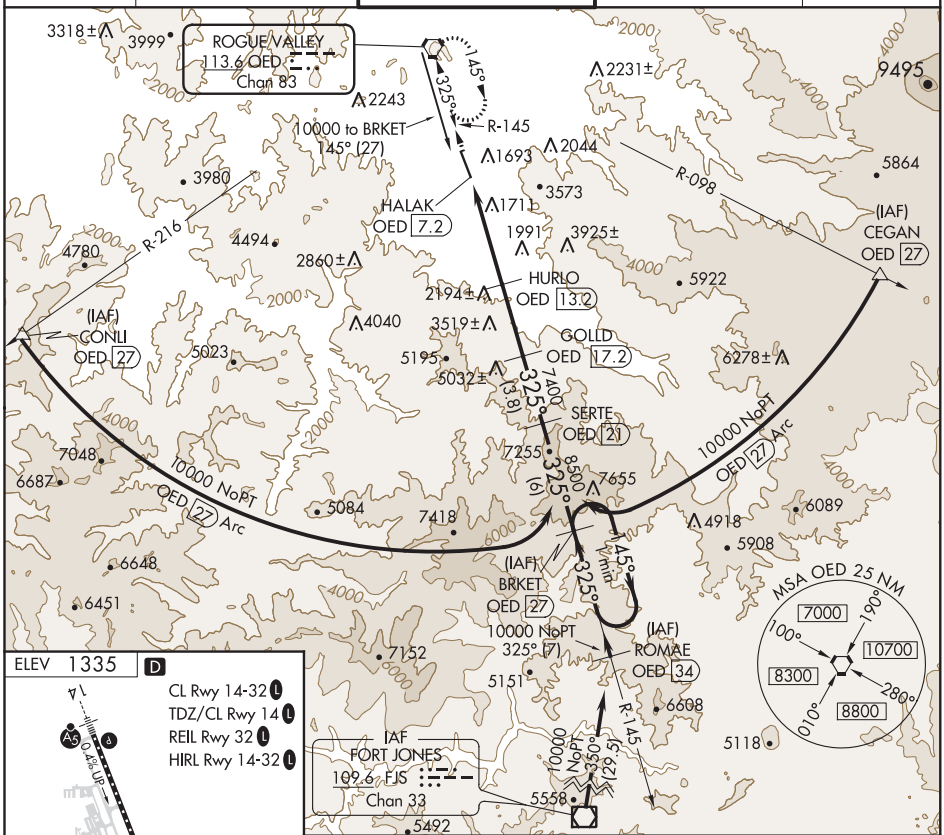
# VOR/DME-C

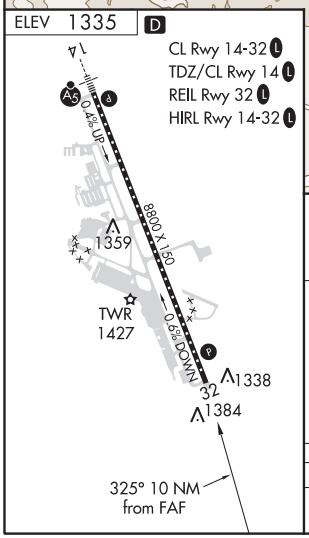
## ROGUE VALLEY INTL-MEDFORD (MFR)

T A -3°C

MISSED APPROACH: Climb to 7600 direct OED VORTAC and hold, continue climb-in-hold to 7600.

| ATIS | CASCADE APP CON ★ | MEDFORD TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 127.25 | 124.3 379.9 | 119.4 (CTAF) L 257.8 | 121.8 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 3600-1¼<br>2265 (2300-1¼) | 3600-1½<br>2265 (2300-1½) | 3600-3 2265 (2300-3) | |



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NW-1, 05 NOV 2020 to 31 DEC 2020

| VORTAC OED | APP CRS | Rwy ldg | N/A |
|---|---|---|---|
| 113.6 | 146° | TDZE | N/A |
| Chan 83 | | Apt Elev | 1335 |

# VOR-A

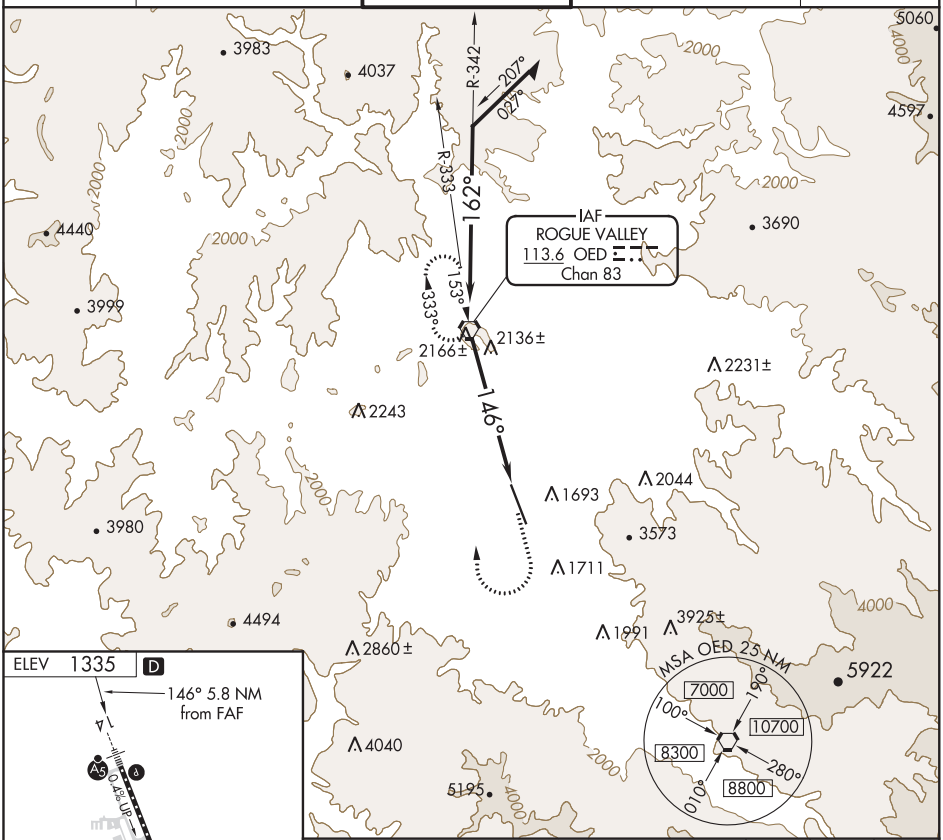
## ROGUE VALLEY INTL-MEDFORD (MFR)

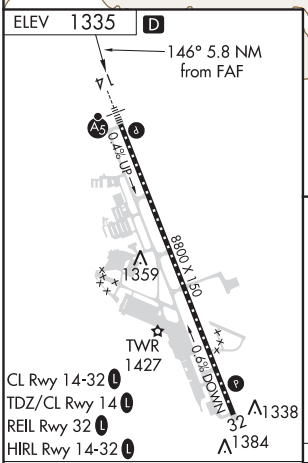
If local altimeter setting not received, procedure NA.

-3°C

MISSED APPROACH: Climb to 2900 then climbing right turn to 6400 direct OED VORTAC and hold, continue climb-in-hold to 6400.

| ATIS | CASCADE APP CON ★ | MEDFORD TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 127.25 | 124.3 379.9 | 119.4 (CTAF) L 257.8 | 121.8 | 122.95 |




| 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 |
|---|---|---|---|---|
| CIRCLING | 2680-1¼ 1345 (1400-1¼) | 2680-1½ 1345 (1400-1½) | 2680-3 1345 (1400-3) | |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

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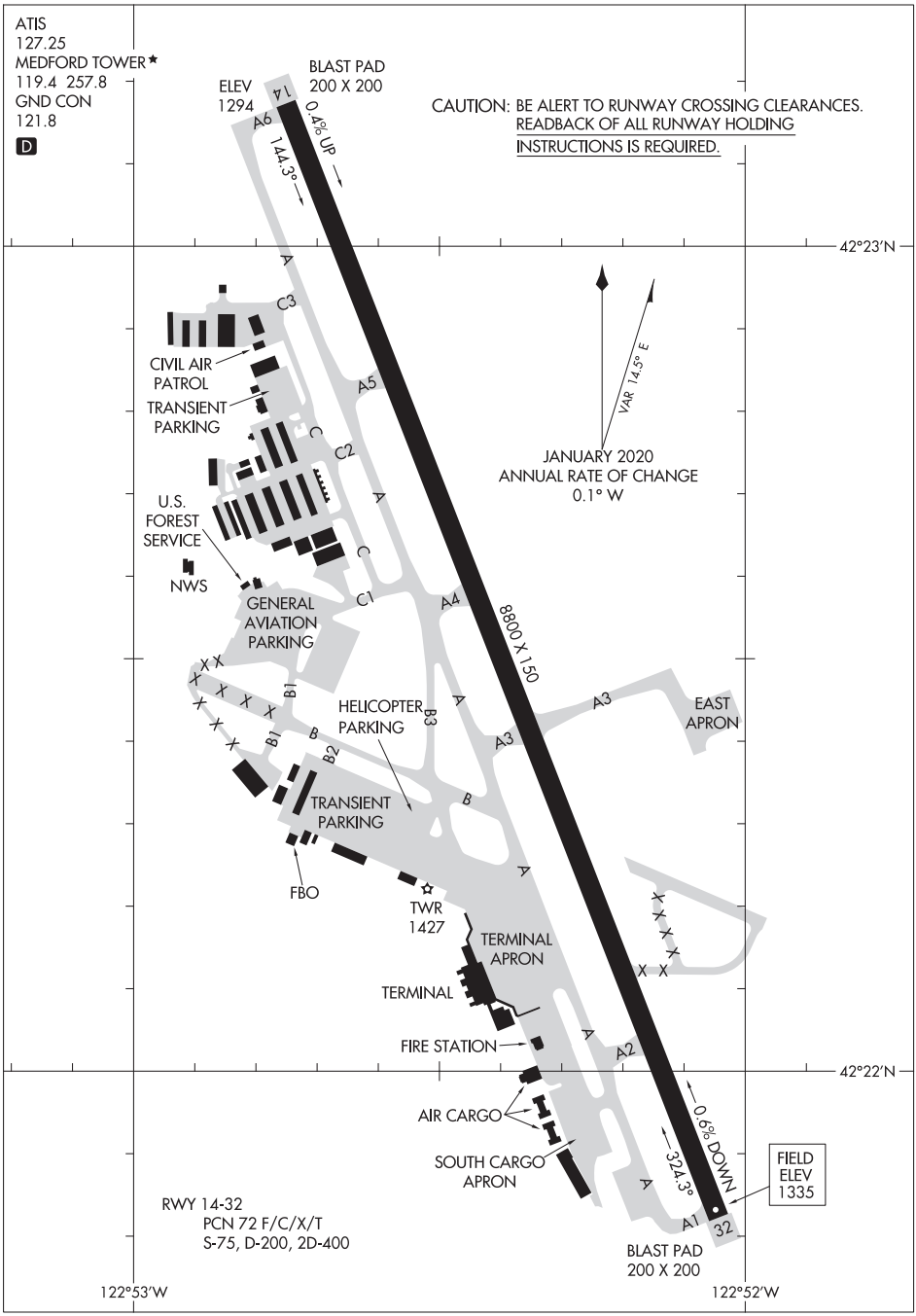
# AIRPORT DIAGRAM

ROGUE VALLEY INTL - MEDFORD (MFR)

AL-251 (FAA)

MEDFORD, OREGON




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM

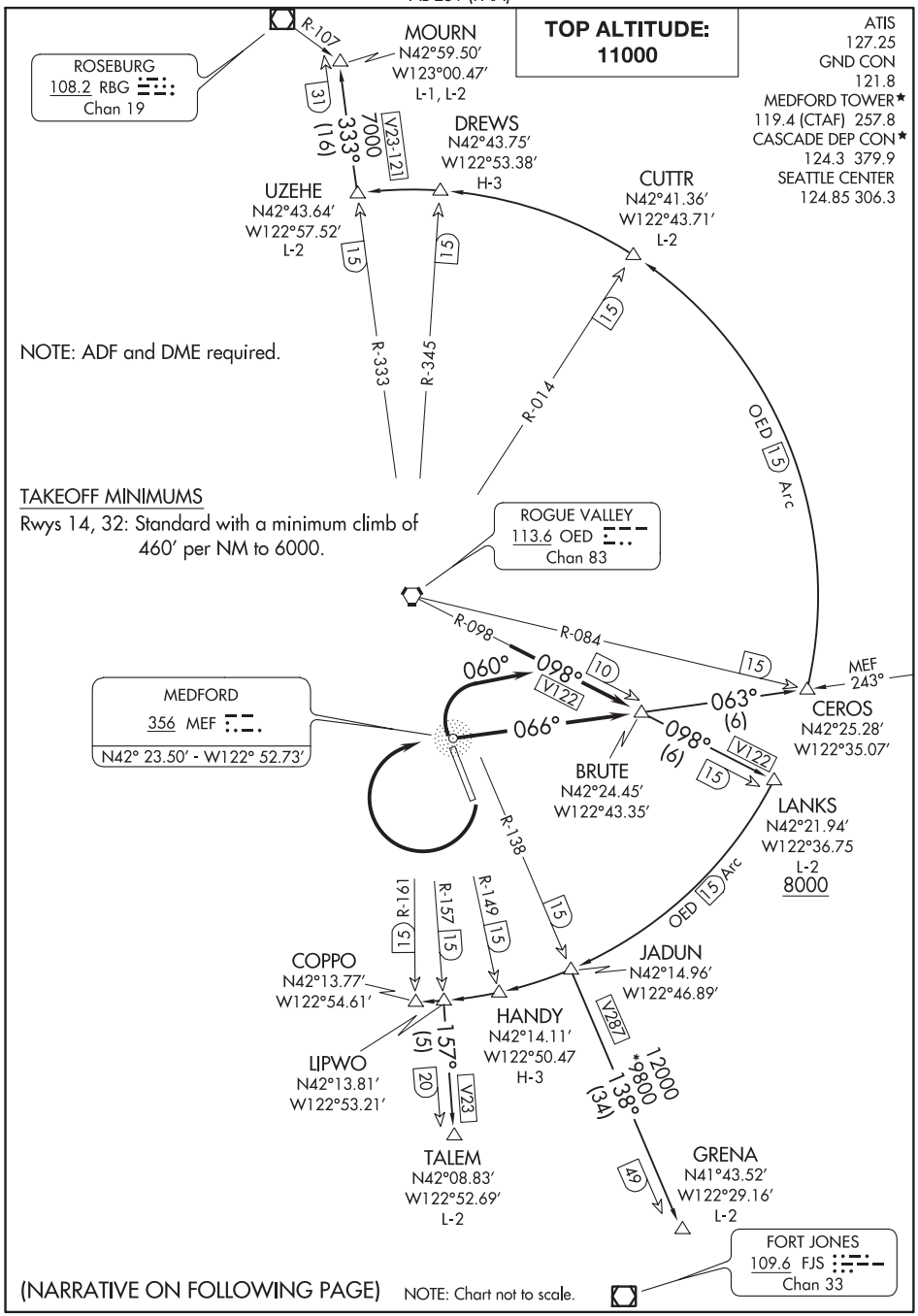
MEDFORD, OREGON

ROGUE VALLEY INTL - MEDFORD(MFR)

20254

# BRUTE SEVEN DEPARTURE

AL-251 (FAA)




(NARRATIVE ON FOLLOWING PAGE)

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climbing right turn direct MEF NDB, depart MEF NDB bearing 066° to BRUTE INT. Thence. . . .

TAKEOFF RUNWAY 32: Climbing right turn heading 060° and OED VORTAC R-098 to BRUTE INT. Thence. . . .

. . . . via (transition) or (assigned route). Maintain 11000 or assigned altitude.

COPPO TRANSITION (BRUTE7.COPPO): From over BRUTE INT on OED VORTAC R-098 to LANKS DME, then on the OED VORTAC 15 DME Arc CW to COPPO DME.

CUTTR TRANSITION (BRUTE7.CUTTR): From over BRUTE INT on MEF NDB 063° to CEROS INT, then on the OED VORTAC 15 DME Arc CCW to CUTTR DME.

DREWS TRANSITION (BRUTE7.DREWS): From over BRUTE INT on MEF NDB 063° to CEROS INT, then on the OED VORTAC 15 DME Arc CCW to DREWS DME.

GRENA TRANSITION (BRUTE7.GRENA): From over BRUTE INT on OED VORTAC R-098 to LANKS DME, then on the OED VORTAC 15 DME Arc CW to JADUN DME, then on OED VORTAC R-138 to GRENA DME.

HANDY TRANSITION (BRUTE7.HANDY): From over BRUTE INT on OED VORTAC R-098 to LANKS DME, then on the OED VORTAC 15 DME Arc CW to HANDY DME.

LANKS TRANSITION (BRUTE7.LANKS): From over BRUTE INT on OED VORTAC R-098 to LANKS DME.

MOURN TRANSITION (BRUTE7.MOURN): From over BRUTE INT on MEF NDB 063° to CEROS INT, then on the OED VORTAC 15 DME Arc CCW to UZEHE DME, then on OED VORTAC R-333 to MOURN INT.

TALEM TRANSITION (BRUTE7.TALEM): From over BRUTE INT on OED VORTAC R-098 to LANKS DME, then on the OED VORTAC 15 DME Arc CW to LIPWO DME, then on OED VORTAC R-157 to TALEM DME.

UZEHE TRANSITION (BRUTE7.UZEHE): From over BRUTE INT on MEF NDB 063° to CEROS INT, then on the OED VORTAC 15 DME Arc CCW to UZEHE DME.

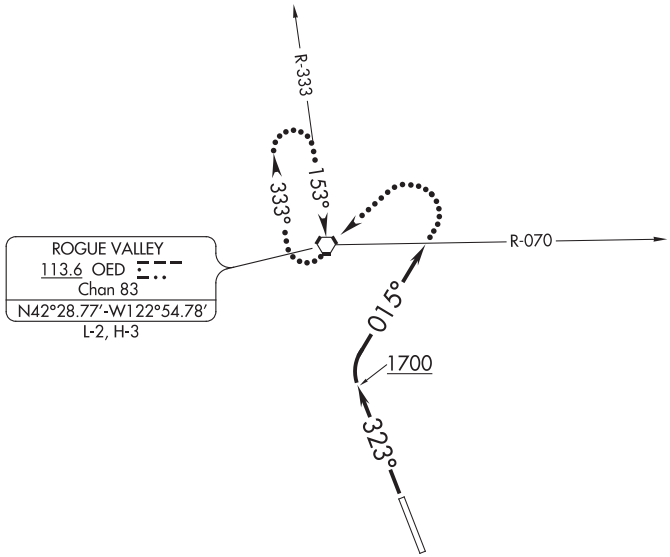
# EAGLE SIX DEPARTURE

AL-251 (FAA)

ROGUE VALLEY INTL-MEDFORD (MFR)
MEDFORD, OREGON

ATIS
127.25
GND CON
121.8
MEDFORD TOWER★
119.4 (CTAF) 257.8
CASCADE DEP CON★
124.3 379.9
SEATTLE CENTER
124.85 306.3

**TOP ALTITUDE: 11000**




TAKEOFF MINIMUMS
Rwys 14: NA - ATC.
Rwy 32: Standard with minimum climb of 410′ per NM to 6300.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 32: Climb to 1700 on heading 323° then climbing right turn heading 015°, maintain 11000 or assigned altitude, expect RADAR vectors to assigned route; expect filed altitude/flight level five minutes after departure.

LOST COMMUNICATIONS: If no contact with ATC crossing the OED R-070, turn left, proceed direct OED VORTAC, continue climb in holding pattern to minimum crossing altitude/minimum enroute altitude before proceeding on course.



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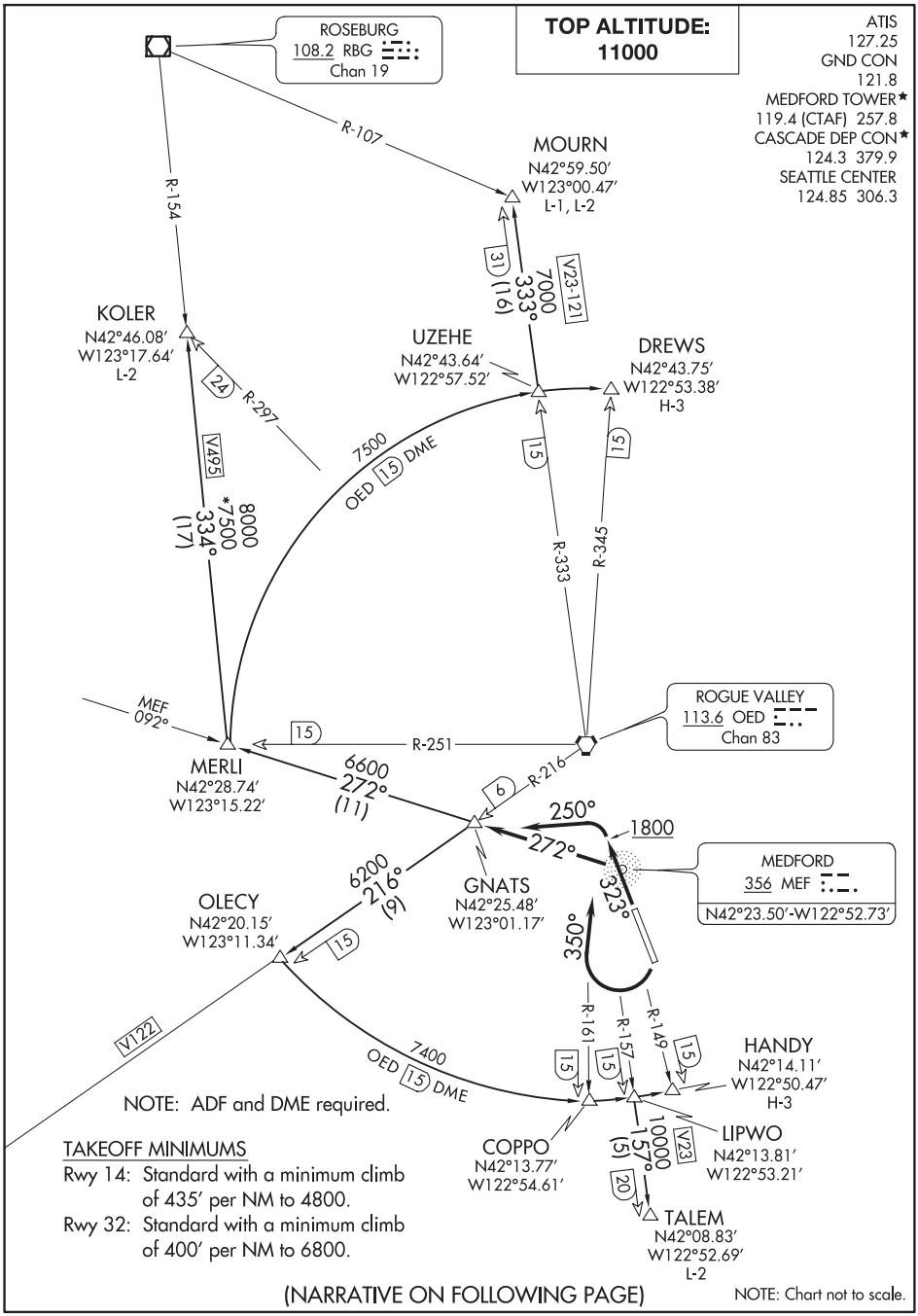
(GNATS7.GNATS) 18060

# GNATS SEVEN DEPARTURE

AL-251 (FAA)

ROGUE VALLEY INTL-MEDFORD (MFR)
MEDFORD, OREGON




TAKEOFF MINIMUMS

Rwy 14: Standard with a minimum climb of 435′ per NM to 4800.

Rwy 32: Standard with a minimum climb of 400′ per NM to 6800.

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climbing right turn on heading 350° to intercept bearing 272° from MEF NDB to GNATS INT. Thence . . . .

TAKEOFF RUNWAY 32: Climb on heading 323° to 1800 then climbing left turn on heading 250° to intercept bearing 272° from MEF NDB to GNATS INT. Thence . . . .

. . . . via (transition) or (assigned route). Maintain 11000 or assigned lower altitude.

COPPO TRANSITION (GNATS7.COPPO): From over GNATS INT on OED VORTAC R-216 to OLECY DME, then on the OED VORTAC 15 DME Arc CCW to COPPO DME.

DREWS TRANSITION (GNATS7.DREWS): From over GNATS INT on MEF NDB 272° to MERLI INT, then on the OED VORTAC 15 DME Arc CW to DREWS DME.

HANDY TRANSITION (GNATS7.HANDY): From over GNATS INT on OED VORTAC R-216 to OLECY DME, then on the OED VORTAC 15 DME Arc CCW to HANDY DME.

KOLER TRANSITION (GNATS7.KOLER): From over GNATS INT on MEF NDB 272° to MERLI INT, then on RBG VOR/DME R-154 to KOLER INT.

MOURN TRANSITION (GNATS7.MOURN): From over GNATS INT on MEF NDB 272° to MERLI INT, then on the OED VORTAC 15 DME Arc CW to UZEHE DME, then on OED VORTAC R-333 to MOURN INT.

TALEM TRANSITION (GNATS7.TALEM): From over GNATS INT on OED VORTAC R-216 to OLECY DME, then on the OED VORTAC 15 DME Arc CCW to LIPWO DME, then on OED VORTAC R-157 to TALEM DME.


NW-1, 05 NOV 2020 to 31 DEC 2020

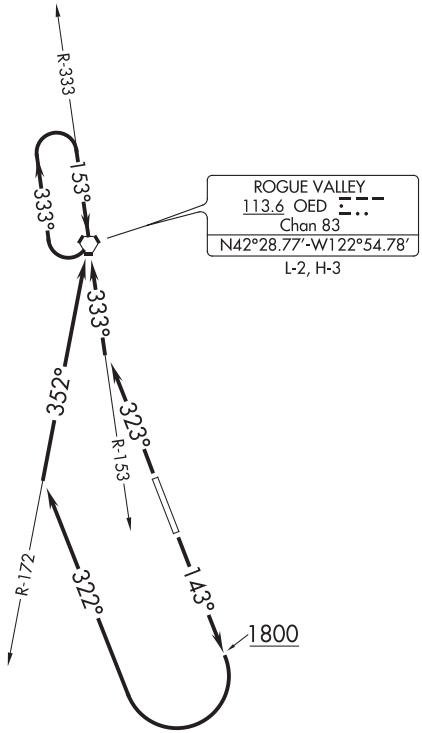
(JKSN1.OED) 18060

# JACKSON ONE DEPARTURE

AL-251 (FAA)

ROGUE VALLEY INTL-MEDFORD (MFR)
MEDFORD, OREGON

ATIS
127.25
GND CON
121.8
MEDFORD TOWER★
119.4 (CTAF) 257.8
CASCADE DEP CON★
124.3 379.9
SEATTLE CENTER
124.85 306.3




TAKEOFF MINIMUMS
Rwy 14: Standard with a minimum climb of 435′ per NM to 4700.
Rwy 32: Standard with a minimum climb of 300′ per NM to 6800.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14: Climb on heading 143° to 1800, then climbing right turn heading 322° and OED VORTAC R-172 to OED VORTAC, thence. . . .

TAKEOFF RUNWAY 32: Climb on heading 323° to intercept the OED VORTAC R-153 to OED VORTAC, thence. . . .

. . . . continue climb-in-hold in OED VORTAC holding pattern to cross OED VORTAC at or above MEA/MCA for direction of flight before proceeding on course.


NW-1, 05 NOV 2020 to 31 DEC 2020

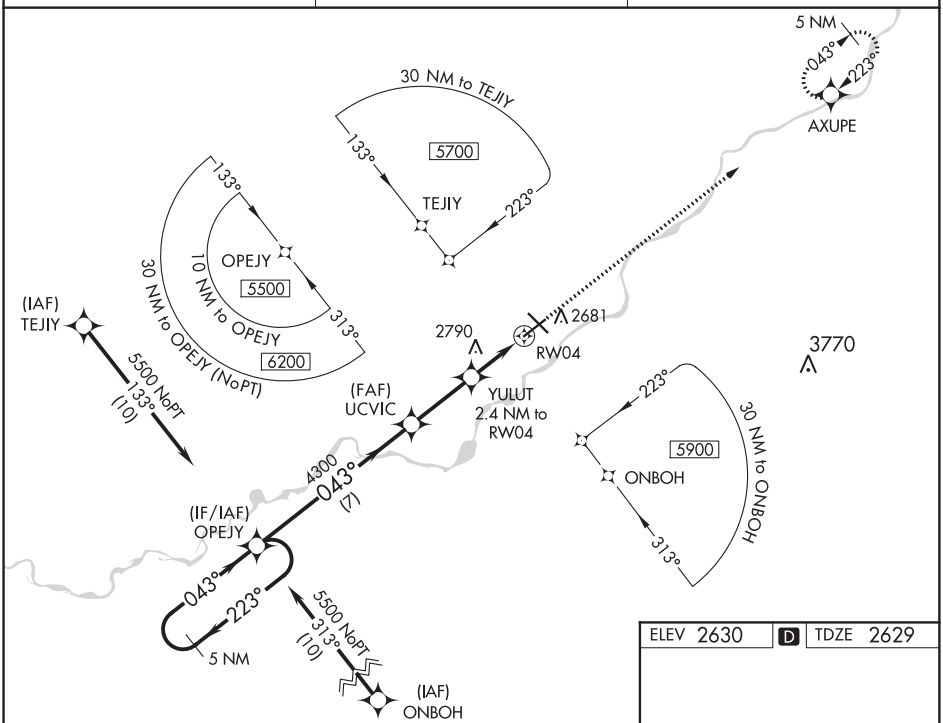
| WAAS CH 42600 W04A | APP CRS 043° | Rwy ldg 5680<br>TDZE 2629<br>Apt Elev 2630 |
|---|---|---|

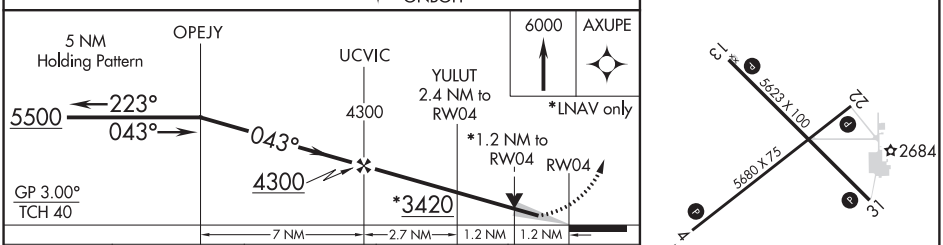
# RNAV (GPS) RWY 4
## FRANK WILEY FIELD (MLS)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C (-13°F) or above 54°C (130°F). Baro-VNAV and VDP NA when using Forsyth altimeter setting. DME/DME RNP -0.3 NA. When local altimeter setting not received, use Forsyth altimeter setting: increase LPV and LNAV/VNAV DA to 2967 and all visibility ⅛ mile. Increase all MDA 100 feet and all Cat C and D visibility ¼ mile.

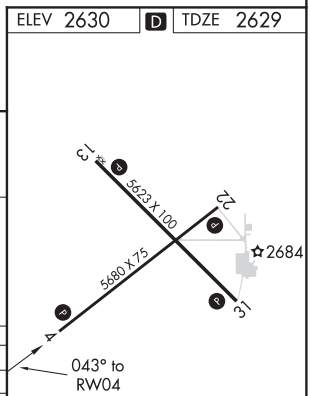
MISSED APPROACH: Climb to 6000 direct AXUPE and hold, continue climb-in-hold to 6000.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.575 | 126.85 305.2 | 123.0 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2879-1 250 (300-1) | | | |
| LNAV/VNAV DA | 2879-1 250 (300-1) | | | |
| LNAV MDA | 3040-1 411 (500-1) | | 3040-1⅛ 411 (500-1⅛) | |
| C CIRCLING | 3060-1 430 (500-1) | 3100-1 470 (500-1) | 3120-1½ 490 (500-1½) | 3320-2¼ 690 (700-2¼) |




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

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

MILES CITY, MONTANA | AL-259 (FAA) | 20198

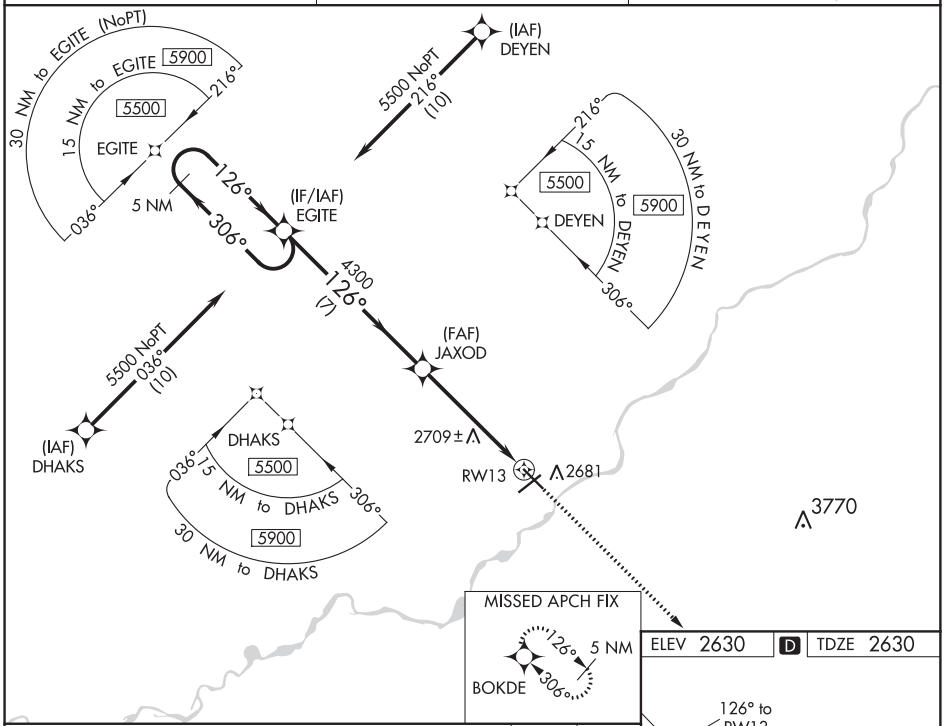
| WAAS CH 97340 W13A | APP CRS 126° | Rwy ldg 5623 TDZE 2630 Apt Elev 2630 |
|---|---|---|

# RNAV (GPS) RWY 13
## FRANK WILEY FIELD (MLS)

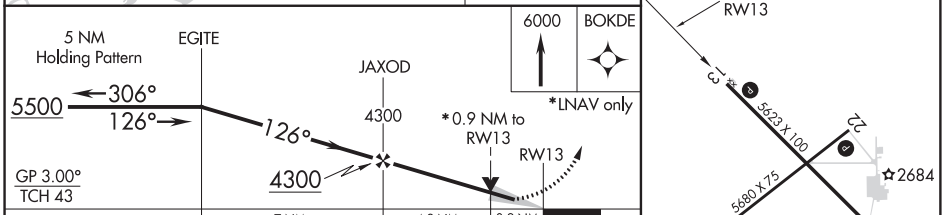
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C (-11°F) or above 54°C (130°F). Baro-VNAV and VDP NA when using Forsyth altimeter setting. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Forsyth altimeter setting; increase LPV and LNAV/VNAV DA to 2968 and all visibility ⅛ mile. Increase all MDA 100 feet and all Cat C and D visibility ¼ mile.

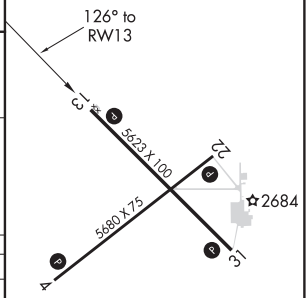
MISSED APPROACH: Climb to 6000 direct BOKDE and hold, continue climb-in-hold to 6000.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.575 | 126.85 305.2 | 123.0 (CTAF) L |




ELEV 2630 | D | TDZE 2630




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2880-1 250 (300-1) | | | |
| LNAV/VNAV DA | 2880-1 250 (300-1) | | | |
| LNAV MDA | 2960-1 330 (400-1) | | | |
| C CIRCLING | 3060-1 430 (500-1) | 3100-1 470 (500-1) | 3120-1½ 490 (500-1½) | 3320-2¼ 690 (700-2¼) |

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

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

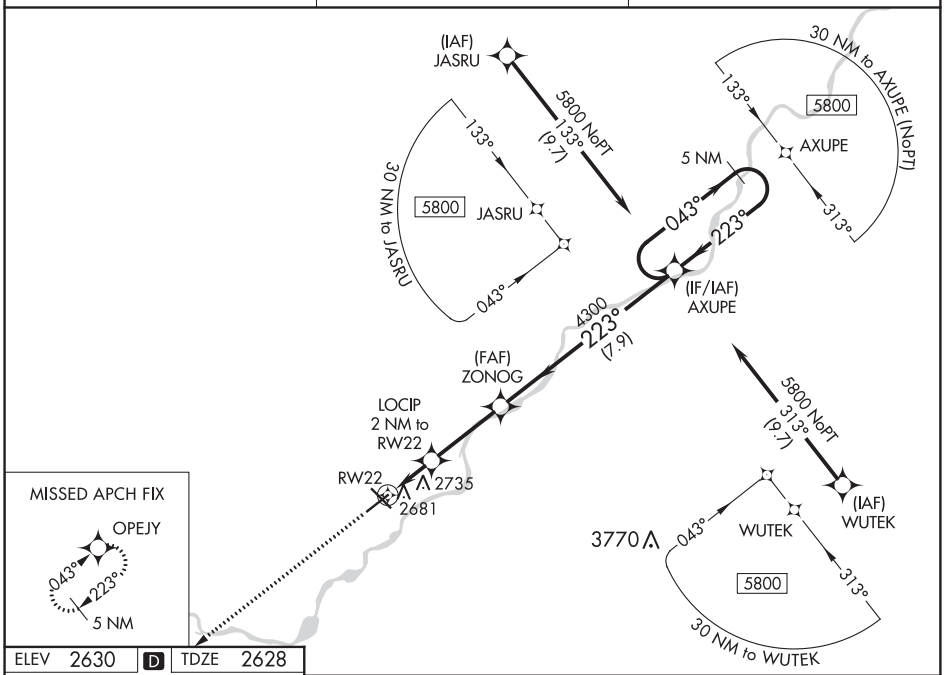
| WAAS CH 77924 W22A | APP CRS 223° | Rwy ldg 5680<br>TDZE 2628<br>Apt Elev 2630 |
|---|---|---|

# RNAV (GPS) RWY 22
## FRANK WILEY FIELD (MLS)

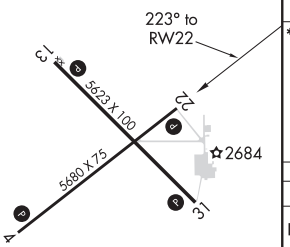
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C (-11°F) or above 54°C (130°F). Baro-VNAV and VDP NA when using Forsyth altimeter setting. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Forsyth altimeter setting: increase LPV DA to 2966 and LNAV/VNAV DA to 2980 and all visibilities ⅛ mile. Increase all MDA 100 feet and LNAV Cat C and D visibility ⅜ mile and Circling Cat D ¼ mile.

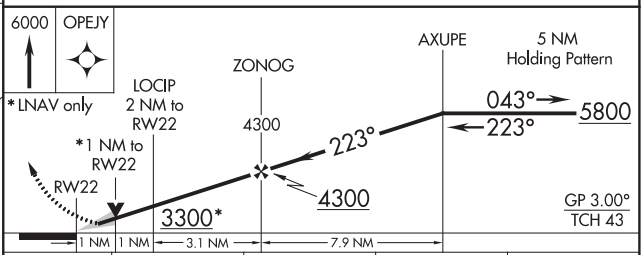
MISSED APPROACH: Climb to 6000 direct OPEJY and hold, continue climb-in-hold to 6000.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.575 | 126.85 305.2 | 123.0 (CTAF) L |




| ELEV 2630 | D | TDZE 2628 |
|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2878-1 250 (300-1) | | | |
| LNAV/VNAV DA | 2892-1 264 (300-1) | | | |
| LNAV MDA | 3000-1 372 (400-1) | | | |
| C CIRCLING | 3060-1 430 (500-1) | 3100-1 470 (500-1) | 3120-1½ 490 (500-1½) | 3320-2¼ 690 (700-2¼) |

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



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

MILES CITY, MONTANA | AL-259 (FAA) | 20198

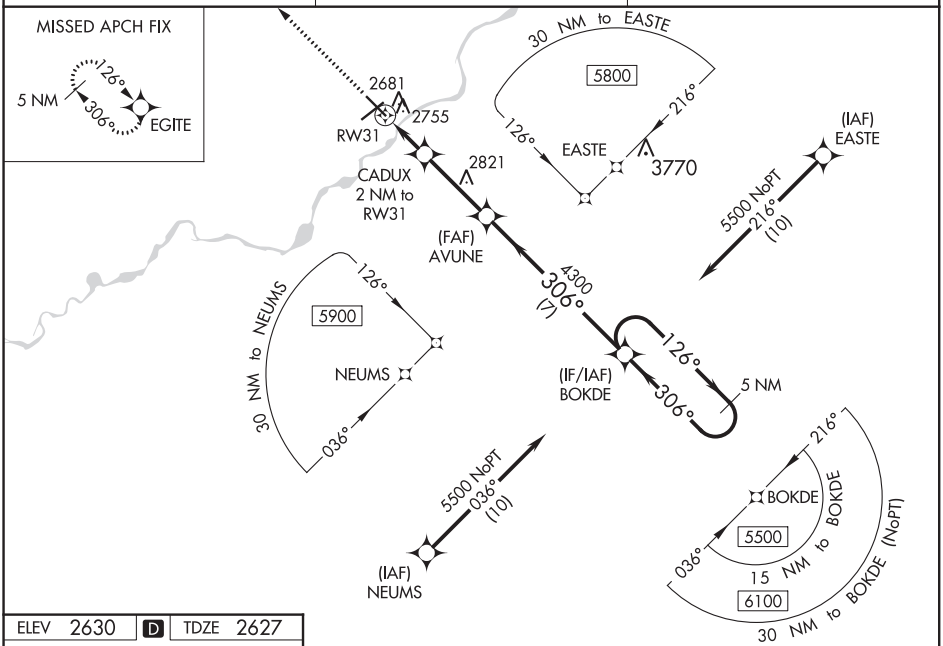
# RNAV (GPS) RWY 31
## FRANK WILEY FIELD (MLS)

| WAAS CH 56240 W31A | APP CRS 306° | Rwy ldg 5623 TDZE 2627 Apt Elev 2630 |
|---|---|---|

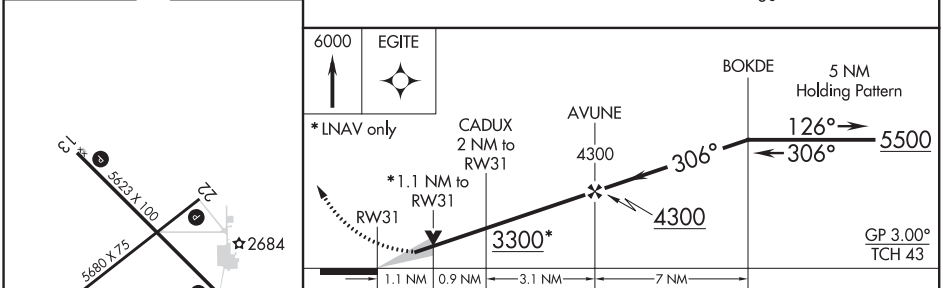
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C (-11°F) or above 54°C (130°F). Baro-VNAV and VDP NA when using Forsyth altimeter setting. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Forsyth altimeter setting; increase LPV DA to 2965 and all visibility ⅛ mile, and increase LNAV/VNAV DA to 3005 and all visibility ¼ mile. Increase all MDA 100 feet and all Cat C and D visibility ¼ mile.

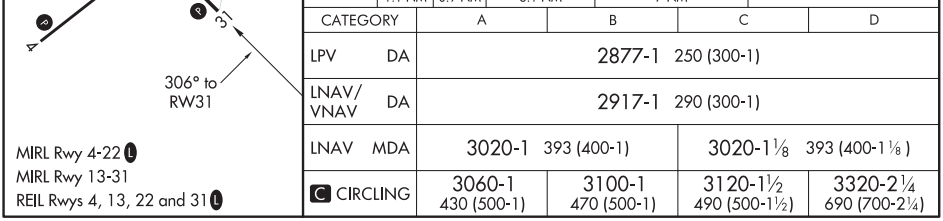
MISSED APPROACH: Climb to 6000 direct EGITE and hold, continue climb-in-hold to 6000.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.575 | 126.85 305.2 | 123.0 (CTAF) L |




ELEV 2630 | D | TDZE 2627




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2877-1 250 (300-1) | | | |
| LNAV/VNAV DA | 2917-1 290 (300-1) | | | |
| LNAV MDA | 3020-1 393 (400-1) | | 3020-1⅛ 393 (400-1⅛) | |
| C CIRCLING | 3060-1 430 (500-1) | 3100-1 470 (500-1) | 3120-1½ 490 (500-1½) | 3320-2¼ 690 (700-2¼) |

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

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

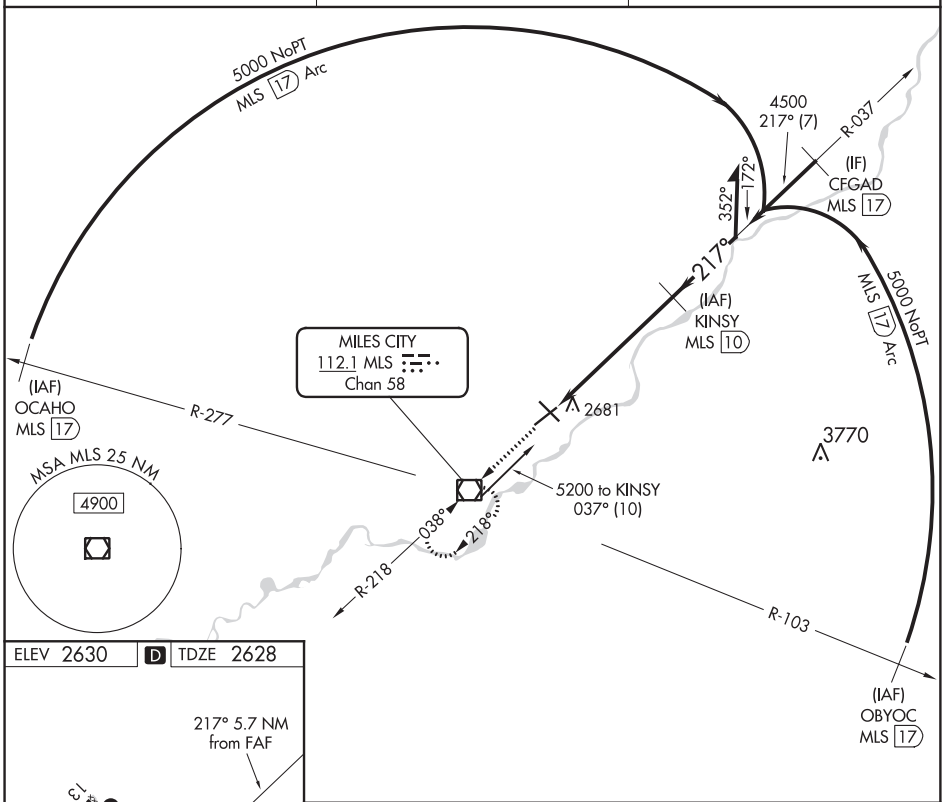
# VOR/DME RWY 22
## FRANK WILEY FIELD (MLS)

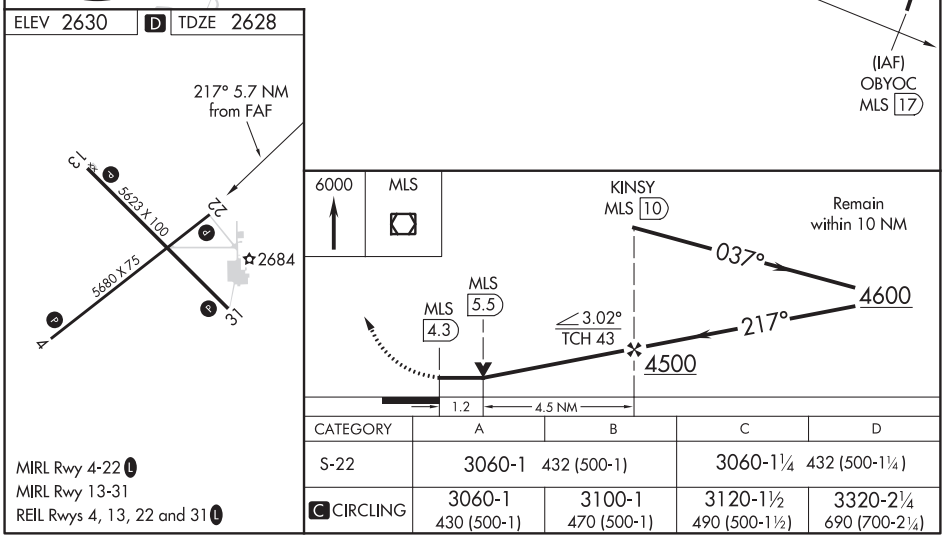
| VOR/DME MLS | APP CRS | Rwy ldg | 5680 |
|---|---|---|---|
| 112.1 | 217° | TDZE | 2628 |
| Chan 58 | | Apt Elev | 2630 |

When local altimeter setting not received, use Forsyth altimeter setting and increase all MDA 100 feet, and increase S-22 Cat C/D visibility ¼ mile and Circling Cat D visibility ¼ mile.

MISSED APPROACH: Climb to 6000 direct MLS VOR/DME and hold, continue climb-in-hold to 6000.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.575 | 126.85 305.2 | 123.0 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-22 | 3060-1 432 (500-1) | | 3060-1¼ 432 (500-1¼) | |
| C CIRCLING | 3060-1 430 (500-1) | 3100-1 470 (500-1) | 3120-1½ 490 (500-1½) | 3320-2¼ 690 (700-2¼) |

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

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

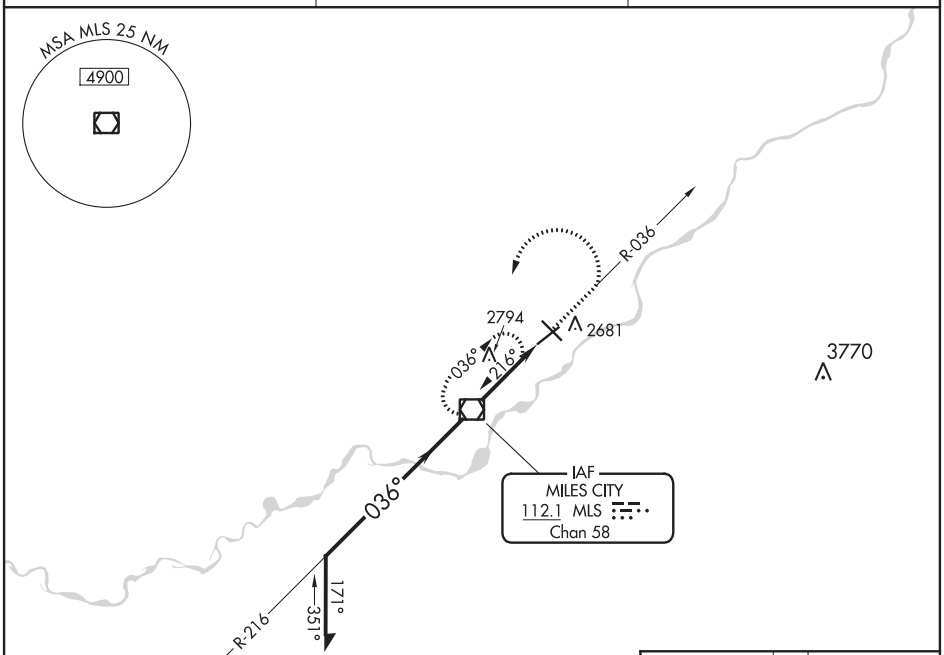
| VOR/DME MLS | APP CRS | Rwy ldg | 5680 |
|---|---|---|---|
| 112.1 | 036° | TDZE | 2629 |
| Chan 58 | | Apt Elev | 2630 |

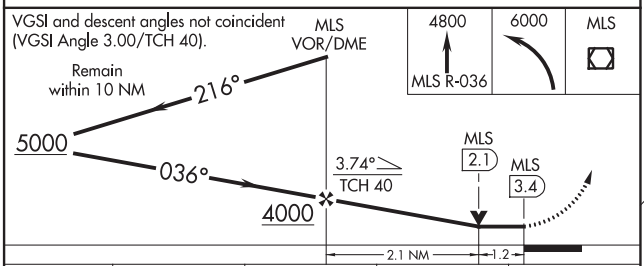
# VOR RWY 4
## FRANK WILEY FIELD (MLS)

When local altimeter setting not received, use Forsyth altimeter setting and increase all MDA 100 feet, and increase S-4 Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 4800 on MLS VOR/DME R-036 then climbing left turn to 6000 direct MLS VOR/DME and hold.

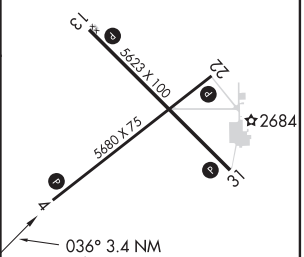
| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.575 | 126.85 305.2 | 123.0 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-4 | 3060-1 431 (500-1) | | 3060-1¼ 431 (500-1¼) | NA |
| C CIRCLING | 3060-1 430 (500-1) | 3100-1 470 (500-1) | 3120-1½ 490 (500-1½) | NA |

ELEV 2630 D TDZE 2629

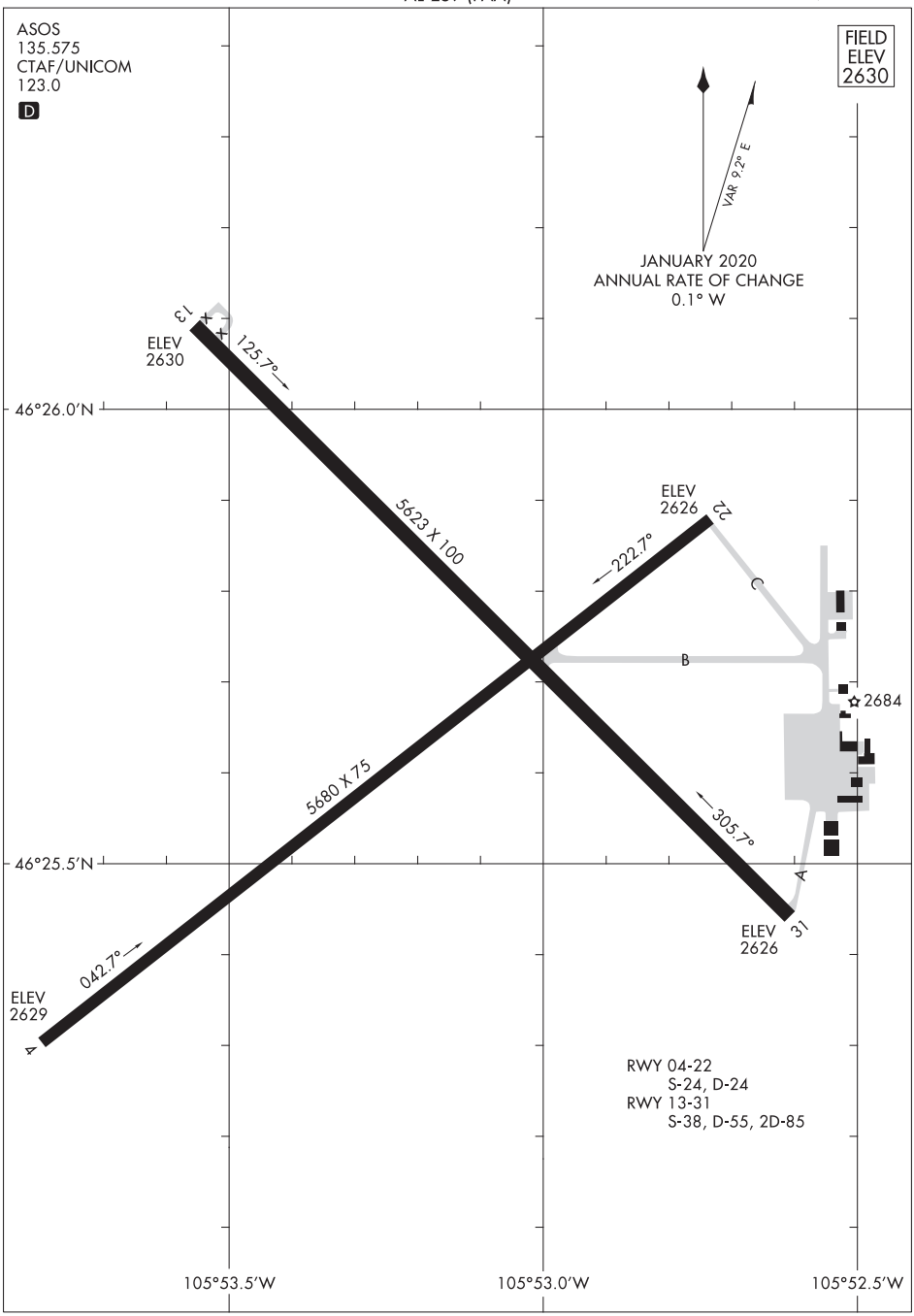



MIRL Rwy 4-22 L
MIRL Rwy 13-31
REIL Rwys 4, 13, 22 and 31 L

| FAF to MAP 3.4 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 3:24 | 2:16 | 1:42 | 1:22 | 1:08 |




NW-1, 05 NOV 2020 to 31 DEC 2020


ASOS
135.575
CTAF/UNICOM
123.0
D
FIELD
ELEV
2630
VAR 9.2° E
JANUARY 2020
ANNUAL RATE OF CHANGE
0.1° W
ELEV
2630
13
125.7°
5623 X 100
ELEV
2626
22
222.7°
C
B
2684
5680 X 75
305.7°
A
ELEV
2626
31
042.7°
ELEV
2629
A
46°26.0′N
46°25.5′N
105°53.5′W
105°53.0′W
105°52.5′W
RWY 04-22
S-24, D-24
RWY 13-31
S-38, D-55, 2D-85

MISSOULA, MONTANA | AL-266 (FAA) | 20198

# ILS Y RWY 12
## MISSOULA INTL (MSO)

| LOC I-MSO | APP CRS | Rwy ldg | 9501 |
|---|---|---|---|
| 109.3 | 117° | TDZE | 3200 |
| | | Apt Elev | 3206 |

DME required.

NA

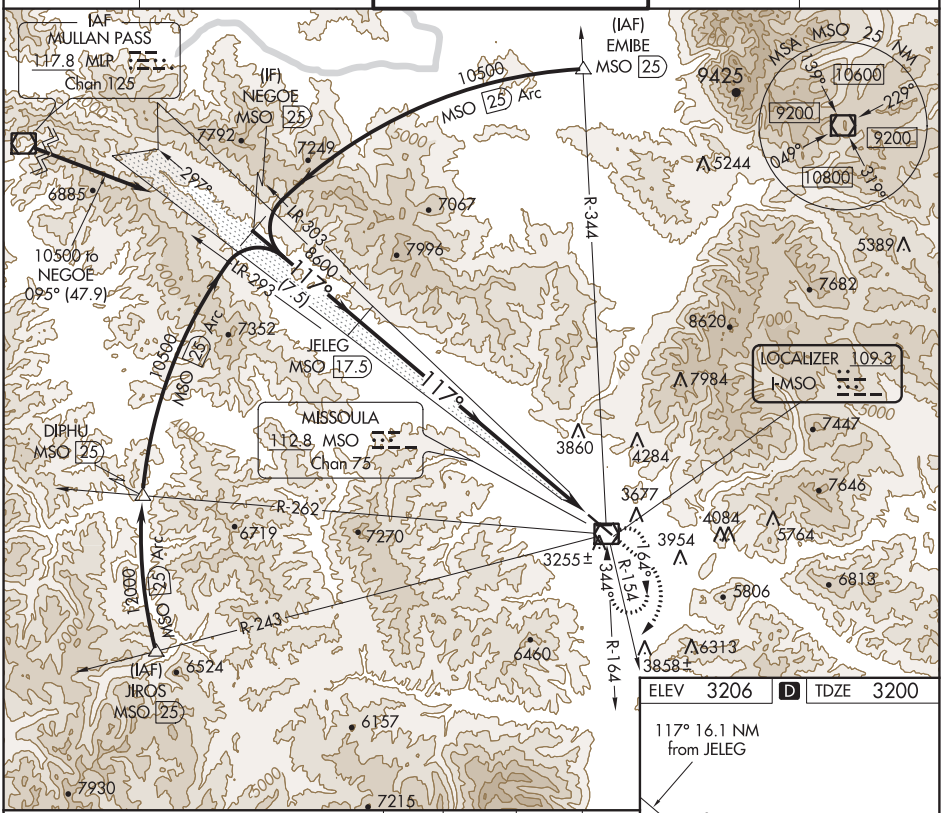
-12°C

Inoperative table does not apply.

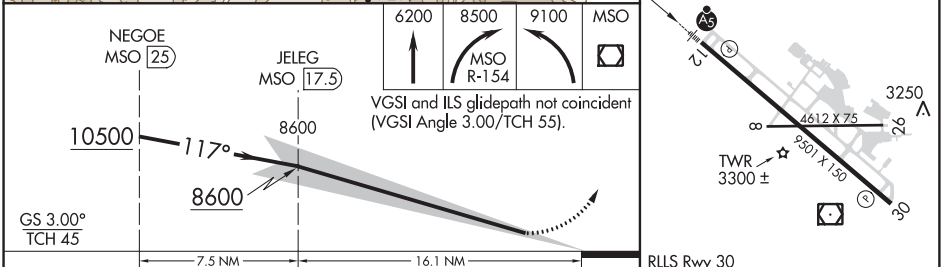
MALSR

MISSED APPROACH: Climb to 6200 then climbing right turn to 8500 on MSO VOR/DME R-154 then climbing left turn to 9100 direct MSO VOR/DME and hold.

| ATIS | SPOKANE APP CON ★ | MISSOULA TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 126.65 | 124.9 298.95 | 118.4 (CTAF) L 377.175 | 121.9 | 122.95 |




| ELEV | 3206 | D | TDZE | 3200 |
|---|---|---|---|---|




RLLS Rwy 30
REIL Rwy 30
MIRL Rwy 8-26
HIRL Rwy 12-30 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 12 | 5022-7 | 1822 (1900-7) | | |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# ILS Z RWY 12
## MISSOULA INTL (MSO)

| LOC I-MSO | APP CRS | Rwy ldg | 9501 |
|---|---|---|---|
| 109.3 | 117° | TDZE | 3200 |
| | | Apt Elev | 3206 |

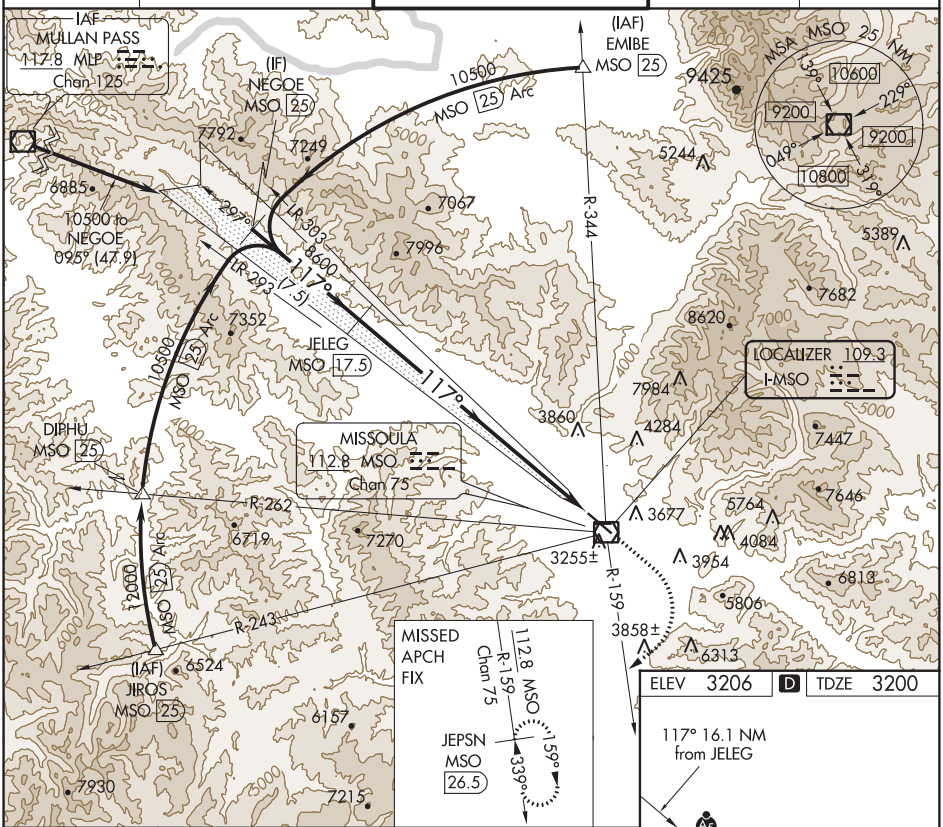
DME required.

-12°C

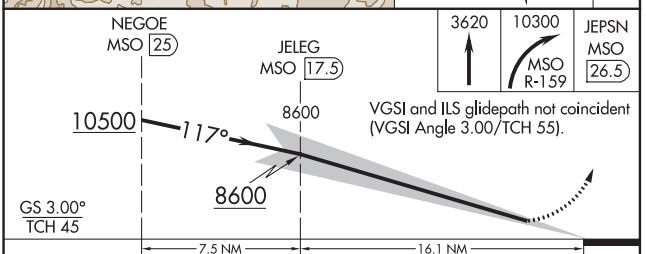
MALSR

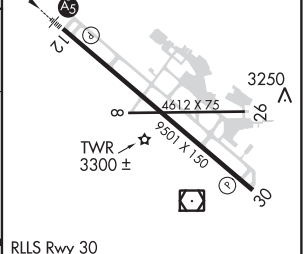
MISSED APPROACH: Climb to 3620 then climbing right turn to 10300 on MSO VOR/DME R-159 to JEPSN/MSO 26.5 DME and hold. Missed approach requires minimum climb of 410 feet per NM to 9800; if unable to meet climb gradient, see ILS Y RWY 12.

| ATIS | SPOKANE APP CON ★ | MISSOULA TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 126.65 | 124.9 298.95 | 118.4 (CTAF) L 377.175 | 121.9 | 122.95 |




| ELEV | 3206 | D | TDZE | 3200 |
|---|---|---|---|---|




RLLS Rwy 30
REIL Rwy 30
MIRL Rwy 8-26
HIRL Rwy 12-30 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 12 | 3411/24 211 (300-½) | | | |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 9501 |
|---|---|---|
| 298° | TDZE | 3206 |
| | Apt Elev | 3206 |

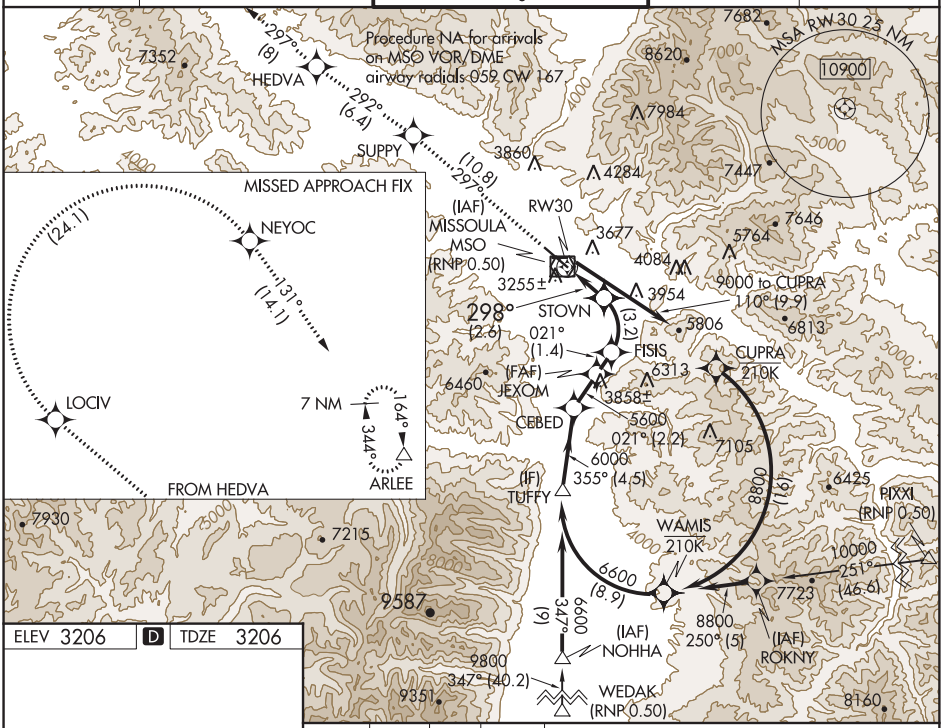
# RNAV (RNP) RWY 30
## MISSOULA INTL (MSO)

RNP AR APCH, RF required.

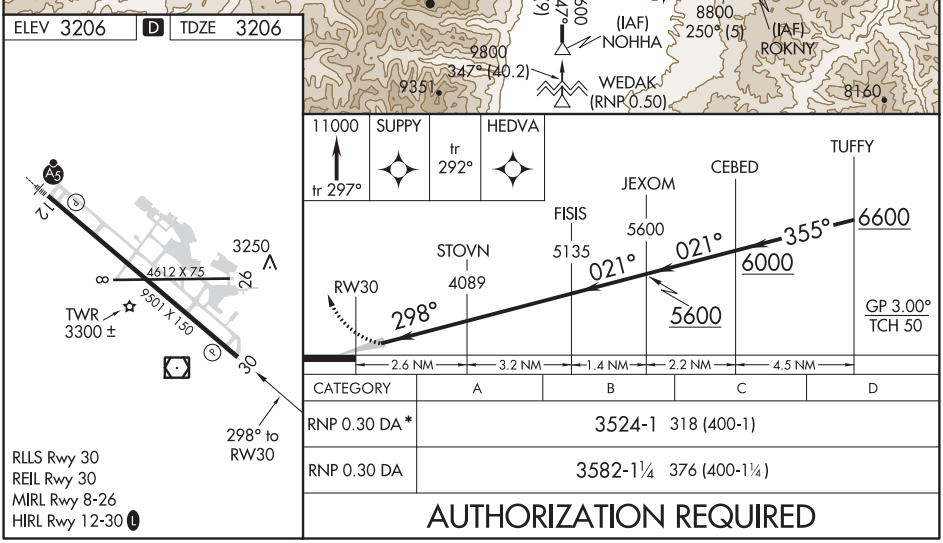
For uncompensated Baro-VNAV systems, procedure NA below -21°C (-5°F) or above 43°C (109°F). When local altimeter setting not received, procedure NA. -12°C

MISSED APPROACH: Climb to 11000 on track 297° to SUPPY and on track 292° to HEDVA and on track 297° to LOCIV, then right turn to NEYOC and on track 131° to ARLEE and hold. *Missed approach requires minimum climb of 215 feet per NM to 5000.

| ATIS | SPOKANE APP CON * | MISSOULA TOWER * | GND CON | UNICOM |
|---|---|---|---|---|
| 126.65 | 124.9 298.95 | 118.4 (CTAF) L 377.175 | 121.9 | 122.95 |




ELEV 3206 D TDZE 3206




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.30 DA* | 3524-1 318 (400-1) | | | |
| RNP 0.30 DA | 3582-1¼ 376 (400-1¼) | | | |

RLLS Rwy 30
REIL Rwy 30
MIRL Rwy 8-26
HIRL Rwy 12-30 L

**AUTHORIZATION REQUIRED**

NW-1, 05 NOV 2020 to 31 DEC 2020

# RNAV (RNP) Z RWY 12

## MISSOULA INTL (MSO)

| APP CRS | Rwy ldg | 9501 |
|---|---|---|
| 117° | TDZE | 3200 |
| | Apt Elev | 3206 |

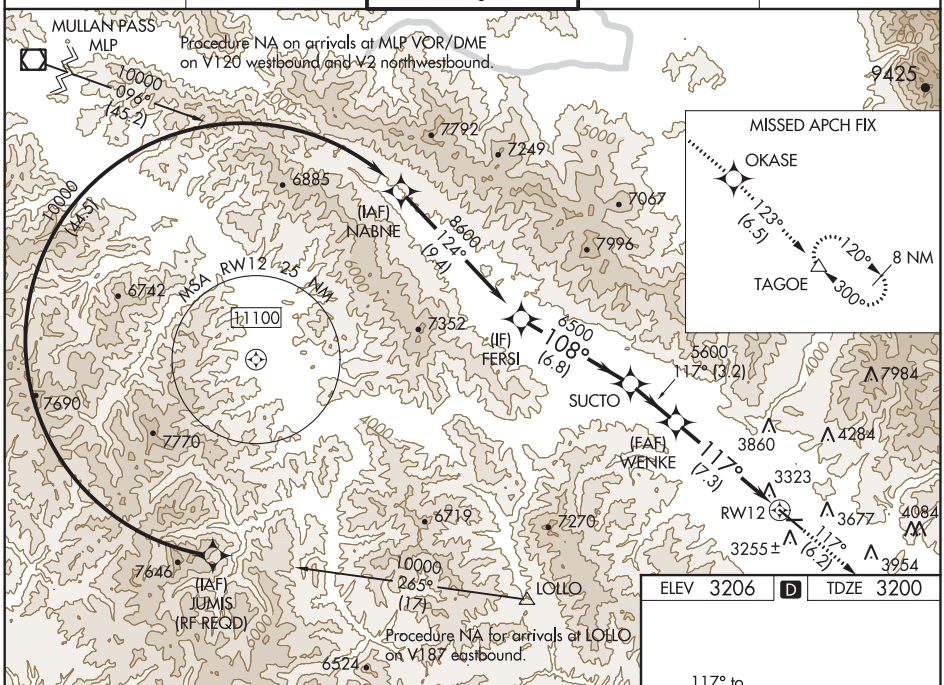
RNP AR apch.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -21° C (-6°F) or above 43°C (109°F).
For inop ALS, increase RNP 0.12 all Cats visibility to RVR 6000. For inop ALS, increase RNP 0.30 all Cats visibility to 2½ SM.
When local weather not received, procedure NA.
-12°C

MALSR

MISSED APPROACH: Climb to 13000 on track 117° to OKASE and on track 123° to TAGOE and hold, continue climb-in-hold to 13000.
*Missed approach requires minimum climb of 350 feet per NM to 8300; if unable to meet climb gradient, see RNAV (GPS) Y RWY 12.
#Missed approach requires minimum climb of 425 feet per NM to 8300.

| ATIS | SPOKANE APP CON* | | MISSOULA TOWER* | | GND CON | UNICOM |
|---|---|---|---|---|---|---|
| 126.65 | 124.9 | 298.95 | 118.4 (CTAF) L | 377.175 | 121.9 | 122.95 |

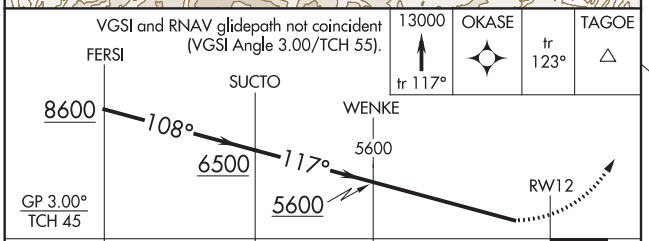



NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 55).

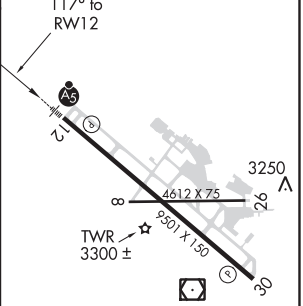
| 13000 | OKASE | TAGOE |
|---|---|---|
| tr 117° | tr 123° | |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.12 DA# | 3518/40 318 (400-¾) | | | |
| RNP 0.30 DA* | 3880-2 680 (700-2) | | | |

**AUTHORIZATION REQUIRED**

ELEV 3206 D TDZE 3200




RLLS Rwy 30
REIL Rwy 30
MIRL Rwy 8-26
HIRL Rwy 12-30 L

MISSOULA, MONTANA — AL-266 (FAA) — 20198

# RNAV (GPS) Y RWY 12
## MISSOULA INTL (MSO)

| WAAS CH 65715 W12B | APP CRS 117° | Rwy ldg 9501 | TDZE 3200 | Apt Elev 3206 |
|---|---|---|---|---|

RNP apch.

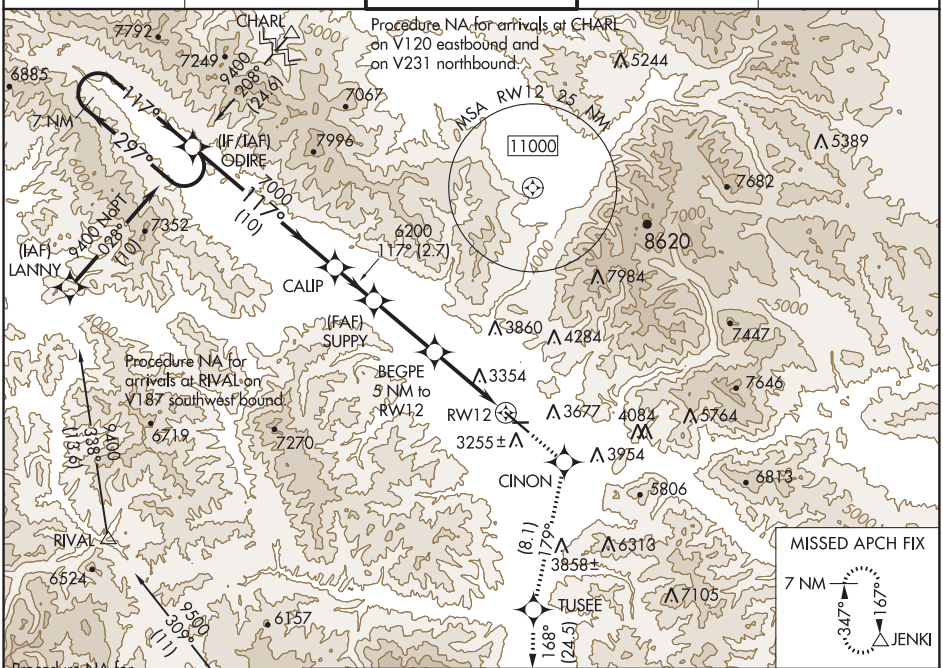
Circling NA for Cats C and D northeast of Rwy 12-30. Inop table does not apply to LNAV # Cats C/D. Inop table does not apply to LPV† all Cats. **RVR 1800 authorized with use of FD or AP or HUD to DA.

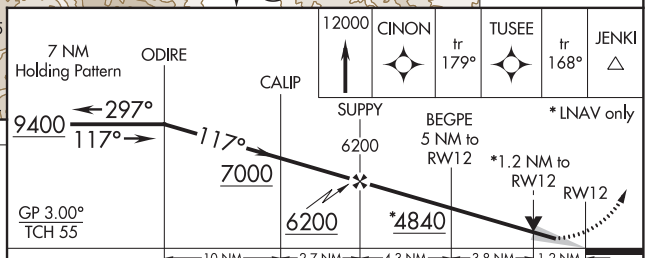
-12°C

MALSR

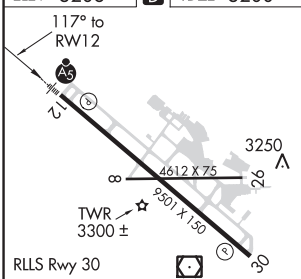
MISSED APPROACH: (Do not exceed 200K until CINON) Climb to 12000 direct CINON and on track 179° to TUSEE and on track 168° to JENKI and hold, continue climb-in-hold to 12000. ## Missed approach requires minimum climb of 325 feet per NM to 7700.

| ATIS | SPOKANE APP CON ★ | MISSOULA TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 126.65 | 124.9 298.95 | 118.4 (CTAF) L 377.175 | 121.9 | 122.95 |




ELEV 3206 | D | TDZE 3200




| CATEGORY | | A | B | C | D |
|---|---|---|---|---|---|
| LPV | DA** ## | 3400/24 200 (200-½) | | | |
| LPV | DA† | 4229-4 1029 (1100-4) | | | |
| LNAV | MDA ## | 3640/24 440 (500-½) | | 3640/40 440 (500-¾) | |
| LNAV | MDA # | 4520/40 1320 (1400-¾) | 4520/55 1320 (1400-1) | 4520-3 1320 (1400-3) | |
| C CIRCLING | | 4520-1¼ 1314 (1400-1¼) | 4700-1½ 1494 (1500-1½) | 4700-3 1494 (1500-3) | 5140-3 1934 (2000-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS 339° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 3206 |
|---|---|

# RNAV (GPS)-D

## MISSOULA INTL (MSO)

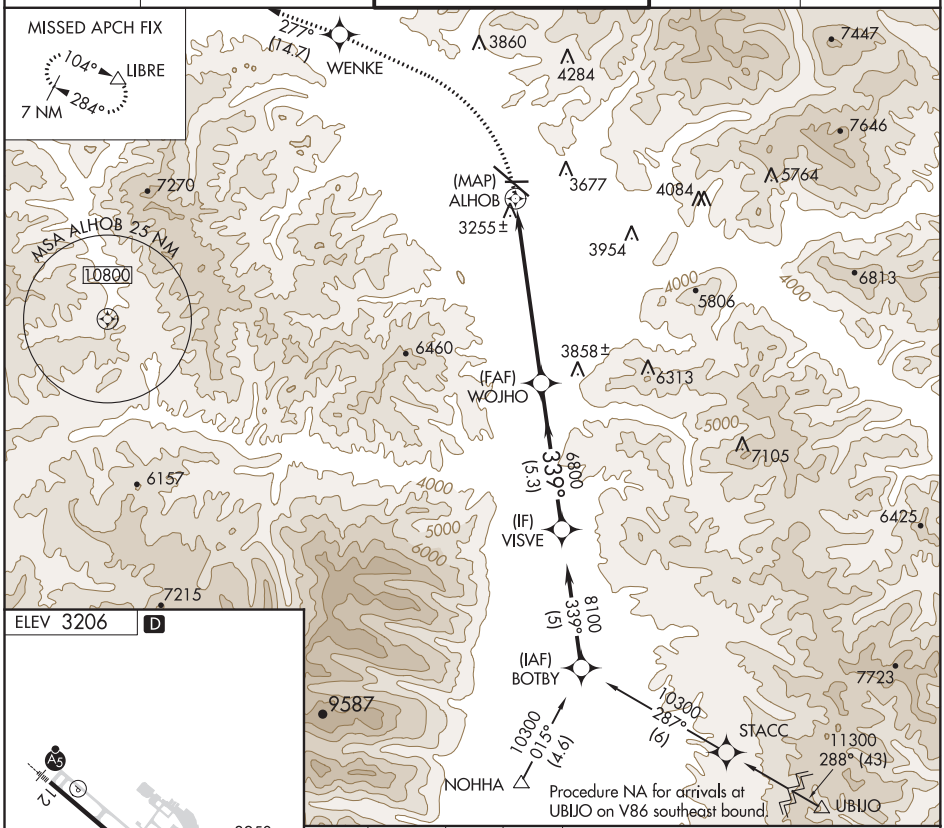
RNP Apch.

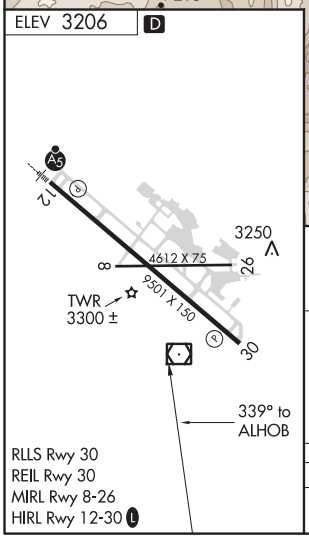
Circling NA for Cats C and D northeast of Rwy 12-30.

-12°C

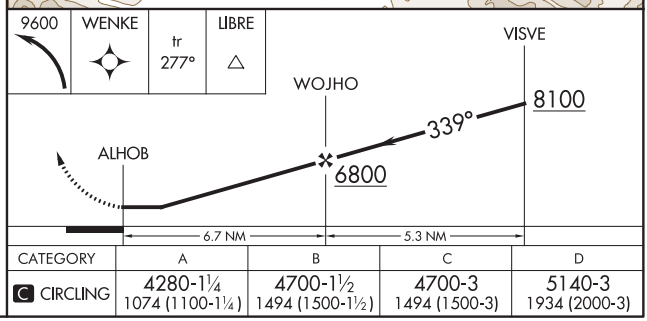
MISSED APPROACH: Climbing left turn to 9600 direct WENKE and on track 277° to LIBRE and hold, continue climb-in-hold to 9600.

| ATIS | SPOKANE APP CON ★ | MISSOULA TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 126.65 | 124.9 298.95 | 118.4 (CTAF) L 377.175 | 121.9 | 122.95 |




RLLS Rwy 30
REIL Rwy 30
MIRL Rwy 8-26
HIRL Rwy 12-30 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 4280-1¼<br>1074 (1100-1¼) | 4700-1½<br>1494 (1500-1½) | 4700-3<br>1494 (1500-3) | 5140-3<br>1934 (2000-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

MISSOULA, MONTANA | AL-266 (FAA) | 20310

# VOR-A

MISSOULA INTL (MSO)

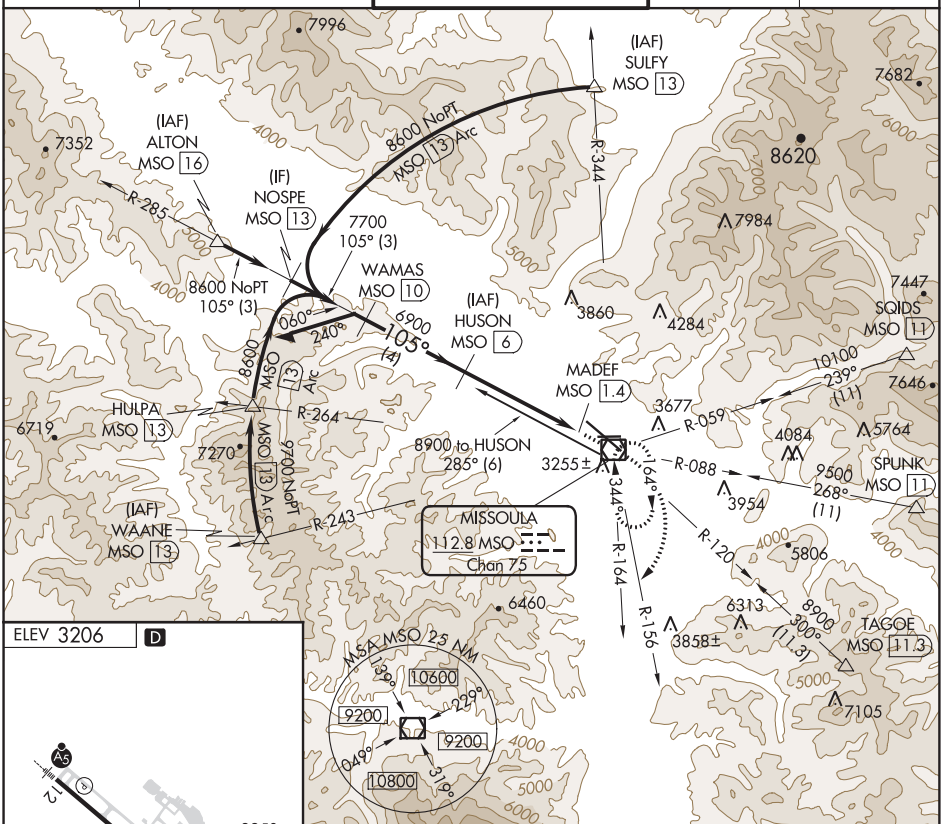
| VOR/DME MSO 112.8 Chan 75 | APP CRS 105° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 3206 |
|---|---|---|

DME required.

T A ❄ -12°C

MISSED APPROACH: Climb direct MSO VOR/DME then climbing right turn to 8500 on MSO VOR/DME R-156 outbound then climbing left turn to 9100 direct to MSO VOR/DME and hold.

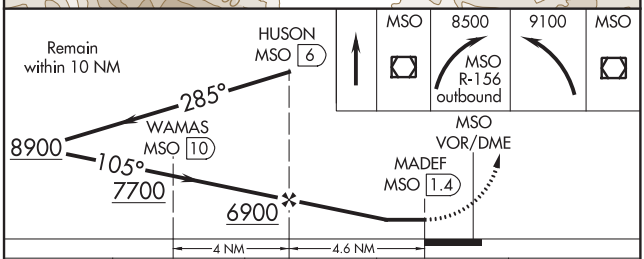
| ATIS | SPOKANE APP CON ★ | MISSOULA TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 126.65 | 124.9 298.95 | 118.4 (CTAF) L 377.175 | 121.9 | 122.95 |







RLLS Rwy 30
REIL Rwy 30
MIRL Rwy 8-26
HIRL Rwy 12-30 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 5120-1¼<br>1914 (2000-1¼) | 5120-1½<br>1914 (2000-1½) | 5120-3<br>1914 (2000-3) | 5160-3<br>1954 (2000-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# VOR-B
## MISSOULA INTL (MSO)

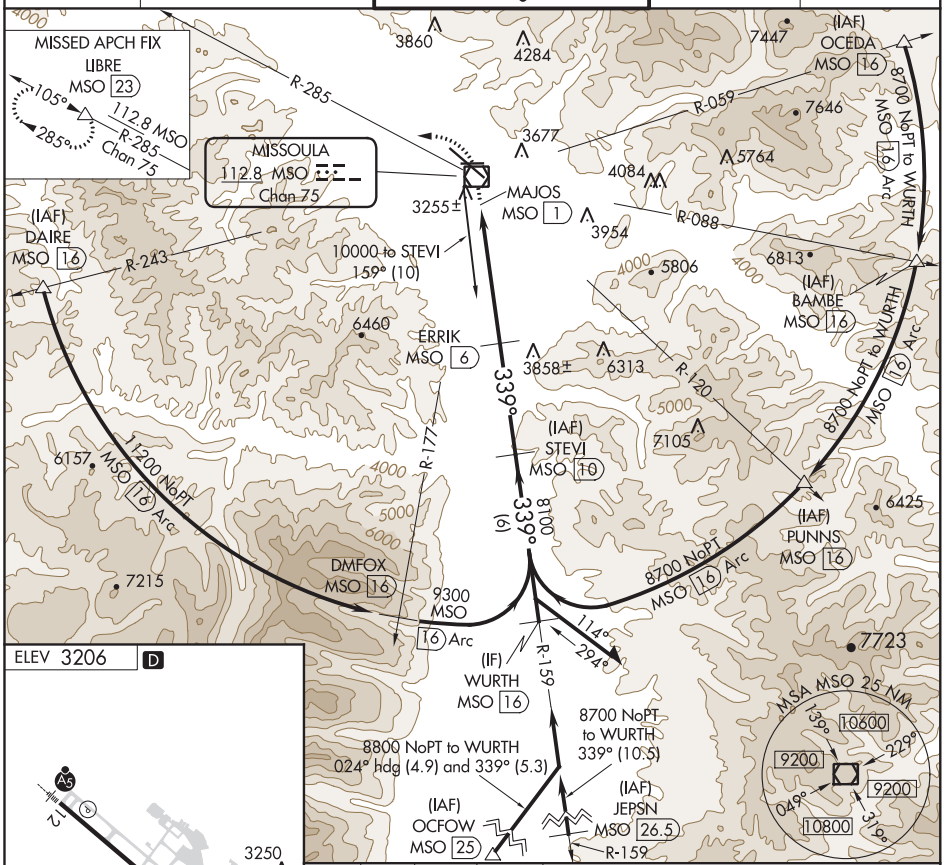
| VOR/DME MSO 112.8 Chan 75 | APP CRS 339° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 3206 |
|---|---|---|

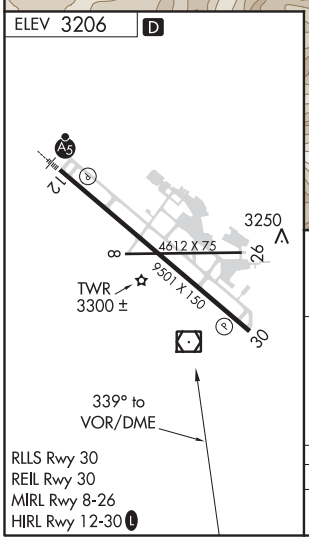
RADAR required for procedure entry at JEPSN. DME required.

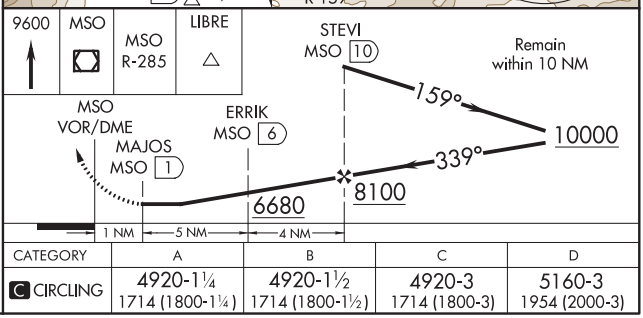
-12°C

MISSED APPROACH: Climb to 9600 direct MSO VOR/DME and on MSO VOR/DME R-285 to LIBRE/MSO 23 DME and hold, continue climb-in-hold to 9600.

| ATIS | SPOKANE APP CON ★ | MISSOULA TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 126.65 | 124.9 298.95 | 118.4 (CTAF) L 377.175 | 121.9 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 4920-1¼<br>1714 (1800-1¼) | 4920-1½<br>1714 (1800-1½) | 4920-3<br>1714 (1800-3) | 5160-3<br>1954 (2000-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

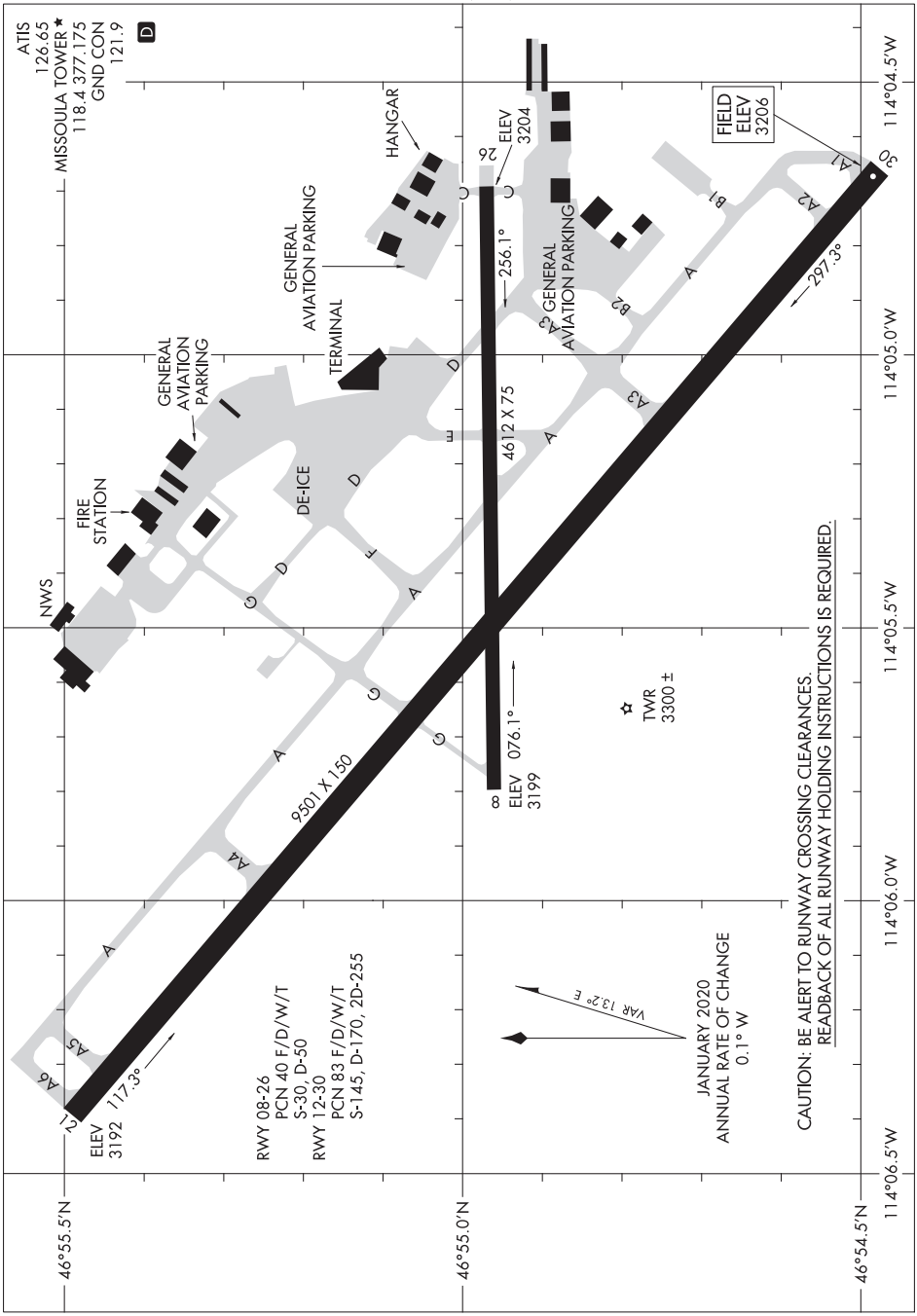
NW-1, 05 NOV 2020 to 31 DEC 2020

20086

# AIRPORT DIAGRAM

MISSOULA INTL (MSO)
MISSOULA, MONTANA

AL-266 (FAA)




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

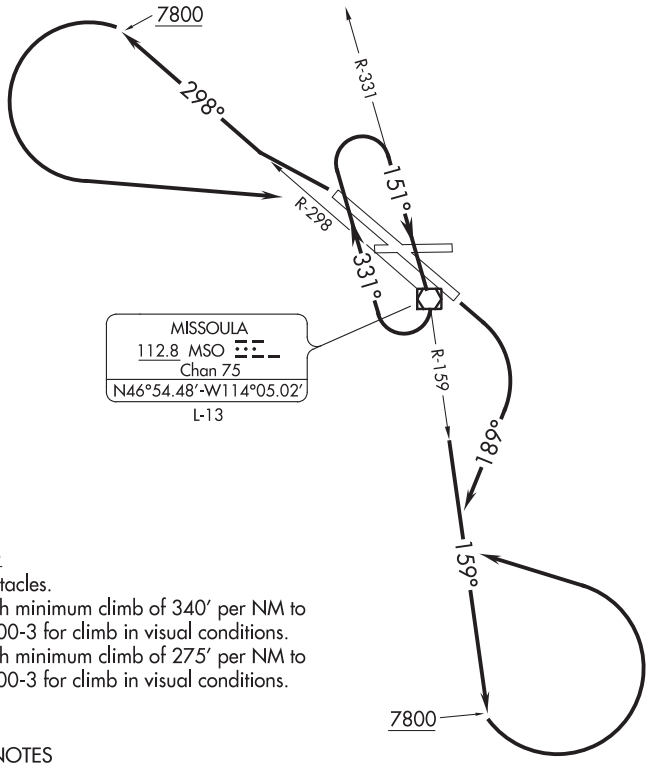
AIRPORT DIAGRAM
20086
MISSOULA, MONTANA
MISSOULA INTL (MSO)

# GRZLY THREE DEPARTURE (OBSTACLE)

AL-266 (FAA)

MISSOULA INTL (MSO)
MISSOULA, MONTANA

ATIS
126.65
GND CON
121.9
MISSOULA TOWER★
118.4 (CTAF) 377.175
SPOKANE DEP CON
124.9 298.95
SALT LAKE CITY CENTER
133.4 285.4




TAKEOFF MINIMUMS

Rwys 8, 26: NA- Obstacles.
Rwy 12: Standard with minimum climb of 340′ per NM to 7800, or 2700-3 for climb in visual conditions.
Rwy 30: Standard with minimum climb of 275′ per NM to 7800, or 2700-3 for climb in visual conditions.

TAKEOFF OBSTACLE NOTES

Rwy 12: Fence beginning 22′ from DER, 487′ right of centerline, up to 9′ AGL/3215′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 12: Climbing right turn heading 189° to intercept MSO R-159, southeast bound to 7800, thence. . . .
or, climb in visual conditions to cross MSO VOR/DME southeast bound at or above 5800, continue climb to 7800 on MSO VOR/DME R-159, thence. . . .

TAKEOFF RUNWAY 30: Climb on MSO R-298 to 7800, then climbing left turn on MSO R-298 to MSO VOR/DME, climb in MSO VOR/DME holding pattern to MEA/MCA for route of flight or, climb in visual conditions to cross MSO VOR/DME southeast bound at or above 5800, continue climb to 7800 on MSO VOR/DME R-159, thence. . . .

. . . .climbing left turn on MSO VOR/DME R-159 to MSO VOR/DME, climb in MSO VOR/DME holding pattern to MEA/MCA for route of flight.

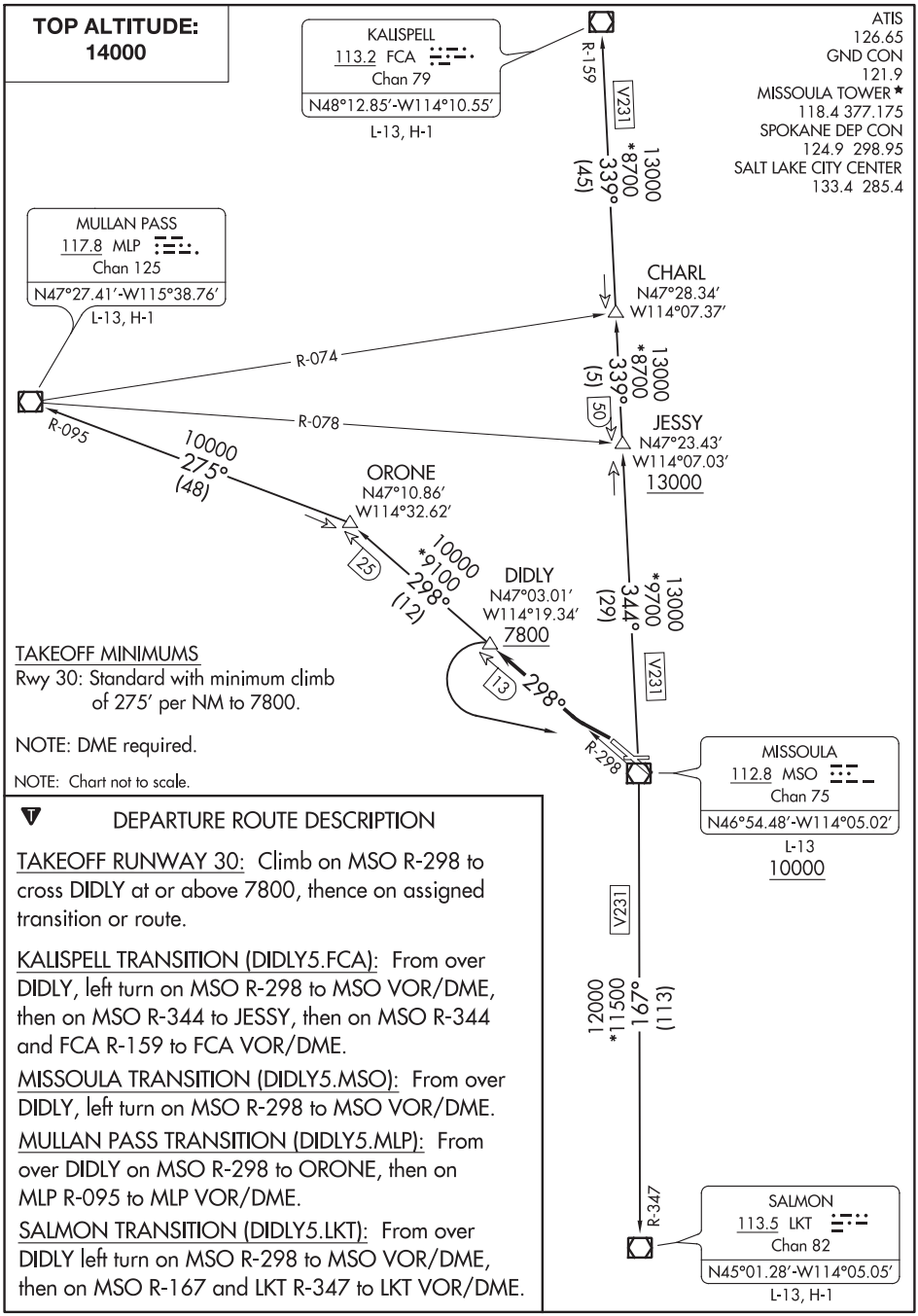

NW-1, 05 NOV 2020 to 31 DEC 2020

(DIDLY5.DIDLY) 18144

# DIDLY FIVE DEPARTURE

AL-266 (FAA)

MISSOULA INTL (MSO)
MISSOULA, MONTANA




TAKEOFF MINIMUMS

Rwy 30: Standard with minimum climb of 275′ per NM to 7800.

NOTE: DME required.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 30: Climb on MSO R-298 to cross DIDLY at or above 7800, thence on assigned transition or route.

KALISPELL TRANSITION (DIDLY5.FCA): From over DIDLY, left turn on MSO R-298 to MSO VOR/DME, then on MSO R-344 to JESSY, then on MSO R-344 and FCA R-159 to FCA VOR/DME.

MISSOULA TRANSITION (DIDLY5.MSO): From over DIDLY, left turn on MSO R-298 to MSO VOR/DME.

MULLAN PASS TRANSITION (DIDLY5.MLP): From over DIDLY on MSO R-298 to ORONE, then on MLP R-095 to MLP VOR/DME.

SALMON TRANSITION (DIDLY5.LKT): From over DIDLY left turn on MSO R-298 to MSO VOR/DME, then on MSO R-167 and LKT R-347 to LKT VOR/DME.



NW-1, 05 NOV 2020 to 31 DEC 2020

DIDLY FIVE DEPARTURE

(DIDLY5.DIDLY) 24MAY18

MISSOULA, MONTANA
MISSOULA INTL (MSO)

**TOP ALTITUDE: 14000**

ATIS 126.65
GND CON 121.9
MISSOULA TOWER* 118.4 377.175
SPOKANE DEP CON 124.9 298.95
SALT LAKE CITY CENTER 133.4 285.4

KALISPELL
113.2 FCA
Chan 79
N48°12.85′-W114°10.55′
L-13, H-1

MULLAN PASS
117.8 MLP
Chan 125
N47°27.41′-W115°38.76′
L-13, H-1

R-159 V231 13000 *8700 339° (45)

CHARL
N47°28.34′
W114°07.37′

R-074 13000 *8700 339° (5) 50

R-078

R-095 10000 275° (48)

JESSY
N47°23.43′
W114°07.03′

ORONE
N47°10.86′
W114°32.62′

13000 *9700 344° (29) V231

10000 *9100 298° (25)

MISSOULA
112.8 MSO
Chan 75
N46°54.48′-W114°05.02′
L-13
10000

R-159 189° 159° 13 R-167

IPPUG
N46°41.61′
W114°02.39′
7800

11000 *7000 159° (7) 20

VICTO
N46°34.68′
W114°00.98′
11000

12000 *7200 195° (6) 25

OCFOW
N46°29.49′
W114°05.03′

V231 12000 *11500 167° (88)

SALMON
113.5 LKT
Chan 82
N45°01.28′
W114°05.05′
L-13, H-1

R-347

TAKEOFF MINIMUMS
Rwy 12: Standard with minimum climb of 340′ per NM to 7800.

NOTE: DME required.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 12: Climbing right turn heading 189° to intercept and proceed on MSO R-159 to cross IPPUG at/above 7800. Thence on transition or assigned route.

KALISPELL TRANSITION (MZULA5.FCA): From over IPPUG, left turn on MSO R-159 to MSO VOR/DME, then on MSO R-344 to JESSY, then on MSO R-344 and FCA R-159 to FCA VOR/DME.

MISSOULA TRANSITION (MZULA5.MSO): From over IPPUG, left turn on MSO R-159 to MSO VOR/DME.

MULLAN PASS TRANSITION (MZULA5.MLP): From over IPPUG left turn on MSO R-159 to MSO VOR/DME, then on MSO R-298 to ORONE, then on MLP R-095 to MLP VOR/DME.

SALMON TRANSITION (MZULA5.LKT): From over IPPUG on MSO R-159 to VICTO, then on heading 195° to OCFOW, then on MSO R-167 and LKT R-347 to LKT VOR/DME.

| LOC I-MWH | APP CRS | Rwy ldg / TDZE / Apt Elev |
|---|---|---|
| 109.5 | 324° | 13492 / 1167 / 1189 |

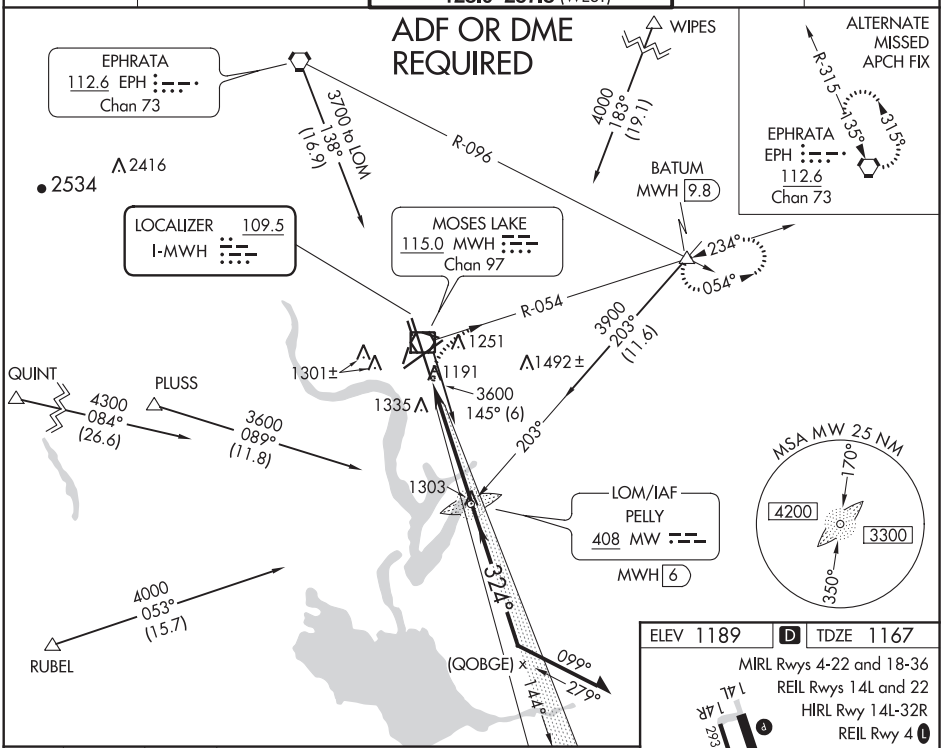
# ILS or LOC RWY 32R
## GRANT COUNTY INTL (MWH)

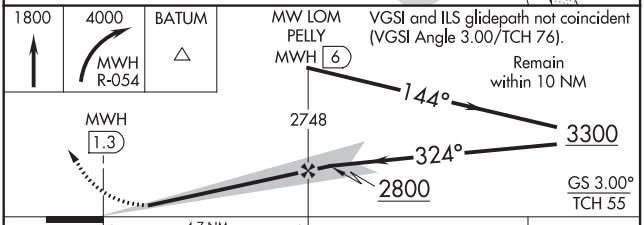
When local altimeter setting not received, use Ephrata altimeter setting and increase all DA/MDA 40 feet. For inoperative MALSR, increase S-LOC 32R Cat D visibility to RVR 5000.
*RVR 1800 authorized with use of FD or AP or HUD to DA, NA when using Ephrata altimeter setting.

MALSR

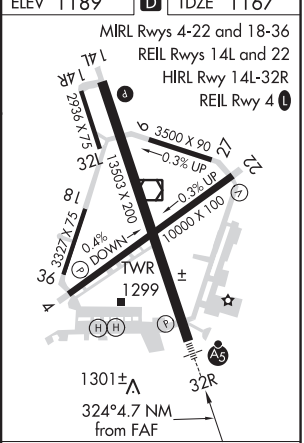
MISSED APPROACH: Climb to 1800, then climbing right turn to 4000 on MWH R-054 to BATUM INT/MWH 9.8 DME and hold, continue climb-in-hold to 4000.

| ATIS | GRANT COUNTY APP CON * | GRANT COUNTY TOWER * | GND CON | UNICOM |
|---|---|---|---|---|
| 119.05 | 126.4 379.95 | 118.25 (CTAF) L 257.8 (EAST) 128.0 257.8 (WEST) | 121.9 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 32R* | 1367/24 200 (200-½) | | | |
| S-LOC 32R | 1440/24 273 (300-½) | | | 1440/40 273 (300-¾) |
| CIRCLING | 1680-1 491 (500-1) | | 1680-1½ 491 (500-1½) | 1740-2 551 (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 |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

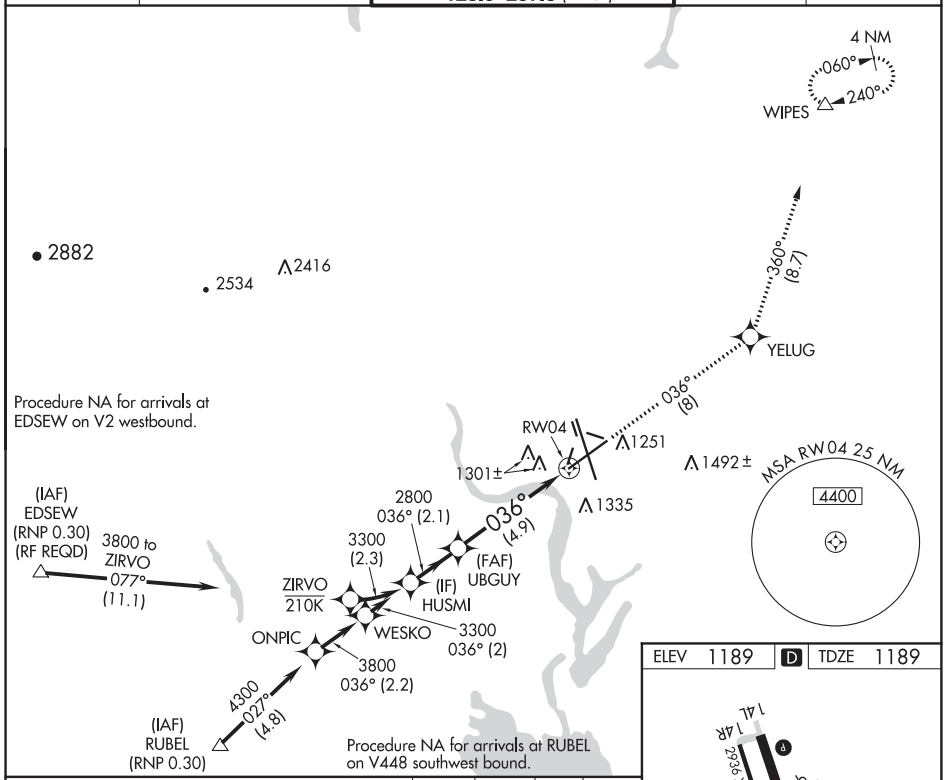
| APP CRS | Rwy ldg | 10000 |
|---|---|---|
| 036° | TDZE | 1189 |
| | Apt Elev | 1189 |

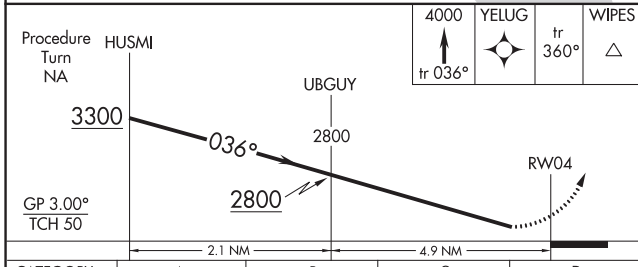
# RNAV (RNP) Z RWY 4
## GRANT COUNTY INTL (MWH)

For uncompensated Baro-VNAV systems, procedure NA below -17°C (2°F) or above 46°C (114°F). GPS required.

MISSED APPROACH: Climb to 4000 on track 036° to YELUG and on track 360° to WIPES and hold.

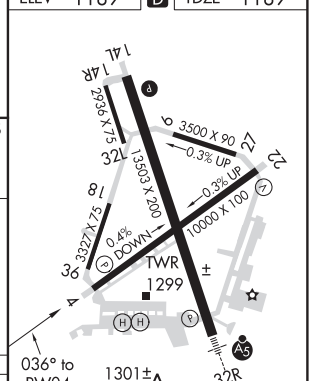
| ATIS | GRANT COUNTY APP CON ★ | GRANT COUNTY TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 119.05 | 126.4 379.95 | 118.25 (CTAF) L 257.8 (EAST) 128.0 257.8 (WEST) | 121.9 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.10 DA | 1439-¾ 250 (300-¾) | | | |
| RNP 0.30 DA | 1498-1 309 (400-1) | | | |

**AUTHORIZATION REQUIRED**




REIL Rwy 4 L
REIL Rwys 14L and 22
HIRL Rwy 14L-32R
MIRL Rwys 4-22 and 18-36

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

MOSES LAKE, WASHINGTON | AL-961 (FAA) | 20254

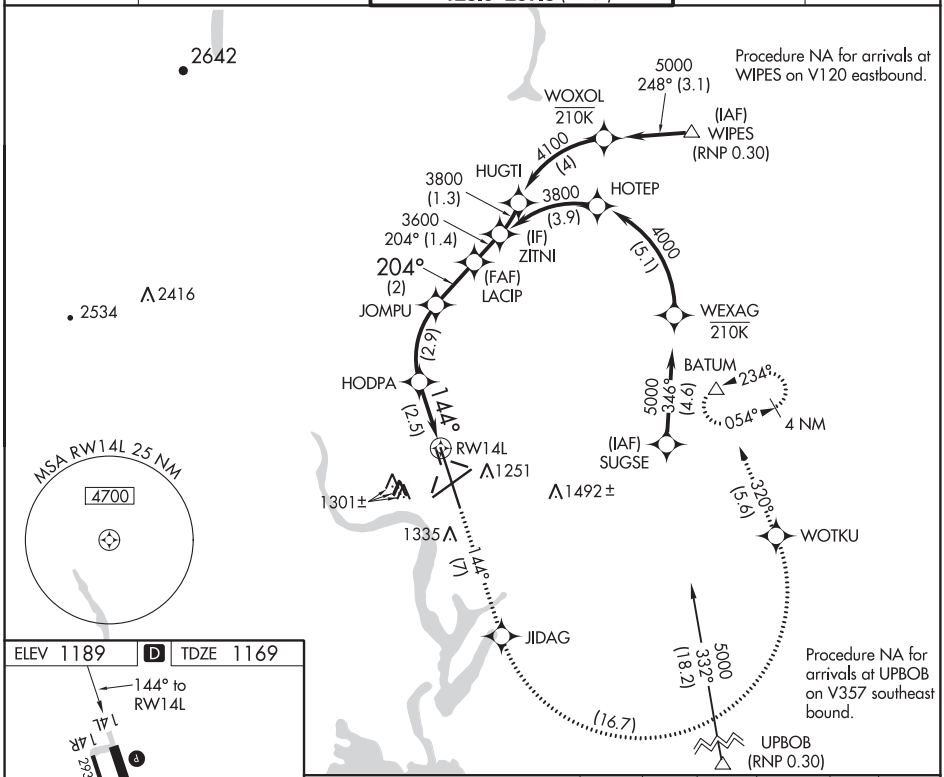
| APP CRS | Rwy ldg | 13503 |
|---|---|---|
| 144° | TDZE | 1169 |
| | Apt Elev | 1189 |

# RNAV (RNP) Z RWY 14L
## GRANT COUNTY INTL (MWH)

For uncompensated Baro-VNAV systems, procedure NA below -17°C (2°F) or above 47°C (116°F). RF required. GPS required.

MISSED APPROACH: Climb to 4000 on track 144° to JIDAG left turn to WOTKU and track 320° to BATUM and hold.

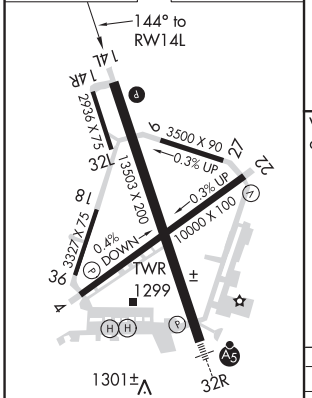
| ATIS | GRANT COUNTY APP CON ★ | GRANT COUNTY TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 119.05 | 126.4 379.95 | 118.25 (CTAF) L 257.8 (EAST)<br>128.0 257.8 (WEST) | 121.9 | 122.95 |




NW-1, 05 NOV 2020 to 31 DEC 2020

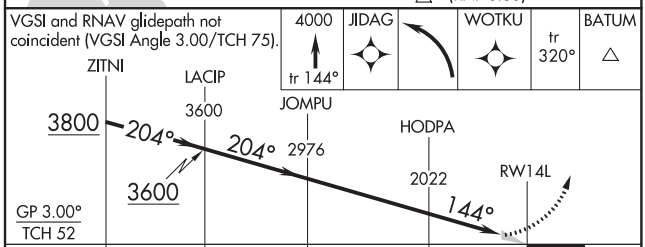
NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 1189 | D | TDZE 1169




REIL Rwy 4 L
REIL Rwys 14L and 22
HIRL Rwy 14L-32R
MIRL Rwys 4-22 and 18-36

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 75).




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.10 DA | 1419-¾ 250 (300-¾) | | | |
| RNP 0.30 DA | 1479-1 310 (300-1) | | | |

**AUTHORIZATION REQUIRED**

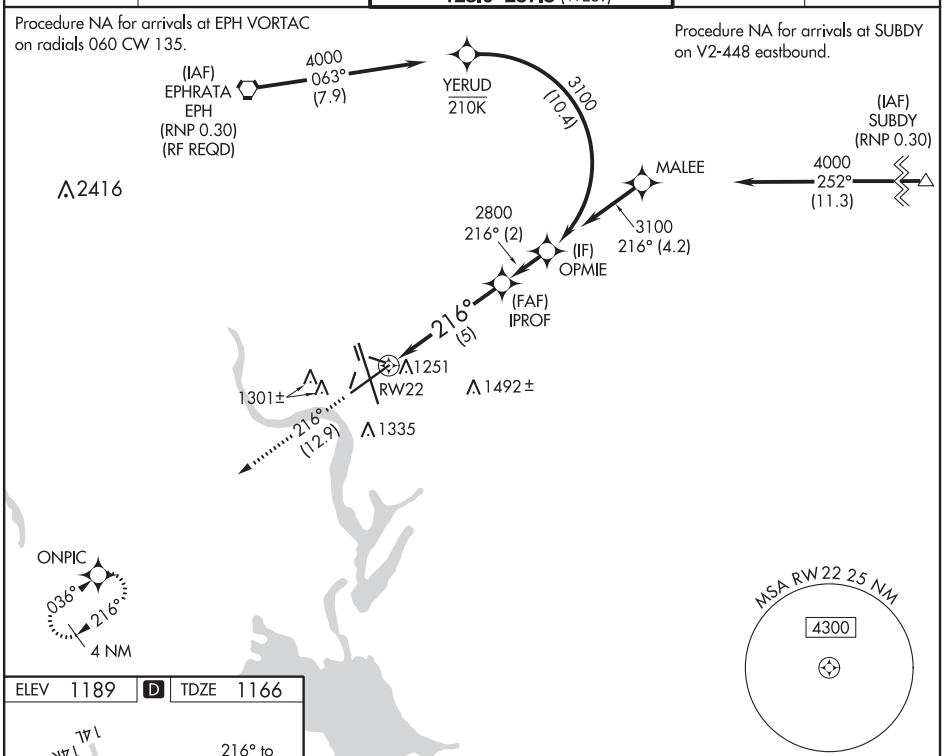
| APP CRS | Rwy ldg | 10000 |
|---|---|---|
| 216° | TDZE | 1166 |
| | Apt Elev | 1189 |

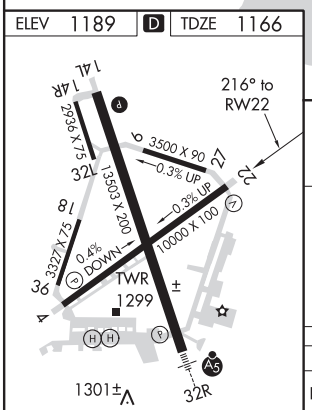
# RNAV (RNP) Z RWY 22
## GRANT COUNTY INTL (MWH)

For uncompensated Baro-VNAV systems, procedure NA below -17°C (2°F) or above 46°C (114°F). GPS required.

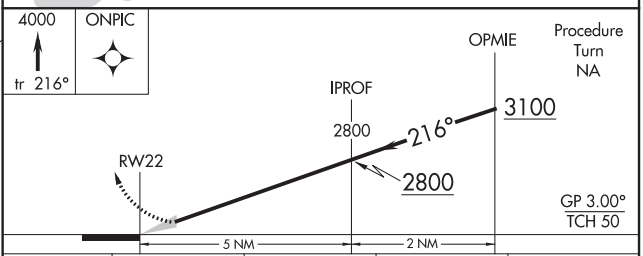
MISSED APPROACH: Climb to 4000 on track 216° to ONPIC and hold.

| ATIS | GRANT COUNTY APP CON ★ | GRANT COUNTY TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 119.05 | 126.4 379.95 | 118.25 (CTAF) L 257.8 (EAST) 128.0 257.8 (WEST) | 121.9 | 122.95 |




REIL Rwy 4 L
REIL Rwys 14L and 22
HIRL Rwy 14L-32R
MIRL Rwys 4-22 and 18-36




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.10 DA | 1416-¾ 250 (300-¾) | | | |
| RNP 0.30 DA | 1476-1 310 (300-1) | | | |

**AUTHORIZATION REQUIRED**

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

MOSES LAKE, WASHINGTON | AL-961 (FAA) | 20254

# RNAV (RNP) Z RWY 32R
## GRANT COUNTY INTL (MWH)

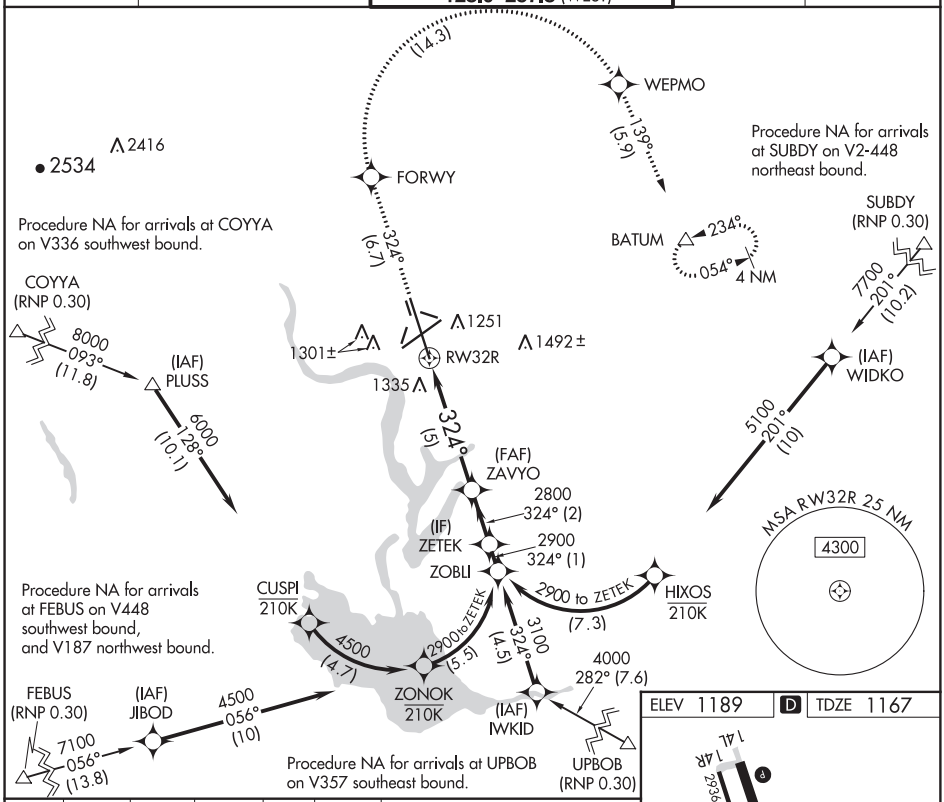
| APP CRS | Rwy ldg | 13492 |
|---|---|---|
| 324° | TDZE | 1167 |
| | Apt Elev | 1189 |

For uncompensated Baro-VNAV systems, procedure NA below -17°C (2°F) or above 46°C (114°F). RF required. GPS required. For inoperative MALSR increase RNP 0.10 visibility all Cats to RVR 4000, increase RNP 0.30 visibility all Cats to RVR 6000.

MALSR

MISSED APPROACH: Climb to 4000 on track 324° to FORWY right turn to WEPMO and track 139° to BATUM and hold.

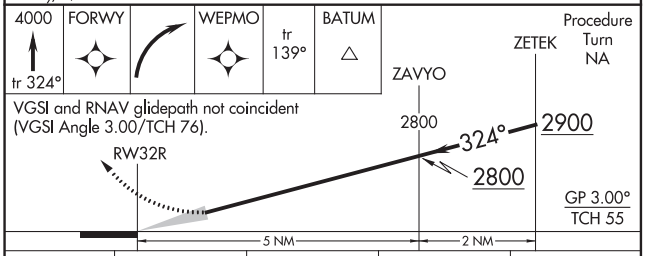
| ATIS | GRANT COUNTY APP CON ★ | GRANT COUNTY TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 119.05 | 126.4 379.95 | 118.25 (CTAF) L 257.8 (EAST) 128.0 257.8 (WEST) | 121.9 | 122.95 |




| 4000 | FORWY | | WEPMO | tr 139° | BATUM |
|---|---|---|---|---|---|
| tr 324° | | | | | |

Procedure Turn NA

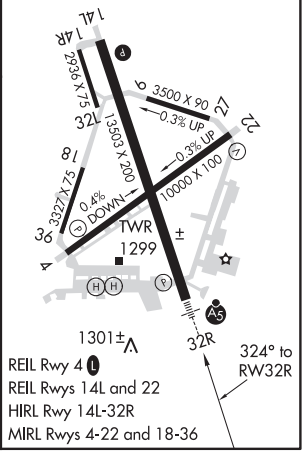
VGSI and RNAV glidepath not coincident
(VGSI Angle 3.00/TCH 76).




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.10 DA | 1417/24 | 250 (300-½) | | |
| RNP 0.30 DA | 1533/40 | 366 (400-¾) | | |

**AUTHORIZATION REQUIRED**

ELEV 1189 | D | TDZE 1167




REIL Rwy 4 L
REIL Rwys 14L and 22
HIRL Rwy 14L-32R
MIRL Rwys 4-22 and 18-36

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

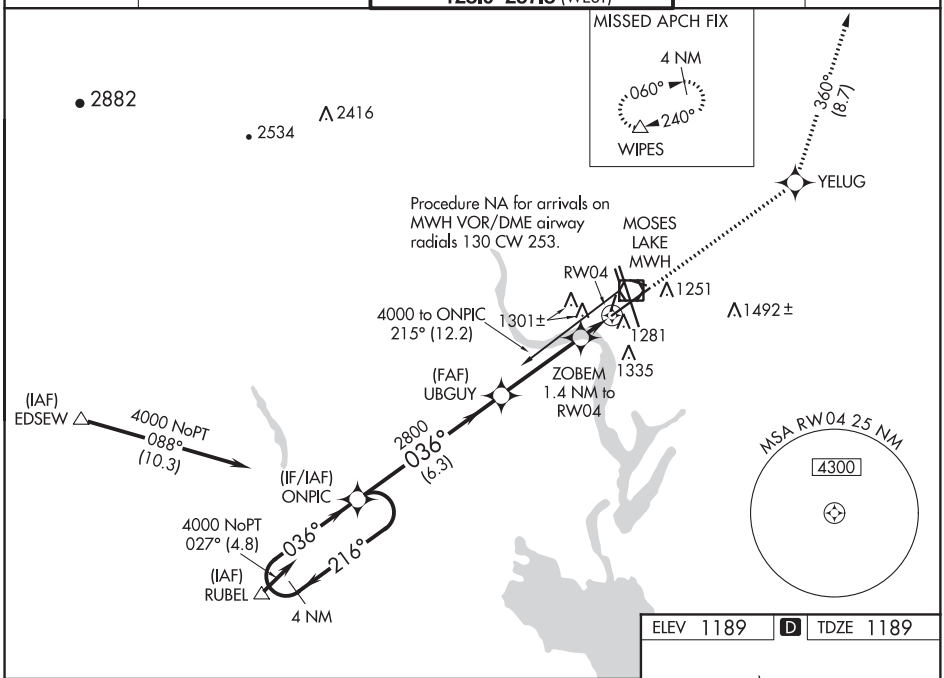
| WAAS CH 42809 W04A | APP CRS 036° | Rwy ldg 10000<br>TDZE 1189<br>Apt Elev 1189 |
|---|---|---|

# RNAV (GPS) Y RWY 4
## GRANT COUNTY INTL (MWH)

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 Ephrata altimeter setting and increase all DA 36 feet and increase all MDA 40 feet, increase LNAV/VNAV all Cats visibility, and LNAV Cat C and D visibility ⅛ mile. Baro-VNAV NA when using Ephrata altimeter setting.

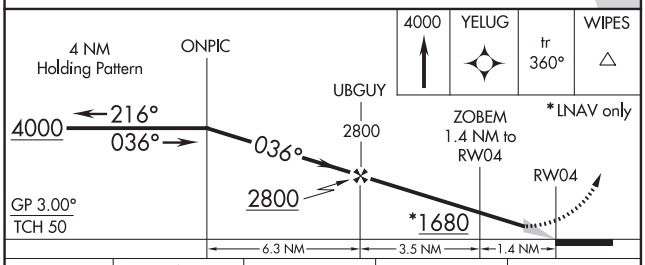
MISSED APPROACH: Climb to 4000 direct YELUG and on track 360° to WIPES and hold.

| ATIS | GRANT COUNTY APP CON * | GRANT COUNTY TOWER * | GND CON | UNICOM |
|---|---|---|---|---|
| 119.05 | 126.4 379.95 | 118.25 (CTAF) L 257.8 (EAST)<br>128.0 257.8 (WEST) | 121.9 | 122.95 |



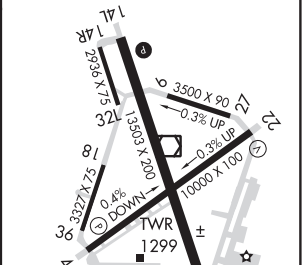

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 1389-¾ 200 (200-¾) | | | |
| LNAV/VNAV DA | 1442-¾ 253 (300-¾) | | | |
| LNAV MDA | 1540-1 351 (400-1) | | | |
| CIRCLING | 1660-1 471 (500-1) | | 1660-1½ 471 (500-1½) | 1740-2 551 (600-2) |

ELEV 1189 D TDZE 1189




REIL Rwy 4 L
REIL Rwys 14L and 22
HIRL Rwy 14L-32R
MIRL Rwys 4-22 and 18-36

MOSES LAKE, WASHINGTON AL-961 (FAA) 20254

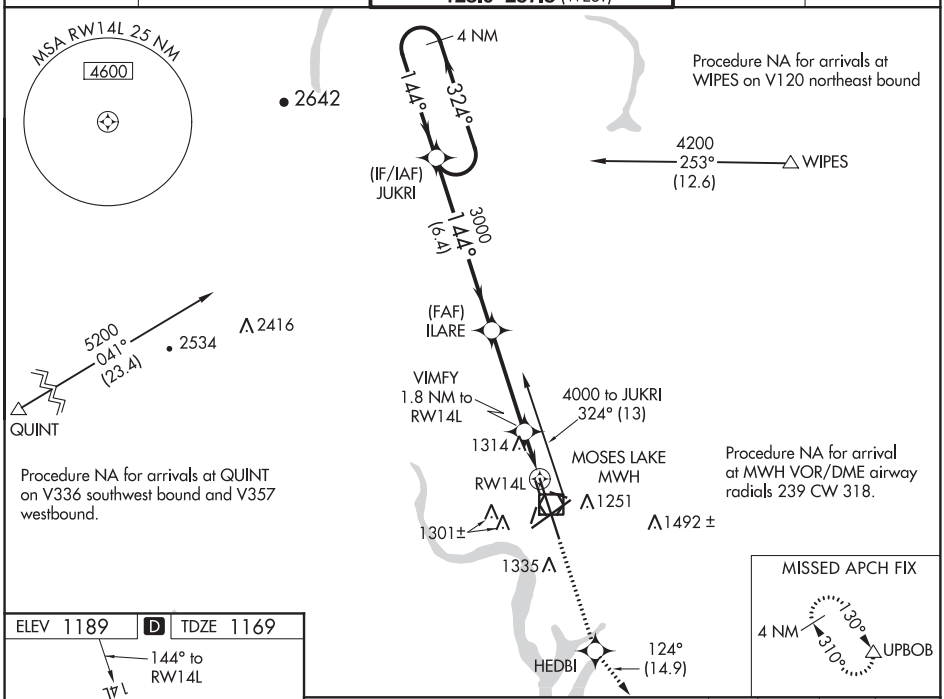
| WAAS CH 90509 W14A | APP CRS 144° | Rwy ldg 13503 TDZE 1169 Apt Elev 1189 |
|---|---|---|

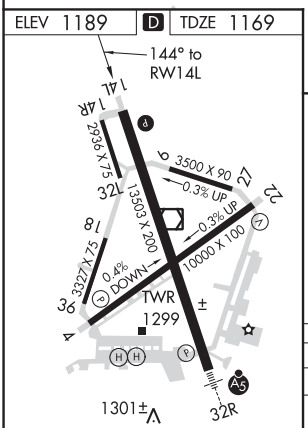
# RNAV (GPS) Y RWY 14L
## GRANT COUNTY INTL (MWH)

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. Baro-VNAV and VDP NA when using Ephrata altimeter setting. When local altimeter setting not received, use Ephrata altimeter setting and increase all DA 36 feet and all MDA 40 feet, increase LNAV/VNAV visibility all Cats ⅛ mile and LNAV Cats C and D visibility ¼ mile.

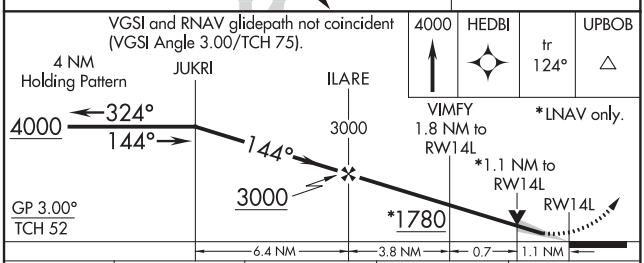
MISSED APPROACH: Climb to 4000 direct HEDBI and on track 124° to UPBOB and hold.

| ATIS | GRANT COUNTY APP CON ★ | GRANT COUNTY TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 119.05 | 126.4 379.95 | 118.25 (CTAF) L 257.8 (EAST) 128.0 257.8 (WEST) | 121.9 | 122.95 |




REIL Rwy 4 L
REIL Rwys 14L and 22
HIRL Rwy 14L-32R
MIRL Rwys 4-22 and 18-36




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 1369-¾ 200 (200-¾) | | | |
| LNAV/VNAV DA | 1436-⅞ 267 (300-⅞) | | | |
| LNAV MDA | 1580-1 411 (400-1) | | 1580-1⅛ 411 (400-1⅛) | |
| CIRCLING | 1660-1 471 (500-1) | | 1660-1½ 471 (500-1½) | 1740-2 551 (600-2) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

MOSES LAKE, WASHINGTON
Amdt 1B 01MAY14

47°13′N-119°19′W

GRANT COUNTY INTL (MWH)
RNAV (GPS) Y RWY 14L

| WAAS CH 70410 W22A | APP CRS 216° | Rwy ldg 10000 TDZE 1166 Apt Elev 1189 |
|---|---|---|

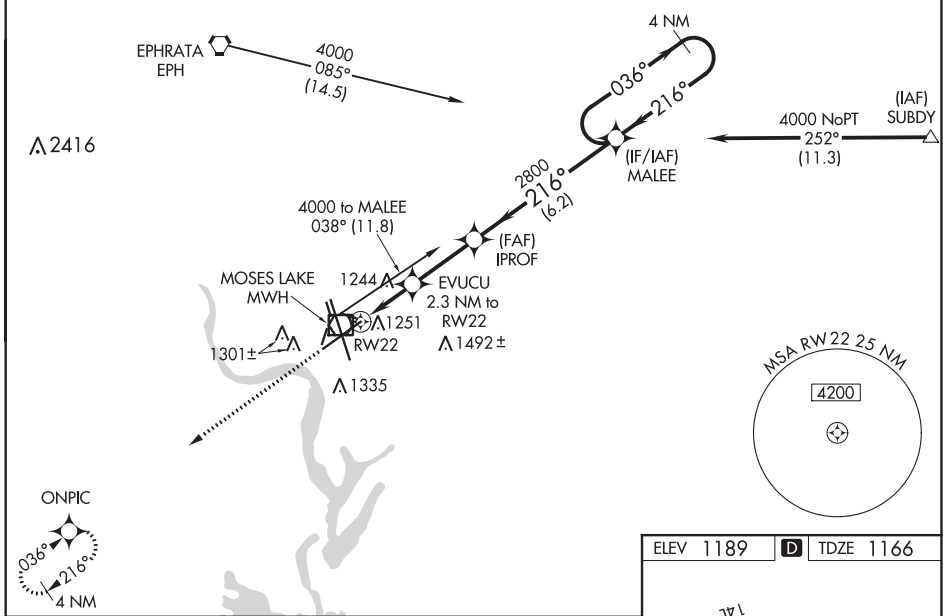
# RNAV (GPS) Y RWY 22
## GRANT COUNTY INTL (MWH)

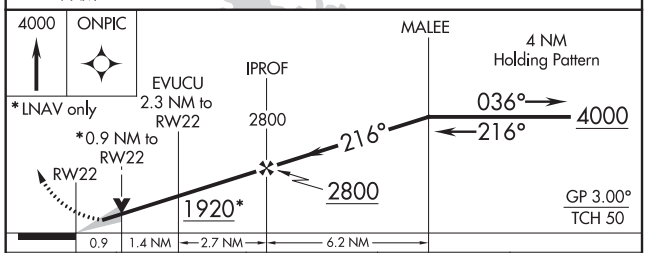
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 36°C (96°F). DME/DME RNP- 0.3 NA. Baro-VNAV and VDP NA when using Ephrata altimeter setting. When local altimeter setting not received, use Ephrata altimeter setting and increase all DA 36 feet and all MDA 40 feet, increase LNAV/VNAV all Cats visibility and LNAV Cats C and D visibility ⅛ mile.

MISSED APPROACH: Climb to 4000 direct ONPIC and hold.

| ATIS | GRANT COUNTY APP CON ★ | GRANT COUNTY TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 119.05 | 126.4 379.95 | 118.25 (CTAF) L 257.8 (EAST) 128.0 257.8 (WEST) | 121.9 | 122.95 |

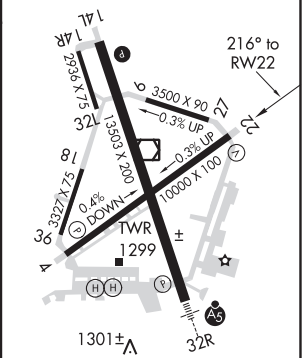
Procedure NA for arrivals at EPH VORTAC on airway radials 060 CW 135.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 1366-¾ 200 (200-¾) | | | |
| LNAV/VNAV DA | 1429-⅞ 263 (300-⅞) | | | |
| LNAV MDA | 1500-1 334 (400-1) | | | |
| CIRCLING | 1660-1 471 (500-1) | | 1660-1½ 471 (500-1½) | 1740-2 551 (600-2) |

ELEV 1189 D TDZE 1166




REIL Rwy 4 L
REIL Rwys 14L and 22
HIRL Rwy 14L-32R
MIRL Rwys 4-22 and 18-36

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 77799 W32A | APP CRS 324° | Rwy ldg 13492<br>TDZE 1167<br>Apt Elev 1189 |
|---|---|---|

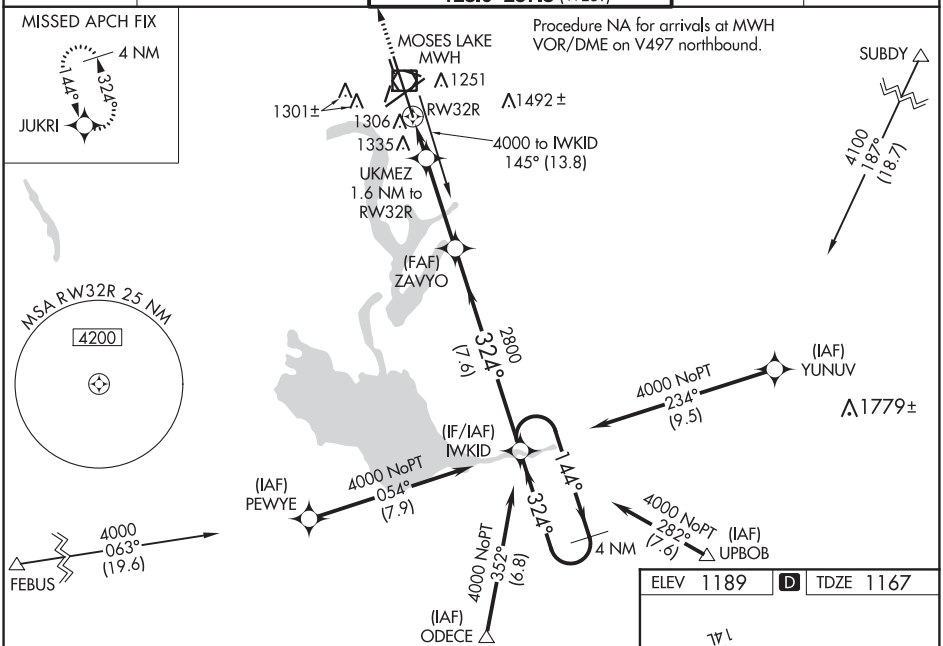
# RNAV (GPS) Y RWY 32R
## GRANT COUNTY INTL (MWH)

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. Baro-VNAV NA when using Ephrata altimeter setting. When local altimeter setting not received, use Ephrata altimeter setting and increase all DA 36 feet and all MDA 40 feet and increase LNAV/VNAV all Cats visibility to RVR 3500 and LNAV Cats C and D visibility to RVR 5000. For inoperative MALSR increase LNAV/VNAV all Cats visibility to RVR 5500 and LNAV Cats C and D visibility to 1⅜ miles. For inoperative MALSR, when using Ephrata altimeter setting, increase LNAV/VNAV all Cats visibility to 1¼ miles.
#RVR 1800 authorized with use of FD or AP or HUD to DA, NA when using Ephrata altimeter setting.

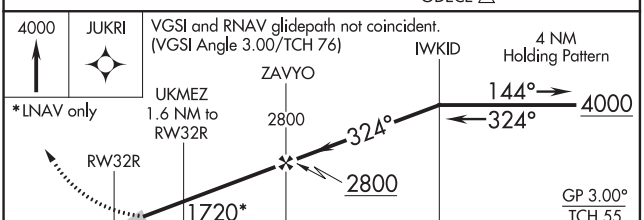
MALSR

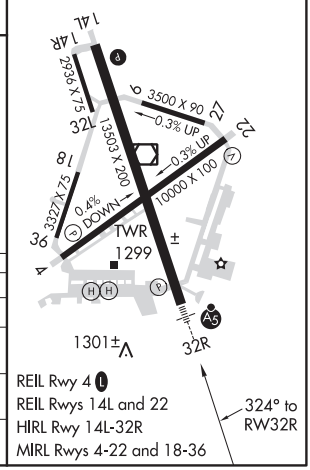
MISSED APPROACH: Climb to 4000 direct JUKRI and hold.

| ATIS | GRANT COUNTY APP CON ★ | GRANT COUNTY TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 119.05 | 126.4 379.95 | 118.25 (CTAF) L 257.8 (EAST)<br>128.0 257.8 (WEST) | 121.9 | 122.95 |




| ELEV 1189 | D | TDZE 1167 |
|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA# | 1367/24 200 (200-½) | | | |
| LNAV/VNAV DA | 1517/30 350 (400-⅝) | | | |
| LNAV MDA | 1620/24 453 (500-½) | | 1620/45 453 (500-⅞) | |
| CIRCLING | 1660-1 471 (500-1) | | 1660-1½ 471 (500-1½) | 1740-2 551 (600-2) |

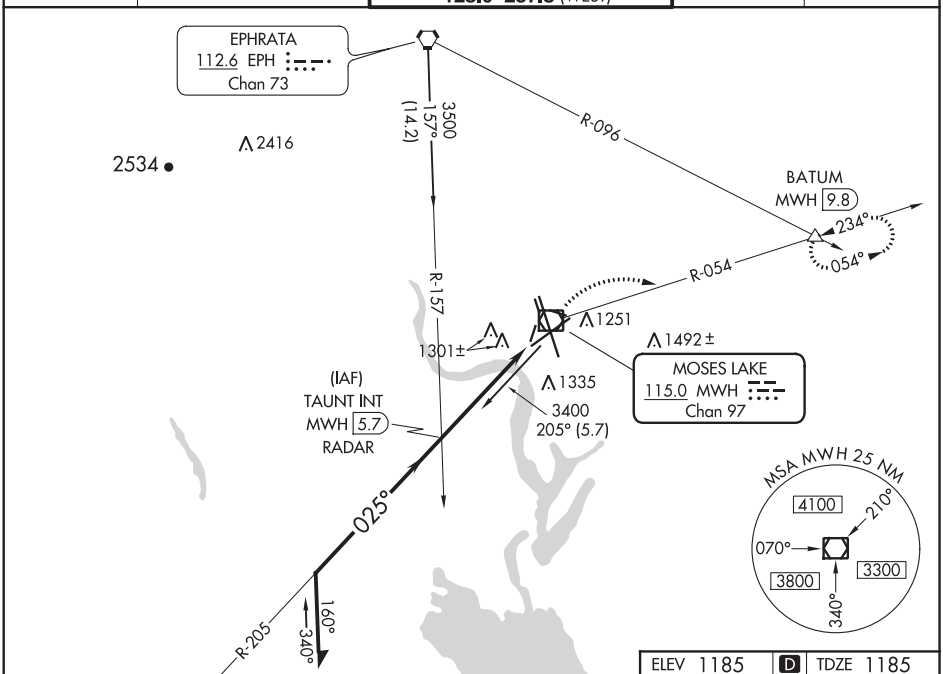

NW-1, 05 NOV 2020 to 31 DEC 2020

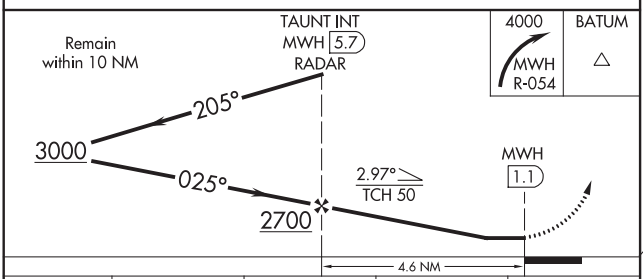
| VOR/DME MWH | APP CRS | Rwy ldg | 10000 |
|---|---|---|---|
| 115.0 | 025° | TDZE | 1185 |
| Chan 97 | | Apt Elev | 1185 |

# VOR RWY 4
## GRANT COUNTY INTL (MWH)

MISSED APPROACH: Climbing right turn to 4000 via MWH R-054 to BATUM INT/MWH 9.8 DME and hold.

| ATIS | GRANT COUNTY APP CON ★ | GRANT COUNTY TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 119.05 | 126.4 379.95 | 118.25 (CTAF) L 257.8 (EAST) 128.0 257.8 (WEST) | 121.9 | 122.95 |

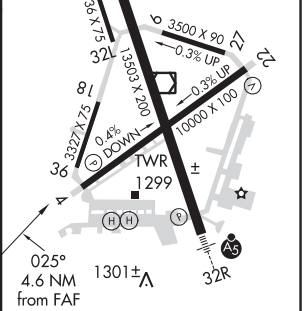



| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-4 | 1620-1 435 (500-1) | | 1620-1¼ 435 (500-1¼) | 1620-1½ 435 (500-1½) |
| CIRCLING | 1680-1 495 (500-1) | | 1680-1½ 495 (500-1½) | 1740-2 555 (600-2) |

ELEV 1185 D TDZE 1185

MIRL Rwys 4-22 and 18-36
REIL Rwys 14L and 22
HIRL Rwy 14L-32R
REIL Rwy 4 L




| FAF to MAP 4.6 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 4:36 | 3:04 | 2:18 | 1:50 | 1:32 |

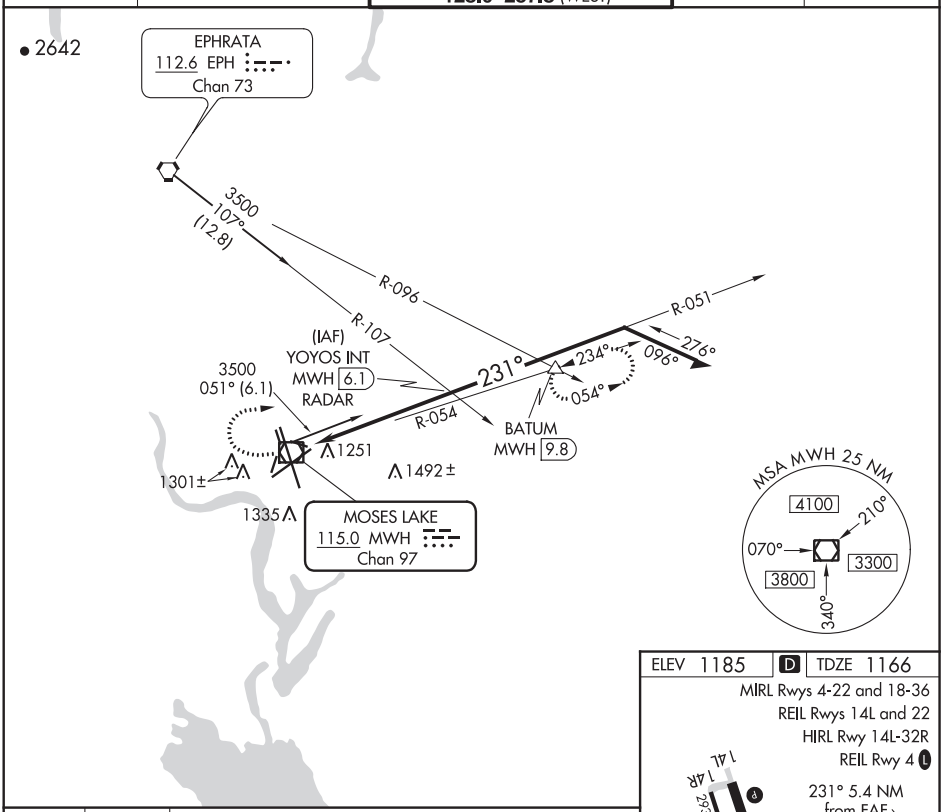

NW-1, 05 NOV 2020 to 31 DEC 2020

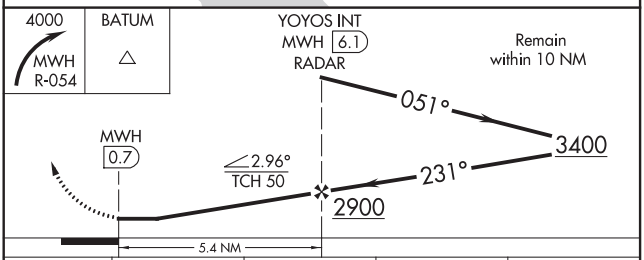
| VOR/DME MWH 115.0 Chan 97 | APP CRS 231° | Rwy ldg 10000 TDZE 1166 Apt Elev 1185 |
|---|---|---|

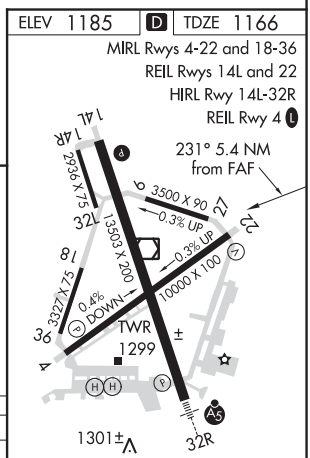
# VOR RWY 22
## GRANT COUNTY INTL (MWH)

MISSED APPROACH: Climbing right turn to 4000 via MWH R-054 to BATUM INT/MWH 9.8 DME and hold.

| ATIS | GRANT COUNTY APP CON ★ | GRANT COUNTY TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 119.05 | 126.4 379.95 | 118.25 (CTAF) L 257.8 (EAST) 128.0 257.8 (WEST) | 121.9 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-22 | 1760-1 594 (600-1) | | 1760-1½ 594 (600-1½) | 1760-1¾ 594 (600-1¾) |
| CIRCLING | 1760-1 575 (600-1) | | 1760-1½ 575 (600-1½) | 1760-2 575 (600-2) |

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

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

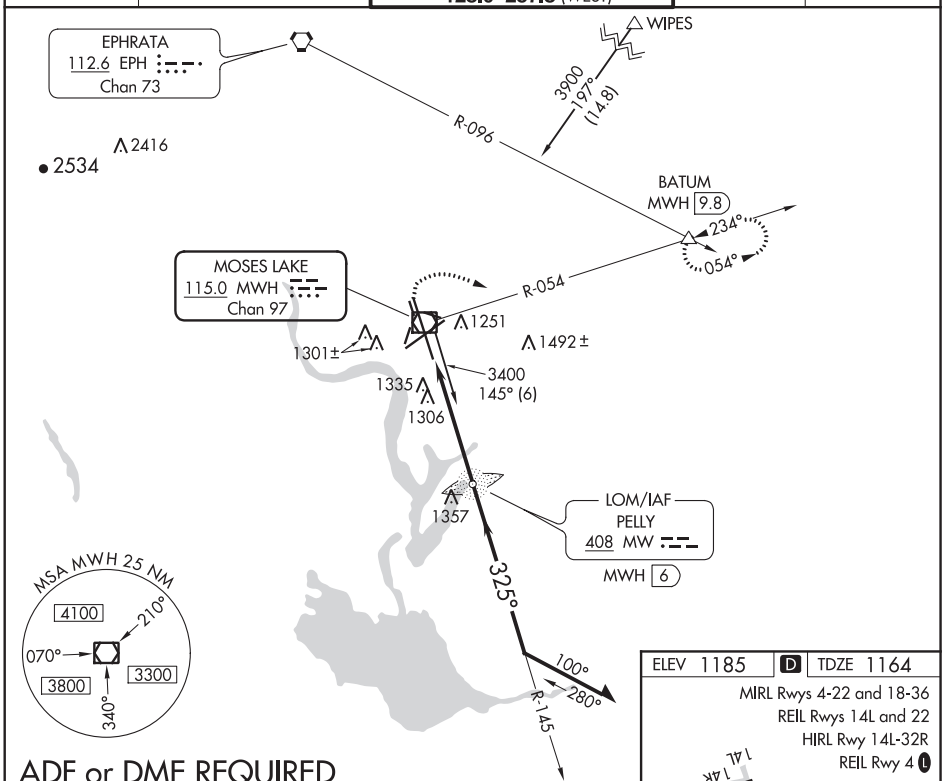
# VOR RWY 32R
## GRANT COUNTY INTL (MWH)

| VOR/DME MWH 115.0 Chan 97 | APP CRS 325° | Rwy ldg 13492 TDZE 1164 Apt Elev 1185 |
|---|---|---|

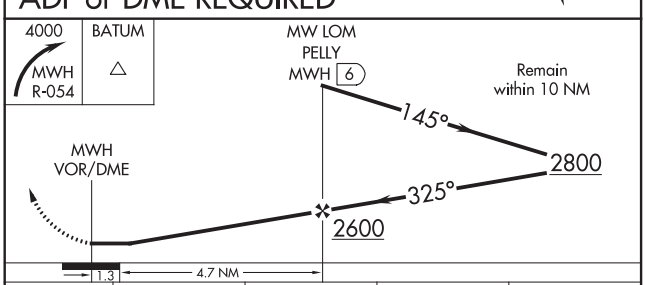
MALSR

MISSED APPROACH: Climbing right turn to 4000 via MWH R-054 to BATUM INT/MWH 9.8 DME and hold.

| ATIS | GRANT COUNTY APP CON ★ | GRANT COUNTY TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 119.05 | 126.4 379.95 | 118.25 (CTAF) (L) 257.8 (EAST) 128.0 257.8 (WEST) | 121.9 | 122.95 |



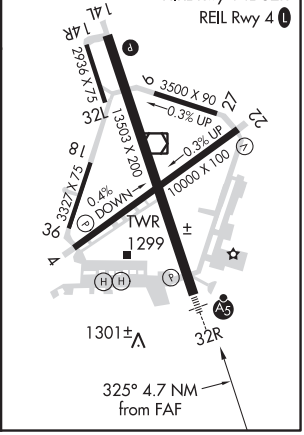

ADF or DME REQUIRED




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-32R | 1620/24 456 (500-½) | | 1620/40 456 (500-¾) | 1620/50 456 (500-1) |
| CIRCLING | 1680-1 495 (500-1) | | 1680-1½ 495 (500-1½) | 1740-2 555 (600-2) |

ELEV 1185 (D) TDZE 1164

MIRL Rwys 4-22 and 18-36
REIL Rwys 14L and 22
HIRL Rwy 14L-32R
REIL Rwy 4 (L)






NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

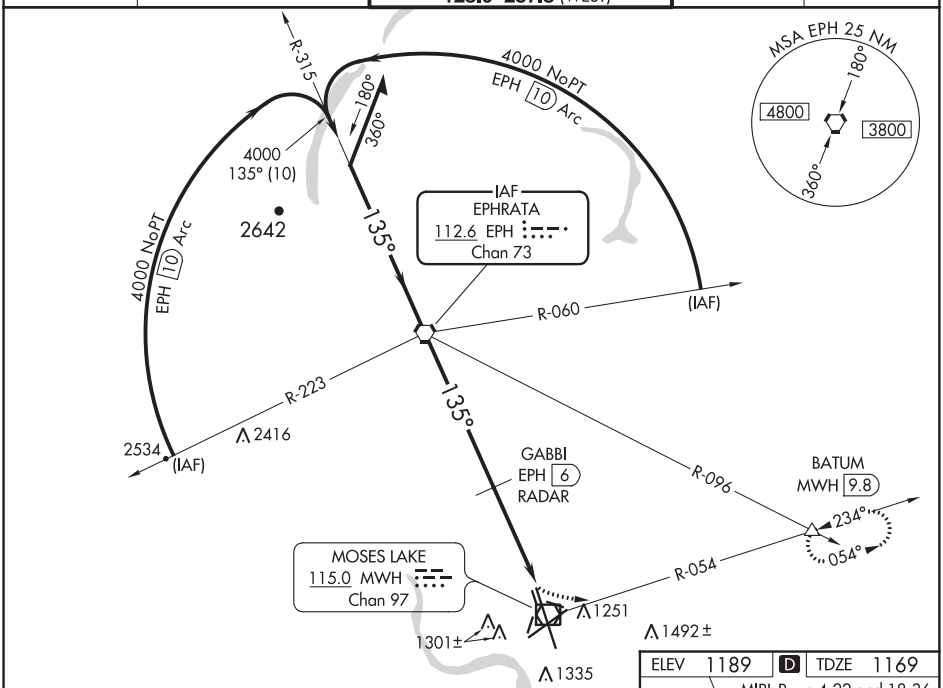
MOSES LAKE, WASHINGTON AL-961 (FAA) 20254

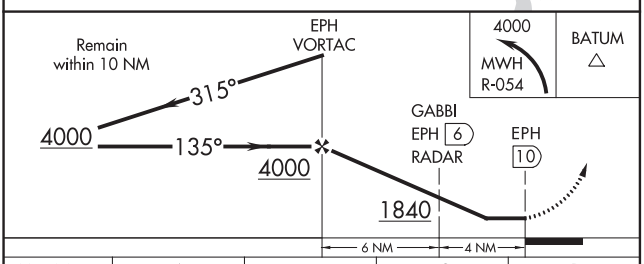
# VOR-1 RWY 14L
## GRANT COUNTY INTL (MWH)

| VORTAC EPH | APP CRS | Rwy ldg | 13503 |
|---|---|---|---|
| 112.6 | 135° | TDZE | 1169 |
| Chan 73 | | Apt Elev | 1189 |

MISSED APPROACH: Climbing left turn to 4000 via MWH R-054 to BATUM INT/MWH 9.8 DME and hold.

| ATIS | GRANT COUNTY APP CON ★ | GRANT COUNTY TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 119.05 | 126.4 379.95 | 118.25 (CTAF) L 257.8 (EAST) 128.0 257.8 (WEST) | 121.9 | 122.95 |

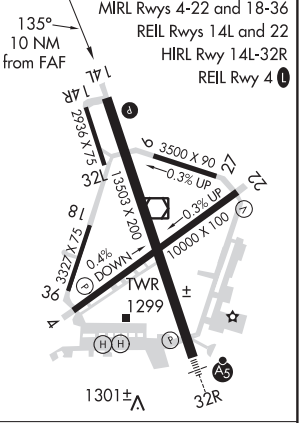



| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-14L | 1840-1 671 (700-1) | | 1840-2 671 (700-2) | 1840-2¼ 671 (700-2¼) |
| CIRCLING | 1840-1 651 (700-1) | | 1840-2 651 (700-2) | 1840-2¼ 651 (700-2¼) |
| GABBI DME or RADAR MINIMUMS | | | | |
| S-14L | 1640-1 471 (500-1) | | 1640-1¼ 471 (500-1¼) | 1640-1½ 471(500-1½) |
| CIRCLING | 1680-1 491 (500-1) | | 1680-1½ 491 (500-1½) | 1740-2 551 (600-2) |

ELEV 1189 D TDZE 1169

MIRL Rwys 4-22 and 18-36
REIL Rwys 14L and 22
HIRL Rwy 14L-32R
REIL Rwy 4 L




| FAF to MAP 10 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 10:00 | 6:40 | 5:00 | 4:00 | 3:20 |

NW-1, 05 NOV 2020 to 31 DEC 2020

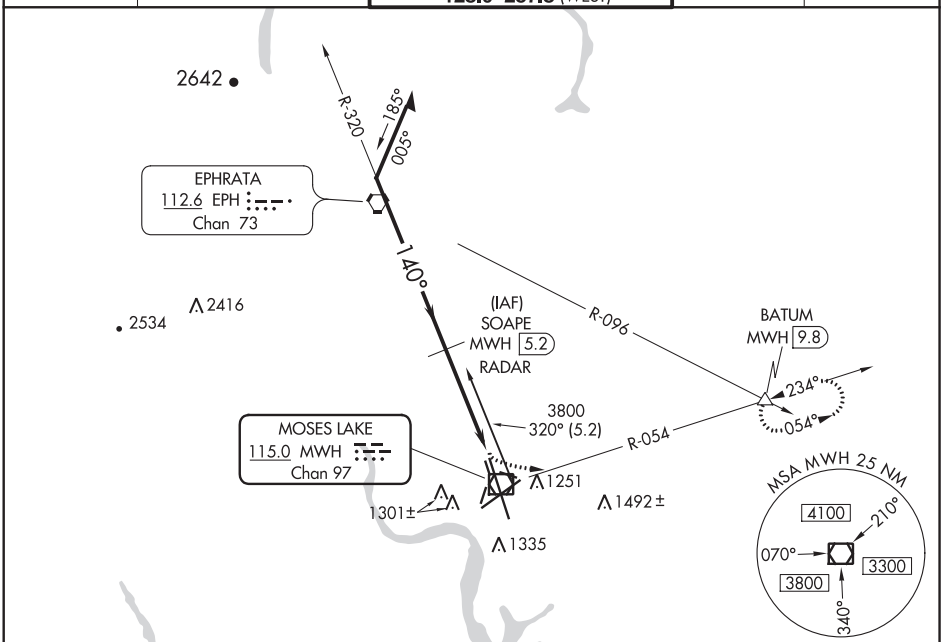
NW-1, 05 NOV 2020 to 31 DEC 2020

| VOR/DME MWH | APP CRS | Rwy ldg | 13503 |
|---|---|---|---|
| 115.0 | 140° | TDZE | 1166 |
| Chan 97 | | Apt Elev | 1185 |

# VOR-3 RWY 14L
## GRANT COUNTY INTL (MWH)

MISSED APPROACH: Climbing left turn to 4000 via MWH R-054 to BATUM INT/MWH 9.8 DME and hold.

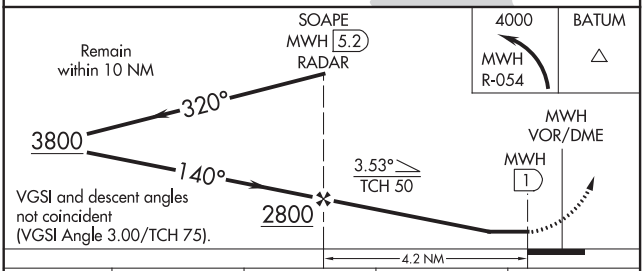
| ATIS | GRANT COUNTY APP CON ★ | GRANT COUNTY TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 119.05 | 126.4 379.95 | 118.25 (CTAF) Ⓛ 257.8 (EAST) 128.0 257.8 (WEST) | 121.9 | 122.95 |




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

RADAR or DME REQUIRED

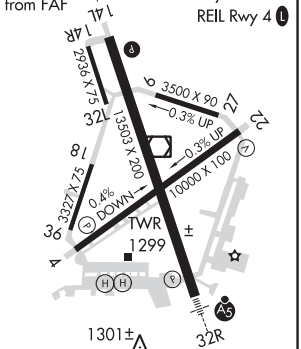



| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-14L | 1620-1 454 (500-1) | | 1620-1¼ 454 (500-1¼) | 1620-1½ 454 (500-1½) |
| CIRCLING | 1680-1 495 (500-1) | | 1680-1½ 495 (500-1½) | 1740-2 555 (600-2) |

ELEV 1185 D TDZE 1166

140° 4.2 NM from FAF

MIRL Rwys 4-22 and 18-36
REIL Rwys 14L and 22
HIRL Rwy 14L-32R
REIL Rwy 4 Ⓛ




| FAF to MAP 4.2 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 4:12 | 2:48 | 2:06 | 1:41 | 1:24 |

MOSES LAKE, WASHINGTON AL-961 (FAA) 20254

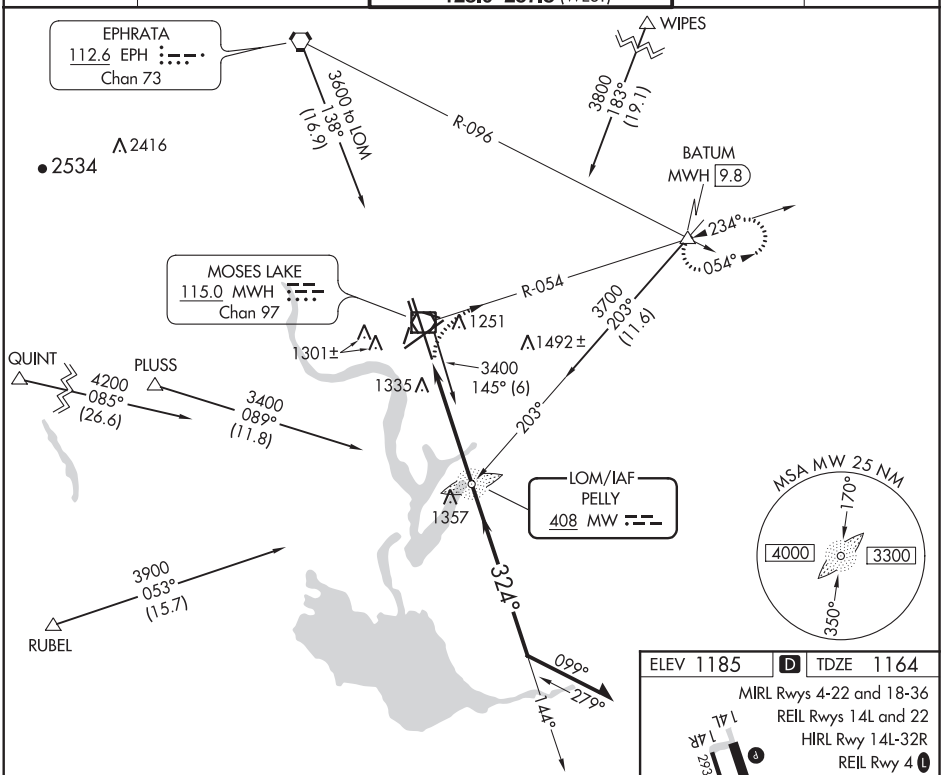
| LOM MW | APP CRS | Rwy ldg / TDZE / Apt Elev |
|---|---|---|
| 408 | 324° | 13492 / 1164 / 1185 |

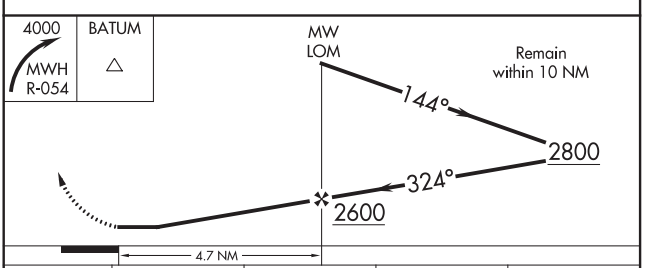
# NDB RWY 32R
## GRANT COUNTY INTL (MWH)

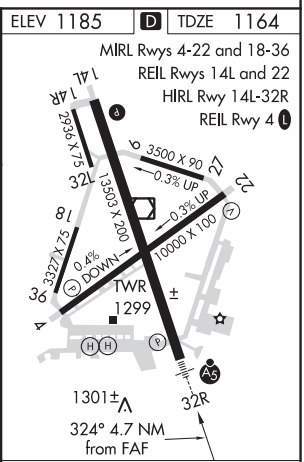
MALSR

MISSED APPROACH: Climbing right turn to 4000 via MWH R-054 to BATUM INT/MWH 9.8 DME and hold.

| ATIS | GRANT COUNTY APP CON ★ | GRANT COUNTY TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 119.05 | 126.4 379.95 | 118.25 (CTAF) (L) 257.8 (EAST) 128.0 257.8 (WEST) | 121.9 | 122.95 |



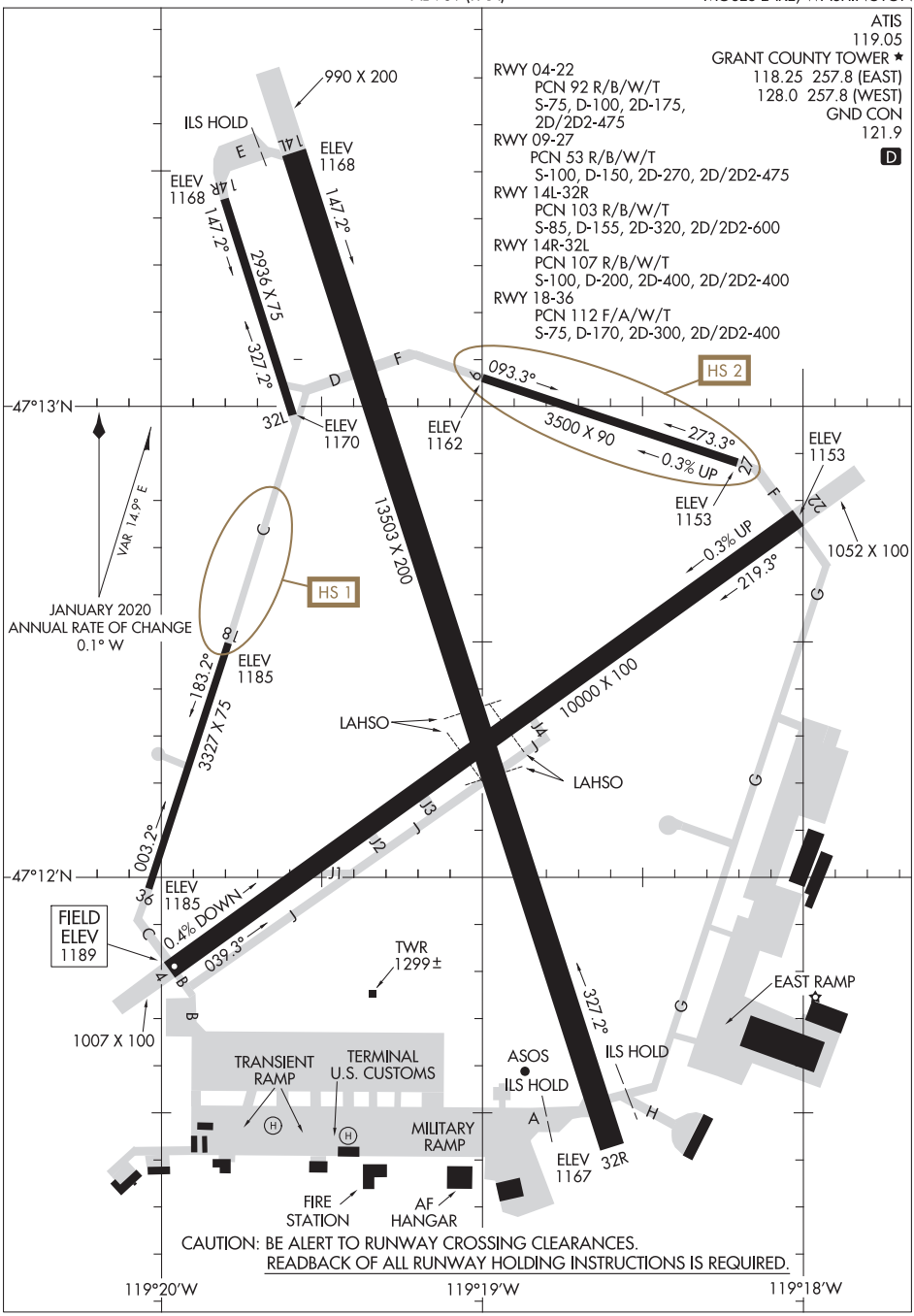

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-32R | 1680/40 516 (500-¾) | | 1680/50 516 (500-1) | 1680-1½ 516 (500-1½) |
| CIRCLING | 1680-1 495 (500-1) | | 1680-1½ 495 (500-1½) | 1740-2 555 (600-2) |

FAF to MAP 4.7 NM

| Knots | 60 | 90 | 120 | 150 | 180 |
|---|---|---|---|---|---|
| Min:Sec | 4:42 | 3:08 | 2:21 | 1:53 | 1:34 |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

MOUNTAIN HOME, IDAHO | AL-6595 (FAA) | 20142

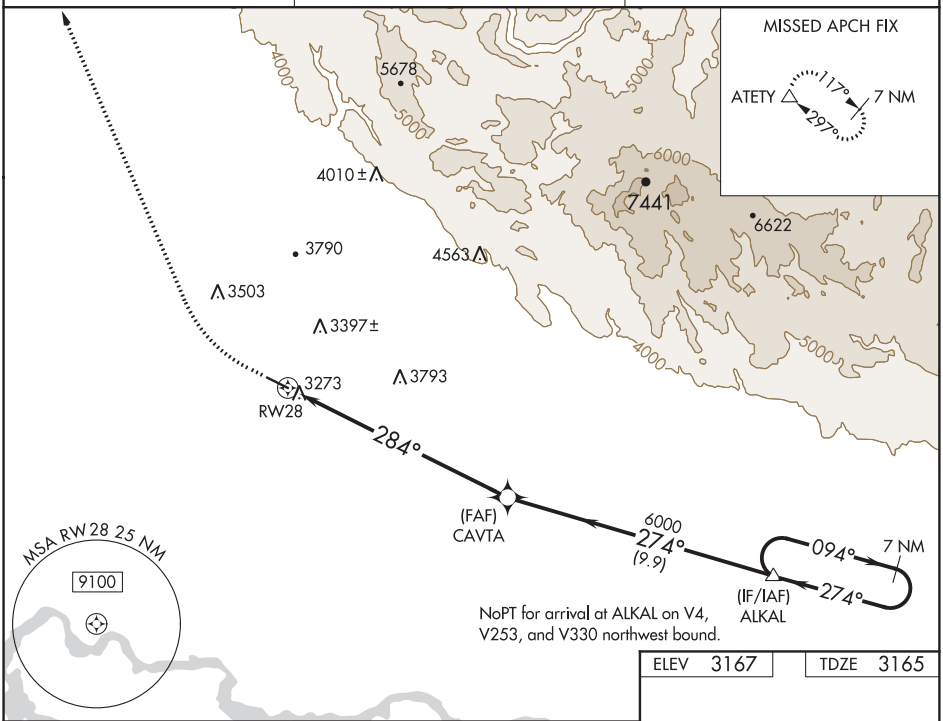
# RNAV (GPS) RWY 28
## MOUNTAIN HOME MUNI (U76)

| WAAS CH 42815 W28A | APP CRS 284° | Rwy ldg 5000<br>TDZE 3165<br>Apt Elev 3167 |
|---|---|---|

T A NA — Use Mountain Home AFB altimeter setting, when not received, procedure NA. Baro-VNAV NA. Rwy 28 helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA.

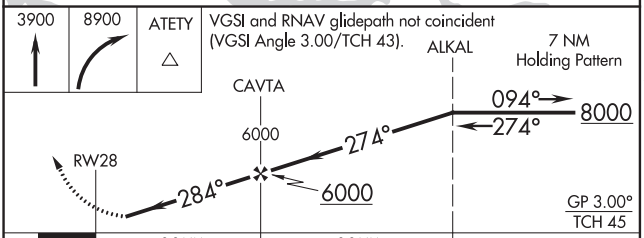
MISSED APPROACH: Climb to 3900 then climbing right turn 8900 direct ATETY and hold, continue climb-in-hold to 8900.

| MUO AWOS | MOUNTAIN HOME APP CON ★ | AUNICOM |
|---|---|---|
| 273.5 | 124.8 259.1 | 122.8 (CTAF) L |

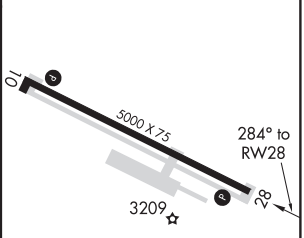



| 3900 | 8900 | ATETY |
|---|---|---|

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 43).




ELEV 3167 | TDZE 3165




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 3458-1 293 (300-1) | | | |
| LNAV/VNAV DA | 3524-1¼ 359 (400-1¼) | | | |
| LNAV MDA | 3900-1 735 (800-1) | | 3900-2 735 (800-2) | |
| C CIRCLING | 3900-1 733 (800-1) | | 3900-2 733 (800-2) | 4180-3 1013 (1100-3) |

REIL Rwys 10 and 28 L
MIRL Rwy 10-28 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

MOUNTAIN HOME, IDAHO

# ILS or LOC Z RWY 12

| LOC I-MUO | APCH CRS | Rwy ldg 13,510 TDZE 2987 Arpt Elev 2996 |
|---|---|---|
| 110.3 | 122° | |

AL-323 [USAF]

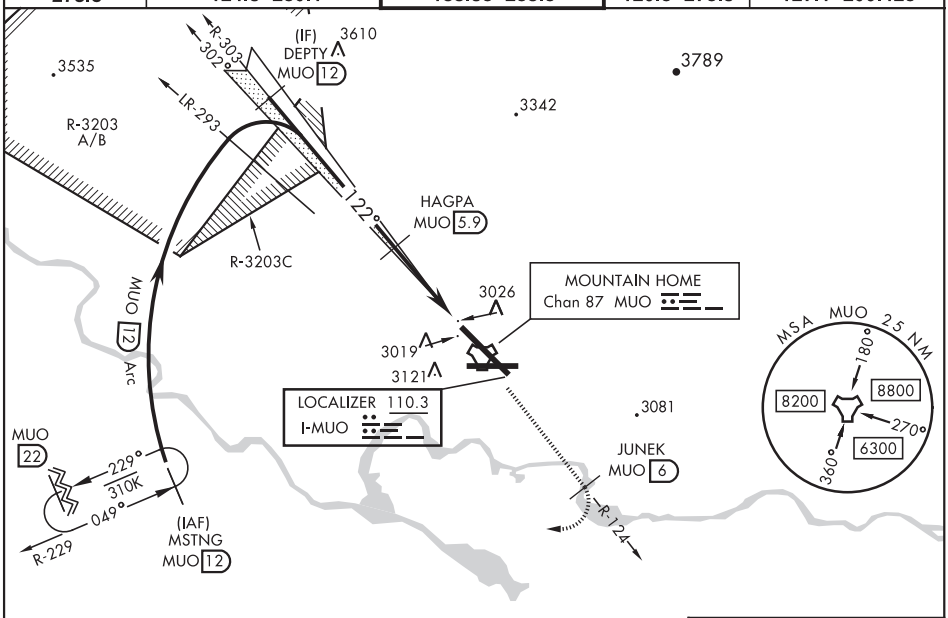
MOUNTAIN HOME AFB (KMUO)

T * When ALS inop, increase RVR to 40, vis to ¾ mile.
** When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile, CAT CDE vis to 1⅜ miles.
*** Circling NA NE of Rwy 12-30.

ALSF-1

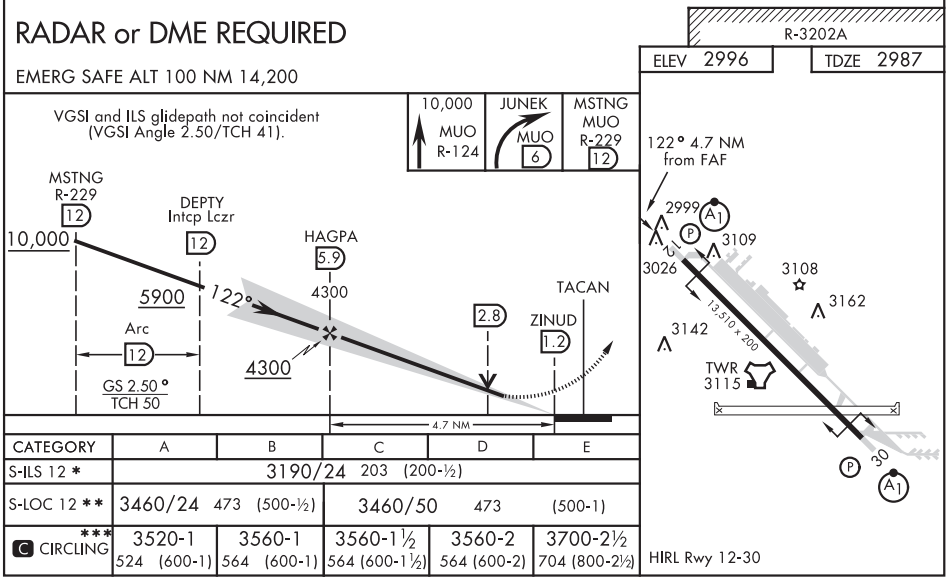
MISSED APPROACH: Climb to 10,000 via MUO R-124 to JUNEK/6 DME, turn right and intercept MUO R-229 to MSTNG/12 DME and hold. Continue climb in hold to 10,000.

| ATIS | MOUNTAIN HOME APP CON | MOUNTAIN HOME TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 273.5 | 124.8 259.1 | 133.85 253.5 | 120.5 275.8 | 127.1 290.425 |




## RADAR or DME REQUIRED

EMERG SAFE ALT 100 NM 14,200




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-ILS 12 * | 3190/24 203 (200-½) | | | | |
| S-LOC 12 ** | 3460/24 473 (500-½) | | 3460/50 473 (500-1) | | |
| *** C CIRCLING | 3520-1 524 (600-1) | 3560-1 564 (600-1) | 3560-1½ 564 (600-1½) | 3560-2 564 (600-2) | 3700-2½ 704 (800-2½) |

MOUNTAIN HOME, IDAHO

43°03′N-115°52′W

MOUNTAIN HOME AFB (KMUO)

Amdt 4 18JUN20

ILS or LOC Z RWY 12



NW-1, 05 NOV 2020 to 31 DEC 2020

MOUNTAIN HOME, IDAHO

20170

# ILS or LOC Z RWY 30

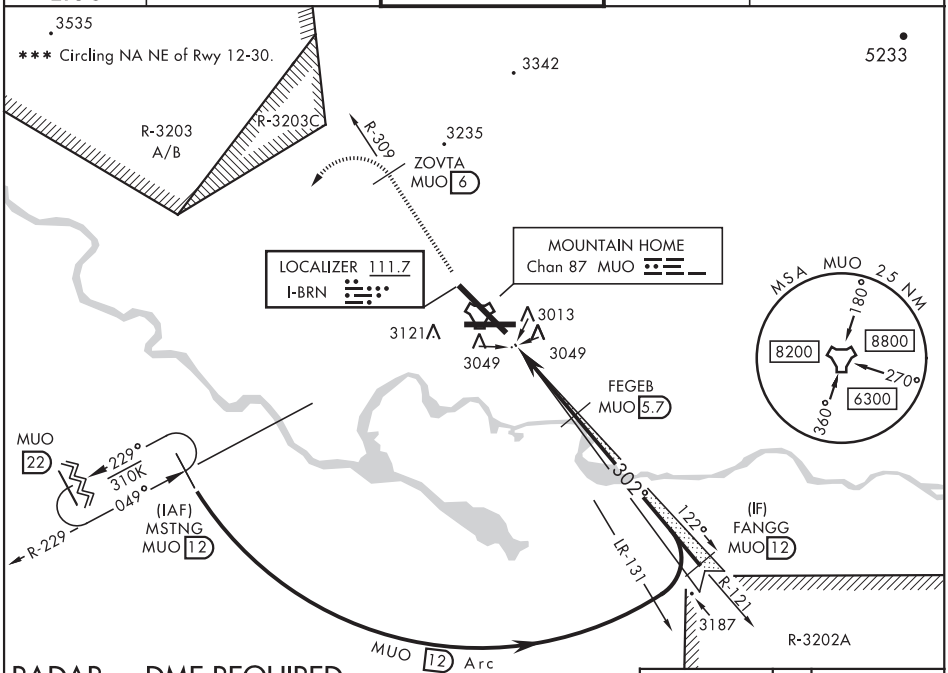
| LOC I-BRN | APCH CRS | Rwy ldg 13,510 TDZE 2996 Arpt Elev 2996 | AL-323 [USAF] | MOUNTAIN HOME AFB (KMUO) |
|---|---|---|---|---|
| 111.7 | 302° | | | |

T * When ALS inop, increase CAT ABCDE RVR to 47 and vis to 1 mile.
** When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile, CAT CDE vis to 1⅜ miles.

ALSF-1 (A1)

MISSED APPROACH: Climb to 10,000 via MUO R-309 to ZOVTA/6 DME, turn left and intcp MUO R-229 to MSTNG/12 DME and hold. Continue climb in hold to 10,000.

| ATIS | MOUNTAIN HOME APP CON | MOUNTAIN HOME TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 273.5 | 124.8 259.1 | 133.85 253.5 | 120.5 275.8 | 127.1 290.425 |

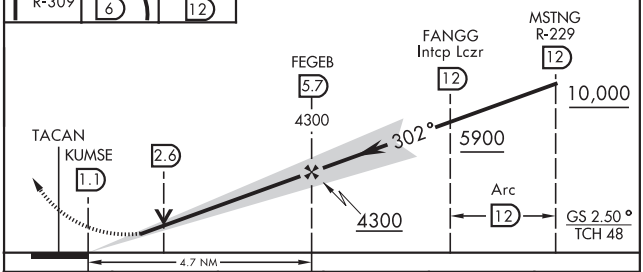



## RADAR or DME REQUIRED

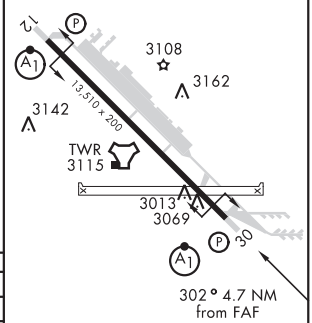
EMERG SAFE ALT 100 NM 14,200

| 10,000 | ZOVTA | MSTNG |
|---|---|---|
| MUO R-309 | MUO 6 | MUO R-229 12 |

VGSI and ILS glidepath not coincident (VGSI Angle 2.50/TCH 40).




ELEV 2996 | TDZE 2996




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-ILS 30 * | 3246/40 250 (300-¾) | | | | |
| S-LOC 30 ** | 3460/24 464 (500-½) | | 3460/50 464 (500-1) | | |
| C CIRCLING *** | 3520-1 524 (600-1) | 3560-1 564 (600-1) | 3560-1½ 564 (600-1½) | 3560-2 564 (600-2) | 3700-2½ 704 (800-2½) |

HIRL Rwy 12-30



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

MOUNTAIN HOME, IDAHO

# TACAN Z RWY 12

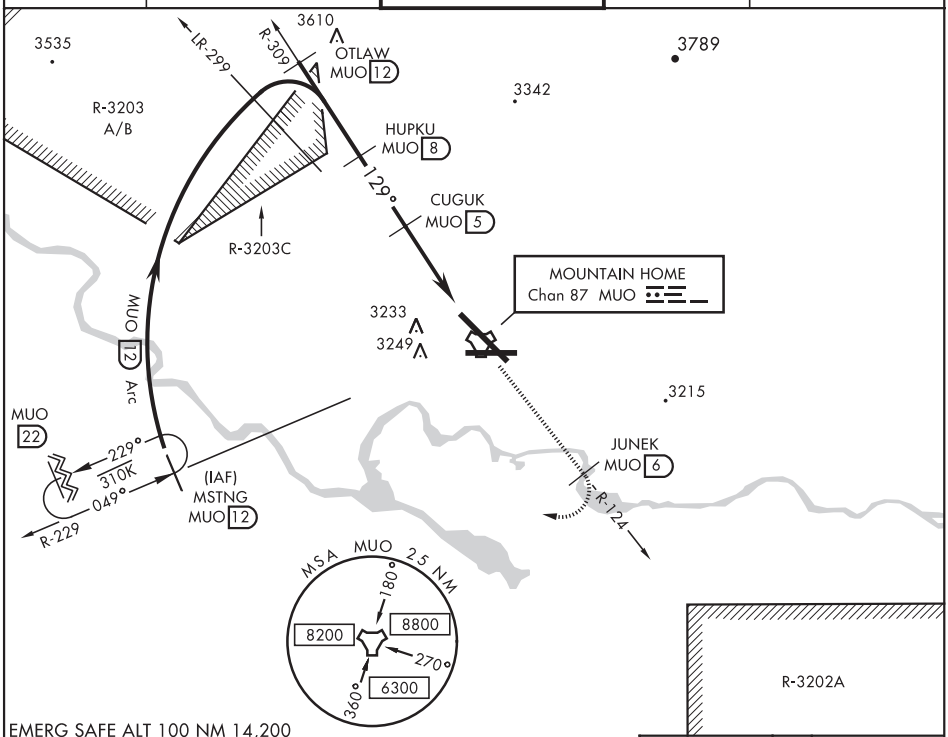
| TACAN MUO Chan 87 | APCH CRS 129° | Rwy ldg 13,510 TDZE 2987 Arpt Elev 2996 | AL-323 [USAF] | MOUNTAIN HOME AFB (KMUO) |
|---|---|---|---|---|

T * When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile, CAT CDE vis to 1⅜ miles.
** Circling NA NE of Rwy 12-30.

ALSF-1 A1

MISSED APPROACH: Climb to 10,000 via MUO R-124 to JUNEK/6 DME, turn right and intercept MUO R-229 to MSTNG/12 DME and hold. Continue climb in hold to 10,000.

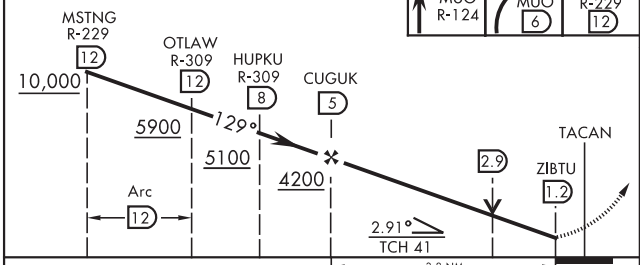
| ATIS | MOUNTAIN HOME APP CON | MOUNTAIN HOME TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 273.5 | 124.8 259.1 | 133.85 253.5 | 120.5 275.8 | 127.1 290.425 |



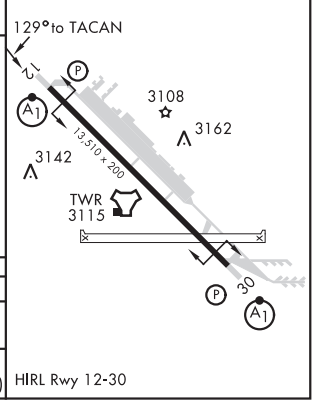

EMERG SAFE ALT 100 NM 14,200

VGSI and descent angles not coincident (VGSI Angle 2.50/TCH 41).

| 10,000 MUO R-124 | JUNEK MUO 6 | MSTNG MUO R-229 12 |
|---|---|---|




ELEV 2996 | TDZE 2987




HIRL Rwy 12-30

| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-12 * | 3480/40 493 (500-¾) | | 3480/50 493 (500-1) | | |
| C CIRCLING ** | 3520-1 524 (600-1) | 3560-1 564 (600-1) | 3560-1½ 564 (600-1½) | 3560-2 564 (600-2) | 3700-2½ 704 (800-2½) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

17229

MOUNTAIN HOME, IDAHO

# TACAN Z RWY 30

MOUNTAIN HOME AFB (KMUO)

AL-323 [USAF]

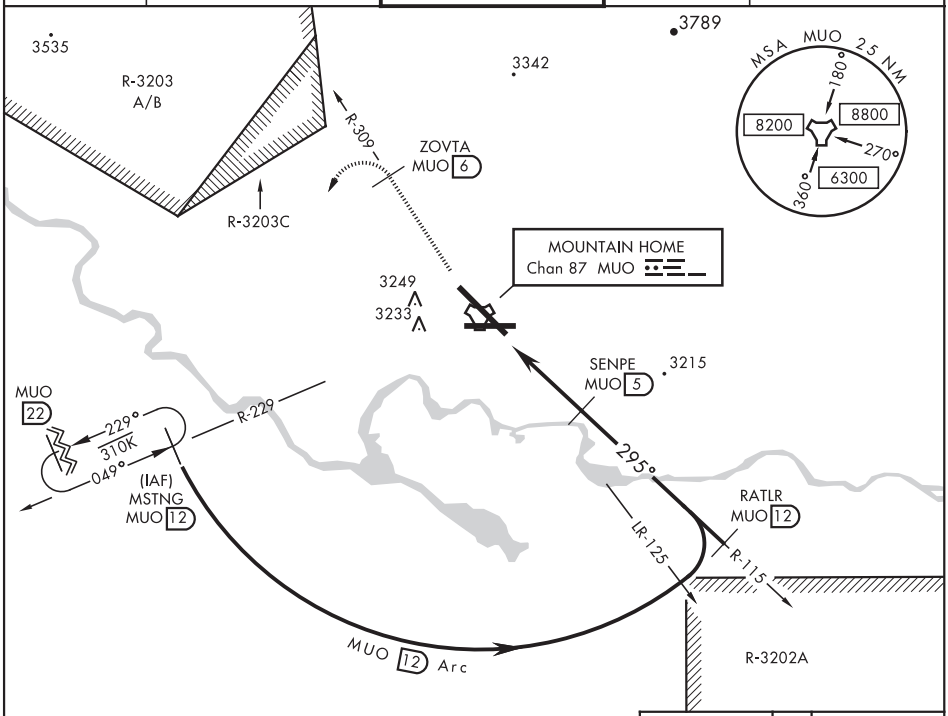
| TACAN | APCH CRS | Rwy ldg | 13,510 |
|---|---|---|---|
| MUO Chan 87 | 295° | TDZE | 2996 |
| | | Arpt Elev | 2996 |

T * When ALS inop, increase CAT AB RVR to 55 and vis to 1 mile, CAT CDE vis to 1⅜ miles.
** Circling NA NE of Rwy 12-30.

ALSF-1

MISSED APPROACH: Climb to 10,000 via MUO R-309 to ZOVTA/6 DME, turn left and intercept MUO R-229 to MSTNG/12 DME and hold. Continue climb in hold to 10,000.

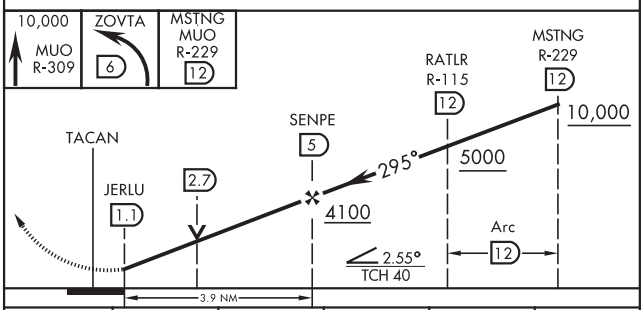
| ATIS | MOUNTAIN HOME APP CON | MOUNTAIN HOME TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 273.5 | 124.8 259.1 | 133.85 253.5 | 120.5 275.8 | 127.1 290.425 |



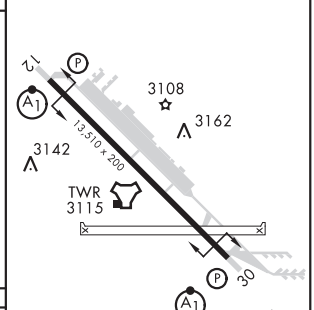

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

EMERG SAFE ALT 100 NM 14,200




ELEV 2996 TDZE 2996




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-30 * | 3480/24 484 (500-½) | | 3480/50 484 (500-1) | | |
| C CIRCLING ** | 3520-1 524 (600-1) | 3560-1 564 (600-1) | 3560-1½ 564 (600-1½) | 3560-2 564 (600-2) | 3700-2½ 704 (800-2½) |

HIRL Rwy 12-30

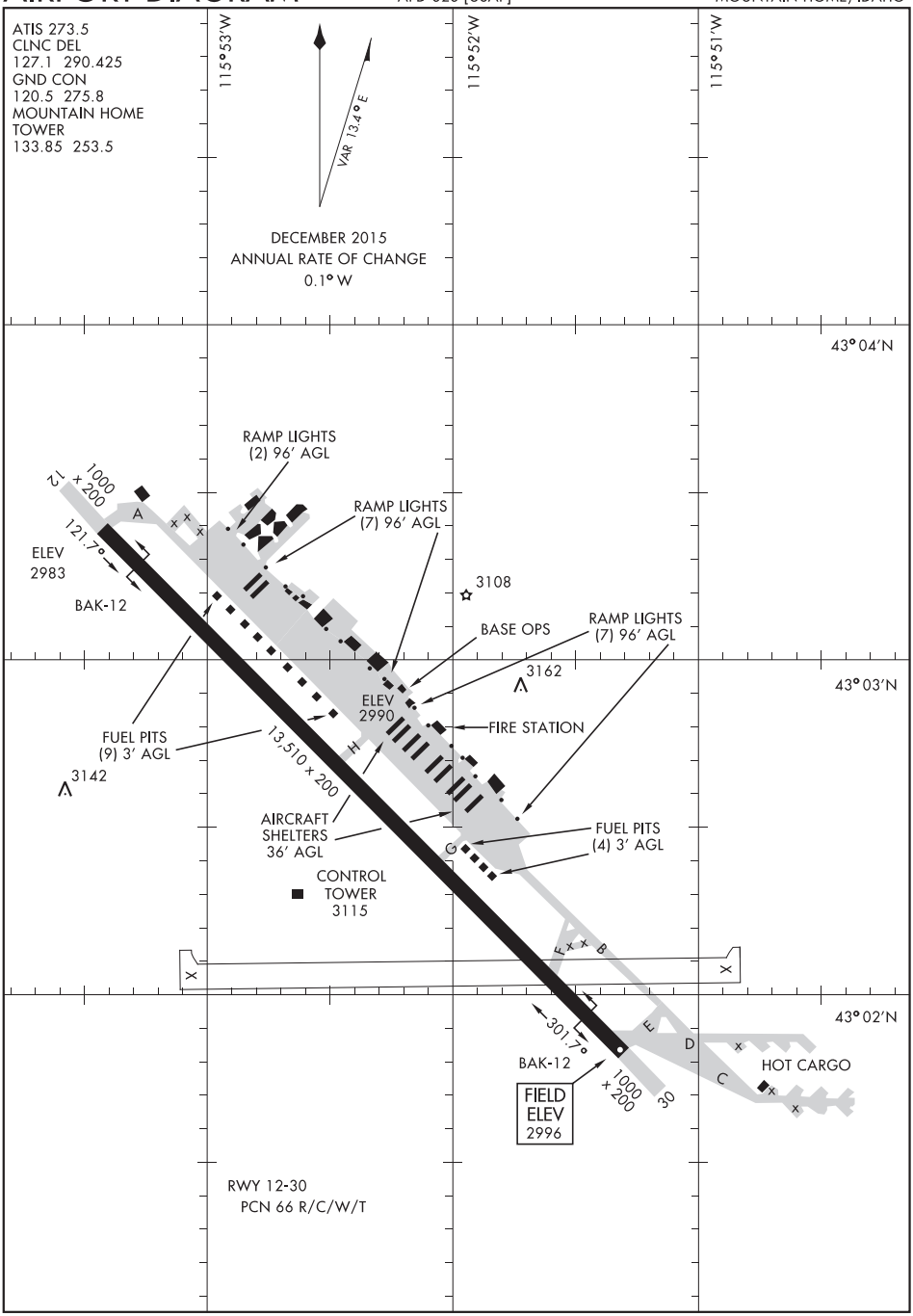
MOUNTAIN HOME, IDAHO

43°03′N-115°52′W

MOUNTAIN HOME AFB (KMUO)

Amdt 3 17AUG17

TACAN Z RWY 30


ATIS 273.5
CLNC DEL
127.1 290.425
GND CON
120.5 275.8
MOUNTAIN HOME
TOWER
133.85 253.5
115°53'W
115°52'W
115°51'W
VAR 13.4° E
DECEMBER 2015
ANNUAL RATE OF CHANGE
0.1° W
43° 04'N
43° 03'N
43° 02'N
RAMP LIGHTS
(2) 96' AGL
RAMP LIGHTS
(7) 96' AGL
RAMP LIGHTS
(7) 96' AGL
1000 x 200
121.7°
ELEV
2983
BAK-12
3108
BASE OPS
3162
ELEV
2990
FIRE STATION
FUEL PITS
(9) 3' AGL
3142
13,510 x 200
AIRCRAFT
SHELTERS
36' AGL
FUEL PITS
(4) 3' AGL
CONTROL
TOWER
3115
301.7°
BAK-12
FIELD
ELEV
2996
1000 x 200
HOT CARGO
RWY 12-30
PCN 66 R/C/W/T

NAMPA, IDAHO AL-6807 (FAA) 19115

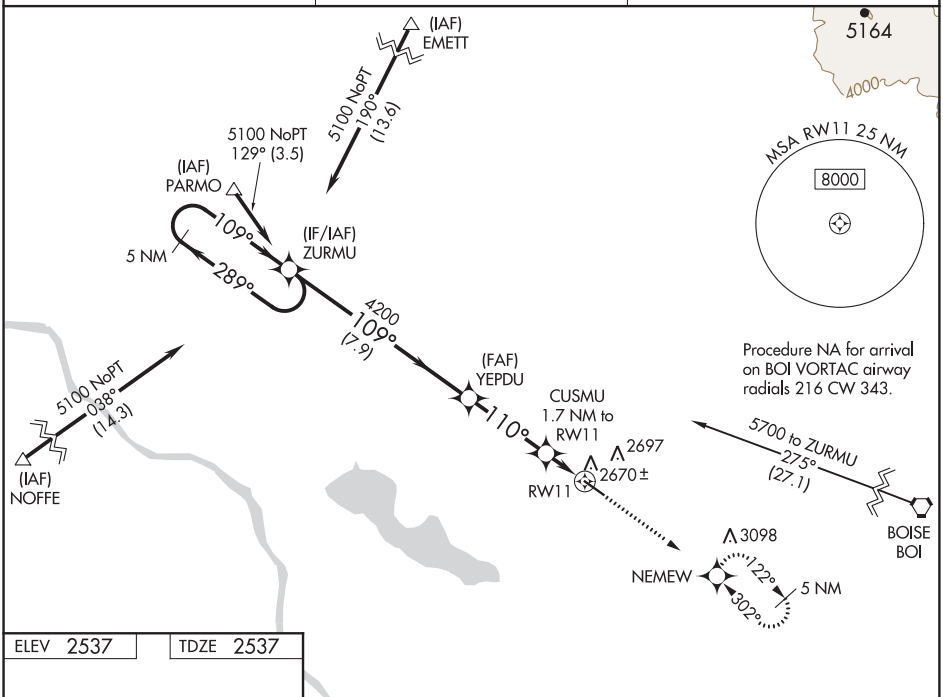
# RNAV (GPS) RWY 11
## NAMPA MUNI (MAN)

| WAAS CH 78202 W11A | APP CRS 110° | Rwy ldg 5000<br>TDZE 2537<br>Apt Elev 2537 |
|---|---|---|

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 54°C (130°F). When Circling to Rwy 29 at night, operational VGSI required, remain on or above VGSI glidepath until threshold. DME/DME RNP-0.3 NA. Rwy 11 helicopter visibiliy reduction below ¾ SM NA.

MISSED APPROACH: Climb to 5100 direct NEMEW and hold, continue climb-in-hold to 5100.

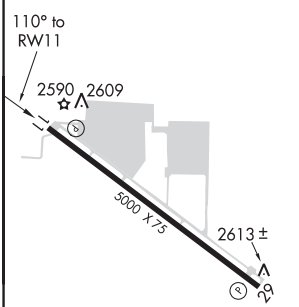
| AWOS-3 | BIG SKY APP CON | UNICOM |
|---|---|---|
| 118.325 | 119.6 269.4 | 122.7 (CTAF) L |



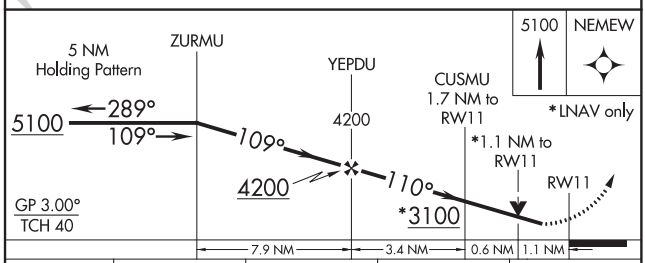

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 2537 TDZE 2537




MIRL Rwy 11-29 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2787-⅞ 250 (300-⅞) | | | |
| LNAV/VNAV DA | 2851-1 314 (400-1) | | | |
| LNAV MDA | 2920-1 383 (400-1) | | 2920-1⅛ 383 (400-1⅛) | |
| C CIRCLING | 3060-1 523 (600-1) | | 3100-1½ 563 (600-1½) | 3220-2¼ 683 (700-2¼) |

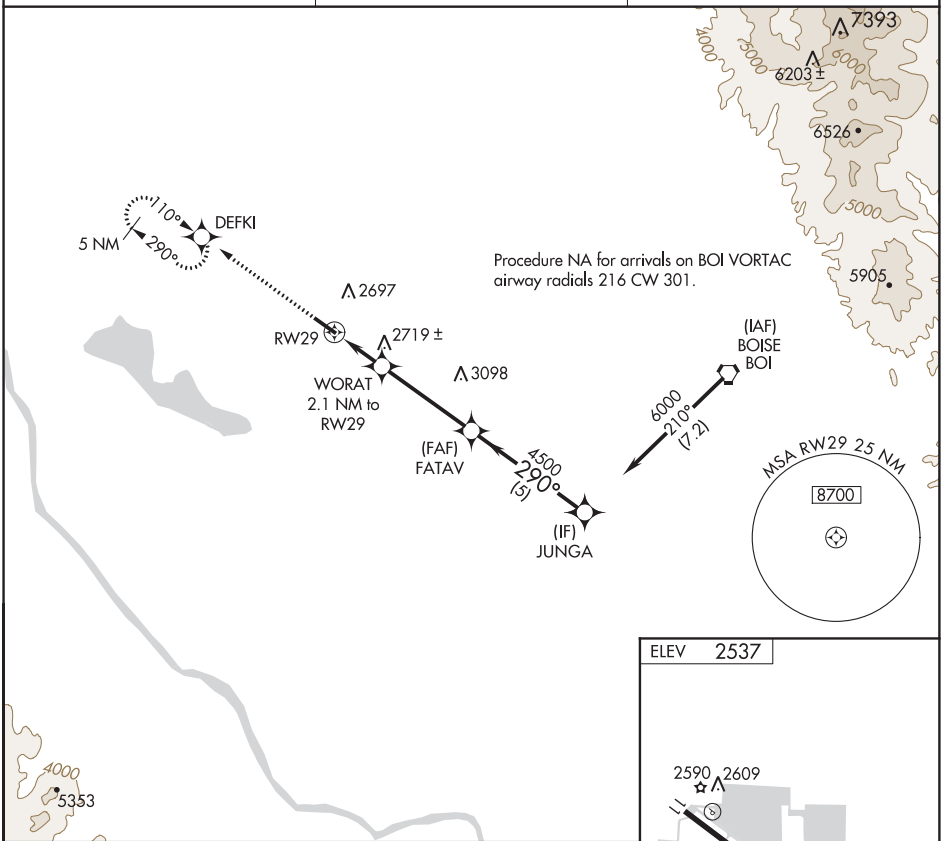
| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 290° | TDZE | N/A |
| | Apt Elev | 2537 |

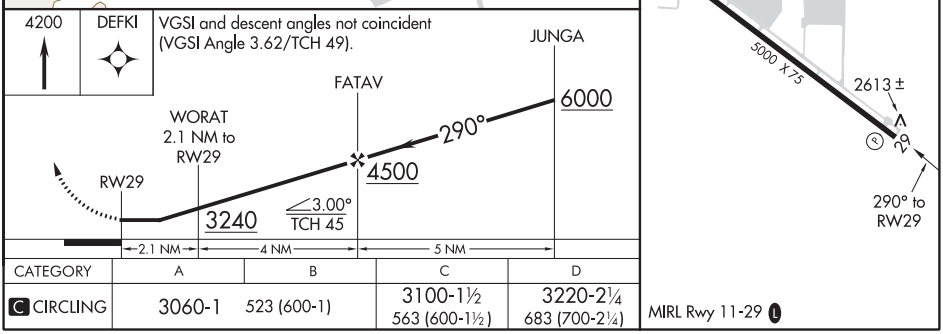
# RNAV (GPS)-B
## NAMPA MUNI (MAN)

Night landing: Rwy 29, operational VGSI required, remain on or above VGSI glidepath until threshold. DME/DME RNP -0.3 NA. When local altimeter setting not received, use Caldwell Industrial altimeter setting and increase all MDA 40 feet and visibility Cat C ¼ SM. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 4200 direct DEFKI and hold.

| AWOS-3 | BIG SKY APP CON | UNICOM |
|---|---|---|
| 118.325 | 119.6 269.4 | 122.7 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 3060-1 | 523 (600-1) | 3100-1½ 563 (600-1½) | 3220-2¼ 683 (700-2¼) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

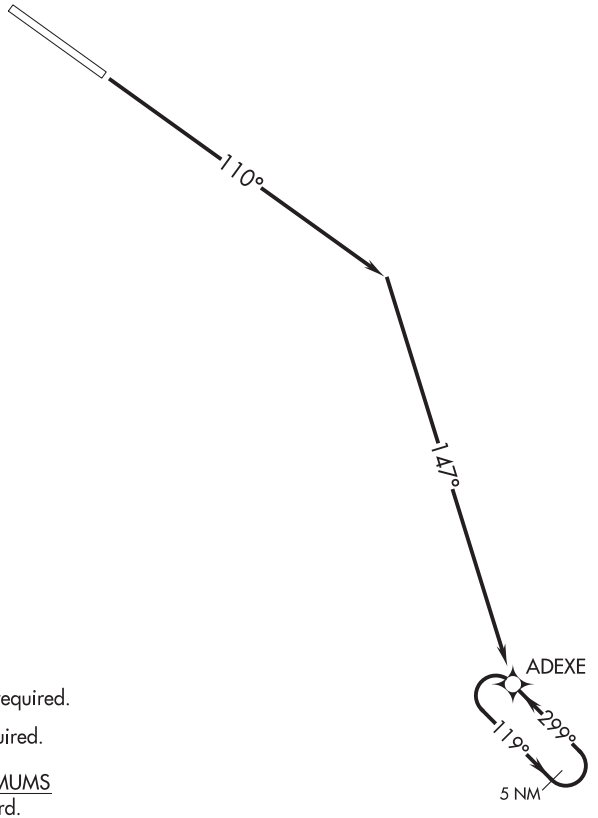
(ADEXE1.ADEXE) 20030

# ADEXE ONE DEPARTURE (OBSTACLE) (RNAV)

AL-6807 (FAA)

NAMPA MUNI (MAN)
NAMPA, IDAHO

BIG SKY APP CON
119.6 269.4
CTAF
122.7




NOTE: RNAV 1.

NOTE: RADAR required.

NOTE: GPS required.

TAKEOFF MINIMUMS
Rwy 11: Standard.

TAKEOFF OBSTACLE NOTES
Rwy 11: Trees, fence, building, pole, and vehicle on road beginning 77′ from DER, 82′ left of centerline, up to 71′ AGL/2611′ MSL.
Pole 478′ from DER, 298′ right of centerline, 27′ AGL/2548′ MSL.
Pole 1043′ from DER, 340′ right of centerline, 35′ AGL/2557′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 11: Climb heading 110° to intercept course 147° to ADEXE then continue climb in ADEXE holding pattern. Expect further clearance when reaching 5000.



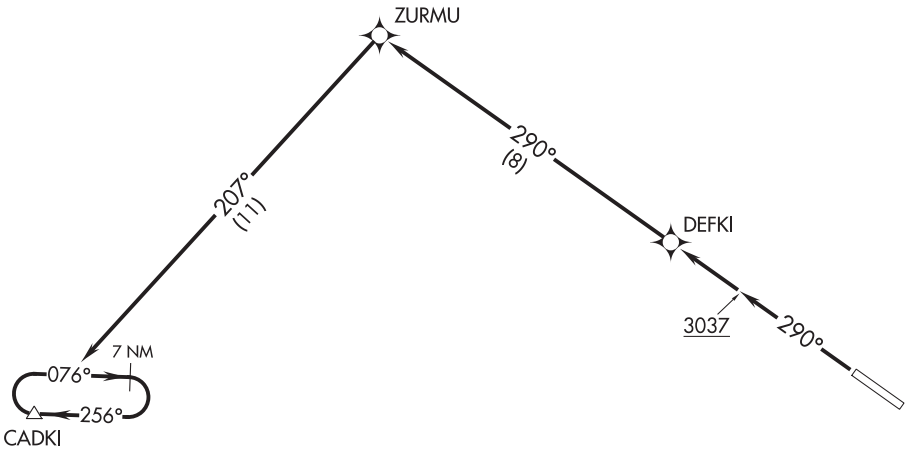
NW-1, 05 NOV 2020 to 31 DEC 2020

ADEXE ONE DEPARTURE (OBSTACLE) (RNAV)

NAMPA, IDAHO
NAMPA MUNI (MAN)

(ADEXE1.ADEXE) 12OCT17

BIG SKY DEP CON
119.6 269.4
CTAF
122.7




NOTE: RNAV 1.

NOTE: GPS required.

TAKEOFF MINIMUMS
Rwy 29: Standard.

TAKEOFF OBSTACLE NOTES
Rwy 29: Poles beginning 38′ from DER, 269′ left of centerline, up to 38′ AGL/2565′ MSL.
Building, and vehicles on roads beginning 83′ from DER, 289′ right of centerline, up to 25′ AGL/2561′ MSL.
Trees, and pole beginning 560′ from DER, 455′ right of centerline, up to 68′ AGL/2599′ MSL.
Building, and pole beginning 1050′ from DER, 154′ left of centerline, up to 48′ AGL/2575′ MSL.
Tree, elevator, and hopper beginning 1209′ from DER, 327′ left of centerline, up to 81′ AGL/2602′ MSL.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 29: Climb heading 290° to 3037, then direct DEFKI, then on track 290° to ZURMU, then on track 207° to CADKI, then continue climb in CADKI holding pattern, expect further clearance when reaching 8000.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

NEWCASTLE, WYOMING AL-5774 (FAA) 20142

| WAAS CH 56525 W14A | APP CRS 136° | Rwy ldg 5310<br>TDZE 4168<br>Apt Elev 4176 |
|---|---|---|

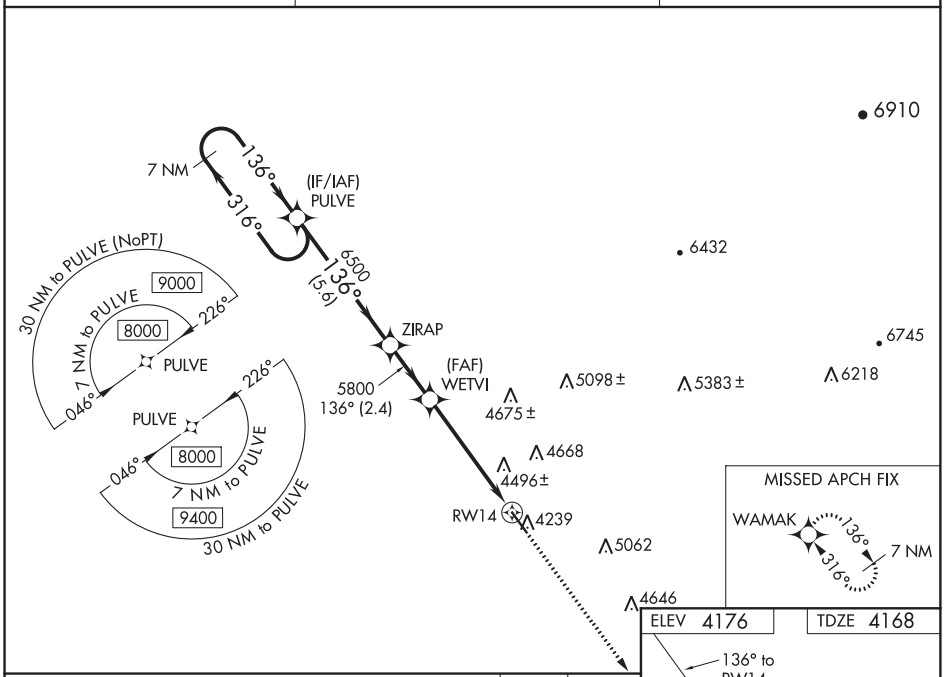
# RNAV (GPS) RWY 14
MONDELL FIELD (ECS)

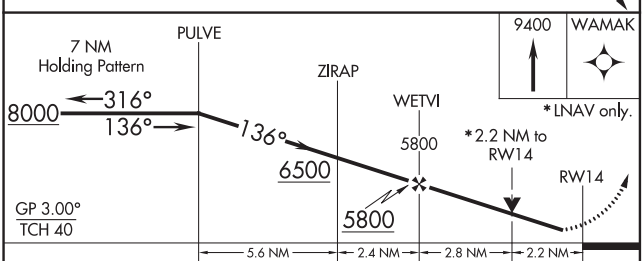
RNP APCH.

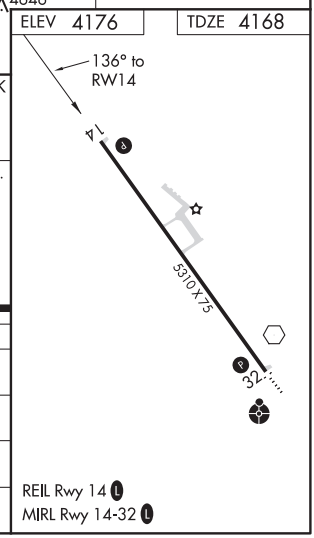
When Newcastle altimeter setting not received, procedure NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C (-9°F) or above 53°C (128°F). Rwy 14 helicopter visibility reduction below ¾ SM NA. Circling NA northeast of Rwy 14-32.

MISSED APPROACH: Climb to 9400 direct WAMAK and hold, continue climb-in-hold to 9400.

| AWOS-3PT | DENVER CENTER | UNICOM |
|---|---|---|
| 118.0 | 127.95 338.2 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4418-1 250 (300-1) | | | |
| LNAV/VNAV DA | 4846-2½ 678 (700-2½) | | | |
| LNAV MDA | 4920-1 752 (800-1) | 4920-1¼ 752 (800-1¼) | 4920-2 752 (800-2) | |
| C CIRCLING | 4920-1 744 (800-1) | 4920-1¼ 744 (800-1¼) | 4920-2¼ 744 (800-2¼) | 5000-2¾ 824 (900-2¾) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

NEWCASTLE, WYOMING
Amdt 1A 28MAR19

43°53′N-104°19′W

MONDELL FIELD (ECS)
RNAV (GPS) RWY 14

| WAAS CH 61225 W32A | APP CRS 316° | Rwy ldg 5310 TDZE 4176 Apt Elev 4176 |
|---|---|---|

# RNAV (GPS) RWY 32

## MONDELL FIELD (ECS)

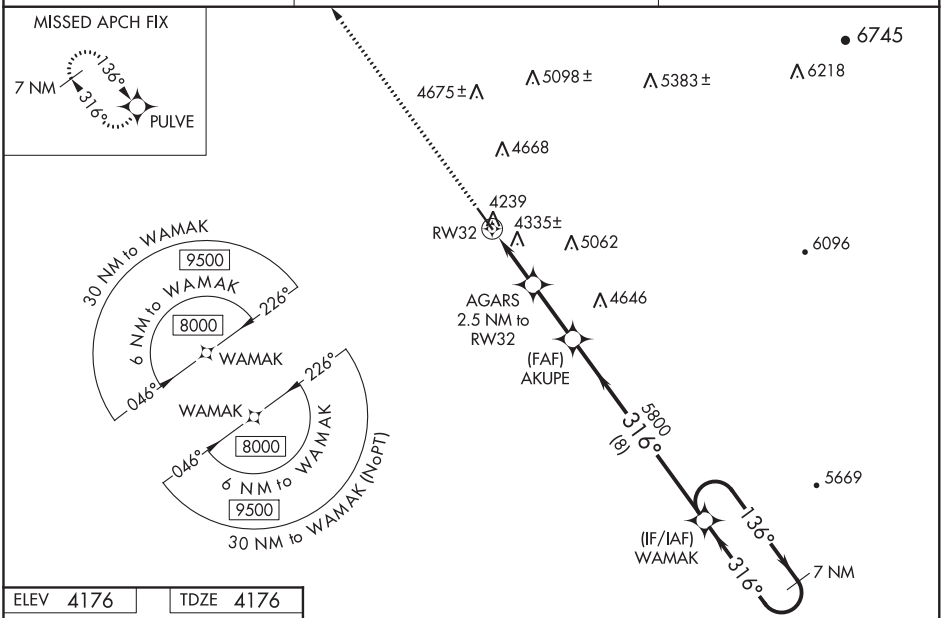
RNP APCH.

When Newcastle altimeter setting not received, procedure NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C (-9°F) or above 53°C (128°F). Circling NA northeast of Rwy 14-32. For inop ODAL, increase LNAV/VNAV visibility all Cats and LNAV Cats C/D ⅛ mile. Inop table does not apply to LPV all Cats and LNAV Cats A/B.

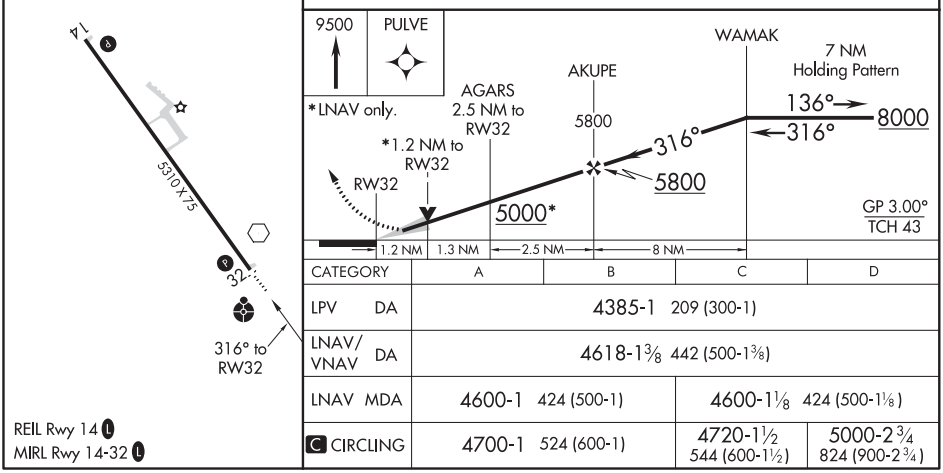
ODALS

MISSED APPROACH: Climb to 9500 direct PULVE and hold, continue climb-in-hold to 9500.

| AWOS-3PT | DENVER CENTER | UNICOM |
|---|---|---|
| 118.0 | 127.95 338.2 | 122.8 (CTAF) L |




| ELEV 4176 | TDZE 4176 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4385-1 209 (300-1) | | | |
| LNAV/VNAV DA | 4618-1⅜ 442 (500-1⅜) | | | |
| LNAV MDA | 4600-1 424 (500-1) | | 4600-1⅛ 424 (500-1⅛) | |
| C CIRCLING | 4700-1 524 (600-1) | | 4720-1½ 544 (600-1½) | 5000-2¾ 824 (900-2¾) |

REIL Rwy 14 L
MIRL Rwy 14-32 L



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

NEWCASTLE, WYOMING AL-5774 (FAA) 20310

# VOR RWY 32
## MONDELL FIELD (ECS)

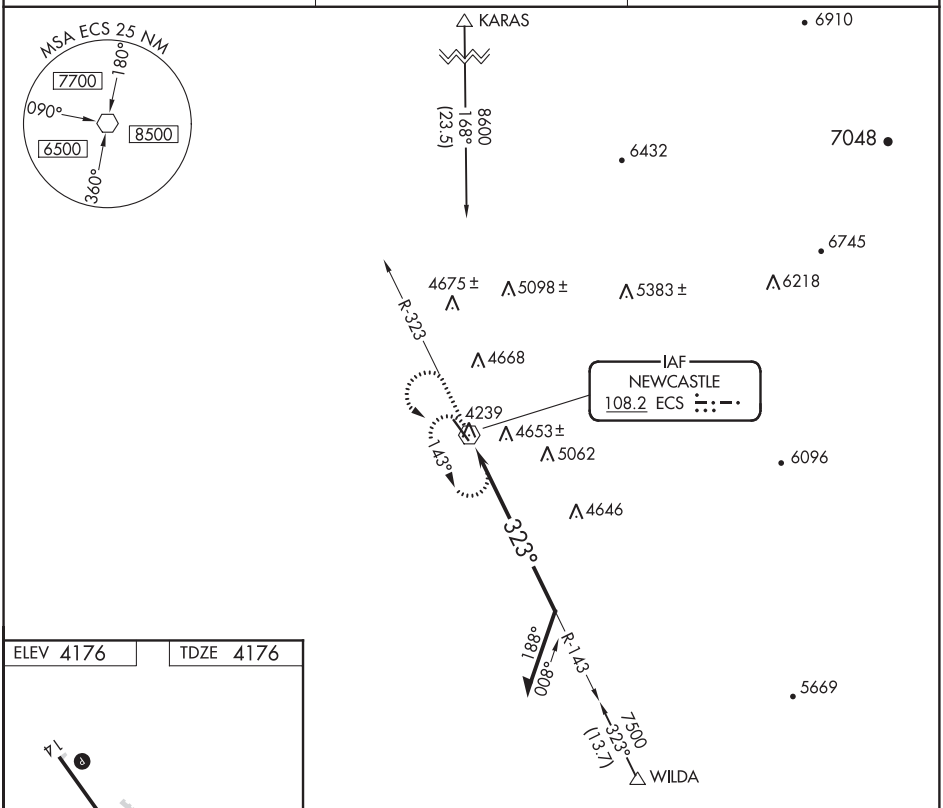
| VOR ECS | APP CRS | Rwy ldg | 5310 |
|---|---|---|---|
| 108.2 | 323° | TDZE | 4176 |
| | | Apt Elev | 4176 |

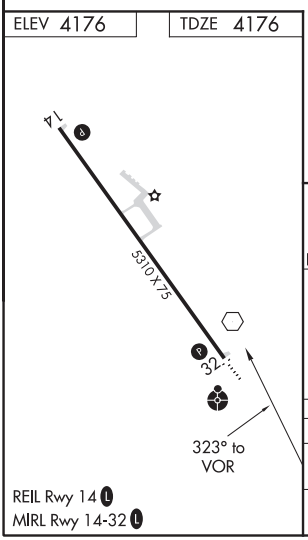
When Newcastle altimeter setting not received, procedure NA. Circling NA NE of Rwy 14-32.

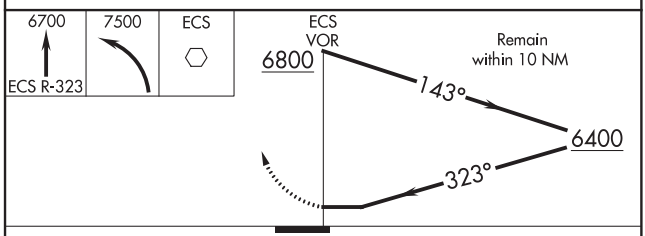
ODALS

MISSED APPROACH: Climb to 6700 on ECS VOR R-323 then climbing left turn to 7500 direct ECS VOR and hold, continue climb-in-hold to 7500.

| AWOS-3PT | DENVER CENTER | UNICOM |
|---|---|---|
| 118.0 | 127.95 338.2 | 122.8 (CTAF) L |




REIL Rwy 14 L
MIRL Rwy 14-32 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-32 | 4980-¾ 804 (900-¾) | 4980-1 804 (900-1) | 4980-2½ | 804 (900-2½) |
| C CIRCLING | 4980-1 804 (900-1) | 4980-1¼ 804 (900-1¼) | 4980-2½ 804 (900-2½) | 5000-2¾ 824 (900-2¾) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC I-ONP | APP CRS | Rwy ldg | 5398 |
|---|---|---|---|
| 111.5 | 162° | TDZE | 152 |
| | | Apt Elev | 160 |

# ILS or LOC RWY 16

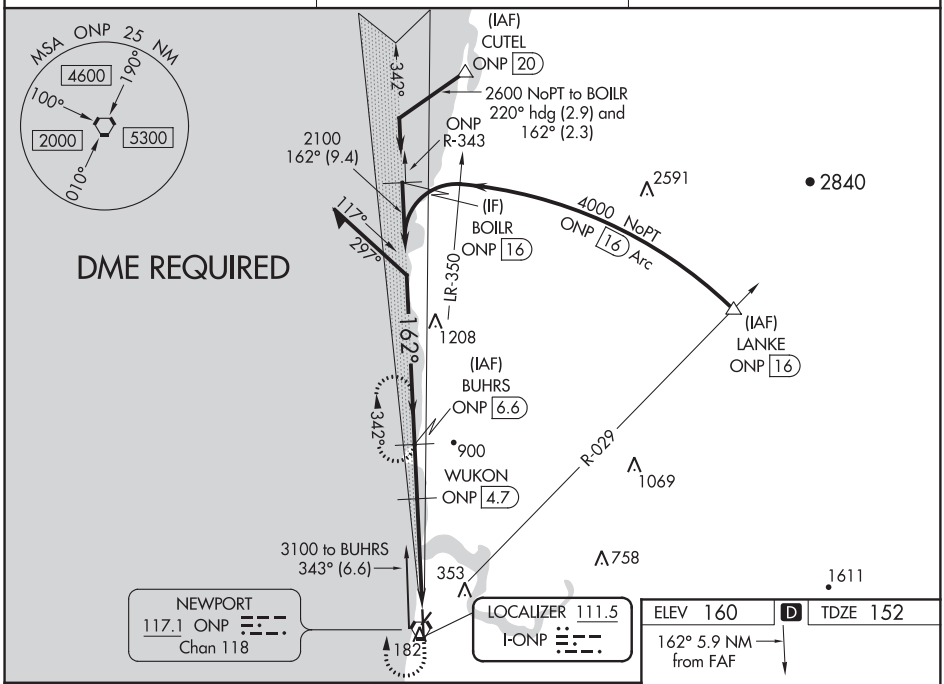
## NEWPORT MUNI (ONP)

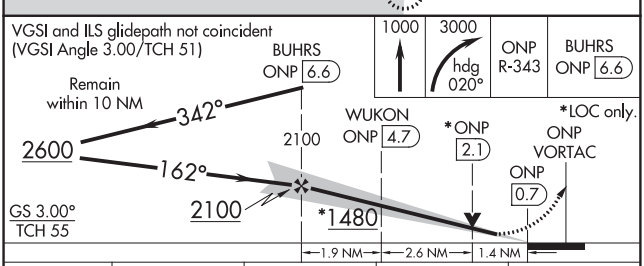
T A NA Inop table does not apply to S-ILS Rwy 16, all Cats. DME required. VDP NA when using Tillamook altimeter setting. Rwy 16 helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Tillamook altimeter setting; increase DA to 537 feet and all MDA 140 feet; increase S-LOC 16 Cat C/D visibility ⅜ mile and increase Circling Cat B visibility ¼ mile. For inop MALSR, increase S-LOC 16 Cat A/B visibility to 1 mile and Cat C/D visibility to 1⅜ mile. For inop MALSR when using Tillamook altimeter setting, increase S-ILS 16 all Cats visibility to 1¼ mile and increase S-LOC 16 Cat A/B visibility to 1 mile. DME from ONP VORTAC. Simultaneous reception of I-ONP and ONP DME required.

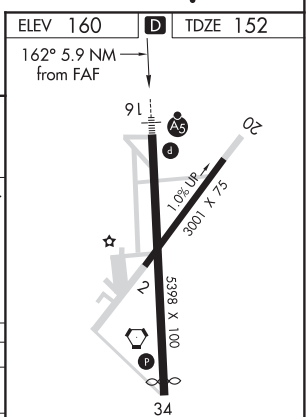
MALSR A5

MISSED APPROACH: Climb to 1000 then climbing right turn to 3000 on heading 020° and on ONP VORTAC R-343 to BUHRS/ONP 6.6 DME and hold, continue climb-in-hold to 3000.

| AWOS-3 | SEATTLE CENTER | UNICOM |
|---|---|---|
| 133.9 | 125.8 291.7 | 122.8 (CTAF) L |




REIL Rwy 34 L
MIRL Rwy 2-20 L
HIRL Rwy 16-34 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 16 | 402-¾ 250 (300-¾) | | | |
| S-LOC 16 | 660-¾ 508 (500-¾) | | 660-1 508 (500-1) | |
| C CIRCLING | 880-1 720 (800-1) | 1000-1¼ 840 (900-1¼) | 1400-3 1240 (1300-3) | 1600-3 1440 (1500-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

NEWPORT, OREGON — AL-735 (FAA) — 20198

| WAAS CH 53439 W16A | APP CRS 162° | Rwy ldg 5398<br>TDZE 152<br>Apt Elev 160 |
|---|---|---|

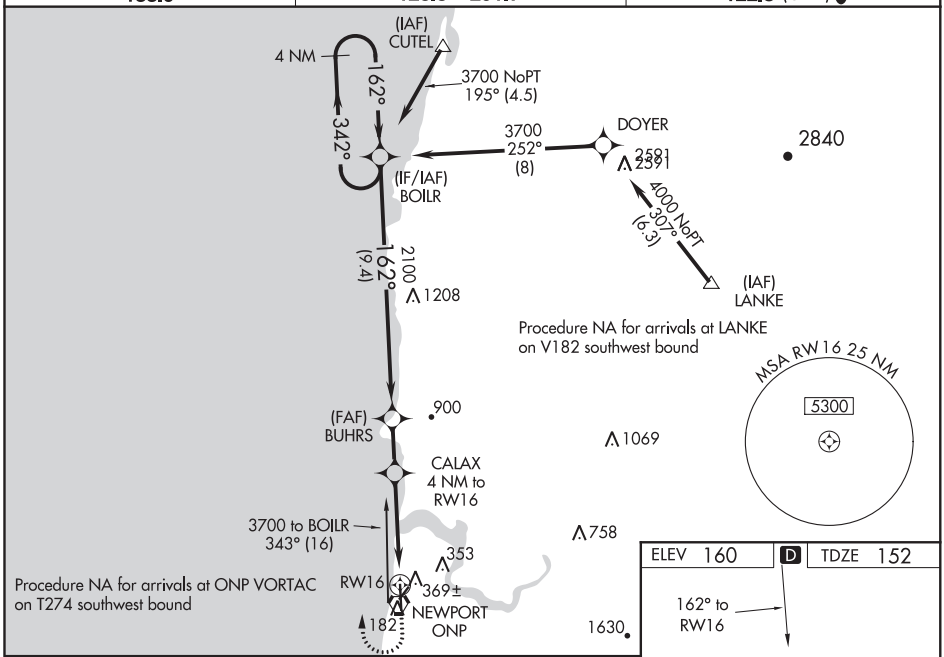
# RNAV (GPS) RWY 16
## NEWPORT MUNI (ONP)

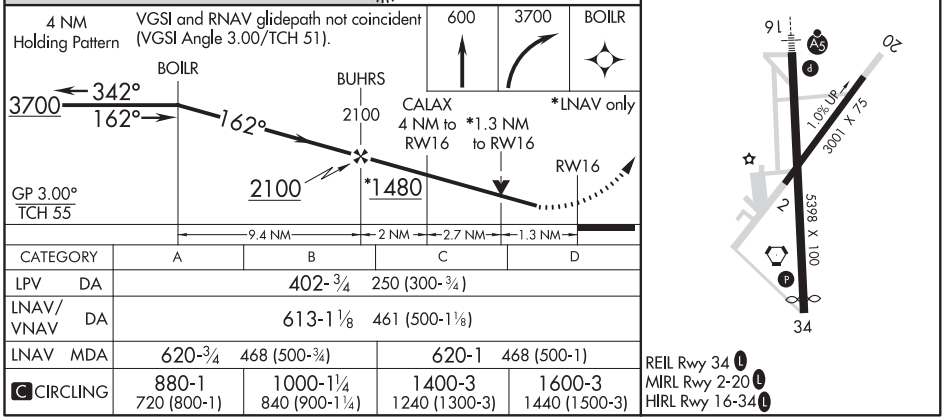
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). Baro-VNAV and VDP NA when using Tillamook altimeter setting. DME/DME RNP-0.3 NA. Inop table does not apply to LPV all Cats. When local altimeter setting not received, use Tillamook altimeter setting: increase LPV DA to 537 feet and LNAV/VNAV DA to 748 feet and all MDA 140 feet; increase LNAV/VNAV all Cats visibility and LNAV Cat C/D visibility ⅜ mile and increase Circling Cat B visibility ¼ mile. For inop MALSR, increase LNAV/VNAV all Cats visibility to 1½ mile, and increase LNAV Cat A/B visibility to 1 mile, Cat C/D to 1⅜ mile. For inop MALSR when using Tillamook altimeter setting, increase LPV all Cats visibility to 1¼ mile, and LNAV Cat A/B visibility to 1 mile, LNAV Cat C/D to 1¾ mile. Rwy 16 helicopter visibility reduction below ¾ SM NA.

MALSR A5

MISSED APPROACH: Climb to 600 then climbing right turn to 3700 direct BOILR and hold.

| AWOS-3 | SEATTLE CENTER | UNICOM |
|---|---|---|
| 133.9 | 125.8 291.7 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 402-¾ 250 (300-¾) | | | |
| LNAV/VNAV DA | 613-1⅛ 461 (500-1⅛) | | | |
| LNAV MDA | 620-¾ 468 (500-¾) | | 620-1 468 (500-1) | |
| C CIRCLING | 880-1 720 (800-1) | 1000-1¼ 840 (900-1¼) | 1400-3 1240 (1300-3) | 1600-3 1440 (1500-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

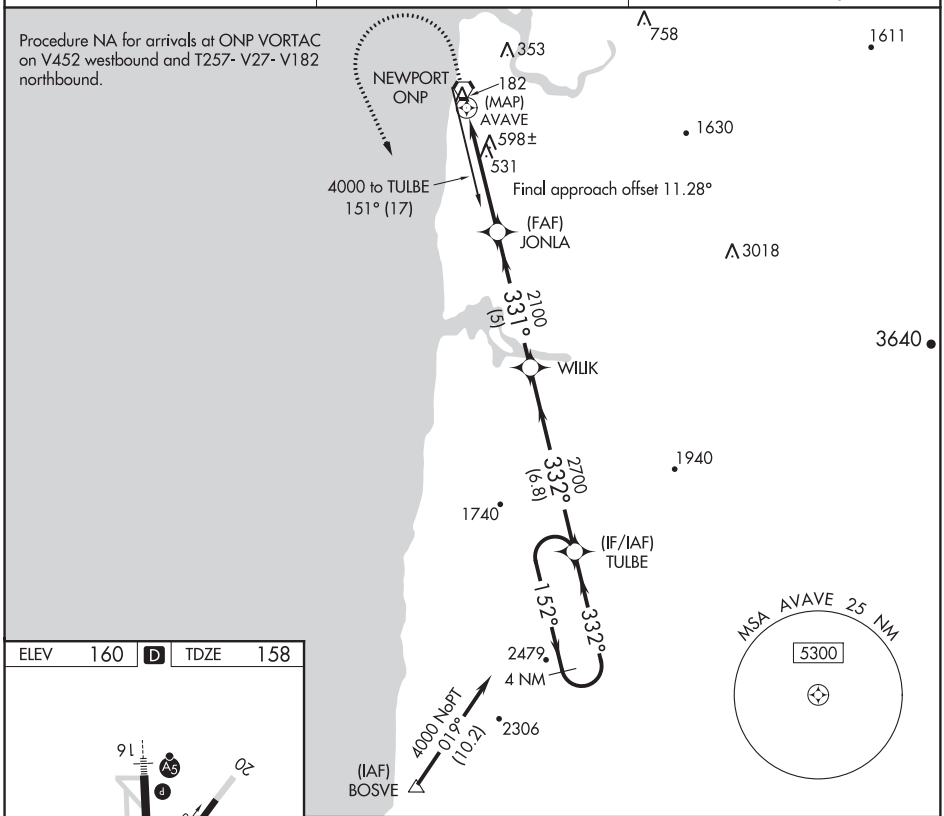
| APP CRS | Rwy ldg | 5098 |
|---|---|---|
| 331° | TDZE | 158 |
| | Apt Elev | 160 |

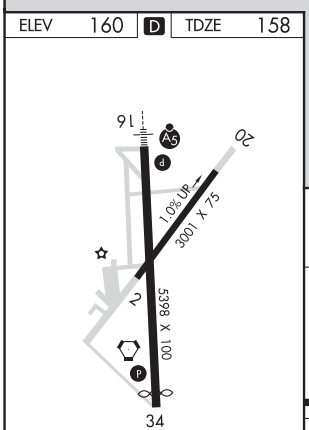
# RNAV (GPS) RWY 34
## NEWPORT MUNI (ONP)

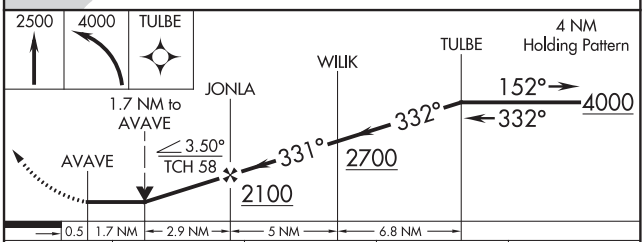
Rwy 34 helicopter visibility reduction below ¾ SM NA.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2500 then climbing left turn to 4000 direct TULBE and hold.

| AWOS-3 | SEATTLE CENTER | UNICOM |
|---|---|---|
| 133.9 | 125.8 291.7 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 860-1 702 (700-1) | | 860-2 702 (700-2) | |
| C CIRCLING | 880-1 720 (800-1) | 1000-1¼ 840 (900-1¼) | 1400-3 1240 (1300-3) | 1600-3 1440 (1500-3) |

REIL Rwy 34 L
MIRL Rwy 2-20 L
HIRL Rwy 16-34 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

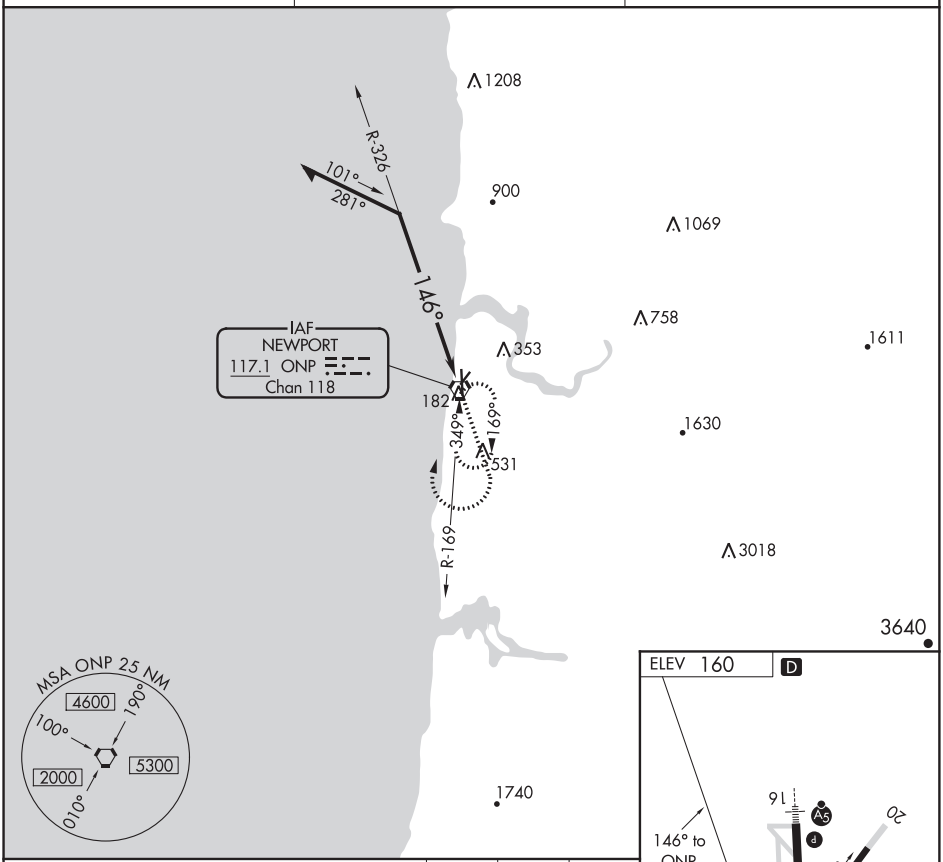
| VORTAC ONP 117.1 Chan 118 | APP CRS 146° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 160 |
|---|---|---|

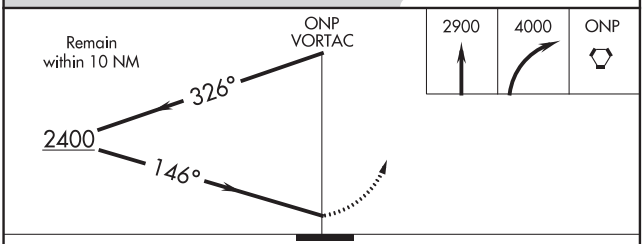
# VOR-A
## NEWPORT MUNI (ONP)

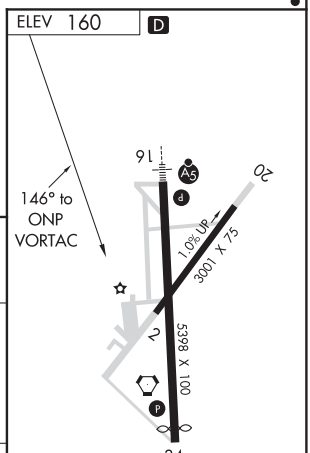
When local altimeter setting not received, use Tillamook altimeter setting: increase all MDA 140 feet, increase Circling Cat B visibility ¼ mile.

MISSED APPROACH: Climb to 2900 then climbing right turn to 4000 direct ONP VORTAC and hold, continue climb-in-hold to 4000.

| AWOS-3 | SEATTLE CENTER | UNICOM |
|---|---|---|
| 133.9 | 125.8 291.7 | 122.8 (CTAF) L |




REIL Rwy 34 L
MIRL Rwy 2-20 L
HIRL Rwy 16-34 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 1060-1¼ 900 (900-1¼) | | 1400-3 1240 (1300-3) | 1600-3 1440 (1500-3) |




NW-1, 05 NOV 2020 to 31 DEC 2020

# NEWPORT ONE DEPARTURE (OBSTACLE)

SL-735 (FAA)

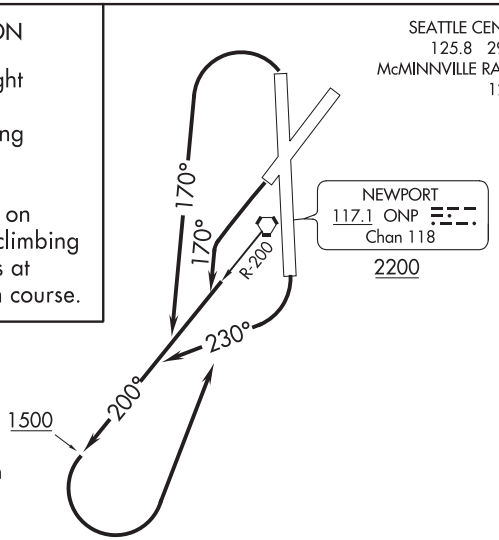


## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climbing right turn heading 230°, thence. . . .
TAKEOFF RUNWAYS 20, 34: Climbing left turn heading 170°, thence. . . .

. . . .Intercept and proceed outbound on ONP VORTAC R-200 to 1500, then climbing left turn direct ONP VORTAC to cross at or above 2200 before proceeding on course.

NOTE: Chart not to scale.




TAKEOFF MINIMUMS
Rwy 2: NA-Obstacles.
Rwy 16: 500-2¾ or standard with minimum climb of 265′ per NM to 800.
Rwys 20, 34: Standard.

TAKEOFF OBSTACLE NOTES

Rwy 16: Tree and terrain beginning 82′ from DER, 87′ left of centerline, up to 213′ MSL. Tree and building beginning 137′ from DER, 261′ right of centerline, up to 171′ MSL. Trees beginning 783′ from DER, 370′ right of centerline, up to 238′ MSL. Trees beginning 1262′ from DER, 66′ right of centerline, up to 253′ MSL. Tree and terrain beginning 1476′ from DER, 786′ left of centerline, up to 220′ MSL. Trees beginning 1750′ from DER, 931′ left of centerline, up to 239′ MSL. Trees beginning 1786′ from DER, 247′ right of centerline, up to 256′ MSL. Trees beginning 2062′ from DER, 41′ left of centerline, up to 259′ MSL. Trees beginning 2145′ from DER, 109′ right of centerline, up to 267′ MSL. Trees beginning 2309′ from DER, 172′ right of centerline, up to 273′ MSL. Trees beginning 2402′ from DER, 717′ right of centerline, up to 282′ MSL. Trees beginning 3840′ from DER, 434′ left of centerline, up to 262′ MSL. Trees beginning 1.2 NM from DER, 2098′ left of centerline, up to 386′ MSL. Tower and trees beginning 1.3 NM from DER, 1398′ left of centerline, up to 152′ AGL/422′ MSL. Tree 1.5 NM from DER, 2974′ left of centerline, 426′ MSL. Trees beginning 1.7 NM from DER, 3260′ left of centerline, up to 465′ MSL. Trees beginning 2.1 NM from DER, 3602′ left of centerline, up to 539′ MSL. Trees, transmission line tower and pole beginning 2.2 NM from DER, 3464′ left of centerline, up to 584′ MSL.

Rwy 20: General utility 5′ from DER, 80′ left of centerline, 1′ AGL/132′ MSL. Building 312′ from DER, 564′ right of centerline, 39′ AGL/159′ MSL. Tree 449′ from DER, 494′ right of centerline, 163′ MSL. Bush 700′ from DER, 491′ left of centerline, 153′ MSL. Tree 2822′ from DER, 1160′ left of centerline, 220′ MSL. Tree 3043′ from DER,1197′ left of centerline, 223′ MSL.

Rwy 34: Tree 212′ from DER, 408′ left of centerline, 167′ MSL. Tree 319′ from DER, 524′ left of centerline, 175′ MSL. Trees beginning 965′ from DER, 356′ left of centerline, up to 189′ MSL. Trees beginning 1420′ from DER, 571′ left of centerline, up to 196′ MSL. Trees beginning 1487′ from DER, 186′ right of centerline, up to 209′ MSL. Tree 1564′ from DER, 897′ left of centerline, 202′ MSL. Tree 2004′ from DER, 1016′ right of centerline, 219′ MSL. Tree 2054′ from DER, 874′ right of centerline, 232′ MSL. Tree 2201′ from DER, 934′ right of centerline, 234′ MSL. Trees beginning 2419′ from DER, 1120′ right of centerline, up to 241′ MSL.


NW-1, 05 NOV 2020 to 31 DEC 2020

# ILS or LOC RWY 5
## SOUTHWEST OREGON RGNL (OTH)

| LOC I-OTH | APP CRS | Rwy ldg | 5320 |
|---|---|---|---|
| 108.5 | 046° | TDZE | 16 |
| | | Apt Elev | 17 |

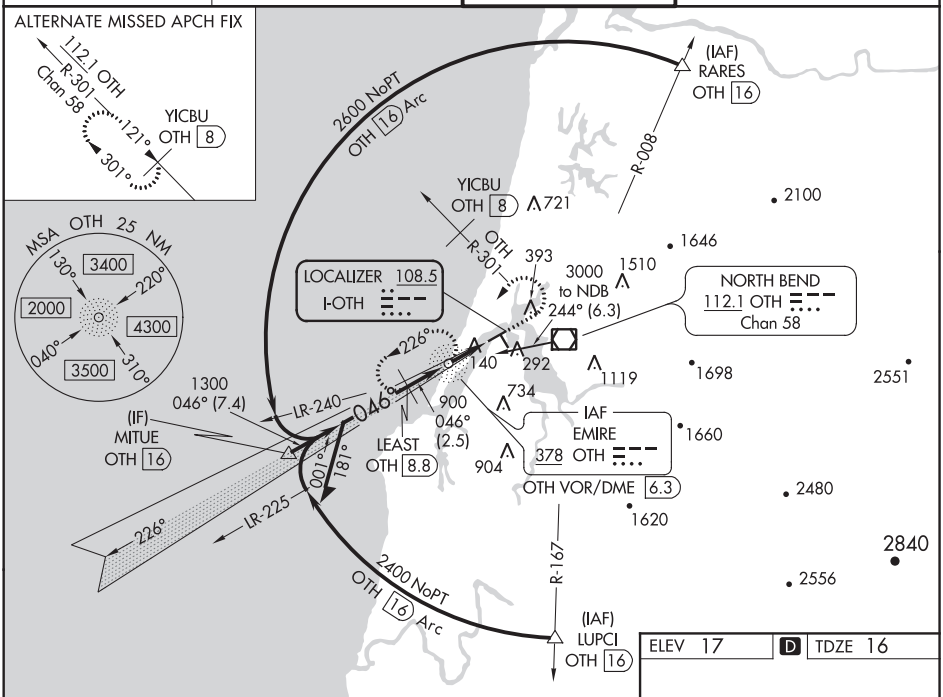
ADF and DME required.

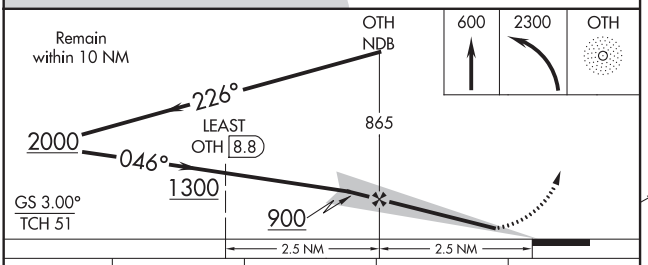
T A Circling Rwy 13, 31 NA at night. For inop ALS, increase S-ILS 5 all Cats visibility to ⅞ mile, S-LOC 5 Cat C/D visibility to 1⅛ mile.
*Missed approach requires minimum climb of 248 feet per NM to 800.

MALSR A5

MISSED APPROACH: Climb to 600 then climbing left turn to 2300 direct OTH NDB and hold, continue climb-in-hold to 2300.

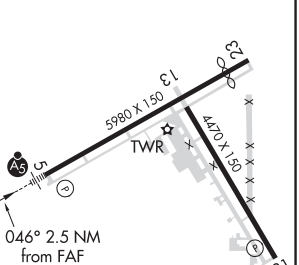
| AWOS-3PT | SEATTLE CENTER | NORTH BEND TOWER* | GND CON |
|---|---|---|---|
| 135.075 | 127.55 254.35 | 118.45 (CTAF) L | 127.1 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 5* | 216-½ 200 (200-½) | | | |
| S-ILS 5 | 278-½ 262 (300-½) | | | |
| S-LOC 5 | 400-½ 384 (400-½) | | 400-¾ 384 (400-¾) | |
| C CIRCLING | 680-1 663 (700-1) | 820-1 803 (900-1) | NA | |

ELEV 17 D TDZE 16




HIRL Rwy 5-23 L
MIRL Rwy 13-31 L
REIL Rwys 13, 23 and 31 L

| FAF to MAP 2.5 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 2:30 | 1:40 | 1:15 | 1:00 | 0:50 |




NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 5320 |
|---|---|---|
| 046° | TDZE | 16 |
| | Apt Elev | 17 |

# RNAV (RNP) Z RWY 5
## SOUTHWEST OREGON RGNL (OTH)

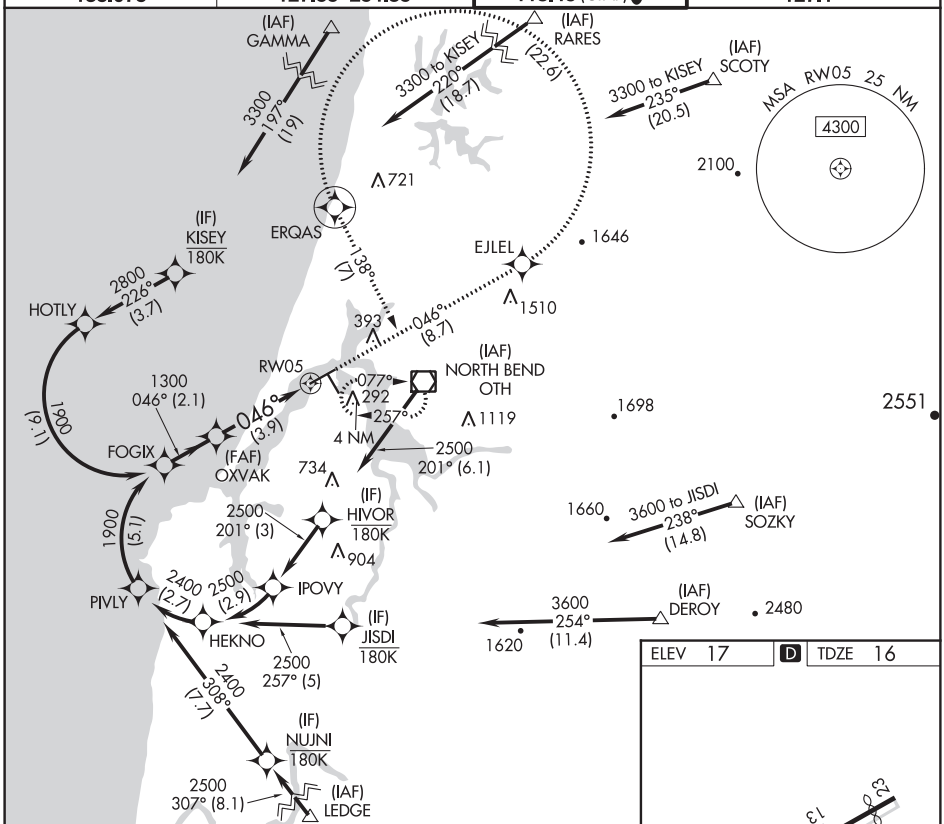
RNP AR APCH. RF required.

For inop ALS, increase *RNP 0.11 all Cats visibility to 1 SM, #RNP 0.30 all Cats visibility to 1⅜ SM, and RNP 0.30 all Cats visibility to 1⅝ SM. For uncompensated Baro-VNAV systems, procedure NA below -2°C or above 54°C.

MALSR

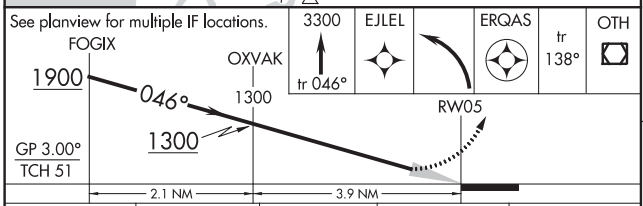
MISSED APPROACH: Climb to 3300 on track 046° to EJLEL, left turn to ERQAS, and on track 138° to OTH VOR/DME and hold.
*Missed approach requires minimum climb of 400 feet per NM to 1200.
#Missed approach requires minimum climb of 255 feet per NM to 2400.

| AWOS-3PT | SEATTLE CENTER | NORTH BEND TOWER* | GND CON |
|---|---|---|---|
| 135.075 | 127.55 254.35 | 118.45 (CTAF) L | 127.1 |




See planview for multiple IF locations.

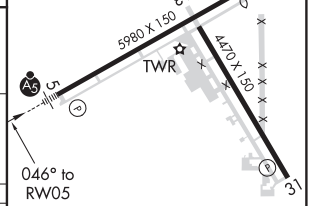
| 3300 | EJLEL | | ERQAS | tr 138° | OTH |
|---|---|---|---|---|---|
| tr 046° | | | | | |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.11 DA* | 394-⅝ | 378 (400-⅝) | | |
| RNP 0.30 DA# | 477-1⅛ | 461 (500-1⅛) | | |
| RNP 0.30 DA | 569-1⅜ | 553 (600-1⅜) | | |

**AUTHORIZATION REQUIRED**

ELEV 17 D TDZE 16




HIRL Rwy 5-23 L
MIRL Rwy 13-31 L
REIL Rwys 13, 23 and 31 L

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| WAAS CH 82416 W05A | APP CRS 046° | Rwy ldg 5320<br>TDZE 16<br>Apt Elev 17 |
|---|---|---|

# RNAV (GPS) Y RWY 5
## SOUTHWEST OREGON RGNL (OTH)

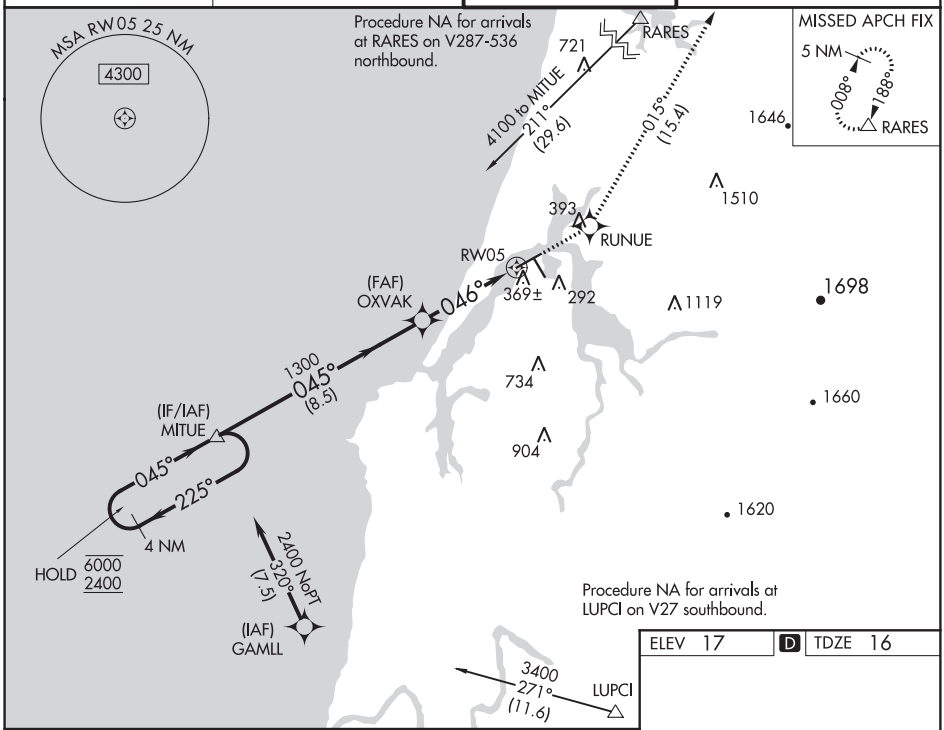
RNP APCH.

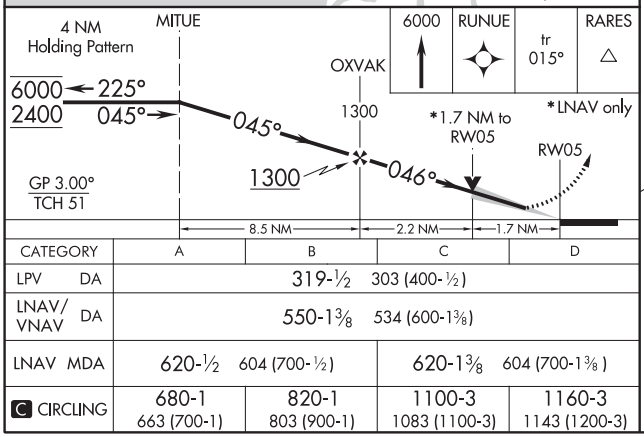
Circling Rwy 13, 31 NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -2°C or above 54°C. For inop ALS, increase LPV all Cats visibility to ⅞ SM, LNAV/VNAV all Cats visibility to 1½ SM, and increase LNAV Cat C/D visibility to 1¾ SM.

MALSR

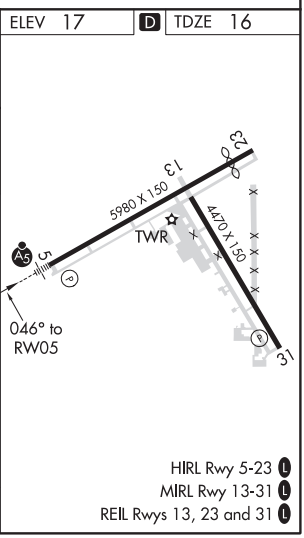
MISSED APPROACH: Climb to 6000 direct RUNUE and on track 015° to RARES and hold, continue climb-in-hold to 6000.

| AWOS-3PT | SEATTLE CENTER | NORTH BEND TOWER★ | GND CON |
|---|---|---|---|
| 135.075 | 127.55 254.35 | 118.45 (CTAF) L | 127.1 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 319-½ 303 (400-½) | | | |
| LNAV/VNAV DA | 550-1⅜ 534 (600-1⅜) | | | |
| LNAV MDA | 620-½ 604 (700-½) | | 620-1⅜ 604 (700-1⅜) | |
| C CIRCLING | 680-1 663 (700-1) | 820-1 803 (900-1) | 1100-3 1083 (1100-3) | 1160-3 1143 (1200-3) |







NW-1, 05 NOV 2020 to 31 DEC 2020

| VOR/DME OTH 112.1 Chan 58 | APP CRS 257° | Rwy ldg N/A TDZE N/A Apt Elev 17 |
|---|---|---|

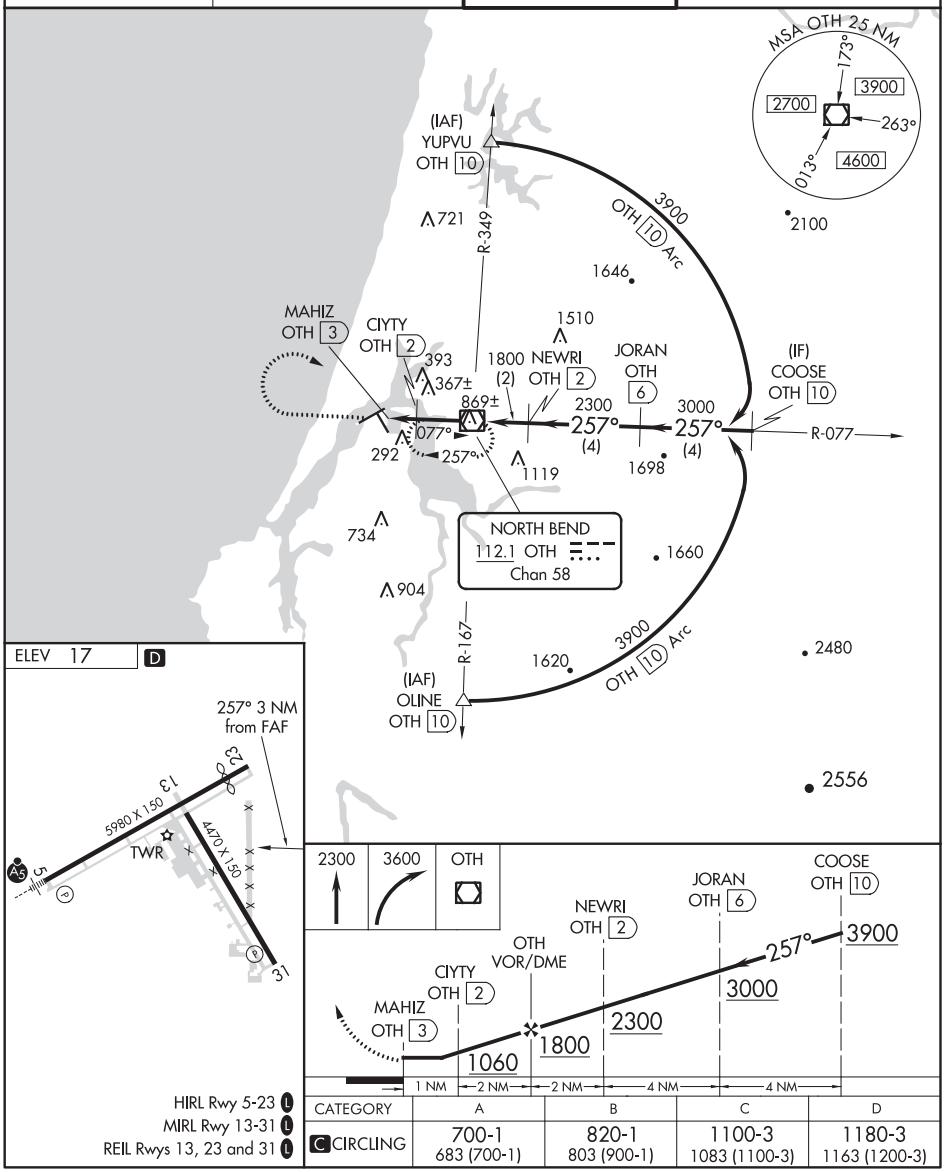
# VOR-B
## SOUTHWEST OREGON RGNL (OTH)

DME required.

Circling Rwy 13, 31 NA at night.
Rwy 13, 31 helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 2300 then climbing right turn to 3600 direct OTH VOR/DME and hold.

| AWOS-3PT | SEATTLE CENTER | NORTH BEND TOWER★ | GND CON |
|---|---|---|---|
| 135.075 | 127.55 254.35 | 118.45 (CTAF) L | 127.1 |




HIRL Rwy 5-23 L
MIRL Rwy 13-31 L
REIL Rwys 13, 23 and 31 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 700-1<br>683 (700-1) | 820-1<br>803 (900-1) | 1100-3<br>1083 (1100-3) | 1180-3<br>1163 (1200-3) |

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NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC I-OTH | APP CRS | Rwy ldg | 5320 |
|---|---|---|---|
| 108.5 | 046° | TDZE | 16 |
| | | Apt Elev | 17 |

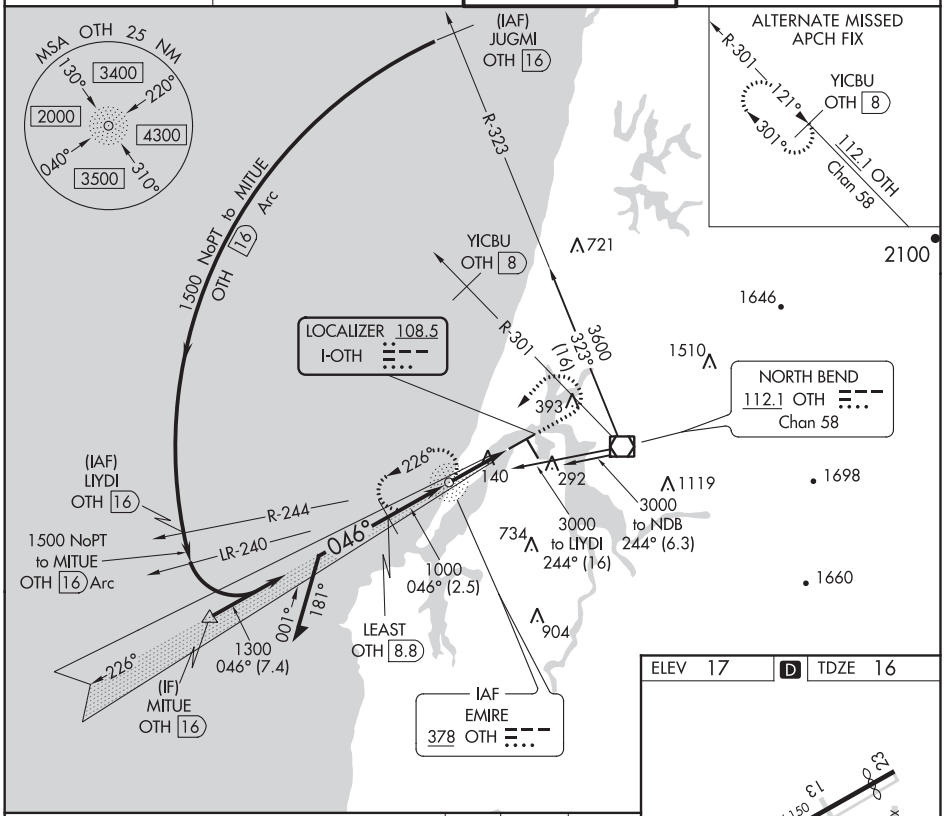
# COPTER ILS or LOC RWY 5
## SOUTHWEST OREGON RGNL (OTH)

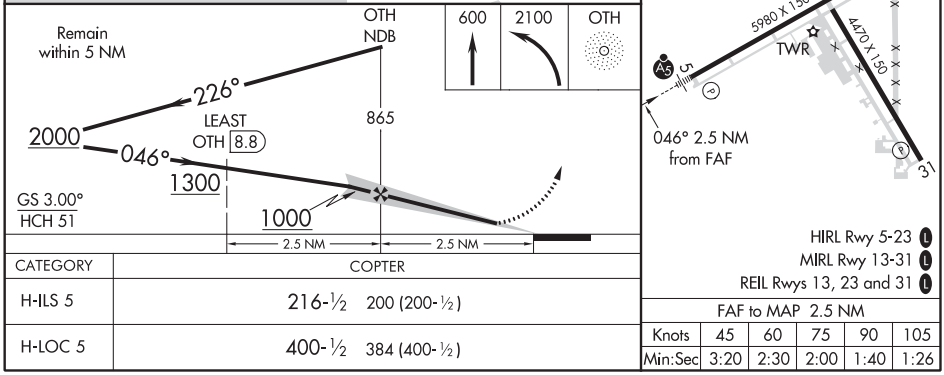
ADF and DME required.

MALSR

MISSED APPROACH: Climb to 600 then climbing left turn to 2100 direct OTH NDB and hold, continue climb-in-hold to 2100.

| AWOS-3PT | SEATTLE CENTER | NORTH BEND TOWER* | GND CON |
|---|---|---|---|
| 135.075 | 127.55 254.35 | 118.45 (CTAF) L | 127.1 |




| CATEGORY | COPTER |
|---|---|
| H-ILS 5 | 216-½ 200 (200-½) |
| H-LOC 5 | 400-½ 384 (400-½) |

| FAF to MAP 2.5 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 45 | 60 | 75 | 90 | 105 |
| Min:Sec | 3:20 | 2:30 | 2:00 | 1:40 | 1:26 |

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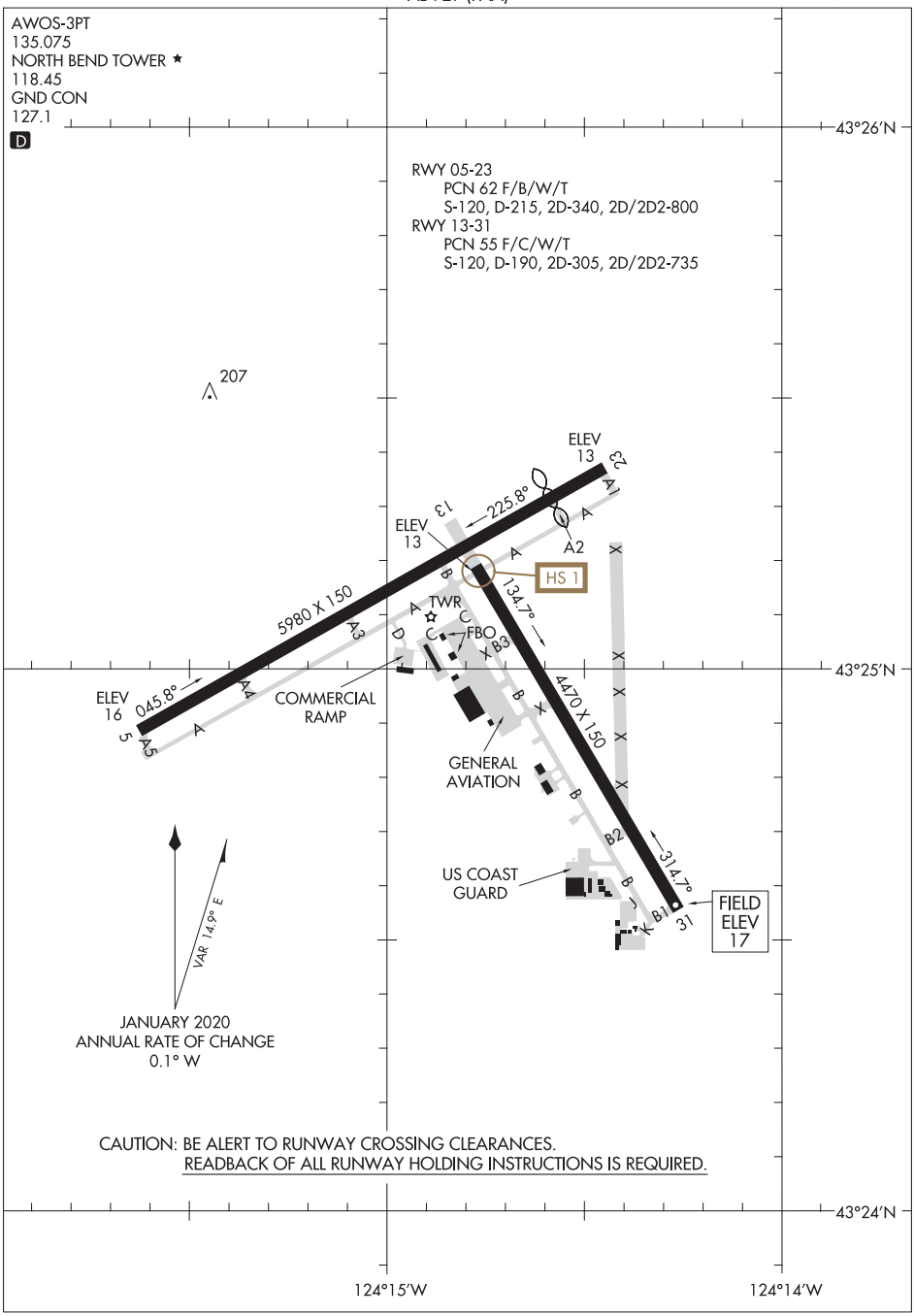
AL-929 (FAA)




NW-1, 05 NOV 2020 to 31 DEC 2020

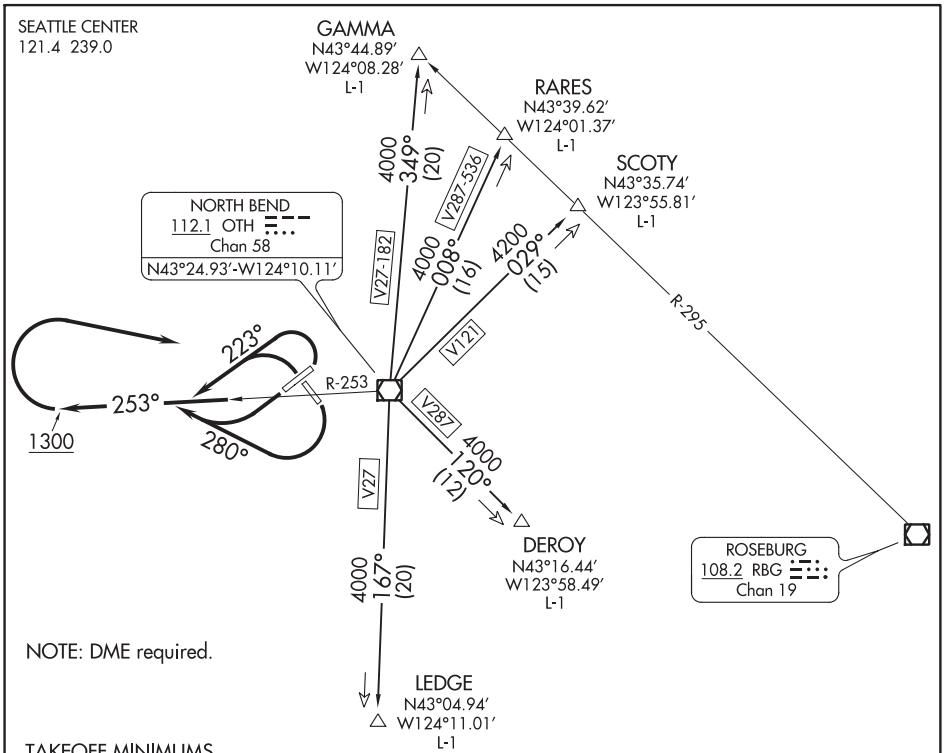
NW-1, 05 NOV 2020 to 31 DEC 2020

(OTH7.OTH) 20086

# NORTH BEND SEVEN DEPARTURE

AL-929 (FAA)

SOUTHWEST OREGON RGNL (OTH)
NORTH BEND, OREGON




NOTE: DME required.

TAKEOFF MINIMUMS

Rwy 5: 900-3 with minimum climb of 300′ per NM to 900 or
Standard with minimum climb of 475′ per NM to 1200.
Rwy 13: 400-1 with minimum climb of 330′ per NM to 1200.
Rwy 23: Standard.
Rwy 31: 300-1¾ or Standard with minimum climb of 280′ per NM to 300.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 5, 31: Climbing left turn heading 223° and on OTH R-253 thence . . . .
TAKEOFF RUNWAYS 13, 23: Climbing right turn heading 280° and on OTH R-253 thence . . . .

. . . . continue climb on OTH R-253 to 1300 then right turn direct OTH VOR/DME, then on assigned transition.

DEROY TRANSITION (OTH7.DEROY): From over OTH VOR/DME on OTH R-120 to DEROY INT.
GAMMA TRANSITION (OTH7.GAMMA): From over OTH VOR/DME on OTH R-349 to GAMMA INT.
LEDGE TRANSITION (OTH7.LEDGE): From over OTH VOR/DME on OTH R-167 to LEDGE INT.
RARES TRANSITION (OTH7.RARES): From over OTH VOR/DME on OTH R-008 to RARES INT.
SCOTY TRANSITION (OTH7.SCOTY): From over OTH VOR/DME on OTH R-029 to SCOTY INT.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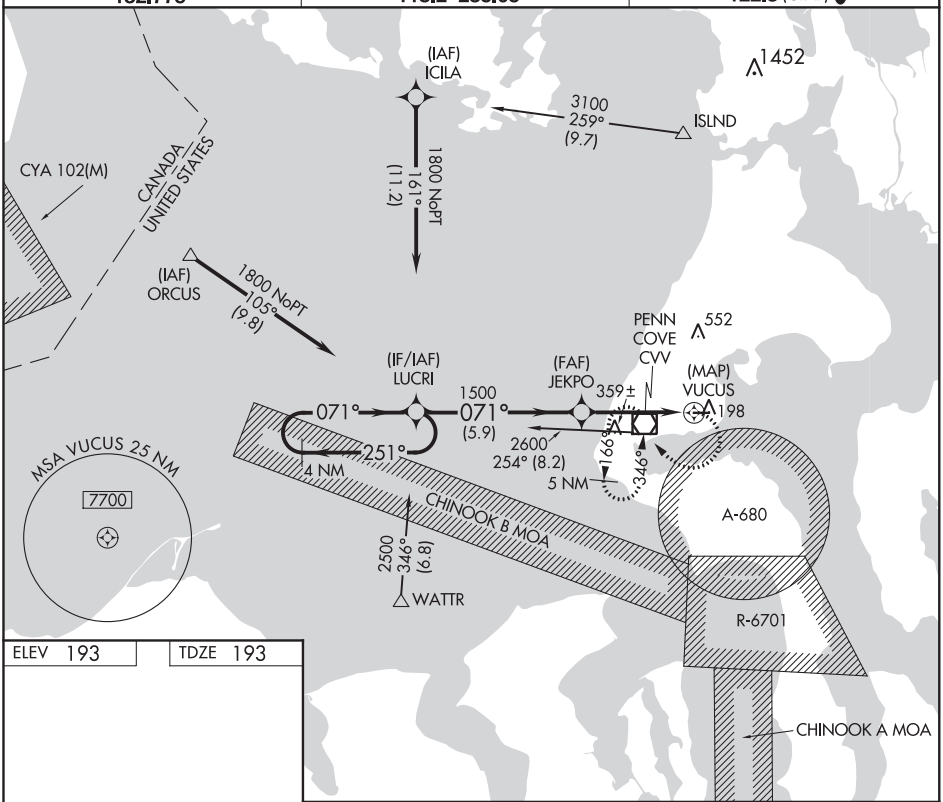
| APP CRS | Rwy ldg | 2758 |
|---|---|---|
| 071° | TDZE | 193 |
| | Apt Elev | 193 |

# RNAV (GPS) RWY 7
## AJ EISENBERG (OKH)

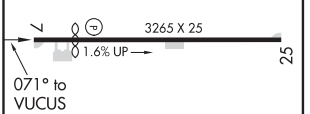
DME/DME RNP- 0.3 NA. Helicopter visibility reduction below ¾ SM NA. Circling north of Rwy 7-25 NA at night. When local altimeter setting not received, use Whidbey Island NAS altimeter setting and increase all MDAs 40 feet. Night landing: Rwy 25 NA.

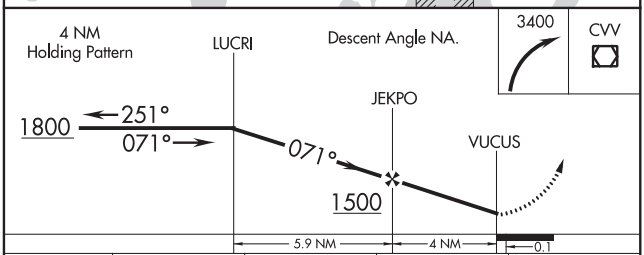
MISSED APPROACH: Climbing right turn to 3400 direct CVV VOR/DME and hold, continue climb-in-hold to 3400.

| AWOS-3 | WHIDBEY APP CON | UNICOM |
|---|---|---|
| 132.775 | 118.2 285.65 | 122.8 (CTAF) L |




ELEV 193 TDZE 193




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 620-1 427 (500-1) | | NA | |
| CIRCLING | 620-1 427 (500-1) | 660-1 467 (500-1) | NA | |

LIRL Rwy 7-25 L



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NW-1, 05 NOV 2020 to 31 DEC 2020

OLYMPIA, WASHINGTON

AL-645 (FAA)

18200

# ILS or LOC RWY 17
## OLYMPIA RGNL (OLM)

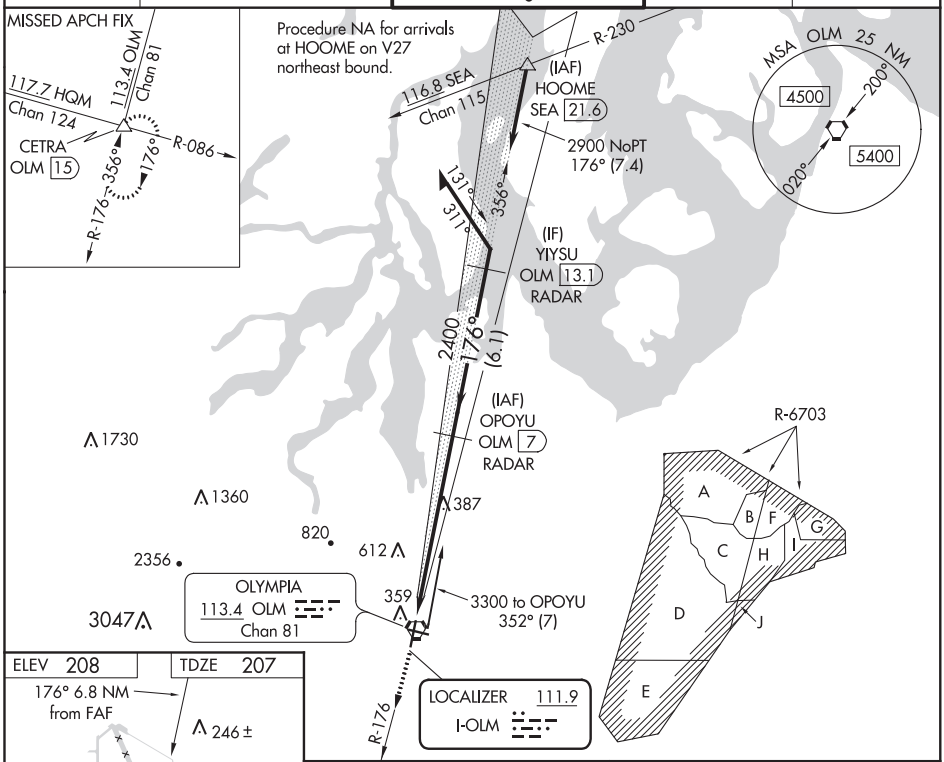
| LOC I-OLM | APP CRS | Rwy ldg | 5500 |
|---|---|---|---|
| 111.9 | 176° | TDZE | 207 |
| | | Apt Elev | 208 |

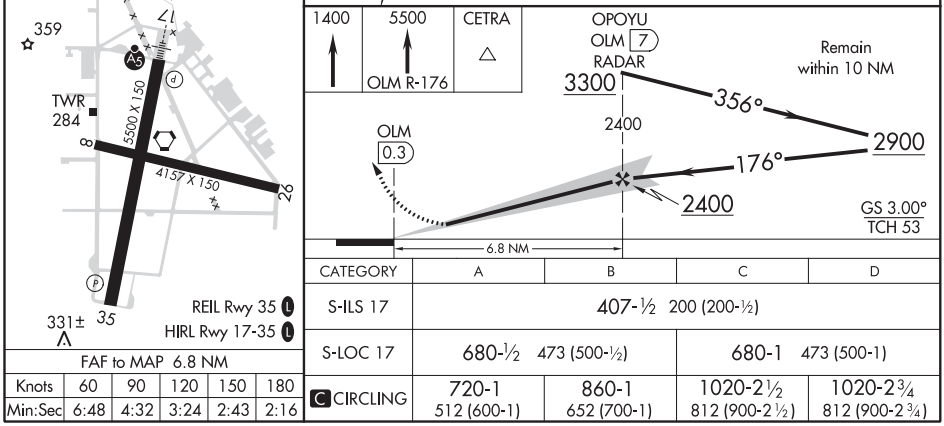
DME or RADAR required. For inop ALS, increase S-LOC 17 Cat C/D visibility to 1⅜ SM.

MALSR

MISSED APPROACH: Climb to 1400 then climb to 5500 on OLM VORTAC R-176 to CETRA INT/OLM 15 DME and hold, continue climb-in-hold to 5500.

| ATIS★ | SEATTLE APP CON | OLYMPIA TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 135.725 | 121.1 290.9 | 124.4 (CTAF) L 254.25 | 121.6 | 122.95 |




| FAF to MAP 6.8 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 6:48 | 4:32 | 3:24 | 2:43 | 2:16 |

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 17 | 407-½ 200 (200-½) | | | |
| S-LOC 17 | 680-½ 473 (500-½) | | 680-1 473 (500-1) | |
| C CIRCLING | 720-1 512 (600-1) | 860-1 652 (700-1) | 1020-2½ 812 (900-2½) | 1020-2¾ 812 (900-2¾) |

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| WAAS CH 45599 W17A | APP CRS 176° | Rwy ldg 5500 TDZE 207 Apt Elev 208 |
|---|---|---|

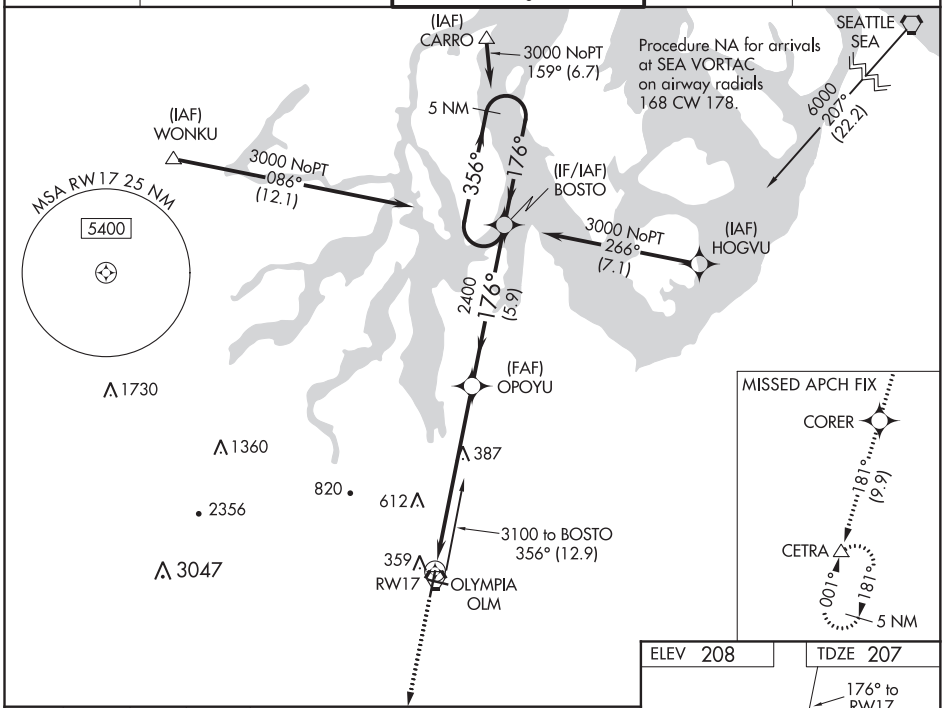
# RNAV (GPS) RWY 17
## OLYMPIA RGNL (OLM)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -9°C (16°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. For inop ALS; increase LNAV/VNAV visibility all Cats to 1⅛ SM. Increase LNAV Cats C/D to 1⅜ SM.

MALSR

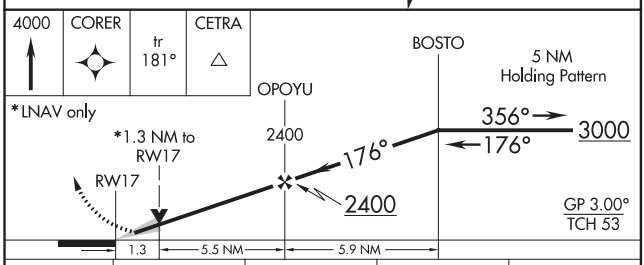
MISSED APPROACH: Climb to 4000 direct CORER and on track 181° to CETRA and hold, continue climb-in-hold to 4000.

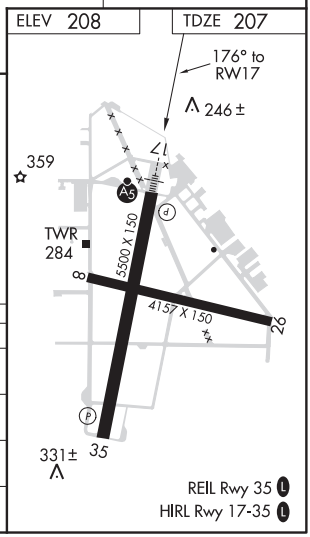
| ATIS* | SEATTLE APP CON | OLYMPIA TOWER* | GND CON | UNICOM |
|---|---|---|---|---|
| 135.725 | 121.1 290.9 | 124.4 (CTAF) L 254.25 | 121.6 | 122.95 |










| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 407-½ 200 (200-½) | | | |
| LNAV/VNAV DA | 629-¾ 422 (500-¾) | | | |
| LNAV MDA | 680-½ 473 (500-½) | | 680-1 473 (500-1) | |
| C CIRCLING | 720-1 512 (600-1) | 860-1 652 (700-1) | 1020-2½ 812 (900-2½) | 1020-2¾ 812 (900-2¾) |



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OLYMPIA, WASHINGTON AL-645 (FAA) 18200

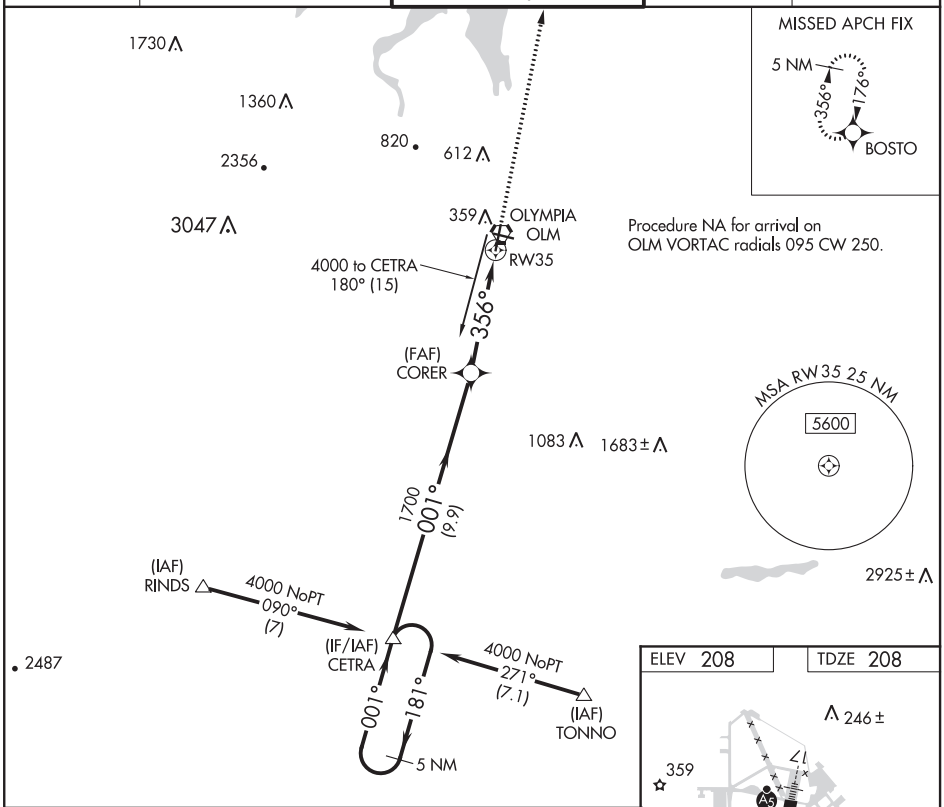
# RNAV (GPS) RWY 35
## OLYMPIA RGNL (OLM)

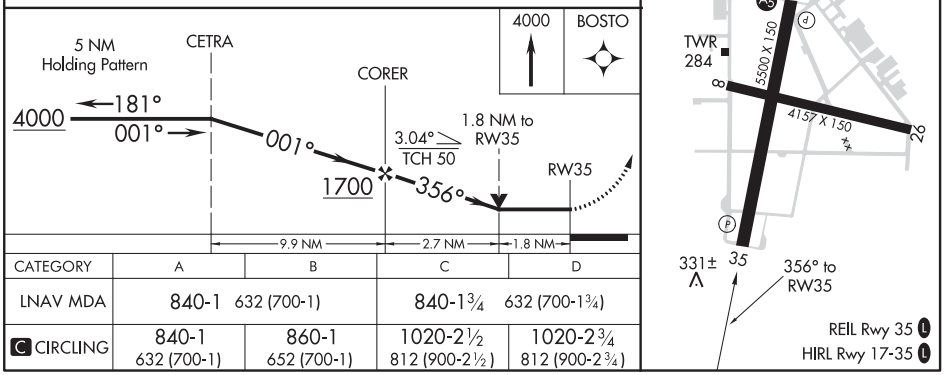
| APP CRS | Rwy ldg | 5500 |
|---|---|---|
| 356° | TDZE | 208 |
| | Apt Elev | 208 |

Rwy 35 helicopter visibility reduction below ¾ SM NA.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 4000 direct BOSTO and hold, continue climb-in-hold to 4000.

| ATIS ★ | SEATTLE APP CON | OLYMPIA TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 135.725 | 121.1 290.9 | 124.4 (CTAF) (L) 254.25 | 121.6 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 840-1 632 (700-1) | | 840-1¾ 632 (700-1¾) | |
| (C) CIRCLING | 840-1 632 (700-1) | 860-1 652 (700-1) | 1020-2½ 812 (900-2½) | 1020-2¾ 812 (900-2¾) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

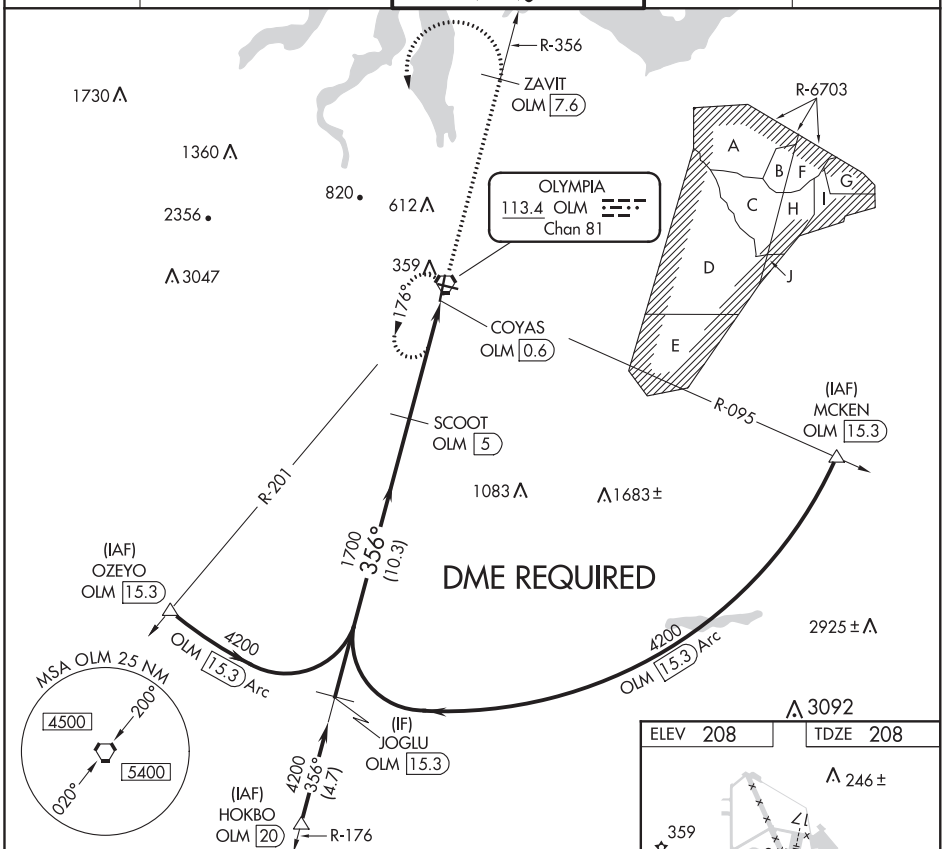
| VORTAC OLM | APP CRS | Rwy ldg | 5500 |
|---|---|---|---|
| 113.4 | 356° | TDZE | 208 |
| Chan 81 | | Apt Elev | 208 |

# VOR RWY 35
## OLYMPIA RGNL (OLM)

Rwy 35 helicopter visibility reduction below ¾ SM NA.
DME required.

MISSED APPROACH: Climb to 4000 on OLM VORTAC R-356 to ZAVIT/OLM 7.6 DME then climbing left turn direct OLM VORTAC and hold.

| ATIS★ | SEATTLE APP CON | OLYMPIA TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 135.725 | 121.1 290.9 | 124.4 (CTAF) L 254.25 | 121.6 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-35 | 840-1 632 (700-1) | | 840-1¾ 632 (700-1¾) | |
| C CIRCLING | 840-1 632 (700-1) | 860-1 652 (700-1) | 1020-2½ 812 (900-2½) | 1020-2¾ 812 (900-2¾) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

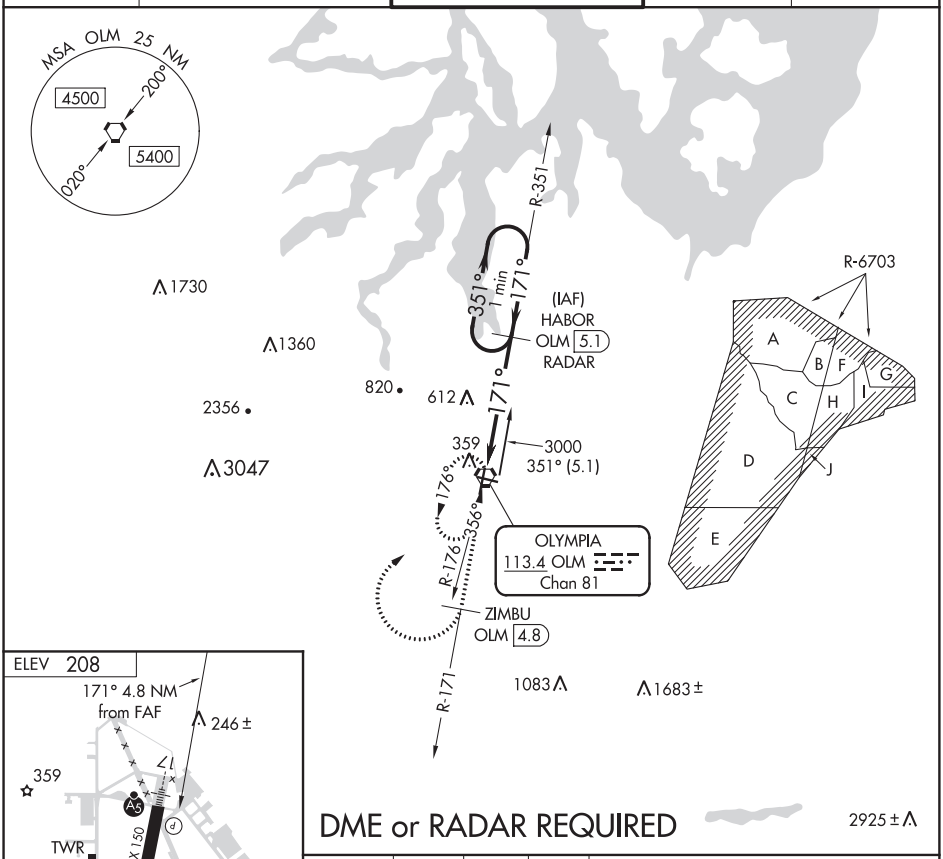
| VORTAC OLM 113.4 Chan 81 | APP CRS 171° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 208 |
|---|---|---|

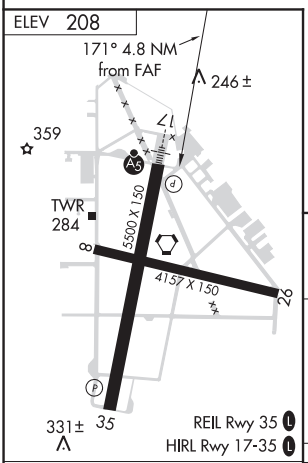
# VOR-A
## OLYMPIA RGNL (OLM)

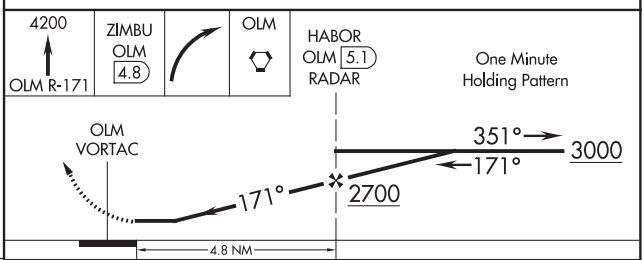
T A DME required.

MISSED APPROACH: Climb to 4200 on OLM VORTAC R-171 to ZIMBU/OLM 4.8 DME and climbing right turn direct OLM VORTAC and hold, continue climb-in-hold to 4200.

| ATIS★ | SEATTLE APP CON | OLYMPIA TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 135.725 | 121.1 290.9 | 124.4 (CTAF) L 254.25 | 121.6 | 122.95 |



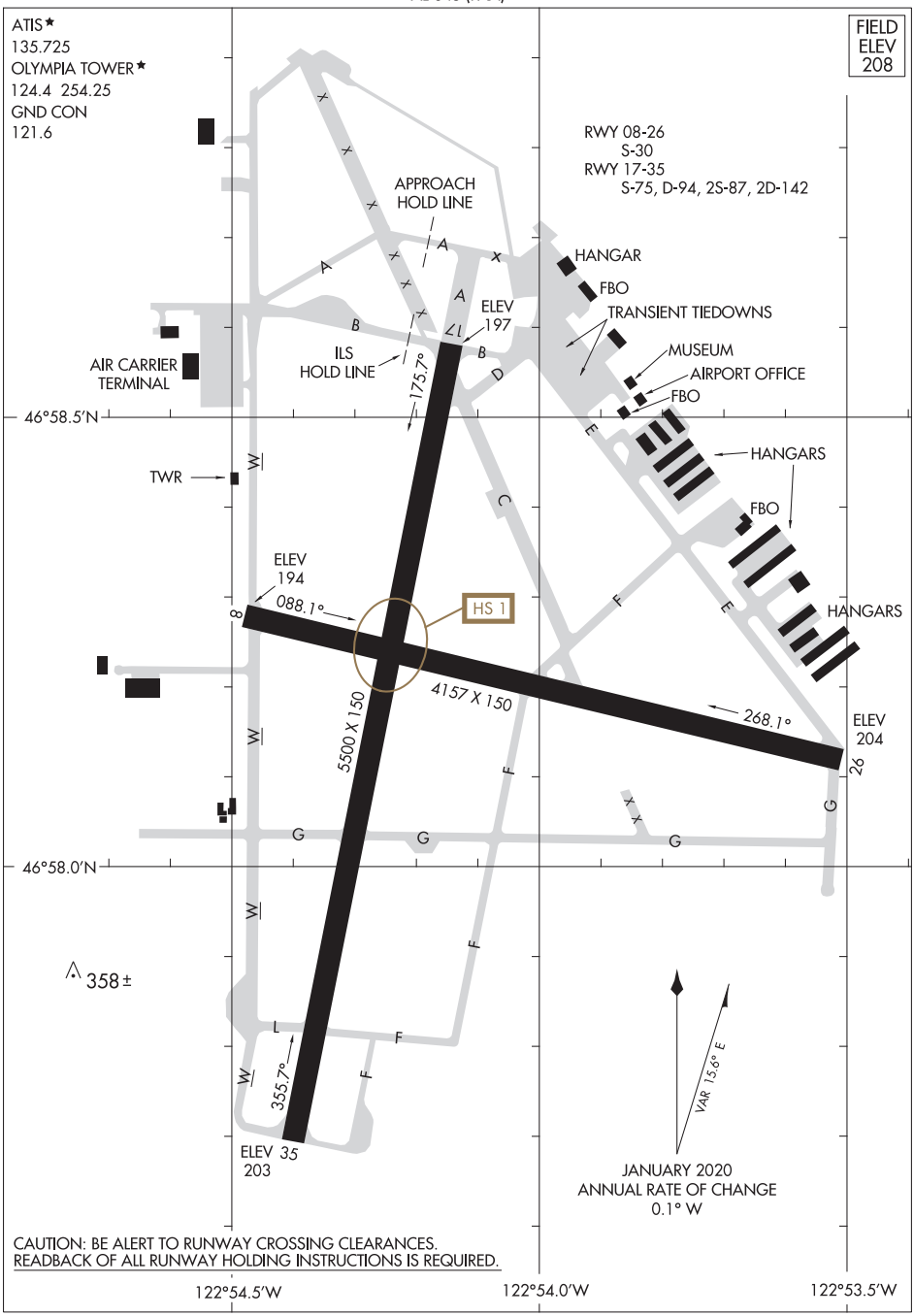




| FAF to MAP 4.8 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 4:48 | 3:12 | 2:24 | 1:55 | 1:36 |

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 880-1 672 (700-1) | | 1020-2½ 812 (900-2½) | 1020-2¾ 812 (900-2¾) |




NW-1, 05 NOV 2020 to 31 DEC 2020




NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

(YELM5.YELM) 18200

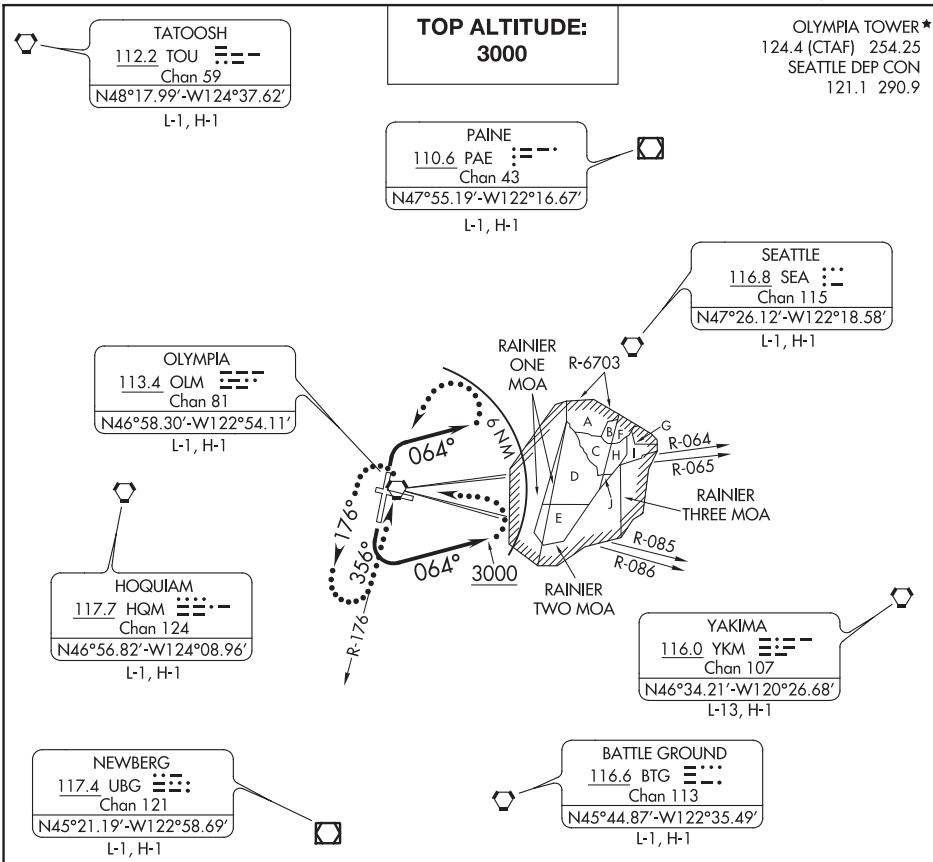
# YELM FIVE DEPARTURE

AL-645 (FAA)

OLYMPIA RGNL (OLM)
OLYMPIA, WASHINGTON

**TOP ALTITUDE: 3000**

OLYMPIA TOWER★
124.4 (CTAF) 254.25
SEATTLE DEP CON
121.1 290.9




TAKEOFF MINIMUMS
Rwys 8, 26: NA- ATC.
Rwy 17: 300-2 with minimum climb of 210′ per NM to 2200 or standard with minimum climb of 720′ per NM to 500.
Rwy 35: Standard.

NOTE: RADAR required.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Turn left, climb heading 064° to 3000, thence. . . .

TAKEOFF RUNWAY 35: Turn right, climb heading 064°, maintain 3000 thence. . . .

. . . .for RADAR vectors on course and filed altitude.

LOST COMMUNICATIONS: If no contact with ATC within 6 NM of OLM VORTAC, or 2 minutes after departure for non-DME aircraft, turn left direct OLM VORTAC, continue climb in OLM VORTAC holding pattern to cross OLM VORTAC at or above R-086 CW R-064 4200 feet; R-065 CW R-085 7300 feet, continue climb on assigned route.


NW-1, 05 NOV 2020 to 31 DEC 2020

YELM FIVE DEPARTURE
OLYMPIA, WASHINGTON
OLYMPIA RGNL (OLM)
(YELM5.YELM) 19JUL18

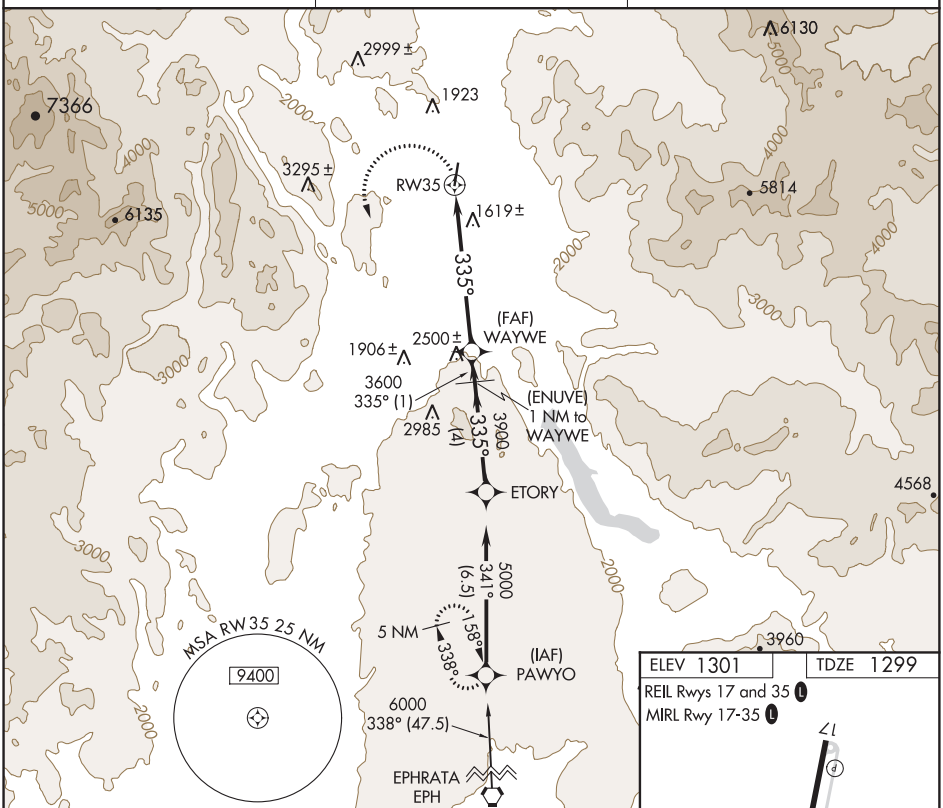
# GPS RWY 35
## OMAK (OMK)

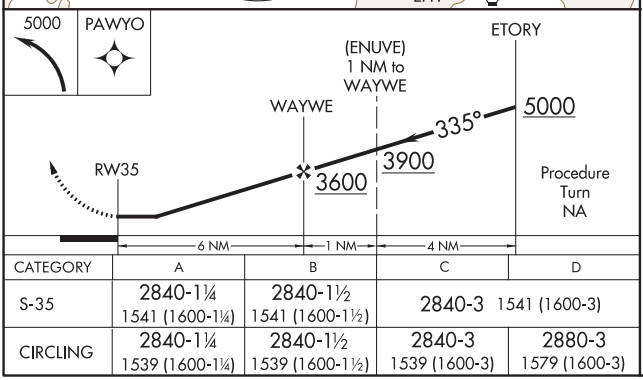
| APP CRS | Rwy ldg | 4667 |
|---|---|---|
| 335° | TDZE | 1299 |
| | Apt Elev | 1301 |

NA
-15°C

MISSED APPROACH: Climbing left turn to 5000 direct PAWYO WP and hold.

| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 118.325 | 126.1 291.6 | 122.8 (CTAF) L |

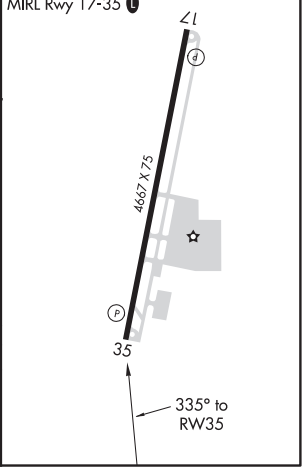



| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-35 | 2840-1¼ 1541 (1600-1¼) | 2840-1½ 1541 (1600-1½) | 2840-3 1541 (1600-3) | |
| CIRCLING | 2840-1¼ 1539 (1600-1¼) | 2840-1½ 1539 (1600-1½) | 2840-3 1539 (1600-3) | 2880-3 1579 (1600-3) |

| ELEV 1301 | TDZE 1299 |
|---|---|

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




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

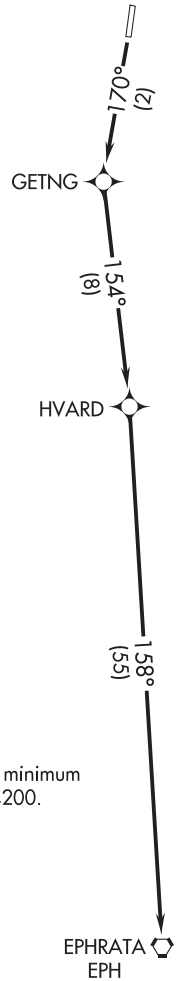
(GETNG1.GETNG) 16147

# GETNG ONE DEPARTURE (OBSTACLE) (RNAV)

SL-5453 (FAA)

OMAK (OMK)
OMAK, WASHINGTON

SEATTLE CENTER
126.1 291.6
SEATTLE RADIO
122.2




TAKEOFF MINIMUMS
Rwy 17: 2200-2 or standard with a minimum climb of 300′ per NM to 4200.

NOTE: GPS required.
NOTE: RNAV 1.

NOTE: Chart not to scale

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb to 4200 via 170° course to GETNG WP, 154° course to HVARD WP, and 158° course to EPH VORTAC. Thence proceed on course.

TAKEOFF RUNWAY 35: NA.


NW-1, 05 NOV 2020 to 31 DEC 2020

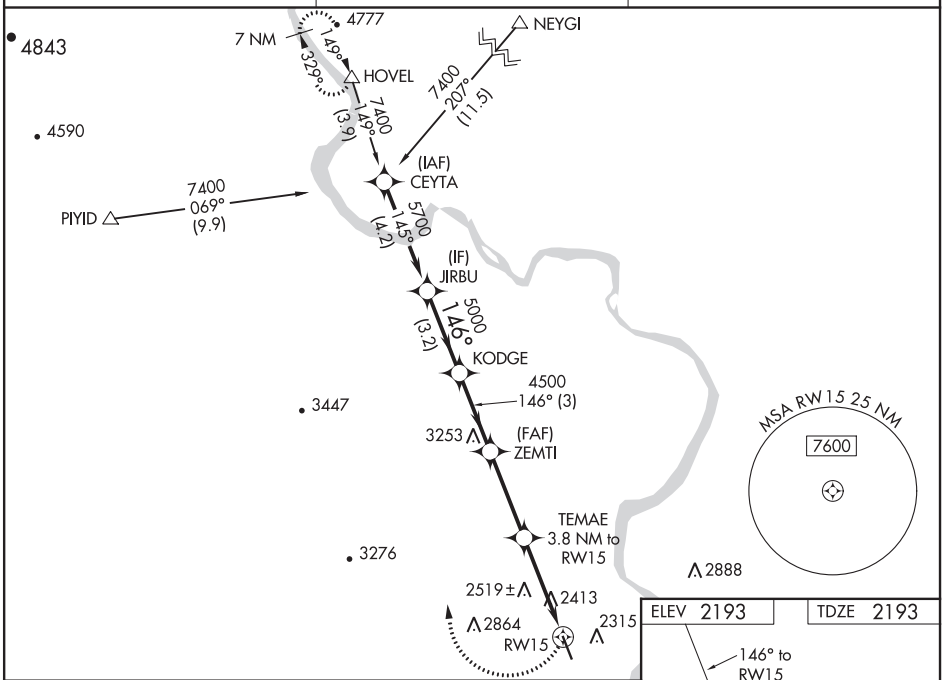
| WAAS CH 78207 W15A | APP CRS 146° | Rwy ldg 5006<br>TDZE 2193<br>Apt Elev 2193 |
|---|---|---|

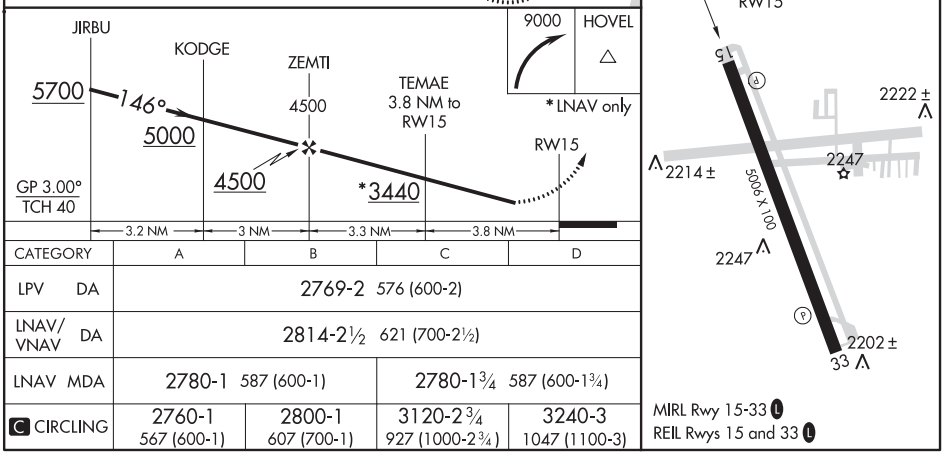
# RNAV (GPS) RWY 15
## ONTARIO MUNI (ONO)

Baro-VNAV NA when using Caldwell 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 Caldwell altimeter setting and increase LPV DA to 2867 feet, LNAV/VNAV DA to 2911 feet, and all MDA 100 feet; increase LPV visibility, all Cats by ½ SM, increase LNAV visibility Cats C/D and Circling Cat C by ¼ SM. Rwy 15 helicopter visibility reduction below 1 SM NA. Straight-in Rwy 15 NA at night, Circling Rwy 15 NA at night.

MISSED APPROACH: Climbing right turn to 9000 direct HOVEL and hold, continue climb-in-hold to 9000.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.275 | 128.05 306.95 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2769-2 576 (600-2) | | | |
| LNAV/VNAV DA | 2814-2½ 621 (700-2½) | | | |
| LNAV MDA | 2780-1 587 (600-1) | | 2780-1¾ 587 (600-1¾) | |
| C CIRCLING | 2760-1 567 (600-1) | 2800-1 607 (700-1) | 3120-2¾ 927 (1000-2¾) | 3240-3 1047 (1100-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

ONTARIO, OREGON | AL-802 (FAA) | 20142

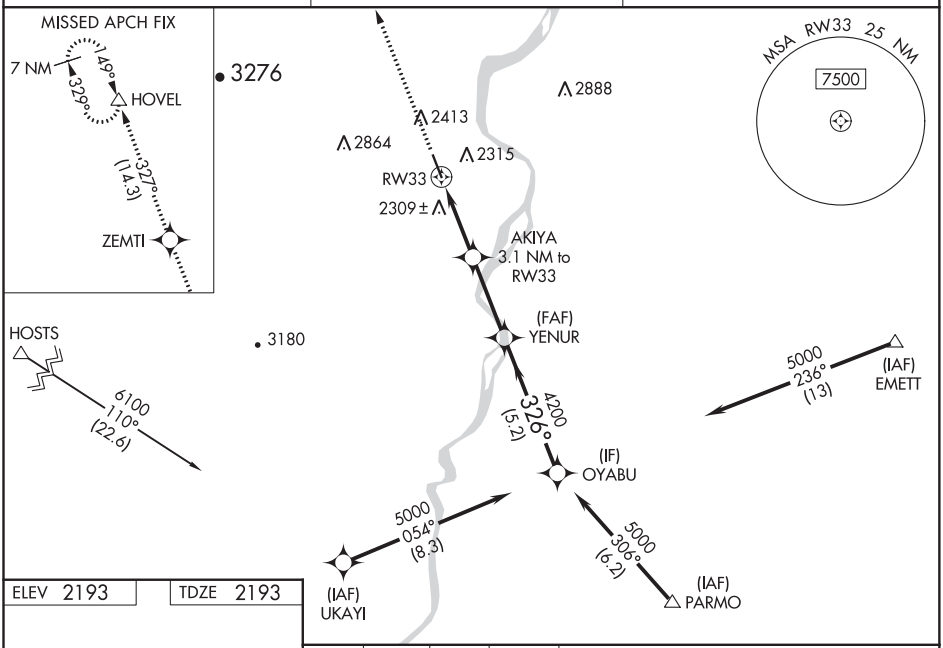
| WAAS CH 87007 W33A | APP CRS 326° | Rwy ldg 5006 TDZE 2193 Apt Elev 2193 |
|---|---|---|

# RNAV (GPS) RWY 33
## ONTARIO MUNI (ONO)

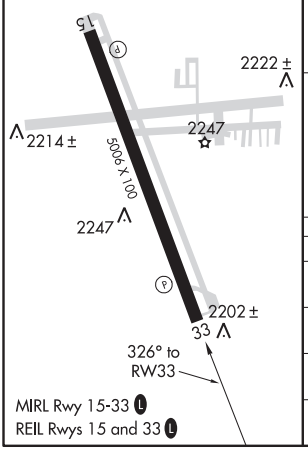
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 54°C (130°F). DME/DME RNP -0.3 NA. Baro-VNAV and VDP NA when using Caldwell altimeter setting. When local altimeter setting not received, use Caldwell altimeter setting and increase all DA to 2541 feet and increase LPV and LNAV/VNAV visibility ⅜ SM all Cats; increase all MDA 100 feet and increase LNAV Cat C and D ⅜ SM and Circling Cat C visibility ¼ SM. Circling Rwy 15 NA at night. Rwy 33 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 9000 direct ZEMTI and on track 327° to HOVEL and hold, continue climb-in-hold 9000.

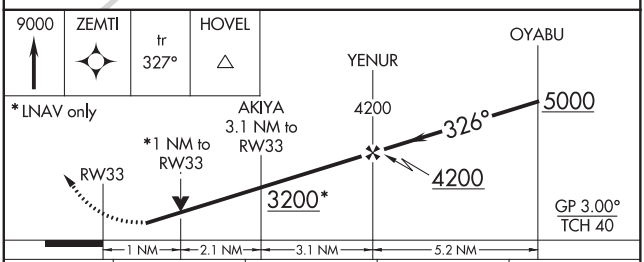
| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.275 | 128.05 306.95 | 122.8 (CTAF) L |




ELEV 2193 | TDZE 2193




MIRL Rwy 15-33 L
REIL Rwys 15 and 33 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2443-⅞ 250 (300-⅞) | | | |
| LNAV/VNAV DA | 2443-⅞ 250 (300-⅞) | | | |
| LNAV MDA | 2560-1 367 (400-1) | | | |
| C CIRCLING | 2760-1 567 (600-1) | 2800-1 607 (700-1) | 3120-2¾ 927 (1000-2¾) | 3240-3 1047 (1100-3) |


NW-1, 05 NOV 2020 to 31 DEC 2020

ONTARIO, OREGON
Amdt 1 07DEC17

44°01'N-117°01'W

ONTARIO MUNI (ONO)
RNAV (GPS) RWY 33

| WAAS CH 65742 W10A | APP CRS 124° | Rwy ldg 5728 TDZE 5931 Apt Elev 5933 |
|---|---|---|

# RNAV (GPS) RWY 10

## BEAR LAKE COUNTY (1U7)

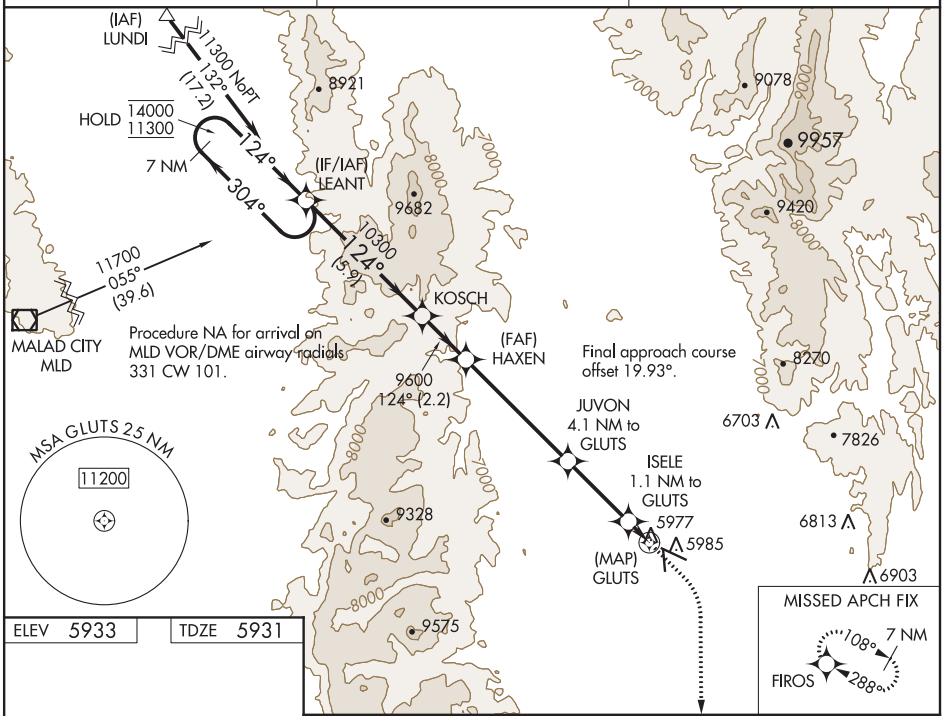
RNP APCH.

NA When local altimeter setting not received, procedure NA.

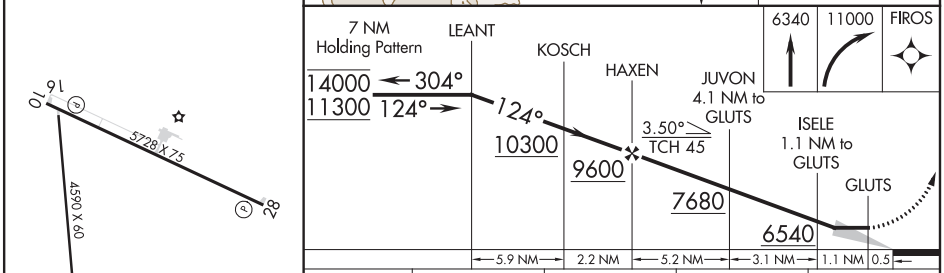
-23°C

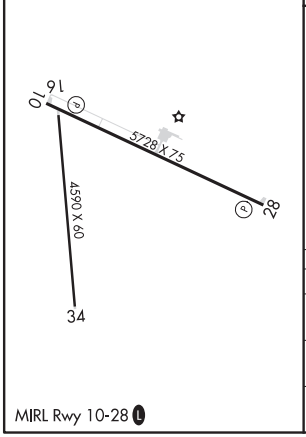
MISSED APPROACH: (Do not exceed 185K until FIROS) Climb to 6340 then climbing right turn to 11000 direct FIROS and hold.

| AWOS-3 | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 118.525 | 128.35 239.25 | 122.8 (CTAF) L |




| ELEV 5933 | TDZE 5931 |
|---|---|




MIRL Rwy 10-28 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LP MDA | 6240-1 309 (400-1) | | | |
| LNAV MDA | 6260-1 329 (400-1) | | | |
| C CIRCLING | 6320-1 387 (400-1) | 6400-1 467 (500-1) | 6720-2¼ 787 (800-2¼) | 7140-3 1207 (1300-3) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

PARIS, IDAHO | AL-10475 (FAA) | 20254

| WAAS CH 62842 W28A | APP CRS 284° | Rwy ldg 5728 TDZE 5933 Apt Elev 5933 |
|---|---|---|

# RNAV (GPS) RWY 28
## BEAR LAKE COUNTY (1U7)

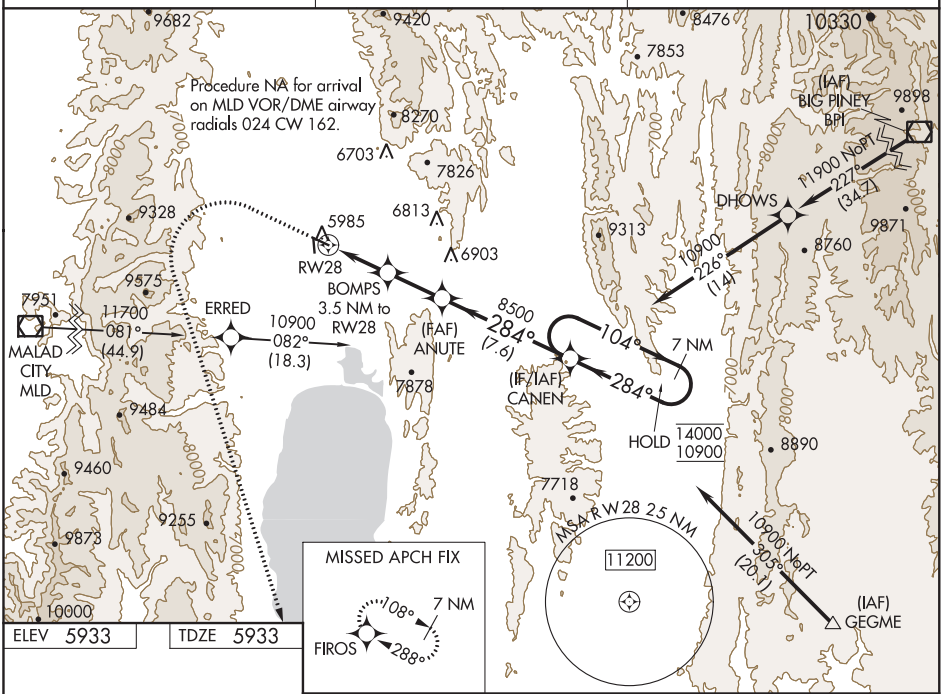
RNP APCH.

T
A NA
-23°C

Baro-VNAV NA.
When local altimeter setting not received, procedure NA.

MISSED APPROACH: (Do not exceed 185K until FIROS) Climb to 6560 then climbing left turn to 11000 direct FIROS and hold.

| AWOS-3 | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 118.525 | 128.35 239.25 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 6275-1 342 (400-1) | | | |
| LNAV/VNAV DA | 6365-1¼ 432 (500-1¼) | | | |
| LNAV MDA | 6560-1 627 (700-1) | | 6560-1¾ 627 (700-1¾) | |
| C CIRCLING | 6560-1 627 (700-1) | | 6720-2¼ 787 (800-2¼) | 7140-3 1207 (1300-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# ILS or LOC RWY 21R
## TRI-CITIES (PSC)

| LOC/DME I-PSC | APP CRS | Rwy ldg | 7110 |
|---|---|---|---|
| 108.7 | 211° | TDZE | 404 |
| Chan 24 | | Apt Elev | 410 |

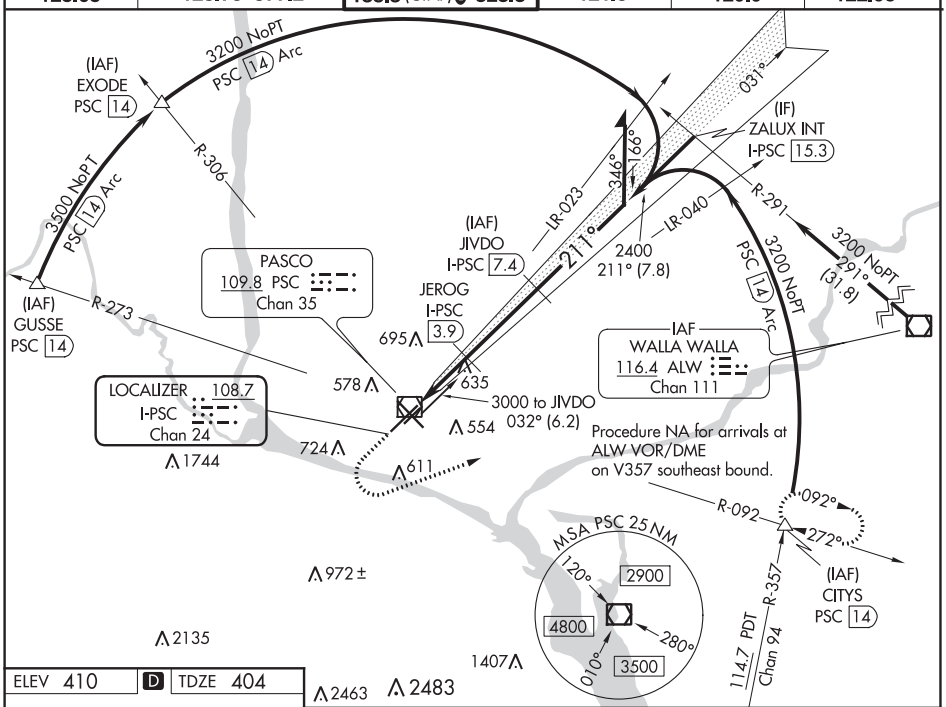
DME required for LOC only.

VDP NA when using Hermiston altimeter setting. When local altimeter setting not received, use Hermiston altimeter setting and increase all DA 95 feet and all MDA 100 feet; increase S-LOC 21R Cat C and D visibility ⅜ mile and Circling Cat C and D visibility ¼ mile.
For inop ALS when using Hermiston altimeter setting, increase S-ILS 21R all Cats visibility to RVR 4500, increase S-LOC 21R Cats C and D visibility to 1¾ SM.
#RVR 1800 authorized with use of FD or AP or HUD to DA (NA when using Hermiston altimeter setting).

MALSR

MISSED APPROACH: Climb to 1200 then climbing left turn to 3200 on heading 050° and PSC VOR/DME R-092 to CITYS INT/PSC VOR/DME 14 DME and hold.

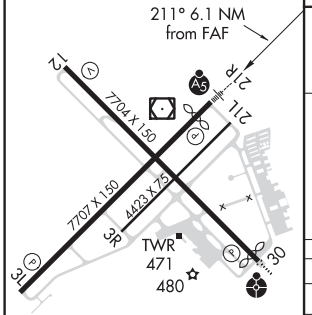
| ATIS | CHINOOK APP CON ★ | TRI-CITIES TOWER ★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.65 | 128.75 377.2 | 135.3 (CTAF) L 323.3 | 121.8 | 120.0 | 122.95 |



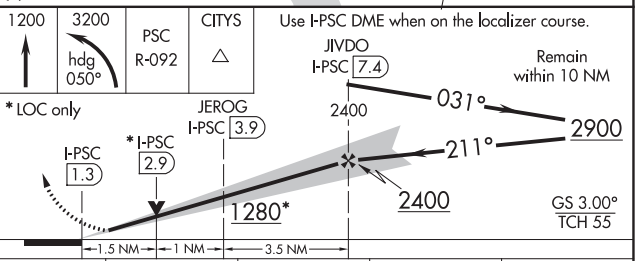

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 410 | D | TDZE 404




REIL Rwys 3L and 12
MIRL Rwy 12-30 L
HIRL Rwy 3L-21R L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 21R | #604/24 200 (200-½) | | | |
| S-LOC 21R | 940/24 536 (600-½) | | 940/55 536 (600-1) | |
| C CIRCLING | 940-1 530 (600-1) | | 1040-1¾ 630 (700-1¾) | 1100-2¼ 690 (700-2¼) |

PASCO, WASHINGTON | AL-474 (FAA) | 20254

# RNAV (RNP) Z RWY 3L
## TRI-CITIES (PSC)

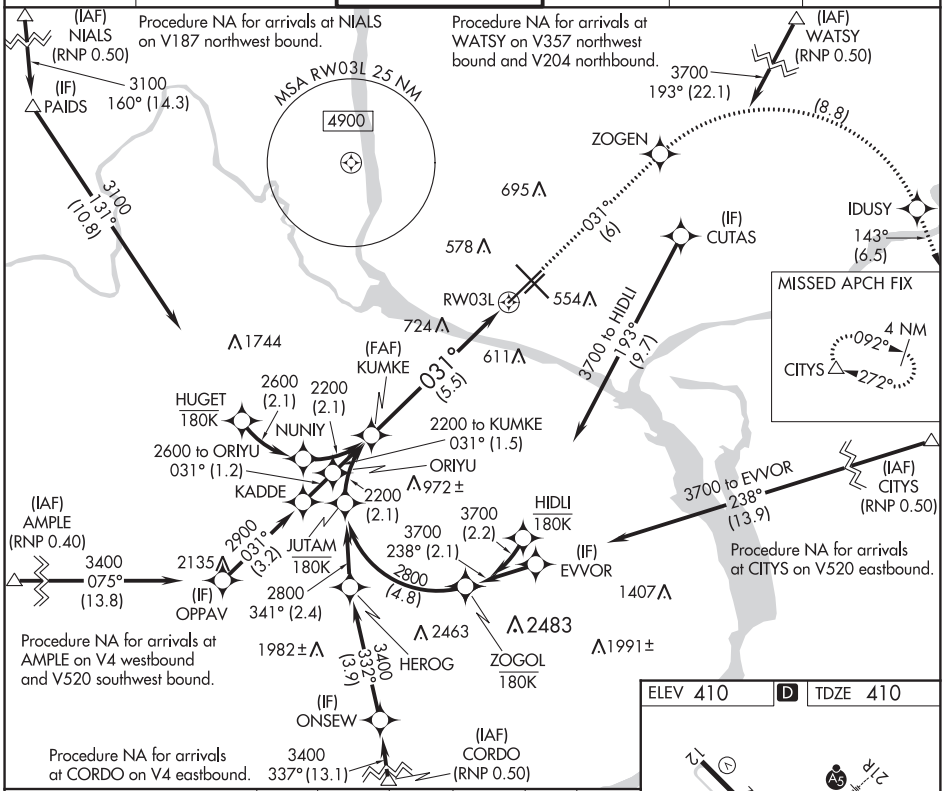
| APP CRS | Rwy ldg | 7707 |
|---|---|---|
| 031° | TDZE | 410 |
| | Apt Elev | 410 |

RNP AR APCH. RF required.

For uncompensated Baro-VNAV systems, procedure NA below -14°C or above 54°C.

MISSED APPROACH: Climb to 3200 on track 031° to ZOGEN, right turn to IDUSY, and on track 143° to CITYS and hold.

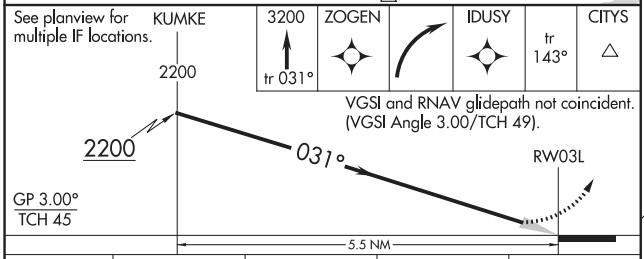
| ATIS | CHINOOK APP CON★ | TRI-CITIES TOWER★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.65 | 128.75 377.2 | 135.3 (CTAF) L 323.3 | 121.8 | 120.0 | 122.95 |




See planview for multiple IF locations.

| 3200 | ZOGEN | | IDUSY | | CITYS |
|---|---|---|---|---|---|
| tr 031° | | | | tr 143° | |

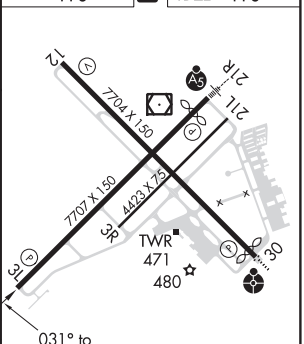
VGSI and RNAV glidepath not coincident. (VGSI Angle 3.00/TCH 49).




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.11 DA | 729-1 319 (400-1) | | | |
| RNP 0.30 DA | 849-1½ 439 (500-1½) | | | |

**AUTHORIZATION REQUIRED**

ELEV 410 | D | TDZE 410




REIL Rwys 3L and 12
MIRL Rwy 12-30 L
HIRL Rwy 3L-21R L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

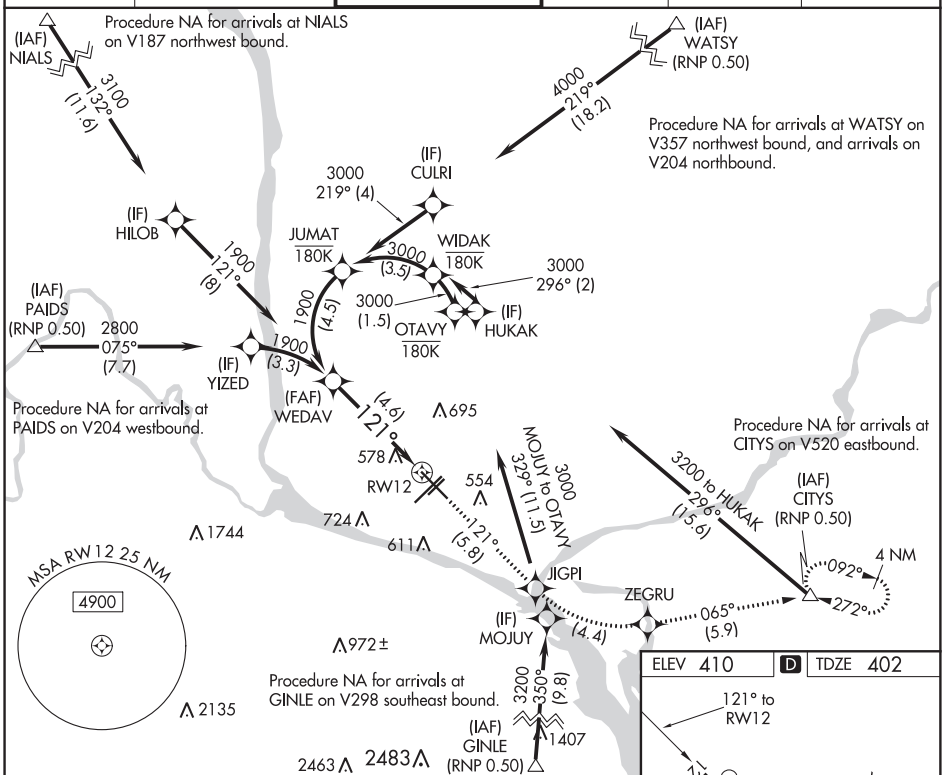
| APP CRS | Rwy ldg | 7504 |
|---|---|---|
| 121° | TDZE | 402 |
| | Apt Elev | 410 |

# RNAV (RNP) Z RWY 12
## TRI-CITIES (PSC)

For uncompensated Baro-VNAV systems, procedure NA below -14°C (7°F) or above 54°C (130°F). GPS required. RF required.

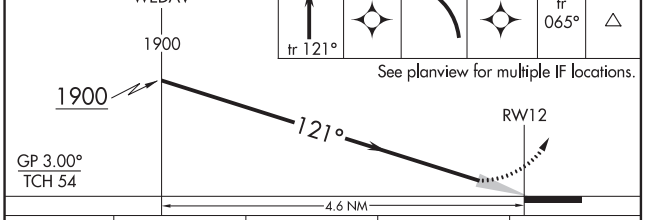
MISSED APPROACH: Climb to 3200 on track 121° to JIGPI, left turn to ZEGRU, and on track 065° to CITYS and hold.

| ATIS | CHINOOK APP CON★ | TRI-CITIES TOWER★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.65 | 128.75 377.2 | 135.3 (CTAF) L 323.3 | 121.8 | 120.0 | 122.95 |




| | 3200 | JIGPI | | ZEGRU | | CITYS |
|---|---|---|---|---|---|---|
| | tr 121° | | | | tr 065° | |

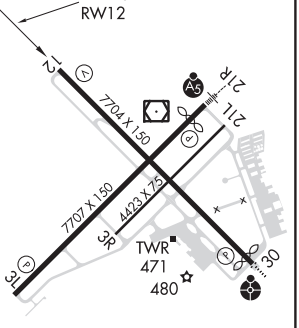
See planview for multiple IF locations.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.11 DA | 769-1¼ 367 (400-1¼) | | | |
| RNP 0.30 DA | 883-1⅝ 481 (500-1⅝) | | | |

**AUTHORIZATION REQUIRED**

ELEV 410 D TDZE 402




REIL Rwys 3L and 12
MIRL Rwy 12-30 L
HIRL Rwy 3L-21R L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

PASCO, WASHINGTON | AL-474 (FAA) | 20142

# RNAV (RNP) Z RWY 21R
TRI-CITIES (PSC)

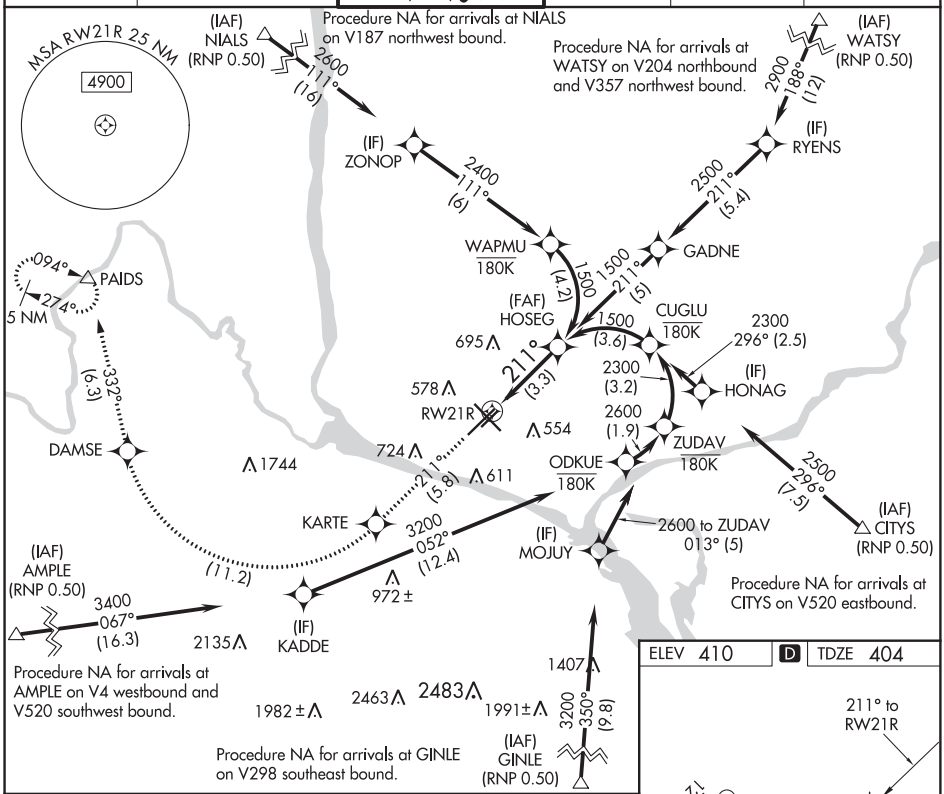
| APP CRS | Rwy ldg | 7110 |
|---|---|---|
| 211° | TDZE | 404 |
| | Apt Elev | 410 |

For uncompensated Baro-VNAV systems, procedure NA below -14°C (7°F) or above 54°C (130°F). GPS required. RF required. For inoperative MALSR, increase RNP 0.11 all Cats visibility to RVR 5700 and RNP 0.30 all Cats visibility to 1⅜ mile.

MALSR

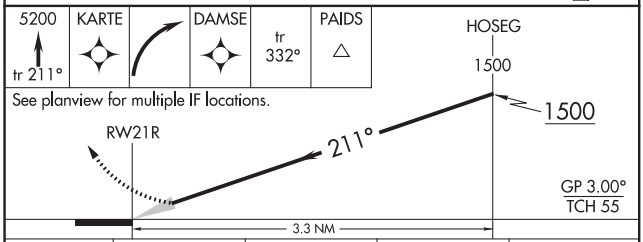
MISSED APPROACH: Climb to 5200 on track 211° to KARTE, right turn to DAMSE, and on track 332° to PAIDS and hold.

| ATIS | CHINOOK APP CON★ | TRI-CITIES TOWER★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.65 | 128.75 377.2 | 135.3 (CTAF) L 323.6 | 121.8 | 120.0 | 122.95 |




| 5200 | KARTE | | DAMSE | tr 332° | PAIDS |
|---|---|---|---|---|---|
| tr 211° | | | | | |

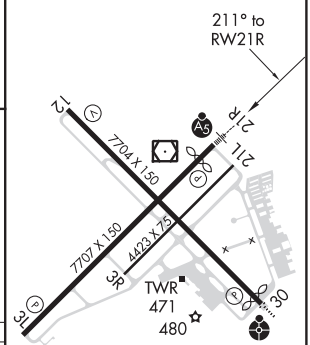
See planview for multiple IF locations.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.11 DA | 754/33 | 350 (400-⅝) | | |
| RNP 0.30 DA | 832/48 | 428 (500-1) | | |

**AUTHORIZATION REQUIRED**

ELEV 410 | D | TDZE 404




REIL Rwys 3L and 12
MIRL Rwy 12-30 L
HIRL Rwy 3L-21R L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 7504 |
|---|---|---|
| 301° | TDZE | 405 |
| | Apt Elev | 410 |

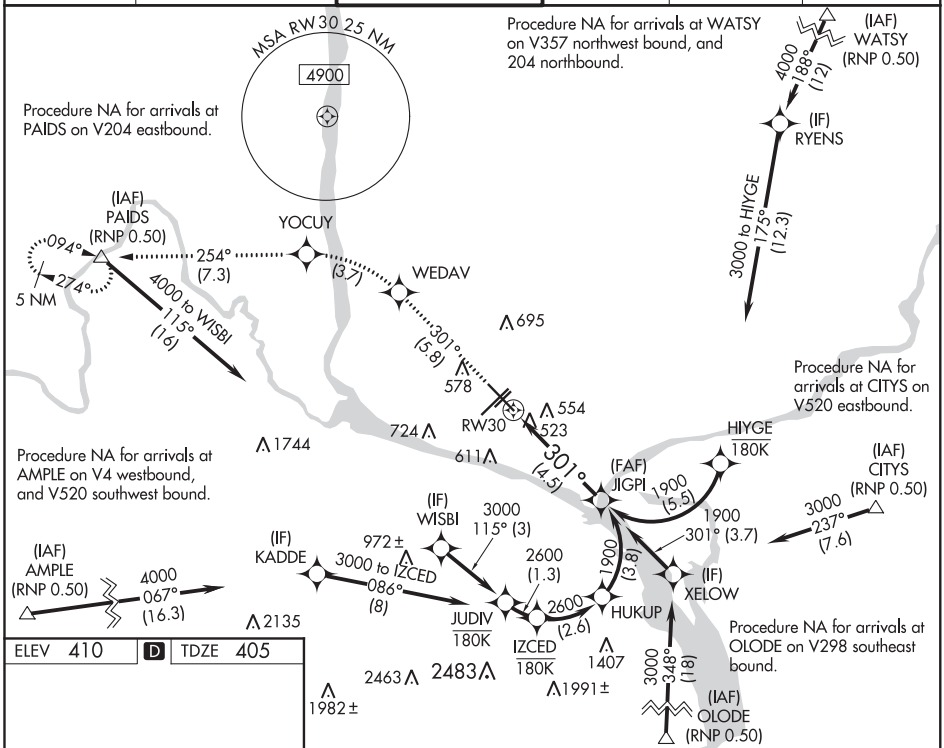
# RNAV (RNP) Z RWY 30
## TRI-CITIES (PSC)

For uncompensated Baro-VNAV systems, procedure NA below -14°C (7°F) or above 54°C (130°F). RF required. GPS required. For inoperative ODALS, increase RNP 0.11 visibility all Cats to 1¼ mile, and increase RNP 0.30 visibility all Cats to 1⅜ mile.

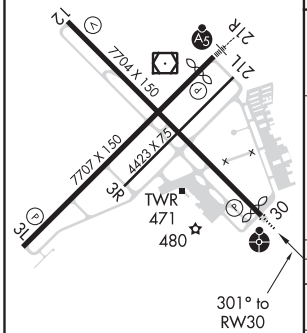
ODALS

MISSED APPROACH: Climb to 5200 on track 301° to WEDAV, left turn to YOCUY, and on track 254° to PAIDS and hold.

| ATIS | CHINOOK APP CON★ | TRI-CITIES TOWER★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.65 | 128.75 377.2 | 135.3 (CTAF) L 323.3 | 121.8 | 120.0 | 122.95 |



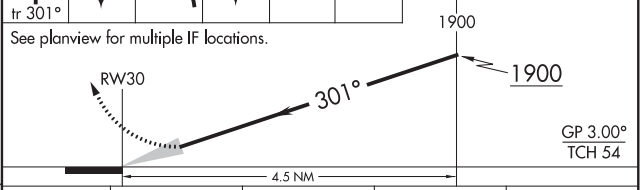

| ELEV 410 | D | TDZE 405 |
|---|---|---|




REIL Rwys 3L and 12
MIRL Rwy 12-30 L
HIRL Rwy 3L-21R L

| 5200 tr 301° | WEDAV | | YOCUY | tr 254° | PAIDS |
|---|---|---|---|---|---|

See planview for multiple IF locations.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.11 DA | 778-1⅛ 373 (400-1⅛) | | | |
| RNP 0.30 DA | 834-1¼ 429 (500-1¼) | | | |

**AUTHORIZATION REQUIRED**

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

PASCO, WASHINGTON AL-474 (FAA) 20254

| WAAS CH 40206 W03A | APP CRS 031° | Rwy ldg 7707 TDZE 410 Apt Elev 410 |
|---|---|---|

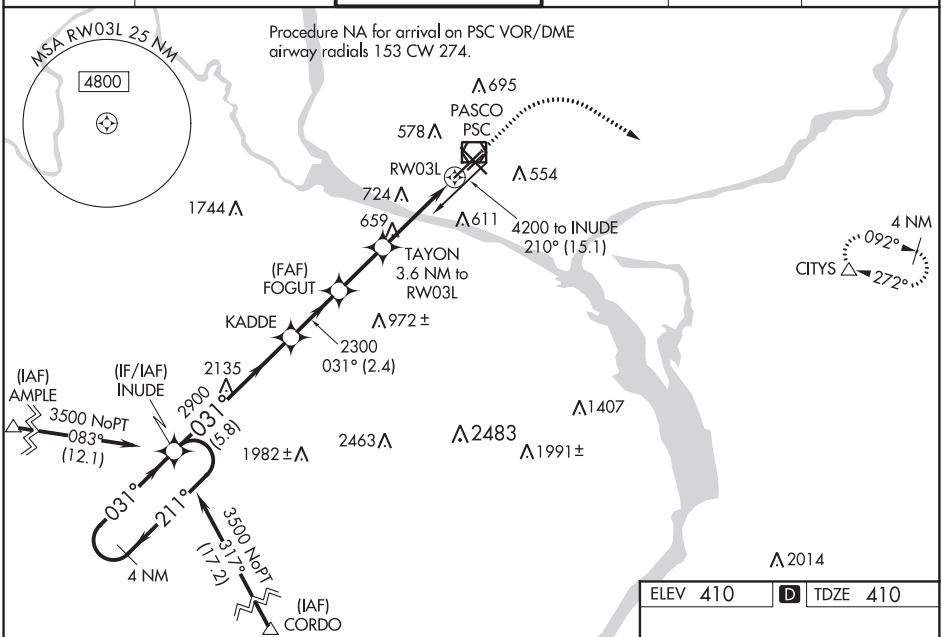
# RNAV (GPS) Y RWY 3L
## TRI-CITIES (PSC)

RNP APCH.

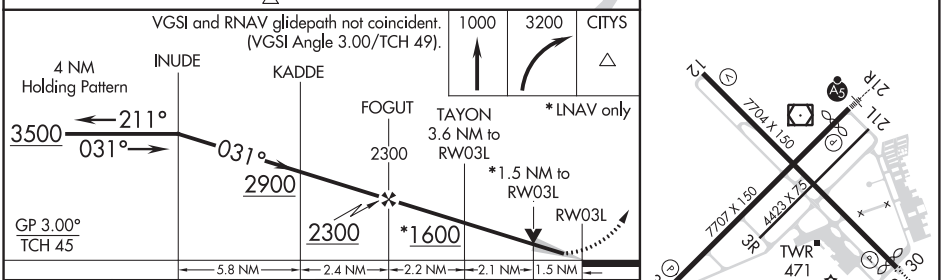
Baro-VNAV NA when using Hermiston altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -14°C or above 54°C . VDP NA with Hermiston altimeter setting. When local altimeter setting not received, use Hermiston altimeter setting: increase all DA 95 feet and all MDA 100 feet. Increase LPV all Cats visibility ¼ mile, LNAV/VNAV all Cats visibilities ⅜ mile: increase LNAV Cats C and D visibility ⅜ mile. Circling Cat C and D visibility ¼ mile.

MISSED APPROACH: Climb to 1000 then climbing right turn to 3200 direct CITYS and hold.

| ATIS | CHINOOK APP CON★ | TRI-CITIES TOWER★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.65 | 128.75 377.2 | 135.3 (CTAF) L 323.3 | 121.8 | 120.0 | 122.95 |




| ELEV 410 | D | TDZE 410 |
|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 610-¾ 200 (200-¾) | | | |
| LNAV/VNAV DA | 708-1 298 (300-1) | | | |
| LNAV MDA | 920-1 510 (600-1) | | 920-1⅜ 510 (600-1⅜) | |
| C CIRCLING | 920-1 510 (600-1) | 940-1 530 (600-1) | 1040-1¾ 630 (700-1¾) | 1100-2¼ 690 (700-2¼) |




REIL Rwys 3L and 12
MIRL Rwy 12-30 L
HIRL Rwy 3L-21R L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

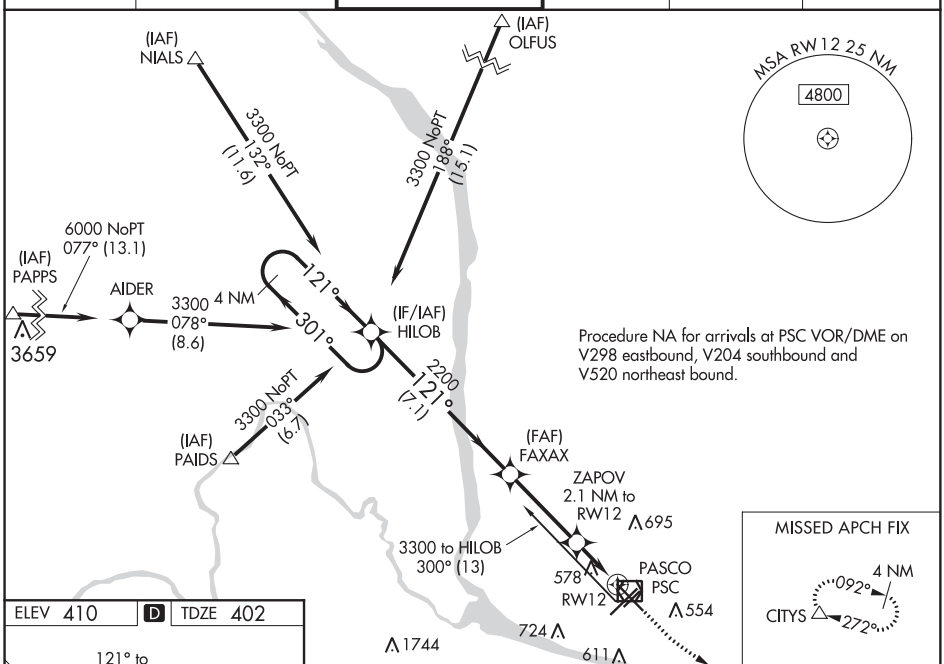
| WAAS CH 58006 W12A | APP CRS 121° | Rwy ldg 7504<br>TDZE 402<br>Apt Elev 410 |
|---|---|---|

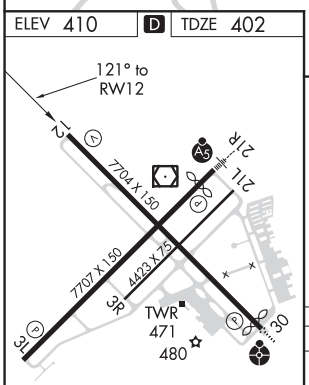
# RNAV (GPS) Y RWY 12
## TRI-CITIES (PSC)

T A Baro-VNAV NA when using Hermiston altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -14°C (7°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. VDP NA with Hermiston altimeter setting. When local altimeter setting not received, use Hermiston altimeter setting: increase all DA 95 feet and all MDA 100 feet. Increase LPV all Cats visibilities ⅛ mile; LNAV/VNAV all Cats visibilities ⅜ mile; increase LNAV and Circling Cats C and D visibility ¼ mile.

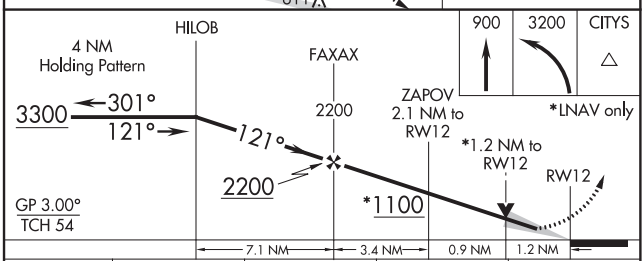
MISSED APPROACH: Climb to 900 then climbing left turn to 3200 direct CITYS and hold.

| ATIS | CHINOOK APP CON★ | TRI-CITIES TOWER★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.65 | 128.75 377.2 | 135.3 (CTAF) L 323.3 | 121.8 | 120.0 | 122.95 |




REIL Rwys 3L and 12
MIRL Rwy 12-30 L
HIRL Rwy 3L-21R L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 602-¾ 200 (200-¾) | | | |
| LNAV/VNAV DA | 755-1⅛ 353 (400-1⅛) | | | |
| LNAV MDA | 840-1 438 (500-1) | | 840-1⅜ 438 (500-1⅜) | |
| C CIRCLING | 880-1 470 (500-1) | 940-1 530 (600-1) | 1040-1¾ 630 (700-1¾) | 1100-2¼ 690 (700-2¼) |

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NW-1, 05 NOV 2020 to 31 DEC 2020

PASCO, WASHINGTON AL-474 (FAA) 20142

| WAAS CH 40303 W21A | APP CRS 211° | Rwy ldg 7110 TDZE 404 Apt Elev 410 |
|---|---|---|

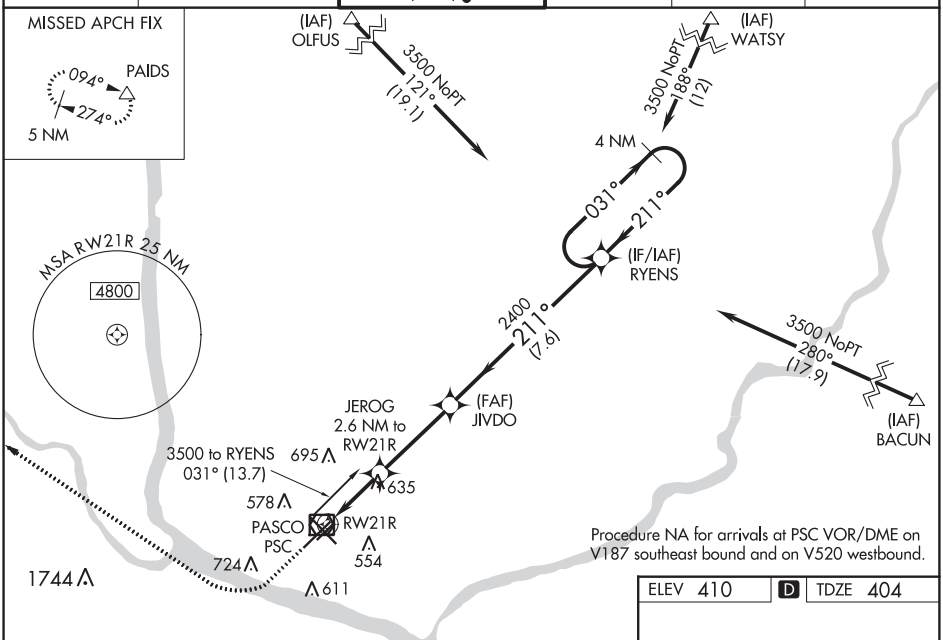
# RNAV (GPS) Y RWY 21R
## TRI-CITIES (PSC)

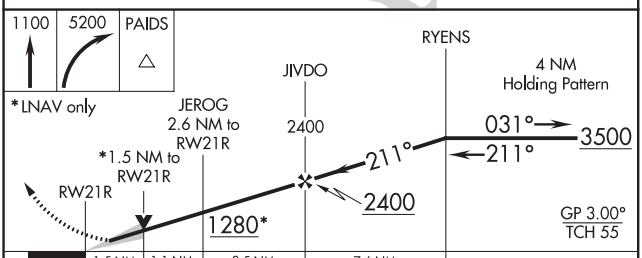
T A Baro-VNAV NA when using Hermiston altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -14°C (7°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. VDP NA with Hermiston altimeter setting. When local altimeter setting not received, use Hermiston altimeter setting and increase all DA 95 feet and all MDA 100 feet; increase LNAV/VNAV all Cats visibility ⅜ mile; LNAV Cat C and D visibility ⅜ mile and Circling Cat C and D visibility ¼ mile.
# RVR 1800 authorized with use of FD or AP or HUD to DA, NA when using Hermiston altimeter setting.

MALSR A5

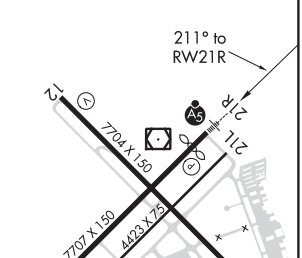
MISSED APPROACH: Climb to 1100 then climbing right turn to 5200 direct PAIDS and hold, continue climb-in-hold to 5200.

| ATIS | CHINOOK APP CON★ | TRI-CITIES TOWER★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.65 | 128.75 377.2 | 135.3 (CTAF) L 323.3 | 121.8 | 120.0 | 122.95 |




ELEV 410 D TDZE 404




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA# | 604/24 200 (200-½) | | | |
| LNAV/VNAV DA | 844/51 440 (500-1) | | | |
| LNAV MDA | 940/24 536 (600-½) | | 940/55 536 (600-1) | |
| C CIRCLING | 940-1 530 (600-1) | | 1040-1¾ 630 (700-1¾) | 1100-2¼ 690 (700-2¼) |

REIL Rwys 3L and 12
MIRL Rwy 12-30 L
HIRL Rwy 3L-21R L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 86605 W30A | APP CRS 301° | Rwy ldg 7504 TDZE 405 Apt Elev 410 |
|---|---|---|

# RNAV (GPS) Y RWY 30
## TRI-CITIES (PSC)

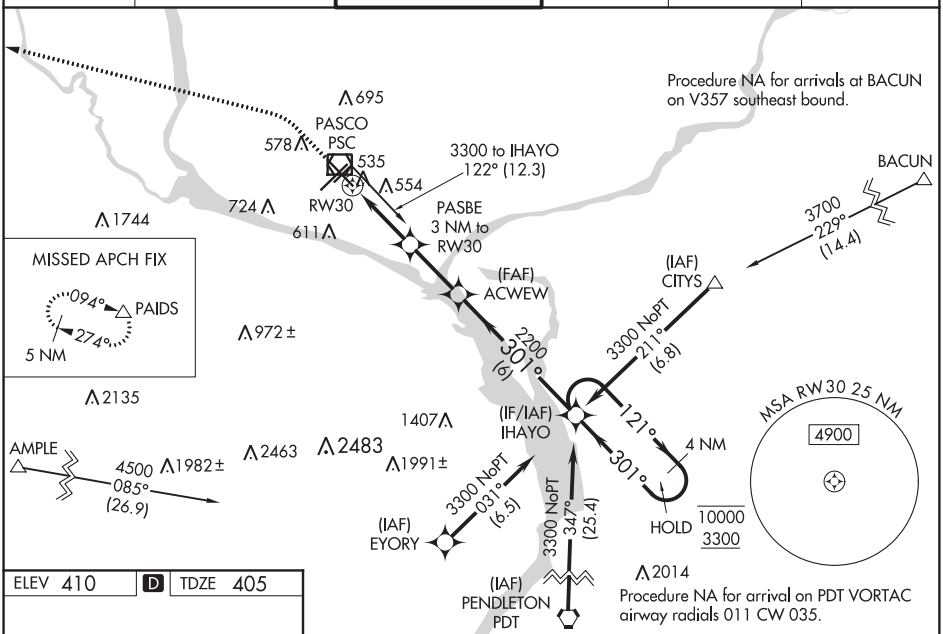
RNP APCH.

Baro-VNAV and VDP NA when using Hermiston altimeter setting. Rwy 30 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -14°C or above 54°C . When local altimeter setting not received, use Hermiston altimeter setting; increase all DA 95 feet and all MDA 100 feet. Increase LPV and LNAV/VNAV all Cats visibilities ¼ mile; increase LNAV and Circling Cats C and D visibility ¼ mile.

ODALS

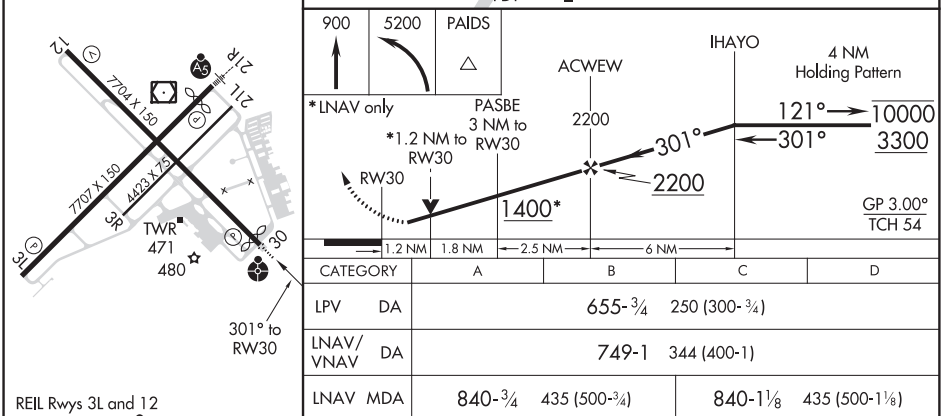
MISSED APPROACH: Climb to 900 then climbing left turn to 5200 direct PAIDS and hold, continue climb-in-hold to 5200.

| ATIS | CHINOOK APP CON★ | TRI-CITIES TOWER★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.65 | 128.75 377.2 | 135.3 (CTAF) L 323.3 | 121.8 | 120.0 | 122.95 |




NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 410 | D | TDZE 405




REIL Rwys 3L and 12
MIRL Rwy 12-30 L
HIRL Rwy 3L-21R L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 655-¾ 250 (300-¾) | | | |
| LNAV/VNAV DA | 749-1 344 (400-1) | | | |
| LNAV MDA | 840-¾ 435 (500-¾) | | 840-1⅛ 435 (500-1⅛) | |
| C CIRCLING | 880-1 470 (500-1) | 940-1 530 (600-1) | 1040-1¾ 630 (700-1¾) | 1100-2¼ 690 (700-2¼) |

PASCO, WASHINGTON AL-474 (FAA) 20142

# VOR RWY 21R
## TRI-CITIES (PSC)

| VOR/DME PSC | APP CRS | Rwy ldg | 7110 |
|---|---|---|---|
| 109.8 | 217° | TDZE | 404 |
| Chan 35 | | Apt Elev | 410 |

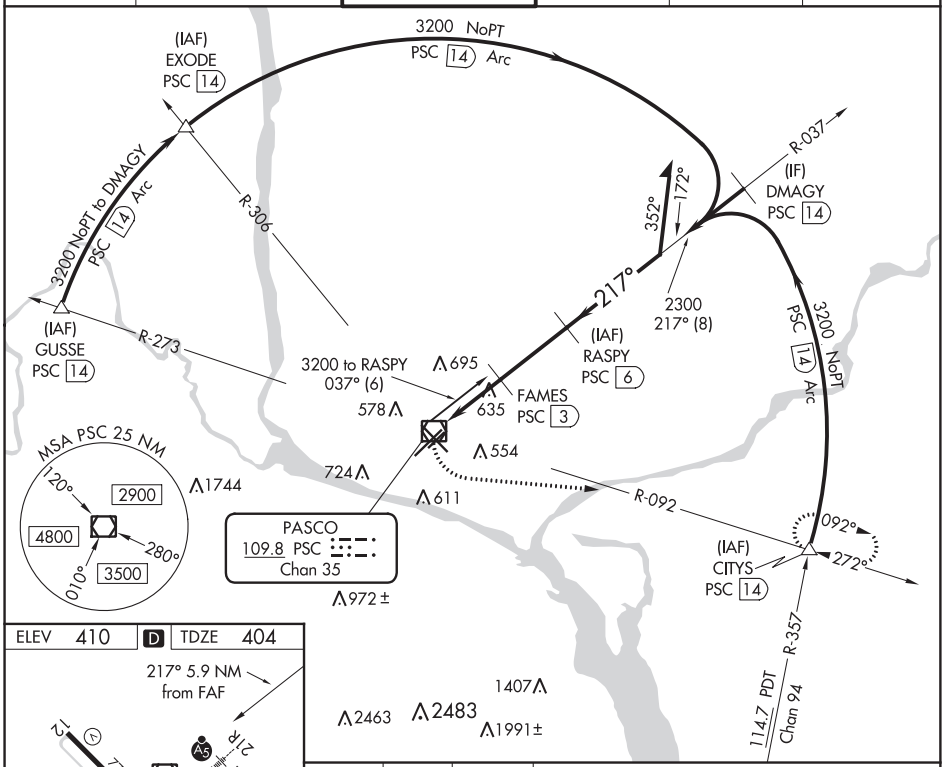
DME required.

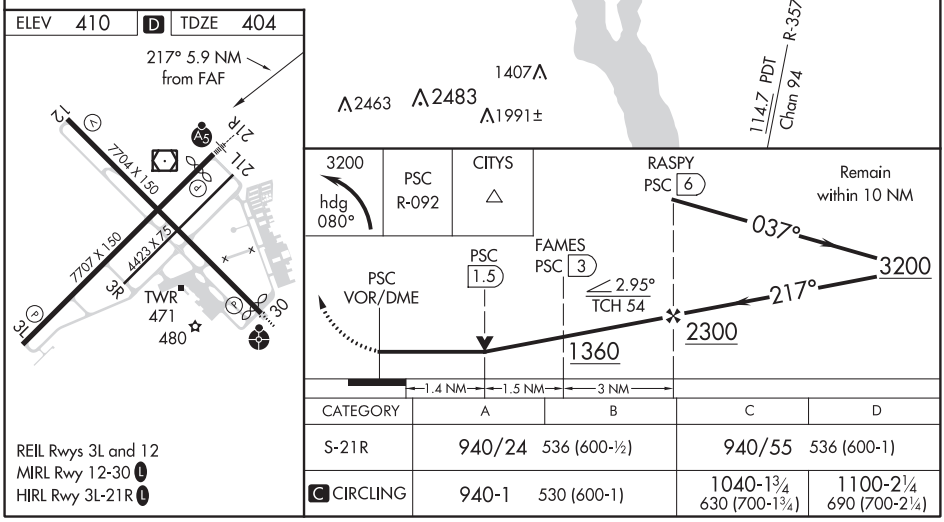
T A VDP NA when using Hermiston altimeter setting. When local altimeter setting not received, use Hermiston altimeter setting and increase all MDA 100 feet and increase S-21R Cat C/D visibilty ⅜ SM and Circling Cat C/D visibility ¼ SM. For inop ALS when using Hermiston altimeter setting, increase Cat C/D visibility to 1¾ SM.

MALSR

MISSED APPROACH: Climbing left turn to 3200 on heading 080° and PSC VOR/DME R-092 PSC VOR/DME to CITYS INT/PSC 14 DME and hold.

| ATIS | CHINOOK APP CON★ | TRI-CITIES TOWER★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.65 | 128.75 377.2 | 135.3 (CTAF) L 323.3 | 121.8 | 120.0 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-21R | 940/24 | 536 (600-½) | 940/55 | 536 (600-1) |
| C CIRCLING | 940-1 | 530 (600-1) | 1040-1¾ 630 (700-1¾) | 1100-2¼ 690 (700-2¼) |

REIL Rwys 3L and 12
MIRL Rwy 12-30 L
HIRL Rwy 3L-21R L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# VOR RWY 30
## TRI-CITIES (PSC)

| VOR/DME PSC 109.8 Chan 35 | APP CRS 307° | Rwy ldg 7504 TDZE 405 Apt Elev 410 |
|---|---|---|

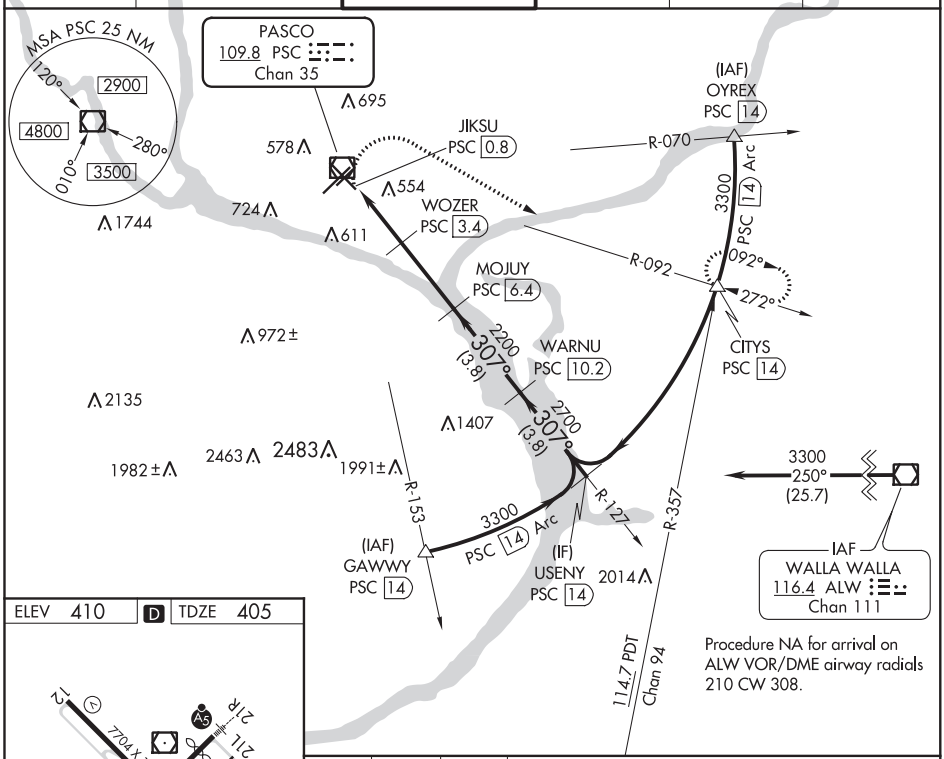
DME required.

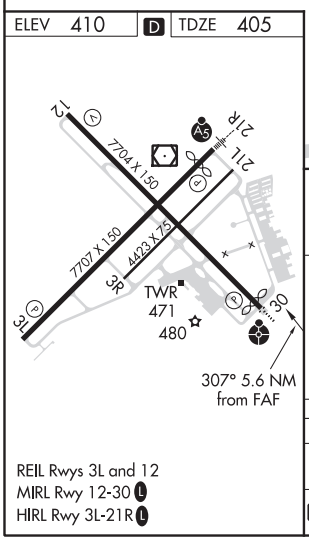
Rwy 30 helicopter visibility reduction below ¾ SM not authorized.
VDP NA when using Hermiston altimeter setting. When local altimeter setting not received, use Hermiston altimeter setting and increase all MDA 100 feet, increase S-30 visibility Cat C/D ⅜ SM and Circling Cat C/D visibility ¼ SM. For inoperative ALS, increase S-30 Cat C/D visibility to 1⅛ SM.

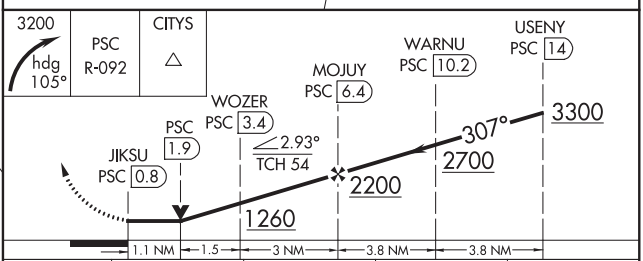
ODALS

MISSED APPROACH: Climbing right turn to 3200 on heading 105° and PSC R-092 to CITYS/PSC 14 DME and hold.

| ATIS | CHINOOK APP CON ★ | TRI-CITIES TOWER ★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.65 | 128.75 377.2 | 135.3 (CTAF) L 323.3 | 121.8 | 120.0 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-30 | 820-¾ 415 (500-¾) | | 820-1 415 (500-1) | |
| C CIRCLING | 880-1 470 (500-1) | 940-1 530 (600-1) | 1040-1¾ 630 (700-1¾) | 1100-2¼ 690 (700-2¼) |

NW-1, 05 NOV 2020 to 31 DEC 2020

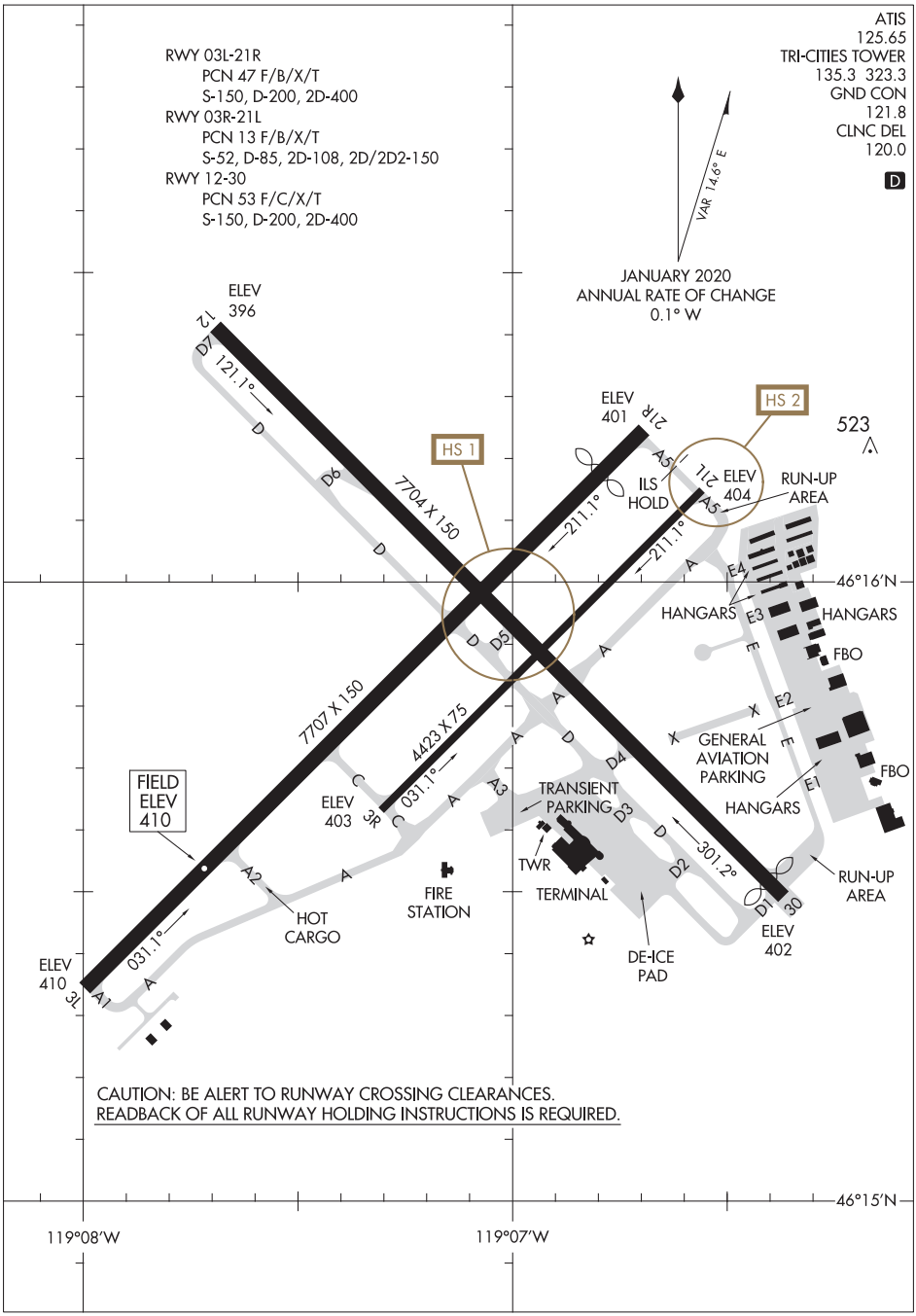
NW-1, 05 NOV 2020 to 31 DEC 2020

20142

# AIRPORT DIAGRAM

AL-474 (FAA)

TRI-CITIES (PSC)
PASCO, WASHINGTON




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM
20142
PASCO, WASHINGTON
TRI-CITIES (PSC)

# TRI-CITIES SEVEN DEPARTURE

AL-474 (FAA)

TRI-CITIES (PSC)
PASCO, WASHINGTON

**TOP ALTITUDE: 10000**

ATIS 125.65
CLNC DEL 120.0
GND CON 121.8
TRI-CITIES TOWER★ 135.3 (CTAF) 323.3
CHINOOK DEP CON★ 128.75 377.2

EPHRATA
112.6 EPH
Chan 73
N47°22.68′-W119°25.44′
L-13, H-1

SPOKANE
115.5 GEG
Chan 102
N47°33.90′-W117°37.61′
L-13, H-1

WENATCHEE
111.0 EAT
Chan 47
N47°23.98′-W120°12.65′
L-13

MOSES LAKE
115.0 MWH
Chan 97
N47°12.65′-W119°19.01′
L-13, H-1

PULLMAN
109.0 PUW
Chan 27
N46°40.45′-W117°13.41′
L-13

ELLENSBURG
117.9 ELN
Chan 126
N47°01.46′-W120°27.50′
L-13, H-1

PASCO
109.8 PSC
Chan 35
N46°16.22′-W119°07.04′
L-13

NEZ PERCE
108.2 MQG
Chan 19
N46°22.89′-W116°52.17′
L-13

YAKIMA
116.0 YKM
Chan 107
N46°34.21′-W120°26.68′
L-13, H-1

WALLA WALLA
116.4 ALW
Chan 111
N46°05.22′-W118°17.55′
L-13

KLICKITAT
112.3 LTJ
Chan 70
N45°42.82′-W121°06.05′
L-13, H-1

PENDLETON
114.7 PDT
Chan 94
N45°41.91′-W118°56.32′
L-13, H-1

TAKEOFF MINIMUMS
Rwys 21L, 21R, 12, 30, 3L, 3R: Standard with minimum climb of 310′ per NM to 3500.

NOTE: RADAR required.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 21R, 21L, 12, 30, 3L, 3R: Climb on assigned heading for vector to assigned route/fix. Maintain 10000 or assigned lower altitude. Expect clearance to filed altitude 5 minutes after departure.

LOST COMMUNICATIONS
RUNWAYS 30, 12, 3L, 3R, 21R, 21L: Climb on last assigned heading to 3500′, then proceed direct PSC VOR/DME to cross at or above MEA for route of flight.

| LOC I-PDT | APP CRS | Rwy ldg | 6301 |
|---|---|---|---|
| 110.3 | 254° | TDZE | 1487 |
| | | Apt Elev | 1497 |

# ILS or LOC RWY 26

## EASTERN OREGON RGNL AT PENDLETON (PDT)

DME required.

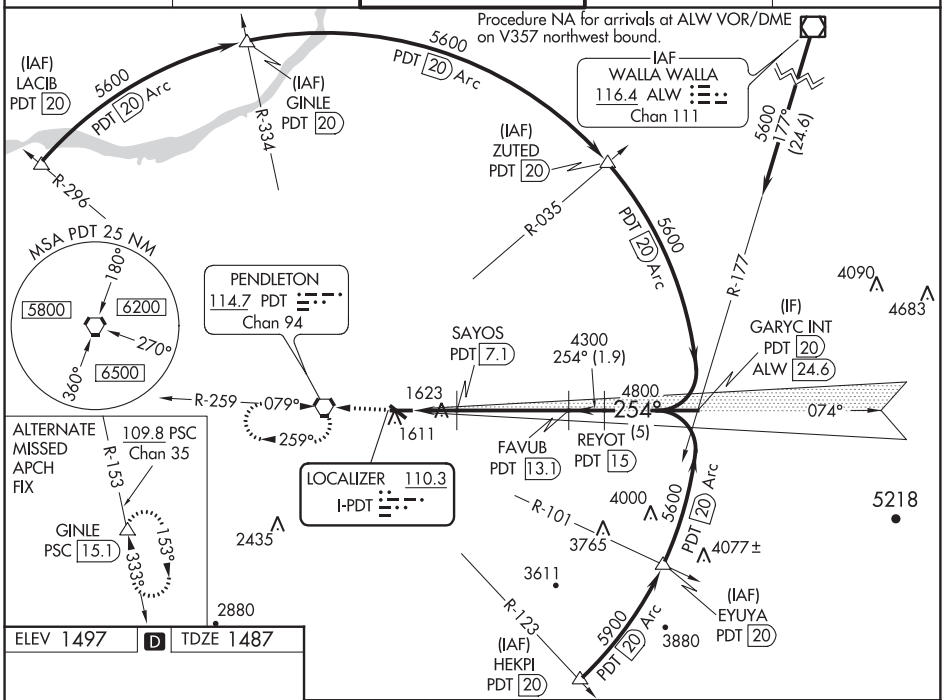
T A -22°C

Circling to Rwy 11 NA at night. DME from PDT VORTAC. Simultaneous reception of I-PDT and PDT DME required. When local altimeter setting not received, use Walla Walla altimeter setting and increase DA to 1809 and all MDA 140 feet and S-ILS 26 visibility to RVR 2600 and S-LOC 26 Cat C and D to RVR 5500. Increase Circling Cat C visibility ¼ SM and Circling Cat D visibility ½ SM. For inop ALS when using Walla Walla altimeter setting increase S-ILS 26 all Cats visibility to RVR 5000 and S-LOC 26 Cat C and D visibility to 1½ SM. # RVR 1800 authorized with use of FD or AP or HUD to DA, (NA when using Walla Walla altimeter setting).

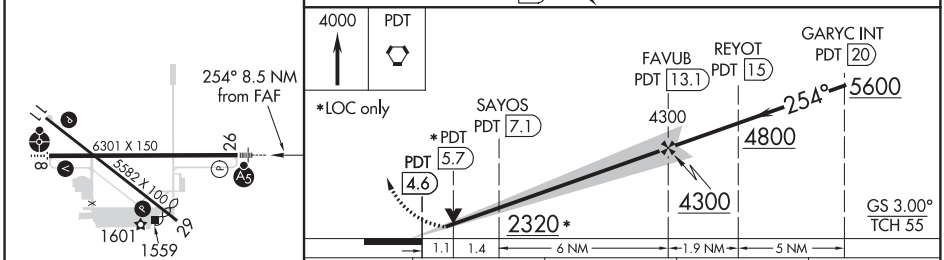
MALSR

MISSED APPROACH: Climb to 4000 direct PDT VORTAC and hold, continue climb-in-hold to 4000.

| ASOS | CHINOOK APP CON ★ | PENDLETON TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 118.325 | 133.15 379.15 | 119.7 (CTAF) L 257.8 | 121.9 257.8 | 122.95 |




ELEV 1497 D TDZE 1487




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 26 # | 1687/24 200 (200-½) | | | |
| S-LOC 26 | 1880/24 393 (400-½) | | 1880/35 393 (400-⅝) | |
| C CIRCLING | 1920-1 423 (500-1) | 1960-1 463 (500-1) | 1980-1½ 483 (500-1½) | 2200-2¼ 703 (800-2¼) |

REIL Rwys 11 and 29 L
MIRL Rwy 11-29 L
HIRL Rwy 8-26 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 73012 W08A | APP CRS 074° | Rwy ldg 6301<br>TDZE 1486<br>Apt Elev 1497 |
|---|---|---|

# RNAV (GPS) RWY 8
## EASTERN OREGON RGNL AT PENDLETON (PDT)

RNP APCH.

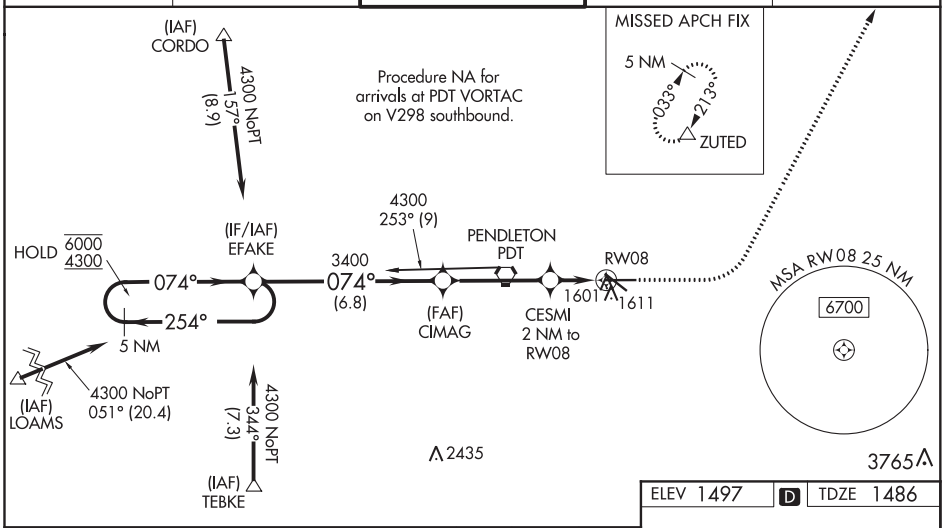
T A -22°C

Circling to Rwy 11 NA at night. Baro-VNAV and VDP NA when using Walla Walla altimeter setting. Rwy 8 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. Inop table does not apply to LPV all Cats and LNAV Cats C/D. When local altimeter setting not received, use Walla Walla altimeter setting and increase all DA 122 feet and all visibilities ¼ SM. Increase all MDA 140 feet and LNAV Cat C/D and Circling Cat C visibilities ¼ SM and Circling Cat D ½ SM. For inop ALS, increase LNAV/VNAV all Cats visibility to ⅞ SM. For inop ALS when using Walla Walla altimeter setting, increase LNAV/VNAV all Cats visibility to 1⅛ SM.

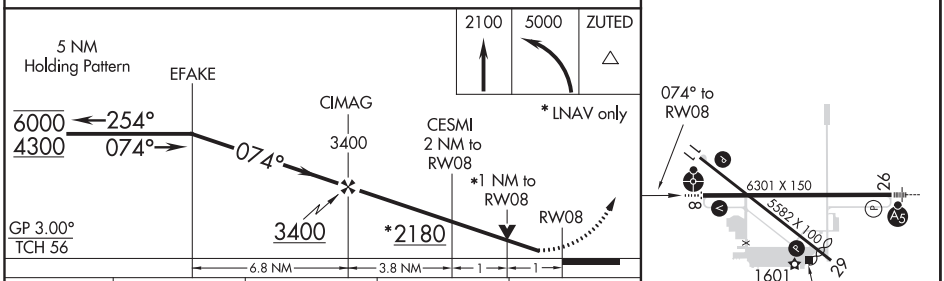
ODALS

MISSED APPROACH: Climb to 2100 then climbing left turn 5000 to ZUTED and hold.

| ASOS | CHINOOK APP CON* | PENDLETON TOWER* | GND CON | UNICOM |
|---|---|---|---|---|
| 118.325 | 133.15 379.15 | 119.7 (CTAF) L 257.8 | 121.9 257.8 | 122.95 |




ELEV 1497 D TDZE 1486




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 1736-¾ 250 (300-¾) | | | |
| LNAV/VNAV DA | 1769-¾ 283 (300-¾) | | | |
| LNAV MDA | 1860-¾ 374 (400-¾) | | 1860-1 374 (400-1) | |
| C CIRCLING | 1920-1 423 (500-1) | 1960-1 463 (500-1) | 1980-1½ 483 (500-1½) | 2200-2¼ 703 (800-2¼) |

REIL Rwys 11 and 29 L
MIRL Rwy 11-29 L
HIRL Rwy 8-26 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 82712 W11A | APP CRS 112° | Rwy ldg 5126<br>TDZE 1487<br>Apt Elev 1497 |
|---|---|---|

# RNAV (GPS) RWY 11
## EASTERN OREGON RGNL AT PENDLETON (PDT)

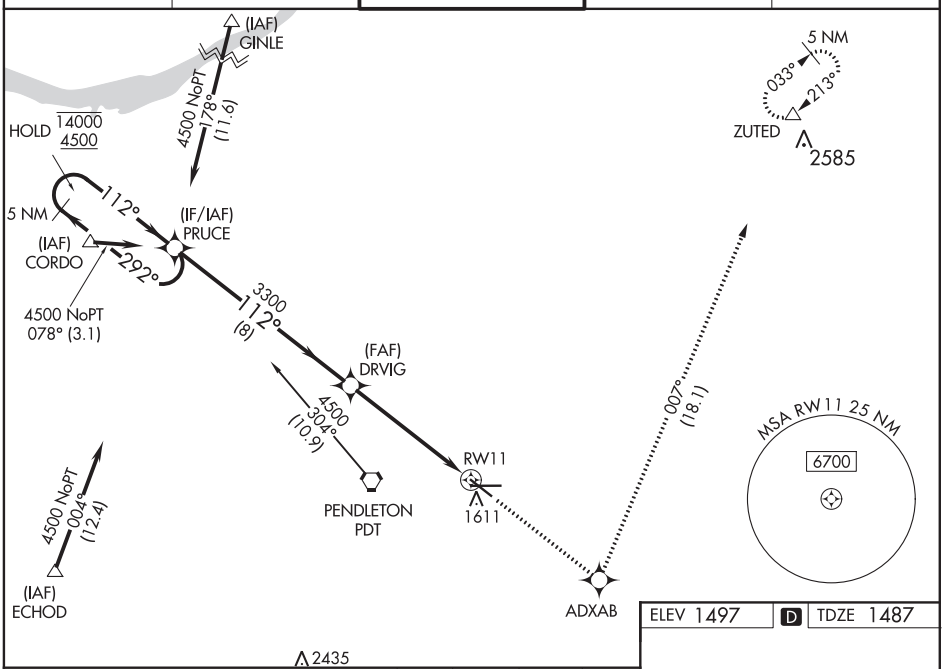
RNP APCH.

Baro-VNAV and VDP NA when using Walla Walla altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. When local altimeter setting not received, use Walla Walla altimeter setting and increase all DA/MDA 120 feet; VNAV all Cats visibility ⅛ SM, LNAV Cat C visibility ⅜ SM and Cat D visibility ⅛ SM, Circling Cat C visiblity ¼ SM and Circling Cat D visiblity ½ SM.

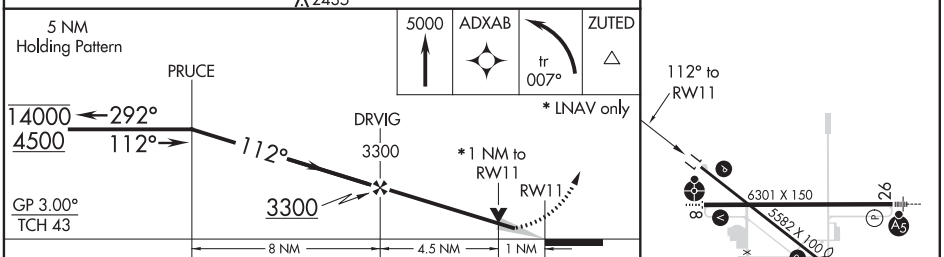
-22°C

MISSED APPROACH: Climb to 5000 direct ADXAB and on track 007° to ZUTED and hold.

| ASOS | CHINOOK APP CON★ | PENDLETON TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 118.325 | 133.15 379.15 | 119.7 (CTAF) L 257.8 | 121.9 257.8 | 122.95 |




ELEV 1497 D TDZE 1487




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 1737-1 250 (300-1) | | | |
| LNAV/VNAV DA | 1850-1¼ 363 (400-1¼) | | | |
| LNAV MDA | 1860-1 373 (400-1) | | | 1860-1¼ 373 (400-1¼) |
| C CIRCLING | 1920-1 423 (500-1) | 1960-1 463 (500-1) | 1980-1½ 483 (500-1½) | 2200-2¼ 703 (800-2¼) |

REIL Rwys 11 and 29 L
MIRL Rwy 11-29 L
HIRL Rwy 8-26 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 78412 W26A | APP CRS 254° | Rwy ldg 6301<br>TDZE 1487<br>Apt Elev 1497 |
|---|---|---|

# RNAV (GPS) RWY 26
## EASTERN OREGON RGNL AT PENDLETON (PDT)

RNP APCH.

Circling to Rwy 11 NA at night. Baro-VNAV and VDP NA when using Walla Walla altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. When local altimeter setting not received, use Walla Walla altimeter setting and increase LPV DA to 1809 feet and all Cats visibility to RVR 2600; increase LNAV/VNAV DA to 1922 and all Cats visibility to RVR 4000; increase all MDA 140 feet and LNAV Cat C and D visibilities to RVR 5500, Circling Cat C visibility ¼ SM, and Circling Cat D visibility ½ SM. For inop ALS, increase LNAV/VNAV all Cats visibility to RVR 4500. For inop ALS when using Walla Walla altimeter setting increase LPV all Cats visibility to RVR 5000.

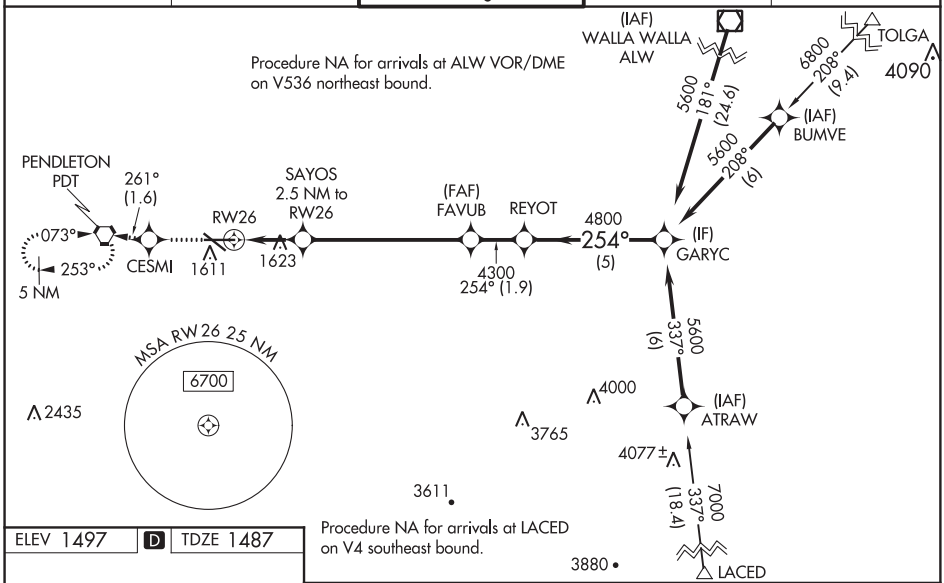
-22°C

# RVR 1800 authorized with the use of FD or AP or HUD to DA(NA when using Walla Walla altimeter setting).

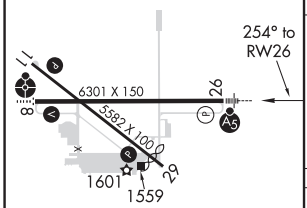
MALSR

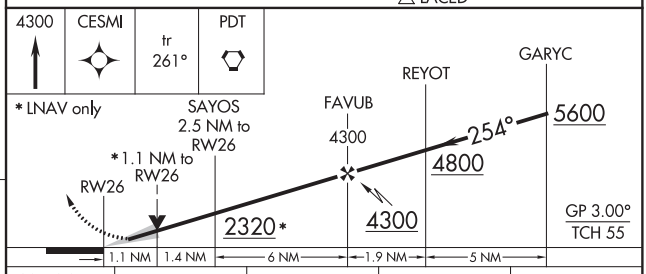
MISSED APPROACH: Climb to 4300 direct CESMI and on track 261° to PDT VORTAC and hold, continue climb-in-hold to 4300.

| ASOS | CHINOOK APP CON★ | PENDLETON TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 118.325 | 133.15 379.15 | 119.7 (CTAF) L 257.8 | 121.9 257.8 | 122.95 |




ELEV 1497 D TDZE 1487




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA # | 1687/24 200 (200-½) | | | |
| LNAV/VNAV DA | 1800/24 313 (400-½) | | | |
| LNAV MDA | 1880/24 393 (400-½) | | 1880/40 393 (400-¾) | |
| C CIRCLING | 1920-1 423 (500-1) | 1960-1 463 (500-1) | 1980-1½ 483 (500-1½) | 2200-2¼ 703 (800-2¼) |

REIL Rwys 11 and 29 L
MIRL Rwy 11-29 L
HIRL Rwy 8-26 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 42513 W29A | APP CRS 292° | Rwy ldg 5126<br>TDZE 1496<br>Apt Elev 1497 |
|---|---|---|

# RNAV (GPS) RWY 29
## EASTERN OREGON RGNL AT PENDLETON (PDT)

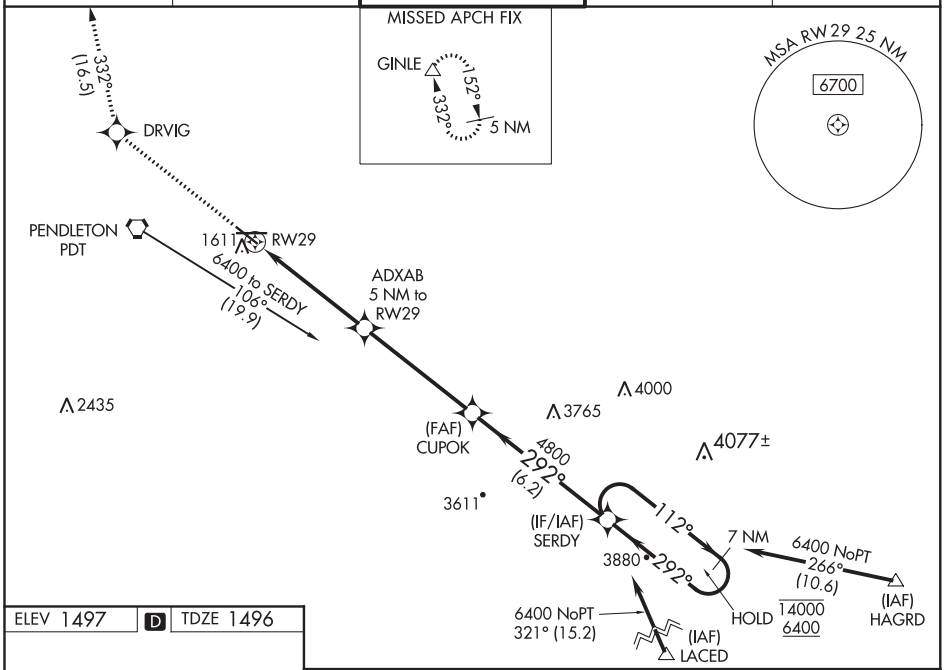
RNP APCH.

T A -22°C

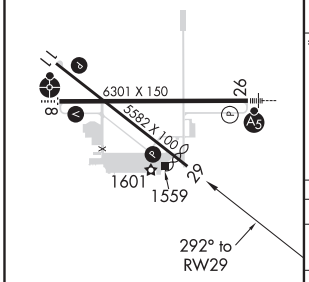
Baro-VNAV and VDP NA when using Walla Walla altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C or above 54°C. When local altimeter setting not received, use Walla Walla altimeter setting and increase all DA/MDA 120 feet, LNAV/VNAV all Cats visibility ¼ SM, LNAV Cat C visibility ¼ SM, Cat D visibility ⅛ SM, Circling Cat C visibility ¼ SM and Circling Cat D visibility ½ SM.

MISSED APPROACH: Climb to 5000 direct DRVIG and on track 332° to GINLE and hold.

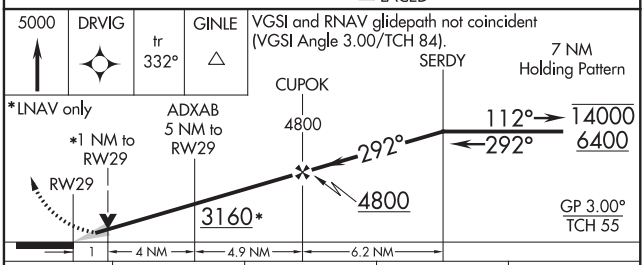
| ASOS | CHINOOK APP CON★ | PENDLETON TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 118.325 | 133.15 379.15 | 119.7 (CTAF) L 257.8 | 121.9 257.8 | 122.95 |




ELEV 1497 D TDZE 1496




REIL Rwys 11 and 29 L
MIRL Rwy 11-29 L
HIRL Rwy 8-26 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 1747-1 251 (300-1) | | | |
| LNAV/VNAV DA | 1801-1 305 (400-1) | | | |
| LNAV MDA | 1880-1 384 (400-1) | | 1880-1⅛ 384 (400-1⅛) | |
| C CIRCLING | 1920-1 423 (500-1) | 1960-1 463 (500-1) | 1980-1½ 483 (500-1½) | 2200-2¼ 703 (800-2¼) |




NW-1, 05 NOV 2020 to 31 DEC 2020

| VORTAC PDT 114.7 Chan 94 | APP CRS 079° | Rwy ldg 6301 TDZE 1486 Apt Elev 1497 |
|---|---|---|

# VOR RWY 8

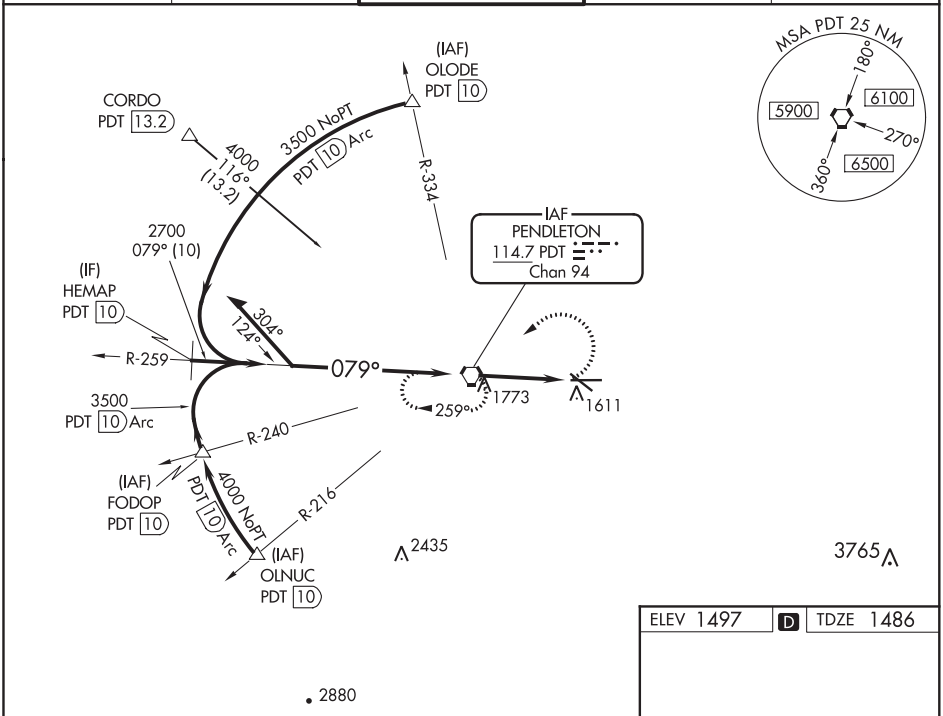
## EASTERN OREGON RGNL AT PENDLETON (PDT)

Circling to Rwy 11 NA at night. Rwy 8 helicopter visibility reduction below ¾ SM NA. VDP NA when using Walla Walla altimeter setting. When local altimeter setting not received, use Walla Walla altimeter setting and increase all MDA 140 feet, increase S-8 Cat C/D visibility to 1⅞ SM, Circling Cat C visibility ¼ SM and Cat D visibility ½ SM. For inop ALS, increase S-8 Cat C visibility to 1⅝ SM. For inop ALS when using Walla Walla altimeter setting, increase S-8 Cat C/D visibility to 2 SM. -22°C

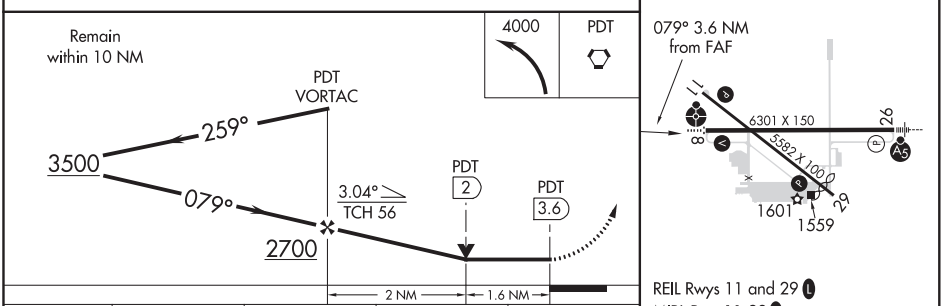
ODALS

MISSED APPROACH: Climbing left turn to 4000 direct PDT VORTAC and hold, continue climb-in-hold to 4000.

| ASOS | CHINOOK APP CON★ | PENDLETON TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 118.325 | 133.15 379.15 | 119.7 (CTAF)L 257.8 | 121.9 257.8 | 122.95 |




ELEV 1497 D TDZE 1486




REIL Rwys 11 and 29 L
MIRL Rwy 11-29 L
HIRL Rwy 8-26 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-8 | 2040-¾ 554 (600-¾) | | 2040-1½ 554 (600-1½) | 2040-1¾ 554 (600-1¾) |
| C CIRCLING | 2040-1 543 (600-1) | | 2040-1⅝ 543 (600-1⅝) | 2200-2¼ 703 (800-2¼) |

FAF to MAP 3.6 NM

| Knots | 60 | 90 | 120 | 150 | 180 |
|---|---|---|---|---|---|
| Min:Sec | 3:36 | 2:24 | 1:48 | 1:26 | 1:12 |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

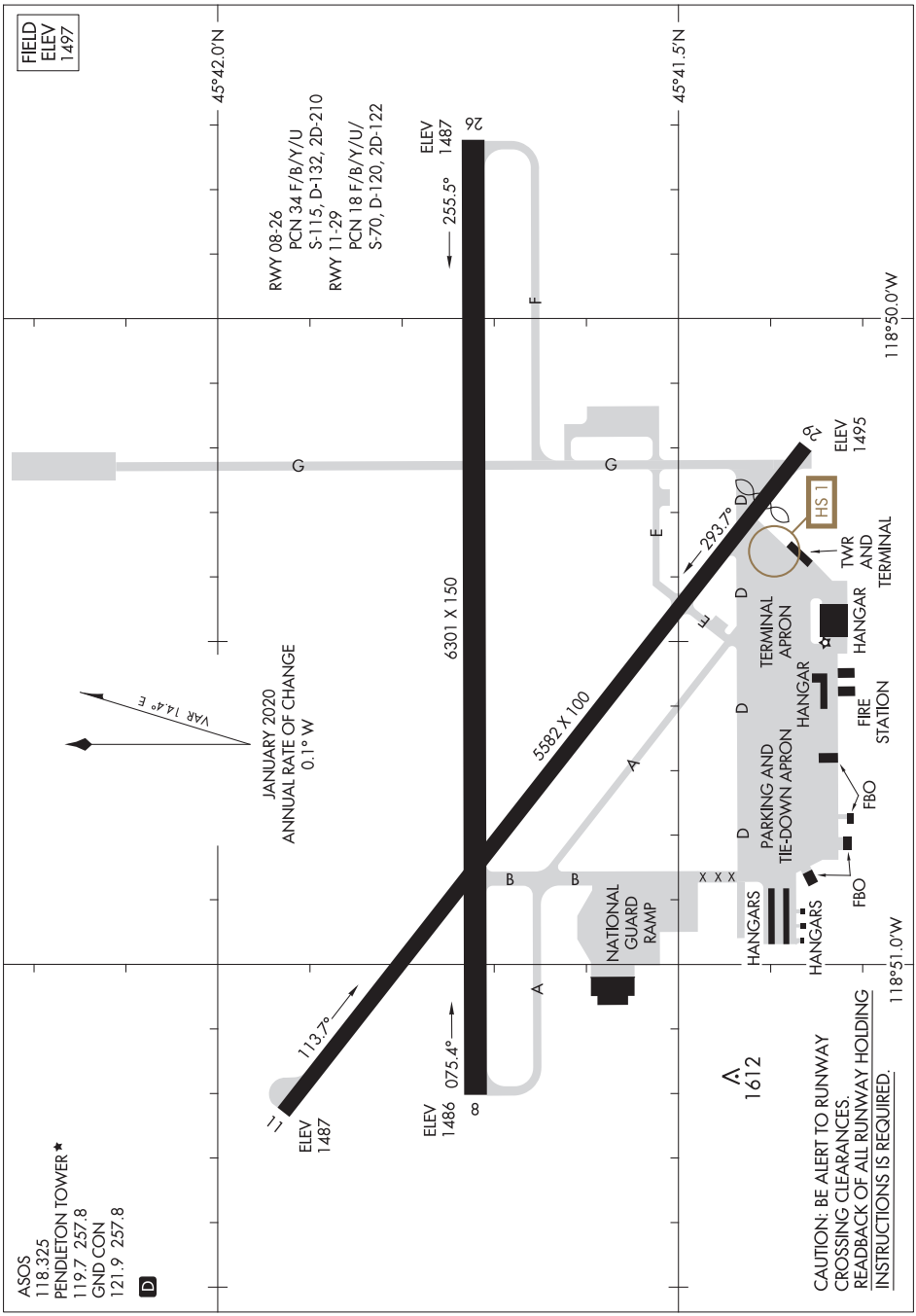
20086

# AIRPORT DIAGRAM

## EASTERN OREGON RGNL AT PENDLETON (PDT)

AL-316 (FAA)

PENDLETON, OREGON




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM

20086

EASTERN OREGON RGNL AT PENDLETON (PDT)

PENDLETON, OREGON

| WAAS CH 58326 W11A | APP CRS 110° | Rwy ldg 8900<br>TDZE 7096<br>Apt Elev 7096 |
|---|---|---|

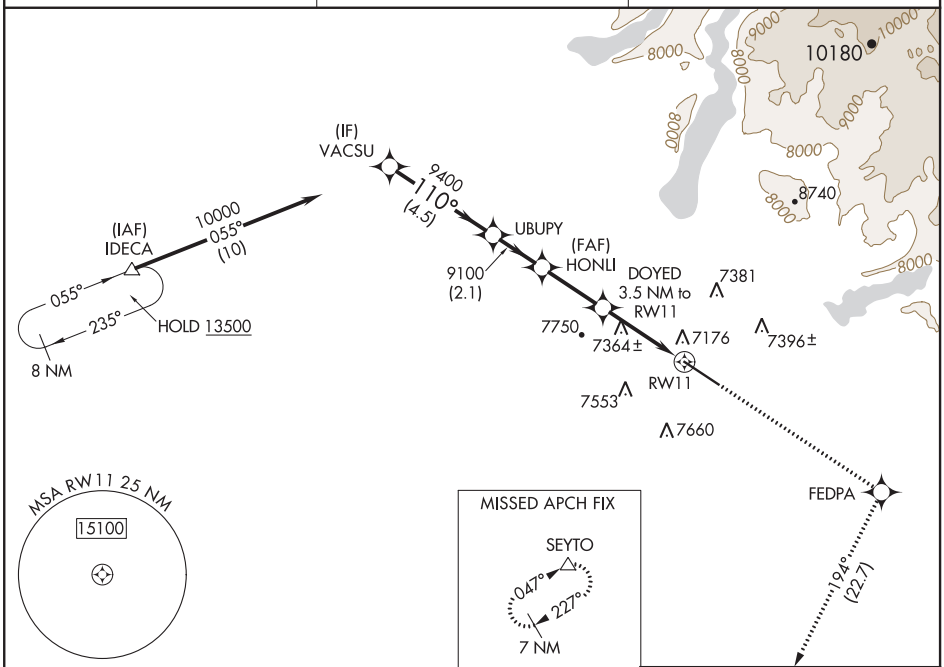
# RNAV (GPS) RWY 11
## RALPH WENZ FIELD (PNA)

Baro-VNAV NA. When local altimeter setting not received, use Big Piney altimeter setting and increase all DA 58 feet and all MDA 60 feet; increase LPV and LNAV/VNAV all Cats, LNAV and Circling Cat C/D visibility ¼ mile. Circling NA south of Rwy 11/29. DME/DME RNP- 0.3 NA. VDP NA with Big Piney altimeter setting.

ODALS

MISSED APPROACH: Climb to 10000 direct FEDPA and on track 194° to SEYTO and hold.

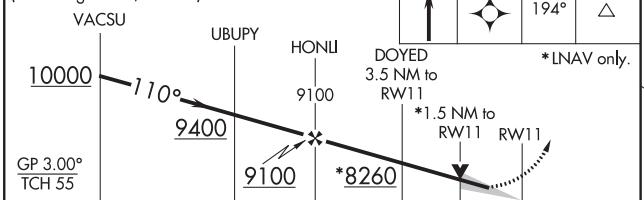
| AWOS-3 | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 118.325 | 128.35 239.25 | 122.8 (CTAF) L |

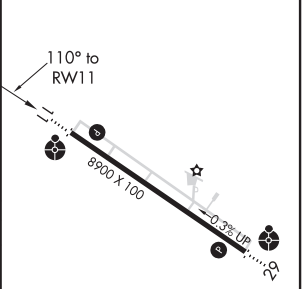



VGSI and RNAV glidepath not coincident (VGSI Angle 2.83/TCH 40).

| 10000 | FEDPA | tr 194° | SEYTO |
|---|---|---|---|

ELEV 7096 TDZE 7096




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 7346-¾ 250 (300-¾) | | | |
| LNAV/VNAV DA | 7355-¾ 259 (300-¾) | | | |
| LNAV MDA | 7620-1 524 (600-1) | | 7620-1½ 524 (600-1½) | |
| CIRCLING | 7620-1 524 (600-1) | | 7640-1½ 544 (600-1½) | 7720-2 624 (700-2) |

MIRL Rwy 11-29 L
REIL Rwys 11 and 29 L




NW-1, 05 NOV 2020 to 31 DEC 2020

PINEDALE, WYOMING | AL-6884 (FAA) | 19227

# RNAV (GPS) RWY 29
## RALPH WENZ FIELD (PNA)

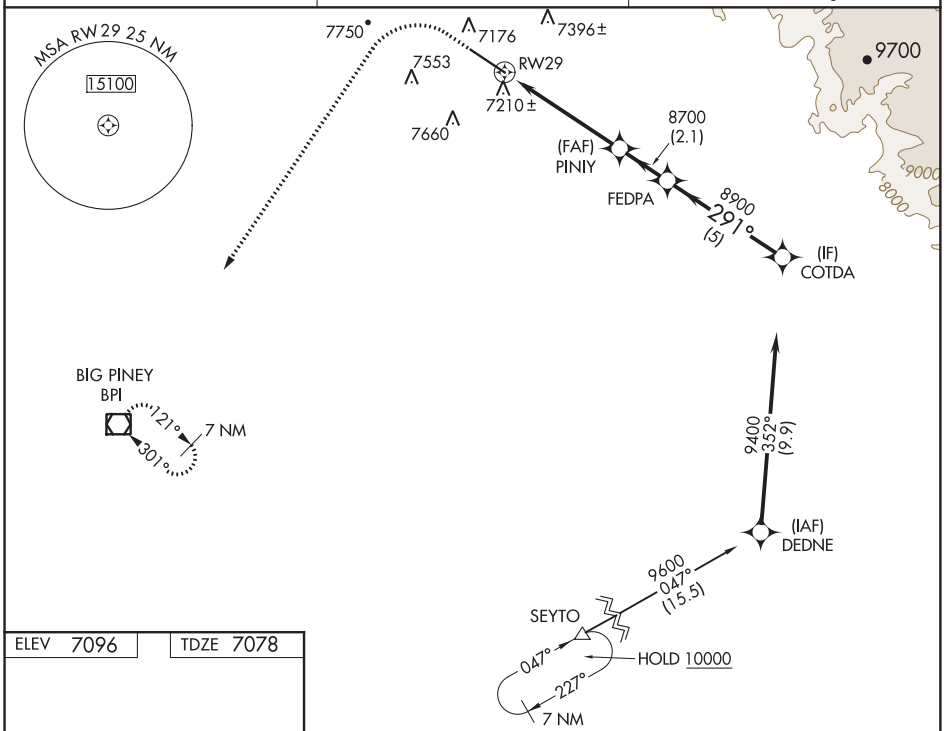
| WAAS CH 40426 W29A | APP CRS 291° | Rwy ldg 8900<br>TDZE 7078<br>Apt Elev 7096 |
|---|---|---|

Baro-VNAV NA. When local altimeter setting not received, use Big Piney altimeter setting and increase all DA 58 feet and all MDA 60 feet; increase LPV all Cats, LNAV and Circling Cat C/D visibility ¼ mile, and LNAV/VNAV all Cats visibility ⅛ mile. Circling NA south of Rwy 11/29. DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA. VDP NA with Big Piney altimeter setting.

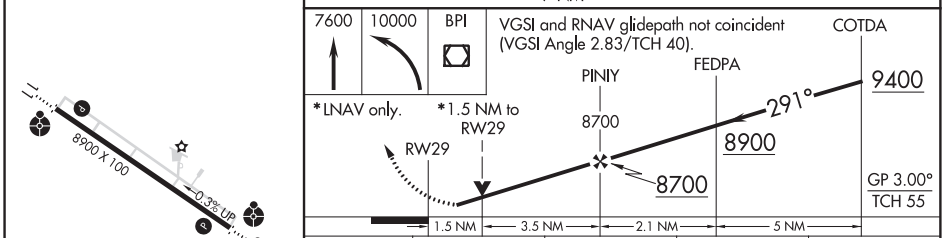
ODALS

MISSED APPROACH: Climb to 7600 then climbing left turn to 10000 direct BPI VOR/DME and hold.

| AWOS-3 | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 118.325 | 128.35 239.25 | 122.8 (CTAF) L |




ELEV 7096 | TDZE 7078




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 7328-¾ 250 (300-¾) | | | |
| LNAV/VNAV DA | 7606-1¾ 528 (600-1¾) | | | |
| LNAV MDA | 7600-1 522 (600-1) | | 7600-1½ 522 (600-1½) | |
| CIRCLING | 7600-1 504 (600-1) | | 7640-1½ 544 (600-1½) | 7720-2 624 (700-2) |

MIRL Rwy 11-29 L
REIL Rwys 11 and 29 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

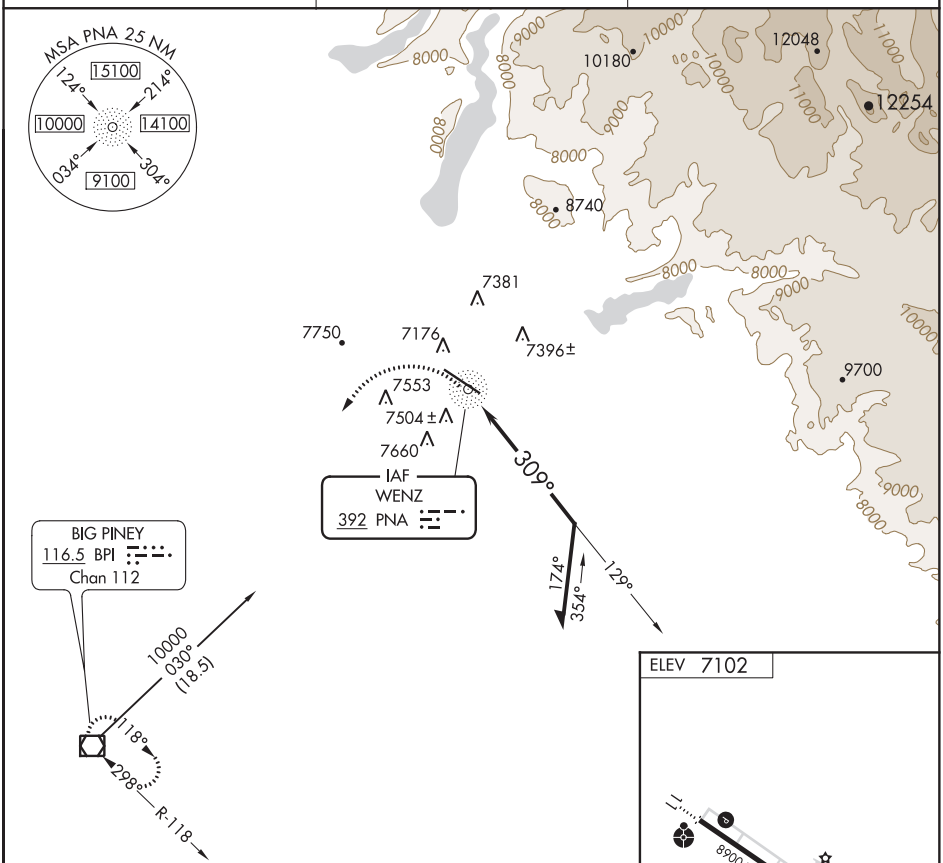
| NDB PNA | APP CRS | Rwy Idg | N/A |
|---|---|---|---|
| 392 | 309° | TDZE | N/A |
| | | Apt Elev | 7102 |

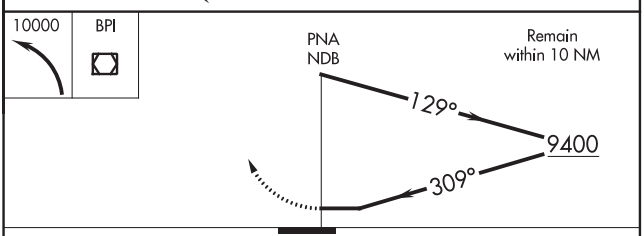
# NDB-A
## RALPH WENZ FIELD (PNA)

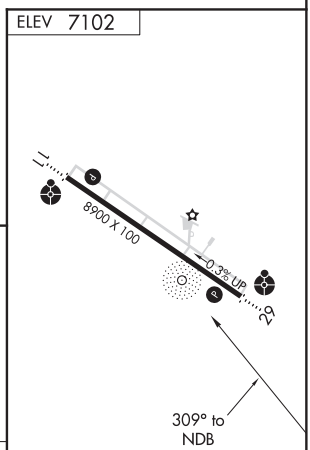
When local altimeter setting not received, use Miley Memorial Field altimeter setting and increase all MDA 60 feet and visibility Cat C/D ¼ mile.

MISSED APPROACH: Climbing left turn to 10000 direct BPI VOR/DME and hold.

| AWOS-3 | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 118.325 | 128.35 239.25 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 7940-1¼ 838 (900-1¼) | | 7940-2½ 838 (900-2½) | 7940-2¾ 838 (900-2¾) |

MIRL Rwy 11-29 L
REIL Rwys 11 and 29 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

PLENTYWOOD, MONTANA AL-10315 (FAA) 20170

| WAAS CH 97729 W12A | APP CRS 122° | Rwy ldg 3900<br>TDZE 2252<br>Apt Elev 2264 |
|---|---|---|

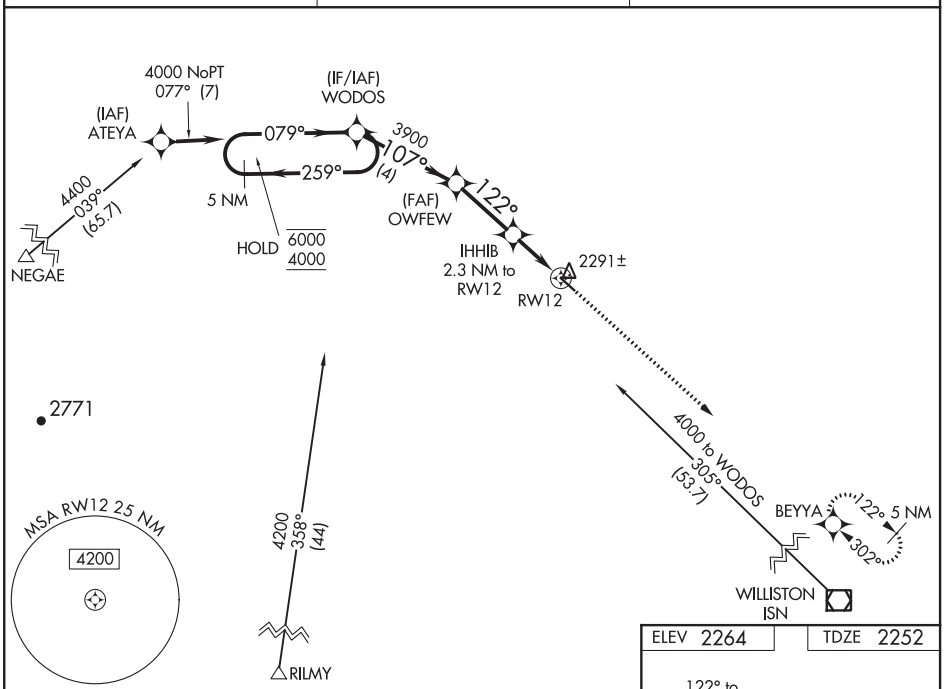
# RNAV (GPS) RWY 12
SHER-WOOD (PWD)

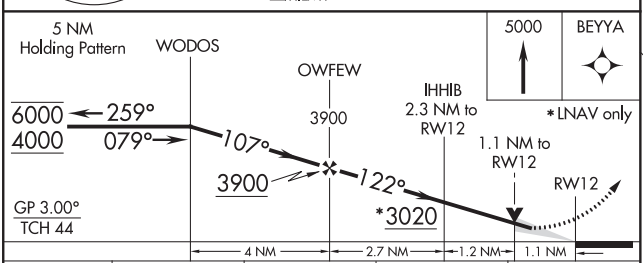
RNP APCH.

T A Circling Rwy 8, 26 NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C or above 54°C. When local altimeter setting not received, use Williston altimeter setting.

MISSED APPROACH: Climb to 5000 direct BEYYA and hold.

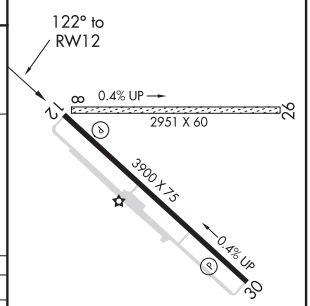
| AWOS-3 | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.025 | 126.85 305.2 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2567-⅞ 315 (400-⅞) | | | |
| LNAV/VNAV DA | 2617-1 365 (400-1) | | | |
| LNAV MDA | 2660-1 408 (400-1) | | 2660-1⅛ 408 (400-1⅛) | |
| C CIRCLING | 2780-1 516 (600-1) | | 2880-1¾ 616 (700-1¾) | 3100-2¾ 836 (900-2¾) |

ELEV 2264 TDZE 2252




MIRL Rwy 12-30 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

PLENTYWOOD, MONTANA
Orig-C 18JUN20

48°47′N-104°31′W

SHER-WOOD (PWD)
RNAV (GPS) RWY 12

| WAAS CH 50529 W30A | APP CRS 302° | Rwy ldg 3900 TDZE 2247 Apt Elev 2264 |
|---|---|---|

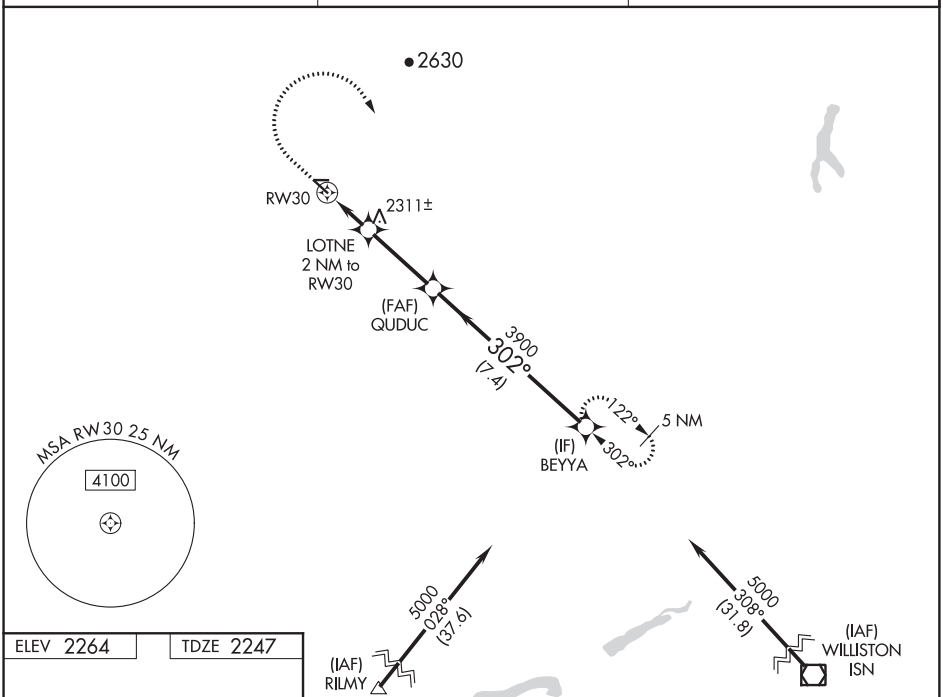
# RNAV (GPS) RWY 30
## SHER-WOOD (PWD)

RNP APCH.

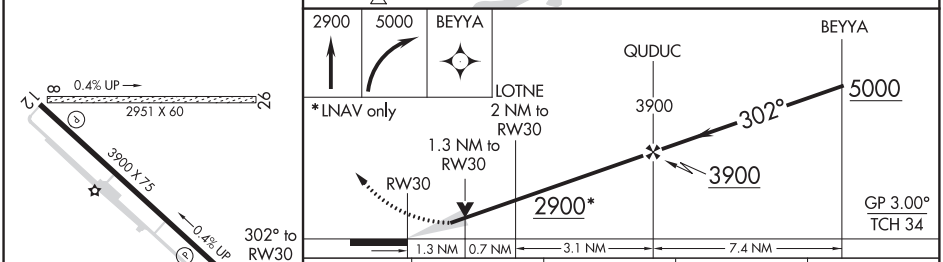
Circling Rwy 8, 26 NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C or above 54°C. When local altimeter setting not received, use Williston altimeter setting.

MISSED APPROACH: Climb to 2900 then climbing right turn to 5000 direct BEYYA and hold.

| AWOS-3 | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.025 | 126.85 305.2 | 122.8 (CTAF) L |




ELEV 2264 TDZE 2247




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2562-¾ 315 (300-¾) | | | |
| LNAV/VNAV DA | 2612-1 365 (400-1) | | | |
| LNAV MDA | 2680-1 433 (500-1) | | 2680-1¼ 433 (500-1¼) | |
| C CIRCLING | 2780-1 516 (600-1) | | 2880-1¾ 616 (700-1¾) | 3100-2¾ 836 (900-2¾) |

MIRL Rwy 12-30 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

POCATELLO, IDAHO | AL-327 (FAA) | 20198

# ILS or LOC RWY 21
## POCATELLO RGNL (PIH)

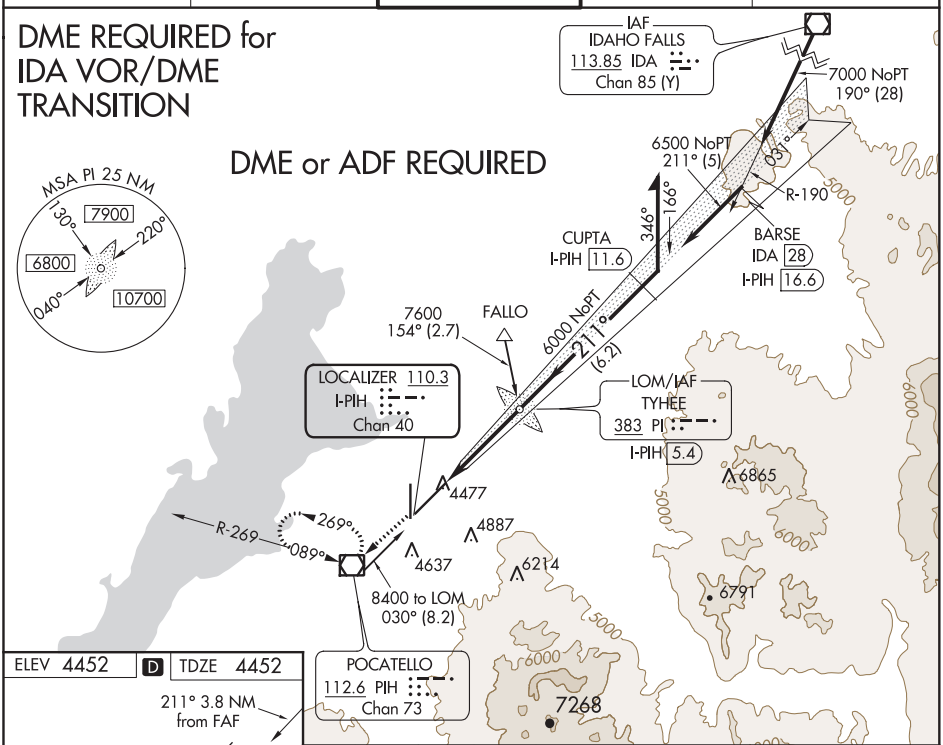
| LOC/DME I-PIH | APP CRS | Rwy ldg | 9059 |
|---|---|---|---|
| 110.3 | 211° | TDZE | 4452 |
| Chan 40 | | Apt Elev | 4452 |

Circling NA southeast of Rwy 3-21. For inoperative MALSR, increase S-ILS-21 Cat E visibility to RVR 4000, and S-LOC-21 Cat E visibility to RVR 5000.
# RVR 1800 authorized with the use of FD or AP or HUD to DA.

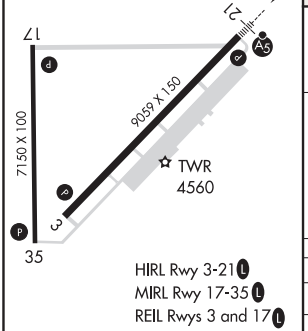
MALSR

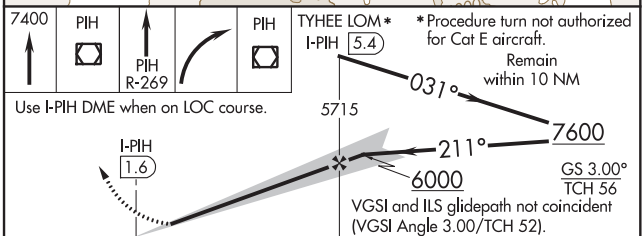
MISSED APPROACH: Climb to 7400 direct PIH VOR/DME, continue climb via PIH VOR/DME R-269, then right turn direct PIH VOR/DME and hold.

| ATIS | SALT LAKE CENTER | POCATELLO TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 135.625 | 128.35 239.25 | 119.1 (CTAF) L 257.8 | 121.9 | 122.95 |




ELEV 4452 | D | TDZE 4452




| 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-ILS 21 # | 4652/24 200 (200-½) | | | | |
| S-LOC 21 | 4740/24 288 (300-½) | | | 4740/40 288 (300-¾) | |
| CIRCLING | 4820-1 368 (400-1) | 4920-1 468 (500-1) | 4920-1½ 468 (500-1½) | 5020-2 568 (600-2) | |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

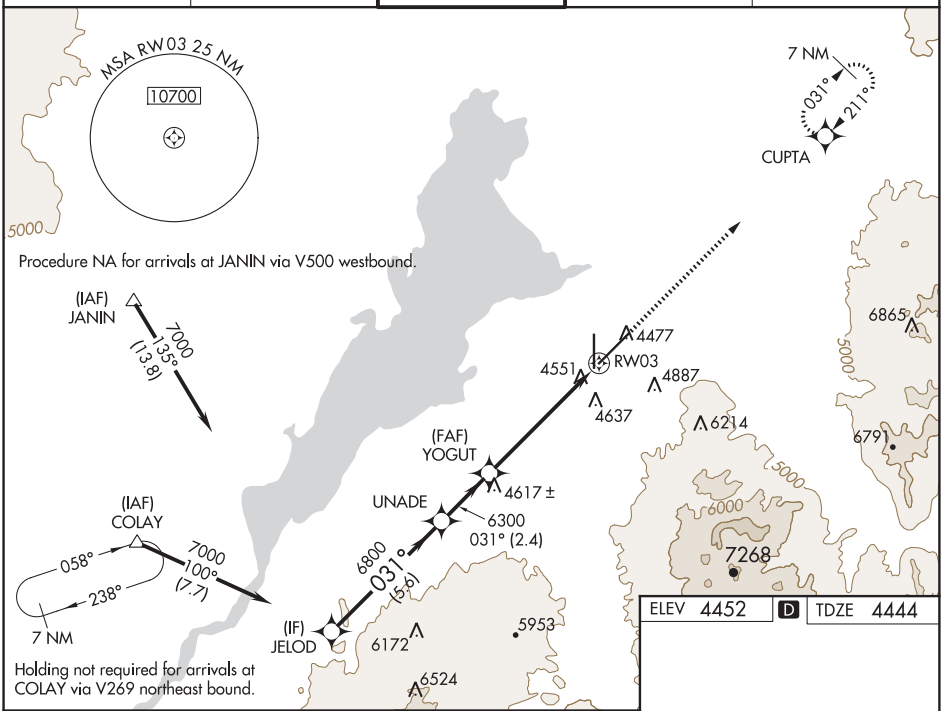
| WAAS CH 97502 W03A | APP CRS 031° | Rwy ldg 9059<br>TDZE 4444<br>Apt Elev 4452 |
|---|---|---|

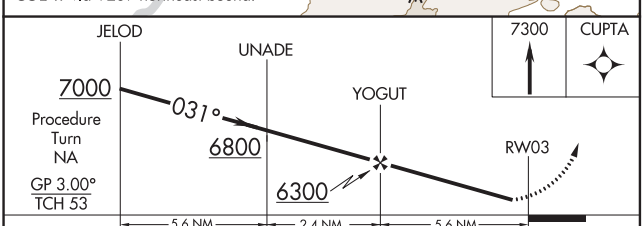
# RNAV (GPS) RWY 3
## POCATELLO RGNL (PIH)

T A Circling NA southeast of Rwy 3-21. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C (9°F) or above 40°C (104°F). If local altimeter setting not received, use Idaho Falls Rgnl altimeter setting and increase all DAs/MDAs 140 feet. Baro-VNAV NA when using Idaho Falls Rgnl altimeter setting.

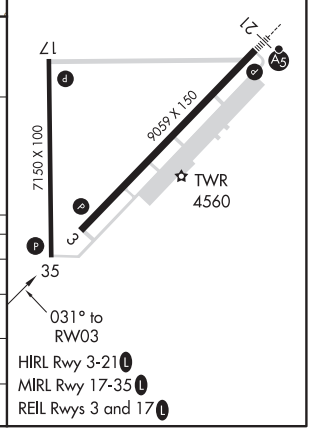
MISSED APPROACH: Climb to 7300 direct CUPTA and hold.

| ATIS | SALT LAKE CENTER | POCATELLO TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 135.625 | 128.35 239.25 | 119.1 (CTAF) L 257.8 | 121.9 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4694-1 250 (300-1) | | | |
| LNAV/VNAV DA | 4978-1¾ 534 (600-1¾) | | | |
| LNAV MDA | 4880-1 436 (500-1) | | 4880-1¼ 436 (500-1¼) | 4880-1½ 436 (500-1½) |
| CIRCLING | 4980-1 528 (600-1) | | 4980-1½ 528 (600-1½) | 5020-2 568 (600-2) |




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# RNAV (GPS) RWY 21
## POCATELLO RGNL (PIH)

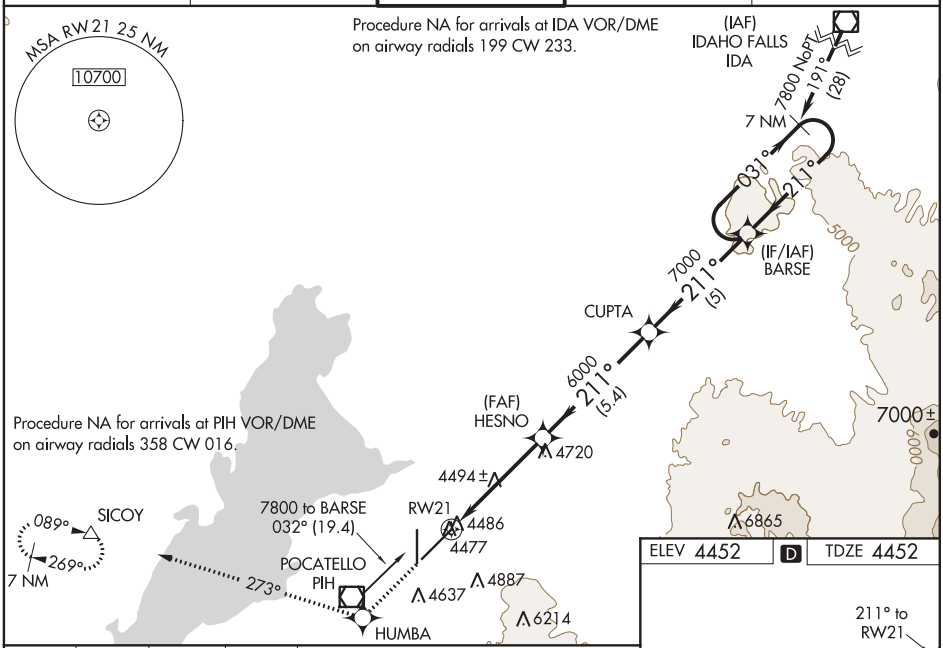
| WAAS CH 78212 W21A | APP CRS 211° | Rwy ldg 9059<br>TDZE 4452<br>Apt Elev 4452 |
|---|---|---|

T Inoperative table does not apply to LNAV Cat D. For inoperative MALSR when using Idaho Falls altimeter setting, increase LPV all Cats visibility to 1¼ mile.
A For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -23°C (-9°F) or above 39°C (102°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Idaho Falls altimeter setting and increase all DA and MDA 140 feet; increase LPV all Cats, LNAV Cat C, and Circling Cat C and D visibility ¼ mile, increase LNAV/VNAV all Cats visibility ½ mile. Baro-VNAV and VDP NA when using Idaho Falls altimeter setting. Circling NA southeast of Rwy 3-21.
# RVR 1800 authorized with use of FD or AP or HUD to DA, NA when using Idaho Falls altimeter setting.

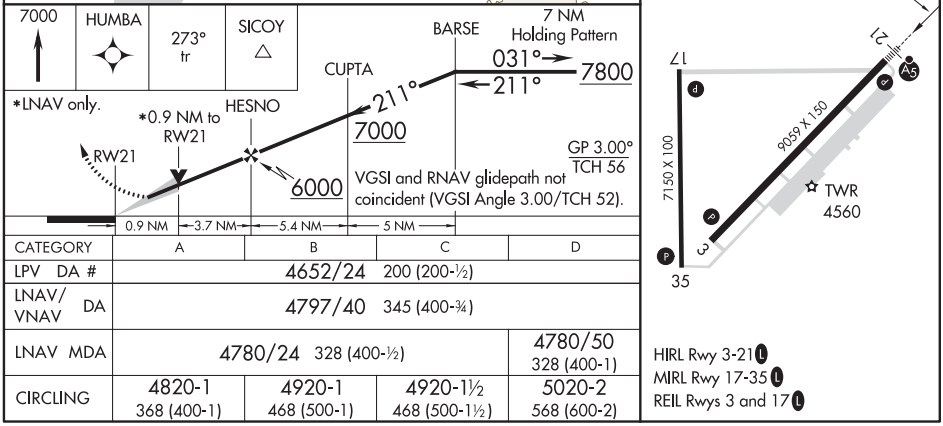
MALSR A5

MISSED APPROACH: Climb to 7000 direct HUMBA and on 273° track to SICOY and hold.

| ATIS | SALT LAKE CENTER | POCATELLO TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 135.625 | 128.35 239.25 | 119.1 (CTAF) L 257.8 | 121.9 | 122.95 |




ELEV 4452 D TDZE 4452




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA # | 4652/24 200 (200-½) | | | |
| LNAV/VNAV DA | 4797/40 345 (400-¾) | | | |
| LNAV MDA | 4780/24 328 (400-½) | | | 4780/50 328 (400-1) |
| CIRCLING | 4820-1 368 (400-1) | 4920-1 468 (500-1) | 4920-1½ 468 (500-1½) | 5020-2 568 (600-2) |

HIRL Rwy 3-21 L
MIRL Rwy 17-35 L
REIL Rwys 3 and 17 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

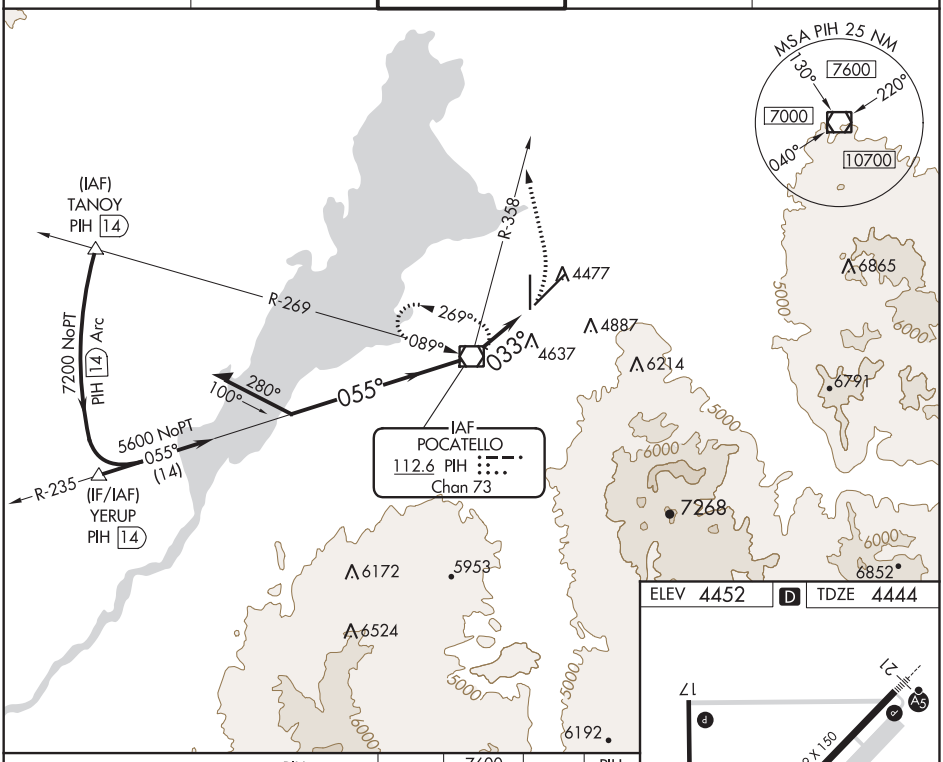
| VOR/DME PIH | APP CRS | Rwy ldg | 9059 |
|---|---|---|---|
| 112.6 | 033° | TDZE | 4444 |
| Chan 73 | | Apt Elev | 4452 |

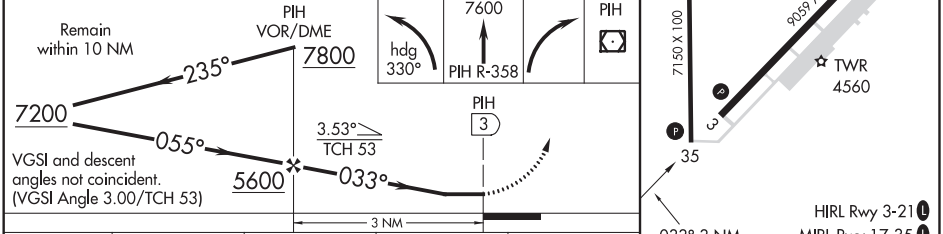
# VOR RWY 3
## POCATELLO RGNL (PIH)

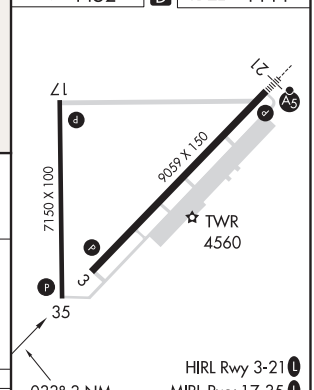
Circling to Rwy 35 NA at night. When VGSI inop, Straight-In/Circling Rwy 3 procedure NA at night. Circling NA southeast of Rwy 3-21. Visibility reduction by helicopters NA. When local altimeter setting not received, use Idaho Falls altimeter setting and increase all MDA 140 feet, and increase visibility S-3 Cat C ½ mile and Circling Cat C ¼ mile.

MISSED APPROACH: Climbing left turn on heading 330° and PIH VOR/DME R-358 to 7600 then right turn direct PIH VOR/DME and hold.

| ATIS | SALT LAKE CENTER | POCATELLO TOWER* | GND CON | UNICOM |
|---|---|---|---|---|
| 135.625 | 128.35 239.25 | 119.1 (CTAF) L 257.8 | 121.9 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-3 | 4940-1 496 (500-1) | | 4940-1⅜ 496 (500-1⅜) | NA |
| CIRCLING | 5000-1 548 (600-1) | 5020-1 568 (600-1) | 5060-1¾ 608 (700-1¾) | NA |

| FAF to MAP 3 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 3:00 | 2:00 | 1:30 | 1:12 | 1:00 |

NW-1, 05 NOV 2020 to 31 DEC 2020

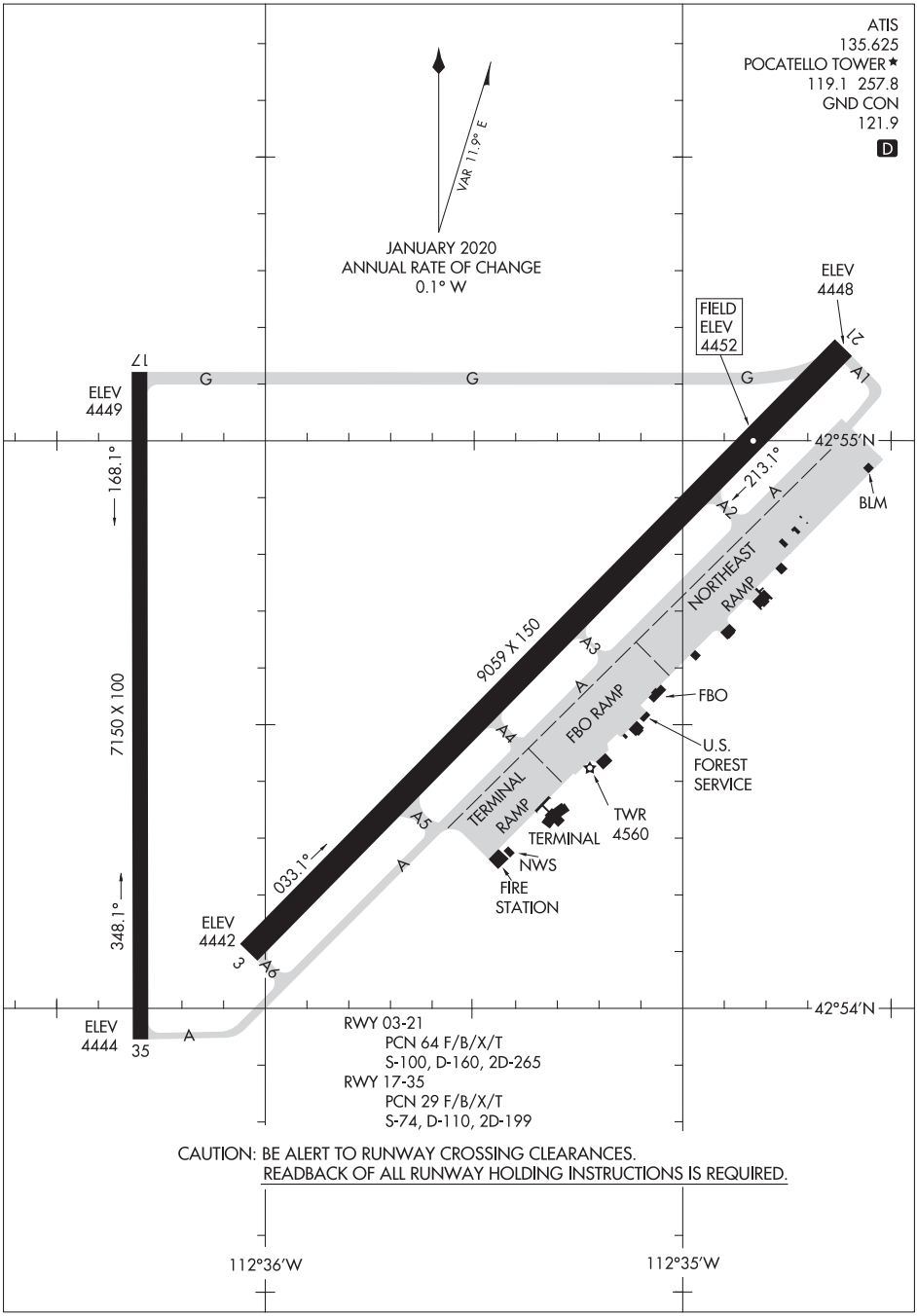
NW-1, 05 NOV 2020 to 31 DEC 2020

20198

# AIRPORT DIAGRAM

AL-327 (FAA)

POCATELLO RGNL (PIH)
POCATELLO, IDAHO




NW-1, 05 NOV 2020 to 31 DEC 2020

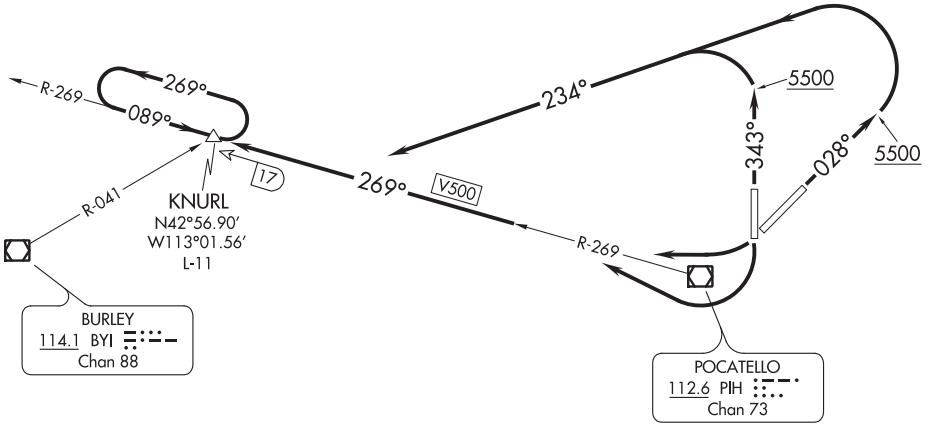
NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM
20198
POCATELLO, IDAHO
POCATELLO RGNL (PIH)

# KNURL ONE DEPARTURE (OBSTACLE)

SL-327 (FAA)

BOISE RADIO
122.6
POCATELLO TOWER ★
119.1 (CTAF) 257.8
SALT LAKE CENTER
128.35 239.25




TAKEOFF MINIMUMS

Rwys 3, 21, 35: Standard.
Rwy 17, 400-2 or standard with minimum climb of 270′ per NM to 4900.

TAKEOFF OBSTACLE NOTES

Rwy 3, Trees beginning 3353′ from DER, 735′ left of centerline, up to 100′ AGL/4549′ MSL.
Rod on obstruction light 978′ from DER, 759′ right of centerline, 39′ AGL/4486′ MSL.
Rwy 17, Transmission tower 1.1 NM from DER, 2395′ left of centerline, 252′ AGL/4693′ MSL.
Trees beginning 1.6 NM from DER, 2642′ left of centerline, up to 100′ AGL/4759′ MSL.
Fence 112′ from DER, 416′ right of centerline, 12′ AGL/4453′ MSL.
Bush 30′ from DER, 261′ right of centerline, 3′ AGL/4445′ MSL.
Fence 208′ from DER, 421′ right of centerline, 13′ AGL/4449′ MSL.
Rwy 21, Antenna 453′ from DER, 309′ left of centerline, 20′ AGL/4466′ MSL.
Light on localizer, 543′ from DER, 286′ left of centerline, 20′ AGL/4462′ MSL.
Rwy 35, Electrical equipment 197′ from DER, 248′ left of centerline, 7′ AGL/4454′ MSL.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 3: Climb heading 028° to 5500, then climbing left turn to 7500 via heading 234° and PIH R-269 to KNURL INT, thence . . . .
TAKEOFF RUNWAY 35: Climb heading 343° to 5500, then climbing left turn to 7500 via heading 234° and PIH R-269 to KNURL INT, thence . . . .
TAKEOFF RUNWAY 17: Climbing right turn to 7500 via PIH R-269 to KNURL INT, thence . . . .
TAKEOFF RUNWAY 21: Climbing right turn to 7500 via PIH R-269 to KNURL INT, thence . . . .

. . . . via assigned route expect filed altitude 10 minutes after departure.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

POLSON, MONTANA AL-9529 (FAA) 19339

# RNAV (GPS) RWY 18
POLSON (8S1)

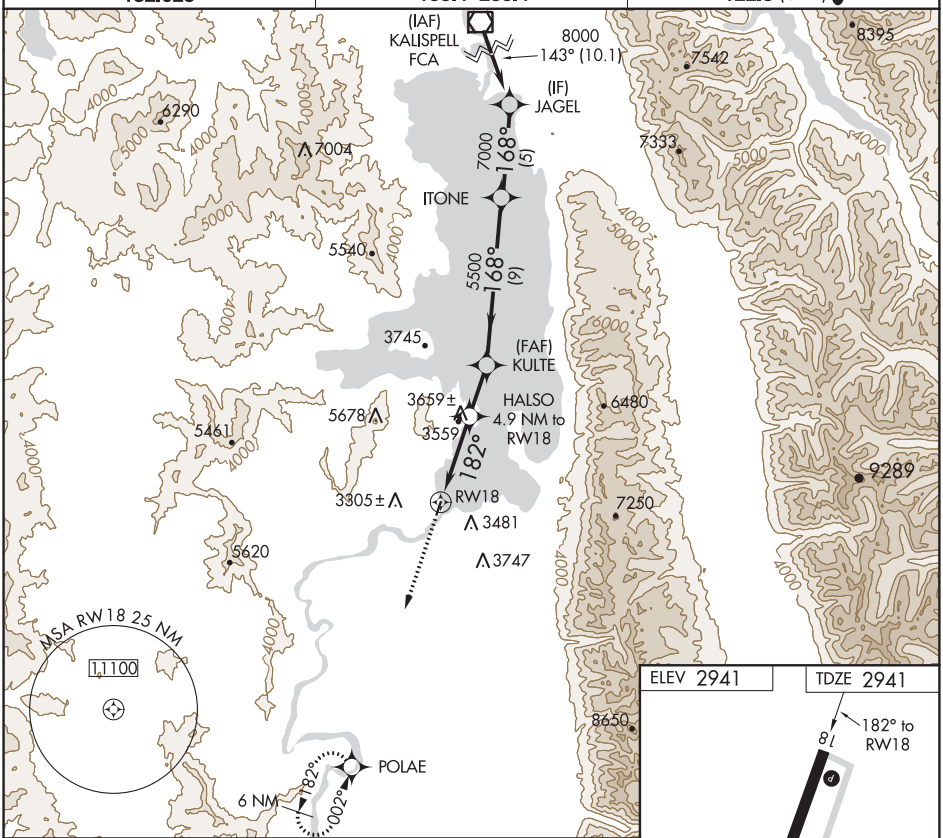
| APP CRS | Rwy ldg | 4195 |
|---|---|---|
| 182° | TDZE | 2941 |
| | Apt Elev | 2941 |

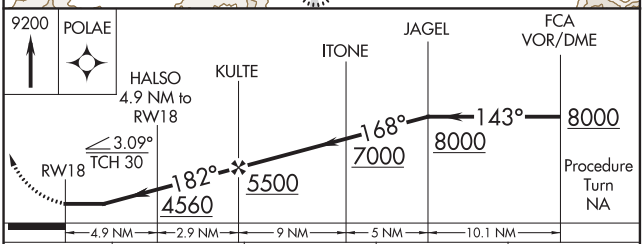
T NA

Procedure NA at night. DME/DME RNP-0.3 NA.
Use Glacier Park Intl altimeter setting.
Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 9200 direct POLAE and hold.

| GPI ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 132.625 | 133.4 285.4 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 4480-1¼<br>1539 (1600-1¼ ) | 4480-1½<br>1539 (1600-1½) | NA | |
| CIRCLING | 4480-1¼<br>1539 (1600-1¼ ) | 4480-1½<br>1539 (1600-1½) | NA | |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 4195 |
|---|---|---|
| 013° | TDZE | 2941 |
| | Apt Elev | 2941 |

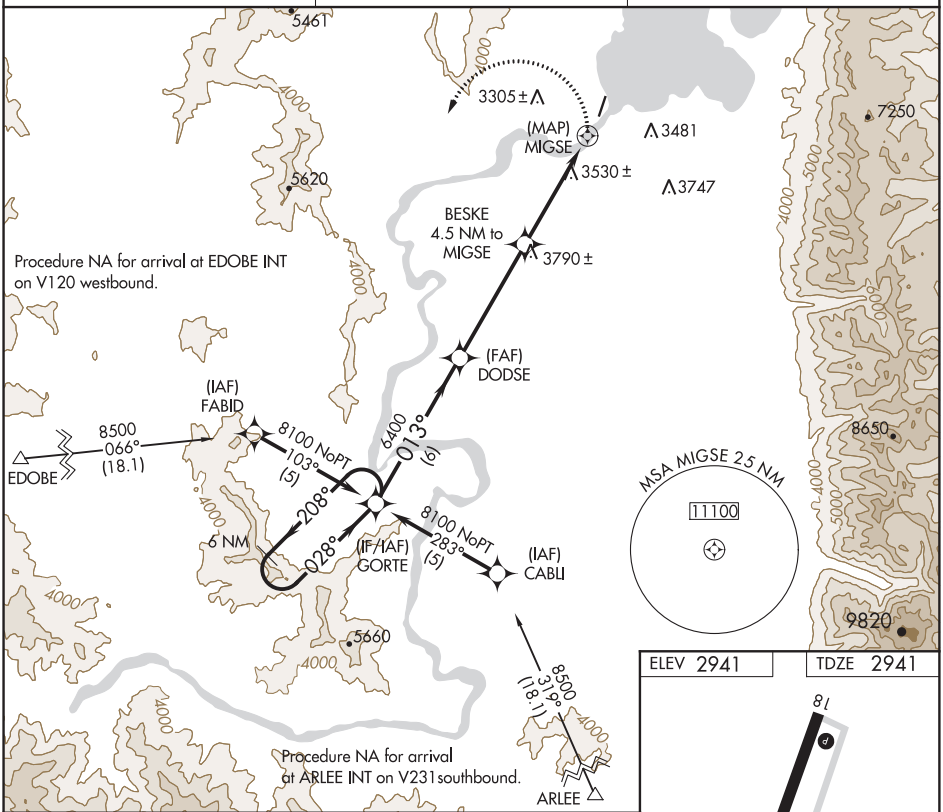
# RNAV (GPS) RWY 36
## POLSON (8S1)

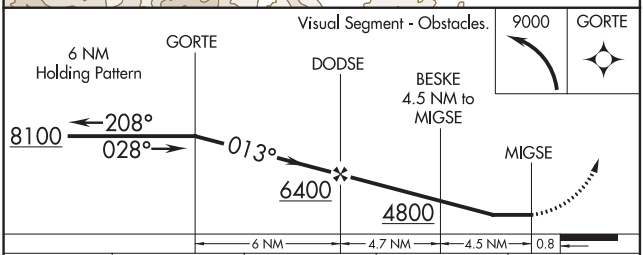
NA

Procedure NA at night. DME/DME RNP-0.3 NA.
Use Glacier Park Intl altimeter setting.
Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climbing left turn to 9000 direct GORTE WP and hold.

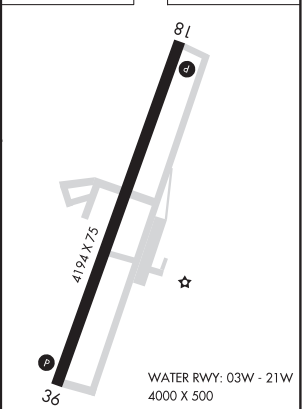
| GPI ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 132.625 | 133.4 285.4 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV | 4340-1¼<br>1399 (1400-1¼ ) | 4340-1½<br>1399 (1400-1½) | NA | |
| CIRCLING | 4340-1¼<br>1399 (1400-1¼ ) | 4340-1½<br>1399 (1400-1½) | NA | |

| ELEV 2941 | TDZE 2941 |
|---|---|




MIRL Rwy 18-36 L

NW-1, 05 NOV 2020 to 31 DEC 2020

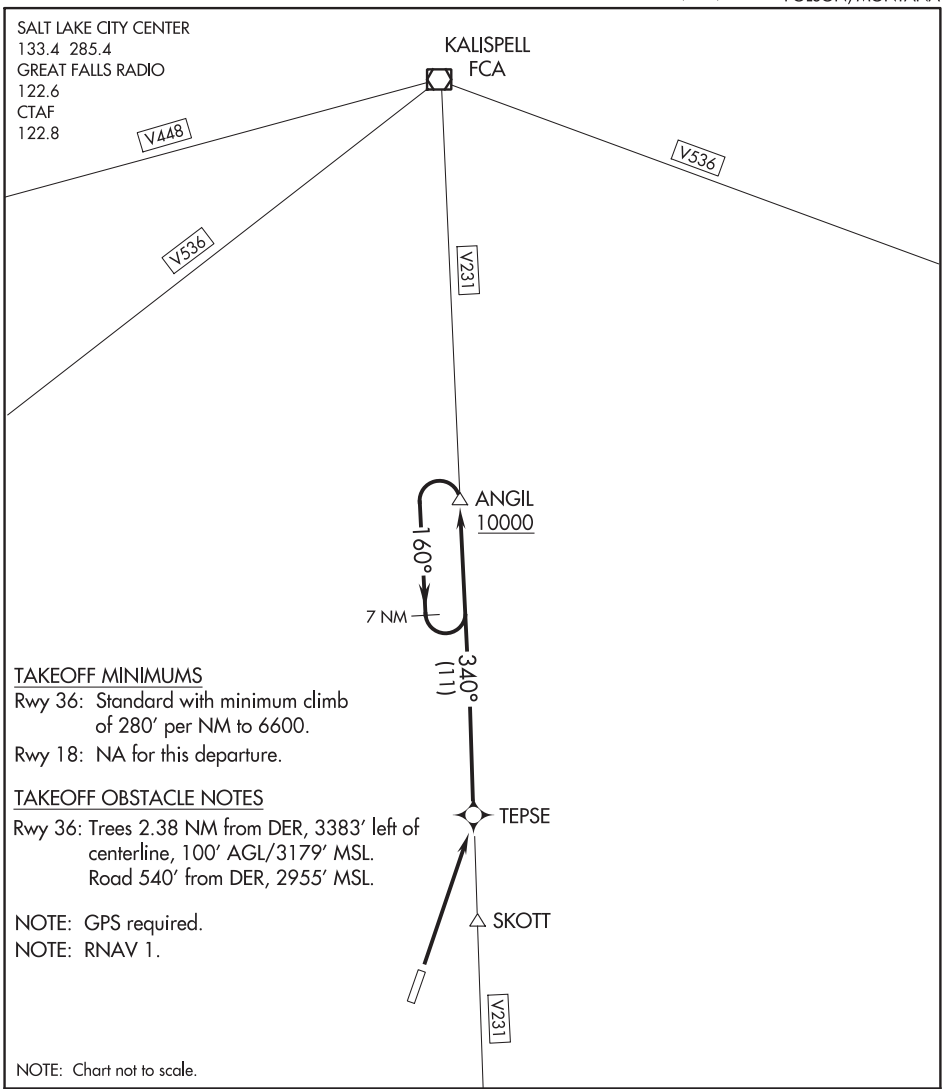
NW-1, 05 NOV 2020 to 31 DEC 2020

(ANGIL1.ANGIL) 16147

# ANGIL ONE DEPARTURE (OBSTACLE) (RNAV)

SL-9529 (FAA)

POLSON (8S1)
POLSON, MONTANA




TAKEOFF MINIMUMS

Rwy 36: Standard with minimum climb of 280′ per NM to 6600.

Rwy 18: NA for this departure.

TAKEOFF OBSTACLE NOTES

Rwy 36: Trees 2.38 NM from DER, 3383′ left of centerline, 100′ AGL/3179′ MSL.
Road 540′ from DER, 2955′ MSL.

NOTE: GPS required.
NOTE: RNAV 1.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 36: Climb direct to TEPSE WP, then via 340° track to ANGIL, Thence. . . .

. . . .Climb in the ANGIL holding pattern to cross ANGIL at or above 10000 prior to proceeding on course.



NW-1, 05 NOV 2020 to 31 DEC 2020

ANGIL ONE DEPARTURE (OBSTACLE) (RNAV)

POLSON, MONTANA
POLSON (8S1)

(ANGIL1.ANGIL) 30SEP04

| WAAS CH **66031** **W09A** | APP CRS **095°** | Rwy ldg **4403** TDZE **2033** Apt Elev **2037** |
|---|---|---|

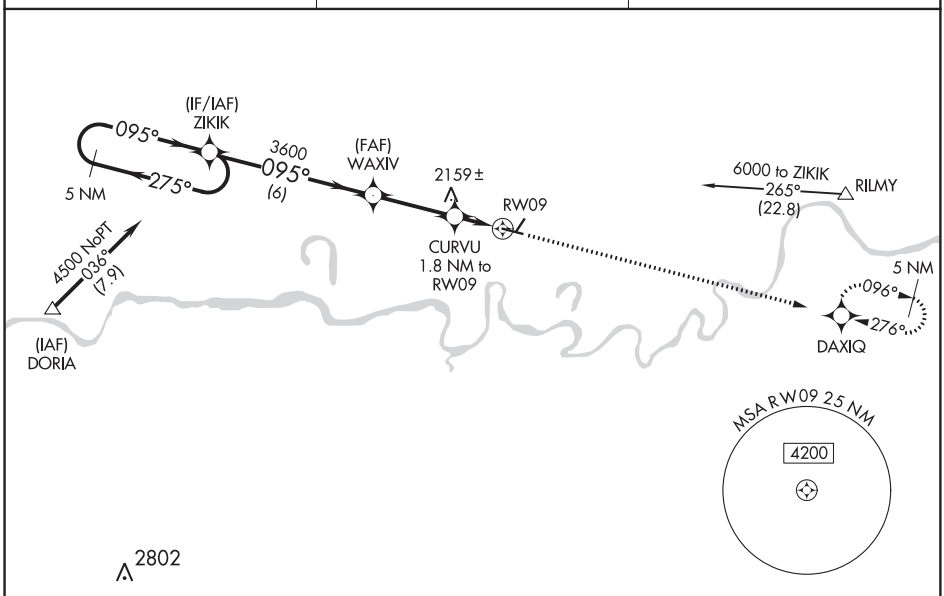
# RNAV (GPS) RWY 9
## POPLAR MUNI (P01)

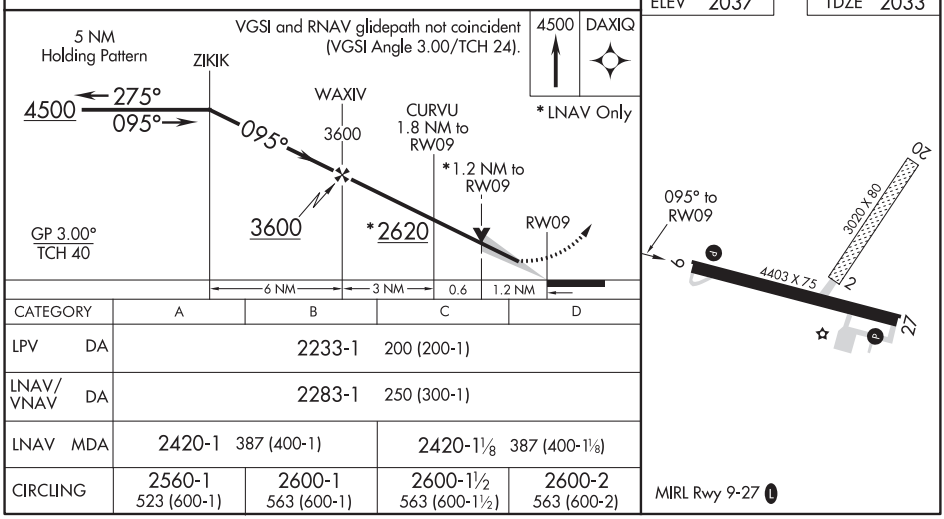
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -19°C (-2°F) or above 54°C (130°F). DME/DME RNP- 0.3 NA. Baro-VNAV and VDP NA with Wolf Point altimeter setting. When local altimeter not received, use Wolf Point altimeter setting and increase all DA 46 feet and all MDA 60 feet, and increase LNAV Cats C and D and Circling Cat C visibility ¼ mile. Helicopter visibility reduction below 1 SM not authorized. Circling NA to Rwy 2/20.

NA

MISSED APPROACH: Climb to 4500 direct DAXIQ and hold.

| AWOS-AV | SALT LAKE CITY APP CON | UNICOM |
|---|---|---|
| **135.325** | **126.85 305.2** | **122.8** (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2233-1 200 (200-1) | | | |
| LNAV/VNAV DA | 2283-1 250 (300-1) | | | |
| LNAV MDA | 2420-1 387 (400-1) | | 2420-1⅛ 387 (400-1⅛) | |
| CIRCLING | 2560-1 523 (600-1) | 2600-1 563 (600-1) | 2600-1½ 563 (600-1½) | 2600-2 563 (600-2) |



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NW-1, 05 NOV 2020 to 31 DEC 2020

POPLAR, MONTANA AL-10424 (FAA) 20198

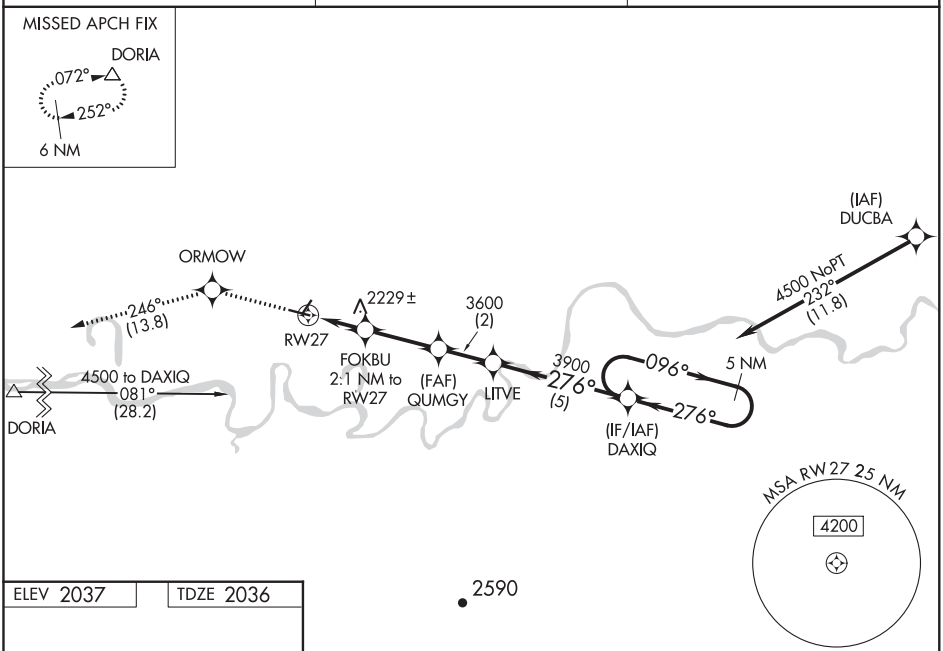
| WAAS CH 69531 W27A | APP CRS 276° | Rwy ldg 4403 TDZE 2036 Apt Elev 2037 |
|---|---|---|

# RNAV (GPS) RWY 27
## POPLAR MUNI (PO1)

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. When local altimeter setting not received, use Wolf Point altimeter setting and increase all DA 46 feet and all MDA 60 feet and increase LNAV/VNAV all Cats visibility ⅛ mile and increase Circling Cat C visibility ¼ mile. Baro-VNAV and VDP NA with Wolf Point altimeter setting. Helicopter visibility reduction below 1 SM not authorized. Circling NA to Rwy 2/20.

MISSED APPROACH: Climb to 6000 direct ORMOW and on track 246° to DORIA and hold, continue climb-in-hold to 6000.

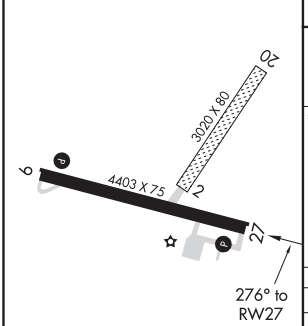
| AWOS-AV | SALT LAKE CITY APP CON | UNICOM |
|---|---|---|
| 135.325 | 126.85 305.2 | 122.8 (CTAF) L |

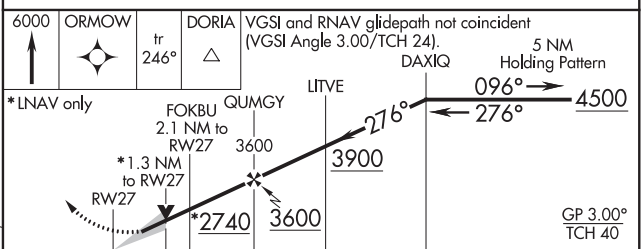



NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 2037 TDZE 2036




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2286-1 250 (300-1) | | | |
| LNAV/VNAV DA | 2536-1¾ 500 (500-1¾) | | | |
| LNAV MDA | 2480-1 444 (500-1) | | 2480-1⅜ 444 (500-1⅜) | |
| CIRCLING | 2560-1 523 (600-1) | 2600-1 563 (600-1) | 2600-1½ 563 (600-1½) | 2600-2 563 (600-2) |

MIRL Rwy 9-27 L

| APP CRS | Rwy ldg | 4500 |
|---|---|---|
| 257° | TDZE | 9 |
| | Apt Elev | 13 |

# COPTER RNAV (GPS) RWY 26

## PORT ANGELES CGAS (NOW)

Use William R Fairchild Intl altimeter setting; when not received, use Whidbey Island NAS/Ault Field altimeter setting and increase MDA 120 feet. DME/DME RNP-0.3 NA. Prior permission required.

MISSED APPROACH: Climbing right turn to 1900 direct KACNE and hold.

| AWOS-3P | WHIDBEY APP CON | PORT ANGELES AIR | CLNC DEL | UNICOM |
|---|---|---|---|---|
| 118.325 | 118.2 285.65 | 127.7 345.0 | 124.15 | 122.975 (CTAF) |

RADAR REQUIRED

MSA RW26 25 NM 9200

CANADA
UNITED STATES

Limit all segments airspeed to 90 KIAS.

RW26 174 (FAF) GOLTE 077° 4 NM 257° (IF/IAF) KACNE 1600 257° (3) 694± 1244± 488 424 886 580 2796 5600 6454 6779 7218 2580 2337 3480 2240 4116 6280

ELEV 13 TDZE 9

4500 X 150 H 26 257° to RW26

1900 KACNE

KACNE 4 NM Holding Pattern GOLTE 077° 257° 1900 257° RW26 3.00° TCH 30 1600 4.9 NM 3 NM

| CATEGORY | COPTER |
|---|---|
| LNAV MDA | 560-1 551 (600-1) |

MIRL Rwy 8-26

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

PORT ANGELES, WASHINGTON AL-653 (FAA) 20310

| NDB NOW | APP CRS | Rwy ldg N/A |
|---|---|---|
| 338 | 242° | TDZE N/A |
| | | Apt Elev 13 |

# COPTER NDB 242°
## PORT ANGELES CGAS (NOW)

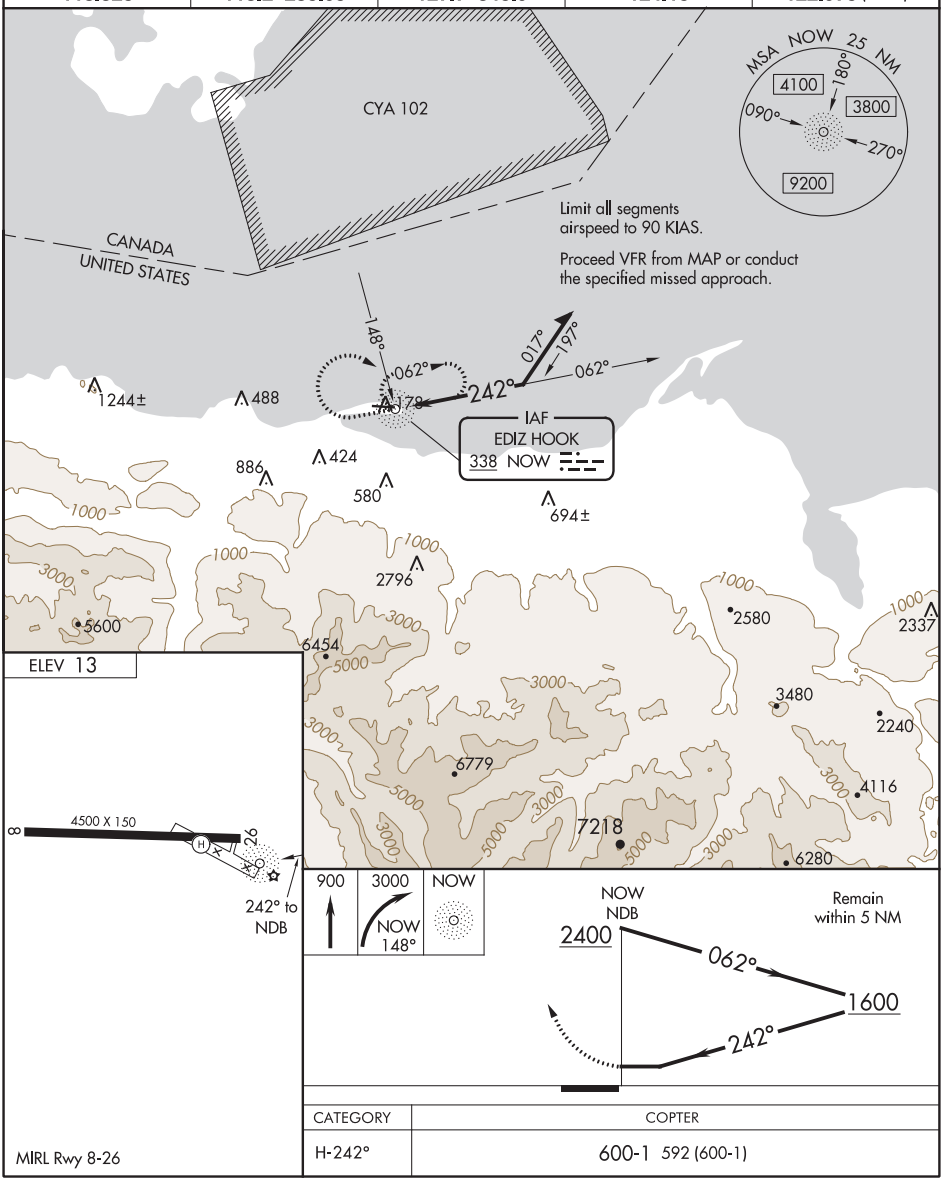
RADAR required for procedure entry

Prior permission required. Use William R Fairchild Intl altimeter setting; when not received, use Whidbey Island NAS/Ault Field/Oak Harbor altimeter setting and increase MDA 120 feet.

NA

MISSED APPROACH: Climb to 900 then climbing right turn to 3000 on NOW NDB bearing 148° to NOW NDB and hold, continue climb-in-hold to 3000.

| AWOS-3P | WHIDBEY APP CON | PORT ANGELES AIR | CLNC DEL | UNICOM |
|---|---|---|---|---|
| 118.325 | 118.2 285.65 | 127.7 345.0 | 124.15 | 122.975 (CTAF) |




| CATEGORY | COPTER |
|---|---|
| H-242° | 600-1 592 (600-1) |

MIRL Rwy 8-26

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC I-CLM | APP CRS | Rwy ldg | 6347 |
|---|---|---|---|
| 108.9 | 089° | TDZE | 285 |
| | | Apt Elev | 291 |

# ILS or LOC RWY 8
## WILLIAM R FAIRCHILD INTL (CLM)

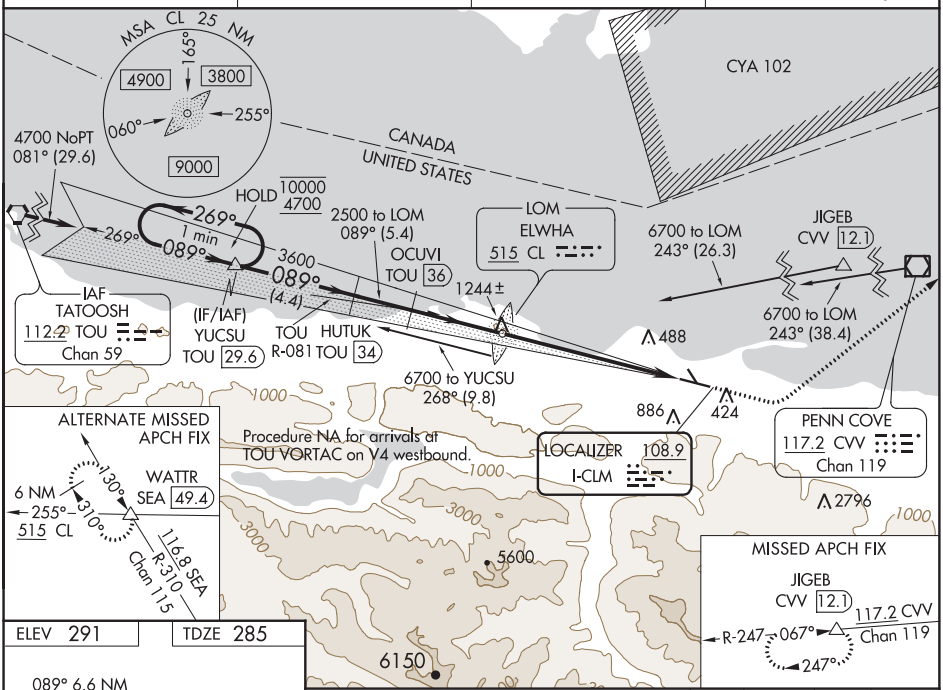
DME required.

T A NA — Circling NA south of Rwy 8-26. Night Landing: Rwy 13, 31 NA. DME from TOU VORTAC. Simultaneous reception of I-CLM and TOU DME required. For inop ALS, increase S-LOC 8 Cat C/D visibility to 1¾ mile.

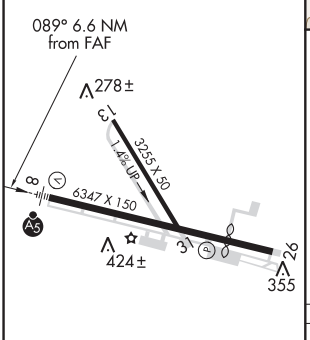
MALSR A5

MISSED APPROACH: Climb to 1000 then climbing left turn to 5400 on heading 030° and on CVV VOR/DME R-247 to JIGEB/CVV 12.1 DME and hold, continue climb-in-hold to 5400.

| ASOS | WHIDBEY APP CON | CLNC DEL | UNICOM |
|---|---|---|---|
| 135.175 | 118.2 285.65 | 124.15 | 122.975 (CTAF) L |




| ELEV 291 | TDZE 285 |
|---|---|

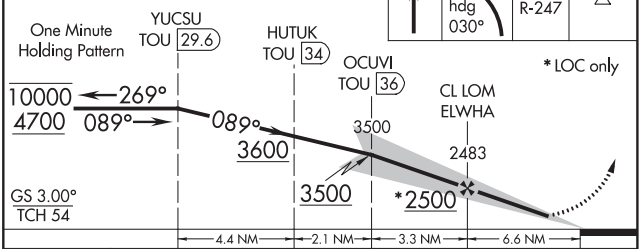



MIRL Rwy 8-26 L
REIL Rwy 26

| FAF to MAP 6.6 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 6:36 | 4:24 | 3:18 | 2:38 | 2:12 |

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 50).

| 1000 | 5400 hdg 030° | CVV R-247 | JIGEB |
|---|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 8 | 496-½ 211 (300-½) | | | |
| S-LOC 8 | 900-½ 615 (700-½) | | 900-1⅜ 615 (700-1⅜) | |
| C CIRCLING | 900-1 609 (700-1) | | 900-1¾ 609 (700-1¾) | 1000-2¼ 709 (800-2¼) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

PORT ANGELES, WASHINGTON — AL-886 (FAA) — 20086

| WAAS CH 77703 W08A | APP CRS 088° | Rwy ldg 6347<br>TDZE 285<br>Apt Elev 291 |
|---|---|---|

# RNAV (GPS) RWY 8
## WILLIAM R FAIRCHILD INTL (CLM)

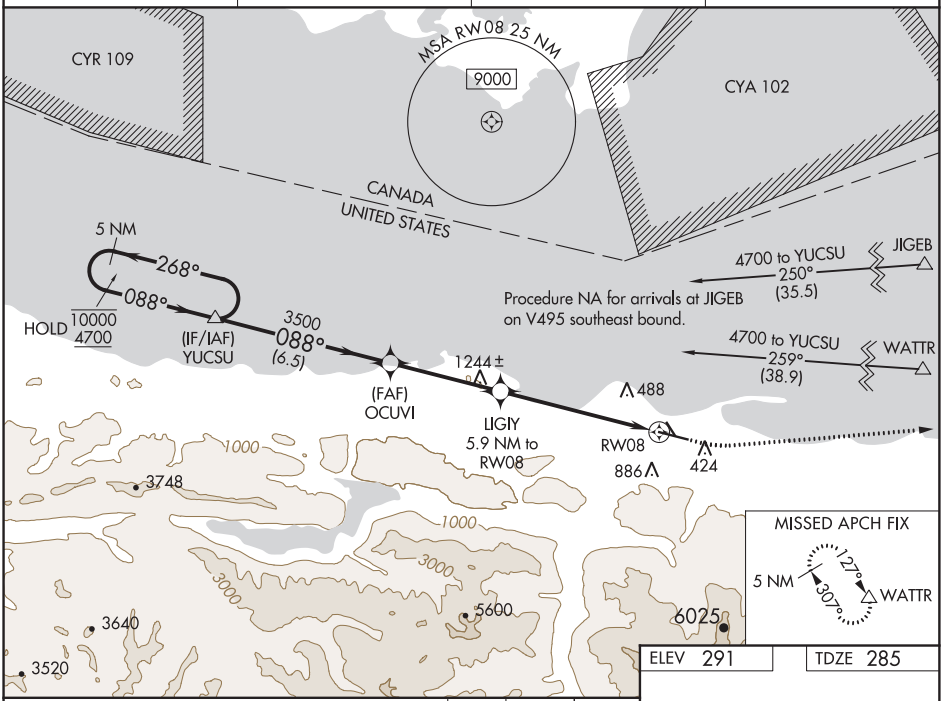
RNP APCH.

Baro-VNAV NA. For inop ALS, increase LNAV/VNAV all Cats visibility to 1⅜ SM, and LNAV Cat C/D visbility to 1⅞ SM.
Night Landing: Rwy 13, 31 NA. Circling NA south of Rwy 8-26.

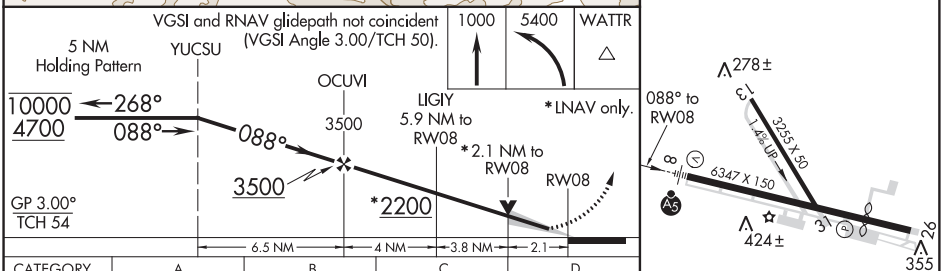
MALSR

MISSED APPROACH: Climb to 1000 then climbing left turn to 5400 direct WATTR and hold, continue climb-in-hold to 5400.

| ASOS | WHIDBEY APP CON | CLNC DEL | UNICOM |
|---|---|---|---|
| 135.175 | 118.2 285.65 | 124.15 | 122.975 (CTAF) L |




| ELEV 291 | TDZE 285 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 505-½ 220 (300-½) | | | |
| LNAV/VNAV DA | 757-1⅛ 472 (500-1⅛) | | | |
| LNAV MDA | 960-½ 675 (700-½) | | 960-1½ 675 (700-1½) | |
| C CIRCLING | 960-1 669 (700-1) | | 960-1⅞ 669 (700-1⅞) | 1000-2¼ 709 (800-2¼) |

MIRL Rwy 8-26 L
REIL Rwy 26

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 90338 W26A | APP CRS 269° | Rwy ldg 4993<br>TDZE 282<br>Apt Elev 291 |
|---|---|---|

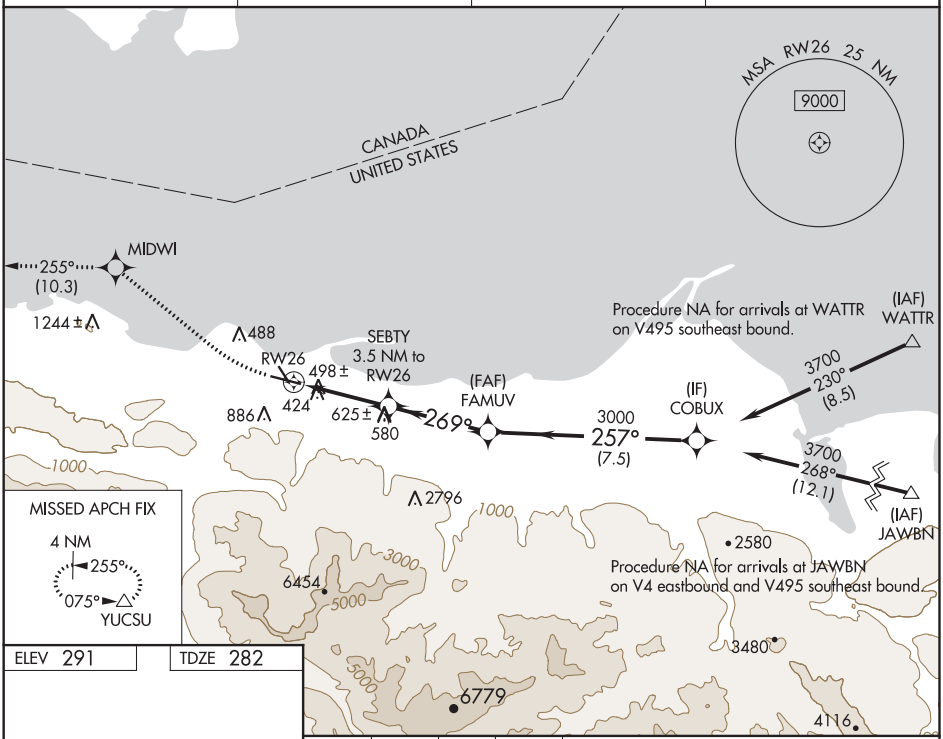
# RNAV (GPS) RWY 26
## WILLIAM R FAIRCHILD INTL (CLM)

RNP APCH.

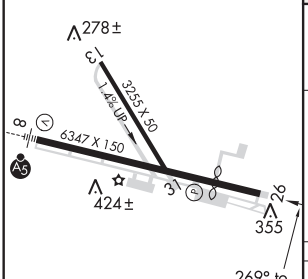
Circling NA south of Rwy 8-26.
Circling Rwy 13, 31 NA at night.
Rwy 26 helicopter visibility reduction below ¾ SM NA.

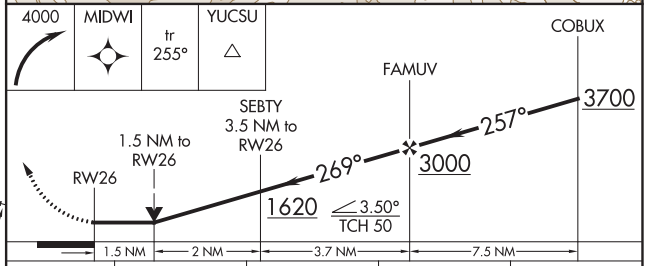
MISSED APPROACH: Climbing right turn to 4000 direct MIDWI and on track 255° to YUCSU and hold.

| ASOS | WHIDBEY APP CON | CLNC DEL | UNICOM |
|---|---|---|---|
| 135.175 | 118.2 285.65 | 124.15 | 122.975 (CTAF) L |




| ELEV 291 | TDZE 282 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LP MDA | 760-1 478 (500-1) | | 760-1⅜ 478 (500-1⅜) | |
| LNAV MDA | 920-1 638 (700-1) | | 920-1¾ 638 (700-1¾) | |
| C CIRCLING | 920-1 629 (700-1) | | 920-1¾ 629 (700-1¾) | 1000-2¼ 709 (800-2¼) |

MIRL Rwy 8-26 L
REIL Rwy 26

NW-1, 05 NOV 2020 to 31 DEC 2020

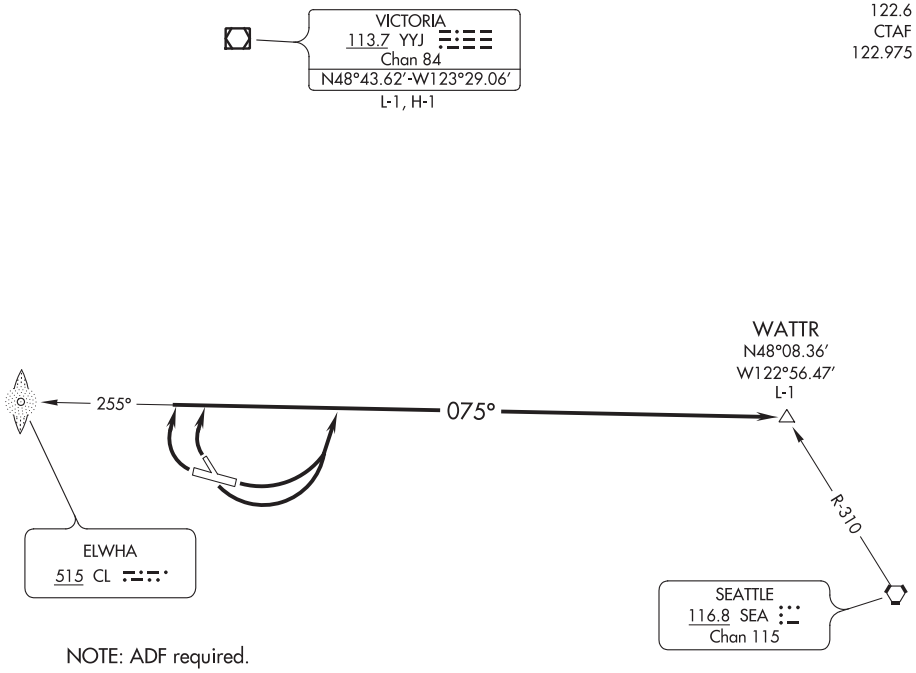
NW-1, 05 NOV 2020 to 31 DEC 2020

(WATTR7.WATTR) 18200 AL-886 (FAA)

# WATTR SEVEN DEPARTURE (OBSTACLE)

WILLIAM R FAIRCHILD INTL (CLM)
PORT ANGELES, WASHINGTON

WHIDBEY DEP CON
118.2 285.65
SEATTLE RADIO
122.6
CTAF
122.975




NOTE: ADF required.

TAKEOFF MINIMUMS

Rwy 8: 300-1.
Rwy 13: Standard with minimum climb of 475′ per NM to 1100, or 3300-3 for VCOA.
Rwys 26, 31: Standard.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 8, 13: Climbing left turn, thence. . . .

TAKEOFF RUNWAYS 26, 31: Climbing right turn, thence. . . .

. . . .on 075° bearing from CL LOM to WATTR INT. Maintain 5400.

VCOA RUNWAY 13: Obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross William R Fairchild Intl Airport at or above 3400, then on heading 045°, continue climb to 5400 on 075° bearing from CL LOM to WATTR INT. Maintain 5400.




NW-1, 05 NOV 2020 to 31 DEC 2020

## TAKEOFF OBSTACLE NOTES

Rwy 8: Sign 46′ from DER, 198′ right of centerline, 4′ AGL/295′ MSL. Terrain 54′ from DER, 449′ right of centerline, 296′ MSL. Sign 79′ from DER, 352′ right of centerline, 4′ AGL/299′ MSL. Building, terrain, Navaid beginning 99′ from DER, 1′ right of centerline, up to 17′ AGL/314′ MSL. Fence 102′ from DER, 526′ left of centerline, 7′ AGL/299′ MSL. Fence 270′ from DER, 526′ left of centerline, 7′ AGL/300′ MSL. Building 298′ from DER, 258′ left of centerline, 20′ AGL/311′ MSL. Tree, pole beginning 575′ from DER, 69′ left of centerline, up to 377′ MSL. Pole, vehicle on traverse way beginning 677′ from DER, 630′ right of centerline, up to 32′ AGL/338′ MSL. Transmission line 922′ from DER, 630′ right of centerline, 51′ AGL/355′ MSL. Tree, transmission line, pole beginning 927′ from DER, 136′ right of centerline, up to 385′ MSL. Trees beginning 1107′ from DER, 391′ right of centerline, up to 420′ MSL. Trees beginning 1312′ from DER, 169′ right of centerline, up to 464′ MSL. Tree 1412′ from DER, 695′ left of centerline, 396′ MSL. Tree 1454′ from DER, 811′ left of centerline, 424′ MSL. Trees beginning 1523′ from DER, 191′ right of centerline, up to 466′ MSL. Tree 1613′ from DER, 790′ left of centerline, 439′ MSL. Trees beginning 1740′ from DER, 35′ right of centerline, up to 469′ MSL. Trees beginning 1826′ from DER, 166′ left of centerline, up to 454′ MSL. Trees beginning 2421′ from DER, 670′ left of centerline, up to 455′ MSL. Trees beginning 2922′ from DER, 9′ left of centerline, up to 457′ MSL. Trees beginning 3272′ from DER, 406′ right of centerline, up to 473′ MSL. Trees beginning 3375′ from DER, 105′ right of centerline, up to 481′ MSL. Tree, pole beginning 3453′ from DER, 105′ right of centerline, up to 490′ MSL. Trees beginning 3601′ from DER, 28′ left of centerline, up to 460′ MSL. Trees beginning 3746′ from DER, 32′ left of centerline, up to 461′ MSL. Trees beginning 4375′ from DER, 622′ right of centerline, up to 498′ MSL. Trees beginning 4460′ from DER, 137′ right of centerline, up to 502′ MSL. Trees beginning 4985′ from DER, 717′ right of centerline, up to 465′ MSL.

Rwy 13: Terrain 40′ from DER, 485′ right of centerline, 274′ MSL. Sign, terrain beginning 44′ from DER, 169′ right of centerline, up to 4′ AGL/278′ MSL. Sign 67′ from DER, 229′ left of centerline, 7′ AGL/276′ MSL. Building 546′ from DER, 556′ right of centerline, 20′ AGL/297′ MSL. pole, building beginning 604′ from DER, 447′ right of centerline, up to 29′ AGL/305′ MSL. Tree 807′ from DER, 448′ right of centerline, 321′ MSL. Trees beginning 829′ from DER, 114′ right of centerline, up to 325′ MSL. Building 1149′ from DER, 226′ left of centerline, 23′ AGL/304′ MSL. Pole 1214′ from DER, 226′ left of centerline, 24′ AGL/308′ MSL. Building, pole beginning 1215′ from DER, 186′ left of centerline, up to 28′ AGL/312′ MSL. Building beginning 1291′ from DER, 321′ left of centerline, up to 36′ AGL/320′ MSL. Tree, pole, building beginning 1357′ from DER, 19′ left of centerline, up to 323′ MSL. Trees beginning 1554′ from DER, 624′ right of centerline, up to 376′ MSL. Tree, pole beginning 1669′ from DER, 51′ left of centerline, up to 337′ MSL. Tree, pole beginning 1792′ from DER, 52′ right of centerline, up to 405′ MSL. Tree, pole, tower beginning 1821′ from DER, 448′ left of centerline, up to 346′ MSL. Rig, pole, tree, vertical point beginning 2195′ from DER, 568′ left of centerline, up to 59′ AGL/359′ MSL. Tree 2211′ from DER, 501′ right of centerline, 408′ MSL. Tree, pole beginning 2271′ from DER, 66′ right of centerline, up to 412′ MSL. Pole, tree beginning 2716′ from DER, 741′ left of centerline, up to 59′ AGL/372′ MSL. Tree, pole beginning 2785′ from DER, 1′ left of centerline, up to 410′ MSL. Trees beginning 3039′ from DER, 79′ left of centerline, up to 420′ MSL. Tree, pole, vegetation, building beginning 3133′ from DER, 15′ left of centerline, up to 456′ MSL. Trees beginning 3290′ from DER, 240′ right of centerline, up to 422′ MSL. Tree, pole beginning 3658′ from DER, 50′ right of centerline, up to 487′ MSL. Tree, building beginning 3723′ from DER, 41′ right of centerline, up to 488′ MSL. Trees beginning 1.6 NM from DER, 2938′ right of centerline, up to 951′ MSL. Trees beginning 1.7 NM from DER, 2811′ right of centerline, up to 1041′ MSL. Trees beginning 1.7 NM from DER, 2983′ right of centerline, up to 1090′ MSL. Tree, building beginning 1.7 NM from DER, 1982′ right of centerline, up to 1145′ MSL.

Rwy 26: Lighting 10′ from DER, 54′ right of centerline, 3′ AGL/287′ MSL. Lighting 10′ from DER, 55′ left of centerline, 3′ AGL/286′ MSL. Trees beginning 2709′ from DER, 130′ left of centerline, up to 406′ MSL. Trees beginning 3951′ from DER, 530′ right of centerline, up to 393′ MSL. Trees beginning 4446′ from DER, 1173′ left of centerline, up to 421′ MSL.

Rwy 31: Tree, pole beginning 1′ from DER, 222′ right of centerline, up to 315′ MSL. Trees beginning 8′ from DER, 4′ left of centerline, up to 321′ MSL. Tree 338′ from DER, 524′ right of centerline, 316′ MSL. Trees beginning 431′ from DER, 121′ right of centerline, up to 320′ MSL. Trees beginning 505′ from DER, 39′ left of centerline, up to 324′ MSL. Trees beginning 638′ from DER, 8′ right of centerline, up to 323′ MSL.

NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

PORT TOWNSEND, WASHINGTON AL-10225 (FAA) 19283

# RNAV (GPS)-A
## JEFFERSON COUNTY INTL (ØS9)

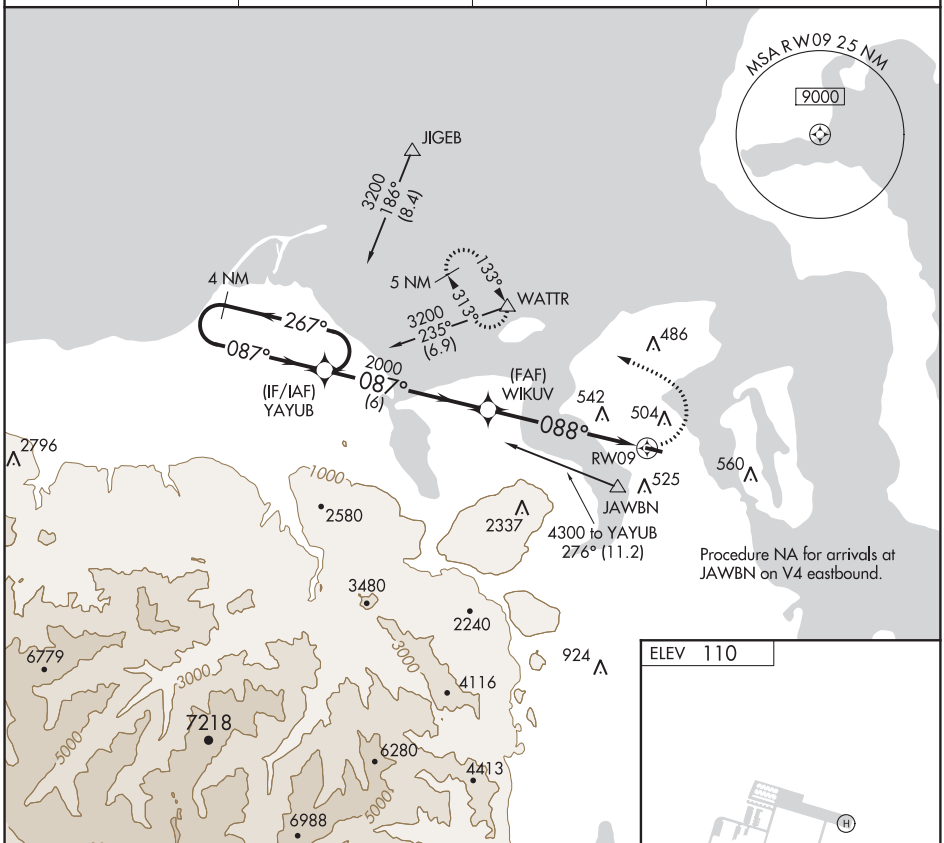
| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 088° | TDZE | N/A |
| | Apt Elev | 110 |

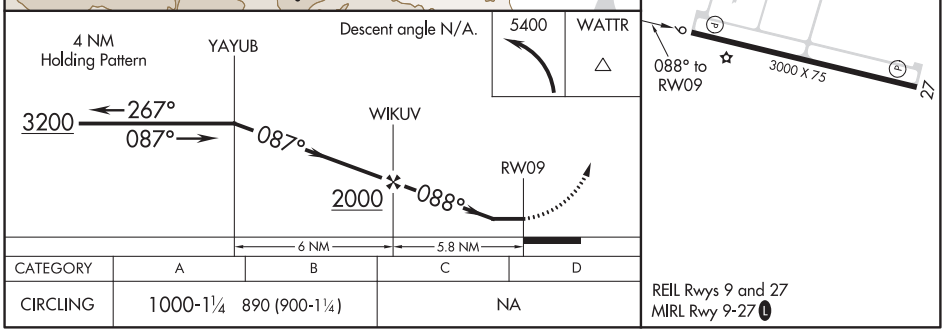
Use AJ Eisenberg altimeter setting; when not received use Whidbey Island NAS/Ault Field altimeter setting and increase all MDA 20 feet. DME/DME RNP- 0.3 NA. Procedure NA at night. Helicopter visibility reduction below 1 SM not authorized.

NA

MISSED APPROACH: Climbing left turn to 5400 direct WATTR and hold, continue climb-in-hold to 5400.

| AWOS-3P | OKH AWOS-3 | WHIDBEY APP CON | CTAF |
|---|---|---|---|
| 119.025 | 132.775 | 118.2 | 123.0 L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 1000-1¼ 890 (900-1¼) | | NA | |

REIL Rwys 9 and 27
MIRL Rwy 9-27 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC/DME I-VDG | APP CRS | Rwy ldg | 8535 |
|---|---|---|---|
| 111.3 | 103° | TDZE | 30 |
| Chan 50 | | Apt Elev | 31 |

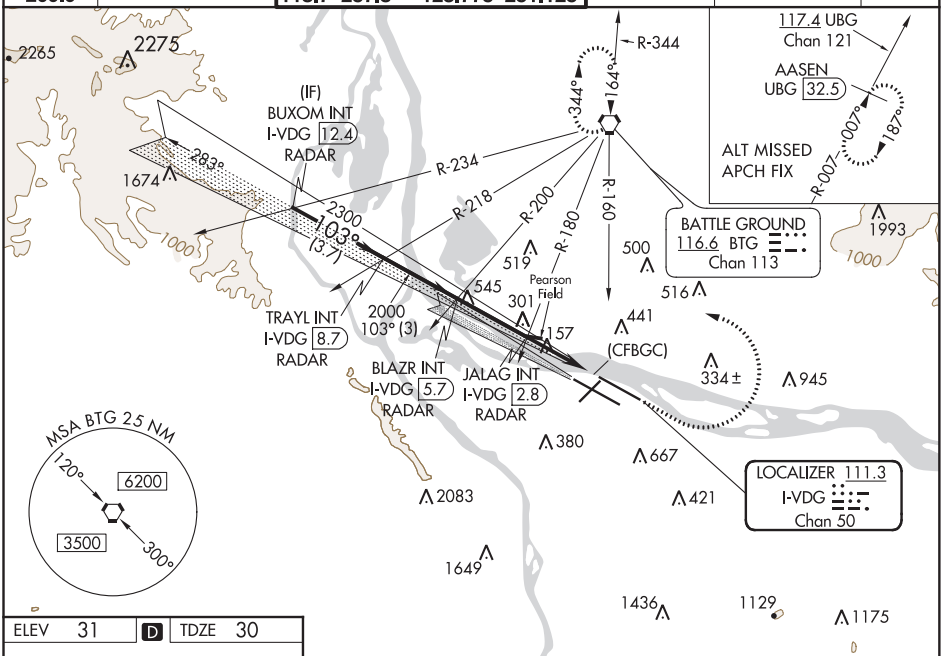
# ILS or LOC RWY 10L
## PORTLAND INTL (PDX)

Simultaneous approach authorized with Rwy 10R.
For inoperative MALSR, increase S-ILS visibility all Cats to RVR 4500.
S-LOC Cat E visibility to RVR 6000. RADAR or DME required.

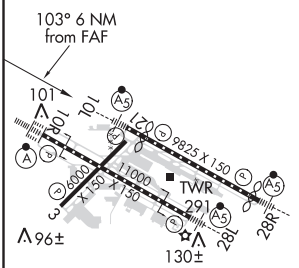
MALSR

MISSED APPROACH: Climb to 800 then climbing left turn to 4200 on BTG VORTAC R-160 to BTG VORTAC and hold, continue climb-in-hold to 4200.

| D-ATIS | PORTLAND APP CON | PORTLAND TOWER Rwy 10L-28R | PORTLAND TOWER Rwys 3-21, 10R-28L | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|---|
| 128.35 269.9 | 124.35 299.2 | 118.7 257.8 | 123.775 251.125 | 121.9 348.6 | 120.125 318.1 | |



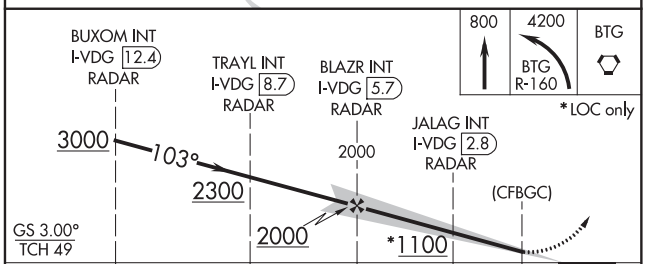

| ELEV | 31 | D | TDZE | 30 |
|---|---|---|---|---|




REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

| FAF to MAP 5.6 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 5:36 | 3:44 | 2:48 | 2:14 | 1:52 |

## RADAR REQUIRED




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-ILS 10L | 293/24 263 (300-½) | | | | |
| S-LOC 10L | 420/24 390 (400-½) | | 420/35 390 (400-⅝) | | |
| C CIRCLING | 720-1 689 (700-1) | 760-1 729 (800-1) | 1060-3 1029 (1100-3) | | 1140-3 1109 (1200-3) |



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NW-1, 05 NOV 2020 to 31 DEC 2020

PORTLAND, OREGON AL-330 (FAA) 20282

# ILS or LOC RWY 10R
## PORTLAND INTL (PDX)

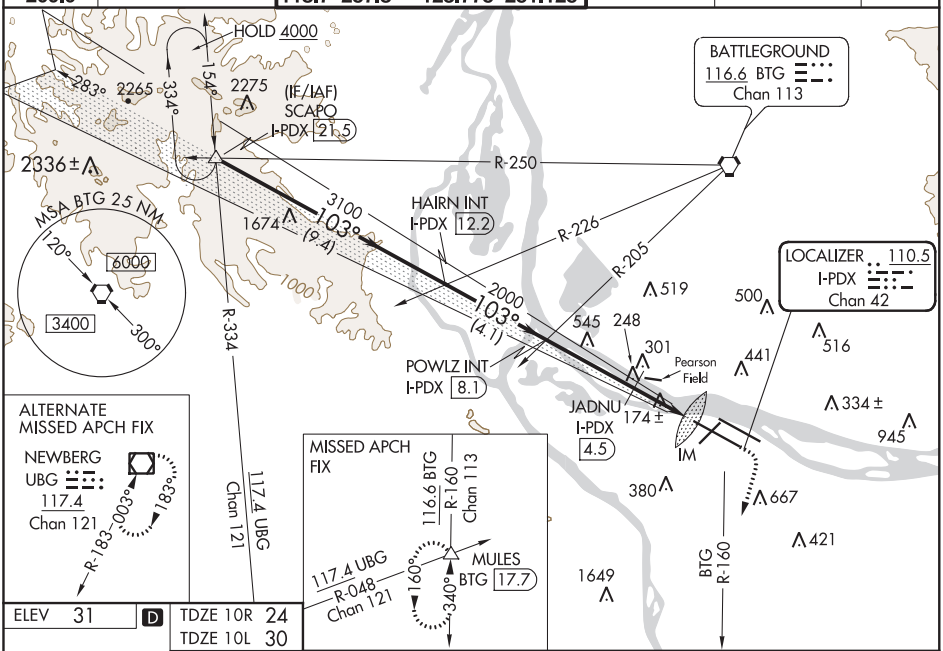
| LOC/DME I-PDX | APP CRS | | 10R | 10L |
|---|---|---|---|---|
| 110.5 | 103° | Rwy ldg | 11000 | 8535 |
| Chan 42 | | TDZE | 24 | 30 |
| | | Apt Elev | 31 | 31 |

Simultaneous approach authorized. Inop table does not apply to Sidestep LOC 10L. For inop ALS increase S-ILS 10R Cat E visibility to RVR 4000. For inop ALS increase S-LOC 10R Cat C/D/E visibility to 2½ SM. For inop ALS increase JADNU fix minimums S-LOC 10R Cat C/D/E visibility to RVR 6000. Sidestep NA until passing JADNU.

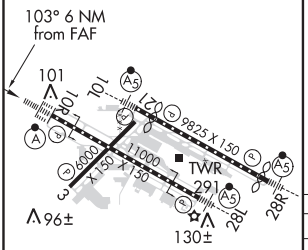
ALSF-2 Rwy 10R (A) | MALSR Rwy 10L (A5)

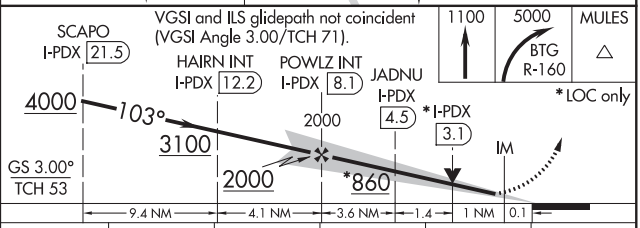
MISSED APPROACH: Climb to 1100 then climbing right turn to 5000 on BTG VORTAC R-160 to MULES/ BTG 17.7 DME and hold, continue climb-in-hold to 5000.

| D-ATIS | PORTLAND APP CON | PORTLAND TOWER | | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|---|
| 128.35 269.9 | 124.35 299.2 | Rwy 10L-28R 118.7 257.8 | Rwys 3-21, 10R-28L 123.775 251.125 | 121.9 348.6 | 120.125 318.1 | |




| ELEV 31 | D | TDZE 10R 24 |
|---|---|---|
| | | TDZE 10L 30 |




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-ILS 10R | 224/18 200 (200-½) | | | | |
| S-LOC 10R | 860/24 836 (900-½) | 860/40 836 (900-¾) | 860-1⅞ 836 (900-1⅞) | | |
| C CIRCLING | 860-1¼ 829 (900-1¼) | | 1060-3 1029 (1100-3) | | 1140-3 1109 (1200-3) |
| JADNU FIX MINIMUMS | | | | | |
| S-LOC 10R | 440/24 416 (500-½) | | 440/40 416 (500-¾) | | |
| SIDESTEP 10L | 800-1 770 (800-1) | 800-1¼ 770 (800-1¼) | 800-2½ 770 (800-2½) | | 800-2¾ 770 (800-2¾) |

REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

| FAF to MAP 6 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 6:00 | 4:00 | 3:00 | 2:24 | 2:00 |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC/DME I-JMJ | APP CRS | Rwy ldg 11000 |
|---|---|---|
| 110.5 Chan 42 | 283° | TDZE 23 Apt Elev 31 |

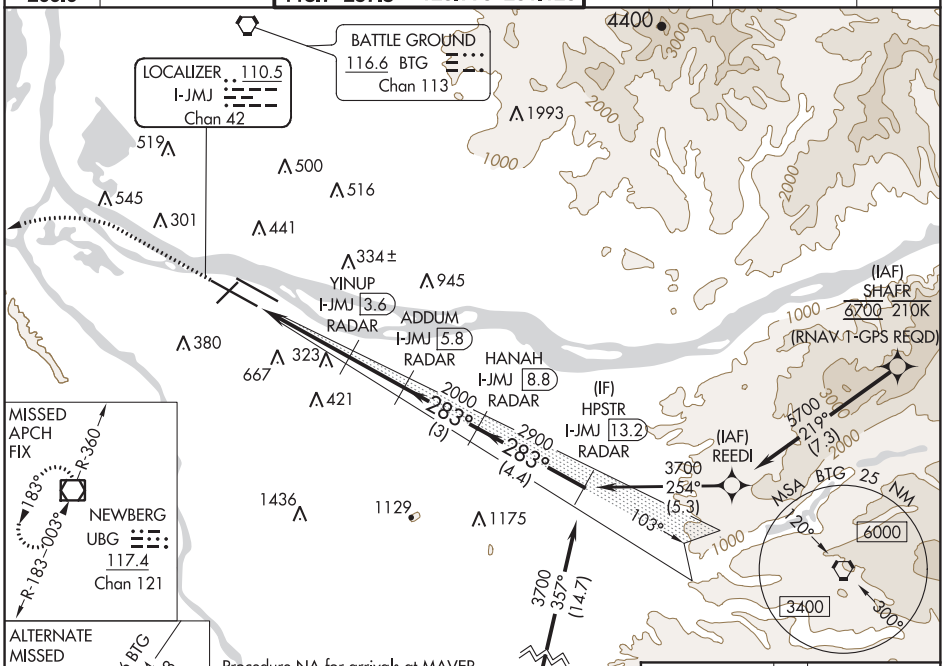
# ILS or LOC RWY 28L
## PORTLAND INTL (PDX)

Simultaneous approach authorized. Autopilot coupled approach NA below 880. DME or RADAR required. For inop ALS, increase S-ILS 28L Cat E visibility to RVR 4500 and increase S-LOC 28L Cat E visibility to 1⅜ SM.

MALSR

MISSED APPROACH: Climb to 2100 then climbing left turn to 4000 on UBG R-360 to UBG VOR/DME and hold.

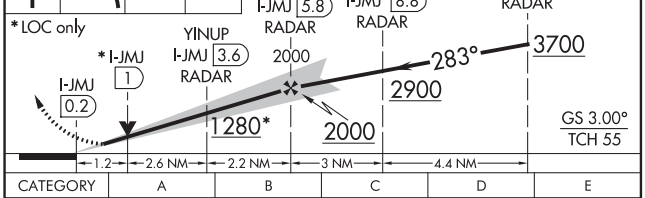
| D-ATIS | PORTLAND APP CON | PORTLAND TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 128.35 269.9 | 124.35 299.2 | Rwy 10L-28R 118.7 257.8; Rwys 3-21, 10R-28L 123.775 251.125 | 121.9 348.6 | 120.125 318.1 | |




NW-1, 05 NOV 2020 to 31 DEC 2020

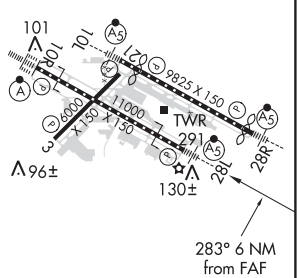
| 2100 | 4000 | UBG R-360 | UBG |
|---|---|---|---|

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 72).




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-ILS 28L | 306/24 283 (300-½) | | | | |
| S-LOC 28L | 480/24 457 (500-½) | | 480/45 457 (500-⅞) | | |
| C CIRCLING | 720-1 689 (700-1) | 760-1 729 (800-1) | 1060-3 1029 (1100-3) | | 1140-3 1109 (1200-3) |

ELEV 31 D TDZE 23




REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

| FAF to MAP 6 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 6:00 | 4:00 | 3:00 | 2:24 | 2:00 |

| LOC/DME I-IAP | APP CRS | Rwy ldg | 9290 |
|---|---|---|---|
| 111.3 | 283° | TDZE | 31 |
| Chan 50 | | Apt Elev | 31 |

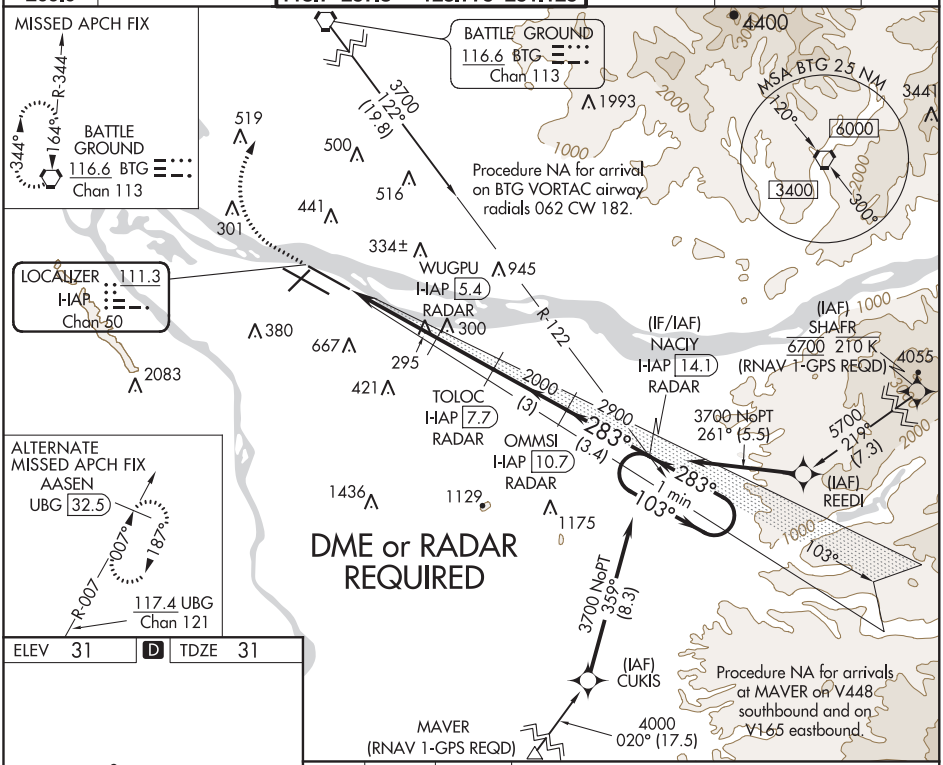
# ILS or LOC RWY 28R
## PORTLAND INTL (PDX)

T A Simultaneous approach authorized. For inop ALS, increase S-ILS 28R Cat E visibility to RVR 4000; increase S-LOC 28R Cat E to 1½ SM.

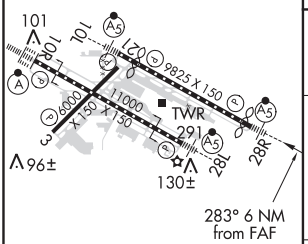
MALSR A5

MISSED APPROACH: Climb to 600 then climbing right turn to 4200 direct BTG VORTAC and hold, continue climb-in-hold to 4200.

| D-ATIS | PORTLAND APP CON | PORTLAND TOWER | | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|---|
| | | Rwy 10L-28R | Rwys 3-21, 10R-28L | | | |
| 128.35 269.9 | 124.35 299.2 | 118.7 257.8 | 123.775 251.125 | 121.9 348.6 | 120.125 318.1 | |

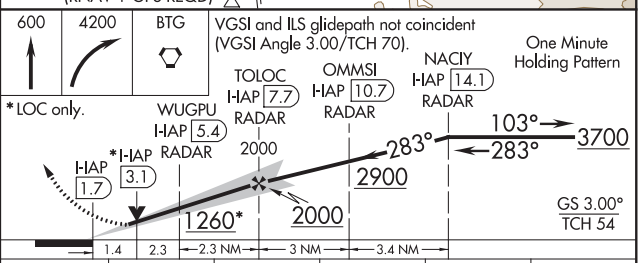



| ELEV | 31 | D | TDZE | 31 |
|---|---|---|---|---|




REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

| FAF to MAP 6 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 6:00 | 4:00 | 3:00 | 2:24 | 2:00 |




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-ILS 28R | 281/24 250 (300-½) | | | | |
| S-LOC 28R | 560/24 529 (600-½) | | 560/55 529 (600-1) | | |
| C CIRCLING | 720-1 689 (700-1) | 760-1 729 (800-1) | 1060-3 1029 (1100-3) | | 1140-3 1109 (1200-3) |



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NW-1, 05 NOV 2020 to 31 DEC 2020

# ILS RWY 10R (SA CAT I)
## PORTLAND INTL (PDX)

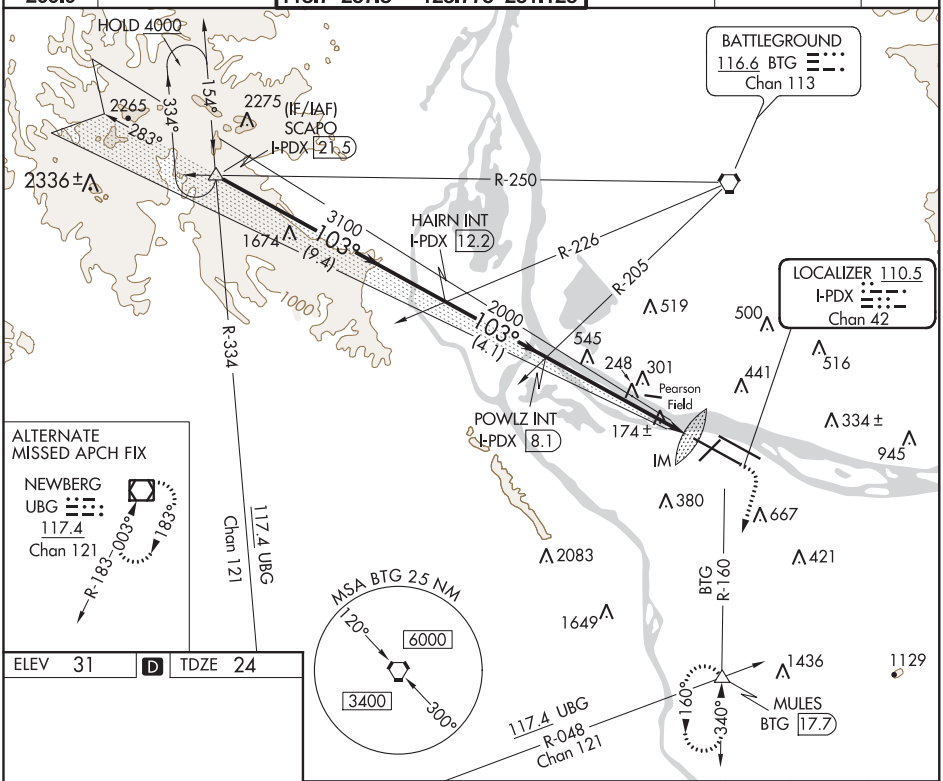
| LOC/DME I-PDX | APP CRS | Rwy ldg | 11000 |
|---|---|---|---|
| 110.5 | 103° | TDZE | 24 |
| Chan 42 | | Apt Elev | 31 |

Simultaneous approach authorized.
Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH.

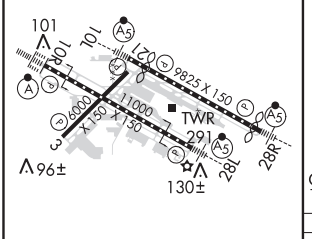
ALSF-2

MISSED APPROACH: Climb to 1100 then climbing right turn to 5000 on BTG VORTAC R-160 to MULES/BTG 17.7 DME and hold, continue climb-in-hold to 5000.

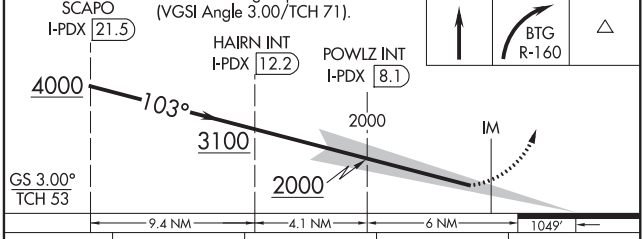
| D-ATIS | PORTLAND APP CON | PORTLAND TOWER Rwy 10L-28R | PORTLAND TOWER Rwys 3-21, 10R-28L | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|---|
| 128.35 269.9 | 124.35 299.2 | 118.7 257.8 | 123.775 251.125 | 121.9 348.6 | 120.125 318.1 | |




| ELEV | 31 | D | TDZE | 24 |
|---|---|---|---|---|




VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 71).




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 10R | RA 157/14 150 DA 174 | | | |

REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

**SA CATEGORY I ILS-SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC/DME I-PDX | APP CRS | Rwy ldg | 11000 |
|---|---|---|---|
| 110.5 | 103° | TDZE | 24 |
| Chan 42 | | Apt Elev | 31 |

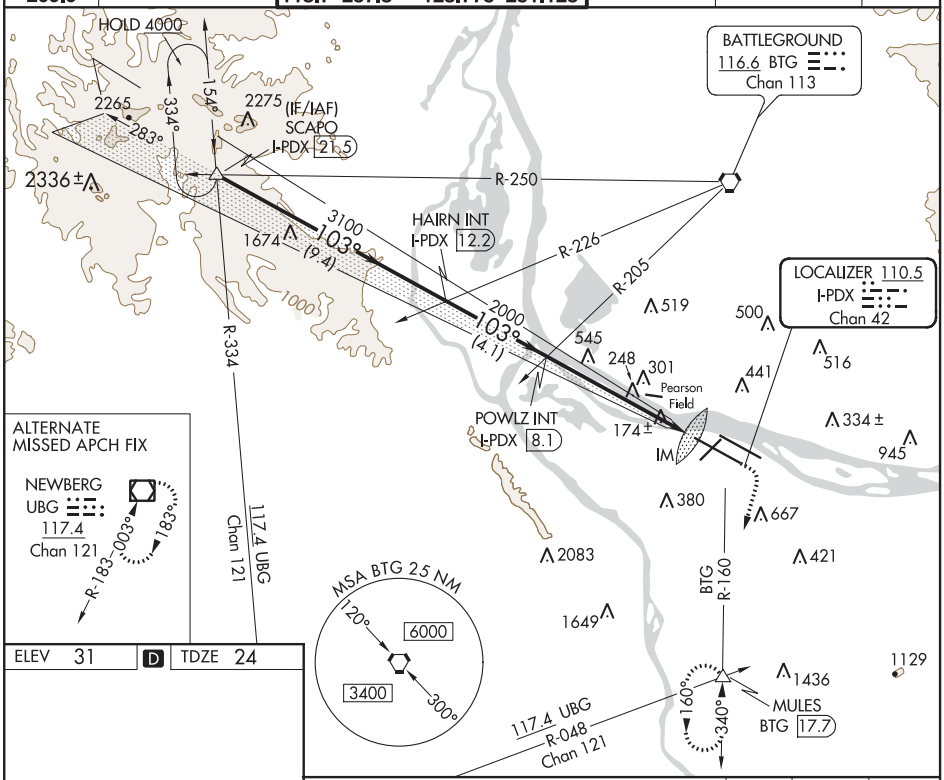
# ILS RWY 10R (CAT II & III)
## PORTLAND INTL (PDX)

Simultaneous approach authorized.
CAT II: RVR 1000 authorized with specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown.

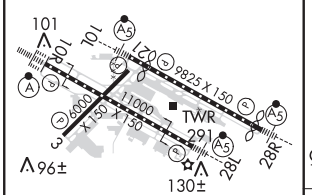
ALSF-2

MISSED APPROACH: Climb to 1100 then climbing right turn to 5000 on BTG VORTAC R-160 to MULES/BTG 17.7 DME and hold, continue climb-in-hold to 5000.

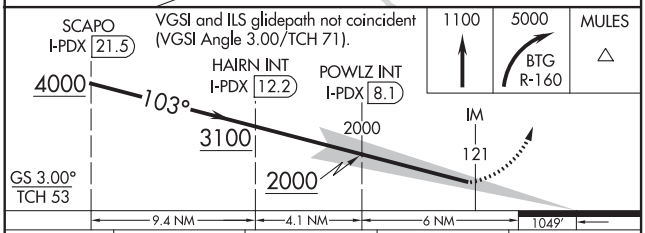
| D-ATIS | PORTLAND APP CON | PORTLAND TOWER | | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|---|
| 128.35 269.9 | 124.35 299.2 | Rwy 10L-28R 118.7 257.8 | Rwys 3-21, 10R-28L 123.775 251.125 | 121.9 348.6 | 120.125 318.1 | |




| ELEV 31 | D | TDZE 24 |
|---|---|---|




VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 71).




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 10R | CAT II RA 107/12 100 DA 124 | | | |
| S-ILS 10R | CAT III RVR 03 | | | |

**CATEGORY II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**

REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L




NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 11000 |
|---|---|---|
| 283° | TDZE | 23 |
| | Apt Elev | 31 |

# RNAV (RNP) Y RWY 28L

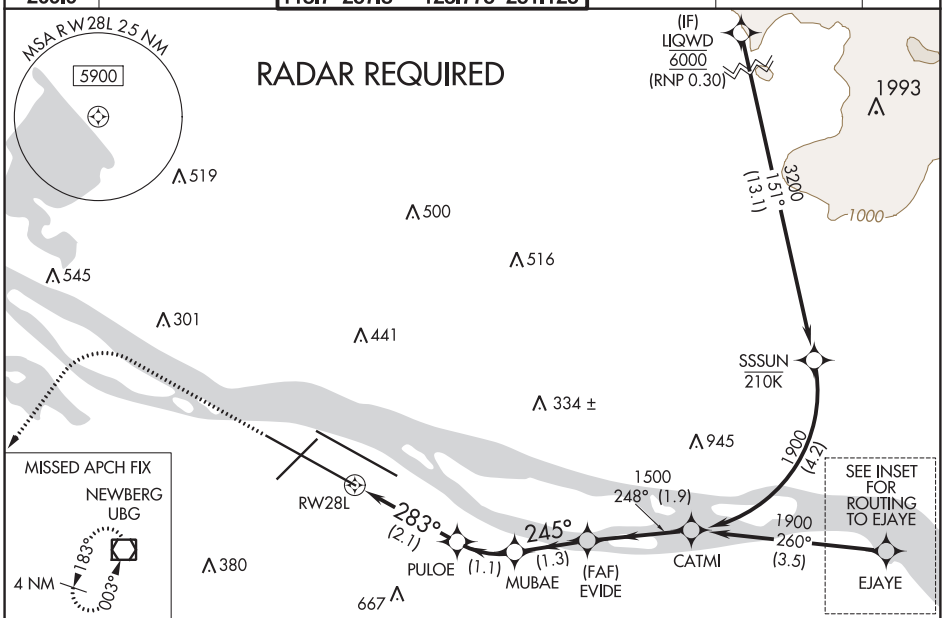
PORTLAND INTL (PDX)

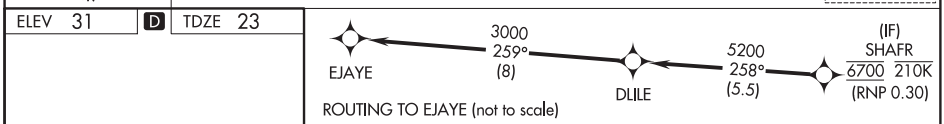
For uncompensated Baro-VNAV systems, procedure NA below -7°C (20°F) or above 54°C (130°F). For inop MALSR, increase RNP 0.23 all Cats visibility to RVR 5600 and increase RNP 0.30 all Cats visibility to 1½ mile. Simultaneous approach authorized with Rwy 28R. RF required. GPS required. Use of FD or AP providing RNAV track guidance required during simultaneous operations.

MALSR

MISSED APPROACH: Climb to 2100 then climbing left turn to 4000 direct UBG VOR/DME and hold.

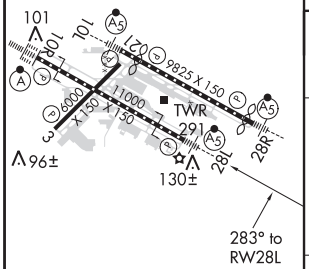
| D-ATIS | PORTLAND APP CON | PORTLAND TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 128.35 269.9 | 124.35 299.2 | Rwy 10L-28R 118.7 257.8; Rwys 3-21, 10R-28L 123.775 251.125 | 121.9 348.6 | 120.125 318.1 | |




ROUTING TO EJAYE (not to scale)

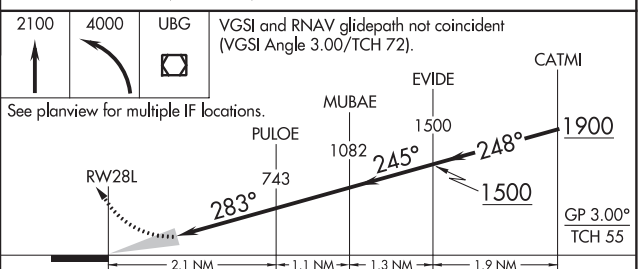
ELEV 31 | D | TDZE 23




| 2100 | 4000 | UBG |
|---|---|---|

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 72).

See planview for multiple IF locations.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.23 DA | 370/33 347 (400-⅝) | | | |
| RNP 0.30 DA | 476/53 453 (500-1) | | | |

AUTHORIZATION REQUIRED

MIRL Rwy 3-21
TDZ/CL Rwy 10R
REIL Rwys 3 and 21
HIRL Rwys 10L-28R and 10R-28L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 9290 |
|---|---|---|
| 283° | TDZE | 31 |
| | Apt Elev | 31 |

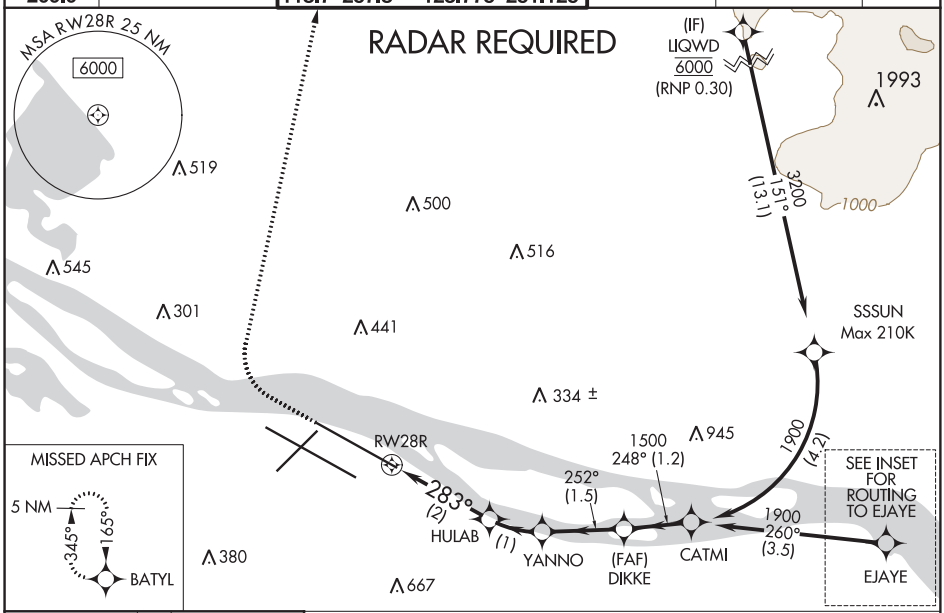
# RNAV (RNP) Y RWY 28R
## PORTLAND INTL (PDX)

For uncompensated Baro-VNAV systems, procedure NA below -7°C (20°F) or above 54°C (130°F). For inop MALSR, increase RNP 0.20 all Cats visibility to 1¼ mile, and increase RNP 0.30 all Cats visibility to 1⅜ mile. RF required. GPS required. Use of FD or AP providing RNAV track guidance required during simultaneous operations. Simultaneous approach authorized with Rwy 28L.

MALSR

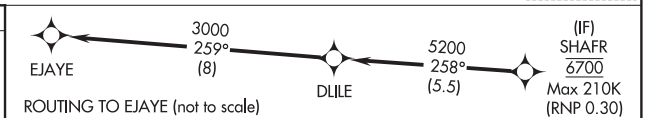
MISSED APPROACH: Climb to 600 then climbing right turn to 4400 direct BATYL and hold, continue climb-in-hold to 4400.

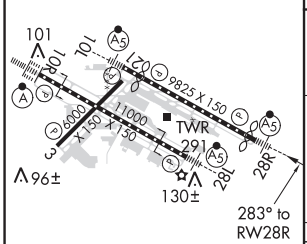
| D-ATIS | PORTLAND APP CON | PORTLAND TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 128.35 269.9 | 124.35 299.2 | Rwy 10L-28R 118.7 257.8; Rwys 3-21, 10R-28L 123.775 251.125 | 121.9 348.6 | 120.125 318.1 | |

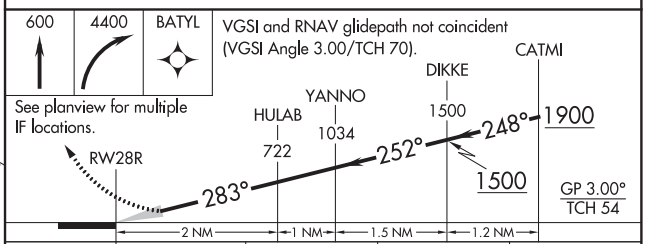



NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 31 | D | TDZE 31




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.20 DA | 403/40 | 372 (400-¾) | | |
| RNP 0.30 DA | 455/50 | 424 (500-1) | | |

**AUTHORIZATION REQUIRED**

REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

| APP CRS | Rwy ldg | 8535 |
|---|---|---|
| 103° | TDZE | 30 |
| | Apt Elev | 31 |

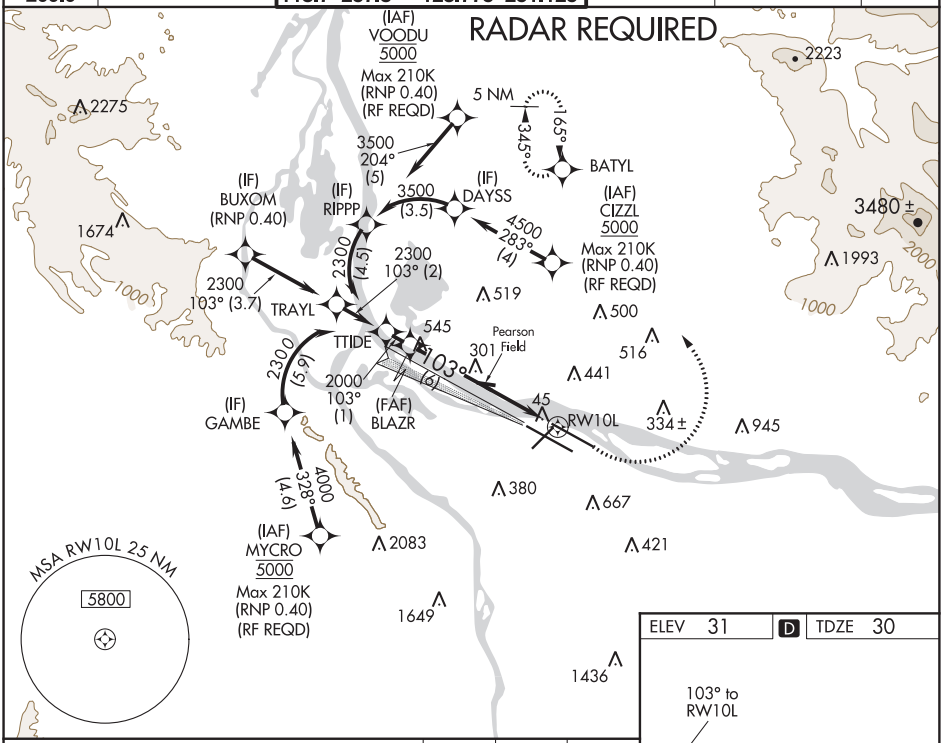
# RNAV (RNP) Z RWY 10L
## PORTLAND INTL (PDX)

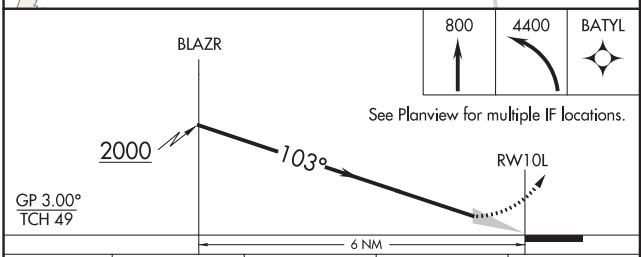
GPS required. For inop MALSR, increase RNP 0.30 all Cats visibility to RVR 5500. For uncompensated Baro-VNAV systems, procedure NA below -6°C (22°F) or above 54°C (130°F). Simultaneous approach authorized with Rwy 10R, except for arrivals at CIZZL, VOODU, and MYCRO. Use of FD or AP providing RNAV track guidance required for simultaneous operations.

MALSR

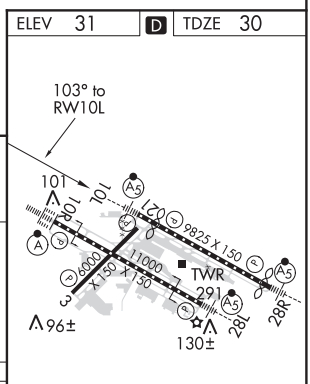
MISSED APPROACH: Climb to 800 then climbing left turn to 4400 direct BATYL and hold, continue climb-in-hold to 4400.

| D-ATIS | PORTLAND APP CON | PORTLAND TOWER Rwy 10L-28R | PORTLAND TOWER Rwys 3-21, 10R-28L | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|---|
| 128.35 269.9 | 124.35 299.2 | 118.7 257.8 | 123.775 251.125 | 121.9 348.6 | 120.125 318.1 | |




See Planview for multiple IF locations.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.30 DA | 365/32 335 (400-⅝) | | | |

AUTHORIZATION REQUIRED

REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 11000 |
|---|---|---|
| 103° | TDZE | 24 |
| | Apt Elev | 31 |

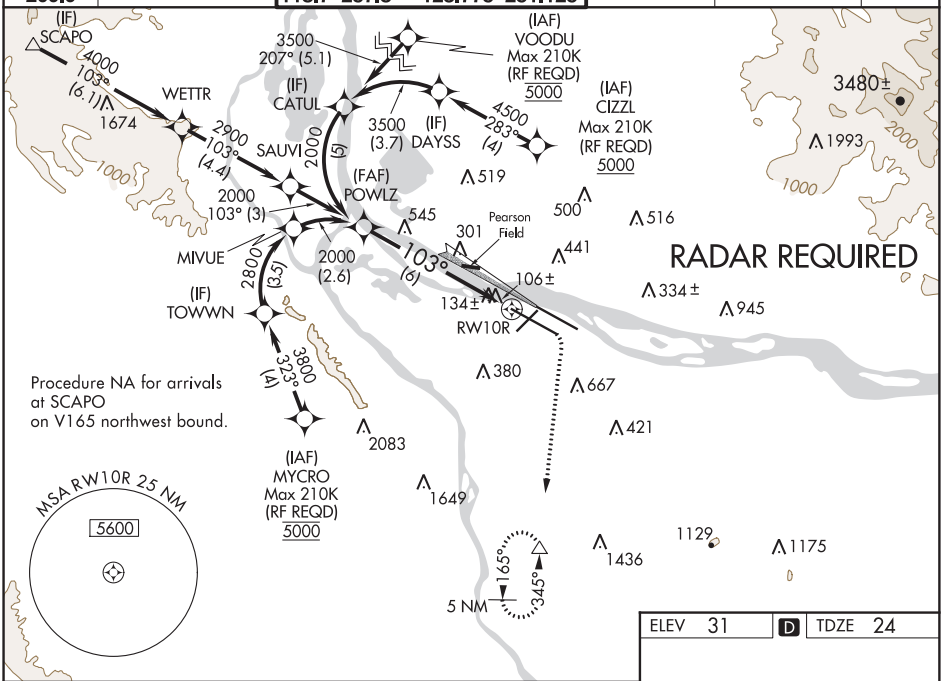
# RNAV (RNP) Z RWY 10R
## PORTLAND INTL (PDX)

GPS required. For inoperative ALSF, increase RNP 0.10 all Cats visibility to RVR 5000 and 0.30 all Cats visibility to 1⅜ miles. For uncompensated Baro-VNAV systems, procedure NA below -15°C (5°F) or above 54°C (130°F). Simultaneous approach authorized with Rwy 10L. Use of FD or AP providing RNAV track guidance required during simultaneous operations.

ALSF-2

MISSED APPROACH: Climb to 440 then climbing right turn to 5000 direct MULES and hold, continue climb-in-hold to 5000.

| D-ATIS | PORTLAND APP CON | PORTLAND TOWER | | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|---|
| | | Rwy 10L-28R | Rwys 3-21, 10R-28L | | | |
| 128.35 269.9 | 124.35 299.2 | 118.7 257.8 | 123.775 251.125 | 121.9 348.6 | 120.125 318.1 | |

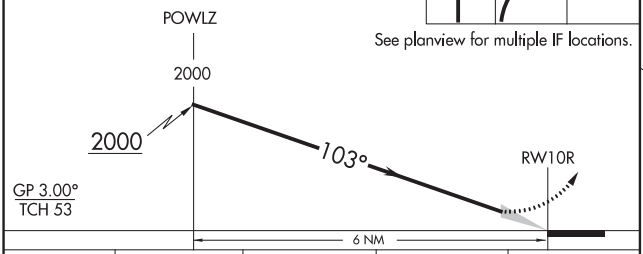


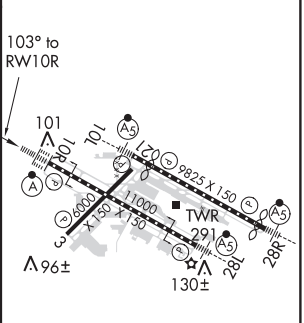

| ELEV | 31 | D | TDZE | 24 |
|---|---|---|---|---|

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 71).

| 440 | 5000 | MULES |
|---|---|---|

See planview for multiple IF locations.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.10 DA | 347/32 323 (400-⅝) | | | |
| RNP 0.30 DA | 449/50 425 (500-1) | | | |

**AUTHORIZATION REQUIRED**

REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 11000 |
|---|---|---|
| 283° | TDZE | 23 |
| | Apt Elev | 31 |

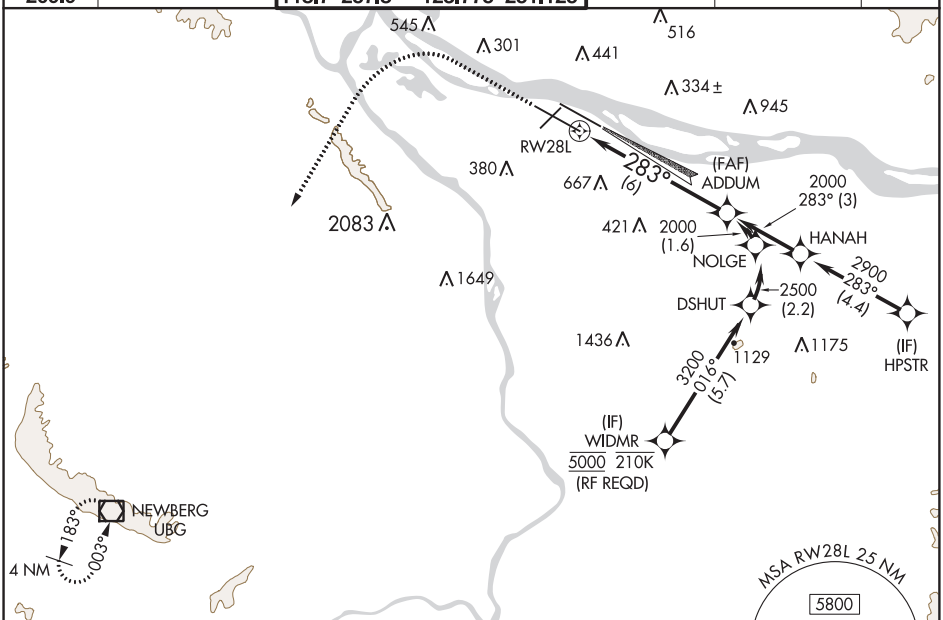
# RNAV (RNP) Z RWY 28L
## PORTLAND INTL (PDX)

For uncompensated Baro-VNAV systems, procedure NA below -15°C (5°F) or above 54°C (130°F). For inoperative MALSR, increase RNP 0.27 all Cats visibility to RVR 6000 and increase RNP 0.30 all Cats visibility to 1⅝ mile. Simultaneous approach authorized with Rwy 28R. GPS Required. Use of FD or AP providing RNAV track guidance required during simultaneous operations.

MALSR

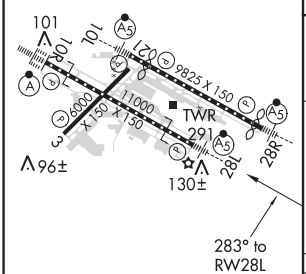
MISSED APPROACH: Climb to 2100 then climbing left turn to 4000 direct UBG VOR/DME and hold.

| D-ATIS | PORTLAND APP CON | PORTLAND TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 128.35 269.9 | 124.35 299.2 | Rwy 10L-28R 118.7 257.8; Rwys 3-21, 10R-28L 123.775 251.125 | 121.9 348.6 | 120.125 318.1 | |




NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 31 | D | TDZE 23



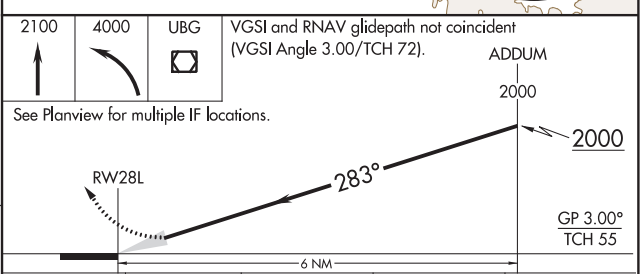

REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

## RADAR REQUIRED

| 2100 | 4000 | UBG |
|---|---|---|

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 72).

See Planview for multiple IF locations.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.27 DA | 374/35 351 (400-⅝) | | | |
| RNP 0.30 DA | 494/60 471 (500-1¼) | | | |

## AUTHORIZATION REQUIRED

| APP CRS | Rwy ldg | 9290 |
|---|---|---|
| 283° | TDZE | 31 |
| | Apt Elev | 31 |

# RNAV (RNP) Z RWY 28R
## PORTLAND INTL (PDX)

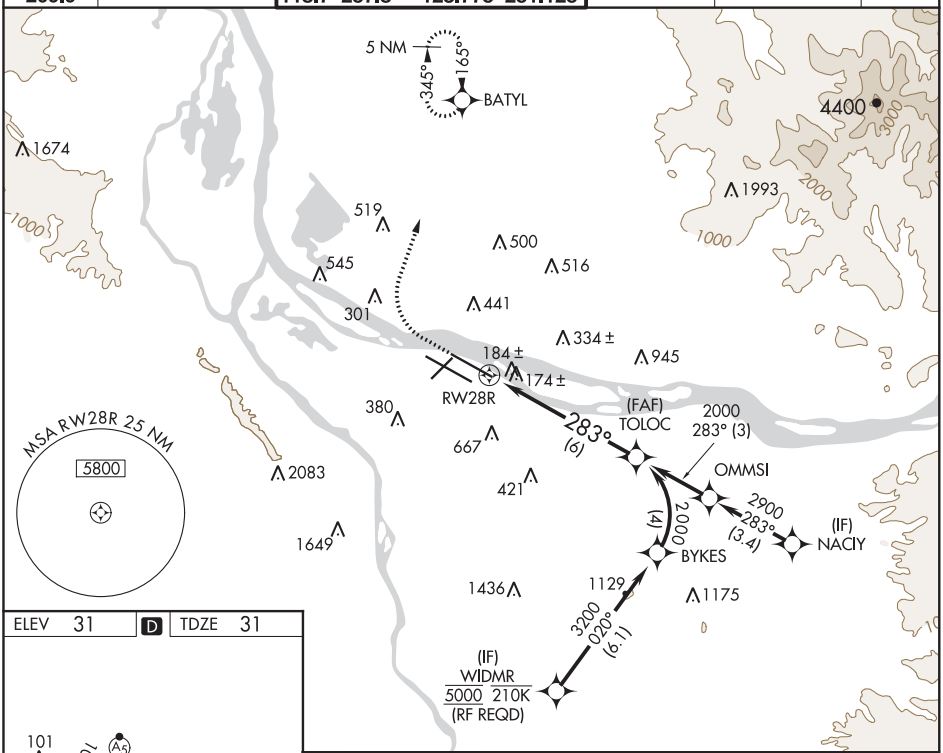
RNP AR APCH.

Use of FD or AP providing RNAV track guidance required during simultaneous operations. Simultaneous approach authorized with Rwy 28L. RADAR required. For uncompensated Baro-VNAV systems, procedure NA below -6°C or above 54°C. For inop ALS increase RNP 0.20 all Cats visibility to 1 ¼ SM, and increase RNP 0.30 all Cats visibility to 1½ SM.

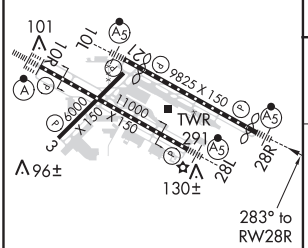
MALSR

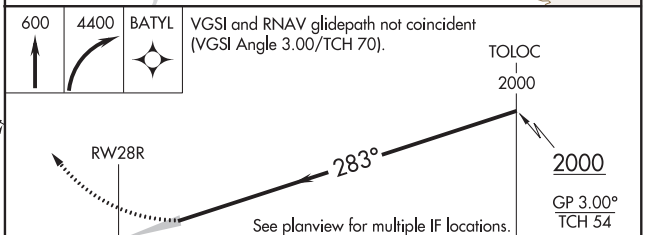
MISSED APPROACH: Climb to 600 then climbing right turn to 4400 direct BATYL and hold, continue climb-in-hold to 4400.

| D-ATIS | PORTLAND APP CON | PORTLAND TOWER Rwy 10L-28R | PORTLAND TOWER Rwys 3-21, 10R-28L | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|---|
| 128.35 269.9 | 124.35 299.2 | 118.7 257.8 | 123.775 251.125 | 121.9 348.6 | 120.125 318.1 | |




| ELEV | 31 | D | TDZE | 31 |
|---|---|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.20 DA | 417/40 | 386 (400-¾) | 417/50 | 386 (400-1) |
| RNP 0.30 DA | 471/50 | 440 (500-1) | | |

AUTHORIZATION REQUIRED

REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L




NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 56205 W28B | APP CRS 283° | Rwy ldg 11000<br>TDZE 23<br>Apt Elev 31 |
|---|---|---|

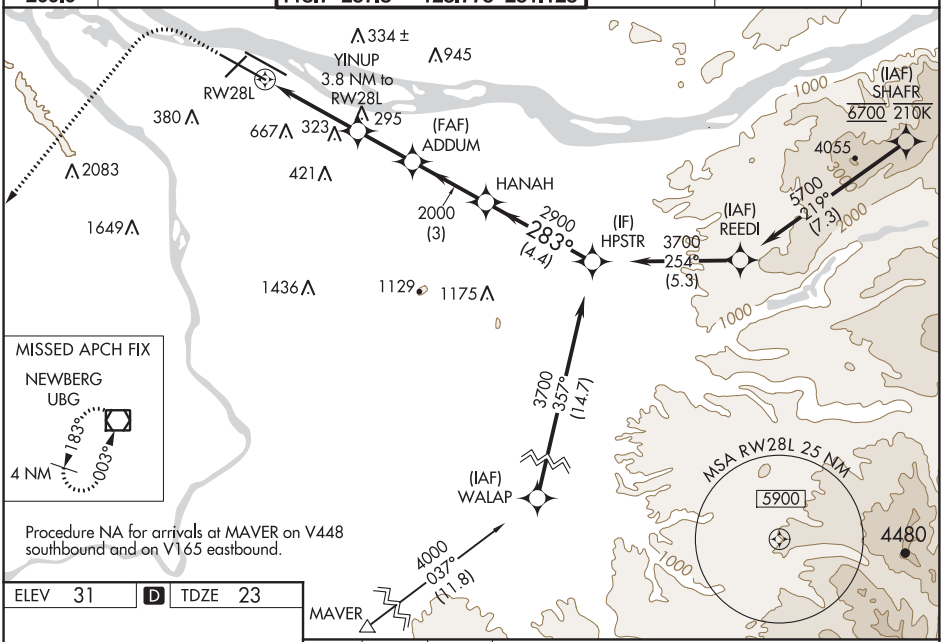
# RNAV (GPS) X RWY 28L
## PORTLAND INTL (PDX)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -6°C (22°F) or above 54°C (130°F). Simultaneous approach authorized. LNAV procedure NA during simultaneous operations. DME/DME RNP-0.3 NA. Use of FD or AP providing RNAV track guidance required during simultaneous operations. For inop ALS, increase LNAV Cat C/D visibility to 1⅜ SM.

MALSR

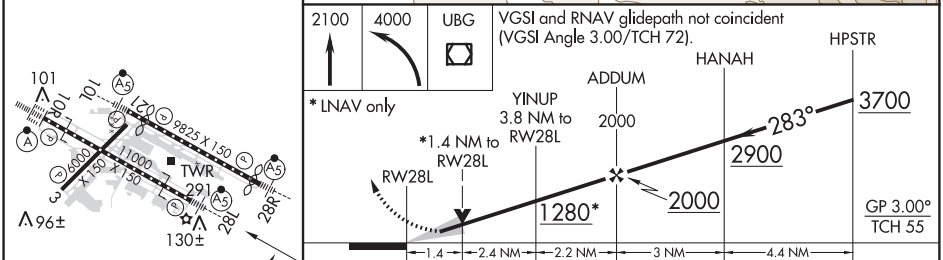
MISSED APPROACH: Climb to 2100 then climbing left turn to 4000 direct UBG VOR/DME and hold.

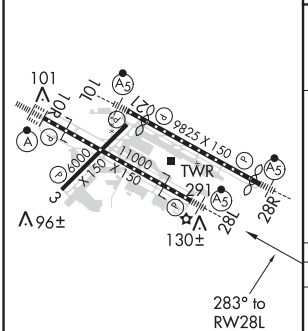
| D-ATIS | PORTLAND APP CON | PORTLAND TOWER | | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|---|
| 128.35<br>269.9 | 124.35 299.2 | Rwy 10L-28R<br>118.7 257.8 | Rwys 3-21, 10R-28L<br>123.775 251.125 | 121.9 348.6 | 120.125 318.1 | |




Procedure NA for arrivals at MAVER on V448 southbound and on V165 eastbound.

| ELEV 31 | D | TDZE 23 |
|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 309/22 286 (300-½) | | | |
| LNAV/VNAV DA | 368/30 345 (400-⅝) | | | |
| LNAV MDA | 540/24 517 (600-½) | | 540/55 517 (600-1) | |
| C CIRCLING | 720-1 689 (700-1) | 760-1 729 (800-1) | 1060-3 1029 (1100-3) | |

REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 60905 W28A | APP CRS 283° | Rwy ldg 9290<br>TDZE 31<br>Apt Elev 31 |
|---|---|---|

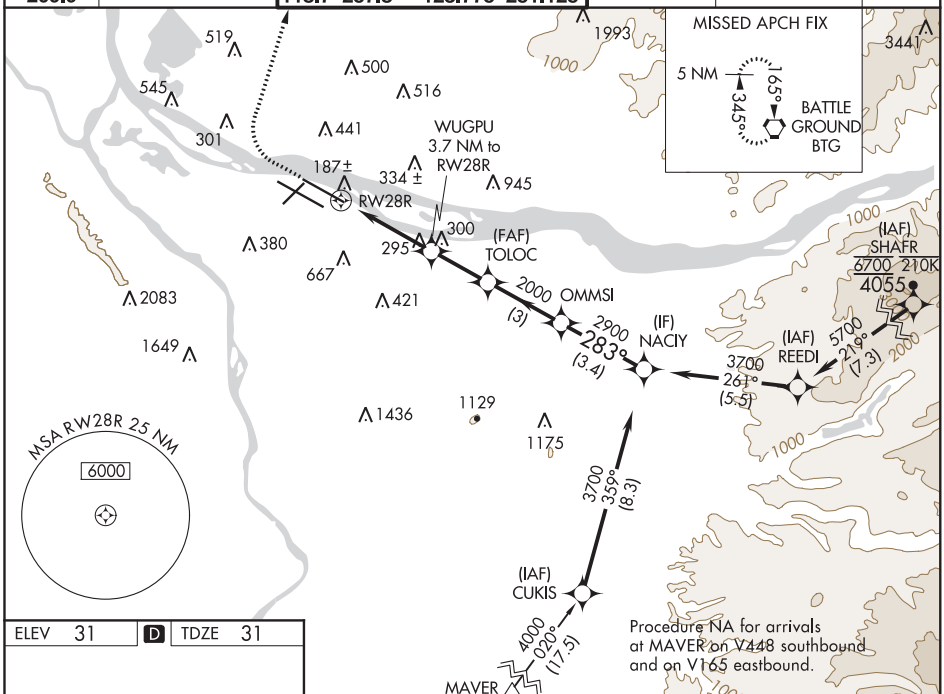
# RNAV (GPS) X RWY 28R
## PORTLAND INTL (PDX)

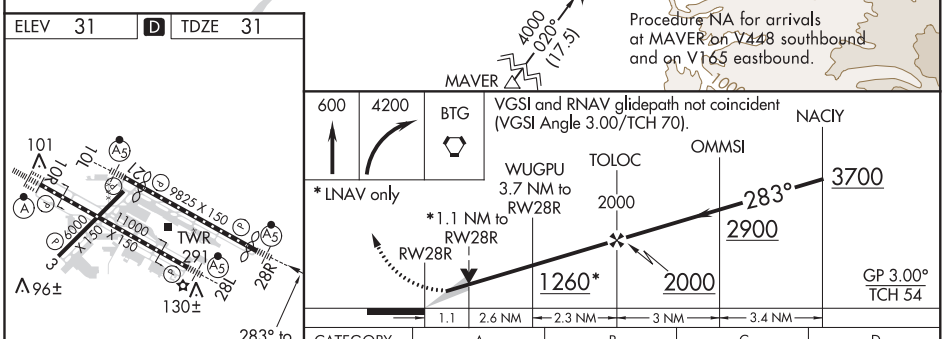
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -6°C (22°F) or above 54°C (130°F). Simultaneous approach authorized. LNAV procedure NA during simultaneous operations. DME/DME RNP-0.3 NA. Use of FD or AP providing RNAV track guidance required during simultaneous operations. For inop ALS increase LNAV Cat C/D visibility to RVR 6000.

MALSR

MISSED APPROACH: Climb to 600 then climbing right turn to 4200 direct BTG VORTAC and hold, continue climb-in-hold to 4200.

| D-ATIS | PORTLAND APP CON | PORTLAND TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 128.35<br>269.9 | 124.35 299.2 | Rwy 10L-28R: 118.7 257.8<br>Rwys 3-21, 10R-28L: 123.775 251.125 | 121.9 348.6 | 120.125 318.1 | |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 281/24 250 (300-½) | | | |
| LNAV/VNAV DA | 446/45 415 (500-⅞) | | | |
| LNAV MDA | 440/24 409 (500-½) | | 440/40 409 (500-¾) | |
| C CIRCLING | 720-1 689 (700-1) | 760-1 729 (800-1) | 1060-3 1029 (1100-3) | |

REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L


NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 81804 W10B | APP CRS 103° | Rwy ldg 8535<br>TDZE 30<br>Apt Elev 31 |
|---|---|---|

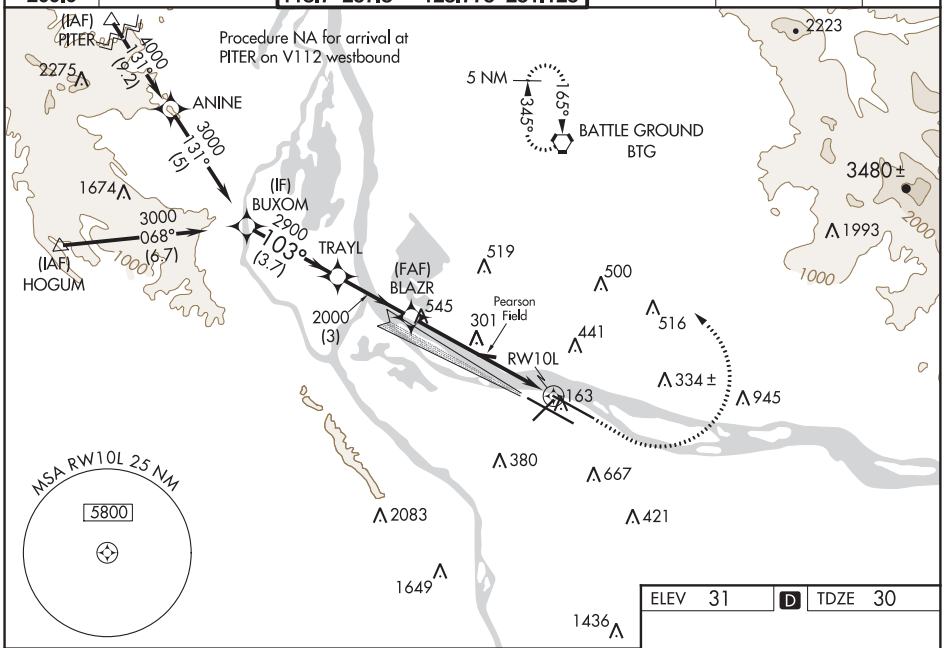
# RNAV (GPS) Y RWY 10L
## PORTLAND INTL (PDX)

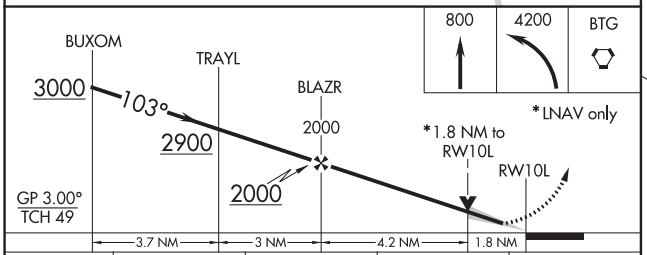
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Simultaneous approach authorized with Rwy 10R. Use of FD or AP providing RNAV track guidance required during simultaneous operations. LNAV procedure NA during simultaneous operations. For inoperative MALSR, increase LPV visibility all Cats to RVR 4500. Increase LNAV/VNAV visibility all Cats to 1¼ mile, and LNAV Cat C and D visibility to 1¾ mile.

MALSR

MISSED APPROACH: Climb to 800 then climbing left turn to 4200 direct BTG VORTAC and hold, continue climb-in-hold to 4200.

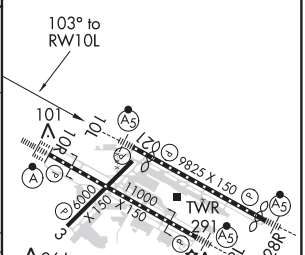
| D-ATIS | PORTLAND APP CON | PORTLAND TOWER | | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|---|
| 128.35<br>269.9 | 124.35 299.2 | Rwy 10L-28R<br>118.7 257.8 | Rwys 3-21, 10R-28L<br>123.775 251.125 | 121.9 348.6 | 120.125 318.1 | |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 296/24 266 (300-½) | | | |
| LNAV/VNAV DA | 413/45 383 (400-⅞) | | | |
| LNAV MDA | 640-1 610 (700-1) | | 640-1⅜ 610 (700-1⅜) | |
| C CIRCLING | 720-1 689 (700-1) | 760-1 729 (800-1) | 1060-3 1029 (1100-3) | |

ELEV 31 D TDZE 30




REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

PORTLAND, OREGON AL-330 (FAA) 20282

| WAAS CH 40004 W10A | APP CRS 103° | Rwy ldg 11000 TDZE 24 Apt Elev 31 |
|---|---|---|

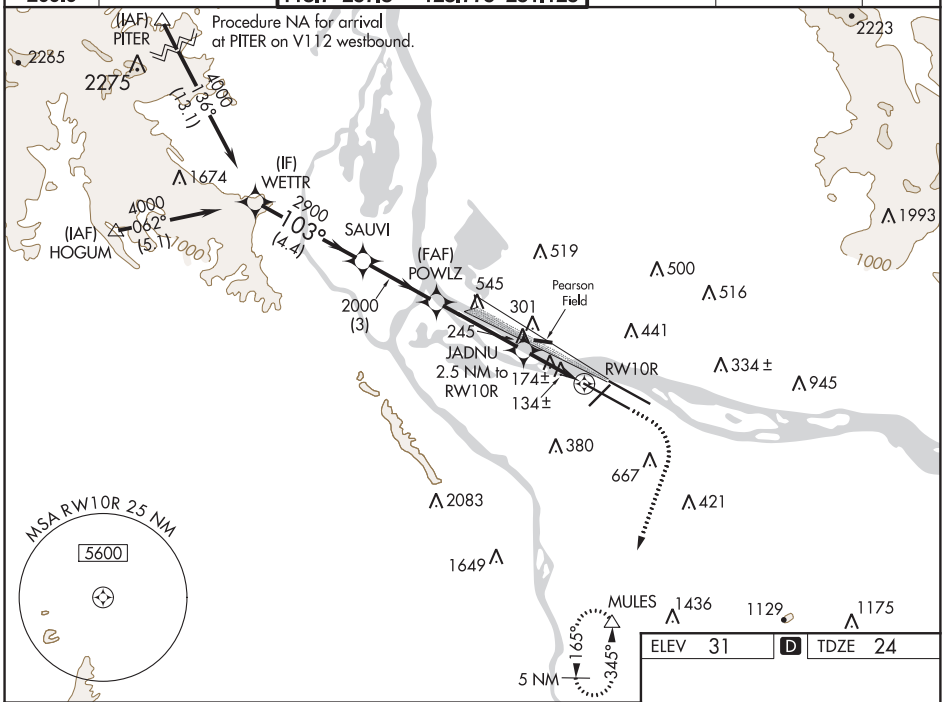
# RNAV (GPS) Y RWY 10R
## PORTLAND INTL (PDX)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Simultaneous approach authorized with Rwy 10L. Use of FD or AP providing RNAV track guidance required during simultaneous operations. LNAV procedure NA during simultaneous operations.

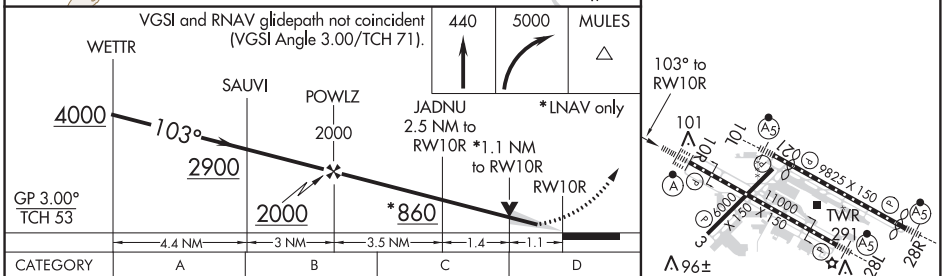
ALSF-2

MISSED APPROACH: Climb to 440 then climbing right turn to 5000 direct MULES and hold.

| D-ATIS | PORTLAND APP CON | PORTLAND TOWER | | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|---|
| | | Rwy 10L-28R | Rwys 3-21, 10R-28L | | | |
| 128.35 269.9 | 124.35 299.2 | 118.7 257.8 | 123.775 251.125 | 121.9 348.6 | 120.125 318.1 | |




| ELEV 31 | D | TDZE 24 |
|---|---|---|







| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 224/18 200 (200-½) | | | |
| LNAV/VNAV DA | 329/24 305 (300-½) | | | |
| LNAV MDA | 440/24 416 (500-½) | | 440/40 416 (500-¾) | |
| C CIRCLING | 720-1 689 (700-1) | 760-1 729 (800-1) | 1060-3 1029 (1100-3) | |

REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

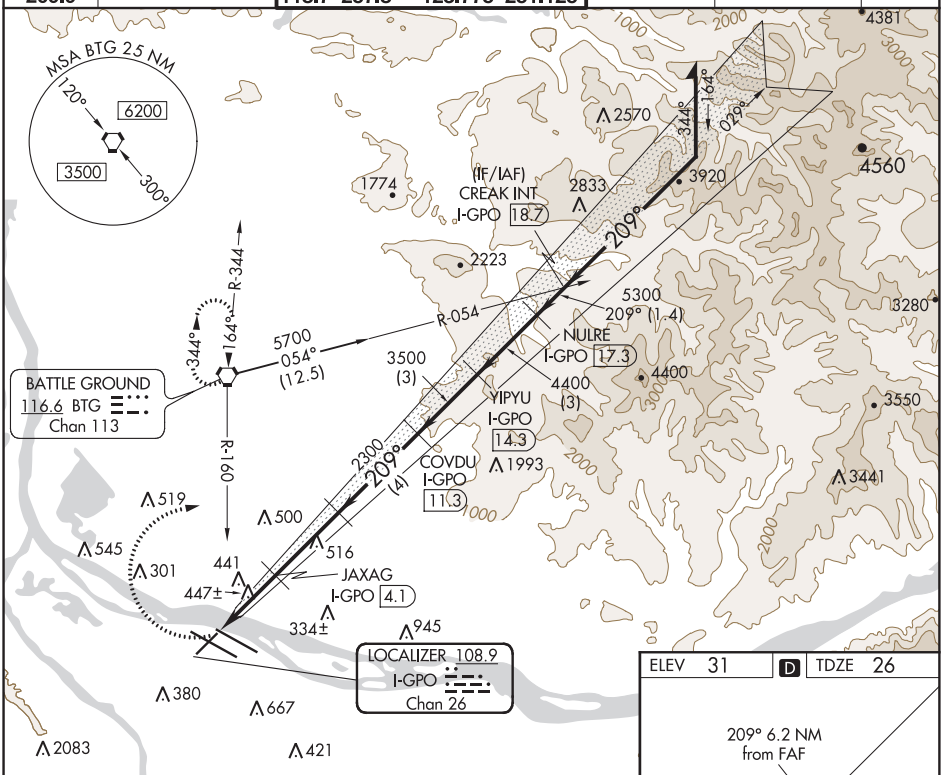
| LOC/DME I-GPO 108.9 Chan 26 | APP CRS 209° | Rwy ldg 6000<br>TDZE 26<br>Apt Elev 31 |
|---|---|---|

# LOC/DME RWY 21
## PORTLAND INTL (PDX)

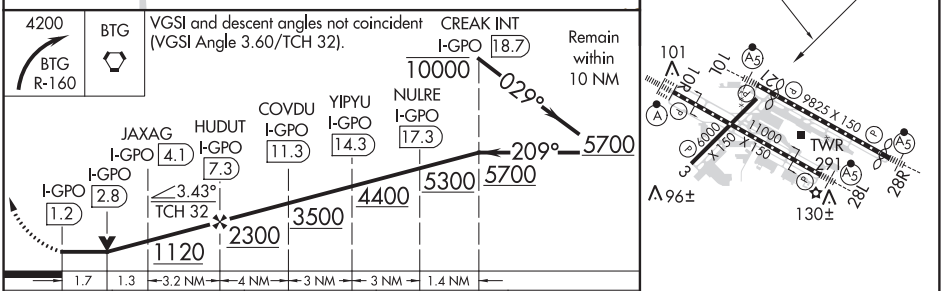
Helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climbing right turn to 4200 on BTG VORTAC R-160 to BTG VORTAC and hold, continue climb-in-hold to 4200.

| D-ATIS | PORTLAND APP CON | PORTLAND TOWER | | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|---|
| 128.35 269.9 | 124.35 299.2 | Rwy 10L-28R 118.7 257.8 | Rwys 3-21, 10R-28L 123.775 251.125 | 121.9 348.6 | 120.125 318.1 | |




ELEV 31 D TDZE 26







| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-21 | 700-1 674 (700-1) | | 700-1⅞ 674 (700-1⅞) | |
| C CIRCLING | 720-1 689 (700-1) | 760-1 729 (800-1) | 1060-3 1029 (1100-3) | |

REIL Rwys 3 and 21
TDZ/CL Rwy 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R and 10R-28L

NW-1, 05 NOV 2020 to 31 DEC 2020

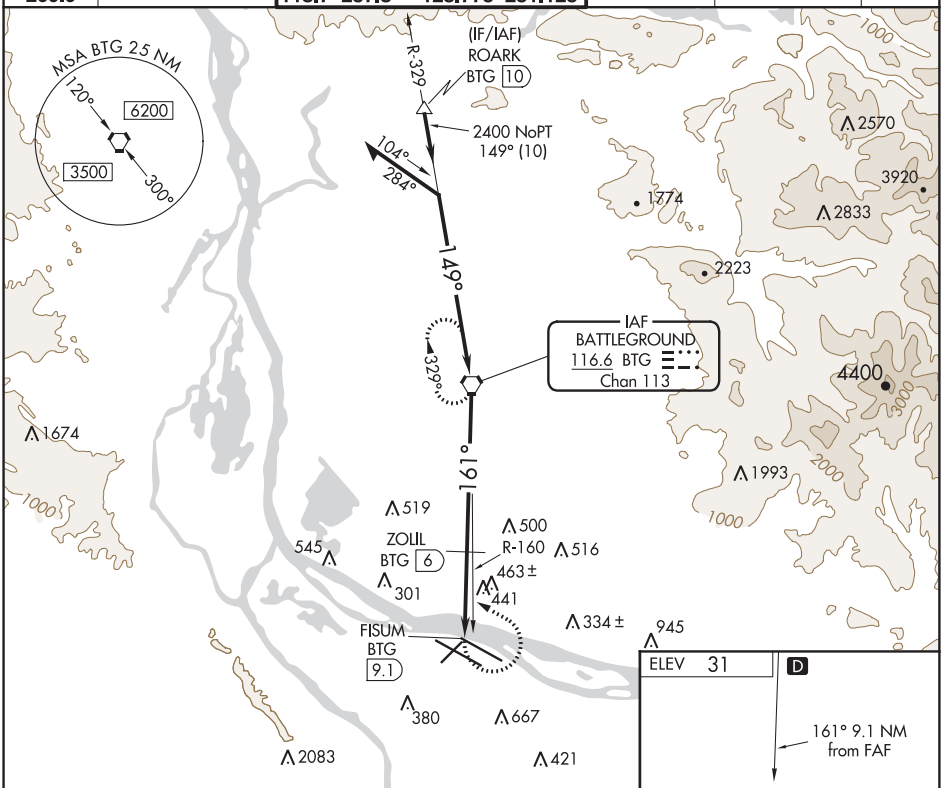
NW-1, 05 NOV 2020 to 31 DEC 2020

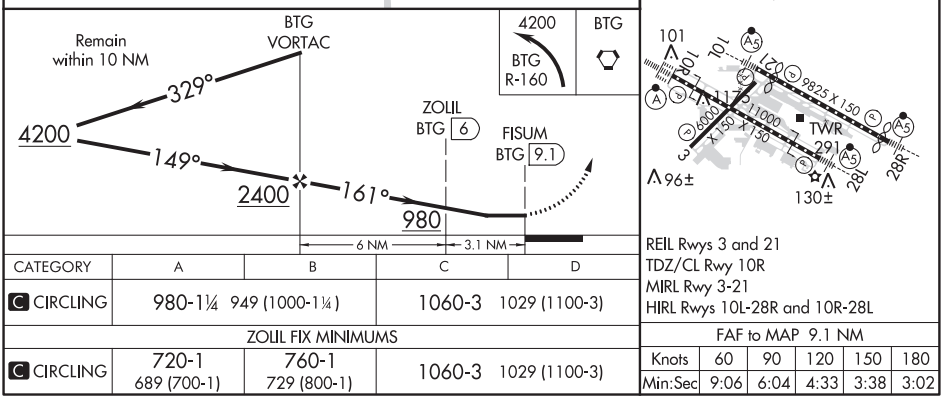
| VORTAC BTG | APP CRS | Rwy ldg | N/A |
|---|---|---|---|
| 116.6 | 161° | TDZE | N/A |
| Chan 113 | | Apt Elev | 31 |

# VOR-A
## PORTLAND INTL (PDX)

MISSED APPROACH: Climbing left turn to 4200 via BTG R-160 to BTG VORTAC and hold, continue climb-in-hold to 4200.

| D-ATIS | PORTLAND APP CON | PORTLAND TOWER | | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|---|
| 128.35 269.9 | 124.35 299.2 | Rwy 10L-28R 118.7 257.8 | Rwys 3-21, 10R-28L 123.775 251.125 | 121.9 348.6 | 120.125 318.1 | |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 980-1¼ 949 (1000-1¼) | | 1060-3 1029 (1100-3) | |

ZOLIL FIX MINIMUMS

| | | | | |
|---|---|---|---|---|
| C CIRCLING | 720-1 689 (700-1) | 760-1 729 (800-1) | 1060-3 1029 (1100-3) | |

FAF to MAP 9.1 NM

| Knots | 60 | 90 | 120 | 150 | 180 |
|---|---|---|---|---|---|
| Min:Sec | 9:06 | 6:04 | 4:33 | 3:38 | 3:02 |




NW-1, 05 NOV 2020 to 31 DEC 2020

PORTLAND, OREGON

# TACAN RWY 28L

PORTLAND INTL (KPDX)

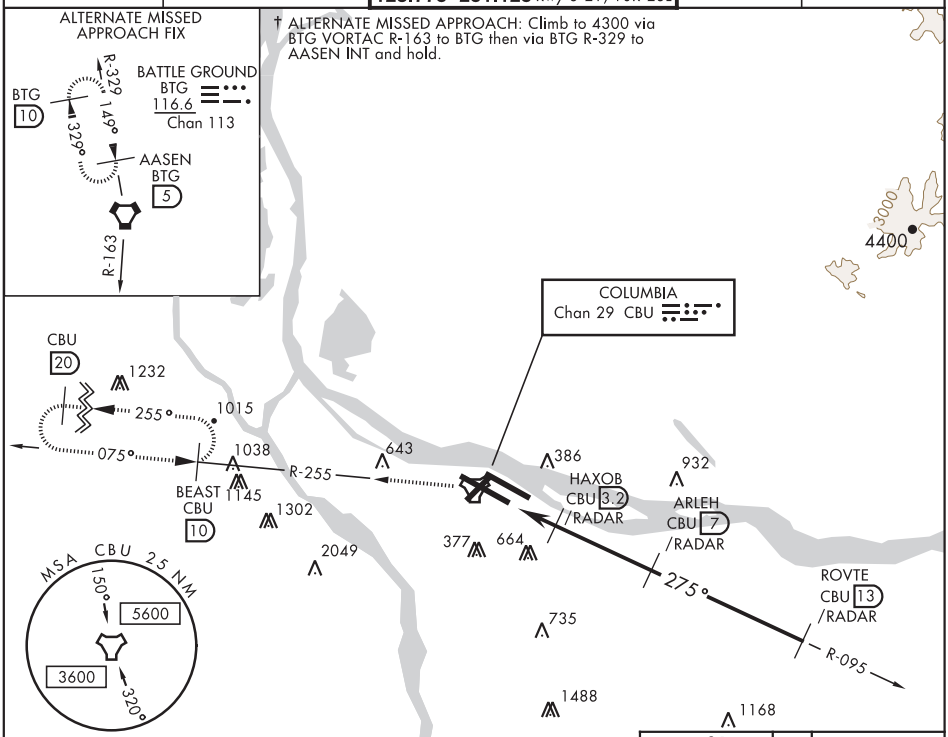
| TACAN CBU Chan 29 | APCH CRS 275° | Rwy ldg 11,000 TDZE 23 Arpt Elev 31 | AL-330 [USAF] |
|---|---|---|---|

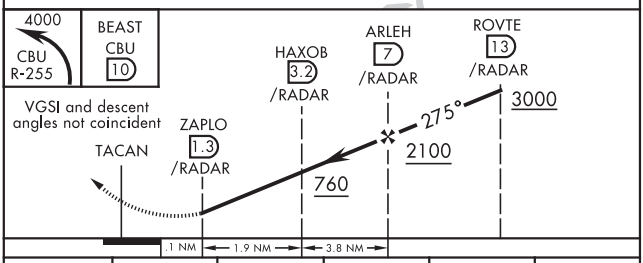
*When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C vis to 1½ miles, CAT D vis to 1¾ miles, CAT E vis to 2 miles.
**When VGSI rwy 28R inop, circling rwy 28R NA at night.

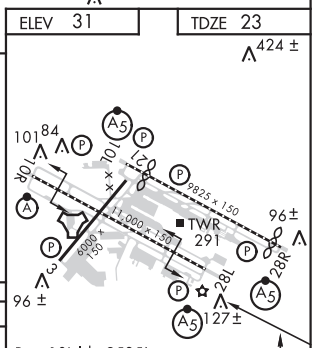
MALSR

† MISSED APPROACH: Climbing left turn to 4000 via CBU TACAN R-255 to BEAST INT/CBU 10 DME and hold or when directed by ATC.

| ATIS | PORTLAND APP CON | PORTLAND TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 128.35 269.9 | 124.35 299.2 | 118.7 257.8 Rwy 10L-28R<br>123.775 251.125 Rwy 3-21, 10R-28L | 121.9 348.6 | 120.125 318.1 |




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-28L * | 600/24<br>577<br>(600-½) | | 600/50<br>577<br>(600-1) | 600/60<br>577<br>(600-1¼) | 600-1½<br>577<br>(600-1½) |
| CIRCLING ** | 720-1<br>689 (700-1) | 740-1<br>709 (800-1) | 760-2<br>729 (800-2) | 1000-3<br>969 (1000-3) | 1160-3<br>1129<br>(1200-3) |

Rwy 10L ldg 8535′
Rwy 28R ldg 9290′
REIL Rwy 3-21
TDZL/CL 10R
MIRL Rwy 3-21
HIRL Rwys 10L-28R , 10R-28L

275° 5.8 NM from FAF

NW-1, 05 NOV 2020 to 31 DEC 2020

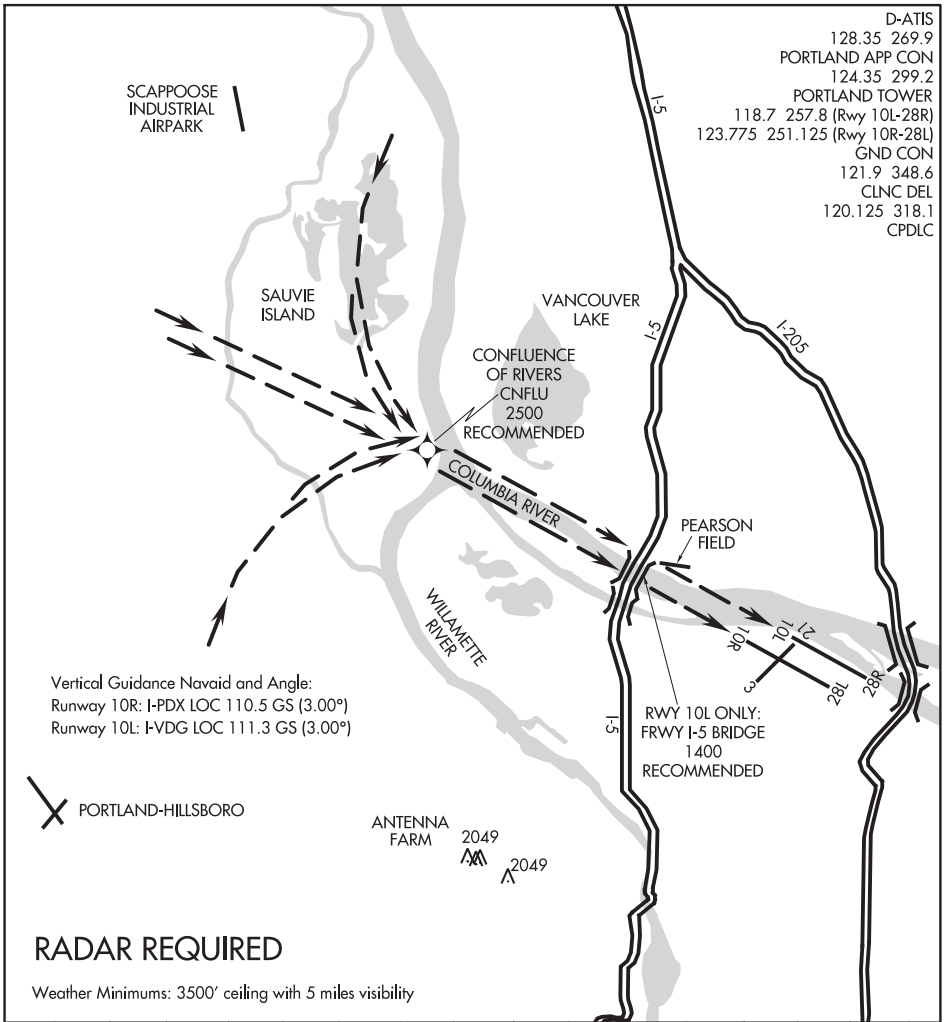
NW-1, 05 NOV 2020 to 31 DEC 2020

17173

# COLUMBIA VISUAL RWY 10L/R

AL-330 (FAA)

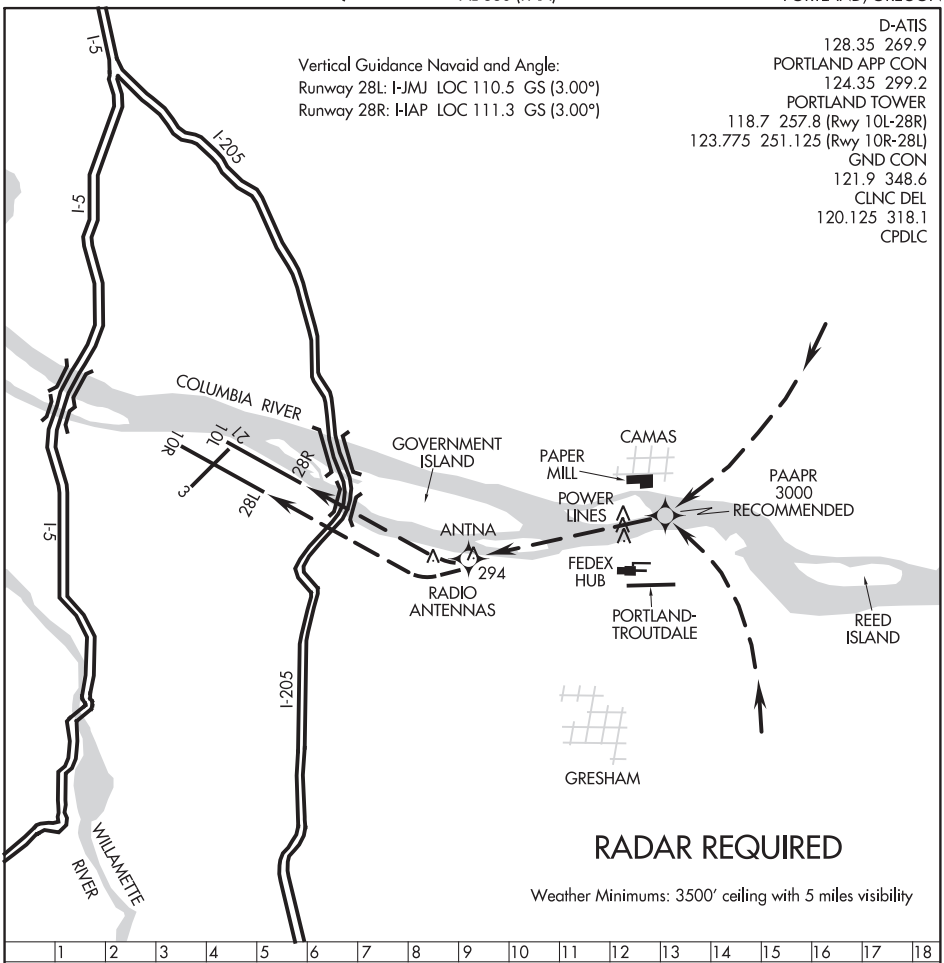
PORTLAND INTL (PDX)
PORTLAND, OREGON




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

COLUMBIA VISUAL RWY 10L/R
PROCEDURE NOT AUTHORIZED AT NIGHT




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

## MILL VISUAL RWY 28L/R
## PROCEDURE NOT AUTHORIZED AT NIGHT

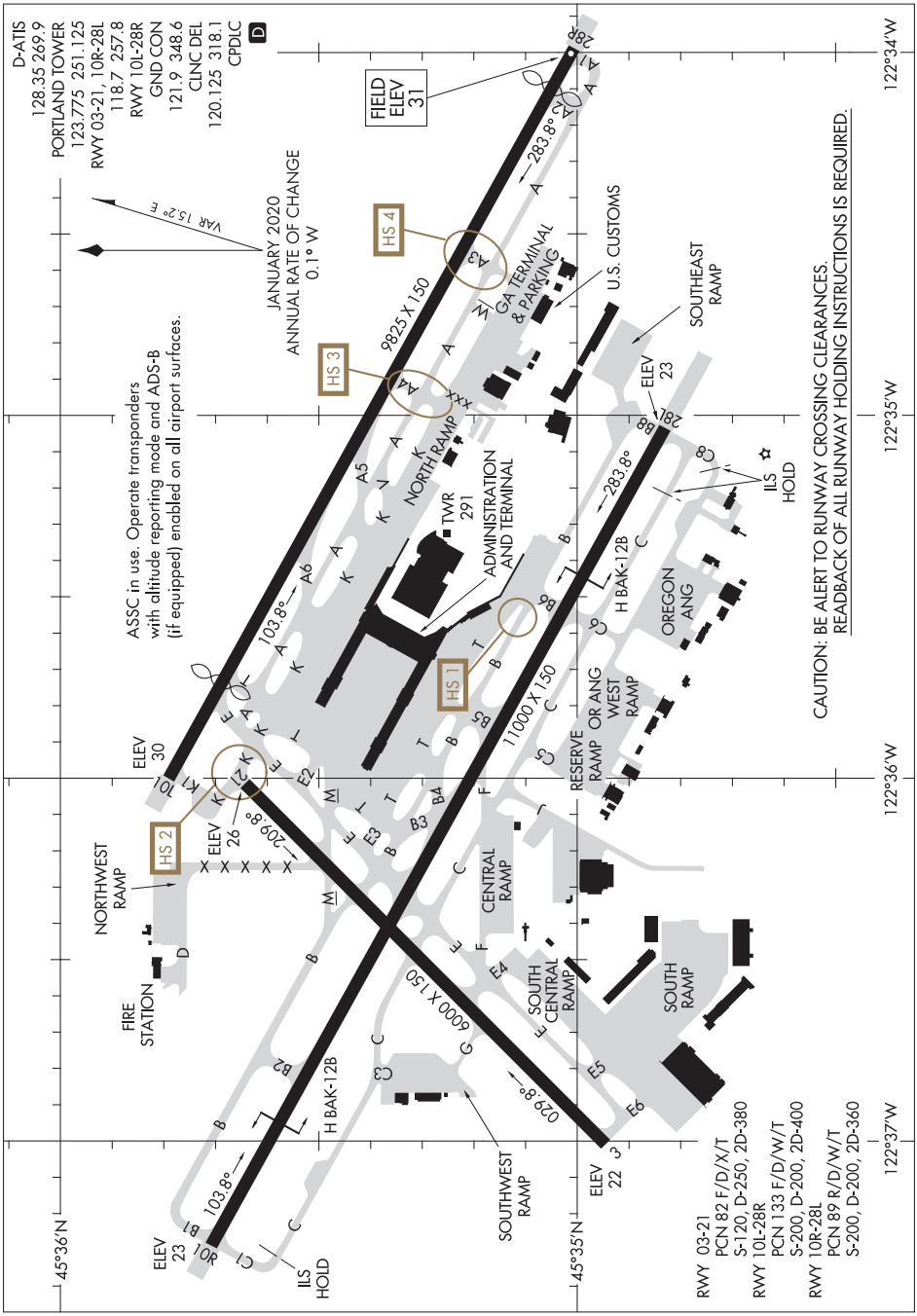
Aircraft cleared for the Mill Visual Approach should proceed over the Columbia River between the Paper Mill and the Fedex Hub, then via the depicted route to intercept the Final Approach Course for the assigned runway.

20086

# AIRPORT DIAGRAM

AL-330 (FAA)

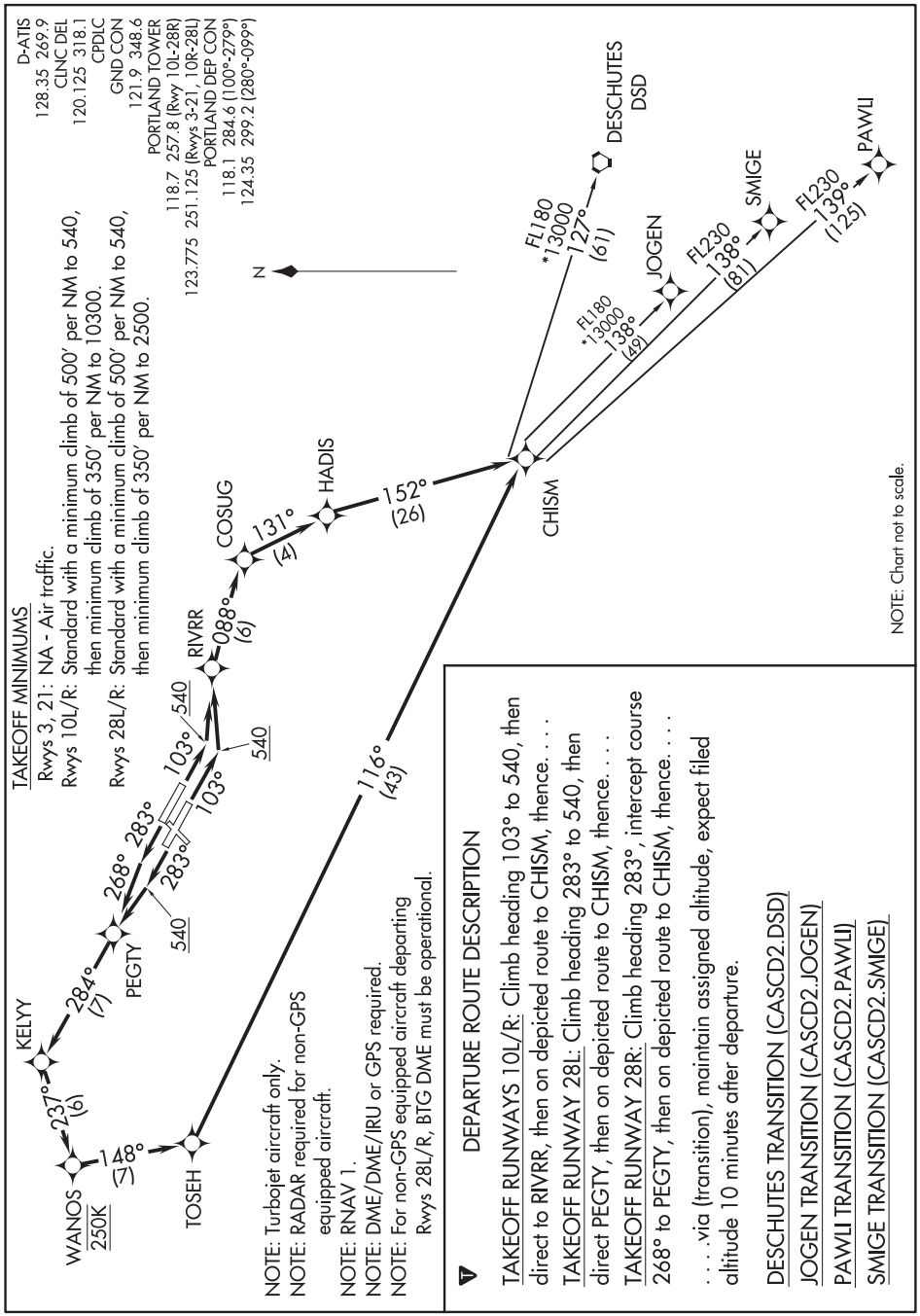
PORTLAND INTL (PDX)
PORTLAND, OREGON




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM
20086
PORTLAND, OREGON
PORTLAND INTL (PDX)


D-ATIS
128.35 269.9
CLNC DEL
120.125 318.1
CPDLC
GND CON
121.9 348.6
PORTLAND TOWER
118.7 257.8 (Rwy 10L-28R)
123.775 251.125 (Rwys 3-21, 10R-28L)
PORTLAND DEP CON
118.1 284.6 (100°-279°)
124.35 299.2 (280°-099°)
TAKEOFF MINIMUMS
Rwys 3, 21: NA - Air traffic.
Rwys 10L/R: Standard with a minimum climb of 500' per NM to 540, then minimum climb of 350' per NM to 10300.
Rwys 28L/R: Standard with a minimum climb of 500' per NM to 540, then minimum climb of 350' per NM to 2500.
N
WANOS
250K
148°
(7)
237°
(6)
KELYY
284°
(7)
PEGTY
268°
283°
283°
103°
103°
540
540
540
TOSEH
RIVRR
088°
(6)
COSUG
131°
(4)
HADIS
152°
(26)
116°
(43)
CHISM
FL180
*13000
138°
(49)
JOGEN
FL180
*13000
127°
(61)
DESCHUTES
DSD
FL230
138°
(81)
SMIGE
FL230
139°
(125)
PAWLI
NOTE: Turbojet aircraft only.
NOTE: RADAR required for non-GPS equipped aircraft.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: For non-GPS equipped aircraft departing Rwys 28L/R, BTG DME must be operational.
DEPARTURE ROUTE DESCRIPTION
TAKEOFF RUNWAYS 10L/R: Climb heading 103° to 540, then direct to RIVRR, then on depicted route to CHISM, thence. . . .
TAKEOFF RUNWAY 28L: Climb heading 283° to 540, then direct PEGTY, then on depicted route to CHISM, thence. . . .
TAKEOFF RUNWAY 28R: Climb heading 283°, intercept course 268° to PEGTY, then on depicted route to CHISM, thence. . . .
. . . .via (transition), maintain assigned altitude, expect filed altitude 10 minutes after departure.
DESCHUTES TRANSITION (CASCD2.DSD)
JOGEN TRANSITION (CASCD2.JOGEN)
PAWLI TRANSITION (CASCD2.PAWLI)
SMIGE TRANSITION (CASCD2.SMIGE)
NOTE: Chart not to scale.

(HRMNS5.HRMNS) 17341

# HRMNS FIVE DEPARTURE (RNAV)

AL-330 (FAA)

PORTLAND INTL (PDX)
PORTLAND, OREGON

**TOP ALTITUDE: ASSIGNED BY ATC**

D-ATIS
128.35 269.9
CLNC DEL
120.125 318.1
CPDLC
GND CON
121.9 348.6
PORTLAND TOWER
118.7 257.8 (Rwy 10L-28R)
123.775 251.125 (Rwys 3-21, 10R-28L)
PORTLAND DEP CON
118.1 284.6 (100°-279°)
124.35 299.2 (280°-099°)

WANOS
250K
237°
(6)
KELYY
284°
(7)
PEGTY
268°
283°
540
283°
103°
540
103°
540
RIVRR
088°
(6)
COSUG
153°
(4)
LEZLI
170°
(32)
HRMNS
133°
(41)
TOSEH
148°
(7)

NOTE: Turbojet aircraft only.
NOTE: RADAR required for non-GPS equipped aircraft.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.
NOTE: For non-GPS equipped aircraft departing Rwys 28L/R, BTG DME must be operational.

TAKEOFF MINIMUMS

Rwys 3, 21: NA - Air traffic.
Rwys 10L/R: Standard with minimum climb of 500′ per NM to 540, then minimum climb of 350′ per NM to 3400.
Rwys 28L/R: Standard with minimum climb of 500′ per NM to 540, then minimum climb of 350′ per NM to 2500.

NOTE: Chart not to scale.

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 10L/R: Climb heading 103° to 540, then direct to RIVRR, then on depicted route to HRMNS, thence. . . .

TAKEOFF RUNWAY 28L: Climb heading 283° to 540, then direct PEGTY, then on depicted route to HRMNS, thence. . . .

TAKEOFF RUNWAY 28R: Climb heading 283°, intercept course 268° to PEGTY, then on depicted route to HRMNS, thence. . . .

. . . .maintain assigned altitude, expect filed altitude 10 minutes after departure.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 10L/R: Climb heading 103° to 540, then direct to RIVRR, then on depicted route to LAVAA, thence. . . .

TAKEOFF RUNWAY 28L: Climb heading 283° to 540, then direct PEGTY, then on depicted route to LAVAA, thence. . . .

TAKEOFF RUNWAY 28R: Climb heading 283°, intercept course 268° to PEGTY, then on depicted route to LAVAA, thence. . . .

. . . .via (Transition), maintain assigned altitude, expect filed altitude 10 minutes after departure.

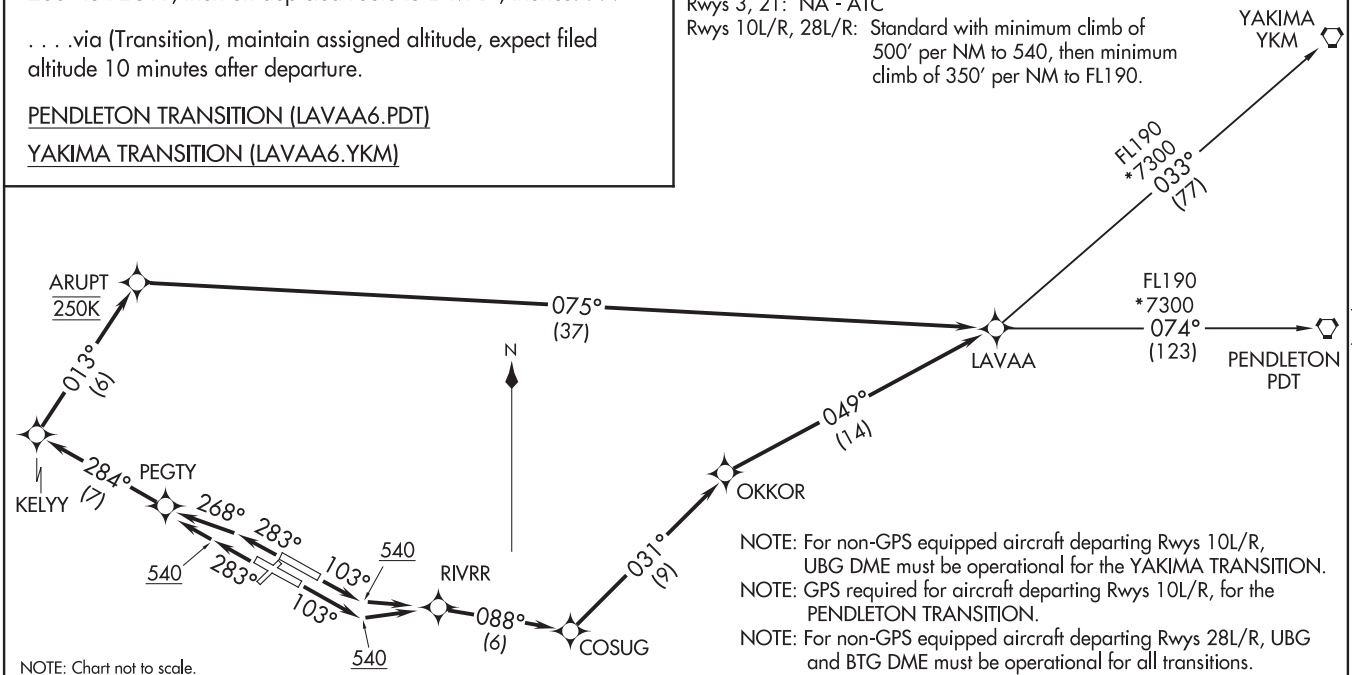
PENDLETON TRANSITION (LAVAA6.PDT)

YAKIMA TRANSITION (LAVAA6.YKM)

NOTE: Turbojet aircraft only.
NOTE: RADAR required for non-GPS equipped aircraft.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.

D-ATIS
128.35 269.9
CLNC DEL
120.125 318.1
CPDLC
GND CON
121.9 348.6
PORTLAND TOWER
118.7 257.8 (Rwy 10L-28R)
123.775 251.125 (Rwys 3-21, 10R-28L)
PORTLAND DEP CON
124.35 299.2

TAKEOFF MINIMUMS
Rwys 3, 21: NA - ATC
Rwys 10L/R, 28L/R: Standard with minimum climb of 500′ per NM to 540, then minimum climb of 350′ per NM to FL190.




NOTE: For non-GPS equipped aircraft departing Rwys 10L/R, UBG DME must be operational for the YAKIMA TRANSITION.
NOTE: GPS required for aircraft departing Rwys 10L/R, for the PENDLETON TRANSITION.
NOTE: For non-GPS equipped aircraft departing Rwys 28L/R, UBG and BTG DME must be operational for all transitions.

NOTE: Chart not to scale.

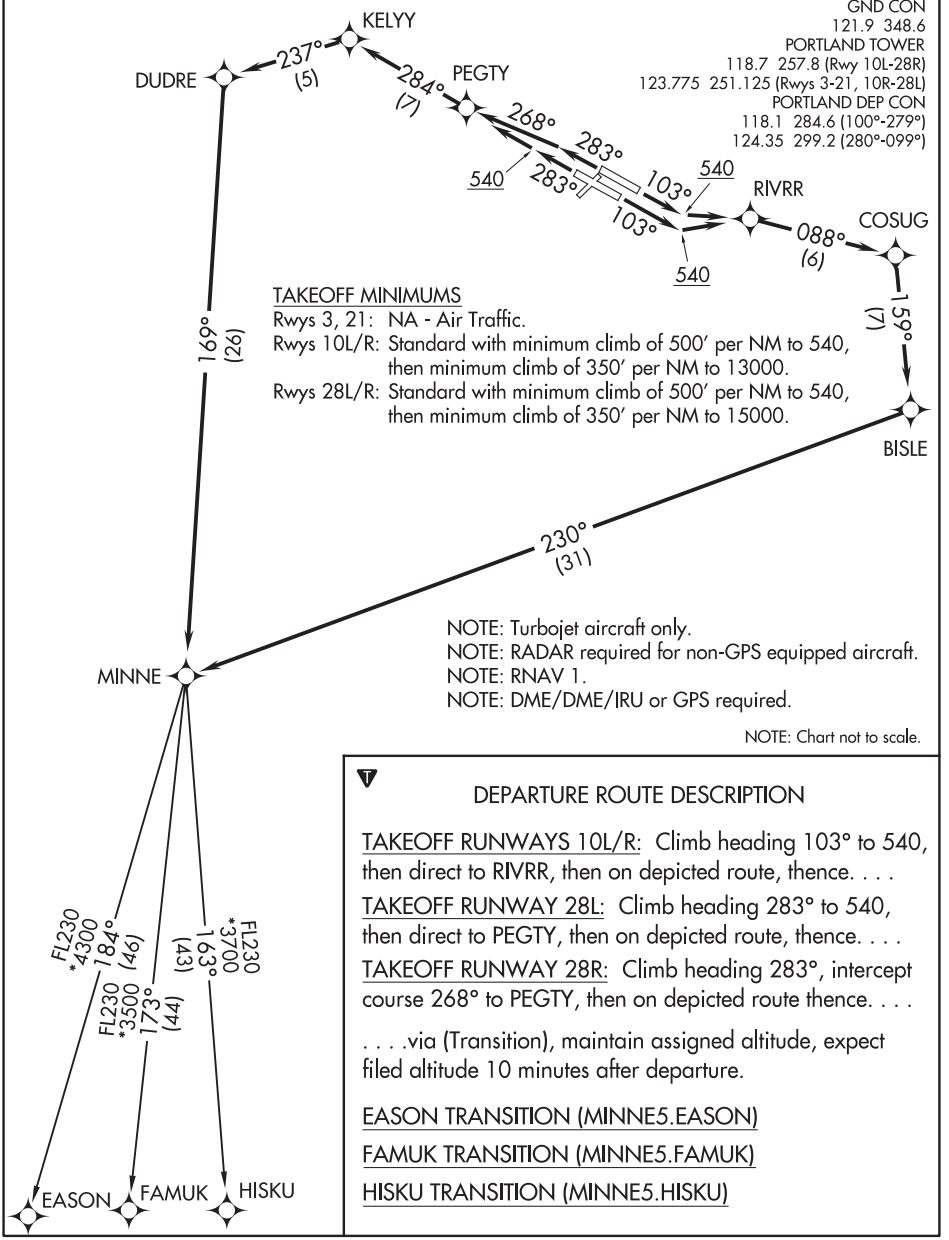
(MINNE5.MINNE) 17341

# MINNE FIVE DEPARTURE (RNAV)

AL-330 (FAA)

PORTLAND INTL (PDX)
PORTLAND, OREGON

D-ATIS
128.35 269.9
CLNC DEL
120.125 318.1
CPDLC
GND CON
121.9 348.6
PORTLAND TOWER
118.7 257.8 (Rwy 10L-28R)
123.775 251.125 (Rwys 3-21, 10R-28L)
PORTLAND DEP CON
118.1 284.6 (100°-279°)
124.35 299.2 (280°-099°)




TAKEOFF MINIMUMS
Rwys 3, 21: NA - Air Traffic.
Rwys 10L/R: Standard with minimum climb of 500′ per NM to 540, then minimum climb of 350′ per NM to 13000.
Rwys 28L/R: Standard with minimum climb of 500′ per NM to 540, then minimum climb of 350′ per NM to 15000.

NOTE: Turbojet aircraft only.
NOTE: RADAR required for non-GPS equipped aircraft.
NOTE: RNAV 1.
NOTE: DME/DME/IRU or GPS required.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 10L/R: Climb heading 103° to 540, then direct to RIVRR, then on depicted route, thence. . . .

TAKEOFF RUNWAY 28L: Climb heading 283° to 540, then direct to PEGTY, then on depicted route, thence. . . .

TAKEOFF RUNWAY 28R: Climb heading 283°, intercept course 268° to PEGTY, then on depicted route thence. . . .

. . . .via (Transition), maintain assigned altitude, expect filed altitude 10 minutes after departure.

EASON TRANSITION (MINNE5.EASON)

FAMUK TRANSITION (MINNE5.FAMUK)

HISKU TRANSITION (MINNE5.HISKU)


NW-1, 05 NOV 2020 to 31 DEC 2020

MINNE FIVE DEPARTURE (RNAV)
(MINNE5.MINNE) 08JAN15

PORTLAND, OREGON
PORTLAND INTL (PDX)

# PORTLAND ONE DEPARTURE

AL-330 (FAA)

D-ATIS
128.35 269.9
CLNC DEL
120.125 318.1
CPDLC
PORTLAND TOWER
118.7 257.8 (Rwy 10L-28R)
123.775 251.125 (Rwys 3-21, 10R-28L)
PORTLAND DEP CON
124.35 299.2

SEATTLE
116.8 SEA
Chan 115
N47°26.12′-W122°18.58′
L-1, H-1

OLYMPIA
113.4 OLM
Chan 81
N46°58.30′
W122°54.11′
L-1, H-1

TATOOSH
112.2 TOU
Chan 59
N48°17.99′-W124°37.62′
L-1, H-1

ASTORIA
114.0 AST
Chan 87
N46°09.70′-W123°52.82′
L-1

BATTLEGROUND
116.6 BTG
Chan 113
N45°44.87′-W122°35.49′
L-1, H-1

YAKIMA
116.0 YKM
Chan 107
N46°34.21′-W120°26.68′
L-13, H-1

KLICKITAT
112.3 LTJ
Chan 70
N45°42.82′
W121°06.05′
L-13, H-1

NEWBERG
117.4 UBG
Chan 121
N45°21.19′-W122°58.69′
L-1, H-1

PENDLETON
114.7 PDT
Chan 94
N45°41.91′-W118°56.32′
L-13, H-1

NEWPORT
117.1 ONP
Chan 118
N44°34.52′-W124°03.64′
L-1, H-1

KIMBERLY
115.6 IMB
Chan 103
N44°38.90′-W119°42.70′
L-13, H-1

EUGENE
112.9 EUG
Chan 76
N44°07.25′-W123°13.37′
L-1, H-1

DESCHUTES
117.6 DSD
Chan 123
N44°15.17′-W121°18.21′
L-13, H-1

NORTH BEND
112.1 OTH
Chan 58
N43°24.93′-W124°10.11′
L-1

LAKEVIEW
112.0 LKV
Chan 57
N42°29.57′-W120°30.43′
L-11, H-3

ROGUE VALLEY
113.6 OED
Chan 83
N42°28.77′-W122°54.78′
L-2, H-3

KLAMATH FALLS
115.9 LMT
Chan 106
N42°09.19′-W121°43.65′
L-2, H-3

R-326
R-355
800
600
R-055
283°
029°
R-085
500
209°
103°
R-115
500

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

TAKEOFF MINIMUMS

Rwy 3: Standard with minimum climb of 400′ per NM to 2900.
Rwy 10L: Standard with minimum climb of 450′ per NM to 2900.
Rwy 10R: Standard with minimum climb of 400′ per NM to 2900.
Rwy 21: Standard with minimum climb of 450′ per NM to 2900.
Rwy 28L: Standard with minimum climb of 375′ per NM to 2900.
Rwy 28R: Standard with minimum climb of 350′ per NM to 2900.

NOTE: RADAR required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 3: Climb heading 029° to 600, thence. . . .
TAKEOFF RUNWAY 10L: Climb heading 103° to 500, thence. . . .
TAKEOFF RUNWAY 10R: Climb heading 103° to 500, thence. . . .
TAKEOFF RUNWAY 21: Climb heading 209° to 500, thence. . . .
TAKEOFF RUNWAY 28L: Climb heading 283° to 800, thence. . . .
TAKEOFF RUNWAY 28R: Climb heading 283° to 800, thence. . . .

. . . .on assigned heading expect RADAR vectors to assigned route/fix. Maintain assigned altitude, expect filed altitude five minutes after departure.

LOST COMMUNICATIONS: If no contact with ATC within 10 NM of airport, continue climb to assigned altitude and proceed direct BTG VORTAC. Continue climb on BTG R-329 within 10 NM to cross BTG VORTAC BTG R-355 CW R-055 or R-085 CW R-115 at or above 5000 feet. Continue climb on course.

# WHAMY FOUR DEPARTURE (RNAV)

NOTE: For non-GPS equipped aircraft departing Rwys 10L/R, UBG and BTG DME must be operational for the KOATA transition.

NOTE: For non-GPS equipped aircraft departing Rwys 10L/R, UBG, BTG and DSD DME must be operational for the IMB transition.

NOTE: For non-GPS equipped aircraft departing Rwys 28L/R, BTG DME must be operational.

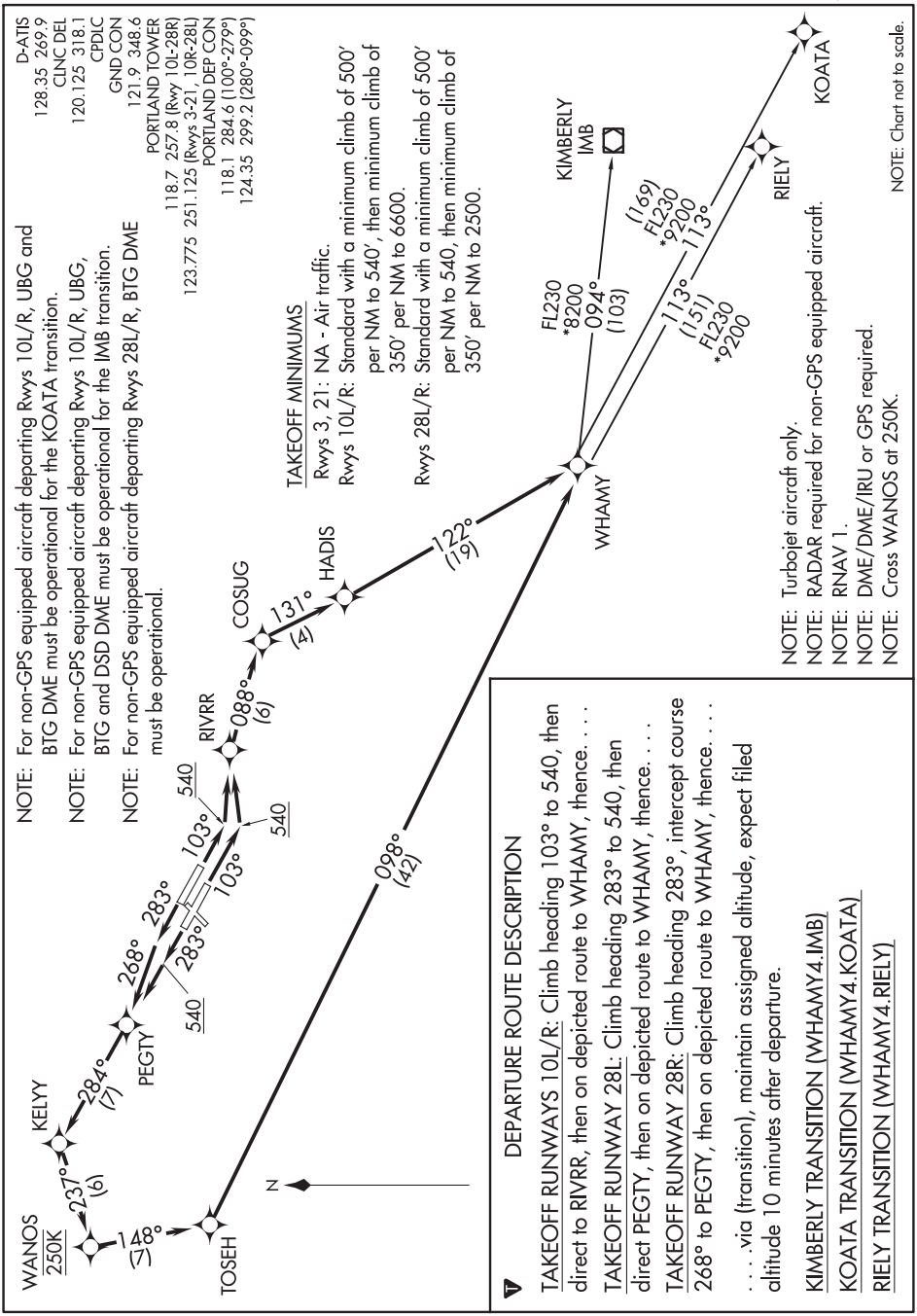
D-ATIS 128.35 269.9
CLNC DEL 120.125 318.1
CPDLC
GND CON 121.9 348.6
PORTLAND TOWER 118.7 257.8 (Rwy 10I-28R) 123.775 251.125 (Rwys 3-21, 10R-28L)
PORTLAND DEP CON 118.1 284.6 (100°-279°) 124.35 299.2 (280°-099°)

TAKEOFF MINIMUMS

Rwys 3, 21: NA - Air traffic.

Rwys 10L/R: Standard with a minimum climb of 500′ per NM to 540′, then minimum climb of 350′ per NM to 6600.

Rwys 28L/R: Standard with a minimum climb of 500′ per NM to 540, then minimum climb of 350′ per NM to 2500.




## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 10L/R: Climb heading 103° to 540, then direct to RIVRR, then on depicted route to WHAMY, thence. . . .

TAKEOFF RUNWAY 28L: Climb heading 283° to 540, then direct PEGTY, then on depicted route to WHAMY, thence. . . .

TAKEOFF RUNWAY 28R: Climb heading 283°, intercept course 268° to PEGTY, then on depicted route to WHAMY, thence. . . .

. . . .via (transition), maintain assigned altitude, expect filed altitude 10 minutes after departure.

KIMBERLY TRANSITION (WHAMY4.IMB)

KOATA TRANSITION (WHAMY4.KOATA)

RIELY TRANSITION (WHAMY4.RIELY)

NOTE: Turbojet aircraft only.

NOTE: RADAR required for non-GPS equipped aircraft.

NOTE: RNAV 1.

NOTE: DME/DME/IRU or GPS required.

NOTE: Cross WANOS at 250K.

NOTE: Chart not to scale.

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

PORTLAND, OREGON AL-5063 (FAA) 20282

| LOC I-HIO | APP CRS | Rwy ldg | 6600 |
|---|---|---|---|
| 110.7 | 128° | TDZE | 203 |
| | | Apt Elev | 208 |

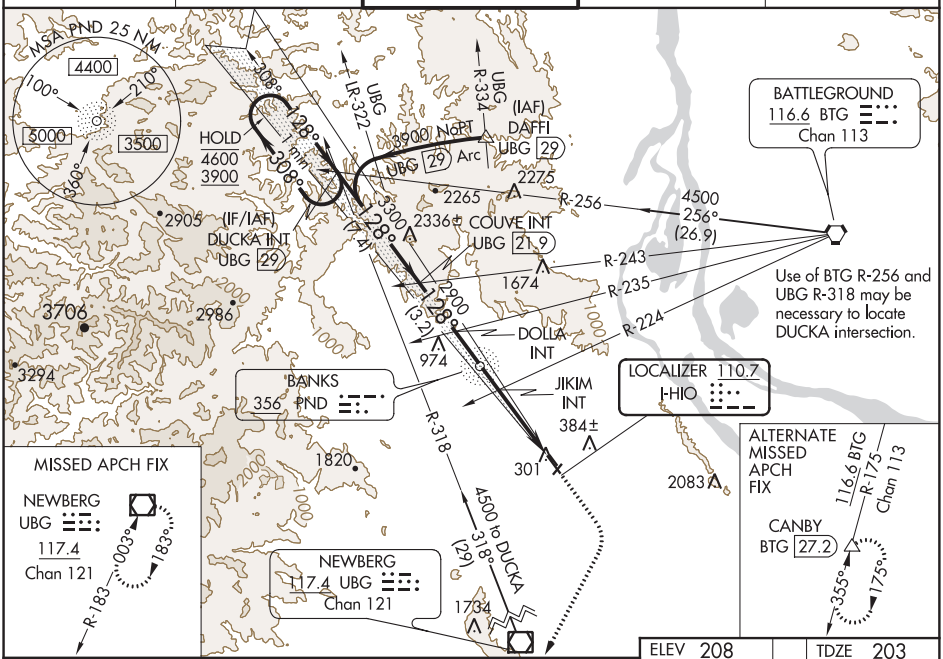
# ILS or LOC RWY 13R
## PORTLAND-HILLSBORO (HIO)

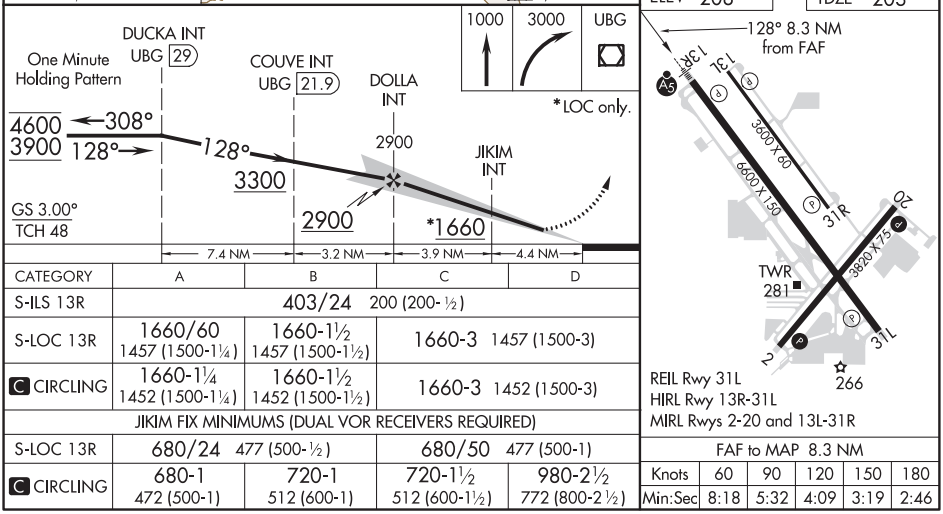
Circling to Rwy 13L, 31R NA at night. Inop table does not apply to S-LOC Rwy 13R all Cats. For inop ALS, increase JIKIM fix minimums Cat C/D visibility to 1⅜ SM.

MALSR

MISSED APPROACH: Climb to 1000 then climbing right turn to 3000 direct UBG VOR/DME and hold. Continue climb-in-hold to 3000.

| ATIS | PORTLAND APP CON | HILLSBORO TOWER * | GND CON | UNICOM |
|---|---|---|---|---|
| 127.65 | 126.0 269.175 | 119.3 (CTAF) 239.3 | 121.7 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 13R | 403/24 200 (200-½) | | | |
| S-LOC 13R | 1660/60 1457 (1500-1¼) | 1660-1½ 1457 (1500-1½) | 1660-3 1457 (1500-3) | |
| C CIRCLING | 1660-1¼ 1452 (1500-1¼) | 1660-1½ 1452 (1500-1½) | 1660-3 1452 (1500-3) | |
| JIKIM FIX MINIMUMS (DUAL VOR RECEIVERS REQUIRED) | | | | |
| S-LOC 13R | 680/24 477 (500-½) | | 680/50 477 (500-1) | |
| C CIRCLING | 680-1 472 (500-1) | 720-1 512 (600-1) | 720-1½ 512 (600-1½) | 980-2½ 772 (800-2½) |

| FAF to MAP 8.3 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 8:18 | 5:32 | 4:09 | 3:19 | 2:46 |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 69502 W13A | APP CRS 127° | Rwy ldg 6600<br>TDZE 203<br>Apt Elev 208 |
|---|---|---|

# RNAV (GPS) RWY 13R
## PORTLAND-HILLSBORO (HIO)

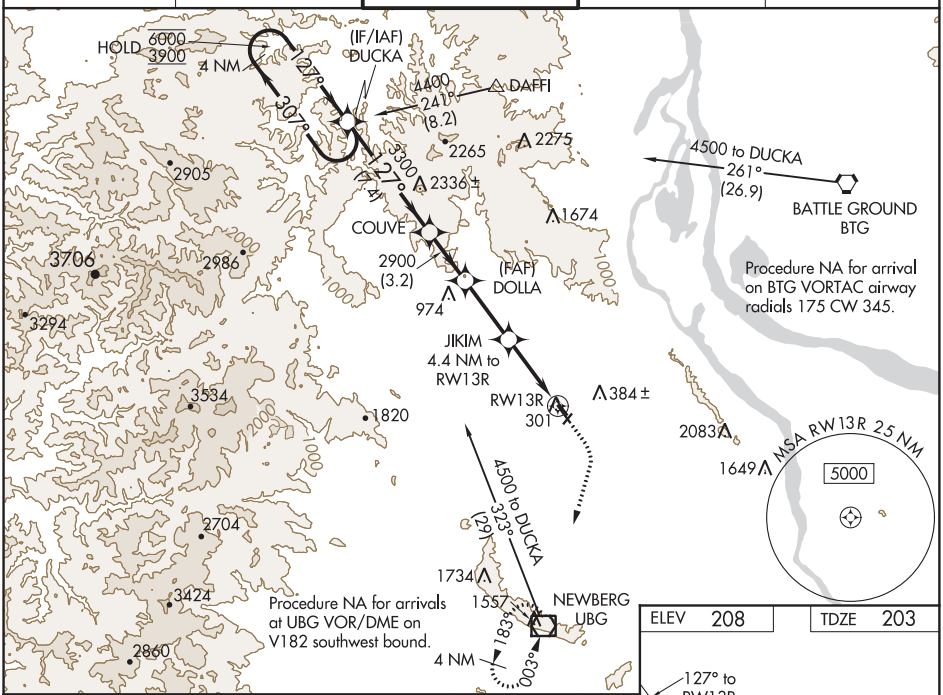
RNP APCH.

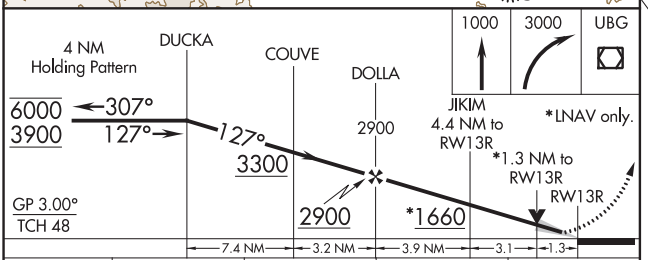
Circling to Rwy 13L-31R NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C or above 54°C. For inop ALS, increase LNAV Cat A/B visibility to RVR 5500 and Cat C/D to 1 3/8 SM.
#RVR 1800 authorized with use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 1000 then climbing right turn to 3000 direct UBG VOR/DME and hold. Continue climb-in-hold to 3000.

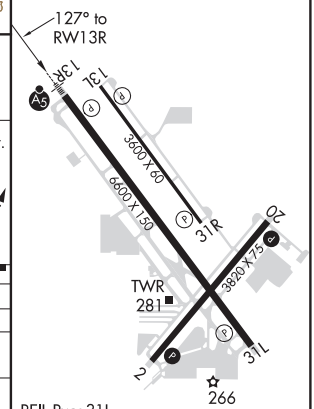
| ATIS | PORTLAND APP CON | HILLSBORO TOWER * | GND CON | UNICOM |
|---|---|---|---|---|
| 127.65 | 126.0 269.175 | 119.3 (CTAF) L 239.3 | 121.7 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA# | 403/24 200 (200-½) | | | |
| LNAV/VNAV DA | 661/45 458 (500-⅞) | | | |
| LNAV MDA | 660/40 457 (500-¾) | | 660/50 457 (500-1) | |
| C CIRCLING | 680-1 472 (500-1) | 720-1 512 (600-1) | 720-1½ 512 (600-1½) | 980-2½ 772 (800-2½) |

ELEV 208 TDZE 203




REIL Rwy 31L
HIRL Rwy 13R-31L
MIRL Rwys 2-20 and 13L-31R

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

PORTLAND, OREGON | AL-5063 (FAA) | 20086

| APP CRS | Rwy ldg | 6600 |
|---|---|---|
| 308° | TDZE | 204 |
| | Apt Elev | 208 |

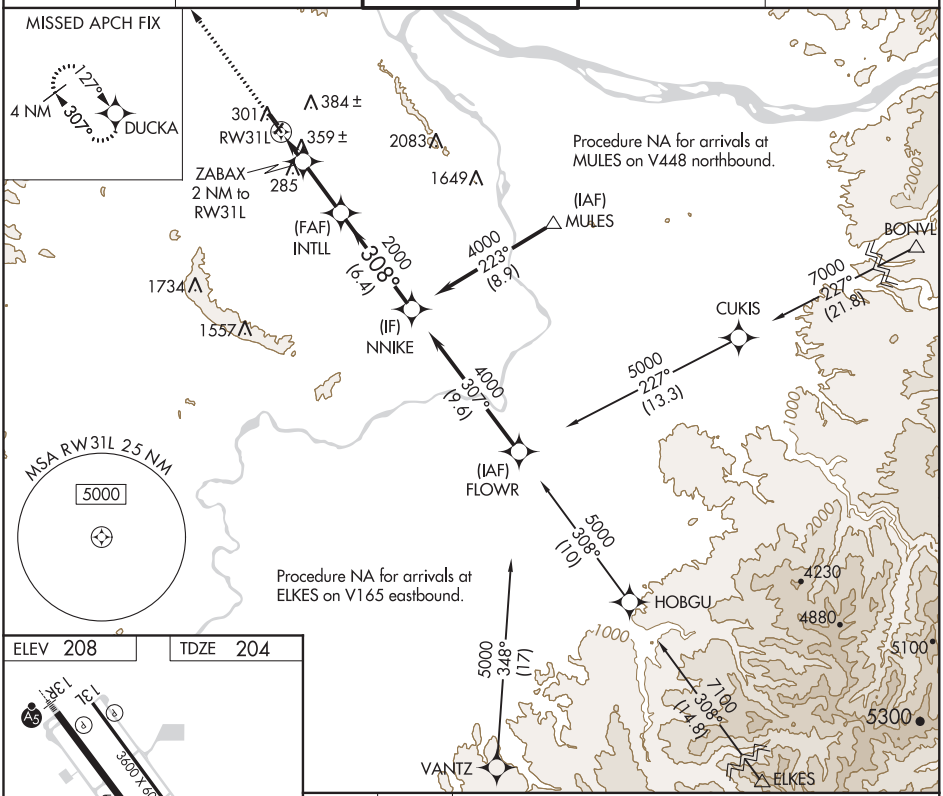
# RNAV (GPS) RWY 31L
## PORTLAND-HILLSBORO (HIO)

RNP APCH.

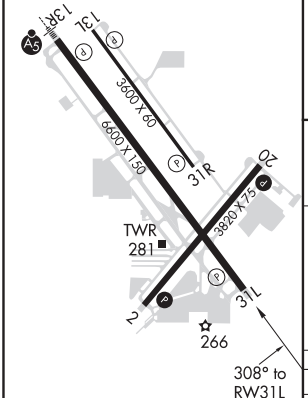
Circling to Rwy 13L, 31R NA at night.
Rwy 31L helicopter visibility reduction below ¾ SM NA.

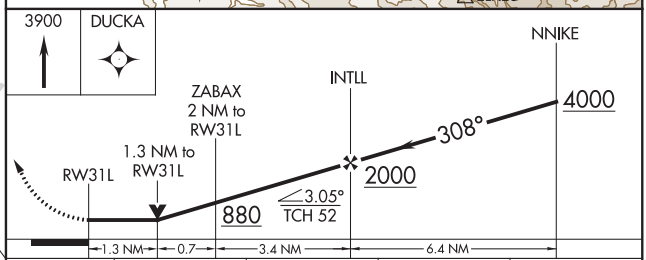
MISSED APPROACH: Climb to 3900 direct DUCKA and hold.

| ATIS | PORTLAND APP CON | HILLSBORO TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 127.65 | 126.0 269.175 | 119.3 (CTAF) (L) 239.3 | 121.7 | 122.95 |




ELEV 208 | TDZE 204




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 660-1 456 (500-1) | | 660-1⅜ 456 (500-1⅜) | |
| C CIRCLING | 680-1 472 (500-1) | 720-1 512 (600-1) | 720-1½ 512 (600-1½) | 980-2½ 772 (800-2½) |

REIL Rwy 31L
HIRL Rwy 13R-31L
MIRL Rwys 2-20 and 13L-31R

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| VOR/DME UBG 117.4 Chan 121 | APP CRS 345° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 208 |
|---|---|---|

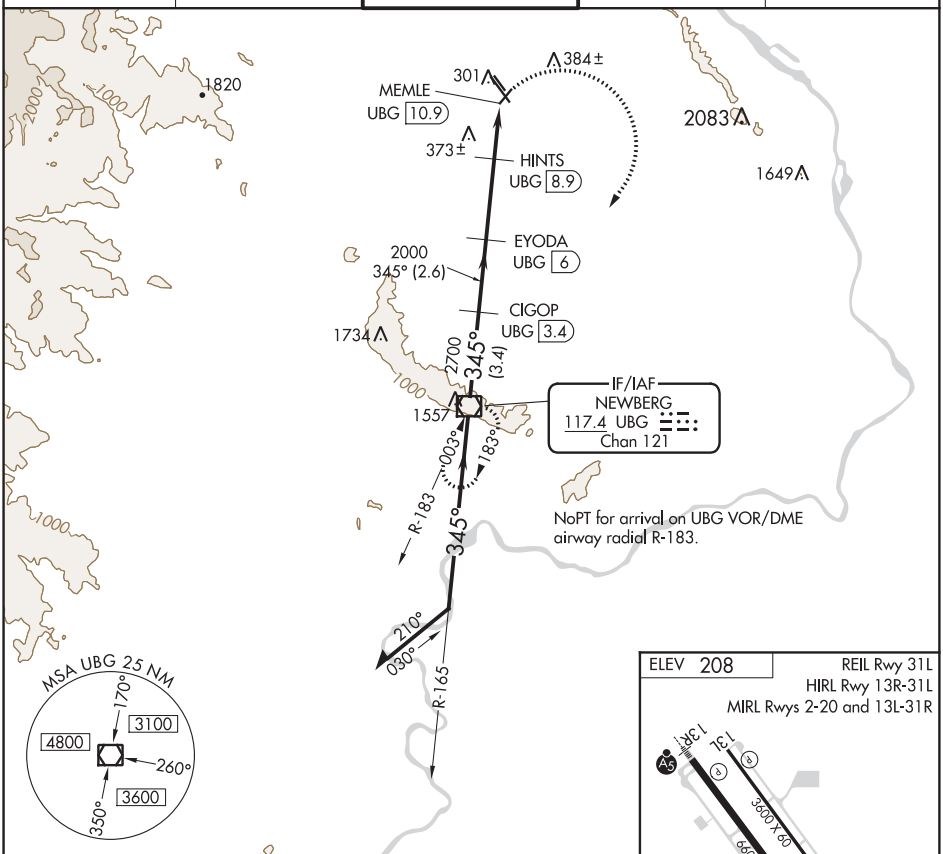
# VOR-C
## PORTLAND-HILLSBORO (HIO)

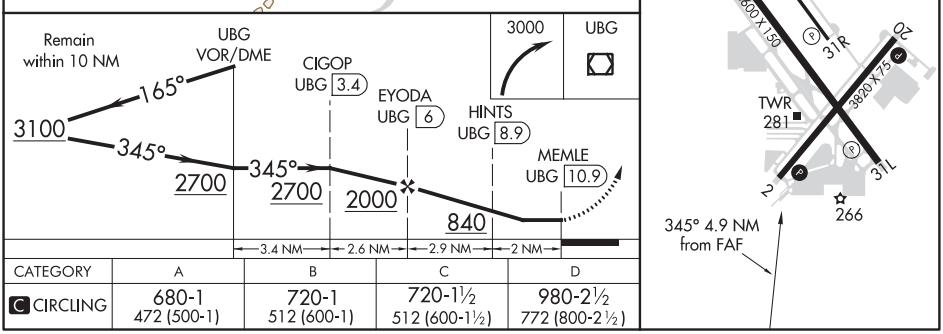
DME required.

Circling to Rwy 13L, 31R NA at night.

MISSED APPROACH: Climbing right turn to 3000 direct UBG VOR/DME and hold. Continue climb-in-hold to 3000.

| ATIS | PORTLAND APP CON | HILLSBORO TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 127.65 | 126.0 269.175 | 119.3 (CTAF) L 239.3 | 121.7 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 680-1<br>472 (500-1) | 720-1<br>512 (600-1) | 720-1½<br>512 (600-1½) | 980-2½<br>772 (800-2½) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

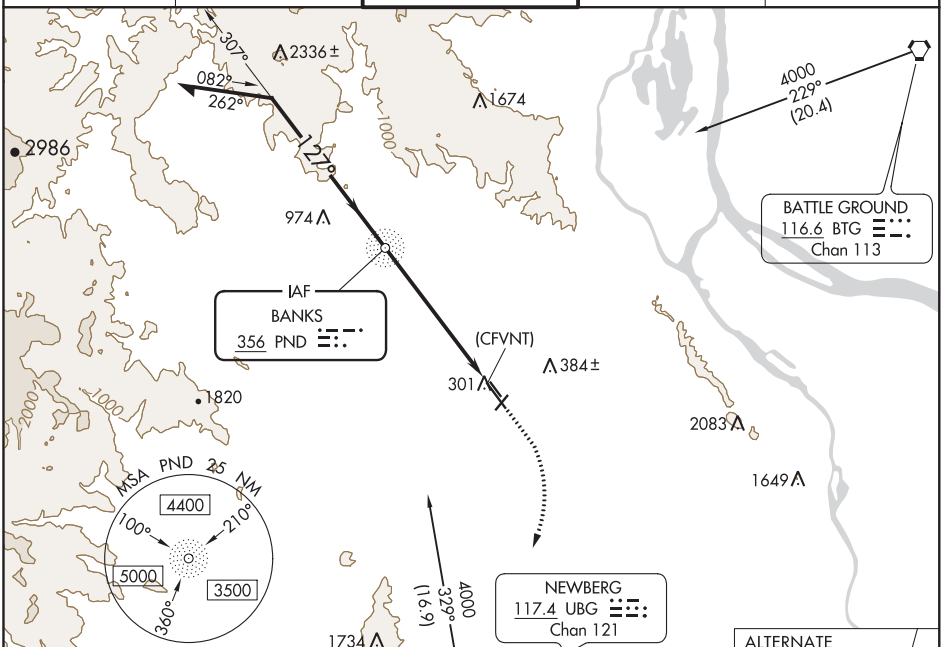
| PND NDB | APP CRS | Rwy ldg | N/A |
|---|---|---|---|
| 356 | 127° | TDZE | N/A |
| | | Apt Elev | 208 |

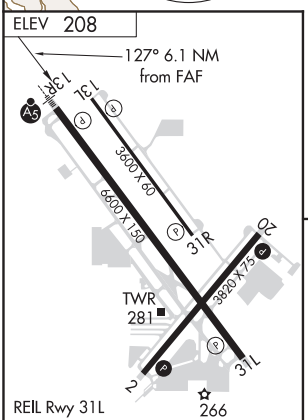
# NDB-B
## PORTLAND-HILLSBORO (HIO)

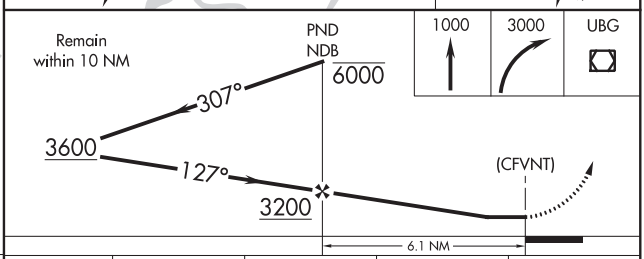
T A NA Circling to Rwy 13L, 31R NA at night.

MISSED APPROACH: Climb to 1000 then climbing right turn to 3000 direct UBG VOR/DME and hold.

| ATIS | PORTLAND APP CON | HILLSBORO TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 127.65 | 126.0 269.175 | 119.3 (CTAF) L 239.3 | 121.7 | 122.95 |



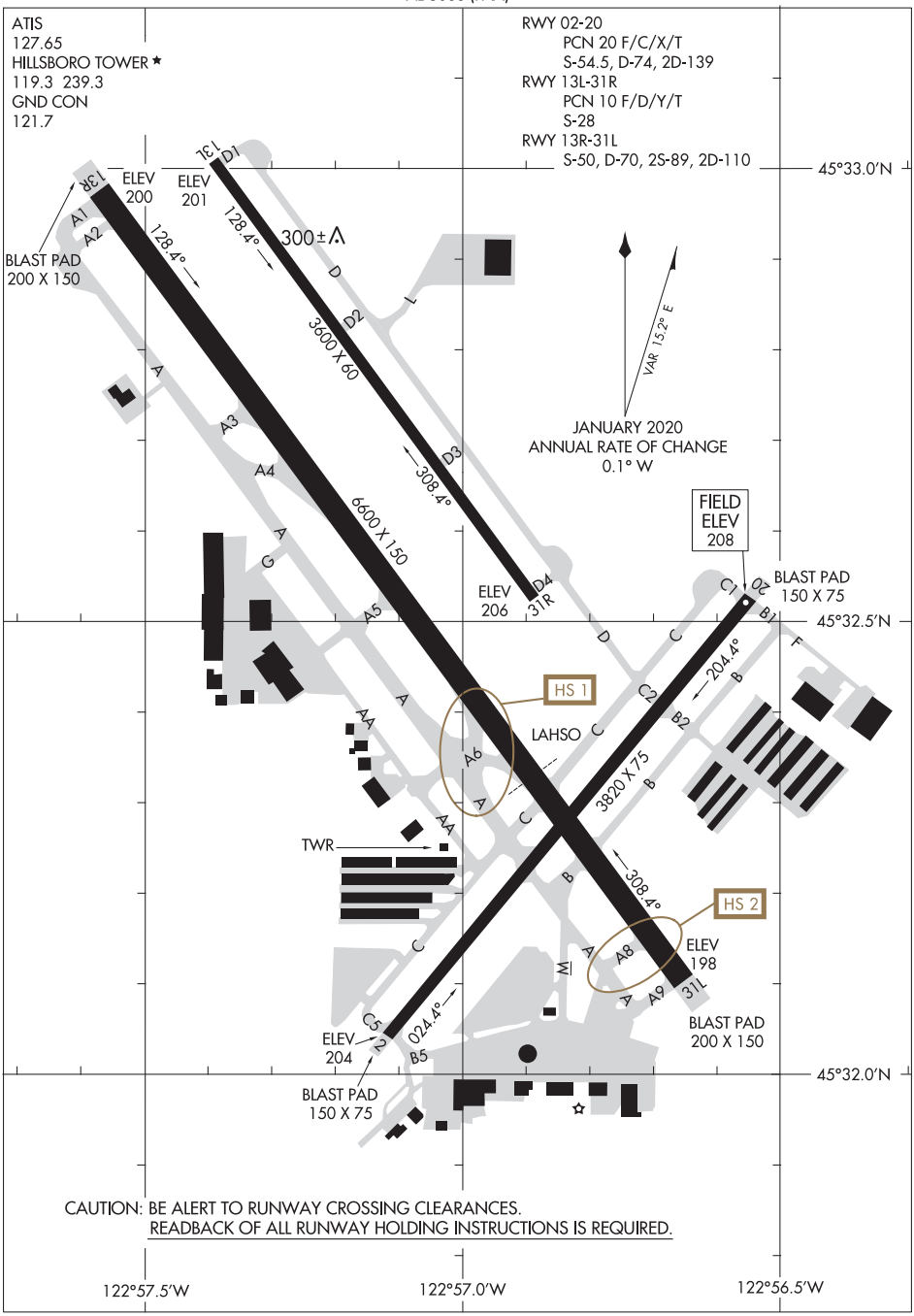

| FAF to MAP 6.1 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 6:06 | 4:04 | 3:03 | 2:26 | 2:02 |

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 960-1 752 (800-1) | | 960-2¼ 752 (800-2¼) | 980-2½ 772 (800-2½) |




NW-1, 05 NOV 2020 to 31 DEC 2020

AL-5063 (FAA)




CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

(BERNI3.BERNI) 18032

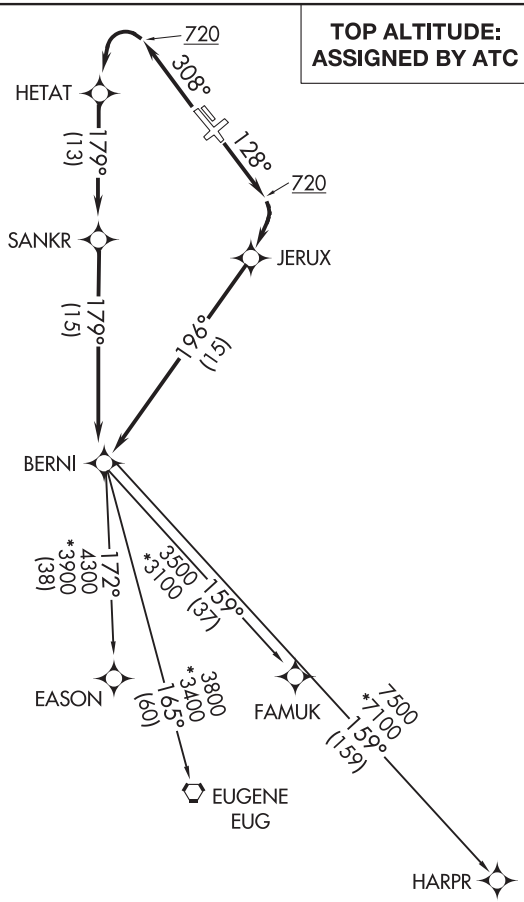
# BERNI THREE DEPARTURE (RNAV)

AL-5063 (FAA)

PORTLAND-HILLSBORO (HIO)
PORTLAND, OREGON

ATIS
127.65
GND CON
121.7
HILLSBORO TOWER ★
119.3 (CTAF) 239.3
PORTLAND DEP CON
126.0 269.175

**TOP ALTITUDE: ASSIGNED BY ATC**




NOTE: GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: Turbojet aircraft only.

TAKEOFF MINIMUMS

Rwys 2, 13L, 20, 31R: NA-ATC.
Rwys 13R, 31L: Standard with minimum climb of 500′ per NM to 720.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 13R: Climb heading 128° to 720, then climbing right turn direct JERUX, then on track 196° to BERNI, thence . . . .

TAKEOFF RUNWAY 31L: Climb heading 308° to 720, then climbing left turn direct HETAT, then on track 179° to SANKR, then on track 179° to BERNI, thence . . . .

. . . . on (transition). Maintain assigned altitude. Expect filed altitude 10 minutes after departure.

EASON TRANSITION (BERNI3.EASON)
EUGENE TRANSITION (BERNI3.EUG)
FAMUK TRANSITION (BERNI3.FAMUK)
HARPR TRANSITION (BERNI3.HARPR)

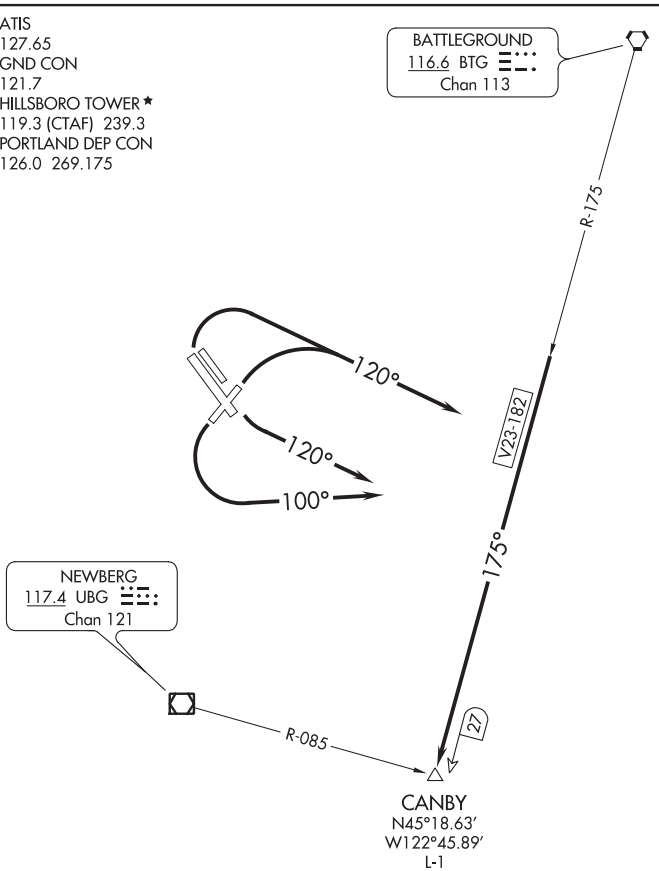

NW-1, 05 NOV 2020 to 31 DEC 2020

BERNI THREE DEPARTURE (RNAV)
(BERNI3.BERNI) 01FEB18

PORTLAND, OREGON
PORTLAND-HILLSBORO (HIO)

**TOP ALTITUDE: ASSIGNED BY ATC**

ATIS
127.65
GND CON
121.7
HILLSBORO TOWER ★
119.3 (CTAF) 239.3
PORTLAND DEP CON
126.0 269.175




TAKEOFF MINIMUMS
Rwys 2: Standard with minimum climb of 305′ per NM to 2700.
Rwys 13L/R: Standard with minimum climb of 235′ per NM to 1500.
Rwy 20: Standard.
Rwys 31L/R: Standard with minimum climb of 280′ per NM to 2700.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 2, 31L/R: Climbing right turn heading 120°, thence. . . .
TAKEOFF RUNWAYS 13L/R: Climbing left turn heading 120°, thence. . . .
TAKEOFF RUNWAY 20: Climbing left turn heading 100°, thence. . . .

. . . .intercept BTG VORTAC R-175 to CANBY. Then on assigned route.
Maintain ATC assigned altitude.



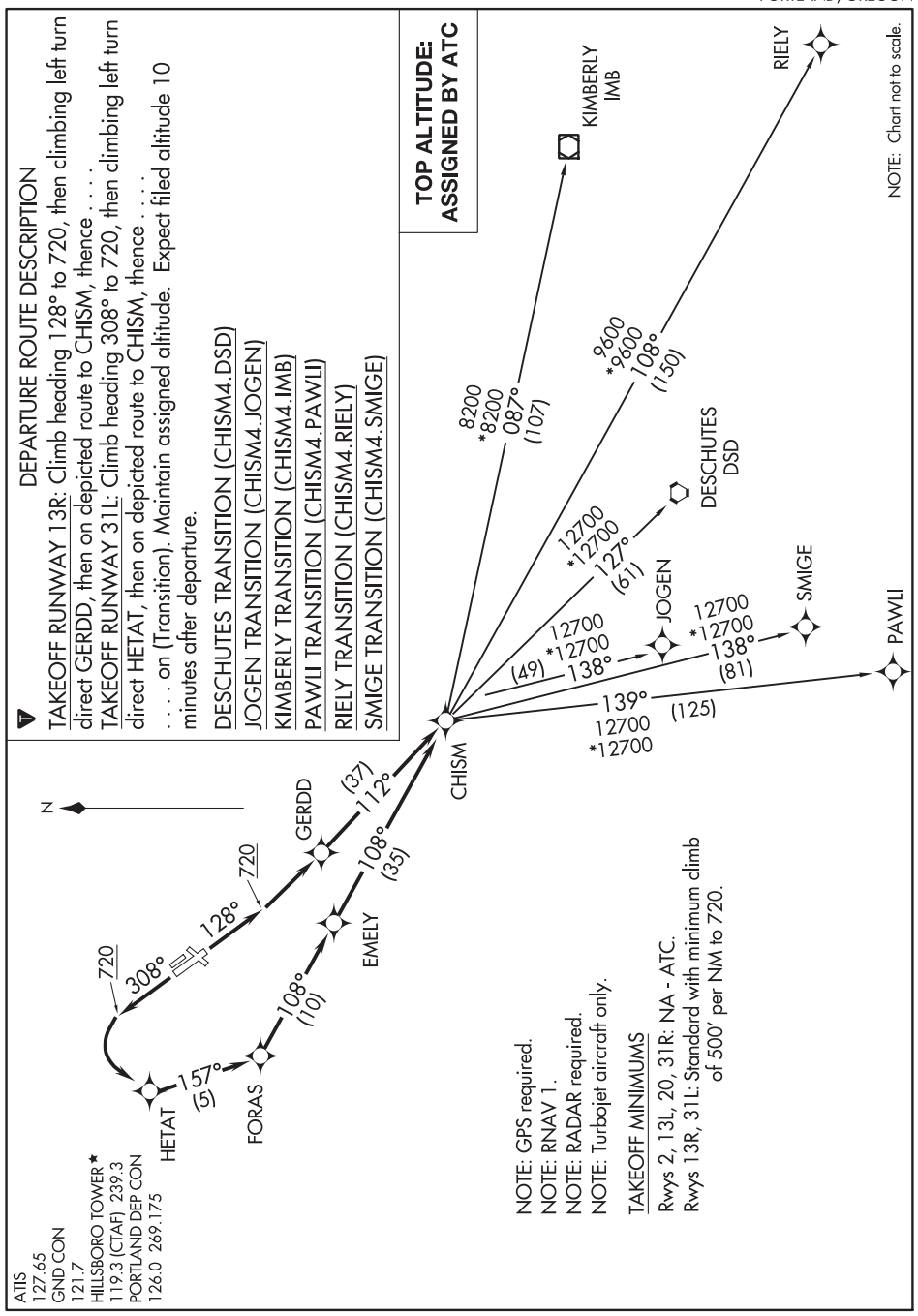
NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

(CHISM4.CHISM) 18032

# CHISM FOUR DEPARTURE (RNAV)

AL-5063 (FAA)

PORTLAND-HILLSBORO (HIO)
PORTLAND, OREGON




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

CHISM FOUR DEPARTURE (RNAV)

(CHISM4.CHISM) 01FEB18

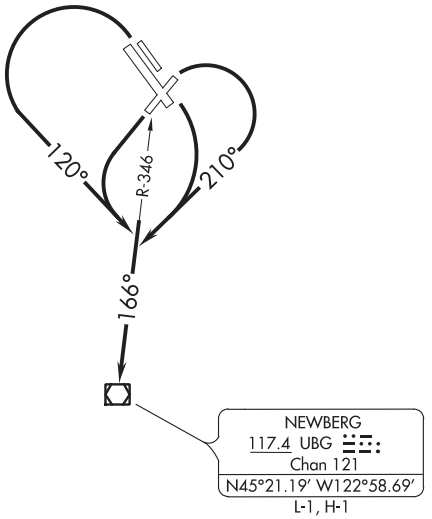
PORTLAND, OREGON
PORTLAND-HILLSBORO (HIO)

# FARMINGTON SEVEN DEPARTURE

AL-5063 (FAA)

ATIS
127.65
GND CON
121.7
HILLSBORO TOWER ★
119.3 (CTAF) 239.3
PORTLAND DEP CON
126.0 269.175

**TOP ALTITUDE: ASSIGNED BY ATC**




TAKEOFF MINIMUMS

Rwy 2: Standard with minimum climb of 305′ per NM to 2700.
Rwys 13L/R: Standard with minimum climb of 235′ per NM to 1500.
Rwy 20: Standard.
Rwys 31L/R: Standard with minimum climb of 240′ per NM to 600.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 2, 13L/R: Climbing right turn heading 210°, thence . . . .
TAKEOFF RUNWAYS 20, 31L/R: Climbing left turn heading 120°, thence . . . .

. . . . intercept UBG VOR/DME R-346 to UBG VOR/DME. Thence on assigned route.

Maintain ATC assigned altitude.

(SCAPO7.SCAPO) 18032

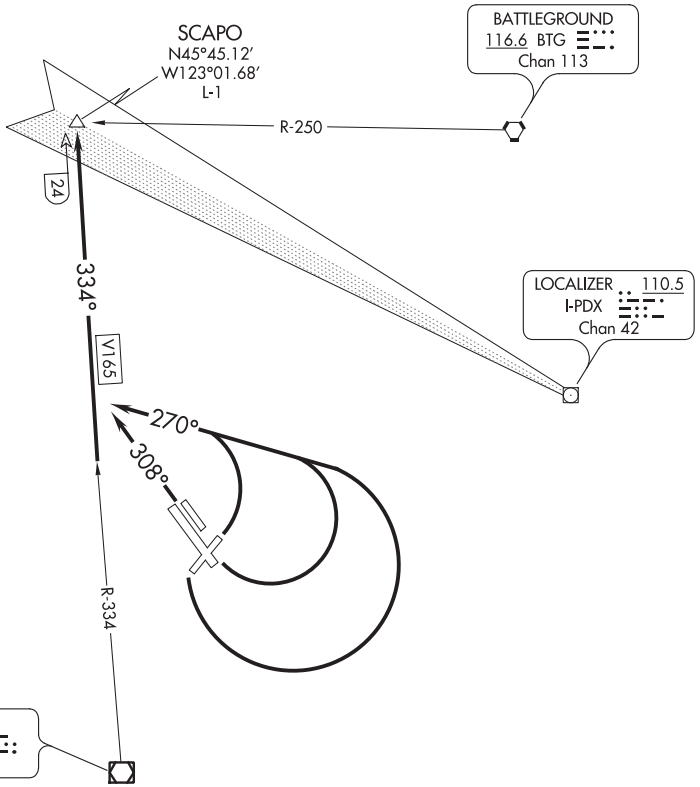
# SCAPO SEVEN DEPARTURE

AL-5063 (FAA)

PORTLAND-HILLSBORO (HIO)
PORTLAND, OREGON

**TOP ALTITUDE: ASSIGNED BY ATC**

ATIS
127.65
GND CON
121.7
HILLSBORO TOWER ★
119.3 (CTAF) 239.3
PORTLAND DEP CON
126.0 269.175




TAKEOFF MINIMUMS
Rwy 2: Standard with minimum climb of 235′ per NM to 2000.
Rwys 13L/R: Standard with minimum climb of 305′ per NM to 2700.
Rwy 20: Standard.
Rwys 31L/R: Standard with minimum climb of 240′ per NM to 600.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 2, 13L/R, 20: Climbing left turn heading 270°, thence . . . .

TAKEOFF RUNWAYS 31L/R: Climb heading 308°, thence . . . .

. . . . intercept UBG VOR/DME R-334 to SCAPO. Then on assigned route.
Maintain ATC assigned altitude.


NW-1, 05 NOV 2020 to 31 DEC 2020

# RNAV (GPS)-A

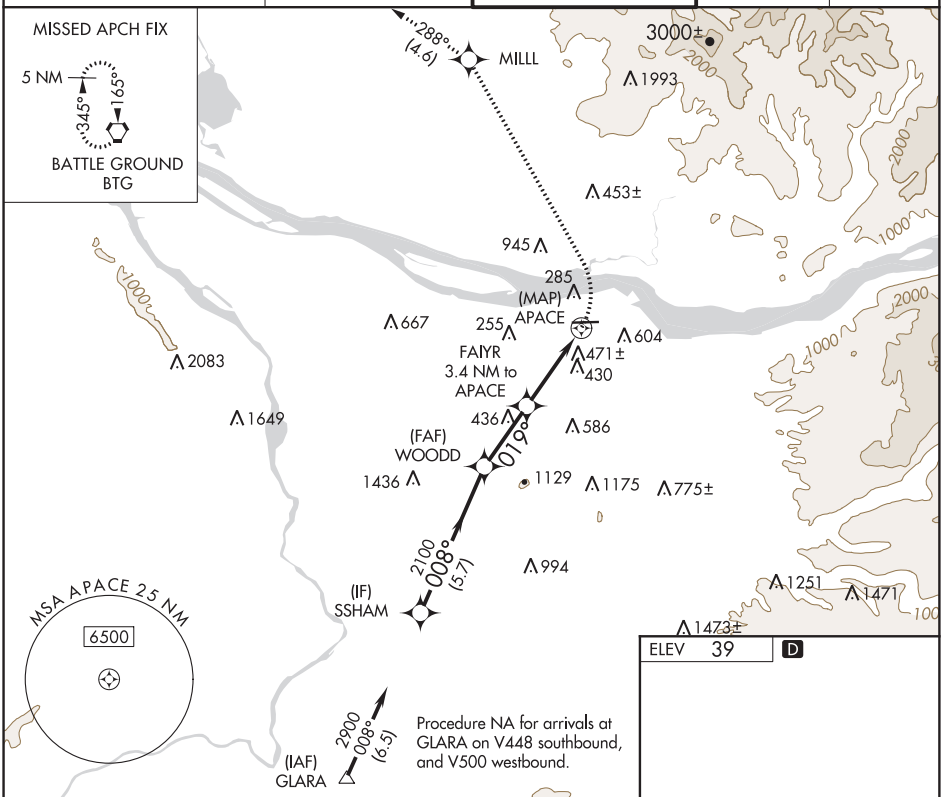
## PORTLAND-TROUTDALE (TTD)

| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 019° | TDZE | N/A |
| | Apt Elev | 39 |

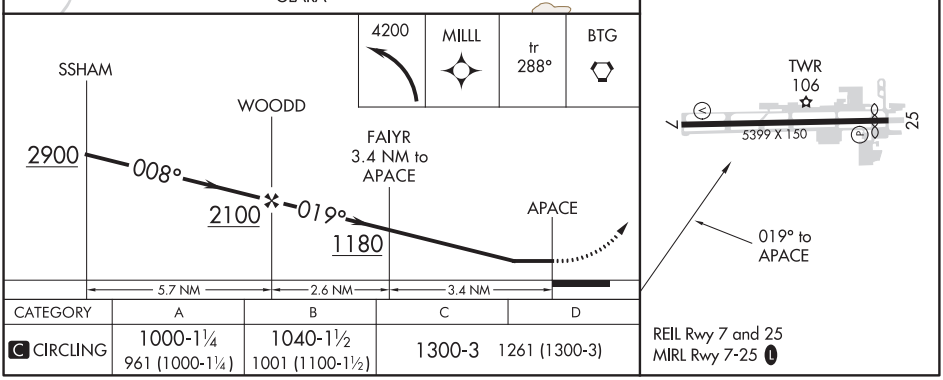
DME/DME RNP-0.3 NA. When local altimeter setting not received, use Portland Intl altimeter setting and increase all MDA 40 feet.

MISSED APPROACH: Climbing left turn to 4200 direct MILLL and on track 288° to BTG VORTAC and hold, continue climb-in-hold to 4200.

| ATIS | PORTLAND APP CON | TROUTDALE TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 135.625 | 124.35 299.2 | 120.9 (CTAF) L 254.3 | 121.8 | 122.95 |




ELEV 39 D




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 1000-1¼ 961 (1000-1¼) | 1040-1½ 1001 (1100-1½) | 1300-3 1261 (1300-3) | |

REIL Rwy 7 and 25
MIRL Rwy 7-25 L

NW-1, 05 NOV 2020 to 31 DEC 2020

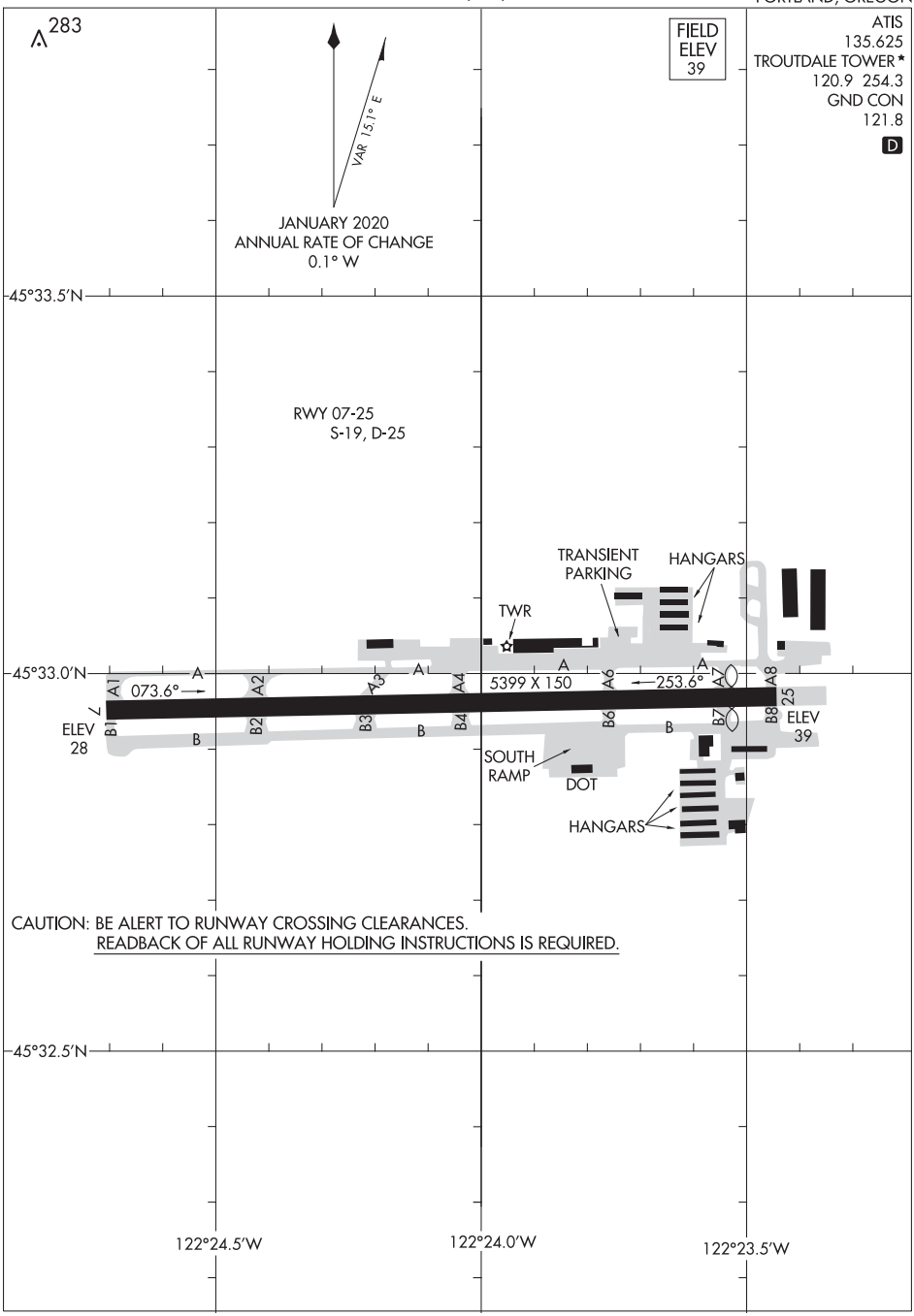
NW-1, 05 NOV 2020 to 31 DEC 2020

20086

# AIRPORT DIAGRAM

AL-649 (FAA)

PORTLAND-TROUTDALE (TTD)
PORTLAND, OREGON

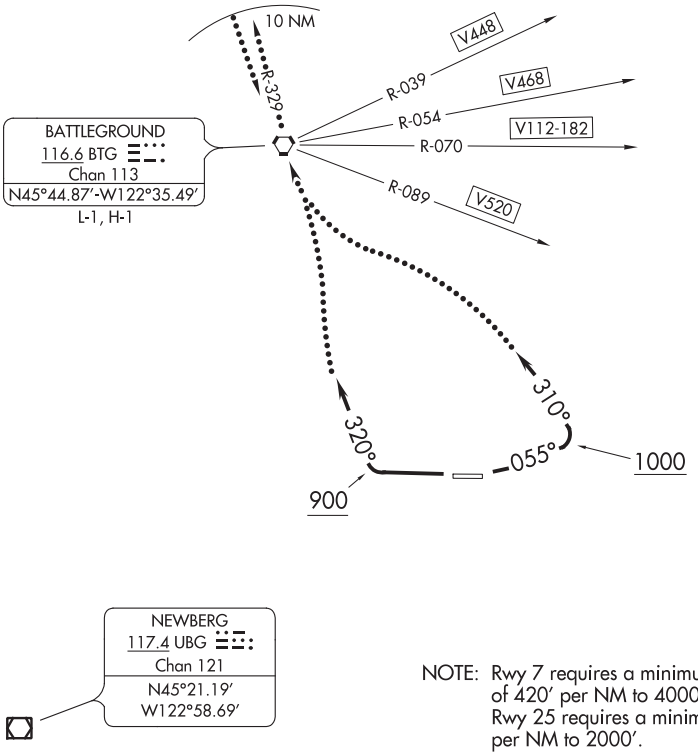



NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM
20086
PORTLAND, OREGON
PORTLAND-TROUTDALE (TTD)

CTAF 120.9




NOTE: Rwy 7 requires a minimum climb gradient of 420′ per NM to 4000′.
Rwy 25 requires a minimum climb of 310′ per NM to 2000′.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 7: Climb via heading 055° to 1000′, then turn left to 310° or as assigned.

TAKEOFF RUNWAY 25: Climb runway heading to 900′, then turn right to 320° or as assigned.

LOST COMMUNICATIONS: Proceed direct to BTG VORTAC. Continue climb on the BTG R-329 within 10 NM to cross BTG VORTAC at or above: NE-bound V448, 9400′; NE-bound V468, 4500′; E-bound V112, V182, V520, 4700′; for non airways BTG R-355 CW BTG R-120, 8800′; all others, 2500′.

ALTERNATE LOST COMMUNICATIONS PROCEDURE: When BTG VORTAC is out of service: if no contact with ATC leaving 3000′, continue climb to assigned altitude and proceed direct to UBG VOR/DME, thence via assigned route.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

POWELL, WYOMING | AL-686 (FAA) | 20030

| WAAS CH 90233 W13A | APP CRS 134° | Rwy ldg 6200 TDZE 5046 Apt Elev 5096 |
|---|---|---|

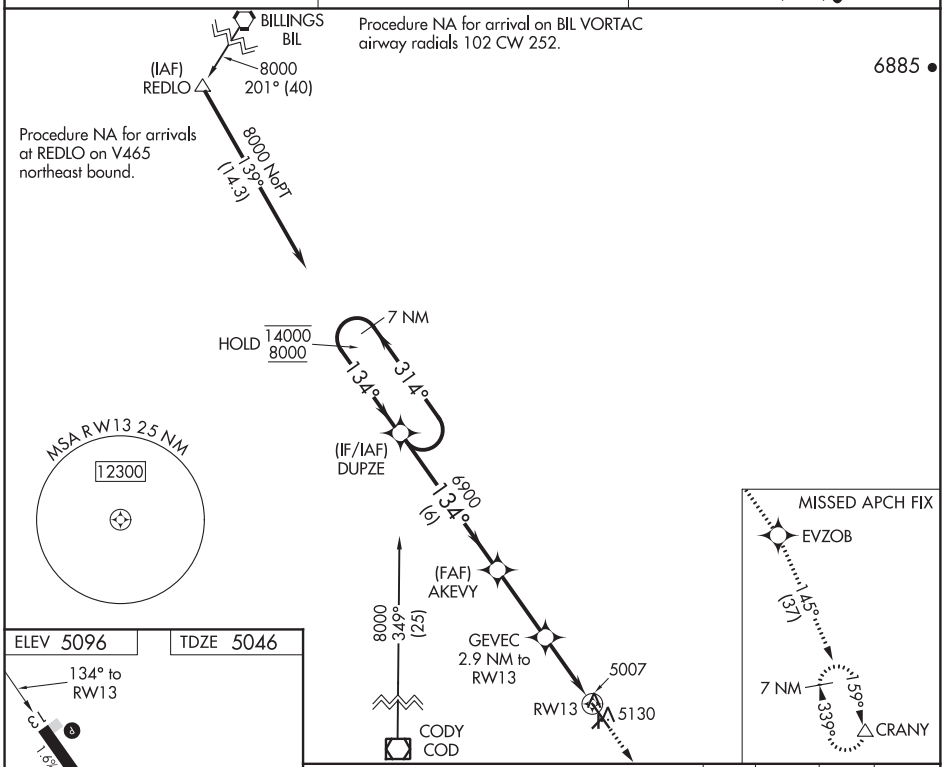
# RNAV (GPS) RWY 13
## POWELL MUNI (POY)

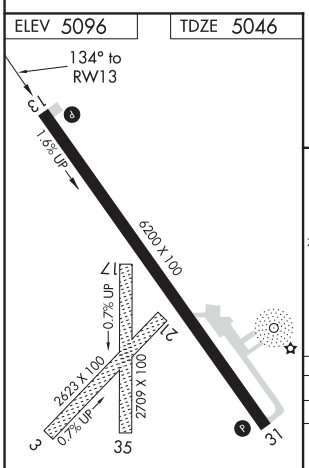
RNP APCH.

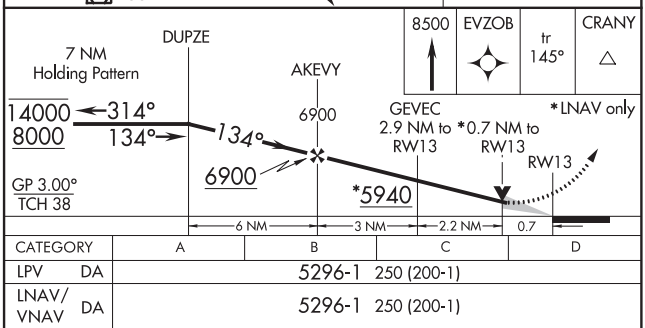
T ▲NA Circling NA to Rwys 3, 17, 21 and 35. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C or above 51°C. Baro-VNAV and VDP NA when using Cody altimeter setting. When local altimeter setting not received, use Cody altimeter setting and increase all DA 54 feet and all MDA 60 feet.

MISSED APPROACH: Climb to 8500 direct EVZOB and on track 145° to CRANY and hold.

| AWOS-3 | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 119.275 | 127.75 351.9 | 122.7 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 5296-1 250 (200-1) | | | |
| LNAV/VNAV DA | 5296-1 250 (200-1) | | | |
| LNAV MDA | 5300-1 254 (300-1) | | | |
| C CIRCLING | 5500-1 404 (500-1) | 5560-1 464 (500-1) | 5560-1½ 464 (500-1½) | 5660-2 564 (600-2) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 50233 W31A | APP CRS 314° | Rwy ldg 6200<br>TDZE 5096<br>Apt Elev 5096 |
|---|---|---|

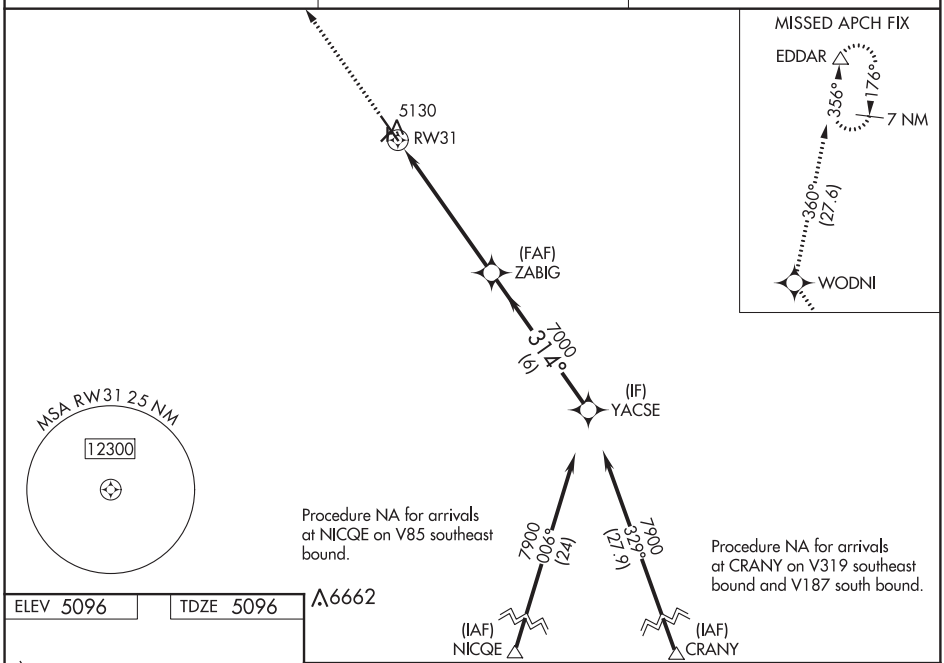
# RNAV (GPS) RWY 31
## POWELL MUNI (POY)

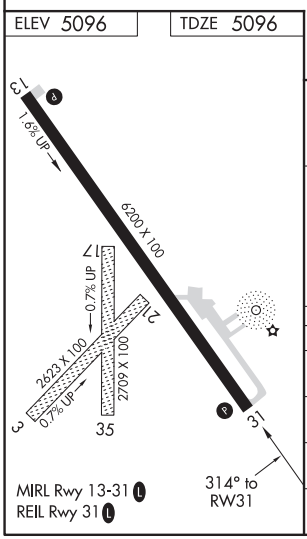
RNP APCH.

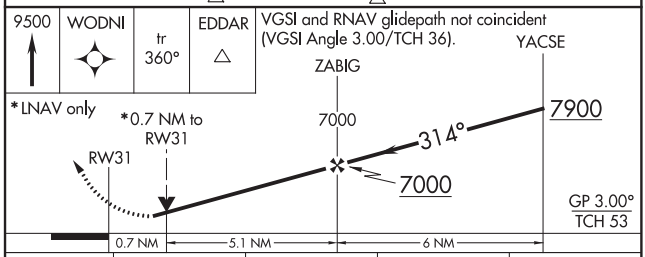
Circling NA to Rwys 3, 17, 21 and 35. Baro-VNAV and VDP NA when using Cody altimeter setting. Rwy 31 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -25°C or above 48°C. When local altimeter setting not received, use Cody altimeter setting and increase all DA 54 feet and all MDA 60 feet.

MISSED APPROACH: Climb to 9500 direct WODNI and on track 360° to EDDAR and hold.

| AWOS-3 | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 119.275 | 127.75 351.9 | 122.7 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 5346-1 250 (300-1) | | | |
| LNAV/VNAV DA | 5346-1 250 (300-1) | | | |
| LNAV MDA | 5380-1 284 (300-1) | | | |
| C CIRCLING | 5500-1 404 (500-1) | 5560-1 464 (500-1) | 5560-1½ 464 (500-1½) | 5660-2 564 (600-2) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

PRINEVILLE, OREGON | AL-9340 (FAA) | 20086

# RNAV (GPS) RWY 10

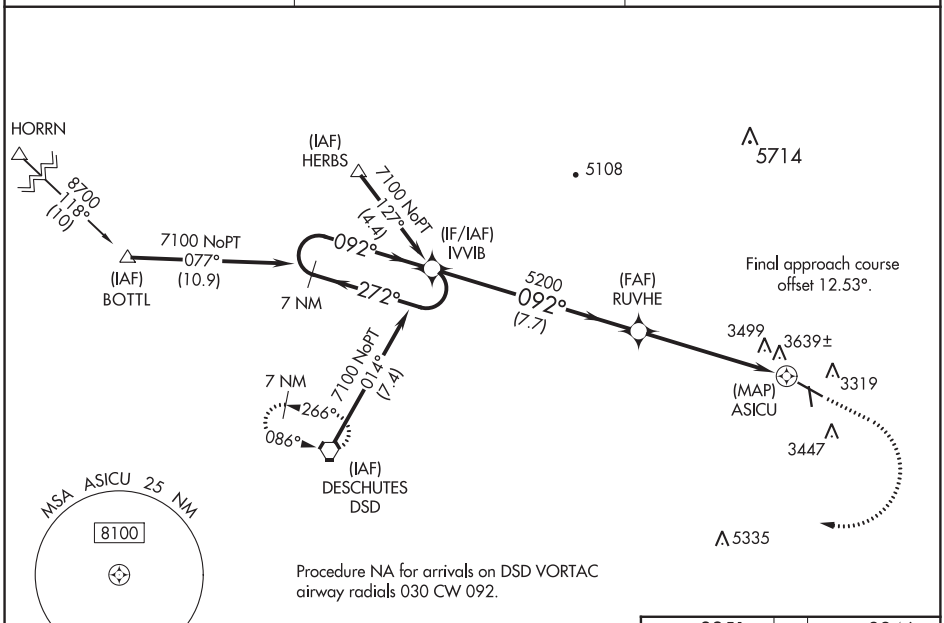
PRINEVILLE (S39)

| WAAS CH 60936 W10A | APP CRS 092° | Rwy ldg 5751<br>TDZE 3246<br>Apt Elev 3251 |
|---|---|---|

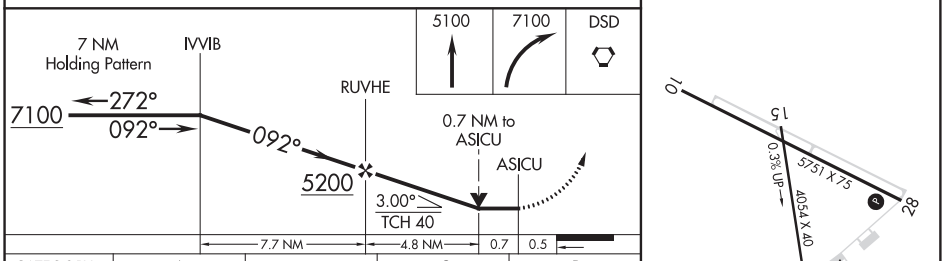
Circling NA for Cat D southwest of Rwy 10-28.
DME/DME RNP-0.3 NA.
Rwy 10 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 5100 then climbing right turn to 7100 direct DSD VORTAC and hold.
*Missed approach requires minimum climb of 215 feet per NM to 5400.

| AWOS-3PT | SEATTLE CENTER | UNICOM |
|---|---|---|
| 118.325 | 126.15 269.475 | 122.7 (CTAF) L |




ELEV 3251 | TDZE 3246




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LP MDA* | 3660-1 414 (500-1) | | 3660-1⅛ 414 (500-1⅛) | |
| LP MDA | 3760-1 514 (600-1) | | 3760-1⅜ 514 (600-1⅜) | |
| LNAV MDA | 3900-1 654 (700-1) | | 3900-1⅞ 654 (700-1⅞) | |
| C CIRCLING | 4040-1 789 (800-1) | 4060-1 809 (900-1) | 4060-2¼ 809 (900-2¼) | 4060-2½ 809 (900-2½) |

MIRL Rwy 10-28 L
LIRL Rwy 15-33 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 56235 W28A | APP CRS 284° | Rwy ldg 5751 TDZE 3239 Apt Elev 3251 |
|---|---|---|

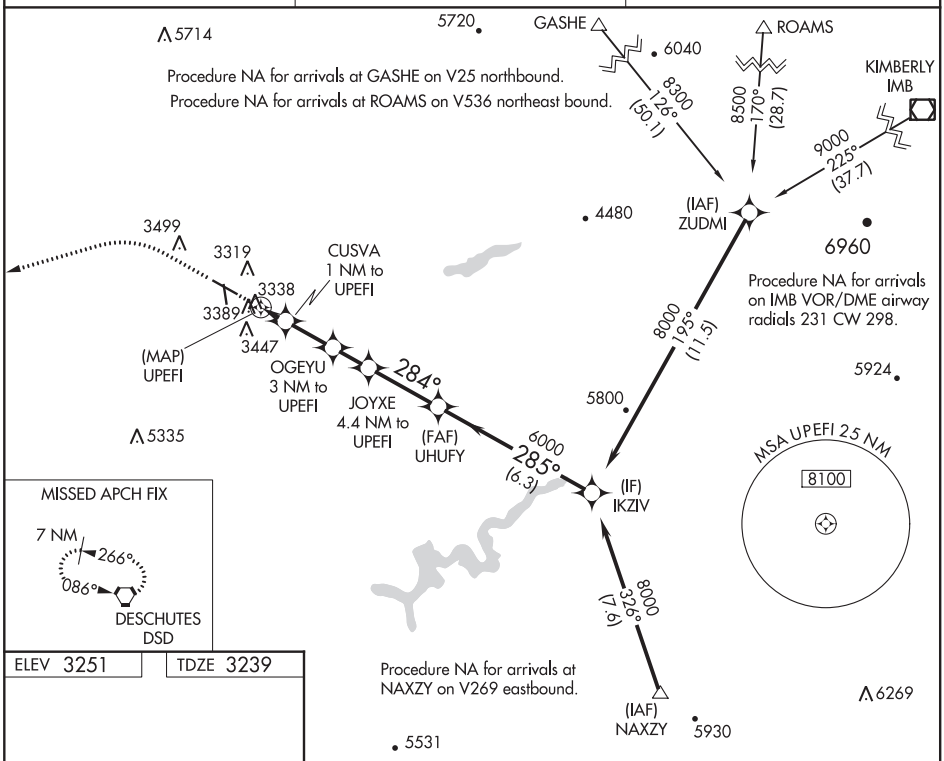
# RNAV (GPS) RWY 28

PRINEVILLE (S39)

Circling NA for Cat D southwest of Rwy 10-28.
DME/DME RNP- 0.3 NA.
Rwy 28 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3800 then climbing left turn to 7100 direct DSD VORTAC and hold.

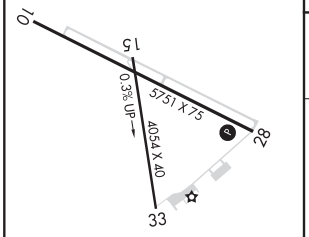
| AWOS-3PT | SEATTLE CENTER | UNICOM |
|---|---|---|
| 118.325 | 126.15 269.475 | 122.7 (CTAF) L |

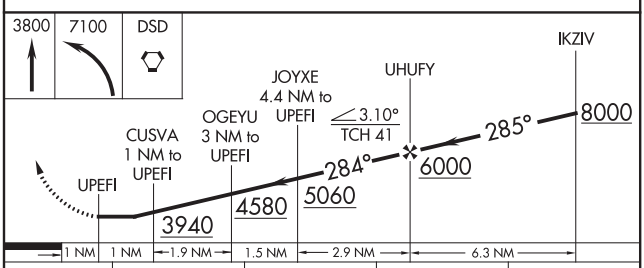






| ELEV 3251 | TDZE 3239 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LP MDA | 3600-1¼ 361 (400-1¼) | | | |
| LNAV MDA | 3680-1¼ 441 (500-1¼) | | 3680-1⅜ 441 (500-1⅜) | |
| C CIRCLING | 4040-1¼ 789 (800-1¼) | 4060-1¼ 809 (900-1¼) | 4060-2¼ 809 (900-2¼) | 4060-2½ 809 (900-2½) |

MIRL Rwy 10-28 L
LIRL Rwy 15-33 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# DESCHUTES TWO DEPARTURE (RNAV)

(DSD2.DSD) 12DEC13

PRINEVILLE, OREGON
PRINEVILLE (S39)

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 10: Climb heading 104° to 3760 then climbing right turn direct DSD VORTAC. Thence . . . .

TAKEOFF RUNWAY 15: Climb heading 156° to 3760 then climbing right turn direct DSD VORTAC. Thence . . . .

TAKEOFF RUNWAY 28: Climb heading 284° to 3760 then climbing left turn direct DSD VORTAC. Thence . . . .

TAKEOFF RUNWAY 33: Climb heading 336° to 3760 then climbing left turn direct DSD VORTAC. Thence . . . .

. . . . cross DSD VORTAC at or above MEA/MCA for route of flight.

SEATTLE CENTER
126.15 269.475

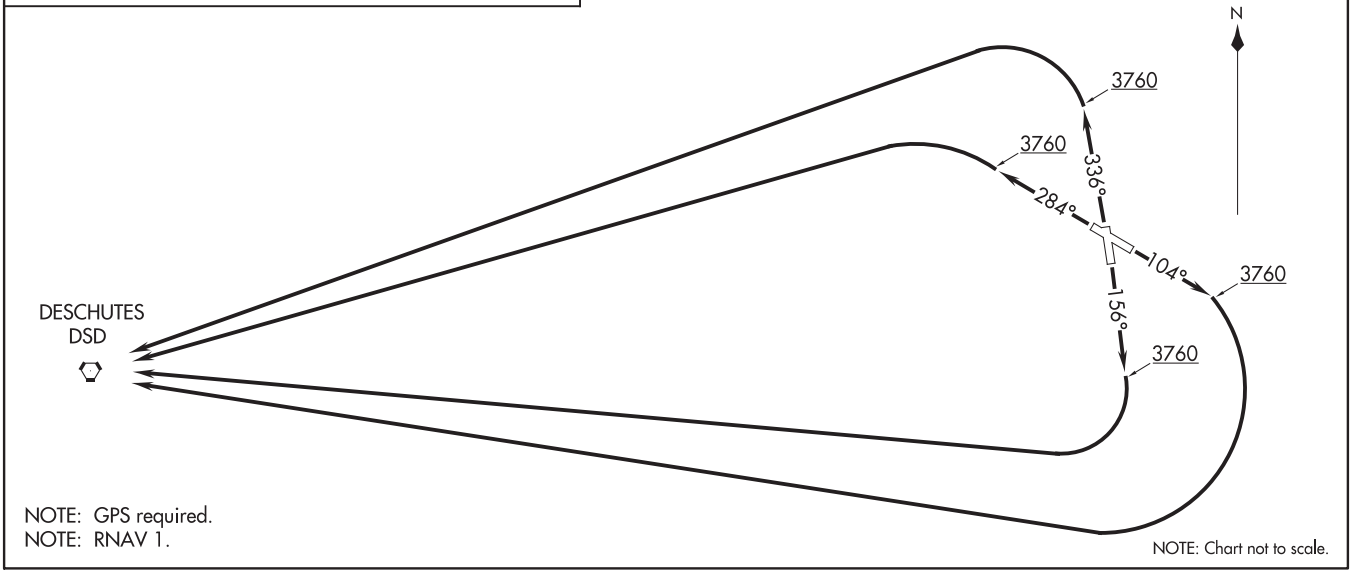
TAKEOFF MINIMUMS

Rwy 10: Standard with minumum climb of 500′ per NM to 3760 then climb 400′ per NM to 9000.

Rwy 15: Standard with minumum climb of 500′ per NM to 3760 then climb 480′ per NM to 9000.

Rwy 28: Standard with minumum climb of 500′ per NM to 3760 then climb 475′ per NM to 9000.

Rwy 33: Standard with minumum climb of 500′ per NM to 3760 then climb 430′ per NM to 9000.




NOTE: GPS required.
NOTE: RNAV 1.

NOTE: Chart not to scale.

(DSD2.DSD) 19171
DESCHUTES TWO DEPARTURE (RNAV)
AL-9340 (FAA)
PRINEVILLE (S39)
PRINEVILLE, OREGON



NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC/DME I-PUW | APP CRS | Rwy ldg | 7100 |
|---|---|---|---|
| 110.35 | 050° | TDZE | 2567 |
| Chan 40 (Y) | | Apt Elev | 2567 |

# ILS or LOC RWY 5
## PULLMAN/MOSCOW RGNL (PUW)

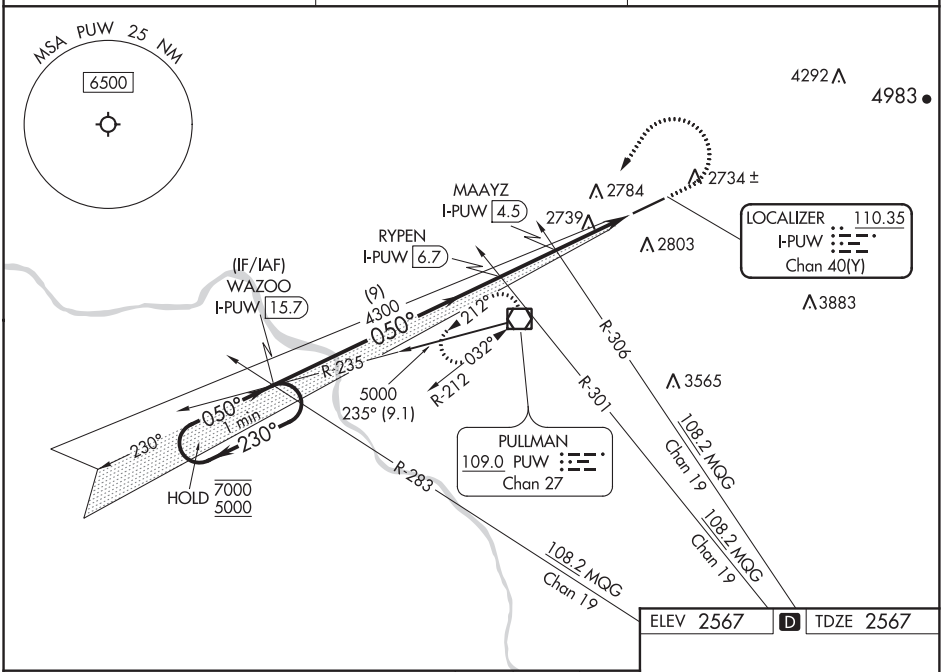
DME required.

For inop ALS, increase S-ILS 5 all Cats visibility to RVR 4500 and S-LOC 5 Cat C/D visibility to 1⅜ SM.
† RVR 1800 authorized with use of FD or AP or HUD to DA.

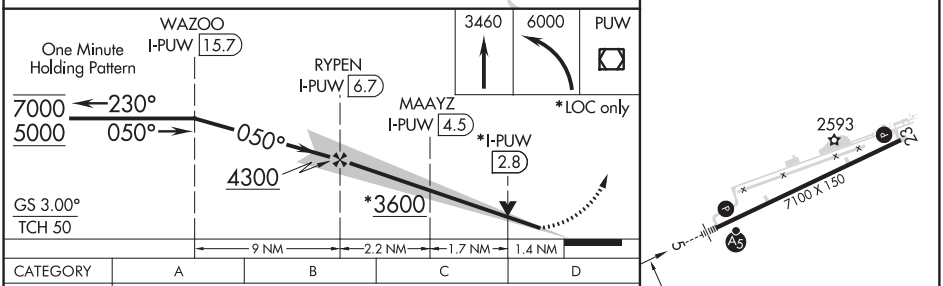
MALSR

MISSED APPROACH: Climb to 3460 then climbing left turn to 6000 direct PUW VOR/DME, continue climb-in-hold to 6000.
# Missed approach requires minimum climb of 222 feet per NM to 4180.

| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.675 | 123.95 290.55 | 122.8 (CTAF) L |




ELEV 2567 | D | TDZE 2567




REIL Rwy 23 L
HIRL Rwy 5-23 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 5 #† | 2767/24 200 (200-½) | | | |
| S-ILS 5 | 2857/24 290 (300-½) | | | |
| S-LOC 5 | 3060/24 493 (500-½) | | 3060/50 493 (500-1) | |
| C CIRCLING | 3080-1 513 (600-1) | 3120-1 553 (600-1) | 3140-1½ 573 (600-1½) | 3420-2¾ 853 (900-2¾) |

| FAF to MAP 5.3 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 5:18 | 3:32 | 2:39 | 2:07 | 1:46 |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

PULLMAN/MOSCOW, WASHINGTON AL-798 (FAA) 20142

| APP CRS | Rwy ldg | 7100 |
|---|---|---|
| 230° | TDZE | 2552 |
| | Apt Elev | 2567 |

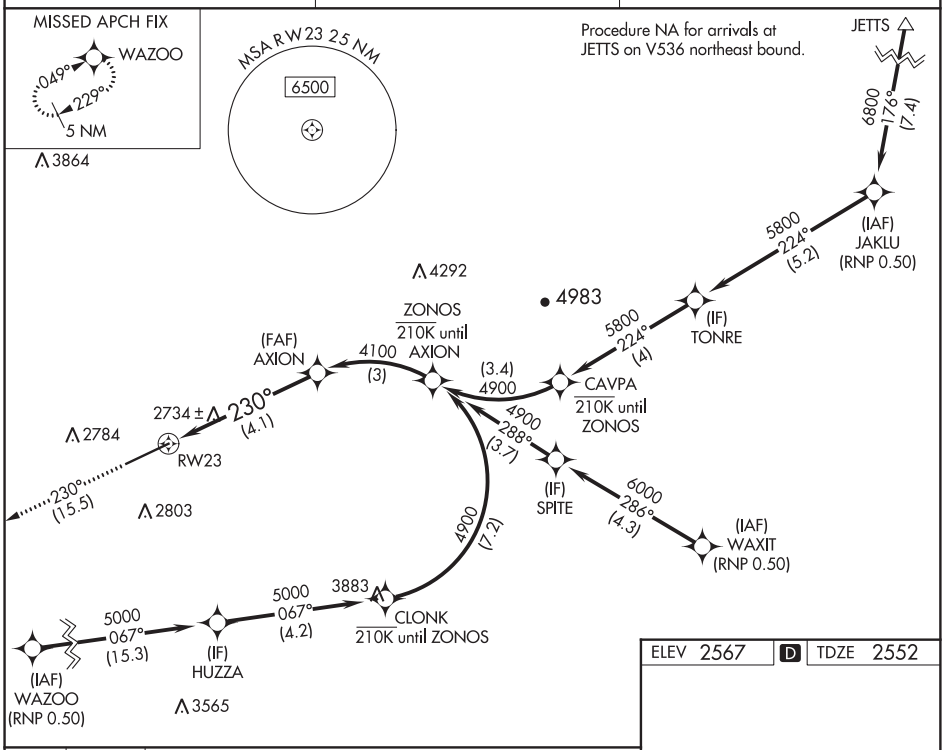
# RNAV (RNP) Z RWY 23
## PULLMAN/MOSCOW RGNL (PUW)

RNP AR APCH. RF required.

NA For uncompensated Baro-VNAV systems, procedure NA below -20°C or above 50°C .

MISSED APPROACH: Climb to 5000 on track 230° to WAZOO and hold.

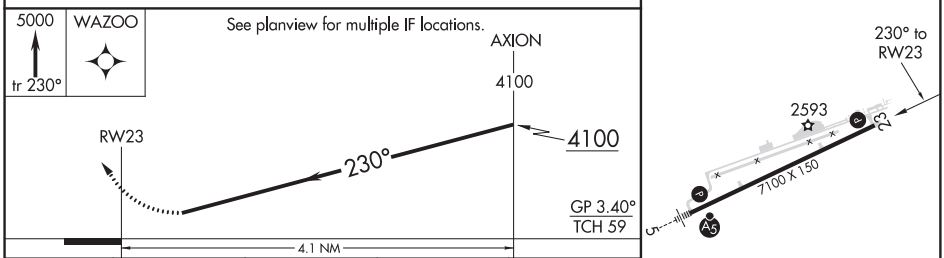
| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.675 | 123.95 290.55 | 122.8 (CTAF) L |




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| ELEV 2567 | D | TDZE 2552 |
|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.22 DA | 3041-1⅜ 489 (500-1⅜) | | | |
| RNP 0.30 DA | 3146-1¾ 594 (600-1¾) | | | |

AUTHORIZATION REQUIRED

REIL Rwy 23 L
HIRL Rwy 5-23 L

| WAAS CH **40243** **W05B** | APP CRS **049°** | Rwy ldg **7100** TDZE **2567** Apt Elev **2567** |
|---|---|---|

# RNAV (GPS) RWY 5
## PULLMAN/MOSCOW RGNL (PUW)

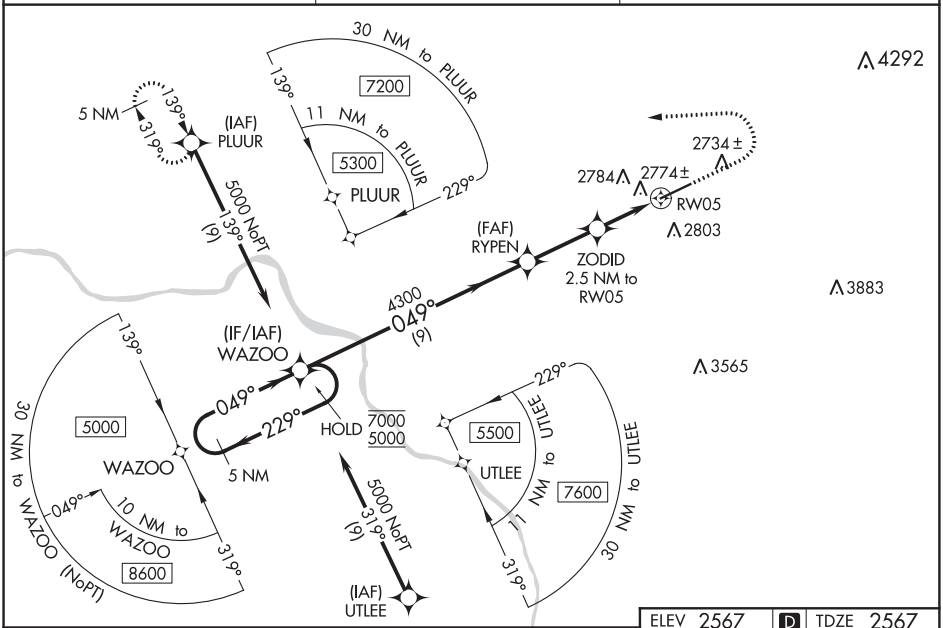
RNP APCH.

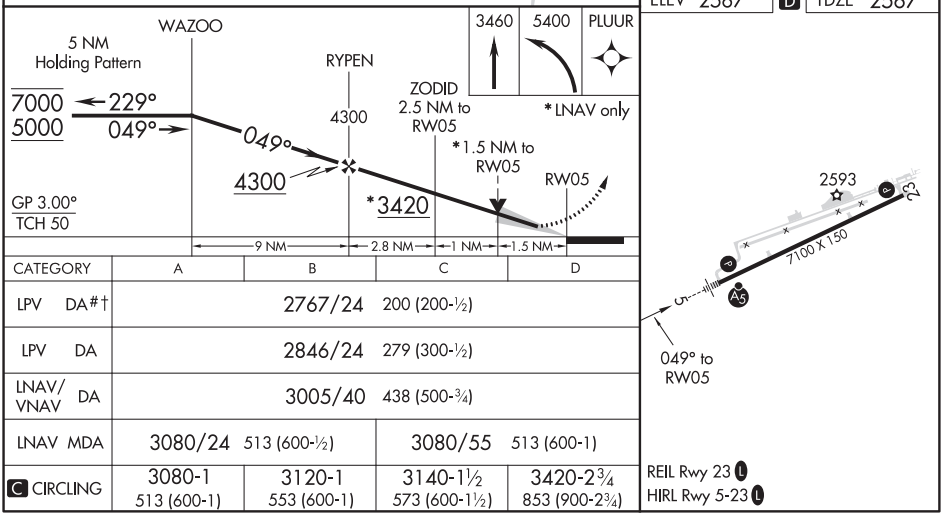
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20° C or above 54° C. For inop ALS, increase LPV all Cats visibility to RVR 4500 and LNAV Cat C/D visibility to 1⅜ SM.
†RVR 1800 authorized with use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 3460 then climbing left turn to 5400 direct PLUUR and hold.
#Missed approach requires minimum climb of 250 feet per NM to 4800.

| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| **135.675** | **123.95 290.55** | **122.8** (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA#† | 2767/24 200 (200-½) | | | |
| LPV DA | 2846/24 279 (300-½) | | | |
| LNAV/VNAV DA | 3005/40 438 (500-¾) | | | |
| LNAV MDA | 3080/24 513 (600-½) | | 3080/55 513 (600-1) | |
| C CIRCLING | 3080-1 513 (600-1) | 3120-1 553 (600-1) | 3140-1½ 573 (600-1½) | 3420-2¾ 853 (900-2¾) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 7100 |
|---|---|---|
| 249° | TDZE | 2552 |
| | Apt Elev | 2567 |

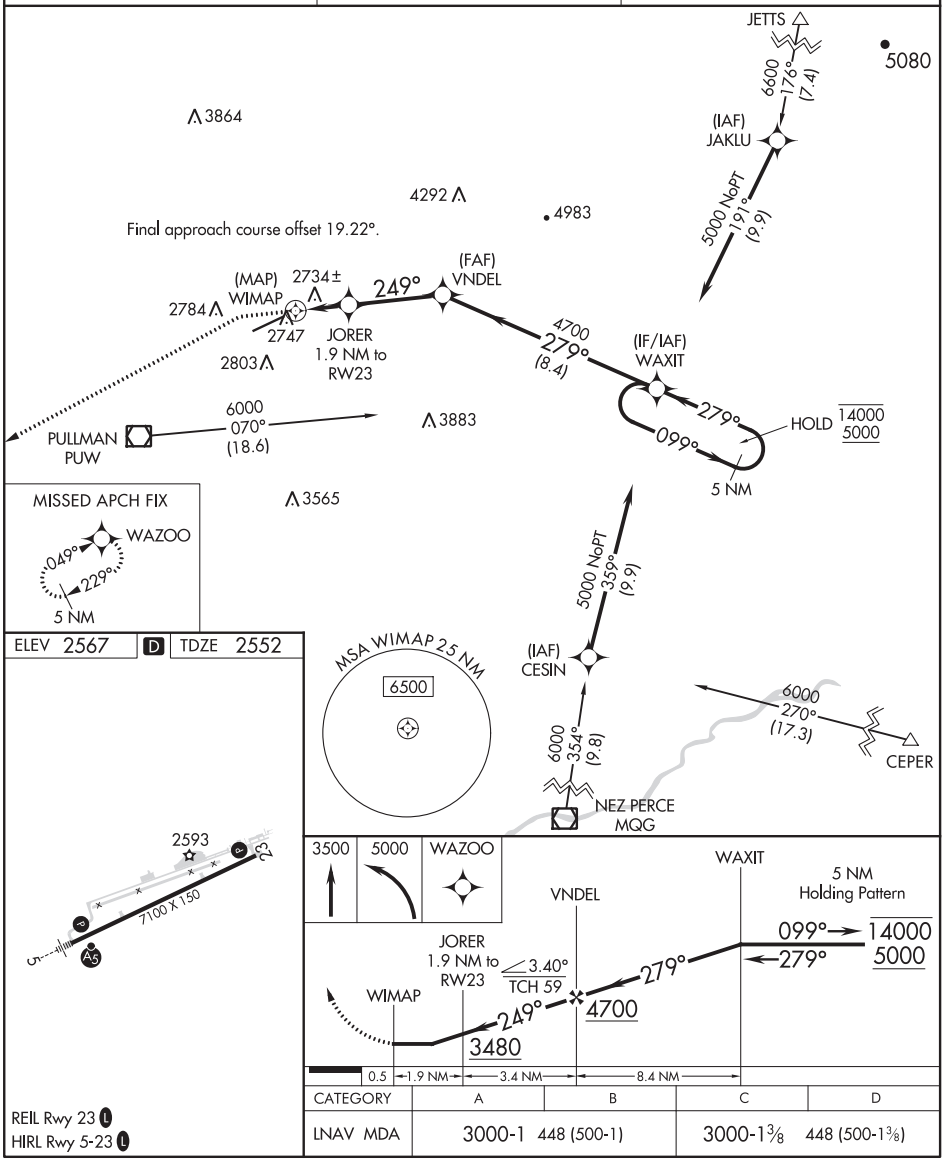
# RNAV (GPS) Y RWY 23
## PULLMAN/MOSCOW RGNL (PUW)

RNP APCH.

Procedure NA at night.
Rwy 23 helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 3500 then climbing left turn to 5000 direct WAZOO and hold.

| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.675 | 123.95 290.55 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 3000-1 448 (500-1) | | 3000-1⅜ 448 (500-1⅜) | |

REIL Rwy 23 L
HIRL Rwy 5-23 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| VOR/DME PUW | APP CRS | Rwy ldg | 7100 |
|---|---|---|---|
| 109.0 | 027° | TDZE | 2567 |
| Chan 27 | | Apt Elev | 2567 |

# VOR RWY 5

## PULLMAN/MOSCOW RGNL (PUW)

DME required.

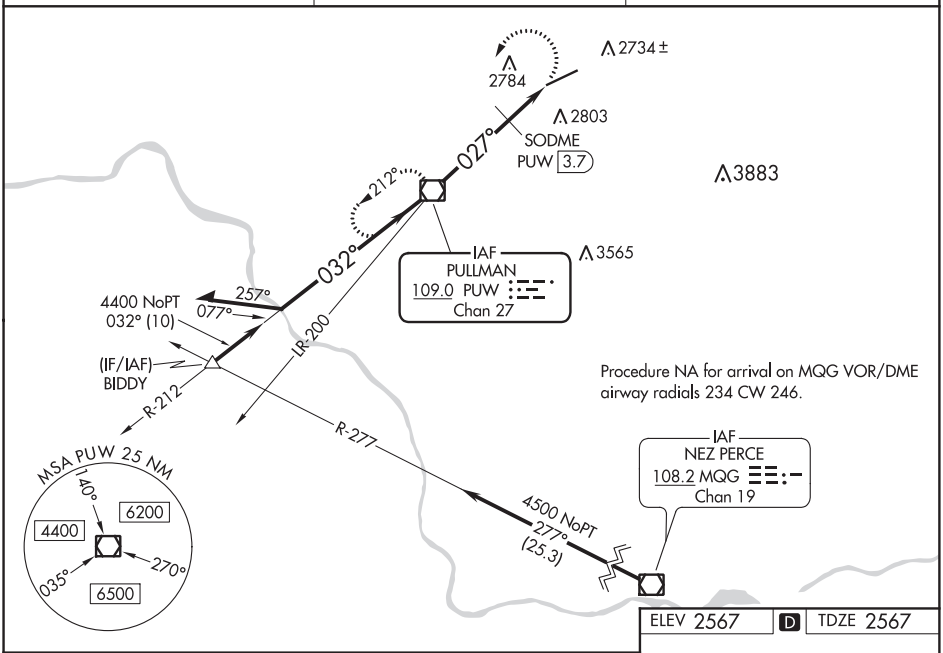
T Procedure NA at night.

A Rwy 5 helicopter visibility reduction below 1 SM NA.
Inop table does not apply to S-5 and SODME fix minimums Cats A/B.
For inop ALS, increase S-5 SODME fix minimums Cat C/D visibility to 1⅜ SM.

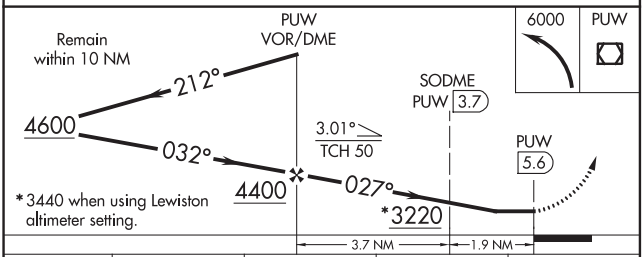
MALSR

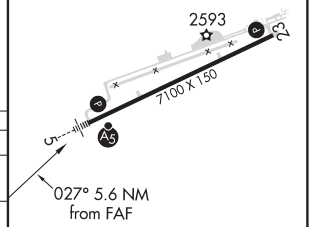
MISSED APPROACH: Climbing left turn to 6000 direct PUW VOR/DME and hold, continue climb-in-hold to 6000.

| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.675 | 123.95 290.55 | 122.8 (CTAF) L |




ELEV 2567 D TDZE 2567




REIL Rwy 23 L
HIRL Rwy 5-23 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-5 | 3220/50 653 (700-1) | | 3220-1⅜ 653 (700-1⅜) | |
| C CIRCLING | 3220-1 653 (700-1) | | 3220-1⅞ 653 (700-1⅞) | 3420-2¾ 853 (900-2¾) |
| SODME FIX MINIMUMS | | | | |
| S-5 | 3040/50 473 (500-1) | | | |
| C CIRCLING | 3080-1 513 (600-1) | 3120-1 553 (600-1) | 3140-1½ 573 (600-1½) | 3420-2¾ 853 (900-2¾) |

| FAF to MAP 5.6 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 5:36 | 3:44 | 2:48 | 2:14 | 1:52 |

NW-1, 05 NOV 2020 to 31 DEC 2020

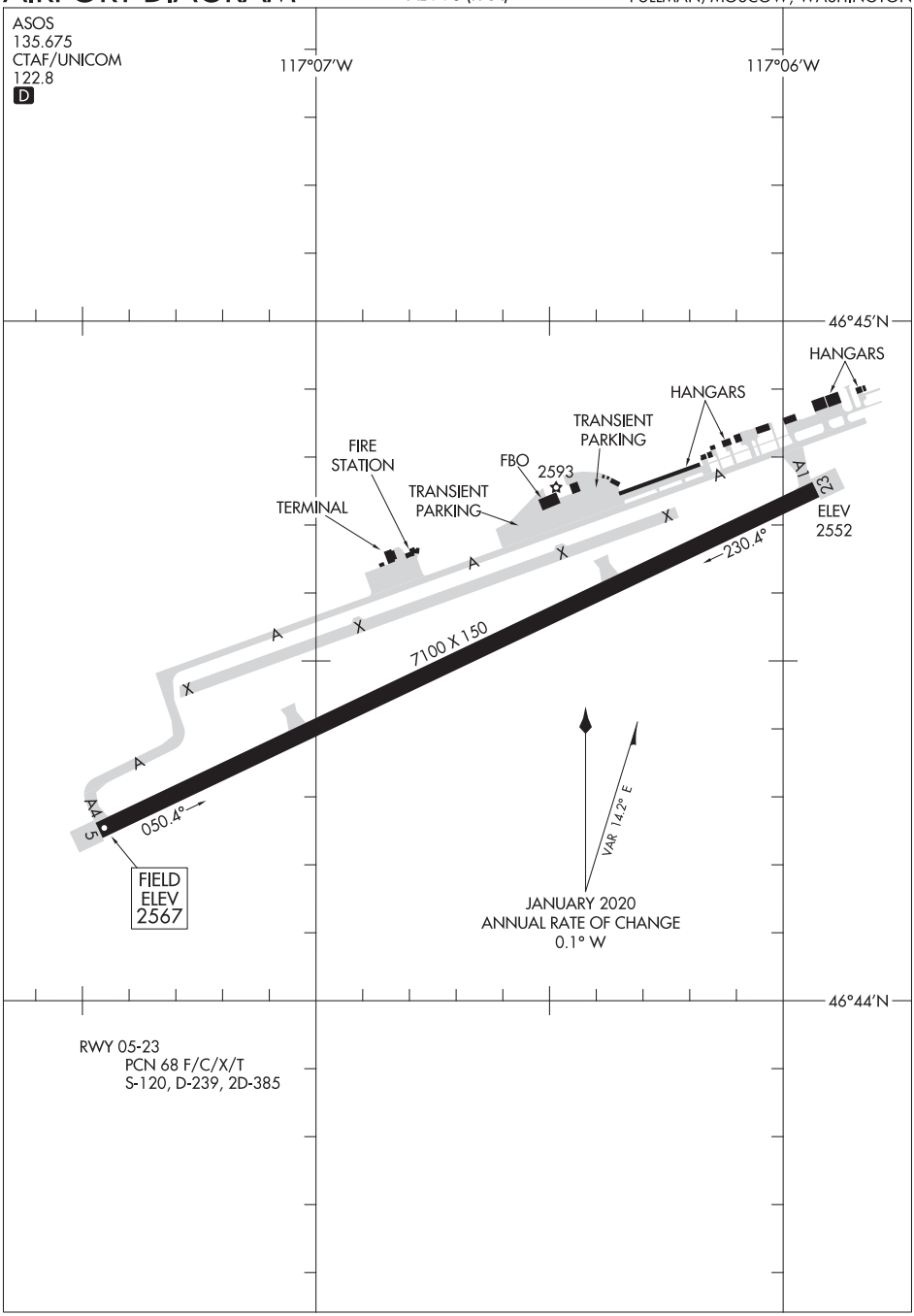
NW-1, 05 NOV 2020 to 31 DEC 2020

20142

# AIRPORT DIAGRAM

AL-798 (FAA)

PULLMAN/MOSCOW RGNL (PUW)
PULLMAN/MOSCOW, WASHINGTON




RWY 05-23
PCN 68 F/C/X/T
S-120, D-239, 2D-385

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM
20142
PULLMAN/MOSCOW, WASHINGTON
PULLMAN/MOSCOW RGNL (PUW)

| WAAS CH 57938 W35A | APP CRS 346° | Rwy ldg 3651<br>TDZE 538<br>Apt Elev 538 |
|---|---|---|

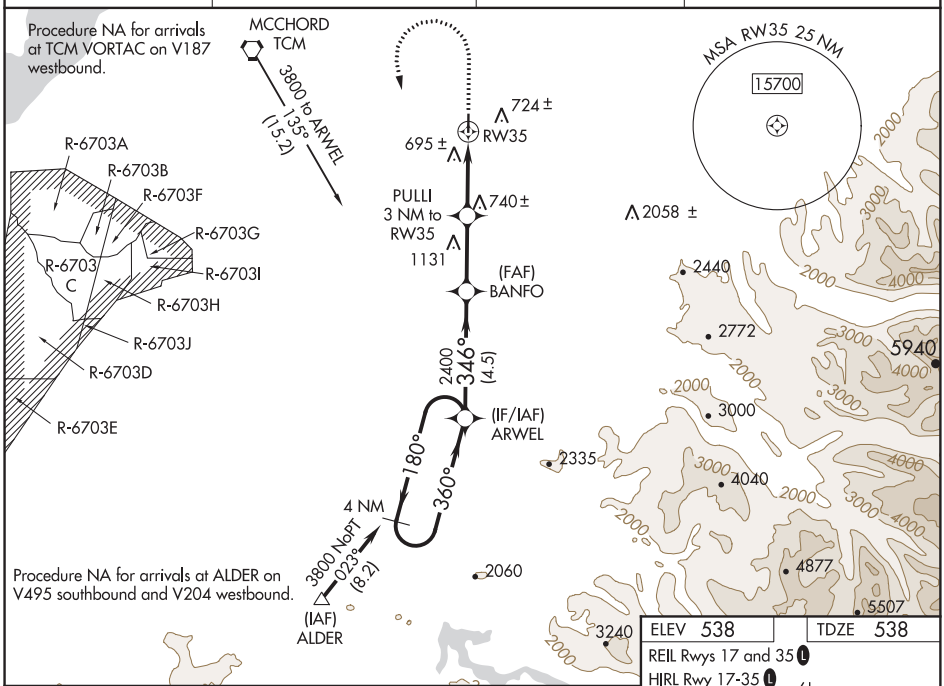
# RNAV (GPS) RWY 35

## PIERCE COUNTY-THUN FIELD (PLU)

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. Helicopter visibility reduction below ¾ SM NA. Baro-VNAV and VDP NA with McChord Field altimeter setting. When local altimeter not received, use McChord Field altimeter setting and increase all DA 49 feet and increase LPV and LNAV/VNAV visibilities ¼ mile; increase all MDA 60 feet.

MISSED APPROACH: Climb to 1900 then climbing left turn to 3800 direct ARWEL and hold.

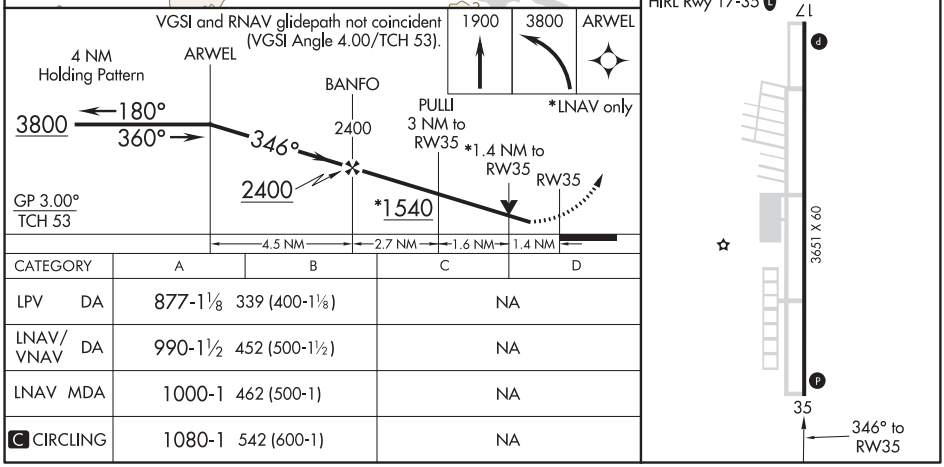
| AWOS-3 | SEATTLE APP CON | CLNC DEL | UNICOM |
|---|---|---|---|
| 128.575 | 126.5 377.15 | 121.85 | 122.7 (CTAF) L |




ELEV 538 TDZE 538

REIL Rwys 17 and 35 L

HIRL Rwy 17-35 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 877-1⅛ 339 (400-1⅛) | | NA | |
| LNAV/VNAV DA | 990-1½ 452 (500-1½) | | NA | |
| LNAV MDA | 1000-1 462 (500-1) | | NA | |
| C CIRCLING | 1080-1 542 (600-1) | | NA | |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

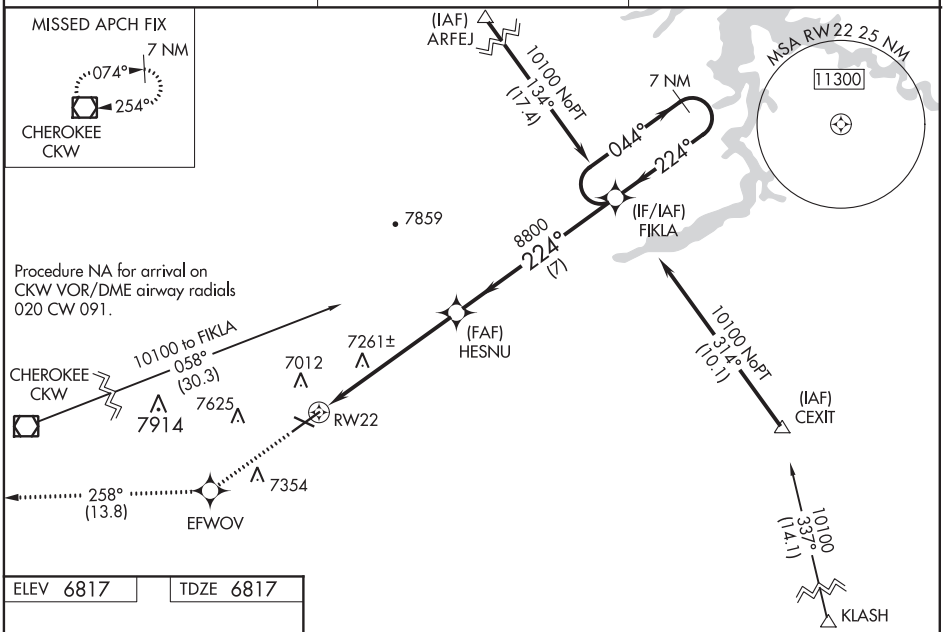
| WAAS CH **93716** **W22A** | APP CRS **224°** | Rwy ldg **7008** TDZE **6817** Apt Elev **6817** |
|---|---|---|

# RNAV (GPS) RWY 22
## RAWLINS MUNI/HARVEY FIELD (RWL)

Baro-VNAV NA when using Saratoga altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -28°C (-18°F) or above 44°C (111°F). Circling NA northwest of Rwy 4-22. DME/DME RNP-0.3 NA. VDP NA when using Saratoga altimeter setting. When local altimeter setting not received, use Saratoga altimeter setting and increase all DA 91 feet, and LPV visibility ⅜ mile, and LNAV/VNAV visibility 1 mile; increase all MDA 100 feet and LNAV visibility Cat B ¼ mile, Cats C and D ½ mile, Circling visibility Cats B and C ¼ mile. Helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 11700 direct EFWOV and on track 258° to CKW VOR/DME and hold, continue climb-in-hold to 11700.

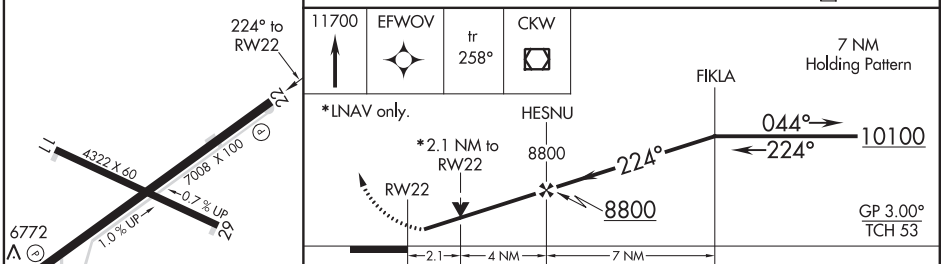
| ASOS | DENVER CENTER | UNICOM |
|---|---|---|
| **118.525** | **132.1 254.35** | **123.0** (CTAF) L |




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| ELEV 6817 | TDZE 6817 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 7131-1 314 (400-1) | | | |
| LNAV/VNAV DA | 7637-3 820 (900-3) | | | |
| LNAV MDA | 7520-1 703 (800-1) | | 7520-2 703 (800-2) | |
| C CIRCLING | 7520-1 703 (800-1) | 7540-1 723 (800-1) | 7660-2½ 843 (900-2½) | 7900-3 1083 (1100-3) |

REIL Rwys 22 and 29 L
MIRL Rwys 4-22 and 11-29 L

# ILS or LOC RWY 23
## ROBERTS FIELD (RDM)

| LOC/DME I-RDM | APP CRS | Rwy ldg | 7031 |
|---|---|---|---|
| 109.1 | 226° | TDZE | 3065 |
| Chan 28 | | Apt Elev | 3080 |

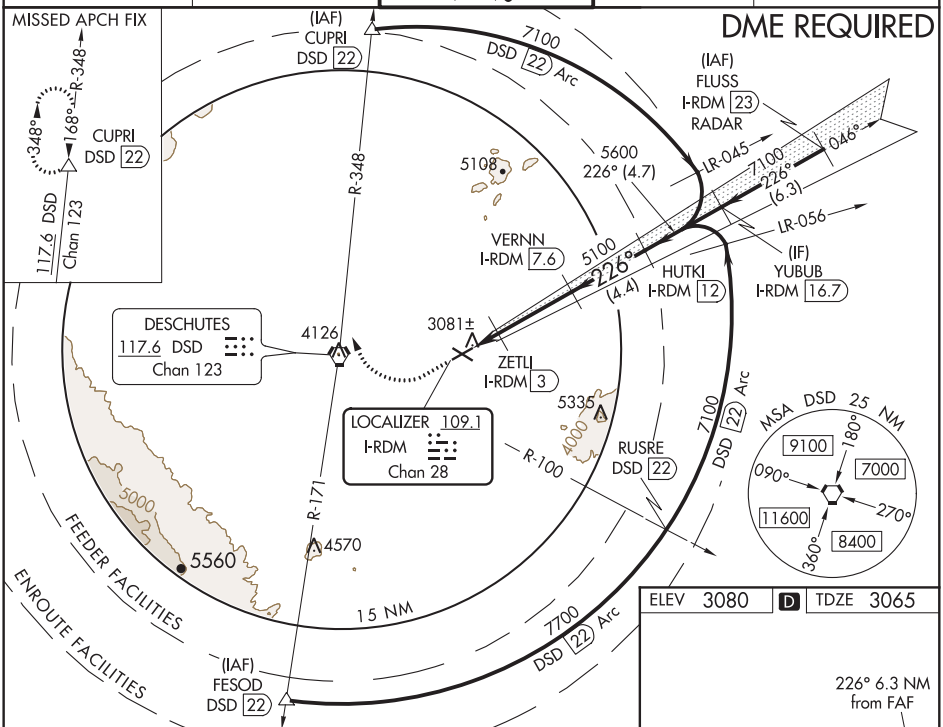
T A NA

Autopilot coupled approach NA below 4370. DME required. When local altimeter setting not received, use Bend altimeter setting: increase DA to 3341 feet; increase all MDAs 80 feet and all Cat C, D and E visibilities ½ mile. For inop MALSR, increase S-ILS-23 Cat E visibility to ¾ mile and S-LOC-23 Cats C, D and E visibility to 1 mile. When using Bend altimeter setting increase S-ILS-23 all Cats visibility to 1 mile and increase S-LOC-23 Cats C, D and E visibility to 1⅜ mile. VDP NA when using Bend altimeter setting.

MALSR A5

MISSED APPROACH: Climb to 3700 then climbing right turn to 7000 on heading 320° and DSD VORTAC R-348 to CUPRI/DSD 22 DME and hold.

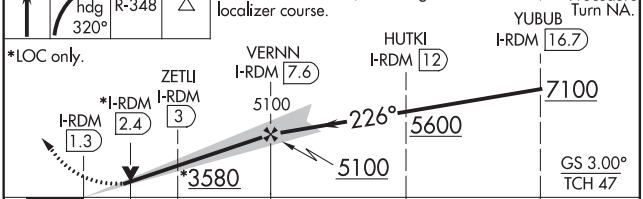
| ATIS | SEATTLE CENTER | REDMOND TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 119.025 | 126.15 269.475 | 124.5 (CTAF) L 256.8 | 121.8 | 122.95 |



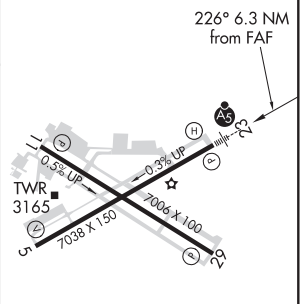

| 3700 | 7000 hdg 320° | DSD R-348 | CUPRI △ |
|---|---|---|---|

Use I-RDM DME when on the localizer course.

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 51). Procedure Turn NA.




ELEV 3080 D TDZE 3065




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-ILS 23 | 3265-½ 200 (200-½) | | | | |
| S-LOC 23 | 3440-½ 375 (400-½) | | 3440-⅝ 375 (400-⅝) | | |
| C CIRCLING | 3540-1 460 (500-1) | 3560-1 480 (500-1) | 3640-1½ 560 (600-1½) | 3740-2 660 (700-2) | 3820-2½ 740 (800-2½) |

REIL Rwys 5, 11 and 29 L
HIRL Rwy 5-23 L
MIRL Rwy 11-29 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

REDMOND, OREGON AL-345 (FAA) 20254

| APP CRS | Rwy ldg | 7038 |
|---|---|---|
| 046° | TDZE | 3075 |
| | Apt Elev | 3082 |

# RNAV (RNP) Z RWY 5

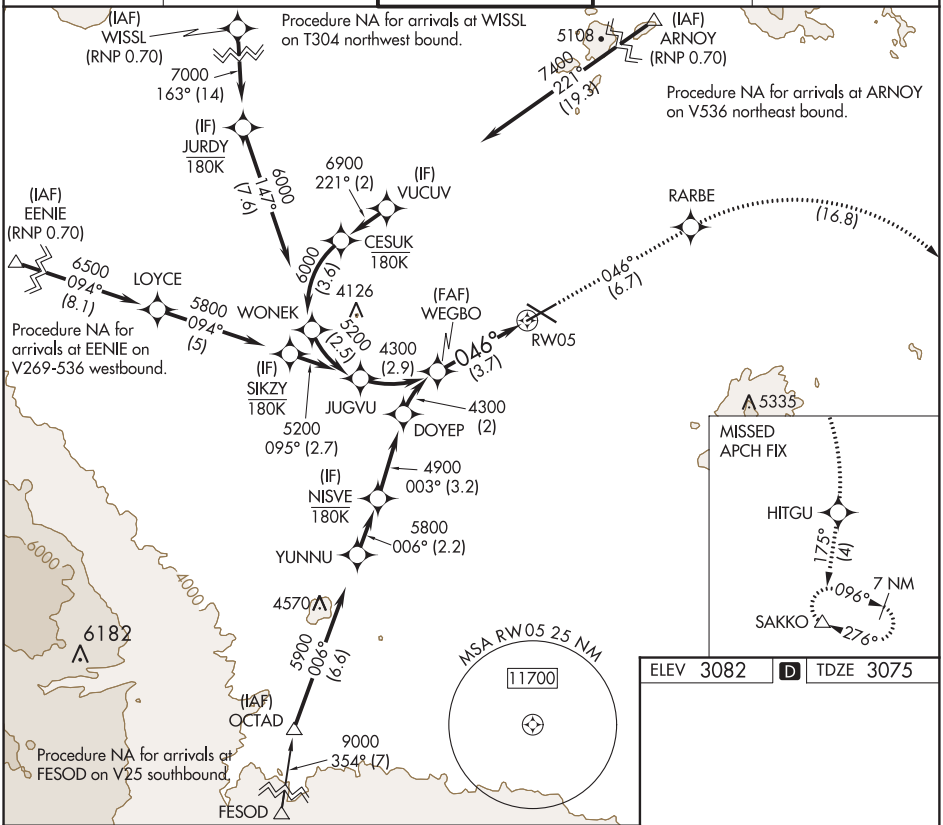
## ROBERTS FIELD (RDM)

RNP AR APCH. RF required.

For uncompensated Baro-VNAV systems, procedure NA below -20°C or above 53°C.

MISSED APPROACH: Climb to 9500 on track 046° to RARBE right turn to HITGU and on track 175° to SAKKO and hold, continue climb-in-hold to 9500.

| ATIS | SEATTLE CENTER | REDMOND TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 119.025 | 126.15 269.475 | 124.5 (CTAF) L 256.8 | 121.8 | 122.95 |

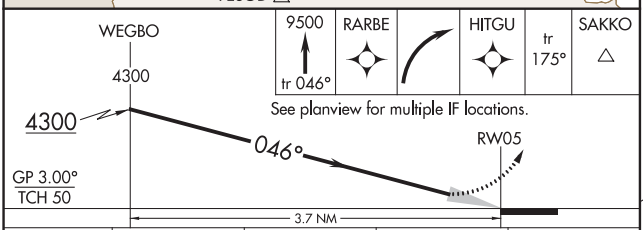



NW-1, 05 NOV 2020 to 31 DEC 2020

| ELEV 3082 | D | TDZE 3075 |
|---|---|---|

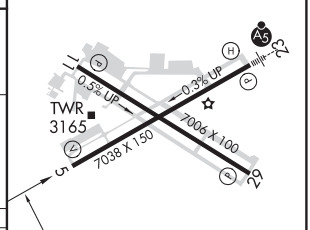
| 9500 | RARBE | | HITGU | tr 175° | SAKKO |
|---|---|---|---|---|---|
| tr 046° | | | | | |

See planview for multiple IF locations.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.10 DA | 3351-⅞ 276 (300-⅞) | | | |
| RNP 0.30 DA | 3574-1⅝ 499 (500-1⅝) | | | |

**AUTHORIZATION REQUIRED**




REIL Rwys 5, 11 and 29 L
HIRL Rwy 5-23 L
MIRL Rwy 11-29 L

# RNAV (RNP) Z RWY 23

ROBERTS FIELD (RDM)

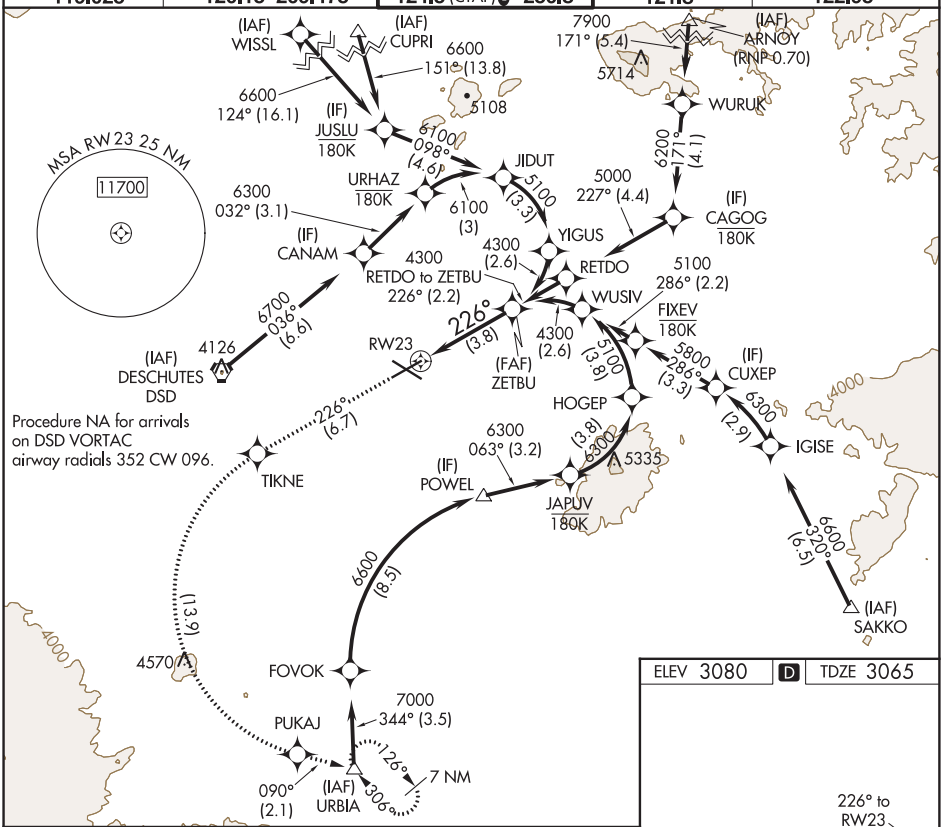
| APP CRS | Rwy ldg | 7031 |
|---|---|---|
| 226° | TDZE | 3065 |
| | Apt Elev | 3080 |

For uncompensated Baro-VNAV systems, procedure NA below -20°C (-4°F) or above 53°C (129°F). For inop MALSR, increase RNP 0.10 all Cats visibility to ⅞ mile. RF required. GPS required.

MALSR

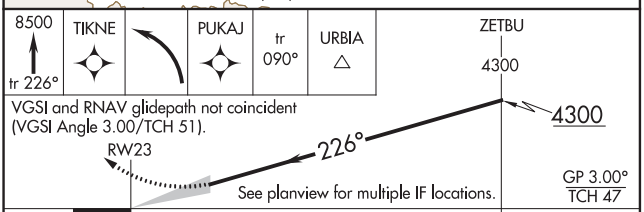
MISSED APPROACH: Climb to 8500 on track 226° to TIKNE left turn to PUKAJ and on track 090° to URBIA and hold, continue climb-in-hold to 8500.

| ATIS | SEATTLE CENTER | REDMOND TOWER* | GND CON | UNICOM |
|---|---|---|---|---|
| 119.025 | 126.15 269.475 | 124.5 (CTAF) L 256.8 | 121.8 | 122.95 |

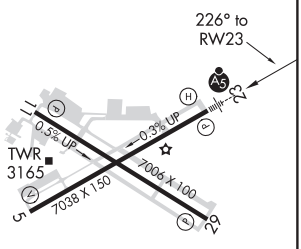



| 8500 tr 226° | TIKNE | | PUKAJ | tr 090° | URBIA |
|---|---|---|---|---|---|

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 51).




ELEV 3080 D TDZE 3065




REIL Rwys 5, 11, and 29 L
HIRL Rwy 5-23 L
MIRL Rwy 11-29 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.10 DA | 3315-½ | 250 (300-½) | | |
| RNP 0.30 DA | 3552-1¼ | 487 (500-1¼) | | |

## AUTHORIZATION REQUIRED

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

REDMOND, OREGON AL-345 (FAA) 20030

| WAAS CH 53514 W11A | APP CRS 108° | Rwy ldg 7006<br>TDZE 3068<br>Apt Elev 3082 |
|---|---|---|

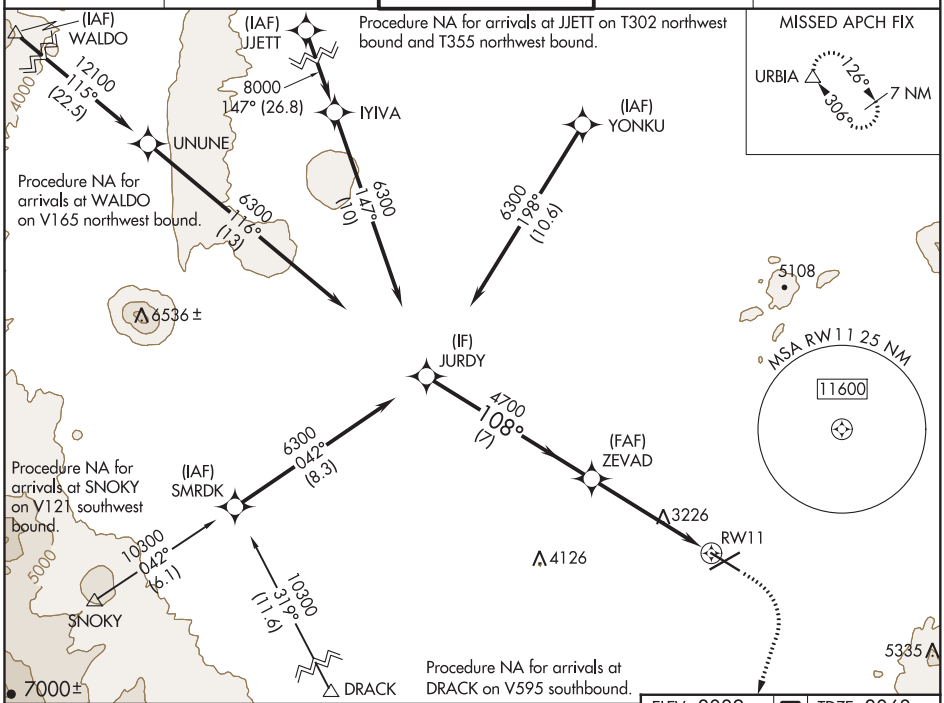
# RNAV (GPS) RWY 11
## ROBERTS FIELD (RDM)

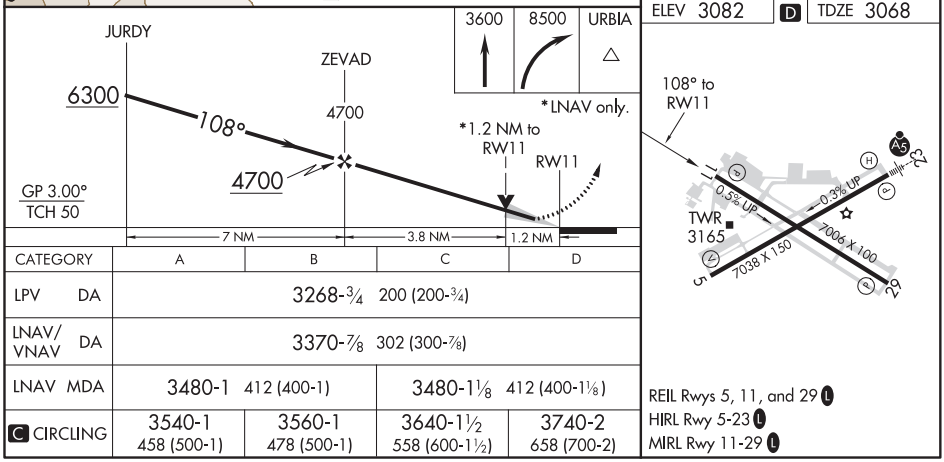
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C or above 54°C.

MISSED APPROACH: Climb to 3600 then climbing right turn to 8500 direct URBIA and hold, continue climb-in-hold to 8500.

| ATIS | SEATTLE CENTER | REDMOND TOWER * | GND CON | UNICOM |
|---|---|---|---|---|
| 119.025 | 126.15 269.475 | 124.5 (CTAF) L 256.8 | 121.8 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 3268-¾ 200 (200-¾) | | | |
| LNAV/VNAV DA | 3370-⅞ 302 (300-⅞) | | | |
| LNAV MDA | 3480-1 412 (400-1) | | 3480-1⅛ 412 (400-1⅛) | |
| C CIRCLING | 3540-1 458 (500-1) | 3560-1 478 (500-1) | 3640-1½ 558 (600-1½) | 3740-2 658 (700-2) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 70514 W05A | APP CRS 046° | Rwy ldg 7038<br>TDZE 3075<br>Apt Elev 3082 |
|---|---|---|

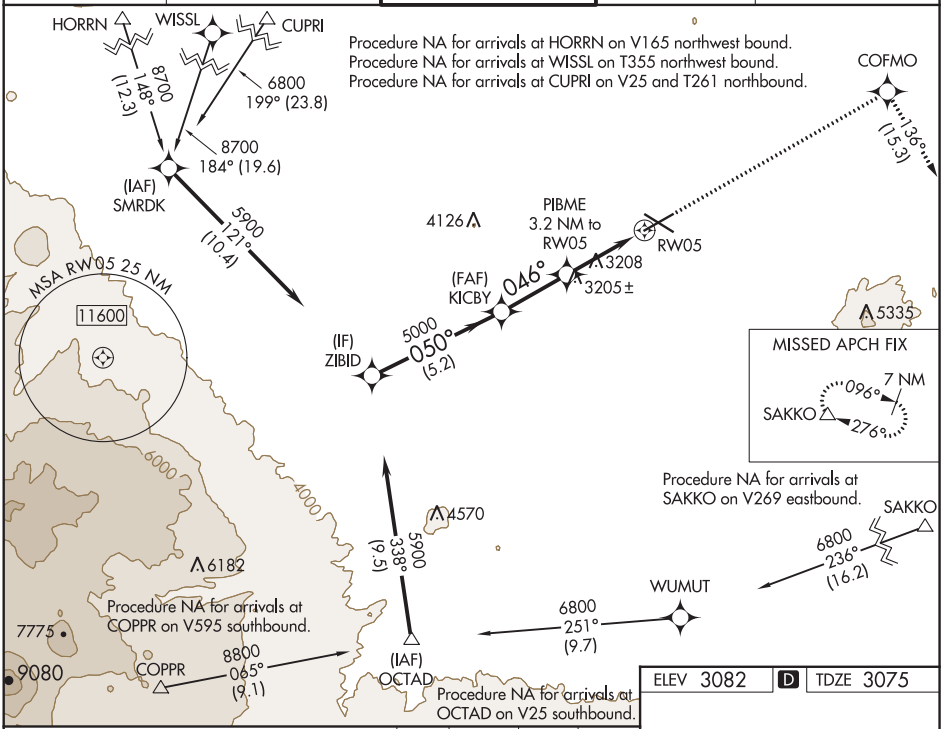
# RNAV (GPS) Y RWY 5
## ROBERTS FIELD (RDM)

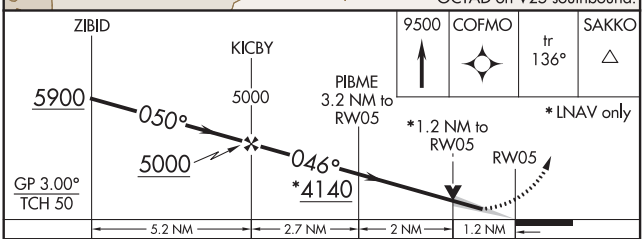
RNP APCH.

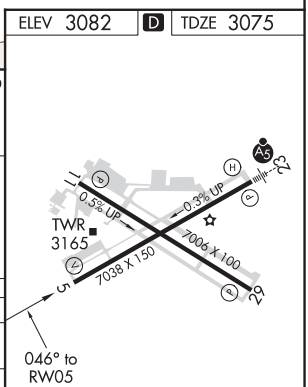
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -22°C or above 54°C.

MISSED APPROACH: Climb to 9500 direct COFMO and on track 136° to SAKKO and hold, continue climb-in-hold to 9500.

| ATIS | SEATTLE CENTER | REDMOND TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 119.025 | 126.15 269.475 | 124.5 (CTAF) L 256.8 | 121.8 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 3275-¾ 200 (200-¾) | | | |
| LNAV/VNAV DA | 3347-⅞ 272 (300-⅞) | | | |
| LNAV MDA | 3520-1 445 (500-1) | | 3520-1⅜ 445 (500-1⅜) | |
| C CIRCLING | 3540-1 458 (500-1) | 3560-1 478 (500-1) | 3640-1½ 558 (600-1½) | 3740-2 658 (700-2) |

REIL Rwys 5, 11, and 29 L
HIRL Rwy 5-23 L
MIRL Rwy 11-29 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

REDMOND, OREGON | AL-345 (FAA) | 19283

# RNAV (GPS) Y RWY 23

ROBERTS FIELD (RDM)

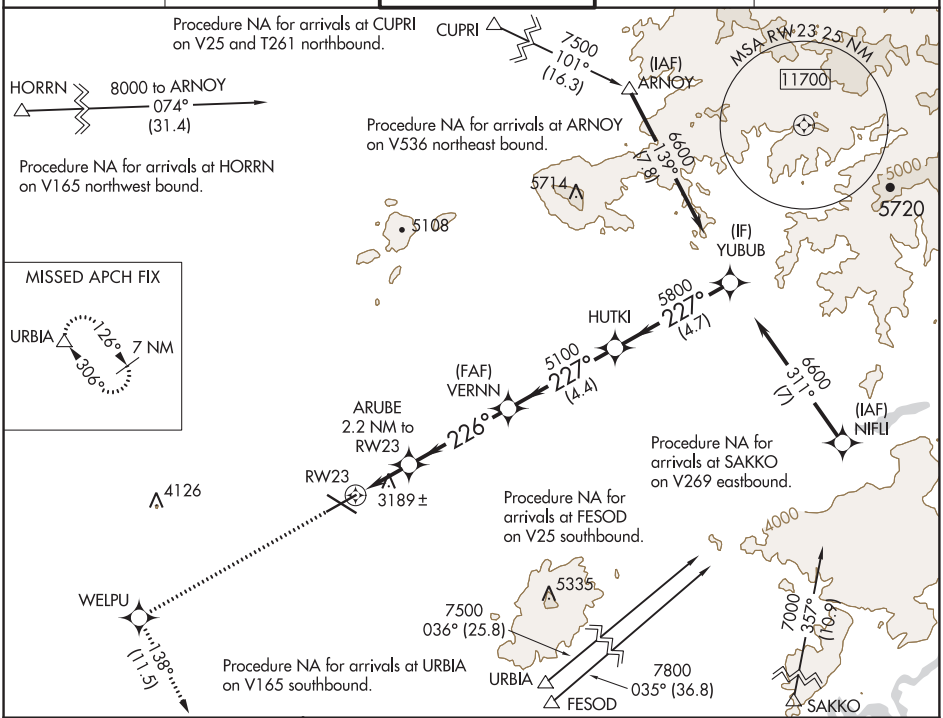
| WAAS CH 82514 W23A | APP CRS 226° | Rwy ldg 7031 TDZE 3067 Apt Elev 3080 |
|---|---|---|

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 53°C (128°F). DME/DME RNP-0.3 NA. For inop ALS, increase LNAV/VNAV all Cats visibility to ⅞ SM and LNAV Cat C/D visibility to 1 SM.

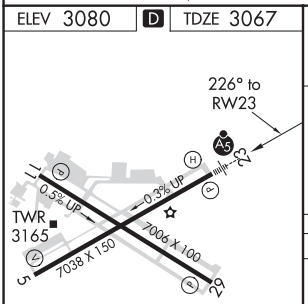
MALSR

MISSED APPROACH: Climb to 8500 direct WELPU and on track 138° to URBIA and hold, continue climb-in-hold to 8500.

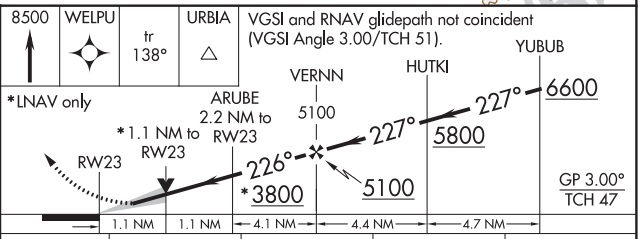
| ATIS | SEATTLE CENTER | REDMOND TOWER* | GND CON | UNICOM |
|---|---|---|---|---|
| 119.025 | 126.15 269.475 | 124.5 (CTAF) L 256.8 | 121.8 | 122.95 |




ELEV 3080 | D | TDZE 3067




REIL Rwys 5, 11 and 29 L
HIRL Rwy 5-23 L
MIRL Rwy 11-29 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 3267-½ 200 (200-½) | | | |
| LNAV/VNAV DA | 3383-⅝ 316 (400-⅝) | | | |
| LNAV MDA | 3440-½ 373 (400-½) | | 3440-¾ 373 (400-¾) | |
| C CIRCLING | 3540-1 460 (500-1) | 3560-1 480 (500-1) | 3640-1½ 560 (600-1½) | 3760-2¼ 680 (700-2¼) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 7006 |
|---|---|---|
| 288° | TDZE | 3080 |
| | Apt Elev | 3080 |

# RNAV (GPS) Y RWY 29

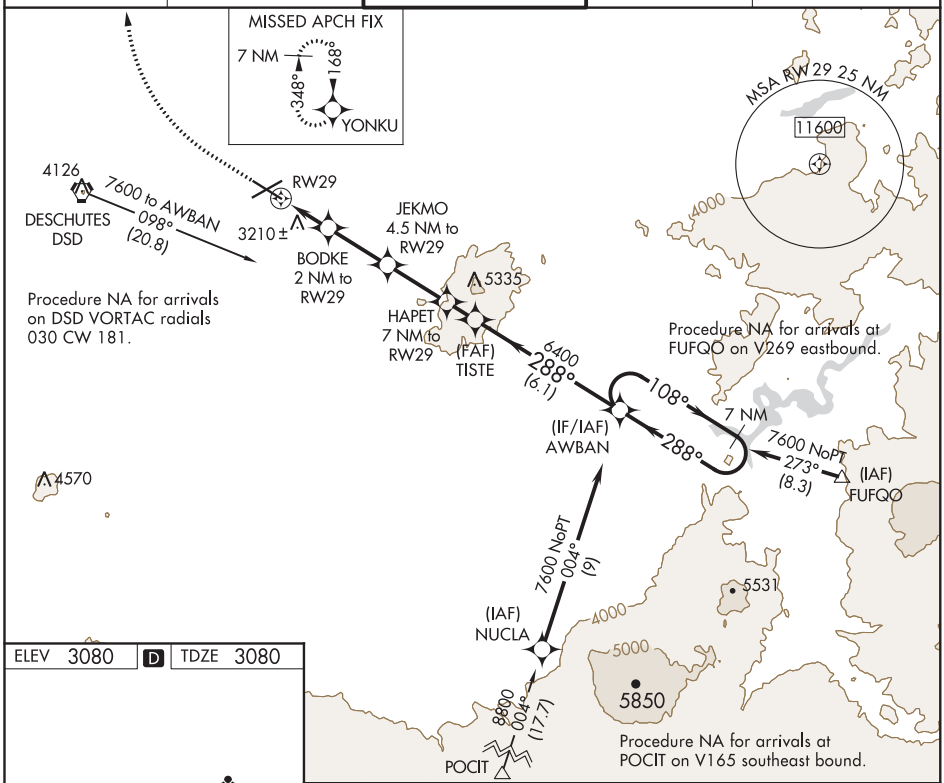
ROBERTS FIELD (RDM)

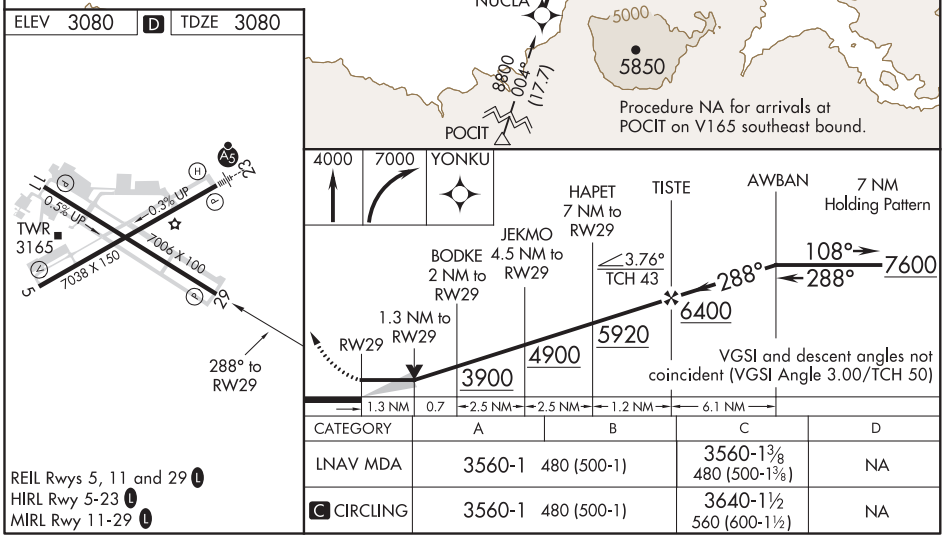
RNP APCH.

T

MISSED APPROACH: Climb to 4000 then climbing right turn to 7000 direct YONKU and hold, continue climb-in-hold to 7000.

| ATIS | SEATTLE CENTER | REDMOND TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 119.025 | 126.15 269.475 | 124.5 (CTAF) L 256.8 | 121.8 | 122.95 |




REIL Rwys 5, 11 and 29 L
HIRL Rwy 5-23 L
MIRL Rwy 11-29 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 3560-1 480 (500-1) | | 3560-1⅜ 480 (500-1⅜) | NA |
| C CIRCLING | 3560-1 480 (500-1) | | 3640-1½ 560 (600-1½) | NA |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

REDMOND, OREGON | AL-345 (FAA) | 19283

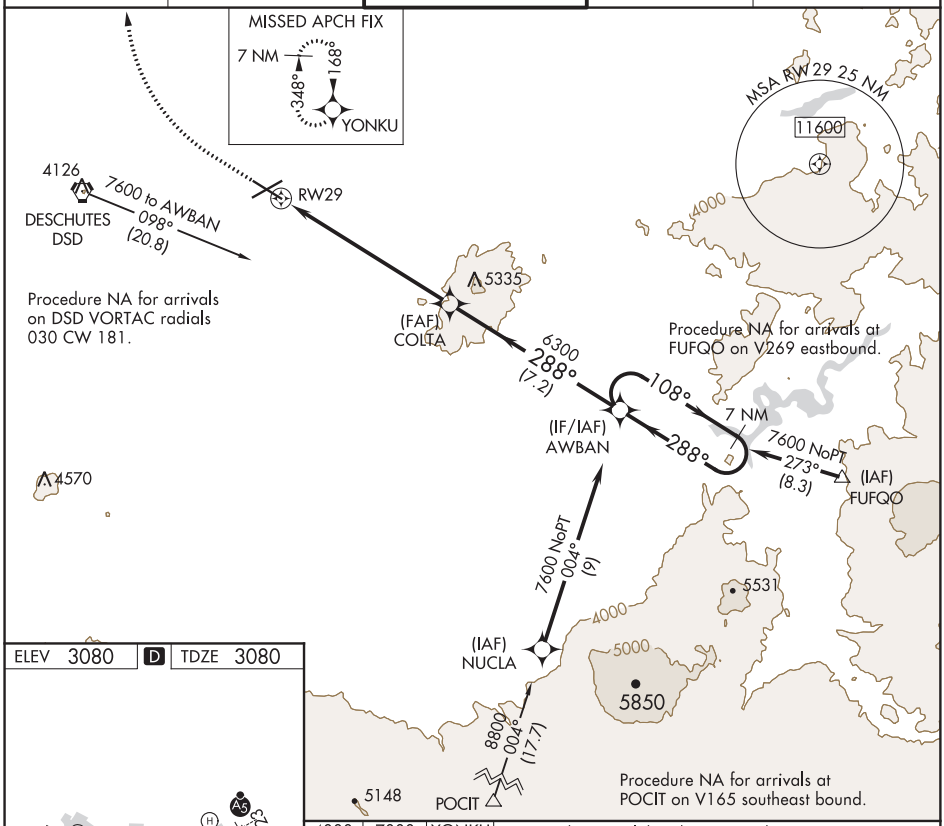
# RNAV (GPS) Z RWY 29
## ROBERTS FIELD (RDM)

| WAAS CH 90214 W29A | APP CRS 288° | Rwy ldg 7006<br>TDZE 3080<br>Apt Elev 3080 |
|---|---|---|

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 43°C (110°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 4000 then climbing right turn to 7000 direct YONKU and hold, continue climb-in-hold to 7000.

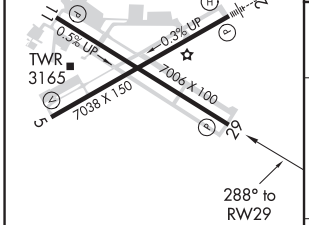
| ATIS | SEATTLE CENTER | REDMOND TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 119.025 | 126.15 269.475 | 124.5 (CTAF) L 256.8 | 121.8 | 122.95 |



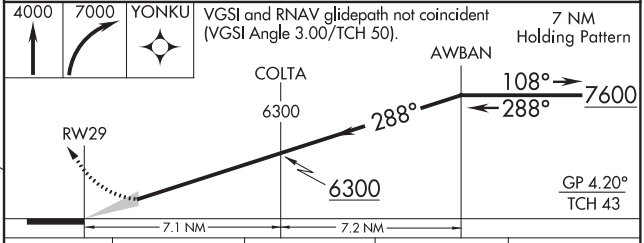

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 3080 | D | TDZE 3080




REIL Rwys 5, 11 and 29 L
HIRL Rwy 5-23 L
MIRL Rwy 11-29 L




| CATEGORY | | A | B | C | D |
|---|---|---|---|---|---|
| LPV | DA | 3366-1 | 286 (300-1) | NA | |
| LNAV/VNAV | DA | 3366-1 | 286 (300-1) | NA | |

REDMOND, OREGON
Amdt 1A 01FEB18

44°15′N-121°09′W

ROBERTS FIELD (RDM)
RNAV (GPS) Z RWY 29

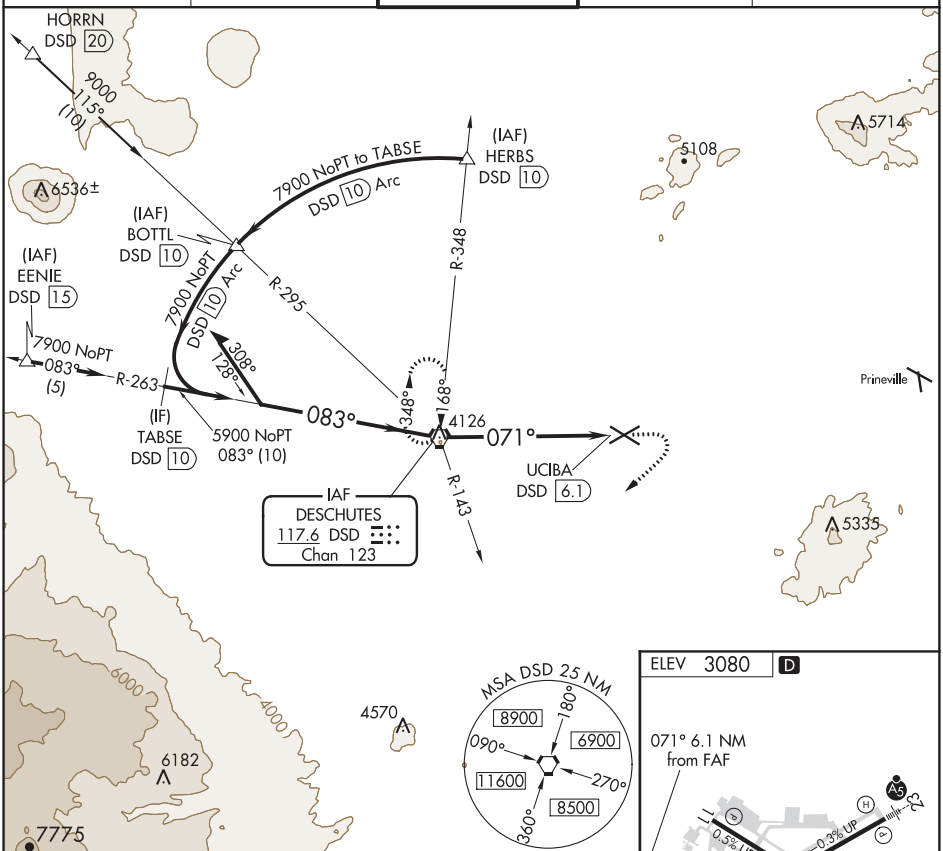
| VORTAC DSD 117.6 Chan 123 | APP CRS 071° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 3080 |
|---|---|---|

# VOR-A
## ROBERTS FIELD (RDM)

When local altimeter setting not received, use Bend altimeter setting and increase all MDA 80 feet and visibility Cats C and D ¼ mile.

MISSED APPROACH: Climb to 4100 then climbing right turn to 7900 on heading 220° and on DSD VORTAC R-143 to DSD VORTAC and hold.

| ATIS | SEATTLE CENTER | REDMOND TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 119.025 | 126.15 269.475 | 124.5 (CTAF) L 256.8 | 121.8 | 122.95 |

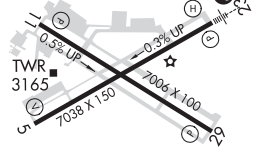




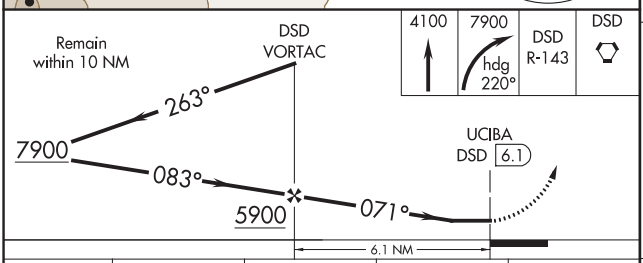


ELEV 3080 D

071° 6.1 NM from FAF




REIL Rwys 5, 11 and 29 L
HIRL Rwy 5-23 L
MIRL Rwy 11-29 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 3660-1 580 (600-1) | | 3660-1½ 580 (600-1½) | 3760-2¼ 680 (700-2¼) |

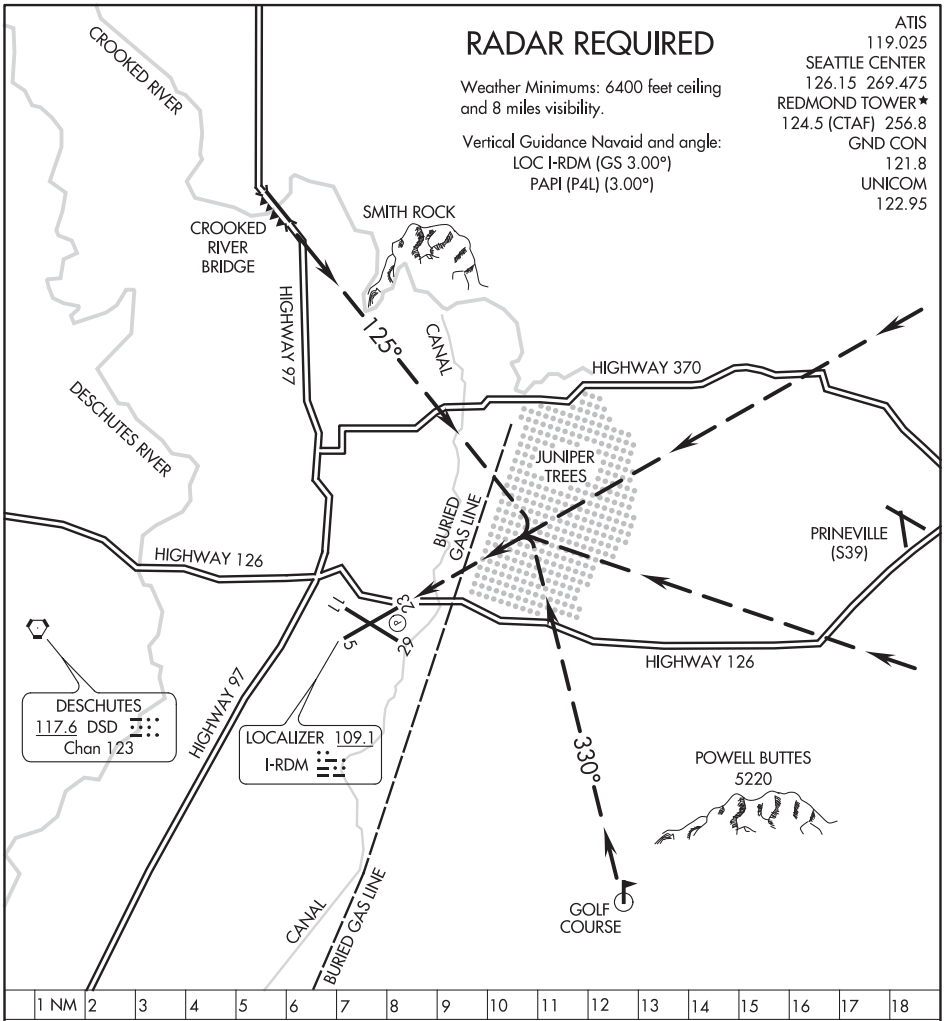
| FAF to MAP 6.1 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 6:06 | 4:04 | 3:03 | 2:26 | 2:02 |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# JUNIPER VISUAL RWY 23

ROBERTS FIELD (RDM)
REDMOND, OREGON



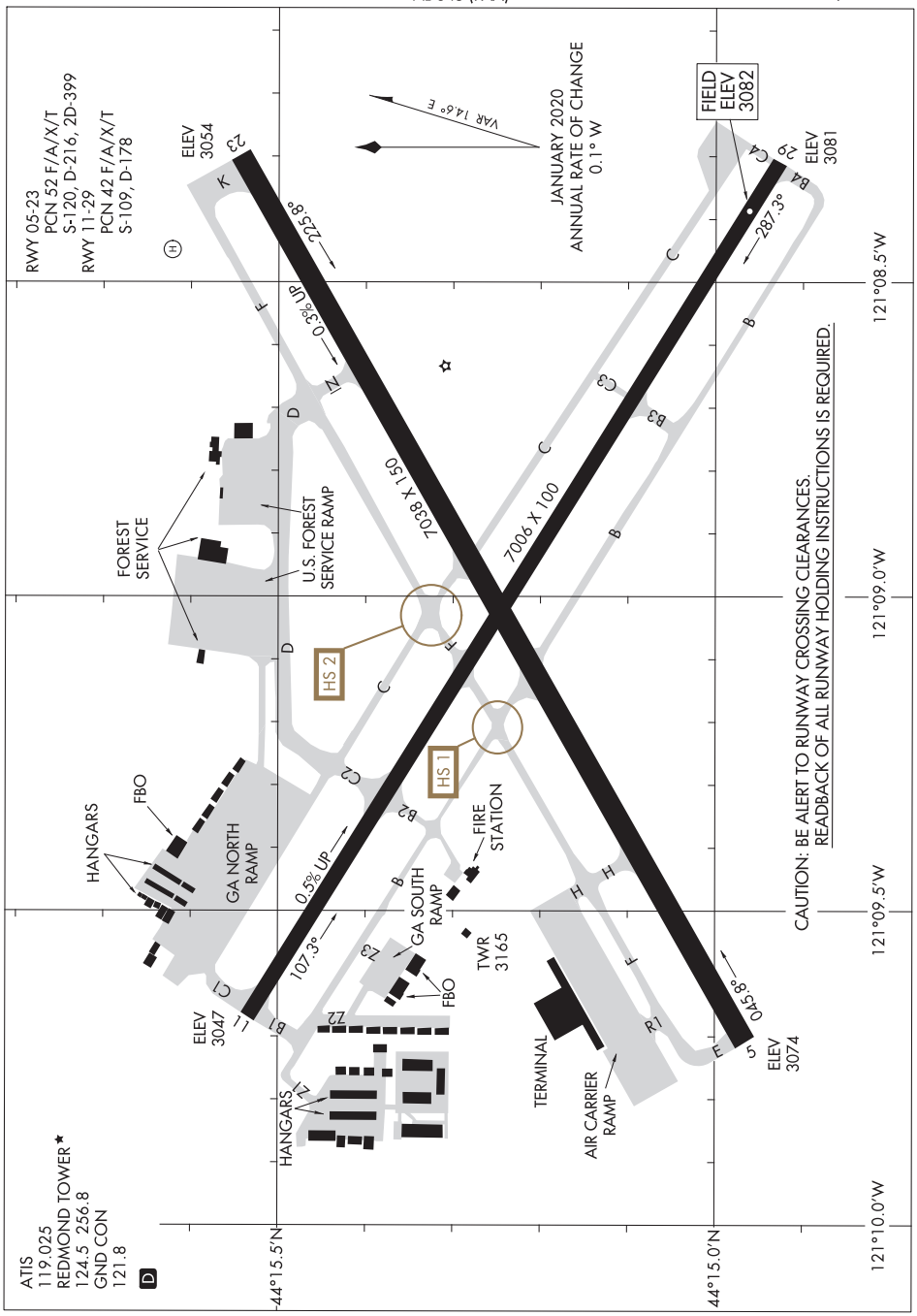

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

JUNIPER VISUAL APPROACH RWY 23

PROCEDURE NOT AUTHORIZED AT NIGHT

AL-345 (FAA)




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

20198

# REDMOND THREE DEPARTURE

AL-345 (FAA)

ROBERTS FIELD (RDM)
REDMOND, OREGON

**TOP ALTITUDE: ASSIGNED BY ATC**

ATIS
119.025
GND CON
121.8
REDMOND TOWER ★
124.5 256.8
SEATTLE CENTER
126.15 269.475

BATTLE GROUND
116.6 BTG
Chan 113
N45°44.86′-W122°35.54′
L-1, H-1

KLICKITAT
112.3 LTJ
Chan 70
N45°42.82′-W121°06.05′
L-13, H-1

PENDLETON
114.7 PDT
Chan 94
N45°41.91′
W118°56.32′
L-13, H-1

NEWBERG
117.4 UBG
Chan 121
N45°21.19′
W122°58.69′
L-1, H-1

CORVALLIS
115.4 CVO
Chan 101
N44°29.97′
W123°17.62′
L-1, H-1

KIMBERLY
115.6 IMB
Chan 103
N44°38.90′
W119°42.70′
L-13, H-1

262°
R-262
082°

EUGENE
112.9 EUG
Chan 76
N44°07.25′
W123°13.37′
L-1, H-1

DESCHUTES
117.6 DSD
Chan 123
N44°15.17′
W121°18.21′
L-13, H-1

WILDHORSE
114.55 ILR
Chan 92 (Y)
N43°35.59′-W118°57.30′
L-11, H-3

ROGUE VALLEY
113.6 OED
Chan 83
N42°28.77′-W122°54.78′
L-21, H-3

KLAMATH FALLS
115.9 LMT
Chan 106
N42°09.19′-W121°43.65′
L-21, H-3

LAKEVIEW
112.0 LKV
Chan 57
N42°29.57′-W120°30.43′
L-11, H-3

TAKEOFF MINIMUMS
Rwy 5: Standard with minimum climb of 390′ per NM to 13000.
Rwy 11: Standard with minimum climb of 406′ per NM to 13000.
Rwy 23: Standard with minimum climb of 356′ per NM to 13000.
Rwy 29: Standard with minimum climb of 358′ per NM to 13000.

NOTE: RADAR required.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 5: Climb on assigned heading for RADAR vectors to assigned route/fix, thence. . . .
TAKEOFF RUNWAY 11: Climb on assigned heading for RADAR vectors to assigned route/fix, thence. . . .
TAKEOFF RUNWAY 23: Climb on assigned heading for RADAR vectors to assigned route/fix, thence. . . .
TAKEOFF RUNWAY 29: Climb on assigned heading for RADAR vectors to assigned route/fix, thence. . . .

. . . .maintain assigned altitude, expect filed altitude/flight level five minutes after departure.

LOST COMMUNICATIONS: If no contact with Seattle Center after reaching 7000, continue climbing to assigned altitude direct DSD VORTAC. Climb in DSD VORTAC holding pattern to cross DSD VORTAC at or above MEA/MCA before proceeding on course.


NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 4742 |
|---|---|---|
| 337° | TDZE | 30 |
| | Apt Elev | 32 |

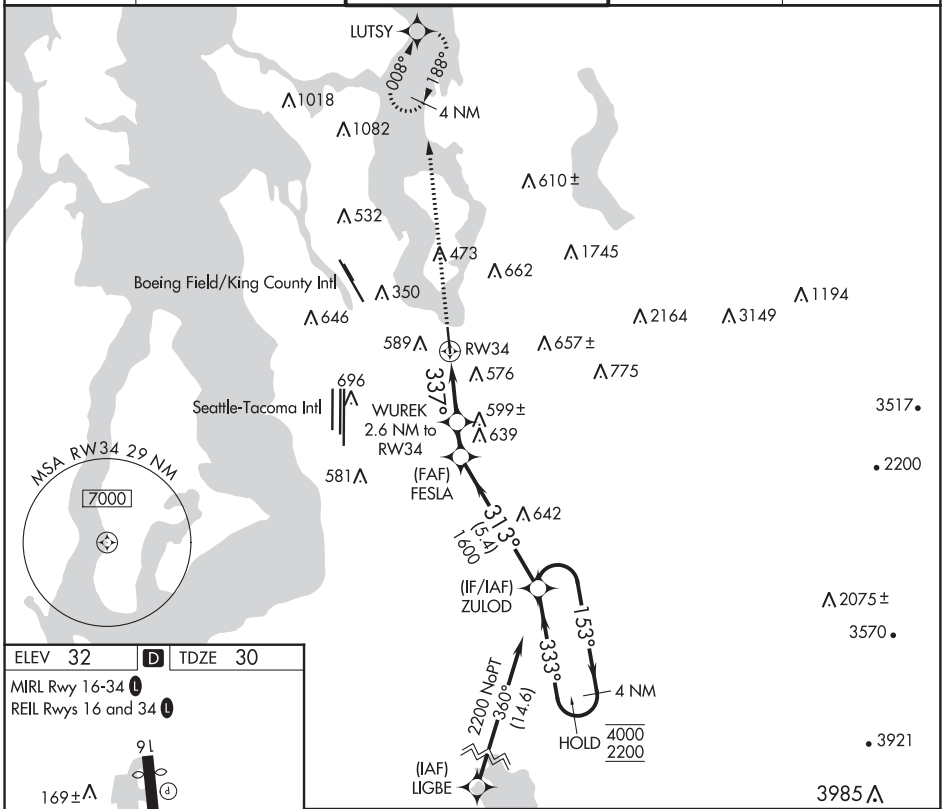
# RNAV (GPS) RWY 34
## RENTON MUNI (RNT)

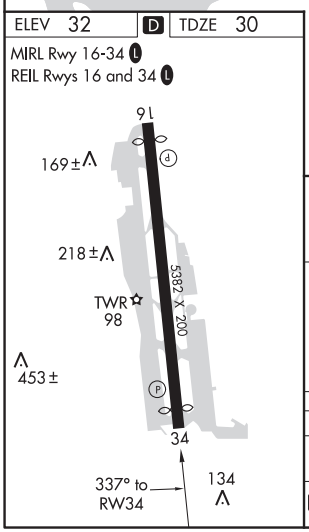
RNP APCH.

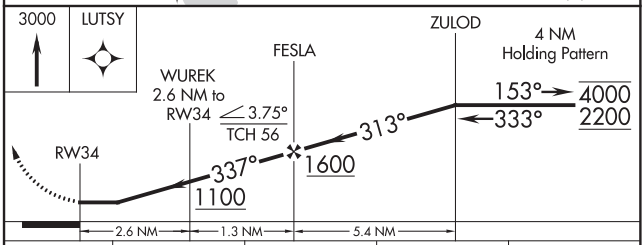
T A Circling NA west of Rwy 16-34. Rwy 34 helicopter visibility reduction below 1 SM NA. Straight-in Rwy 34 at night, Circling Rwy 34 at night, operational VGSI required, remain on or above VGSI glidepath until threshhold.

MISSED APPROACH: Climb to 3000 direct LUTSY and hold.

| ATIS | SEATTLE APP CON | RENTON TOWER* | GND CON | UNICOM |
|---|---|---|---|---|
| 126.95 | 119.2 284.7 | 124.7 (CTAF) L 256.9 | 121.6 256.9 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 860-1<br>830 (900-1) | 860-1¼<br>830 (900-1¼) | 880-2½<br>850 (900-2½) | NA |
| C CIRCLING | 860-1¼<br>828 (900-1¼) | 920-1¼<br>888 (900-1¼) | 1000-3<br>968 (1000-3) | NA |



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RENTON, WASHINGTON AL-5396 (FAA) 20254

# RNAV (GPS) Y RWY 16
## RENTON MUNI (RNT)

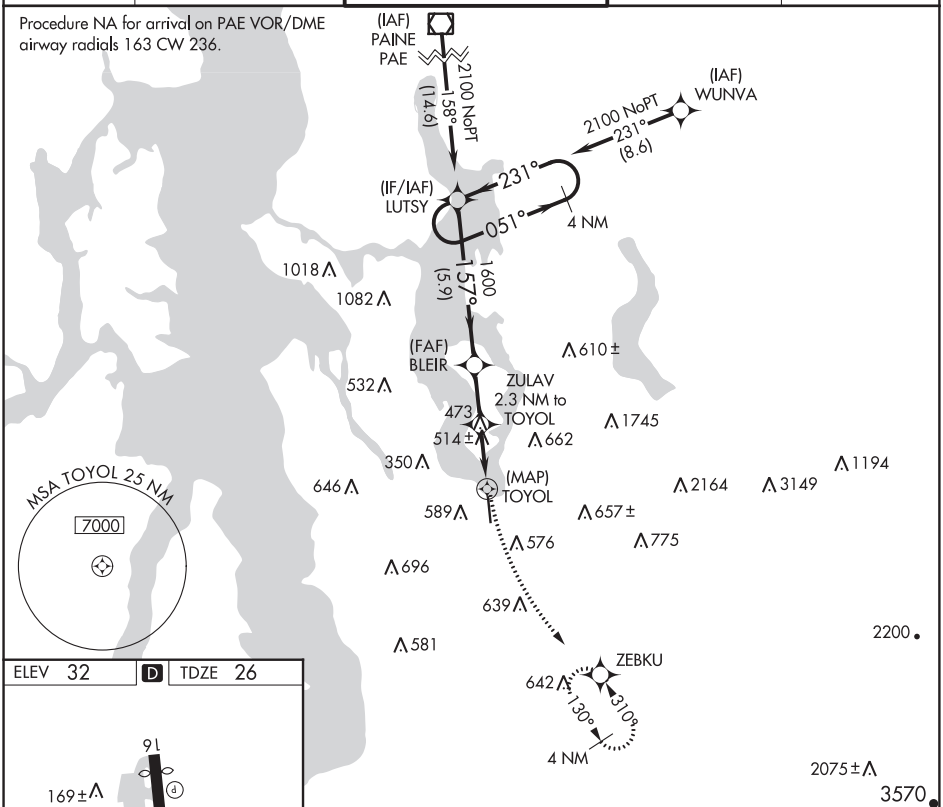
| APP CRS | Rwy ldg | 4742 |
|---|---|---|
| 157° | TDZE | 26 |
| | Apt Elev | 32 |

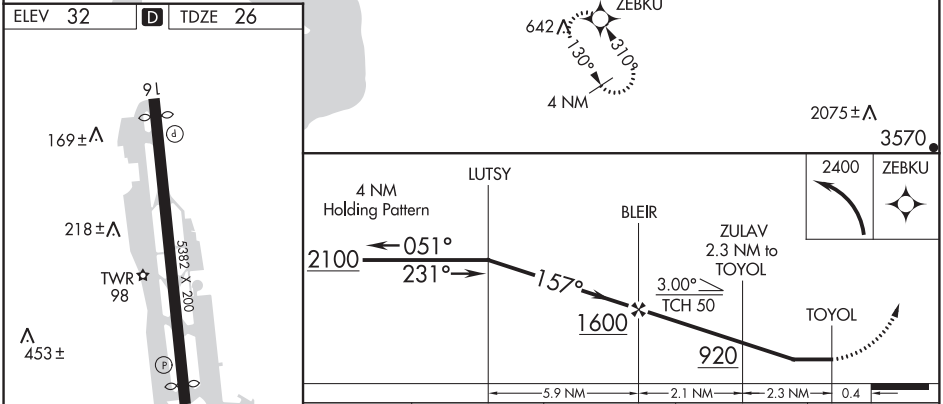
RNP APCH.

Circling NA west of Rwy 16-34. Circling Rwy 34 NA at night.
Rwy 16 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climbing left turn to 2400 direct ZEBKU and hold.

| ATIS | SEATTLE APP CON | RENTON TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 126.95 | 119.2 284.7 | 124.7 (CTAF) L 256.9 | 121.6 256.9 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 780-1 754 (800-1) | 780-1¼ 754 (800-1¼) | 780-2 754 (800-2) | |
| C CIRCLING | 860-1¼ 828 (900-1¼) | 920-1¼ 888 (900-1¼) | 1000-3 968 (1000-3) | NA |



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NW-1, 05 NOV 2020 to 31 DEC 2020

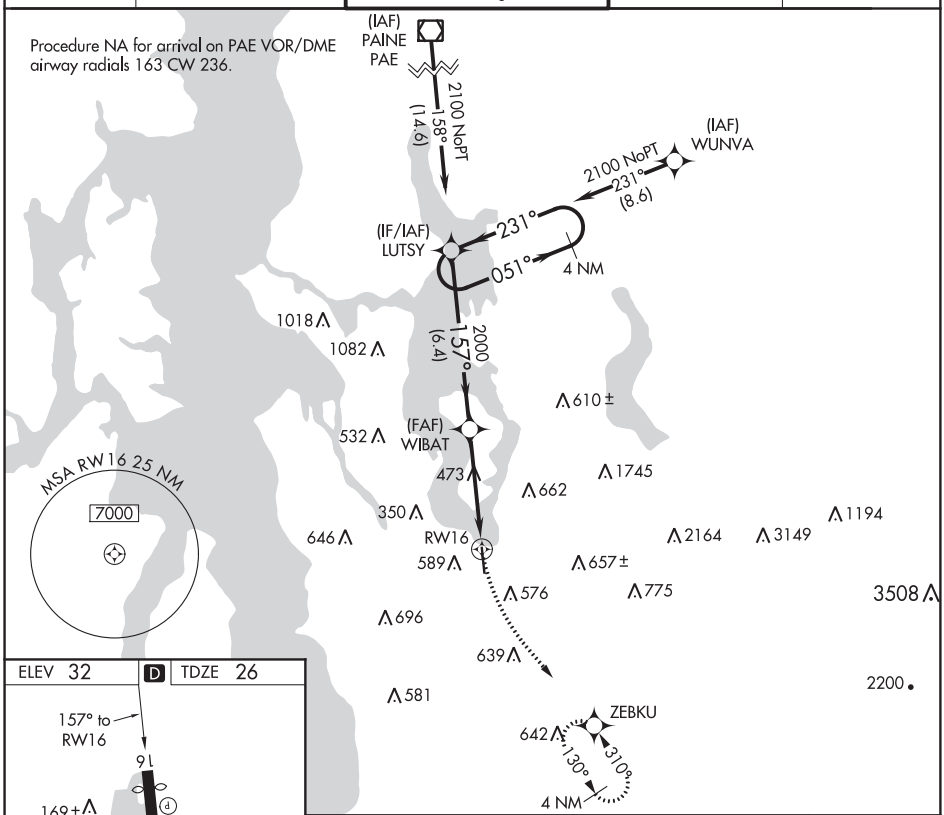
| WAAS CH 93610 W16A | APP CRS 157° | Rwy ldg 4742<br>TDZE 26<br>Apt Elev 32 |
|---|---|---|

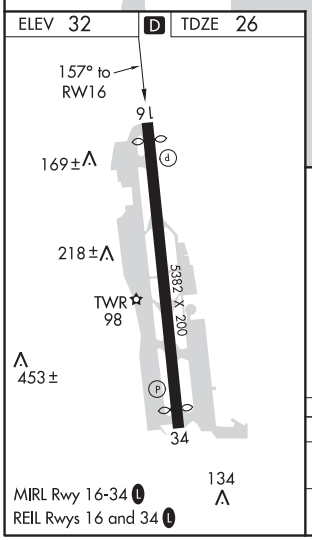
# RNAV (GPS) Z RWY 16
## RENTON MUNI (RNT)

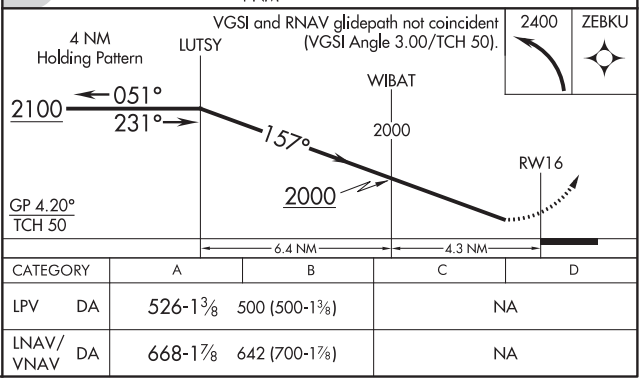
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -5°C (23°F) or above 48°C (119°F). DME/DME RNP-0.3 NA. Rwy 16 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climbing left turn to 2400 direct ZEBKU and hold.

| ATIS | SEATTLE APP CON | RENTON TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 126.95 | 119.2 284.7 | 124.7 (CTAF) L 256.9 | 121.6 256.9 | 122.95 |




| CATEGORY | | A | B | C | D |
|---|---|---|---|---|---|
| LPV | DA | 526-1⅜ | 500 (500-1⅜) | NA | |
| LNAV/VNAV | DA | 668-1⅞ | 642 (700-1⅞) | NA | |



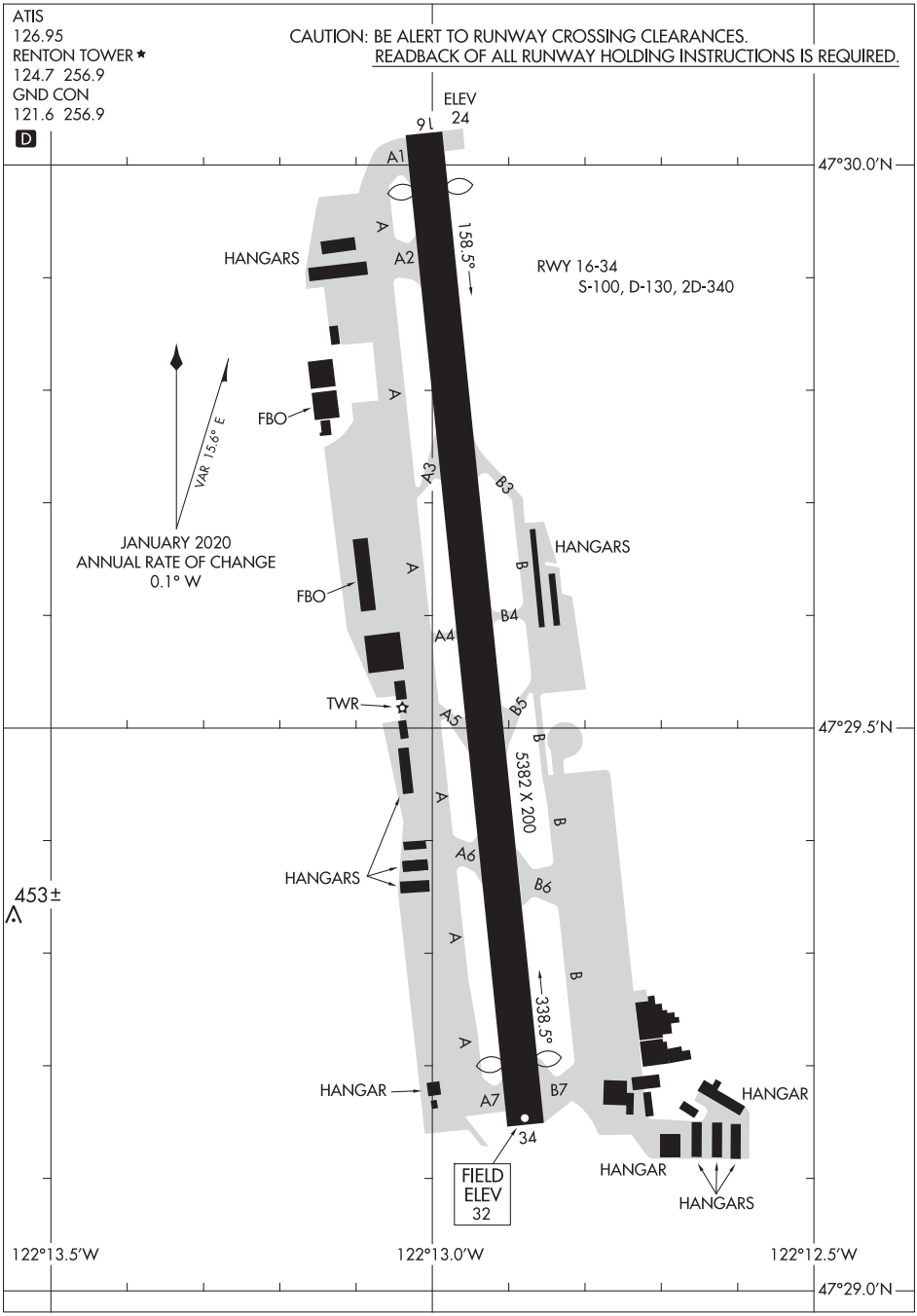
NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

20086

# AIRPORT DIAGRAM

RENTON MUNI (RNT)
RENTON, WASHINGTON

AL-5396 (FAA)



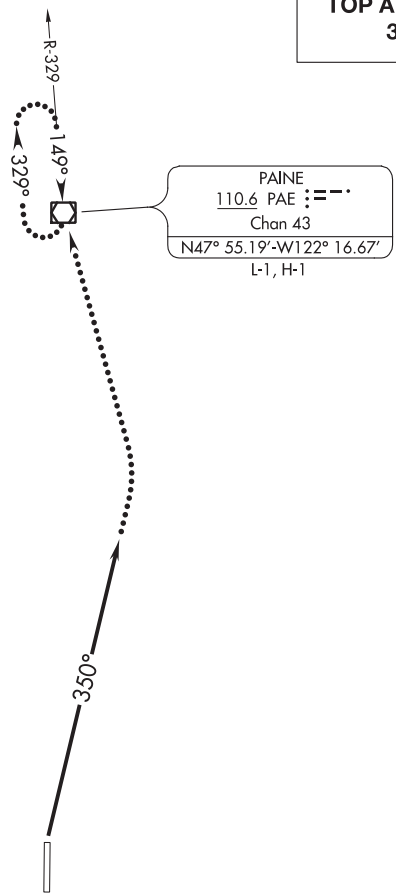

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM
20086
RENTON, WASHINGTON
RENTON MUNI (RNT)

ATIS
126.95
GND CON
121.6 256.9
RENTON TOWER★
124.7 256.9
SEATTLE DEP CON
119.2 284.7

**TOP ALTITUDE: 3000**




NOTE: RADAR required.

TAKEOFF MINIMUMS
Rwy 16: NA- ATC.
Rwy 34: Standard with minimum climb of 330′ per NM to 2700.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 34: Climb heading 350°, maintain 3000, for RADAR vectors, expect filed altitude within 5 minutes after departure.

LOST COMMUNICATIONS: If no contact with Seattle Departure Control within 3 minutes after departure, climbing left turn direct PAE VOR/DME, continue climb-in PAE VOR/DME holding pattern to cross PAE VOR/DME at or above MEA/MCA for direction of flight.



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NW-1, 05 NOV 2020 to 31 DEC 2020

(RENTN3.RENTN) 17341

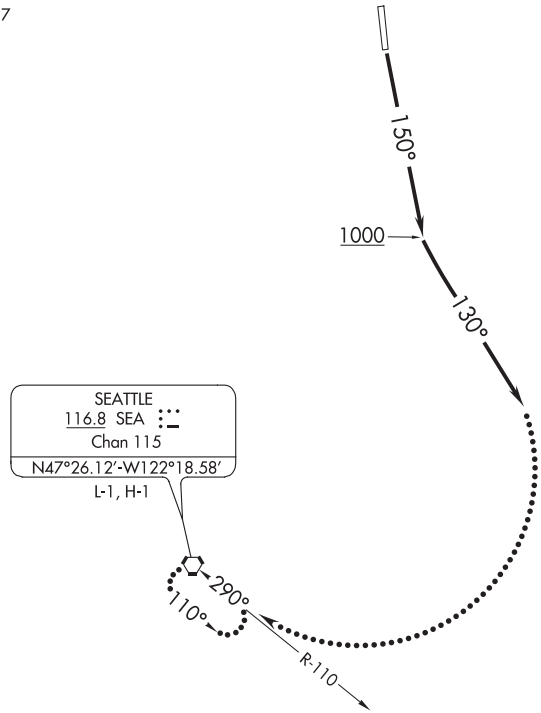
# RENTN THREE DEPARTURE

AL-5396 (FAA)

RENTON MUNI (RNT)
RENTON, WASHINGTON

ATIS 126.95
GND CON
121.6 256.9
RENTON TOWER ★
124.7 (CTAF) 256.9
SEATTLE DEP CON
119.2 284.7

**TOP ALTITUDE: 3000**




NOTE: RADAR required.

TAKEOFF MINIMUMS

Rwy 16: Standard with a minimum climb of 405′ per NM to 800.
Rwy 34: NA- ATC.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb heading 150° to 1000, then climbing left turn heading 130°, expect RADAR vectors, maintain 3000, expect filed altitude within 5 minutes after departure.

LOST COMMUNICATIONS: If no contact with Seattle Departure Control within 3 minutes after departure, climbing right turn direct SEA VORTAC, continue climb-in SEA VORTAC holding pattern to cross SEA VORTAC at or above MEA/MCA for direction of flight before proceeding on course.


NW-1, 05 NOV 2020 to 31 DEC 2020

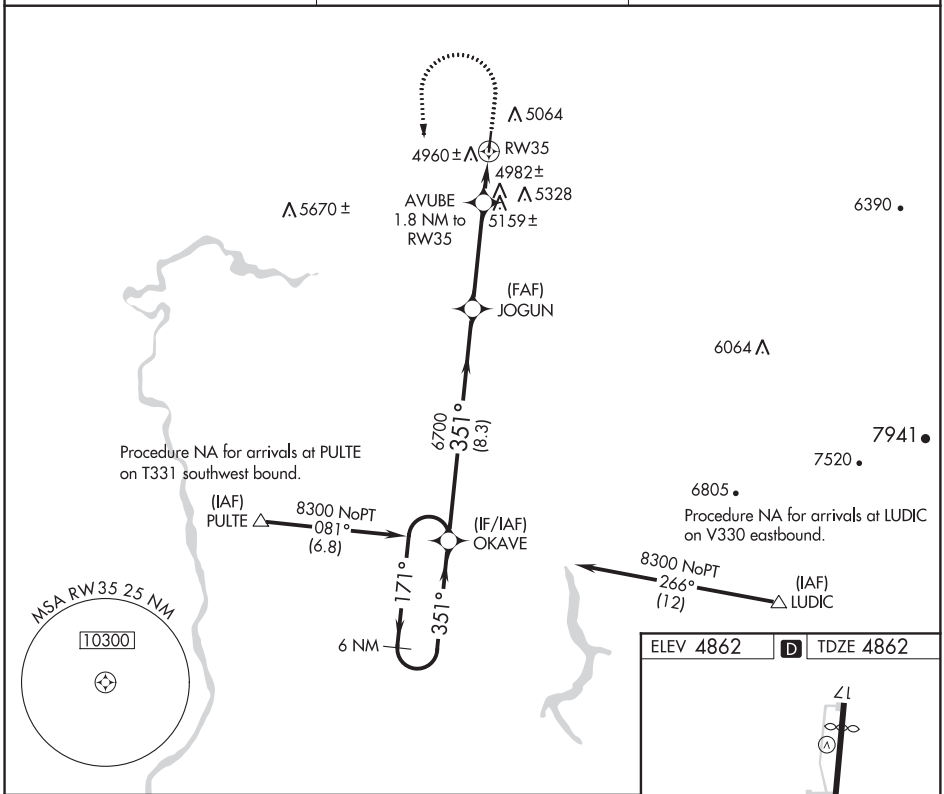
| APP CRS | Rwy ldg | 3900 |
|---|---|---|
| 351° | TDZE | 4862 |
| | Apt Elev | 4862 |

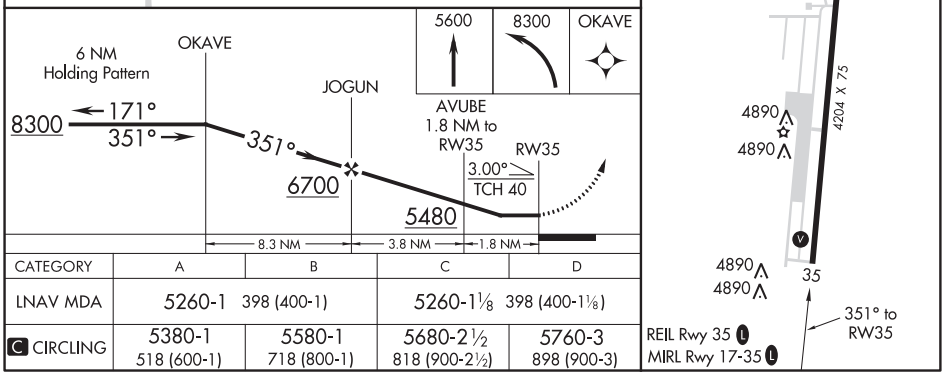
# RNAV (GPS) RWY 35
## REXBURG-MADISON COUNTY (RXE)

T A Rwy 35 helicopter visibility reduction below ¾ SM NA. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Idaho Falls altimeter setting and increase all MDA 80 feet and increase LNAV Cat C/D visibility ⅛ SM and Circling Cat C/D visibility ¼ SM. Circling Rwy 35 NA at night.

MISSED APPROACH: Climb to 5600 then climbing left turn to 8300 direct OKAVE and hold.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.075 | 128.35 239.25 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 5260-1 398 (400-1) | | 5260-1⅛ 398 (400-1⅛) | |
| C CIRCLING | 5380-1 518 (600-1) | 5580-1 718 (800-1) | 5680-2½ 818 (900-2½) | 5760-3 898 (900-3) |


NW-1, 05 NOV 2020 to 31 DEC 2020

REXBURG, IDAHO | AL-5977 (FAA) | 19003

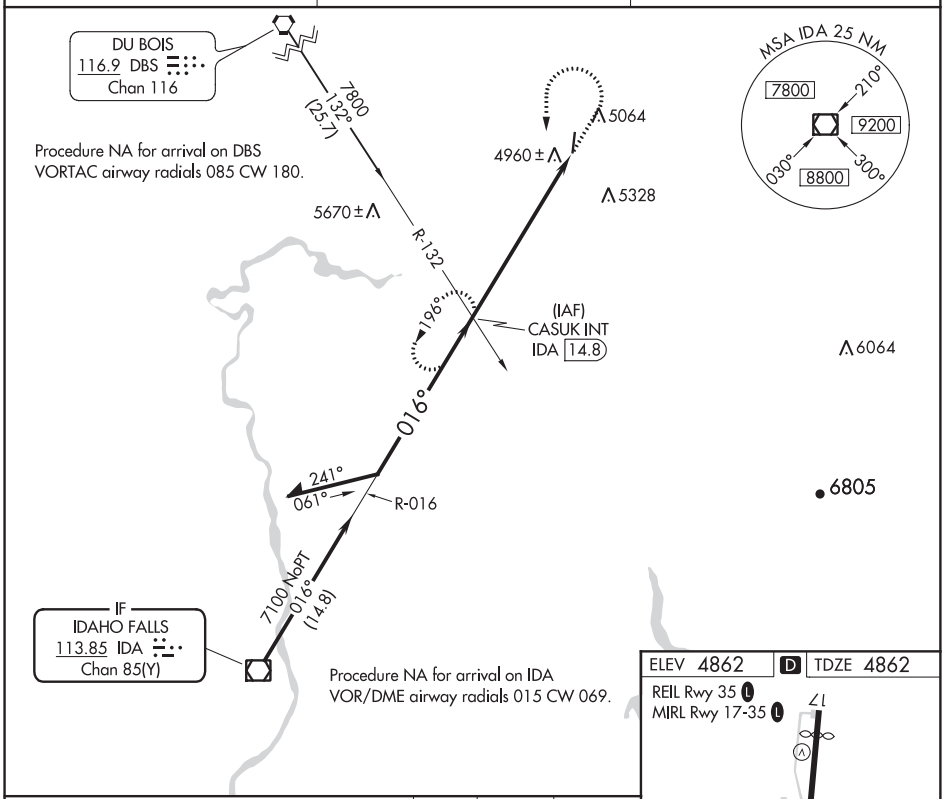
| VOR/DME IDA | APP CRS | Rwy ldg | 3900 |
|---|---|---|---|
| 113.85 | 016° | TDZE | 4862 |
| Chan 85 (Y) | | Apt Elev | 4862 |

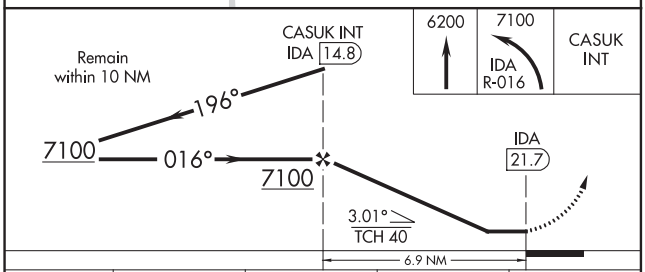
# VOR RWY 35
## REXBURG-MADISON COUNTY (RXE)

Rwy 35 helicopter visibility reduction below 1 SM NA.
Straight-in Rwy 35 NA at night, Circling Rwy 35 NA at night.

MISSED APPROACH: Climb to 6200 then climbing left turn to 7100 on IDA R-016 to CASUK INT/IDA 14.8 DME and hold.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.075 | 128.35 239.25 | 122.8 (CTAF) L |

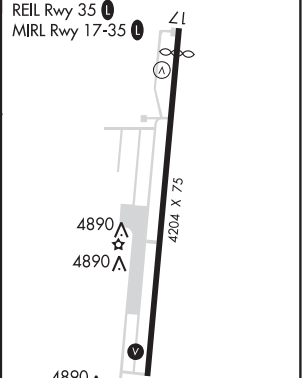



| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-35 | 5680-1 818 (900-1) | 5680-1¼ 818 (900-1¼) | 5680-2½ 818 (900-2½) | |
| C CIRCLING | 5680-1¼ 818 (900-1¼) | | 5680-2½ 818 (900-2½) | 5760-3 898 (900-3) |

ELEV 4862 | D | TDZE 4862

REIL Rwy 35 L
MIRL Rwy 17-35 L




FAF to MAP 6.9 NM

| Knots | 60 | 90 | 120 | 150 | 180 |
|---|---|---|---|---|---|
| Min:Sec | 6:54 | 4:36 | 3:27 | 2:46 | 2:18 |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 77903 W26A | APP CRS 259° | Rwy ldg 4001 TDZE 389 Apt Elev 394 |
|---|---|---|

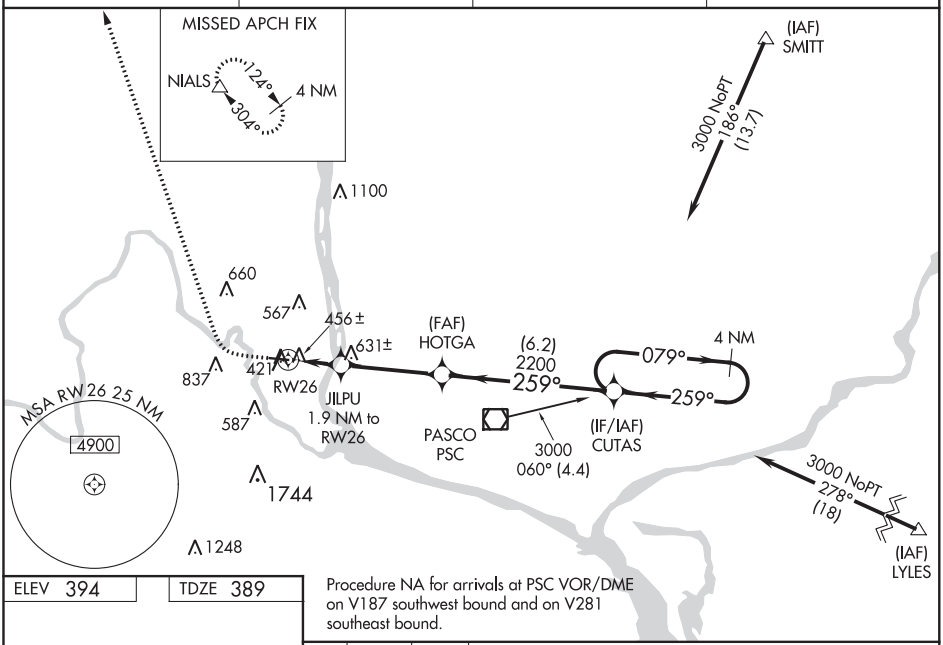
# RNAV (GPS) RWY 26
## RICHLAND (RLD)

RNP APCH.

When local altimeter setting not received, use Pasco altimeter setting and increase all DA 21 feet and all MDA 40 feet and increase LNAV/VNAV Cats A and B visibility ⅛ mile, Circling Cat C visibility ¼ mile. Baro-VNAV NA when using Pasco altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (4°F) or above 41°C (107°F). Rwy 26 helicopter visibility reduction below ¾ SM NA.

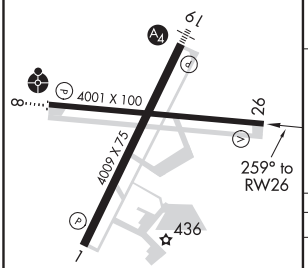
MISSED APPROACH: Climb to 900 then climbing right turn to 3500 direct NIALS and hold.

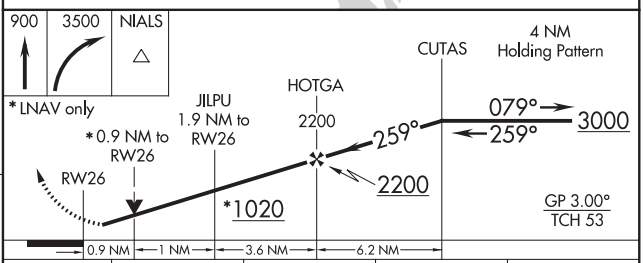
| AWOS-3PT | CHINOOK APP CON * | CLNC DEL | UNICOM |
|---|---|---|---|
| 132.675 | 128.75 377.2 | 122.4 | 122.7 (CTAF) L |




ELEV 394 TDZE 389

Procedure NA for arrivals at PSC VOR/DME on V187 southwest bound and on V281 southeast bound.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 657-⅞ 268 (300-⅞) | | 657-1 268 (300-1) | |
| LNAV/VNAV DA | 639-¾ 250 (300-¾) | | 639-1 250 (300-1) | |
| LNAV MDA | 720-1 331 (400-1) | | | |
| C CIRCLING | 920-1 526 (600-1) | 1000-1 606 (700-1) | 1200-2¼ 806 (700-2¼) | 1940-3 1546 (1600-3) |

REIL Rwys 1 and 19 L
MIRL Rwy 1-19 L
MIRL Rwy 8-26

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NW-1, 05 NOV 2020 to 31 DEC 2020

RICHLAND, WASHINGTON AL-5966 (FAA) 20198

# RNAV (GPS) Y RWY 19
RICHLAND (RLD)

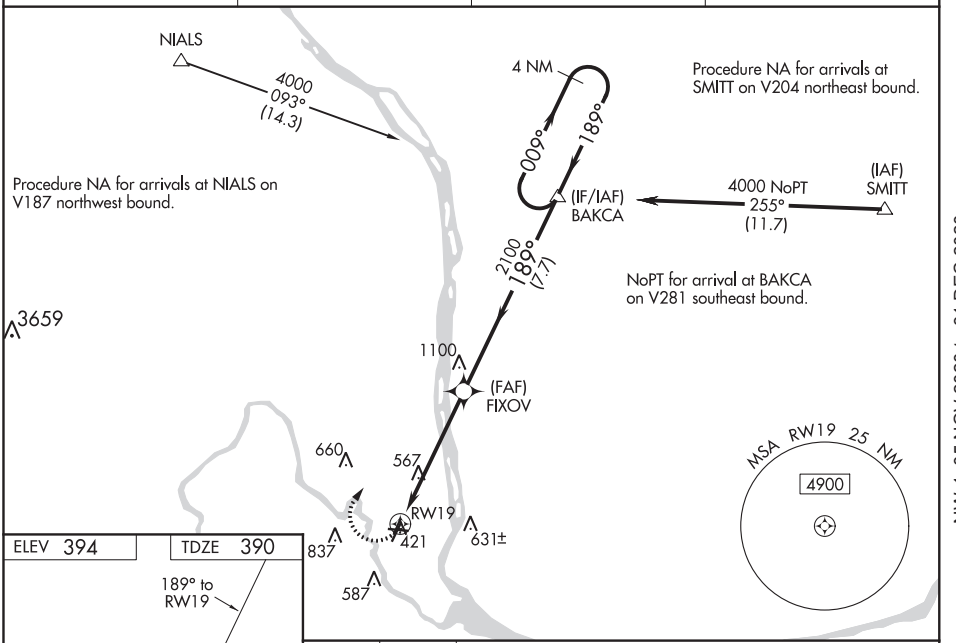
| APP CRS | Rwy ldg | 4009 |
|---|---|---|
| 189° | TDZE | 390 |
| | Apt Elev | 394 |

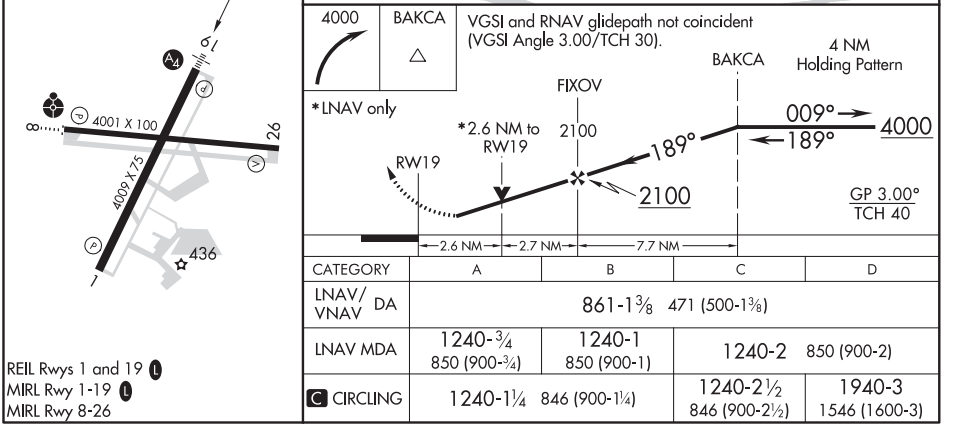
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (4°F) or above 41°C (106°F). DME/DME-RNP- 0.3 NA. When local altimeter setting not received, use Pasco altimeter setting and increase all DA 21 feet and all MDA 40 feet and increase LNAV Cat A visibility ¼ mile, Cat C and D ½ mile, and Circling Cat C visibility ¼ mile. For inop MALS increase LNAV/VNAV Cat D visibility to 1⅝ mile, LNAV Cat C and D visibility to 2½ mile. When using Pasco altimeter setting increase LNAV/VNAV all Cats visibility to 1¾ mile, LNAV Cat C and D visibility to 2½ mile. VDP and Baro-VNAV NA when using Pasco altimeter setting. Helicopter visibility reduction below ¾ SM NA.

MALS

MISSED APPROACH: Climbing right turn 4000 direct BAKCA and hold, continue climb-in-hold to 4000.

| AWOS-3PT | CHINOOK APP CON * | CLNC DEL | UNICOM |
|---|---|---|---|
| 132.675 | 128.75 377.2 | 122.4 | 122.7 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV/VNAV DA | 861-1⅜ 471 (500-1⅜) | | | |
| LNAV MDA | 1240-¾ 850 (900-¾) | 1240-1 850 (900-1) | 1240-2 850 (900-2) | |
| C CIRCLING | 1240-1¼ 846 (900-1¼) | | 1240-2½ 846 (900-2½) | 1940-3 1546 (1600-3) |

REIL Rwys 1 and 19 L
MIRL Rwy 1-19 L
MIRL Rwy 8-26

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 4009 |
|---|---|---|
| 189° | TDZE | 390 |
| | Apt Elev | 394 |

# RNAV (GPS) Z RWY 19
## RICHLAND (RLD)

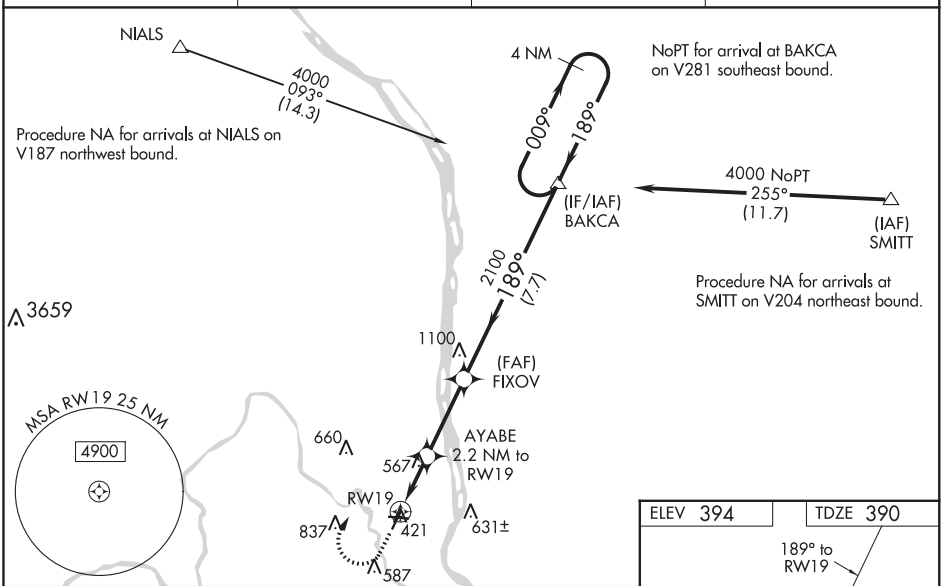
T NA For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (4°F) or above 41°C (106°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Pasco altimeter setting and increase all DA 21 feet and all MDA 40 feet. Increase LNAV Cats C and D visibility ⅛ mile and Circling Cat C ¼ mile. For inop MALS increase LNAV/VNAV all Cats visibility to ⅞ mile and increase LNAV Cat D visibility to 1⅜ mile. Helicopter visibility reduction below ¾ SM NA. VDP and Baro/VNAV NA when using Pasco altimeter setting. For inoperative MALS when using Pasco altimeter setting increase LNAV/VNAV all Cats visibility to ⅞ and LNAV Cats C and D visibility to 1½.

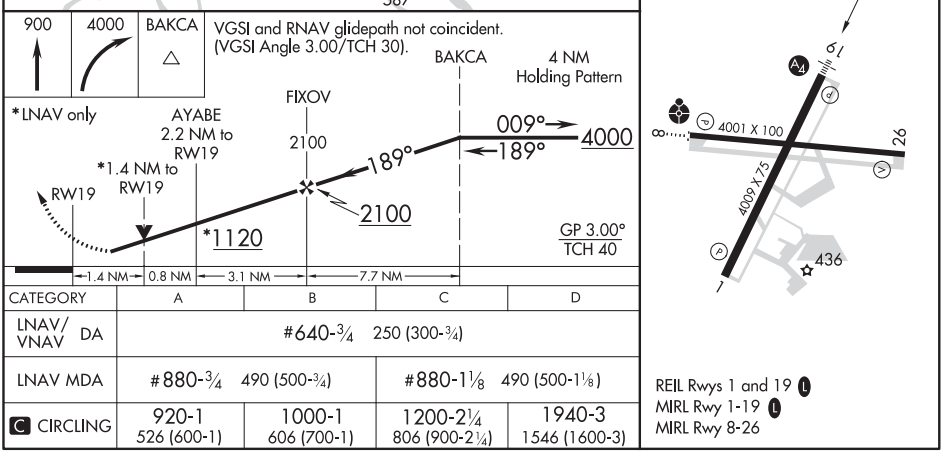
# Missed approach requires minimum climb of 340 feet per NM to 2000; if unable to meet climb gradient see RNAV (GPS) Y Rwy 19.

MALS

MISSED APPROACH: Climb to 900 then climbing right turn to 4000 direct BAKCA and hold, continue climb-in-hold to 4000.

| AWOS-3PT | CHINOOK APP CON * | CLNC DEL | UNICOM |
|---|---|---|---|
| 132.675 | 128.75 377.2 | 122.4 | 122.7 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV/VNAV DA | #640-¾ 250 (300-¾) | | | |
| LNAV MDA | #880-¾ 490 (500-¾) | | #880-1⅛ 490 (500-1⅛) | |
| C CIRCLING | 920-1 526 (600-1) | 1000-1 606 (700-1) | 1200-2¼ 806 (900-2¼) | 1940-3 1546 (1600-3) |

REIL Rwys 1 and 19 L
MIRL Rwy 1-19 L
MIRL Rwy 8-26

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

RICHLAND, WASHINGTON

AL-5966 (FAA)

20198

# LOC RWY 19
## RICHLAND (RLD)

| LOC/DME I-RLD | APP CRS | Rwy ldg | 4009 |
|---|---|---|---|
| 110.5 | 189° | TDZE | 390 |
| Chan 42 | | Apt Elev | 394 |

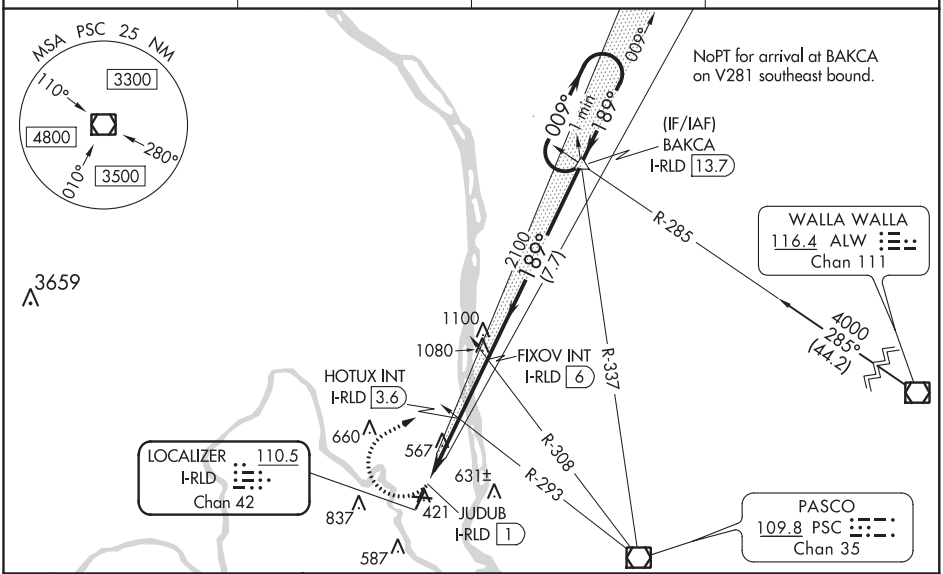
T NA

VDP NA with Pasco altimeter setting. When local altimeter setting not received, use Pasco altimeter setting and increase HOTUX FIX minimums S-19 Cats C and D ⅛ mile and Circling Cat C ¼ mile. For inop MALS when using Pasco altimeter setting, HOTUX FIX minimums increase S-19 Cats C and D visibility ⅜ mile. Inop table does not apply to S-19 Cat C. Helicopter visibility reduction below ¾ SM NA. For inop MALS increase HOTUX FIX minimums S-19 Cat D visibility ¼ mile. Inop table does not apply to S-19 Cat C when using Pasco altimeter setting.

MALS

MISSED APPROACH: Climbing right turn to 4000 on heading 045° and on PSC VOR/DME R-337 to BAKCA INT/I-RLD 13.7 DME and hold, continue climb-in-hold to 4000.

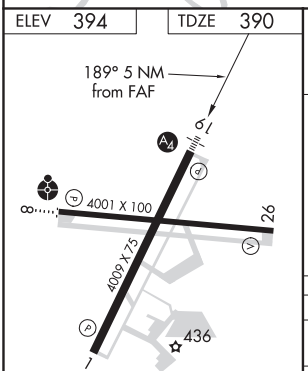
| AWOS-3PT | CHINOOK APP CON ★ | CLNC DEL | UNICOM |
|---|---|---|---|
| 132.675 | 128.75 377.2 | 122.4 | 122.7 (CTAF) L |




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| ELEV 394 | TDZE 390 |
|---|---|



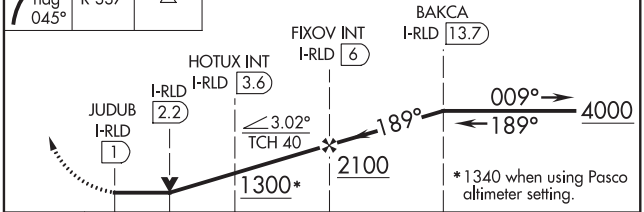

REIL Rwys 1 and 19 L
MIRL Rwy 1-19 L
MIRL Rwy 8-26

| FAF to MAP 5 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 5:00 | 3:20 | 2:30 | 2:00 | 1:40 |

| 4000 hdg 045° | PSC R-337 | BAKCA △ |
|---|---|---|

VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 30).

One Minute Holding Pattern




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-19 | 1300-1 910 (1000-1) | | 1300-2½ 910 (1000-2½) | |
| C CIRCLING | 1300-1¼ 906 (1000-1¼) | | 1300-2¾ 906 (1000-2¾) | 1940-3 1546 (1600-3) |
| HOTUX FIX MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED) | | | | |
| S-19 | 880-¾ 490 (500-¾) | | 880-1⅛ 490 (500-1⅛) | |
| C CIRCLING | 920-1 526 (600-1) | 1000-1 606 (700-1) | 1200-2¼ 806 (900-2¼) | 1940-3 1546 (1600-3) |

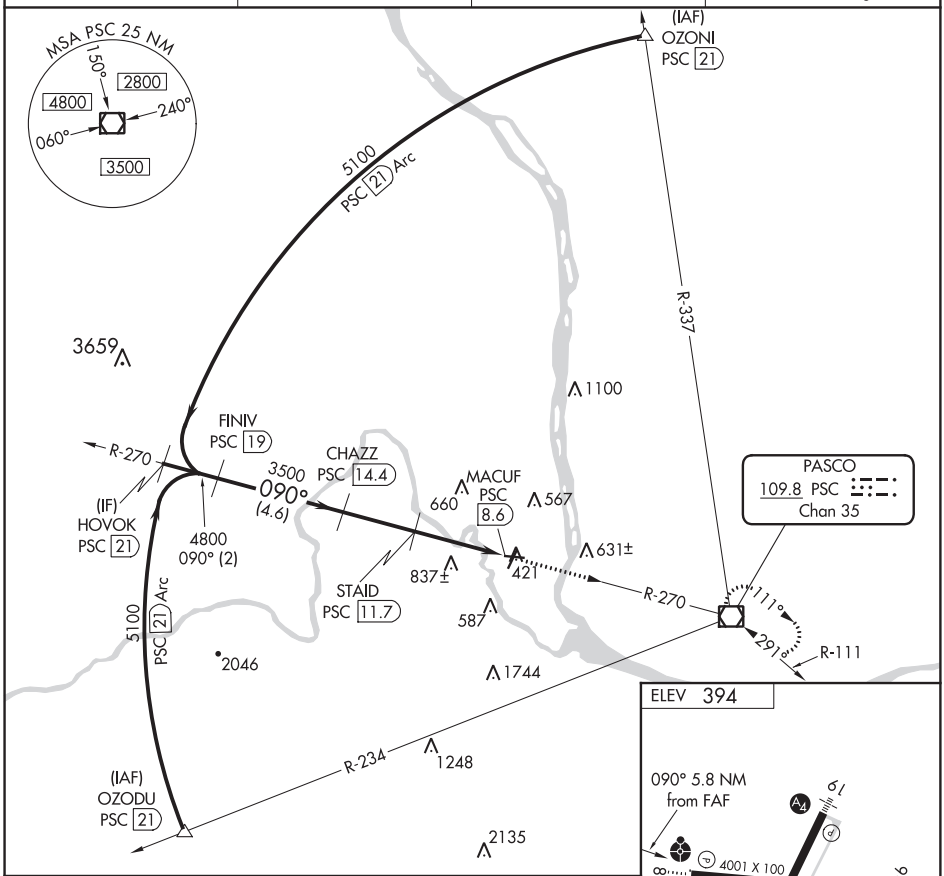
| VOR/DME PSC 109.8 Chan 35 | APP CRS 090° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 394 |
|---|---|---|

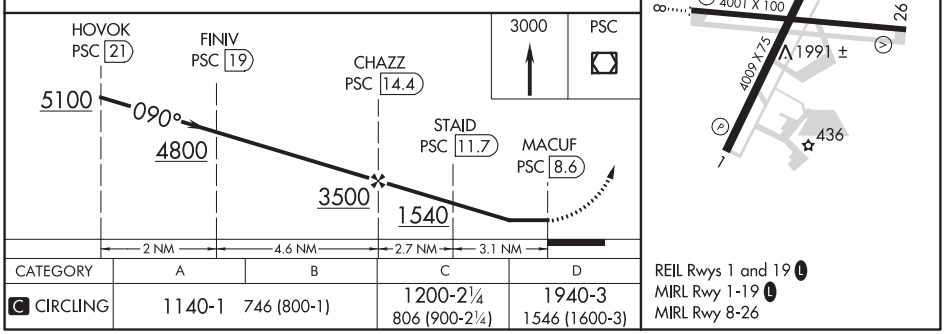
# VOR/DME-A
## RICHLAND (RLD)

NA When local altimeter setting not received, use Pasco altimeter setting and increase all MDA 40 feet.

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

| AWOS-3PT | CHINOOK APP CON ★ | CLNC DEL | UNICOM |
|---|---|---|---|
| 132.675 | 128.75 377.2 | 122.4 | 122.7 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 1140-1 746 (800-1) | | 1200-2¼ 806 (900-2¼) | 1940-3 1546 (1600-3) |

REIL Rwys 1 and 19 L
MIRL Rwy 1-19 L
MIRL Rwy 8-26

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC I-RIW 110.5 | APP CRS 284° | Rwy ldg 8204<br>TDZE 5459<br>Apt Elev 5528 |
|---|---|---|

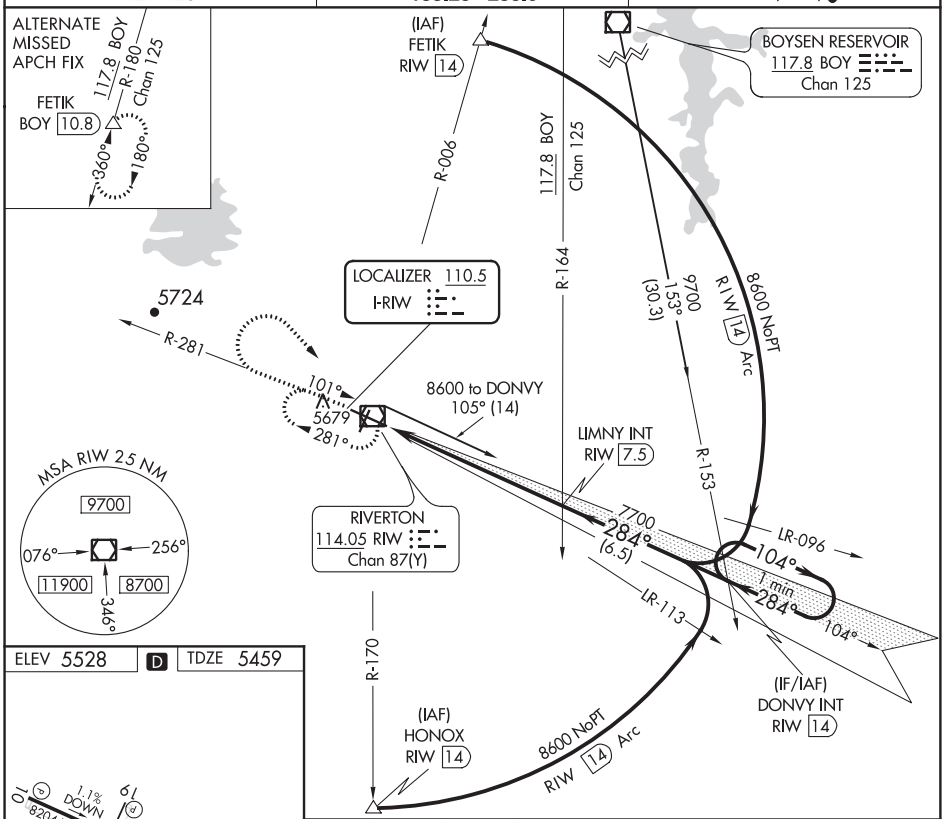
# ILS or LOC RWY 28
## CENTRAL WYOMING RGNL (RIW)

T A NA — When local altimeter setting not received, use Lander altimeter setting: increase DA to 5713 feet; increase all MDA 60 feet and S-LOC 28 Cat C and D visibility ¼ mile. For inop MALSR, when using Lander altimeter setting, increase S-ILS 28 all Cats visibility to ⅞ mile and S-LOC 28 Cat C and D visibility to 1⅜ mile. VDP NA when using Lander altimeter setting.

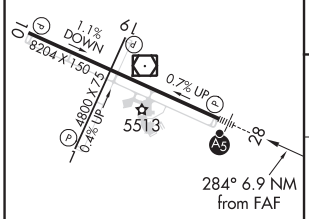
MALSR A5

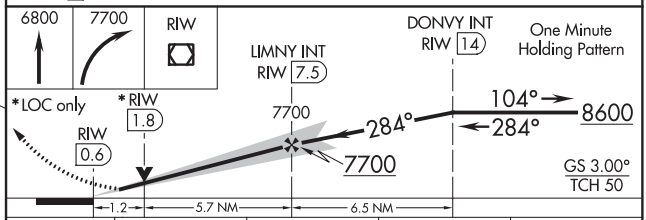
MISSED APPROACH: Climb to 6800 then climbing right turn to 7700 direct RIW VOR/DME and hold, continue climb-in-hold to 7700.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 121.425 | 133.25 285.6 | 122.8 (CTAF) L |




ELEV 5528 D TDZE 5459




REIL Rwys 1, 10 and 19 L
MIRL Rwy 1-19 L
HIRL Rwy 10-28 L

| 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 28 | 5659-½ 200 (200-½) | | | |
| S-LOC 28 | 5880-½ 421 (400-½) | | 5880-¾ 421 (400-¾) | |
| C CIRCLING | 6000-1 472 (500-1) | | 6000-1½ 472 (500-1½) | 6120-2 592 (600-2) |




NW-1, 05 NOV 2020 to 31 DEC 2020

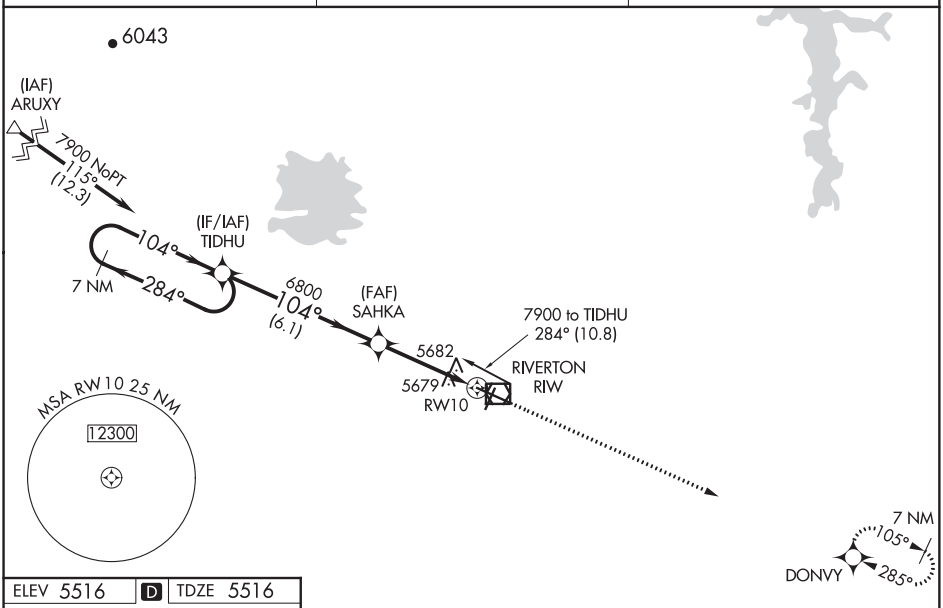
| WAAS CH 42899 W10A | APP CRS 104° | Rwy ldg 8204 TDZE 5516 Apt Elev 5516 |
|---|---|---|

# RNAV (GPS) RWY 10
## CENTRAL WYOMING RGNL (RIW)

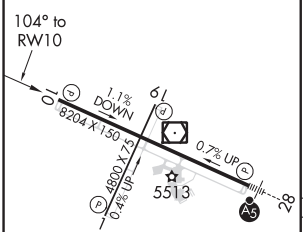
T A DME/DME RNP-0.3 NA. When local altimeter setting not received, use Lander altimeter setting and increase all DA 54 feet and all MDA 60 feet, and increase LPV and LNAV/VNAV all Cats visibility ¼ mile and increase LNAV Cat C/D visibility ⅛ mile. Baro-VNAV and VDP NA when using Lander altimeter setting. Rwy 10 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -27°C (-16°F) or above 48°C (118°F).

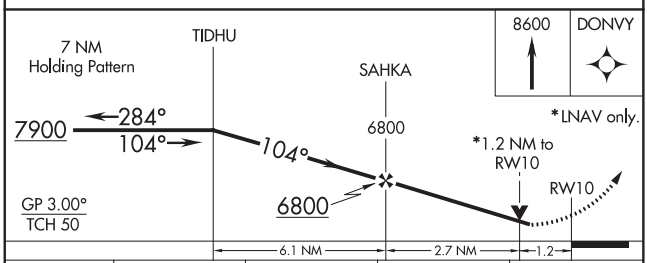
MISSED APPROACH: Climb to 8600 direct DONVY and hold.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 121.425 | 133.25 285.6 | 122.8 (CTAF) L |




ELEV 5516 D TDZE 5516




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 5902-1¼ 386 (400-1¼) | | | |
| LNAV/VNAV DA | 5965-1½ 449 (500-1½) | | | |
| LNAV MDA | 5940-1 424 (500-1) | | 5940-1¼ 424 (500-1¼) | |
| C CIRCLING | 6000-1 484 (500-1) | | 6000-1½ 484 (500-1½) | 6120-2 604 (700-2) |

REIL Rwys 1, 10 and 19 L
MIRL Rwy 1-19 L
HIRL Rwy 10-28 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

RIVERTON, WYOMING | AL-691 (FAA) | 20310

# RNAV (GPS) RWY 28
## CENTRAL WYOMING RGNL (RIW)

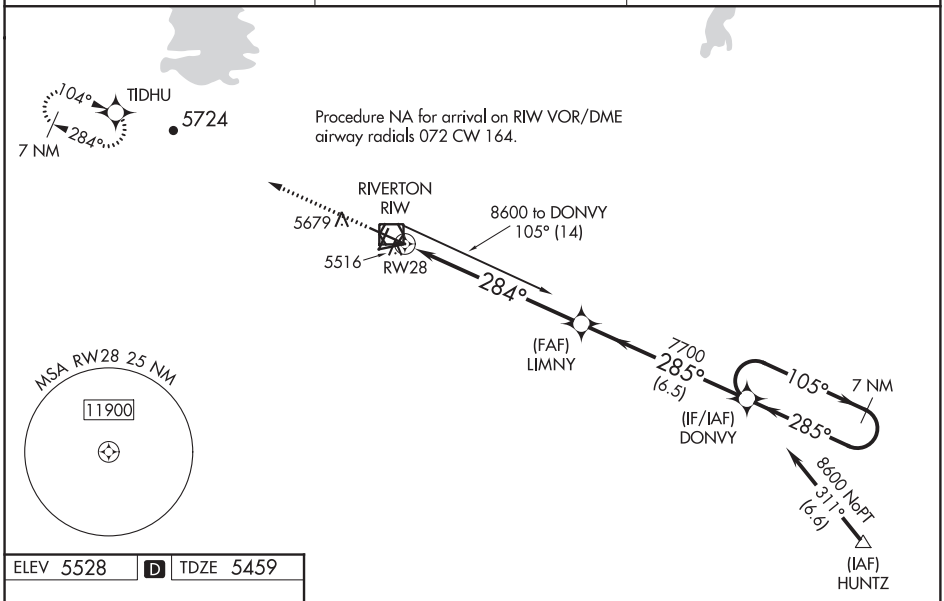
| WAAS CH 61115 W28A | APP CRS 284° | Rwy ldg 8204 TDZE 5459 Apt Elev 5528 |
|---|---|---|

T A DME/DME RNP-0.3 NA. Baro-VNAV and VDP NA when using Lander altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -27°C (-16°F) or above 48°C (118°F). For inop MALSR, increase LNAV/VNAV all Cats visibility to ⅞ mile and LNAV Cat C and D visibility to 1 mile. When local altimeter setting not received, use Lander altimeter setting: increase LPV DA to 5713 feet, LNAV/VNAV DA to 5763 and all visibilities ⅛ mile; increase all MDA 60 feet and LNAV Cat C and D visibility ⅛ mile. For inop MALSR, when using Lander altimeter setting, increase LPV all Cats visibility to ⅞ mile and LNAV/VNAV all Cats visibility to 1 mile.

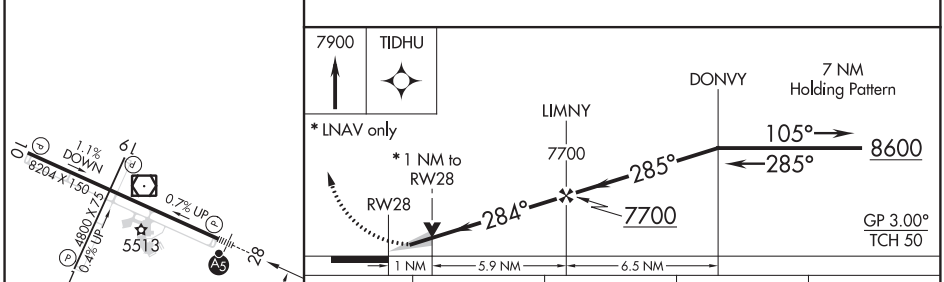
MALSR A5

MISSED APPROACH: Climb to 7900 direct TIDHU and hold.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 121.425 | 133.25 285.6 | 122.8 (CTAF) L |




ELEV 5528 | D | TDZE 5459




| CATEGORY | | A | B | C | D |
|---|---|---|---|---|---|
| LPV | DA | 5659-½ 200 (200-½) | | | |
| LNAV/VNAV | DA | 5709-½ 250 (200-½) | | | |
| LNAV | MDA | 5820-½ 361 (400-½) | | 5820-⅝ 361 (400-⅝) | |
| C CIRCLING | | 6000-1 472 (500-1) | | 6000-1½ 472 (500-1½) | 6120-2 592 (600-2) |

REIL Rwys 1, 10, and 19 L
MIRL Rwy 1-19 L
HIRL Rwy 10-28 L

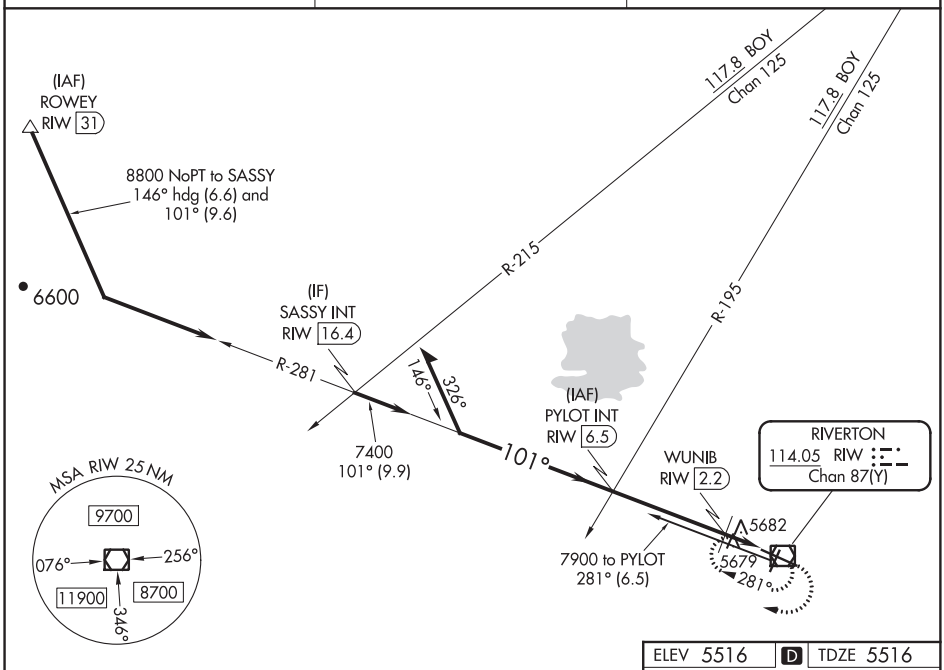
| VOR/DME RIW | APP CRS | Rwy ldg | 8204 |
|---|---|---|---|
| 114.05 | 101° | TDZE | 5516 |
| Chan 87(Y) | | Apt Elev | 5516 |

# VOR RWY 10
## CENTRAL WYOMING RGNL (RIW)

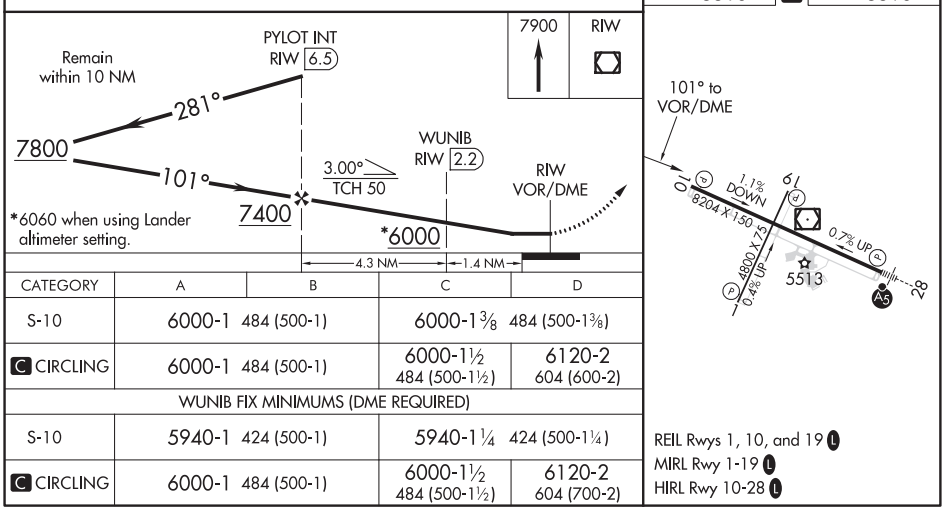
T A When local altimeter setting not received, use Lander altimeter setting and increase all MDA 60 feet and increase S-10 Cat C and D visibility ¼ mile and Circling Cat C visibility ⅛ mile, increase WUNIB fix minimums Cat C and D visibility ⅛ mile. Rwy 10 helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 7900 in RIW VOR/DME holding pattern.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 121.425 | 133.25 285.6 | 122.8 (CTAF) L |




ELEV 5516 D TDZE 5516




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-10 | 6000-1 484 (500-1) | | 6000-1⅜ 484 (500-1⅜) | |
| C CIRCLING | 6000-1 484 (500-1) | | 6000-1½ 484 (500-1½) | 6120-2 604 (600-2) |
| WUNIB FIX MINIMUMS (DME REQUIRED) | | | | |
| S-10 | 5940-1 424 (500-1) | | 5940-1¼ 424 (500-1¼) | |
| C CIRCLING | 6000-1 484 (500-1) | | 6000-1½ 484 (500-1½) | 6120-2 604 (700-2) |

REIL Rwys 1, 10, and 19 L
MIRL Rwy 1-19 L
HIRL Rwy 10-28 L

| VOR/DME RIW | APP CRS | Rwy ldg | 8204 |
|---|---|---|---|
| 114.05 | 293° | TDZE | 5459 |
| Chan 87(Y) | | Apt Elev | 5528 |

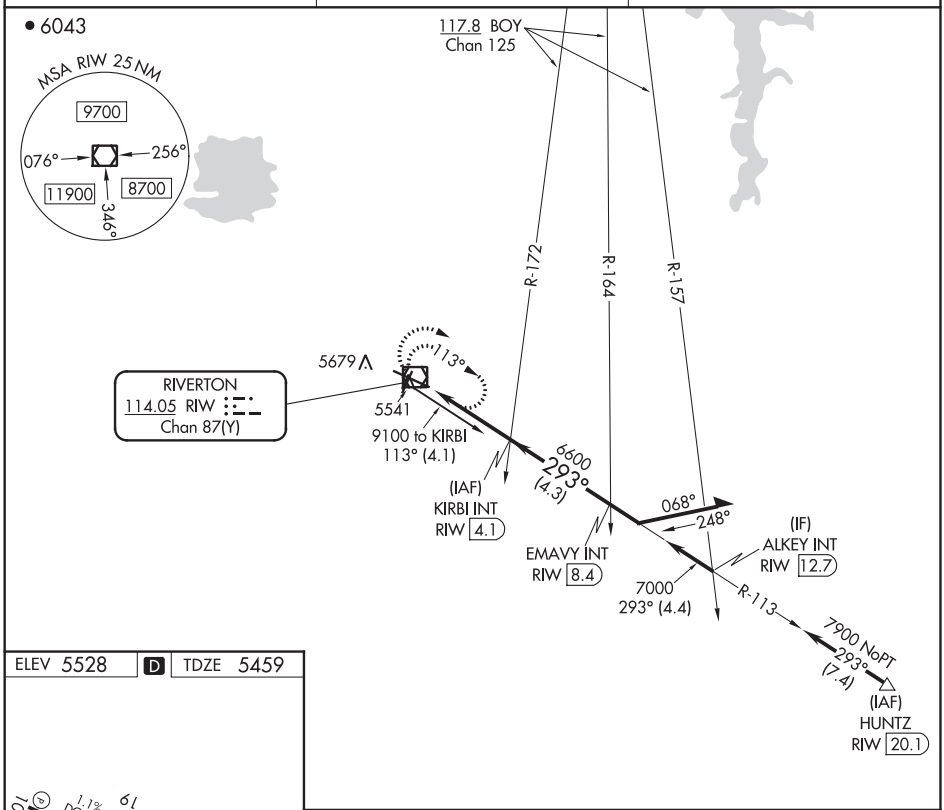
# VOR RWY 28
## CENTRAL WYOMING RGNL (RIW)

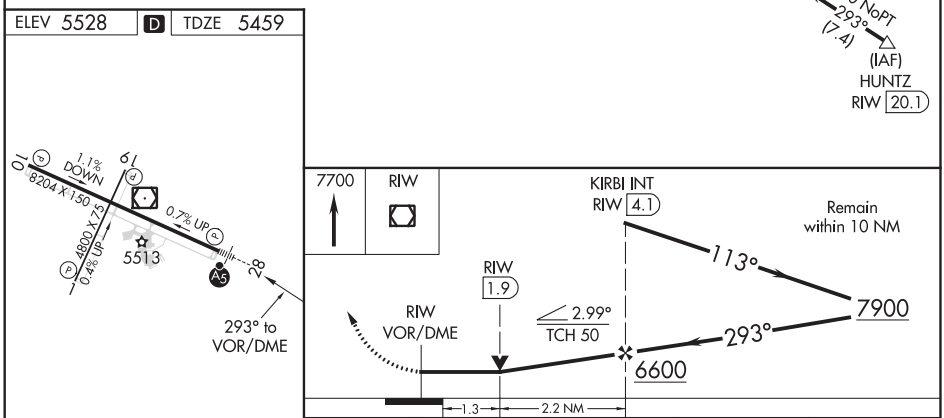
When local altimeter setting not received, use Lander altimeter setting and increase all MDA 60 feet. VDP NA when using Lander altimeter setting. For inop MALSR, increase S-28 Cat C and D visibility to 1⅜ miles.

MALSR

MISSED APPROACH: Climb to 7700 in RIW VOR/DME holding pattern.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 121.425 | 133.25 285.6 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-28 | 5920-½ 461 (500-½) | | 5920-1 461 (500-1) | |
| C CIRCLING | 6000-1 472 (500-1) | | 6000-1½ 472 (500-1½) | 6120-2 592 (600-2) |

REIL Rwys 1, 10 and 19 L
MIRL Rwy 1-19 L
HIRL Rwy 10-28 L

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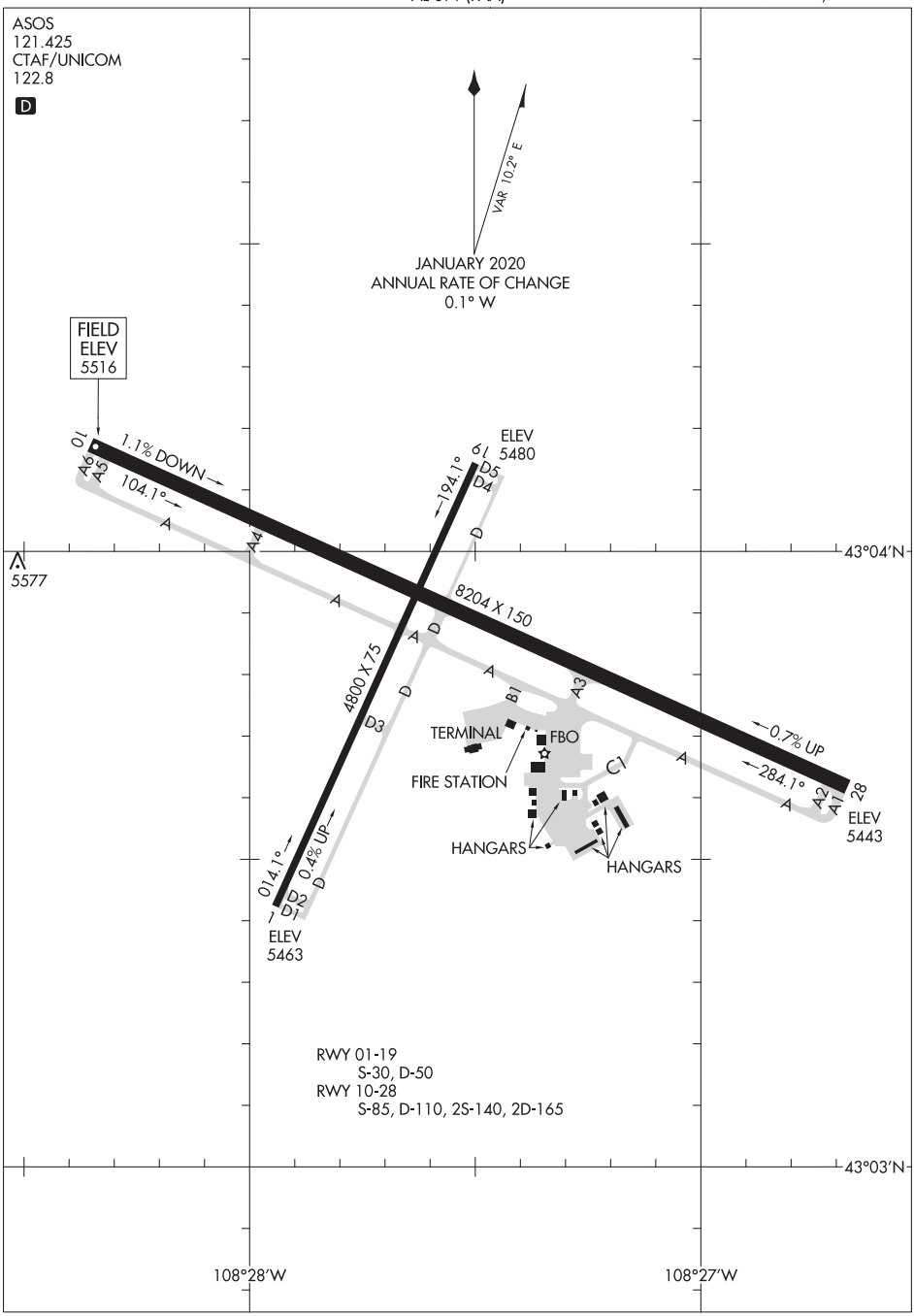
AL-691 (FAA)




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

ROCK SPRINGS, WYOMING | AL-353 (FAA) | 20086

| LOC/DME I-RKS 109.3 Chan 30 | APP CRS 270° | Rwy ldg 10000 TDZE 6765 Apt Elev 6765 |
|---|---|---|

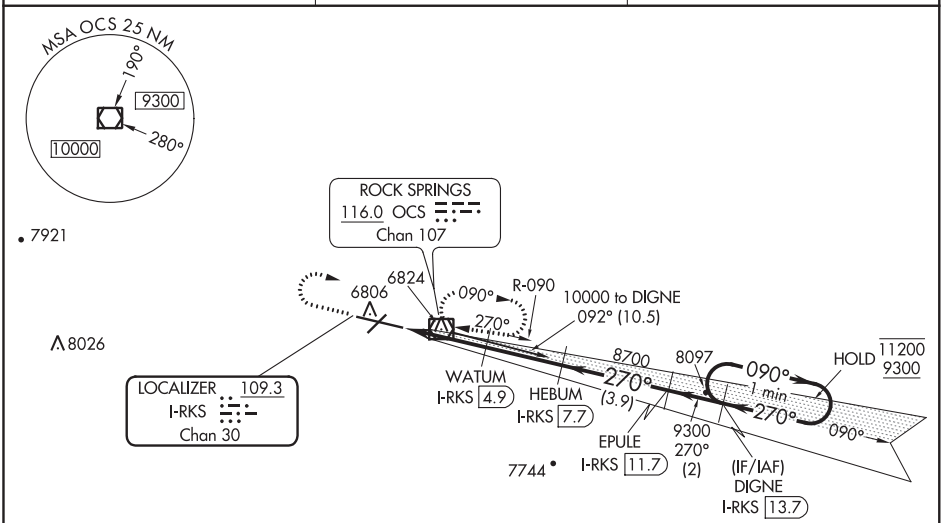
# ILS or LOC RWY 27
## SOUTHWEST WYOMING RGNL (RKS)

DME required.

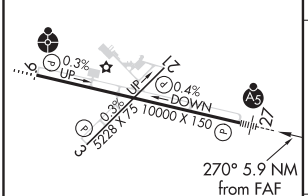
MALSR

MISSED APPROACH: Climb to 7600 then climbing right turn to 9300 direct OCS VOR/DME and hold, continue climb-in-hold to 9300.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 118.375 | 124.35 353.5 | 122.8 (CTAF) L |



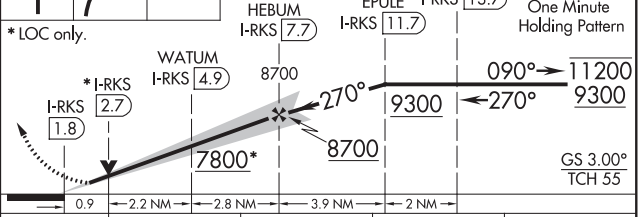

ELEV 6765 | D | TDZE 6765




MIRL Rwy 3-21
HIRL Rwy 9-27 L
REIL Rwys 3 and 21 L

| 7600 | 9300 | OCS |
|---|---|---|

Use I-RKS DME when on the localizer course.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS-27 | 6965- ½ 200 (200-½) | | | |
| S-LOC 27 | 7100- ½ 335 (400-½) | | | |
| C CIRCLING | 7140-1 375 (400-1) | 7220-1 455 (500-1) | 7220-1½ 455 (500-1½) | 7540-2½ 775 (800-2½) |



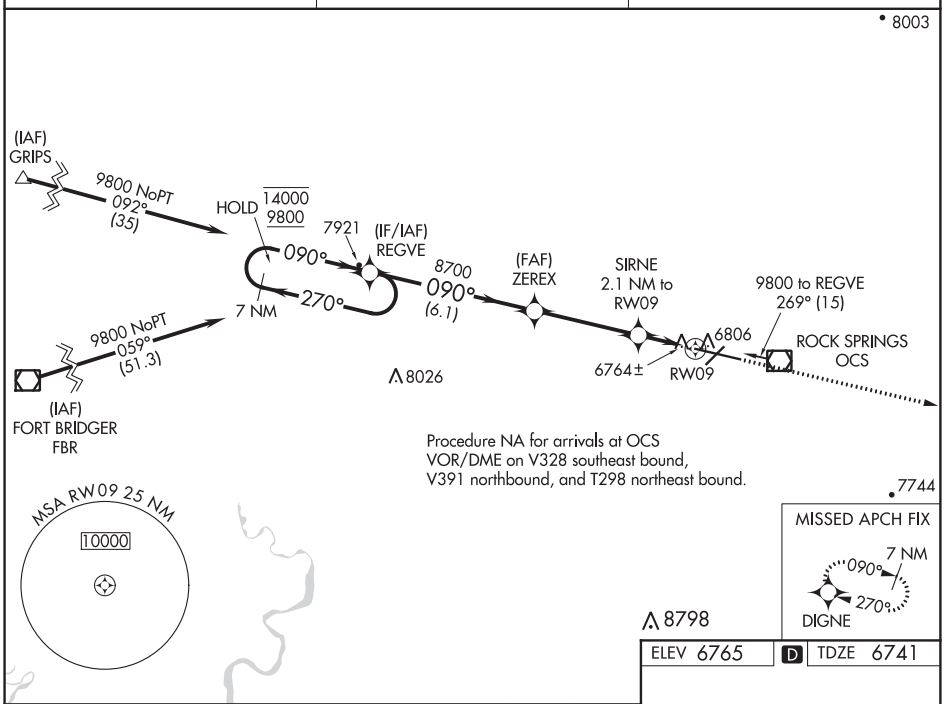
NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH **66016** **W09A** | APP CRS **090°** | Rwy ldg **10000** TDZE **6741** Apt Elev **6765** |
|---|---|---|

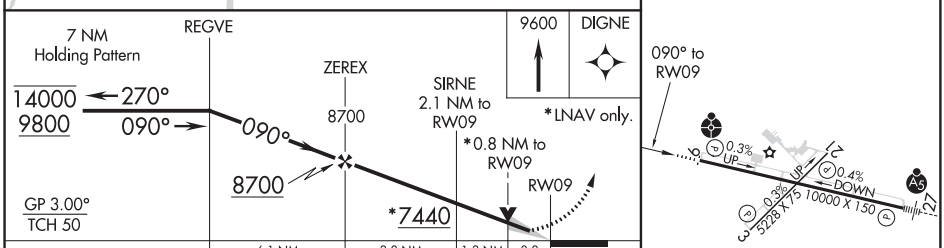
# RNAV (GPS) RWY 9
## SOUTHWEST WYOMING RGNL (RKS)

| RNP APCH. | ODALS | MISSED APPROACH: Climb to 9600 direct DIGNE and hold. |
|---|---|---|
| For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -28°C or above 45°C . | | |

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| **118.375** | **124.35 353.5** | **122.8** (CTAF) L |




| ELEV 6765 | D | TDZE 6741 |
|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 6941-¾ 200 (200-¾) | | | |
| LNAV/VNAV DA | 7034-¾ 293 (300-¾) | | | |
| LNAV MDA | 7040-¾ 299 (300-¾) | | | 7040-1 299 (300-1) |
| C CIRCLING | 7140-1 375 (400-1) | 7220-1 455 (500-1) | 7220-1½ 455 (500-1½) | 7540-2½ 775 (800-2½) |

MIRL Rwy 3-21
HIRL Rwy 9-27 L
REIL Rwys 3 and 21 L



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

ROCK SPRINGS, WYOMING | AL-353 (FAA) | 20086

| WAAS CH 49216 W27A | APP CRS 270° | Rwy ldg 10000<br>TDZE 6765<br>Apt Elev 6765 |
|---|---|---|

# RNAV (GPS) RWY 27
## SOUTHWEST WYOMING RGNL (RKS)

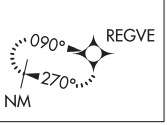
RNP APCH.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -27°C or above 44°C. For inop ALS increase LNAV/VNAV all Cats visibility to ⅞ SM.

MALSR

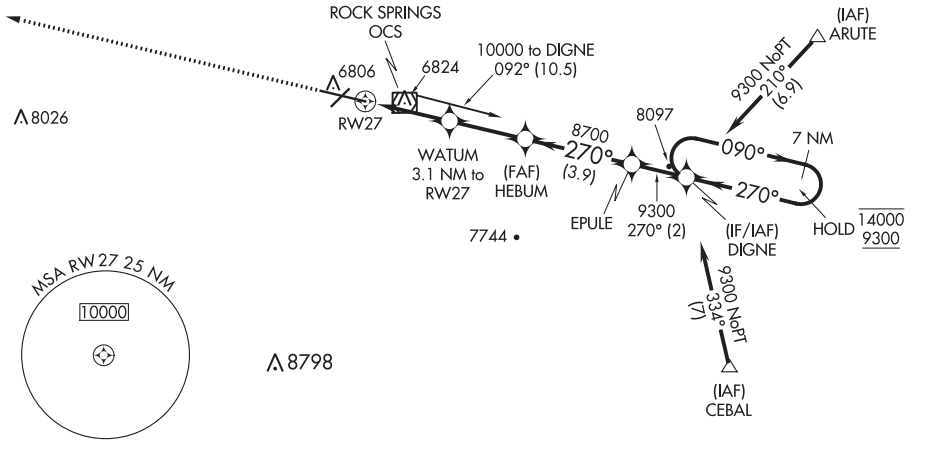
MISSED APPROACH: Climb to 9800 direct REGVE and hold.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 118.375 | 124.35 353.5 | 122.8 (CTAF) L |

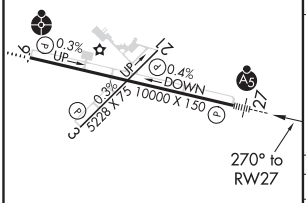
MISSED APCH FIX

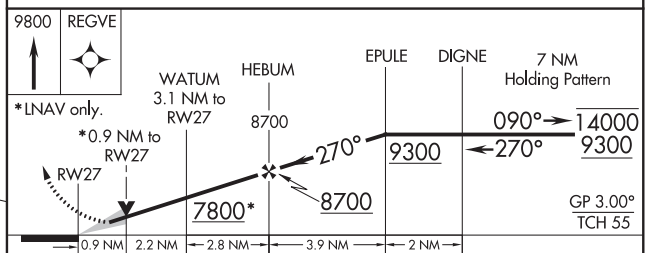



Procedure NA for arrivals at OCS VOR/DME on V235 southwest bound, V187 north and southbound and T298 southwest bound.




ELEV 6765 | D | TDZE 6765




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 6965-½ 200 (200-½) | | | |
| LNAV/VNAV DA | 7036-½ 271 (300-½) | | | |
| LNAV MDA | 7100-½ 335 (400-½) | | | |
| C CIRCLING | 7140-1 375 (400-1) | 7220-1 455 (500-1) | 7220-1½ 455 (500-1½) | 7540-2½ 775 (800-2½) |

MIRL Rwy 3-21
HIRL Rwy 9-27 L
REIL Rwys 3 and 21 L


NW-1, 05 NOV 2020 to 31 DEC 2020

| VOR/DME OCS | APP CRS | Rwy ldg | 10000 |
|---|---|---|---|
| 116.0 | 085° | TDZE | 6741 |
| Chan 107 | | Apt Elev | 6765 |

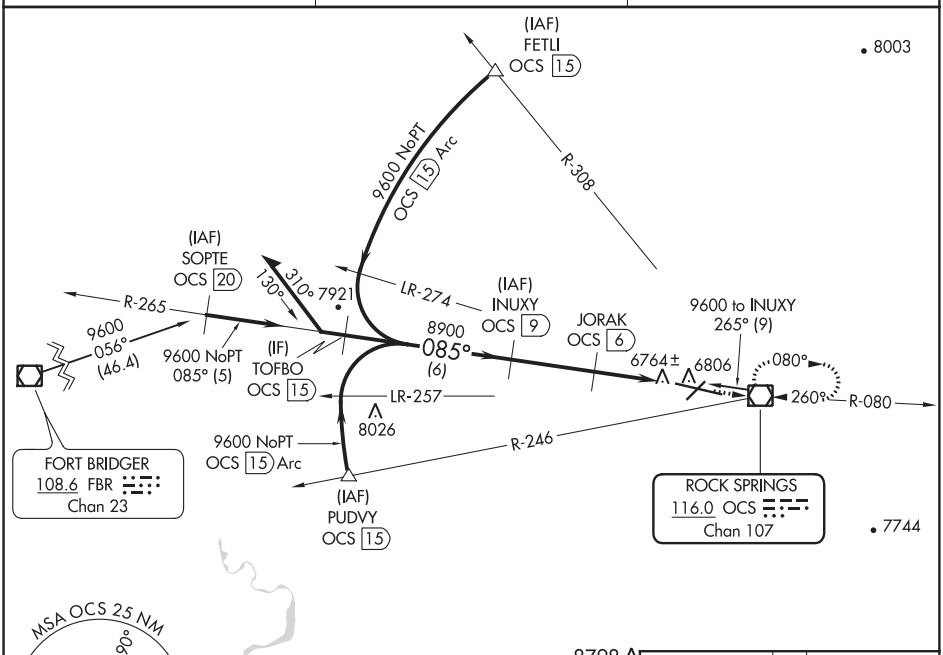
# VOR RWY 9
## SOUTHWEST WYOMING RGNL (RKS)

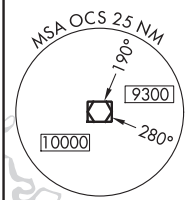
DME required.

ODALS

MISSED APPROACH: Climb to 9300 direct OCS VOR/DME and hold, continue climb-in-hold to 9300.

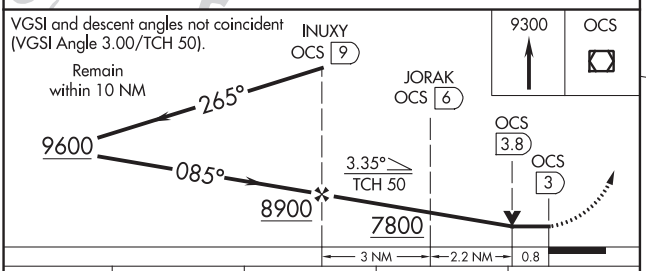
| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 118.375 | 124.35 353.5 | 122.8 (CTAF) |

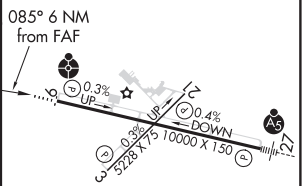



8798

| ELEV 6765 | D | TDZE 6741 |
|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-9 | 7020-¾ 279 (300-¾) | | | 7020-1 279 (300-1) |
| C CIRCLING | 7140-1 375 (400-1) | 7220-1 455 (500-1) | 7220-1½ 455 (500-1½) | 7540-2½ 775 (800-2½) |

MIRL Rwy 3-21
HIRL Rwy 9-27
REIL Rwys 3 and 21

NW-1, 05 NOV 2020 to 31 DEC 2020

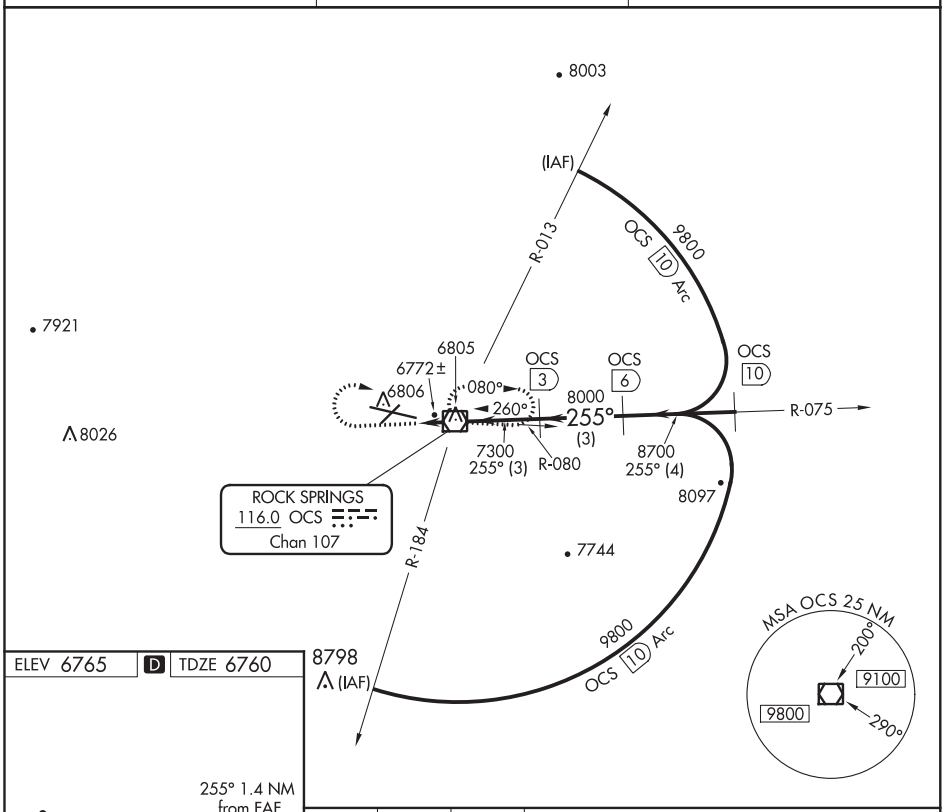
NW-1, 05 NOV 2020 to 31 DEC 2020

| VOR/DME OCS 116.0 Chan 107 | APP CRS 255° | Rwy ldg 10000 TDZE 6760 Apt Elev 6765 |
|---|---|---|

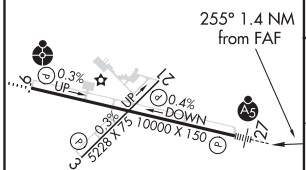
# VOR/DME RWY 27
## SOUTHWEST WYOMING RGNL (RKS)

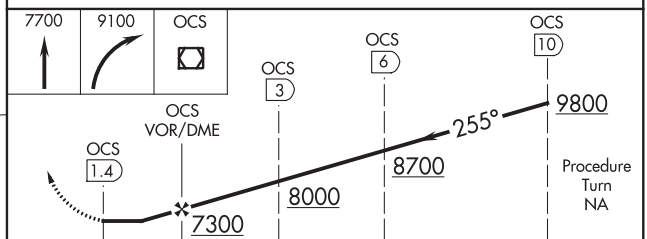
| | | |
|---|---|---|
| Inoperative table does not apply to Cat D. | MALSR A5 | MISSED APPROACH: Climb to 7700, then climbing right turn to 9100 direct OCS VOR/DME and hold. |

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 118.375 | 124.35 353.5 | 122.8 (CTAF) L |




ELEV 6765 | D | TDZE 6760



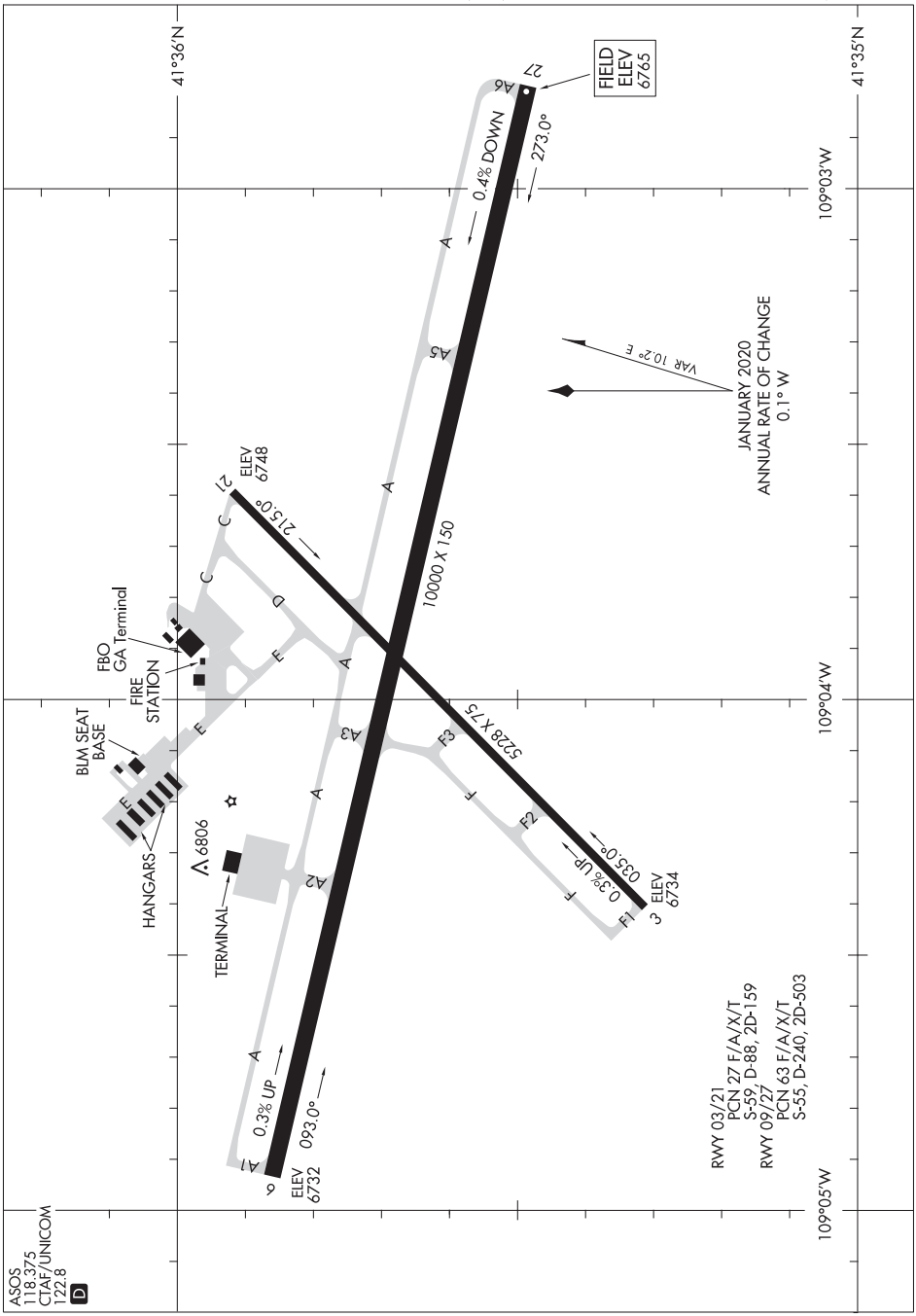




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-27 | 7040-½ 280 (300-½) | | | 7040-1 280 (300-1) |
| C CIRCLING | 7140-1 375 (400-1) | 7220-1 455 (500-1) | 7220-1½ 455 (500-1½) | NA |

MIRL Rwy 3-21
HIRL Rwy 9-27 L
REIL Rwys 3 and 21 L




NW-1, 05 NOV 2020 to 31 DEC 2020




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

RONAN, MONTANA AL-9978 (FAA) 19283

| WAAS CH 45814 W16A | APP CRS 165° | Rwy ldg 4798<br>TDZE 3086<br>Apt Elev 3086 |
|---|---|---|

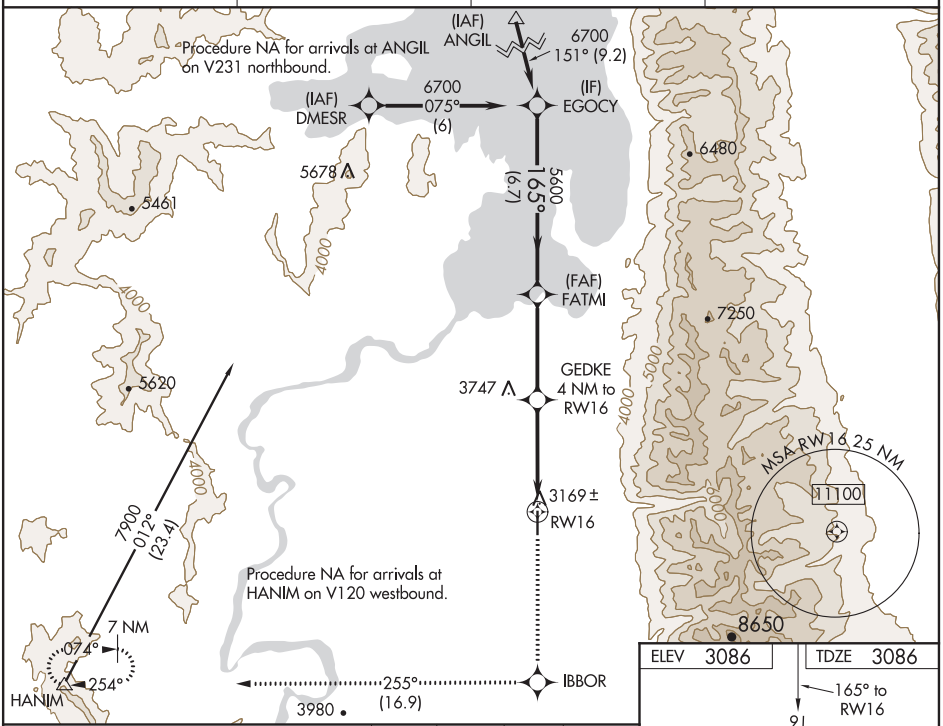
# RNAV (GPS) RWY 16
RONAN (7SØ)

T
NA

DME/DME RNP-0.3 NA.
Use Missoula altimeter setting; when not received, procedure NA.
Circling NA east of Rwy 16-34. Baro-VNAV NA.

MISSED APPROACH: Climb to 13000 direct IBBOR and on track 255° to HANIM and hold, continue climb-in-hold to 13000.

| AWOS-2 | MSO ASOS | SALT LAKE CITY CENTER | AUNICOM |
|---|---|---|---|
| 119.925 | 126.65 | 133.4 285.4 | 122.8 (CTAF) L |



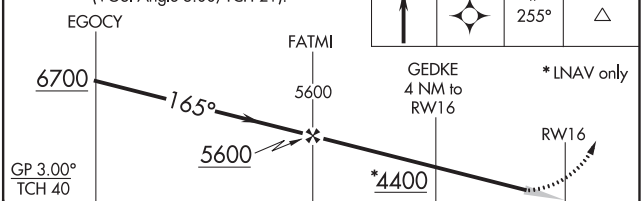

| ELEV 3086 | TDZE 3086 |
|---|---|

165° to RW16

MIRL Rwy 16-34 L

VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 21).

| 13000 | IBBOR | tr 255° | HANIM |
|---|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 3443-1¼ 357 (400-1¼) | | NA | |
| LNAV/VNAV DA | 3443-1¼ 357 (400-1¼) | | NA | |
| LNAV MDA | 3800-1 714 (800-1) | | NA | |
| CIRCLING | 3800-1 714 (800-1) | | NA | |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 86614 W34A | APP CRS 345° | Rwy ldg 4798 TDZE 3081 Apt Elev 3086 |
|---|---|---|

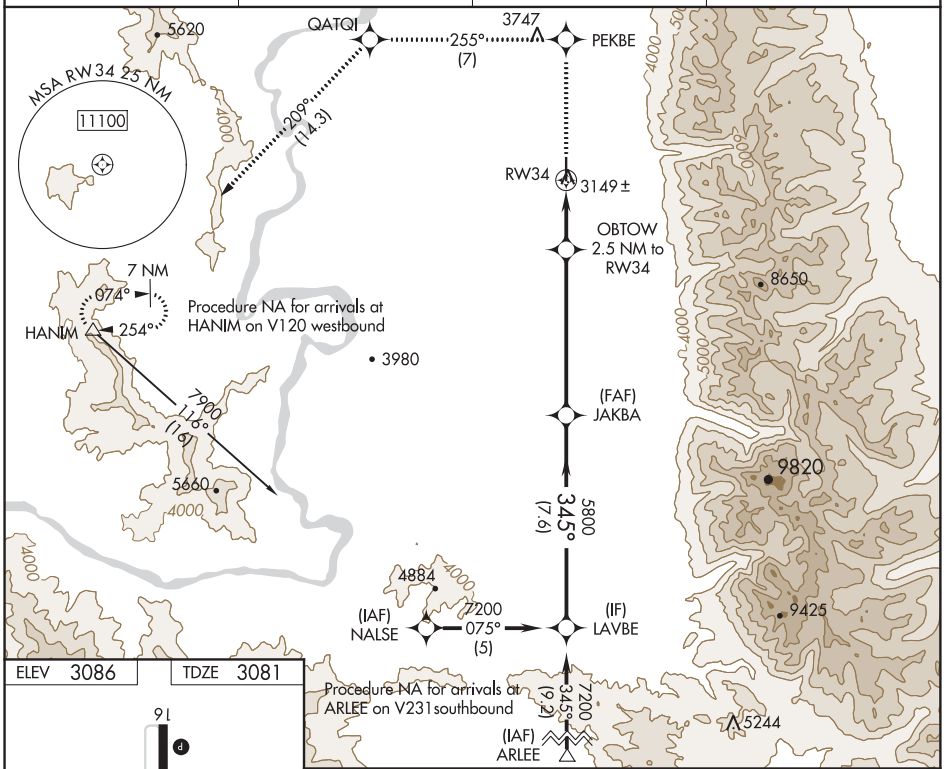
# RNAV (GPS) RWY 34
## RONAN (7SØ)

T NA

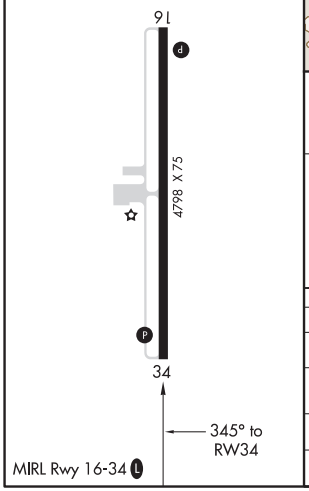
Baro-VNAV NA. DME/DME RNP-0.3 NA. Use Missoula altimeter setting; when not received, procedure NA. Circling NA east of Rwy 16-34.

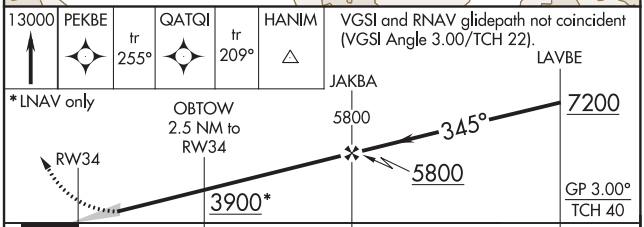
MISSED APPROACH: Climb to 13000 direct PEKBE and on track 255° to QATQI and on track 209° to HANIM and hold, continue climb-in-hold to 13000.

| AWOS-2 | MSO ASOS | SALT LAKE CITY CENTER | AUNICOM |
|---|---|---|---|
| 119.925 | 126.65 | 133.4 285.4 | 122.8 (CTAF) L |




| ELEV 3086 | TDZE 3081 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 3438-1¼ 357 (400-1¼) | | NA | |
| LNAV/VNAV DA | 3438-1¼ 357 (400-1¼) | | NA | |
| LNAV MDA | 3520-1 439 (500-1) | | NA | |
| CIRCLING | 3560-1 474 (500-1) | | NA | |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

(HANIM2.HANIM) 18312

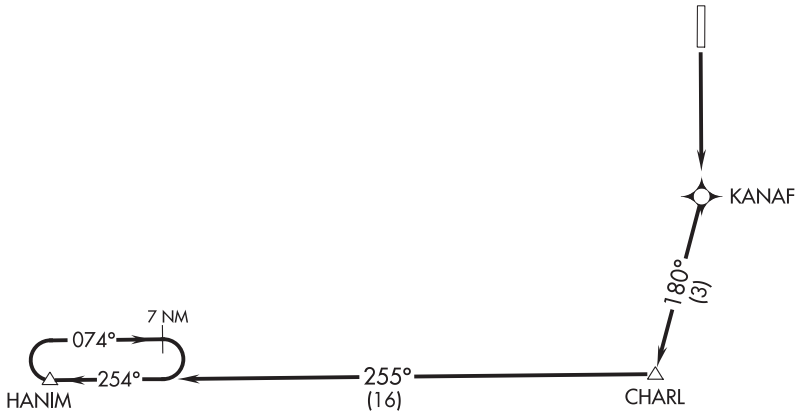
# HANIM TWO DEPARTURE (RNAV)

AL-9978 (FAA)

RONAN (7SØ)
RONAN, MONTANA

SALT LAKE CITY CENTER
133.4 285.4
GREAT FALLS RADIO
122.6
CTAF
122.8

**TOP ALTITUDE: 13000**




NOTE: RNAV 1.

NOTE: GPS required.

TAKEOFF MINIMUMS
Rwy 16: Standard.
Rwy 34: NA. See RONAN DEPARTURE.

NOTE: Chart not to scale

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16: Climb to 13000 direct KANAF and via track 180° to CHARL and via track 255° to HANIM and hold, continue climb-in-hold to 13000 before proceeding on course.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

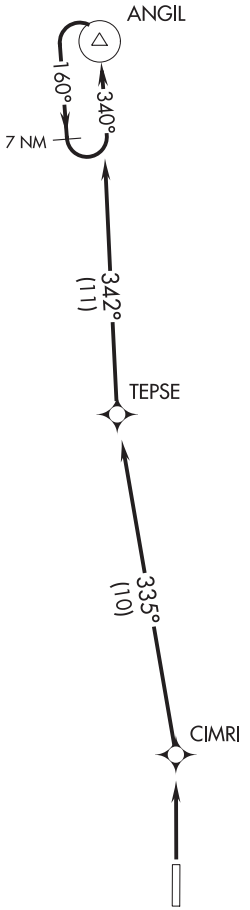
# RONAN THREE DEPARTURE (RNAV)

AL-9978 (FAA)



SALT LAKE CITY CENTER
133.4 285.4
GREAT FALLS RADIO
122.6
CTAF 122.8

**TOP ALTITUDE: 10000**




NOTE: RNAV 1.

NOTE: GPS required.

TAKEOFF MINIMUMS
Rwy 16: NA, see HANIM DEPARTURE
Rwy 34: Standard

NOTE: Chart not to scale.

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 34: Climb to 10000 direct CIMRI and on track 335° to TEPSE and on track 342° to ANGIL, continue climb in ANGIL holding pattern to cross ANGIL at or above MEA for route of flight before proceeding on course.

ROSEBURG, OREGON | AL-888 (FAA) | 19171

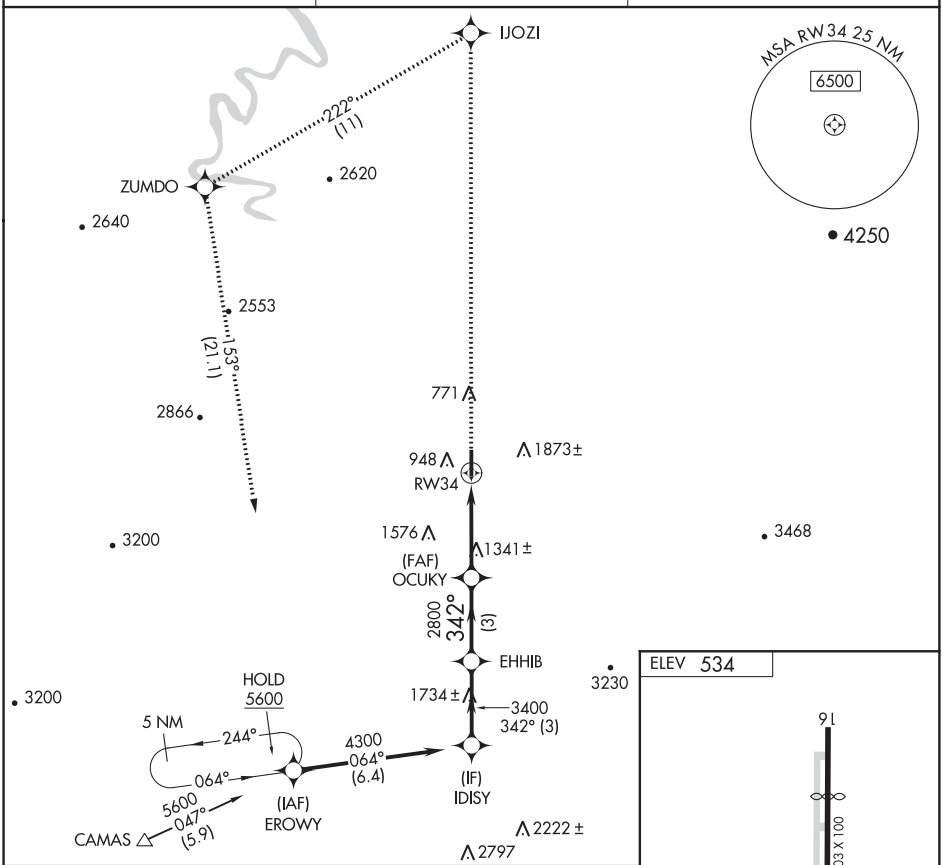
| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 342° | TDZE | N/A |
| | Apt Elev | 534 |

# RNAV (GPS)-B
## ROSEBURG RGNL (RBG)

DME/DME RNP-0.3 NA. Rwy 16, 34 helicopter visibility reduction below 1 SM NA. Procedure NA at night. Circling NA east of Rwy 16-34.

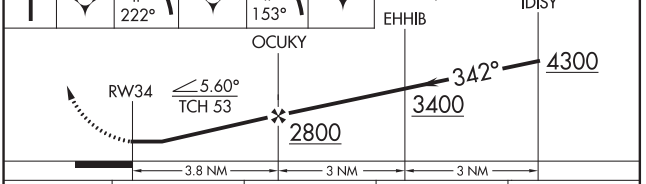
MISSED APPROACH: Climb to 5600 direct IJOZI and left turn on track 222° to ZUMDO and left turn on track 153° to EROWY and hold.

| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.475 | 127.55 239.0 | 122.8 (CTAF) L |




| 5600 | IJOZI | tr 222° | ZUMDO | tr 153° | EROWY |
|---|---|---|---|---|---|

VGSI and descent angles not coincident (VGSI Angle 4.00/ TCH 53).




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 1700-1¼<br>1166 (1200-1¼) | 1700-1½<br>1166 (1200-1½) | 1700-3<br>1166 (1200-3) | 1920-3<br>1386 (1400-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| VOR/DME RBG | APP CRS | Rwy ldg | N/A |
|---|---|---|---|
| 108.2 | 337° | TDZE | N/A |
| Chan 19 | | Apt Elev | 525 |

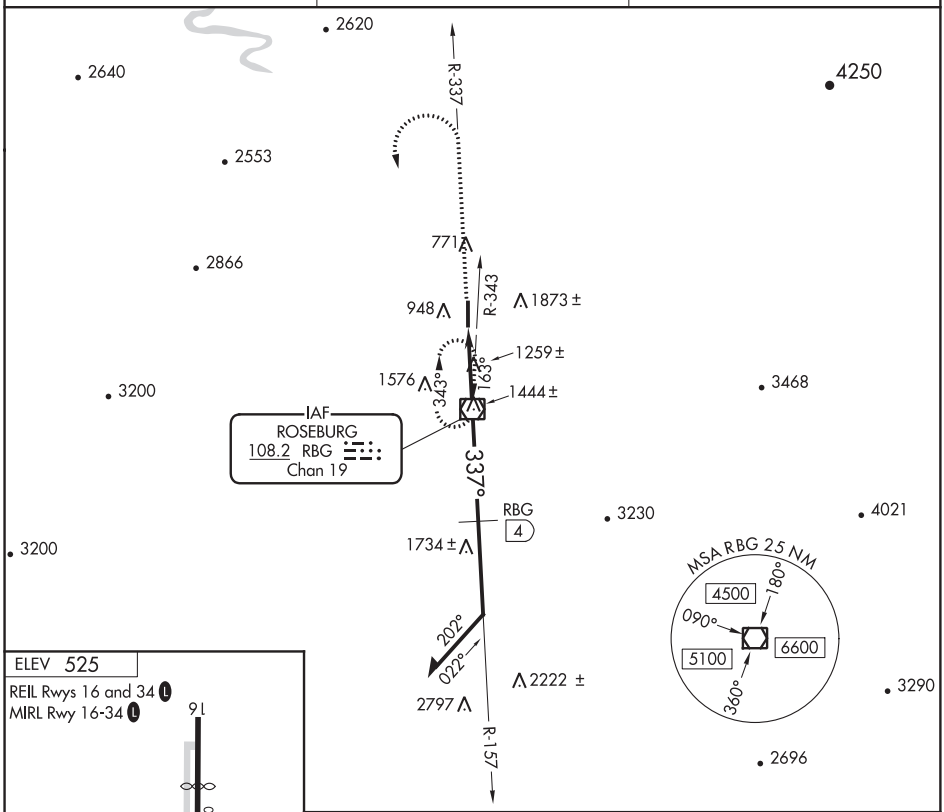
# VOR-A
## ROSEBURG RGNL (RBG)

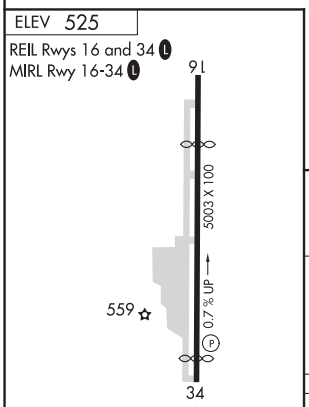
Circling not authorized east of Rwy 16-34.
Procedure NA at night.
Rwy 34 helicopter visibility below 1 SM NA.

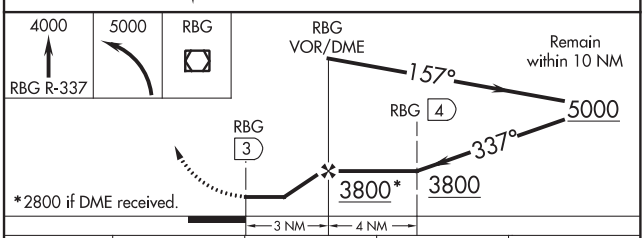
NA

MISSED APPROACH: Climb to 4000 via RBG R-337 within 15 NM; then climbing left turn to 5000 direct RBG VOR/DME and hold.

| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.475 | 127.55 239.0 | 122.8 (CTAF) L |




| FAF to MAP 3 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 3:00 | 2:00 | 1:30 | 1:12 | 1:00 |

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 2600-1¼ 2075 (2100-1¼) | 2600-1½ 2075 (2100-1½) | 2600-3 2075 (2100-3) | |
| DME MINIMUMS | | | | |
| CIRCLING | 1740-1¼ 1215 (1300-1¼) | 1740-1½ 1215 (1300-1½) | 1740-3 1215 (1300-3) | 1920-3 1395 (1400-3) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

ROUNDUP, MONTANA AL-10287 (FAA) 20198

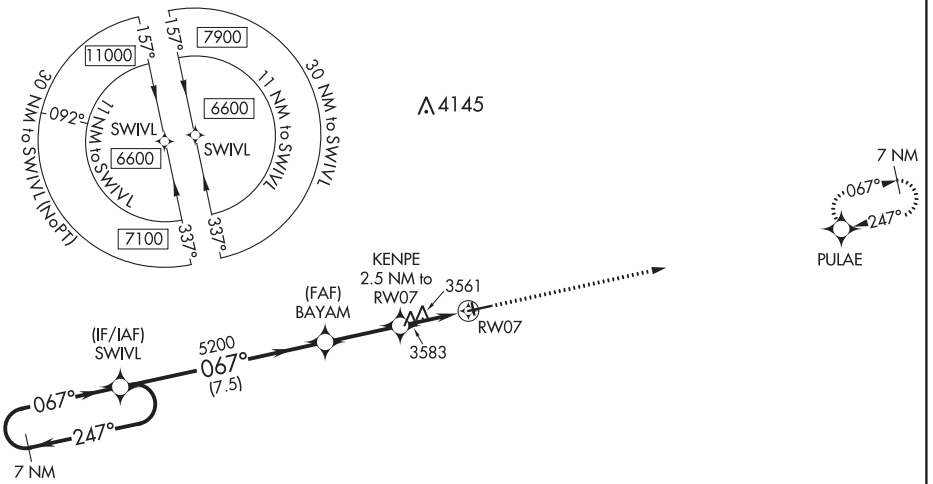
| WAAS CH 56529 W07A | APP CRS 067° | Rwy ldg 5099 TDZE 3490 Apt Elev 3490 |
|---|---|---|

# RNAV (GPS) RWY 7
## ROUNDUP (RPX)

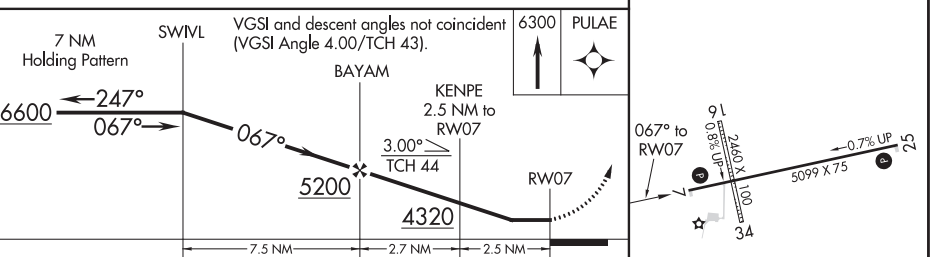
Use Billings altimeter setting, when not received, procedure NA.
When VGSI inop, Straight-in/Circling Rwy 7 procedure NA at night.
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 6300 direct PULAE and hold.

| BIL ASOS | SALT LAKE CENTER | UNICOM | |
|---|---|---|---|
| 126.3 | 126.85 305.2 | 122.8 (CTAF) | 122.7 L |




| ELEV 3490 | TDZE 3490 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LP MDA | 3940-1 450 (500-1) | | 3940-1⅜ 450 (500-1⅜) | |
| LNAV MDA | 3960-1 470 (500-1) | | 3960-1⅜ 470 (500-1⅜) | |
| CIRCLING | 4000-1 510 (600-1) | | 4000-1½ 510 (600-1½) | 4040-2 550 (600-2) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 61229 W25A | APP CRS 247° | Rwy ldg 5099<br>TDZE 3453<br>Apt Elev 3490 |
|---|---|---|

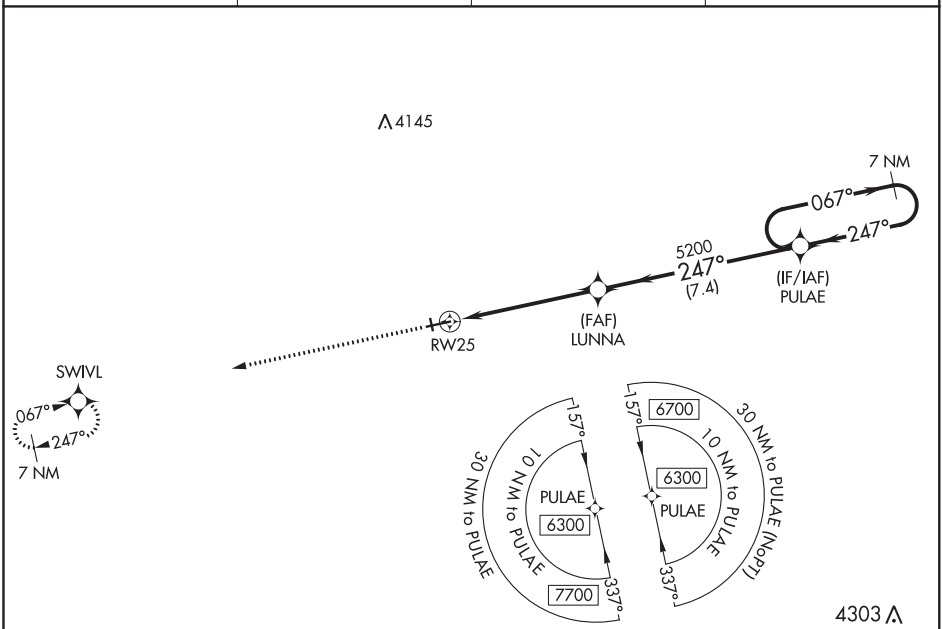
# RNAV (GPS) RWY 25
## ROUNDUP (RPX)

NA

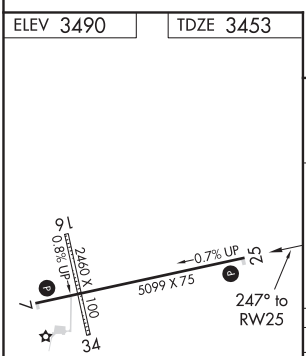
When VGSI inop, Circling to Rwy 7 NA at night. Baro-VNAV NA. Use Billings altimeter setting; when not received, procedure NA. DME/DME RNP- 0.3 NA.

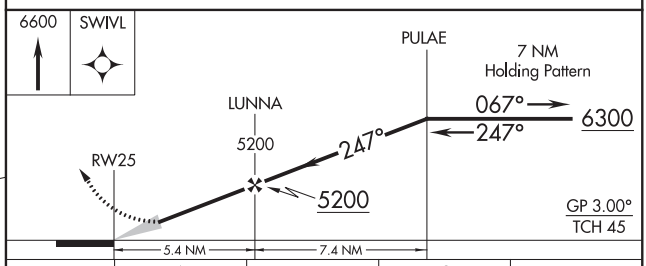
MISSED APPROACH: Climb to 6600 direct SWIVL and hold

| BIL ASOS | SALT LAKE CENTER | UNICOM | |
|---|---|---|---|
| 126.3 | 126.85 305.2 | 122.8 (CTAF) | 122.7 L |




ELEV 3490 TDZE 3453




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 3768-1 315 (300-1) | | | |
| LNAV/VNAV DA | 3818-1¼ 365 (400-1¼) | | | |
| LNAV MDA | 3900-1 447 (500-1) | | 3900-1⅜ 447 (500-1⅜) | |
| CIRCLING | 4000-1 510 (600-1) | | 4000-1½ 510 (600-1½) | 4040-2 550 (600-2) |

MIRL Rwy 7-25 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

SALEM, OREGON

AL-361 (FAA)

19283

# ILS or LOC Z RWY 31
## MCNARY FIELD (SLE)

| LOC/DME I-SLE | APP CRS | Rwy ldg | 5811 |
|---|---|---|---|
| 110.3 | 313° | TDZE | 214 |
| Chan 40 | | Apt Elev | 214 |

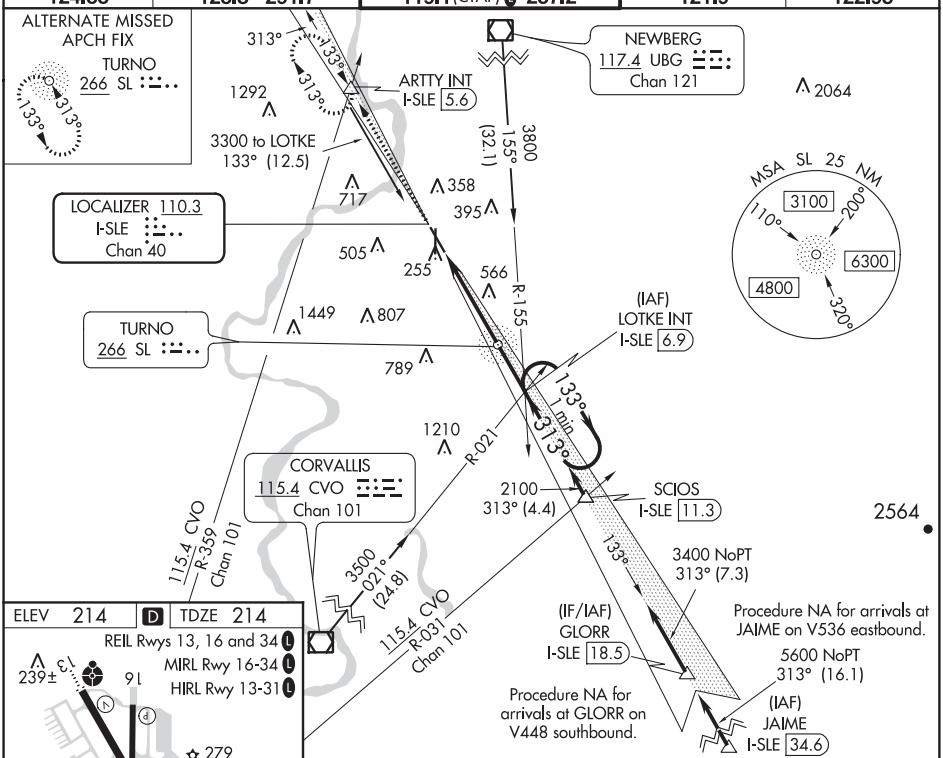
RADAR required for procedure entry at ARTTY.

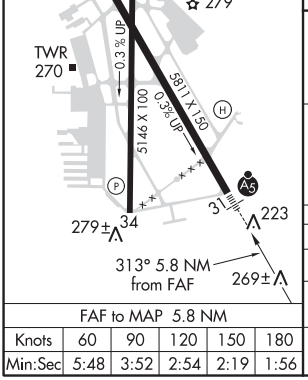
When local altimeter setting not received, use Mc Minnville altimeter setting: increase DA to 463 feet, and all MDA 60 feet; increase S-LOC 31 Cats C/D visibility to 2 SM and Circling Cat A visibility to 1¼ SM. VDP NA when using Mc Minnville altimeter setting. For inop ALS, increase S-LOC 31 Cat C/D visibility to 2½ SM.
# RVR 1800 authorized with the use of FD or AP or HUD to DA, NA when using Mc Minnville altimeter setting.

MALSR

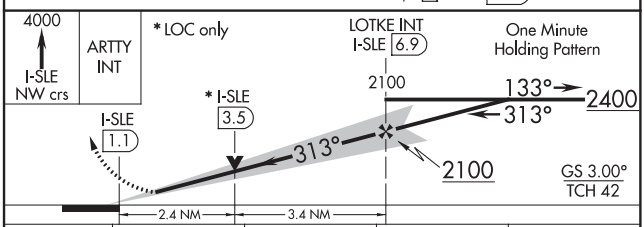
MISSED APPROACH: Climb to 4000 on I-SLE Localizer NW course to ARTTY INT/I-SLE 5.6 DME and hold, continue climb-in-hold to 4000.

| ATIS | SEATTLE CENTER | SALEM TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 124.55 | 125.8 291.7 | 119.1 (CTAF) L 257.2 | 121.9 | 122.95 |




| 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 # | 414/24 200 (200-½) | | | |
| S-LOC 31 | 1020/24 806 (900-½) | 1020/40 806 (900-¾) | 1020-1⅞ 806 (900-1⅞) | |
| C CIRCLING | 1020-1 806 (900-1) | 1020-1¼ 806 (900-1¼) | 1060-2½ 846 (900-2½) | 1260-3 1046 (1100-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 97642 W13A | APP CRS 133° | Rwy ldg 5811<br>TDZE 204<br>Apt Elev 213 |
|---|---|---|

# RNAV (GPS) RWY 13
## MCNARY FIELD (SLE)

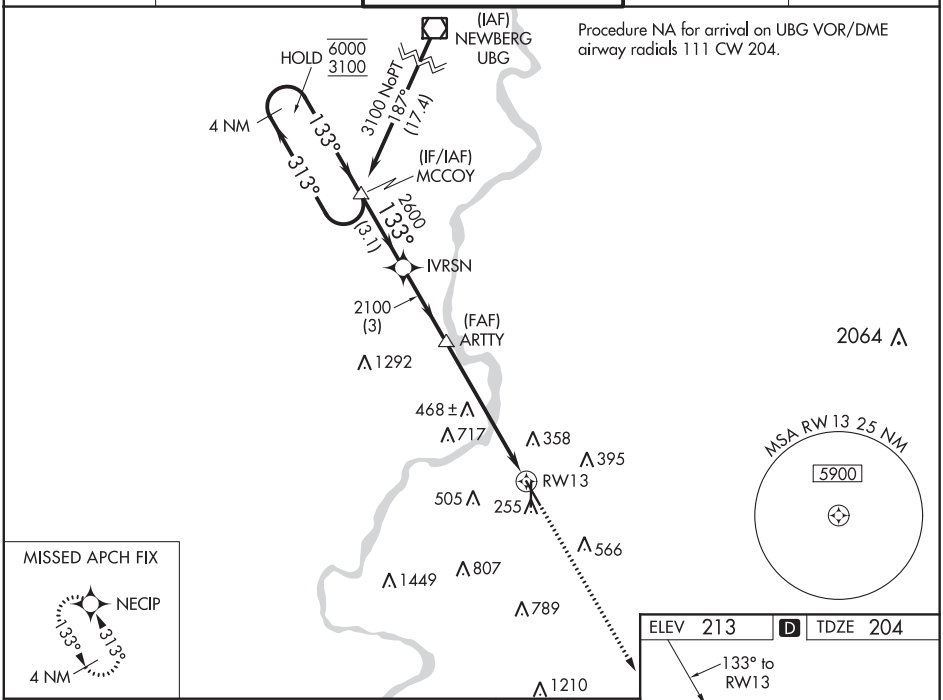
RNP APCH.

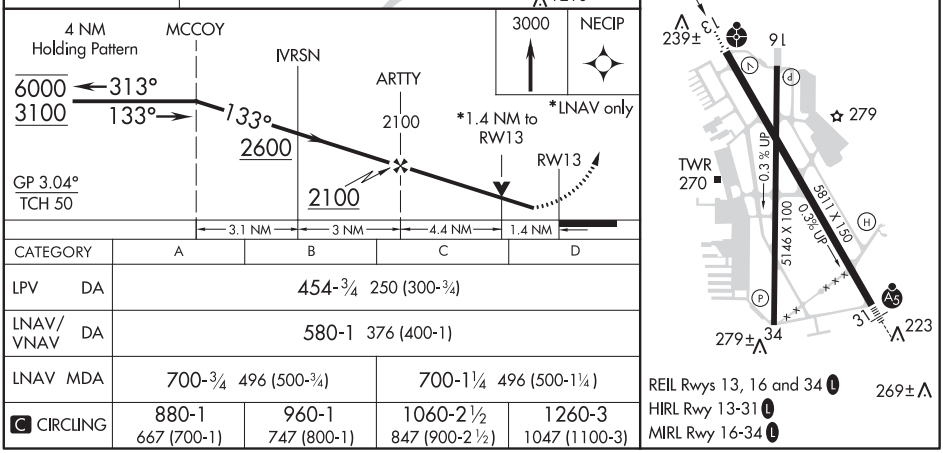
Circling Rwy 16, 34 NA at night. Rwy 13 helicopter visibility reduction below ¾ SM NA. Inop table does not apply to LNAV/VNAV all Cats. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C.

ODALS

MISSED APPROACH: Climb to 3000 direct NECIP and hold.

| ATIS | SEATTLE CENTER | SALEM TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 124.55 | 125.8 291.7 | 119.1 (CTAF) L 257.2 | 121.9 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 454-¾ 250 (300-¾) | | | |
| LNAV/VNAV DA | 580-1 376 (400-1) | | | |
| LNAV MDA | 700-¾ 496 (500-¾) | | 700-1¼ 496 (500-1¼) | |
| C CIRCLING | 880-1 667 (700-1) | 960-1 747 (800-1) | 1060-2½ 847 (900-2½) | 1260-3 1047 (1100-3) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

SALEM, OREGON

AL-361 (FAA)

20086

# RNAV (GPS) RWY 31
## MCNARY FIELD (SLE)

| WAAS CH 86202 W31A | APP CRS 313° | Rwy ldg 5811<br>TDZE 214<br>Apt Elev 214 |
|---|---|---|

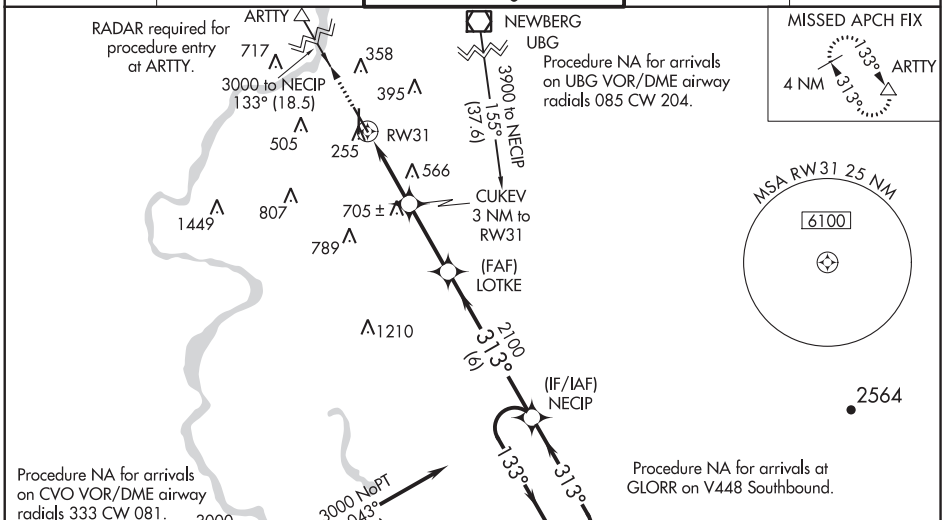
RNP APCH.

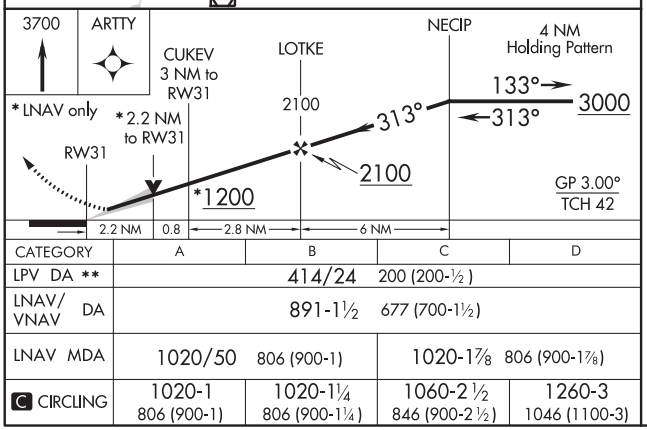
T A For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C or above 54°C When local altimeter setting not received, use Mc Minnville altimeter setting and increase all DA 49 feet; increase all MDAs 60 feet; increase LNAV/VNAV visibility all Cats to 1 5/8 SM, LNAV Cat C and D visibility to 2 SM, and Circling Cat A visibility to 1¼ SM and Cat C visibility to 2¾ SM. Baro-VNAV and VDP NA when using Mc Minnville altimeter setting. For inop ALS, increase LNAV/VNAV all Cats visibility to 1⅞ SM and increase LNAV Cat C and D visibility to 2½ SM. For inop ALS when using Mc Minnville altimeter setting, increase LPV all Cats visibility to 4500, increase LNAV/VNAV all Cats visibility to 2 SM, increase LNAV Cats C and D visibility to 2½ SM. **RVR 1800 authorized with use of FD or AP or HUD to DA, NA when using Mc Minnville altimeter setting.

MALSR

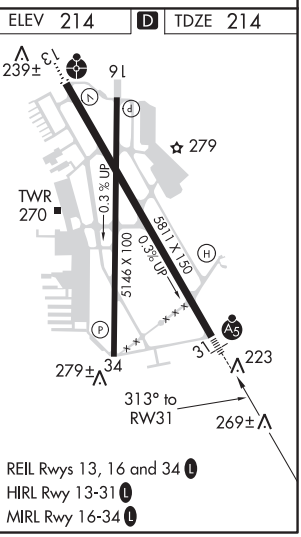
MISSED APPROACH: Climb to 3700 direct ARTTY and hold, continue climb-in-hold to 3700.

| ATIS | SEATTLE CENTER | SALEM TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 124.55 | 125.8 291.7 | 119.1 (CTAF) L 257.2 | 121.9 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA ** | 414/24 200 (200-½) | | | |
| LNAV/VNAV DA | 891-1½ 677 (700-1½) | | | |
| LNAV MDA | 1020/50 806 (900-1) | | 1020-1⅞ 806 (900-1⅞) | |
| C CIRCLING | 1020-1 806 (900-1) | 1020-1¼ 806 (900-1¼) | 1060-2½ 846 (900-2½) | 1260-3 1046 (1100-3) |




REIL Rwys 13, 16 and 34 L
HIRL Rwy 13-31 L
MIRL Rwy 16-34 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

SALEM, OREGON
Amdt 3D 26MAR20

44°55'N-123°00'W

MCNARY FIELD (SLE)
RNAV (GPS) RWY 31

# LOC Y RWY 31
## MCNARY FIELD (SLE)

| LOC/DME I-SLE | APP CRS | Rwy ldg 5811 |
|---|---|---|
| 110.3 | 313° | TDZE 213 |
| Chan 40 | | Apt Elev 213 |

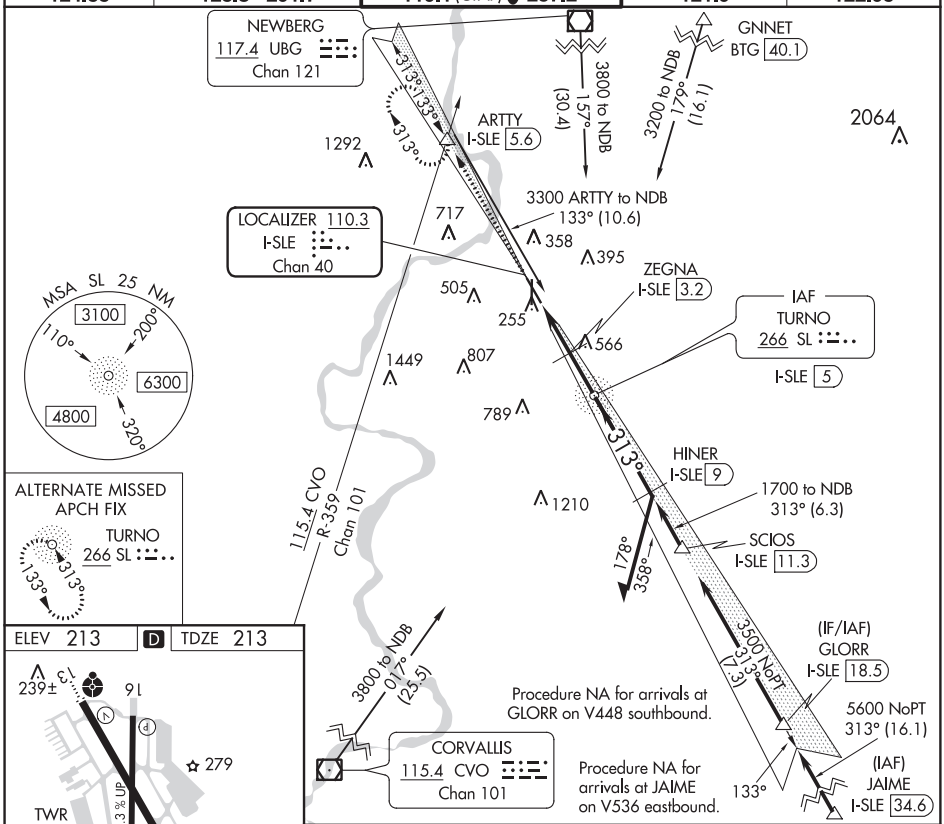
DME required. RADAR required.

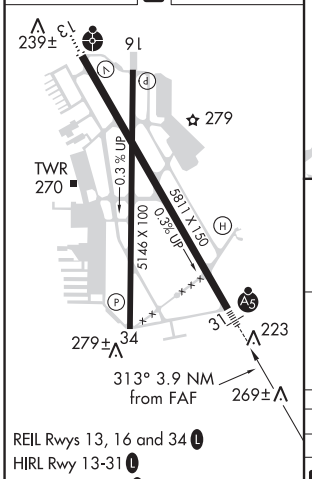
When local altimeter setting not received, use Mc Minnville altimeter setting and increase all MDAs 60 feet and visibility S-LOC 31 Cat C/D ⅛ SM and Circling Cat C ¼ SM. For inop ALS, increase S-LOC 31 Cats C and D visibility to 1⅝ SM. For inop ALS when using Mc Minnville altimeter setting, increase S-LOC 31 Cats C and D visibility to 1¾ SM. VDP NA when using Mc Minnville altimeter setting.

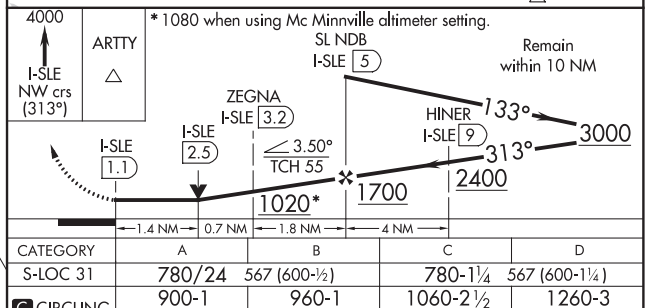
MALSR

MISSED APPROACH: Climb to 4000 on I-SLE Localizer NW course (313°) to ARTTY INT/I-SLE 5.6 DME and hold, continue climb-in-hold to 4000.

| ATIS | SEATTLE CENTER | SALEM TOWER * | GND CON | UNICOM |
|---|---|---|---|---|
| 124.55 | 125.8 291.7 | 119.1 (CTAF) L 257.2 | 121.9 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-LOC 31 | 780/24 | 567 (600-½) | 780-1¼ | 567 (600-1¼) |
| C CIRCLING | 900-1<br>687 (700-1) | 960-1<br>747 (800-1) | 1060-2½<br>847 (900-2½) | 1260-3<br>1047 (1100-3) |

REIL Rwys 13, 16 and 34 L
HIRL Rwy 13-31 L
MIRL Rwy 16-34 L

NW-1, 05 NOV 2020 to 31 DEC 2020

SALEM, OREGON

AL-361 (FAA)

20310

# LOC BC RWY 13

## MCNARY FIELD (SLE)

| LOC/DME I-SLE | APP CRS | Rwy ldg | 5811 |
|---|---|---|---|
| 110.3 | 133° | TDZE | 204 |
| Chan 40 | | Apt Elev | 213 |

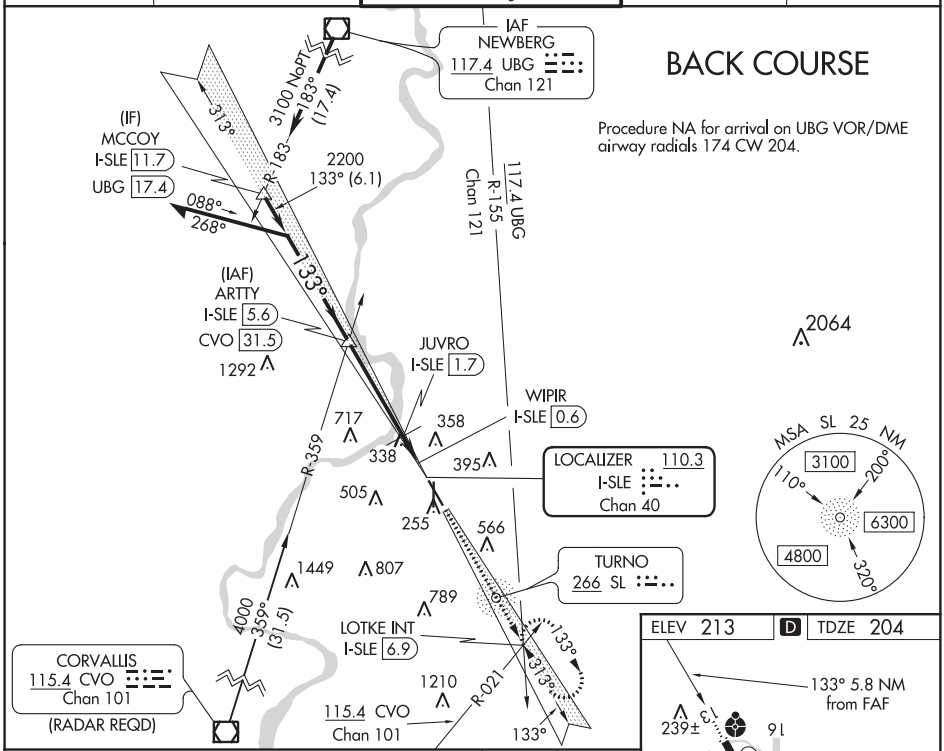
DME required.

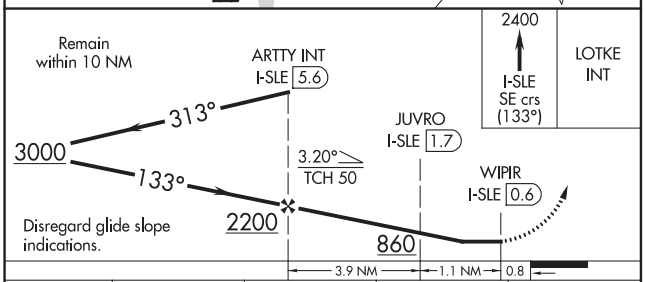
When local altimeter setting not received, use Mc Minnville altimeter setting and increase all MDAs 60 feet and visibility S-LOC 13 Cat C/D ⅛ SM and Circling Cat C ¼ SM. For inop ALS when using Mc Minnville altimeter setting, increase S-LOC 13 Cats C and D visibility to 1⅜ SM. Rwy 13 helicopter visibility reduction below ¾ SM NA.

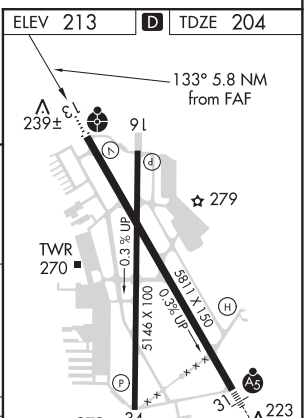
ODALS

MISSED APPROACH: Climb to 2400 on I-SLE Localizer SE course (133°) to LOTKE INT/ I-SLE 6.9 DME and hold.

| ATIS | SEATTLE CENTER | SALEM TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 124.55 | 125.8 291.7 | 119.1 (CTAF) L 257.2 | 121.9 | 122.95 |




REIL Rwys 13, 16 and 34 L

HIRL Rwy 13-31 L

MIRL Rwy 16-34 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-LOC 13 | 600-¾ 396 (400-¾) | | 600-1 396 (400-1) | |
| C CIRCLING | 900-1 687 (700-1) | 960-1 747 (800-1) | 1060-2½ 847 (900-2½) | 1260-3 1047 (1100-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

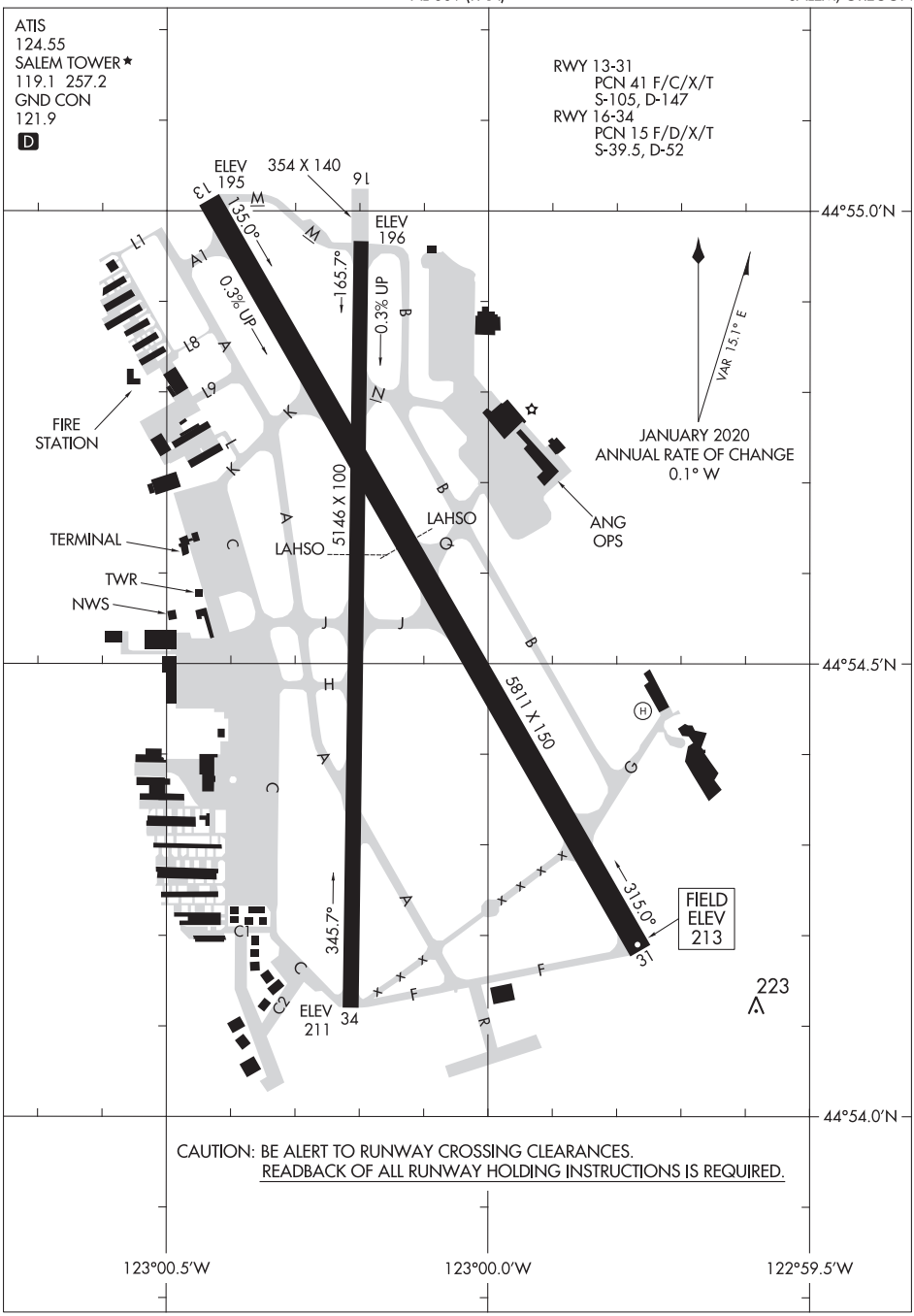
SALEM, OREGON
Amdt 9B 05NOV20

44°55′N-123°00′W

MCNARY FIELD (SLE)

LOC BC RWY 13

AL-361 (FAA)




CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

NW-1, 05 NOV 2020 to 31 DEC 2020

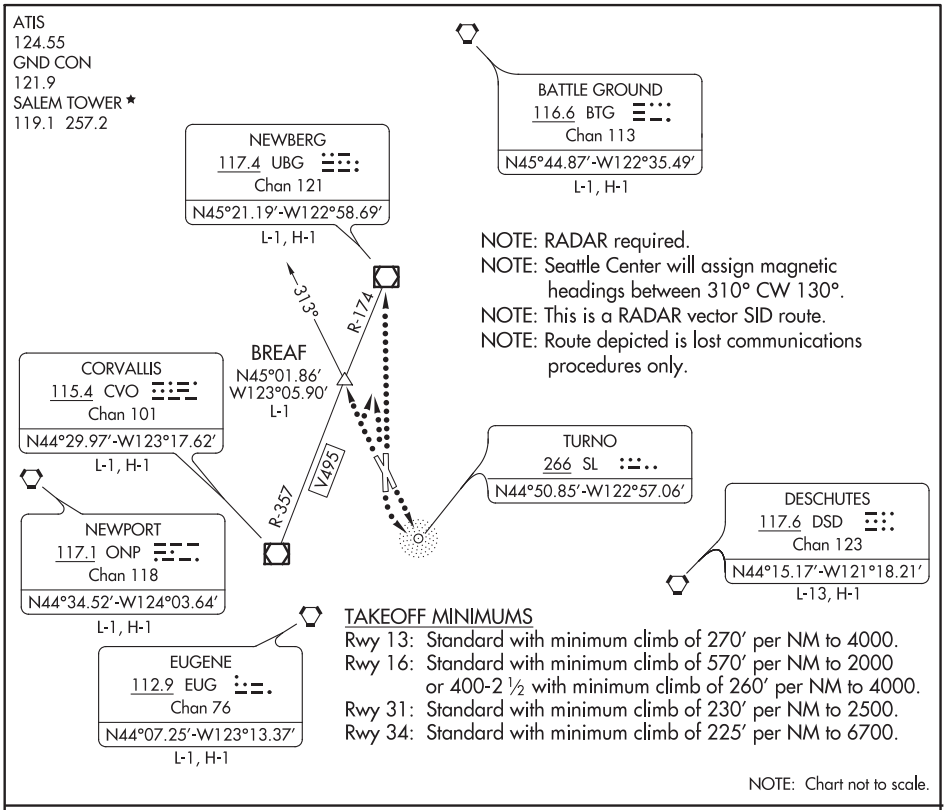
NW-1, 05 NOV 2020 to 31 DEC 2020

17341

# SALEM FOUR DEPARTURE

AL-361 (FAA)

MCNARY FIELD (SLE)
SALEM, OREGON




NOTE: RADAR required.
NOTE: Seattle Center will assign magnetic headings between 310° CW 130°.
NOTE: This is a RADAR vector SID route.
NOTE: Route depicted is lost communications procedures only.

TAKEOFF MINIMUMS

Rwy 13: Standard with minimum climb of 270′ per NM to 4000.
Rwy 16: Standard with minimum climb of 570′ per NM to 2000 or 400-2 ½ with minimum climb of 260′ per NM to 4000.
Rwy 31: Standard with minimum climb of 230′ per NM to 2500.
Rwy 34: Standard with minimum climb of 225′ per NM to 6700.

NOTE: Chart not to scale.

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 13, 31, 34: Climb to assigned altitude and heading between 310° CW 130° from DER, thence . . . .
TAKEOFF RUNWAY 16: Climbing left turn to assigned heading between 340° CW to 130° from DER to assigned altitude, thence . . . .

. . . . expect RADAR vectors with Seattle Center to assigned route. Expect filed altitude 10 minutes after departure.

LOST COMMUNICATIONS:
If not in contact with Seattle Center after reaching 2000, continue climb to assigned altitude.
TAKEOFF RUNWAYS 13 and 16: (Runway 16 turn left) proceed direct to SL NDB thence on (assigned route) (ADF required).
TAKEOFF RUNWAYS 31 and 34: (Runway 31 turn right) proceed direct to UBG VOR/DME thence on (assigned route).
HELICOPTERS ONLY - RUNWAYS 31 and 34: (Runway 34 turn left) intercept and proceed outbound on the SL NDB 313° bearing to BREAF INT, thence on (assigned route) (ADF required).

| APP CRS | Rwy ldg | 5510 |
|---|---|---|
| 175° | TDZE | 4041 |
| | Apt Elev | 4044 |

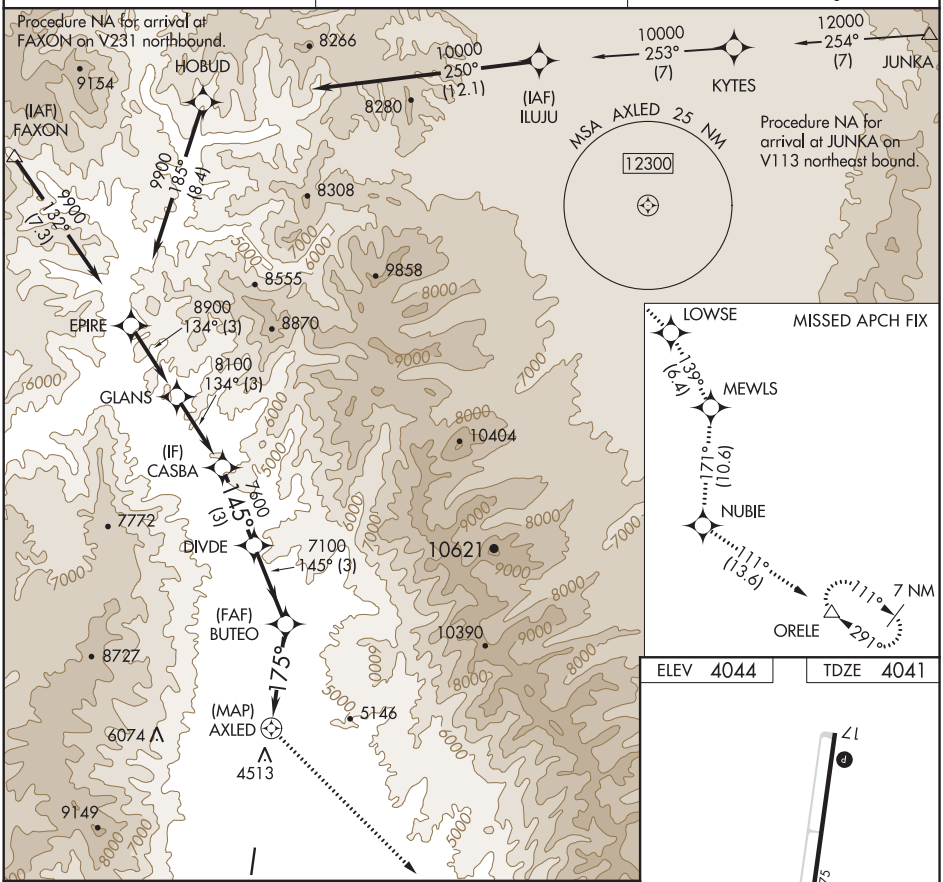
# RNAV (GPS) RWY 17
## LEMHI COUNTY (SMN)

NA
-13°C

DME/DME RNP-0.3 NA. Night landing: Rwy 35 NA.
Circling NA for Cats B and C east of Rwy 17-35.
Helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 13600 direct LOWSE and track 139° to MEWLS and track 171° to NUBIE and track 111° to ORELE and hold, continue climb-in-hold to 13600.

| AWOS-3PT | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.075 | 132.4 338.3 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 5740-5 1699 (1700-5) | | | NA |
| C CIRCLING | 5740-5 1696 (1700-5) | | 6180-5 2136 (2200-5) | NA |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

SALMON, IDAHO | AL-9513 (FAA) | 20254

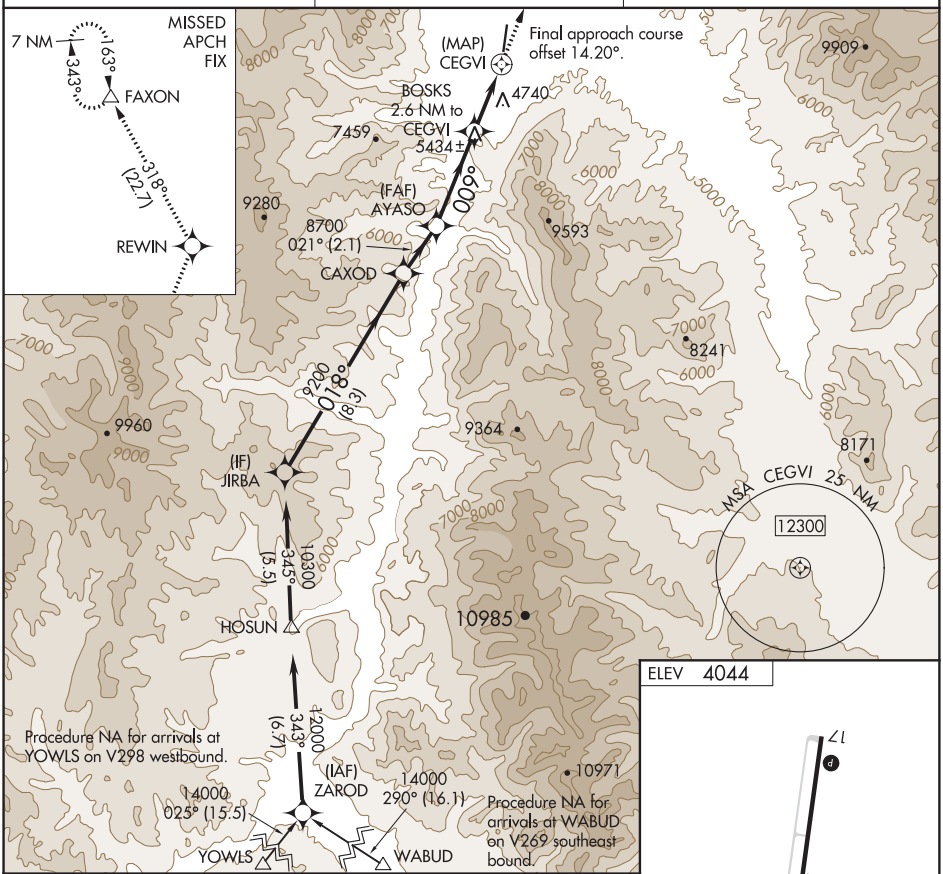
# RNAV (GPS)-D
## LEMHI COUNTY (SMN)

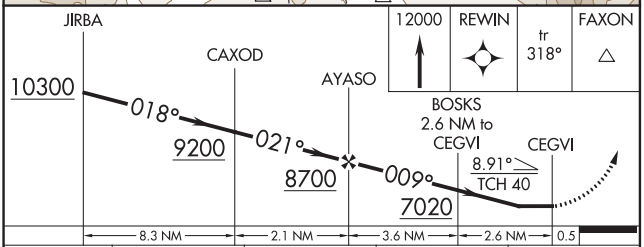
| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 009° | TDZE | N/A |
| | Apt Elev | 4044 |

Circling Rwy 35 NA at night.
NA
DME/DME RNP-0.3 NA.
-13°C
Circling NA for Cat C east of Rwy 17-35.

MISSED APPROACH: Climb to 12000 direct REWIN and on track 318° to FAXON and hold, continue climb-in-hold to 12000.

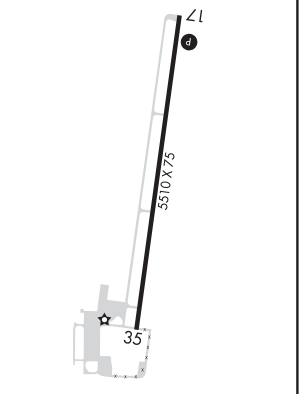
| AWOS-3PT | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.075 | 132.4 338.3 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 6000-1¼ 1956 (2000-1¼) | 6000-1½ 1956 (2000-1½) | 6220-3 2176 (2200-3) | NA |

ELEV 4044




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

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| VOR/DME LKT 113.5 Chan 82 | APP CRS 043° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 4044 |
|---|---|---|

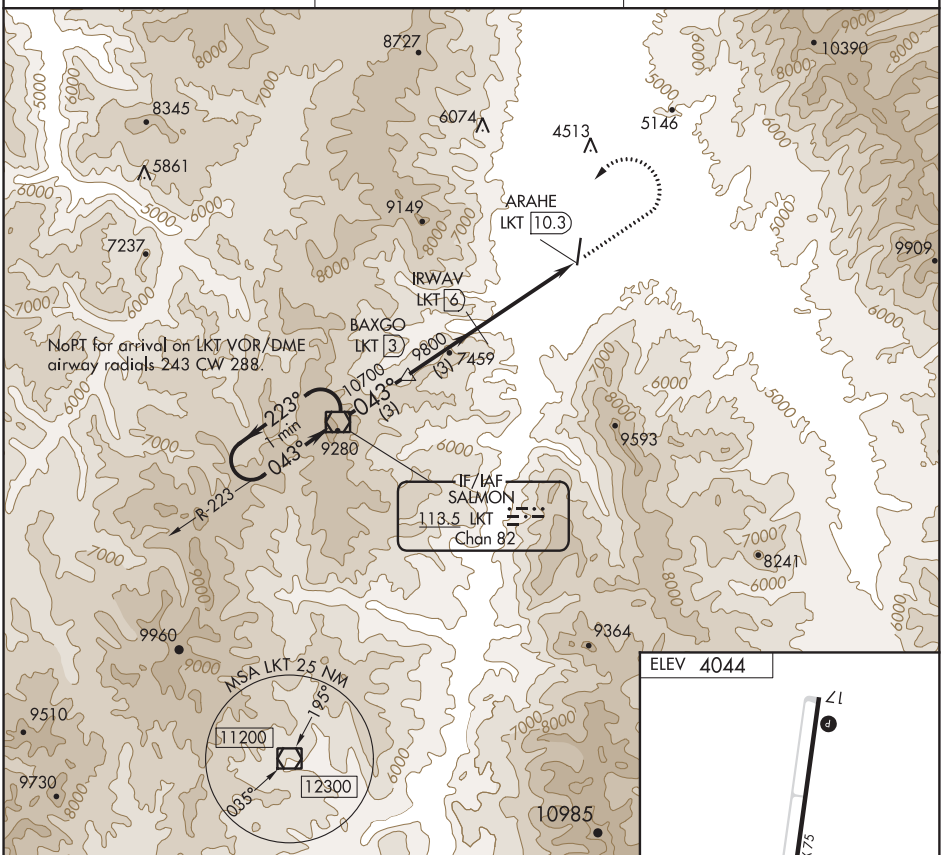
# VOR/DME-B
## LEMHI COUNTY (SMN)

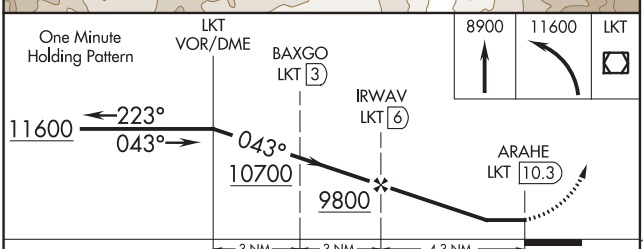
T
NA
-13°C

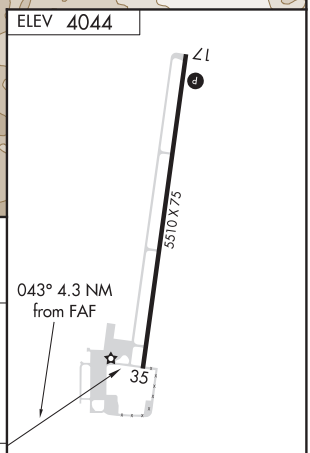
Circling NA for Cat C east of Rwy 17-35.
Night Landing: Rwy 35 NA.

MISSED APPROACH: Climb to 8900 then climbing left turn to 11600 direct LKT VOR/DME and hold, continue climb-in-hold to 11600.

| AWOS-3PT | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.075 | 132.4 338.3 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 8100-1¼<br>4056 (4100-1¼) | 8100-1½<br>4056 (4100-1½) | 8100-3<br>4056 (4100-3) | NA |

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

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

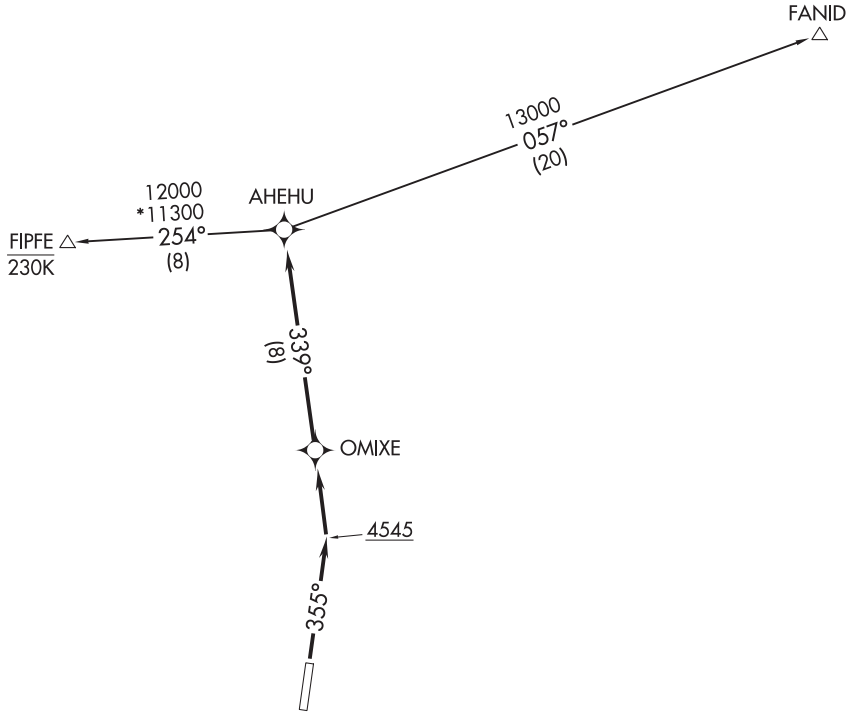
(AHEHU3.AHEHU) 18312

# AHEHU THREE DEPARTURE (RNAV)

AL-9513 (FAA)

LEMHI COUNTY (SMN)
SALMON, IDAHO

SALT LAKE CENTER
132.4 338.3
BOISE RADIO
122.55




NOTE: RNAV 1.

NOTE: GPS required.

TAKEOFF MINIMUMS

Rwy 35: Standard with minimum climb of 420′ per NM to 11800.

NOTE: Chart not to scale.

T

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 35: Climb heading 355° to 4545, then left turn direct OMIXE, then on track 339° to AHEHU, thence. . . .

. . . .on (transition).

FANID TRANSITION (AHEHU3.FANID)

FIPFE TRANSITION (AHEHU3.FIPFE)

| APP CRS | Rwy ldg | 5501 |
|---|---|---|
| 198° | TDZE | 2131 |
| | Apt Elev | 2131 |

# RNAV (GPS) Y RWY 20

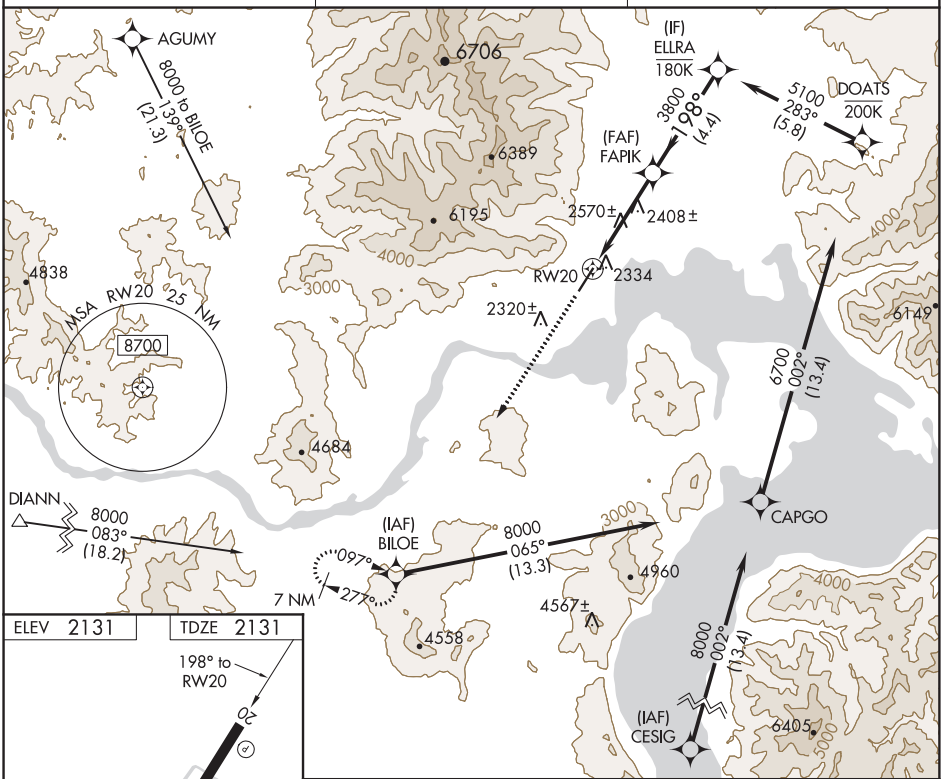
SANDPOINT (SZT)

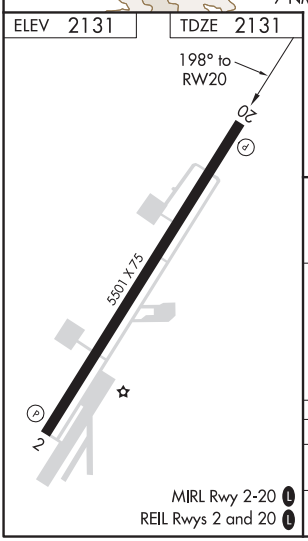
RNP APCH.

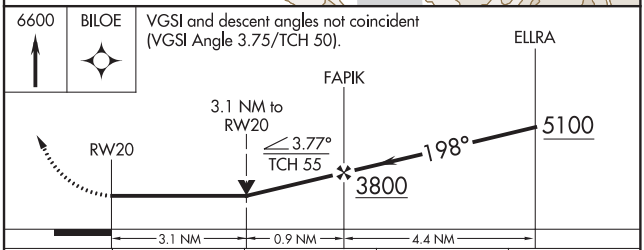
T A Circling NA west of Rwy 2-20. Rwy 20 helicopter visibility reduction below ¾ SM NA. VDP NA with Deer Park altimeter setting. When local altimeter not received, use Deer Park altimeter setting and increase all MDA 120 feet.

MISSED APPROACH: Climb to 6600 direct BILOE and hold, continue climb in hold to 6600.

| AWOS-3 | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.425 | 123.95 290.55 | 122.7 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 3400-1¼<br>1269 (1300-1¼) | 3400-1½<br>1269 (1300-1½) | 3400-3<br>1269 (1300-3) | NA |
| C CIRCLING | 3400-1¼<br>1269 (1300-1¼) | 3400-1½<br>1269 (1300-1½) | 3400-3<br>1269 (1300-3) | NA |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

SANDPOINT, IDAHO | AL-9140 (FAA) | 20198

# RNAV (GPS) Z RWY 20
SANDPOINT (SZT)

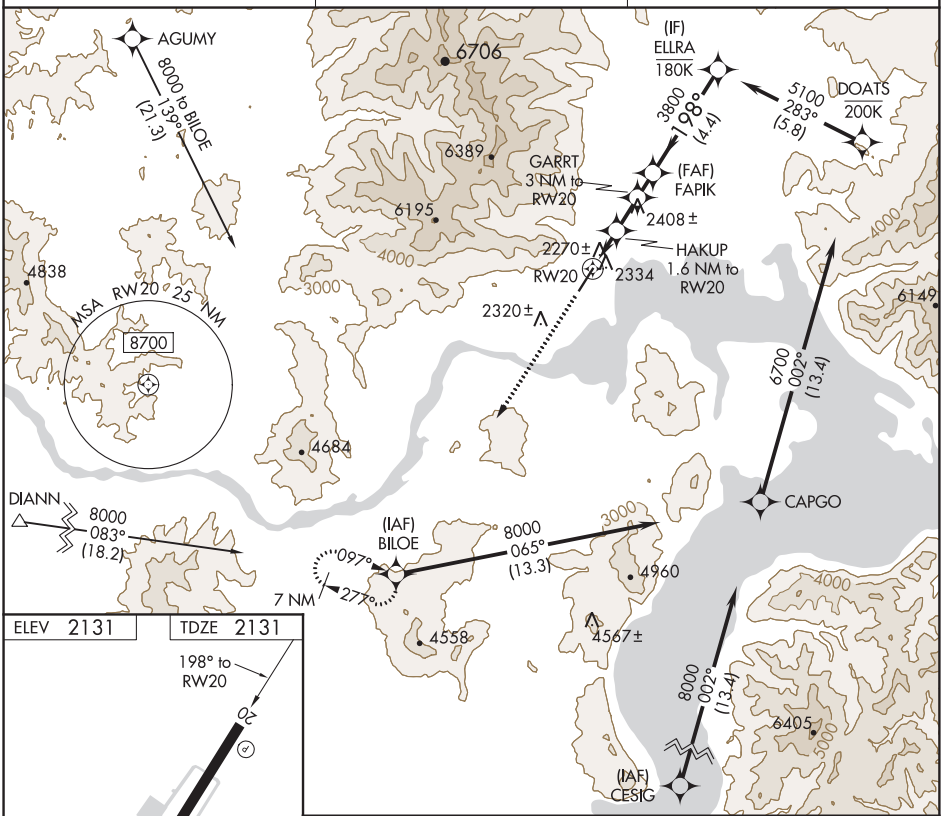
| WAAS CH 99542 W20A | APP CRS 198° | Rwy ldg 5501<br>TDZE 2131<br>Apt Elev 2131 |
|---|---|---|

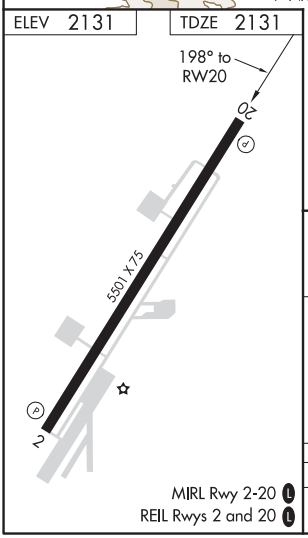
RNP APCH.

Rwy 20 helicopter visibility reduction below ¾ SM NA. When local altimeter not received, procedure NA.

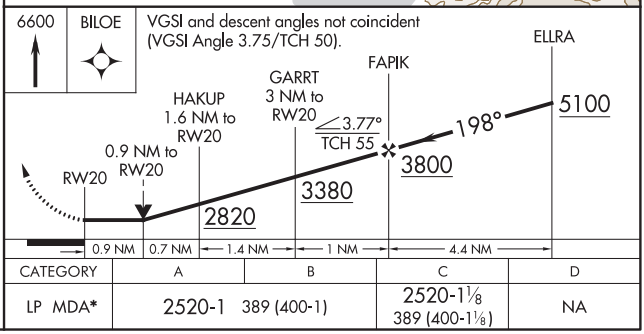
MISSED APPROACH: Climb to 6600 direct BILOE and hold, continue climb-in-hold to 6600.
*Missed approach requires minimum climb of 318 feet per NM to 4500; if unable to meet climb gradient, see RNAV (GPS) Y RWY 20.

| AWOS-3 | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.425 | 123.95 290.55 | 122.7 (CTAF) L |




MIRL Rwy 2-20 L
REIL Rwys 2 and 20 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LP MDA* | 2520-1 389 (400-1) | | 2520-1⅛ 389 (400-1⅛) | NA |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 018° | TDZE | N/A |
| | Apt Elev | 2131 |

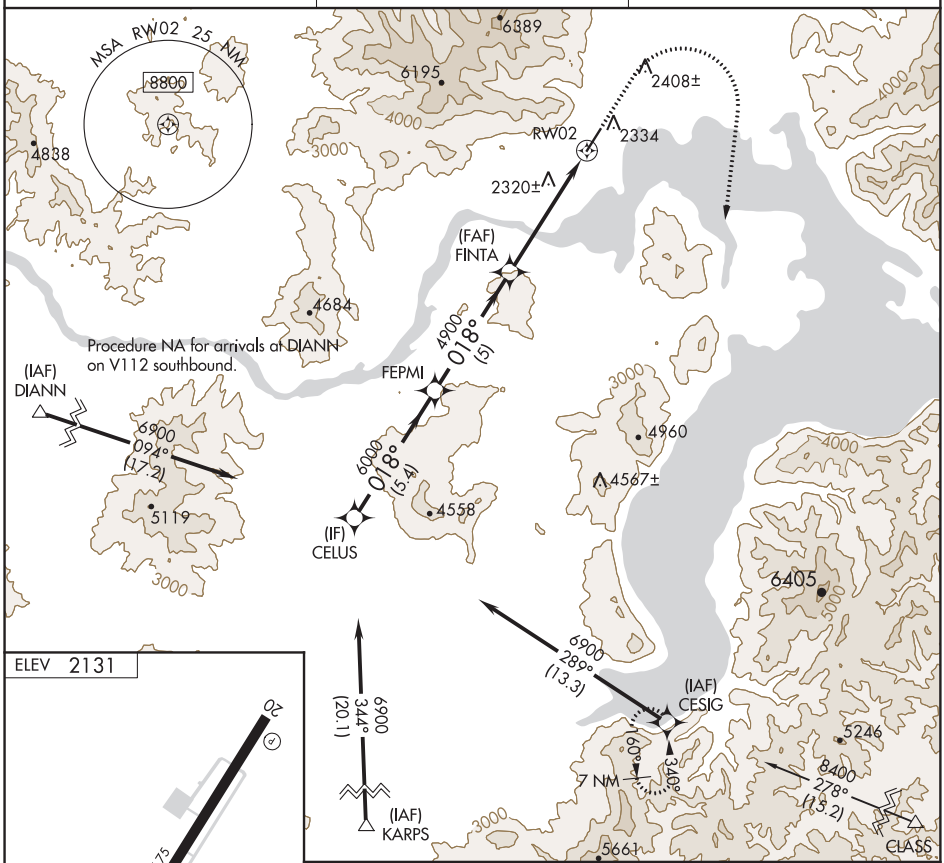
# RNAV (GPS)-B
## SANDPOINT (SZT)

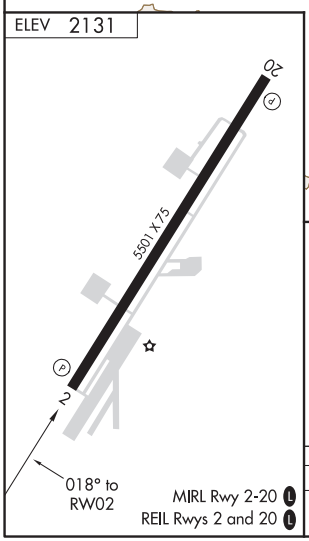
DME/DME RNP-0.3 NA. Circling NA west of Rwy 2-20. When local altimeter setting not received, use Deer Park altimeter setting and increase all MDA 120 feet.

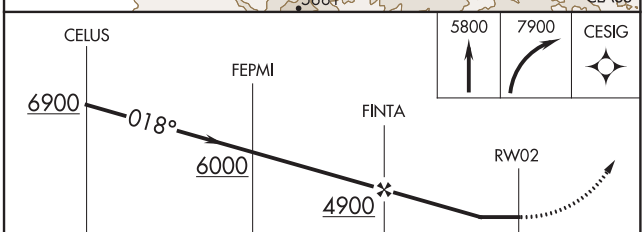
MISSED APPROACH: Climb to 5800 then climbing right turn to 7900 direct CESIG and hold.

| AWOS-3 | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.425 | 123.95 290.55 | 122.7 (CTAF) |






| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 3600-1¼<br>1469 (1500-1¼) | 3600-1½<br>1469 (1500-1½) | 3600-3<br>1469 (1500-3) | 4180-3<br>2049 (2100-3) |

SANDPOINT, IDAHO

AL-9140 (FAA)

20310

# LOC-A

SANDPOINT (SZT)

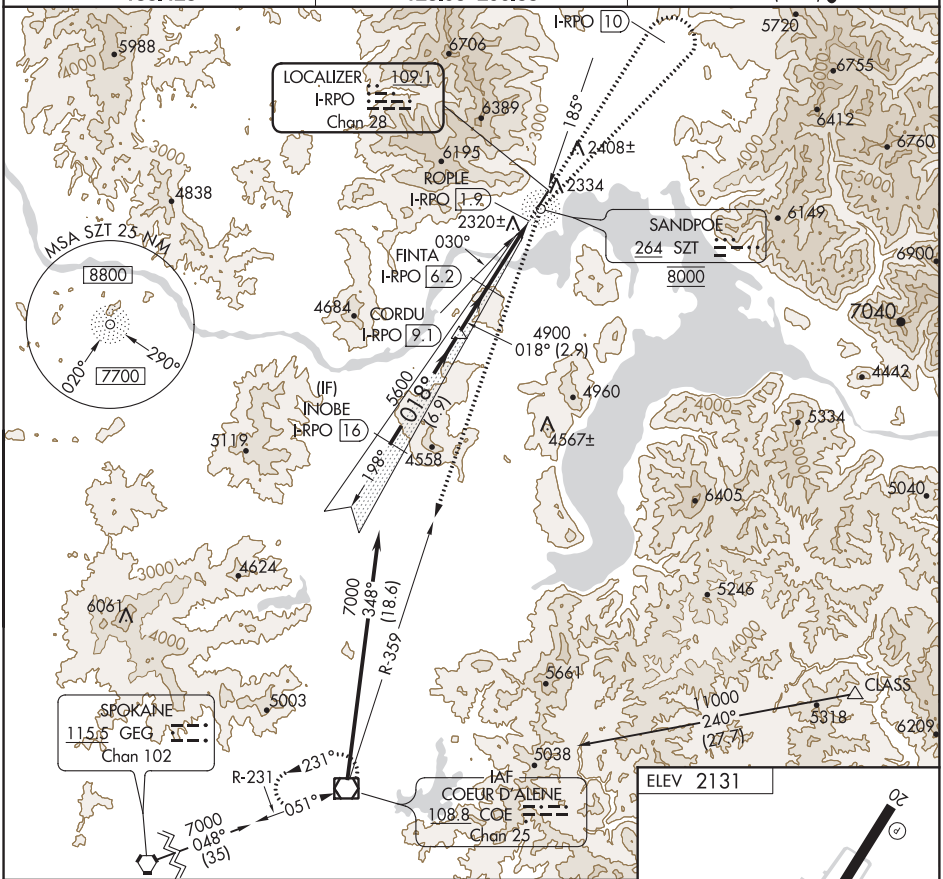
| LOC/DME I-RPO | APP CRS | Rwy ldg | N/A |
|---|---|---|---|
| 109.1 | 018° | TDZE | N/A |
| Chan 28 | | Apt Elev | 2131 |

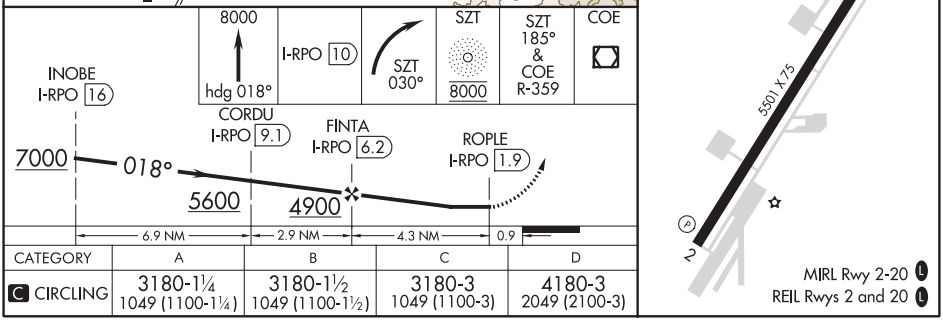
T A NA

ADF and DME required. Circling NA west of Rwy 2-20. When local altimeter setting not received, use Deer Park altimeter setting and increase all MDA 120 feet.

MISSED APPROACH: Climb to 8000 on heading 018° to I-RPO 10 DME and climbing right turn on SZT NDB bearing 030° to SZT NDB to cross SZT NDB at 8000 then on SZT NDB bearing 185° and COE VOR/DME R-359 to COE VOR/DME and hold.

| AWOS-3 | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.425 | 123.95 290.55 | 122.7 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 3180-1¼<br>1049 (1100-1¼) | 3180-1½<br>1049 (1100-1½) | 3180-3<br>1049 (1100-3) | 4180-3<br>2049 (2100-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# RNAV (GPS) RWY 5
## SHIVELY FIELD (SAA)

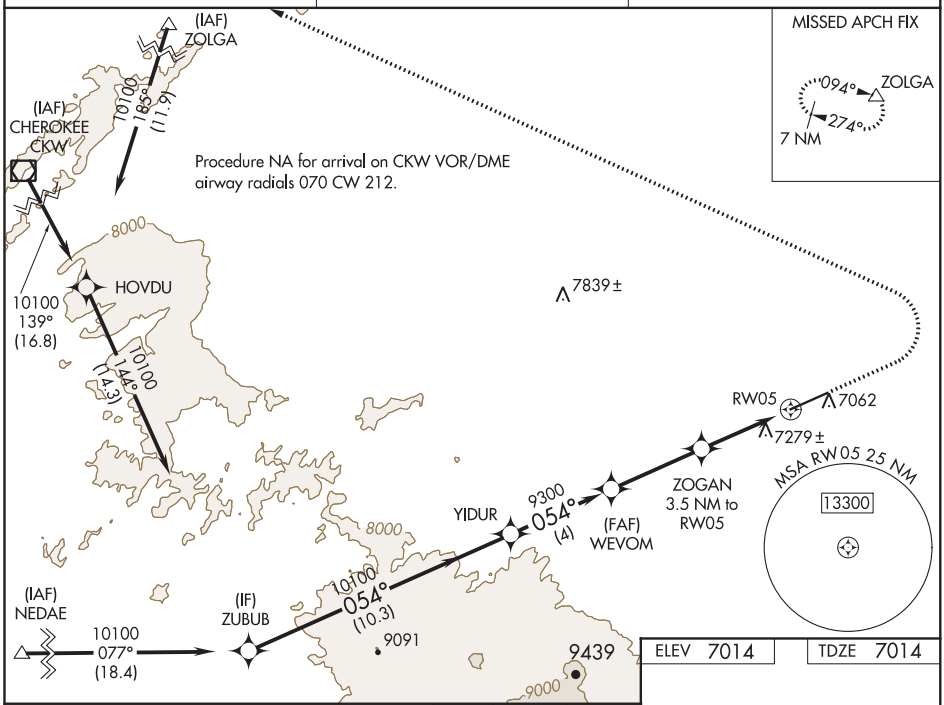
| WAAS CH 65820 W05A | APP CRS 054° | Rwy ldg 8801<br>TDZE 7014<br>Apt Elev 7014 |
|---|---|---|

RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -28°C or above 54°C.

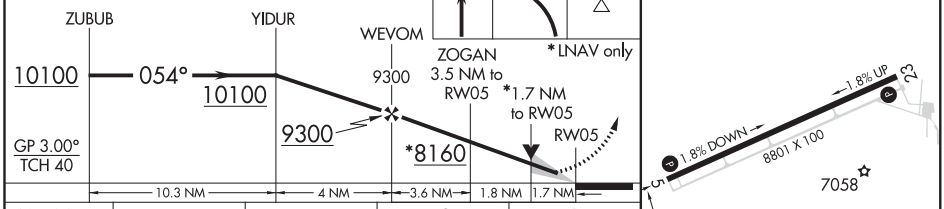
MISSED APPROACH: Climb to 7800 then climbing left turn to 11000 direct ZOLGA and hold.

| AWOS-3PT | DENVER CENTER | UNICOM |
|---|---|---|
| 118.175 | 132.1 254.35 | 122.8 (CTAF) L |




| ELEV 7014 | TDZE 7014 |
|---|---|

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 49).




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 7264-⅞ 250 (300-⅞) | | | |
| LNAV/VNAV DA | 7513-1¾ 499 (500-1¾) | | | |
| LNAV MDA | 7620-1 606 (700-1) | | 7620-1¾ 606 (700-1¾) | |
| CIRCLING | 7620-1 606 (700-1) | | 7620-1¾ 606 (700-1¾) | 7620-2 606 (700-2) |

REIL Rwys 5 and 23 L
MIRL Rwy 5-23 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

SARATOGA, WYOMING | AL-9074 (FAA) | 20310

| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 151° | TDZE | N/A |
| | Apt Elev | 7015 |

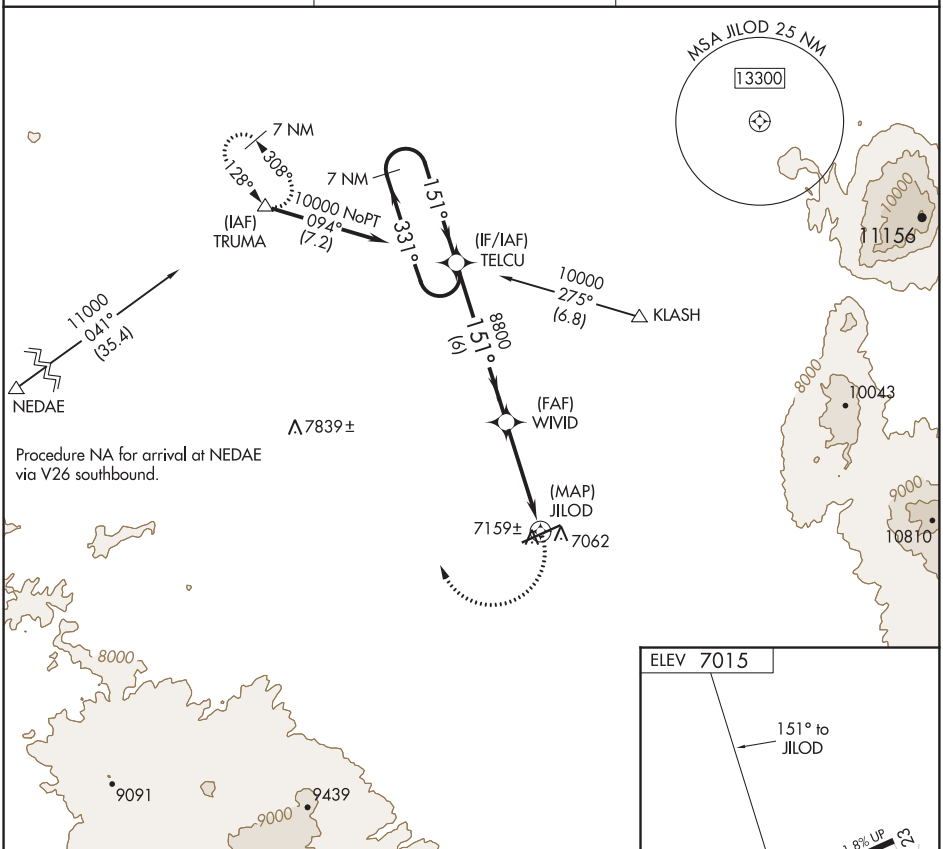
# RNAV (GPS)-B
## SHIVELY FIELD (SAA)

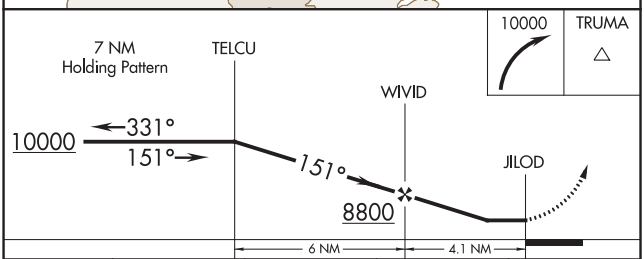
NA

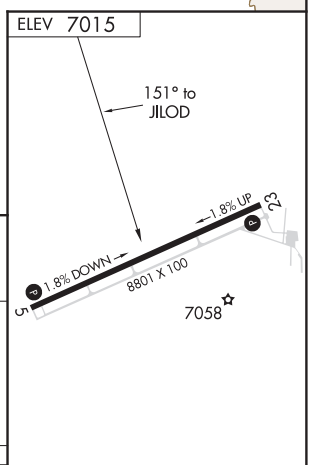
DME/DME RNP-0.3 NA. When local altimeter setting not received, use Rawlins altimeter setting: increase all MDA 100 feet and visibility Cats C and D ¼ mile.

MISSED APPROACH: Climbing right turn to 10000 direct TRUMA and hold.

| AWOS-3PT | DENVER CENTER | UNICOM |
|---|---|---|
| 118.175 | 132.1 254.35 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 7600-1 585 (600-1) | | 7620-1¾ 605 (700-1¾) | 7620-2 605 (700-2) |

REIL Rwys 5 and 23 L
MIRL Rwy 5-23 L




NW-1, 05 NOV 2020 to 31 DEC 2020

| NDB SAA | APP CRS | Rwy ldg | N/A |
|---|---|---|---|
| 266 | 150° | TDZE | N/A |
| | | Apt Elev | 7015 |

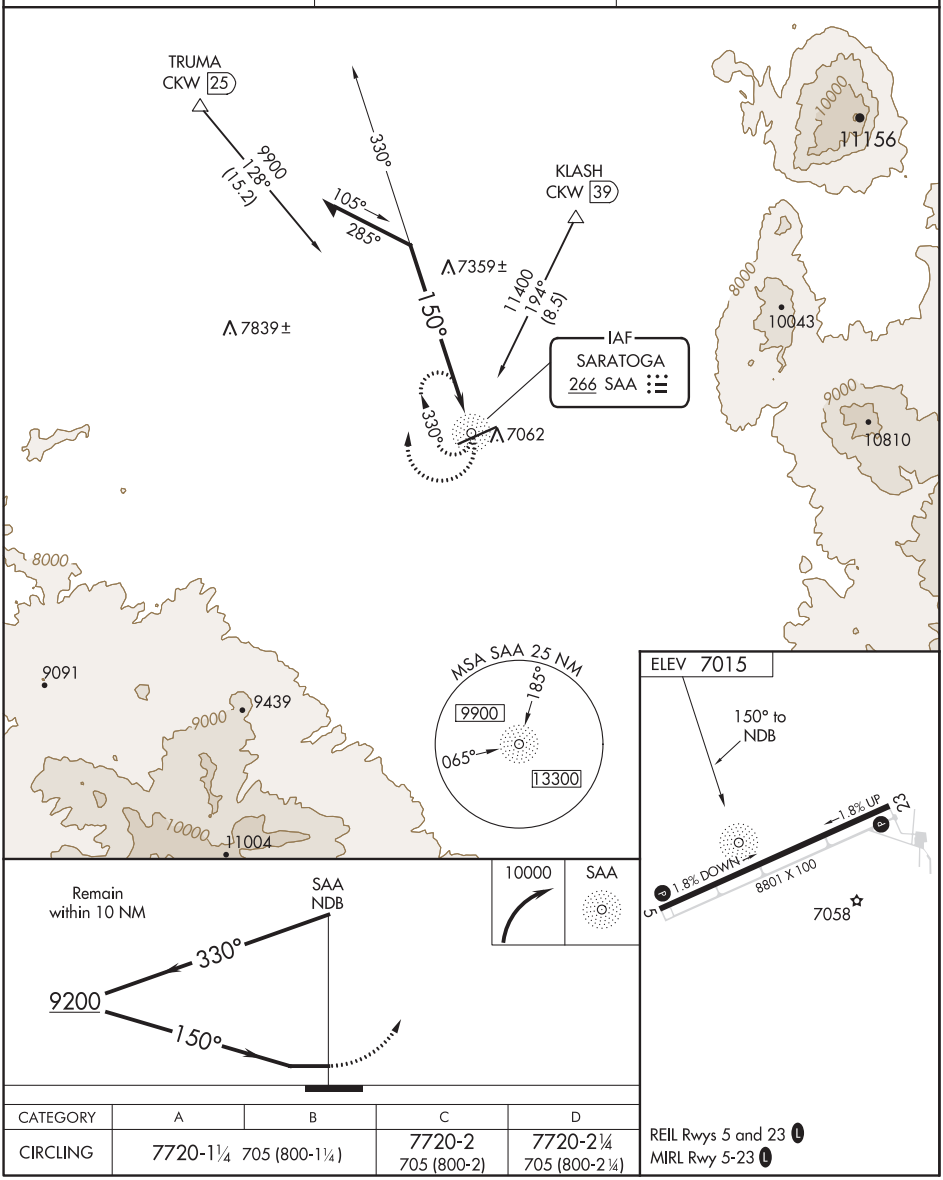
# NDB-A
## SHIVELY FIELD (SAA)

When local altimeter setting not received, use Rawlins altimeter setting: increase all MDA 100 feet and visibility Cats C and D ¼ mile.

NA

MISSED APPROACH: Climbing right turn to 10000 in SAA NDB holding pattern.

| AWOS-3PT | DENVER CENTER | UNICOM |
|---|---|---|
| 118.175 | 132.1 254.35 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 7720-1¼ 705 (800-1¼) | | 7720-2 705 (800-2) | 7720-2¼ 705 (800-2¼) |

REIL Rwys 5 and 23 L
MIRL Rwy 5-23 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

SCAPPOOSE, OREGON

AL-6314 (FAA)

19115

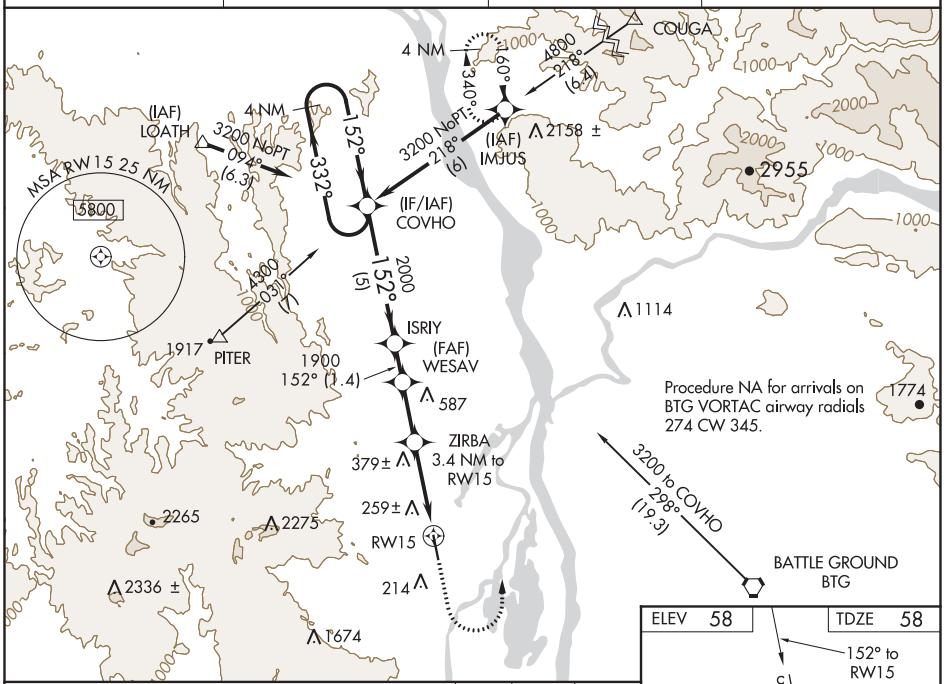
# RNAV (GPS) RWY 15
## SCAPPOOSE INDUSTRIAL AIRPORT (SPB)

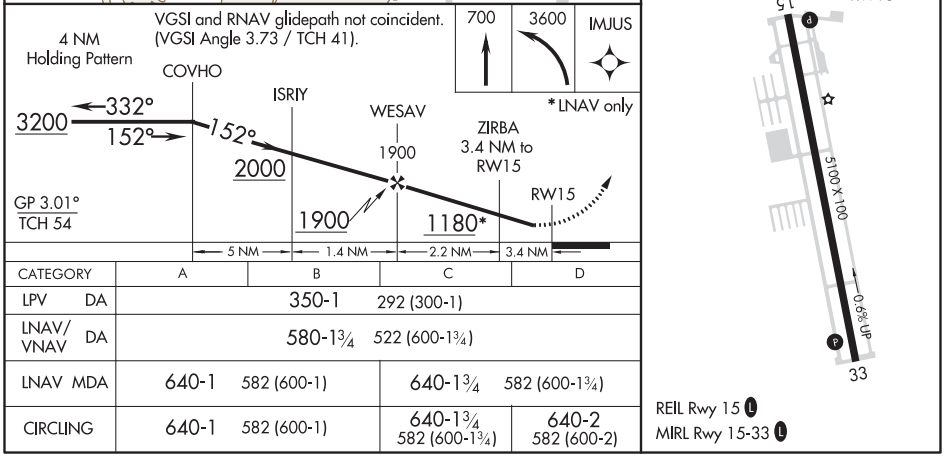
| WAAS CH 65720 W15A | APP CRS 152° | Rwy ldg 5100<br>TDZE 58<br>Apt Elev 58 |
|---|---|---|

Circling NA west of Rwy 15-33. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM NA. When VGSI inop, Straight in and Circling to Rwy 15 NA at night. When local altimeter setting not received, use Portland Intl altimeter setting and increase all DA/MDA 40 feet and increase LNAV/VNAV all Cats visibility ⅛ mile. Baro-VNAV NA when using Portland Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 42°C (107°F).

MISSED APPROACH: Climb to 700 then climbing left turn to 3600 direct IMJUS and hold.

| ASOS | PORTLAND APP CON | CLNC DEL | UNICOM |
|---|---|---|---|
| 135.875 | 124.35 299.2 | 121.65 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 350-1 292 (300-1) | | | |
| LNAV/VNAV DA | 580-1¾ 522 (600-1¾) | | | |
| LNAV MDA | 640-1 582 (600-1) | | 640-1¾ 582 (600-1¾) | |
| CIRCLING | 640-1 582 (600-1) | | 640-1¾ 582 (600-1¾) | 640-2 582 (600-2) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

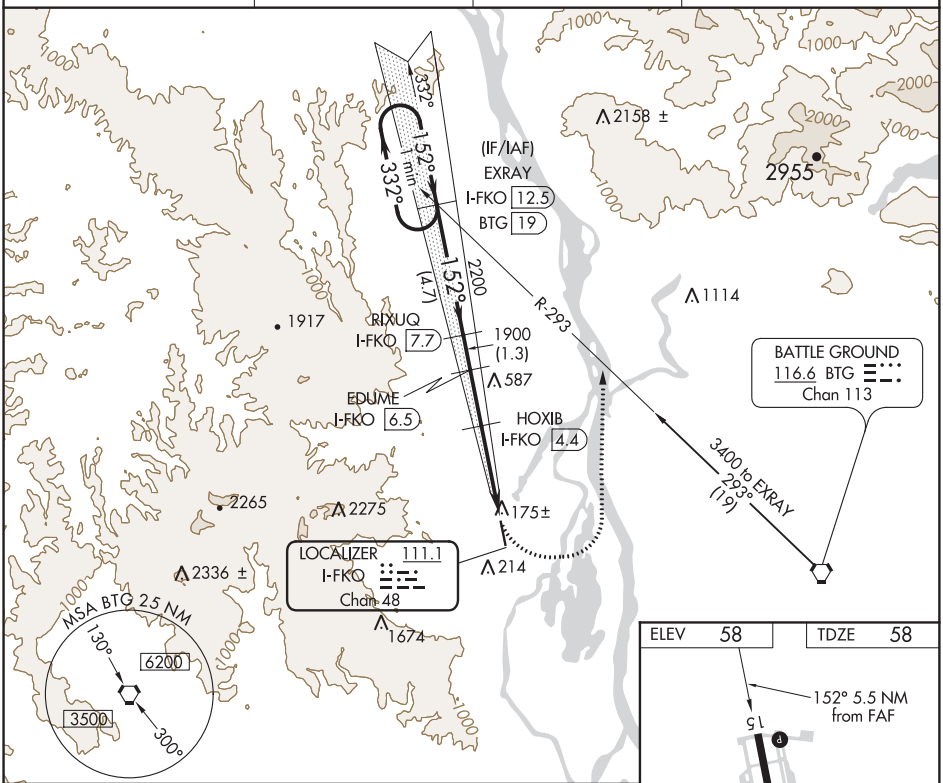
| LOC/DME I-FKO | APP CRS | Rwy ldg | 5100 |
|---|---|---|---|
| 111.1 | 152° | TDZE | 58 |
| Chan 48 | | Apt Elev | 58 |

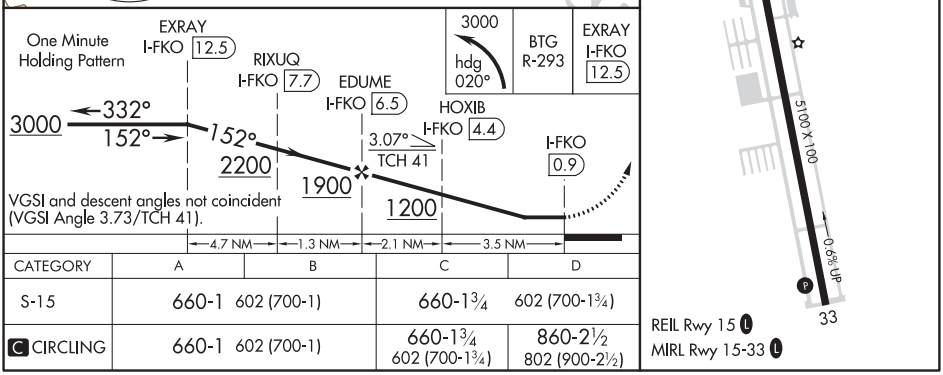
# LOC/DME RWY 15
## SCAPPOOSE INDUSTRIAL AIRPORT (SPB)

Circling NA west of Rwy 15-33. When local altimeter setting not received, use Portland Intl altimeter setting and increase all MDA 40 feet; increase S-15 Cat C/D visibility and Circling Cat C visibility ⅛ mile, Cat D visibility ¼ mile. Helicopter visibility reduction below 1 SM NA. Night Landing Rwy 15 NA.

MISSED APPROACH: Climbing left turn to 3000 on heading 020° and on BTG VORTAC R-293 to EXRAY/I-FKO 12.5 DME and hold.

| ASOS | PORTLAND APP CON | CLNC DEL | UNICOM |
|---|---|---|---|
| 135.875 | 124.35 299.2 | 121.65 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-15 | 660-1 602 (700-1) | | 660-1¾ | 602 (700-1¾) |
| C CIRCLING | 660-1 602 (700-1) | | 660-1¾ 602 (700-1¾) | 860-2½ 802 (900-2½) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

SCAPPOOSE, OREGON | AL-6314 (FAA) | 20310

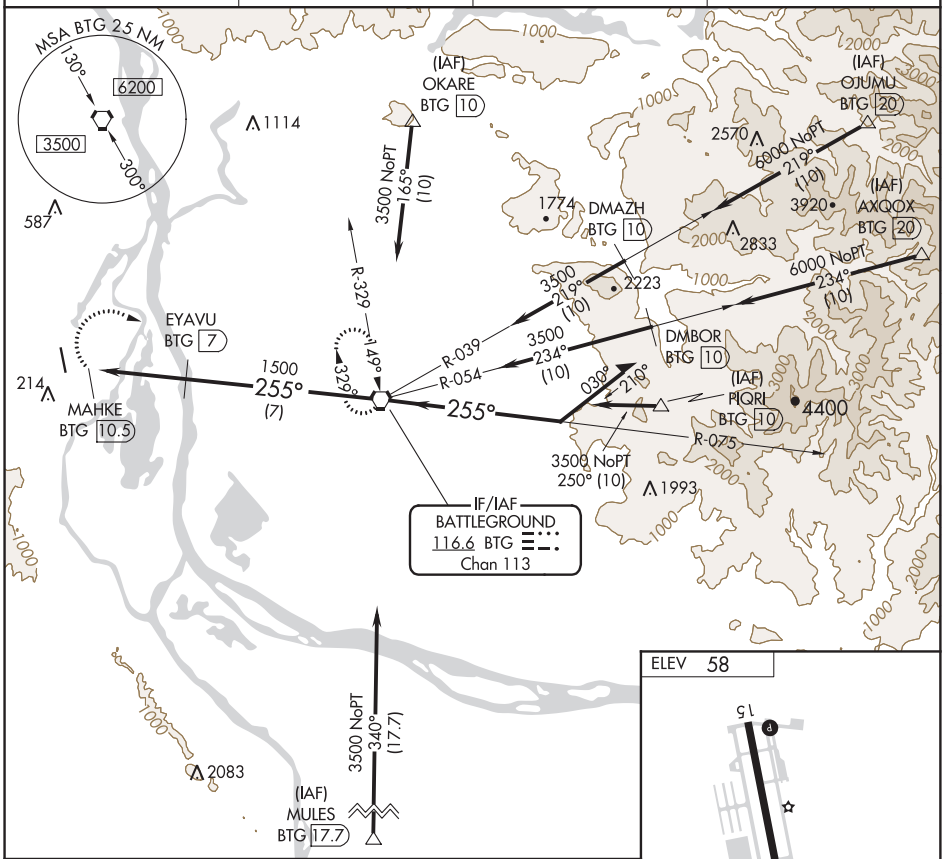
| VORTAC BTG | APP CRS | Rwy ldg | N/A |
|---|---|---|---|
| 116.6 | 255° | TDZE | N/A |
| Chan 113 | | Apt Elev | 58 |

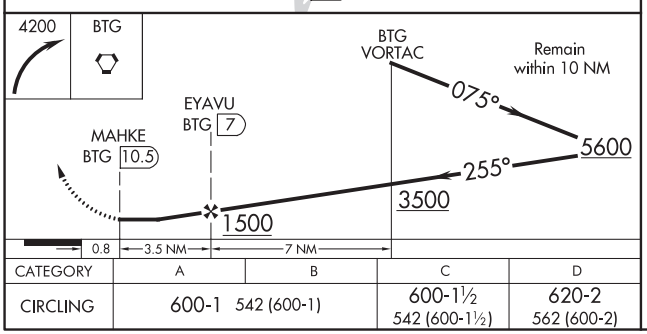
# VOR/DME-A
## SCAPPOOSE INDUSTRIAL AIRPARK (SPB)

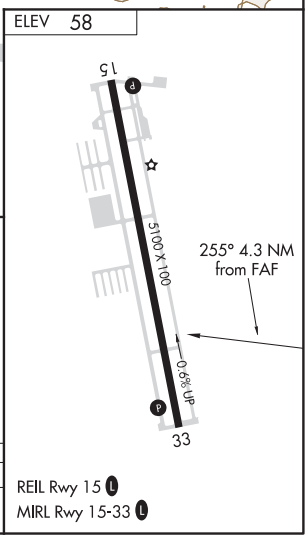
Circling NA west of Rwy 15-33. Helicopter visibility reduction below 1 SM NA. When local altimeter setting not received, use Portland Intl altimeter setting and increase all MDA 40 ft. Circling to Rwy 15 NA at night.

MISSED APPROACH: Climbing right turn to 4200 direct BTG VORTAC and hold, continue climb-in-hold to 4200.

| ASOS | PORTLAND APP CON | CLNC DEL | UNICOM |
|---|---|---|---|
| 135.875 | 124.35 299.2 | 121.65 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 600-1 542 (600-1) | | 600-1½ 542 (600-1½) | 620-2 562 (600-2) |

REIL Rwy 15 L
MIRL Rwy 15-33 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

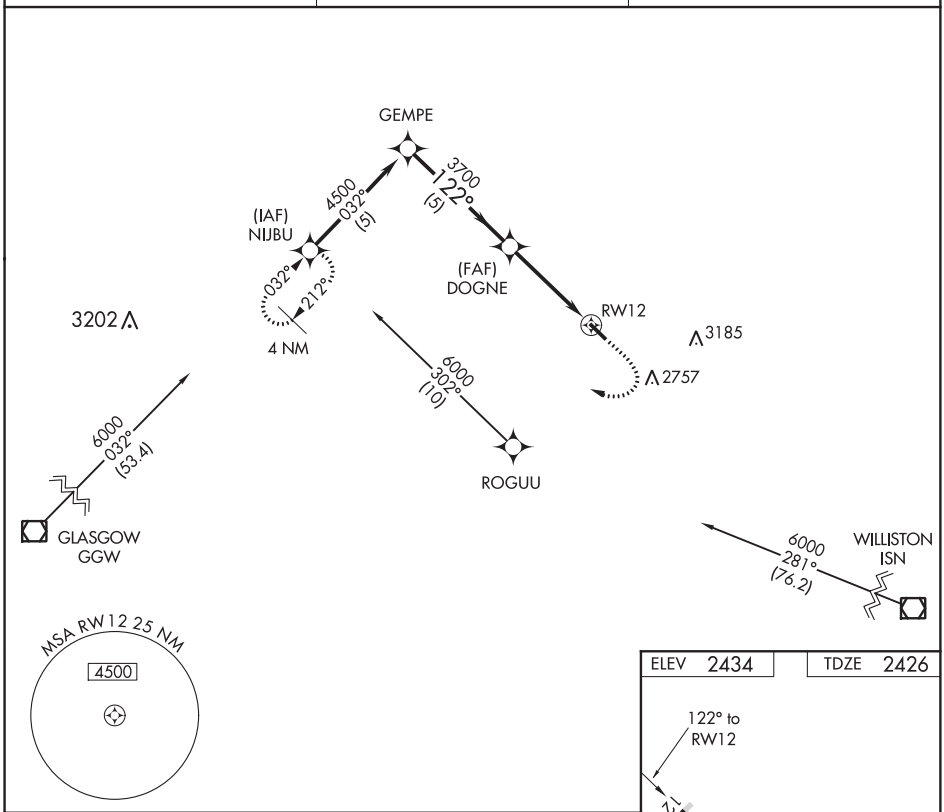
| APP CRS | Rwy ldg | 4020 |
|---|---|---|
| 122° | TDZE | 2426 |
| | Apt Elev | 2434 |

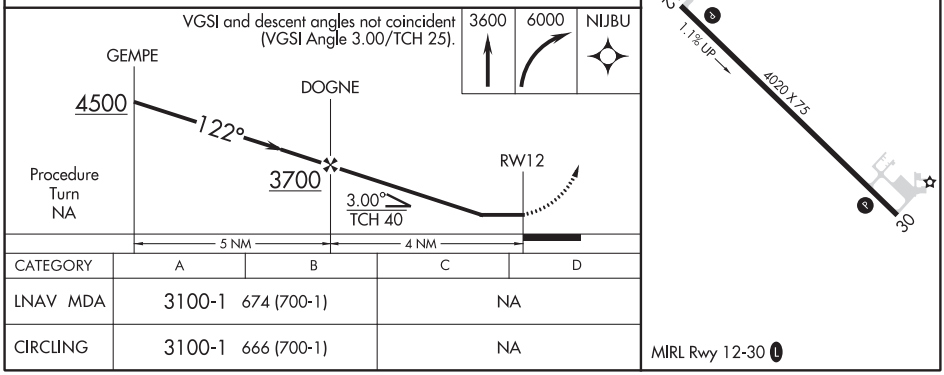
# RNAV (GPS) RWY 12
SCOBEY (9S2)

DME/DME RNP-0.3 NA. Use Wolf Point altimeter setting; when not received procedure not authorized. Helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 3600 then climbing right turn to 6000 direct NIJBU WP and hold.

| OLF ASOS | SALT LAKE CITY CENTER | AUNICOM |
|---|---|---|
| 118.325 | 126.85 305.2 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 3100-1 674 (700-1) | | NA | |
| CIRCLING | 3100-1 666 (700-1) | | NA | |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC/DME I-BFI | APP CRS | Rwy ldg | 9120 |
|---|---|---|---|
| 110.9 | 135° | TDZE | 18 |
| Chan 46 | | Apt Elev | 22 |

# ILS or LOC RWY 14R

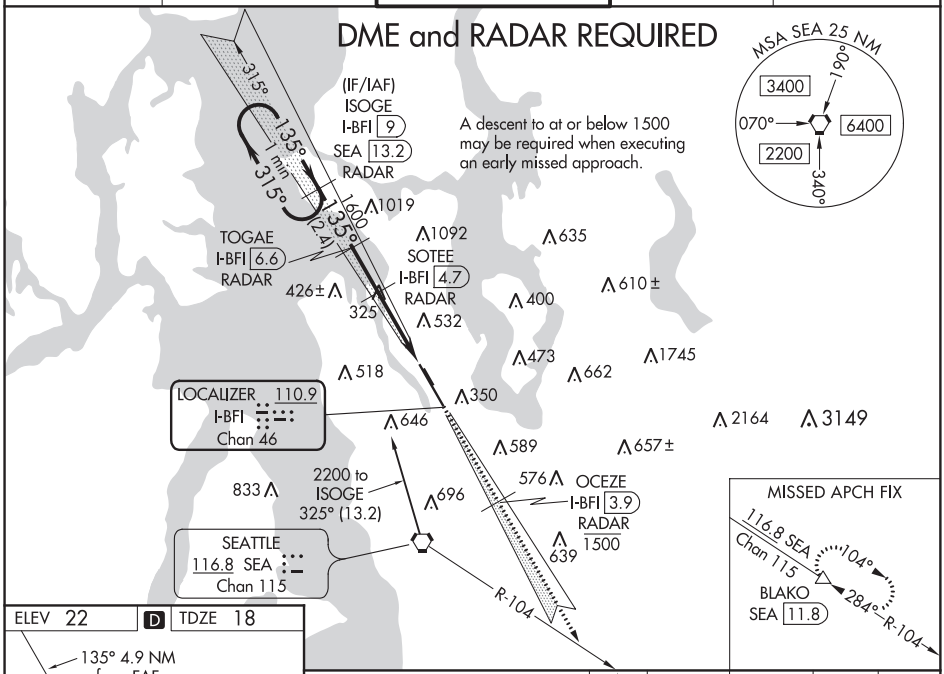
## BOEING FIELD/KING COUNTY INTL (BFI)

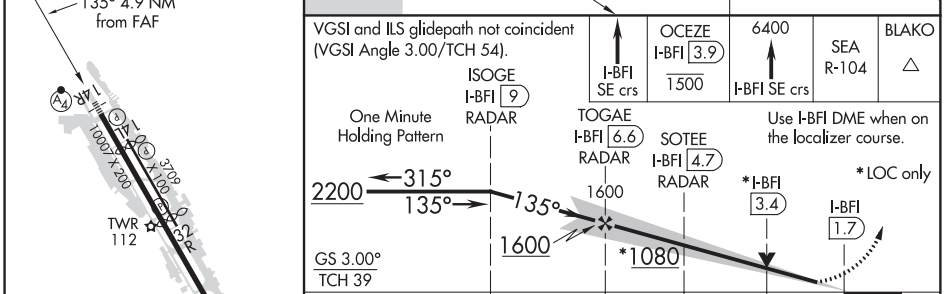
T A Circling NA for C and D northeast of Rwy 14L-32R. For inop ALS, increase S-LOC 14R visibility Cat A/B to RVR 5500, increase Cat C/D visibility to 1⅝ SM. DME and RADAR required. Rwy 14R helicopter visibility below ¾ SM NA. Circling Rwy 32R NA at night. S-ILS 14R # minimums NA when VGSI inop.

MALSF

MISSED APPROACH: Climb on I-BFI SE course to cross OCEZE/I-BFI 3.9 DME/RADAR at or below 1500, then climb to 6400 on I-BFI SE course and SEA R-104 to BLAKO INT/SEA 11.8 DME and hold, continue climb-in-hold to 6400.

| ATIS | SEATTLE APP CON | BOEING TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 127.75 | 119.2 284.7 | 120.6 257.8 | 121.9 | 132.4 |







| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 14R# | 308/40 290 (300-¾) | | | |
| S-LOC 14R | 580/40 562 (600-¾) | | 580-1⅜ 562 (600-1⅜) | |
| C CIRCLING | 760-1 738 (800-1) | 880-1¼ 858 (900-1¼) | 960-2¾ 938 (1000-2¾) | 960-3 938 (1000-3) |

MIRL Rwy 14L-32R
HIRL Rwy 14R-32L
REIL Rwys 14L, 32L and 32R

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC/DME I-CHJ 110.9 Chan 46 | APP CRS 315° | Rwy ldg 9120 TDZE 21 Apt Elev 22 |
|---|---|---|

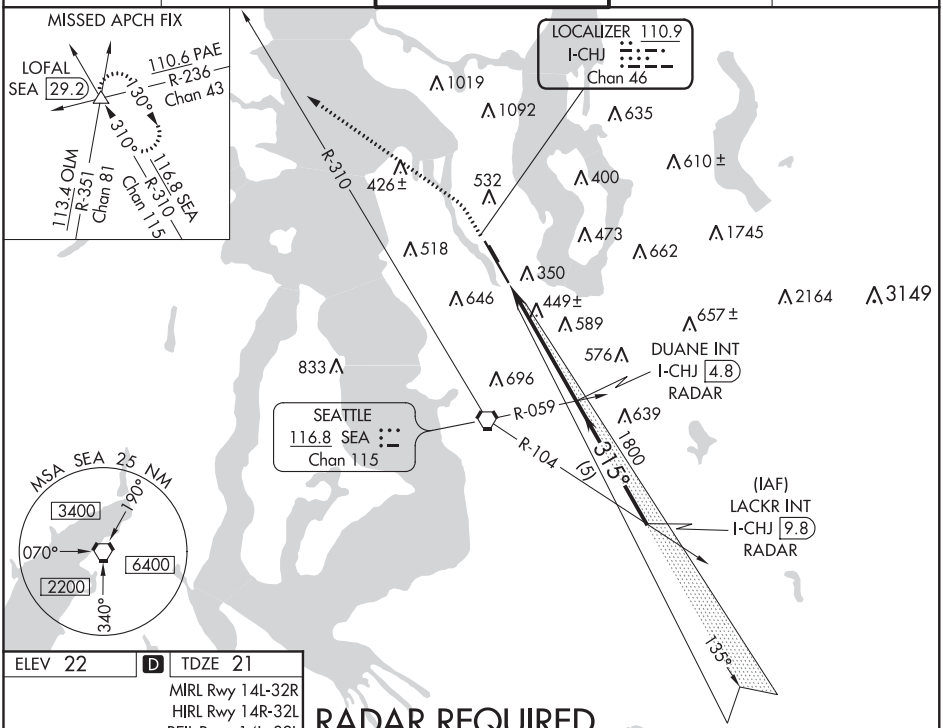
# ILS or LOC RWY 32L

## BOEING FIELD/KING COUNTY INTL (BFI)

Helicopter visibility reduction below ¾ SM NA.

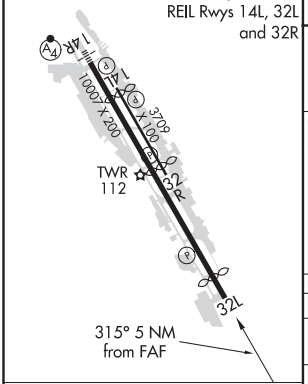
MISSED APPROACH: Climb to 700 then climbing left turn to 6000 on heading 290° and SEA R-310 to LOFAL INT/SEA 29.2 DME and hold, continue climb-in-hold to 6000.

| ATIS | SEATTLE APP CON | BOEING TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 127.75 | 119.2 284.7 | 120.6 257.8 | 121.9 | 132.4 |




| ELEV 22 | D | TDZE 21 |
|---|---|---|

MIRL Rwy 14L-32R
HIRL Rwy 14R-32L
REIL Rwys 14L, 32L and 32R




| FAF to MAP 5 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 5:00 | 3:20 | 2:30 | 2:00 | 1:40 |

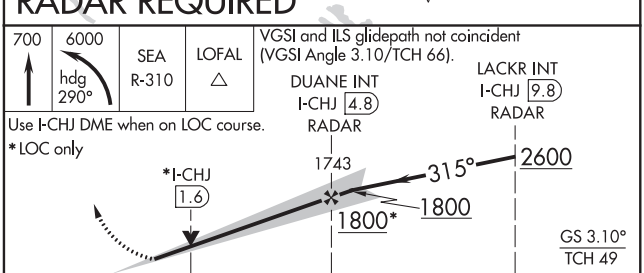
## RADAR REQUIRED

| 700 | 6000 hdg 290° | SEA R-310 | LOFAL △ |
|---|---|---|---|

VGSI and ILS glidepath not coincident (VGSI Angle 3.10/TCH 66).

Use I-CHJ DME when on LOC course.

* LOC only




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 32L | 428-1½ 407 (500-1½) | | | |
| S-LOC 32L | 700-1 679 (700-1) | | 700-2 679 (700-2) | 700-2¼ 679 (700-2¼) |
| C CIRCLING | 780-1 758 (800-1) | 880-1¼ 858 (900-1¼) | 960-2¾ 938 (1000-2¾) | 960-3 938 (1000-3) |


NW-1, 05 NOV 2020 to 31 DEC 2020

SEATTLE, WASHINGTON | AL-384 (FAA) | 19283

| APP CRS | Rwy ldg | 9120 |
|---|---|---|
| 135° | TDZE | 18 |
| | Apt Elev | 22 |

# RNAV (RNP) Z RWY 14R

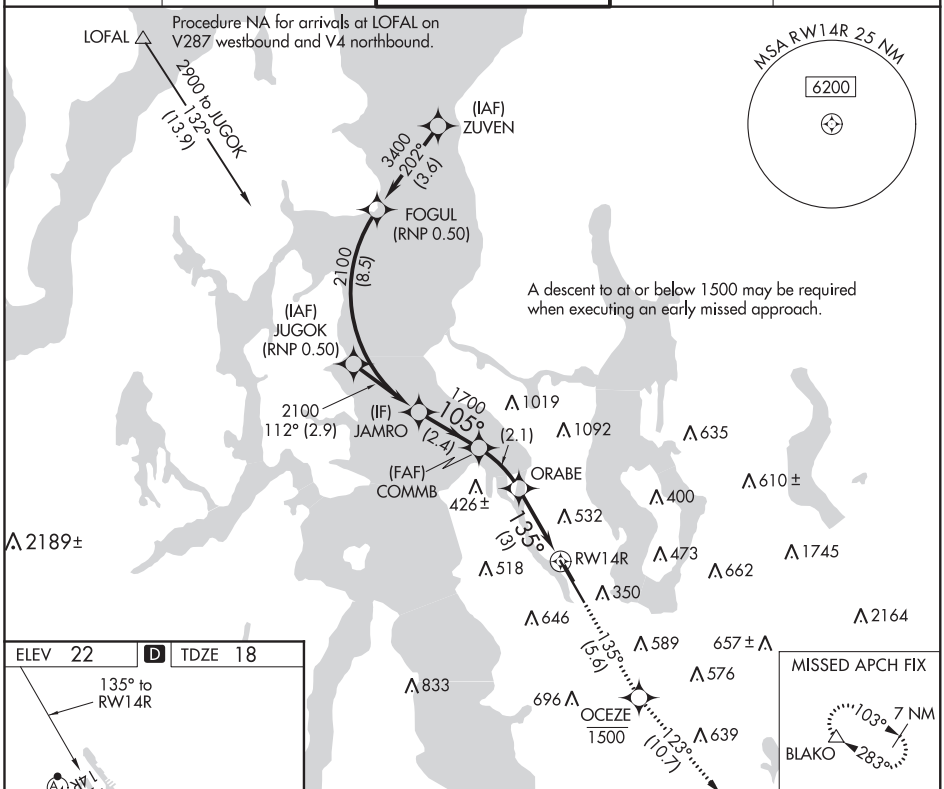
## BOEING FIELD/KING COUNTY INTL (BFI)

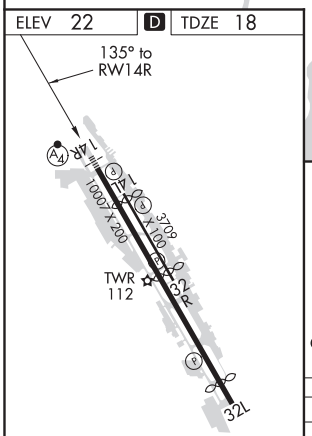
GPS and RF required. Inop table does not apply to RNP 0.30 DA. For inop MALSF, increase RNP 0.15 DA Cat D visibility to 1¾ mile. For uncompensated Baro-VNAV systems, procedure NA below -6°C (22°F) or above 54°C (130°F).

MALSF

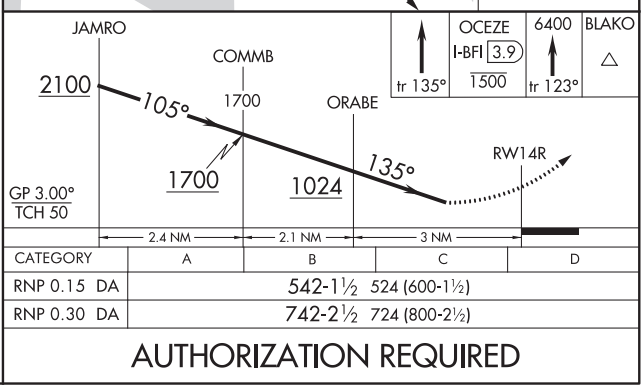
MISSED APPROACH: Climb on track 135° to cross OCEZE at or below 1500 then climb to 6400 on track 123° to BLAKO and hold, continue climb-in-hold to 6400.

| ATIS | SEATTLE APP CON | BOEING TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 127.75 | 119.2 284.7 | 120.6 257.8 | 121.9 | 132.4 |




MIRL Rwy 14L-32R
HIRL Rwy 14R-32L
REIL Rwys 14L, 32L and 32R




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.15 DA | 542-1½ 524 (600-1½) | | | |
| RNP 0.30 DA | 742-2½ 724 (800-2½) | | | |

**AUTHORIZATION REQUIRED**

SEATTLE, WASHINGTON
Amdt 1 14SEP17

47°32′N-122°18′W

BOEING FIELD/KING COUNTY INTL (BFI)
RNAV (RNP) Z RWY 14R


NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 9120 |
|---|---|---|
| 135° | TDZE | 18 |
| | Apt Elev | 22 |

# RNAV (GPS) Y RWY 14R

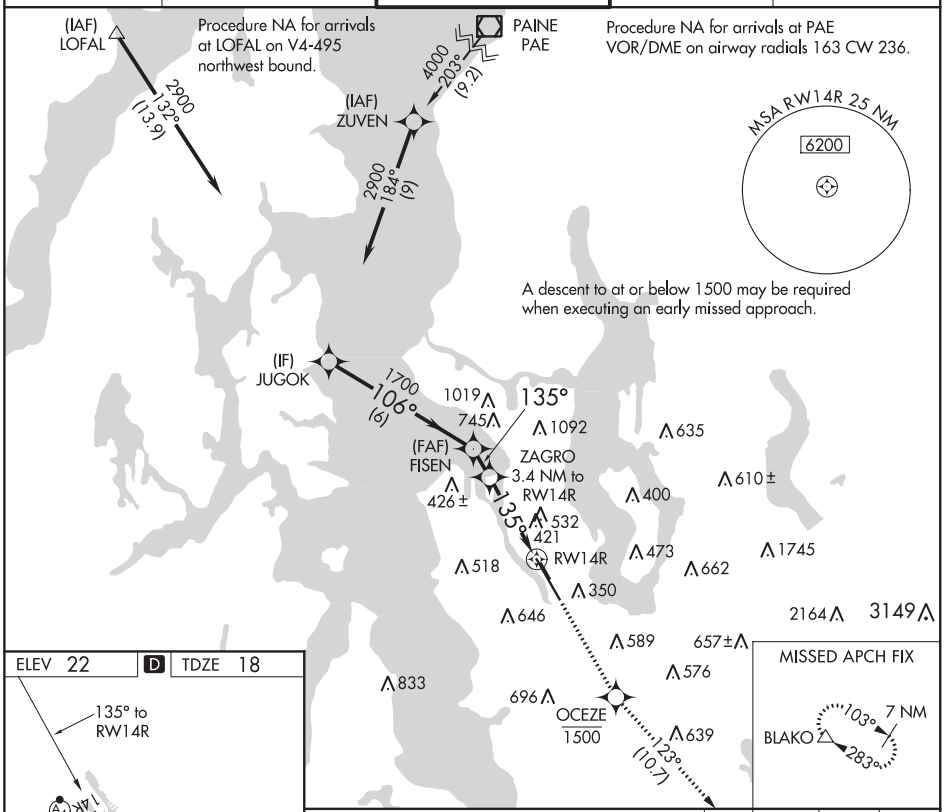
## BOEING FIELD/KING COUNTY INTL (BFI)

Circling NA for Cats C and D northeast of Rwy 14L-32R. DME/DME RNP -0.3 NA. For inop ALS, increase LNAV Cat C and D visibility to 1⅞ SM. Rwy 14R helicopter visibility below RVR 4000 NA. Circling Rwy 32R NA at night.

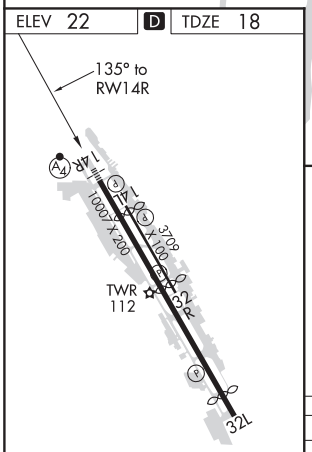
MALSF

MISSED APPROACH: Climb direct OCEZE, cross OCEZE at or below 1500, then climb to 6400 on track 123° to BLAKO and hold, continue climb-in-hold to 6400.

| ATIS | SEATTLE APP CON | BOEING TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 127.75 | 119.2 284.7 | 120.6 257.8 | 121.9 | 132.4 |




ELEV 22 D TDZE 18




MIRL Rwy 14L-32R
HIRL Rwy 14R-32L
REIL Rwys 14L, 32L and 32R

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 680/40 662 (700-¾) | | 680-1¾ 662 (700-1¾) | |
| C CIRCLING | 760-1 738 (800-1) | 880-1¼ 858 (900-1¼) | 960-2¾ 938 (1000-2¾) | 960-3 938 (1000-3) |

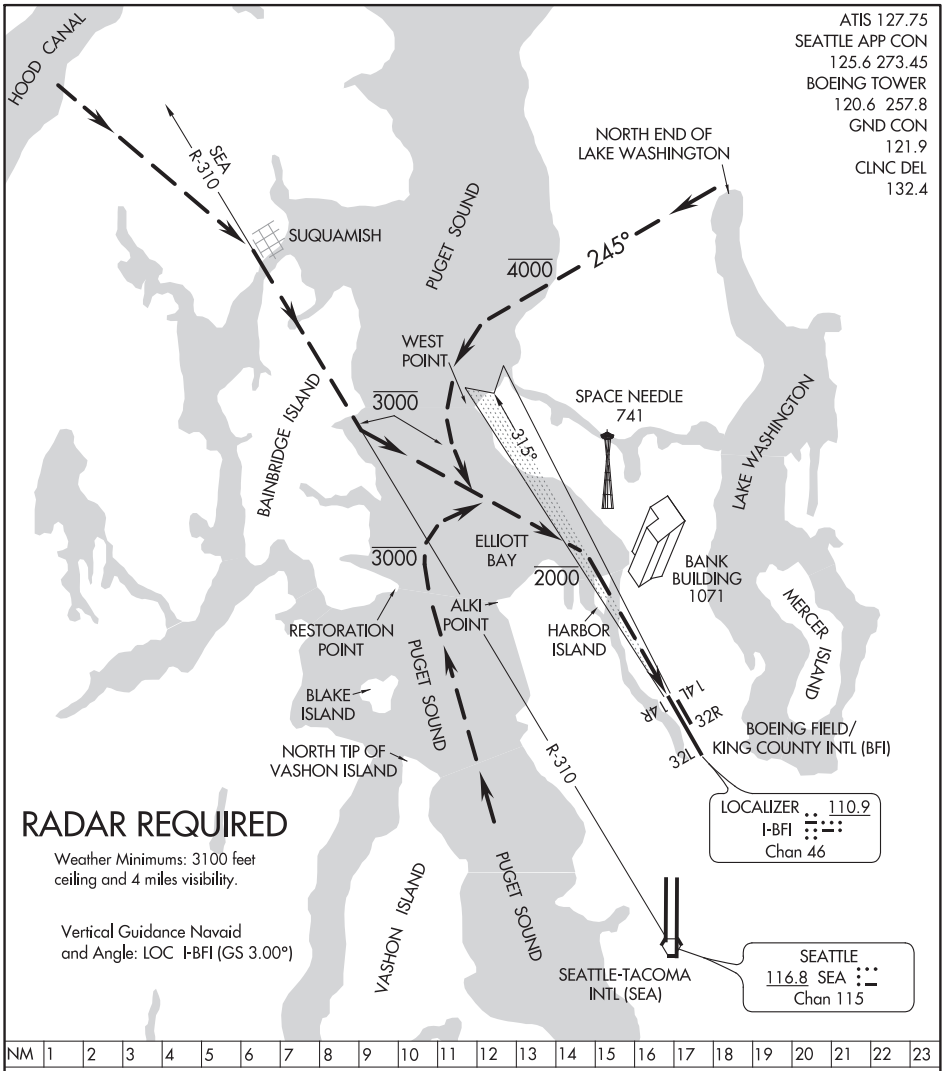

NW-1, 05 NOV 2020 to 31 DEC 2020

Amdt 4 18144

# HARBOR VISUAL RWY 14R

AL-384 (FAA)

BOEING FIELD/KING COUNTY INTL (BFI)
SEATTLE, WASHINGTON

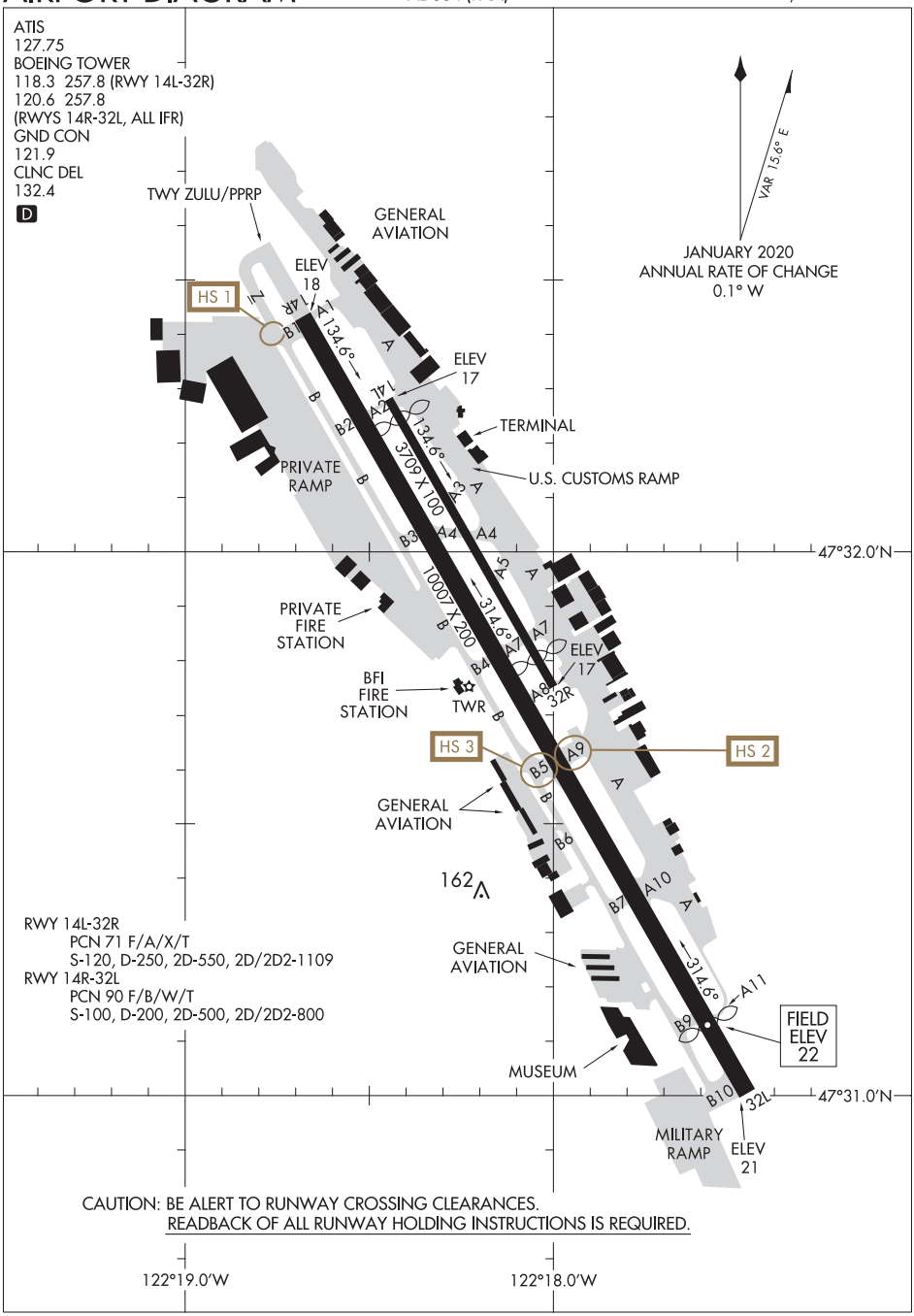



## HARBOR VISUAL APPROACH RWY 14R

Expect radar vectors from the Northwest, over the Hood Canal on the SEA R-310; from the North and Northeast, to the north end of Lake Washington; from the Southwest, South and Southeast, to Puget Sound abeam the north tip of Vashon Island. When cleared for the Harbor Visual Approach Runway 14R, proceed via the depicted routes over the middle of Puget Sound and Elliott Bay to Harbor Island and complete a straight in visual approach to Boeing Field/King County Intl Airport (BFI). Adherence to the recommended altitudes is strongly recommended to reduce the incidence of TCAS alarms. Visual approaches to Seattle-Tacoma Intl Airport (SEA) may be conducted simultaneously through Elliott Bay. It is essential that all aircraft remain in the center of Elliot Bay for noise abatement.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020



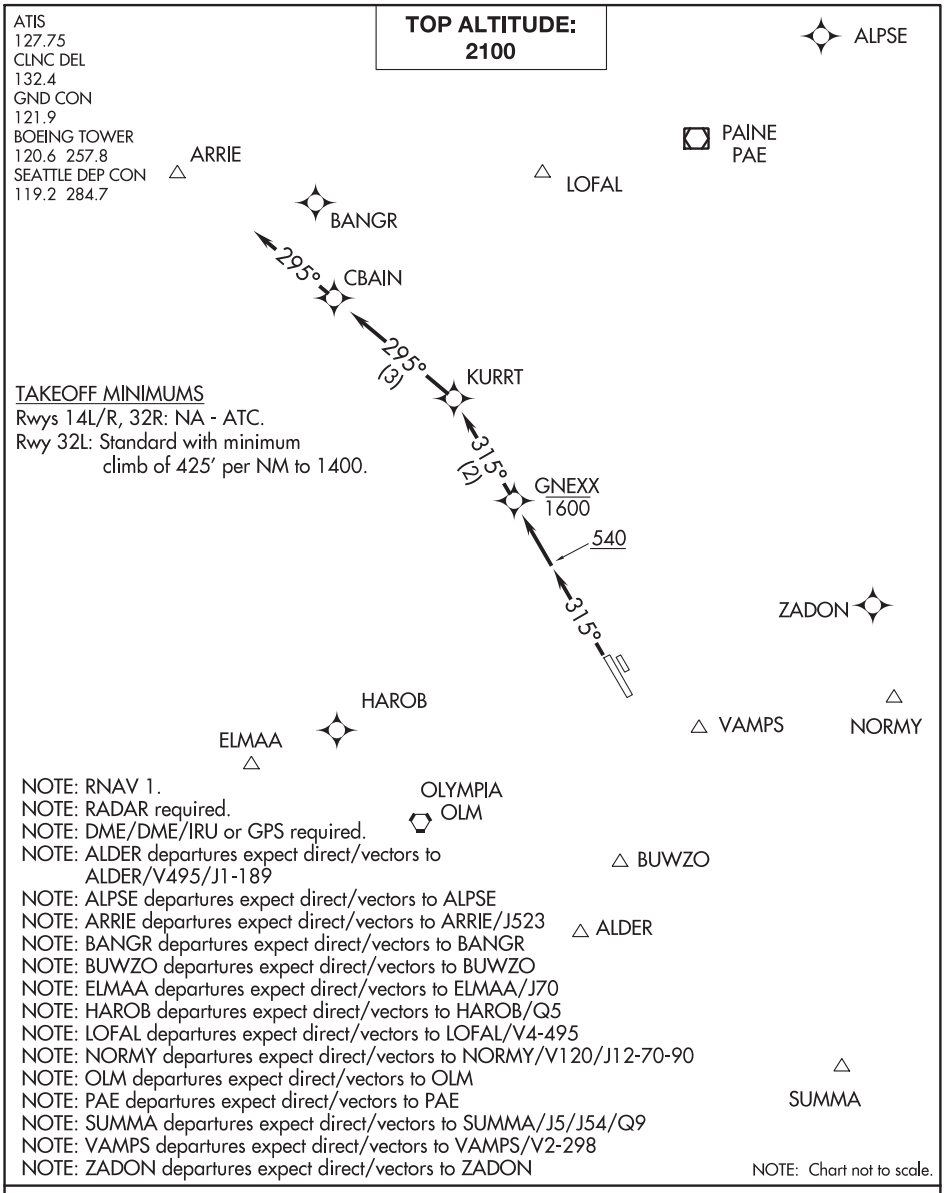

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

(CBAIN1.CBAIN) 17285 AL-384 (FAA)

# CBAIN ONE DEPARTURE (RNAV)

BOEING FIELD/KING COUNTY INTL (BFI)
SEATTLE, WASHINGTON

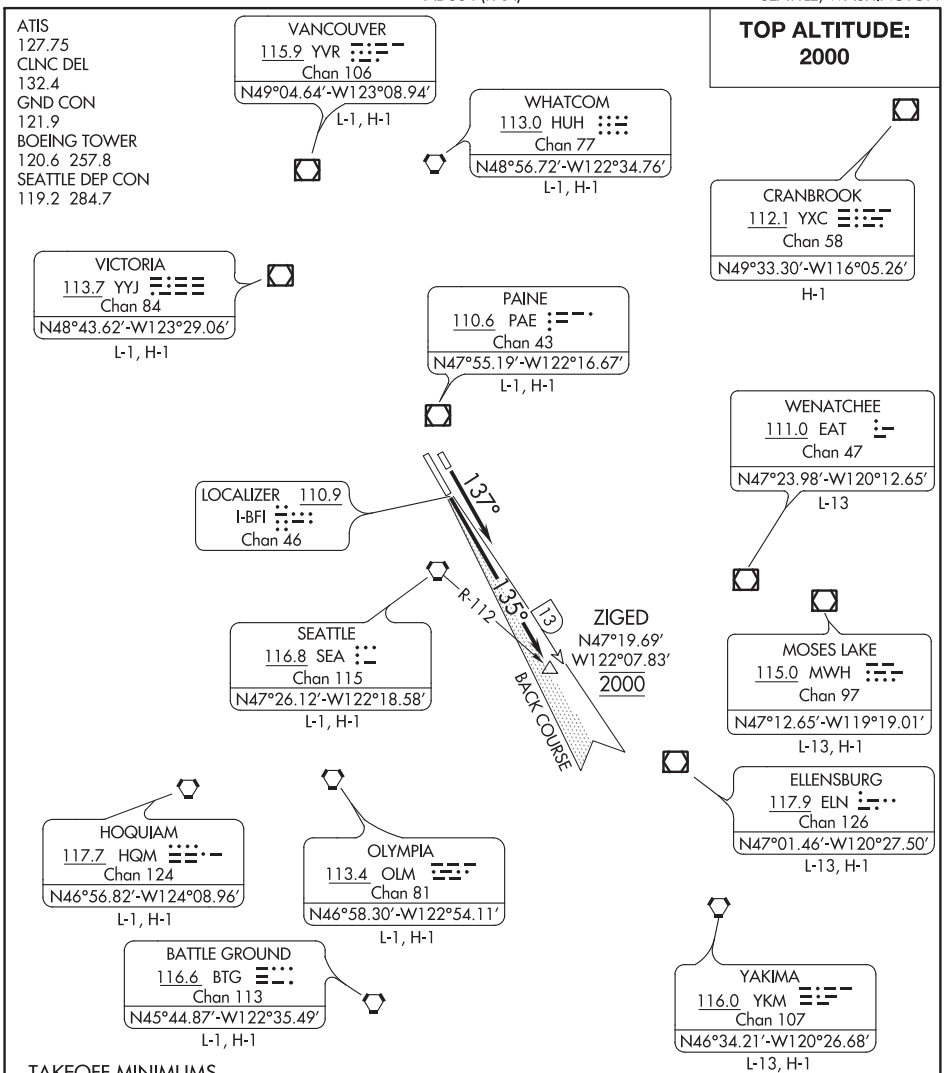



## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 32L: Climb heading 315° to 540, then direct to cross GNEXX at or below 1600, then on track 315° to KURRT, then on track 295° to CBAIN, then on track 295° for vectors to assigned route/fix, maintain 2100 or as assigned by ATC.
Expect clearance to filed altitude/flight level within three minutes after departure.

# KENT EIGHT DEPARTURE

AL-384 (FAA)




TAKEOFF MINIMUMS

Rwys 32L/R: NA-ATC.

Rwy 14L: Standard with minimum climb of 708′ per NM to 500 or 600-3 with minimum climb of 260′ per NM to 700.

Rwy 14R: Standard with minimum climb of 507′ per NM to 700 or 600-3 with minimum climb of 260′ per NM to 700.

NOTE: RADAR required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14L: Climb heading 137° and I-BFI SE course to cross ZIGED INT/I-BFI 13 DME at 2000 or ATC assigned altitude for RADAR vectors to assigned route/fix. Expect clearance to filed altitude within 3 minutes after departure.

TAKEOFF RUNWAY 14R: Climb heading 135° and I-BFI SE course to cross ZIGED INT/I-BFI 13 DME at 2000 or ATC assigned altitude for RADAR vectors to assigned route/fix. Expect clearance to filed altitude within 3 minutes after departure.

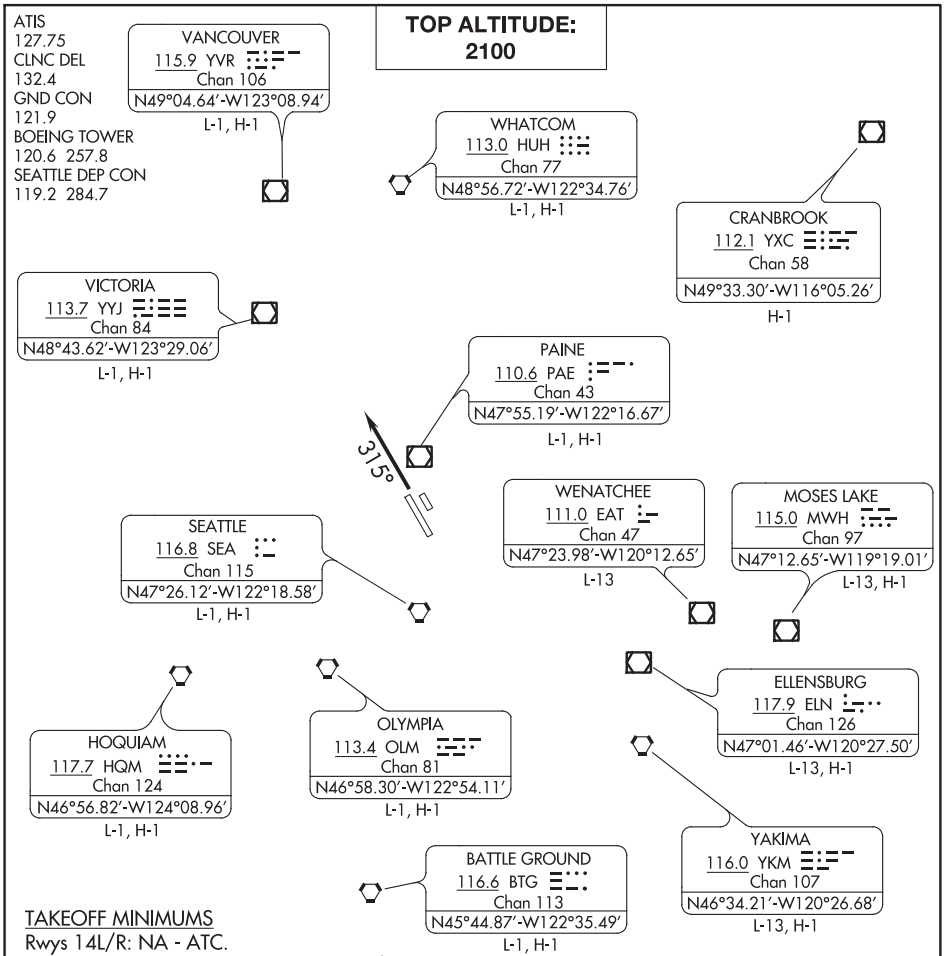


NW-1, 05 NOV 2020 to 31 DEC 2020

# NEEDLE ONE DEPARTURE

AL-384 (FAA)

BOEING FIELD/KING COUNTY INTL (BFI)
SEATTLE, WASHINGTON




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

TAKEOFF MINIMUMS

Rwys 14L/R: NA - ATC.

Rwy 32L: Standard with minimum climb of 425′ per NM to 1400 or 400-1⅞ with minimum climb of 240′ per NM to 1400.

Rwy 32R: Standard with minimum climb of 345′ per NM to 1400 or 400-2 with minimum climb of 240′ per NM to 1400.

NOTE: Rwys 32L/R, no right turns authorized until leaving 1400′.

NOTE: RADAR required.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

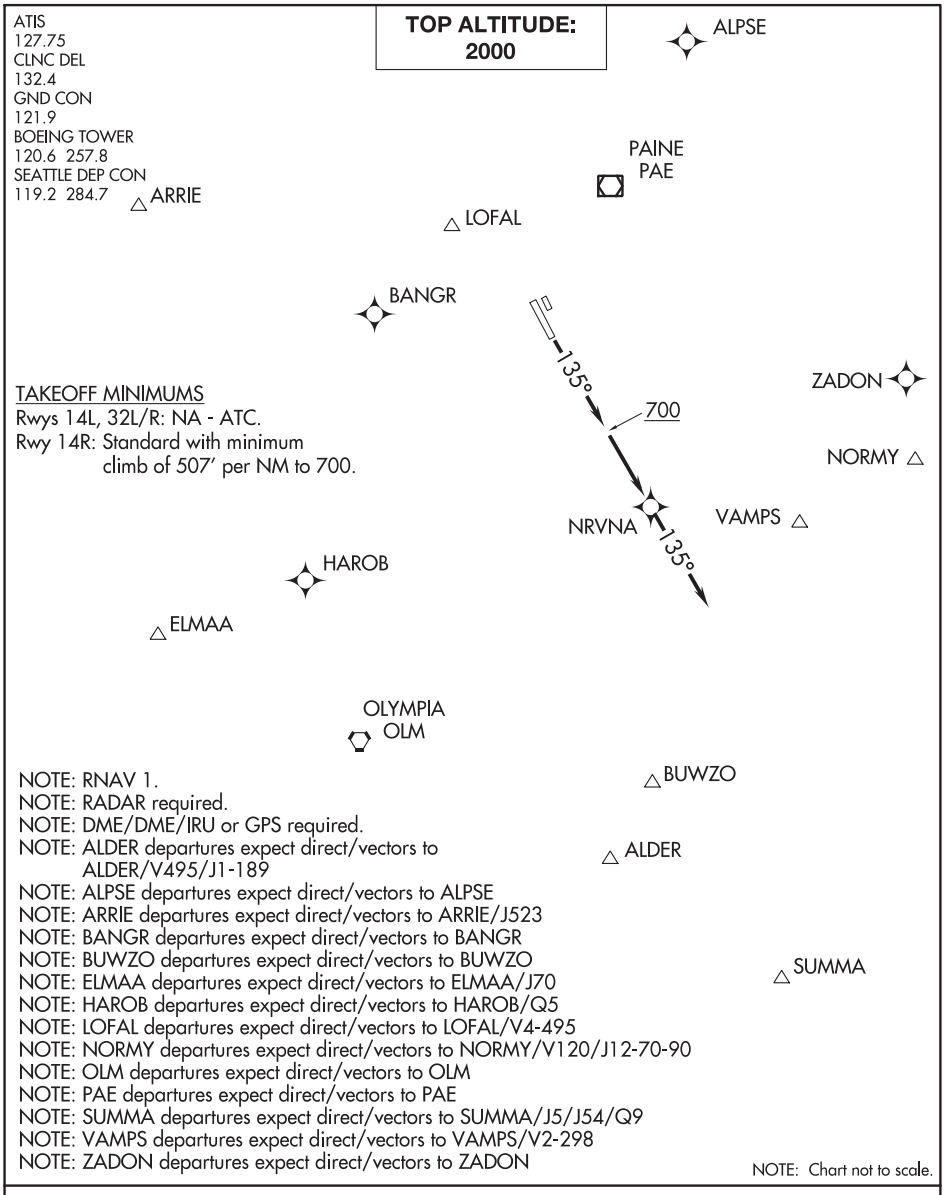
TAKEOFF RUNWAYS 32L/R: Climb heading 315°, maintain 2100 or ATC assigned altitude, for RADAR vectors to assigned route/fix, expect clearance to filed altitude within 3 minutes after departure.

(NRVNA1.NRVNA) 17285

AL-384 (FAA)

# NRVNA ONE DEPARTURE (RNAV)

BOEING FIELD/KING COUNTY INTL (BFI)
SEATTLE, WASHINGTON




TAKEOFF MINIMUMS
Rwys 14L, 32L/R: NA - ATC.
Rwy 14R: Standard with minimum climb of 507′ per NM to 700.

NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: ALDER departures expect direct/vectors to ALDER/V495/J1-189
NOTE: ALPSE departures expect direct/vectors to ALPSE
NOTE: ARRIE departures expect direct/vectors to ARRIE/J523
NOTE: BANGR departures expect direct/vectors to BANGR
NOTE: BUWZO departures expect direct/vectors to BUWZO
NOTE: ELMAA departures expect direct/vectors to ELMAA/J70
NOTE: HAROB departures expect direct/vectors to HAROB/Q5
NOTE: LOFAL departures expect direct/vectors to LOFAL/V4-495
NOTE: NORMY departures expect direct/vectors to NORMY/V120/J12-70-90
NOTE: OLM departures expect direct/vectors to OLM
NOTE: PAE departures expect direct/vectors to PAE
NOTE: SUMMA departures expect direct/vectors to SUMMA/J5/J54/Q9
NOTE: VAMPS departures expect direct/vectors to VAMPS/V2-298
NOTE: ZADON departures expect direct/vectors to ZADON

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 14R: Climb heading 135° to 700, then direct NRVNA, then on track 135° for RADAR vectors to assigned route/fix, maintain 2000 or as assigned by ATC. Expect clearance to filed altitude/flight level within three minutes after departure.


NW-1, 05 NOV 2020 to 31 DEC 2020

NRVNA ONE DEPARTURE (RNAV)
(NRVNA1.NRVNA) 12OCT17

SEATTLE, WASHINGTON
BOEING FIELD/KING COUNTY INTL (BFI)

| LOC/DME I-SZI 111.7 Chan 54 | APP CRS 164° | Rwy ldg 16C 9426 16L 11901 TDZE 16C 430 16L 432 Apt Elev 432 432 |
|---|---|---|

# ILS or LOC RWY 16C

## SEATTLE-TACOMA INTL (SEA)

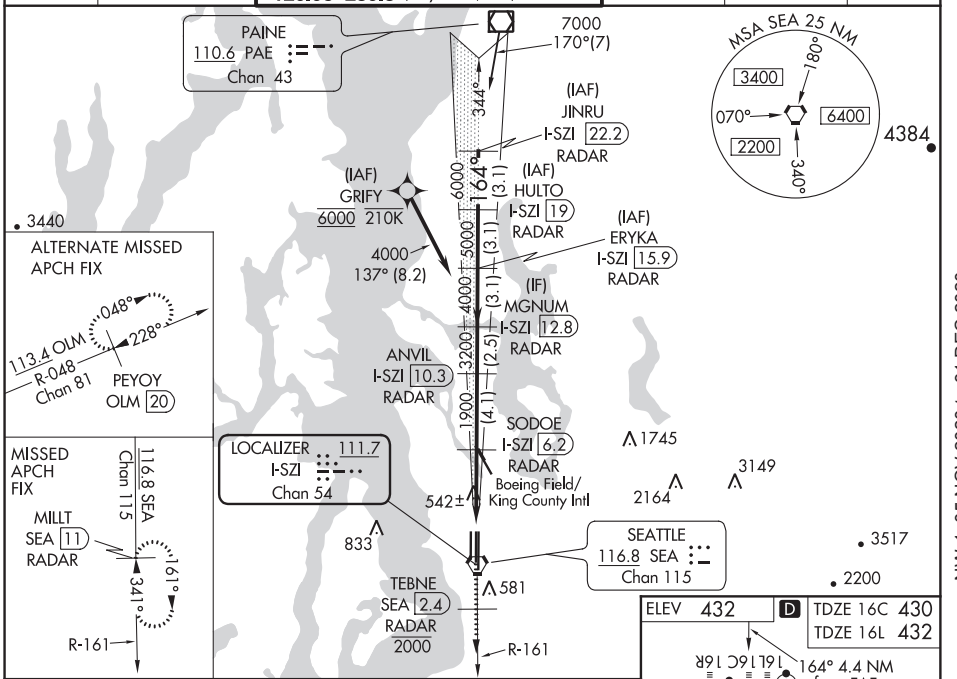
DME or RADAR required. From GRIFY:RNAV 1-GPS required.

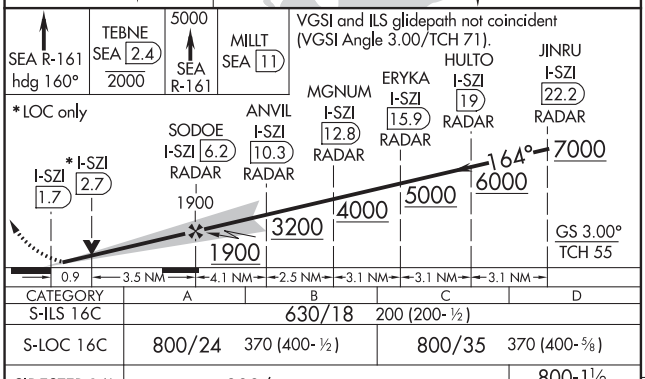
T Inop table does not apply to Sidstep 16L Cats A/B. Simultaneous approach authorized with Rwy 16R. Simultaneous operations require use of vertical guidance, maintain last assigned altitude until established on glideslope. For inop ALS, increase S-LOC 16C Cat C, D visibility to RVR 5500. See additional requirements on adjacent information page.

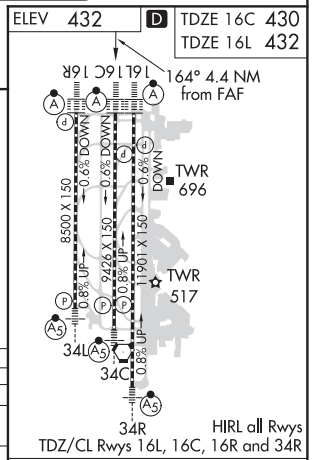
ALSF-2 Rwy 16C/L

MISSED APPROACH: Climb on heading 160° and SEA VORTAC R-161 to cross TEBNE/SEA 2.4 DME/RADAR at or below 2000, then climb to 5000 on SEA VORTAC R-161 to MILLT/SEA 11 DME/RADAR and hold, continue climb-in-hold to 5000.

| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R) 120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 16C | 630/18 200 (200-½) | | | |
| S-LOC 16C | 800/24 370 (400-½) | | 800/35 370 (400-⅝) | |
| SIDESTEP 16L | 800/55 368 (400-1) | | | 800-1½ 368 (400-1½) |
| C CIRCLING | 1000-1 568 (600-1) | | 1000-1½ 568 (600-1½) | 1000-2 568 (600-2) |

| FAF to MAP 4.4 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 4:24 | 2:56 | 2:12 | 1:46 | 1:28 |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

## SEATTLE-TACOMA INTL AIRPORT

# ALERT NOTICE

**ATTENTION ALL AIRCRAFT LANDING TO THE SOUTH:**

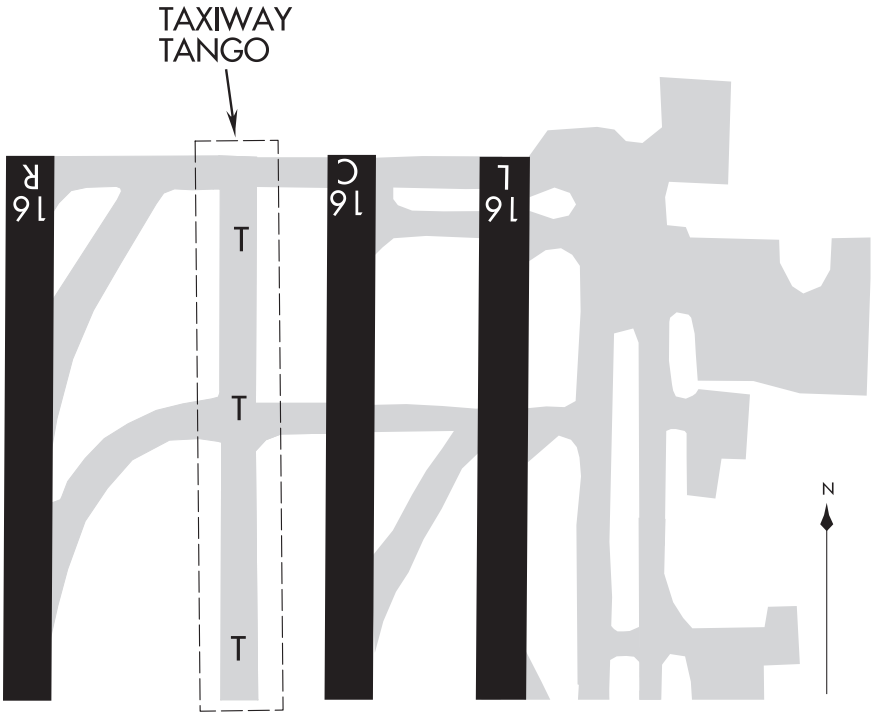
When transitioning from an instrument procedure to a visual approach to Runway 16C, verify you are aligned for the intended landing Runway, not Taxiway Tango. Taxiway Tango is west and parallel to Runway 16C.

**TRANSITION TO VISUAL:**

Taxiway Tango has been mistaken for Runway 16C from the air during certain visibility conditions, i.e., wet runway, low sun angle reflections. Aircrews are advised to be aware of the proximity of the taxiway to Runway 16C and its runway-like appearance while on approach.

**RECOMMENDATION:**

Aircrews should use visual cues, e.g., approach lighting systems, REILs, when available, to confirm alignment with Runway 16C not Taxiway Tango. Additionally, it is recommended when executing a segment of the ILS approach for a visual transition, track the localizer until the runway environment is visually verified.



| LOC/DME I-SNQ 110.3 Chan 40 | APP CRS 164° | Rwy ldg 11901 TDZE 432 Apt Elev 432 |
|---|---|---|

# ILS or LOC RWY 16L
## SEATTLE-TACOMA INTL (SEA)

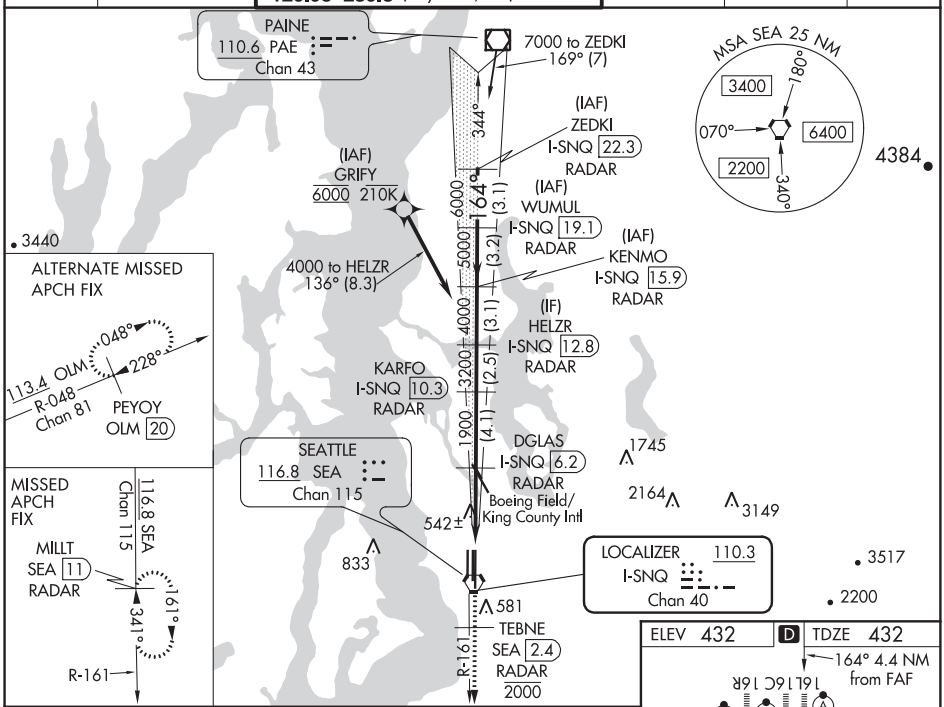
DME or RADAR required. From GRIFY:RNAV 1-GPS required.

T Simultaneous approach authorized with Rwy 16R.

ALSF-2

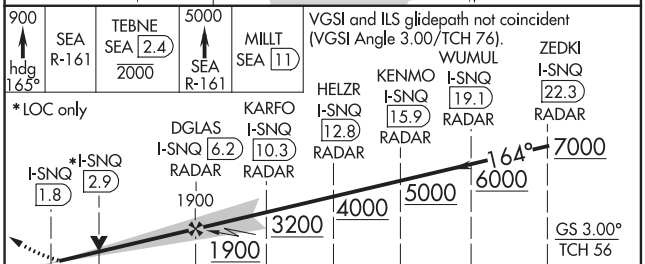
MISSED APPROACH: Climb to 900 on heading 165° then on SEA VORTAC R-161 to cross TEBNE/SEA 2.4 DME/RADAR at or below 2000 then climb to 5000 on SEA VORTAC R-161 to MILLT/SEA 11 DME/RADAR and hold, continue climb-in-hold to 5000.

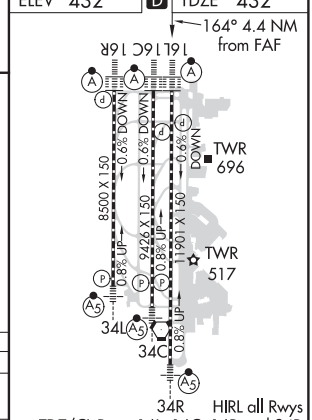
| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R) 120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |




| 900 hdg 165° | SEA R-161 | TEBNE SEA 2.4 2000 | 5000 SEA R-161 | MILLT SEA 11 |
|---|---|---|---|---|

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 76).




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 16L | 697/20 265 (300-½) | 632/18 200 (200-½) | | |
| S-LOC 16L | 880/24 448 (500-½) | | 880/45 448 (500-⅞) | |
| C CIRCLING | 1000-1 568 (600-1) | | 1000-1½ 568 (600-1½) | 1000-2 568 (600-2) |

| FAF to MAP 4.4 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 4:24 | 2:56 | 2:12 | 1:46 | 1:28 |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

SEATTLE, WASHINGTON AL-582 (FAA) 20086

# ILS or LOC RWY 16R
## SEATTLE-TACOMA INTL (SEA)

| LOC/DME I-CJL | APP CRS | Rwy ldg | 8500 |
|---|---|---|---|
| 110.75 | 164° | TDZE | 415 |
| Chan 44 (Y) | | Apt Elev | 432 |

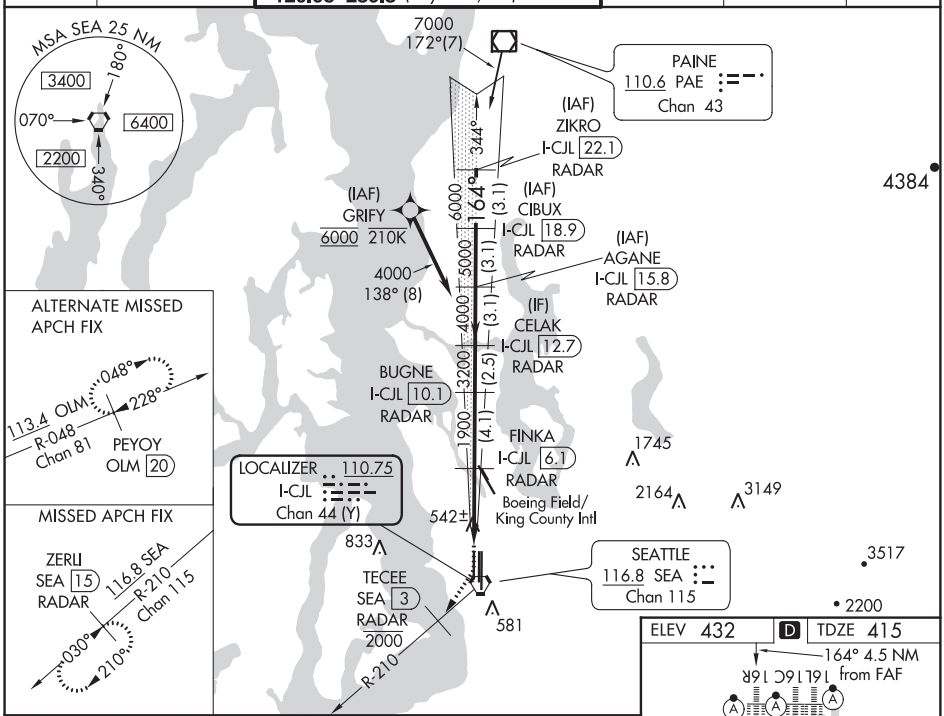
DME or RADAR required. From GRIFY:RNAV 1-GPS required.

T Simultaneous approach authorized with Rwy 16L and 16C. Simultaneous operations require use of vertical guidance, maintain last assigned altitude until established on glideslope.

ALSF-2 (A)

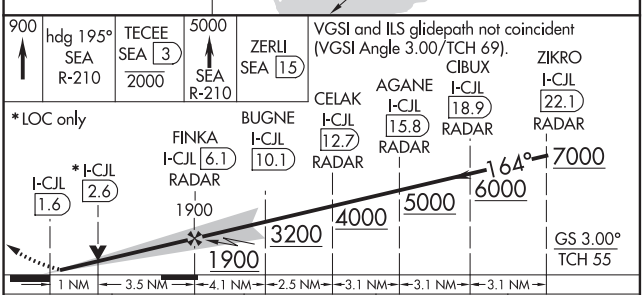
MISSED APPROACH: Climb to 900 then climb on heading 195° and on SEA VORTAC R-210 to cross TECEE/SEA 3 DME/RADAR at or below 2000 then climb to 5000 on SEA VORTAC R-210 to ZERLI/SEA 15 DME/RADAR and hold, continue climb-in-hold to 5000.

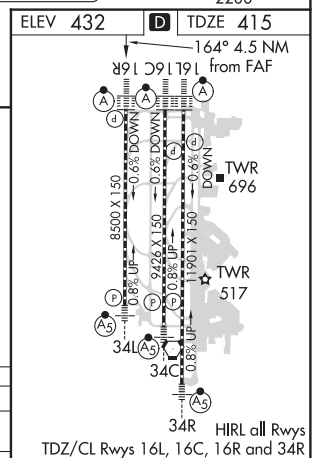
| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R)<br>120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 16R | 615/18 200 (200-½) | | | |
| S-LOC 16R | 800/24 385 (400-½) | | 800/35 385 (400-⅝) | |
| C CIRCLING | 1000-1 568 (600-1) | | 1000-1½ 568 (600-1½) | 1000-2 568 (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 |

SEATTLE, WASHINGTON
Amdt 5 28FEB19

47°27′N-122°19′W

SEATTLE-TACOMA INTL (SEA)
ILS or LOC RWY 16R

# ILS or LOC RWY 34C
## SEATTLE-TACOMA INTL (SEA)

| LOC/DME I-TUC | APP CRS | | 34C | 34R |
|---|---|---|---|---|
| 111.7 | 344° | Rwy ldg | 9426 | 11901 |
| Chan 54 | | TDZE | 387 | 372 |
| | | Apt Elev | 432 | 432 |

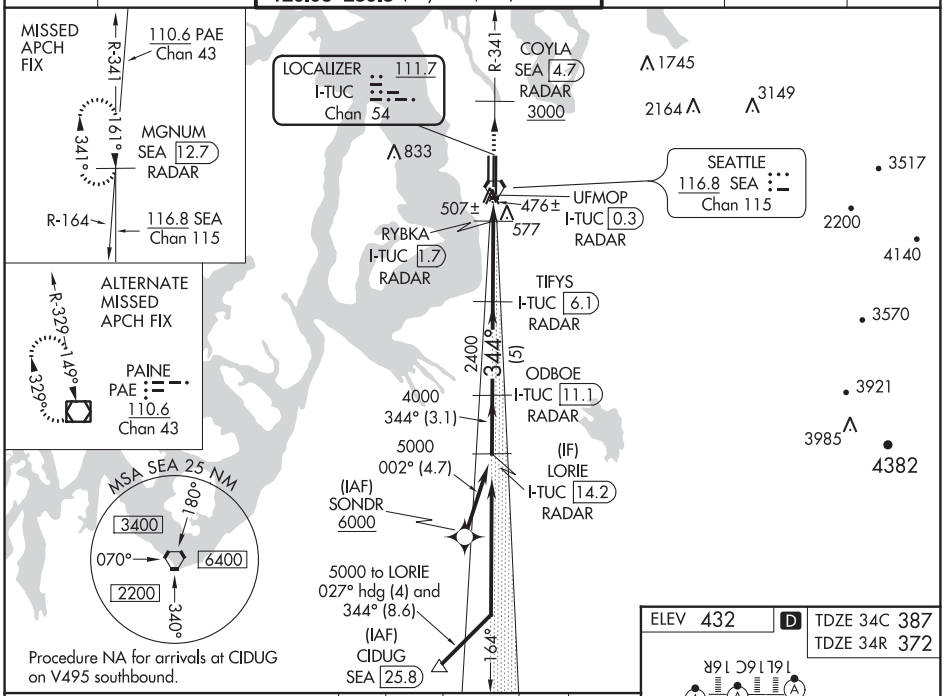
DME or RADAR required.
From SONDR: RNAV 1-GPS required.

Inop table does not apply to ALS Rwy 34R.
Simultaneous approach authorized with Rwy 34L.

MALSR Rwy 34C/R

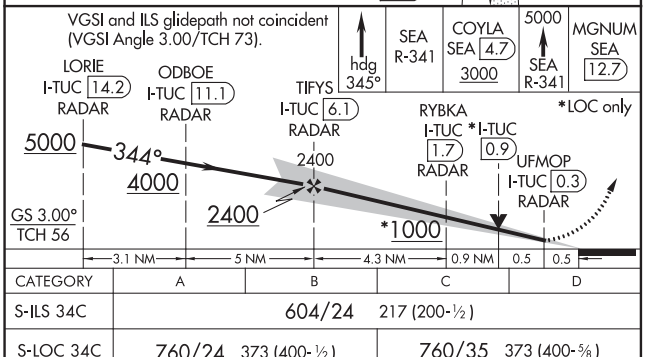
MISSED APPROACH: Climb on heading 345° and outbound on SEA VORTAC R-341 to cross COYLA/SEA 4.7 DME/RADAR at or above 3000 then climb to 5000 on SEA VORTAC R-341 to MGNUM/SEA 12.7 DME/RADAR and hold, continue climb-in-hold to 5000.

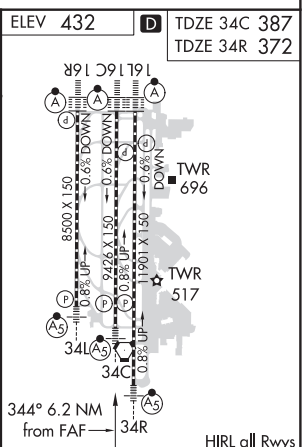
| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R)<br>120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |




Procedure NA for arrivals at CIDUG on V495 southbound.

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 73).




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 34C | 604/24 | 217 (200-½) | | |
| S-LOC 34C | 760/24 373 (400-½) | | 760/35 373 (400-⅝) | |
| SIDESTEP 34R | 760/50 388 (400-1) | | 760/60 388 (400-1¼) | |
| CIRCLING | 1000-1 568 (600-1) | | 1000-1½ 568 (600-1½) | 1000-2 568 (600-2) |

| FAF to MAP 5.7 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 5:42 | 3:48 | 2:51 | 2:17 | 1:54 |


NW-1, 05 NOV 2020 to 31 DEC 2020

SEATTLE, WASHINGTON AL-582 (FAA) 20086

# ILS or LOC RWY 34L
## SEATTLE-TACOMA INTL (SEA)

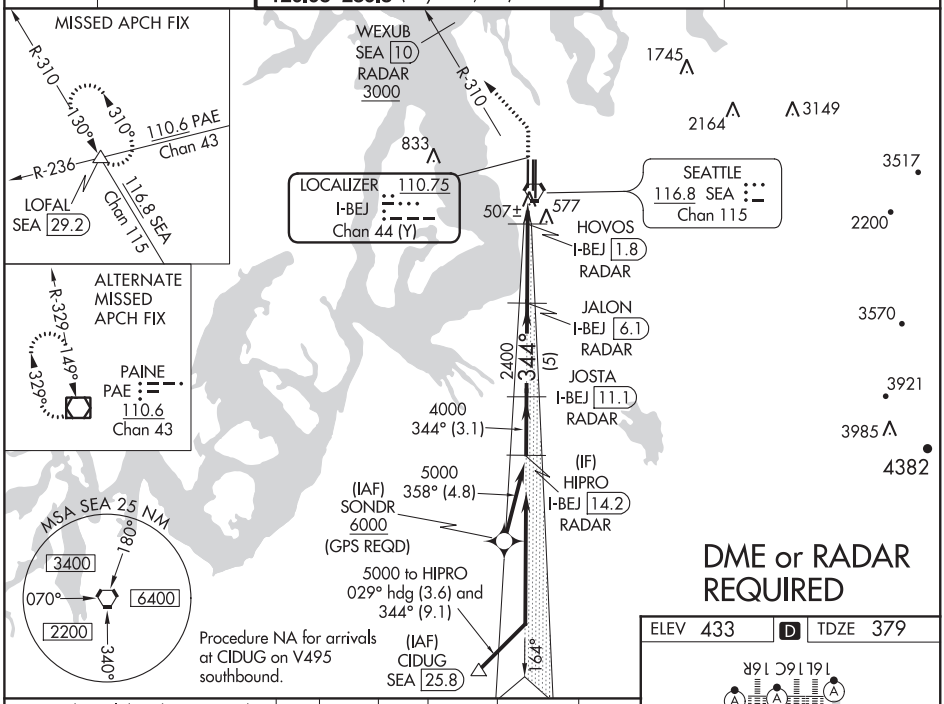
| LOC/DME I-BEJ | APP CRS | Rwy ldg | 8500 |
|---|---|---|---|
| 110.75 | 344° | TDZE | 379 |
| Chan 44 (Y) | | Apt Elev | 433 |

T DME or RADAR required.
Simultaneous approach authorized with Rwy 34R/C.
# RVR 1800 authorized with use of FD or AP or HUD to DA.

MALSR

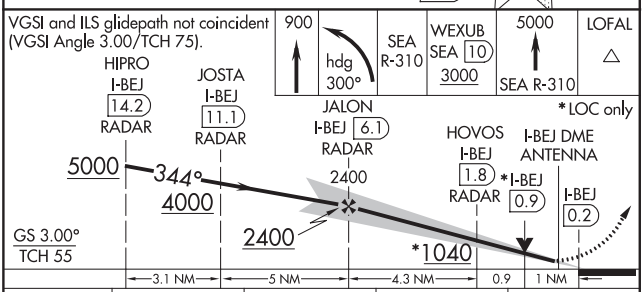
MISSED APPROACH: Climb to 900 then climbing left turn on heading 300° and on SEA VORTAC R-310 to cross WEXUB/10 DME/RADAR at or above 3000, then climb to 5000 on SEA VORTAC R-310 to LOFAL/SEA 29.2 DME and hold.

| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R)<br>120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |

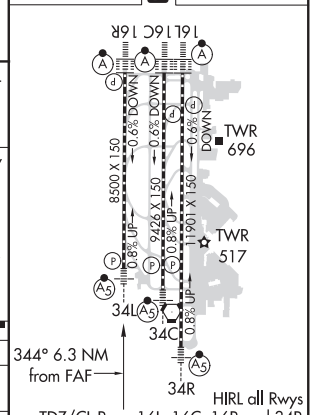



DME or RADAR REQUIRED

VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 75).




ELEV 433 D TDZE 379




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 34L # | 579/24 200 (200-½) | | | |
| S-LOC 34L | 760/24 381 (400-½) | | 760/40 381 (400-¾) | |
| CIRCLING | 1000-1 567 (600-1) | | 1000-1½ 567 (600-1½) | 1000-2 567 (600-2) |

FAF to MAP 6.3 NM

| Knots | 60 | 90 | 120 | 150 | 180 |
|---|---|---|---|---|---|
| Min:Sec | 6:18 | 4:12 | 3:09 | 2:31 | 2:06 |

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NW-1, 05 NOV 2020 to 31 DEC 2020

SEATTLE, WASHINGTON 47°27'N-122°19'W
Amdt 1F 26APR18

SEATTLE-TACOMA INTL (SEA)
ILS or LOC RWY 34L

# ILS or LOC RWY 34R
## SEATTLE-TACOMA INTL (SEA)

| LOC/DME I-SEA 110.3 Chan 40 | APP CRS 344° | Rwy ldg 34R 11901 34C 9426 | TDZE 34R 372 34C 387 | Apt Elev 432 432 |
|---|---|---|---|---|

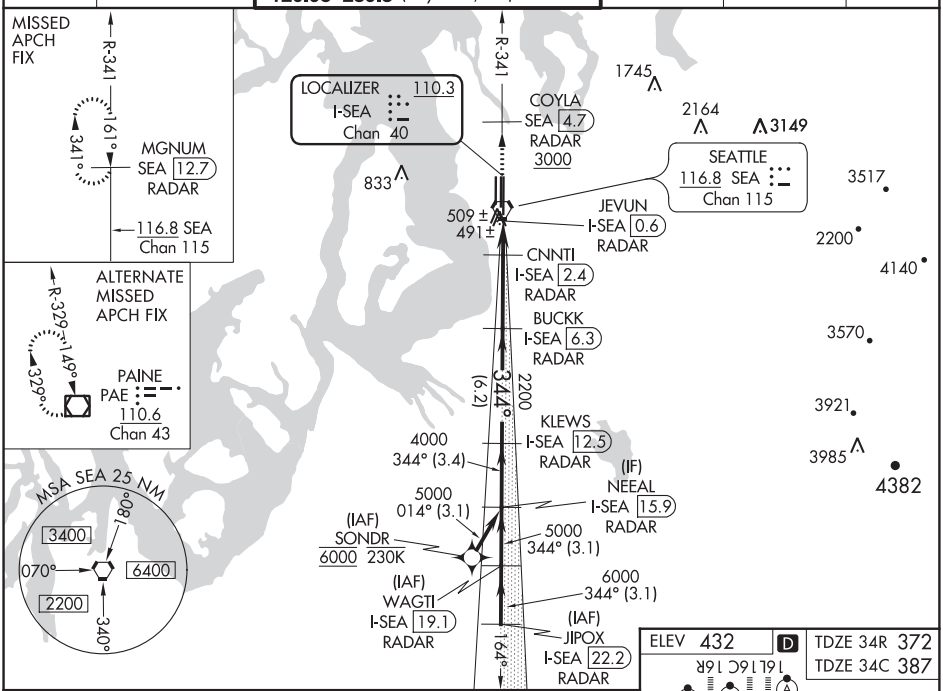
From SONDR: RNAV 1-GPS required.
DME or RADAR required.

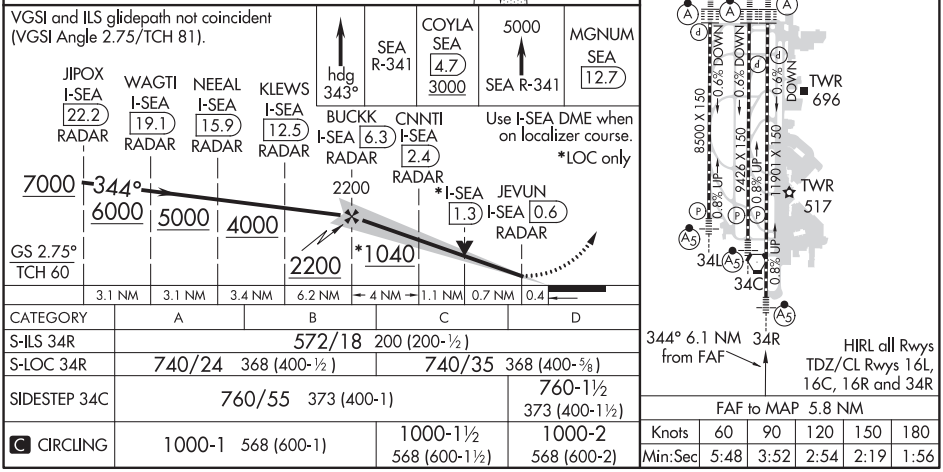
Inop table does not apply to Sidestep 34C Cats A/B.
Simultaneous approach authorized with Rwy 34L.

MALSR Rwy 34R/C

MISSED APPROACH: Climb on heading 343° and outbound on SEA VORTAC R-341 to cross COYLA/SEA 4.7 DME/RADAR at or above 3000 then climb to 5000 on SEA VORTAC R-341 to MGNUM/SEA 12.7 DME/RADAR and hold, continue climb-in-hold to 5000.

| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R)<br>120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 34R | 572/18 200 (200-½) | | | |
| S-LOC 34R | 740/24 368 (400-½) | | 740/35 368 (400-⅝) | |
| SIDESTEP 34C | 760/55 373 (400-1) | | | 760-1½ 373 (400-1½) |
| C CIRCLING | 1000-1 568 (600-1) | | 1000-1½ 568 (600-1½) | 1000-2 568 (600-2) |

FAF to MAP 5.8 NM

| Knots | 60 | 90 | 120 | 150 | 180 |
|---|---|---|---|---|---|
| Min:Sec | 5:48 | 3:52 | 2:54 | 2:19 | 1:56 |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SEATTLE, WASHINGTON AL-582 (FAA) 20086

# ILS RWY 16C (SA CAT I)
## SEATTLE-TACOMA INTL (SEA)

| LOC/DME I-SZI | APP CRS | Rwy ldg 9426 |
|---|---|---|
| 111.7 | 164° | TDZE 430 |
| Chan 54 | | Apt Elev 432 |

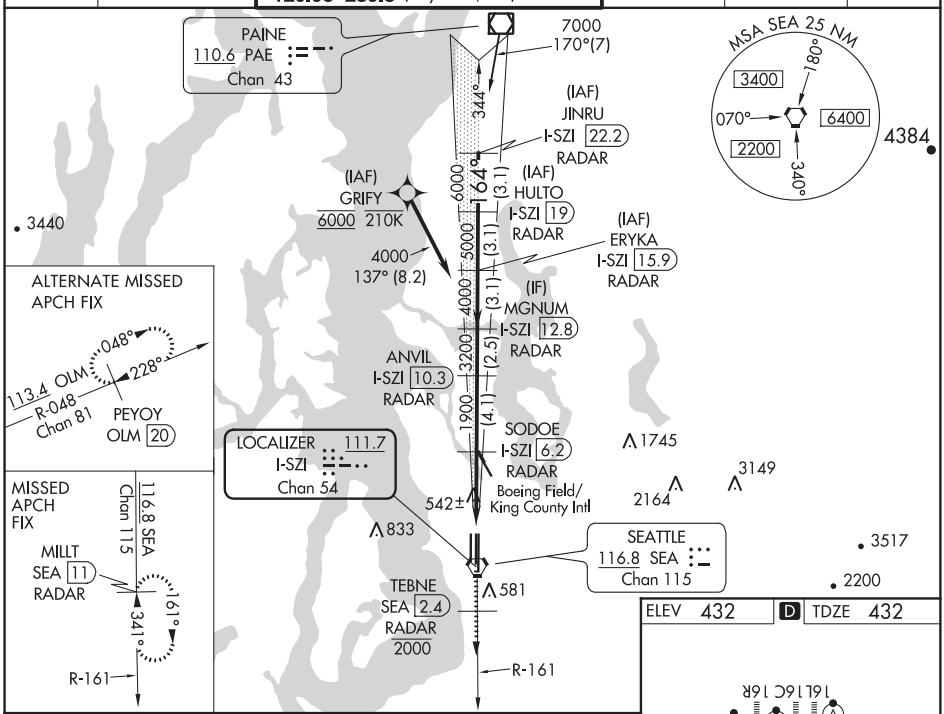
DME or RADAR required. From GRIFY:RNAV 1-GPS required.

Simultaneous approach authorized with Rwy 16R. Simultaneous operations require use of vertical guidance, maintain last assigned altitude until established on glideslope. Requires specific OPSPEC, MSPEC or LOA approval and use of HUD to DH.

ALSF-2

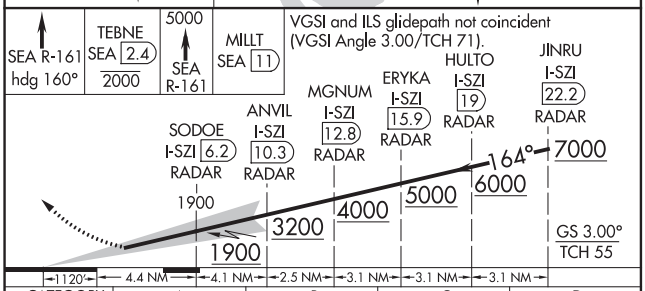
MISSED APPROACH: Climb on heading 160° and SEA VORTAC R-161 to cross TEBNE/SEA 2.4 DME/RADAR at or below 2000, then climb to 5000 on SEA VORTAC R-161 to MILLT/SEA 11 DME/RADAR and hold, continue climb-in-hold to 5000.

| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R)<br>120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |




| SEA R-161 hdg 160° | TEBNE SEA 2.4 2000 | 5000 SEA R-161 | MILLT SEA 11 |
|---|---|---|---|

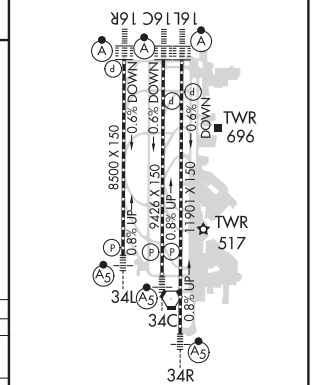
VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 71).




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 16C | RA 292/14 150 DA 580 | | | |

**SA CATEGORY I ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**

ELEV 432 D TDZE 432




HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

NW-1, 05 NOV 2020 to 31 DEC 2020

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| LOC/DME I-SNQ 110.3 Chan 40 | APP CRS 164° | Rwy ldg 11901 TDZE 432 Apt Elev 432 |
|---|---|---|

# ILS RWY 16L (SA CAT I)
## SEATTLE-TACOMA INTL (SEA)

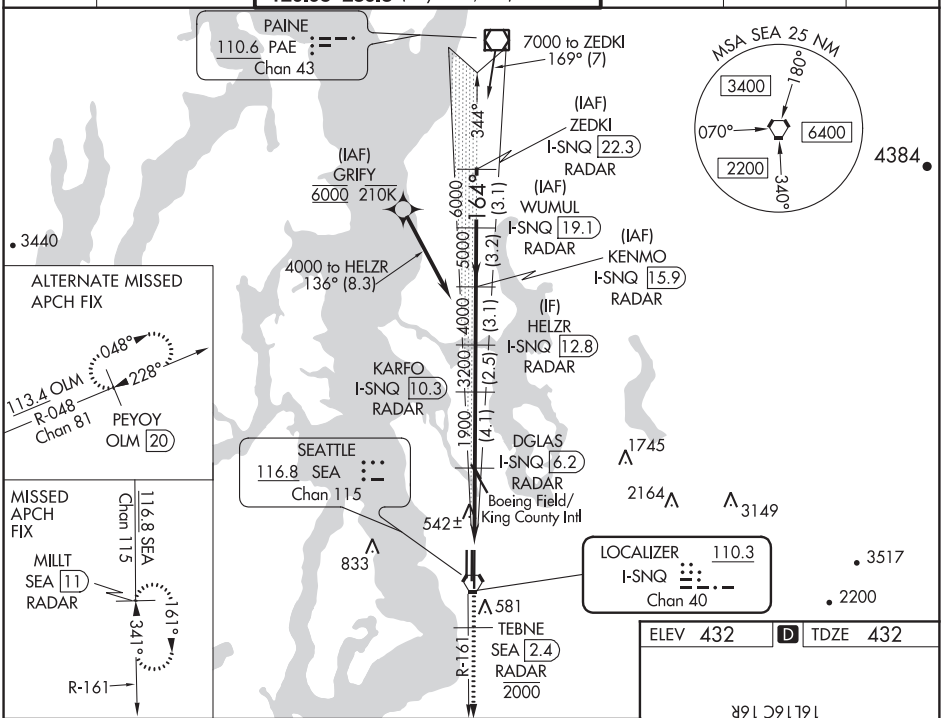
DME or RADAR required. From GRIFY:RNAV 1-GPS required.

Simultaneous approach authorized with Rwy 16R. Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH.

ALSF-2

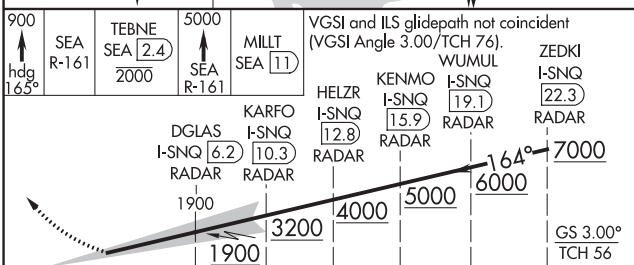
MISSED APPROACH: Climb to 900 on heading 165° then on SEA VORTAC R-161 to cross TEBNE/SEA 2.4 DME/RADAR at or below 2000 then climb to 5000 on SEA VORTAC R-161 to MILLT/SEA 11 DME/RADAR and hold, continue climb-in-hold to 5000.

| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R) 120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |




| 900 hdg 165° | SEA R-161 | TEBNE SEA 2.4 2000 | 5000 SEA R-161 | MILLT SEA 11 |
|---|---|---|---|---|

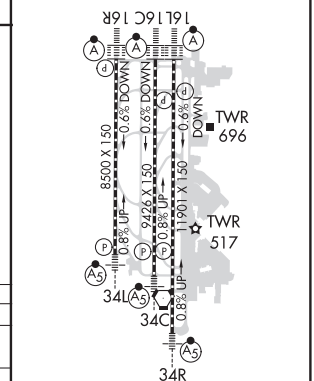
VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 76).




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 16L | RA 248/14 150 DA 582 | | | |

**SA CATEGORY I ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**

ELEV 432 D TDZE 432




HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

NW-1, 05 NOV 2020 to 31 DEC 2020

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SEATTLE, WASHINGTON

AL-582 (FAA)

20086

# ILS RWY 16R (SA CAT I)

## SEATTLE-TACOMA INTL (SEA)

| LOC/DME I-CJL | APP CRS | Rwy ldg | 8500 |
|---|---|---|---|
| 110.75 | 164° | TDZE | 415 |
| Chan 44 (Y) | | Apt Elev | 432 |

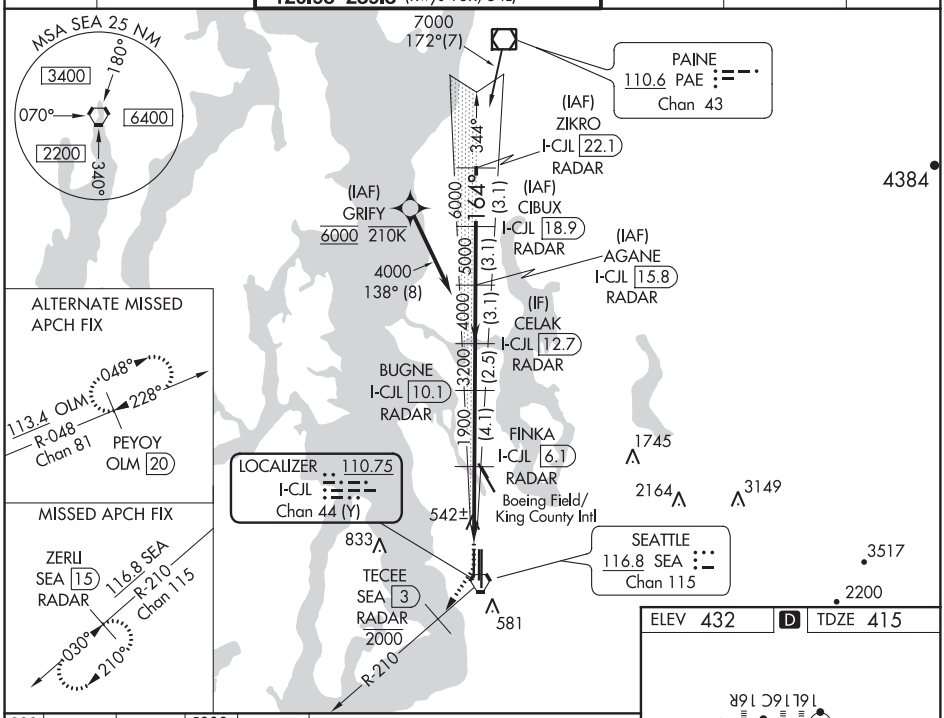
DME or RADAR required. From GRIFY:RNAV 1-GPS required.

Simultaneous approach authorized with Rwy 16L and 16C. Simultaneous operations require use of vertical guidance, maintain last assigned altitude until established on glideslope. Requires specific OPSPEC, MSPEC or LOA approval and use of HUD to DH.

ALSF-2

MISSED APPROACH: Climb to 900 then climb on heading 195° and on SEA VORTAC R-210 to cross TECEE/SEA 3 DME/RADAR at or below 2000 then climb to 5000 on SEA VORTAC R-210 to ZERLI/SEA 15 DME/RADAR and hold, continue climb-in-hold to 5000.

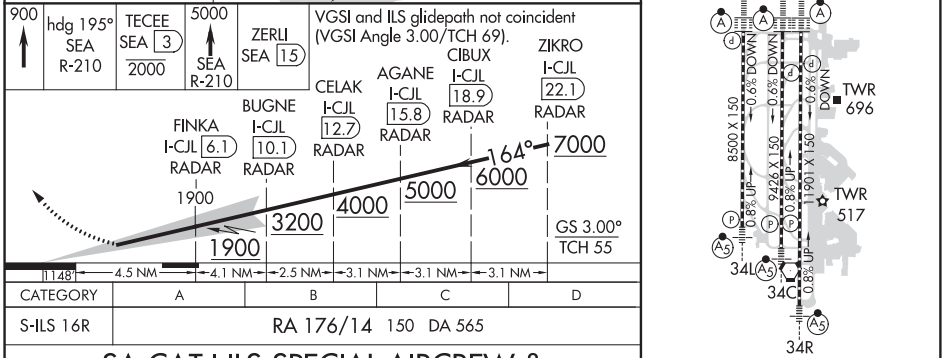
| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R)<br>120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 432 | D | TDZE 415




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 16R | RA 176/14 150 DA 565 | | | |

**SA CAT I ILS-SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**

HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

| LOC/DME I-TUC 111.7 Chan 54 | APP CRS 344° | Rwy ldg 9426 TDZE 387 Apt Elev 432 |
|---|---|---|

# ILS RWY 34C (SA CAT I & II)
## SEATTLE-TACOMA INTL (SEA)

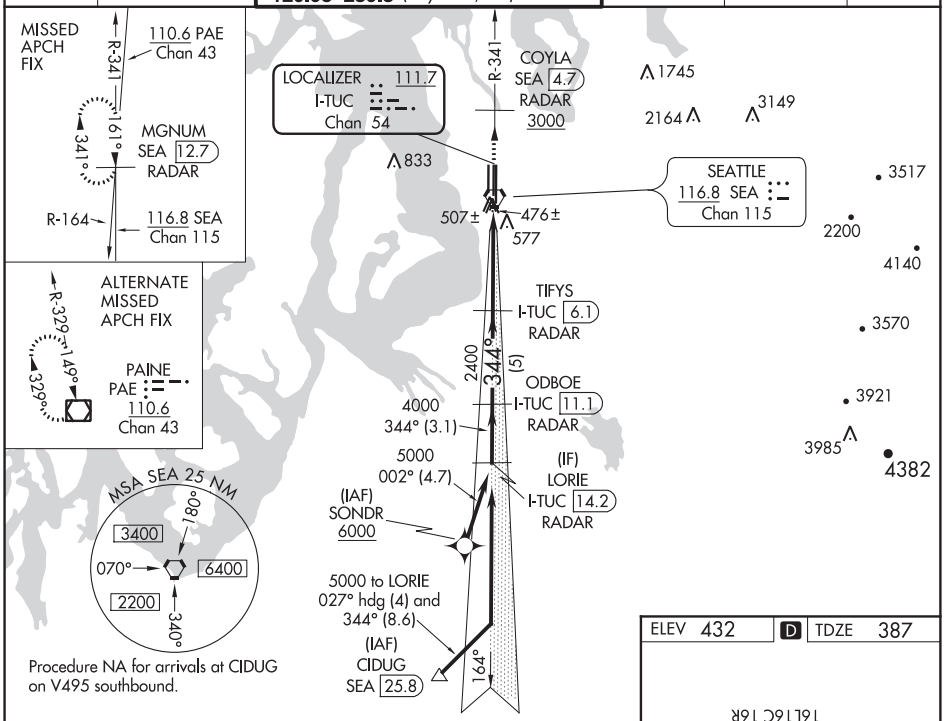
DME or RADAR required. From SONDR: RNAV 1-GPS required.

Simultaneous approach authorized with Rwy 34L. 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.

MALSR

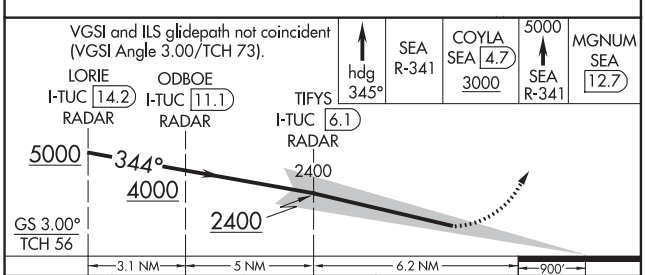
MISSED APPROACH: Climb on heading 345° and outbound on SEA VORTAC R-341 to cross COYLA/SEA 4.7 DME/RADAR at or above 3000 then climb to 5000 on SEA VORTAC R-341 to MGNUM/SEA 12.7 DME/RADAR and hold, continue climb-in-hold to 5000.

| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R) 120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |




Procedure NA for arrivals at CIDUG on V495 southbound.

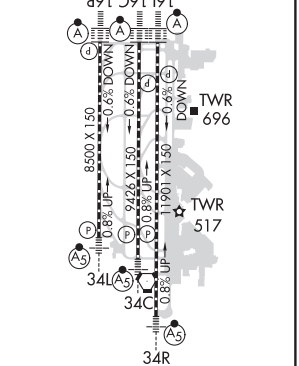
VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 73).




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 34C | SA CAT I RA 231/14 150 DA 537 | | | |
| S-ILS 34C | SA CAT II RA 112/12 100 DA 487 | | | |

**SA CATEGORY I & II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**

ELEV 432 D TDZE 387




HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

SEATTLE, WASHINGTON AL-582 (FAA) 20086

| LOC/DME I-BEJ | APP CRS | Rwy ldg | 8500 |
|---|---|---|---|
| 110.75 | 344° | TDZE | 379 |
| Chan 44 (Y) | | Apt Elev | 433 |

# ILS RWY 34L (SA CAT I & II)

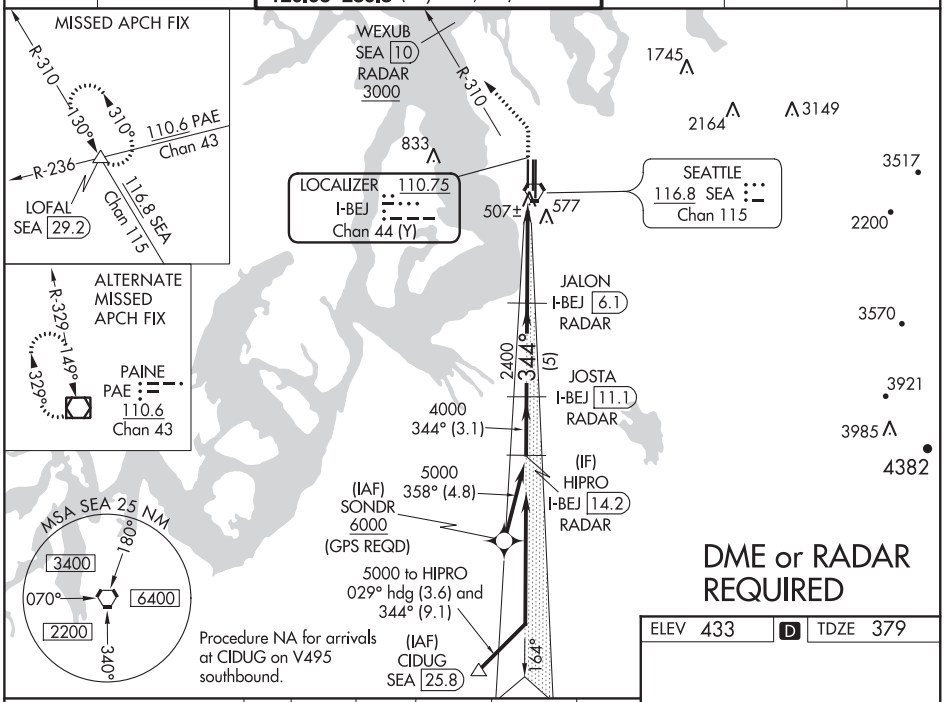
## SEATTLE-TACOMA INTL (SEA)

DME or RADAR required. Simultaneous approach authorized with Rwy 34R/C. 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.

MALSR

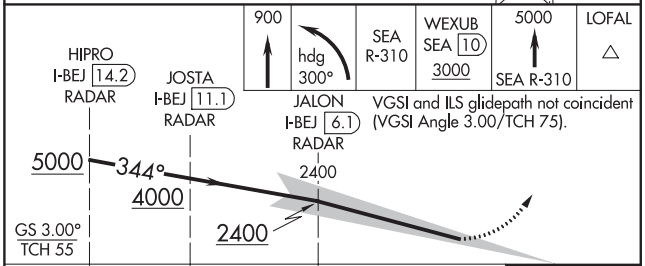
MISSED APPROACH: Climb to 900 then climbing left turn on heading 300° and on SEA VORTAC R-310 to cross WEXUB/10 DME/RADAR at or above 3000, then climb to 5000 on SEA VORTAC R-310 to LOFAL/SEA 29.2 DME and hold.

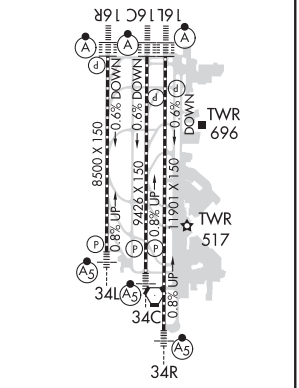
| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R)<br>120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |




NW-1, 05 NOV 2020 to 31 DEC 2020

| ELEV 433 | D | TDZE 379 |
|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 34L | SA CAT I RA 213/14 150 DA 529 | | | |
| S-ILS 34L | SA CAT II RA 117/12 100 DA 479 | | | |

## SA CATEGORY I & II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

NW-1, 05 NOV 2020 to 31 DEC 2020

# ILS RWY 34R (SA CAT I & II)
## SEATTLE-TACOMA INTL (SEA)

| LOC/DME I-SEA 110.3 Chan 40 | APP CRS 344° | Rwy ldg 11901 TDZE 372 Apt Elev 432 |
|---|---|---|

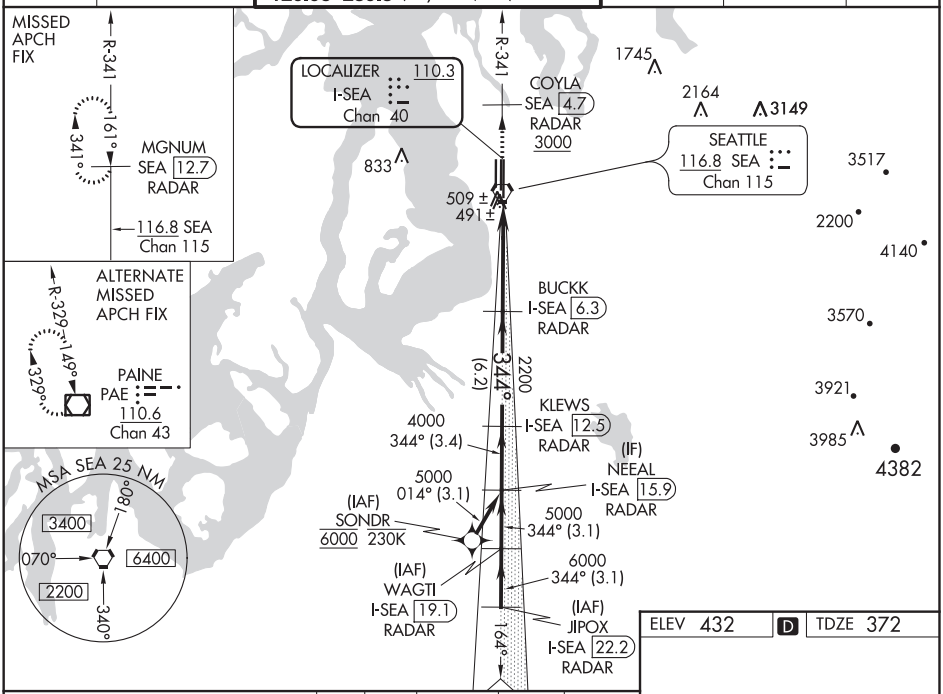
From SONDR: RNAV 1-GPS required. DME or RADAR required.

Simultaneous approach authorized with Rwy 34L. 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.

MALSR

MISSED APPROACH: Climb on heading 343° and outbound on SEA VORTAC R-341 to cross COYLA/SEA 4.7 DME/RADAR at or above 3000 then climb to 5000 on SEA VORTAC R-341 to MGNUM/SEA 12.7 DME/RADAR and hold, continue climb-in-hold to 5000.

| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R) 120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |



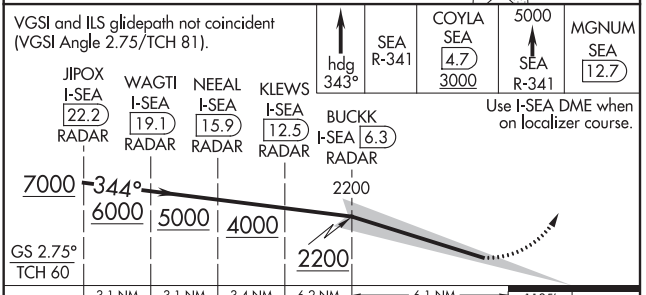

NW-1, 05 NOV 2020 to 31 DEC 2020

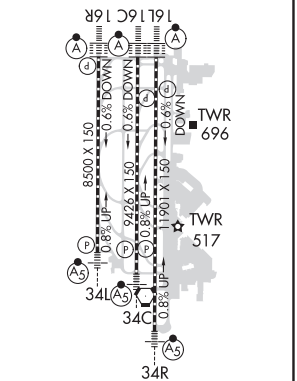
ELEV 432 | D | TDZE 372

VGSI and ILS glidepath not coincident (VGSI Angle 2.75/TCH 81).

| hdg 343° | SEA R-341 | COYLA SEA 4.7 3000 | 5000 SEA R-341 | MGNUM SEA 12.7 |
|---|---|---|---|---|

Use I-SEA DME when on localizer course.




HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 34R | SA CAT I RA 250/14 150 DA 522 | | | |
| S-ILS 34R | SA CAT II RA 200/12 100 DA 472 | | | |

**SA CATEGORY I & II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**

SEATTLE, WASHINGTON AL-582 (FAA) 20086

# ILS RWY 16C (CAT II & III)
## SEATTLE-TACOMA INTL (SEA)

| LOC/DME I-SZI | APP CRS | Rwy ldg 9426 |
|---|---|---|
| 111.7 | 164° | TDZE 430 |
| Chan 54 | | Apt Elev 432 |

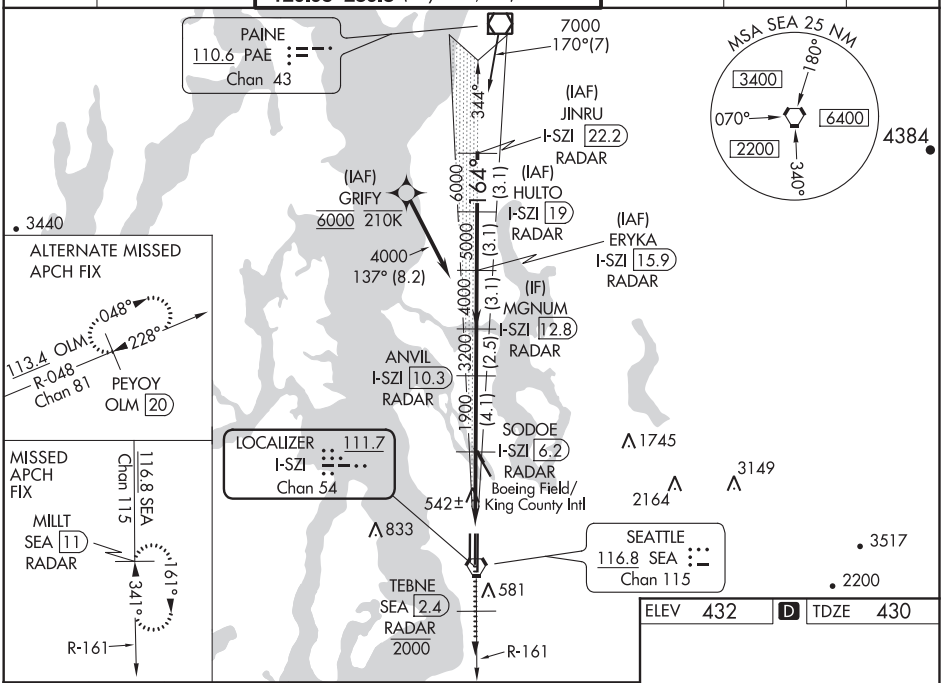
DME or RADAR required. From GRIFY:RNAV 1-GPS required.

Simultaneous approach authorized with Rwy 16R. Simultaneous operations require use of vertical guidance, maintain last assigned altitude until established on glideslope. Cat II: RVR 1000 authorized with specific OPSPEC, MSPEC, or LOA approval and use of Autoland or HUD to touchdown.

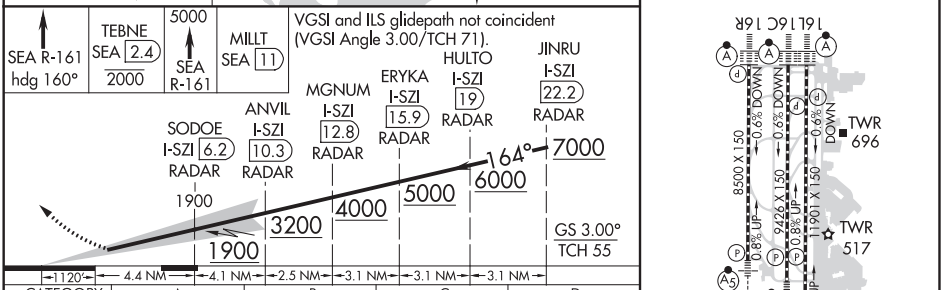
ALSF-2

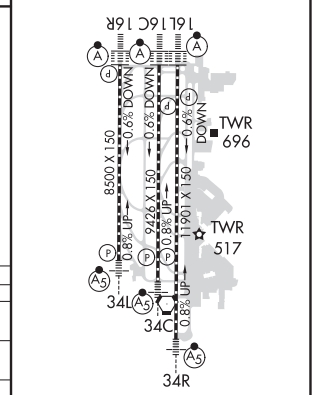
MISSED APPROACH: Climb on heading 160° and SEA VORTAC R-161 to cross TEBNE/SEA 2.4 DME/RADAR at or below 2000, then climb to 5000 on SEA VORTAC R-161 to MILLT/SEA 11 DME/RADAR and hold, continue climb-in-hold to 5000.

| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R)<br>120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |




ELEV 432 D TDZE 430




HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 16C | CAT II RA 126/12 100 DA 530 | | | |
| S-ILS 16C | CAT III RVR 03 | | | |

**CATEGORY II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC/DME I-SNQ 110.3 Chan 40 | APP CRS 164° | Rwy ldg 11901 TDZE 432 Apt Elev 432 |
|---|---|---|

# ILS RWY 16L (CAT II & III)
## SEATTLE-TACOMA INTL (SEA)

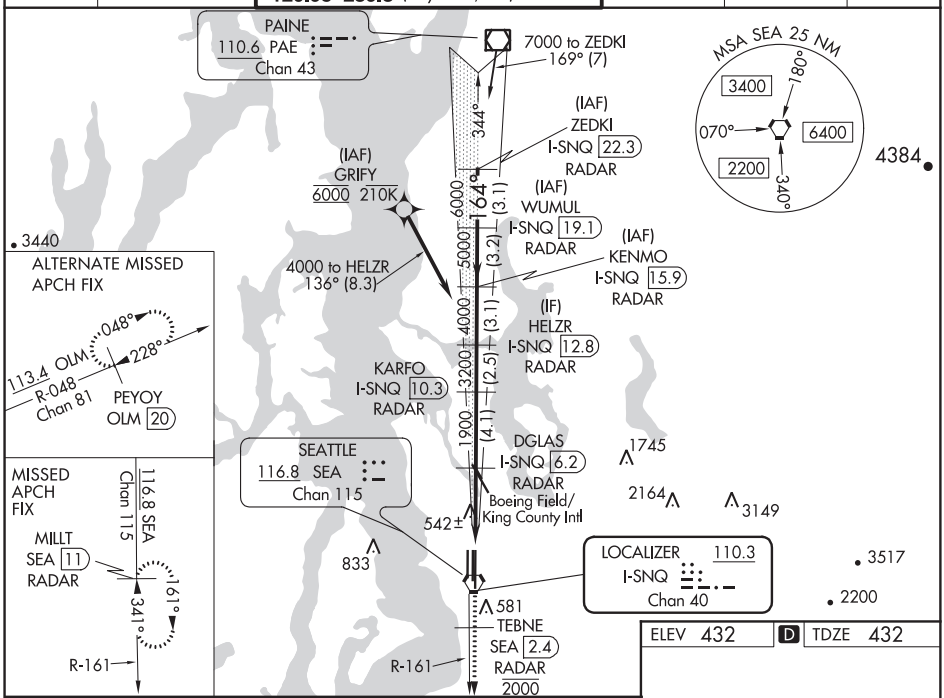
DME or RADAR required. From GRIFY:RNAV 1-GPS required.

Simultaneous approach authorized with Rwy 16R. Cat II: RVR 1000 authorized with specific OPSPEC, MSPEC, or LOA approval and use of Autoland or HUD to touchdown.

ALSF-2

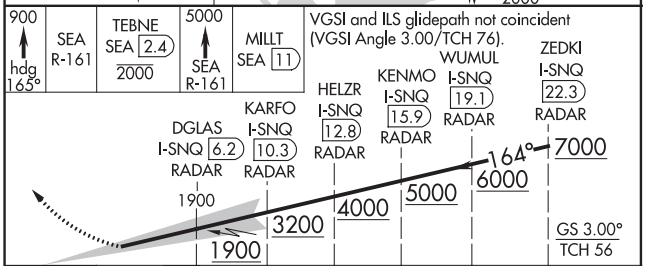
MISSED APPROACH: Climb to 900 on heading 165° then on SEA VORTAC R-161 to cross TEBNE/SEA 2.4 DME/RADAR at or below 2000 then climb to 5000 on SEA VORTAC R-161 to MILLT/SEA 11 DME/RADAR and hold, continue climb-in-hold to 5000.

| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R) 120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |




| 900 hdg 165° | SEA R-161 | TEBNE SEA 2.4 2000 | 5000 SEA R-161 | MILLT SEA 11 |
|---|---|---|---|---|

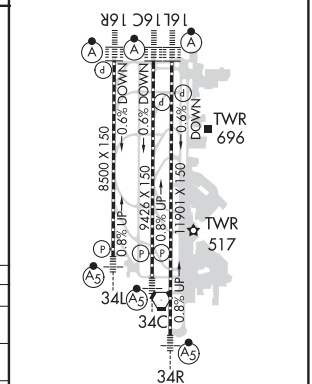
VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 76).




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 16L | CAT II RA 176/12 100 DA 532 | | | |
| S-ILS 16L | CAT III RVR 03 | | | |

**CATEGORY II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**

| ELEV 432 | D | TDZE 432 |
|---|---|---|




HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

SEATTLE, WASHINGTON AL-582 (FAA) 20086

| LOC/DME I-CJL | APP CRS | Rwy ldg | 8500 |
|---|---|---|---|
| 110.75 | 164° | TDZE | 415 |
| Chan 44 (Y) | | Apt Elev | 432 |

# ILS RWY 16R (CAT II & III)
## SEATTLE-TACOMA INTL (SEA)

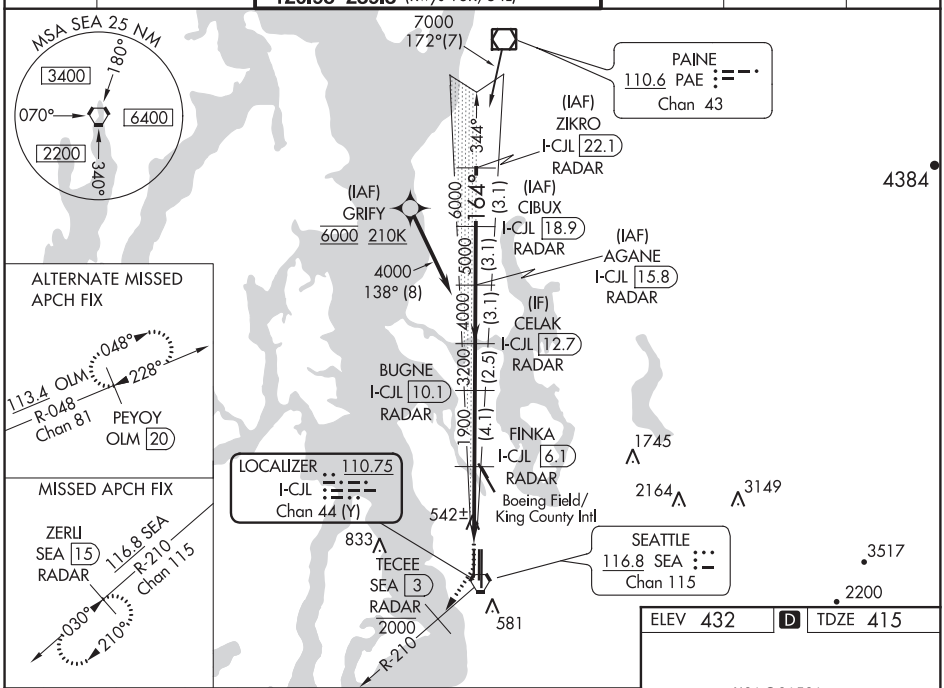
DME or RADAR required. From GRIFY:RNAV 1-GPS required.

Simultaneous approach authorized with Rwy 16L and 16C. Simultaneous operations require use of vertical guidance, maintain last assigned altitude until established on glideslope. Cat II: RVR 1000 authorized with specific OPSPEC, MSPEC or LOA approval and use of Autoland or HUD to touchdown.

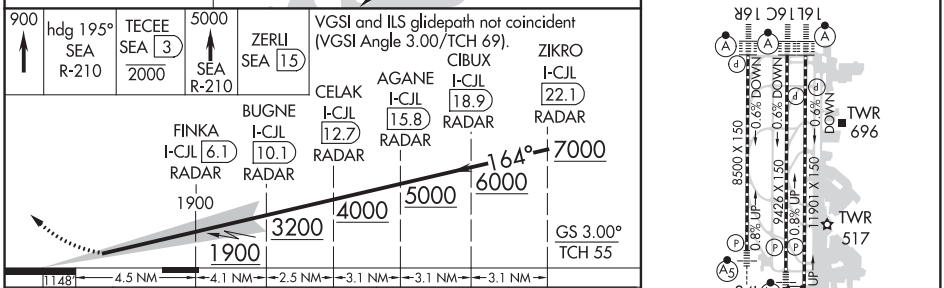
ALSF-2

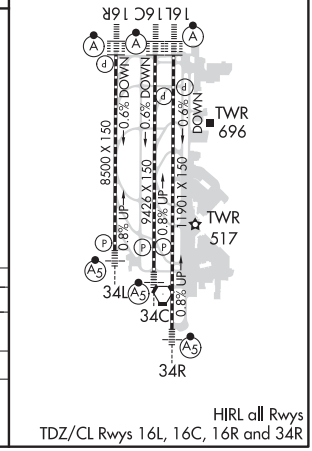
MISSED APPROACH: Climb to 900 then climb on heading 195° and on SEA VORTAC R-210 to cross TECEE/SEA 3 DME/RADAR at or below 2000 then climb to 5000 on SEA VORTAC R-210 to ZERLI/SEA 15 DME/RADAR and hold, continue climb-in-hold to 5000.

| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R)<br>120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |




| ELEV 432 | D | TDZE 415 |
|---|---|---|




HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 16R | CAT II RA 139/12 100 DA 515 | | | |
| S-ILS 16R | CAT III RVR 03 | | | |

**CATEGORY II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 9426 |
|---|---|---|
| 164° | TDZE | 430 |
| | Apt Elev | 433 |

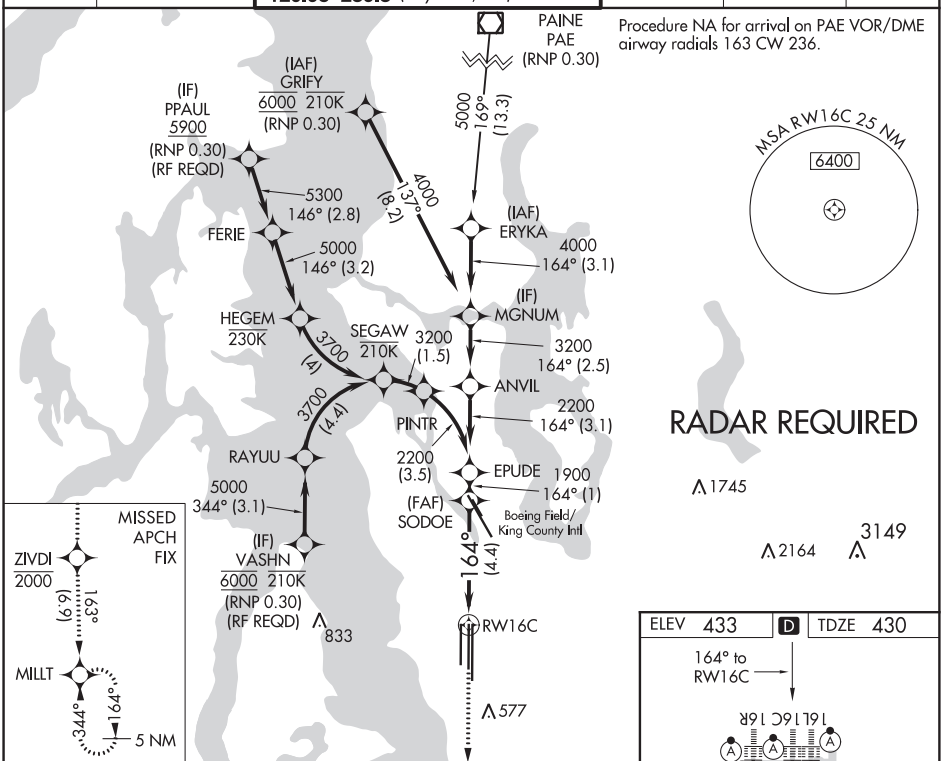
# RNAV (RNP) Z RWY 16C
## SEATTLE-TACOMA INTL (SEA)

For uncompensated Baro-VNAV systems, procedure NA below -6°C (22°F) or above 54°C (130°F). GPS required. See additional requirements on adjacent information page. For inop ALS, increase RNP 0.12 all Cats visibility to RVR 5200, and increase RNP 0.30 all Cats visibility to 1⅜ SM.

ALSF-2

MISSED APPROACH: Climb direct ZIVDI to cross ZIVDI at or below 2000, then climb to 5000 on track 163° to MILLT and hold, continue climb-in-hold to 5000.

| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R)<br>120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.12 DA | 758/29 | 328 (400-⅝) | | |
| RNP 0.30 DA | 834/43 | 404 (500-⅞) | | |

**AUTHORIZATION REQUIRED**

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

## SEATTLE-TACOMA INTL AIRPORT

# ALERT NOTICE

**ATTENTION ALL AIRCRAFT LANDING TO THE SOUTH:**

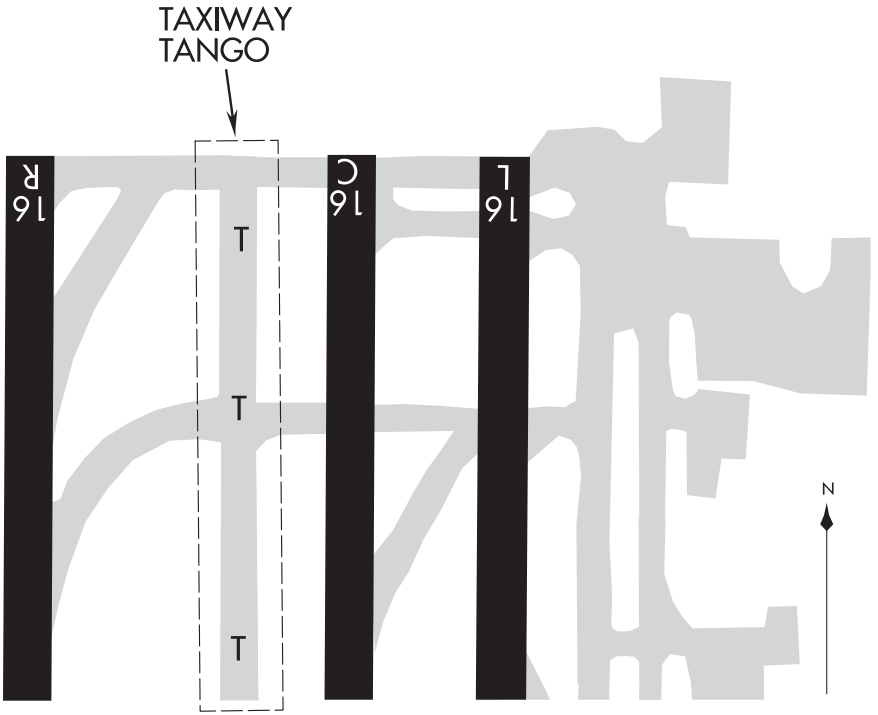
When transitioning from an instrument procedure to a visual approach to Runway 16C, verify you are aligned for the intended landing Runway, not Taxiway Tango. Taxiway Tango is west and parallel to Runway 16C.

**TRANSITION TO VISUAL:**

Taxiway Tango has been mistaken for Runway 16C from the air during certain visibility conditions, i.e., wet runway, low sun angle reflections. Aircrews are advised to be aware of the proximity of the taxiway to Runway 16C and its runway-like appearance while on approach.

**RECOMMENDATION:**

Aircrews should use visual cues, e.g., approach lighting systems, REILs, when available, to confirm alignment with Runway 16C not Taxiway Tango. Additionally, it is recommended when executing a segment of the ILS approach for a visual transition, track the localizer until the runway environment is visually verified.



| APP CRS | Rwy ldg | 11901 |
|---|---|---|
| 164° | TDZE | 433 |
| | Apt Elev | 433 |

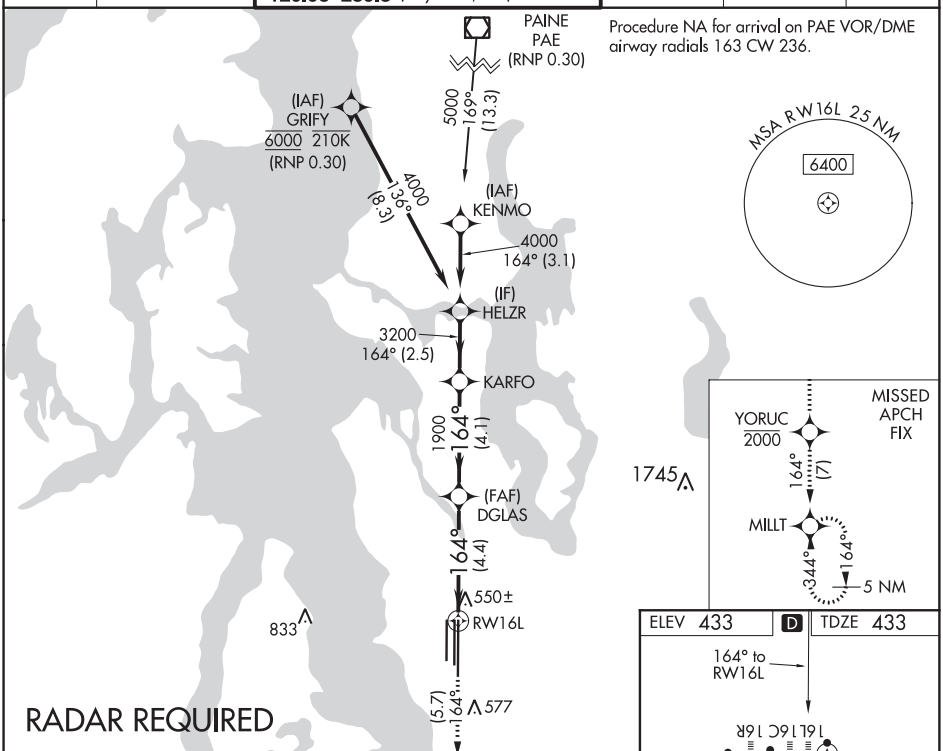
# RNAV (RNP) Z RWY 16L
## SEATTLE-TACOMA INTL (SEA)

For uncompensated Baro-VNAV systems, procedure NA below -6°C (22°F) or above 54°C (130°F). Simultaneous approach authorized with Rwy 16R. GPS required. Use of FD or AP providing RNAV track guidance required during simultaneous operations. For inop ALS, increase RNP 0.30 all Cats visibility to 1⅜ mile.

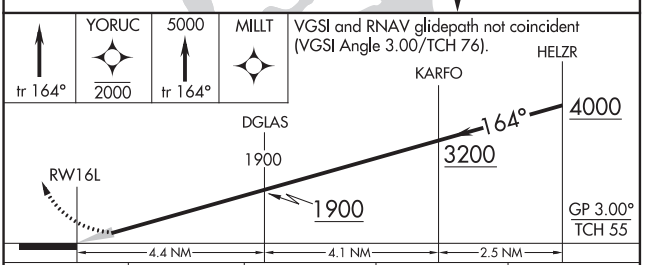
ALSF-2

MISSED APPROACH: Climb on track 164° to cross YORUC at or below 2000, then climb to 5000 on track 164° to MILLT and hold, continue climb-in-hold to 5000.

| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R)<br>120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |




RADAR REQUIRED




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.30 DA | 842/45 409 (500-⅞) | | | |

AUTHORIZATION REQUIRED



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

SEATTLE, WASHINGTON AL-582 (FAA) 20086

| APP CRS | Rwy ldg | 8500 |
|---|---|---|
| 164° | TDZE | 415 |
| | Apt Elev | 433 |

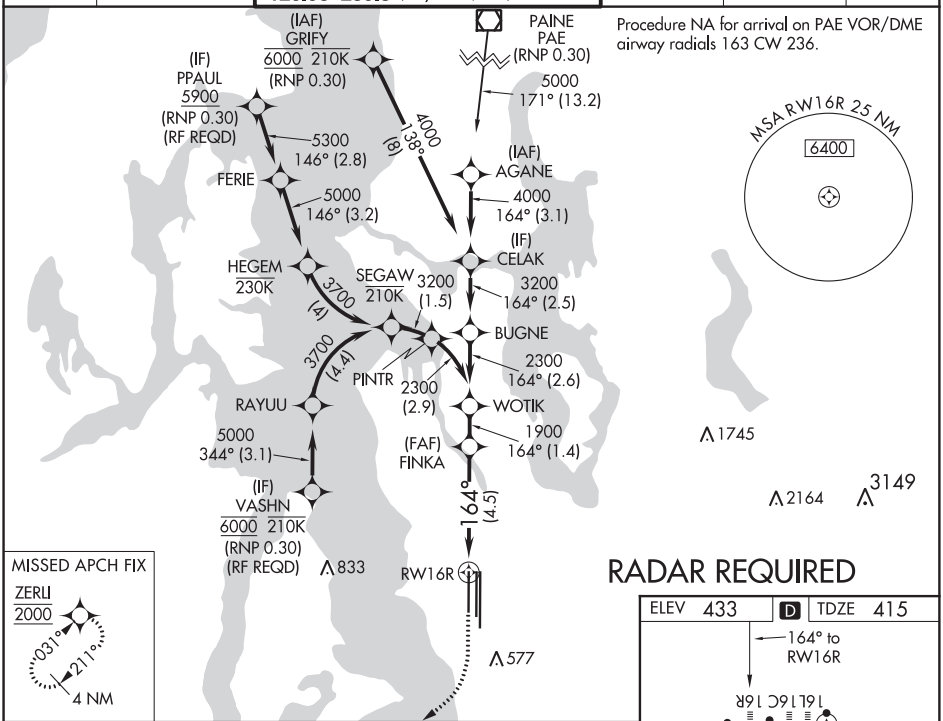
# RNAV (RNP) Z RWY 16R
## SEATTLE-TACOMA INTL (SEA)

For uncompensated Baro-VNAV systems, procedure NA below -6°C (22°F) or above 54°C (130°F). Simultaneous approach authorized with Rwy 16L, except for arrivals at PPAUL and VASHN. GPS required. Use of FD or AP providing RNAV track guidance required during simultaneous operations. For inop ALS, increase RNP 0.15 all Cats visibility to RVR 5800, increase RNP 0.30 all Cats visibility to 1½ SM.

ALSF-2

MISSED APPROACH: Climb to 900 then climbing right direct ZERLI to cross ZERLI at 2000 and hold.

| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R)<br>120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.15 DA | 770/34 355 (400-⅝) | | | |
| RNP 0.30 DA | 854/50 439 (500-1) | | | |

AUTHORIZATION REQUIRED

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 9426 |
|---|---|---|
| 344° | TDZE | 387 |
| | Apt Elev | 432 |

# RNAV (RNP) Z RWY 34C
## SEATTLE-TACOMA INTL (SEA)

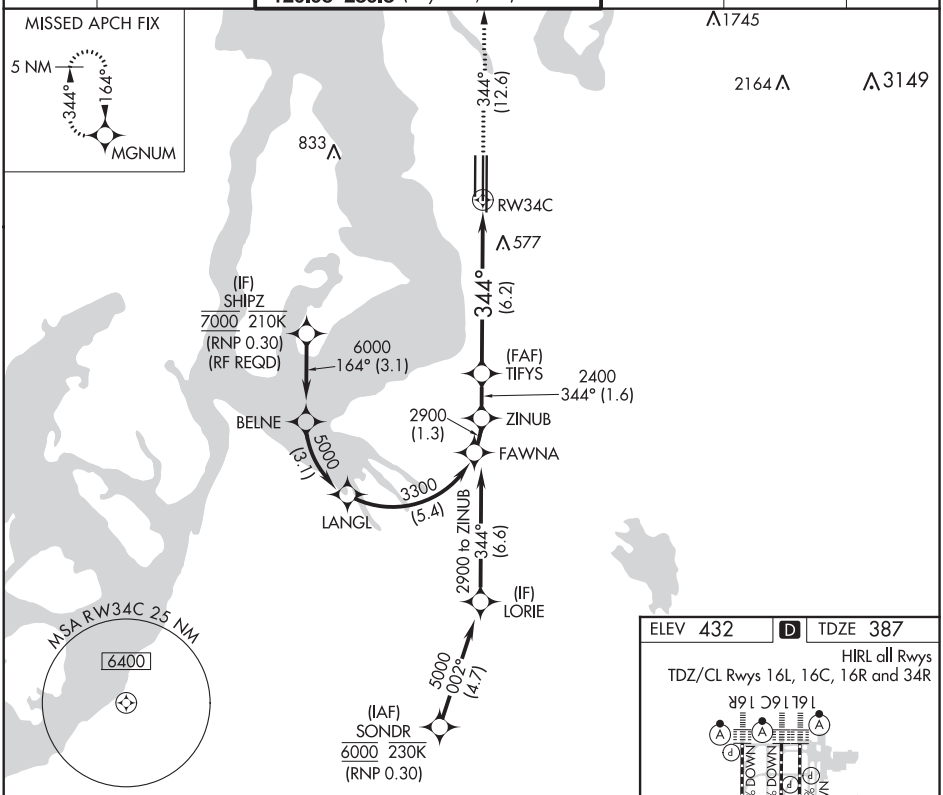
RNP AR APCH.

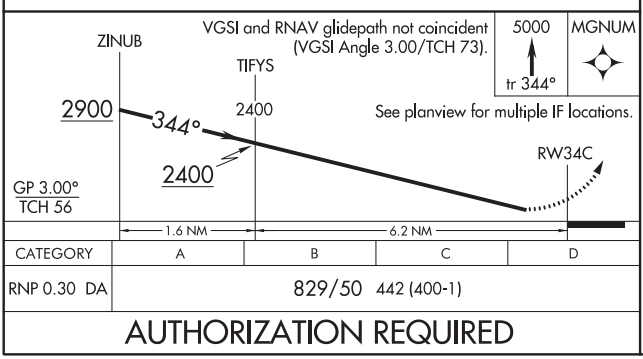
For uncompensated Baro-VNAV systems, procedure NA below -6°C or above 54°C. Simultaneous approach authorized except arrivals at SHIPZ. Use of FD or AP required during simultaneous operations.

MALSR

MISSED APPROACH: Climb to 5000 on track 344° to MGNUM and hold, continue climb-in-hold to 5000.

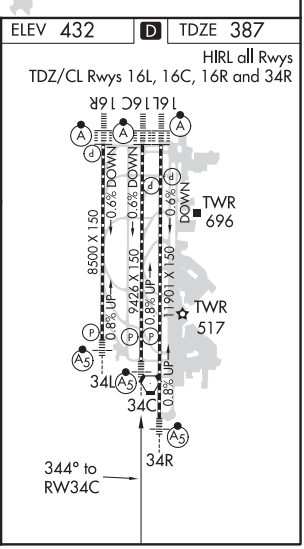
| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R)<br>120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.30 DA | 829/50 442 (400-1) | | | |

**AUTHORIZATION REQUIRED**




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

SEATTLE, WASHINGTON | AL-582 (FAA) | 20086

| APP CRS | Rwy ldg | 8500 |
|---|---|---|
| 344° | TDZE | 379 |
| | Apt Elev | 433 |

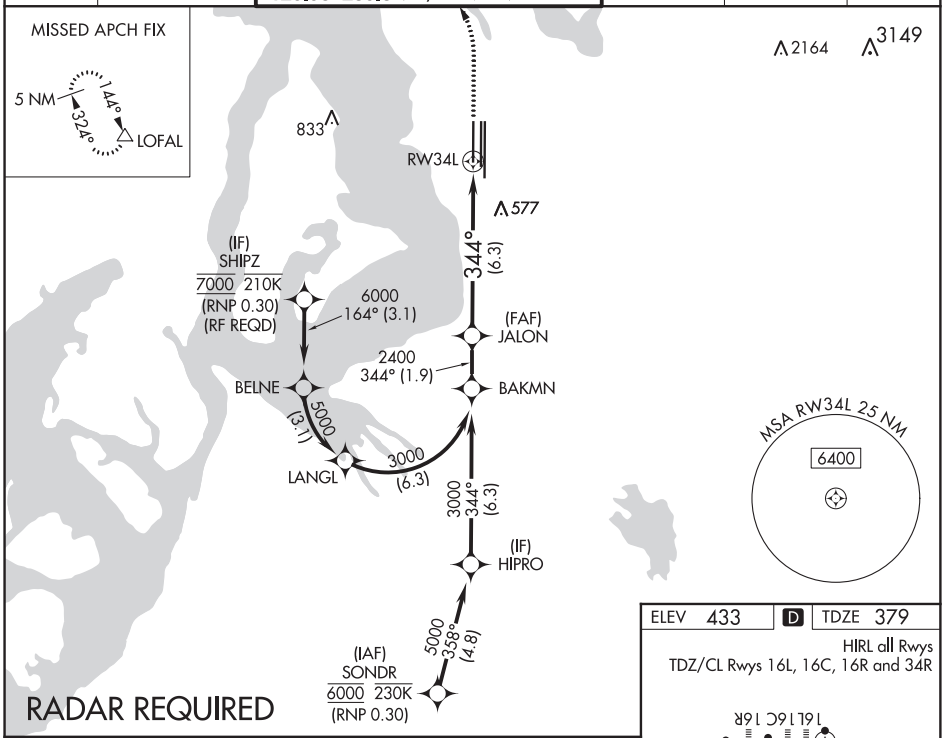
# RNAV (RNP) Z RWY 34L
## SEATTLE-TACOMA INTL (SEA)

For uncompensated Baro-VNAV systems, procedure NA below -6°C (22°F) or above 54°C (130°F). Simultaneous approach authorized with Rwy 34R except for arrivals at SHIPZ. GPS required. Use of FD or AP providing RNAV track guidance required during simultaneous operations. For inop ALS, increase RNP 0.15 all Cats visibility to RVR 5000 and RNP 0.30 all Cats visibility to 1⅜ mile.

MALSR

MISSED APPROACH: Climb to 900 then climbing left turn to 5000 direct LOFAL and hold.

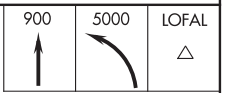
| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R)<br>120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |



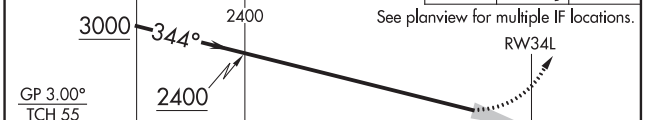

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 75).




See planview for multiple IF locations.

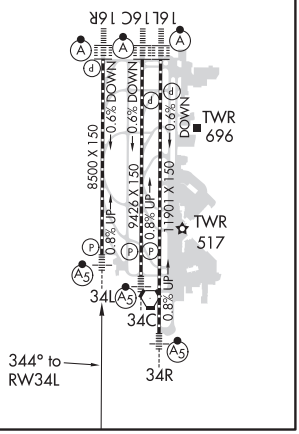



| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.15 DA | 695/24 316 (300-½) | | 695/40 316 (300-¾) | |
| RNP 0.30 DA | 787/50 408 (400-1) | | | |

AUTHORIZATION REQUIRED

ELEV 433 | D | TDZE 379

HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R



| APP CRS | Rwy ldg | 11901 |
|---|---|---|
| 344° | TDZE | 372 |
| | Apt Elev | 432 |

# RNAV (RNP) Z RWY 34R
## SEATTLE-TACOMA INTL (SEA)

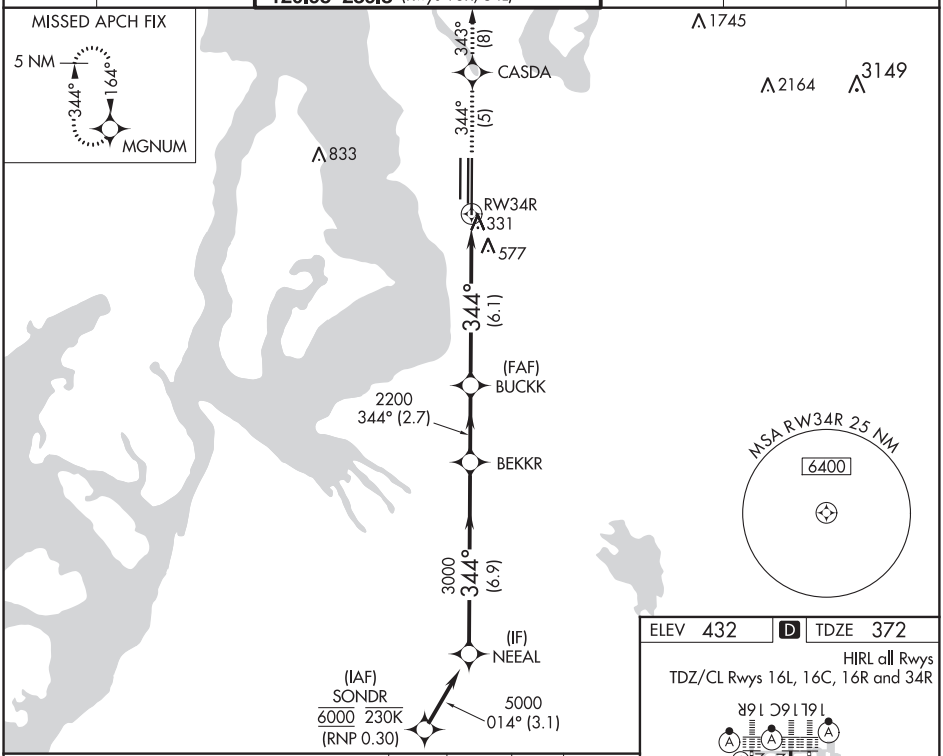
RNP AR APCH.

Simultaneous approach authorized. For uncompensated Baro-VNAV systems, procedure NA below -6°C or above 54°C. Use of FD or AP required during simultaneous operations. For inop ALS, increase RNP 0.28 all Cats visibility to 1⅜ SM. Inop table does not apply to RNP 0.30.

MALSR

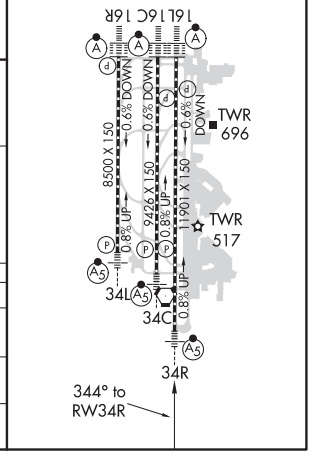
MISSED APPROACH: Climb to 5000 on track 344° to CASDA and on track 343° to MGNUM and hold, continue climb-in-hold to 5000.

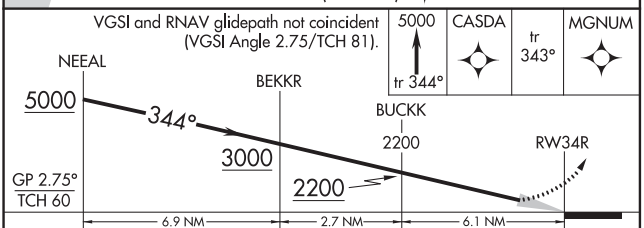
| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R)<br>120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |




| ELEV | 432 | D | TDZE | 372 |
|---|---|---|---|---|

HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.28 DA | 867/50 495 (500-1) | | | |
| RNP 0.30 DA | 880-1½ 508 (500-1½) | | | |

**AUTHORIZATION REQUIRED**

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 61010 W16B | APP CRS 164° | Rwy ldg 9426<br>TDZE 430<br>Apt Elev 433 |
|---|---|---|

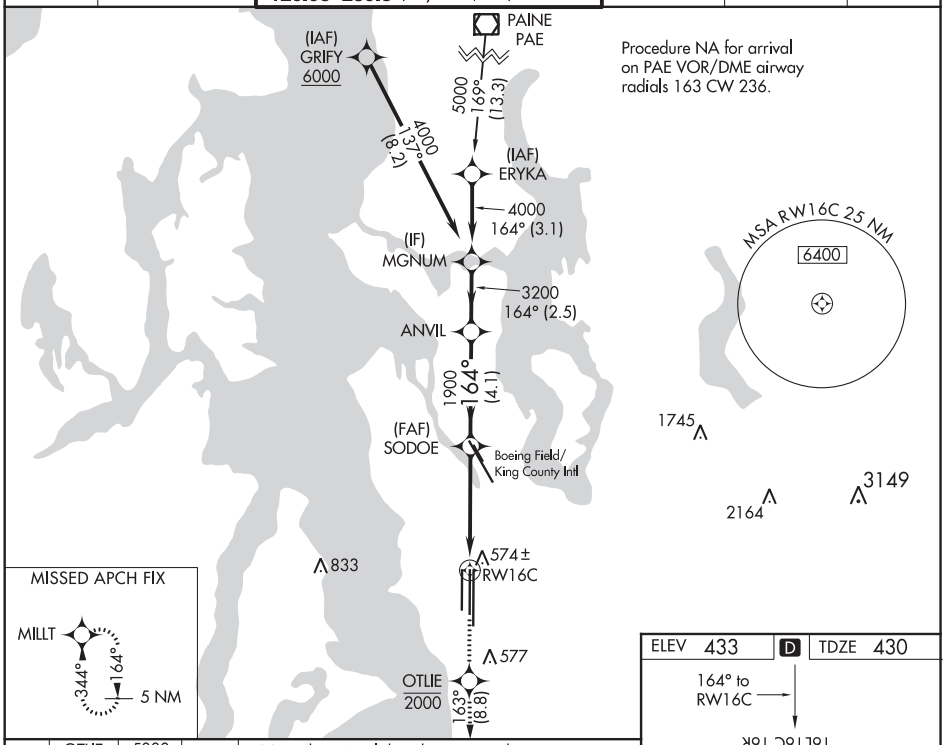
# RNAV (GPS) Y RWY 16C
## SEATTLE-TACOMA INTL (SEA)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -6°C (22°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. For inop ALS, increase LNAV Cats C/D visibility to 1⅜ . See additional requirements on adjacent information page.

ALSF-2

MISSED APPROACH: Climb direct OTLIE to cross OTLIE at or below 2000, then climb to 5000 on track 163° to MILLT and hold, continue climb-in-hold to 5000.

| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R)<br>120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |

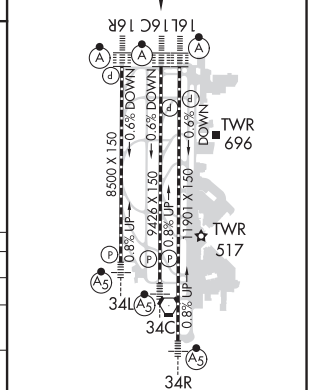



Procedure NA for arrival on PAE VOR/DME airway radials 163 CW 236.

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 630/18 200 (200-½) | | | |
| LNAV/VNAV DA | 840/44 410 (500-⅞) | | | |
| LNAV MDA | 920/24 490 (500-½) | | 920/50 490 (500-1) | |
| C CIRCLING | 1000-1 567 (600-1) | | 1000-1½ 567 (600-1½) | 1000-2 567 (600-2) |

ELEV 433 D TDZE 430

164° to RW16C




HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

## SEATTLE-TACOMA INTL AIRPORT

# ALERT NOTICE

**ATTENTION ALL AIRCRAFT LANDING TO THE SOUTH:**

When transitioning from an instrument procedure to a visual approach to Runway 16C, verify you are aligned for the intended landing Runway, not Taxiway Tango. Taxiway Tango is west and parallel to Runway 16C.

**TRANSITION TO VISUAL:**

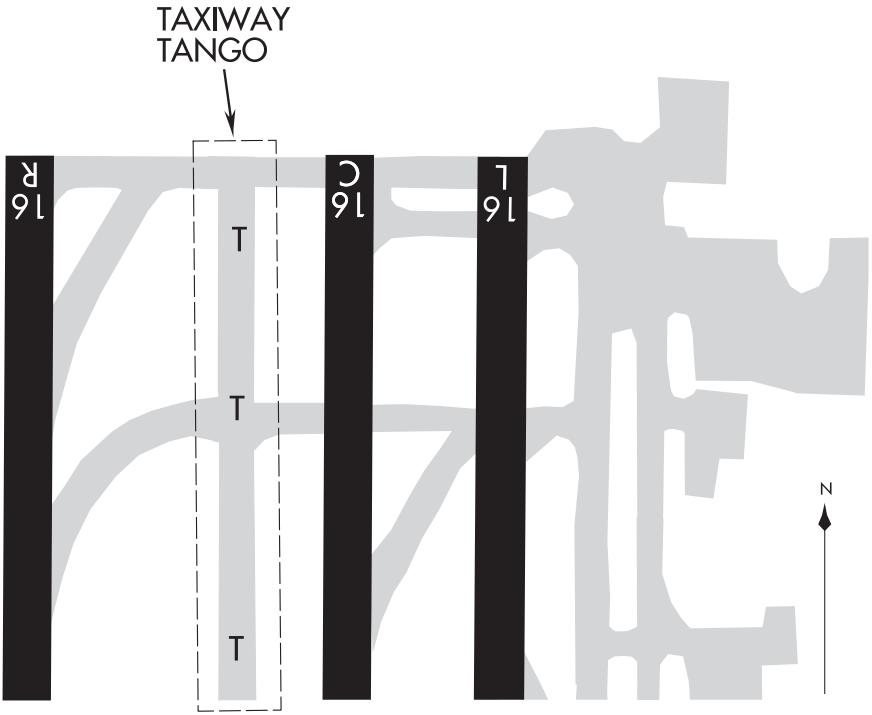
Taxiway Tango has been mistaken for Runway 16C from the air during certain visibility conditions, i.e., wet runway, low sun angle reflections. Aircrews are advised to be aware of the proximity of the taxiway to Runway 16C and its runway-like appearance while on approach.

**RECOMMENDTION:**

Aircrews should use visual cues, e.g., approach lighting systems, REILs, when available, to confirm alignment with Runway 16C not Taxiway Tango. Additionally, it is recommended when executing a segment of the ILS approach for a visual transition, track the localizer until the runway environment is visually verified.



NW-1, 05 NOV 2020 to 31 DEC 2020



SEATTLE, WASHINGTON | AL-582 (FAA) | 20086

| WAAS CH 63202 W16A | APP CRS 164° | Rwy ldg 11901<br>TDZE 432<br>Apt Elev 432 |
|---|---|---|

# RNAV (GPS) Y RWY 16L
## SEATTLE-TACOMA INTL (SEA)

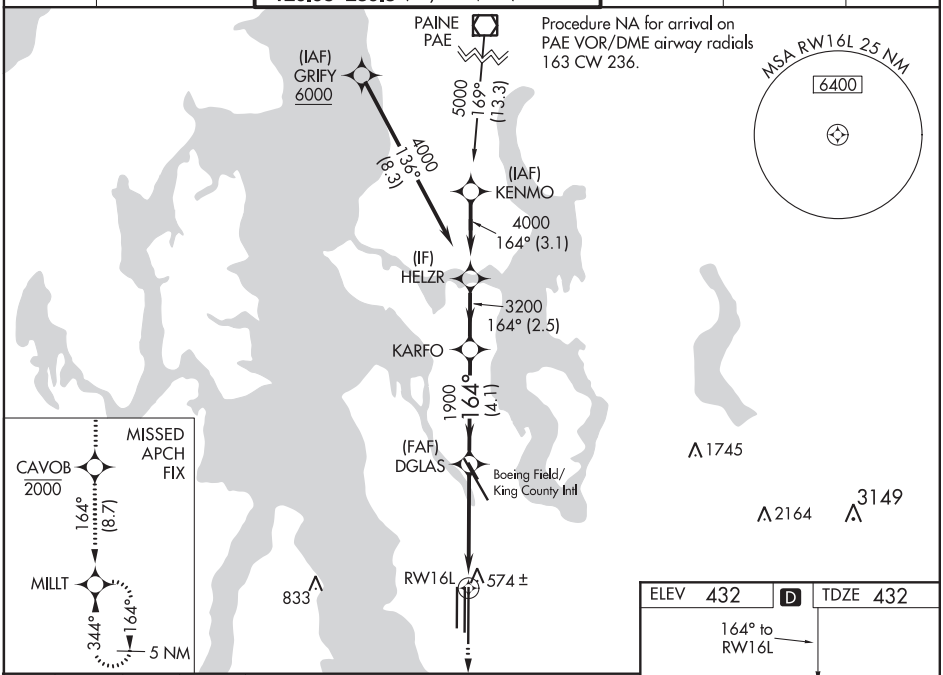
RNP APCH.

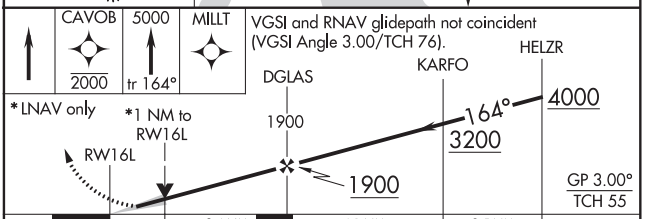
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -6°C (22°F) or above 54°C (130°F). Simultaneous approach authorized with Rwy 16R. Use of FD or AP providing RNAV track guidance required during simultaneous operations. LNAV procedure NA during simultaneous operations. For inop ALS, increase LPV all Cats visibility to RVR 4500, and increase LNAV Cats C/D visibility to RVR 6000.

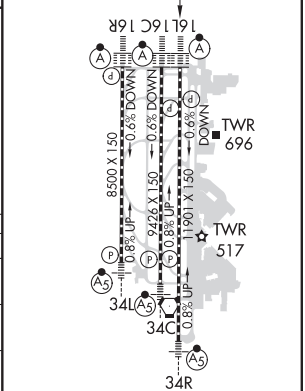
ALSF-2

MISSED APPROACH: Climb direct CAVOB to cross CAVOB at or below 2000 then climb to 5000 on track 164° to MILLT and hold, continue climb-in-hold to 5000.

| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R)<br>120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 700/24 268 (300-½) | | | |
| LNAV/VNAV DA | 766/32 334 (400-⅝) | | | |
| LNAV MDA | 840/24 408 (500-½) | | 840/40 408 (500-¾) | |
| C CIRCLING | 1000-1 568 (600-1) | | 1000-1½ 568 (600-1½) | 1000-2 568 (600-2) |

NW-1, 05 NOV 2020 to 31 DEC 2020

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| WAAS CH 86910 W16D | APP CRS 164° | Rwy ldg 8500<br>TDZE 415<br>Apt Elev 433 |
|---|---|---|

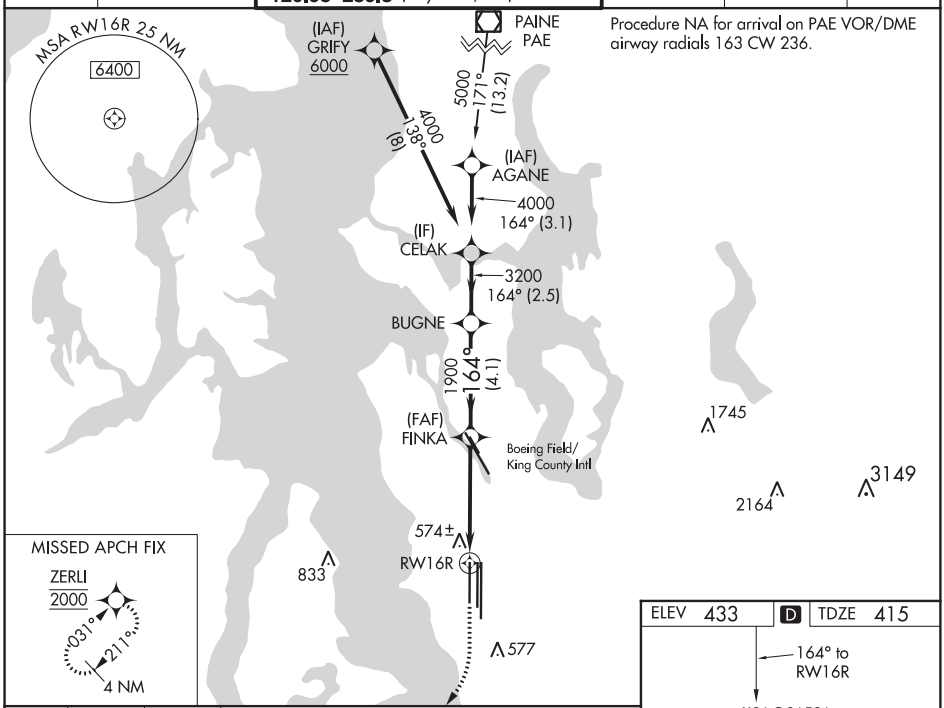
# RNAV (GPS) Y RWY 16R
## SEATTLE-TACOMA INTL (SEA)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -6°C (22°F) or above 54°C (130°F). Simultaneous approach authorized with Rwy 16L. DME/DME RNP-0.3 NA. LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations.

ALSF-2

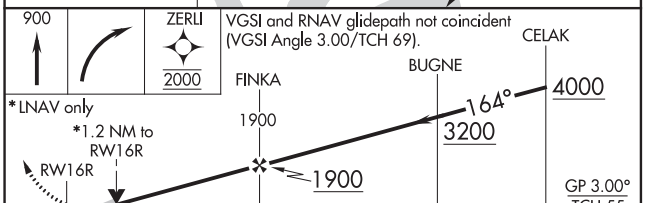
MISSED APPROACH: Climb to 900 then climbing right turn direct ZERLI to cross ZERLI at 2000 and hold.

| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R)<br>120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |



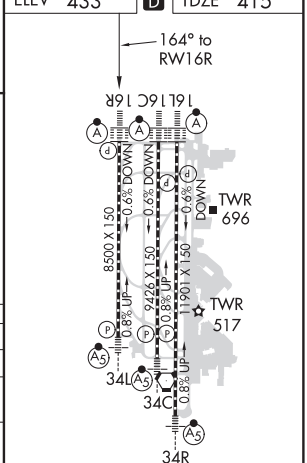

Procedure NA for arrival on PAE VOR/DME airway radials 163 CW 236.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 615/18 200 (200-½) | | | |
| LNAV/VNAV DA | 760/32 345 (400-⅝) | | | |
| LNAV MDA | 840/24 425 (500-½) | | 840/40 425 (500-¾) | |
| C CIRCLING | 1000-1 567 (600-1) | | 1000-1½ 567 (600-1½) | 1000-2 567 (600-2) |

ELEV 433 | D | TDZE 415




HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

SEATTLE, WASHINGTON AL-582 (FAA) 20086

| WAAS CH 77710 W34B | APP CRS 344° | Rwy ldg 9426<br>TDZE 387<br>Apt Elev 432 |
|---|---|---|

# RNAV (GPS) Y RWY 34C
## SEATTLE-TACOMA INTL (SEA)

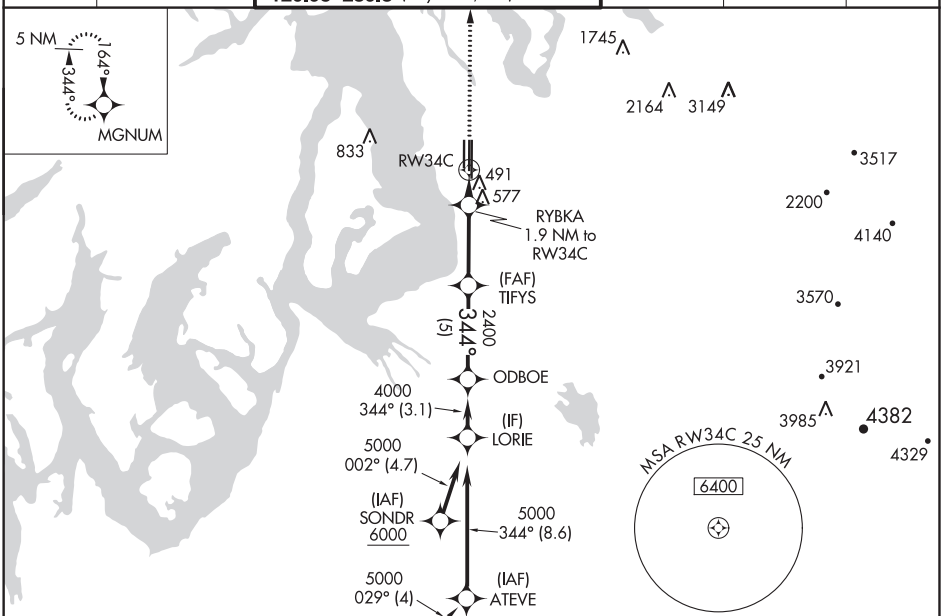
RNP APCH.

Simultaneous approach authorized with Rwy 34L. LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -6°C (22°F) or above 54°C (130°F).

MALSR

MISSED APPROACH: Climb to 5000 direct MGNUM and hold, continue climb-in-hold to 5000.

| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R)<br>120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |

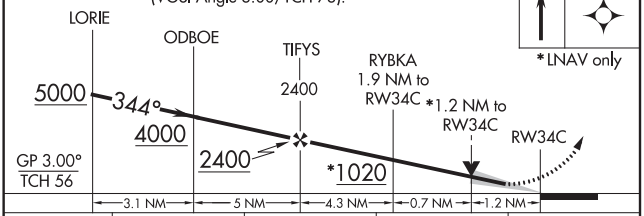



Procedure NA for arrivals at CIDUG on V495 southbound.

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 73).

5000 MGNUM

*LNAV only

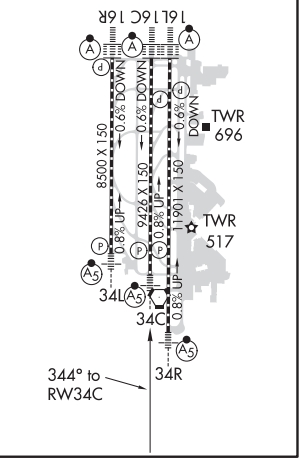



| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 610/24 223 (200-½) | | | |
| LNAV/VNAV DA | 839/50 452 (500-1) | | | |
| LNAV MDA | 880/24 493 (500-½) | | 880/55 493 (500-1) | |
| CIRCLING | 1000-1 568 (600-1) | | 1000-1½ 568 (600-1½) | 1000-2 568 (600-2) |

ELEV 432 D TDZE 387

HIRL all Rwys

TDZ/CL Rwys 16L, 16C, 16R and 34R




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 45810 W34A | APP CRS 344° | Rwy ldg 8500 TDZE 379 Apt Elev 433 |
|---|---|---|

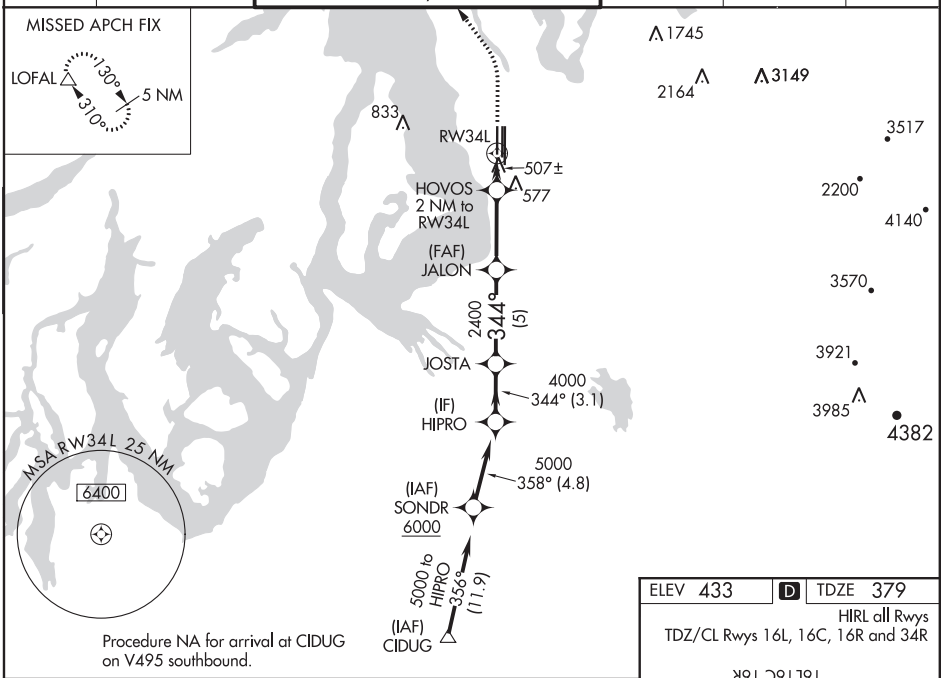
# RNAV (GPS) Y RWY 34L
## SEATTLE-TACOMA INTL (SEA)

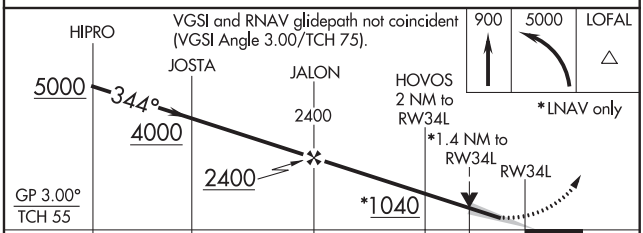
DME/DME RNP -0.3 NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -6°C (22°F) or above 54°C (130°F). Use of FD or AP providing RNAV track guidance required during simultaneous operations. LNAV procedure NA during simultaneous operations. Simultaneous approach authorized with Rwy 34R/C. For inoperative ALS, increase LNAV/VNAV all Cats visibility to 1⅜ SM, increase LNAV Cat A and B visibility to RVR 5500 and Cat C and D visibility to 1⅜ SM.
#RVR 1800 authorized with use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 900 then climbing left turn to 5000 direct LOFAL and hold.

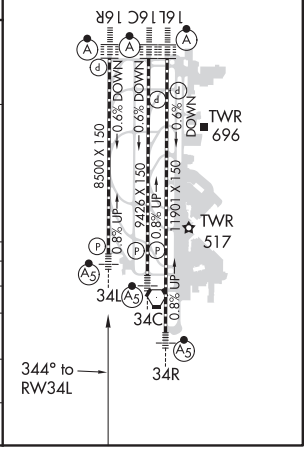
| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R) 120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA# | 579/24 200 (200-½) | | | |
| LNAV/VNAV DA | 808/40 429 (400-¾) | | | |
| LNAV MDA | 860/24 481 (500-½) | | 860/55 481 (500-1) | |
| CIRCLING | 1000-1 567 (600-1) | | 1000-1½ 567 (600-1½) | 1000-2 567 (600-2) |

ELEV 433 D TDZE 379
HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R






NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

SEATTLE, WASHINGTON | AL-582 (FAA) | 20086

| WAAS CH 42710 W34D | APP CRS 344° | Rwy ldg 11901<br>TDZE 372<br>Apt Elev 433 |
|---|---|---|

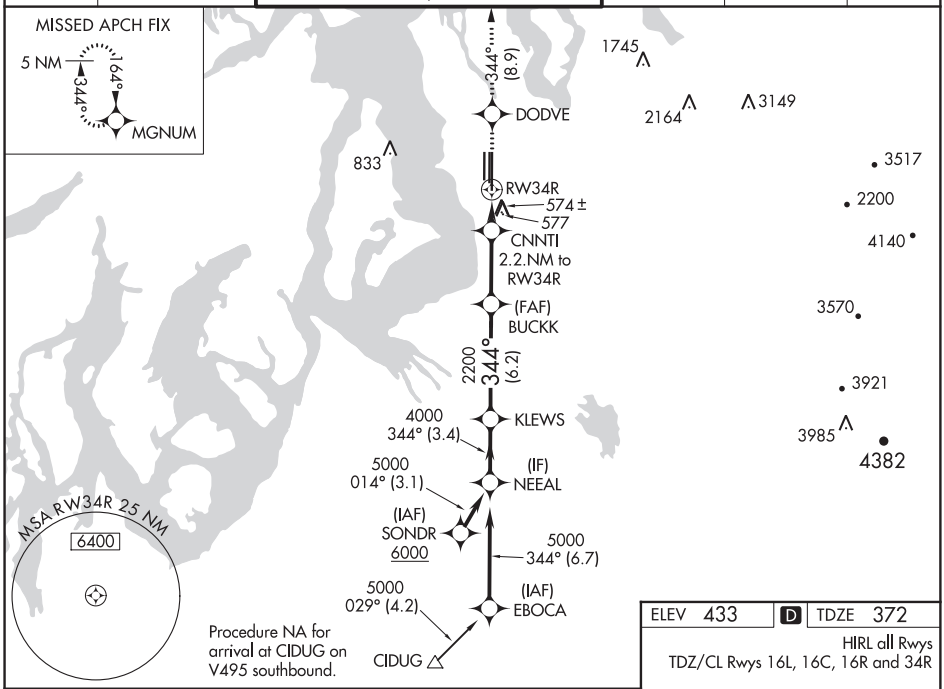
# RNAV (GPS) Y RWY 34R
## SEATTLE-TACOMA INTL (SEA)

DME/DME RNP-0.3 NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -6°C (22°F) or above 54°C (130°F). LNAV procedure NA during simultaneous operations. Use of FD or AP providing RNAV track guidance required during simultaneous operations. Simultaneous approach authorized with Rwy 34L. For inoperative ALS, increase LNAV Cat C and D visibility to 1⅜ SM.
#RVR 1800 authorized with use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 3000 direct DODVE then climb to 5000 on track 344° to MGNUM and hold, continue climb-in-hold to 5000.

| D-ATIS | SEATTLE APP CON | SEATTLE TOWER | GND CON | CLNC DEL | CPDLC |
|---|---|---|---|---|---|
| 118.0 | 133.65 273.45 | 119.9 239.3 (Rwys 16L, 16C, 34C, 34R)<br>120.95 239.3 (Rwys 16R, 34L) | 121.7 | 128.0 | |

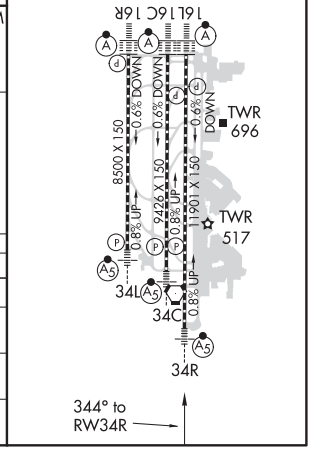


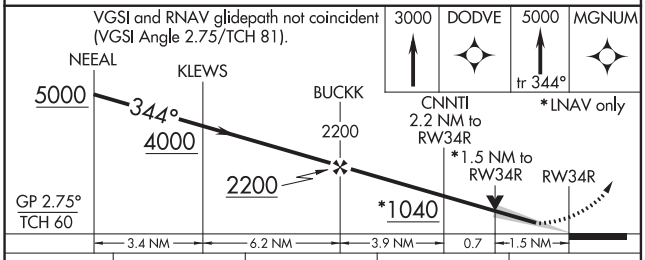

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 433 | D | TDZE 372

HIRL all Rwys
TDZ/CL Rwys 16L, 16C, 16R and 34R




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA# | 572/24 200 (200-½) | | | |
| LNAV/VNAV DA | 915-1½ 543 (500-1½) | | | |
| LNAV MDA | 840/24 468 (500-½) | | 840/50 468 (500-1) | |
| CIRCLING | 1000-1 567 (600-1) | | 1000-1½ 567 (600-1½) | 1000-2 567 (600-2) |

# BAY VISUAL RWY 16R/C/L

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON

D-ATIS
118.0
SEATTLE APP CON
125.6 273.45
SEATTLE TOWER
119.9 239.3 (Rwys 16L, 16C)
120.95 239.3 (Rwy 16R)
GND CON
121.7
CLNC DEL
128.0
CPDLC

HOOD CANAL
SEA R-341
I-5
SEA R-329
LAKE WASHINGTON
163°
WEST POINT
SPACE NEEDLE
EVERGREEN POINT FLOATING BRIDGE
SR-520
ELLIOTT BAY
BAINBRIDGE ISLAND
PUGET SOUND
BANK BUILDING SEA 10
LAKE SAMMAMISH
ALKI POINT
3000
I-90
GOLF COURSE SEA 8
2400
MERCER ISLAND FLOATING BRIDGE
SEA 6
1900
BOEING FIELD/ KING COUNTY INTL
VASHON ISLAND
16C
16R
16L

Vertical Guidance Navaid and angle:
LOC 110.75, I-CJL (GS 3.00°) Chan 44 (Y)
LOC 111.7, I-SZI (GS 3.00°) Chan 54
LOC 110.3, I-SNQ (GS 3.00°) Chan 40

NOTE: TCAS sensitive approach due to extensive traffic in the vicinity of Boeing Field/King County Intl Airport (KBFI).

LOCALIZER 110.75
I-CJL
Chan 44 (Y)

LOCALIZER 111.7
I-SZI
Chan 54

LOCALIZER 110.3
I-SNQ
Chan 40

SEATTLE
116.8 SEA
Chan 115

NOTE: See additional requirements on adjacent information page.

RADAR REQUIRED

COMMENCEMENT BAY

Weather Minimums: 3100 feet ceiling and 4 miles visibility.

0 5 10 NM 15 20 25 30

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

## BAY VISUAL APPROACH RWY 16R/C/L

When the ceiling is at least 3100′ and visibility is at least 4 miles, aircraft may be vectored over Puget Sound for a Bay Visual Runway 16R/C/L Approach. When cleared for a Bay Visual Approach: proceed inbound visually over the middle of Elliott Bay (via route depicted); intercept the Runway 16R/C/L localizer/SEA R-341 on Runway 16R/C/L extended centerline at the golf course (8 DME) and complete a straight in visual approach to the airport. On final approach, a descent profile of approximately 300′ per mile may be made with reference to the altitudes shown at the visual checkpoints or associated DME/fix positions.

## SEATTLE-TACOMA INTL AIRPORT

# ALERT NOTICE

**ATTENTION ALL AIRCRAFT LANDING TO THE SOUTH:**

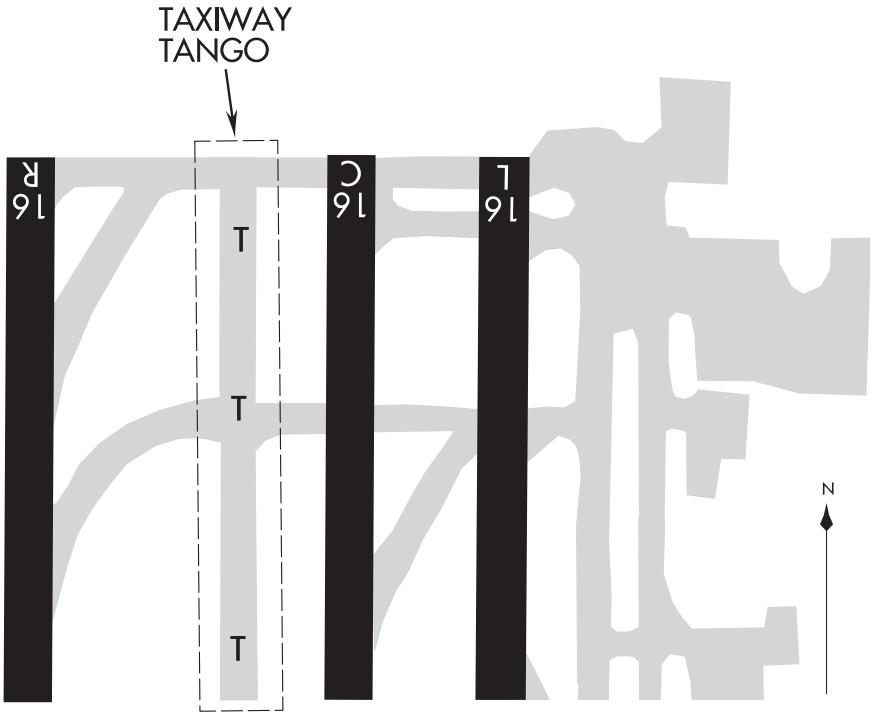
When transitioning from an instrument procedure to a visual approach to Runway 16C, verify that you are aligned for the intended landing Runway, not Taxiway Tango. Taxiway Tango is west and parallel to Runway 16C.

**TRANSITION TO VISUAL:**

Taxiway Tango has been mistaken for Runway 16C from the air during certain visibility conditions, i.e., wet runway, low sun angle reflections. Aircrews are advised to be aware of the proximity of the taxiway to Runway 16C and its runway-like appearance while on approach.

**RECOMMENDATION:**

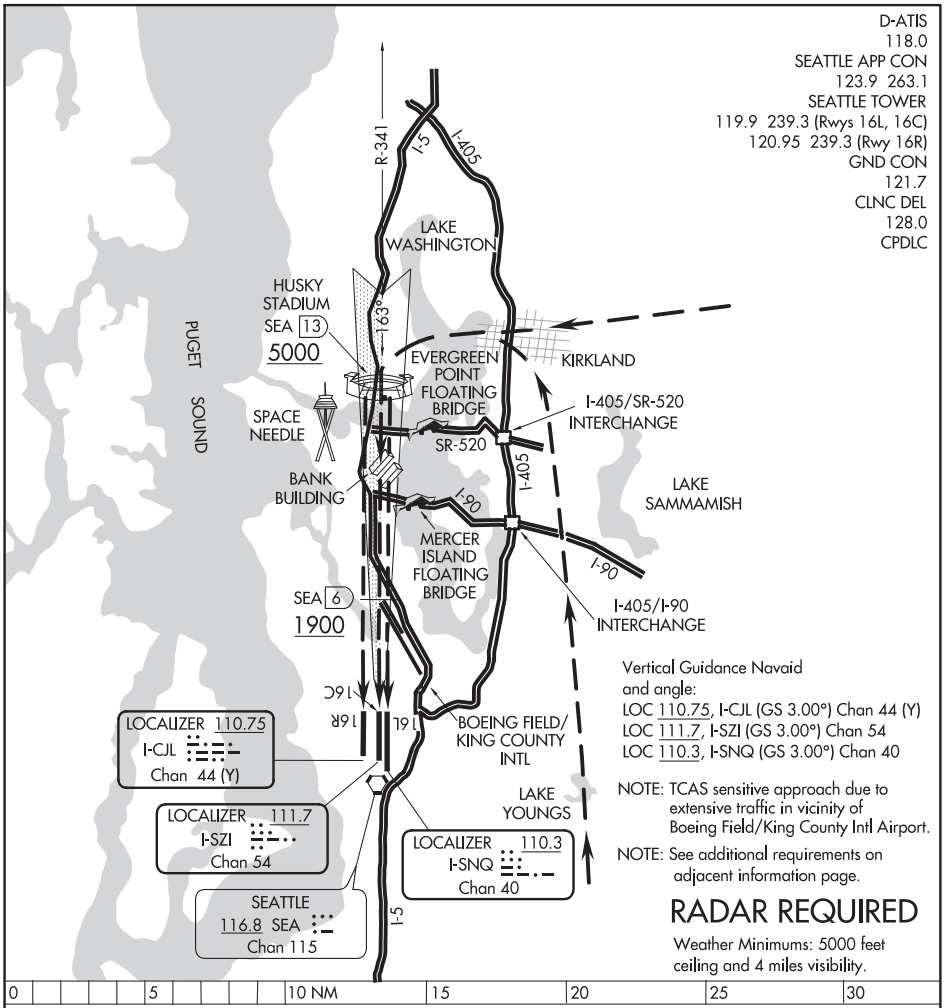
Aircrews should use visual cues, e.g., approach lighting systems, REILs, when available, to confirm alignment with Runway 16C not Taxiway Tango. Additionally, it is recommended to track the localizer until the runway environment is visually verified.



# HUSKY VISUAL RWY 16R/C/L

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

## HUSKY VISUAL APPROACH RWY 16R/C/L

When the ceiling is at least 5000′ and visibility is at least 4 miles, aircraft may be vectored over Kirkland or Lake Youngs for a Husky Visual Runway 16R/C/L Approach. When cleared for a Husky Visual Approach; proceed inbound visually over Husky Stadium (via route depicted); intercept the Runway 16R/C/L localizer/SEA R-341 at 13 DME and complete a straight in visual approach to the airport.

## SEATTLE-TACOMA INTL AIRPORT

# ALERT NOTICE

**ATTENTION ALL AIRCRAFT LANDING TO THE SOUTH:**

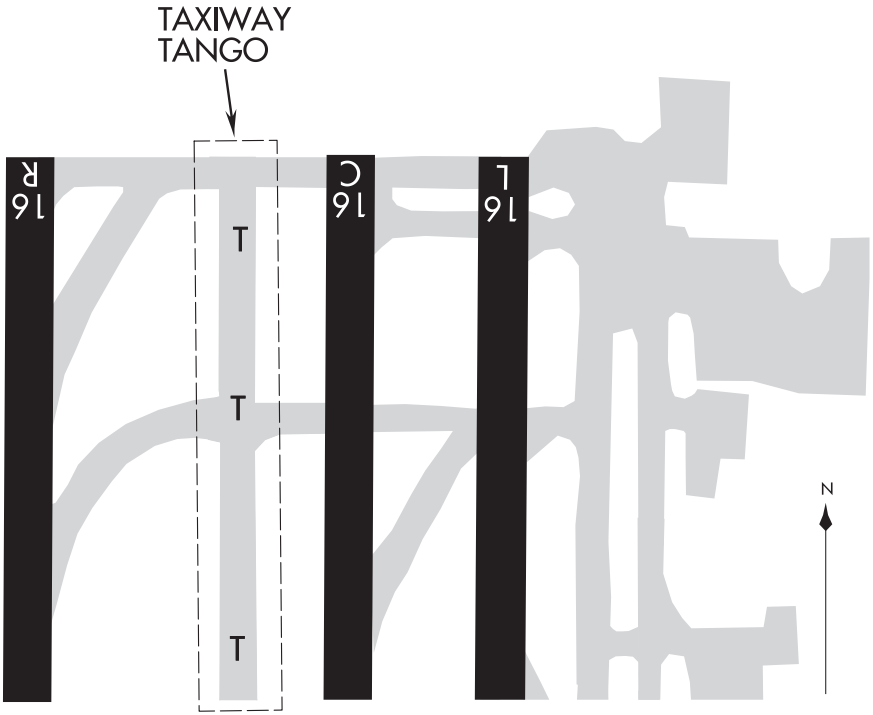
When transitioning from an instrument procedure to a visual approach to Runway 16C, verify that you are aligned for the intended landing Runway, not Taxiway Tango. Taxiway Tango is west and parallel to Runway 16C.

**TRANSITION TO VISUAL:**

Taxiway Tango has been mistaken for Runway 16C from the air during certain visibility conditions, i.e., wet runway, low sun angle reflections. Aircrews are advised to be aware of the proximity of the taxiway to Runway 16C and its runway-like appearance while on approach.

**RECOMMENDATION:**

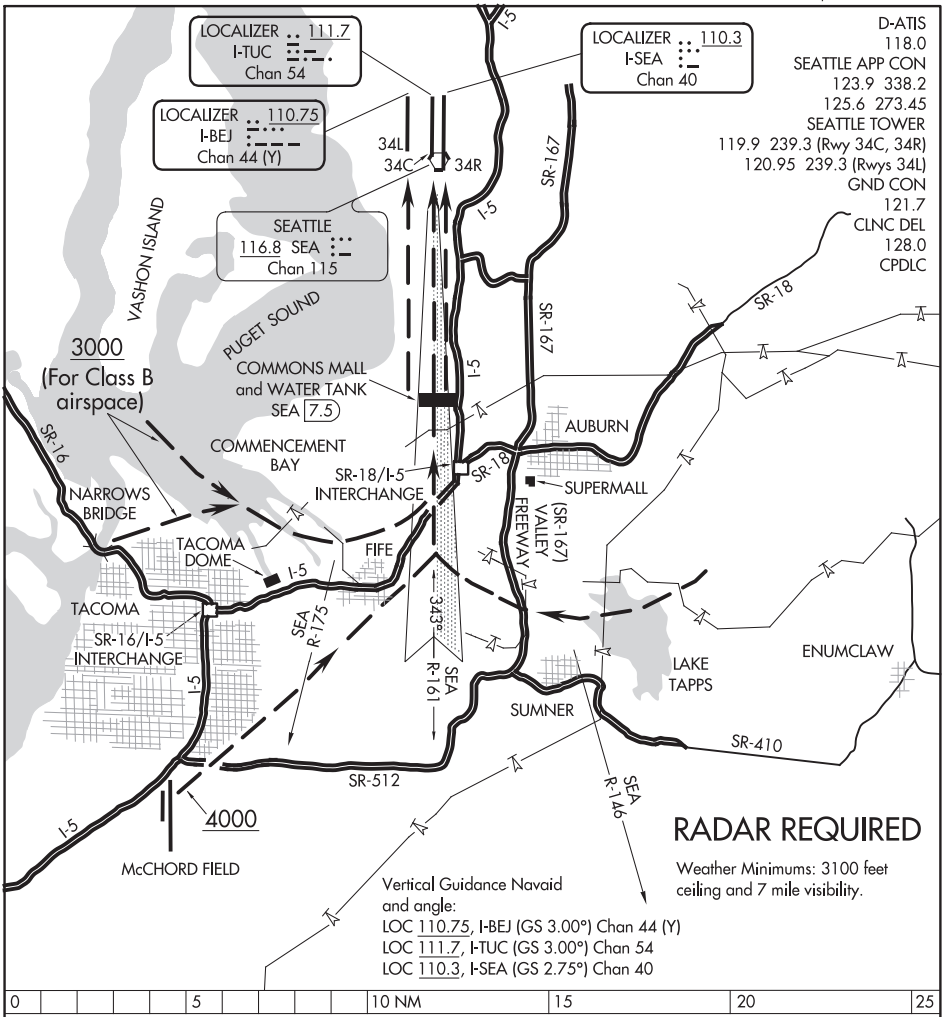
Aircrews should use visual cues, e.g., approach lighting systems, REILs, when available, to confirm alignment with Runway 16C not Taxiway Tango. Additionally, it is recommended to track the localizer until the runway environment is visually verified.



# MALL VISUAL RWY 34R/C/L

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

## MALL VISUAL APPROACH RWY 34R/C/L

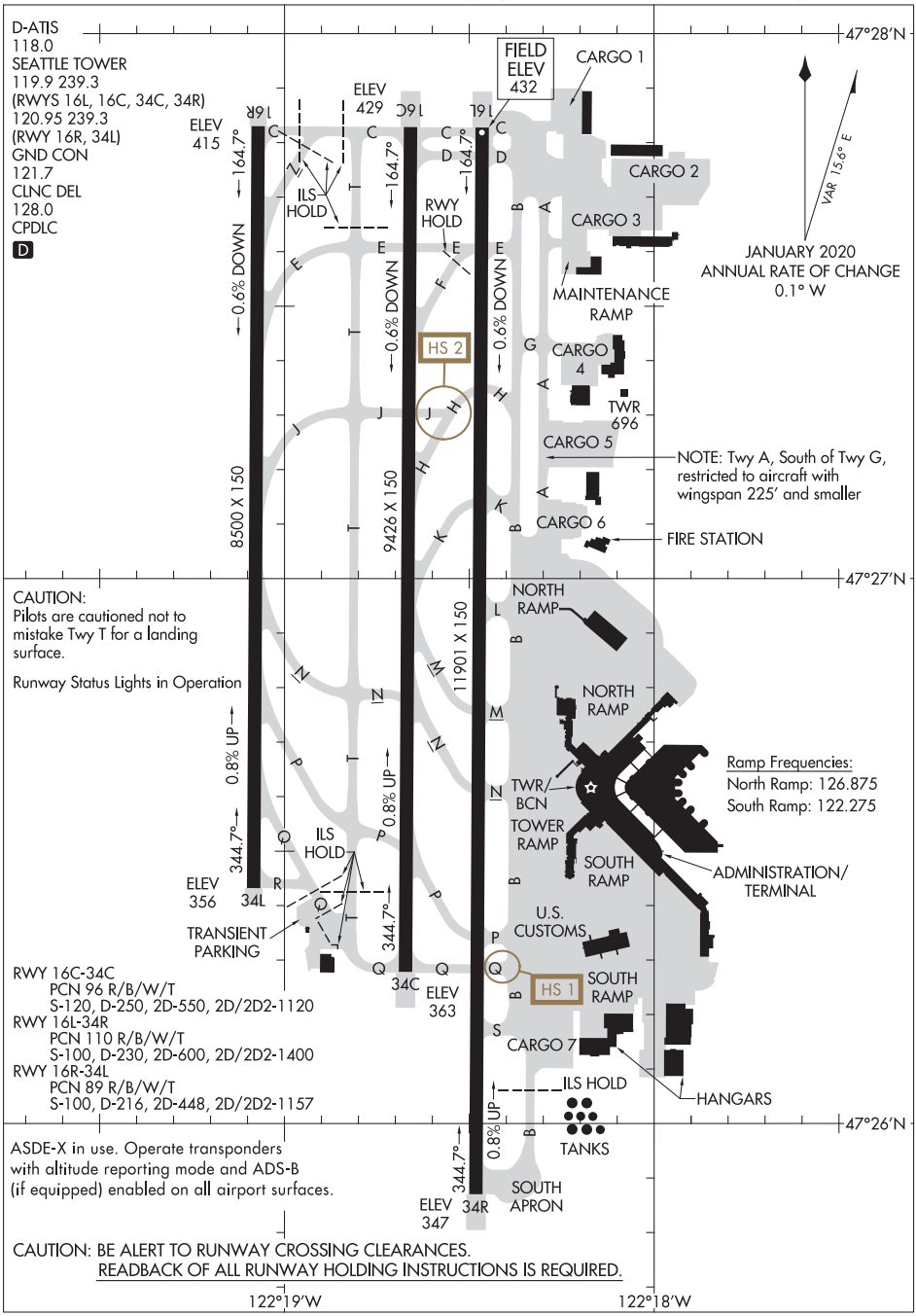
When the ceiling is at least 3100′ and visibility is at least 7 miles, aircraft may be vectored towards Commencement Bay or McChord Field or Lake Tapps for a Mall Visual Runway 34R/C/L Approach. When cleared for this approach; proceed inbound visually using the depicted landmarks to the centerline of runway 34R/C/L. Turn final before or over the interchange of State Road 18 (SR-18) and Interstate 5. Be established on the localizer or runway centerline at the Commons Mall and Water Tank (7.5 DME) and proceed visually to runway 34R/C/L.

20086

# AIRPORT DIAGRAM

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON



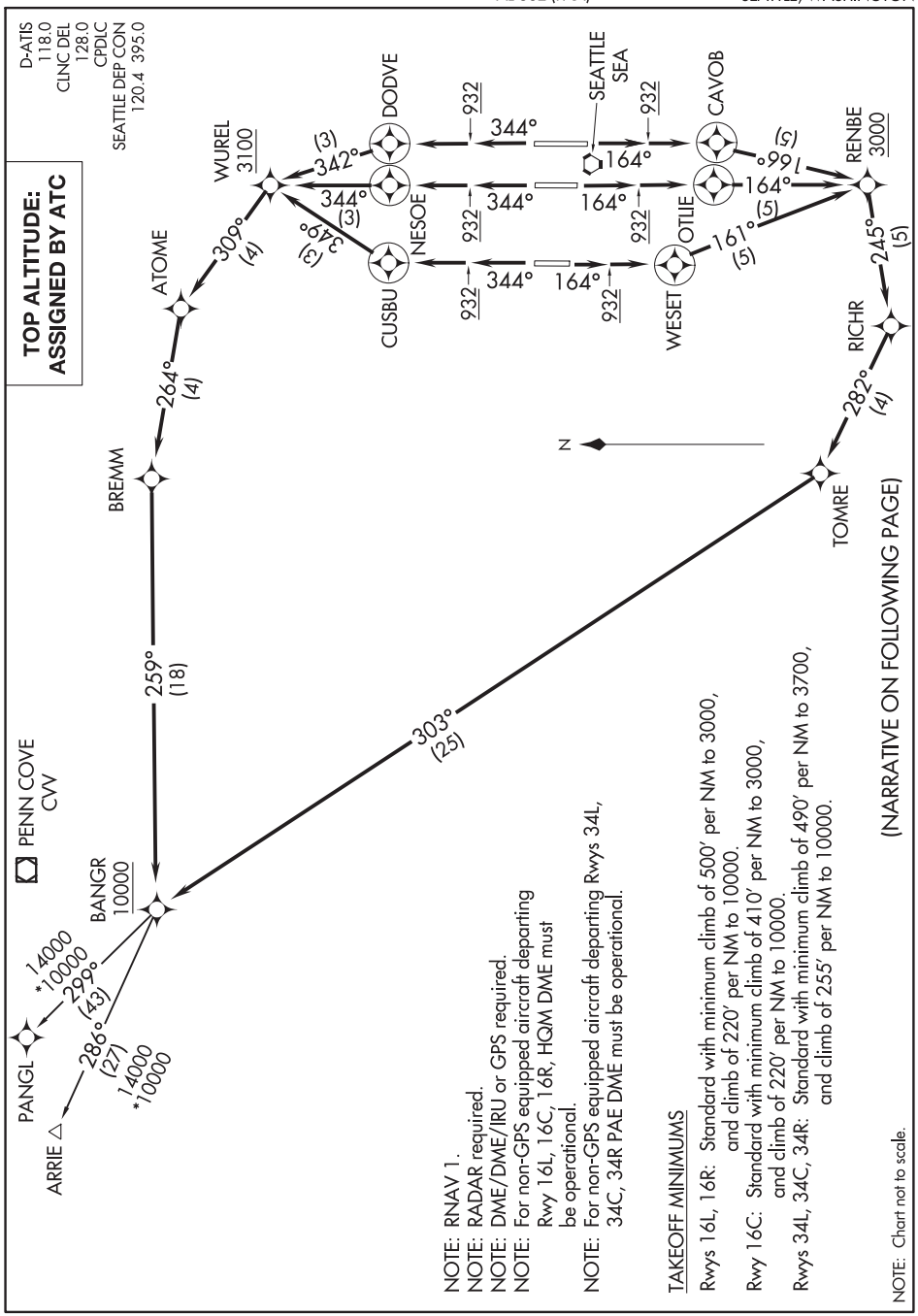

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM
20086
SEATTLE, WASHINGTON
SEATTLE-TACOMA INTL (SEA)

# BANGR NINE DEPARTURE (RNAV)

AL-582 (FAA)





NW-1, 05 NOV 2020 to 31 DEC 2020

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16L: Climb heading 164° to at/above 932, then direct CAVOB, then on track 166° to cross RENBE at or above 3000, then on depicted route to BANGR, cross BANGR at or above 10000, thence. . . .

TAKEOFF RUNWAY 16C: Climb heading 164° to at/above 932, then direct OTLIE, then on track 164° to cross RENBE at or above 3000, then on depicted route to BANGR, cross BANGR at or above 10000, thence. . . .

TAKEOFF RUNWAY 16R: Climb heading 164° to at/above 932, then direct WESET, then on track 161° to cross RENBE at or above 3000, then on depicted route to BANGR, cross BANGR at or above 10000, thence. . . .

TAKEOFF RUNWAY 34L: Climb heading 344° to at/above 932, then direct CUSBU, then on track 349° to cross WUREL at or above 3100, then on depicted route to BANGR, cross BANGR at or above 10000, thence. . . .

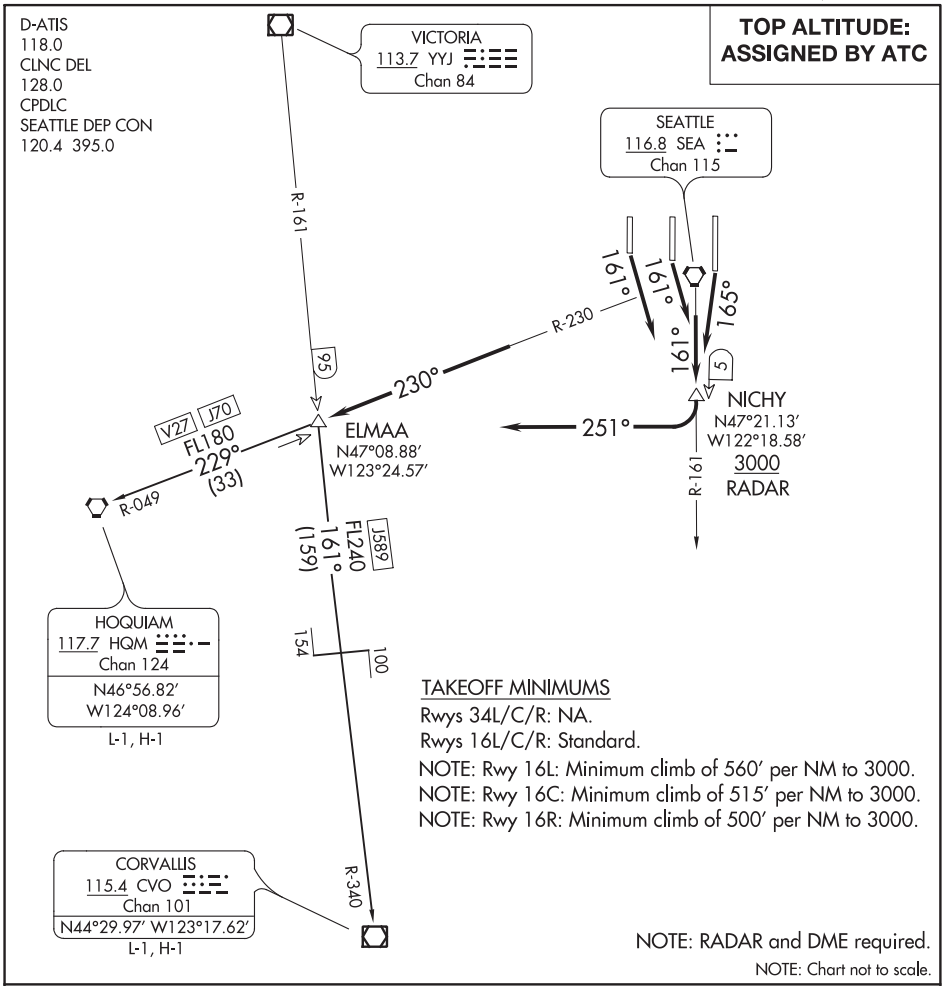
TAKEOFF RUNWAY 34C: Climb heading 344° to at/above 932, then direct NESOE, then on track 344° to cross WUREL at or above 3100, then on depicted route to BANGR, cross BANGR at or above 10000, thence. . . .

TAKEOFF RUNWAY 34R: Climb heading 344° to at/above 932, then direct DODVE, then on track 342° to cross WUREL at or above 3100, then on depicted route to BANGR, cross BANGR at or above 10000, thence. . . .

. . . .on (transition). Maintain assigned altitude, expect filed altitude/flight level 15 NM from SEA VORTAC.

ARRIE TRANSITION (BANGR9.ARRIE)

PANGL TRANSITION (BANGR9.PANGL)




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16L: Climb heading 165° and SEA R-161, thence. . . .
TAKEOFF RUNWAYS 16C, 16R: Climb heading 161° and SEA R-161, thence. . . .

. . . .to cross NICHY/5 DME/RADAR at or above 3000, then right turn heading 251° to intercept SEA R-230 to ELMAA INT, then on (transition/assigned route), expect requested altitude/flight level 15 NM from SEA.

CORVALLIS TRANSITION (ELMAA3.CVO): From over ELMAA on YYJ R-161 and CVO R-340 to CVO VOR/DME.
HOQUIAM TRANSITION (ELMAA3.HQM): From over ELMAA on HQM R-049 to HQM VORTAC.

(HAROB6.HAROB) 17285

# HAROB SIX DEPARTURE (RNAV)

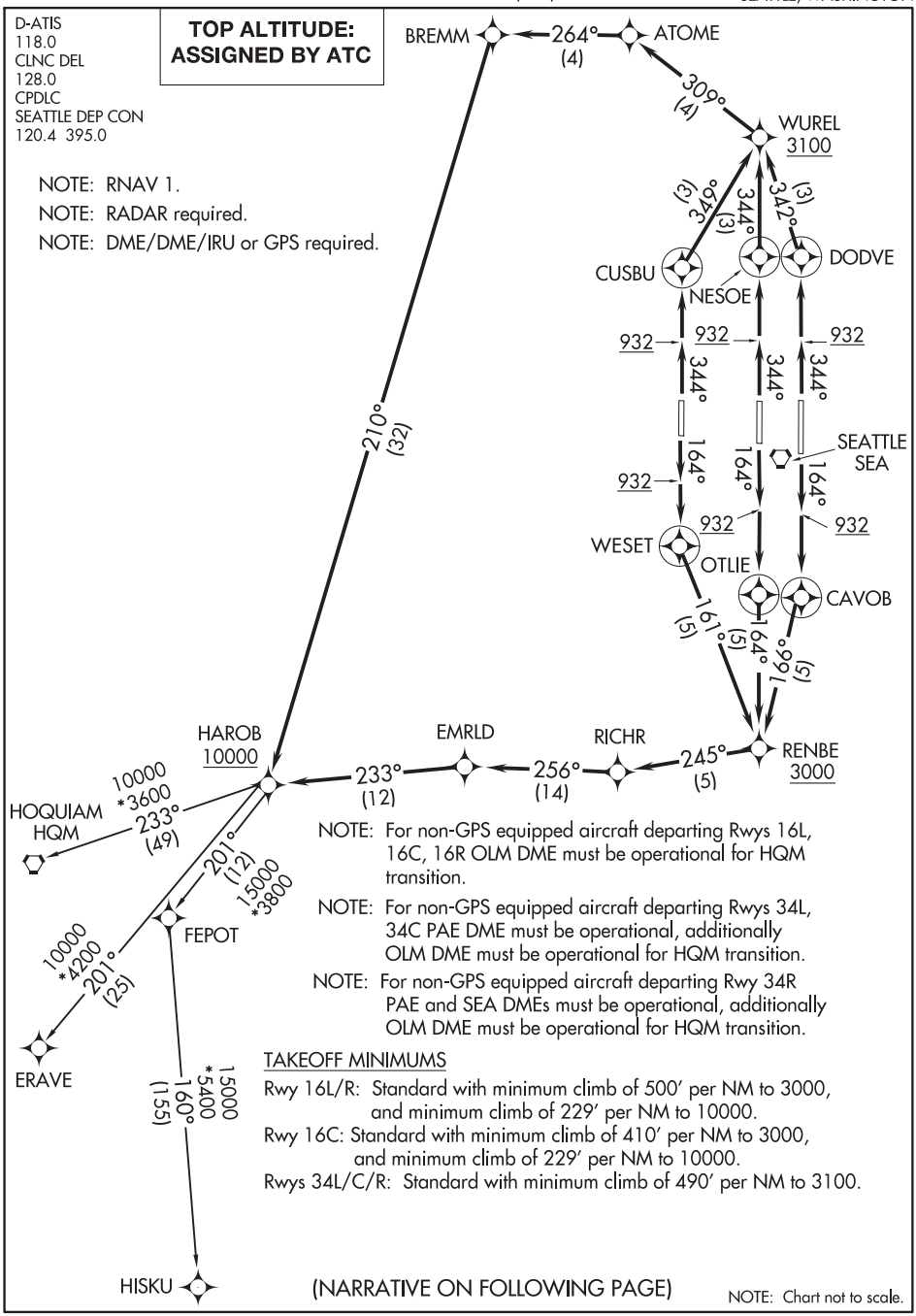
AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON

D-ATIS
118.0
CLNC DEL
128.0
CPDLC
SEATTLE DEP CON
120.4 395.0

**TOP ALTITUDE: ASSIGNED BY ATC**

NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.




NOTE: For non-GPS equipped aircraft departing Rwys 16L, 16C, 16R OLM DME must be operational for HQM transition.

NOTE: For non-GPS equipped aircraft departing Rwys 34L, 34C PAE DME must be operational, additionally OLM DME must be operational for HQM transition.

NOTE: For non-GPS equipped aircraft departing Rwy 34R PAE and SEA DMEs must be operational, additionally OLM DME must be operational for HQM transition.

TAKEOFF MINIMUMS

Rwy 16L/R: Standard with minimum climb of 500′ per NM to 3000, and minimum climb of 229′ per NM to 10000.
Rwy 16C: Standard with minimum climb of 410′ per NM to 3000, and minimum climb of 229′ per NM to 10000.
Rwys 34L/C/R: Standard with minimum climb of 490′ per NM to 3100.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16C: Climb heading 164° to at/above 932, then direct OTLIE, then on track 164° to cross RENBE at/above 3000, then on depicted route to HAROB, cross HAROB at or above 10000, thence. . . .

TAKEOFF RUNWAY 16L: Climb heading 164° to at/above 932, then direct CAVOB, then on track 166° to cross RENBE at/above 3000, then on depicted route to HAROB, cross HAROB at or above 10000, thence. . . .

TAKEOFF RUNWAY 16R: Climb heading 164° to at/above 932, then direct WESET, then on track 161° to cross RENBE at/above 3000, then on depicted route to HAROB, cross HAROB at or above 10000, thence. . . .

TAKEOFF RUNWAY 34C: Climb heading 344° to at/above 932, then direct NESOE, then on track 344° to cross WUREL at/above 3100, then on depicted route to HAROB, cross HAROB at or above 10000, thence. . . .

TAKEOFF RUNWAY 34L: Climb heading 344° to at/above 932, then direct CUSBU, then on track 349° to cross WUREL at/above 3100, then on depicted route to HAROB, cross HAROB at or above 10000, thence. . . .

TAKEOFF RUNWAY 34R: Climb heading 344° to at/above 932, then direct DODVE, then on track 342° to cross WUREL at/above 3100, then on depicted route to HAROB, cross HAROB at or above 10000, thence. . . .

. . . . on (transition). Maintain assigned altitude, expect filed altitude/flight level 15 NM from SEA VORTAC.

ERAVE TRANSITION (HAROB6.ERAVE)

FEPOT TRANSITION (HAROB6.FEPOT)

HISKU TRANSITION (HAROB6.HISKU)

HOQUIAM TRANSITION (HAROB6.HQM)

NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

# ISBRG ONE DEPARTURE (RNAV)

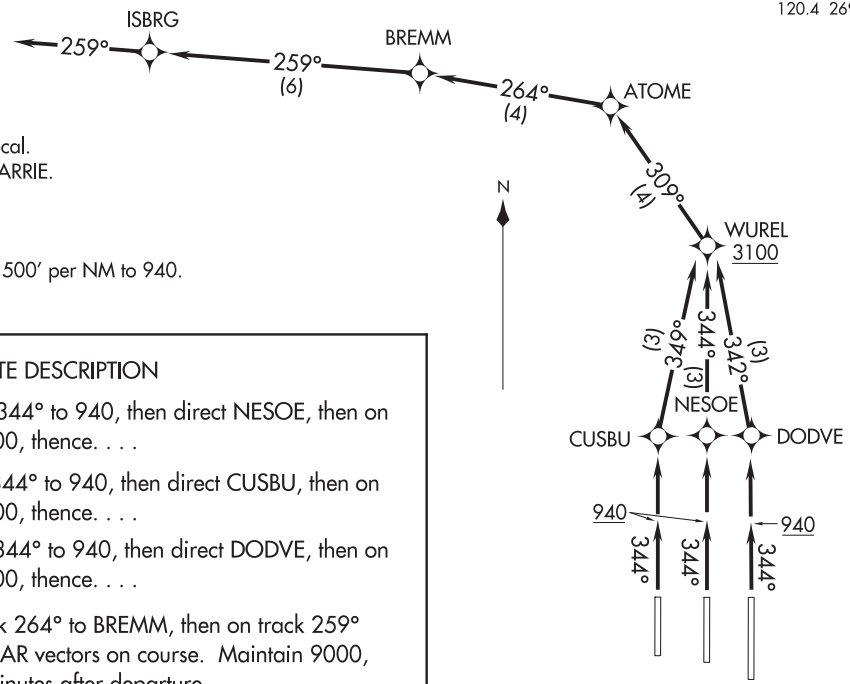
(ISBRG1.ISBRG) 19JUL18

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON

△ ARRIE

**TOP ALTITUDE: 9000**

D-ATIS
118.0
CLNC DEL
128.0
CPDLC
GND CON
121.7
SEATTLE TOWER
119.9 239.3 (Rwys 16L/34R, 16C/34C)
120.95 239.3 (Rwy 16R/34L)
SEATTLE DEP CON
120.4 269.125




NOTE: RNAV-1.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: Procedure available from 2200 to 0600 local.
NOTE: ARRIE departures expect direct/vectors to ARRIE.

TAKEOFF MINIMUMS
Rwys 16L/C/R - NA, ATC.
Rwys 34L/C/R - Standard with minimum climb of 500′ per NM to 940.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 34C: Climb heading 344° to 940, then direct NESOE, then on track 344° to cross WUREL at or above 3100, thence. . . .

TAKEOFF RUNWAY 34L: Climb heading 344° to 940, then direct CUSBU, then on track 349° to cross WUREL at or above 3100, thence. . . .

TAKEOFF RUNWAY 34R: Climb heading 344° to 940, then direct DODVE, then on track 342° to cross WUREL at or above 3100, thence. . . .

. . . .on track 309° to ATOME, then on track 264° to BREMM, then on track 259° to ISBRG, then on course 259°, expect RADAR vectors on course. Maintain 9000, expect clearance to filed altitude within 5 minutes after departure.

(ISBRG1.ISBRG) 18200
ISBRG ONE DEPARTURE (RNAV)
AL-582 (FAA)
SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON



NW-1, 05 NOV 2020 to 31 DEC 2020

D-ATIS
118.0
CLNC DEL
128.0
CPDLC
GND CON
121.7
SEATTLE TOWER
119.9 239.3 (Rwys 16L/34R, 16C/34C)
120.95 239.3 (Rwy 16R/34L)
SEATTLE DEP CON
120.4 269.125

**TOP ALTITUDE: 9000**

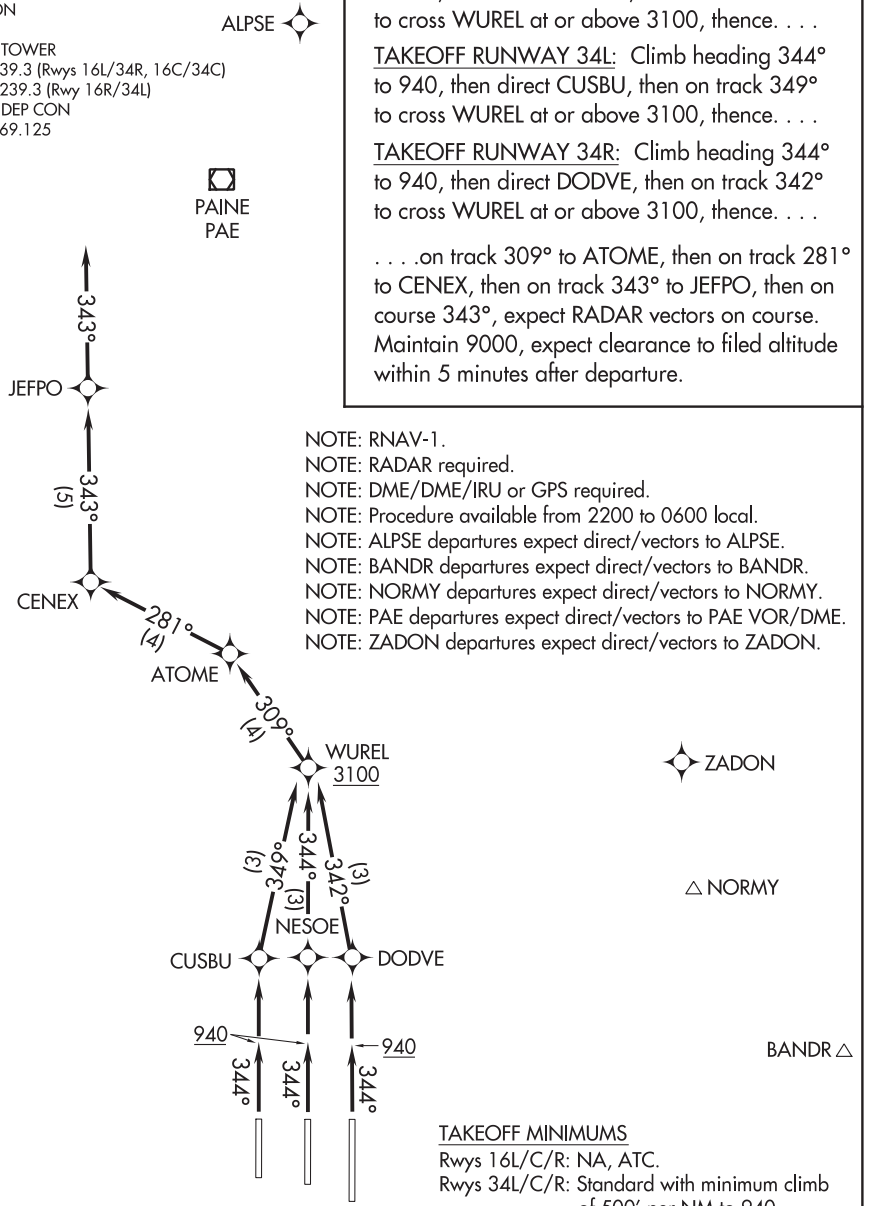
## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 34C: Climb heading 344° to 940, then direct NESOE, then on track 344° to cross WUREL at or above 3100, thence. . . .

TAKEOFF RUNWAY 34L: Climb heading 344° to 940, then direct CUSBU, then on track 349° to cross WUREL at or above 3100, thence. . . .

TAKEOFF RUNWAY 34R: Climb heading 344° to 940, then direct DODVE, then on track 342° to cross WUREL at or above 3100, thence. . . .

. . . .on track 309° to ATOME, then on track 281° to CENEX, then on track 343° to JEFPO, then on course 343°, expect RADAR vectors on course. Maintain 9000, expect clearance to filed altitude within 5 minutes after departure.




NOTE: RNAV-1.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: Procedure available from 2200 to 0600 local.
NOTE: ALPSE departures expect direct/vectors to ALPSE.
NOTE: BANDR departures expect direct/vectors to BANDR.
NOTE: NORMY departures expect direct/vectors to NORMY.
NOTE: PAE departures expect direct/vectors to PAE VOR/DME.
NOTE: ZADON departures expect direct/vectors to ZADON.

TAKEOFF MINIMUMS
Rwys 16L/C/R: NA, ATC.
Rwys 34L/C/R: Standard with minimum climb of 500′ per NM to 940.

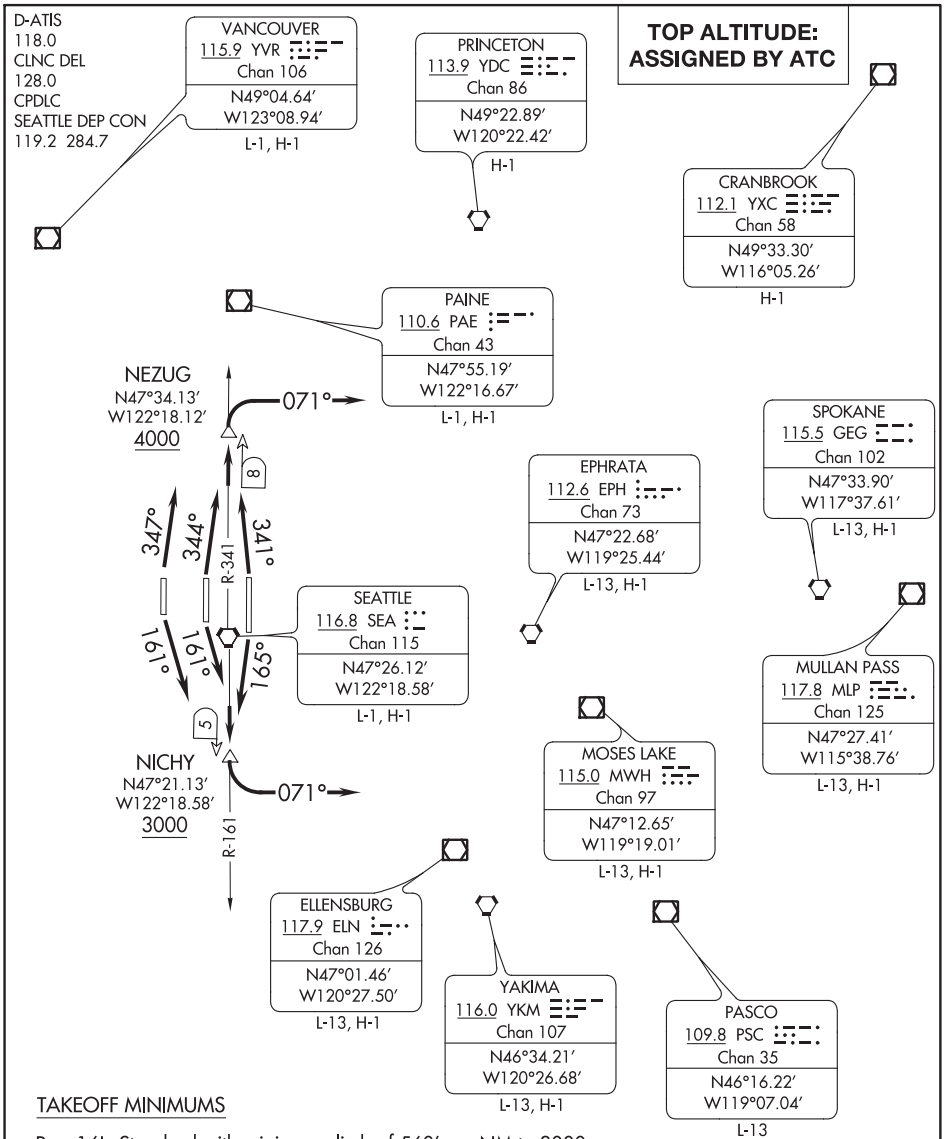
NOTE: Chart not to scale.

(MONTN1.SEA) 20030

# MOUNTAIN ONE DEPARTURE

AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON




TAKEOFF MINIMUMS

Rwy 16L: Standard with minimum climb of 560′ per NM to 3000.
Rwy 16C: Standard with minimum climb of 515′ per NM to 3000.
Rwy 16R: Standard with minimum climb of 500′ per NM to 3000.
Rwys 34L/C/R: Standard with minimum climb of 580′ per NM to 4000.

NOTE: RADAR and DME required.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.


NW-1, 05 NOV 2020 to 31 DEC 2020

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16L: Climb on heading 165° and SEA VORTAC R-161 to cross NICHY at or above 3000, then left turn on heading 071° for RADAR vectors to assigned route, thence. . . .
TAKEOFF RUNWAYS 16C/R: Climb on heading 161° and SEA VORTAC R-161 to cross NICHY at or above 3000, then left turn on heading 071° for RADAR vectors to assigned route, thence. . . .
TAKEOFF RUNWAY 34L: Climb on heading 347° and SEA VORTAC R-341 to cross NEZUG at or above 4000, then right turn on heading 071° for RADAR vectors to assigned route, thence. . . .
TAKEOFF RUNWAY 34C: Climb on heading 344° and SEA VORTAC R-341 to cross NEZUG at or above 4000, then right turn on heading 071° for RADAR vectors to assigned route, thence. . . .
TAKEOFF RUNWAY 34R: Climb on heading 341° and SEA VORTAC R-341 to cross NEZUG at or above 4000, then right turn on heading 071° for RADAR vectors to assigned route, thence. . . .

. . . .Maintain ATC assigned altitude, expect altitude/flight level 15 NM from SEA VORTAC.

LOST COMMUNICATIONS: If no contact with ATC leaving 4000′, proceed direct SEA VORTAC, then proceed on course.

NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

(OZWLD1.OZWLD) 18200

# OZWLD ONE DEPARTURE (RNAV)

AL-582 (FAA)

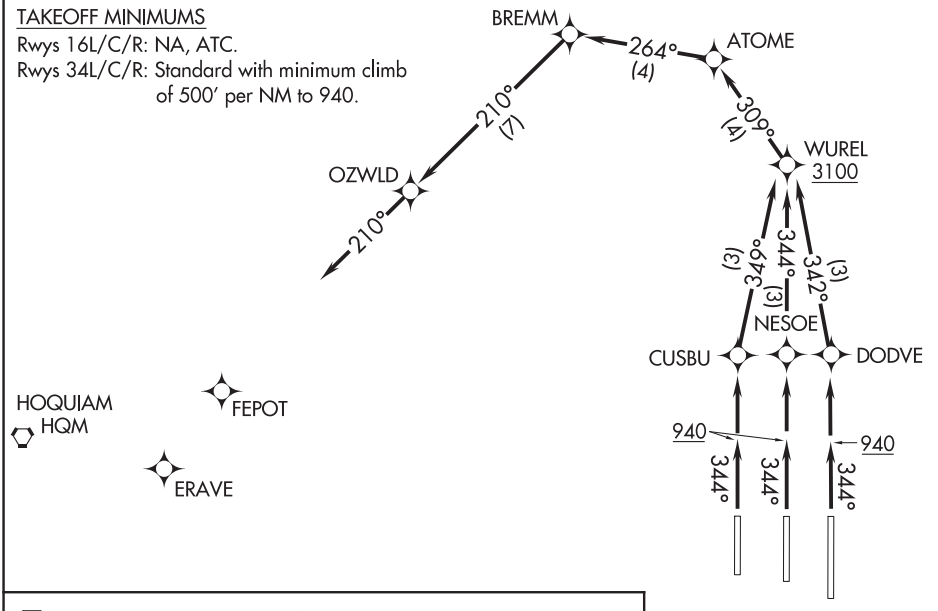
SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON

**TOP ALTITUDE: 9000**

NOTE: RNAV-1.
NOTE: RADAR required.
NOTE: DME/DME/IRU or GPS required.
NOTE: Procedure available from 2200 to 0600 local.
NOTE: ALDER departures expect direct/vectors to ALDER.
NOTE: BUWZO departures expect direct/vectors to BUWZO.
NOTE: ERAVE departures expect direct/vectors to ERAVE.
NOTE: FEPOT departures expect direct/vectors to FEPOT.
NOTE: HQM departures expect direct/vectors to HQM VORTAC.
NOTE: SUMMA departures expect direct/vectors to SUMMA.

D-ATIS
118.0
CLNC DEL
128.0
CPDLC
GND CON
121.7
SEATTLE TOWER
119.9 239.3 (Rwys 16L/34R, 16C/34C)
120.95 239.3 (Rwy 16R/34L)
SEATTLE DEP CON
120.4 269.125

TAKEOFF MINIMUMS
Rwys 16L/C/R: NA, ATC.
Rwys 34L/C/R: Standard with minimum climb of 500′ per NM to 940.




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 34C: Climb heading 344° to 940, then direct NESOE, then on track 344° to cross WUREL at or above 3100, thence. . . .

TAKEOFF RUNWAY 34L: Climb heading 344° to 940, then direct CUSBU, then on track 349° to cross WUREL at or above 3100, thence. . . .

TAKEOFF RUNWAY 34R: Climb heading 344° to 940, then direct DODVE, then on track 342° to cross WUREL at or above 3100, thence. . . .

. . . .on track 309° to ATOME, then on track 264° to BREMM, then on track 210° to OZWLD, then on course 210°, expect RADAR vectors on course. Maintain 9000, expect clearance to filed altitude within 5 minutes after departure.

△ BUWZO

△ ALDER

SUMMA △

NOTE: Chart not to scale.

# SEATTLE SEVEN DEPARTURE

AL-582 (FAA)

D-ATIS
118.0
CLNC DEL
128.0
CPDLC
SEATTLE DEP CON
119.2 284.7

VANCOUVER
115.9 YVR
Chan 106
N49°04.64′
W123°08.94′
L-1, H-1

WHATCOM
113.0 HUH
Chan 77
N48°56.72′
W122°34.76′
L-1, H-1

PRINCETON
113.9 YDC
Chan 86
N49°22.89′
W120°22.42′
H-1

VICTORIA
113.7 YYJ
Chan 84
N48°43.62′
W123°29.06′
L-1, H-1

PAINE
110.6 PAE
Chan 43
N47°55.19′
W122°16.67′
L-1, H-1

EPHRATA
112.6 EPH
Chan 73
N47°22.68′
W119°25.44′
L-13, H-1

TATOOSH
112.2 TOU
Chan 59
N48°17.99′
W124°37.62′
L-1, H-1

SEATTLE
116.8 SEA
Chan 115
N47°26.12′
W122°18.58′
L-1, H-1

ELLENSBURG
117.9 ELN
Chan 126
N47°01.46′
W120°27.50′
L-13, H-1

HOQUIAM
117.7 HQM
Chan 124
N46°56.82′
W124°08.96′
L-1, H-1

OLYMPIA
113.4 OLM
Chan 81
N46°58.30′
W122°54.11′
L-1, H-1

BATTLE GROUND
116.6 BTG
Chan 113
N45°44.87′
W122°35.49′
L-1, H-1

YAKIMA
116.0 YKM
Chan 107
N46°34.21′
W120°26.68′
L-13, H-1

ASTORIA
114.0 AST
Chan 87
N46°09.70′
W123°52.82′
L-1

NEWBERG
117.4 UBG
Chan 121
N45°21.19′
W122°58.69′
L-1, H-1

EUGENE
112.9 EUG
Chan 76
N44°07.25′
W123°13.37′
L-1, H-1

NOTE: Chart not to scale.

NOTE: RADAR required.

NOTE: Between the hours of 2200 and 0600 local, large turbine powered aircraft departing Rwys 34L/C/R will be vectored over Puget Sound for noise abatement before proceeding on course.

TAKEOFF MINIMUMS
Rwys 16C, 34L, 34C, 34R: Standard.
Rwy 16L: 300-1 or standard with minimum climb of 425′ per NM to 600.
Rwy 16R: 300-1¼ or standard with minimum climb of 215′ per NM to 600.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 16L: Climb heading 165° and on SEA R-161, thence. . . .
TAKEOFF RUNWAY 16C: Climb heading 163° and on SEA R-161, thence. . . .
TAKEOFF RUNWAY 16R: Climb heading 158° and on SEA R-161, thence. . . .
TAKEOFF RUNWAY 34L: Climb heading 350° and on SEA R-341, thence. . . .
TAKEOFF RUNWAYS 34C/R: Climb heading 345° and on SEA R-341, thence. . . .

. . . .maintain assigned altitude, expect RADAR vectors to assigned route.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

(SUMMA2.SUMMA) 20030

# SUMMA TWO DEPARTURE

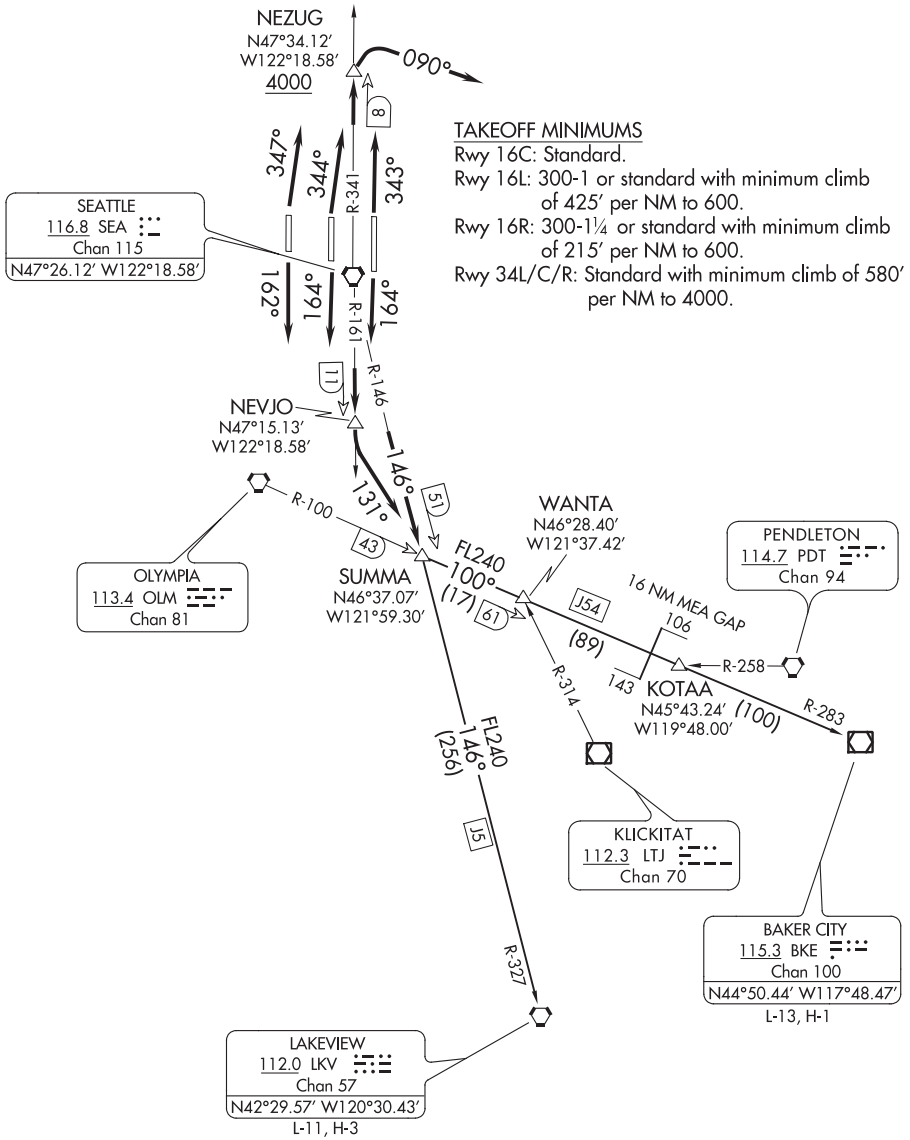
AL-582 (FAA)

SEATTLE-TACOMA INTL (SEA)
SEATTLE, WASHINGTON

D-ATIS
118.0
CPDLC
SEATTLE DEP CON
119.2 284.7 (Rwys 34R/C/L) (N)
120.4 269.125 (Rwys 16L/C/R) (S)

**TOP ALTITUDE: ASSIGNED BY ATC**

NOTE: RADAR and DME required.




TAKEOFF MINIMUMS
Rwy 16C: Standard.
Rwy 16L: 300-1 or standard with minimum climb of 425′ per NM to 600.
Rwy 16R: 300-1¼ or standard with minimum climb of 215′ per NM to 600.
Rwy 34L/C/R: Standard with minimum climb of 580′ per NM to 4000.

NOTE: Chart not to scale.


NW-1, 05 NOV 2020 to 31 DEC 2020

SUMMA TWO DEPARTURE
SEATTLE, WASHINGTON
SEATTLE-TACOMA INTL (SEA)
(SUMMA2.SUMMA) 30JAN20

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 16L/C: Climb on heading 164° and SEA VORTAC R-161 to NEVJO, thence. . . .
TAKEOFF RUNWAY 16R: Climb on heading 162° and SEA VORTAC R-161 to NEVJO, thence. . . .

. . . . left turn heading 131° to intercept the SEA R-146 to SUMMA INT, then on assigned transition, maintain ATC assigned altitude.

TAKEOFF RUNWAY 34L: Climb on heading 347° and SEA VORTAC R-341, to cross NEZUG at or above 4000, thence. . . .
TAKEOFF RUNWAY 34C: Climb on heading 344° and SEA VORTAC R-341, to cross NEZUG at or above 4000, thence. . . .
TAKEOFF RUNWAY 34R: Climb on heading 343° and SEA VORTAC R-341, to cross NEZUG at or above 4000, thence. . . .

. . . .right turn heading 090° for RADAR vectors to SUMMA INT, then on assigned transition, maintain ATC assigned altitude.

BAKER CITY TRANSITION (SUMMA2.BKE): From over SUMMA on OLM R-100 and and BKE R-283 to BKE VOR/DME.

LAKEVIEW TRANSITION (SUMMA2.LKV): From over SUMMA on SEA R-146 and and LKV R-327 to LKV VORTAC.

NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

SHELBY, MONTANA | AL-5372 (FAA) | 20310

| WAAS CH 69630 W05A | APP CRS 050° | Rwy ldg 5005 TDZE 3427 Apt Elev 3443 |
|---|---|---|

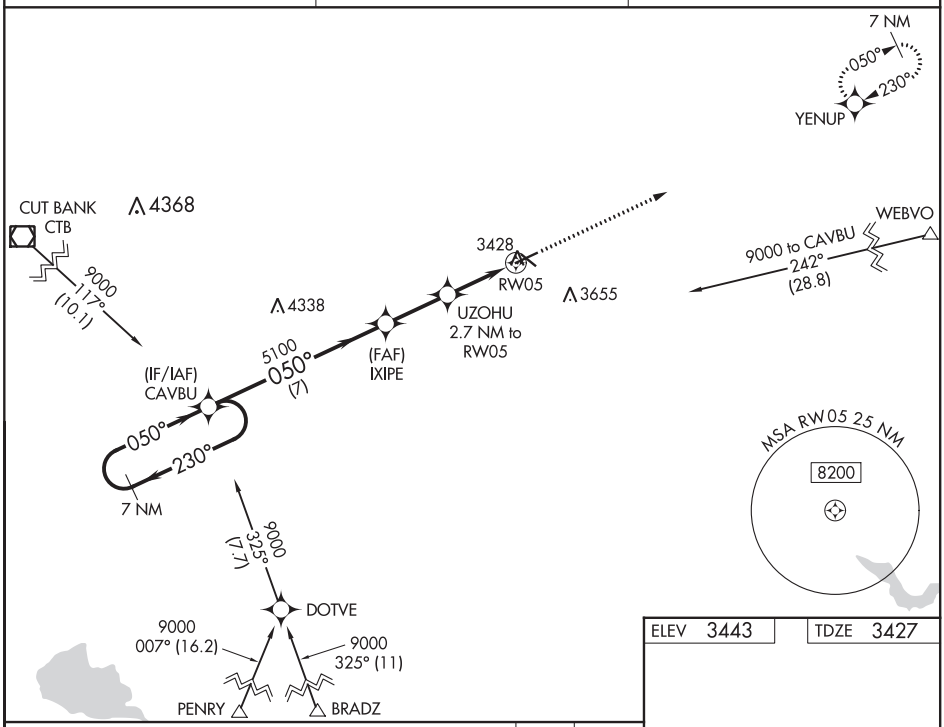
# RNAV (GPS) RWY 5
## SHELBY (SBX)

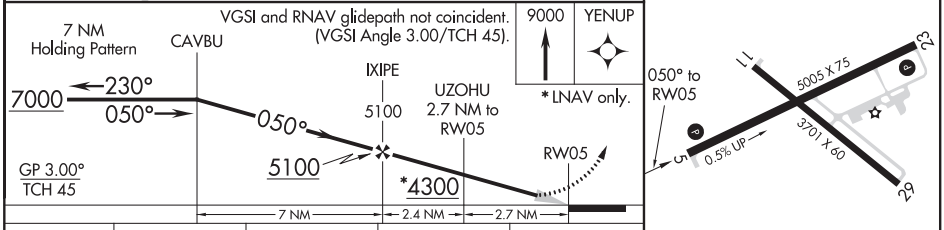
T
NA
-31°C

Night landing: Rwy 23 NA. Baro-VNAV NA. DME/DME RNP-0.3 NA. Use Cut Bank altimeter setting, if not received use Great Falls altimeter setting and increase all DA 81 feet and all MDA 100 feet; increase LPV all Cats visibility ¼ mile, LNAV/VNAV all Cats visibility ⅝ mile, LNAV Cats C/D and Circling Cat C/D visibilities ¼ mile.

MISSED APPROACH: Climb to 9000 direct YENUP and hold, continue climb-in-hold to 9000.

| CTB ASOS | SALT LAKE CITY CENTER | UNICOM |
|---|---|---|
| 119.025 | 133.4 285.4 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 3733-1 306 (300-1) | | | |
| LNAV/VNAV DA | 3783-1⅛ 356 (400-1⅛) | | | |
| LNAV MDA | 3800-1 373 (400-1) | | 3800-1⅛ 373 (400-1⅛) | |
| C CIRCLING | 4020-1 577 (600-1) | 4080-1 637 (700-1) | 4100-1¾ 657 (700-1¾) | 4220-2½ 777 (800-2½) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 78026 W23A | APP CRS 230° | Rwy ldg 5005<br>TDZE 3443<br>Apt Elev 3443 |
|---|---|---|

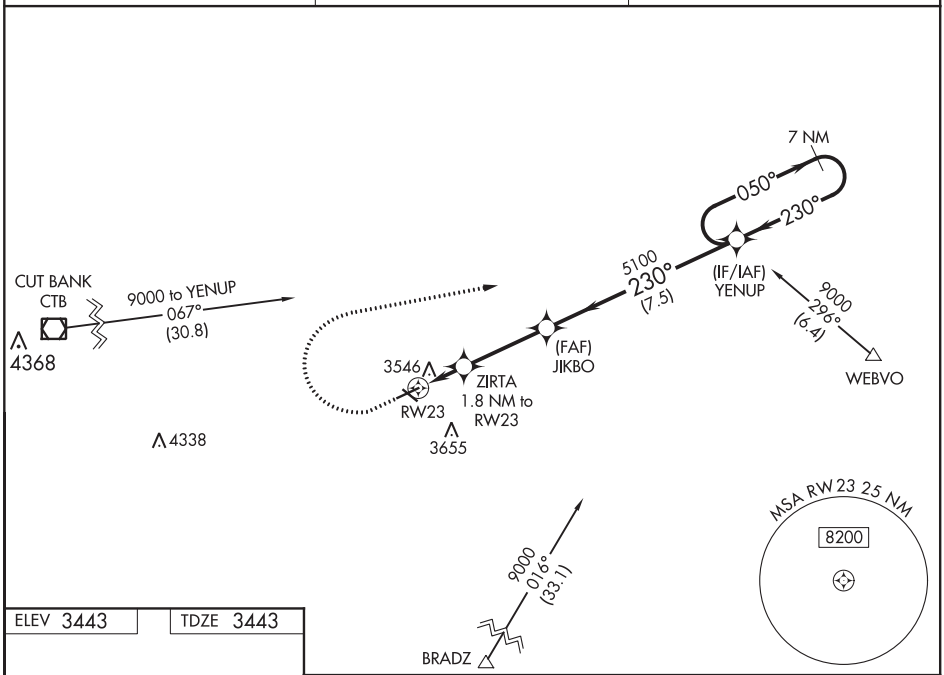
# RNAV (GPS) RWY 23
## SHELBY (SBX)

NA
-31°C

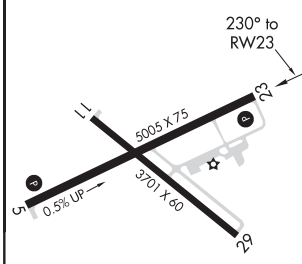
Baro-VNAV NA. Rwy 23 helicopter visibility reduction below 1 SM NA. DME/DME RNP-0.3 NA. Use Cut Bank altimeter setting, if not received use Great Falls altimeter setting and increase all DA 81 feet and all MDA 100 feet; increase LPV all Cats visibility ⅜ mile, LNAV/VNAV all Cats, LNAV Cats C/D, Circling Cats C/D visibilities ¼ mile.
Straight-in Rwy 23 NA at night. Circling Rwy 23 NA at night.

MISSED APPROACH: Climb to 4300 then climbing right turn to 9000 direct YENUP and hold, continue climb-in-hold to 9000.

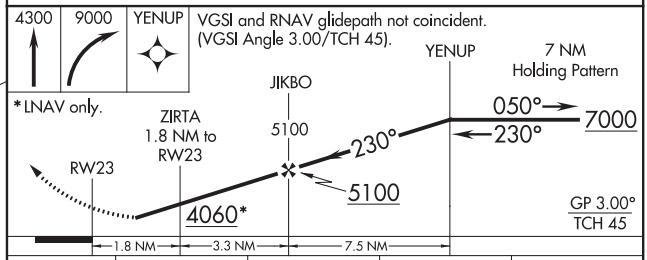
| CTB ASOS | SALT LAKE CITY CENTER | UNICOM |
|---|---|---|
| 119.025 | 133.4 285.4 | 122.8 (CTAF) L |




ELEV 3443 TDZE 3443




MIRL Rwys 5-23 and 11-29 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 3799-1⅛ 356 (400-1⅛) | | | |
| LNAV/VNAV DA | 3813-1¼ 370 (400-1¼) | | | |
| LNAV MDA | 3920-1 477 (500-1) | | 3920-1⅜ 477 (500-1⅜) | |
| C CIRCLING | 4020-1 577 (600-1) | 4080-1 637 (700-1) | 4100-1¾ 657 (700-1¾) | 4220-2½ 777 (800-2½) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

SHELTON, WASHINGTON AL-6643 (FAA) 20198

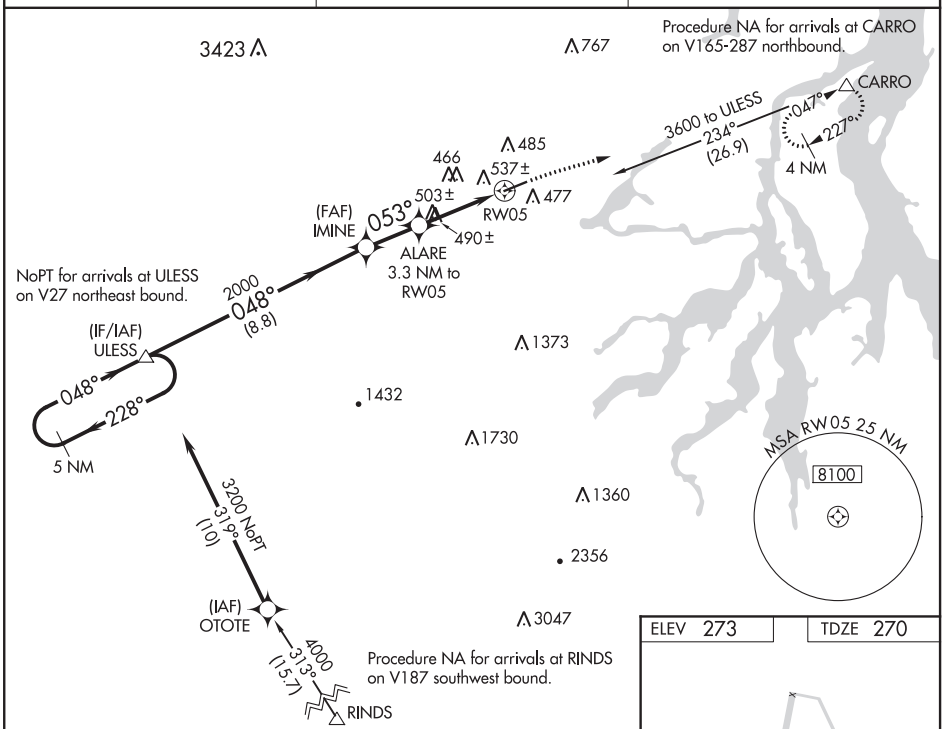
| WAAS CH 61038 W05A | APP CRS 053° | Rwy ldg 5005 TDZE 270 Apt Elev 273 |
|---|---|---|

# RNAV (GPS) RWY 5
## SANDERSON FIELD (SHN)

T A DME/DME RNP-0.3 NA. Circling NA for Cats C and D south of Rwy 5-23. Helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Olympia altimeter setting and increase all MDA by 60 feet, increase LP and LNAV visibility Cats C, D and Circling Cat C visibility ⅛ mile.

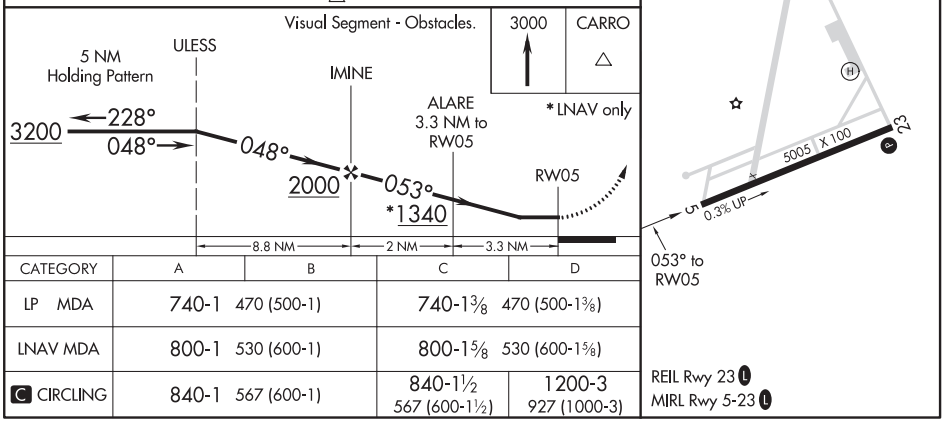
MISSED APPROACH: Climb to 3000 direct CARRO and hold.

| ASOS | SEATTLE APP CON | UNICOM |
|---|---|---|
| 119.275 | 121.1 290.9 | 122.8 (CTAF) L |




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LP MDA | 740-1 470 (500-1) | | 740-1⅜ 470 (500-1⅜) | |
| LNAV MDA | 800-1 530 (600-1) | | 800-1⅝ 530 (600-1⅝) | |
| C CIRCLING | 840-1 567 (600-1) | | 840-1½ 567 (600-1½) | 1200-3 927 (1000-3) |

| WAAS CH 58335 W23A | APP CRS 233° | Rwy ldg 5005<br>TDZE 273<br>Apt Elev 273 |
|---|---|---|

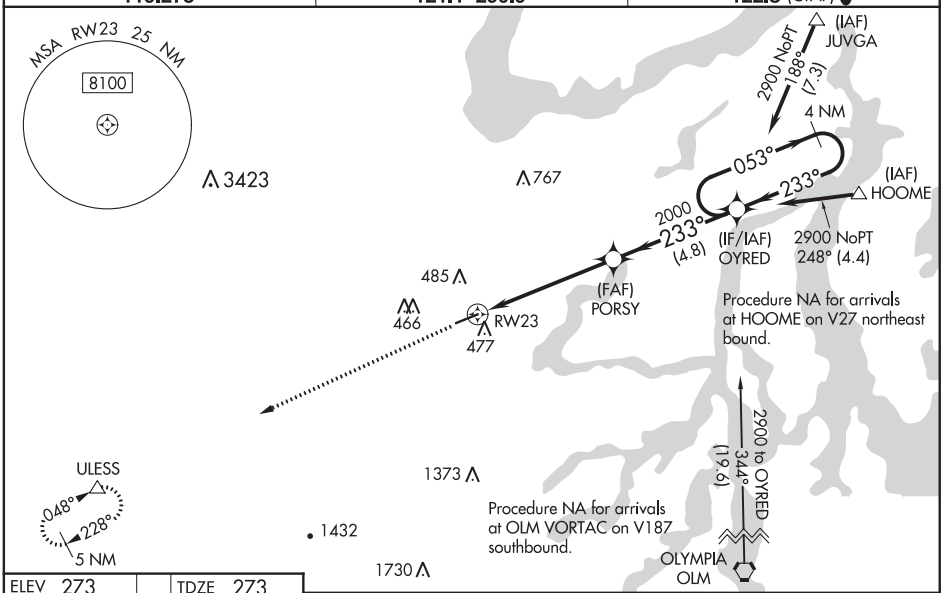
# RNAV (GPS) RWY 23
## SANDERSON FIELD (SHN)

RNP APCH.

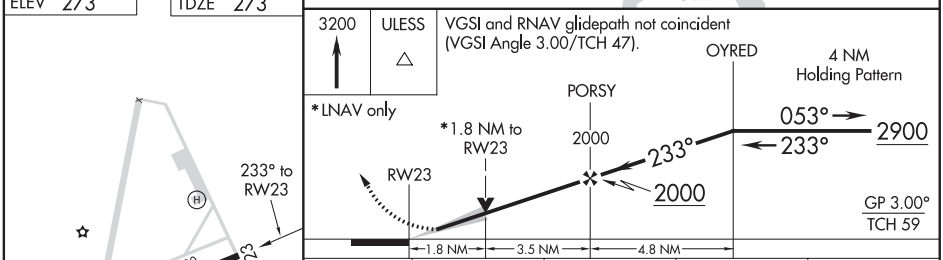
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -10°C or above 54°C. Rwy 23 helicopter visibility reduction below ¾ SM NA. Baro-VNAV and VDP NA when using Olympia altimeter setting. Circling NA for Cats C and D south of Rwy 5-23. When local altimeter setting not received, use Olympia altimeter setting: increase #LPV DA to 576 feet, LPV DA to 720 feet, and LNAV/VNAV DA to 773 feet and all visibilities ¼ SM; increase all MDAs 60 feet and visibility LNAV Cat C and D and Circling Cat C visibility ⅛ SM.
# LPV missed approach requires minimum climb of 244 feet per NM to 1700.

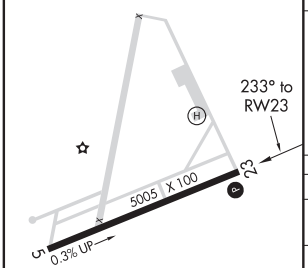
MISSED APPROACH: Climb to 3200 direct ULESS and hold.

| ASOS | SEATTLE APP CON | UNICOM |
|---|---|---|
| 119.275 | 121.1 290.9 | 122.8 (CTAF) L |




ELEV 273 TDZE 273




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA# | 523-¾ 250 (300-¾) | | | |
| LPV DA | 667-1¼ 394 (400-1¼) | | | |
| LNAV/VNAV DA | 720-1½ 447 (500-1½) | | | |
| LNAV MDA | 880-1 607 (700-1) | | 880-1¾ 607 (700-1¾) | |
| C CIRCLING | 880-1 607 (700-1) | | 880-1¾ 607 (700-1¾) | 1200-3 927 (1000-3) |

REIL Rwy 23 L
MIRL Rwy 5-23 L




NW-1, 05 NOV 2020 to 31 DEC 2020

SHERIDAN, WYOMING | AL-388 (FAA) | 20254

# ILS or LOC/DME RWY 33

SHERIDAN COUNTY (SHR)

| LOC/DME I-SHR | APP CRS | Rwy ldg | 8301 |
|---|---|---|---|
| 108.7 | 326° | TDZE | 3985 |
| Chan 24 | | Apt Elev | 4021 |

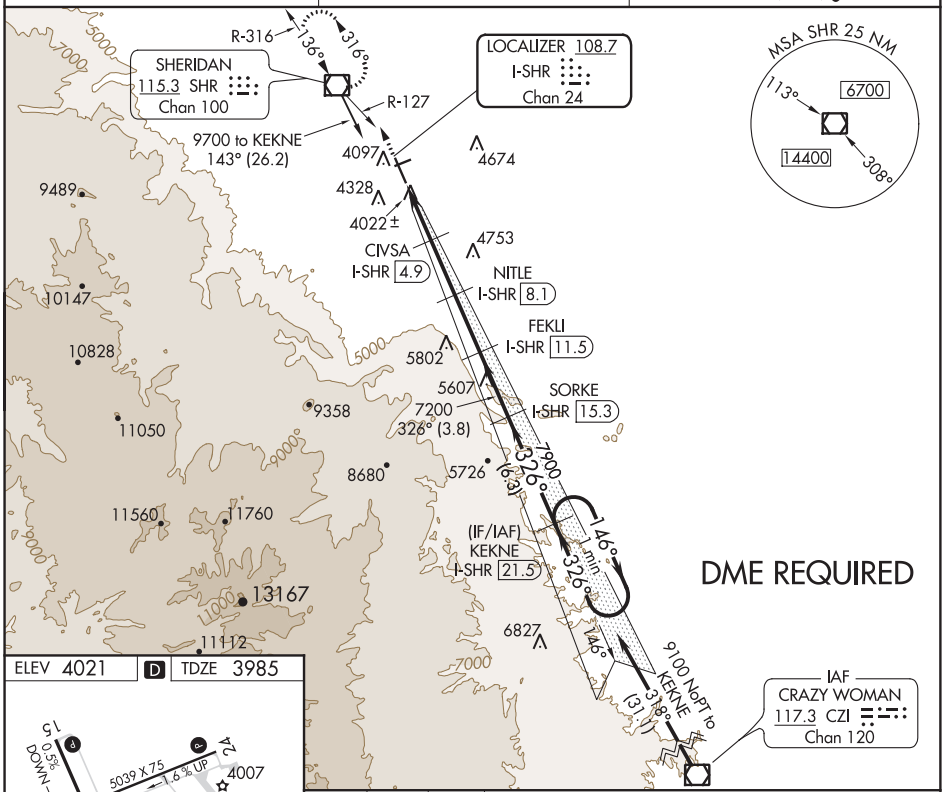
T A -19°C

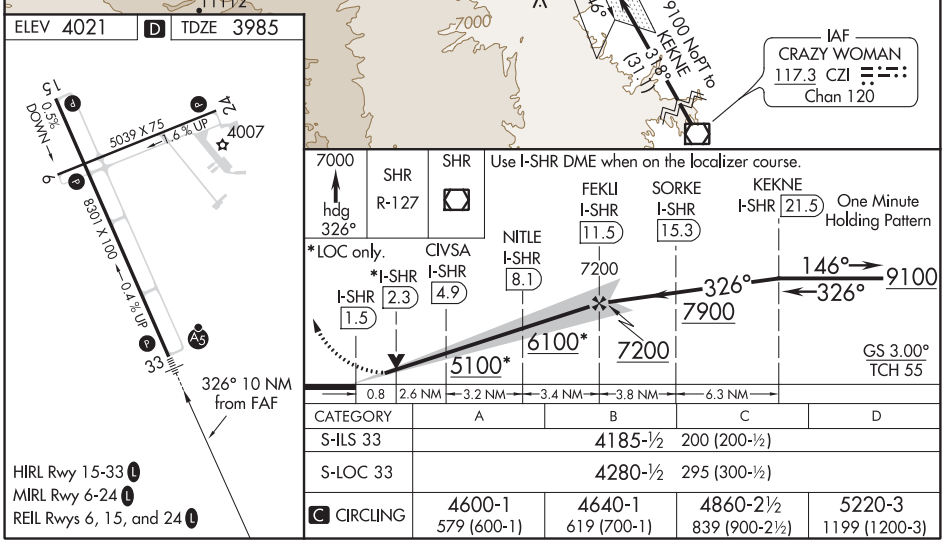
When local altimeter setting not received, procedure NA. Night landing: Rwy 24 NA. For inoperative MALSR, increase S-LOC 33 Cats C and D visibility to ⅞ mile.

MALSR

MISSED APPROACH: Climb to 7000 on heading 326° and on SHR VOR/DME R-127 to SHR VOR/DME and hold, continue climb-in-hold to 7000.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.175 | 127.75 351.9 | 123.0 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 33 | 4185-½ 200 (200-½) | | | |
| S-LOC 33 | 4280-½ 295 (300-½) | | | |
| C CIRCLING | 4600-1 579 (600-1) | 4640-1 619 (700-1) | 4860-2½ 839 (900-2½) | 5220-3 1199 (1200-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 81899 W15A | APP CRS 146° | Rwy ldg 8301 TDZE 4014 Apt Elev 4021 |
|---|---|---|

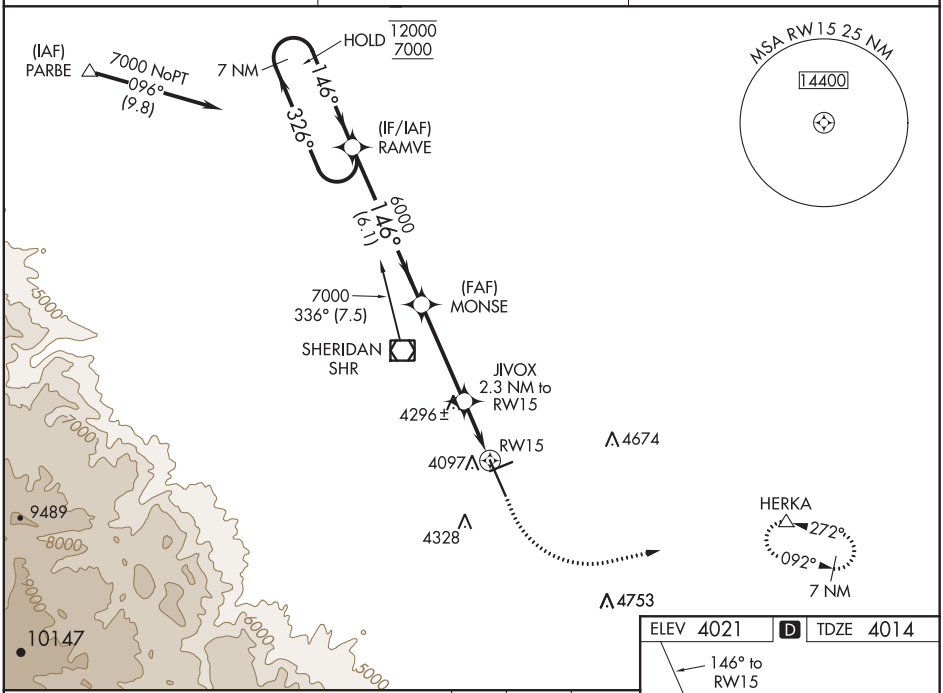
# RNAV (GPS) RWY 15
## SHERIDAN COUNTY (SHR)

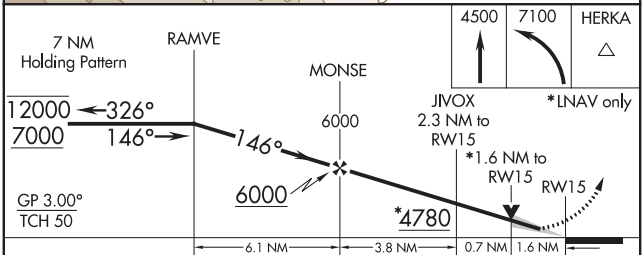
RNP APCH.

Circling to Rwy 24 NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -26°C or above 51°C. When local altimeter setting not received, procedure NA. -19°C

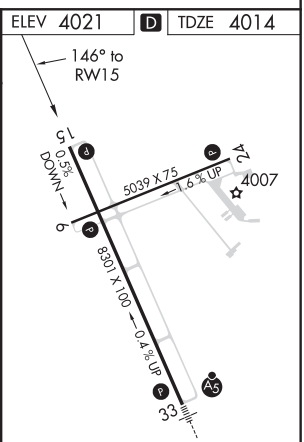
MISSED APPROACH: Climb to 4500 then climbing left turn to 7100 direct HERKA and hold, continue climb-in-hold to 7100.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.175 | 127.75 351.9 | 123.0 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4264-¾ 250 (300-¾) | | | |
| LNAV/VNAV DA | 4292-⅞ 278 (300-⅞) | | | |
| LNAV MDA | 4560-1 546 (600-1) | | 4560-1⅝ 546 (600-1⅝) | |
| C CIRCLING | 4600-1 579 (600-1) | 4640-1 619 (700-1) | 4860-2½ 839 (900-2½) | 5220-3 1199 (1200-3) |




HIRL Rwy 15-33 L
MIRL Rwy 6-24 L
REIL Rwys 6, 15, and 24 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

SHERIDAN, WYOMING | AL-388 (FAA) | 20254

# RNAV (GPS) RWY 33
## SHERIDAN COUNTY (SHR)

| WAAS CH 65699 W33A | APP CRS 326° | Rwy ldg 8301<br>TDZE 3985<br>Apt Elev 4021 |
|---|---|---|

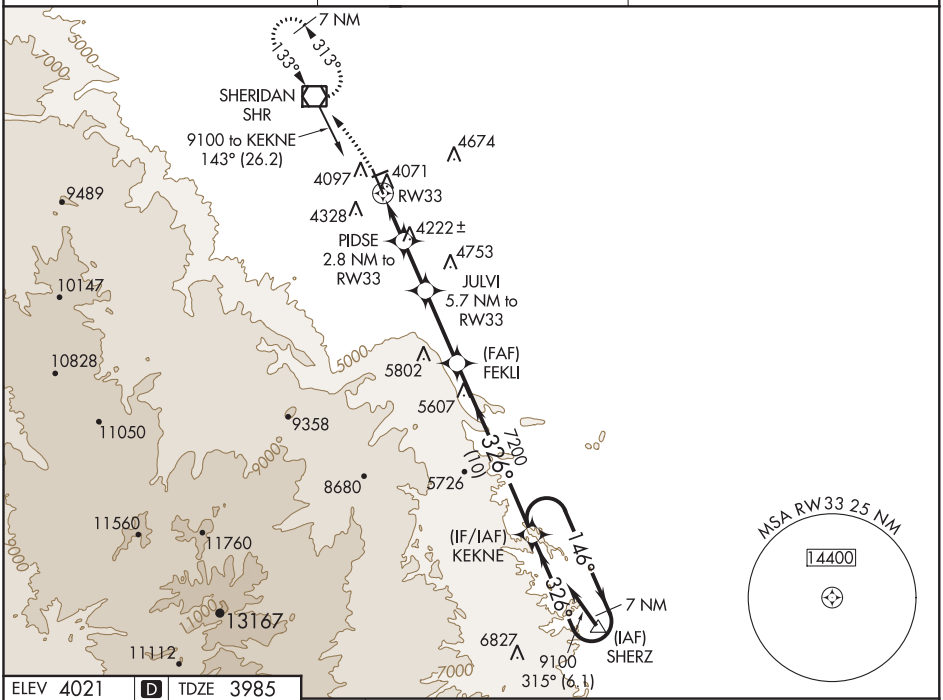
-19°C

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -26°C (-14°F) or above 51°C (124°F). When local altimeter setting not received, procedure NA. DME/DME RNP-0.3 NA. Night landing: Rwy 24 NA.

MALSR

MISSED APPROACH: Climbing left turn to 7300 direct SHR VOR/DME and hold, continue climb-in-hold to 7300.

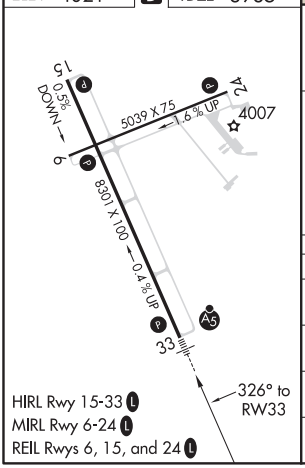
| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.175 | 127.75 351.9 | 123.0 (CTAF) L |



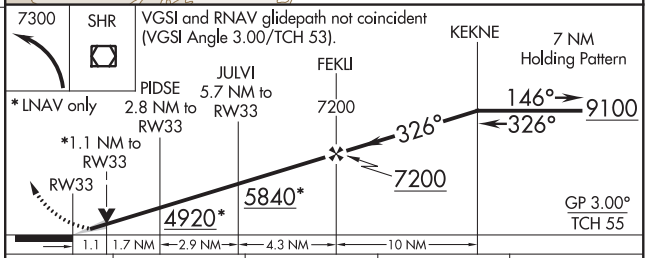

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 4021 | D | TDZE 3985




HIRL Rwy 15-33 L
MIRL Rwy 6-24 L
REIL Rwys 6, 15, and 24 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4205-½ 220 (200-½) | | | |
| LNAV/VNAV DA | 4355-¾ 370 (400-¾) | | | |
| LNAV MDA | 4380-½ 395 (400-½) | | 4380-⅝ 395 (400-⅝) | |
| C CIRCLING | 4600-1 579 (600-1) | 4640-1 619 (700-1) | 4860-2½ 839 (900-2½) | 5220-3 1199 (1200-3) |

SHERIDAN, WYOMING
Amdt 1 25JUN15

44°46′N-106°59′W

SHERIDAN COUNTY (SHR)
RNAV (GPS) RWY 33

| VOR/DME SHR 115.3 Chan 100 | APP CRS 131° | Rwy ldg 8301 TDZE 4014 Apt Elev 4021 |
|---|---|---|

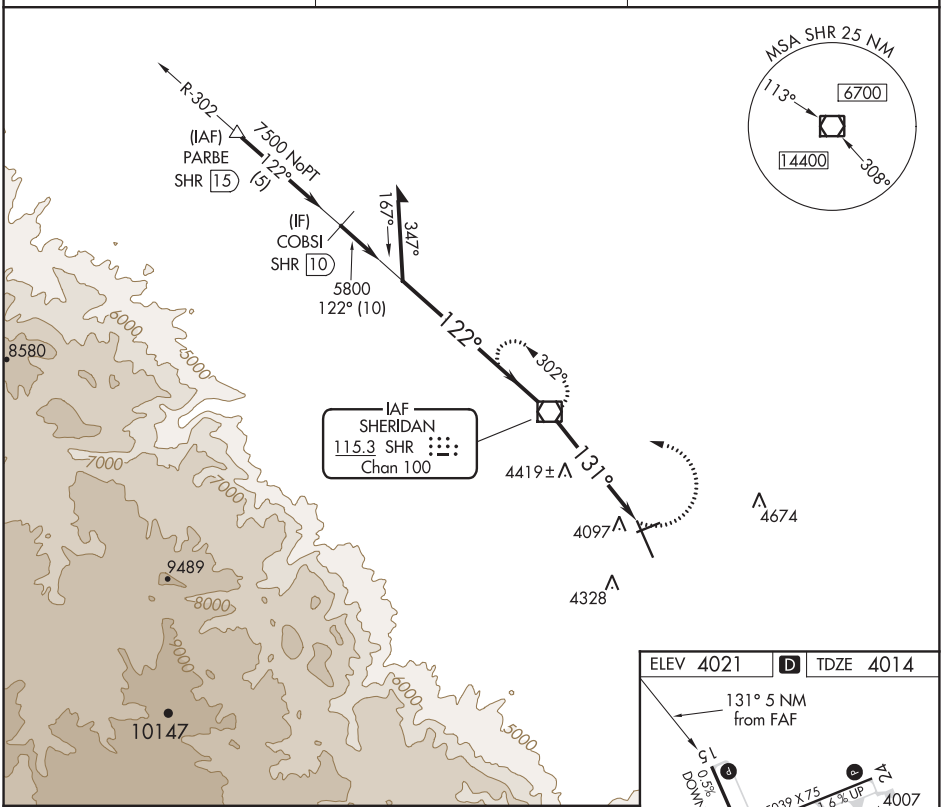
# VOR RWY 15
## SHERIDAN COUNTY (SHR)

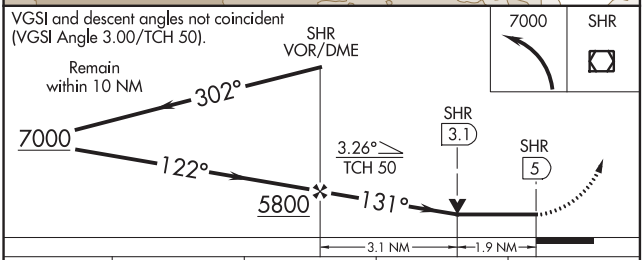
-19°C

When local altimeter setting not received, procedure NA. Night landing: Rwy 24 NA.

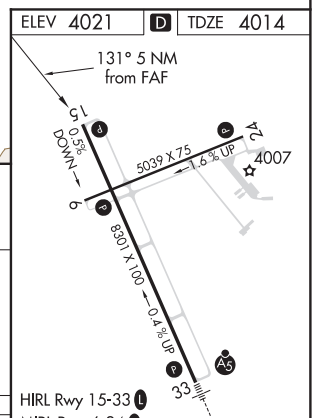
MISSED APPROACH: Climbing left turn to 7000 direct SHR VOR/DME and hold, continue climb-in-hold to 7000.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.175 | 127.75 351.9 | 123.0 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-15 | 4680-1 666 (700-1) | | 4680-1⅞ 666 (700-1⅞) | |
| C CIRCLING | 4680-1 659 (700-1) | | 4860-2½ 839 (900-2½) | 5220-3 1199 (1200-3) |




HIRL Rwy 15-33 L
MIRL Rwy 6-24 L
REIL Rwys 6, 15, and 24 L

| 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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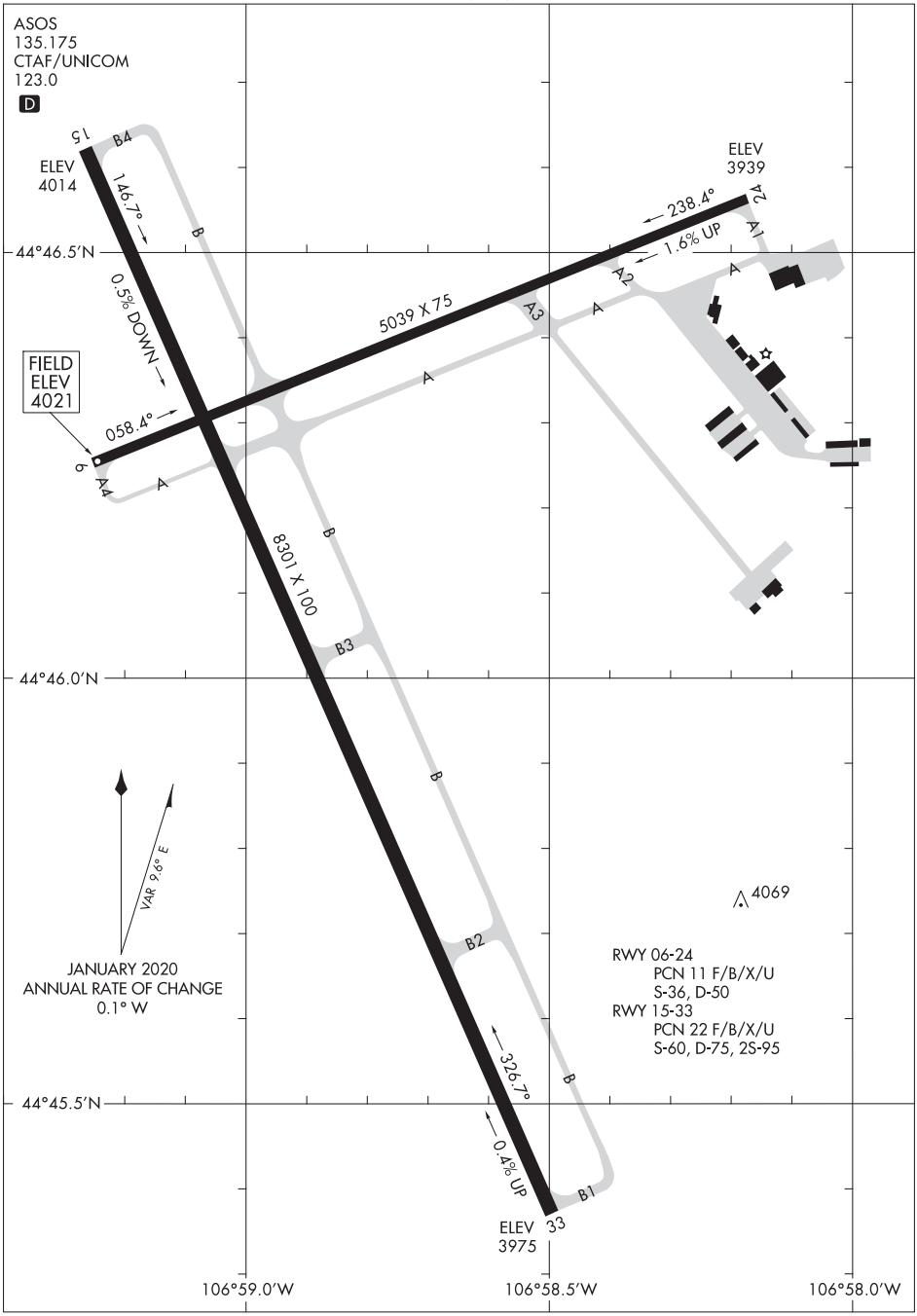
NW-1, 05 NOV 2020 to 31 DEC 2020

20086

# AIRPORT DIAGRAM

AL-388 (FAA)

SHERIDAN COUNTY (SHR)
SHERIDAN, WYOMING




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM
20086
SHERIDAN, WYOMING
SHERIDAN COUNTY (SHR)

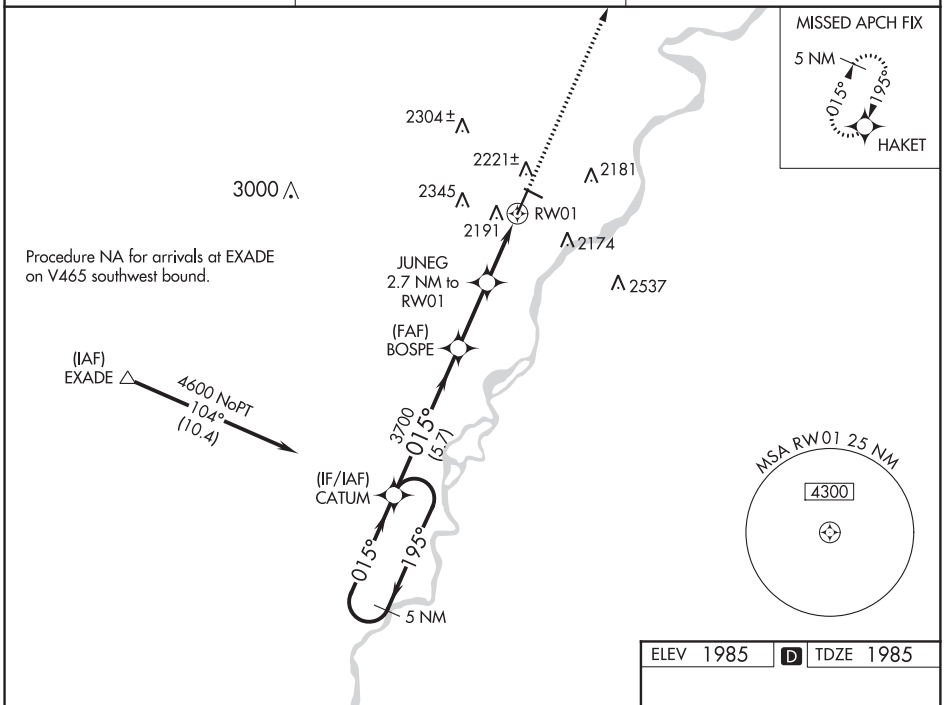
| WAAS CH 62918 W01A | APP CRS 015° | Rwy ldg 5705<br>TDZE 1985<br>Apt Elev 1985 |
|---|---|---|

# RNAV (GPS) RWY 1
## SIDNEY-RICHLAND RGNL (SDY)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -20°C (-4°F) or above 54°C (130°F). Circling Rwy 11, 19, and 29 NA at night. DME/DME RNP- 0.3 NA.

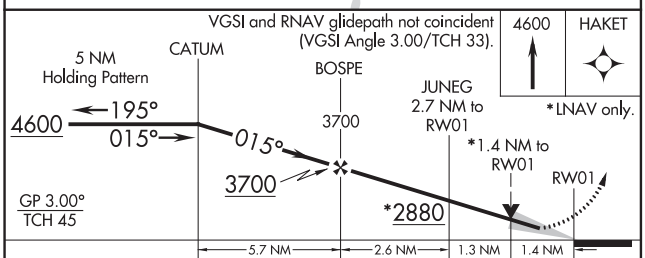
MISSED APPROACH: Climb to 4600 direct HAKET and hold.

| AWOS-3PT | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 119.275 | 126.85 305.2 | 122.8 (CTAF) L |

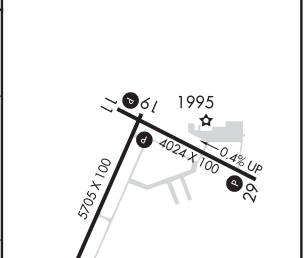



NW-1, 05 NOV 2020 to 31 DEC 2020

| ELEV 1985 | D | TDZE 1985 |
|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2238-⅞ 253 (300-⅞) | | | |
| LNAV/VNAV DA | 2419-1½ 434 (500-1½) | | | |
| LNAV MDA | 2460-1 475 (500-1) | | 2460-1⅜ 475 (500-1⅜) | |
| C CIRCLING | 2580-1 595 (600-1) | 2660-1 675 (700-1) | 2700-2 715 (800-2) | 2840-2¾ 855 (900-2¾) |




REIL Rwys 1,19, 11, and 29 L
MIRL Rwys 1-19 and 11-29 L

SIDNEY, MONTANA | AL-5303 (FAA) | 20086

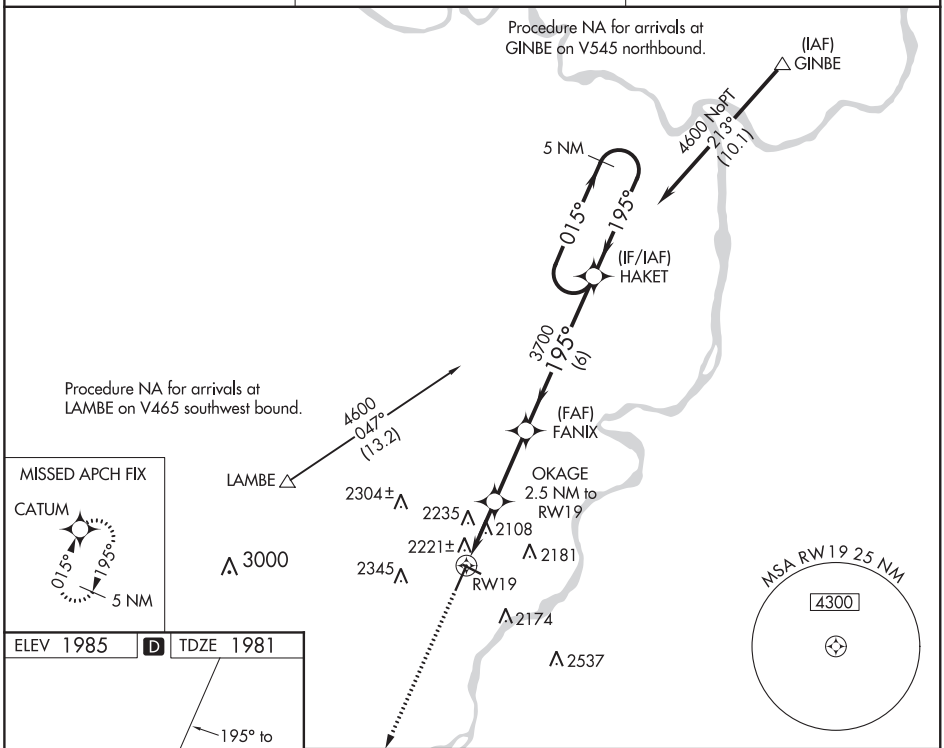
# RNAV (GPS) RWY 19
## SIDNEY-RICHLAND RGNL (SDY)

| WAAS CH 86818 W19A | APP CRS 195° | Rwy ldg 5705<br>TDZE 1981<br>Apt Elev 1985 |
|---|---|---|

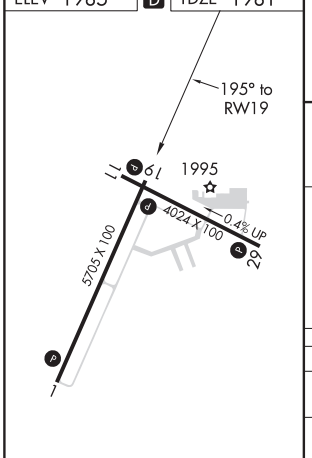
Rwy 19 Straight-in minimums NA at night.
Circling Rwy 11, 19, 29 NA at night.
Rwy 19 helicopter visibility reduction below 1 SM NA.
DME/DME RNP-0.3 NA.

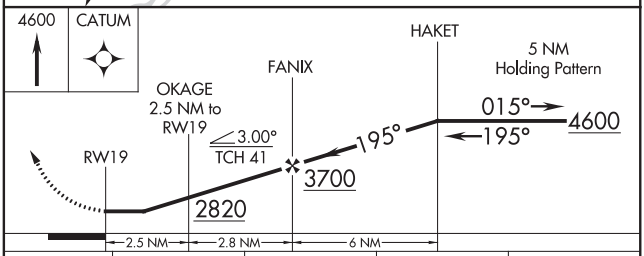
MISSED APPROACH: Climb to 4600 direct CATUM and hold.

| AWOS-3PT | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 119.275 | 126.85 305.2 | 122.8 (CTAF) L |




ELEV 1985 | D | TDZE 1981

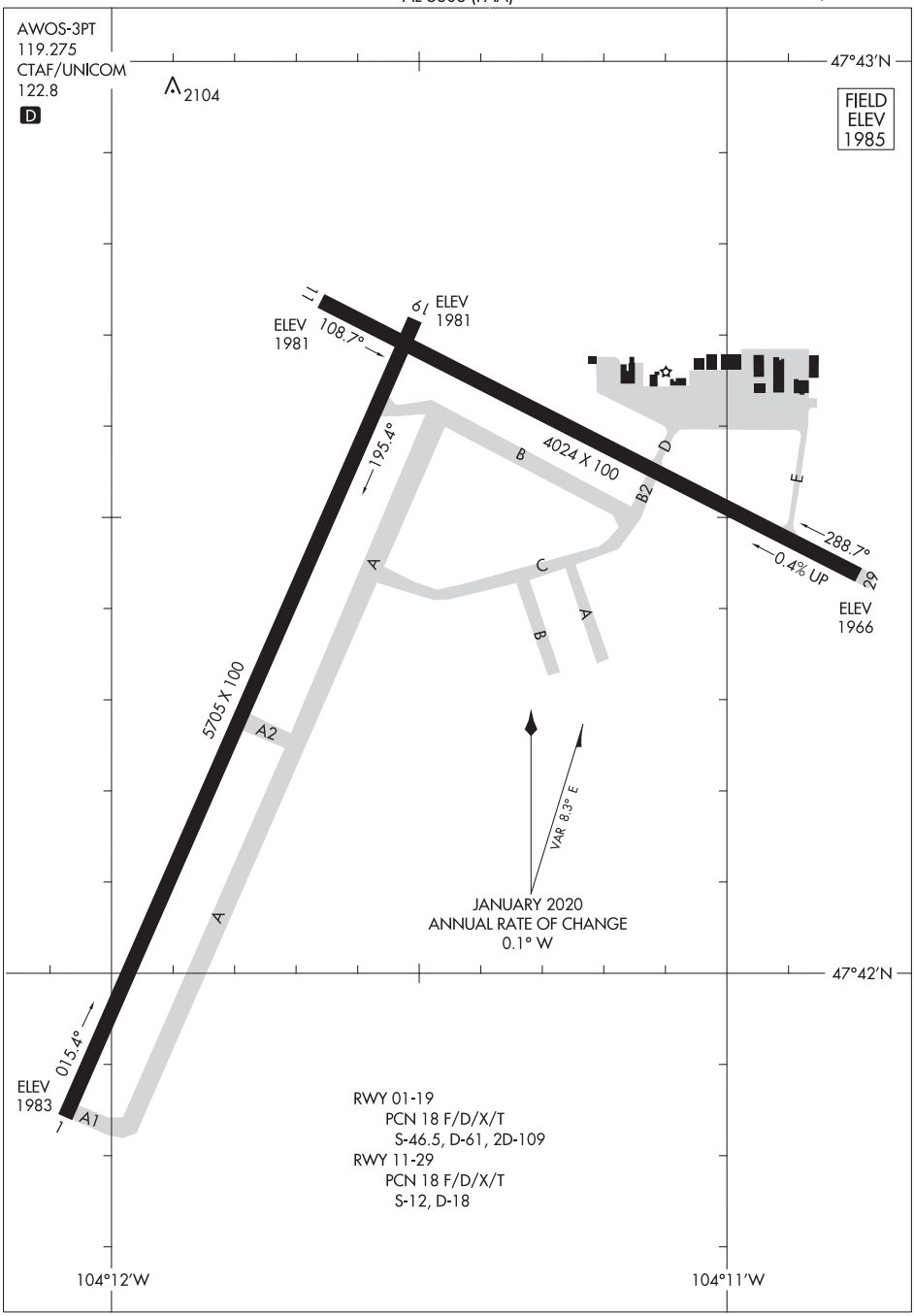



| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LP MDA | 2360-1 379 (400-1) | | | |
| LNAV MDA | 2500-1 519 (600-1) | | 2500-1⅜ 519 (600-1⅜) | |
| C CIRCLING | 2580-1 595 (600-1) | 2660-1 675 (700-1) | 2700-2 715 (800-2) | 2840-2¾ 855 (900-2¾) |

REIL Rwys 1,19, 11, and 29 L
MIRL Rwys 1-19 and 11-29 L

AL-5303 (FAA)




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

SNOHOMISH, WASHINGTON

AL-10305 (FAA)

20198

| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 328° | TDZE | N/A |
| | Apt Elev | 22 |

# RNAV (GPS)-A

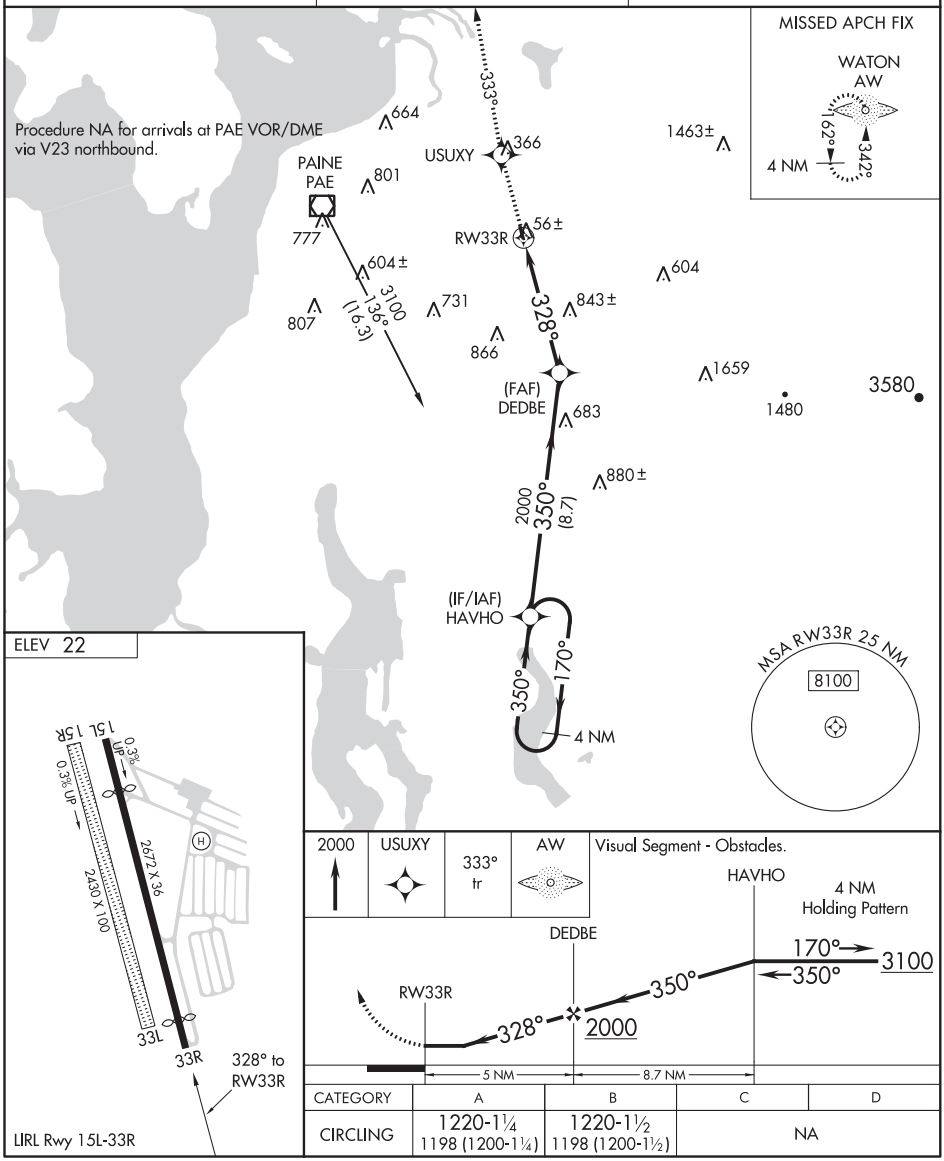
## HARVEY FIELD (S43)

T NA

DME/DME RNP-0.3 NA. Procedure NA at night. Use Arlington altimeter setting. When not received, use Everett altimeter setting and increase all MDA 60 feet. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 2000 direct USUXY and via 333° track to WATON LOM and hold.

| AWO AWOS-3PT | SEATTLE APP CON | UNICOM |
|---|---|---|
| 135.625 | 128.5 306.9 | 123.0 (CTAF) |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 1220-1¼ 1198 (1200-1¼) | 1220-1½ 1198 (1200-1½) | NA | |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# ILS or LOC RWY 22R
## FELTS FIELD (SFF)

| LOC/DME I-FLZ | APP CRS | Rwy ldg | 4499 |
|---|---|---|---|
| 111.7 | 221° | TDZE | 1957 |
| Chan 54 | | Apt Elev | 1957 |

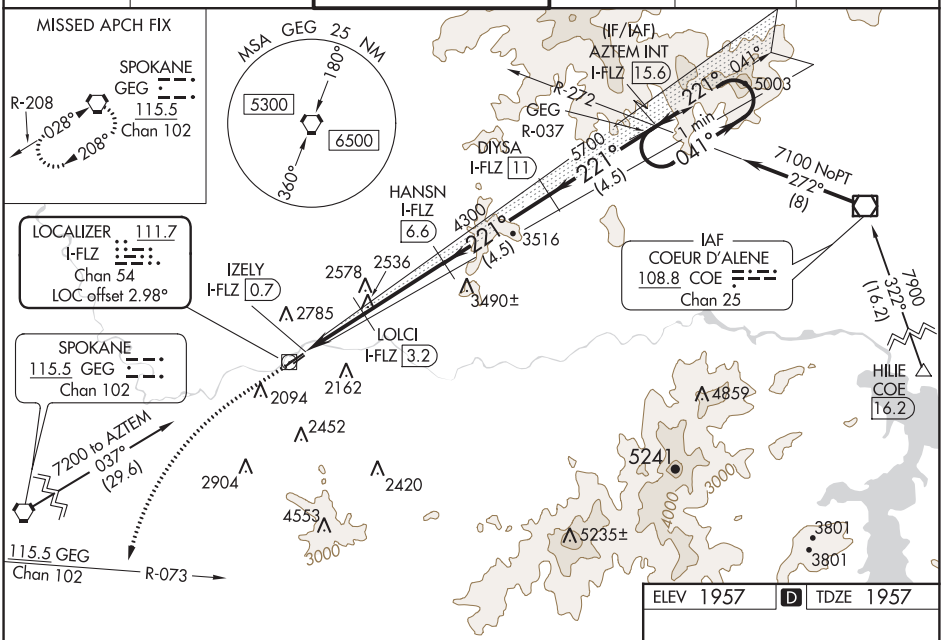
Inop table does not apply to S-ILS all Cats. Circling NA northwest of Rwy 4L-22R. DME required. Helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Spokane Intl altimeter setting and increase all DA 82 feet and all MDA 100 feet; and increase S-LOC Cat C visibility ⅛ and Circling Cat C visibility ¼. For inop MALSR, increase S-LOC Cat A visibility to 1 and Cat C visibility to 2½.

-16°C

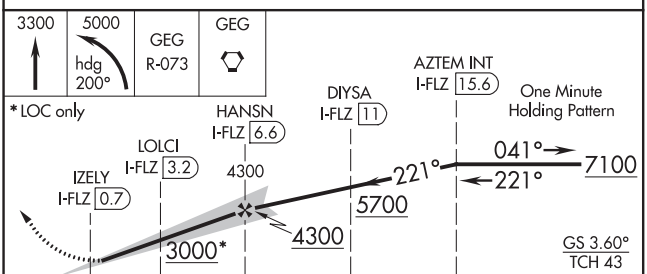
MALSR

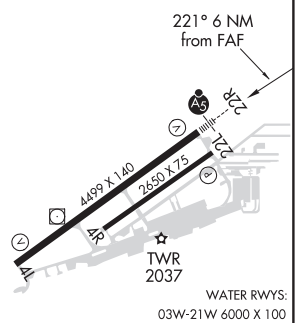
MISSED APPROACH: Climb to 3300 then climbing left turn to 5000 on heading 200° and on GEG VORTAC R-073 to GEG VORTAC and hold.

| ATIS | SPOKANE APP CON | | FELTS TOWER ★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|---|
| 120.55 | 133.35 | 263.0 | 132.5 (CTAF) L 239.025 | 121.7 | 121.7 | 122.95 |




| ELEV | 1957 | D | TDZE | 1957 |
|---|---|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 22R | 2227-¾ 270 (300-¾) | | 2227-1⅞ 270 (300-1⅞) | NA |
| S-LOC 22R | 2800-¾ 843 (900-¾) | | 2800-1⅞ 843 (900-1⅞) | NA |
| C CIRCLING | 2800-1¼ 843 (900-1¼) | 2800-1½ 843 (900-1½) | 3020-3 1063 (1100-3) | NA |

REIL Rwy 4L L
MIRL Rwy 4L-22R L



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 65931 W04A | APP CRS 038° | Rwy ldg 4499 TDZE 1949 Apt Elev 1957 |
|---|---|---|

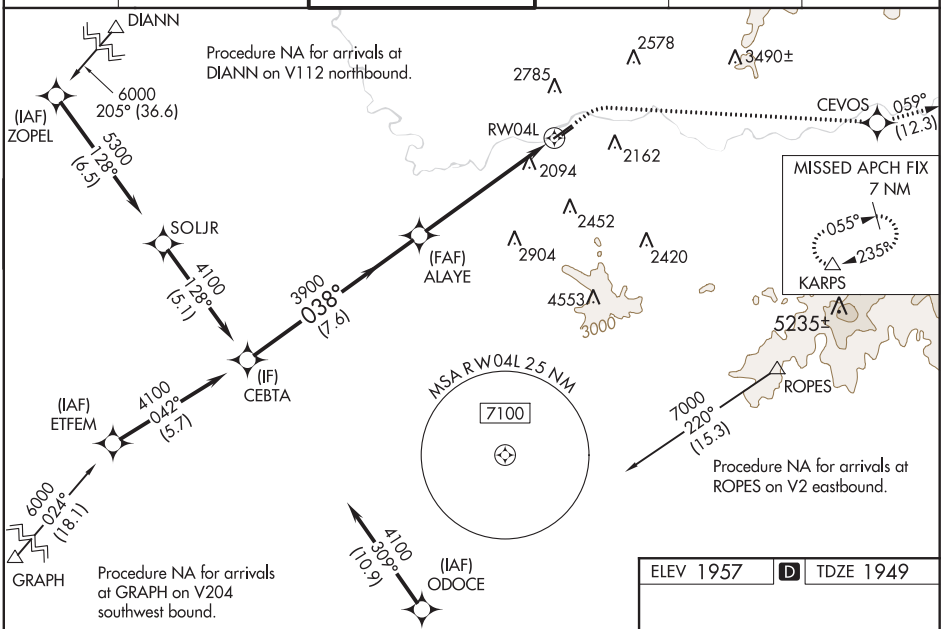
# RNAV (GPS) RWY 4L
## FELTS FIELD (SFF)

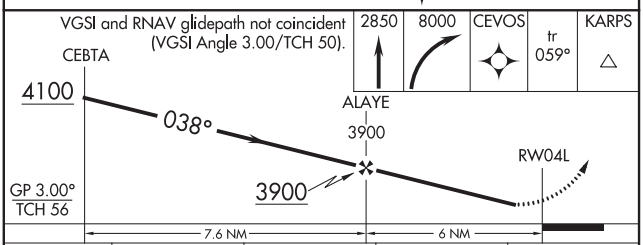
T A -16°C

Baro-VNAV NA when using Spokane Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (-1°F) or above 54°C (130°F). Circling NA northwest of Rwy 4L-22R. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Spokane Intl altimeter setting and increase all DA 82 feet and all MDA 100 feet. Increase LPV all Cats, LNAV/VNAV all Cats, LNAV Cat C and Circling Cat C visibility ½ mile; increase LNAV Cat A/B/D and Circling Cat B/D visibility ¼ mile. Helicopter visibility reduction below ¾ SM NA. * LPV missed approach requires a minimum climb of 330 feet per NM to 5400.

MISSED APPROACH: Climb to 2850 then climbing right turn to 8000 direct CEVOS and on track 059° to KARPS INT and hold, continue climb-in-hold to 8000.

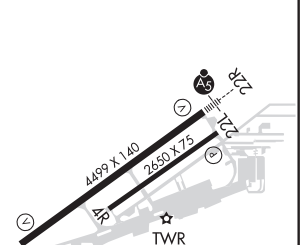
| ATIS | SPOKANE APP CON | FELTS TOWER * | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 120.55 | 133.35 263.0 | 132.5 (CTAF) L 239.025 | 121.7 | 121.7 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA* | 2199-1 250 (300-1) | | | |
| LPV DA | 2529-2 580 (600-2) | | | |
| LNAV/VNAV DA | 2779-3 830 (900-3) | | | |
| LNAV MDA | 2820-1 871 (900-1) | 2820-1¼ 871 (900-1¼) | 2820-2½ 871 (900-2½) | |
| CIRCLING | 2820-1¼ 863 (900-1¼) | | 3020-3 1063 (1100-3) | 3360-3 1403 (1500-3) |

ELEV 1957 D TDZE 1949




WATER RWYS: 03W-21W 6000 X 100

REIL Rwy 4L L
MIRL Rwy 4L-22R L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| VORTAC GEG | APP CRS | Rwy ldg | 4499 |
|---|---|---|---|
| 115.5 | 039° | TDZE | 1949 |
| Chan 102 | | Apt Elev | 1957 |

# VOR RWY 4L
## FELTS FIELD (SFF)

T A -16°C

Circling NA northwest of Rwy 4L-22R. VDP NA when using Spokane Intl altimeter setting. Helicopter visibility reduction below ¾ SM NA. When local altimeter setting not received, use Spokane Intl altimeter setting and increase all MDA 100 feet. DME required.

MISSED APPROACH: Climbing left turn to 4500 direct GEG VORTAC and hold.

| ATIS | SPOKANE APP CON | | FELTS TOWER ★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|---|
| 120.55 | 133.35 | 263.0 | 132.5 (CTAF) L 239.025 | 121.7 | 121.7 | 122.95 |



IF/IAF SPOKANE 115.5 GEG Chan 102

NoPT for arrival on GEG VORTAC airway radials 142 CW 241.

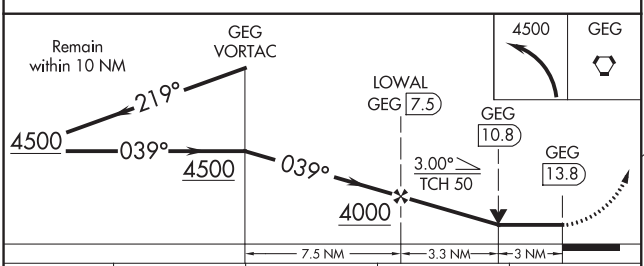
039° 4000 (7.5) LOWAL GEG 7.5

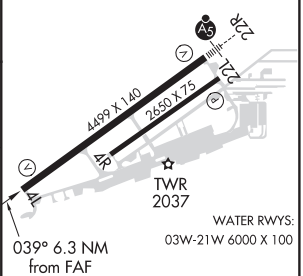
028° 208° 039° R-208 R-219 354° 174°

3516 2578 3490± 2785 2162 2094 2452 2904 2420 4553 3000

MSA GEG 25 NM 180° 360° 5300 6500

ELEV 1957 D TDZE 1949




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-4L | 2960-1¼ 1011 (1100-1¼) | 2960-1½ 1011 (1100-1½) | 2960-3 1011 (1100-3) | |
| C CIRCLING | 2960-1¼ 1003 (1100-1¼) | 2960-1½ 1003 (1100-1½) | 3020-3 1063 (1100-3) | 3360-3 1403 (1500-3) |

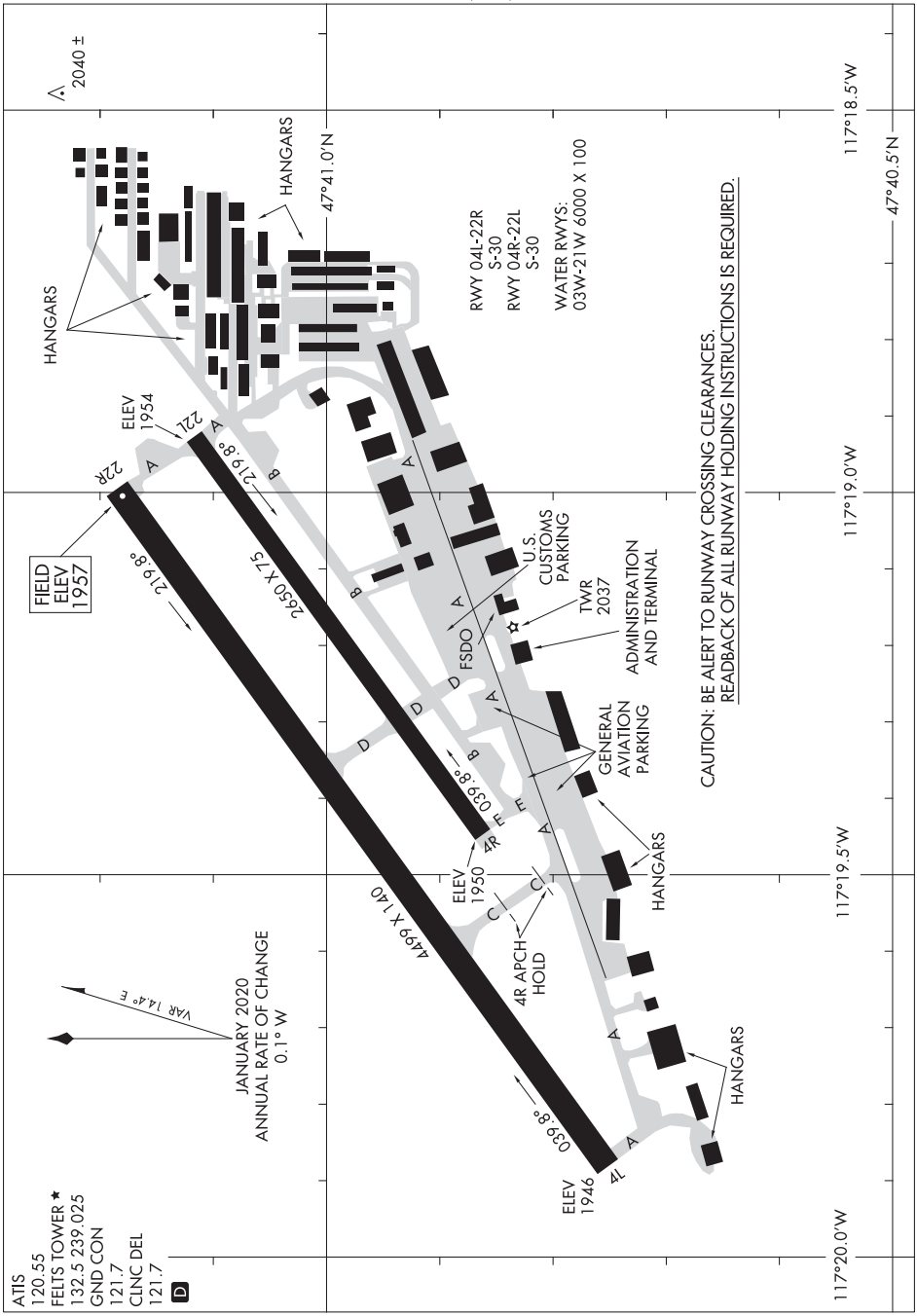
REIL Rwy 4L L
MIRL Rwy 4L-22R L

20142

# AIRPORT DIAGRAM

AL-402 (FAA)

FELTS FIELD (SFF)
SPOKANE, WASHINGTON




NW-1, 05 NOV 2020 to 31 DEC 2020

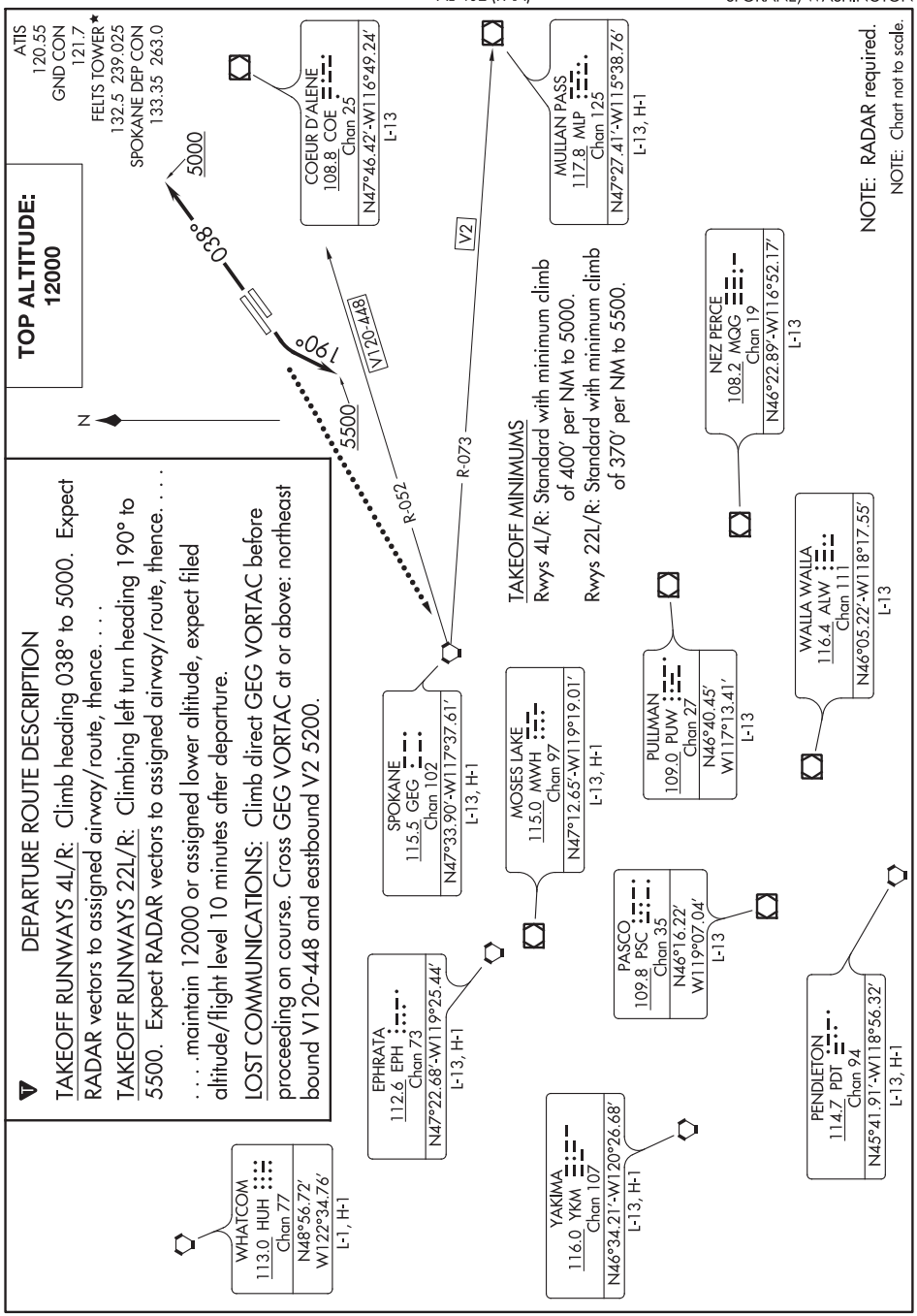
NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM
20142
SPOKANE, WASHINGTON
FELTS FIELD (SFF)

# FELTS FOUR DEPARTURE

AL-402 (FAA)

FELTS FIELD (SFF)
SPOKANE, WASHINGTON




NW-1, 05 NOV 2020 to 31 DEC 2020

FELTS FOUR DEPARTURE

21JUL16

SPOKANE, WASHINGTON
FELTS FIELD (SFF)

17341

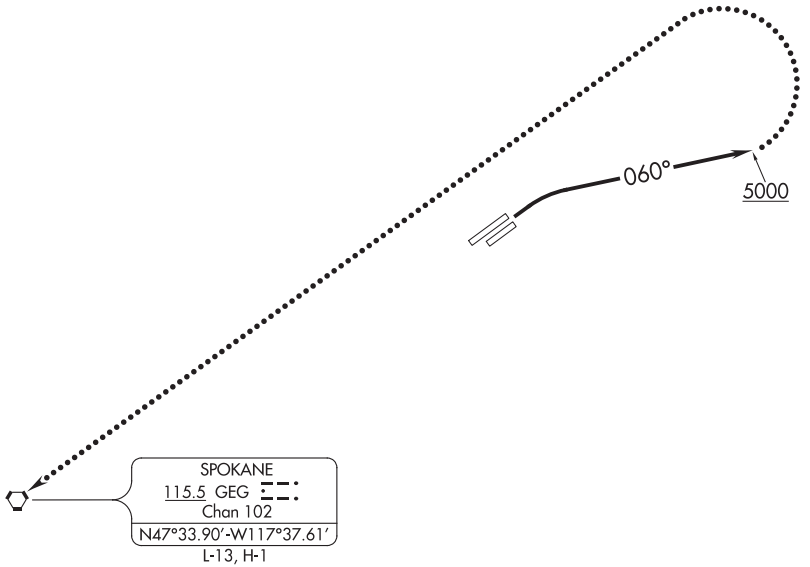
# HAYDEN FOUR DEPARTURE

AL-402 (FAA)

FELTS FIELD (SFF)
SPOKANE, WASHINGTON

ATIS
120.55
GND CON
121.7
FELTS TOWER ★
132.5 239.025
SPOKANE DEP CON
133.35 263.0

**TOP ALTITUDE: 12000**




TAKEOFF MINIMUMS
Rwys 22L/R: NA- ATC.
Rwys 4L/R: Standard with minimum climb of 400′ per NM to 5000.

NOTE: RADAR required.

NOTE: Chart not to scale.

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 22L/R: NA - ATC.

TAKEOFF RUNWAYS 4L/R: Climbing right turn heading 060° to 5000. Expect RADAR vectors to assigned route/fix.

LOST COMMUNICATIONS: If no radio contact with departure control after leaving 3000, continue climb to 5000, then left turn direct to GEG VORTAC, thence proceed on course.

# ILS or LOC RWY 3
## SPOKANE INTL (GEG)

| LOC/DME I-OLJ | APP CRS | Rwy ldg | 11002 |
|---|---|---|---|
| 111.1 | 031° | TDZE | 2385 |
| Chan 48 | | Apt Elev | 2385 |

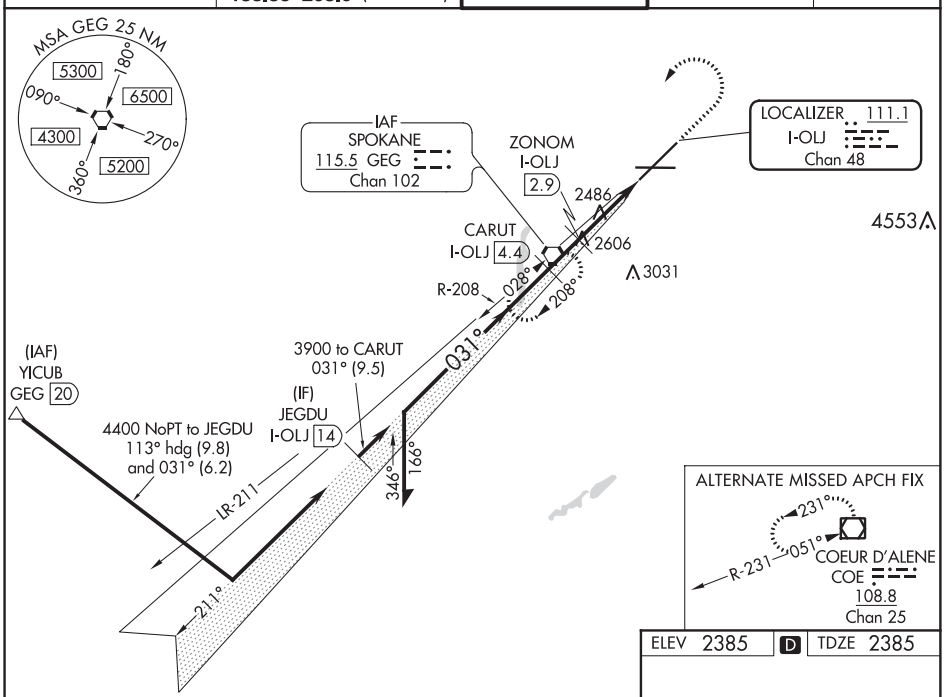
DME required for localizer only.

For inop ALS, increase S-LOC 3 Cat C/D visibility to RVR 5500.

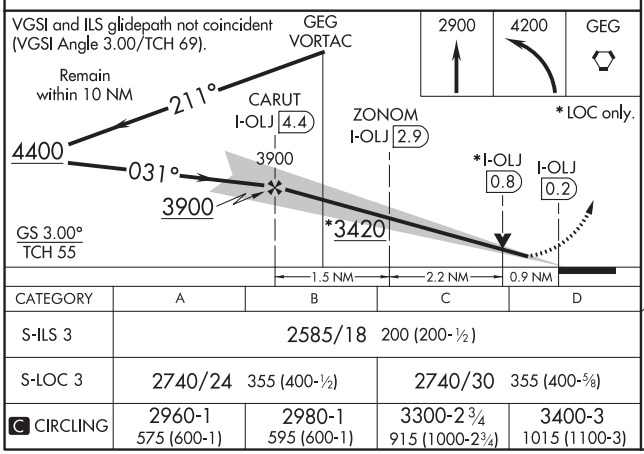
ALSF-2

MISSED APPROACH: Climb to 2900 then climbing left turn to 4200 direct GEG VORTAC and hold.

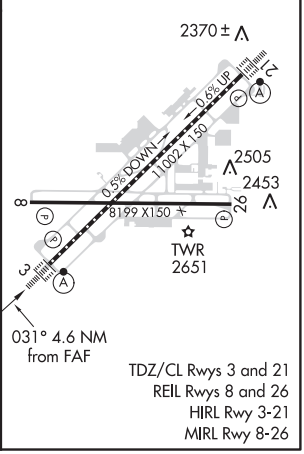
| ATIS | SPOKANE APP CON | SPOKANE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 124.325 254.375 | 123.75 282.25 (205°-025°)<br>133.35 263.0 (026°-204°) | 118.3 278.3 | 121.9 348.6 | 127.55 |




| ELEV 2385 | D | TDZE 2385 |
|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 3 | 2585/18 200 (200-½) | | | |
| S-LOC 3 | 2740/24 355 (400-½) | | 2740/30 355 (400-⅝) | |
| C CIRCLING | 2960-1 575 (600-1) | 2980-1 595 (600-1) | 3300-2¾ 915 (1000-2¾) | 3400-3 1015 (1100-3) |




TDZ/CL Rwys 3 and 21
REIL Rwys 8 and 26
HIRL Rwy 3-21
MIRL Rwy 8-26

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

SPOKANE, WASHINGTON AL-403 (FAA) 19059

| LOC/DME I-GEG | APP CRS | Rwy ldg | 11002 |
|---|---|---|---|
| 111.1 | 212° | TDZE | 2346 |
| Chan 48 | | Apt Elev | 2385 |

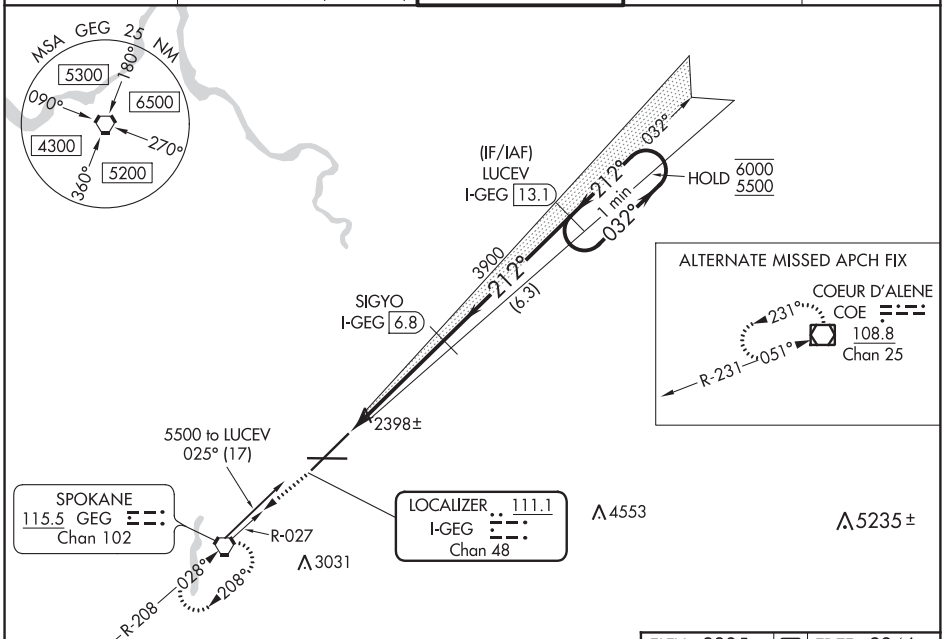
# ILS or LOC RWY 21
## SPOKANE INTL (GEG)

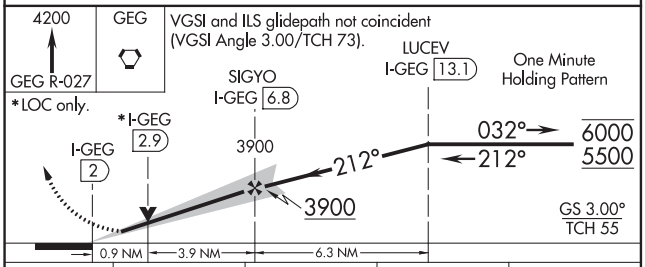
DME required.

ALSF-2

MISSED APPROACH: Climb to 4200 on GEG VORTAC R-027 to GEG VORTAC and hold.

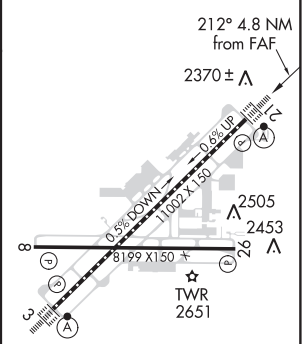
| ATIS | SPOKANE APP CON | SPOKANE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 124.325 254.375 | 123.75 282.25 (205°-025°)<br>133.35 263.0 (026°-204°) | 118.3 278.3 | 121.9 348.6 | 127.55 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 21 | 2546/18 200 (200-½) | | | |
| S-LOC 21 | 2680/24 334 (300-½) | | 2680/26 334 (300-½) | |
| C CIRCLING | 2960-1 575 (600-1) | 2980-1 595 (600-1) | 3300-2¾ 915 (1000-2¾) | 3400-3 1015 (1100-3) |

ELEV 2385 D TDZE 2346




TDZ/CL Rwys 3 and 21
REIL Rwys 8 and 26
HIRL Rwy 3-21
MIRL Rwy 8-26

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC/DME I-OLJ | APP CRS | Rwy ldg | 11002 |
|---|---|---|---|
| 111.1 | 031° | TDZE | 2385 |
| Chan 48 | | Apt Elev | 2385 |

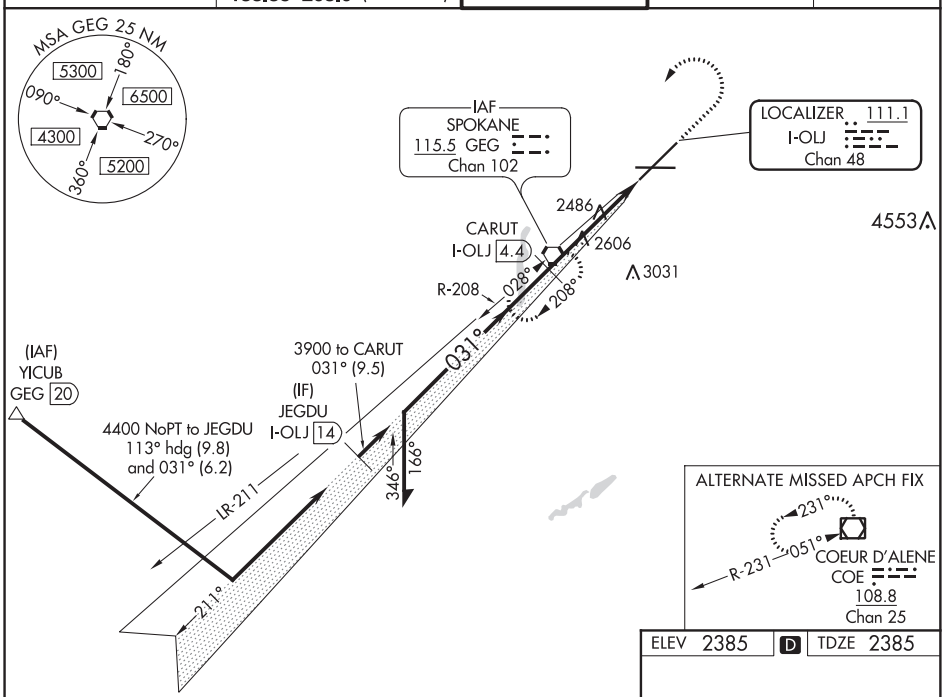
# ILS RWY 3 (SA CAT I)
## SPOKANE INTL (GEG)

Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH.

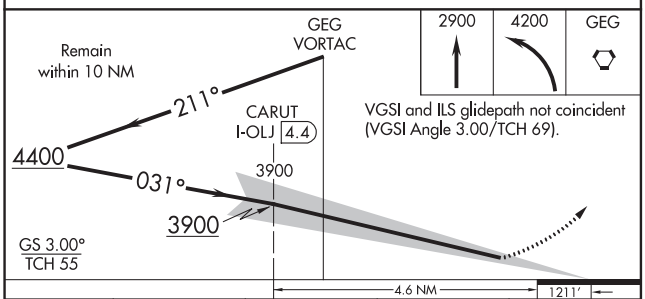
ALSF-2

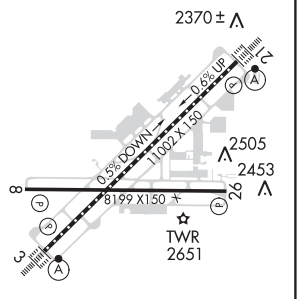
MISSED APPROACH: Climb to 2900 then climbing left turn to 4200 direct GEG VORTAC and hold.

| ATIS | SPOKANE APP CON | SPOKANE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 124.325 254.375 | 123.75 282.25 (205°-025°)<br>133.35 263.0 (026°-204°) | 118.3 278.3 | 121.9 348.6 | 127.55 |




| ELEV 2385 | D | TDZE 2385 |
|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 3 | RA 154/14 150 DA 2535 | | | |

**SA CATEGORY I ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**

TDZ/CL Rwys 3 and 21
REIL Rwys 8 and 26
HIRL Rwy 3-21
MIRL Rwy 8-26

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC/DME I-GEG | APP CRS | Rwy ldg | 11002 |
|---|---|---|---|
| 111.1 | 212° | TDZE | 2346 |
| Chan 48 | | Apt Elev | 2385 |

# ILS RWY 21 (SA CAT I)
## SPOKANE INTL (GEG)

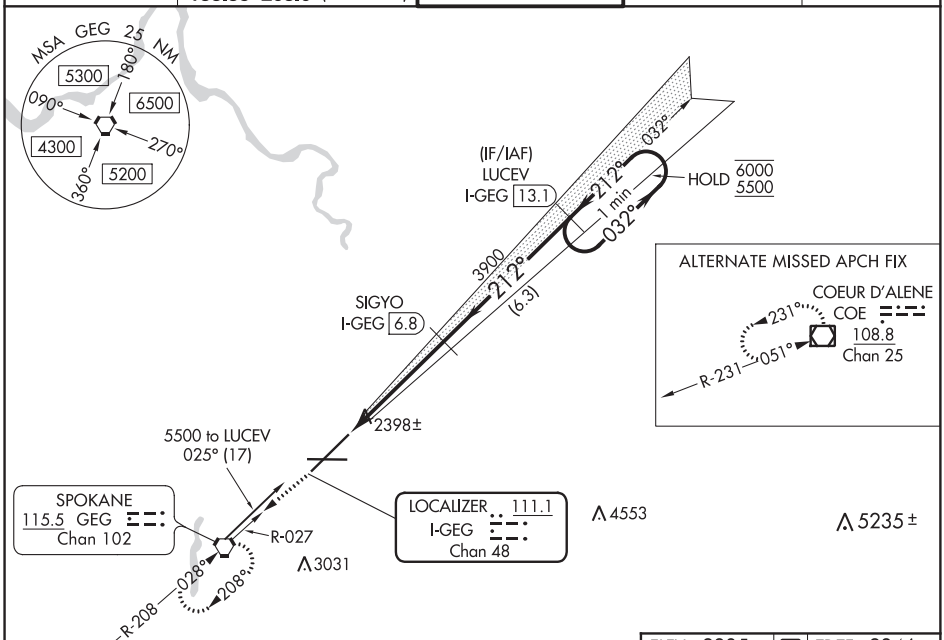
DME required.

T A Requires specific OPSPEC, MSPEC, or LOA approval and use of HUD to DH.

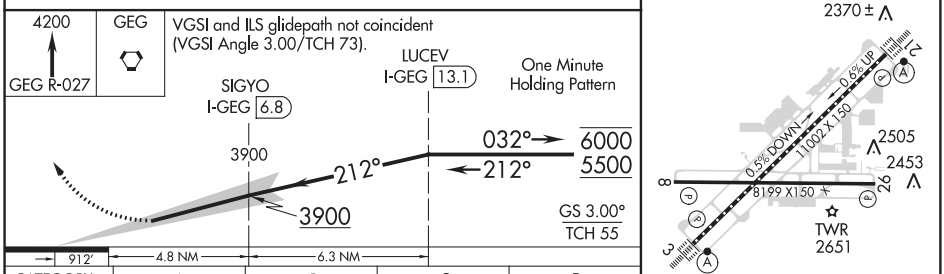
ALSF-2

MISSED APPROACH: Climb to 4200 on GEG VORTAC R-027 to GEG VORTAC and hold.

| ATIS | SPOKANE APP CON | SPOKANE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 124.325 254.375 | 123.75 282.25 (205°-025°)<br>133.35 263.0 (026°-204°) | 118.3 278.3 | 121.9 348.6 | 127.55 |




| ELEV 2385 | D | TDZE 2346 |
|---|---|---|







| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 21 | RA 197/14 126 DA 2472 | | | |

**SA CATEGORY I ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**

TDZ/CL Rwys 3 and 21
REIL Rwys 8 and 26
HIRL Rwy 3-21
MIRL Rwy 8-26




NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC/DME I-OLJ | APP CRS | Rwy ldg 11002 |
|---|---|---|
| 111.1 | 031° | TDZE 2385 |
| Chan 48 | | Apt Elev 2385 |

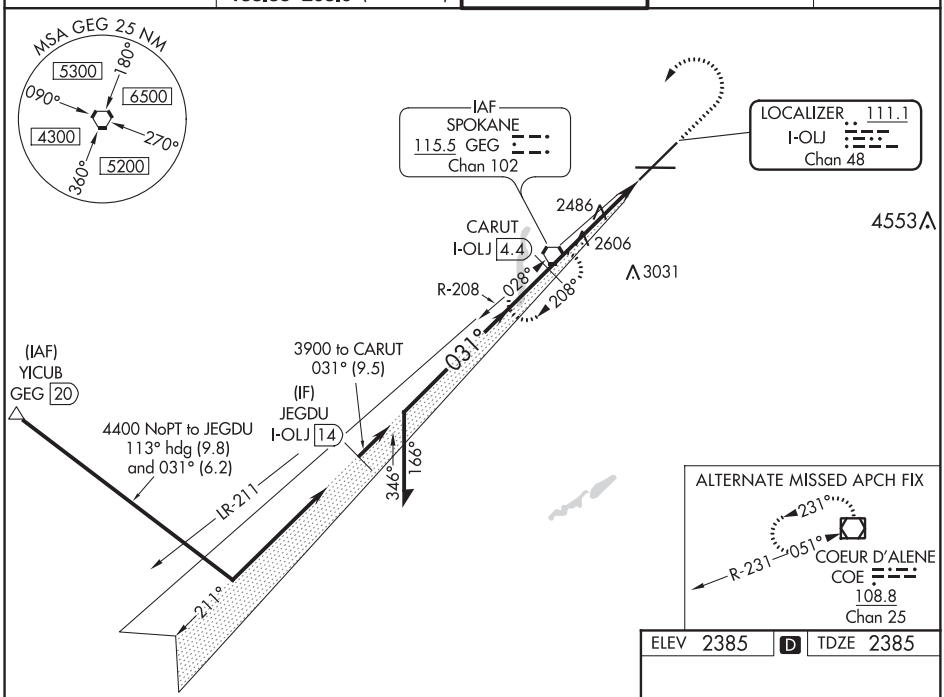
# ILS RWY 3 (CAT II & III)
## SPOKANE INTL (GEG)

CAT II: RVR 1000 authorized with specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown.

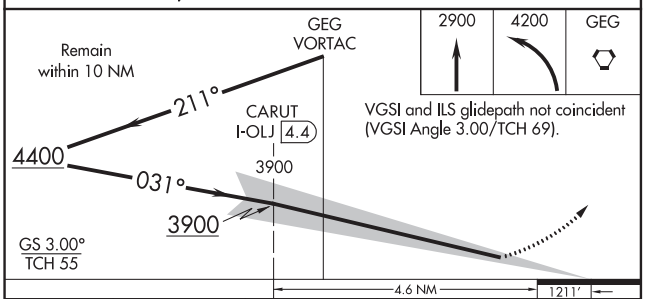
ALSF-2

MISSED APPROACH: Climb to 2900 then climbing left turn to 4200 direct GEG VORTAC and hold.

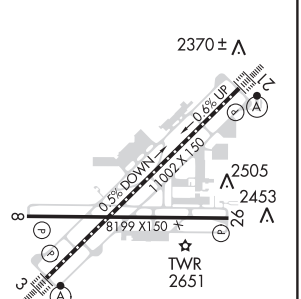
| ATIS | SPOKANE APP CON | SPOKANE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 124.325 254.375 | 123.75 282.25 (205°-025°)<br>133.35 263.0 (026°-204°) | 118.3 278.3 | 121.9 348.6 | 127.55 |




| ELEV 2385 | D | TDZE 2385 |
|---|---|---|




VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 69).




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 3 | CAT II RA 104/12 100 DA 2485 | | | |
| S-ILS 3 | CAT III RVR 03 | | | |

**CATEGORY II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**

TDZ/CL Rwys 3 and 21
REIL Rwys 8 and 26
HIRL Rwy 3-21
MIRL Rwy 8-26

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

SPOKANE, WASHINGTON AL-403 (FAA) 19059

| LOC/DME I-GEG | APP CRS | Rwy ldg | 11002 |
|---|---|---|---|
| 111.1 | 212° | TDZE | 2346 |
| Chan 48 | | Apt Elev | 2385 |

# ILS RWY 21 (CAT II & III)
## SPOKANE INTL (GEG)

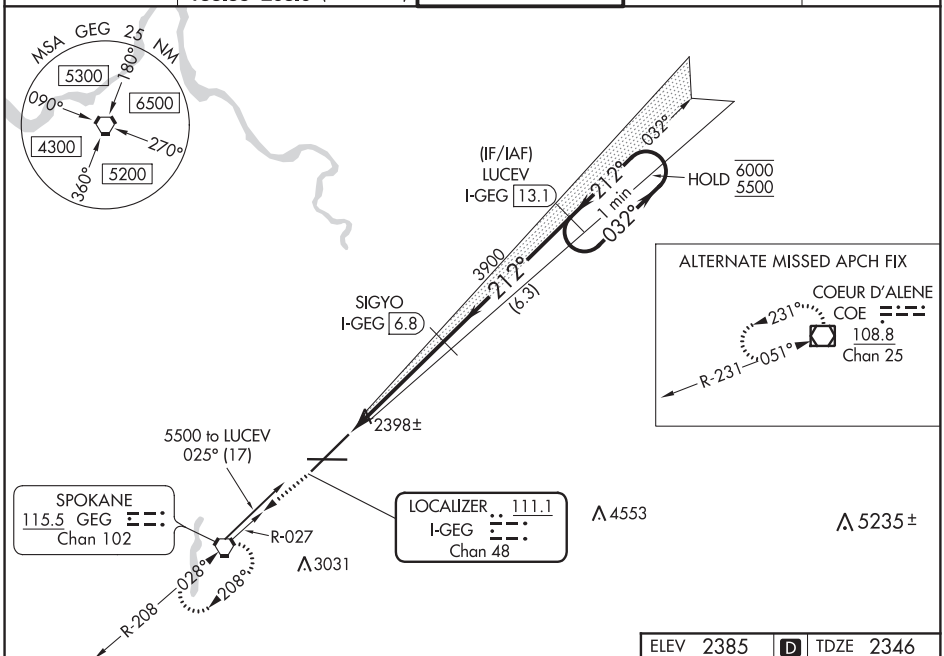
DME required.

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 4200 on GEG VORTAC R-027 to GEG VORTAC and hold.

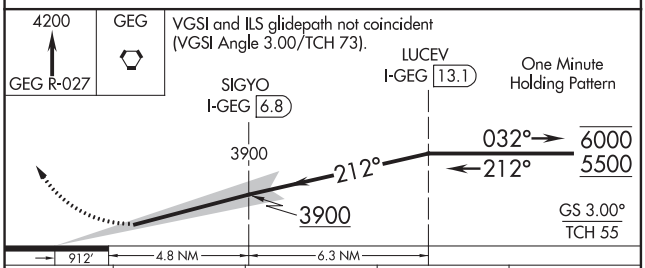
| ATIS | SPOKANE APP CON | SPOKANE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 124.325 254.375 | 123.75 282.25 (205°-025°)<br>133.35 263.0 (026°-204°) | 118.3 278.3 | 121.9 348.6 | 127.55 |




NW-1, 05 NOV 2020 to 31 DEC 2020

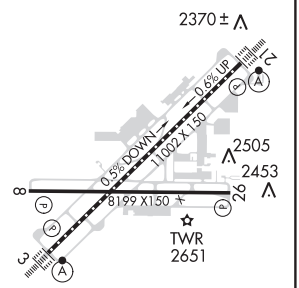
NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 2385 D TDZE 2346




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 21 | CAT II RA 147/12 76 DA 2422 | | | |
| S-ILS 21 | CAT III RVR 03 | | | |

**CATEGORY II & III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED**




TDZ/CL Rwys 3 and 21
REIL Rwys 8 and 26
HIRL Rwy 3-21
MIRL Rwy 8-26

# RNAV (RNP) Z RWY 3
## SPOKANE INTL (GEG)

| APP CRS | Rwy ldg | 11002 |
|---|---|---|
| 031° | TDZE | 2385 |
| | Apt Elev | 2385 |

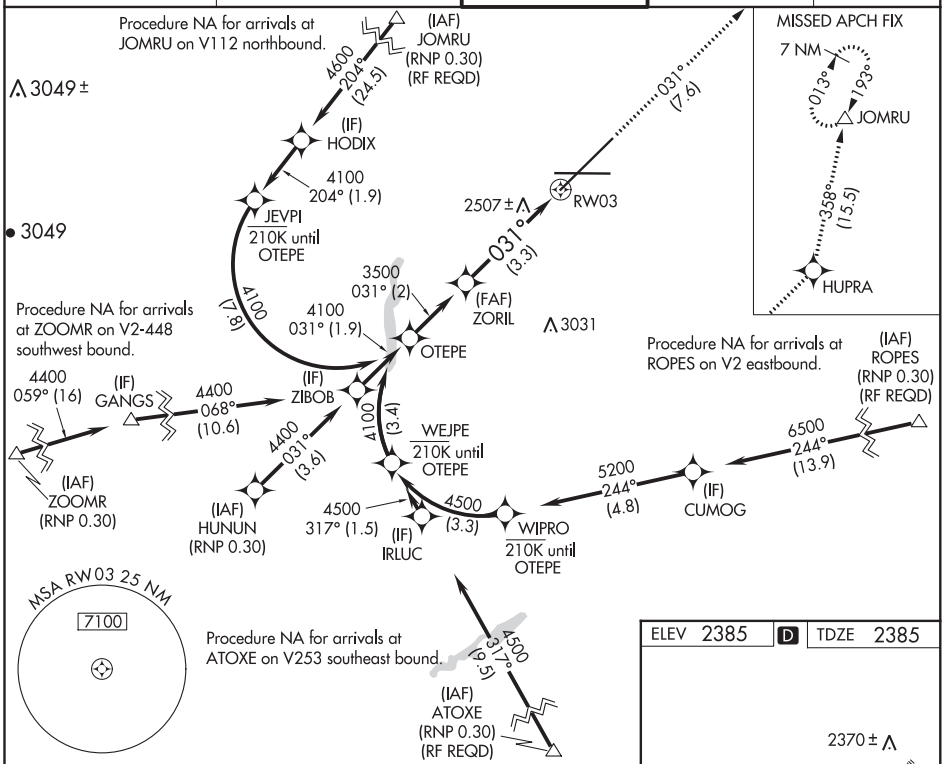
RNP AR APCH.

For uncompensated Baro-VNAV systems, procedure NA below -18°C or above 53°C.

ALSF-2

MISSED APPROACH: Climb to 7000 on track 031° to HUPRA and on track 358° to JOMRU and hold.

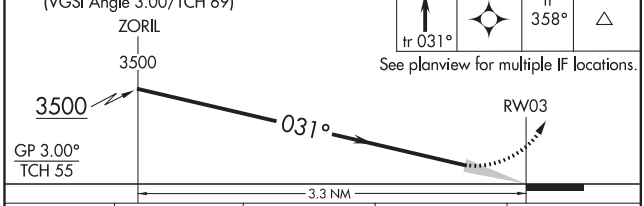
| ATIS | SPOKANE APP CON | SPOKANE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 124.325 254.375 | 123.75 282.25 (205°-025°)<br>133.35 263.0 (026°-204°) | 118.3 278.3 | 121.9 348.6 | 127.55 |




VGSI and RNAV glidepath not coincident
(VGSI Angle 3.00/TCH 69)

| 7000 | HUPRA | JOMRU |
|---|---|---|
| tr 031° | tr 358° | |

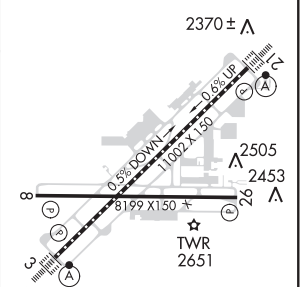
See planview for multiple IF locations.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.11 DA | 2716/26 331 (400-½) | | | |
| RNP 0.30 DA | 2842/45 457 (500-⅞) | | | |

**AUTHORIZATION REQUIRED**

ELEV 2385 D TDZE 2385




TDZ/CL Rwys 3 and 21
REIL Rwys 8 and 26
HIRL Rwy 3-21
MIRL Rwy 8-26

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 8199 |
|---|---|---|
| 076° | TDZE | 2376 |
| | Apt Elev | 2385 |

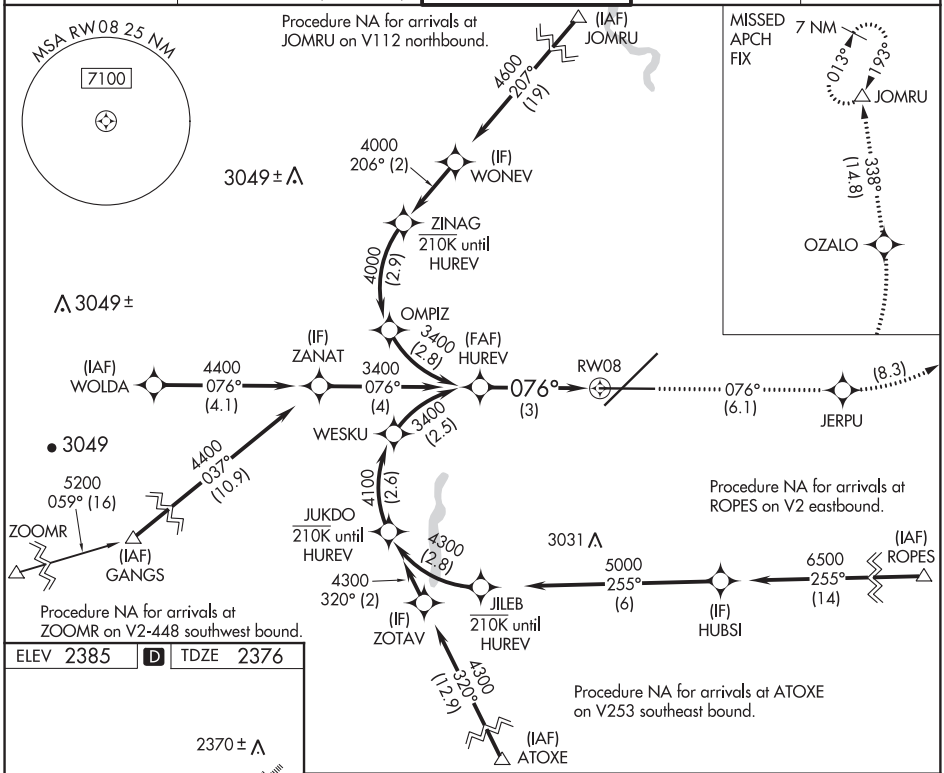
# RNAV (RNP) Z RWY 8
## SPOKANE INTL (GEG)

RNP AR APCH. RF required.

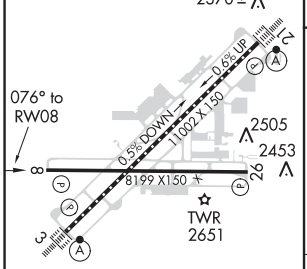
For uncompensated Baro-VNAV systems, procedure NA below -18°C or above 53°C.

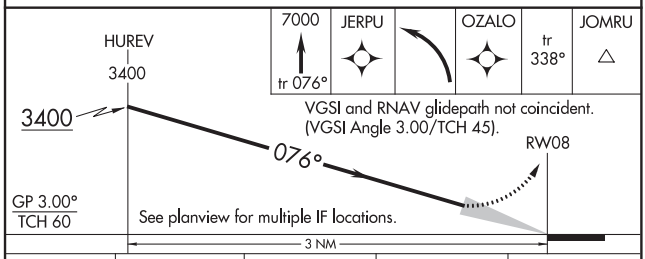
MISSED APPROACH: Climb to 7000 on track 076° to JERPU, left turn to OZALO, and on track 338° to JOMRU and hold.

| ATIS | SPOKANE APP CON | SPOKANE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 124.325 254.375 | 123.75 282.25 (205°-025°)<br>133.35 263.0 (026°-204°) | 118.3 278.3 | 121.9 348.6 | 127.55 |




| ELEV 2385 | D | TDZE 2376 |
|---|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.11 DA | 2665-⅞ 289 (300-⅞) | | | |
| RNP 0.30 DA | 2869-1⅜ 493 (500-1⅜) | | | |

**AUTHORIZATION REQUIRED**

TDZ/CL Rwys 3 and 21
REIL Rwys 8 and 26
HIRL Rwy 3-21
MIRL Rwy 8-26

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 11002 |
|---|---|---|
| 212° | TDZE | 2346 |
| | Apt Elev | 2385 |

# RNAV (RNP) Z RWY 21
## SPOKANE INTL (GEG)

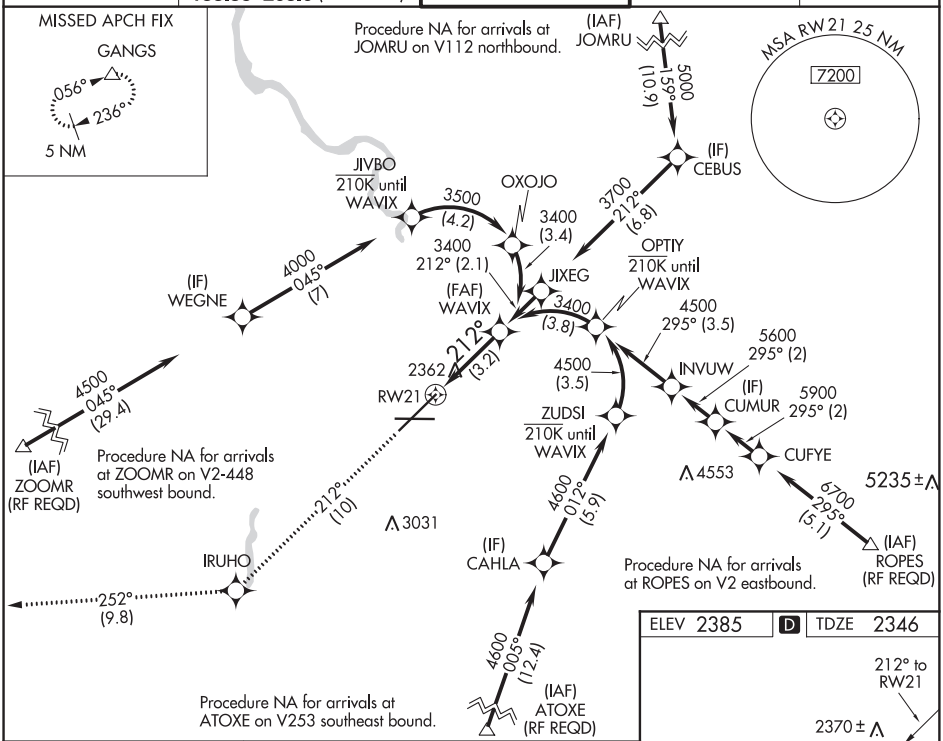
RNP AR APCH.

For uncompensated Baro-VNAV systems, procedure NA below -19°C or above 43°C. For inop ALS increase RNP 0.11 visibility all Cats to ¾, RNP 0.15 visibility all Cats to 1⅛ and RNP 0.30 visibility all Cats to 1⅜.

ALSF-2

MISSED APPROACH: Climb to 5000 on track 212° to IRUHO and on track 252° to GANGS and hold.
*Missed approach requires minimum climb of 310 feet per NM to 3000.

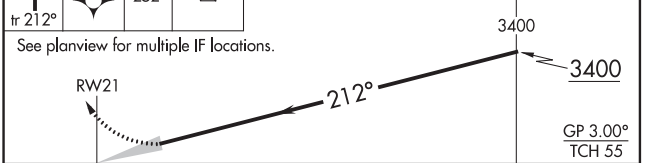
| ATIS | SPOKANE APP CON | SPOKANE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 124.325 254.375 | 123.75 282.25 (205°-025°)<br>133.35 263.0 (026°-204°) | 118.3 278.3 | 121.9 348.6 | 127.55 |




| 5000 | IRUHO | tr 252° | GANGS |
|---|---|---|---|
| tr 212° | | | |

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 73).

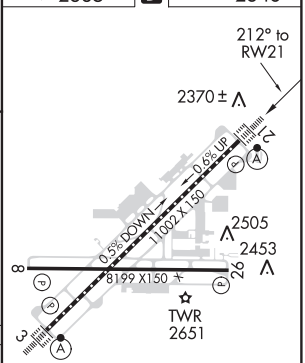
See planview for multiple IF locations.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.11 DA* | 2596/24 | 250 (300-½) | | |
| RNP 0.15 DA | 2699/30 | 353 (400-⅝) | | |
| RNP 0.30 DA | 2752/45 | 406 (400-⅞) | | |

**AUTHORIZATION REQUIRED**

ELEV 2385 D TDZE 2346




TDZ/CL Rwys 3 and 21
REIL Rwys 8 and 26
HIRL Rwy 3-21
MIRL Rwy 8-26

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

SPOKANE, WASHINGTON AL-403 (FAA) 19115

# RNAV (RNP) Z RWY 26
SPOKANE INTL (GEG)

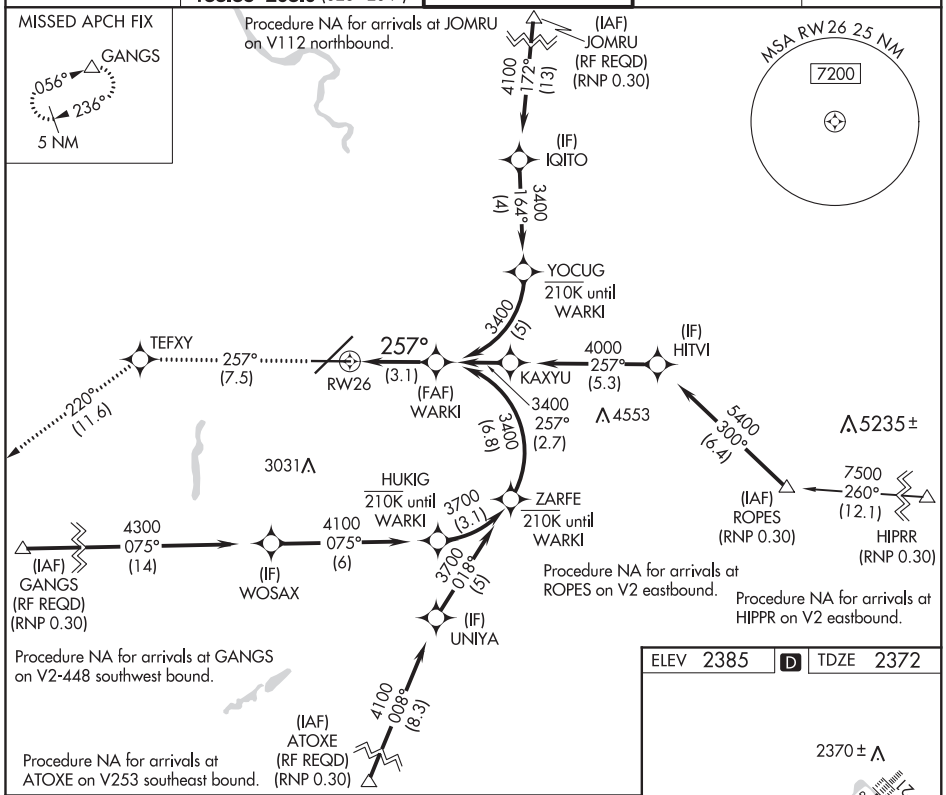
| APP CRS | Rwy ldg | 8199 |
|---|---|---|
| 257° | TDZE | 2372 |
| | Apt Elev | 2385 |

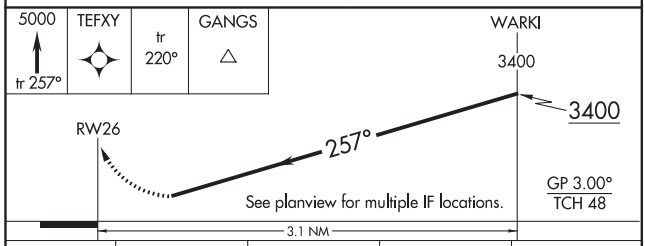
RNP AR APCH.

For uncompensated Baro-VNAV systems, procedure NA below -17°C or above 54°C.

MISSED APPROACH: Climb to 5000 on track 257° to TEFXY and on track 220° to GANGS and hold.

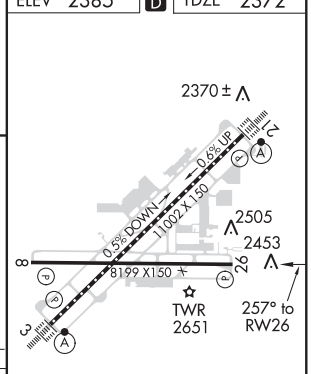
| ATIS | SPOKANE APP CON | SPOKANE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 124.325 254.375 | 123.75 282.25 (205°-025°)<br>133.35 263.0 (026°-204°) | 118.3 278.3 | 121.9 348.6 | 127.55 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.11 DA | 2745-1¼ 373 (400-1¼) | | | |
| RNP 0.30 DA | 2795-1⅜ 423 (500-1⅜) | | | |

AUTHORIZATION REQUIRED




TDZ/CL Rwys 3 and 21
REIL Rwys 8 and 26
HIRL Rwy 3-21
MIRL Rwy 8-26

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 81920 W03A | APP CRS 031° | Rwy ldg 11002 TDZE 2385 Apt Elev 2385 |
|---|---|---|

# RNAV (GPS) Y RWY 3
## SPOKANE INTL (GEG)

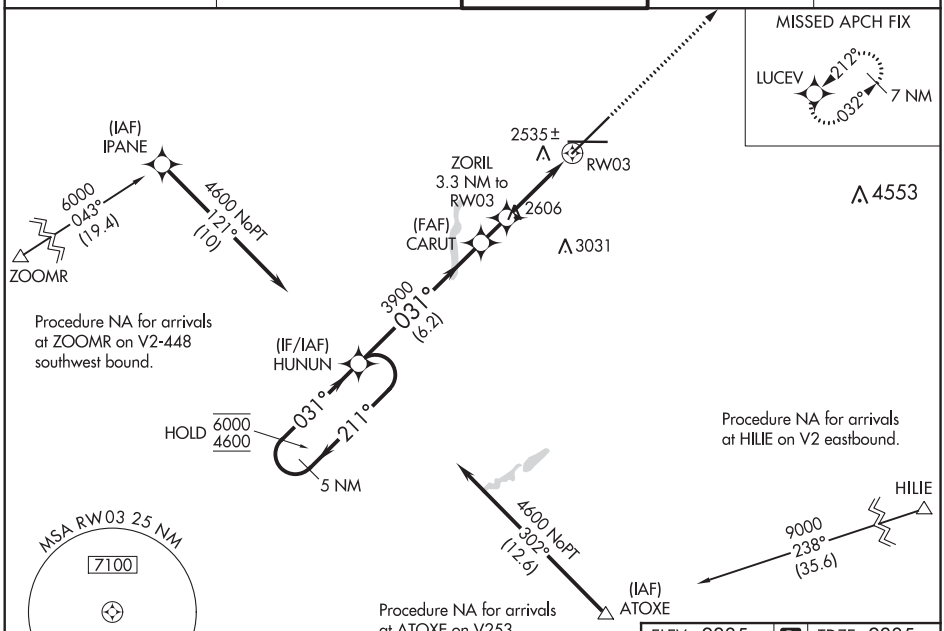
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C or above 53°C. For inop ALS increase LNAV/VNAV all Cats visibility to 1⅝ SM and increase LNAV Cats C and D visibility to 1¾ SM.

ALSF-2

MISSED APPROACH: Climb to 8200 direct LUCEV and hold, continue climb-in-hold to 8200.

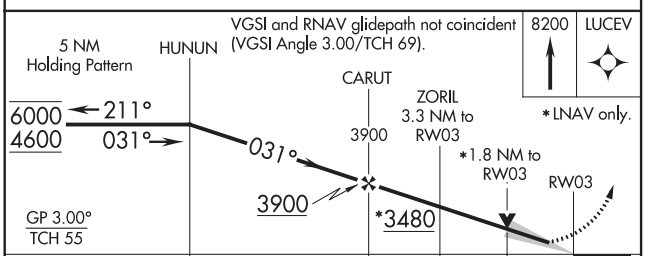
| ATIS | SPOKANE APP CON | SPOKANE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 124.325 254.375 | 123.75 282.25 (205°-025°) 133.35 263.0 (026°-204°) | 118.3 278.3 | 121.9 348.6 | 127.55 |

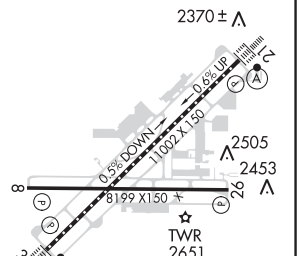



NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 2385 D TDZE 2385




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2585/18 200 (200-½) | | | |
| LNAV/VNAV DA | 2962-1½ 577 (600-1½) | | | |
| LNAV MDA | 3020/24 635 (700-½) | | 3020/60 635 (700-1¼) | 3020-1½ 635 (700-1½) |

TDZ/CL Rwys 3 and 21
REIL Rwys 8 and 26
HIRL Rwy 3-21
MIRL Rwy 8-26

SPOKANE, WASHINGTON | AL-403 (FAA) | 19227

| WAAS CH 48801 W08A | APP CRS 076° | Rwy ldg 8199<br>TDZE 2376<br>Apt Elev 2385 |
|---|---|---|

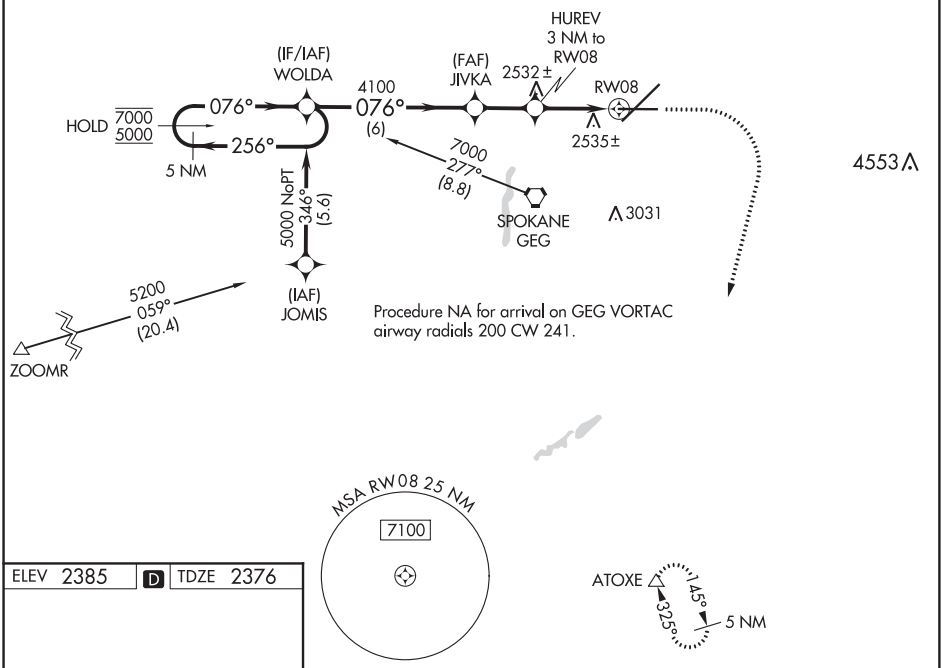
# RNAV (GPS) Y RWY 8
## SPOKANE INTL (GEG)

RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C or above 52°C.

MISSED APPROACH: Climb to 2900, then climbing right turn to 6000 direct ATOXE and hold.

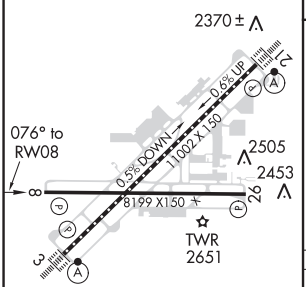
| ATIS | SPOKANE APP CON | SPOKANE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 124.325 254.375 | 123.75 282.25 (205°-025°)<br>133.35 263.0 (026°-204°) | 118.3 278.3 | 121.9 348.6 | 127.55 |



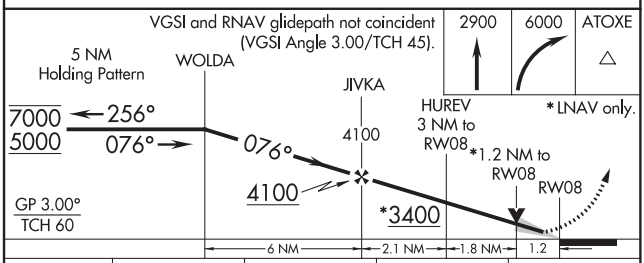




| ELEV 2385 | D | TDZE 2376 |
|---|---|---|




TDZ/CL Rwys 3 and 21
REIL Rwys 8 and 26
HIRL Rwy 3-21
MIRL Rwy 8-26




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2576-¾ 200 (200-¾) | | | |
| LNAV/VNAV DA | 2834-1½ 458 (500-1½) | | | |
| LNAV MDA | 2800-1 424 (500-1) | | 2800-1¼ 424 (500-1¼) | |

SPOKANE, WASHINGTON
Amdt 2E 15AUG19

47°37′N-117°32′W

SPOKANE INTL (GEG)
RNAV (GPS) Y RWY 8

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 82619 W21A | APP CRS 212° | Rwy ldg 11002 TDZE 2346 Apt Elev 2385 |
|---|---|---|

# RNAV (GPS) Y RWY 21
## SPOKANE INTL (GEG)

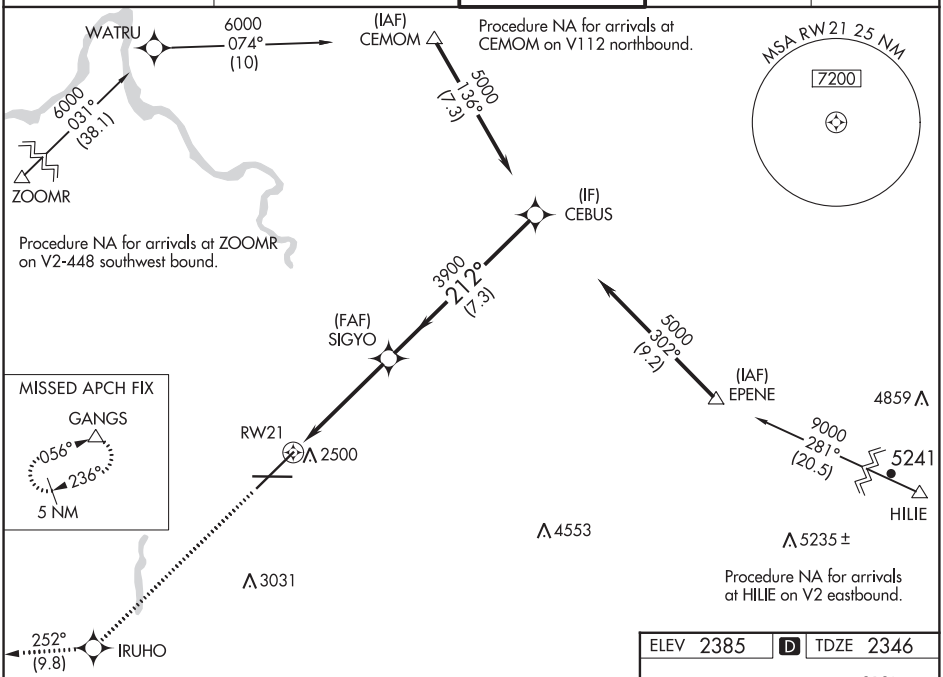
RNP APCH.

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C or above 53°C.

ALSF-2

MISSED APPROACH: Climb to 5000 direct IRUHO and on track 252° to GANGS and hold.

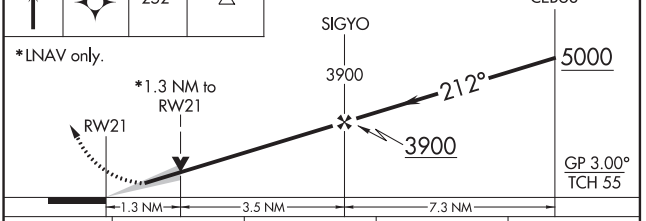
| ATIS | SPOKANE APP CON | SPOKANE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 124.325 254.375 | 123.75 282.25 (205°-025°) 133.35 263.0 (026°-204°) | 118.3 278.3 | 121.9 348.6 | 127.55 |




| 5000 | IRUHO | tr 252° | GANGS |
|---|---|---|---|

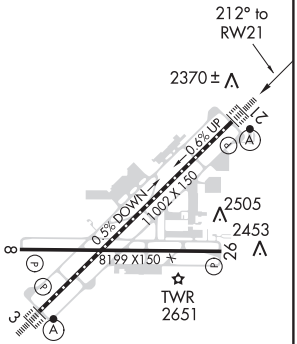
VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 73).

*LNAV only.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2546/18 200 (200-½) | | | |
| LNAV/VNAV DA | 2720/45 374 (400-⅞) | | | |
| LNAV MDA | 2800/24 454 (500-½) | | 2800/45 454 (500-⅞) | |
| C CIRCLING | 2960-1 575 (600-1) | 2980-1 595 (600-1) | 3300-2¾ 915 (1000-2¾) | 3400-3 1015 (1100-3) |

ELEV 2385 D TDZE 2346




TDZ/CL Rwys 3 and 21
REIL Rwys 8 and 26
HIRL Rwy 3-21
MIRL Rwy 8-26

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 93501 W26A | APP CRS 257° | Rwy ldg 8199<br>TDZE 2372<br>Apt Elev 2385 |
|---|---|---|

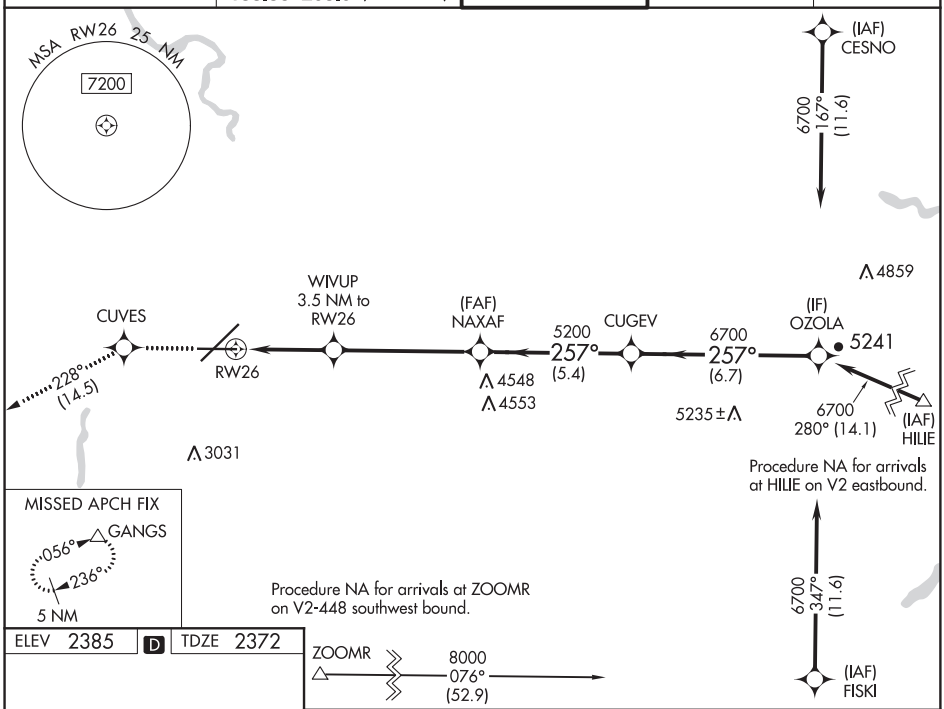
# RNAV (GPS) Y RWY 26
## SPOKANE INTL (GEG)

RNP APCH.

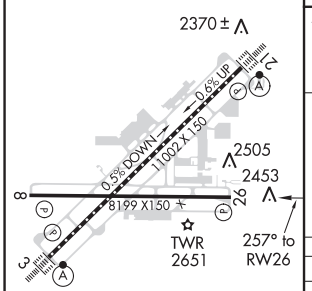
Rwy 26 helicopter visibility reduction below ¾ SM NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C or above 54°C.

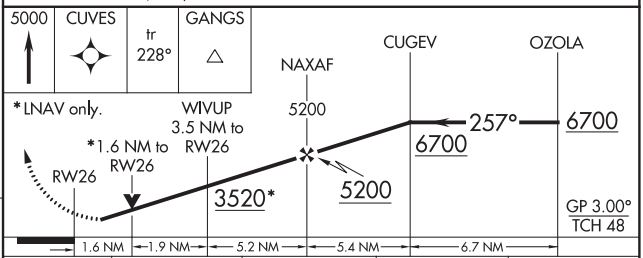
MISSED APPROACH: Climb to 5000 direct CUVES and on track 228° to GANGS and hold.

| ATIS | SPOKANE APP CON | SPOKANE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 124.325 254.375 | 123.75 282.25 (205°-025°)<br>133.35 263.0 (026°-204°) | 118.3 278.3 | 121.9 348.6 | 127.55 |




ELEV 2385 D TDZE 2372




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2688-1 316 (400-1) | | | |
| LNAV/VNAV DA | 2911-1½ 539 (600-1½) | | | |
| LNAV MDA | 2920-1 548 (600-1) | | 2920-1⅝ 548 (600-1⅝) | |
| C CIRCLING | 2960-1 575 (600-1) | 2980-1 595 (600-1) | 3300-2¾ 915 (1000-2¾) | 3400-3 1015 (1100-3) |

TDZ/CL Rwys 3 and 21
REIL Rwys 8 and 26
HIRL Rwy 3-21
MIRL Rwy 8-26




NW-1, 05 NOV 2020 to 31 DEC 2020

| VORTAC GEG 115.5 Chan 102 | APP CRS 028° | Rwy ldg 11002 TDZE 2385 Apt Elev 2385 |
|---|---|---|

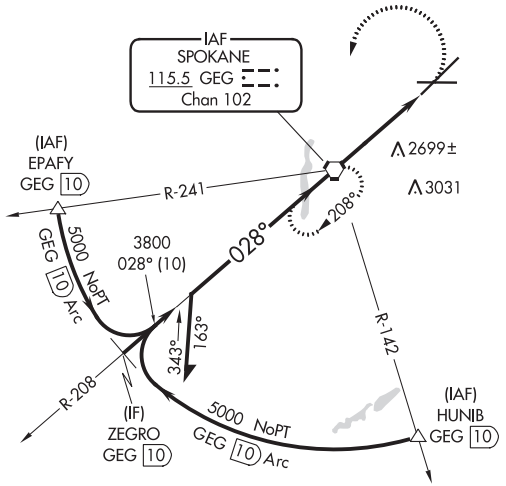
# VOR RWY 3
## SPOKANE INTL (GEG)

Circling NA for Cat E southeast of Rwy 3-21. For inop ALS, increase S-3 Cat C/D/E visibility to 1⅝ SM.

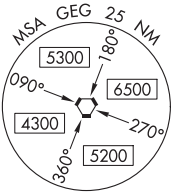
ALSF-2

MISSED APPROACH: Climbing left turn to 4200 direct GEG VORTAC and hold, continue climb-in-hold to 4200.

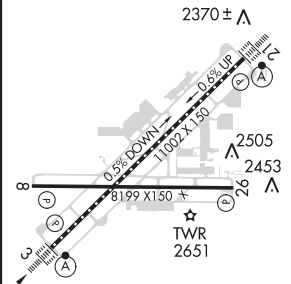
| ATIS | SPOKANE APP CON | SPOKANE TOWER | GND CON | CLNC DEL |
|---|---|---|---|---|
| 124.325 254.375 | 123.75 282.25 (205°-025°)<br>133.35 263.0 (026°-204°) | 118.3 278.3 | 121.9 348.6 | 127.55 |




4553

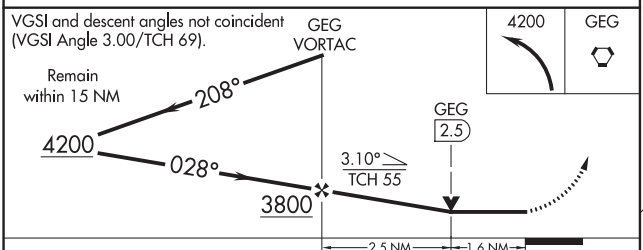



ELEV 2385 D TDZE 2385




TDZ/CL Rwys 3 and 21
REIL Rwys 8 and 26
HIRL Rwy 3-21
MIRL Rwy 8-26

VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 69).




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-3 | 2960/24 575 (600-½) | | 2960-1¼ 575 (600-1¼) | | |
| C CIRCLING | 2960-1 575 (600-1) | 2980-1 595 (600-1) | 3300-2¾ 915 (1000-2¾) | 3400-3 1015 (1100-3) | |

| FAF to MAP 4.1 NM | | | | | |
|---|---|---|---|---|---|
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 4:06 | 2:44 | 2:03 | 1:38 | 1:22 |

NW-1, 05 NOV 2020 to 31 DEC 2020

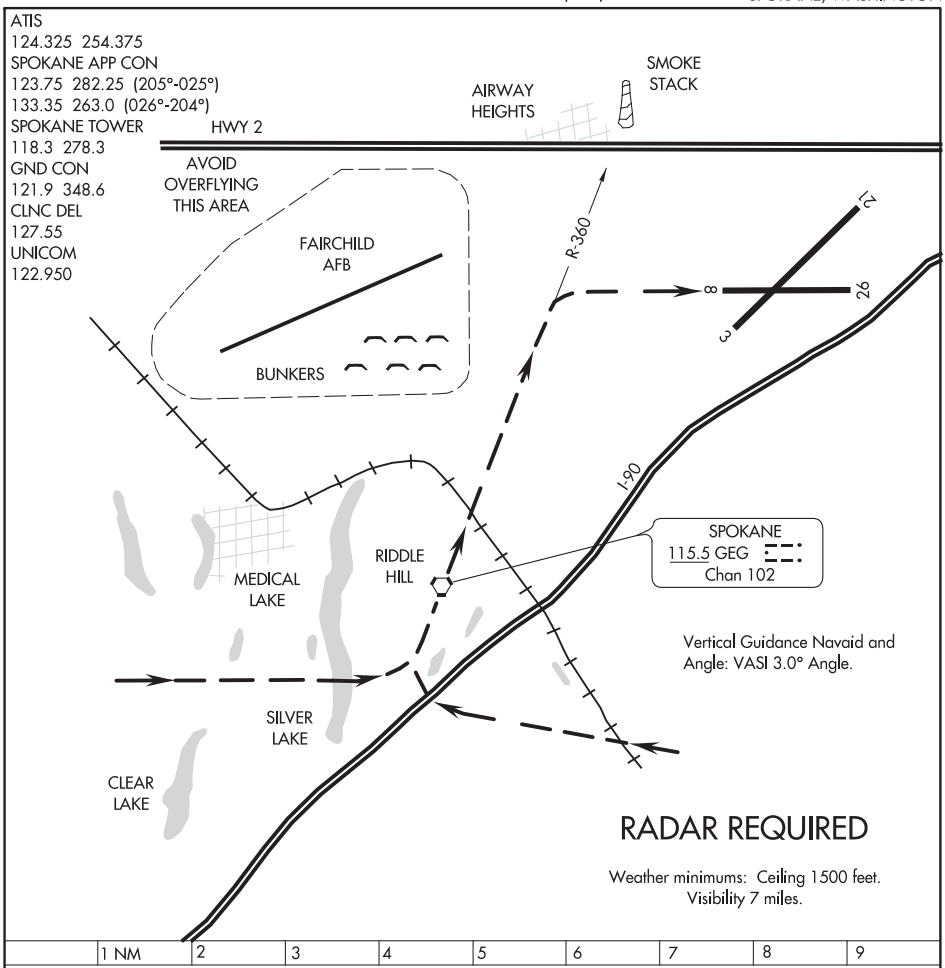
NW-1, 05 NOV 2020 to 31 DEC 2020

19003

# RIDDLE HILL VISUAL RWY 8

AL-403 (FAA)

SPOKANE INTL (GEG)
SPOKANE, WASHINGTON

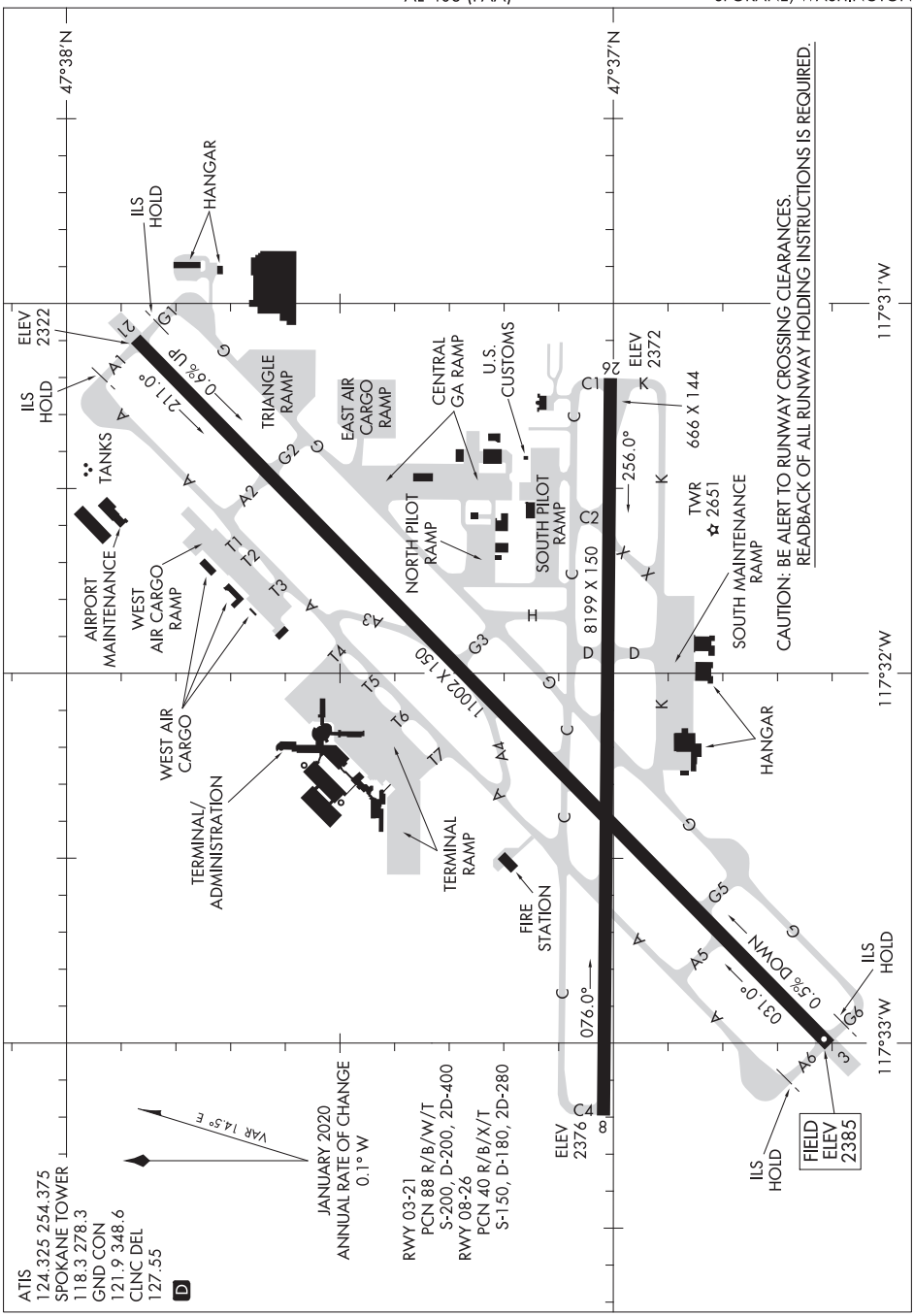



NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

RIDDLE HILL VISUAL APPROACH RWY 8

PROCEDURE NOT AUTHORIZED AT NIGHT.


47°38'N
47°37'N
117°31'W
117°32'W
117°33'W
ILS HOLD
HANGAR
ELEV 2322
ILS HOLD
TANKS
211.0°
0.6% UP
TRIANGLE RAMP
EAST AIR CARGO RAMP
CENTRAL GA RAMP
U.S. CUSTOMS
ELEV 2372
666 X 144
256.0°
TWR 2651
SOUTH MAINTENANCE RAMP
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
AIRPORT MAINTENANCE
WEST AIR CARGO RAMP
NORTH PILOT RAMP
SOUTH PILOT RAMP
8199 X 150
11002 X 150
WEST AIR CARGO
TERMINAL/ ADMINISTRATION
TERMINAL RAMP
FIRE STATION
HANGAR
076.0°
0.5% DOWN
031.0°
ILS HOLD
ILS HOLD
FIELD ELEV 2385
ELEV 2376
ATIS
124.325 254.375
SPOKANE TOWER
118.3 278.3
GND CON
121.9 348.6
CLNC DEL
127.55
D
VAR 14.5° E
JANUARY 2020
ANNUAL RATE OF CHANGE
0.1° W
RWY 03-21
PCN 88 R/B/W/T
S-200, D-200, 2D-400
RWY 08-26
PCN 40 R/B/X/T
S-150, D-180, 2D-280

19171

# SPOKANE SIX DEPARTURE

AL-403 (FAA)

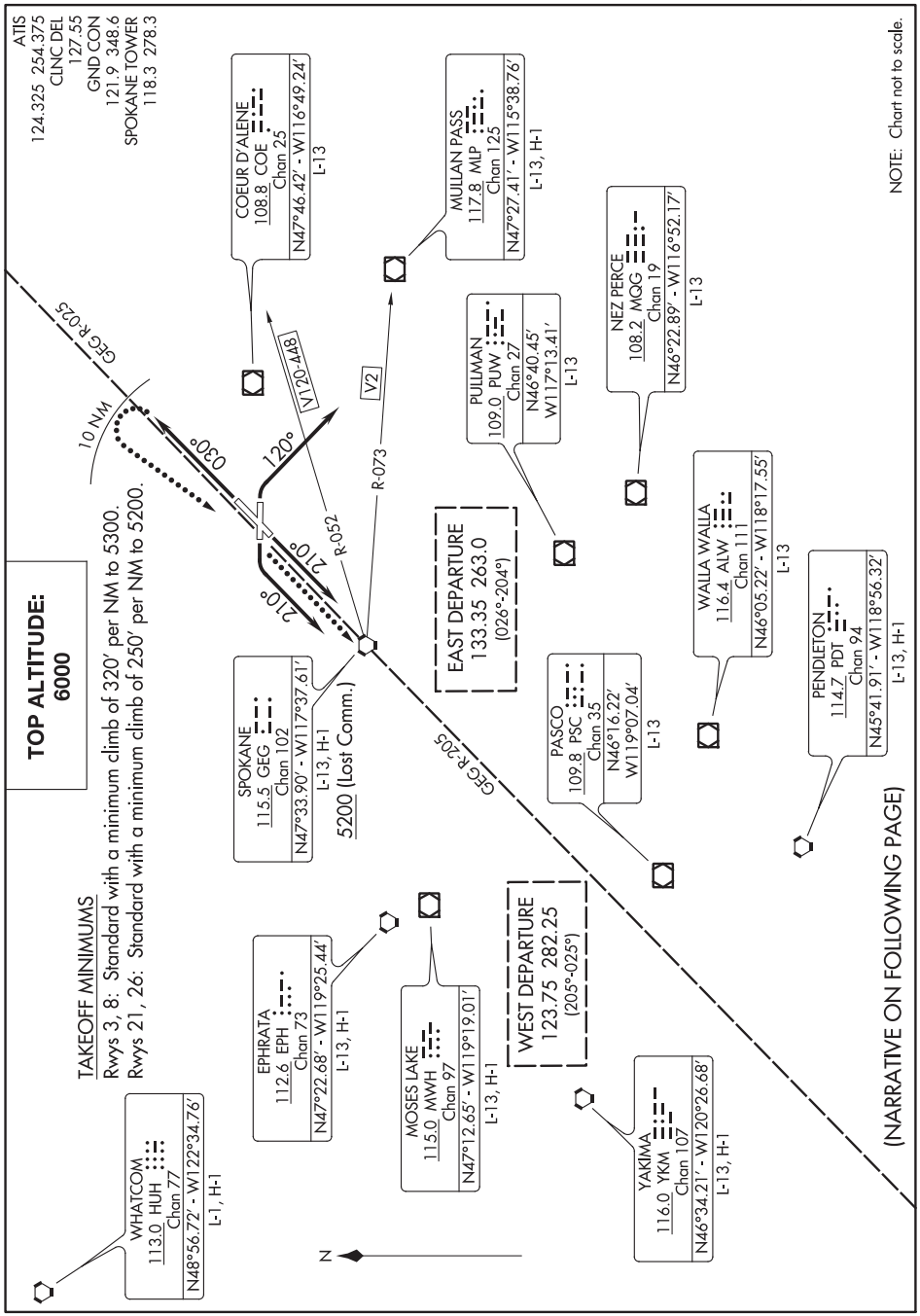
SPOKANE INTL (GEG)
SPOKANE, WASHINGTON

ATIS 124.325 254.375
CLNC DEL 127.55
GND CON 121.9 348.6
SPOKANE TOWER 118.3 278.3

NOTE: Chart not to scale.

**TOP ALTITUDE: 6000**

TAKEOFF MINIMUMS
Rwys 3, 8: Standard with a minimum climb of 320′ per NM to 5300.
Rwys 21, 26: Standard with a minimum climb of 250′ per NM to 5200.




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 3: Climb on heading 030° (or ATC assigned heading) for vectors to assigned route/fix, thence . . . .
TAKEOFF RUNWAY 8: Climbing right turn heading 120° (or ATC assigned heading) for vectors to assigned route/fix, thence . . . .
TAKEOFF RUNWAY 21: Climb heading 210° (or ATC assigned heading) for vectors to assigned route/fix, thence . . . .
TAKEOFF RUNWAY 26: Climbing left turn heading 210° (or ATC assigned heading) for vectors to assigned route/fix, thence . . . .

. . . . maintain 6000 or assigned higher altitude, expect filed altitude/flight level 10 minutes after departure.

LOST COMMUNICATIONS:
Climb direct GEG VORTAC before proceeding on course.
Aircraft northeastbound V120-448 and eastbound V2: Climb direct GEG VORTAC, cross GEG VORTAC at or above 5200.
Aircraft departing Rwy 3: If not in contact with ATC within 10 NM after takeoff, turn left direct GEG VORTAC, cross GEG VORTAC at or above 5200, thence on assigned route/fix.

NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

STEVENSVILLE, MONTANA | AL-9301 (FAA) | 20310

# RNAV (GPS)-A
## STEVENSVILLE (32S)

| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 162° | TDZE | N/A |
| | Apt Elev | 3614 |

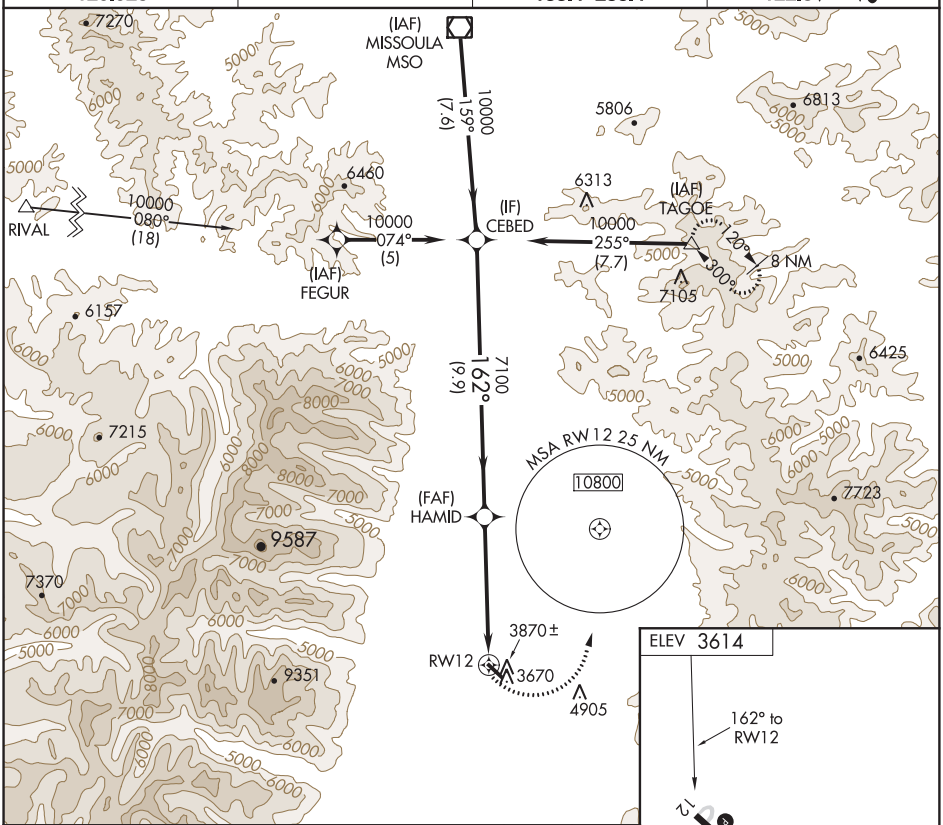
RNP APCH.

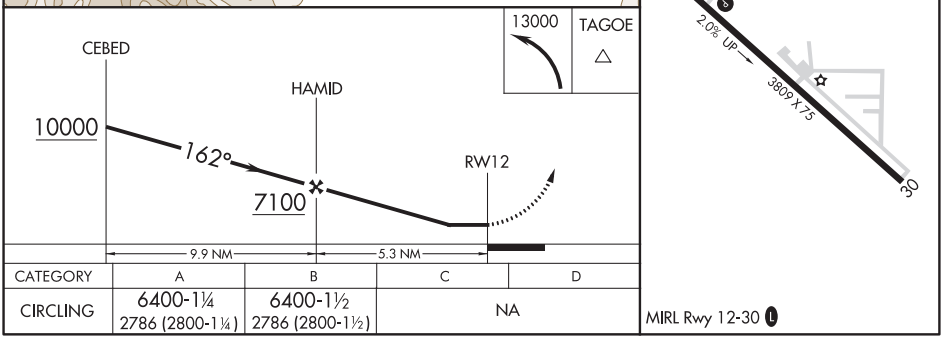
NA

Use Missoula Intl altimeter setting.
Procedure NA at night.

MISSED APPROACH: Climbing left turn to 13000 direct TAGOE and hold, continue climb-in-hold to 13000.

| AWOS-AV | SPOKANE APP CON ★ | SALT LAKE CITY CENTER | UNICOM |
|---|---|---|---|
| 120.925 | 124.9 298.95 | 133.4 285.4 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 6400-1¼<br>2786 (2800-1¼) | 6400-1½<br>2786 (2800-1½) | NA | |

MIRL Rwy 12-30 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

STEVENSVILLE, MONTANA
Orig-E 20JUN19

46°32′N-114°03′W

STEVENSVILLE (32S)
RNAV (GPS)-A

| APP CRS | Rwy ldg | 4473 |
|---|---|---|
| 178° | TDZE | 4162 |
| | Apt Elev | 4163 |

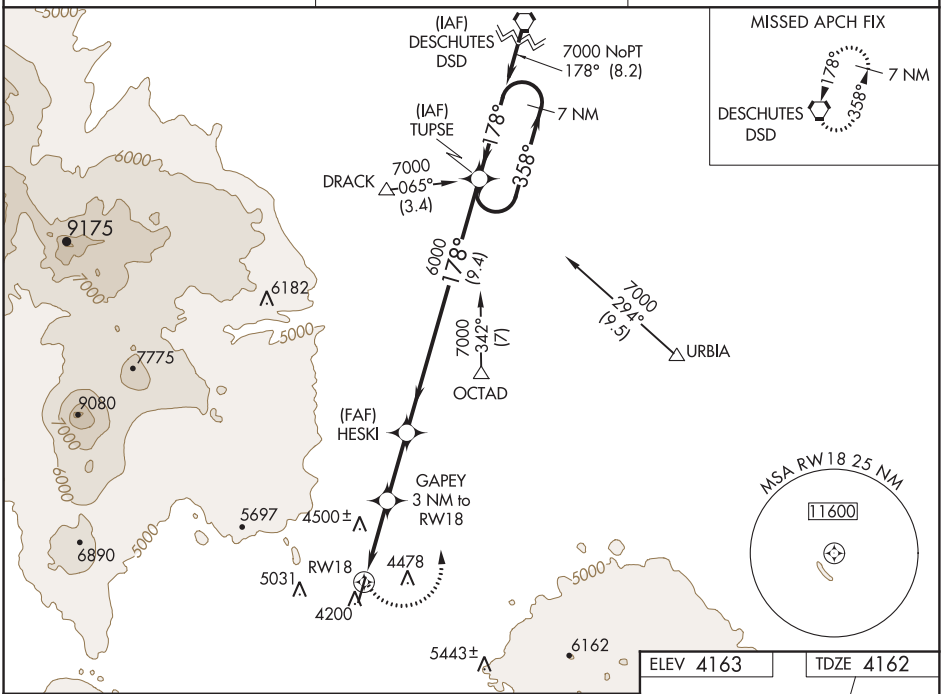
# RNAV (GPS) RWY 18
## SUNRIVER (S21)

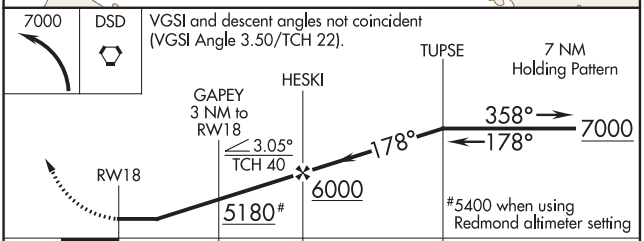
T
NA

Obtain local altimeter setting on CTAF; when not received, use Redmond altimeter setting. DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climbing left turn to 7000 direct DSD VORTAC and hold.

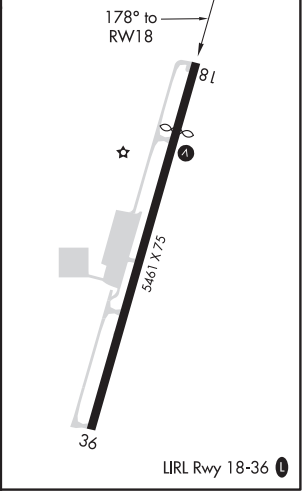
| AWOS-3PT | SEATTLE CENTER | UNICOM |
|---|---|---|
| 128.325 | 126.15 269.475 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 4760-1 598 (600-1) | | 4760-1½ 598 (600-1½) | 4960-2½ 798 (800-2½) |
| CIRCLING | 4920-1 757 (800-1) | 4920-1¼ 757 (800-1¼) | 5040-2½ 877 (900-2½) | 5380-3 1217 (1300-3) |
| REDMOND ALTIMETER SETTING MINIMUMS | | | | |
| LNAV MDA | 4980-1 818 (900-1) | 4980-1¼ 818 (900-1¼) | 4980-2½ 818 (900-2½) | 4980-2¾ 818 (900-2¾) |
| CIRCLING | 5140-1¼ 977 (1000-1¼) | 5140-1½ 977 (1000-1½) | 5260-3 1097 (1100-3) | 5580-3 1417 (1500-3) |

ELEV 4163 TDZE 4162




LIRL Rwy 18-36 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

TACOMA, WASHINGTON

AL-5186 (FAA)

19115

# ILS or LOC RWY 17
## TACOMA NARROWS (TIW)

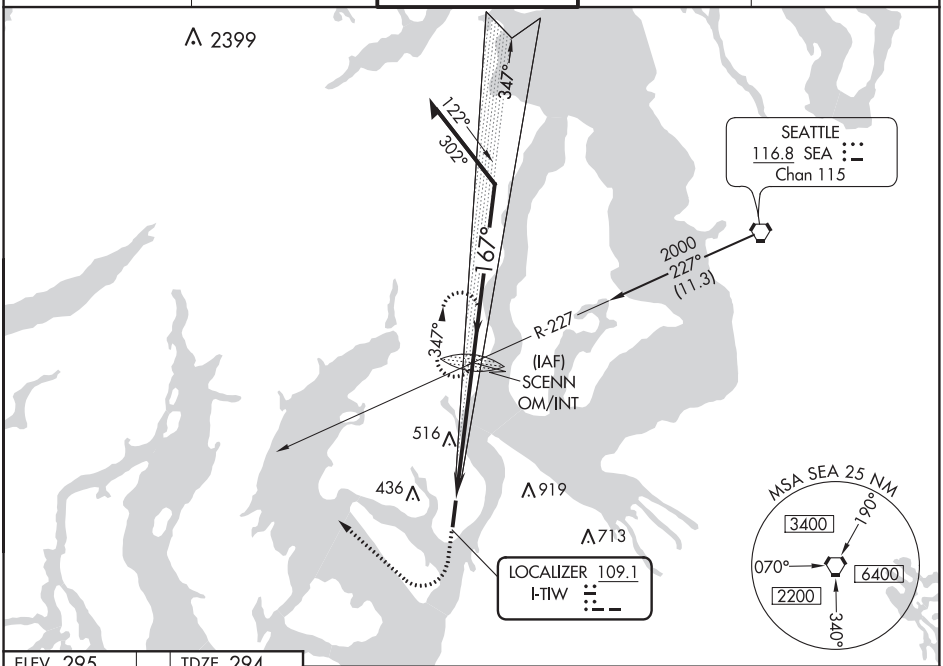
| LOC I-TIW | APP CRS | Rwy ldg | 5002 |
|---|---|---|---|
| 109.1 | 167° | TDZE | 294 |
| | | Apt Elev | 295 |

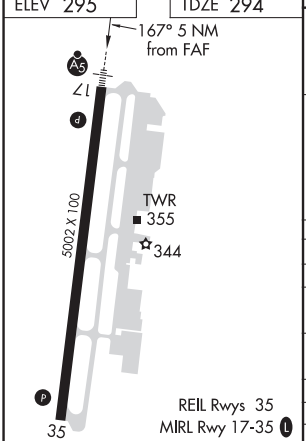
When control tower closed, obtain local altimeter setting on UNICOM, when not received, use McChord Field altimeter setting minimums. Circling not authorized east of Rwy 17-35.

MALSR

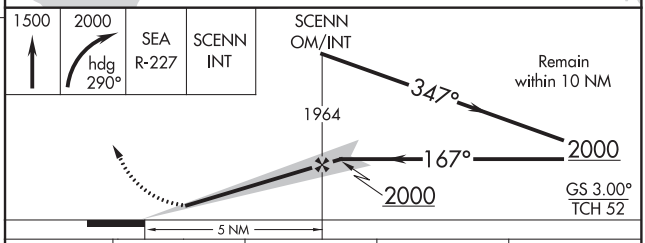
MISSED APPROACH: Climb to 1500, then climbing right turn to 2000 via heading 290° and SEA VORTAC R-227 to SCENN INT and hold.

| ATIS | SEATTLE APP CON | TACOMA TOWER★ | GND CON | UNICOM |
|---|---|---|---|---|
| 124.05 | 120.1 290.9 | 118.5 (CTAF) L 253.5 | 121.8 | 122.95 |




| 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 17 | 494-½ 200 (200-½) | | | |
| S-LOC 17 | 760-½ 466 (500-½) | | 760-¾ 466 (500-¾) | 760-1 466 (500-1) |
| CIRCLING | 760-1 465 (500-1) | | 760-1½ 465 (500-1½) | 860-2 565 (600-2) |
| McCHORD FIELD ALTIMETER SETTING MINIMUMS | | | | |
| S-ILS 17 | 519-½ 225 (300-½) | | | |
| S-LOC 17 | 780-½ 486 (500-½) | | 780-¾ 486 (500-¾) | 780-1 486 (500-1) |
| CIRCLING | 780-1 485 (500-1) | | 780-1½ 485 (500-1½) | 860-2 565 (600-2) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 82608 W17A | APP CRS 167° | Rwy ldg 5002<br>TDZE 294<br>Apt Elev 295 |
|---|---|---|

# RNAV (GPS) RWY 17
## TACOMA NARROWS (TIW)

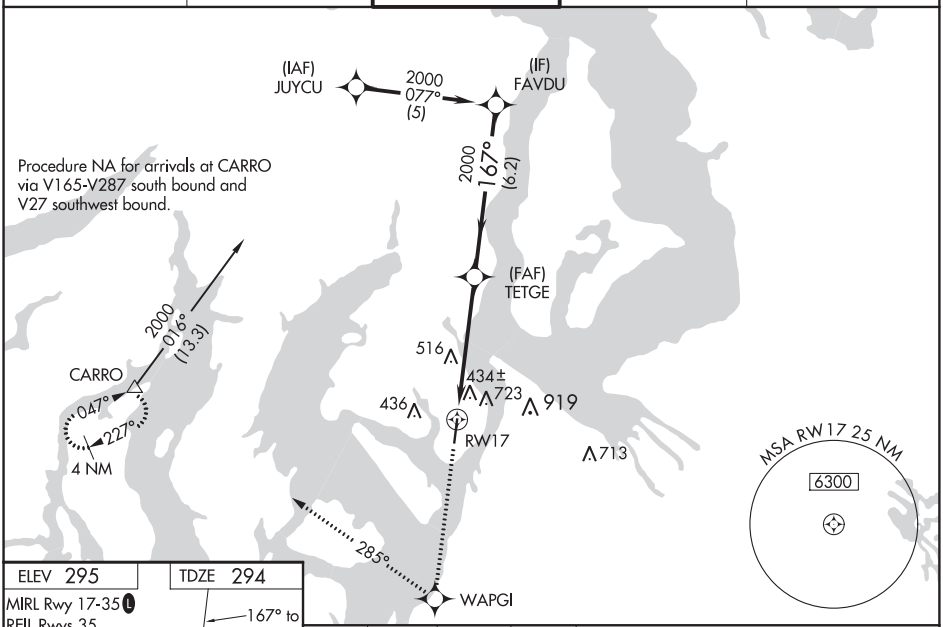
RNP APCH.

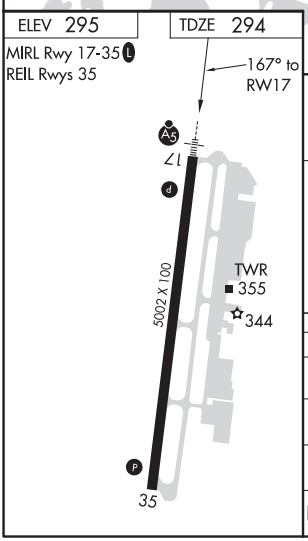
VDP NA with McChord Field altimeter setting. For inoperative MALSR, increase LPV all Cats visibility to 1 ⅛ mile. Circling NA east of Rwy 17/35.
Baro-VNAV NA when using McChord Field altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). When local altimeter setting not received, use McChord Field altimeter setting and increase all DA 25 feet, all MDA 40 feet, and increase LPV all Cats visibility ⅛ mile.

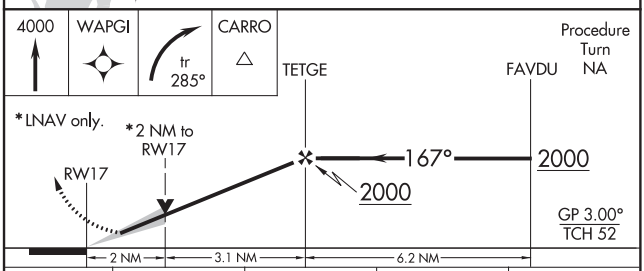
MALSR

MISSED APPROACH: Climb to 4000 direct WAPGI and right turn via 285° track to CARRO and hold, continue climb-in-hold to 4000.

| ATIS | SEATTLE APP CON | TACOMA TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 124.05 | 120.1 290.9 | 118.5 (CTAF) L 253.5 | 121.8 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 638-⅝ 344 (400-⅝) | | | |
| LNAV/VNAV DA | 992-2 698 (700-2) | | | |
| LNAV MDA | 980-½ 686 (700-½) | | 980-1½ 686 (700-1½) | |
| C CIRCLING | 980-1 685 (700-1) | | 980-2 685 (700-2) | 980-2¼ 685 (700-2¼) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

TACOMA, WASHINGTON

AL-5186 (FAA)

20282

# RNAV (GPS) RWY 35
## TACOMA NARROWS (TIW)

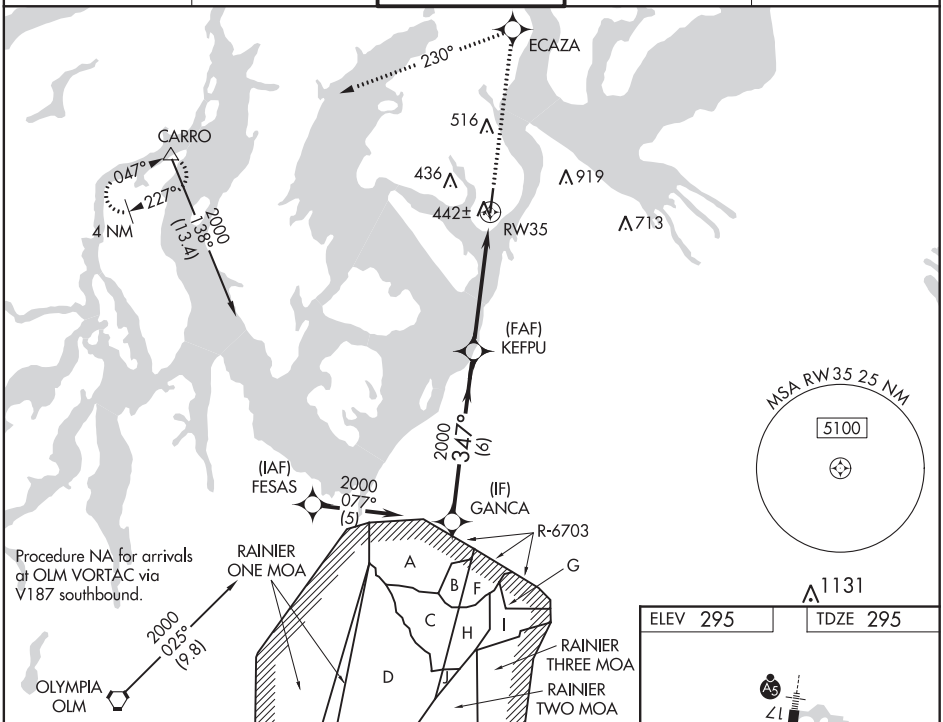
| WAAS CH 50312 W35A | APP CRS 347° | Rwy ldg 5002<br>TDZE 295<br>Apt Elev 295 |
|---|---|---|

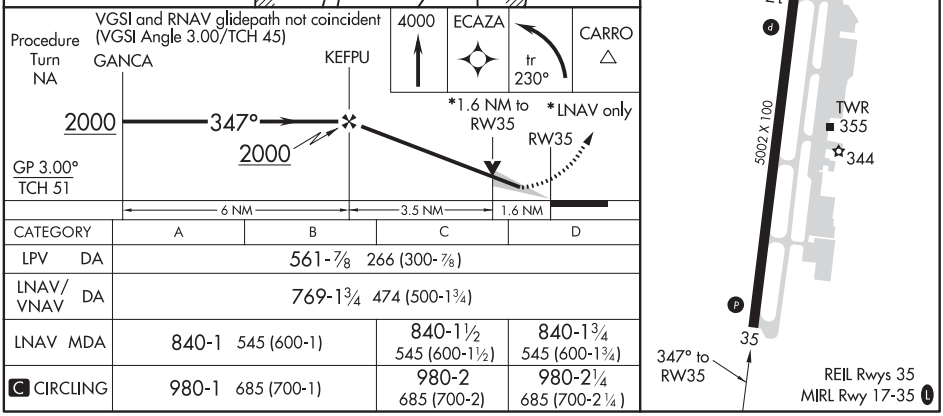
RNP APCH.

Baro-VNAV NA when using McChord Field altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). Circling NA east of Rwy 17-35. When local altimeter setting not received, use McChord Field altimeter setting and increase all DA 25 feet and all MDA 40 feet.

MISSED APPROACH: Climb to 4000 direct ECAZA and left turn via 230° track to CARRO and hold, continue climb-in-hold to 4000.

| ATIS | SEATTLE APP CON | TACOMA TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 124.05 | 120.1 290.9 | 118.5 (CTAF) L 253.5 | 121.8 | 122.95 |

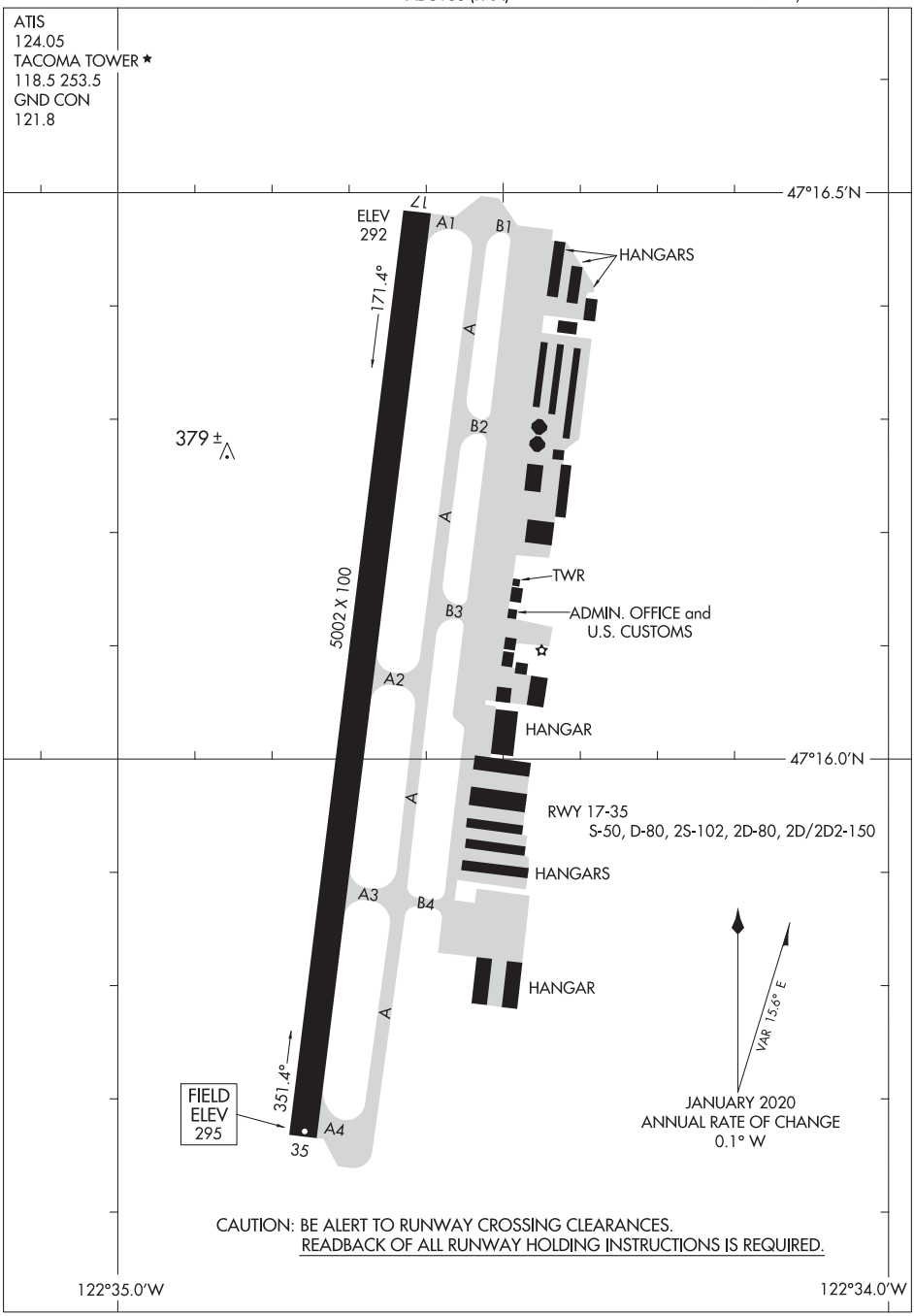



| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 561-⅞ 266 (300-⅞) | | | |
| LNAV/VNAV DA | 769-1¾ 474 (500-1¾) | | | |
| LNAV MDA | 840-1 545 (600-1) | | 840-1½ 545 (600-1½) | 840-1¾ 545 (600-1¾) |
| C CIRCLING | 980-1 685 (700-1) | | 980-2 685 (700-2) | 980-2¼ 685 (700-2¼) |

NW-1, 05 NOV 2020 to 31 DEC 2020

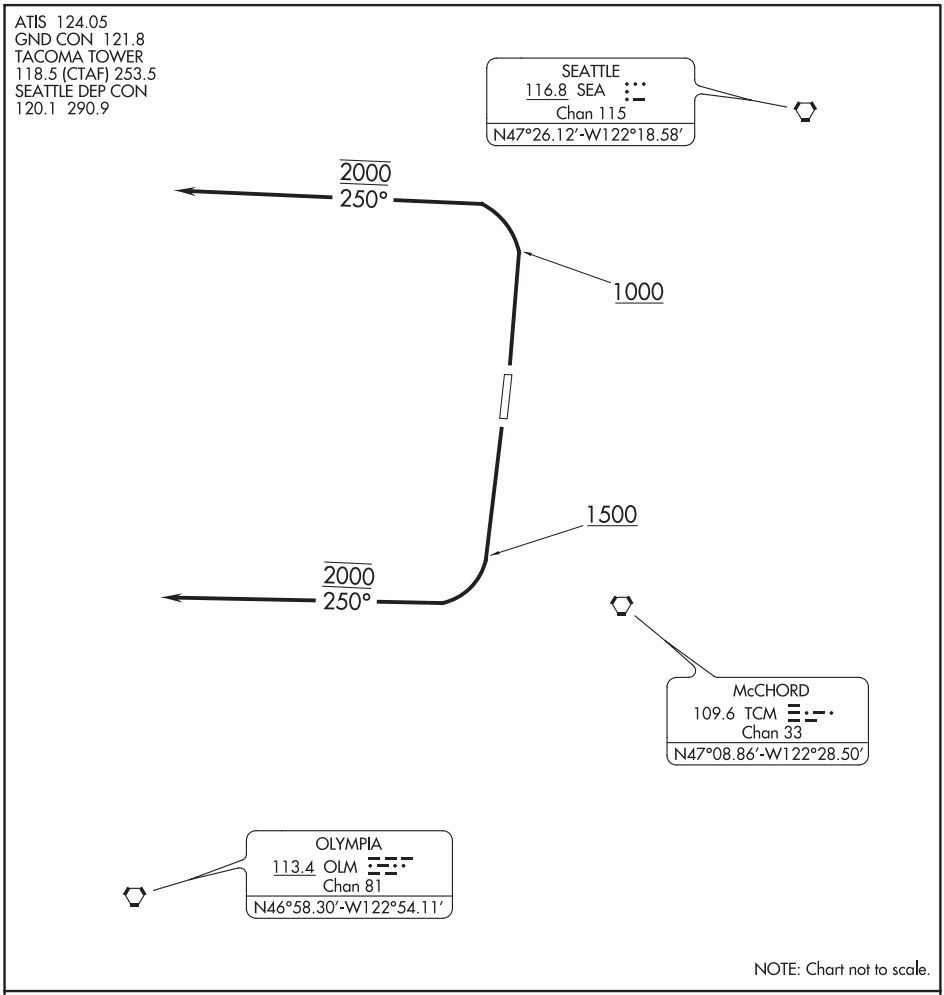
NW-1, 05 NOV 2020 to 31 DEC 2020


ATIS
124.05
TACOMA TOWER ★
118.5 253.5
GND CON
121.8
47°16.5'N
ELEV
292
Z1
A1
B1
HANGARS
171.4°
A
B2
379 ±
A
TWR
5002 X 100
B3
ADMIN. OFFICE and
U.S. CUSTOMS
A2
HANGAR
47°16.0'N
A
RWY 17-35
S-50, D-80, 2S-102, 2D-80, 2D/2D2-150
HANGARS
A3
B4
HANGAR
A
VAR 15.6° E
351.4°
FIELD
ELEV
295
A4
35
JANUARY 2020
ANNUAL RATE OF CHANGE
0.1° W
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
122°35.0'W
122°34.0'W

16147 SL-5186 (FAA)

# NARROWS ONE DEPARTURE

TACOMA NARROWS (TIW)
TACOMA, WASHINGTON




## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb runway heading until leaving 1500, turn right heading 250°, maintain 2000. Expect filed altitude 5 minutes after departure. Expect radar vectors to assigned route

TAKEOFF RUNWAY 35: Climb runway heading until leaving 1000, turn left heading 250°, maintain 2000. Expect filed altitude 5 minutes after departure. Expect radar vectors to assigned route.

LOST COMMUNICATIONS: If no transmissions are received for 3 minutes after departure, climb to filed altitude direct SEA VORTAC, thence via assigned route.



NW-1, 05 NOV 2020 to 31 DEC 2020

NARROWS ONE DEPARTURE
TACOMA, WASHINGTON
TACOMA NARROWS (TIW)

15OCT92

| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 339° | TDZE | N/A |
| | Apt Elev | 247 |

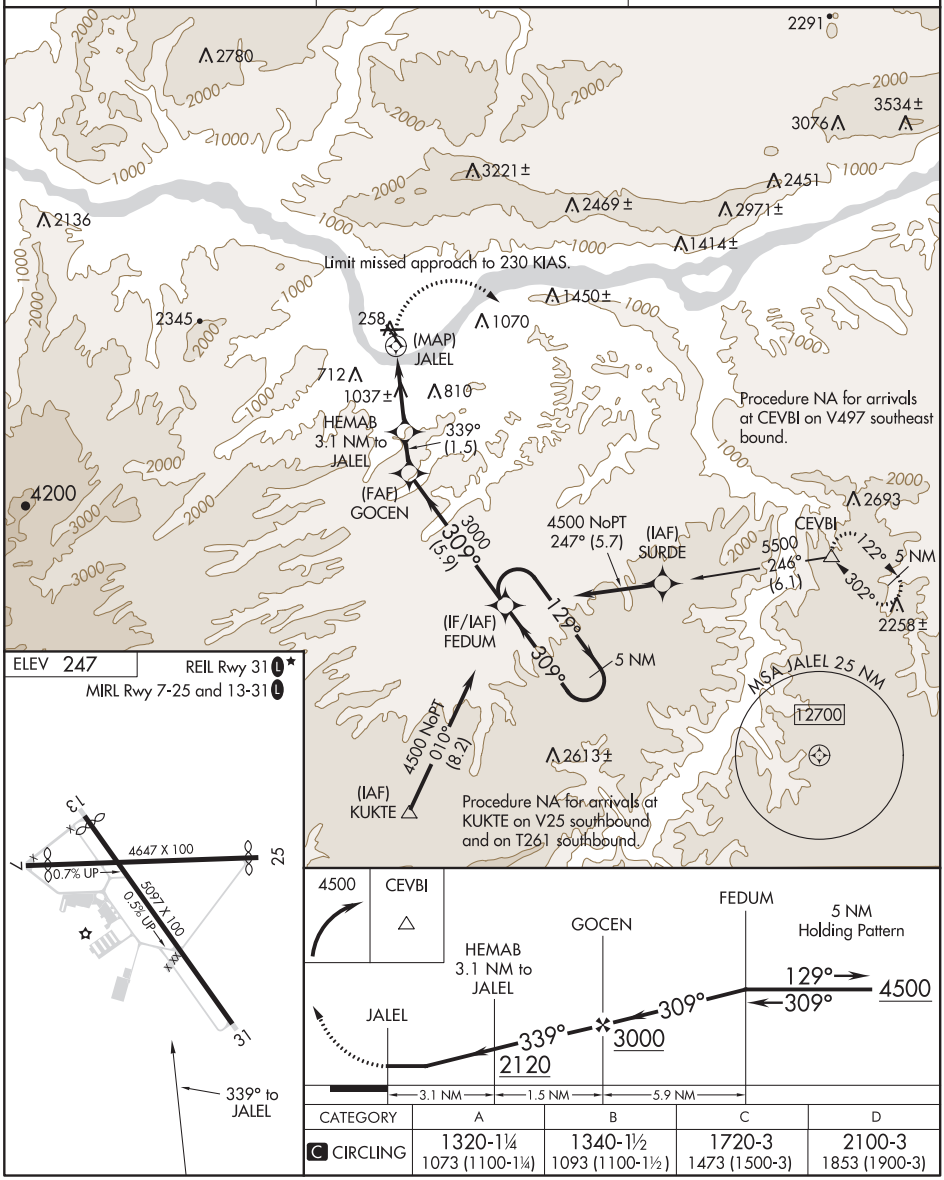
# RNAV (GPS)-A

## COLUMBIA GORGE RGNL/THE DALLES MUNI (DLS)

Circling to Rwy 7, 31 NA at night. When local altimeter setting not received, procedure NA. Circling NA for Cat D north of Rwy 7 and northeast of Rwy 31. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing right turn to 4500 direct CEVBI and hold.

| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.175 | 119.65 257.6 | 123.0 (CTAF) |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 1320-1¼<br>1073 (1100-1¼) | 1340-1½<br>1093 (1100-1½) | 1720-3<br>1473 (1500-3) | 2100-3<br>1853 (1900-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

THE DALLES, OREGON | AL-530 (FAA) | 20142

| LOC/DME I-DLS | APP CRS | Rwy ldg | 4451 |
|---|---|---|---|
| 109.35 | 238° | TDZE | 243 |
| Chan 30 (Y) | | Apt Elev | 247 |

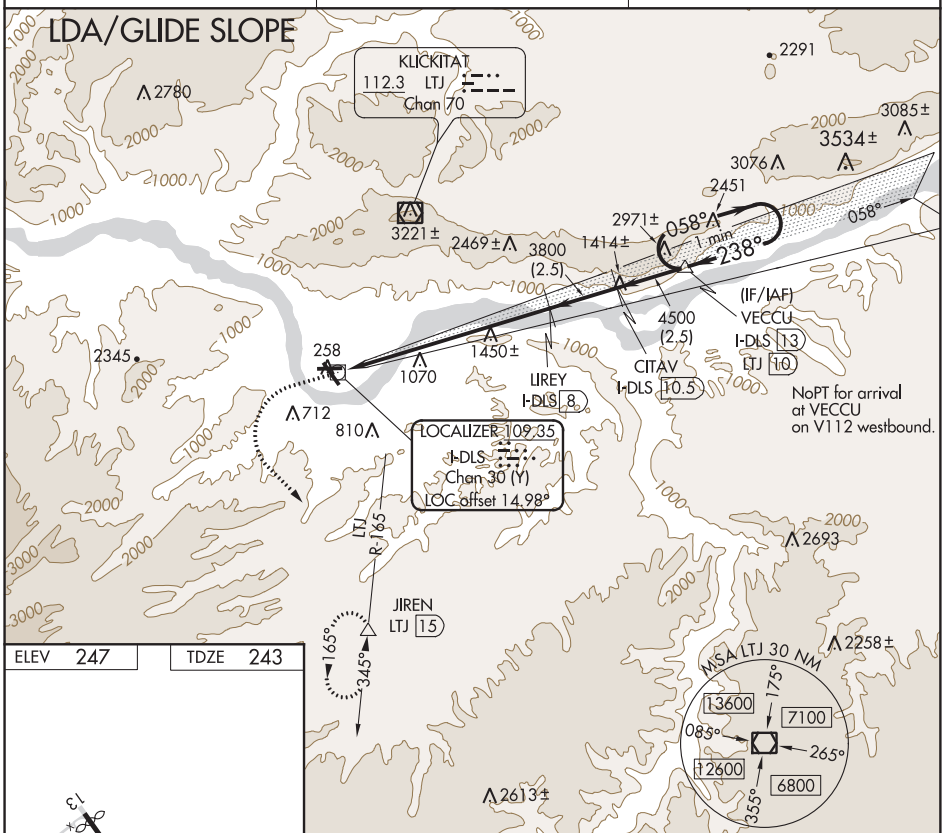
# LDA/DME RWY 25

## COLUMBIA GORGE RGNL/THE DALLES MUNI (DLS)

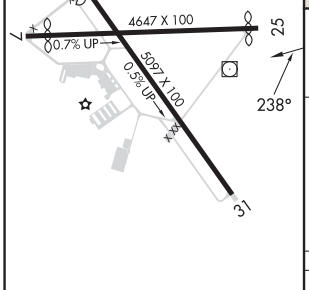
T A NA — When local altimeter setting not received, procedure NA. Glide slope provided by standard glide slope equipment.

MISSED APPROACH: Climb to 1600 then climbing left turn to 7000 on heading 120° and LTJ VOR/DME R-165 to JIREN/LTJ 15 DME and hold, continue climb-in-hold to 7000.

| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.175 | 119.65 257.6 | 123.0 (CTAF) L |



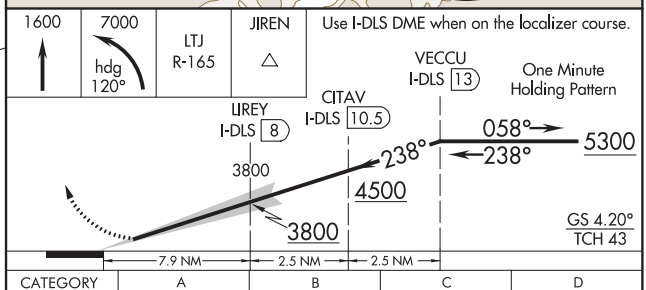

| ELEV 247 | TDZE 243 |
|---|---|




REIL Rwy 31 L ★
MIRL Rwys 7-25 and 13-31 L

| 1600 | 7000 | LTJ | JIREN |
|---|---|---|---|
| ↑ | hdg 120° | R-165 | △ |

Use I-DLS DME when on the localizer course.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-LDA/GS 25 | 1368-3 1125 (1200-3) | | NA | |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

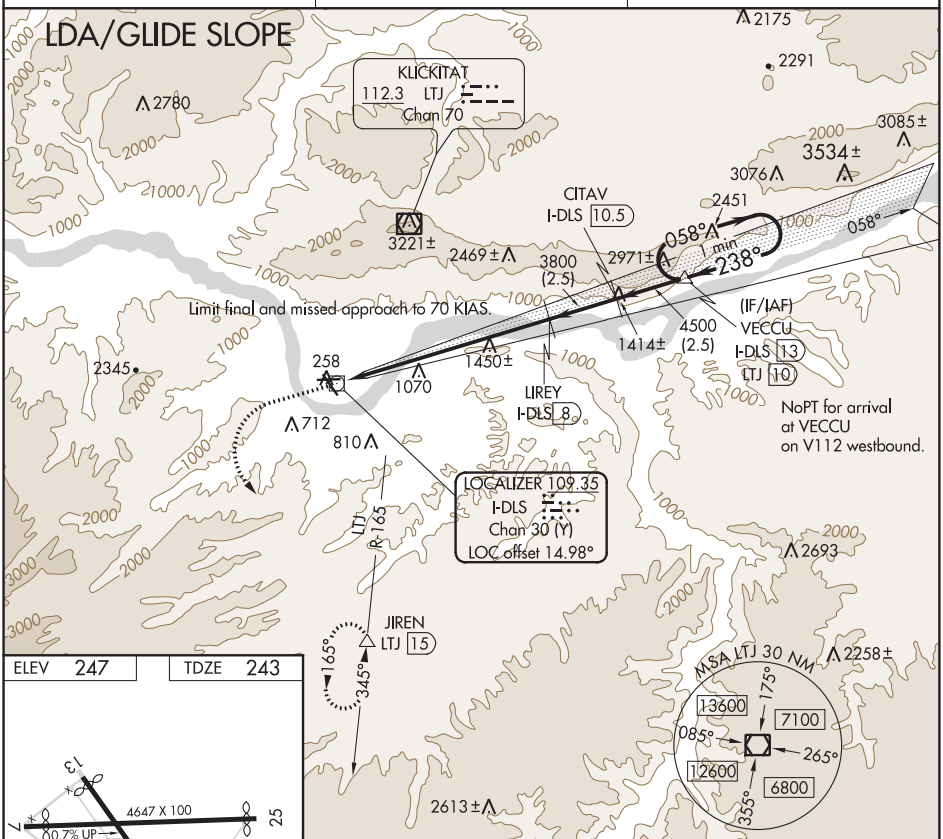
| LOC/DME I-DLS | APP CRS | Rwy ldg | 4451 |
|---|---|---|---|
| 109.35 | 238° | TDZE | 243 |
| Chan 30(Y) | | Apt Elev | 247 |

# COPTER LDA/DME RWY 25
## COLUMBIA GORGE RGNL/THE DALLES MUNI (DLS)

When local altimeter setting not received, procedure NA.
Glide slope provided by standard glide slope equipment.

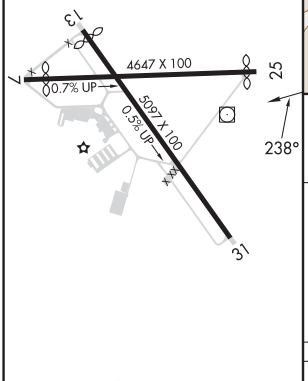
MISSED APPROACH: Climb to 1200 then climbing left turn to 7000 on heading 125° and LTJ VOR/DME R-165 to JIREN/LTJ 15 DME and hold, continue climb-in-hold to 7000.

| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 135.175 | 119.65 257.6 | 123.0 (CTAF) L |



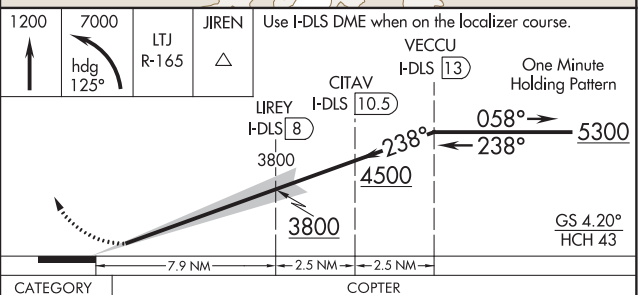

NW-1, 05 NOV 2020 to 31 DEC 2020

| ELEV 247 | TDZE 243 |
|---|---|




| 1200 | 7000 hdg 125° | LTJ R-165 | JIREN |
|---|---|---|---|

Use I-DLS DME when on the localizer course.




| CATEGORY | COPTER |
|---|---|
| H-25 | 783-1½ 540 (600-1½) |

REIL Rwy 31 L ★
MIRL Rwys 7-25 and 13-31 L

(DALLS1.LTJ) 16147

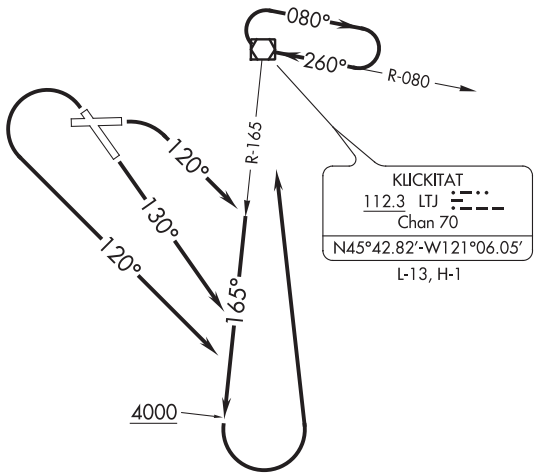
COLUMBIA GORGE RGNL/THE DALLES MUNI (DLS)

# DALLES ONE DEPARTURE (OBSTACLE)

AL-530 (FAA)

THE DALLES, OREGON

ASOS
135.175
SEATTLE CENTER
119.65 257.6




TAKEOFF MINIMUMS

Rwy 25: NA - Terrain.
Rwy 7: Standard with minimum climb of 490′ per NM to 3000.
Rwy 13: Standard with minimum climb of 650′ per NM to 1800 or 900-2¾ with minimum climb of 415′ per NM to 3000.
Rwy 31: Standard with minimum climb of 620′ per NM to 3000.

TAKEOFF OBSTACLE NOTES

Rwy 7: Terrain 83′ from DER, 249′ right of centerline, 248′ MSL.
Rwy 13: Fence 136′ from DER, 316′ right of centerline, up to 249′ MSL.
Rising terrain beginning 1.2 NM from DER, left and right of centerline, up to 836′ MSL.
Buildings beginning 1.3 NM from DER, 1069′ right of centerline, up to 663′ MSL.
Trees beginning 1.5 NM from DER, 833′ right of centerline, up to 100′ AGL/1059′ MSL.
Tower 2.2 NM from DER, 462′ right of centerline, 210′ AGL/810′ MSL.
Trees beginning 3 NM from DER, left and right of centerline, up to 100′ AGL/1220′ MSL.
Rwy 31: Trees beginning 86′ from DER, 418′ left of centerline, up to 40′ AGL/247′ MSL.
Trees beginning 714′ from DER, 120′ right of centerline, up to 45′ AGL/256′ MSL.
Trees beginning 1004′ from DER, 354′ right of centerline, up to 80′ AGL/290′ MSL.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 7: Climbing right turn heading 120° to intercept LTJ VOR/DME R-165, then climb on LTJ VOR/DME R-165 southbound to 4000, thence. . . .
TAKEOFF RUNWAY 13: Climb heading 130° to intercept LTJ VOR/DME R-165, then climb on LTJ VOR/DME R-165 southbound to 4000, thence. . . .
TAKEOFF RUNWAY 31: Climbing left turn heading 120° to intercept LTJ VOR/DME R-165, then climb on LTJ VOR/DME R-165 southbound to 4000, thence. . . .

. . . .Climbing left turn direct LTJ VOR/DME. Continue climb-in-hold, hold east, LTJ VOR/DME, RT, 260° inbound to cross LTJ VOR/DME at or above MEA/MCA for route of flight.


NW-1, 05 NOV 2020 to 31 DEC 2020

DALLES ONE DEPARTURE (OBSTACLE)
THE DALLES, OREGON
(DALLS1.LTJ) 12DEC13
COLUMBIA GORGE RGNL/THE DALLES MUNI (DLS)

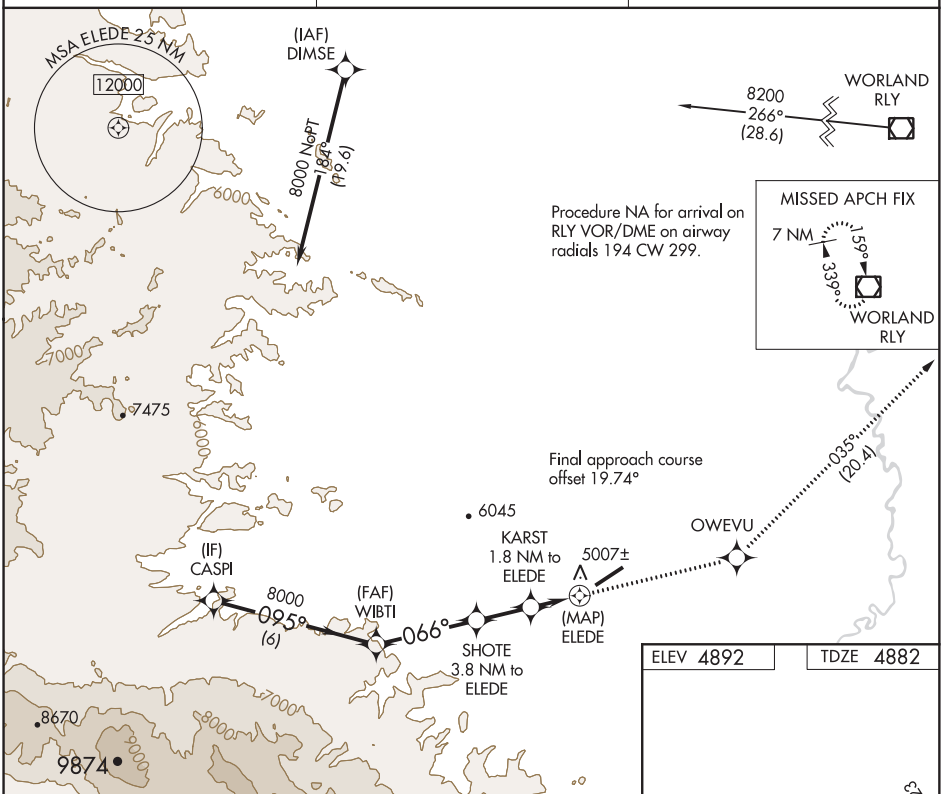
| APP CRS | Rwy ldg | 6370 |
|---|---|---|
| 066° | TDZE | 4882 |
| | Apt Elev | 4892 |

# RNAV (GPS) RWY 5
## HOT SPRINGS COUNTY (HSG)

Circling NA northwest of Rwy 5-23.
DME/DME RNP-0.3 NA.
Rwy 5 helicopter visibility reduction below ¾ SM NA.
-36°C

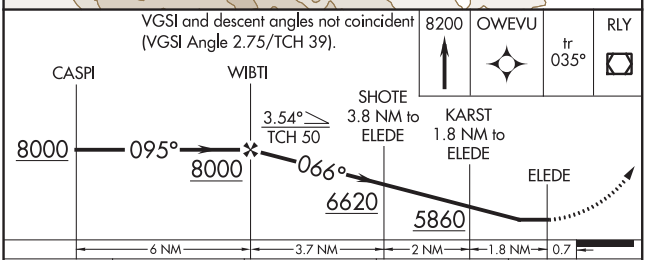
MISSED APPROACH: Climb to 8200 direct OWEVU and on track 035° to RLY VOR/DME and hold.

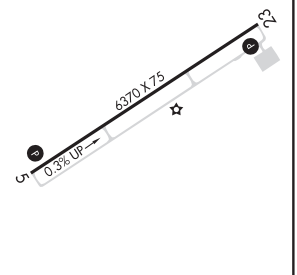
| AWOS-3PT | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 121.125 | 133.25 285.6 | 122.8 (CTAF) L |




ELEV 4892 TDZE 4882

VGSI and descent angles not coincident (VGSI Angle 2.75/TCH 39).




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 5240-1 358 (400-1) | | | NA |
| C CIRCLING | 5320-1 428 (500-1) | 5540-1 648 (700-1) | 5580-2 688 (700-2) | 5880-3 988 (1000-2) |

REIL Rwys 5 and 23 L
MIRL Rwy 5-23 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

THERMOPOLIS, WYOMING AL-11427 (FAA) 19171

# RNAV (GPS) RWY 23
## HOT SPRINGS COUNTY (HSG)

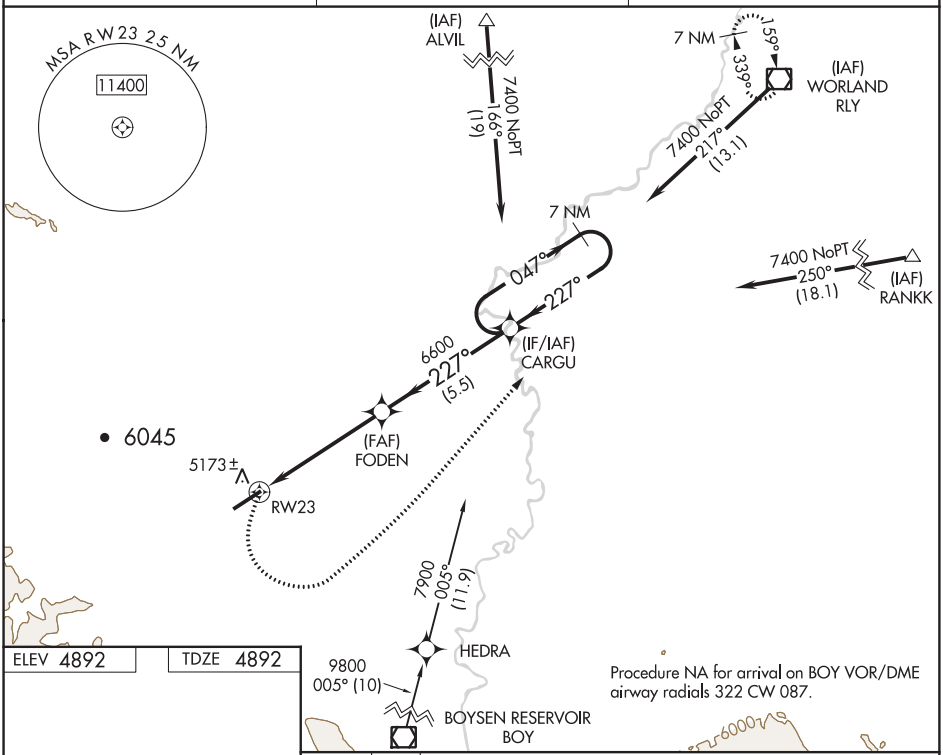
| WAAS CH 53340 W23A | APP CRS 227° | Rwy ldg 6370 TDZE 4892 Apt Elev 4892 |
|---|---|---|

-36°C

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C (-11°F) or above 54°C (130°F). Circling NA northwest of Rwy 5-23. DME/DME RNP-0.3 NA.

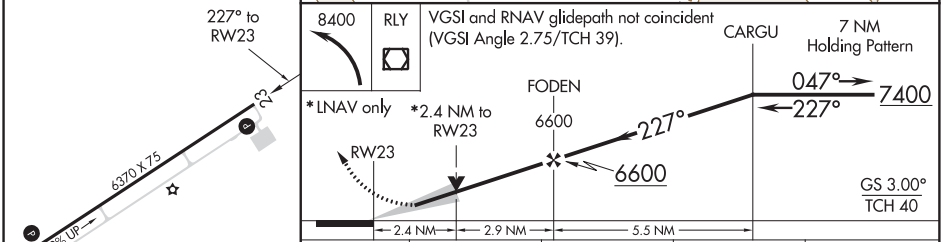
MISSED APPROACH: Climbing left turn to 8400 direct RLY VOR/DME and hold.

| AWOS-3PT | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 121.125 | 133.25 285.6 | 122.8 (CTAF) L |




Procedure NA for arrival on BOY VOR/DME airway radials 322 CW 087.

| ELEV 4892 | TDZE 4892 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 5382-1¾ 490 (500-1¾) | | | |
| LNAV/VNAV DA | 5577-2½ 685 (700-2½) | | | |
| LNAV MDA | 5620-1 728 (800-1) | | 5620-2 728 (800-2) | |
| C CIRCLING | 5620-1 728 (800-1) | | 5620-2 728 (800-2) | 5880-3 988 (1000-3) |

REIL Rwys 5 and 23 L
MIRL Rwy 5-23 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 5001 |
|---|---|---|
| 136° | TDZE | 31 |
| | Apt Elev | 39 |

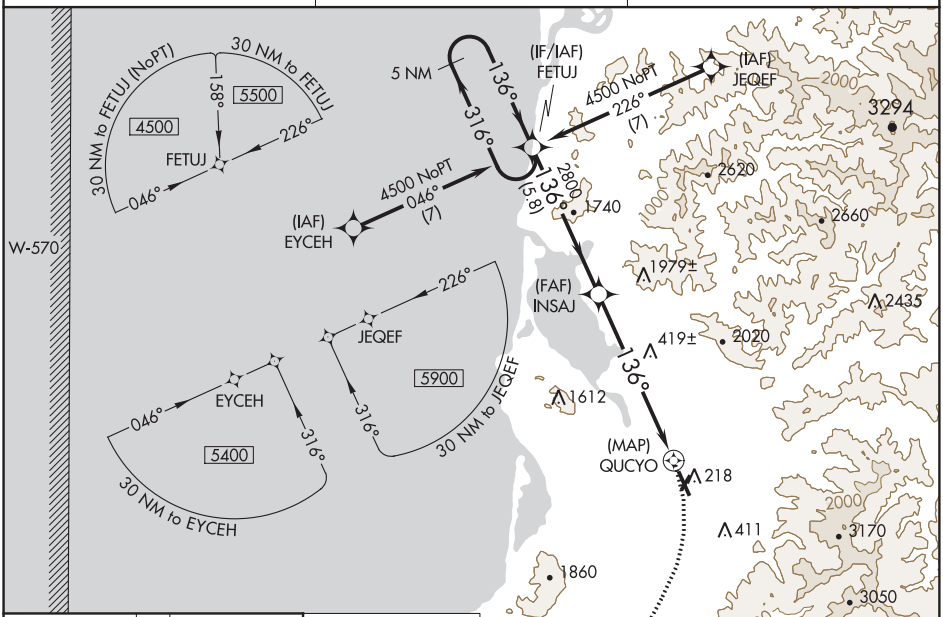
# RNAV (GPS) RWY 13
## TILLAMOOK (TMK)

T
A NA

DME/DME RNP-0.3 NA. When local altimeter setting not received, use Astoria altimeter setting and increase all MDA by 540 feet; increase LNAV visibility Cat A ¼, Cat B ½, and Cat C 1 mile and Circling visibility Cats B and C ¼ mile.
Night Landing: Rwy 1, 19 NA. Helicopter visibility reduction below ¾ SM NA.

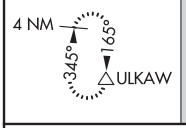
MISSED APPROACH: Climbing right turn to 5000 direct ULKAW and hold, continue climb-in-hold to 5000.

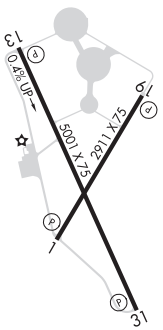
| AWOS-3 | SEATTLE CENTER | UNICOM |
|---|---|---|
| 120.0 | 124.2 317.6 | 122.8 (CTAF) L |



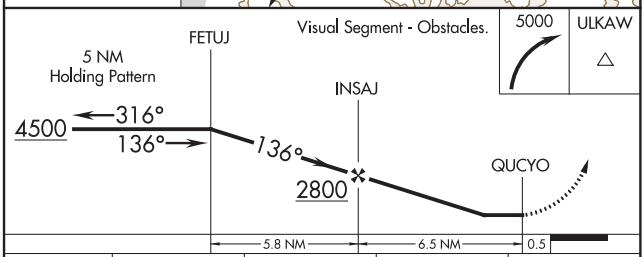

| ELEV 39 | TDZE 31 |
|---|---|

MISSED APCH FIX




REIL Rwy 13 L
MIRL Rwys 1-19 and 13-31 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 760-1 729 (800-1) | | 760-2 729 (800-2) | NA |
| CIRCLING | 880-1¼ 841 (900-1¼) | 920-1¼ 881 (900-1¼) | 920-2¾ 881 (900-2¾) | NA |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

(FETUJ3.FETUJ) 18200

# FETUJ THREE DEPARTURE (OBSTACLE) (RNAV)

AL-475 (FAA)

TILLAMOOK (TMK)
TILLAMOOK, OREGON

SEATTLE CENTER
124.2 317.6
McMINNVILLE RADIO
122.45

FETUJ
5000

540

316°

CONTIGUOUS U.S. ADIZ

W-570

TAKEOFF MINIMUMS
Rwys 1, 13, 19: NA-ATC.
Rwy 31: Standard with minimum climb of 395′ per NM to 5000.

TAKEOFF OBSTACLE NOTES
Rwy 31: Bush 76′ from DER, 283′ right of centerline, 3′ AGL/32′ MSL.
Fence 111′ from DER, 383′ left of centerline, 8′ AGL/26′ MSL.
Monument 1275′ from DER, 383′ left of centerline, 40′ AGL/64′ MSL.
Pole 1505′ from DER, 155′ right of centerline, 34′ AGL/60′ MSL.
Trees beginning 1974′ from DER, left and right of centerline, up to 86′ AGL/105′ MSL.

NOTE: RNAV 1.
NOTE: GPS required.
NOTE: Chart not to scale.

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 31: Climb heading 316° to 540, then climb to 5000, or as assigned by ATC, direct FETUJ. Cross FETUJ at or above 5000.

FETUJ THREE DEPARTURE (OBSTACLE) (RNAV)

(FETUJ3.FETUJ) 07MAR13

TILLAMOOK, OREGON
TILLAMOOK (TMK)

| WAAS CH 58017 W06A | APP CRS 057° | Rwy ldg 4479<br>TDZE 367<br>Apt Elev 374 |
|---|---|---|

# RNAV (GPS) RWY 6

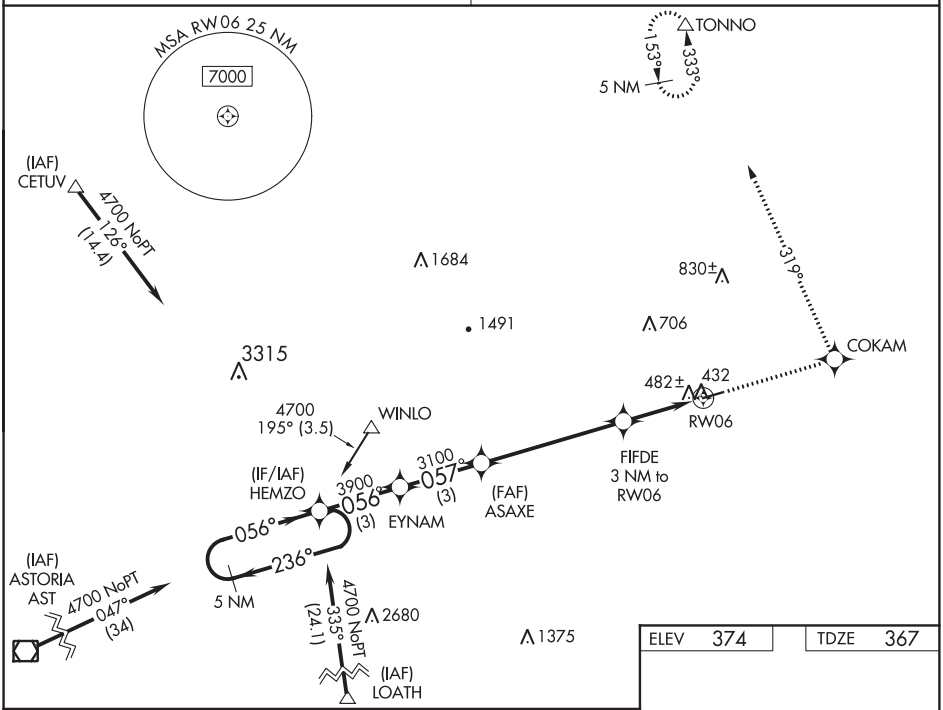
## ED CARLSON MEMORIAL FIELD-SOUTH LEWIS COUNTY (TDO)

T NA

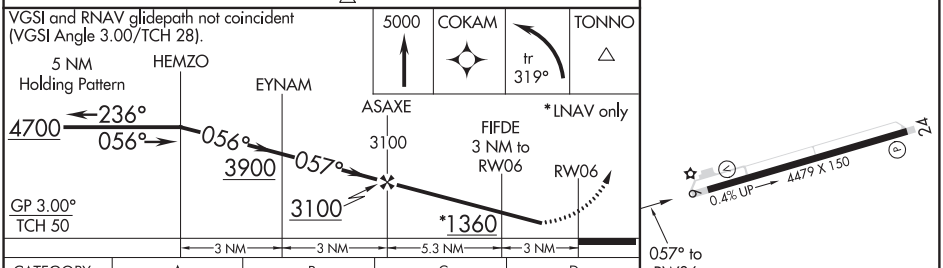
Circling NA at night. Baro-VNAV NA. DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA. Use Chehalis altimeter setting, when not received use Kelso altimeter setting and increase all DA/MDA 40 feet and increase LNAV/VNAV visibility all Cats ¼ mile.

MISSED APPROACH: Climb to 5000 direct COKAM and left turn on track 319° to TONNO and hold, continue climb-in-hold to 5000.

| SEATTLE CENTER | CTAF |
|---|---|
| 124.2 317.6 | 122.9 L |




| ELEV 374 | TDZE 367 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 767-1½ 400 (400-1½) | | | |
| LNAV/VNAV DA | 813-1½ 446 (500-1½) | | | |
| LNAV MDA | 800-1 433 (500-1) | | 800-1¼ 433 (500-1¼) | 800-1½ 433 (500-1½) |
| CIRCLING | 900-1 526 (600-1) | | 900-1½ 526 (600-1½) | 940-2 566 (600-2) |

REIL Rwys 6 and 24 L
MIRL Rwy 6-24 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

TOLEDO, WASHINGTON AL-422 (FAA) 20198

| WAAS CH 72617 W24A | APP CRS 237° | Rwy ldg 4479<br>TDZE 374<br>Apt Elev 374 |
|---|---|---|

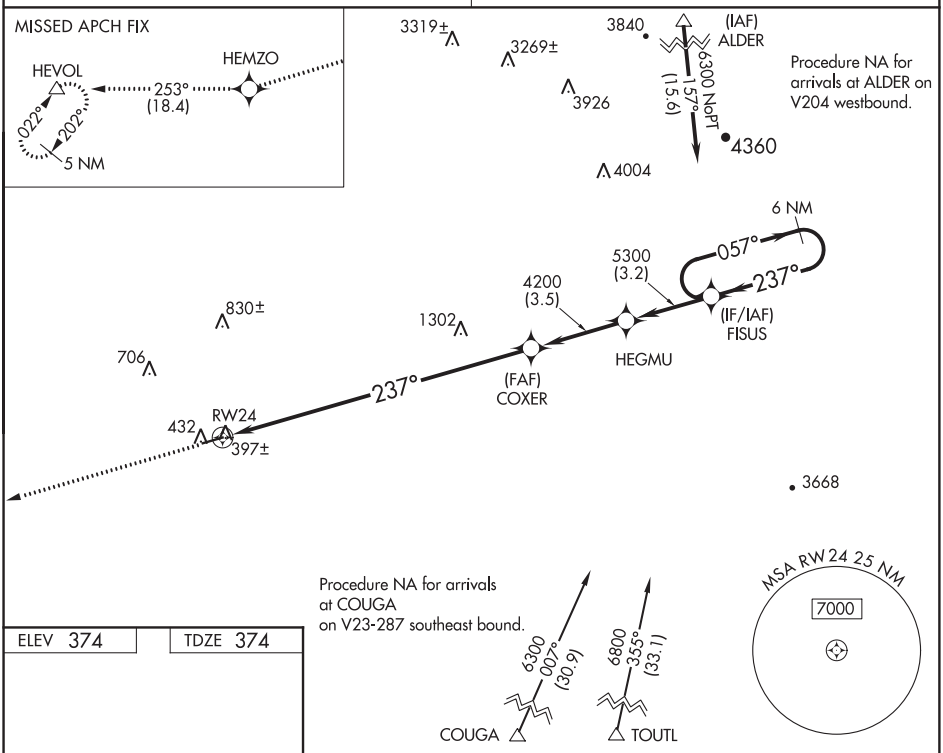
# RNAV (GPS) RWY 24
## ED CARLSON MEMORIAL FIELD-SOUTH LEWIS COUNTY (TDO)

NA

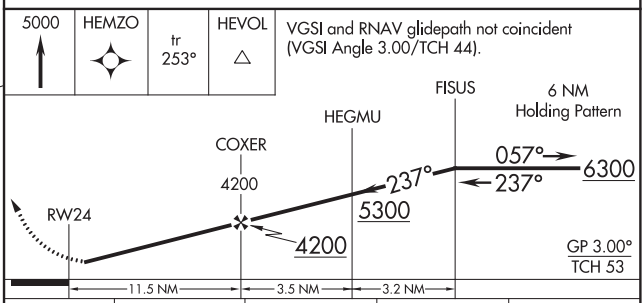
Baro-VNAV NA. DME/DME RNP- 0.3 NA. Helicopter visibility reduction below 1 SM not authorized. Use Chehalis altimeter setting, when not received use Kelso altimeter setting and increase all DA/MDA 40 feet and increase LPV visibility all Cats ¼ mile. Procedure NA at night.

MISSED APPROACH: Climb to 5000 direct HEMZO and on track 253° to HEVOL and hold.

| SEATTLE CENTER | CTAF |
|---|---|
| 124.2 317.6 | 122.9 L |




| ELEV 374 | TDZE 374 |
|---|---|




| CATEGORY | | A | B | C | D |
|---|---|---|---|---|---|
| LPV | DA | 685-1 311 (400-1) | | | |
| LNAV/VNAV | DA | 802-1½ 428 (500-1½) | | | |

REIL Rwys 6 and 24 L
MIRL Rwy 6-24 L



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

# ATASY TWO DEPARTURE (OBSTACLE) (RNAV)

SL-422 (FAA) TOLEDO, WASHINGTON

SEATTLE CENTER
124.2 317.6

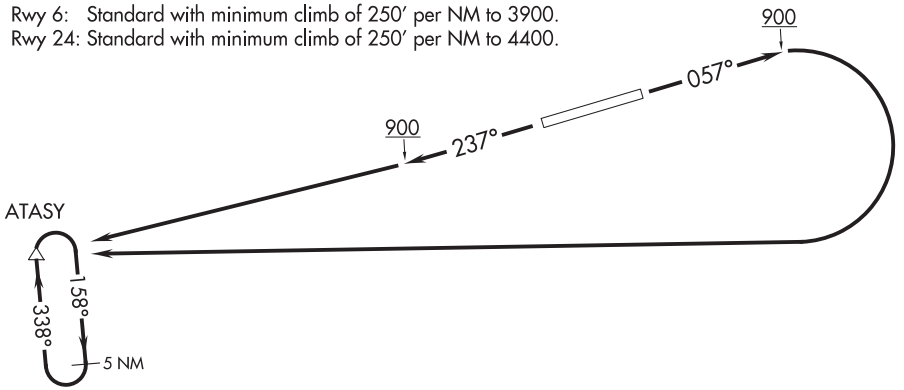
TAKEOFF OBSTACLE NOTES

Rwy 6: Antenna 9′ from DER, 344′ left of centerline, 16′ AGL/390′ MSL.
Trees beginning 190′ from DER, 12′ right of centerline, up to 27′ AGL/397′ MSL.

Rwy 24: Trees, buildings, and airport beacon on tower beginning 53′ from DER, 328′ right of centerline, up to 71′ AGL/432′ MSL. Trees 434′ from DER, 267′ left of centerline, 26′ AGL/381′ MSL. Vehicle on road 529′ from DER, 83′ left of centerline, 13′ AGL/370′ MSL. Trees beginning 2525′ from DER, 72′ right of centerline, up to 141′ AGL/482′ MSL.

TAKEOFF MINIMUMS

Rwy 6: Standard with minimum climb of 250′ per NM to 3900.
Rwy 24: Standard with minimum climb of 250′ per NM to 4400.




NOTE: RNAV 1.

NOTE: GPS required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 6: Climb heading 057° to 900, then climbing right turn to 5000 direct ATASY and hold, continue climb-in-hold to 5000, when authorized by ATC, continue climb-in-hold to 6000, thence. . . .

TAKEOFF RUNWAY 24: Climb heading 237° to 900, then climb to 5000 direct ATASY and hold, continue climb-in-hold to 5000, when authorized by ATC, continue climb-in-hold to 6000, thence. . . .

. . . .Expect filed altitude 10 minutes after departure.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

TORRINGTON, WYOMING | AL-6845 (FAA) | 20310

| APP CRS | Rwy ldg | 5703 |
|---|---|---|
| 104° | TDZE | 4207 |
| | Apt Elev | 4207 |

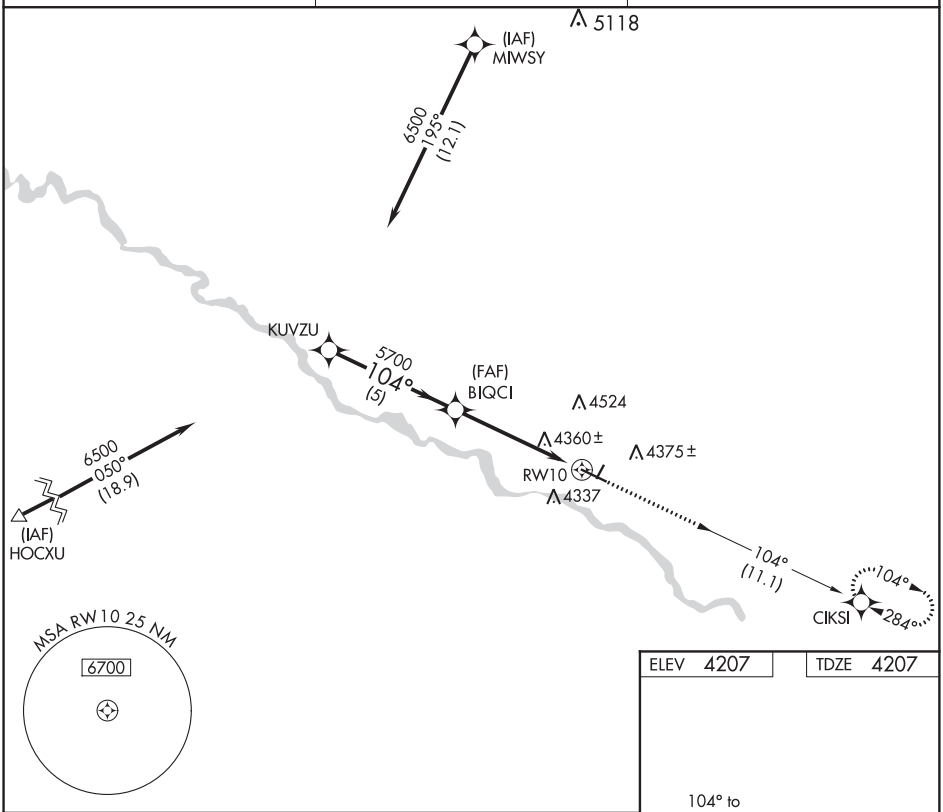
# GPS RWY 10
## TORRINGTON MUNI (TOR)

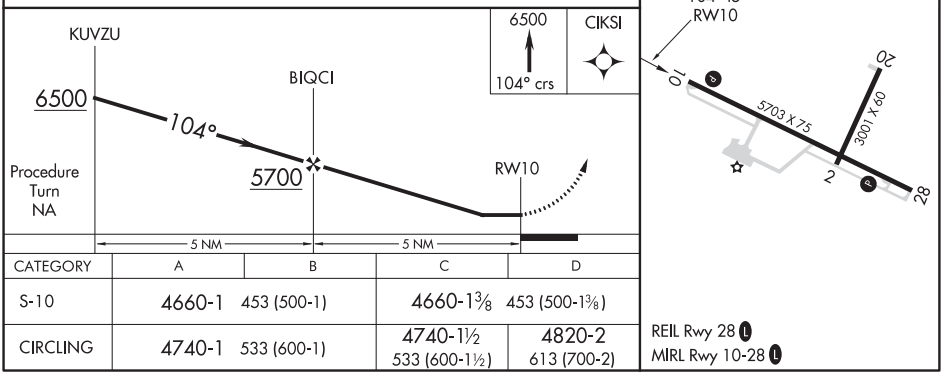
NA

Procedure NA at night.
Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 6500 via 104° course to CIKSI WP and hold.

| ASOS | DENVER CENTER | UNICOM |
|---|---|---|
| 118.375 | 127.95 338.2 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-10 | 4660-1 453 (500-1) | | 4660-1⅜ 453 (500-1⅜) | |
| CIRCLING | 4740-1 533 (600-1) | | 4740-1½ 533 (600-1½) | 4820-2 613 (700-2) |

REIL Rwy 28 L
MIRL Rwy 10-28 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

TORRINGTON, WYOMING
Orig-D 28APR16

42°04′N-104°09′W

TORRINGTON MUNI (TOR)
GPS RWY 10

| APP CRS | Rwy ldg | 5703 |
|---|---|---|
| 284° | TDZE | 4202 |
| | Apt Elev | 4207 |

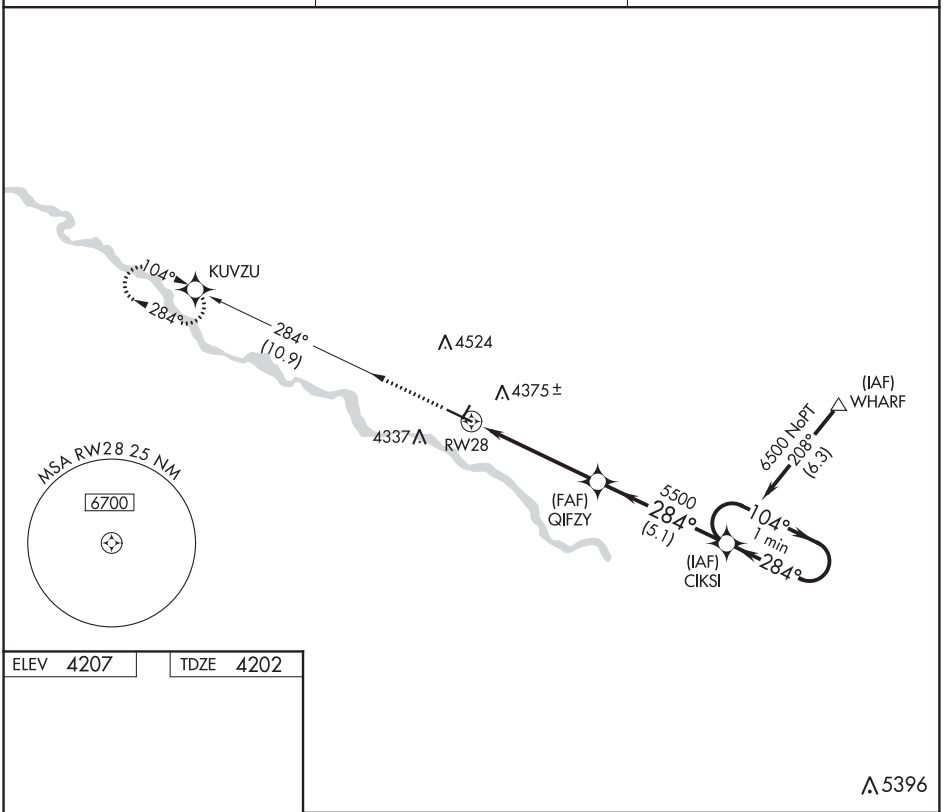
# GPS RWY 28
## TORRINGTON MUNI (TOR)

NA

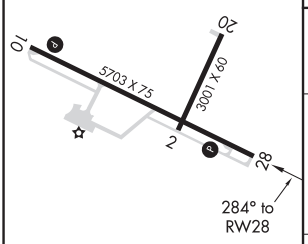
Procedure NA at night.
Helicopter visibility reduction below 1 SM NA.

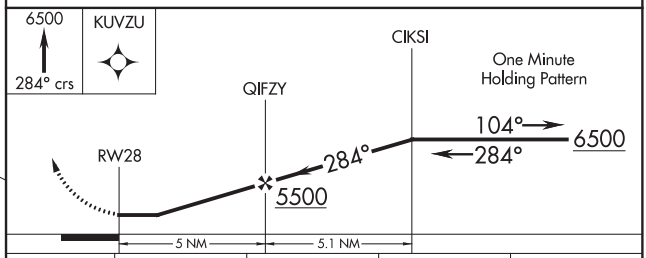
MISSED APPROACH: Climb to 6500 via 284° course to KUVZU WP and hold.

| ASOS | DENVER CENTER | UNICOM |
|---|---|---|
| 118.375 | 127.95 338.2 | 122.8 (CTAF) L |




| ELEV 4207 | TDZE 4202 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-28 | 4620-1 | 418 (500-1) | 4620-1¼ | 418 (500-1¼) |
| CIRCLING | 4740-1 | 533 (600-1) | 4740-1½<br>533 (600-1½) | 4820-2<br>613 (700-2) |

REIL Rwy 28 L
MIRL Rwy 10-28 L



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

TORRINGTON, WYOMING AL-6845 (FAA) 20310

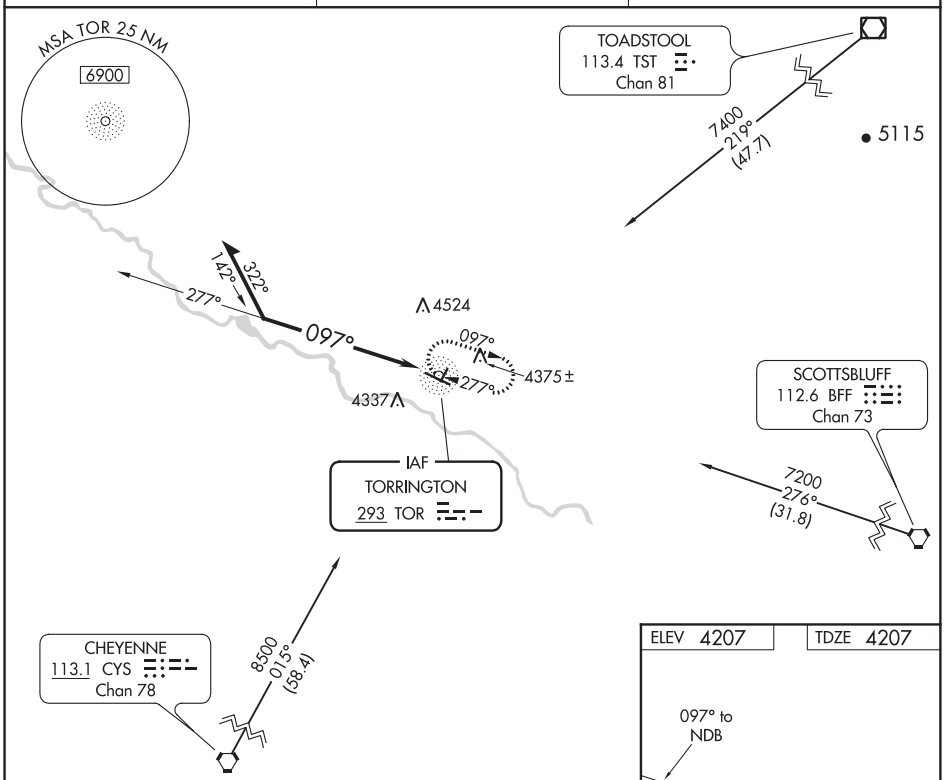
| NDB TOR | APP CRS | Rwy ldg | 5703 |
|---|---|---|---|
| 293 | 097° | TDZE | 4207 |
| | | Apt Elev | 4207 |

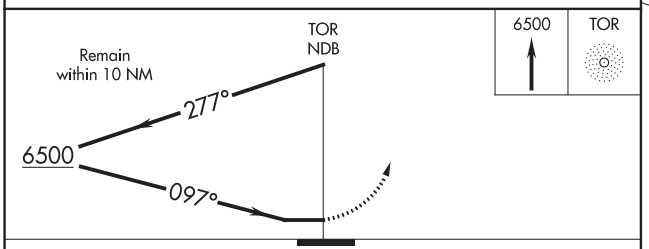
# NDB RWY 10
## TORRINGTON MUNI (TOR)

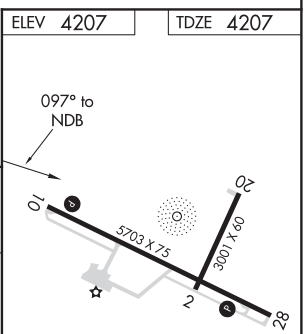
When local altimeter setting not received, use Scottsbluff altimeter setting and increase all MDA 100 feet; increase S-10 Cat A visibility ¼ mile; increase Circling Cat C and D visibility ¼ mile. Procedure NA at night. Helicopter visibility reduction below 1 SM NA.

MISSED APPROACH: Climb to 6500 in TOR NDB holding pattern.

| ASOS | DENVER CENTER | UNICOM |
|---|---|---|
| 118.375 | 127.95 338.2 | 122.8 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-10 | 5040-1<br>833 (900-1) | 5040-1¼<br>833 (900-1¼) | 5040-2½ | 833 (900-2½) |
| CIRCLING | 5040-1¼ 833 (900-1¼) | | 5040-2½<br>833 (900-2½) | 5040-2¾<br>833 (900-2¾) |

REIL Rwy 28 L
MIRL Rwy 10-28 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# NDB RWY 28
## TORRINGTON MUNI (TOR)

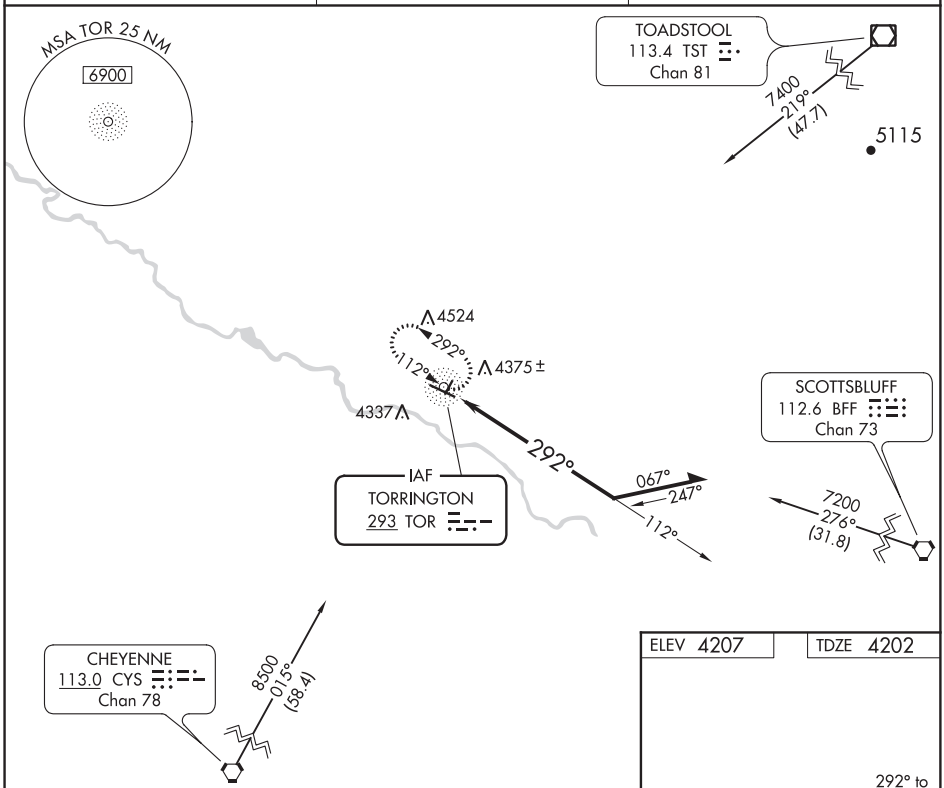
| NDB TOR | APP CRS | Rwy ldg / TDZE / Apt Elev |
|---|---|---|
| 293 | 292° | 5703 / 4202 / 4207 |

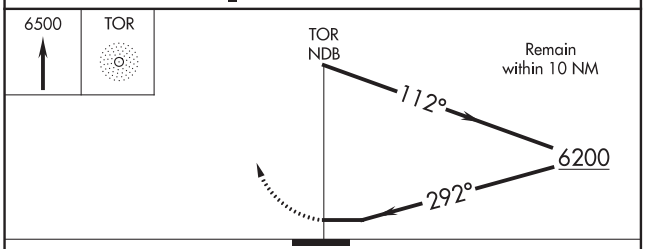
NA

When local altimeter setting not received, use Scottsbluff altimeter setting and increase all MDA 100 feet; increase all Cat C and D visibility ¼ mile. Procedure NA at night. Helicopter visibility reduction below 1 SM NA.

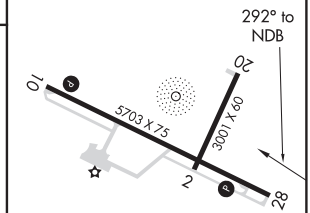
MISSED APPROACH: Climb to 6500 in TOR NDB holding pattern.

| ASOS | DENVER CENTER | UNICOM |
|---|---|---|
| 118.375 | 127.95 338.2 | 122.8 (CTAF) L |




ELEV 4207 TDZE 4202




REIL Rwy 28 L
MIRL Rwy 10-28 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-28 | 4780-1 578 (600-1) | | 4780-1¾ 578 (600-1¾) | |
| CIRCLING | 4780-1 573 (600-1) | | 4780-1¾ 573 (600-1¾) | 4820-2 613 (700-2) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

TWIN BRIDGES, MONTANA — AL-10303 (FAA) — 20086

# RNAV (GPS) RWY 17
## TWIN BRIDGES (7S1)

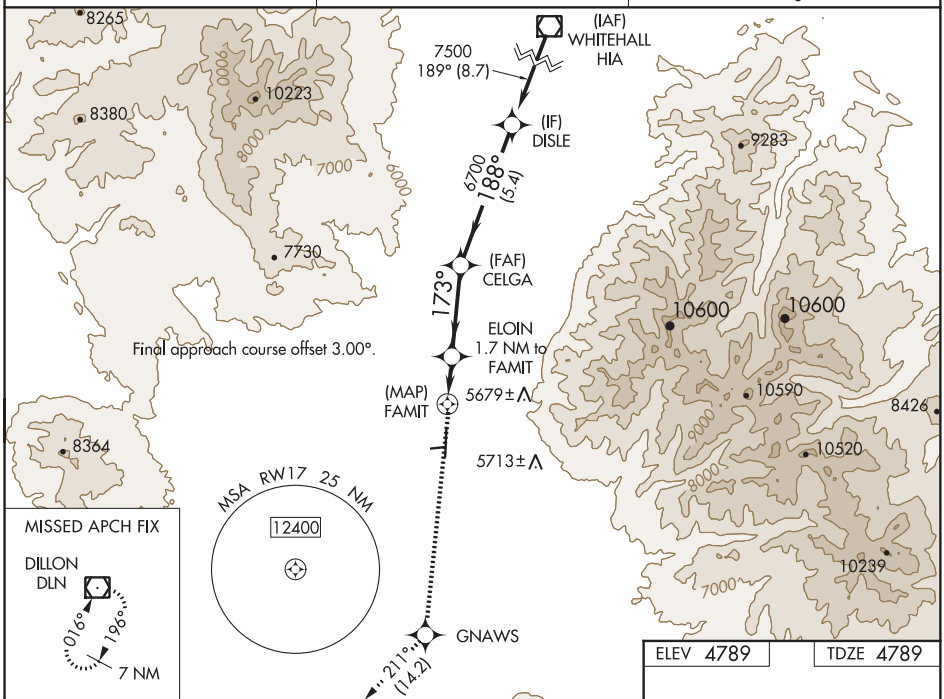
| WAAS CH 93840 W17A | APP CRS 173° | Rwy ldg 6000 / TDZE 4789 / Apt Elev 4789 |
|---|---|---|

RNP APCH.

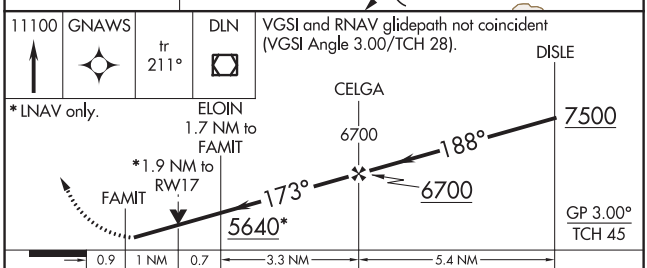
Circling NA to Rwys 7 and 25. Circling NA east of Rwy 17-35.
Rwy 17 helicopter visibility reduction below ¾ SM NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C or above 54°C.

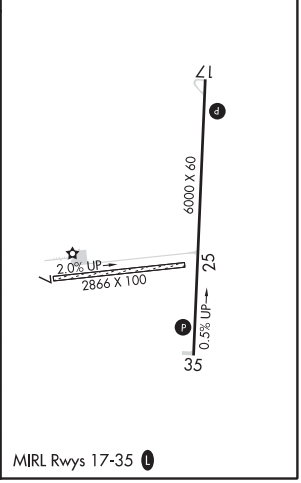
MISSED APPROACH: Climb to 11100 direct GNAWS and on track 211° to DLN VOR/DME and hold, continue climb-in-hold to 11100.

| AWOS-3PT | SALT LAKE CENTER | CTAF |
|---|---|---|
| 119.025 | 132.4 338.3 | 122.9 L |




ELEV 4789 — TDZE 4789




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 5174-1¼ 385 (400-1¼) | | | |
| LNAV/VNAV DA | 5579-3 790 (800-3) | | | |
| LNAV MDA | 5440-1 651 (700-1) | | 5440-1⅞ 651 (700-1⅞) | |
| C CIRCLING | 5440-1 651 (700-1) | | 5480-2 691 (700-2) | 5620-2¾ 831 (900-2¾) |

MIRL Rwys 17-35 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 42940 W35A | APP CRS 353° | Rwy ldg 6000 TDZE 4774 Apt Elev 4789 |
|---|---|---|

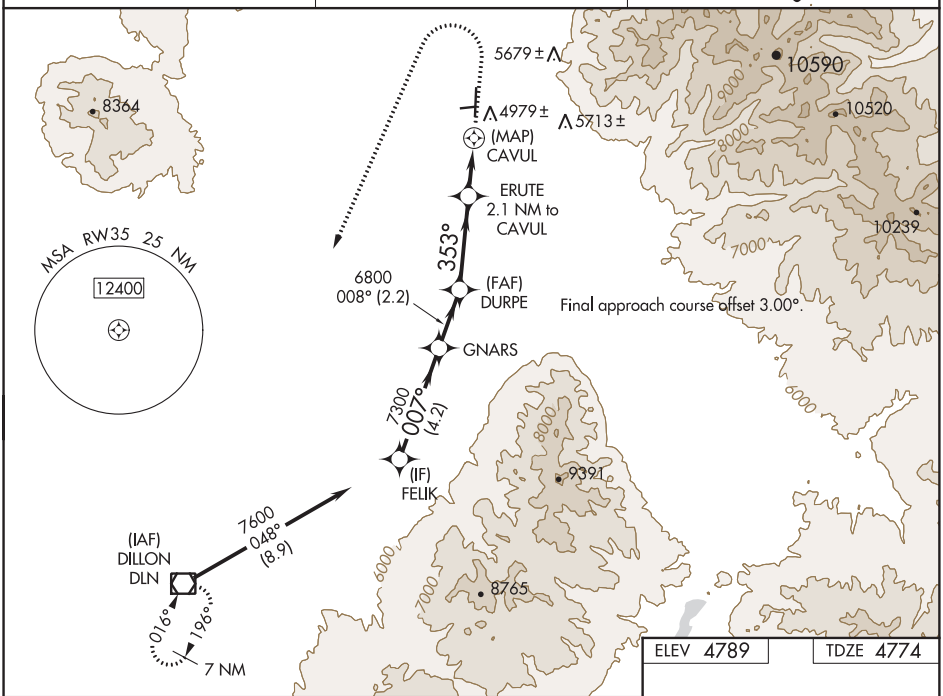
# RNAV (GPS) RWY 35
## TWIN BRIDGES (7S1)

RNP APCH.

Circling NA to Rwys 7 and 25. Circling NA east of Rwy 17-35. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -24°C or above 54°C.

MISSED APPROACH: (Do not exceed 185K until DLN VOR/DME) Climb to 5500 then climbing left turn to 11100 direct DLN VOR/DME and hold, continue climb-in-hold to 11100.

| AWOS-3PT | SALT LAKE CENTER | CTAF |
|---|---|---|
| 119.025 | 132.4 338.3 | 122.9 L |

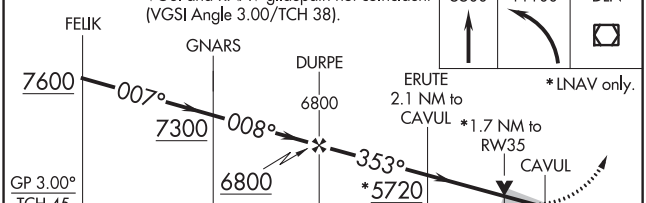


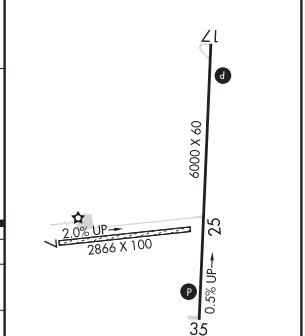

ELEV 4789 TDZE 4774

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 38).

| 5500 | 11100 | DLN |
|---|---|---|

*LNAV only.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 5120-1⅛ 346 (400-1⅛) | | | |
| LNAV/VNAV DA | 5270-1¾ 496 (500-1¾) | | | |
| LNAV MDA | 5340-1 566 (600-1) | | 5340-1⅝ 566 (600-1⅝) | |
| C CIRCLING | 5400-1 611 (700-1) | 5440-1 651 (700-1) | 5480-2 691 (700-2) | 5620-2¾ 831 (900-2¾) |

MIRL Rwy 17-35 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

(7S11.HIA) 18032 AL-10303 (FAA)

# BRIDGES ONE DEPARTURE (OBSTACLE) (RNAV)

TWIN BRIDGES (7S1)
TWIN BRIDGES, MONTANA

SALT LAKE CENTER
132.4 338.3

TAKEOFF MINIMUMS:
Rwy 7, 17, 25: NA - Environmental.
Rwy 35: Standard.

NOTE: GPS Required.
NOTE: RNAV 1.

TAKEOFF OBSTACLE NOTES:
Rwy 35: Airfield light 10′ from DER, 9′ right of centerline, 2′ AGL/4791′ MSL.
Airfield light 10′ from DER, 10′ left of centerline, 2′ AGL/4791′ MSL.
Fence beginning 188′ from DER, 296′ right of centerline, up to 3′ AGL/4807′ MSL.
Pole 499′ from DER, 607′ left of centerline, 34′ AGL/4808′ MSL.
Secondary road beginning 643′ from DER, 492′ right of centerline, 4817′ MSL.
Secondary road beginning 1193′ from DER, 503′ right of centerline, up to 4831′ MSL.
Pole 1319′ from DER, 612′ right of centerline, 34′ AGL/4849′ MSL.
Pole 1431′ from DER, 754′ right of centerline, 30′ AGL/4851′ MSL.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 35: Climb heading 350° to 5300, then climbing right turn direct HIA VOR/DME, continue climb in HIA VOR/DME holding pattern to cross HIA VOR/DME at or above 10600 before proceeding on course. Expect filed altitude five minutes after departure.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

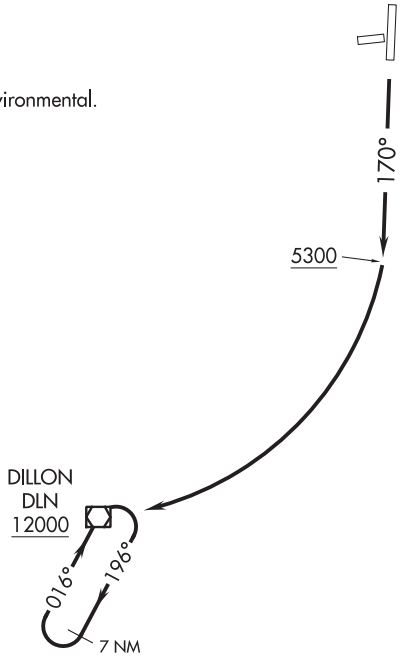
# DILLON ONE DEPARTURE (OBSTACLE) (RNAV)



SALT LAKE CENTER
132.4 338.3

TAKEOFF MINIMUMS:
Rwy 7, 25, 35: NA - Environmental.
Rwy 17: Standard.

NOTE: GPS Required.
NOTE: RNAV 1.




TAKEOFF OBSTACLE NOTES:
Rwy 17: Ground, airfield light beginning 5′ from DER, 9′ left of centerline, up to 4767′ MSL.
Airfield light 9′ from DER, 10′ right of centerline, 2′ AGL/4762′ MSL.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 17: Climb heading 170° to 5300, then climbing right turn direct DILLON VOR/DME, continue climb in DILLON VOR/DME holding pattern to cross DILLON VOR/DME at or above 12000 before proceeding on course. Expect filed altitude five minutes after departure.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

TWIN FALLS, IDAHO — AL-885 (FAA) — 18032

# ILS or LOC RWY 26

## JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)

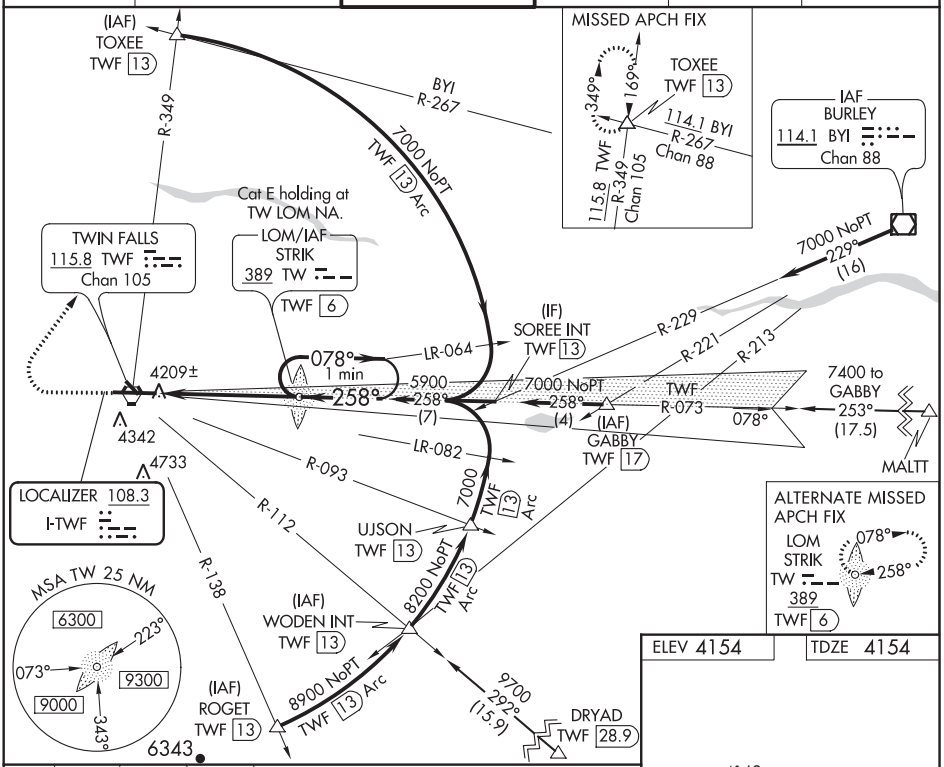
| LOC I-TWF | APP CRS | Rwy ldg / TDZE / Apt Elev |
|---|---|---|
| 108.3 | 258° | 8703 / 4154 / 4154 |

T A Night landing: Rwy 30 NA. When local altimeter setting not received, use Jerome altimeter setting and increase all DA 49 feet, and all MDA 60 feet, increase S-LOC 26 Cat C-E visibility ⅛ mile. For inoperative MALSR when using local or Jerome altimeter setting, increase S-ILS 26 Cat E visibility ¼ mile and S-LOC 26 Cat E visibility ½ mile. ADF or DME required.

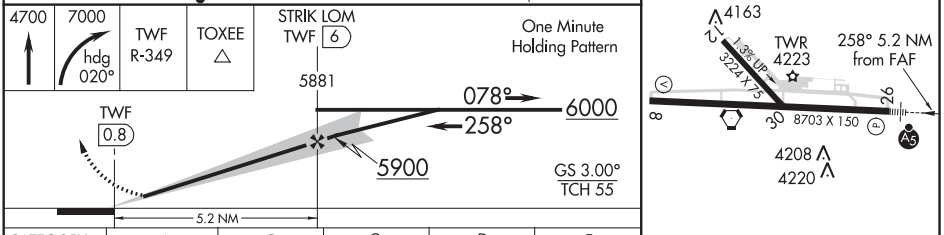
MALSR A5

MISSED APPROACH: Climb to 4700 then climbing right turn to 7000 on heading 020° and TWF VORTAC R-349 to TOXEE INT/TWF 13 DME and hold.

| ASOS | TWIN FALLS APP CON★ | TWIN FALLS TOWER★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 135.025 | 126.7 353.75 | 118.2 (CTAF) L 317.5 | 121.7 | 123.65 | 122.95 |




ELEV 4154 | TDZE 4154




REIL Rwy 8 L
HIRL Rwy 8-26 L

| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-ILS 26 | 4354-½ 200 (200-½) | | | | |
| S-LOC 26 | 4480-½ 326 (400-½) | | | | |
| C CIRCLING | 4700-1 546 (600-1) | 4780-1 626 (700-1) | 5100-2¾ 946 (1000-2¾) | 5100-3 946 (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 |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 40211 W08A | APP CRS 078° | Rwy ldg 8703<br>TDZE 4149<br>Apt Elev 4154 |
|---|---|---|

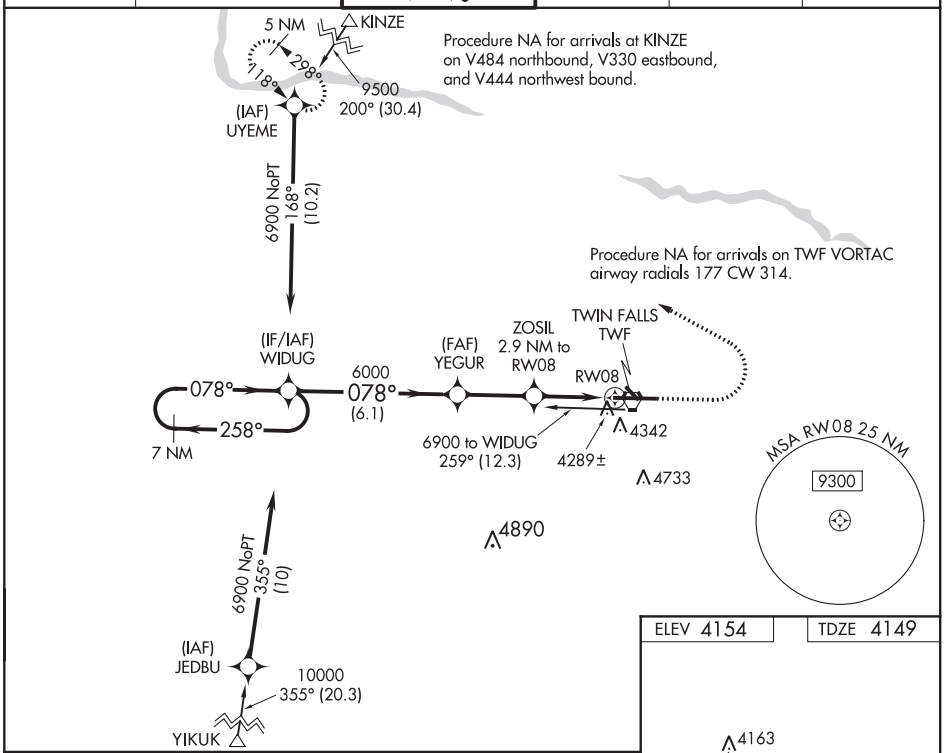
# RNAV (GPS) RWY 8

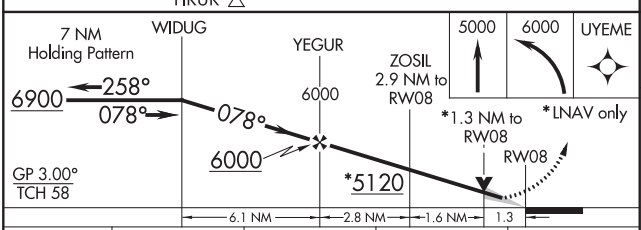
## JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)

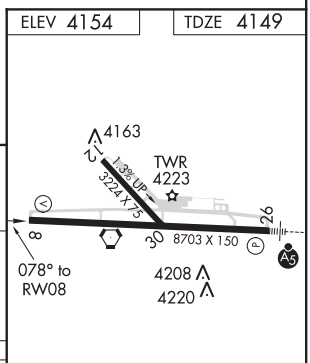
Night landing: Rwy 30 NA. Baro-VNAV NA when using Jerome altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 48°C (120°F). DME/DME RNP-0.3 NA. VDP NA with Jerome altimeter setting. When local altimeter setting not received, use Jerome altimeter setting and increase all DA 49 feet and all MDA 60 feet, and increase LPV and LNAV/VNAV all Cats visibility ⅛ mile, and LNAV Cats C and D visibility ⅛ mile, and Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 5000 then climbing left turn to 6000 direct UYEME and hold.

| ASOS | TWIN FALLS APP CON★ | TWIN FALLS TOWER★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 135.025 | 126.7 353.75 | 118.2 (CTAF) L 317.5 | 121.7 | 123.65 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4399-¾ 250 (300-¾) | | | |
| LNAV/VNAV DA | 4673-1¾ 524 (600-1¾) | | | |
| LNAV MDA | 4620-1 471 (500-1) | | 4620-1⅜ 471 (500-1⅜) | |
| C CIRCLING | 4700-1 546 (600-1) | 4780-1 626 (700-1) | 5100-2¾ 946 (1000-2¾) | 5100-3 946 (1000-3) |

REIL Rwy 8 L
HIRL Rwy 8-26 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

TWIN FALLS, IDAHO

AL-885 (FAA)

18032

| WAAS CH 56311 W26A | APP CRS 258° | Rwy ldg 8703<br>TDZE 4154<br>Apt Elev 4154 |
|---|---|---|

# RNAV (GPS) RWY 26

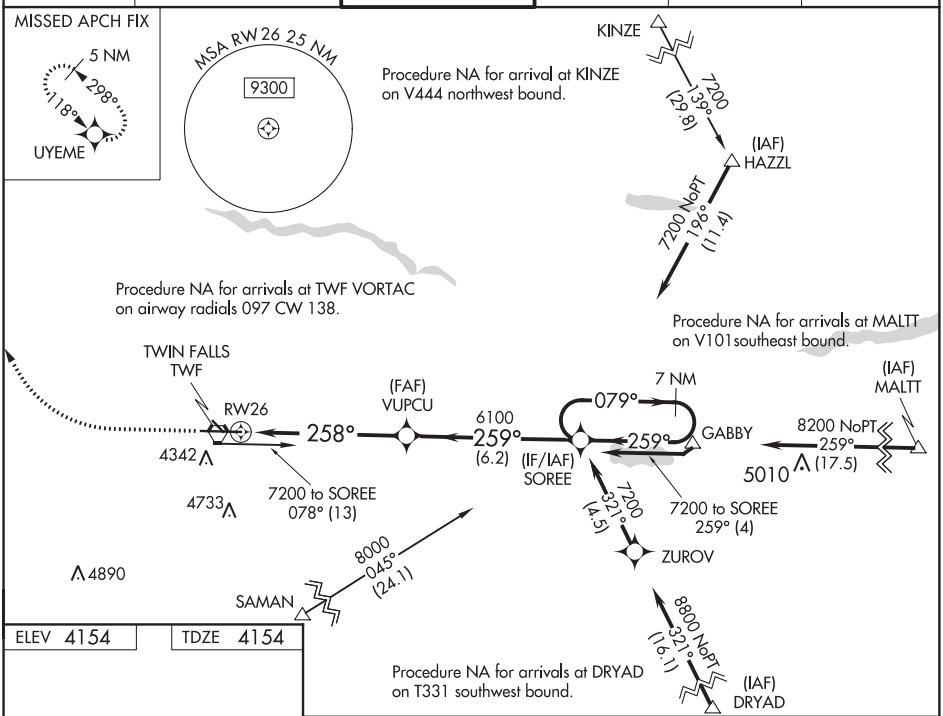
## JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)

Circling to Rwy 30 NA at night.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 49°C (121°F).
DME/DME RNP-0.3 NA.

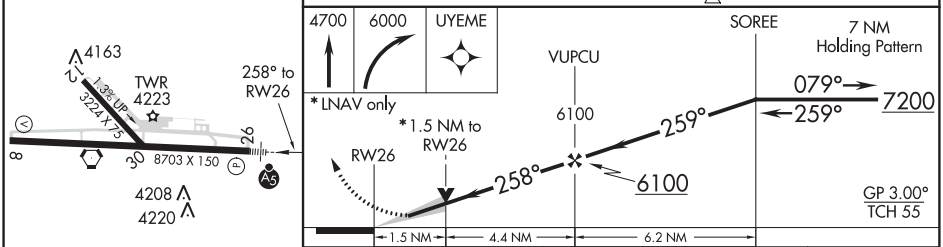
MALSR

MISSED APPROACH: Climb to 4700 then climbing right turn to 6000 direct UYEME and hold.

| ASOS | TWIN FALLS APP CON★ | TWIN FALLS TOWER★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 135.025 | 126.7 353.75 | 118.2 (CTAF) L 317.5 | 121.7 | 123.65 | 122.95 |




| ELEV 4154 | TDZE 4154 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4354-½ 200 (200-½) | | | |
| LNAV/VNAV DA | 4533-¾ 379 (400-¾) | | | |
| LNAV MDA | 4680-½ 526 (600-½) | | 4680-1 526 (600-1) | |
| C CIRCLING | 4700-1 546 (600-1) | 4780-1 626 (700-1) | 5160-3 1006 (1100-3) | |

REIL Rwy 8 L
HIRL Rwy 8-26 L



NW-1, 05 NOV 2020 to 31 DEC 2020

TWIN FALLS, IDAHO
Amdt 1B 01FEB18

42°29′N-114°29′W

JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)
RNAV (GPS) RWY 26

| VORTAC TWF | APP CRS | Rwy ldg | 8703 |
|---|---|---|---|
| 115.8 | 078° | TDZE | 4149 |
| Chan 105 | | Apt Elev | 4154 |

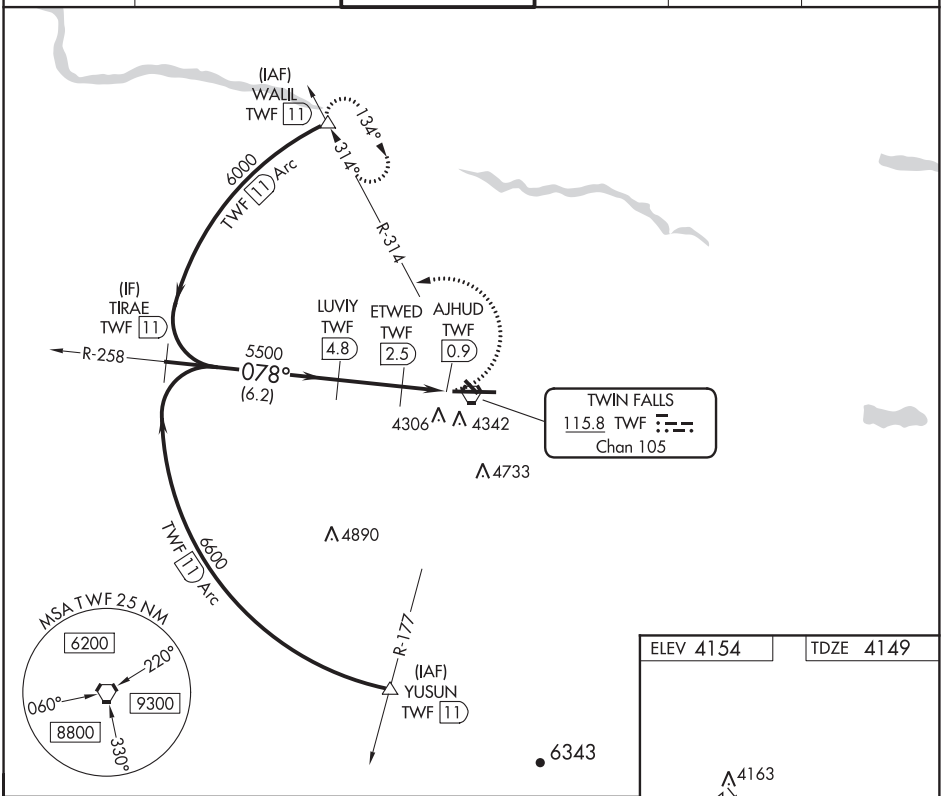
# VOR/DME RWY 8

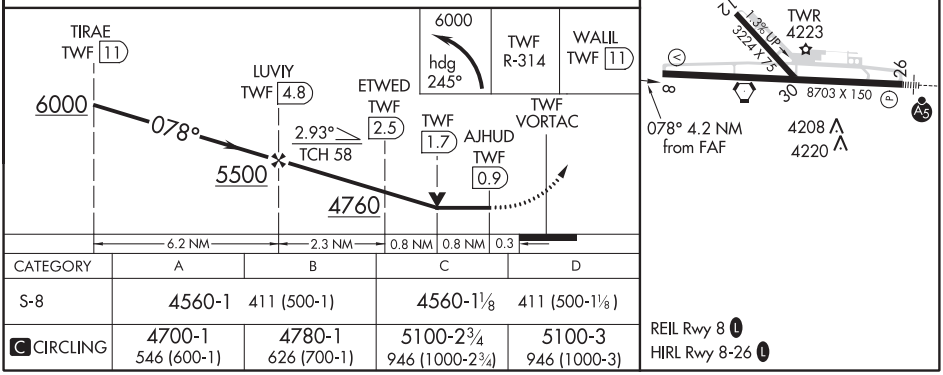
## JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)

Night landing: Rwy 30 NA. VDP NA with Jerome altimeter setting. When local altimeter setting not received, use Jerome altimeter setting and increase all MDA 60 feet and S-8 Cats C and D visibility ¼ mile and Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climbing left turn to 6000 on heading 245° and TWF R-314 to WALIL/TWF 11 DME and hold.

| ASOS | TWIN FALLS APP CON★ | TWIN FALLS TOWER★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 135.025 | 126.7 353.75 | 118.2 (CTAF) L 317.5 | 121.7 | 123.65 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-8 | 4560-1 411 (500-1) | | 4560-1⅛ 411 (500-1⅛) | |
| C CIRCLING | 4700-1 546 (600-1) | 4780-1 626 (700-1) | 5100-2¾ 946 (1000-2¾) | 5100-3 946 (1000-3) |

REIL Rwy 8 L
HIRL Rwy 8-26 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

TWIN FALLS, IDAHO — AL-885 (FAA) — 18032

# VOR RWY 8

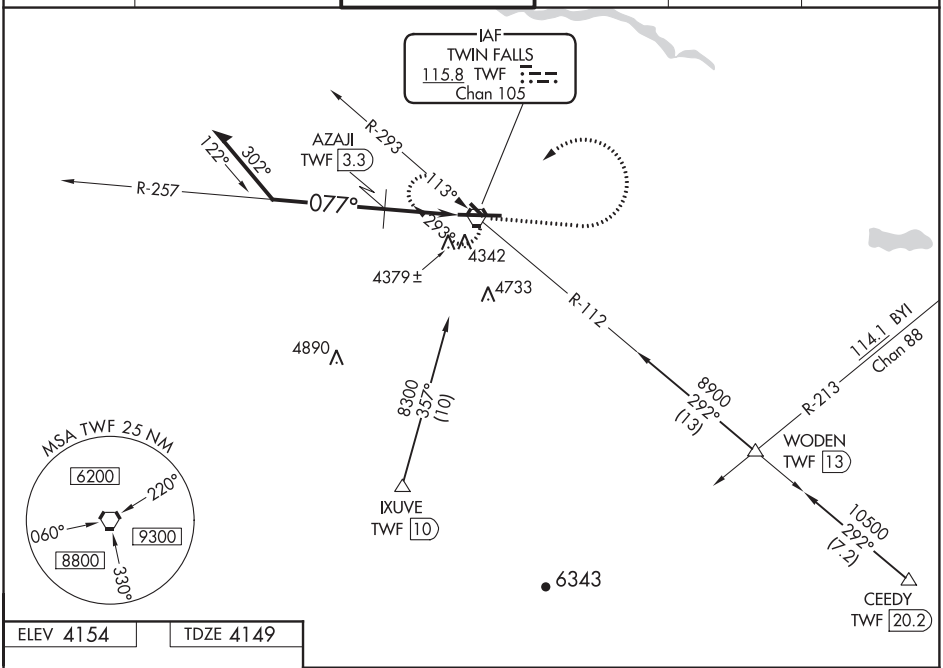
## JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)

| VORTAC TWF | APP CRS | Rwy ldg | 8703 |
|---|---|---|---|
| 115.8 | 077° | TDZE | 4149 |
| Chan 105 | | Apt Elev | 4154 |

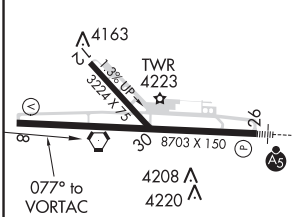
Night landing: Rwy 30 NA. When local altimeter setting not received, use Jerome altimeter setting and increase all MDA 60 feet and S-8 Cats C and D visibility ½ mile, S-8 Cat B and Circling Cat B and C visibility ¼ mile. Increase AZAJI FIX minimums S-8 Cat C and D and Circling Cat C visibility ¼ mile. VDP NA when using Jerome altimeter setting.

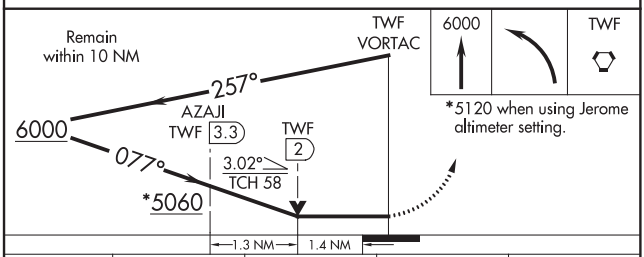
MISSED APPROACH: Climb to 6000 then left turn direct TWF VORTAC and hold.

| ASOS | TWIN FALLS APP CON* | TWIN FALLS TOWER* | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 135.025 | 126.7 353.75 | 118.2 (CTAF) L 317.5 | 121.7 | 123.65 | 122.95 |




| ELEV 4154 | TDZE 4149 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-8 | 5060-1¼ 911 (1000-1¼) | | 5060-2½ 911 (1000-2½) | |
| C CIRCLING | 5060-1¼ 906 (1000-1¼) | | 5100-2¾ 946 (1000-2¾) | 5100-3 946 (1000-3) |
| AZAJI FIX MINIMUMS | | | | |
| S-8 | 4640-1 491 (500-1) | | 4640-1⅜ 491 (500-1⅜) | |
| C CIRCLING | 4700-1 546 (600-1) | 4780-1 626 (700-1) | 5100-2¾ 946 (1000-2¾) | 5100-3 946 (1000-3) |

REIL Rwy 8 L
HIRL Rwy 8-26 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| VORTAC TWF | APP CRS | Rwy ldg | 8703 |
|---|---|---|---|
| 115.8 | 248° | TDZE | 4154 |
| Chan 105 | | Apt Elev | 4154 |

# VOR RWY 26

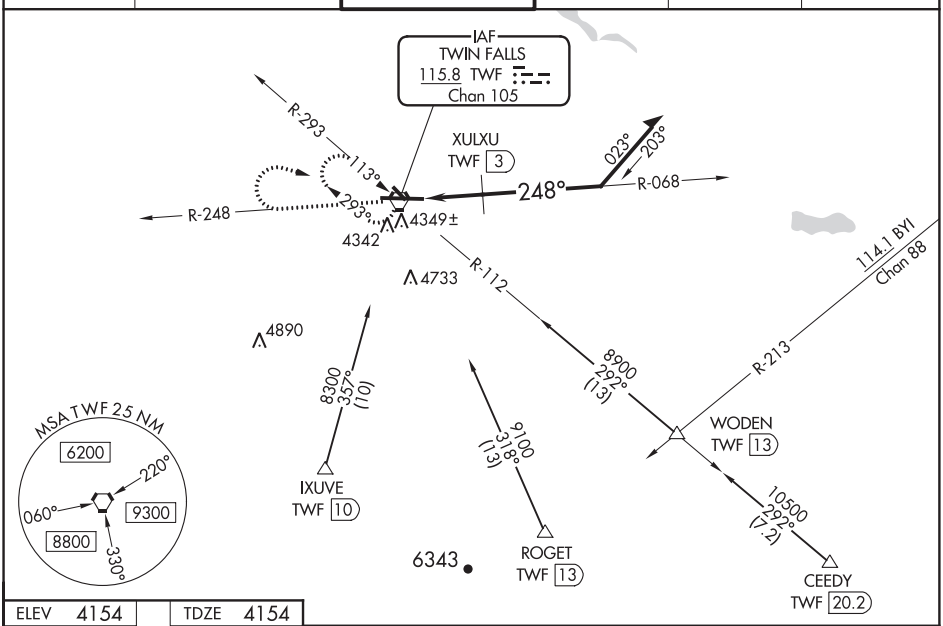
## JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)

Night landing: Rwy 30 NA. VDP NA with Jerome altimeter setting. When local altimeter setting not received, use Jerome altimeter setting and increase all MDA 60 feet; increase S-26 Cat A visibility ¼ mile, Cat C/D ⅛ mile, Circling Cat C ¼ mile, and XULXU FIX S-26 Cat C/D ⅛ mile. For inop MALSR, increase S-26 Cat C/D visibility to 2½ miles; when using Jerome altimeter setting increase XULXU FIX S-26 Cat C/D visibility to 1⅜ mile.

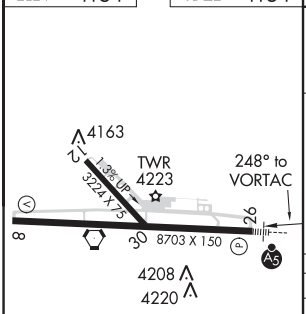
MALSR

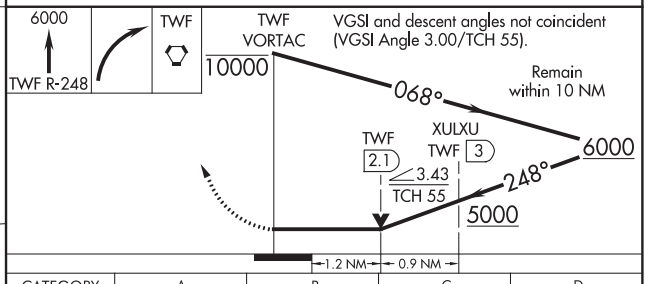
MISSED APPROACH: Climb to 6000 on TWF VORTAC R-248 then right turn direct TWF VORTAC and hold.

| ASOS | TWIN FALLS APP CON★ | TWIN FALLS TOWER★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 135.025 | 126.7 353.75 | 118.2 (CTAF) L 317.5 | 121.7 | 123.65 | 122.95 |




ELEV 4154 TDZE 4154




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-26 | 5000-½ 846 (900-½) | 5000-¾ 846 (900-¾) | 5000-1⅞ 846 (900-1⅞) | |
| C CIRCLING | 5000-1¼ 846 (900-1¼) | | 5100-2¾ 946 (1000-2¾) | 5100-3 946 (1000-3) |
| XULXU FIX MINIMUMS | | | | |
| S-26 | 4600-½ 446 (500-½) | | 4600-⅞ 446 (500-⅞) | |
| C CIRCLING | 4700-1 546 (600-1) | 4780-1 626 (700-1) | 5100-2¾ 946 (1000-2¾) | 5100-3 946 (1000-3) |

REIL Rwy 8 L
HIRL Rwy 8-26 L



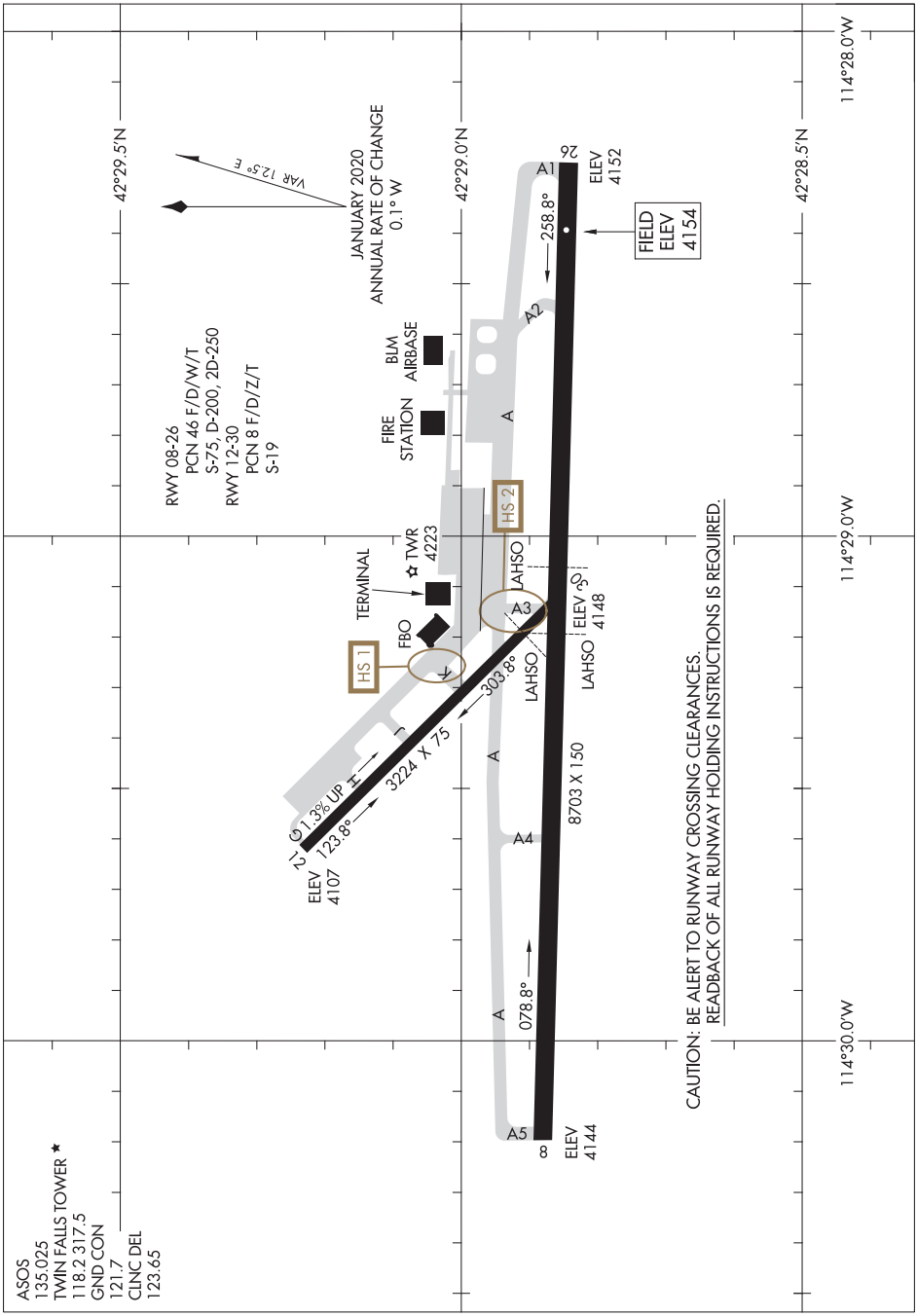
NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

20086

# AIRPORT DIAGRAM

JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)
TWIN FALLS, IDAHO

AL-885 (FAA)




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

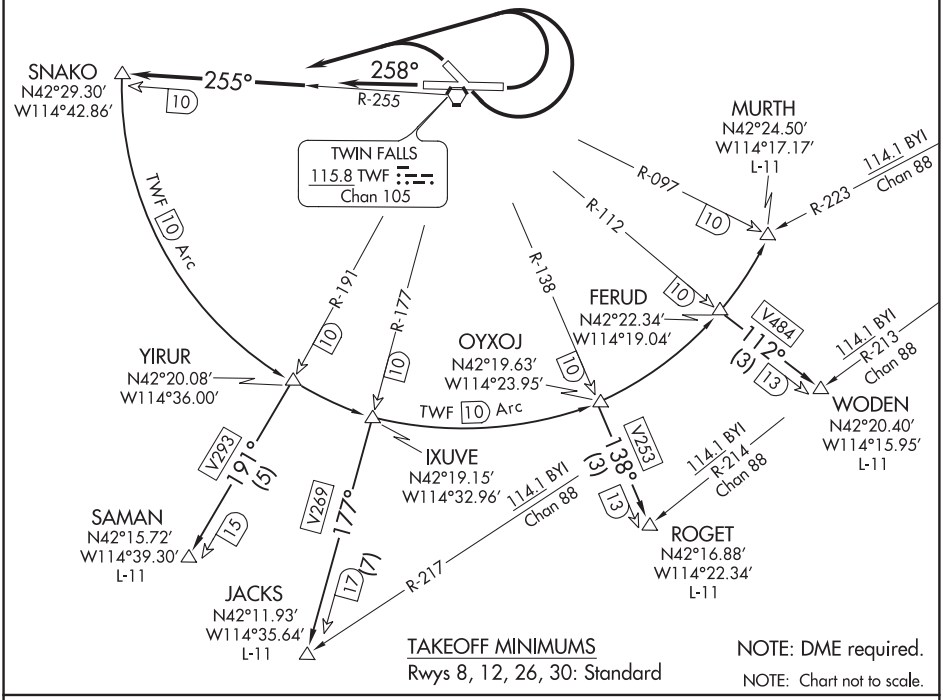
AIRPORT DIAGRAM
20086
TWIN FALLS, IDAHO
JOSLIN FIELD-MAGIC VALLEY RGNL (TWF)

# SNAKO THREE DEPARTURE

AL-885 (FAA)

TWIN FALLS DEP CON★
126.7 353.75
SALT LAKE CENTER
118.05

NOTE: ROGET transition requires minimum climb of 290′ per NM to 7600′.
NOTE: MURTH transition requires minimum climb of 295′ per NM to 15000′.
NOTE: SAMAN transition requires minimum climb of 254′ per NM to 10600′.
NOTE: JACKS transition requires minimum climb of 292′ per NM to 13000′.




TAKEOFF MINIMUMS
Rwys 8, 12, 26, 30: Standard

NOTE: DME required.
NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 8, 30 and 12: Climbing left turn to intercept TWF R-255 to SNAKO, thence. . . .
TAKEOFF RUNWAY 26: Climb heading 258° to intercept TWF R-255 to SNAKO, thence. . . .

. . . .(transition) expect filed altitude 10 minutes after departure.

JACKS TRANSITION (SNAKO3.JACKS): From over SNAKO on TWF VORTAC 10 DME Arc to IXUVE, then on V269 to JACKS INT.

MURTH TRANSITION (SNAKO3.MURTH): From over SNAKO on TWF VORTAC 10 DME Arc to MURTH INT.

ROGET TRANSITION (SNAKO3.ROGET): From over SNAKO on TWF VORTAC 10 DME Arc to OYXOJ then on V253 to ROGET INT.

SAMAN TRANSITION (SNAKO3.SAMAN): From over SNAKO on TWF VORTAC 10 DME Arc to YIRUR then on V293 to SAMAN.

WODEN TRANSITION (SNAKO3.WODEN): From over SNAKO on TWF VORTAC 10 DME Arc to FERUD then on V484 to WODEN INT.

VANCOUVER, WASHINGTON | AL-5807 (FAA) | 20310

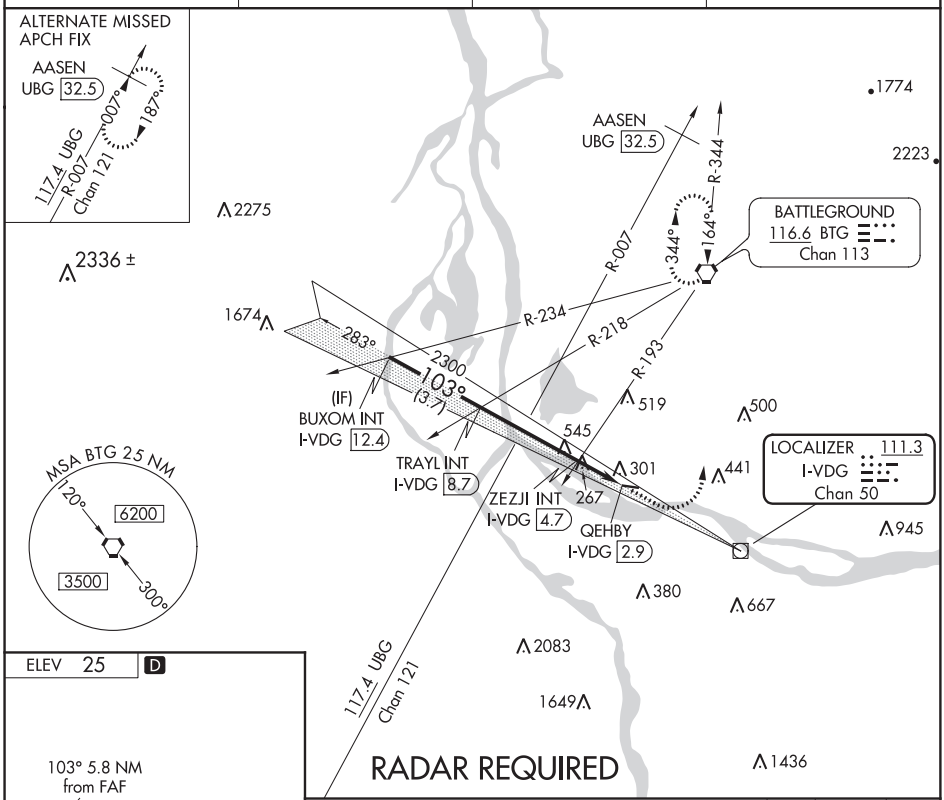
# LDA-A
## PEARSON FIELD (VUO)

| LOC/DME I-VDG | APP CRS | Rwy ldg | N/A |
|---|---|---|---|
| 111.3 | 103° | TDZE | N/A |
| Chan 50 | | Apt Elev | 25 |

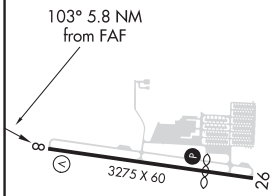
When local altimeter setting not received, use Portland Intl altimeter setting. Helicopter visibility reduction below 1 SM (or RVR 5000 as appropriate) not authorized.

MISSED APPROACH: Climb to 900 then climbing left turn to 4200 direct BTG VORTAC and hold, continue climb-in-hold to 4200.

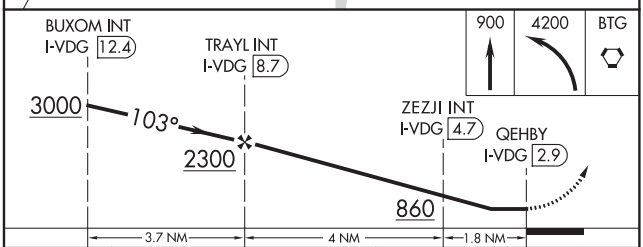
| ASOS | PORTLAND APP CON | CLNC DEL | UNICOM |
|---|---|---|---|
| 135.125 | 124.35 360.8 | 119.0 (CTAF) L | 123.0 |




ELEV 25 D




REIL Rwy 26
MIRL Rwy 8-26 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 |
|---|---|---|---|---|
| CIRCLING | 860-1¼ 835 (900-1¼) | | NA | |
| ZEZJI FIX MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED) | | | | |
| CIRCLING | 700-1 675 (700-1) | 740-1 715 (800-1) | NA | |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC I-ALW | APP CRS | Rwy ldg | 6527 |
|---|---|---|---|
| 111.7 | 196° | TDZE | 1194 |
| | | Apt Elev | 1194 |

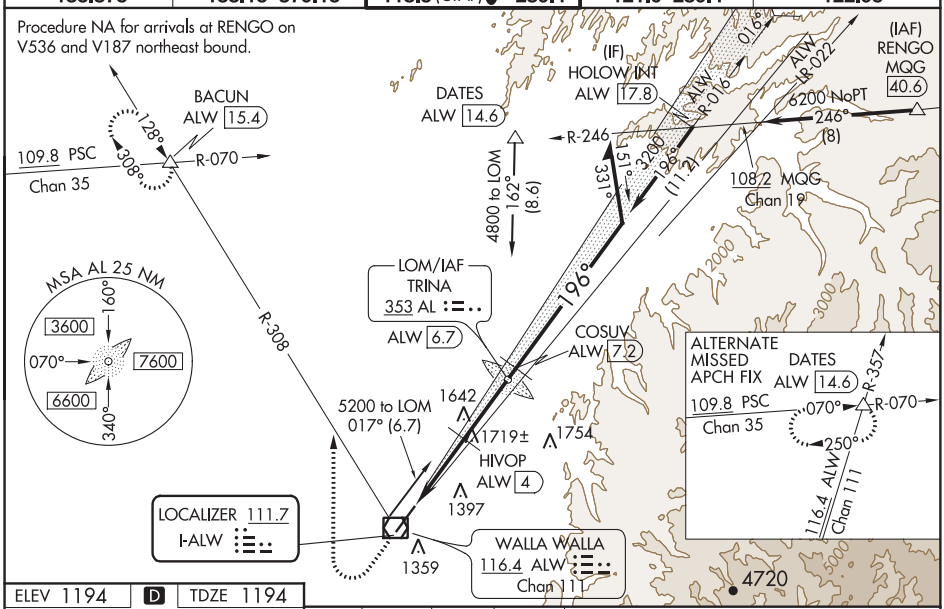
# ILS Y or LOC RWY 20
## WALLA WALLA RGNL (ALW)

VDP NA when using Pendleton altimeter setting. When local altimeter setting not received, use Pendleton altimeter setting and increase all DA and all MDA 120 feet. Increase S-ILS 20 visibility all Cats to RVR 3200, S-LOC 20 Cat A/C/D visibility ½ mile. Increase HIVOP DME FIX S-LOC 20 Cat A/C/D visibility ¼ mile, and Circling Cat A and C visibility ¼ mile. For inoperative MALSR, when using Pendleton altimeter setting increase S-ILS 20 all Cats visibility to RVR 5500. For inoperative MALSR increase HIVOP DME FIX minimums S-LOC 20 Cat C/D visibility ¾ mile. Inoperative table does not apply to S-LOC 20 Cat A, C, and D visibility when using Pendleton altimeter setting. # RVR 1800 authorized with use of FD or AP or HUD to DA.

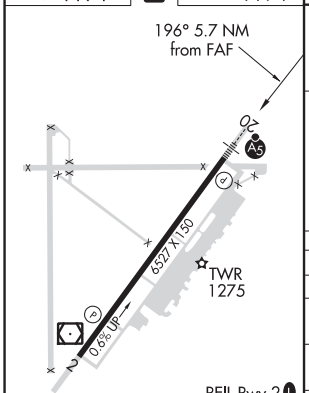
MALSR A5

MISSED APPROACH: Climb to 1800 then climbing right turn to 4000 on heading 340° and ALW VOR/DME R-308 to BACUN INT/ALW 15.4 DME and hold.

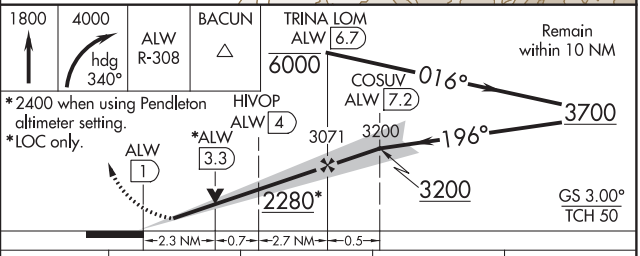
| ASOS | CHINOOK APP CON ★ | WALLA WALLA TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 135.875 | 133.15 379.15 | 118.5 (CTAF) L 289.4 | 121.6 289.4 | 122.95 |




| ELEV 1194 | D | TDZE 1194 |
|---|---|---|




| 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 20 # | 1394/24 200 (200-½) | | | |
| S-LOC 20 | 2280/40 1086 (1100-¾) | 2280/55 1086 (1100-1) | 2280-2½ 1086 (1100-2½) | |
| C CIRCLING | 2280-1¼ 1086 (1100-1¼) | 2280-1½ 1086 (1100-1½) | 2280-3 1086 (1100-3) | 2300-3 1106 (1200-3) |
| HIVOP DME FIX MINIMUMS | | | | |
| S-LOC 20 | 1980/24 786 (800-½) | 1980/40 786 (800-¾) | 1980-1¾ 786 (800-1¾) | |
| C CIRCLING | 1980-1 786 (800-1) | 1980-1¼ 786 (800-1¼) | 2120-2¾ 926 (1000-2¾) | 2300-3 1106 (1200-3) |


NW-1, 05 NOV 2020 to 31 DEC 2020

# ILS Z or LOC/DME RWY 20

## WALLA WALLA RGNL (ALW)

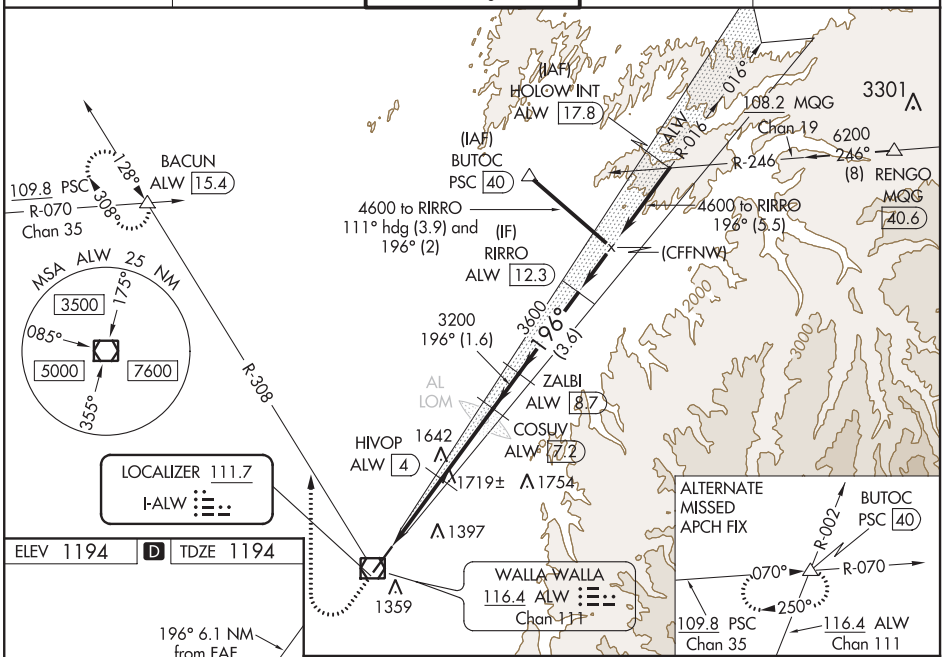
| LOC I-ALW | APP CRS | Rwy ldg | 6527 |
|---|---|---|---|
| 111.7 | 196° | TDZE | 1194 |
| | | Apt Elev | 1194 |

T A DME required. When local altimeter setting not received, use Pendleton altimeter setting and increase all DA and all MDA 120 feet, increase S-ILS 20 visibility to RVR 3200, increase S-LOC 20 Cat A visibility ⅜ mile, Cat C and D visibility ¼ mile and Circling Cat A and C/D visibility ¼ mile. VDP NA when using Pendleton altimeter setting. For inoperative MALSR, when using Pendleton altimeter setting, increase S-ILS 20 all Cats visibility to 5000 RVR. DME from ALW VOR/DME. Simultaneous reception of I-ALW and ALW VOR/DME required.
For inoperative MALSR, increase S-LOC 20 Cat C/D visibility ¾ mile.
# RVR 1800 authorized with use of FD or AP or HUD to DA.

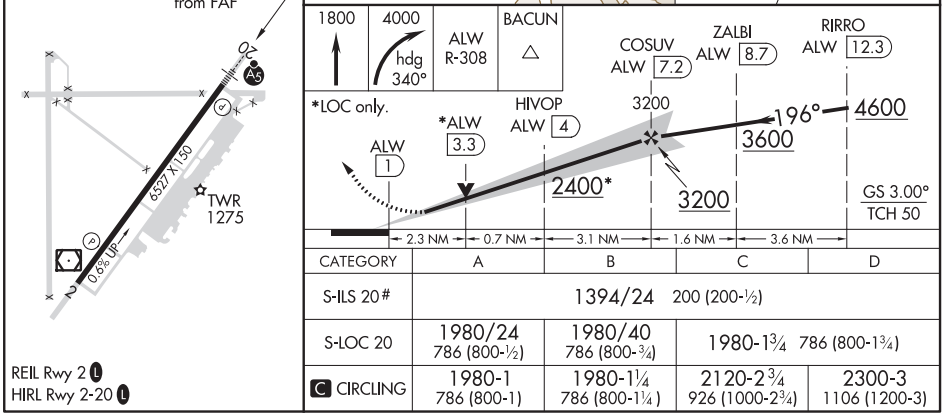
MALSR

MISSED APPROACH: Climb to 1800 then climbing right turn to 4000 on heading 340° and ALW VOR/DME R-308 to BACUN INT/ALW 15.4 DME and hold.

| ASOS | CHINOOK APP CON ★ | WALLA WALLA TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 135.875 | 133.15 379.15 | 118.5 (CTAF) L 289.4 | 121.6 289.4 | 122.95 |




ELEV 1194 D TDZE 1194




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 20# | 1394/24 200 (200-½) | | | |
| S-LOC 20 | 1980/24 786 (800-½) | 1980/40 786 (800-¾) | 1980-1¾ 786 (800-1¾) | |
| C CIRCLING | 1980-1 786 (800-1) | 1980-1¼ 786 (800-1¼) | 2120-2¾ 926 (1000-2¾) | 2300-3 1106 (1200-3) |

REIL Rwy 2 L
HIRL Rwy 2-20 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

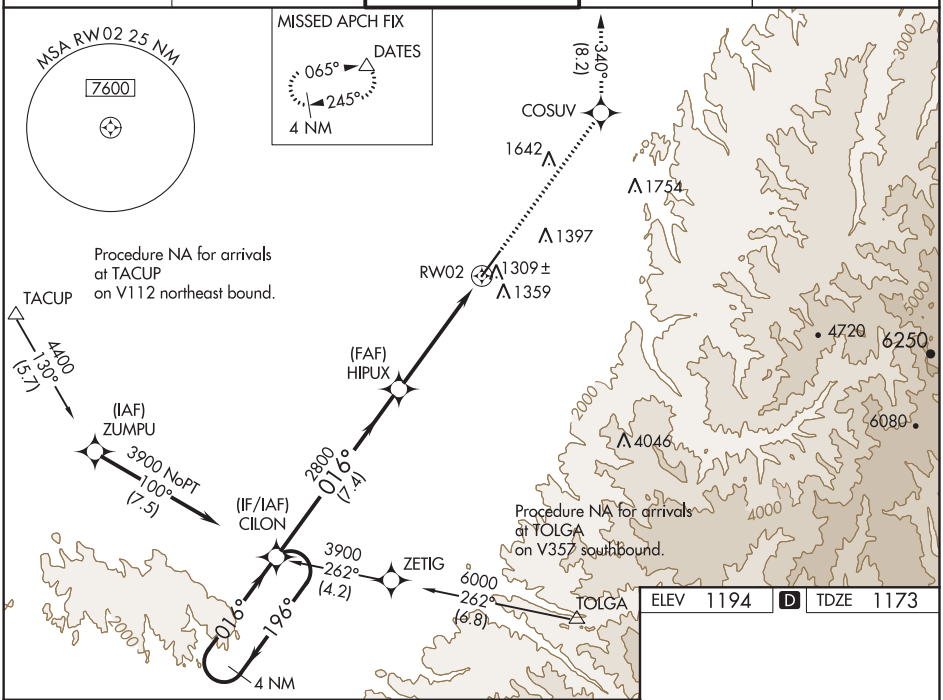
| WAAS CH 72805 W02A | APP CRS 016° | Rwy ldg 6527<br>TDZE 1173<br>Apt Elev 1194 |
|---|---|---|

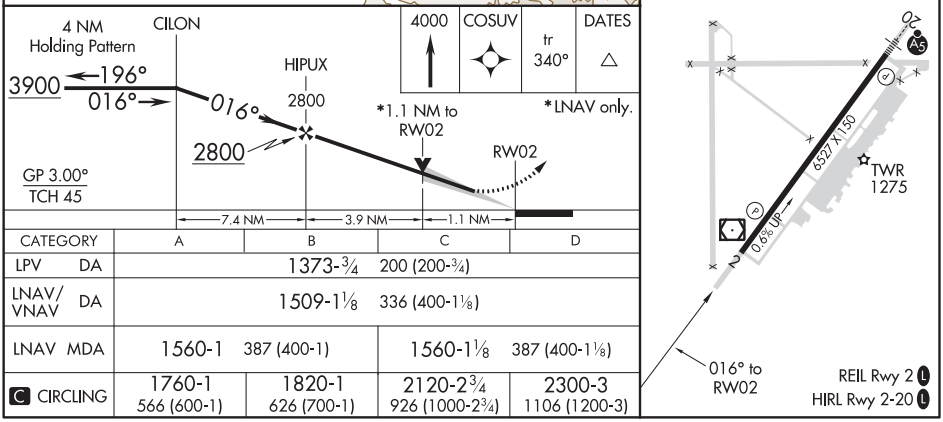
# RNAV (GPS) RWY 2
## WALLA WALLA RGNL (ALW)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C (13°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Pendleton altimeter setting and increase all DA/MDA 120 feet and LPV all visibilities ¼ mile, LNAV/VNAV all visibilities ⅜ mile, LNAV Cats C/D visibility ⅜ mile, and Circling Cat C visibility ¼ mile. VDP and Baro-VNAV NA when using Pendleton altimeter setting.

MISSED APPROACH: Climb to 4000 direct COSUV and on track 340° to DATES and hold.

| ASOS | CHINOOK APP CON ★ | WALLA WALLA TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 135.875 | 133.15 379.15 | 118.5(CTAF) L 289.4 | 121.6 289.4 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 1373-¾ 200 (200-¾) | | | |
| LNAV/VNAV DA | 1509-1⅛ 336 (400-1⅛) | | | |
| LNAV MDA | 1560-1 387 (400-1) | | 1560-1⅛ 387 (400-1⅛) | |
| C CIRCLING | 1760-1 566 (600-1) | 1820-1 626 (700-1) | 2120-2¾ 926 (1000-2¾) | 2300-3 1106 (1200-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

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| WAAS CH 90299 W20A | APP CRS 196° | Rwy ldg 6527<br>TDZE 1194<br>Apt Elev 1194 |
|---|---|---|

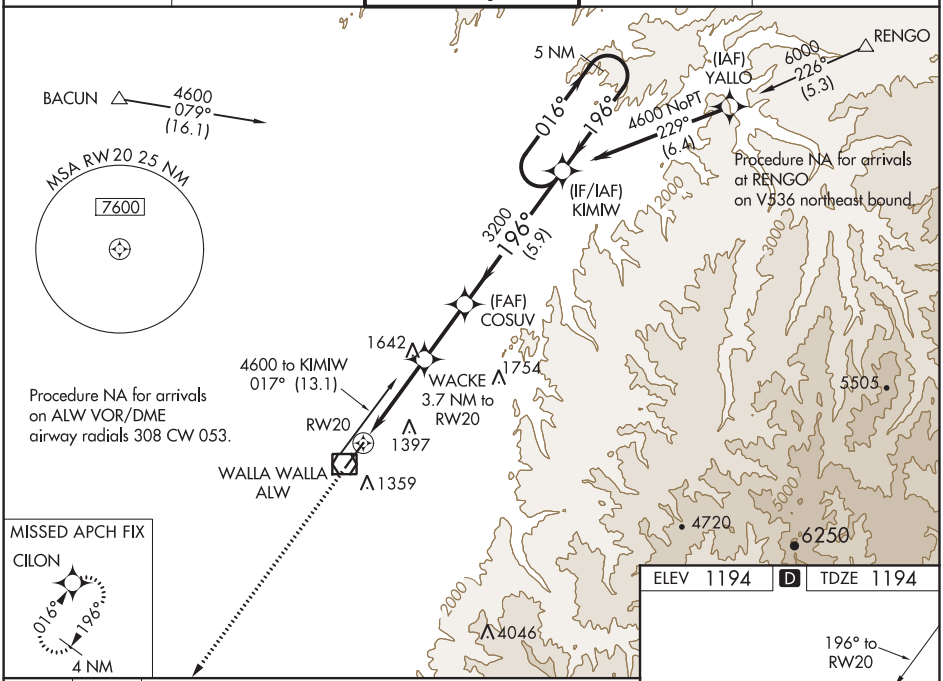
# RNAV (GPS) RWY 20
## WALLA WALLA RGNL (ALW)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -11°C (13°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Pendleton altimeter setting and increase all DAs/MDAs 120 feet and increase LPV RVR to 2800, LNAV/VNAV visibilities to 1⅞ miles, and LNAV Cat A RVR to 6000. VDP and Baro-VNAV NA when using Pendleton altimeter setting. For inoperative MALSR when using Pendleton altimeter setting, increase LPV all Cats visibility to 1 and LNAV Cat A to 1¼ . # RVR 1800 authorized with use of FD or AP or HUD to DA, NA when using Pendleton altimeter setting.

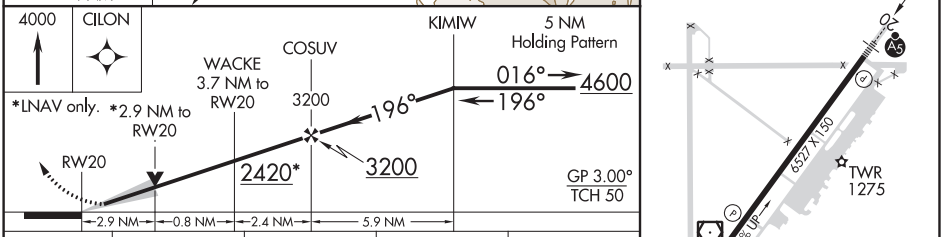
MALSR

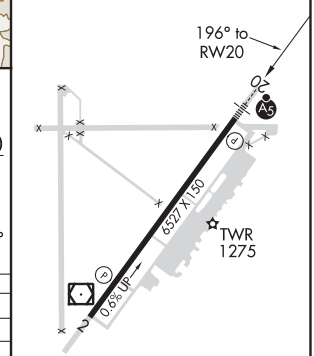
MISSED APPROACH: Climb to 4000 direct CILON and hold.

| ASOS | CHINOOK APP CON ★ | WALLA WALLA TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 135.875 | 133.15 379.15 | 118.5 (CTAF) L 289.4 | 121.6 289.4 | 122.95 |




ELEV 1194 D TDZE 1194




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA# | 1394/24 200 (200-½) | | | |
| LNAV/VNAV DA | 1773-1½ 579 (600-1½) | | | |
| LNAV MDA | 2160/40 966 (1000-¾) | 2160/55 966 (1000-1) | 2160-2½ 966 (1000-2½) | |
| C CIRCLING | 2160-1¼ 966 (1000-1¼) | 2160-1½ 966 (1000-1½) | 2160-3 966 (1000-3) | 2300-3 1106 (1200-3) |

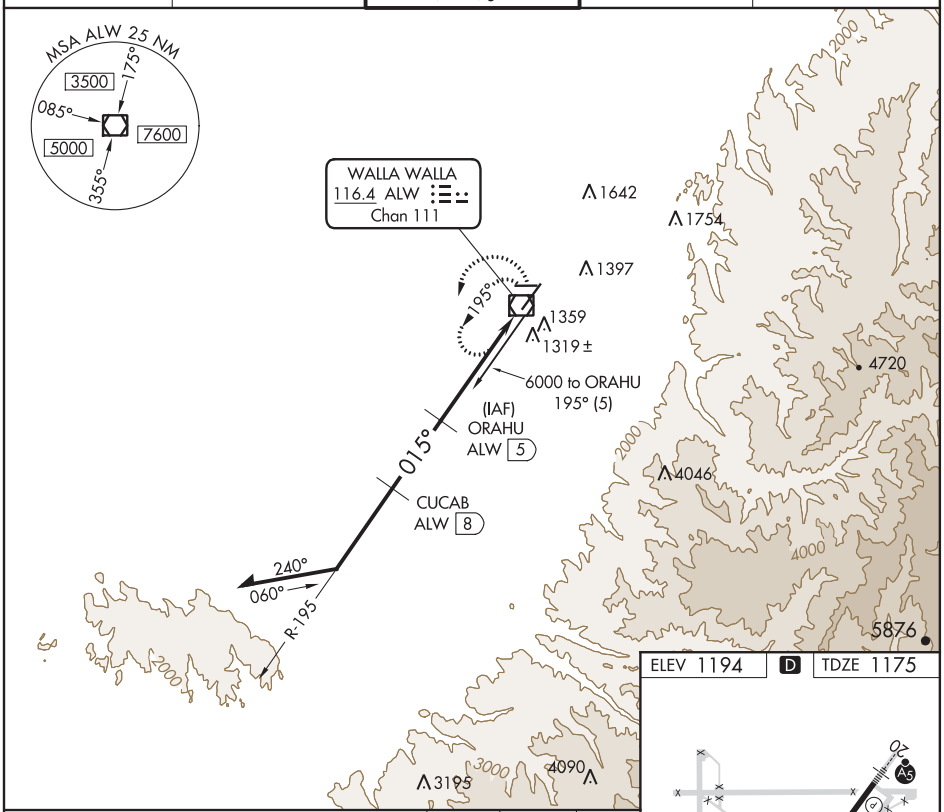
REIL Rwy 2 L
HIRL Rwy 2-20 L

| VOR/DME ALW | APP CRS | Rwy ldg | 6527 |
|---|---|---|---|
| 116.4 | 015° | TDZE | 1175 |
| Chan 111 | | Apt Elev | 1194 |

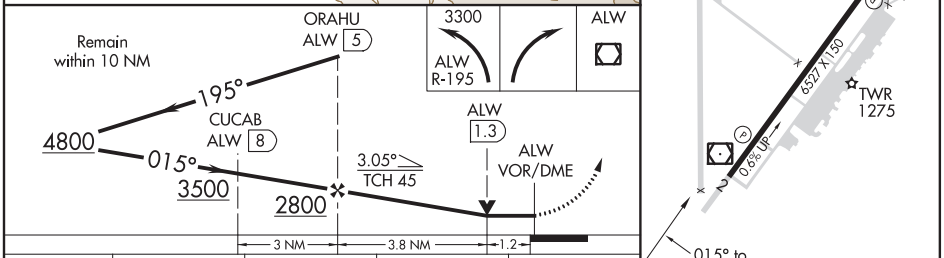
# VOR/DME RWY 2
## WALLA WALLA RGNL (ALW)

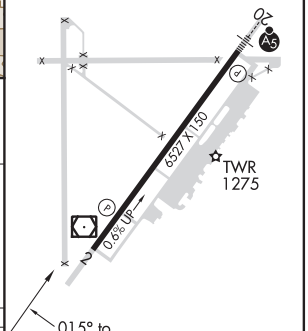
MISSED APPROACH: Climbing left turn to 3300 via ALW VOR/DME R-195 within 10 DME then turn right direct ALW VOR/DME and hold.

| ASOS | CHINOOK APP CON ★ | WALLA WALLA TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 135.875 | 133.15 379.15 | 118.5 (CTAF) L 289.4 | 121.6 289.4 | 122.95 |




ELEV 1194 D TDZE 1175




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-2 | 1580-1 405 (400-1) | | 1580-1¼ 405 (400-1¼) | |
| C CIRCLING | 1720-1 526 (600-1) | 1820-1 626 (700-1) | 2080-2¾ 886 (900-2¾) | 2240-3 1046 (1100-3) |

REIL Rwy 2 L
HIRL Rwy 2-20 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

WALLA WALLA, WASHINGTON AL-440 (FAA) 19171

# VOR RWY 20
## WALLA WALLA RGNL (ALW)

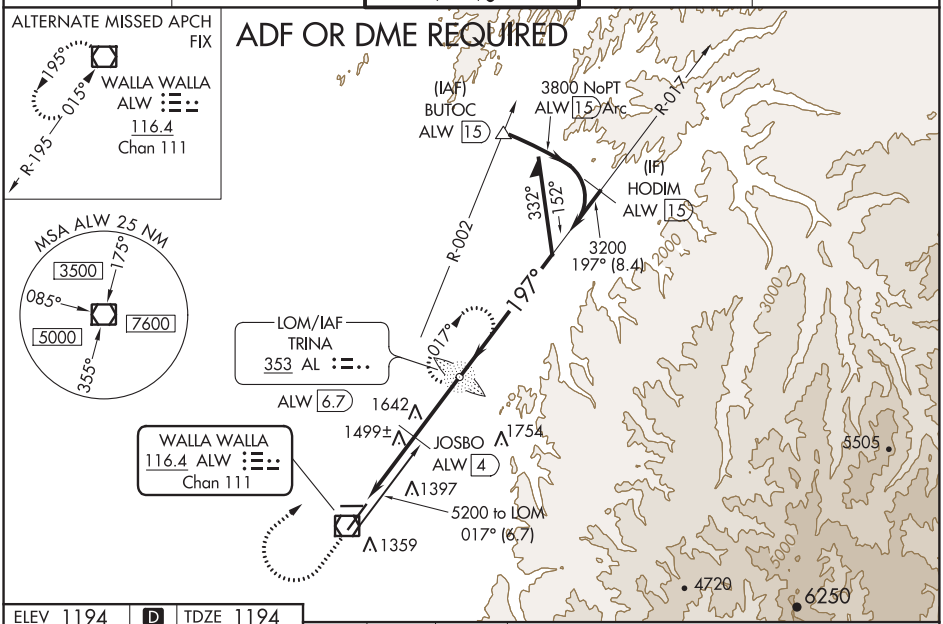
| VOR/DME ALW | APP CRS | Rwy ldg | 6527 |
|---|---|---|---|
| 116.4 | 197° | TDZE | 1194 |
| Chan 111 | | Apt Elev | 1194 |

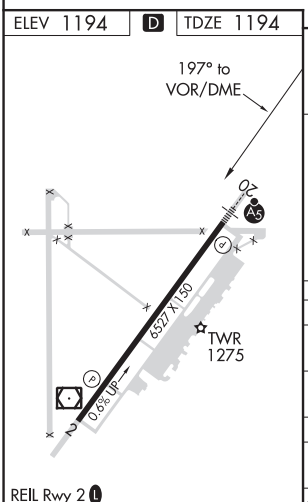
T A ADF required. VDP NA with Pendleton altimeter setting. When local altimeter setting not received, use Pendleton altimeter setting and increase all MDA 120 feet. Increase S-20 visibility Cat B ¼ mile, Cat C and D ½ mile. Increase JOSBO fix minimums S-20 visibility Cat C and D ¼ mile, Circling visibility Cat A and C ¼ mile, and Cat B ½ mile.

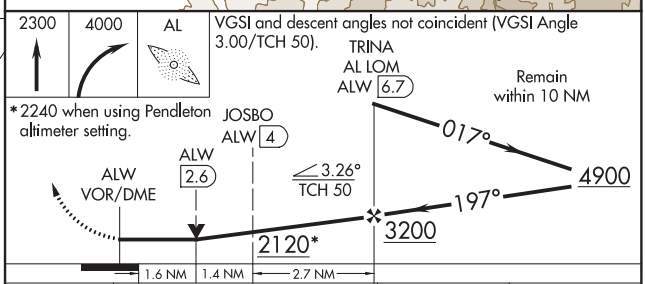
MALSR

MISSED APPROACH: Climb to 2300 then climbing right turn to 4000 direct TRINA LOM and hold.

| ASOS | CHINOOK APP CON ★ | WALLA WALLA TOWER ★ | GND CON | UNICOM |
|---|---|---|---|---|
| 135.875 | 133.15 379.15 | 118.5 (CTAF) L 289.4 | 121.6 289.4 | 122.95 |



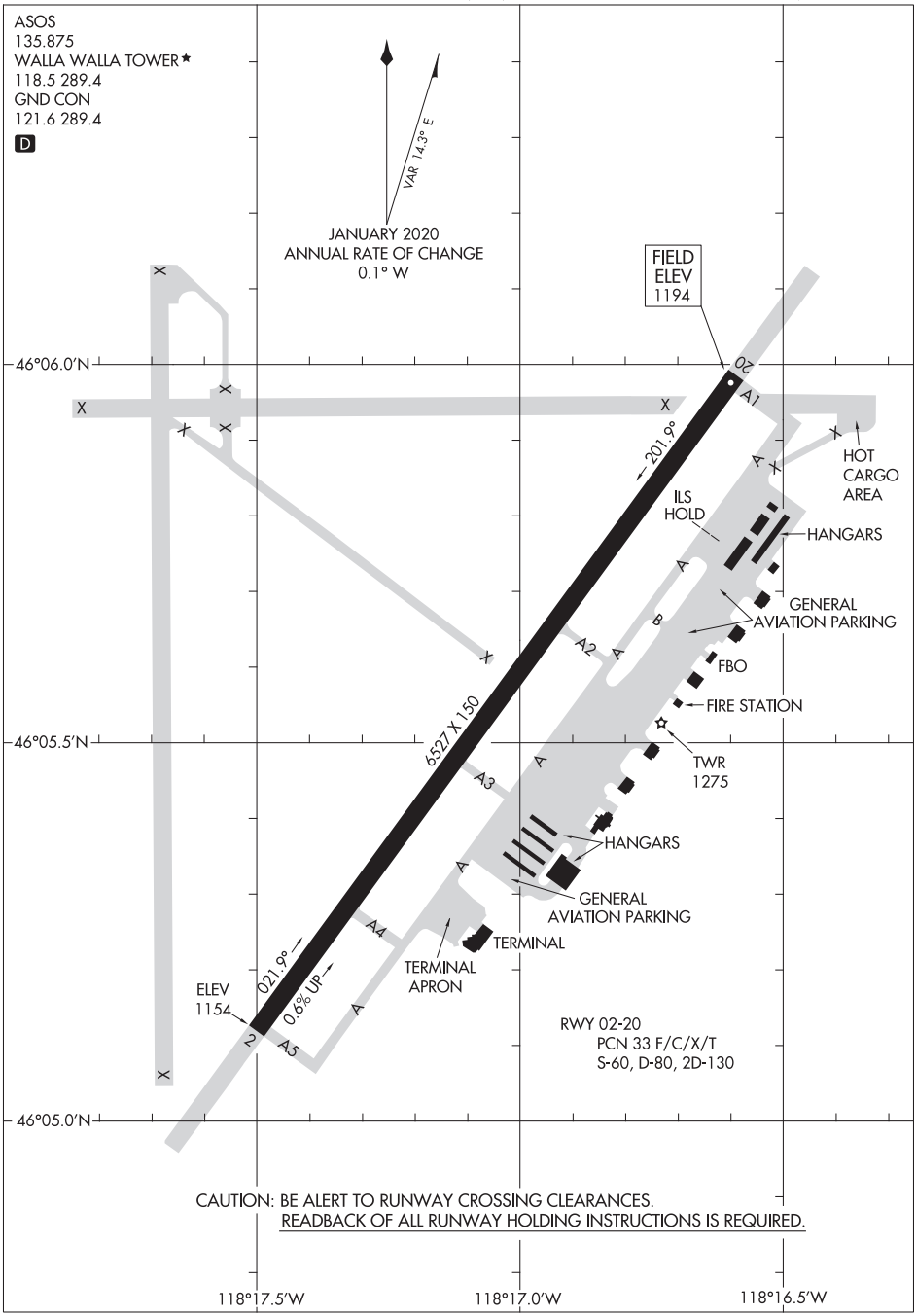




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-20 | 2120/40 926 (1000-¾) | | 2120-2 926 (1000-2) | |
| C CIRCLING | 2120-1¼ 926 (1000-1¼) | | 2120-3 926 (1000-3) | 2240-3 1046 (1100-3) |
| JOSBO FIX MINIMUMS (DME REQUIRED) | | | | |
| S-20 | 1760/24 566 (600-½) | | 1760-1¼ 566 (600-1¼) | |
| C CIRCLING | 1760-1 566 (600-1) | 1820-1 626 (700-1) | 2080-2¾ 886 (900-2¾) | 2240-3 1046 (1100-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020




CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

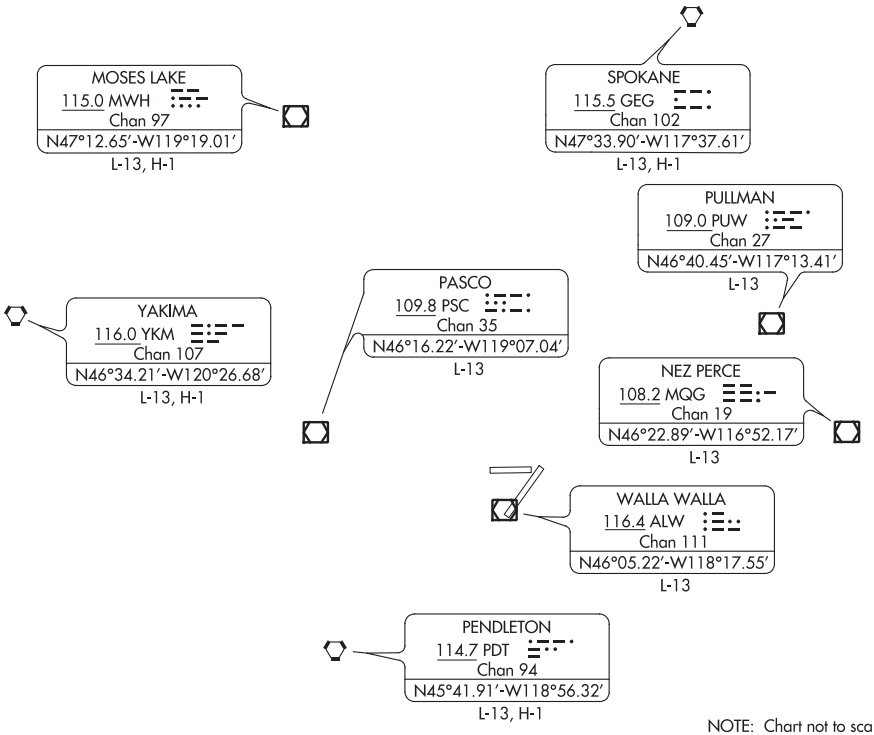
18144

# WALLA WALLA ONE DEPARTURE

AL-440 (FAA)

WALLA WALLA RGNL (ALW)
WALLA WALLA, WASHINGTON

GND CON
121.6 289.4
WALLA WALLA TOWER ★
118.5 (CTAF) 289.4
CHINOOK APP CON ★
133.15 379.15




NOTE: Chart not to scale.

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: Climb via specified turn and heading for vector to assigned route.

LOST COMMUNICATIONS: If not in contact with Departure Control after reaching 2500′ continue climb to assigned altitude and proceed direct to ALW VOR/DME, thence via assigned route.

NOTE: Air Traffic Control may assign turns and magnetic headings of 195° clockwise through 020° in the initial clearance.

| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 301° | TDZE | N/A |
| | Apt Elev | 2120 |

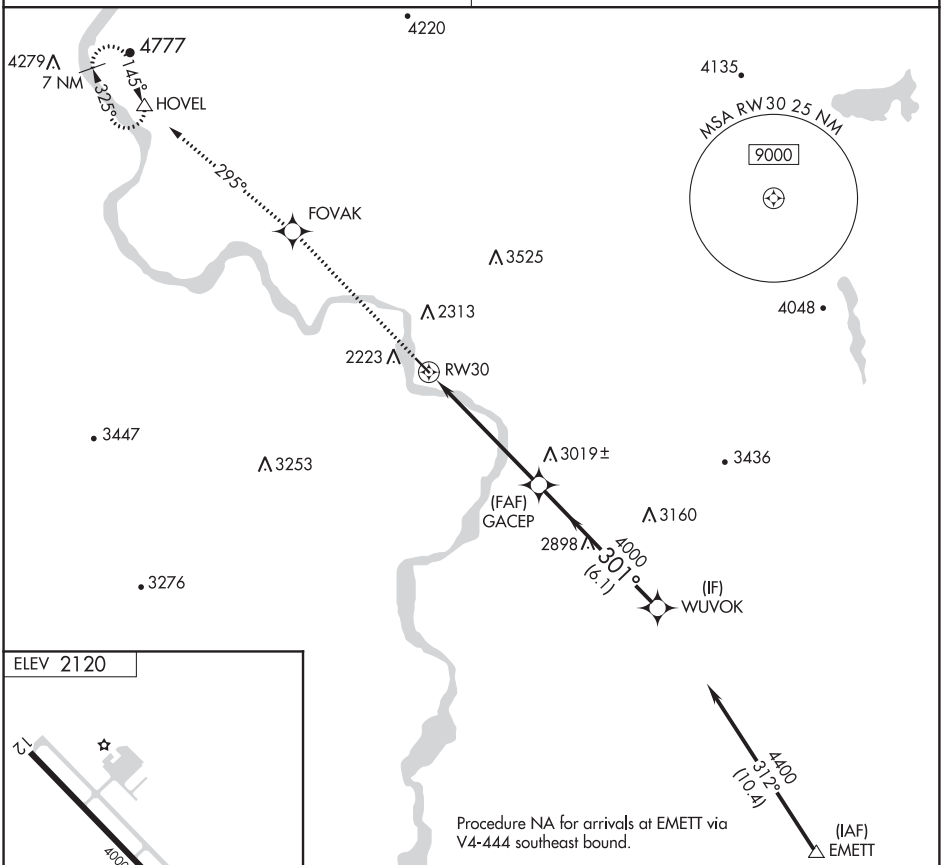
# RNAV (GPS)-A
## WEISER MUNI (S87)

T NA

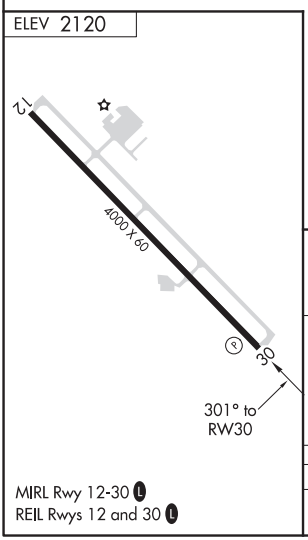
DME/DME RNP-0.3 NA. Procedure NA at night. Use Ontario altimeter setting; when not received, use Boise altimeter setting and increase all MDAs 160 feet.

MISSED APPROACH: Climb to 9000 direct FOVAK and via 295° track to HOVEL and hold, continue climb-in-hold to 9000.

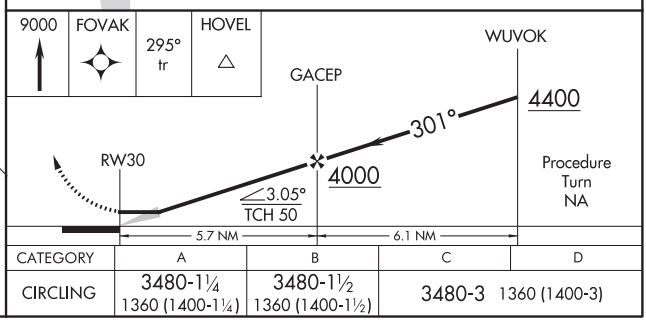
| SALT LAKE CENTER | UNICOM |
|---|---|
| **128.05 306.95** | **122.8** (CTAF) L |




Procedure NA for arrivals at EMETT via V4-444 southeast bound.




MIRL Rwy 12-30 L
REIL Rwys 12 and 30 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 3480-1¼ 1360 (1400-1¼) | 3480-1½ 1360 (1400-1½) | 3480-3 1360 (1400-3) | |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

WENATCHEE, WASHINGTON AL-641 (FAA) 20198

# ILS Y RWY 12
## PANGBORN MEMORIAL (EAT)

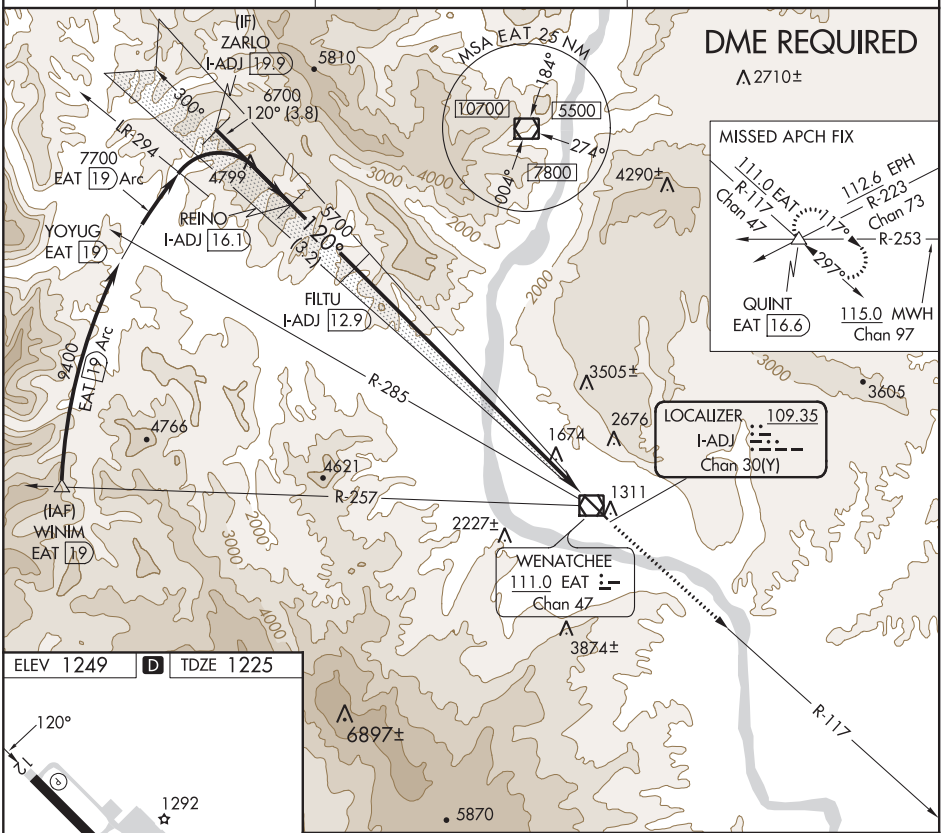
| LOC/DME I-ADJ | APP CRS | Rwy ldg | 7000 |
|---|---|---|---|
| 109.35 | 120° | TDZE | 1225 |
| Chan 30 (Y) | | Apt Elev | 1249 |

DME required.

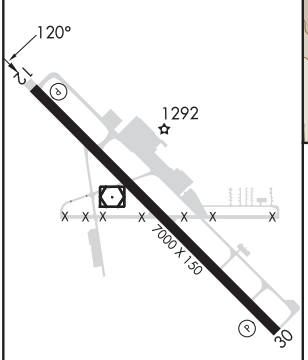
-7°C

MISSED APPROACH: Climb to 2700 then climb to 4000 direct EAT VOR/DME and on EAT VOR/DME R-117 to QUINT INT/EAT 16.6 DME and hold.

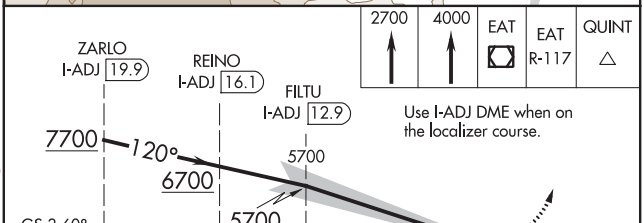
| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 119.925 | 126.1 291.6 | 123.0 (CTAF) |




ELEV 1249 D TDZE 1225




HIRL Rwy 12-30
REIL Rwys 12 and 30




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 12 | 2433-4 1208 (1200-4) | | | NA |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# ILS Z RWY 12
## PANGBORN MEMORIAL (EAT)

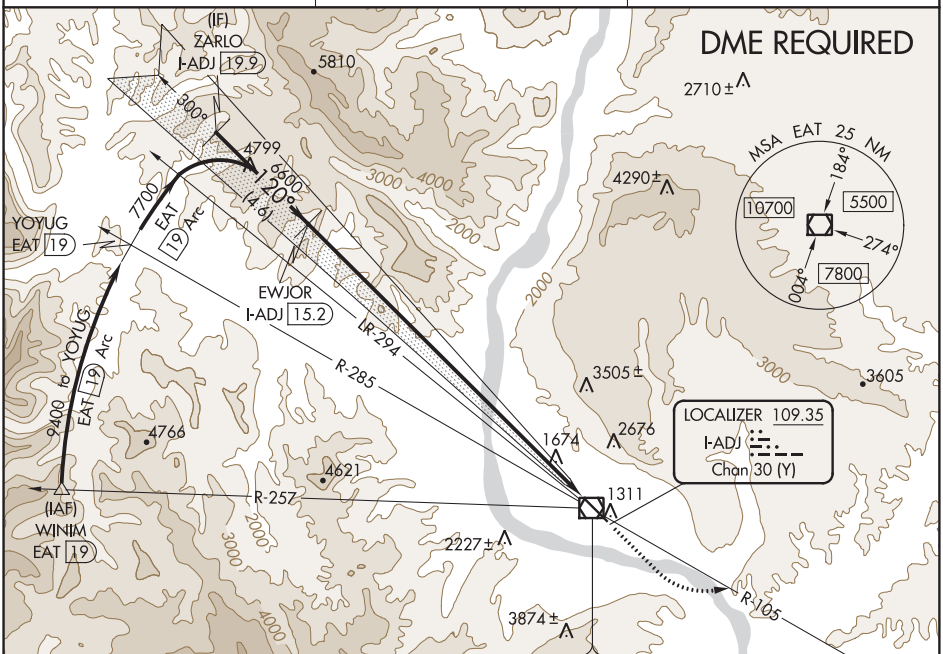
| LOC/DME I-ADJ | APP CRS | Rwy ldg | 7000 |
|---|---|---|---|
| 109.35 | 120° | TDZE | 1225 |
| Chan 30 (Y) | | Apt Elev | 1249 |

DME required.

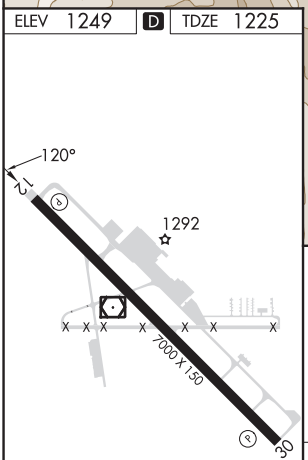
-7°C

MISSED APPROACH: Climb to 1820 then climb to 5500 on EAT VOR/DME R-105 to COYYA INT/EAT 18.5 DME and hold. *Missed approach requires minimum climb of 420′ per NM to 3200; if unable to meet climb gradient, see ILS Y RWY 12.

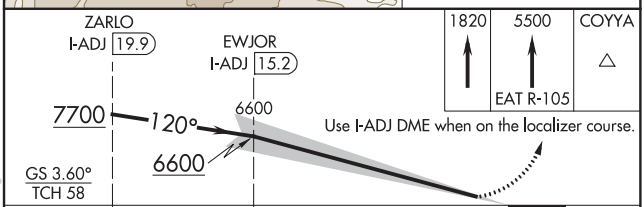
| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 119.925 | 126.1 291.6 | 123.0 (CTAF) L |




ELEV 1249 D TDZE 1225




HIRL Rwy 12-30 L
REIL Rwys 12 and 30 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 12 | 1555-1 | 330 (400-1) | | NA |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

WENATCHEE, WASHINGTON | AL-641 (FAA) | 20198

# RNAV (RNP) RWY 12
## PANGBORN MEMORIAL (EAT)

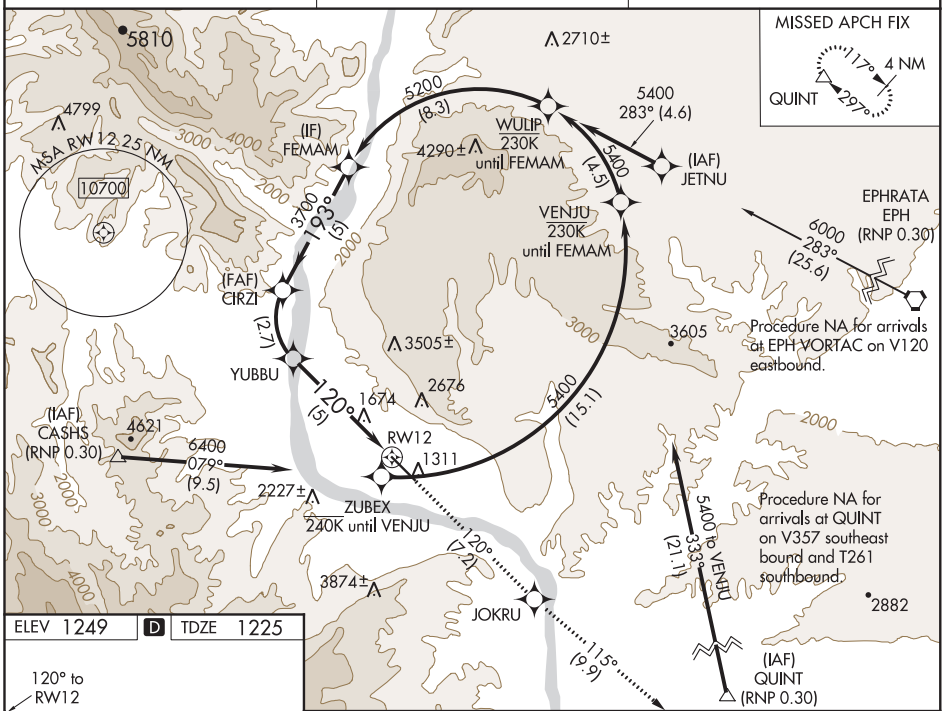
| APP CRS | Rwy ldg | 7000 |
|---|---|---|
| 120° | TDZE | 1225 |
| | Apt Elev | 1249 |

T
A
-7°C

For uncompensated Baro-VNAV systems, procedure NA below -10°C (14°F) or above 54°C (130°F). RF required. GPS required. FD or HUD required.

MISSED APPROACH: Climb to 5400 on track 120° to JOKRU and on track 115° to QUINT and hold.
*Missed approach requires a minimum climb of 319 feet per NM to 3700.
#Missed approach requires a minimum climb of 295 feet per NM to 3700.

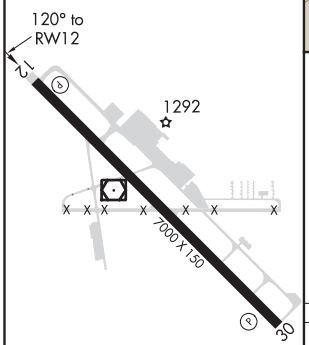
| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 119.925 | 126.1 291.6 | 123.0 (CTAF) L |




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

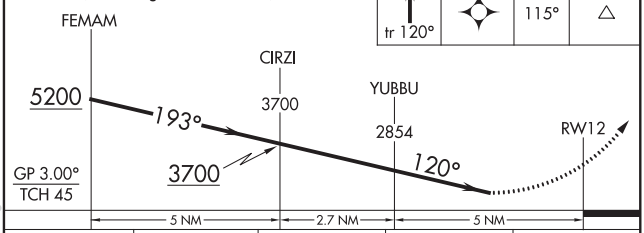
ELEV 1249 | D | TDZE 1225




HIRL Rwy 12-30 L
REIL Rwys 12 and 30 L

VGSI and RNAV glidepath not coincident
(VGSI Angle 3.60/TCH 60).

| 5400 | JOKRU | tr 115° | QUINT |
|---|---|---|---|
| tr 120° | | | |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.15 DA* | | 1995-3 | 770 (800-3) | |
| RNP 0.19 DA# | | 2072-3 | 847 (900-3) | |
| RNP 0.30 DA | | 2417-5 | 1192 (1200-5) | |

**AUTHORIZATION REQUIRED**

| APP CRS | Rwy ldg | 7000 |
|---|---|---|
| 300° | TDZE | 1232 |
| | Apt Elev | 1249 |

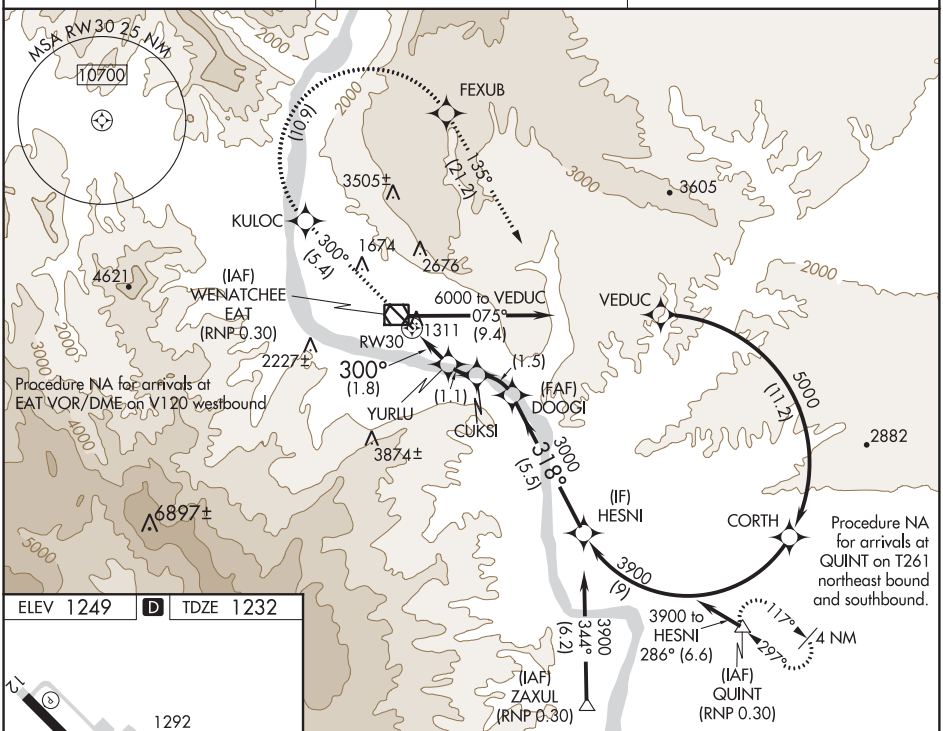
# RNAV (RNP) Z RWY 30
## PANGBORN MEMORIAL (EAT)

-7°C

For uncompensated Baro-VNAV systems, procedure NA below -10°C (14°F) or above 44°C (111°F). RF required. GPS required. FD or HUD required.

MISSED APPROACH: Climb to 6000 on track 300° to KULOC, right turn to FEXUB, and on track 135° to QUINT and hold.
*Missed approach requires minimum climb of 320 feet per NM to 5500.
#Missed approach requires minimum climb of 325 feet per NM to 5500.

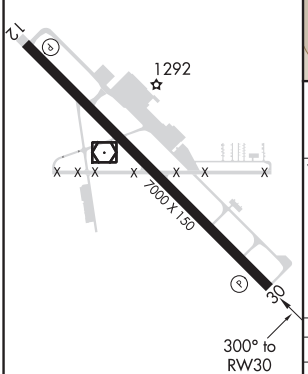
| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 119.925 | 126.1 291.6 | 123.0 (CTAF) L |



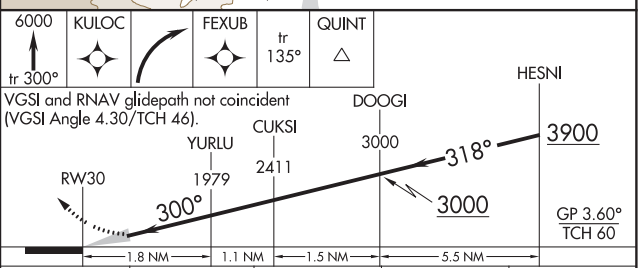

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 1249 D TDZE 1232




HIRL Rwy 12-30 L
REIL Rwys 12 and 30 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.17 DA* | 1595-1 | 363 (400-1) | | NA |
| RNP 0.30 DA# | 1686-1 3/8 | 454 (500-1 3/8) | | NA |

**AUTHORIZATION REQUIRED**

WENATCHEE, WASHINGTON AL-641 (FAA) 20310

# VOR-A

## PANGBORN MEMORIAL (EAT)

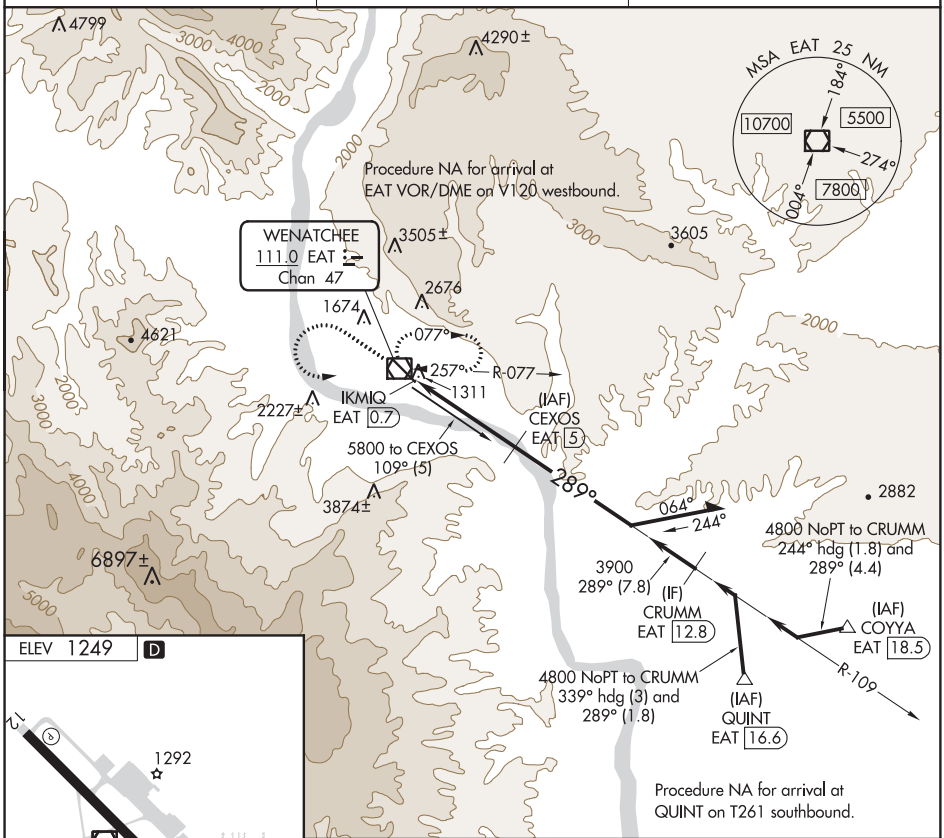
| VOR/DME EAT 111.0 Chan 47 | APP CRS 289° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 1249 |
|---|---|---|

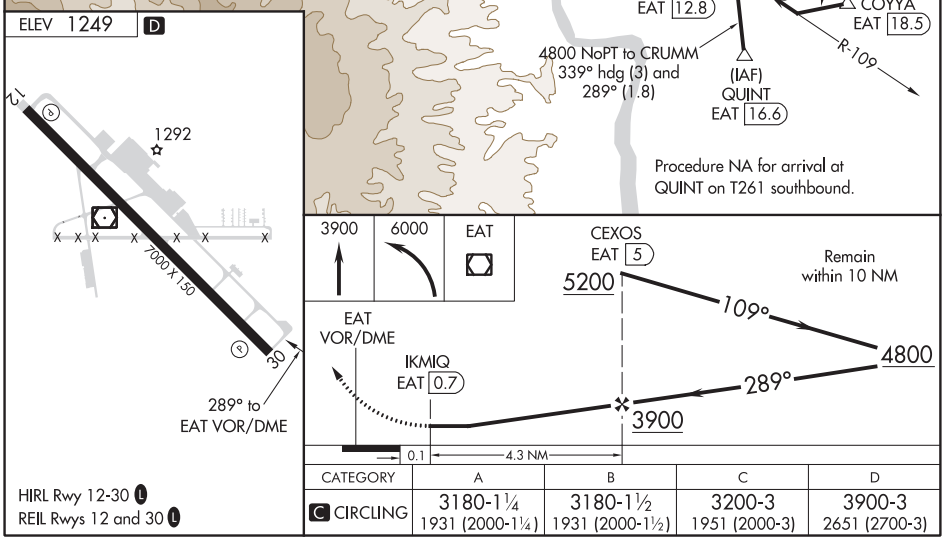
DME required.
Circling NA northeast of Rwy 12-30.

-7°C

MISSED APPROACH: Climb to 3900 then climbing left turn to 6000 direct EAT VOR/DME and hold, continue climb-in-hold to 6000.

| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 119.925 | 126.1 291.6 | 123.0 (CTAF) L |




HIRL Rwy 12-30 L
REIL Rwys 12 and 30 L

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 3180-1¼<br>1931 (2000-1¼) | 3180-1½<br>1931 (2000-1½) | 3200-3<br>1951 (2000-3) | 3900-3<br>2651 (2700-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| VOR/DME EAT 111.0 Chan 47 | APP CRS 104° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 1249 |
|---|---|---|

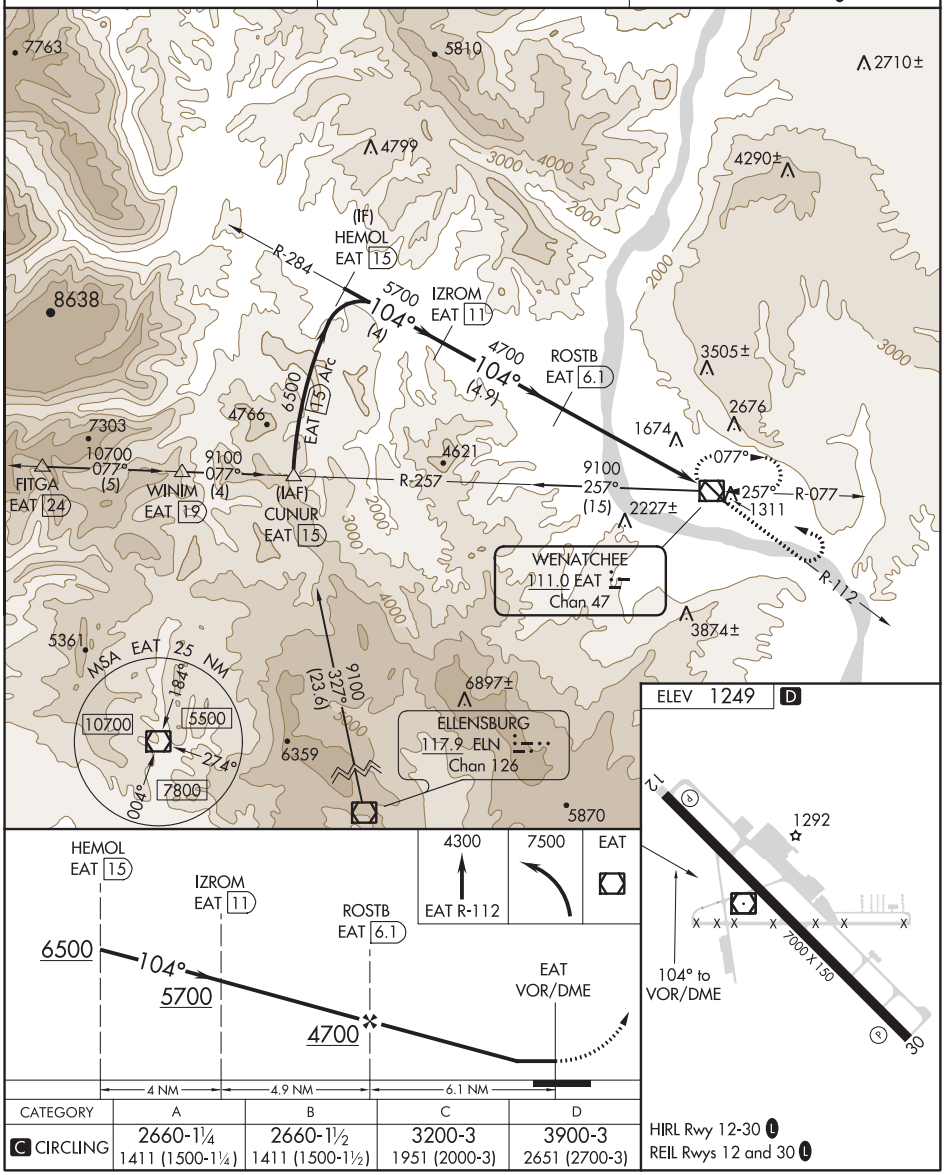
# VOR-B
## PANGBORN MEMORIAL (EAT)

DME required.
Circling NA northeast of Rwy 12-30.

-7°C

MISSED APPROACH: Climb to 4300 on EAT VOR/DME R-112 then climbing left turn to 7500 direct EAT VOR/DME and hold, continue climb-in-hold to 7500.

| ASOS | SEATTLE CENTER | UNICOM |
|---|---|---|
| 119.925 | 126.1 291.6 | 123.0 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 2660-1¼<br>1411 (1500-1¼) | 2660-1½<br>1411 (1500-1½) | 3200-3<br>1951 (2000-3) | 3900-3<br>2651 (2700-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

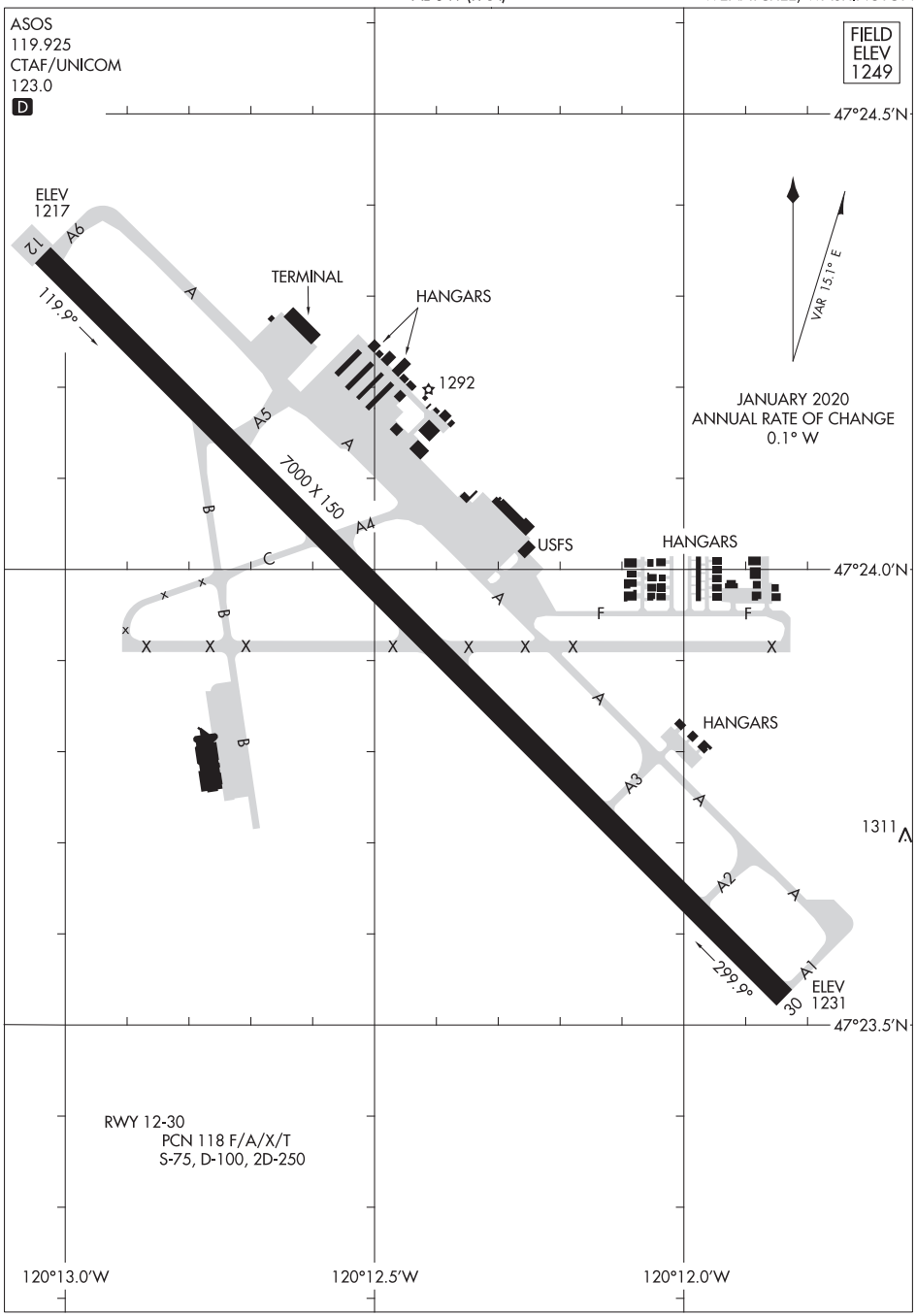
NW-1, 05 NOV 2020 to 31 DEC 2020

20086

# AIRPORT DIAGRAM

AL-641 (FAA)

PANGBORN MEMORIAL (EAT)
WENATCHEE, WASHINGTON



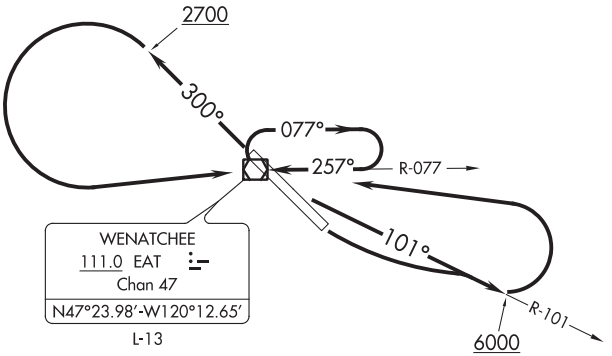

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM
20086
WENATCHEE, WASHINGTON
PANGBORN MEMORIAL (EAT)

# WENATCHEE TWO DEPARTURE (OBSTACLE)

ASOS
119.925
UNICOM
123.0
SEATTLE CENTER
126.1 291.6




TAKEOFF MINIMUMS
Rwy 12: Standard with minimum climb of 575′ per NM to 3300 or 3500-3 for VCOA.
Rwy 30: Standard with minimum climb of 500′ per NM to 3500 or 3500-3 for VCOA.

(NOTES CONTINUED ON FOLLOWING PAGE)

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 12: Climbing left turn to 6000 to intercept EAT VOR/DME R-101 eastbound, thence . . . .

TAKEOFF RUNWAY 30: Climb heading 300° to 2700, then climbing left turn to 6000 direct EAT VOR/DME, then on EAT VOR/DME R-101 eastbound, thence . . . .

. . . . leaving 6000, turn left direct EAT VOR/DME. Climb-in-holding pattern to cross EAT VOR/DME at or above the MCA/MEA for direction of flight.

VCOA ALL RUNWAYS: Obtain ATC approval for VCOA when requesting IFR clearance. Climb in visual conditions to cross EAT VOR/DME at or above 4600. Climb-in-holding pattern to cross EAT VOR/DME at or above the MCA/MEA for direction of flight.

TAKEOFF OBSTACLE NOTES

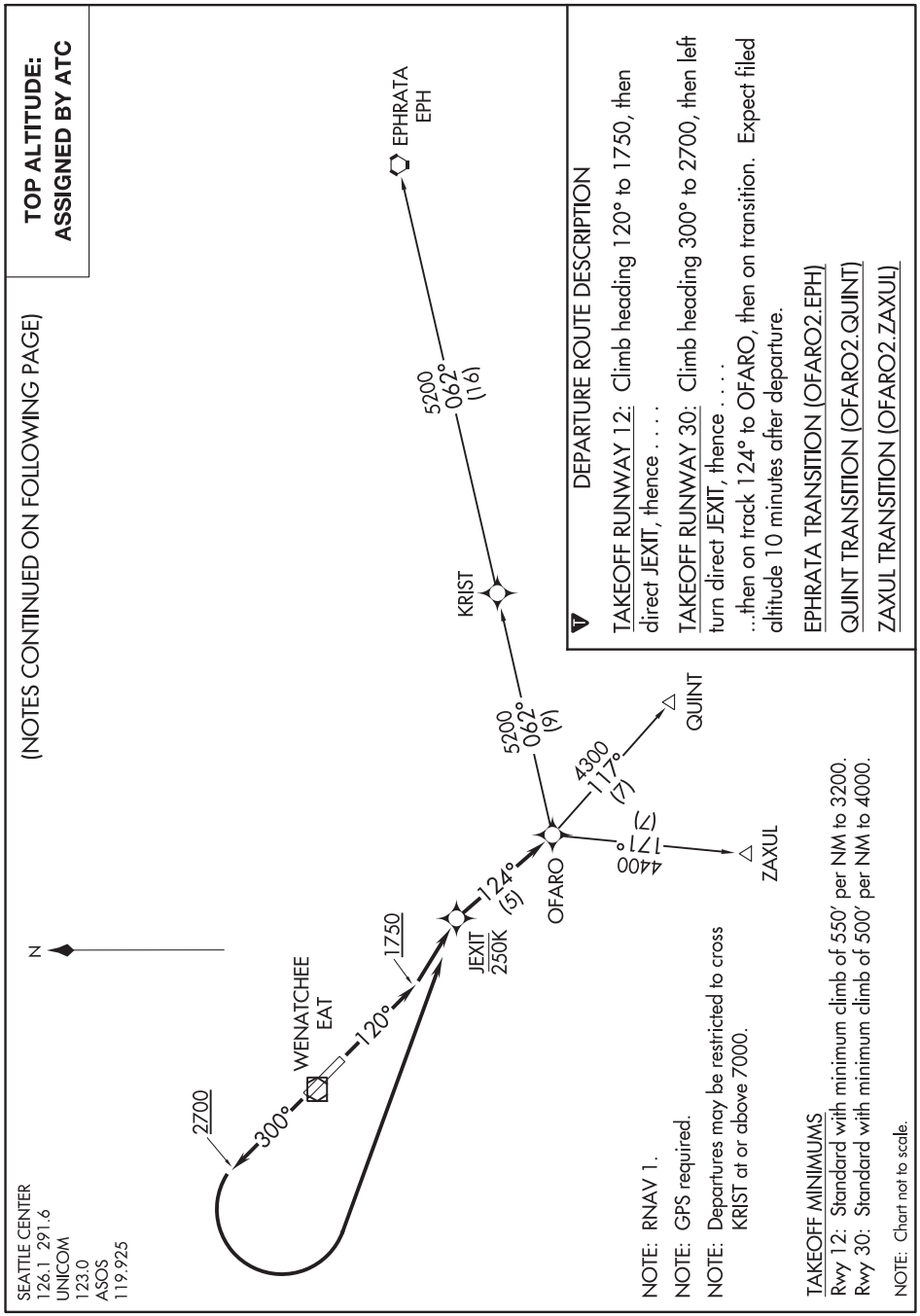
Rwy 12: Terrain 25′ from DER, 194′ left of centerline, 1234′ MSL.
Sign 68′ from DER, 474′ left of centerline, 1237′ MSL.
Building beginning 133′ from DER, 399′ right of centerline, up to 19′ AGL/1237′ MSL.
Terrain 171′ from DER, 340′ left of centerline, 1241′ MSL.
Terrain 317′ from DER, 486′ left of centerline, 1247′ MSL.
Agricultural equipment 435′ from DER, 575′ left of centerline, 37′ AGL/1260′ MSL.
Tree 1190′ from DER, 815′ left of centerline, 1301′ MSL.

Rwy 30: Terrain 66′ from DER, 411′ right of centerline, 1219′ MSL.
Vehicles on road, 201′ from DER, 535′ left of centerline, 1224′ MSL.
Transmission tower 304′ from DER, 274′ left of centerline, 42′ AGL/1253′ MSL.
Building 1185′ from DER, 480′ right of centerline, 40′ AGL/1247′ MSL.
Terrain beginning 1.4 NM from DER, 2496′ right of centerline, up to 1518′ MSL.
Terrain 1.4 NM from DER, 2729′ right of centerline, 1546′ MSL.
Pole 1.4 NM from DER, 2257′ right of centerline, 43′ AGL/1574′ MSL.
Terrain beginning 1.4 NM from DER, 2490′ right of centerline, up to 1586′ MSL.
Terrain beginning 1.5 NM from DER, 410′ right of centerline, up to 1606′ MSL.
Terrain beginning 1.5 NM from DER, 136′ right of centerline, up to 1651′ MSL.
Terrain 1.5 NM from DER, 10′ left of centerline, 1449′ MSL.
Terrain beginning 1.5 NM from DER, 402′ right of centerline, up to 1670′ MSL.
Transmission tower, pole, and terrain beginning 1.5 NM from DER, 820′ right of centerline, up to 65′ AGL/1666′ MSL.
Terrain beginning 1.5 NM from DER, 1252′ right of centerline, up to 1672′ MSL.
Terrain beginning 1.5 NM from DER, 521′ right of centerline, up to 1682′ MSL.
Terrain, transmission tower, and pole beginning 1.6 NM from DER, 80′ right of centerline, up to 1690′ MSL.
Transmission tower, pole, and terrain beginning 1.8 NM from DER, 186′ left of centerline, up to 65′ AGL/1590′ MSL.
Terrain 1.9 NM from DER, 1516′ right of centerline, 1565′ MSL.


NW-1, 05 NOV 2020 to 31 DEC 2020

# OFARO TWO DEPARTURE (RNAV)

AL-641 (FAA)

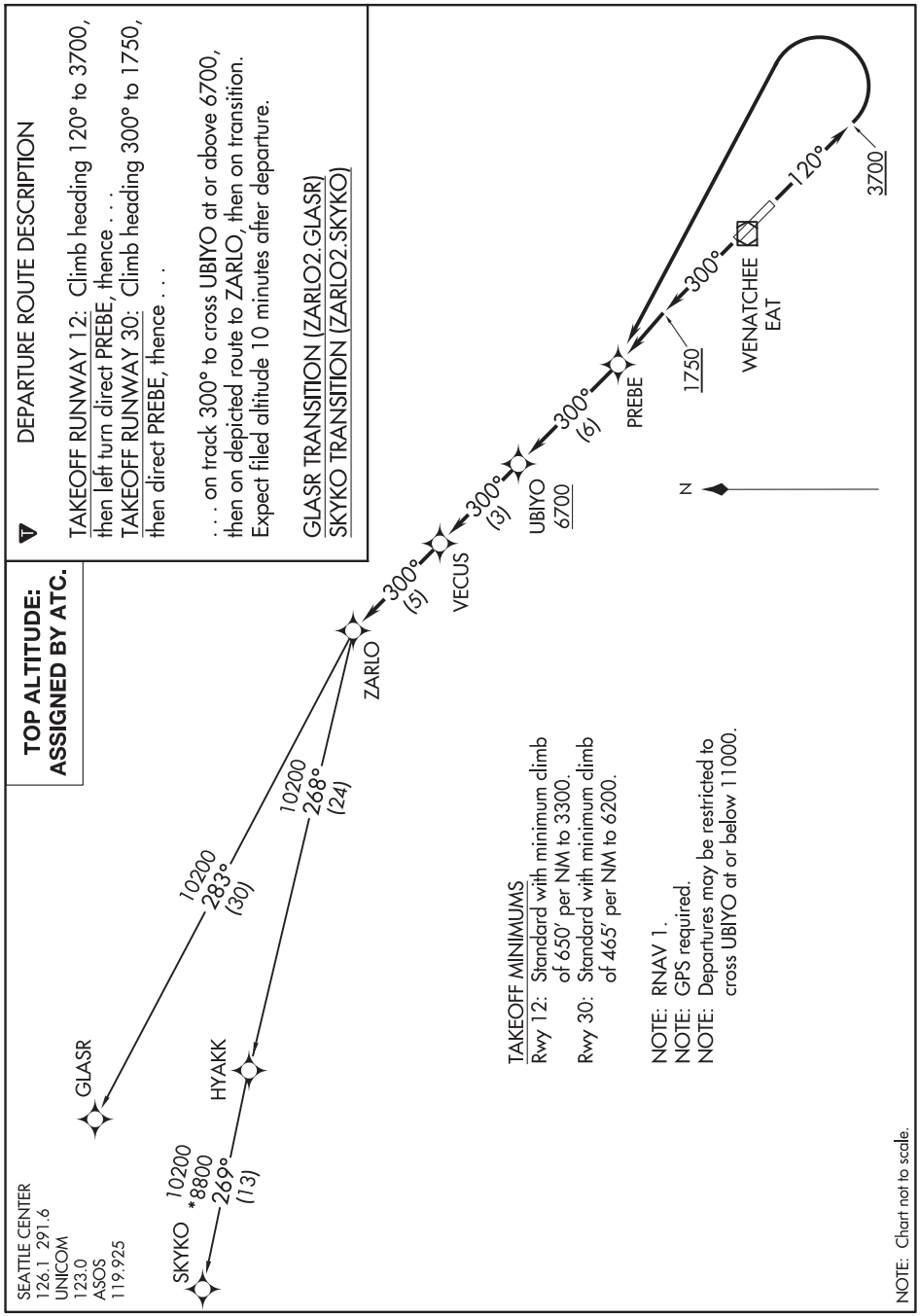


(ZARLO2.ZARLO) 18144

# ZARLO TWO DEPARTURE (RNAV)

AL-641 (FAA)

PANGBORN MEMORIAL (EAT)
WENATCHEE, WASHINGTON




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

ZARLO TWO DEPARTURE (RNAV)

(ZARLO2.ZARLO) 10NOV16

WENATCHEE, WASHINGTON
PANGBORN MEMORIAL (EAT)

| LOC I-LOW | APP CRS | Rwy ldg | 8399 |
|---|---|---|---|
| 110.7 | 012° | TDZE | 6649 |
| | | Apt Elev | 6649 |

# ILS or LOC RWY 1
## YELLOWSTONE (WYS)

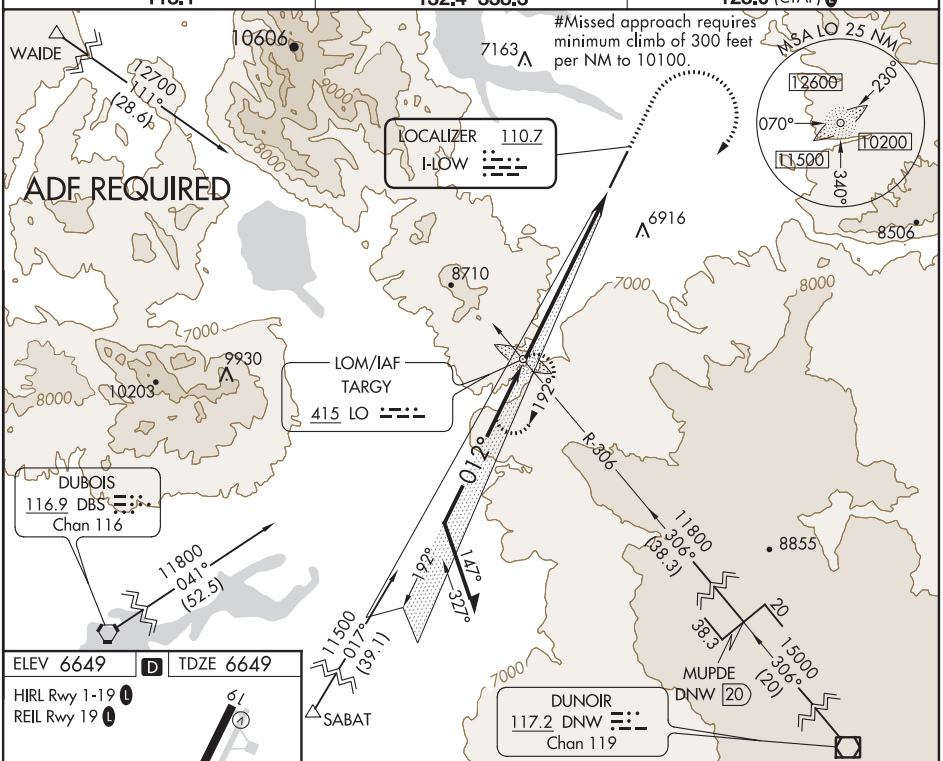
T
A NA
-19°C

Obtain local altimeter setting on CTAF, when not received procedure NA. Inoperative table does not apply to S-LOC 1 Cat A. ADF required. For inoperative MALSR, increase S-ILS 1 all Cats visibility to 2 ¾ mile.

MALSR

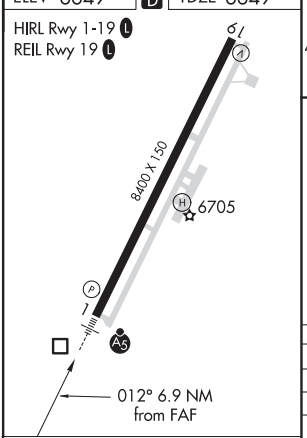
MISSED APPROACH: Climb to 9000, then climbing right turn to 10100 direct TARGY LOM and hold.

| AWOS-3P | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 118.1 | 132.4 338.3 | 123.0 (CTAF) L |

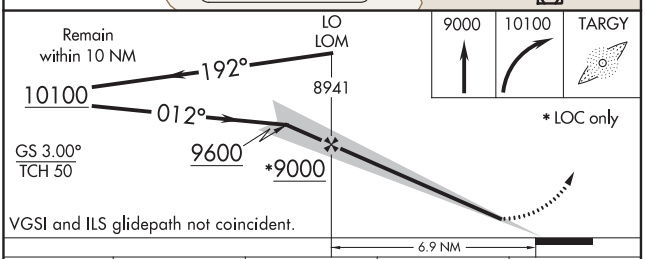



ELEV 6649 D TDZE 6649

HIRL Rwy 1-19 L
REIL Rwy 19 L




| 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 1# | 6849-½ 200 (200-½) | | | |
| S-ILS 1 | 7449-2¼ 800 (800-2¼) | | | |
| S-LOC 1 | 7780-1¼ 1131 (1200-1¼) | 7780-1 1131 (1200-1) | 7780-2½ 1131 (1200-2½) | |
| C CIRCLING | 7780-1¼ 1131 (1200-1¼) | 7780-1½ 1131 (1200-1½) | 7780-3 1131 (1200-3) | 8020-3 1371 (1400-3) |



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

WEST YELLOWSTONE, MONTANA | AL-632 (FAA) | 20142

# RNAV (GPS) RWY 1
## YELLOWSTONE (WYS)

| WAAS CH 86916 W01A | APP CRS 012° | Rwy ldg 8400 TDZE 6649 Apt Elev 6649 |
|---|---|---|

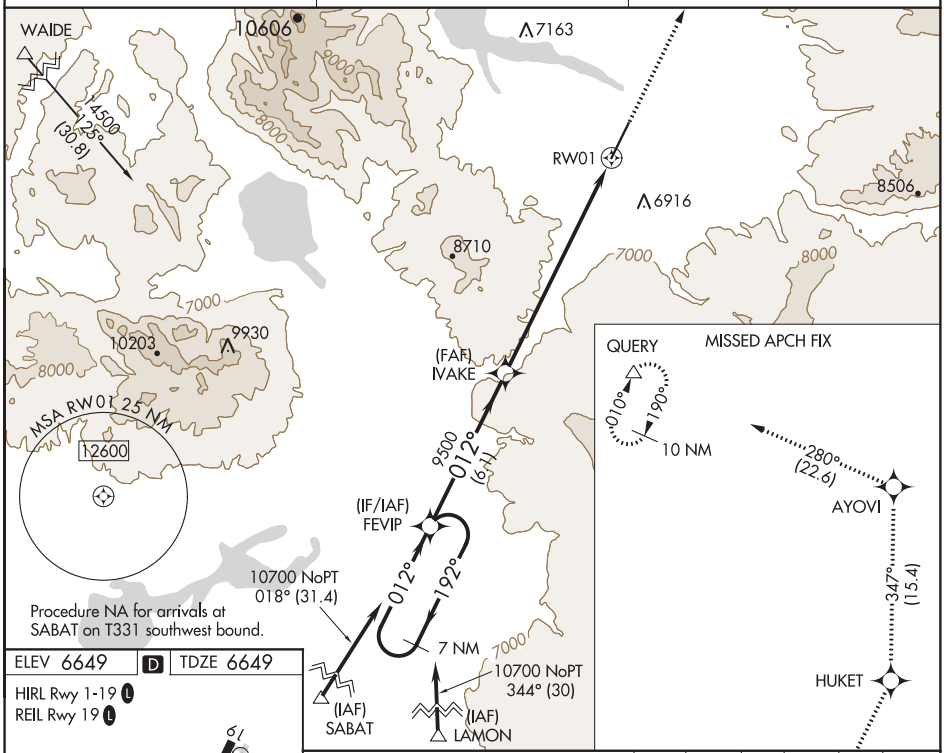
T NA -19°C

DME/DME RNP-0.3 NA. Obtain local altimeter setting on CTAF; when not received, procedure NA. Inop table does not apply to LNAV Cats A and B.

MALSR

MISSED APPROACH: Climb to 15000 direct HUKET and on track 347° to AYOVI and on track 280° to QUERY and hold.

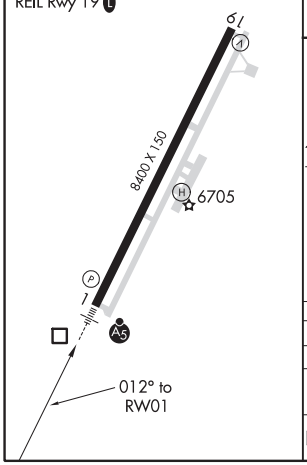
| AWOS-3P | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 118.1 | 132.4 338.3 | 123.0 (CTAF) L |

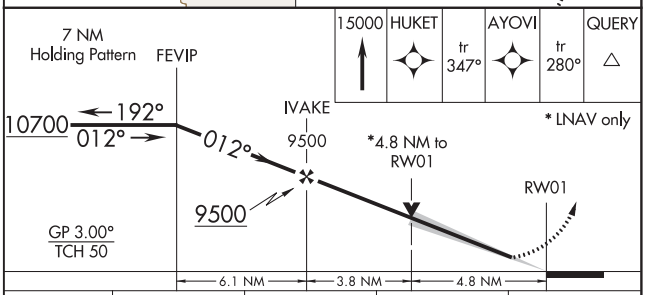



Procedure NA for arrivals at SABAT on T331 southwest bound.

ELEV 6649 | D | TDZ 6649

HIRL Rwy 1-19 L
REIL Rwy 19 L




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 6849-½ 200 (200-½) | | | |
| LNAV MDA | 8240-1¼ 1591 (1600-1¼) | 8240-1½ 1591 (1600-1½) | 8240-2½ 1591 (1600-2½) | |
| C CIRCLING | 8240-1¼ 1591 (1600-1¼) | 8240-1½ 1591 (1600-1½) | 8240-3 1591 (1600-3) | |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

# RNAV (GPS) RWY 19
## YELLOWSTONE (WYS)

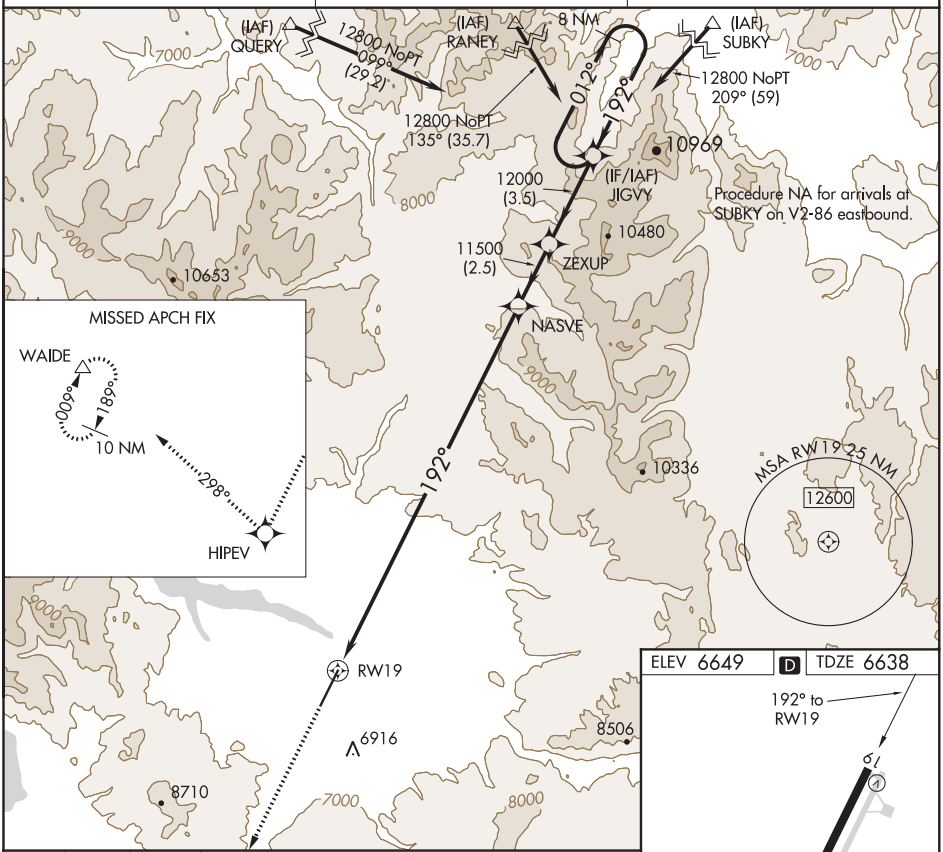
| WAAS CH 82016 W19A | APP CRS 192° | Rwy ldg 8399 TDZE 6638 Apt Elev 6649 |
|---|---|---|

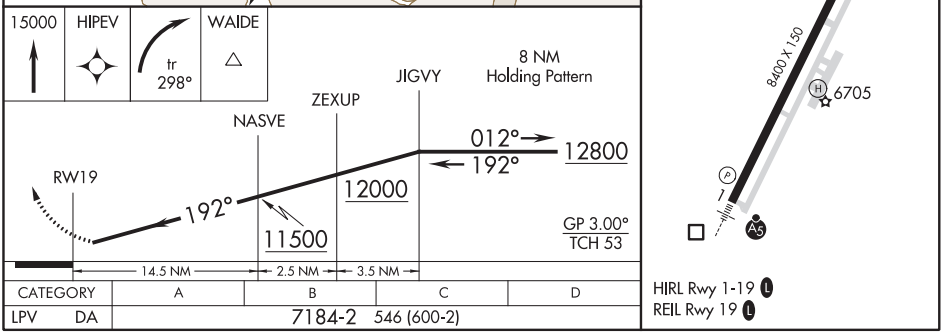
NA
-19°C

DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA. Obtain local altimeter setting on CTAF, when not received, procedure NA.

MISSED APPROACH: Climb to 15000 direct HIPEV and right turn on track 298° to WAIDE and hold, continue climb-in-hold to 15000.

| AWOS-3P | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 118.1 | 132.4 338.3 | 123.0 (CTAF) L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 7184-2 546 (600-2) | | | |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

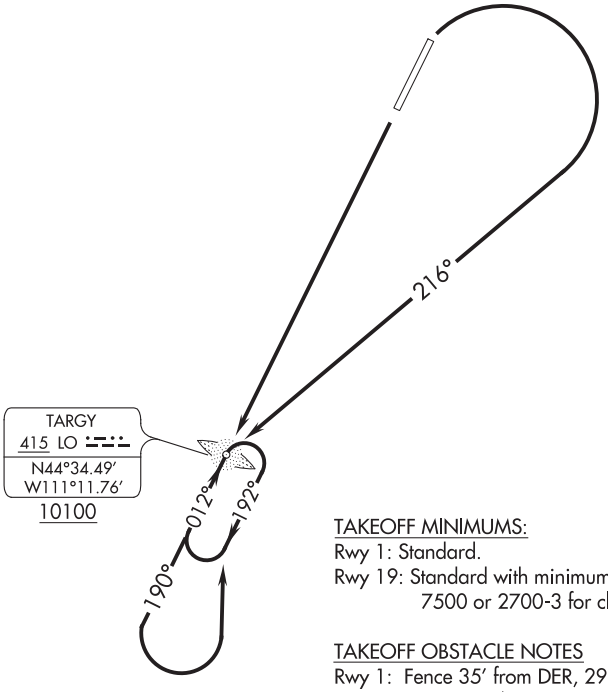
(LOW1.LOW) 16147

# TARGY ONE DEPARTURE (OBSTACLE)

SL-632 (FAA)

YELLOWSTONE (WYS)
WEST YELLOWSTONE, MONTANA

SALT LAKE CENTER
132.4 338.30
CTAF
123.0




TAKEOFF MINIMUMS:
Rwy 1: Standard.
Rwy 19: Standard with minimum climb of 270′/NM to 7500 or 2700-3 for climb in visual conditions.

TAKEOFF OBSTACLE NOTES
Rwy 1: Fence 35′ from DER, 298′ left of centerline, 14′ AGL/6635′ MSL.
Rwy 19: Tree 487′ from DER, 581′ right of centerline, 17′ AGL/6665′ MSL.

NOTE: ADF required.
NOTE: RADAR required.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 1: Climbing right turn to intercept course 216° to TARGY LOM, then on bearing 190° outbound and a left turn direct to cross TARGY LOM at or above 10100. Thence. . . .

TAKEOFF RUNWAY 19: Climb direct to TARGY LOM then outbound bearing 190° and a left turn direct to cross TARGY LOM at or above 10100. Thence...or climb in visual conditions to cross Yellowstone Airfield at or above 9200, then direct TARGY LOM at or above 10100. Thence. . . .

. . . .continue climb in holding to 12000 at TARGY LOM (Hold S, RT 012° inbound), expect RADAR vectors with Salt Lake Center.


NW-1, 05 NOV 2020 to 31 DEC 2020

TARGY ONE DEPARTURE (OBSTACLE)
(LOW1.LOW) 09FEB12

WEST YELLOWSTONE, MONTANA
YELLOWSTONE (WYS)

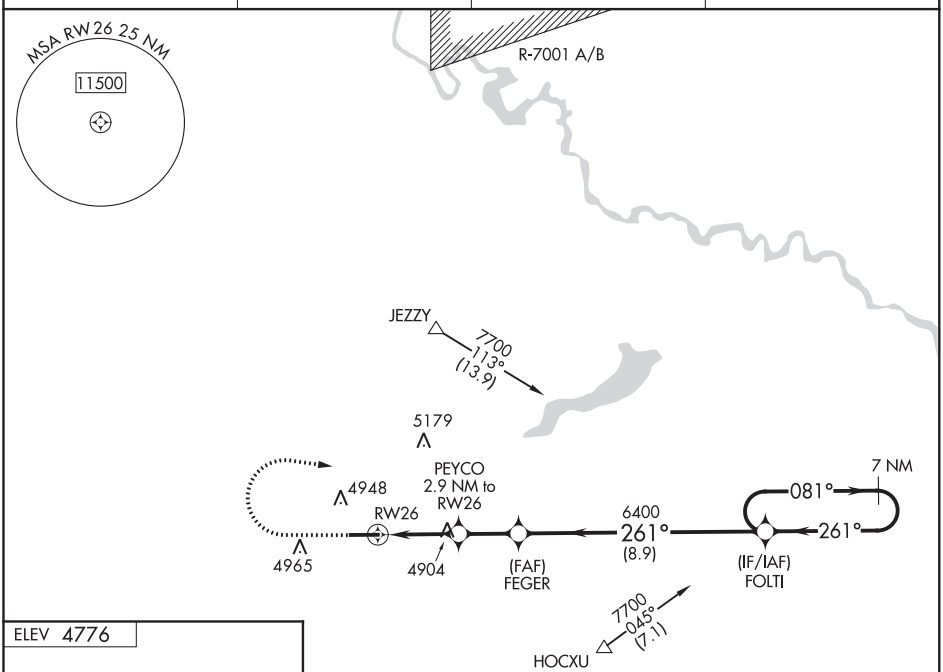
# RNAV (GPS)-A
## PHIFER AIRFIELD (EAN)

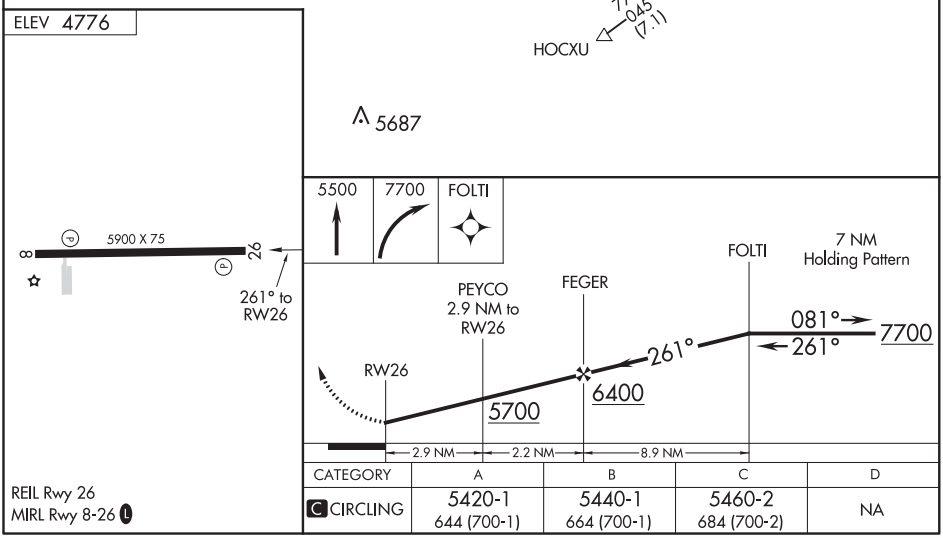
| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 261° | TDZE | N/A |
| | Apt Elev | 4776 |

T NA Use Torrington altimeter setting; when not received, use Western Nebraska Rgnl/ William B Heilig Field altimeter setting and increase all MDA 100 feet and Cat C visibility ¼ mile. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM not authorized. Night landing: Rwy 8 NA.

MISSED APPROACH: Climb to 5500 then climbing right turn to 7700 direct FOLTI and hold.

| AWOS-3PT | TOR ASOS | DENVER CENTER | CTAF |
|---|---|---|---|
| 121.125 | 118.375 | 135.6 363.025 | 122.9 L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 5420-1<br>644 (700-1) | 5440-1<br>664 (700-1) | 5460-2<br>684 (700-2) | NA |

REIL Rwy 26
MIRL Rwy 8-26 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

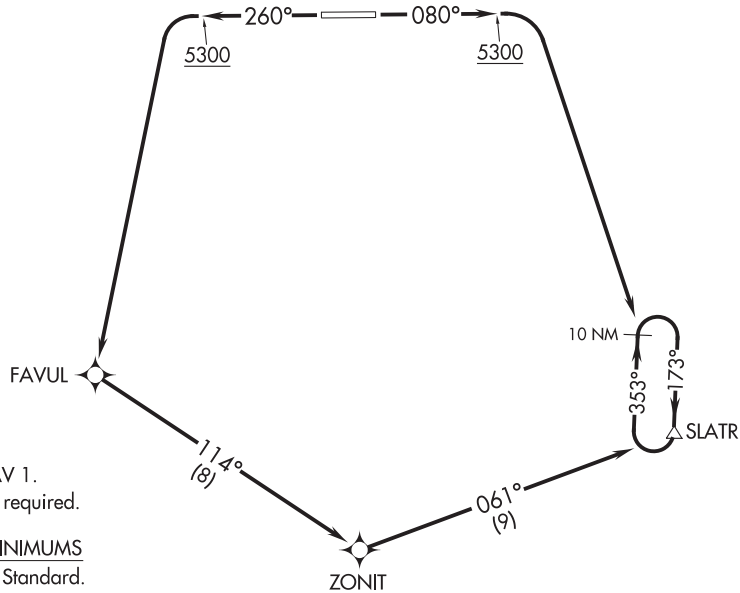
(SLATR1.SLATR) 20030

# SLATR ONE DEPARTURE (OBSTACLE) (RNAV)

AL-10272 (FAA)

PHIFER AIRFIELD (EAN)
WHEATLAND, WYOMING

DENVER CENTER
135.6 363.025
CASPER RADIO
122.2




NOTE: RNAV 1.
NOTE: GPS required.

TAKEOFF MINIMUMS
Rwys 8, 26: Standard.

TAKEOFF OBSTACLE NOTES
Rwy 26: Vehicles on road 7′ from DER, 153′ right of centerline, 4781′ MSL.
Buildings, pole, fence, vertical point beginning 18′ from DER, 186′ left of centerline, up to 17′ AGL/4796′ MSL.
Vehicles on road 60′ from DER, 150′ right of centerline, 4786′ MSL.
Trees, vehicles on road beginning 61′ from DER, 151′ right of centerline, up to 4814 MSL.
Pole, fence, terrain, tank, vehicles on road, tree beginning 149′ from DER, 137′ left of centerline, up to 25′ AGL/4804′ MSL.
Trees, poles beginning 365′ from DER, 7′ right of centerline, up to 4823′ MSL.
Poles beginning 562′ from DER, 353′ left of centerline, up to 38′ AGL/4817′ MSL.
Trees, poles, buildings, transmission lines beginning 779′ from DER, 38′ left of centerline, up to 4825′ MSL.
Trees, transmission lines, poles beginning 1121′ from DER, 18′ left of centerline, up to 4838′ MSL.
Trees, pole, transmission line beginning 1192′ from DER, 26′ right of centerline, up to 4827′ MSL.
Trees beginning 1328′ from DER, 51′ right of centerline, up to 4834′ MSL.
Trees beginning 1552′ from DER, 55′ right of centerline, up to 4837′ MSL.
Tree 1627′ from DER, 73′ left of centerline, 4842′ MSL.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 8: Climb on heading 080° to 5300, then climbing right turn to 9500 direct SLATR, thence . . . .
TAKEOFF RUNWAY 26: Climb on heading 260° to 5300, then climbing left turn direct FAVUL, then on depicted route to SLATR, thence . . . .

. . . . continue climb in SLATR holding pattern to MEA for assigned route of flight.




NW-1, 05 NOV 2020 to 31 DEC 2020

OAK HARBOR, WASHINGTON

# ILS or LOC/DME RWY 14

| LOC I-NUW | APCH CRS | Rwy ldg 8000 |
|---|---|---|
| 110.1 | 137° | TDZE 39 |
| | | Arpt Elev 47 |

AL-451 [USN]

WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

* When ALS inop, increase vis to ¾ mile.
** When ALS inop, increase CAT AB vis to 1 mile; CAT CDE vis to 1⅛ miles.

ALSF-2

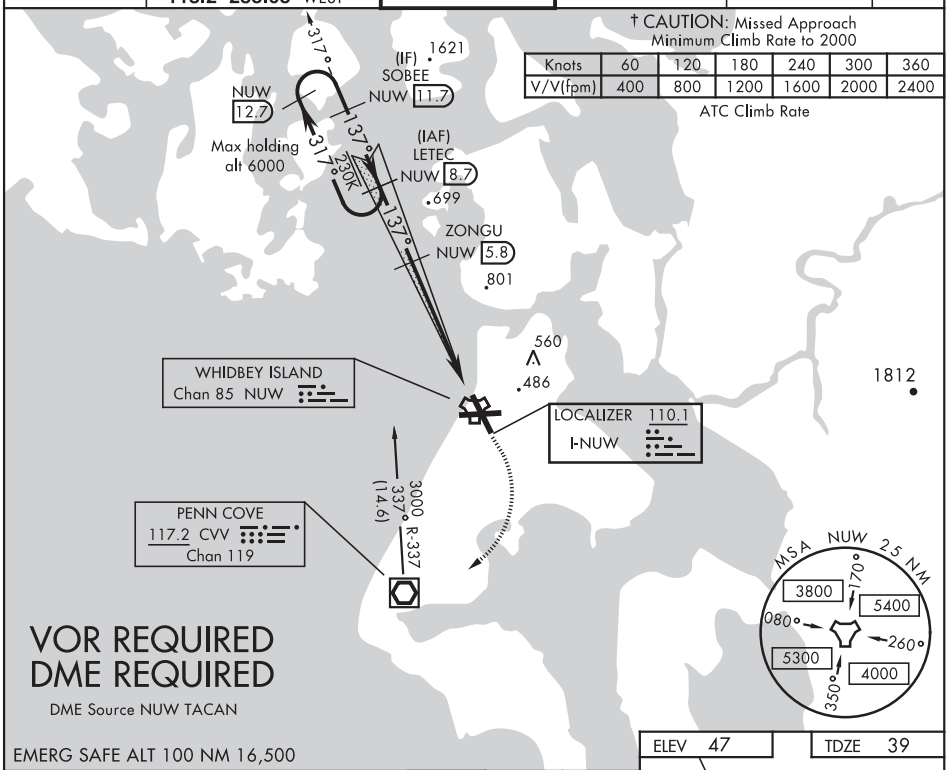
†MISSED APPROACH: Climb to 2000 via hdg 137°, then climbing right turn to 3000, direct CVV VOR/DME, then via CVV R-337 to LETEC and hold.

| ATIS | WHIDBEY APP CON | WHIDBEY TOWER | GND CON | CLNC DEL | ASR/PAR |
|---|---|---|---|---|---|
| 134.15 281.5 | 120.7 270.8 EAST<br>118.2 285.65 WEST | 127.9 340.2 | 121.75 336.4 | 135.1 379.9 | |

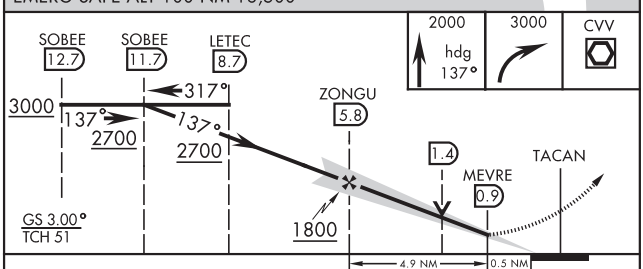
† CAUTION: Missed Approach Minimum Climb Rate to 2000

| Knots | 60 | 120 | 180 | 240 | 300 | 360 |
|---|---|---|---|---|---|---|
| V/V(fpm) | 400 | 800 | 1200 | 1600 | 2000 | 2400 |

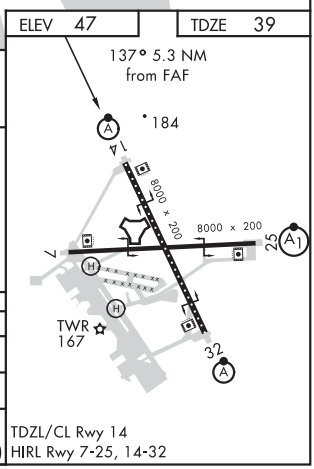
ATC Climb Rate




EMERG SAFE ALT 100 NM 16,500




| CATEGORY | A | B | C | D | E |
|---|---|---|---|---|---|
| S-ILS 14 * | 239-½ 200 (200-½) | | | | |
| S-LOC 14 ** | 420-½ 381 (400-½) | | 420-⅝ 381 (400-⅝) | | |
| C CIRCLING | 700-1<br>653 (700-1) | 800-1<br>753 (800-1) | 900-2½<br>853 (900-2½) | 900-2¾<br>853 (900-2¾) | 1200-3<br>1153(1200-3) |




TDZL/CL Rwy 14
HIRL Rwy 7-25, 14-32

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

OAK HARBOR, WASHINGTON

48°21′N-122°39′W

WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

Amdt 3 21MAY20

ILS or LOC/DME RWY 14

20142

OAK HARBOR, WASHINGTON

# RNAV (GPS) RWY 7

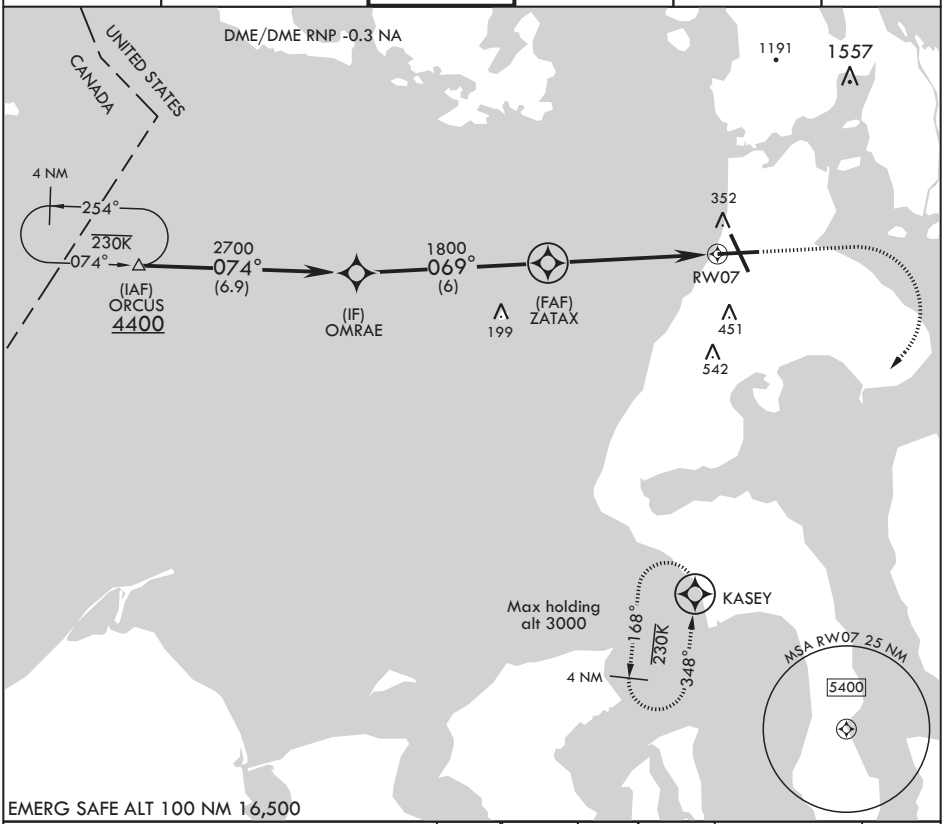
| APCH CRS | Rwy ldg | 8000 |
|---|---|---|
| 069° | TDZE | 25 |
| | Arpt Elev | 47 |

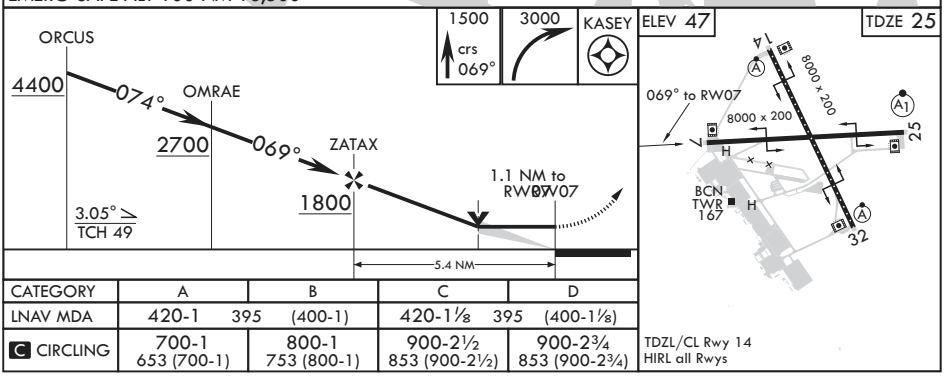
AL-451 (USN)

WHIDBEY ISLAND NAS (KNUW)

MISSED APPROACH: Climb to 1500, then climbing right turn to 3000 direct KASEY and hold. Do not exceed 230 KIAS until turn completion.

| ATIS | APP CON/DEP CON | TOWER | GND CON | CLNC DEL | ASR/PAR |
|---|---|---|---|---|---|
| 134.15 281.5 | 118.2 285.65 W<br>120.7 270.8 E | 127.9 340.2 | 121.75 336.4 | 135.1 379.9 | |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 420-1 395 (400-1) | | 420-1⅛ 395 (400-1⅛) | |
| C CIRCLING | 700-1<br>653 (700-1) | 800-1<br>753 (800-1) | 900-2½<br>853 (900-2½) | 900-2¾<br>853 (900-2¾) |



NW-1, 05 NOV 2020 to 31 DEC 2020

OAK HARBOR, WASHINGTON

48°21'N - 122°39'W

WHIDBEY ISLAND NAS (KNUW)

Amdt 1 21MAY20
TERPS

RNAV (GPS) RWY 7

OAK HARBOR, WASHINGTON

# RNAV (GPS) RWY 14

| WAAS CH 50004 W14A | APCH CRS 137° | Rwy ldg 8000<br>TDZE 39<br>Arpt Elev 47 |
|---|---|---|

AL-451 (USN)

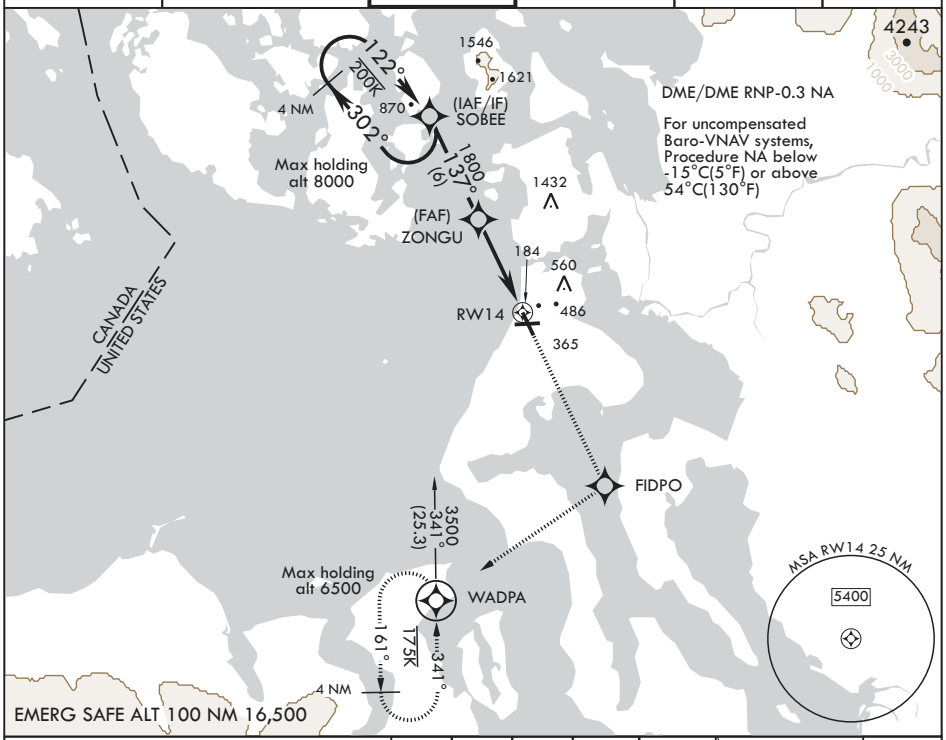
WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

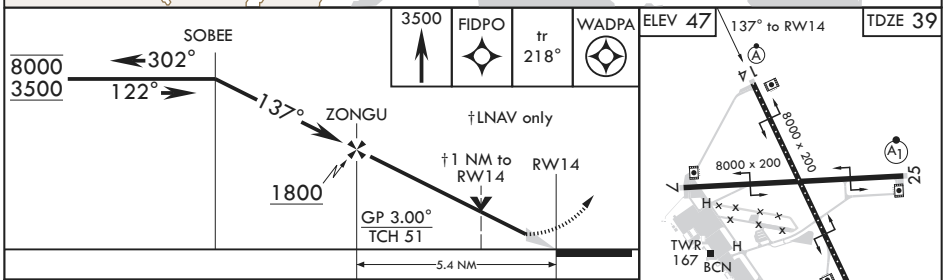
T * When ALS inop, increase CAT ABCD vis to 3/4 mile.
** When ALS inop, increase CAT A vis to 3/4 mile, CAT BCD vis to 7/8 mile.
*** When ALS inop, increase CAT AB vis to 1 mile, CAT CD vis to 1 1/8 miles.

ALSF-2

MISSED APPROACH: Climb to 3500 direct FIDPO, and on track 218° to WADPA and hold.

| ATIS | APP CON/DEP CON | TOWER | GND CON | CLNC DEL | ASR/PAR |
|---|---|---|---|---|---|
| 134.15 281.5 | 118.2 285.65 W<br>120.7 270.8 E | 127.9 340.2 | 121.75 336.4 | 135.1 379.9 | |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA* | 239-½ 200 (200-½) | | | |
| LNAV/VNAV DA** | 292-½<br>253 (300-½) | 313-½<br>274 (300-½) | 327-½<br>288 (300-½) | 342-½<br>303 (700-½) |
| LNAV MDA*** | 420-½ 381 (400-½) | | 420-⅝ 381 (400-⅝) | |
| C CIRCLING | 700-1<br>653 (700-1) | 800-1<br>753 (800-1) | 900-2½<br>853 (900-2½) | 900-2¾<br>853 (900-2¾) |

HIRL all Rwys
TDZL/CL Rwy 14



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

20142

OAK HARBOR, WASHINGTON

# RNAV (GPS) RWY 25

WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

| WAAS CH 44487 W25A | APCH CRS 249° | Rwy ldg 8000<br>TDZE 28<br>Arpt Elev 47 |
|---|---|---|

AL-451 (USN)

T * When ALS inop, increase vis to 3/4 mile.
** When ALS inop, increase vis to 1 7/8 miles.
*** When ALS inop, increase CAT AB vis to 1 mile, CAT CD vis to 1 3/4 miles.

ALSF-1

MISSED APPROACH: Climb to 3000 direct TOCUY and track 259° to NEDOE and hold, continue climb in hold.

| ATIS | APP CON/DEP CON | TOWER | GND CON | CLNC DEL | ASR/PAR |
|---|---|---|---|---|---|
| 134.15 281.5 | 118.2 285.65 W<br>120.7 270.8 E | 127.9 340.2 | 121.75 336.4 | 135.1 379.9 | |

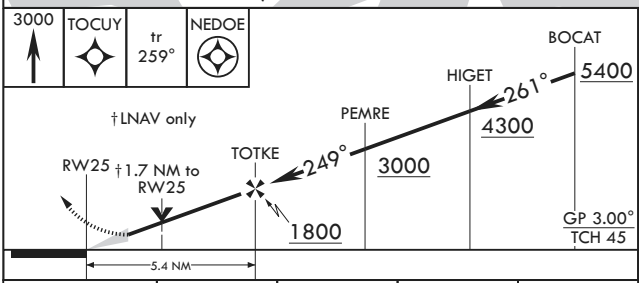
DME/DME RNP-0.3 NA

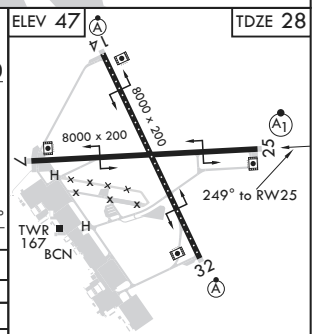
For uncompensated Baro-VNAV systems, Procedure NA below -15°C (5°F) or above 54°C (130°F).

4 NM
Max holding alt 3000
259°
079°
NEDOE
TOCUY
560
486
338
RW25
486
499
(FAF) TOTKE
1800
249°
(6)
(IF) PEMRE
(3.9)
3000
1812
HIGET
4300
261°
(3.9)
(IAF) BOCAT
5400
3964

MSA RW25 25 NM
5800

EMERG SAFE ALT 100 NM 16,500




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA* | 278-½ 250 (300-½) | | | |
| LNAV/VNAV DA** | 685-1⅜ 657 (700-1⅜) | | | |
| LNAV MDA*** | 620-½ 592 (600-½) | | 620-1¼ 592 (600-1¼) | |
| C CIRCLING | 700-1 653 (700-1) | 800-1 753 (800-1) | 900-2½ 853 (900-2½) | 900-2¾ 853 (900-2¾) |

HIRL all Rwys
TDZL/CL Rwy 14



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

OAK HARBOR, WASHINGTON

# RNAV (GPS) RWY 32

| APCH CRS | Rwy ldg | 8000 |
|---|---|---|
| 317° | TDZE | 47 |
| | Arpt Elev | 47 |

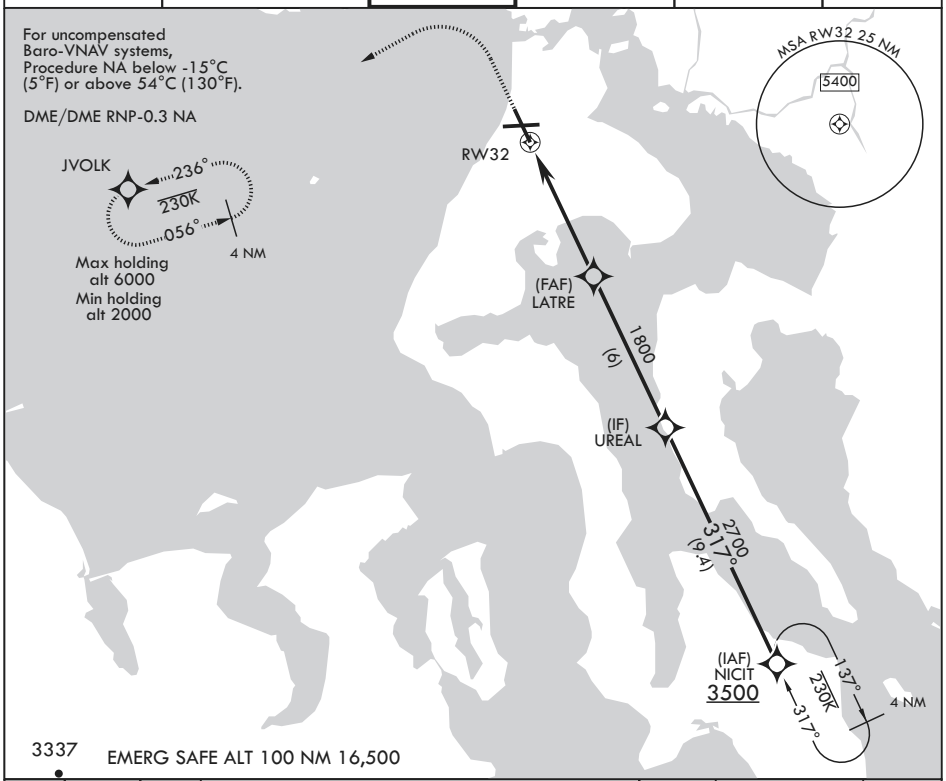
AL-451 (USN) WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

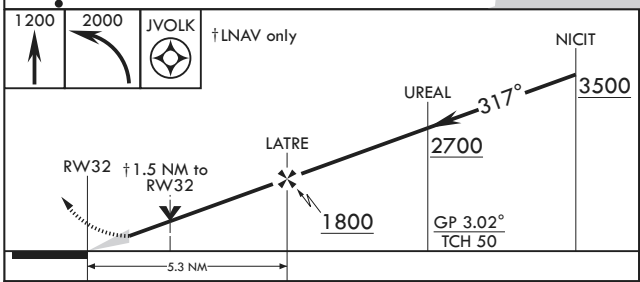
* When ALS inop, increase vis to 1 3/8 miles.
** When ALS inop, increase CAT AB vis to 1 mile, CAT CD vis to 1 1/2 miles.

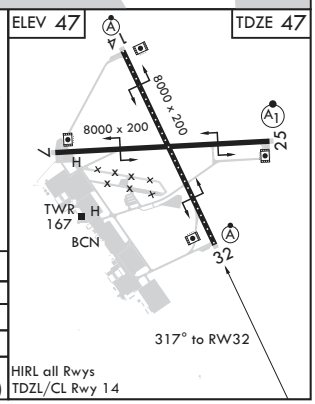
ALSF-2

MISSED APPROACH: Climb to 1200 then climbing left turn to 2000 direct JVOLK and hold.

| ATIS | APP CON/DEP CON | TOWER | GND CON | CLNC DEL | ASR/PAR |
|---|---|---|---|---|---|
| 134.15 281.5 | 118.2 285.65 W<br>120.7 270.8 E | 127.9 340.2 | 121.75 336.4 | 135.1 379.9 | |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV/VNAV DA* | 492-⅞ 445 (500-⅞) | | | |
| LNAV MDA** | 580-½ 533 (600-½) | | 580-1 533 (600-1) | |
| C CIRCLING | 700-1<br>653 (700-1) | 800-1<br>753 (800-1) | 900-2½<br>853 (900-2½) | 900-2¾<br>853 (900-2¾) |

OAK HARBOR, WASHINGTON 48°21'N - 122°39'W WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

Amdt 1 21MAY20
TERPS

RNAV (GPS) RWY 32

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

OAK HARBOR, WASHINGTON

20142

# TACAN RWY 7

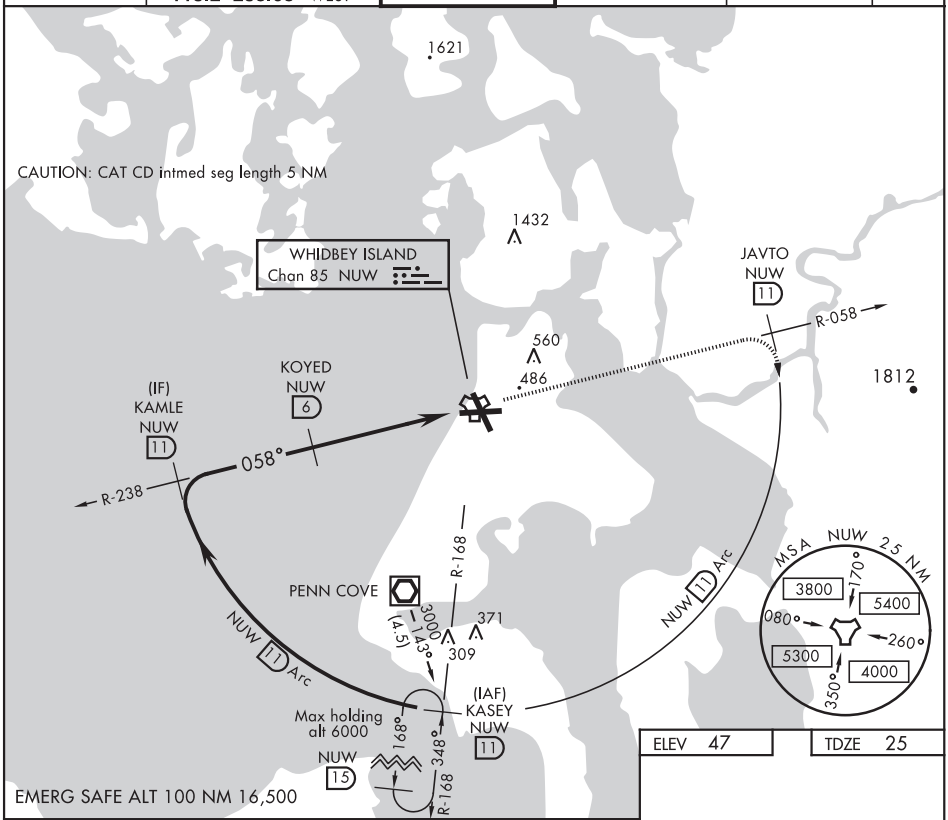
| TACAN | APCH CRS | Rwy ldg | 8000 |
|---|---|---|---|
| NUW Chan 85 | 058° | TDZE | 25 |
| | | Arpt Elev | 47 |

AL-451 [USN]

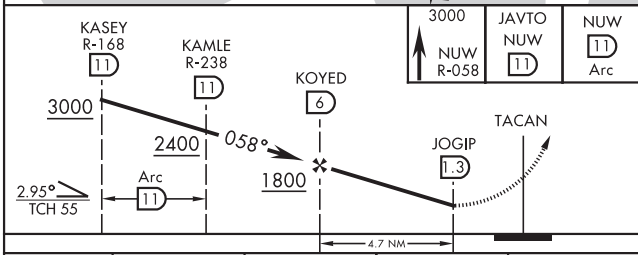
WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

MISSED APPROACH: Climb to 3000 via NUW TACAN R-058 to JAVTO, then arc SE of NUW via 11 DME Arc to KASEY and hold.

| ATIS | WHIDBEY APP CON | WHIDBEY TOWER | GND CON | CLNC DEL | ASR/PAR |
|---|---|---|---|---|---|
| 134.15 281.5 | 120.7 270.8 EAST<br>118.2 285.65 WEST | 127.9 340.2 | 121.75 336.4 | 135.1 379.9 | |

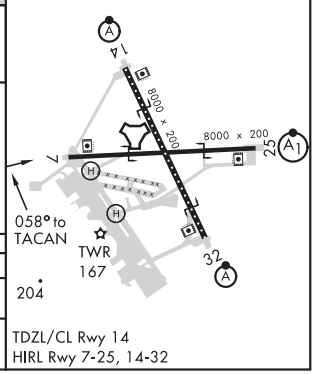



| 3000 | JAVTO | NUW |
|---|---|---|
| NUW R-058 | NUW 11 | 11 Arc |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-7 | 400-1 375 (400-1) | | | |
| C CIRCLING | 760-1<br>713 (800-1) | 800-1<br>753 (800-1) | 900-2½<br>853 (900-2½) | 900-2¾<br>853 (900-2¾) |

| ELEV | 47 | TDZE | 25 |
|---|---|---|---|




TDZL/CL Rwy 14
HIRL Rwy 7-25, 14-32




NW-1, 05 NOV 2020 to 31 DEC 2020

OAK HARBOR, WASHINGTON

# TACAN RWY 14

| TACAN NUW Chan 85 | APCH CRS 141° | Rwy ldg 8000 TDZE 39 Arpt Elev 47 |
|---|---|---|

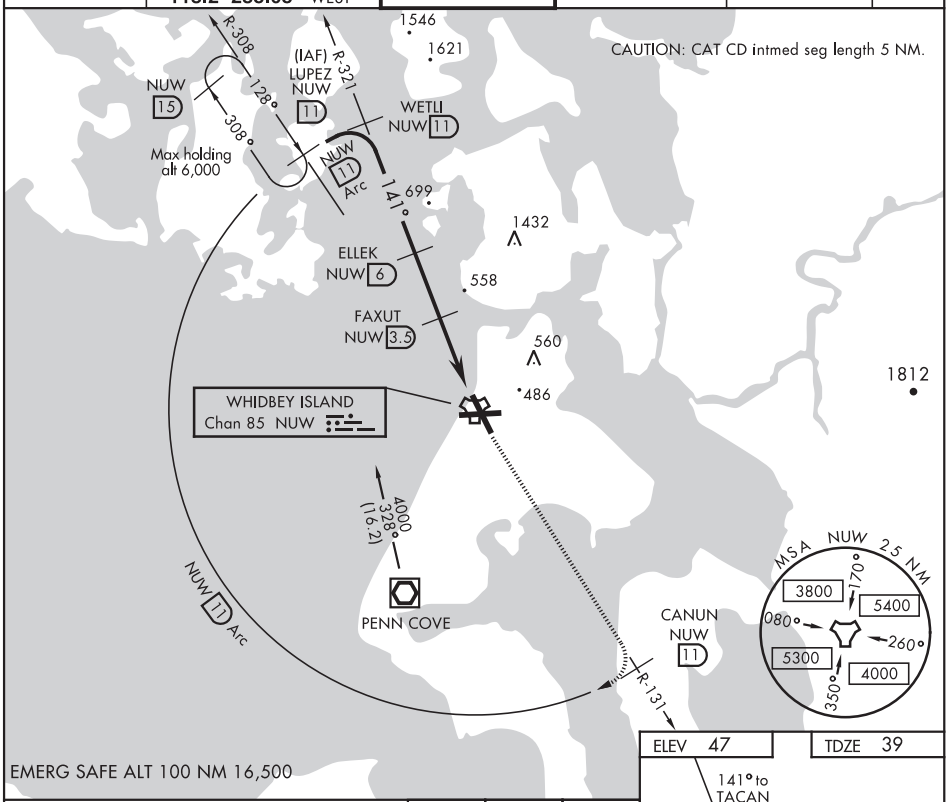
AL-451 [USN] WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

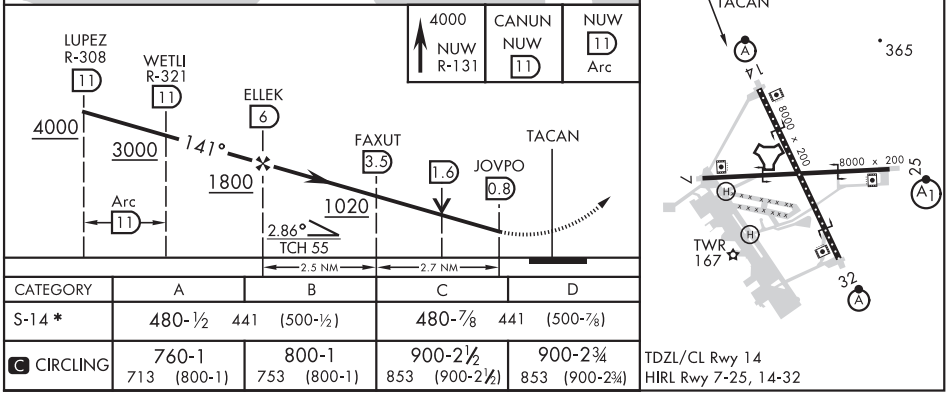
* When ALS inop, increase CAT AB vis to 1 mile, CAT CD to 1⅜ miles.

ALSF-2

MISSED APPROACH: Climb to 4000 via NUW TACAN R-131 to CANUN, then arc SW of NUW via 11 DME Arc to LUPEZ and hold.

| ATIS | WHIDBEY APP CON | WHIDBEY TOWER | GND CON | CLNC DEL | ASR/PAR |
|---|---|---|---|---|---|
| 134.15 281.5 | 120.7 270.8 EAST<br>118.2 285.65 WEST | 127.9 340.2 | 121.75 336.4 | 135.1 379.9 | |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-14 * | 480-½ 441 (500-½) | | 480-⅞ 441 (500-⅞) | |
| C CIRCLING | 760-1<br>713 (800-1) | 800-1<br>753 (800-1) | 900-2½<br>853 (900-2½) | 900-2¾<br>853 (900-2¾) |

TDZL/CL Rwy 14
HIRL Rwy 7-25, 14-32

OAK HARBOR, WASHINGTON 48°21′N-122°39′W WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

Amdt 2 21MAY20

TACAN RWY 14



NW-1, 05 NOV 2020 to 31 DEC 2020

20142

OAK HARBOR, WASHINGTON

# TACAN RWY 25

AL-451 [USN]

WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

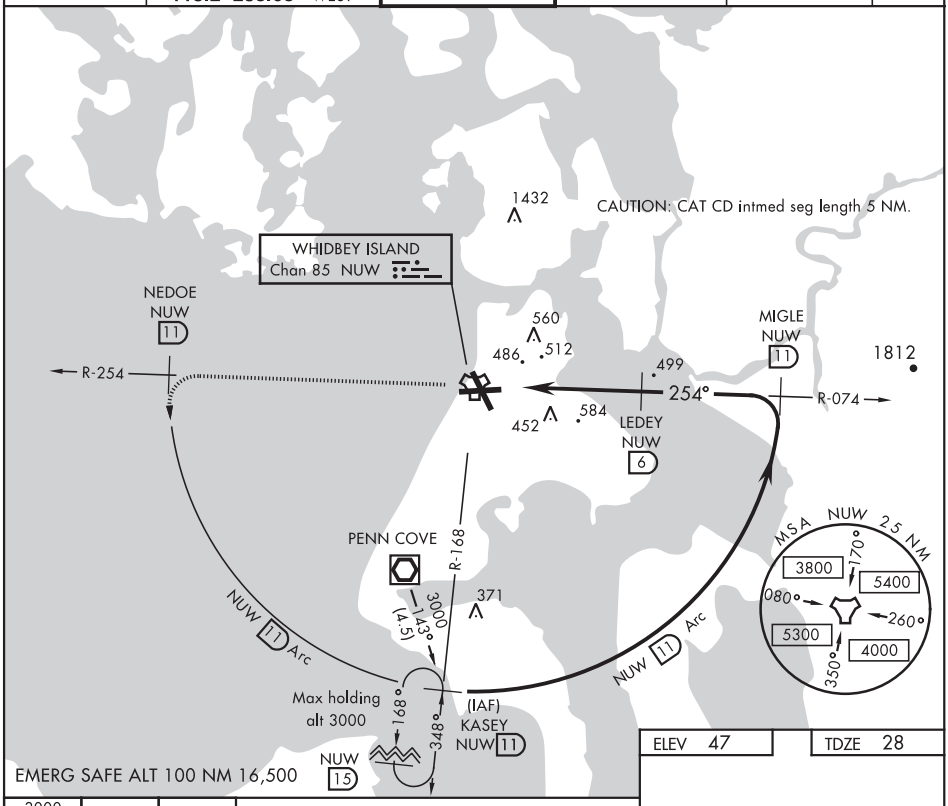
| TACAN | APCH CRS | Rwy ldg | 8000 |
|---|---|---|---|
| NUW Chan 85 | 254° | TDZE | 28 |
| | | Arpt Elev | 47 |

* When ALS inop, increase CAT AB vis to 1 mile, CAT CD to 2 miles.

ALSF-1

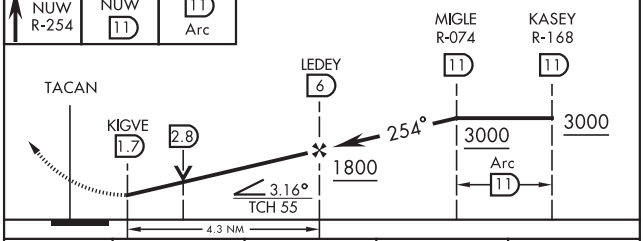
MISSED APPROACH: Climb to 3000 via NUW TACAN R-254 to NEDOE, then arc SW of NUW via 11 DME Arc to KASEY and hold.

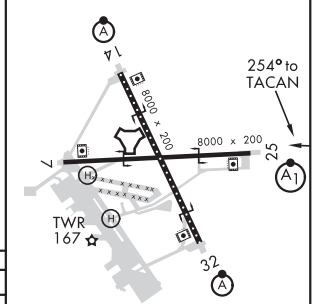
| ATIS | WHIDBEY APP CON | WHIDBEY TOWER | GND CON | CLNC DEL | ASR/PAR |
|---|---|---|---|---|---|
| 134.15 281.5 | 120.7 270.8 EAST<br>118.2 285.65 WEST | 127.9 340.2 | 121.75 336.4 | 135.1 379.9 | |




| ELEV | 47 | TDZE | 28 |
|---|---|---|---|

| 3000 | NEDOE | NUW |
|---|---|---|
| NUW R-254 | NUW 11 | 11 Arc |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-25 * | 740-⅝ 712 (700-⅝) | | 740-1⅝ 712 (700-1⅝) | |
| C CIRCLING | 760-1<br>713 (800-1) | 800-1<br>753 (800-1) | 900-2½<br>853 (900-2½) | 900-2¾<br>853 (900-2¾) |

TDZL/CL Rwy 14
HIRL Rwy 7-25, 14-32

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

OAK HARBOR, WASHINGTON

# TACAN RWY 32

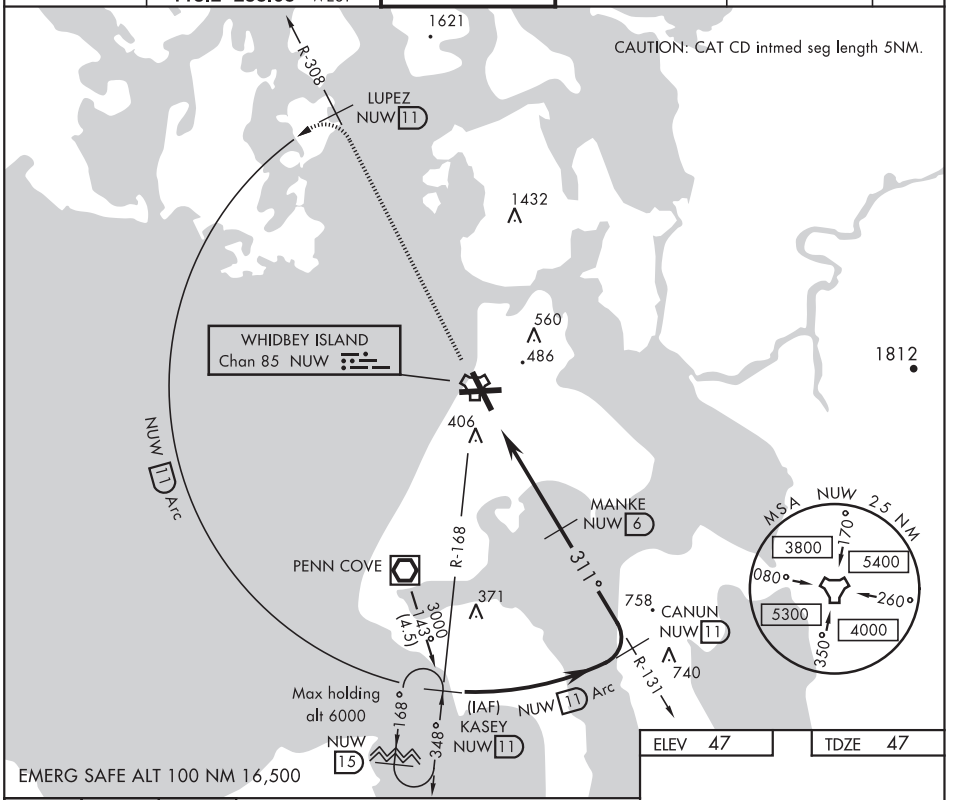
| TACAN NUW Chan 85 | APCH CRS 311° | Rwy ldg 8000 TDZE 47 Arpt Elev 47 | AL-451 [USN] | WHIDBEY ISLAND NAS (AULT FLD) (KNUW) |
|---|---|---|---|---|

* When ALS inop, increase CAT AB vis to 1 mile, CAT CD to 1¾ miles.

ALSF-2

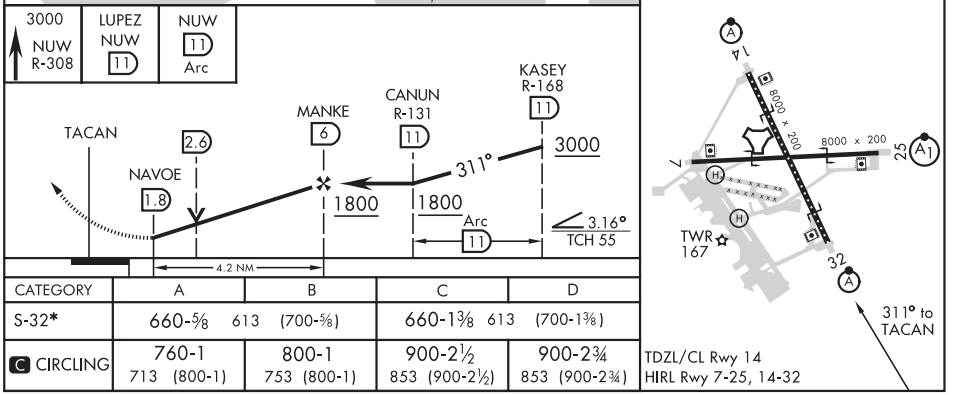
MISSED APPROACH: Climb to 3000 via NUW TACAN R-308 to LUPEZ, then Arc SW of NUW via 11 DME Arc to KASEY and hold.

| ATIS | WHIDBEY APP CON | WHIDBEY TOWER | GND CON | CLNC DEL | ASR/PAR |
|---|---|---|---|---|---|
| 134.15 281.5 | 120.7 270.8 EAST<br>118.2 285.65 WEST | 127.9 340.2 | 121.75 336.4 | 135.1 379.9 | |




NW-1, 05 NOV 2020 to 31 DEC 2020

| ELEV 47 | TDZE 47 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-32* | 660-⅝ 613 (700-⅝) | | 660-1⅜ 613 (700-1⅜) | |
| C CIRCLING | 760-1 713 (800-1) | 800-1 753 (800-1) | 900-2½ 853 (900-2½) | 900-2¾ 853 (900-2¾) |

TDZL/CL Rwy 14
HIRL Rwy 7-25, 14-32

NW-1, 05 NOV 2020 to 31 DEC 2020

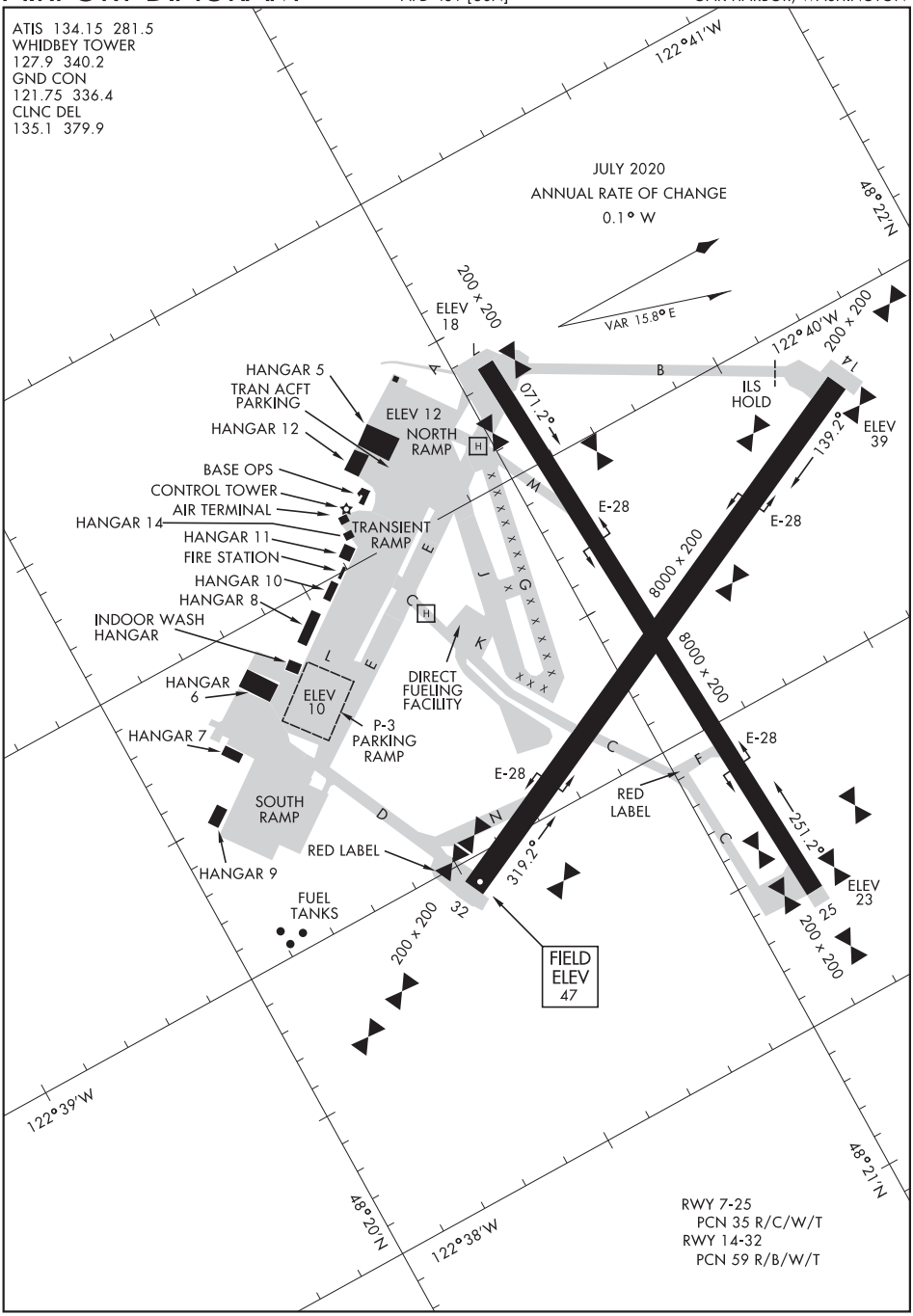
20198

# AIRPORT DIAGRAM

WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

AFD-451 [USN]

OAK HARBOR, WASHINGTON




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM

OAK HARBOR, WASHINGTON

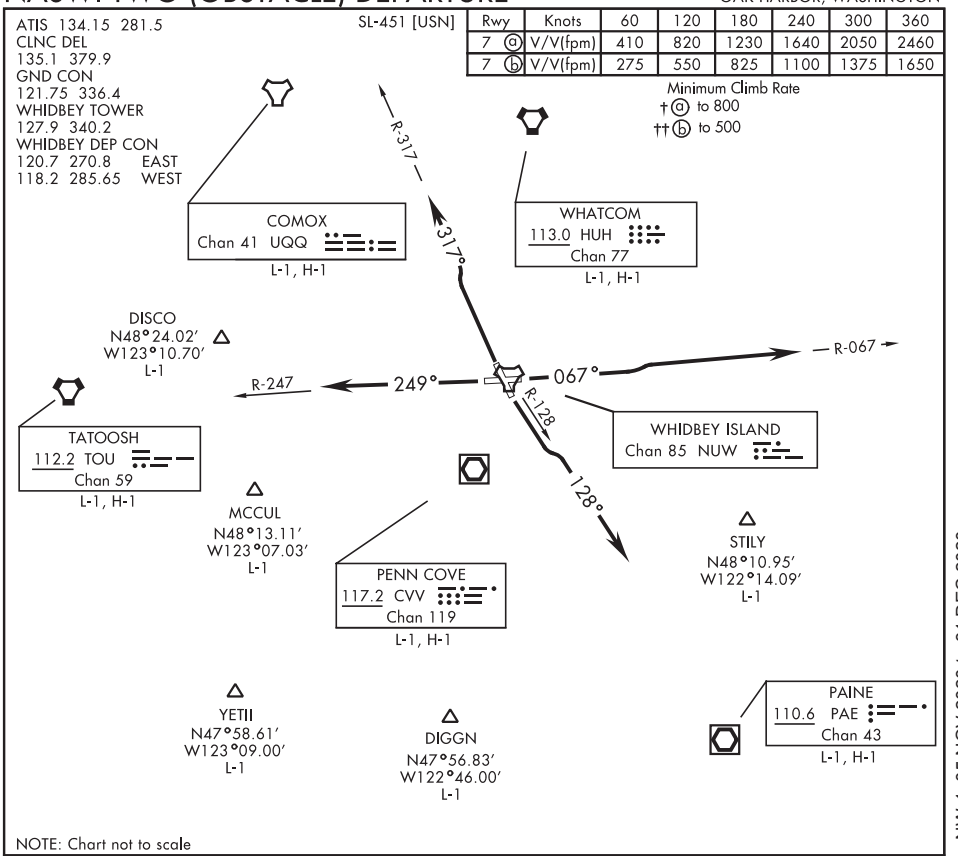
WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

# NASWI TWO (OBSTACLE) DEPARTURE



| Rwy | Knots | 60 | 120 | 180 | 240 | 300 | 360 |
|---|---|---|---|---|---|---|---|
| 7 ⓐ | V/V(fpm) | 410 | 820 | 1230 | 1640 | 2050 | 2460 |
| 7 ⓑ | V/V(fpm) | 275 | 550 | 825 | 1100 | 1375 | 1650 |

Minimum Climb Rate
†ⓐ to 800
††ⓑ to 500




NOTE: Chart not to scale

## DEPARTURE ROUTE DESCRIPTION

MILITARY DEPARTURE PROCEDURE:

†RWY 7: Climbing left turn to 2000, intercept NUW TACAN R-067, then radar vectors to assigned route.
RWY 14: Climbing left turn to 2000, intercept NUW TACAN R-128, then radar vectors to assigned route.
RWY 25: Climb to 2000, intercept NUW TACAN R-247, then radar vectors to assigned route.
RWY 32: Climb to 2000 via R-317, then radar vectors to assigned route.

All RWYS: If control instructions are not received by 10 DME of NUW TACAN, climb to 3000, intercept the NUW 11 DME ARC to join assigned route.

CIVIL DEPARTURE PROCEDURE:

††RWY 7: Climb to 2000 via heading 067°, then radar vectors to assigned route.
RWY 14: Climbing left turn to 2000 via heading 128°, then radar vectors to assigned route.
RWY 25: Climb to 2000 via heading 249°, then radar vectors to assigned route.
RWY 32: Climb to 2000 via heading 317°, then radar vectors to assigned route.

All RWYS: If control instructions are not received by 10 DME of NUW TACAN, climb to 3000, proceed direct CVV VOR/DME to join assigned route.



NW-1, 05 NOV 2020 to 31 DEC 2020

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WHIDBEY ISLAND NAS (AULT FLD) (KNUW)

# PENN COVE FIVE DEPARTURE (CVV5.CVV)

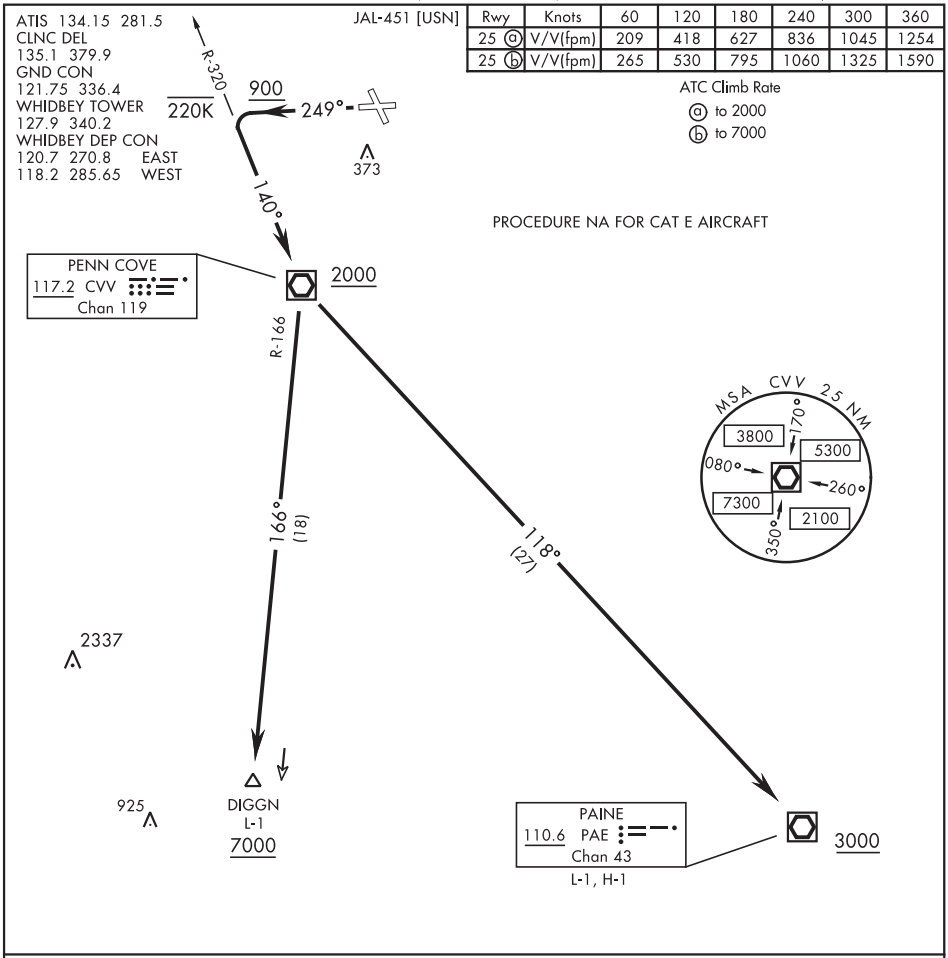
OAK HARBOR, WASHINGTON

ATIS 134.15 281.5
CLNC DEL
135.1 379.9
GND CON
121.75 336.4
WHIDBEY TOWER
127.9 340.2
WHIDBEY DEP CON
120.7 270.8 EAST
118.2 285.65 WEST

JAL-451 [USN]

| Rwy | Knots | 60 | 120 | 180 | 240 | 300 | 360 |
|---|---|---|---|---|---|---|---|
| 25 ⓐ | V/V(fpm) | 209 | 418 | 627 | 836 | 1045 | 1254 |
| 25 ⓑ | V/V(fpm) | 265 | 530 | 795 | 1060 | 1325 | 1590 |

ATC Climb Rate
ⓐ to 2000
ⓑ to 7000




## DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 25: Climb to 900 feet on heading 249°, do not exceed 220 KIAS until 900. Then climbing left turn to intercept CVV VOR/DME R-320 to CVV. Cross CVV at or above 2000 feet. Thence....

....Via assigned transition or fly heading 158° and expect vectors to join assigned route.

DIGGN TRANSITION (CVV3.DIGGN): Via CVV R-166 to DIGGN, cross DIGGN at or above 7000 feet.

PAINE TRANSITION (CVV3.PAE): Via CVV R-118 to PAE VOR/DME. Cross PAE at or above 3000 feet.

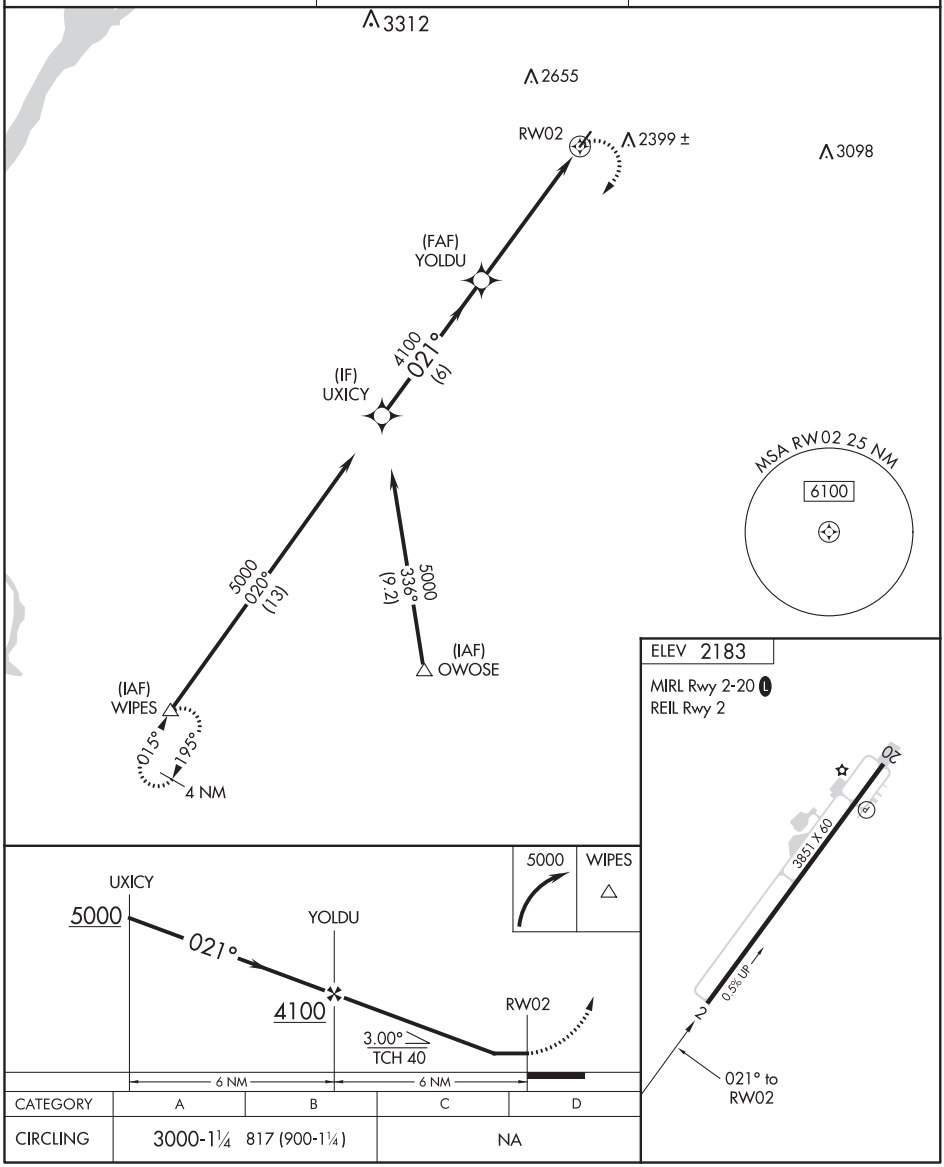
# RNAV (GPS)-A
## WILBUR (2S8)

| APP CRS | Rwy ldg | N/A |
|---|---|---|
| 021° | TDZE | N/A |
| | Apt Elev | 2183 |

T NA Circling NA at night. Use Moses Lake/Grant Co Intl altimeter setting; when not received, use Ephrata Muni altimeter setting and increase all MDAs 20 feet. DME/DME RNP-0.3 NA. Helicopter visibility reduction below 1 SM not authorized.

MISSED APPROACH: Climbing right turn to 5000 direct WIPES and hold.

| AWOS-2 | GRANT COUNTY APP CON ★ | CTAF |
|---|---|---|
| 124.175 | 126.4 379.95 | 122.9 L |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| CIRCLING | 3000-1¼ 817 (900-1¼) | | NA | |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

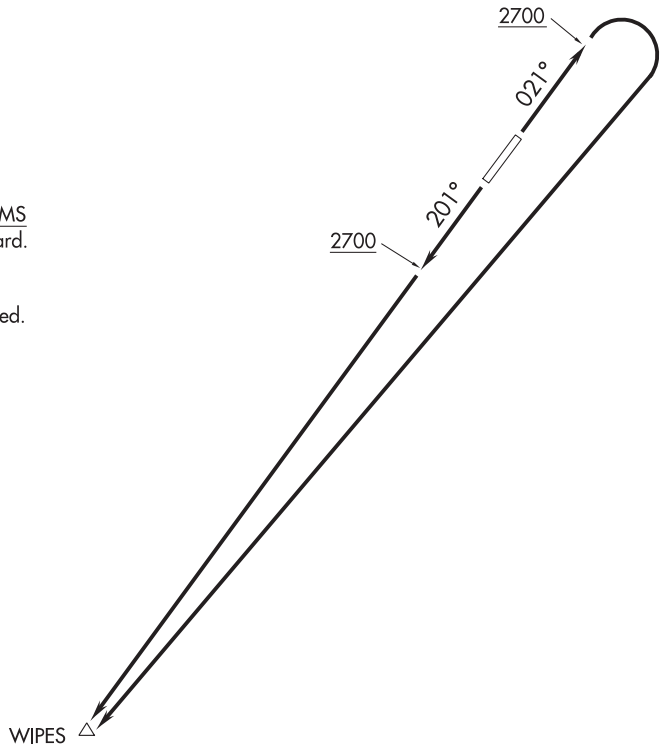
(WIPES1.WIPES) 16147

# WIPES ONE DEPARTURE (OBSTACLE) (RNAV)

SL-10463 (FAA)

WILBUR (2S8)
WILBUR, WASHINGTON

SEATTLE CENTER
126.1 291.6
GRANT COUNTY TOWER ★
118.25 257.8 (EAST)
128.0 257.8 (WEST)
CTAF
122.9




TAKEOFF MINIMUMS
Rwys 2, 20: Standard.

NOTE: GPS required.

NOTE: RNAV-1

TAKEOFF OBSTACLE NOTES
Rwy 2: Vehicle on road beginning 4′ from DER, 192′ right of centerline, 15′ AGL/2207′ MSL.
Vehicle on road 145′ from DER, 485′ left of centerline, up to 15′ AGL/2215′ MSL.
Pole 34′ from DER, 495′ left of centerline, 39′ AGL/2223′ MSL.
Rwy 20: Train, 122′ from DER, 515′ left of centerline, 20′ AGL/2185′MSL.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 2: Climb heading 021° to 2700 then climbing right turn direct WIPES, thence. . . .
TAKEOFF RUNWAY 20: Climb heading 201° to 2700 then direct WIPES, thence. . . .

. . . . maintain 5000 or assigned altitude. Expect filed altitude 10 minutes after departure.



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

| WAAS CH 77929 W11A | APP CRS 111° | Rwy ldg 5091 TDZE 1988 Apt Elev 1989 |
|---|---|---|

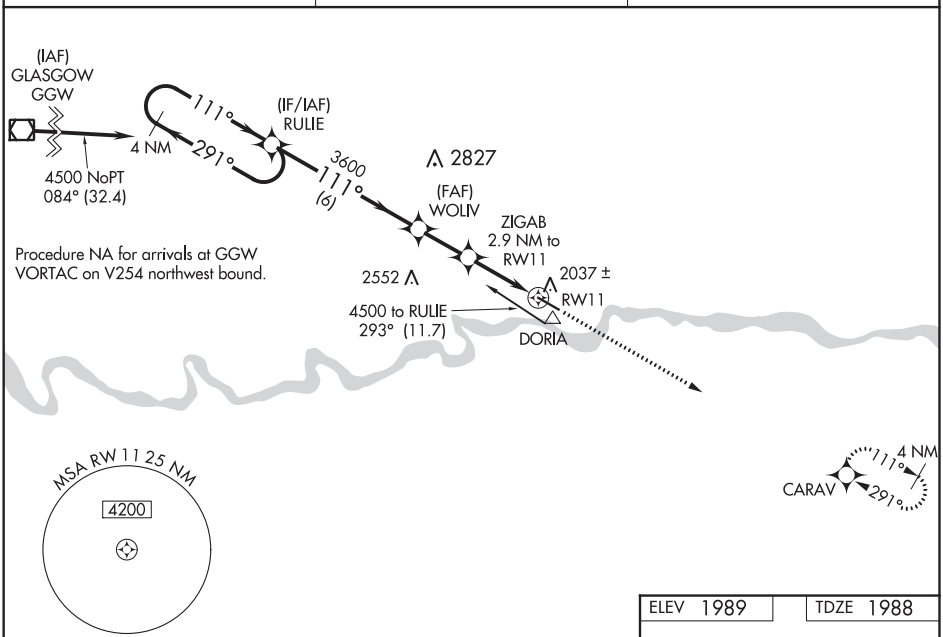
# RNAV (GPS) RWY 11
## L M CLAYTON (OLF)

-38°C

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 not received, use Glasgow altimeter setting and increase all DA 141 feet and all MDA 160 feet and increase LPV all Cats visibility ⅜ mile; LNAV/VNAV all Cats ½ mile; LNAV Cats C/D ½ mile; Circling Cat C ½ mile and Cat D ¼ mile. Baro-VNAV and VDP NA with Glasgow altimeter setting.

MISSED APPROACH: Climb to 4800 direct CARAV and hold.

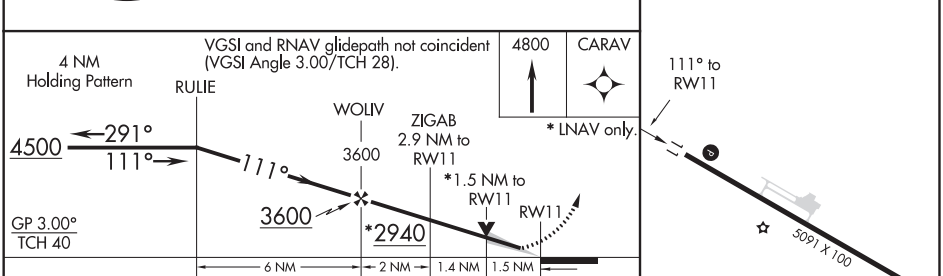
| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 118.325 | 126.85 305.2 | 122.8 (CTAF) L |




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| ELEV 1989 | TDZE 1988 |
|---|---|




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2188-¾ 200 (200-¾) | | | |
| LNAV/VNAV DA | 2266-⅞ 278 (300-⅞) | | | |
| LNAV MDA | 2500-1 512 (600-1) | | 2500-1⅜ 512 (600-1⅜) | |
| CIRCLING | 2500-1 511 (600-1) | | 2500-1½ 511 (600-1½) | 2540-2 551 (600-2) |

MIRL Rwy 11-29 L
REIL Rwy 11-29 L

WOLF POINT, MONTANA

AL-6018 (FAA)

19171

# RNAV (GPS) RWY 29

## L M CLAYTON (OLF)

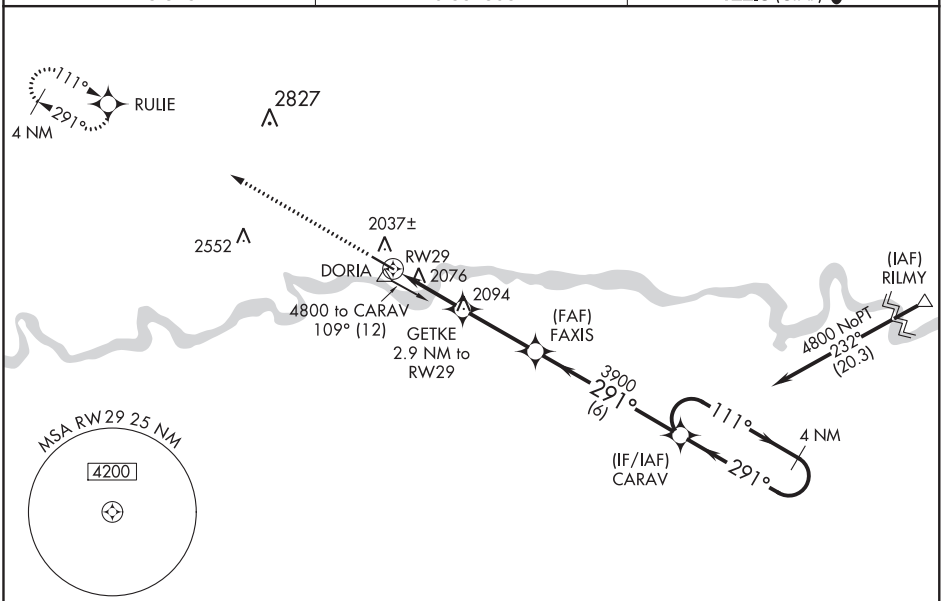
| WAAS CH 49229 W29A | APP CRS 291° | Rwy ldg 5091<br>TDZE 1989<br>Apt Elev 1989 |
|---|---|---|

-38°C

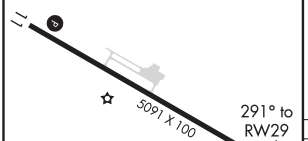
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -18°C (0°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Glasgow altimeter setting and increase all DA 141 feet and all MDA 160 feet and increase LPV all Cats visibility ⅜ mile, LNAV/VNAV all Cats visibility ½ mile, LNAV Cats C/D visibility ½ mile, and Circling Cats C/D visibility ¼ mile. Baro-VNAV and VDP NA with Glasgow altimeter setting.

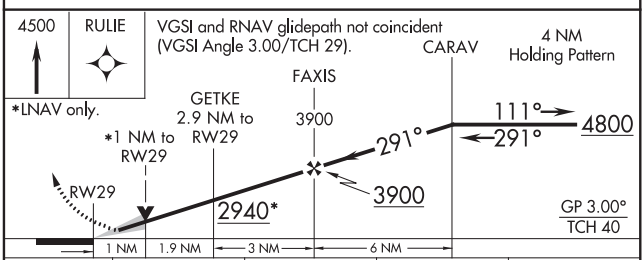
MISSED APPROACH: Climb to 4500 direct RULIE and hold.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 118.325 | 126.85 305.2 | 122.8 (CTAF) L |




| ELEV 1989 | TDZE 1989 |
|---|---|



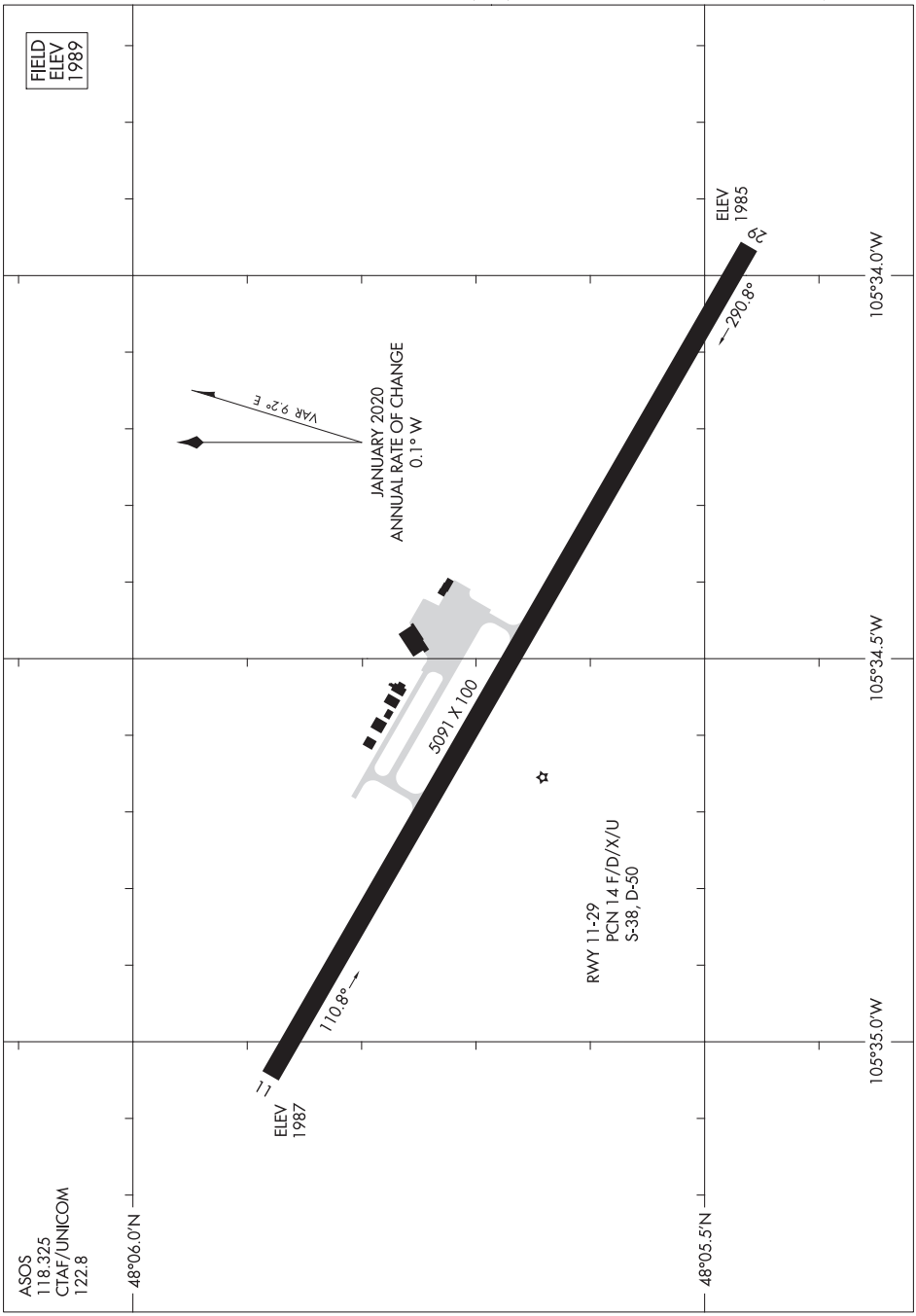




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 2189-¾ 200 (200-¾) | | | |
| LNAV/VNAV DA | 2239-⅞ 250 (300-⅞) | | | |
| LNAV MDA | 2340-1 351 (400-1) | | | |
| CIRCLING | 2480-1 491 (500-1) | | 2480-1½ 491 (500-1½) | 2540-2 551 (600-2) |

MIRL Rwy 11-29 L
REIL Rwy 11-29 L

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

WORLAND, WYOMING | AL-801 (FAA) | 19115

| WAAS CH 40228 W16A | APP CRS 162° | Rwy ldg 7000 TDZE 4202 Apt Elev 4252 |
|---|---|---|

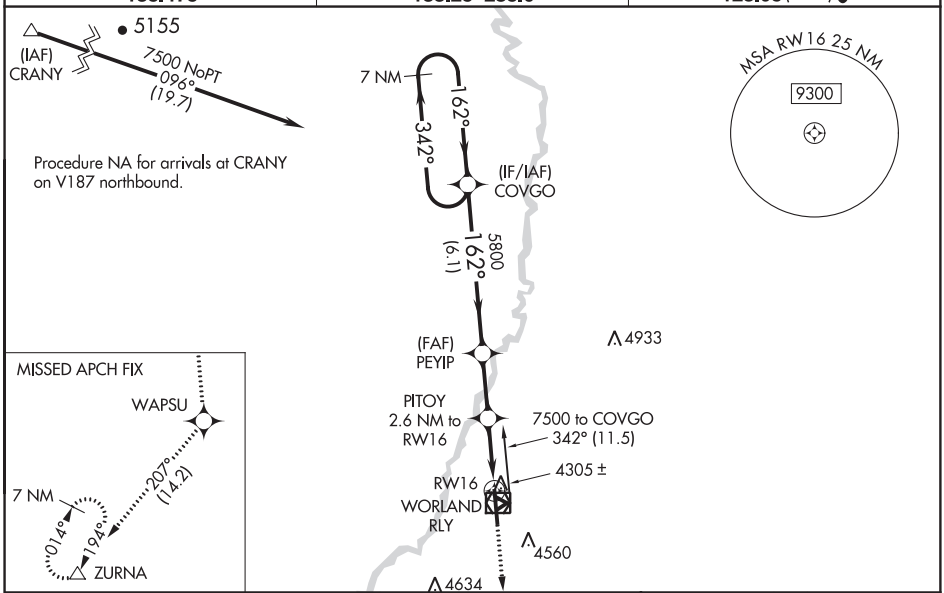
# RNAV (GPS) RWY 16
## WORLAND MUNI (WRL)

T
A
-33°C

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -32°C (-25°F) or above 17°C (62°F). DME/DME RNP-0.3 NA. VDP and Baro-VNAV NA with Greybull altimeter setting. When local altimeter not received, use Greybull altimeter setting and increase all DA/MDA 140 feet, and all visibilities ½ mile. Helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 9600 direct WAPSU and on track 207° to ZURNA and hold, continue climb-in-hold to 9600.

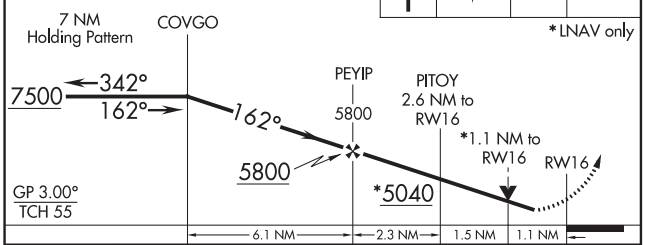
| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.475 | 133.25 285.6 | 123.05 (CTAF) L |



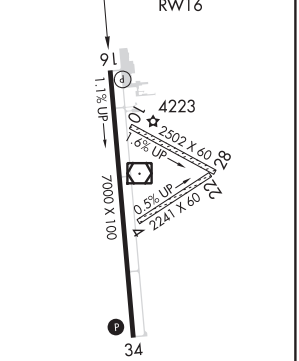

| 9600 | WAPSU | tr 207° | ZURNA |
|---|---|---|---|

*LNAV only

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 41).




ELEV 4252 D TDZE 4202




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA | 4452-¾ 250 (200-¾) | | | |
| LNAV/VNAV DA | 4494-⅞ 292 (300-⅞) | | | |
| LNAV MDA | 4560-1 358 (400-1) | | 4560-1⅛ 358 (400-1⅛) | |
| CIRCLING | 4880-1 628 (700-1) | 4900-1 648 (700-1) | 4900-1¾ 648 (700-1¾) | 4900-2 648 (700-2) |

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

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 7000 |
|---|---|---|
| 342° | TDZE | 4252 |
| | Apt Elev | 4252 |

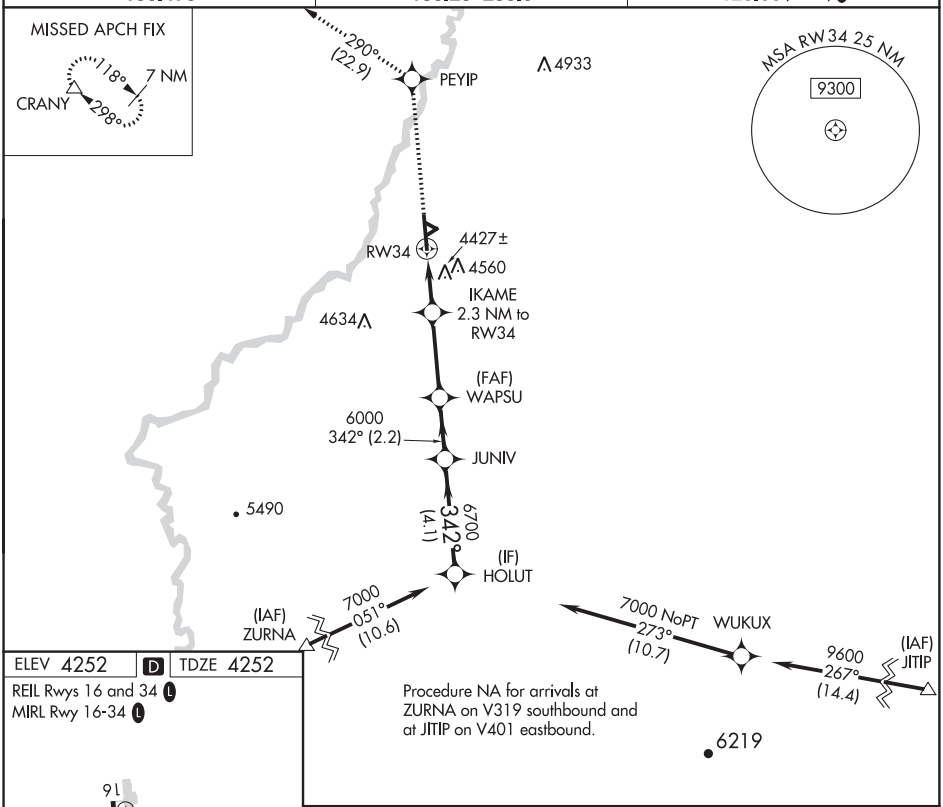
# RNAV (GPS) RWY 34
## WORLAND MUNI (WRL)

T
A
-33°C

When local altimeter setting not received, use Greybull altimeter setting and increase all MDA 140 feet, and all visibilities ½ mile. DME/DME RNP-0.3 NA. Helicopter visibility reduction below ¾ SM NA.

MISSED APPROACH: Climb to 8500 direct PEYIP and on track 290° to CRANY and hold.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.475 | 133.25 285.6 | 123.05 (CTAF) L |



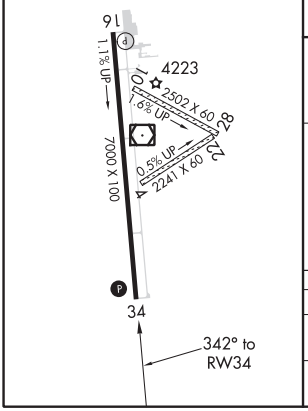

NW-1, 05 NOV 2020 to 31 DEC 2020

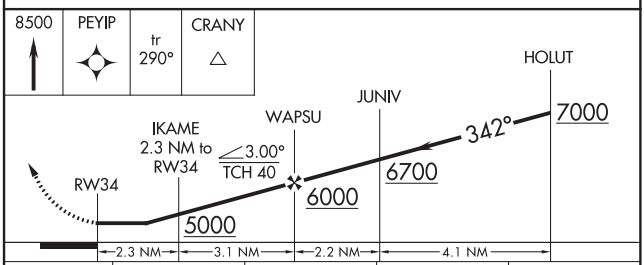
NW-1, 05 NOV 2020 to 31 DEC 2020

| ELEV 4252 | D | TDZE 4252 |
|---|---|---|

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

Procedure NA for arrivals at ZURNA on V319 southbound and at JITIP on V401 eastbound.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LNAV MDA | 4680-1 428 (500-1) | | 4680-1¼ 428 (500-1¼) | |
| CIRCLING | 4880-1 628 (700-1) | 4900-1 648 (700-1) | 4900-1¾ 648 (700-1¾) | 4900-2 648 (700-2) |

WORLAND, WYOMING | AL-801 (FAA) | 19115

# VOR RWY 16
## WORLAND MUNI (WRL)

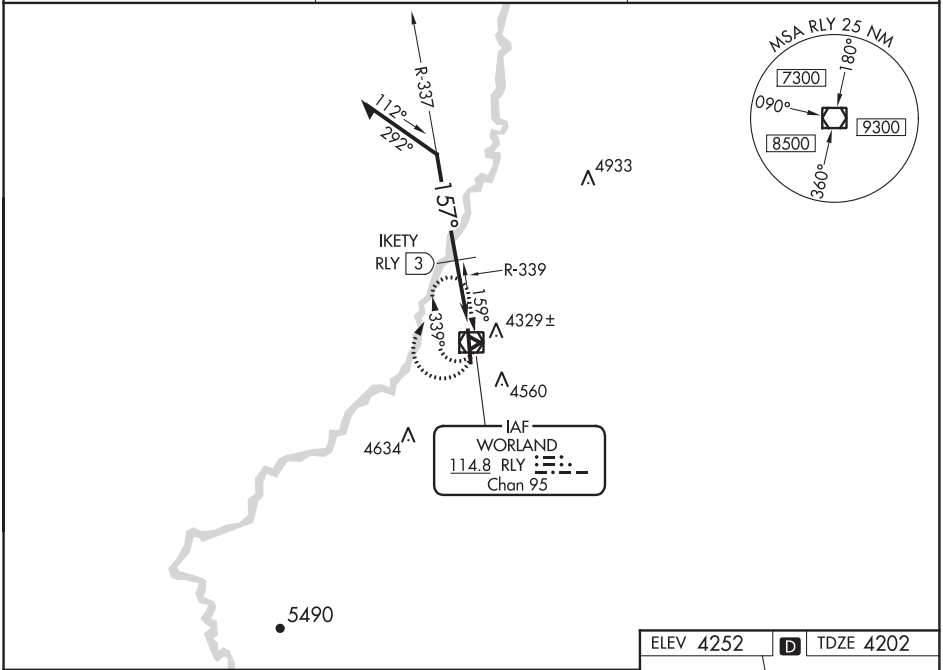
| VOR/DME RLY | APP CRS | Rwy ldg | 7000 |
|---|---|---|---|
| 114.8 | 157° | TDZE | 4202 |
| Chan 95 | | Apt Elev | 4252 |

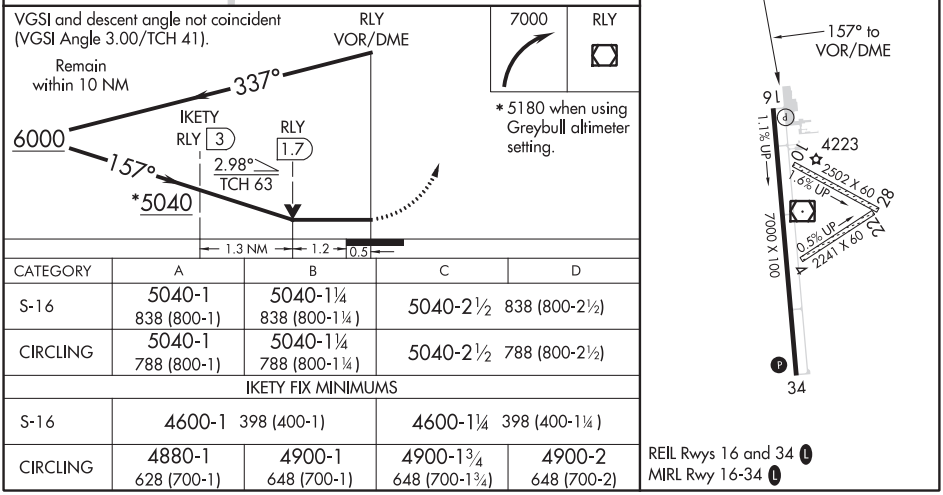
-33°C

When local altimeter setting not received, use Greybull altimeter setting and increase all MDA 140 feet, and all visibilities ½ mile. Helicopter visibility reduction below ¾ SM NA. VDP NA with Greybull altimeter setting.

MISSED APPROACH: Climbing right turn to 7000 in RLY VOR/DME holding pattern.

| ASOS | SALT LAKE CENTER | UNICOM |
|---|---|---|
| 135.475 | 133.25 285.6 | 123.05 (CTAF) L |



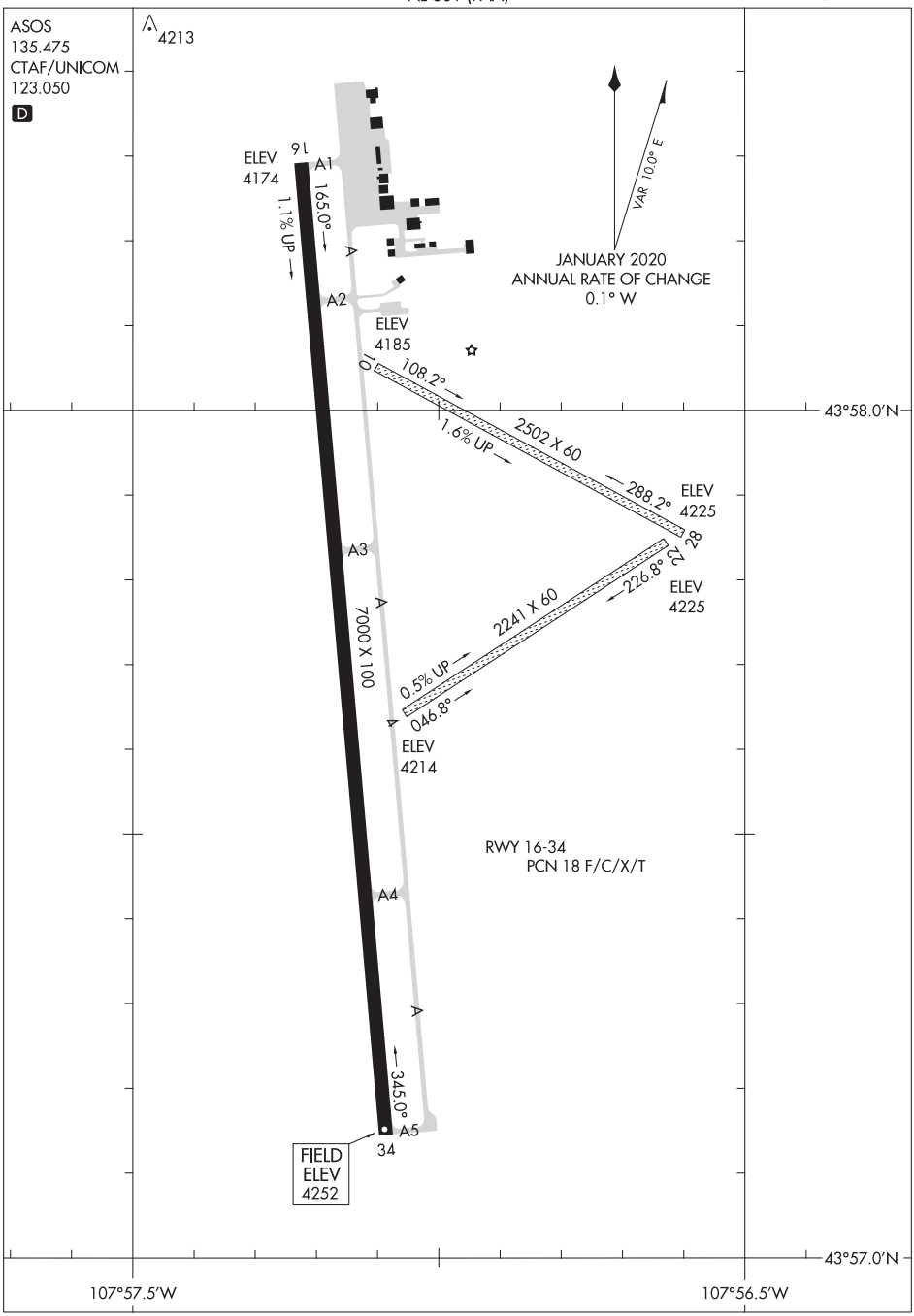

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-16 | 5040-1<br>838 (800-1) | 5040-1¼<br>838 (800-1¼) | 5040-2½ 838 (800-2½) | |
| CIRCLING | 5040-1<br>788 (800-1) | 5040-1¼<br>788 (800-1¼) | 5040-2½ 788 (800-2½) | |
| IKETY FIX MINIMUMS | | | | |
| S-16 | 4600-1 398 (400-1) | | 4600-1¼ 398 (400-1¼) | |
| CIRCLING | 4880-1<br>628 (700-1) | 4900-1<br>648 (700-1) | 4900-1¾<br>648 (700-1¾) | 4900-2<br>648 (700-2) |

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

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

AL-801 (FAA)


ASOS
135.475
CTAF/UNICOM
123.050
D
4213
ELEV
4174
16
A1
165.0°
1.1% UP
A
A2
ELEV
4185
10
108.2°
1.6% UP
2502 X 60
288.2°
ELEV
4225
28
22
226.8°
ELEV
4225
A3
7000 X 100
2241 X 60
0.5% UP
046.8°
ELEV
4214
RWY 16-34
PCN 18 F/C/X/T
A4
345.0°
A5
34
FIELD
ELEV
4252
VAR 10.0° E
JANUARY 2020
ANNUAL RATE OF CHANGE
0.1° W
43°58.0'N
43°57.0'N
107°57.5'W
107°56.5'W

YAKIMA, WASHINGTON | AL-465 (FAA) | 19283

# ILS or LOC RWY 27

## YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

| LOC/DME I-YKM | APP CRS | Rwy ldg | 7604 |
|---|---|---|---|
| 110.1 | 274° | TDZE | 1068 |
| Chan 38 | | Apt Elev | 1099 |

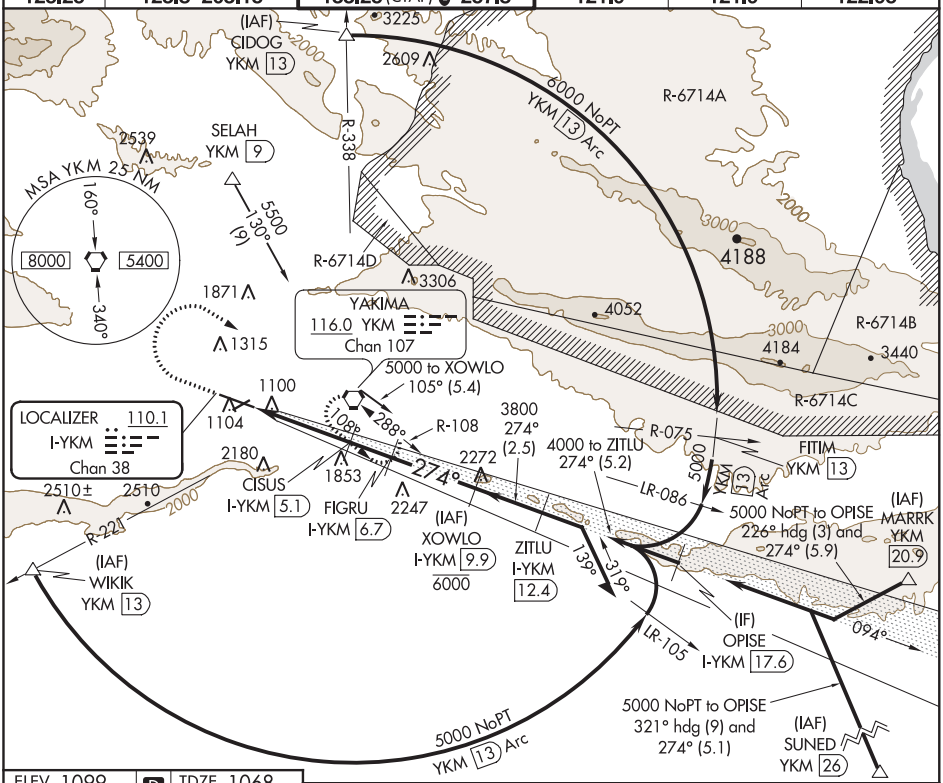
DME required for procedure entry. DME required for LOC only.

When local altimeter setting not received, procedure NA. Circling NA south of Rwys 9 and 27. For inop ALS, increase S-LOC 27 Cats C/D visibility to 2 SM. For inop ALS, increase S-ILS 27 all Cats visibility to 1⅞ SM. #RVR 1800 authorized with use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 2900 then climbing right turn to 4900 direct YKM VORTAC and hold, continue climb-in-hold to 4900. #Missed approach requires minimum climb of 275 feet per NM to 3600.

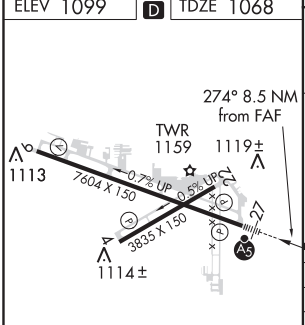
| ATIS | CHINOOK APP CON★ | YAKIMA TOWER★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.25 | 123.8 263.15 | 133.25 (CTAF) L 257.8 | 121.9 | 121.9 | 122.95 |



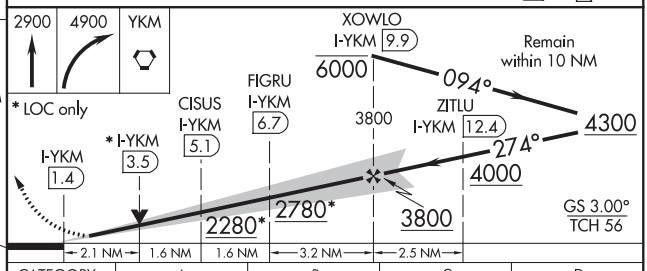

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

ELEV 1099 | D | TDZE 1068




MIRL Rwy 4-22
HIRL Rwy 9-27 L
REIL Rwys 4, 9, and 22




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-ILS 27 # | 1268/24 200 (200-½) | | | |
| S-ILS 27 | 1713-1⅜ 645 (700-1⅜) | | | |
| S-LOC 27 | 1780/24 712 (700-½) | | 1780-1⅝ 712 (700-1⅝) | |
| C CIRCLING | 1780-1 681 (700-1) | | 1940-2½ 841 (900-2½) | 2280-3 1181 (1200-3) |

| APP CRS | Rwy ldg | 7604 |
|---|---|---|
| 094° | TDZE | 1099 |
| | Apt Elev | 1099 |

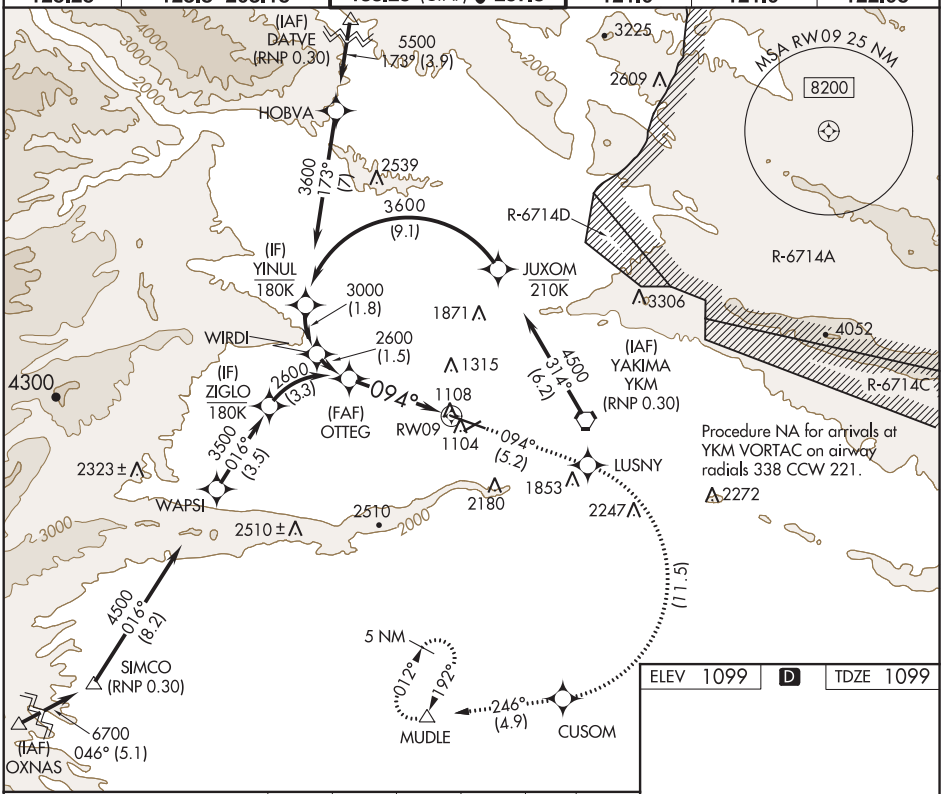
# RNAV (RNP) RWY 9

## YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

T A RF required. GPS required. For uncompensated Baro-VNAV systems, procedure NA below -17°C (2°F) or above 45°C (113°F).
*Missed approach requires a minimum climb of 425 feet per NM to 3000.

MISSED APPROACH: Climb to 5100 on track 094° to LUSNY right turn to CUSOM and on track 246° to MUDLE and hold.

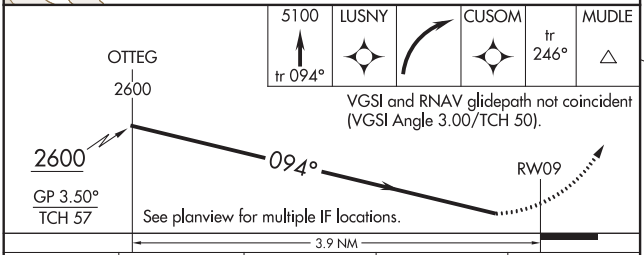
| ATIS | CHINOOK APP CON * | YAKIMA TOWER * | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.25 | 123.8 263.15 | 133.25 (CTAF) L 257.8 | 121.9 | 121.9 | 122.95 |

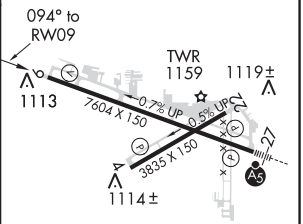



| ELEV 1099 | D | TDZE 1099 |
|---|---|---|

| 5100 | LUSNY | | CUSOM | tr 246° | MUDLE |
|---|---|---|---|---|---|
| tr 094° | | | | | |

VGSI and RNAV glidepath not coincident (VGSI Angle 3.00/TCH 50).




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.30 DA* | 1473-1 374 (400-1) | | | NA |
| RNP 0.30 DA | 1934-2½ 835 (900-2½) | | | NA |

AUTHORIZATION REQUIRED

MIRL Rwy 4-22
HIRL Rwy 9-27 L
REIL Rwys 4, 9, and 22



NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 7604 |
|---|---|---|
| 274° | TDZE | 1068 |
| | Apt Elev | 1099 |

# RNAV (RNP) Y RWY 27

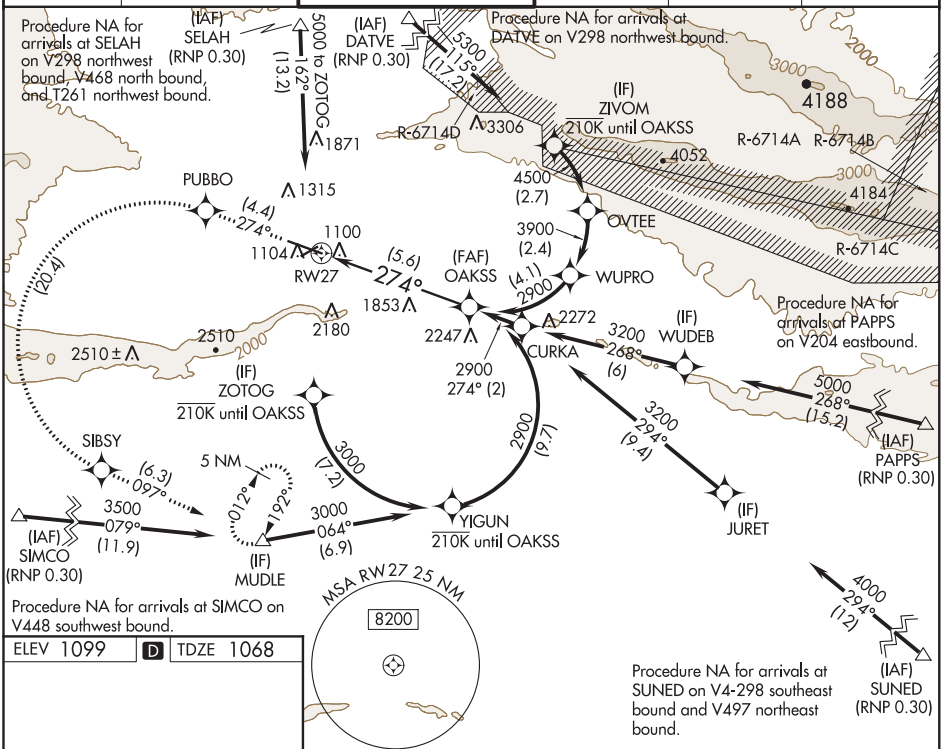
## YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

For uncompensated Baro-VNAV systems, procedure NA below -17°C (2°F) or above 54°C (130°F). RF required. GPS required. DATVE transition NA when R-6714 A, C, D active.

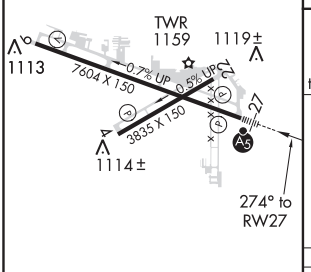
MALSR

MISSED APPROACH: Climb to 5100 on track 274° to PUBBO left turn to SIBSY and on track 097° to MUDLE and hold.
*Missed approach requires minimum climb of 425 feet per NM to 3400.

| ATIS | CHINOOK APP CON★ | YAKIMA TOWER★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.25 | 123.8 263.15 | 133.25 (CTAF) L 257.8 | 121.9 | 121.9 | 122.95 |

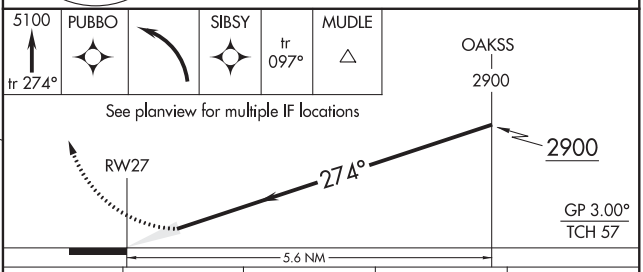



| ELEV 1099 | D | TDZE 1068 |
|---|---|---|




| 5100 | PUBBO | | SIBSY | MUDLE |
|---|---|---|---|---|
| tr 274° | | | tr 097° | |

See planview for multiple IF locations




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.30 DA* | 1418/30 350 (400-⅝) | | | |
| RNP 0.30 DA | 1845-2¼ 777 (800-2¼) | | | |

**AUTHORIZATION REQUIRED**

MIRL Rwy 4-22
HIRL Rwy 9-27 L
REIL Rwys 4, 9, and 22




NW-1, 05 NOV 2020 to 31 DEC 2020

| APP CRS | Rwy ldg | 7604 |
|---|---|---|
| 274° | TDZE | 1068 |
| | Apt Elev | 1099 |

# RNAV (RNP) Z RWY 27

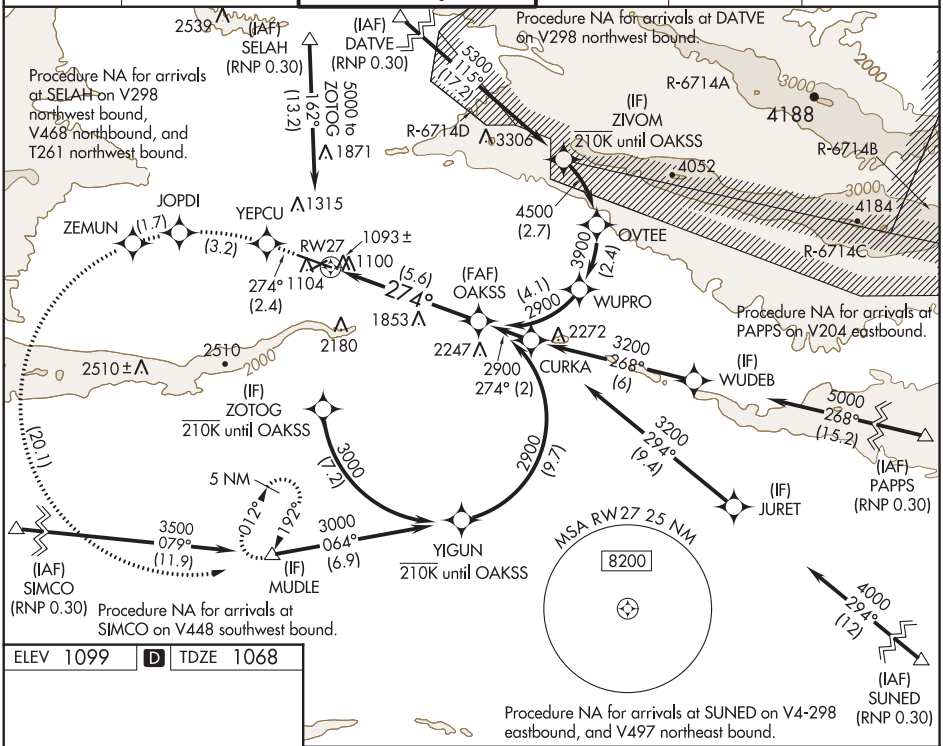
## YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

For uncompensated Baro-VNAV systems, procedure NA below -17°C (2°F) or above 54°C (130°F). RF required. GPS required. Missed approach requires RNP less than 1.0. For inop ALS increase *RNP 0.10 DA visibility all Cats to RVR 4500 and RNP 0.30 DA visibility all Cats to 1¼ SM. DATVE transition NA when R-6714 A, C, D active.

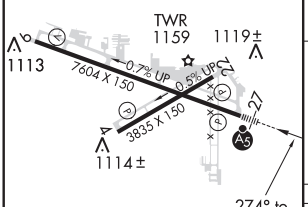
MALSR

MISSED APPROACH: Climb to 5100 on track 274° to YEPCU left turn to JOPDI left turn to ZEMUN left turn to MUDLE and hold.
*Missed approach requires a minimum climb of 215 feet per NM to 4300.

| ATIS | CHINOOK APP CON* | YAKIMA TOWER* | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.25 | 123.8 263.15 | 133.25 (CTAF) L 257.8 | 121.9 | 121.9 | 122.95 |



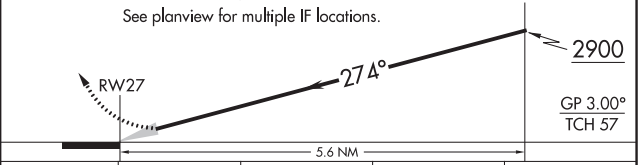

ELEV 1099 | D | TDZE 1068




MIRL Rwy 4-22
HIRL Rwy 9-27 L
REIL Rwys 4, 9, and 22

| 5100 tr 274° | YEPCU | | JOPDI | | ZEMUN | | MUDLE | OAKSS 2900 |
|---|---|---|---|---|---|---|---|---|

See planview for multiple IF locations.




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| RNP 0.10 DA* | 1348/24 280 (300-½) | | | |
| RNP 0.30 DA | 1468/45 400 (400-⅞) | | | |

**AUTHORIZATION REQUIRED**

NW-1, 05 NOV 2020 to 31 DEC 2020

YAKIMA, WASHINGTON AL-465 (FAA) 18312

| WAAS CH 90512 W27A | APP CRS 274° | Rwy ldg 7604 TDZE 1068 Apt Elev 1099 |
|---|---|---|

# RNAV (GPS) X RWY 27
## YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

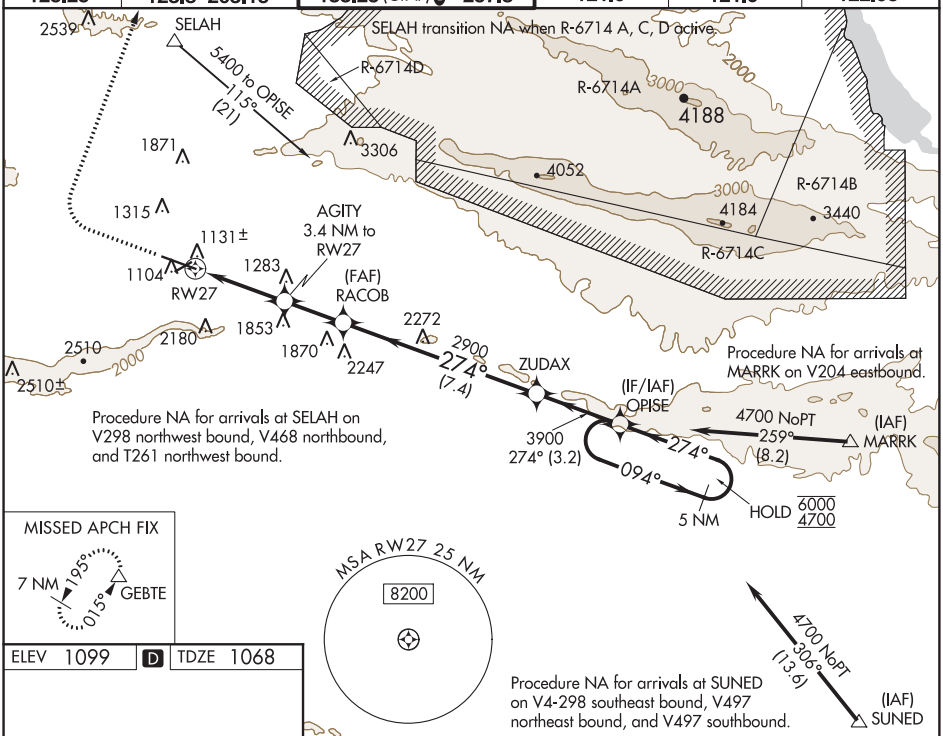
RNP APCH.

Circling NA south of Rwys 9 and 27.
For inop ALS, increase LPV all Cats visibility to 1¾ SM.
*RVR 1800 authorized with use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 2100 then climbing right turn to 7000 direct GEBTE and hold. Continue climb-in-hold to 7000. *Missed approach requires minimum climb of 300 feet per NM to 3700. #Missed approach requires minimum climb of 300 feet per NM to 4900.

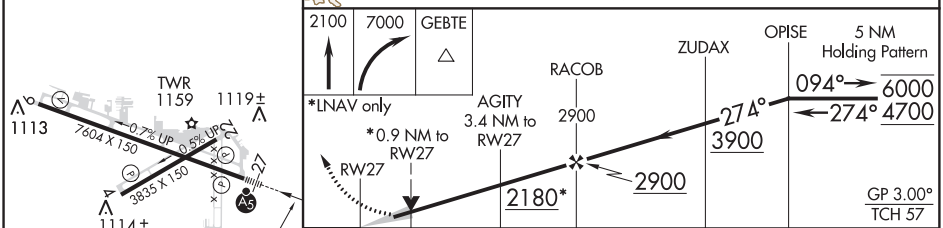
| ATIS | CHINOOK APP CON★ | YAKIMA TOWER★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.25 | 123.8 263.15 | 133.25 (CTAF) L 257.8 | 121.9 | 121.9 | 122.95 |

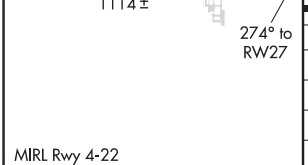






ELEV 1099 D TDZE 1068




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| LPV DA* | 1268/24 200 (200-½) | | | |
| LPV DA | 1668-1¼ 600 (600-1¼) | | | |
| LNAV MDA# | 1400/24 332 (400-½) | | 1400/26 332 (400-½) | |
| LNAV MDA | 1720/24 652 (700-½) | | 1720-1⅜ 652 (700-1⅜) | |
| C CIRCLING | 1720-1 621 (700-1) | | 1880-2¼ 781 (800-2¼) | 2280-3 1181 (1200-3) |

MIRL Rwy 4-22
HIRL Rwy 9-27 L
REIL Rwys 4, 9, and 22

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| LOC/DME I-YKM 110.1 Chan 38 | APP CRS 094° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 1099 |
|---|---|---|

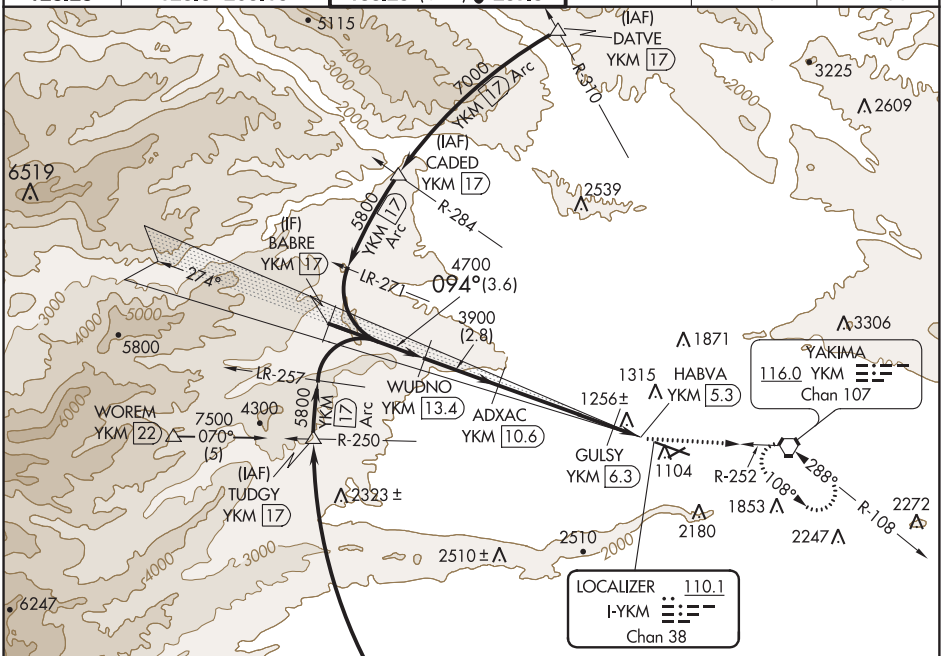
# LOC/DME BC-B

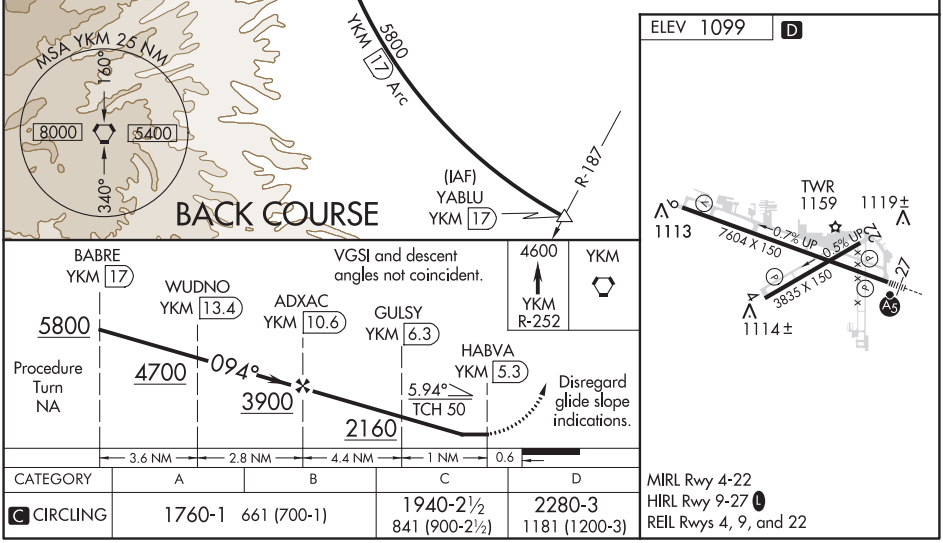
## YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

Simultaneous reception of I-YKM and YKM DME required.
Circling NA south of Rwy 9-27.
When local altimeter setting not received, procedure NA.

MISSED APPROACH: Climb to 4600 via YKM VORTAC R-252 to YKM VORTAC and hold, continue climb-in-hold to 4600.

| ATIS | CHINOOK APP CON ★ | YAKIMA TOWER ★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.25 | 123.8 263.15 | 133.25 (CTAF) L 257.8 | 121.9 | 121.9 | 122.95 |




| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| C CIRCLING | 1760-1 661 (700-1) | | 1940-2½ 841 (900-2½) | 2280-3 1181 (1200-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| VORTAC YKM 116.0 Chan 107 | APP CRS 244° | Rwy ldg 7604 TDZE 1068 Apt Elev 1099 |
|---|---|---|

# VOR/DME or TACAN RWY 27

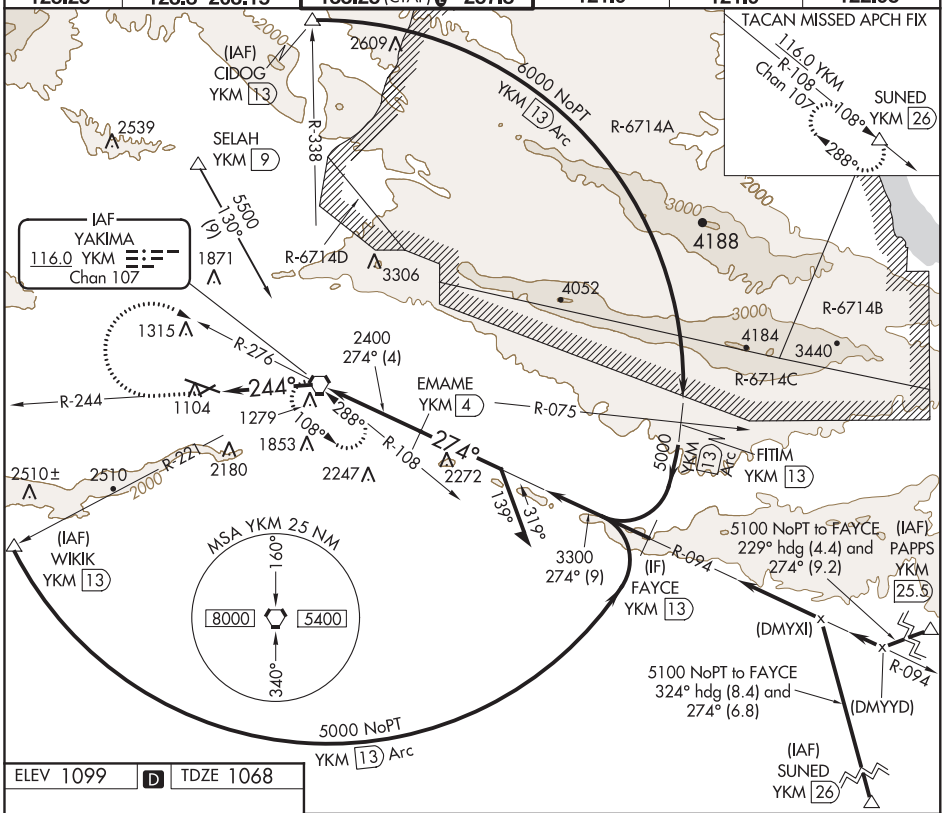
## YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

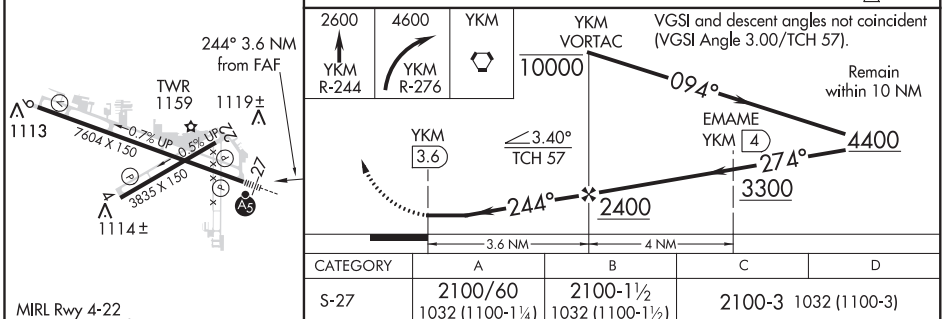
T Inoperative table does not apply.
A Circling NA south of Rwy 9-27. When local altimeter setting not received, procedure NA.

MALSR A5

MISSED APPROACH: Climb to 2600 via YKM VORTAC R-244, then climbing right turn to 4600 via YKM VORTAC R-276 to YKM VORTAC and hold, continue climb-in-hold to 4600 (TACAN aircraft, continue climb to 5000 via YKM VORTAC R-108 to SUNED/YKM 26 DME and hold west, right turns, 108° inbound).

| ATIS | CHINOOK APP CON ★ | YAKIMA TOWER ★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.25 | 123.8 263.15 | 133.25 (CTAF) L 257.8 | 121.9 | 121.9 | 122.95 |




VGSI and descent angles not coincident (VGSI Angle 3.00/TCH 57).

| CATEGORY | A | B | C | D |
|---|---|---|---|---|
| S-27 | 2100/60 1032 (1100-1¼) | 2100-1½ 1032 (1100-1½) | 2100-3 1032 (1100-3) | |
| C CIRCLING | 2100-1¼ 1001 (1100-1¼) | 2100-1½ 1001 (1100-1½) | 2100-3 1001 (1100-3) | 2280-3 1181 (1200-3) |

MIRL Rwy 4-22
HIRL Rwy 9-27 L
REIL Rwys 4, 9, and 22

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

| VORTAC YKM 116.0 Chan 107 | APP CRS 251° | Rwy ldg N/A<br>TDZE N/A<br>Apt Elev 1099 |
|---|---|---|

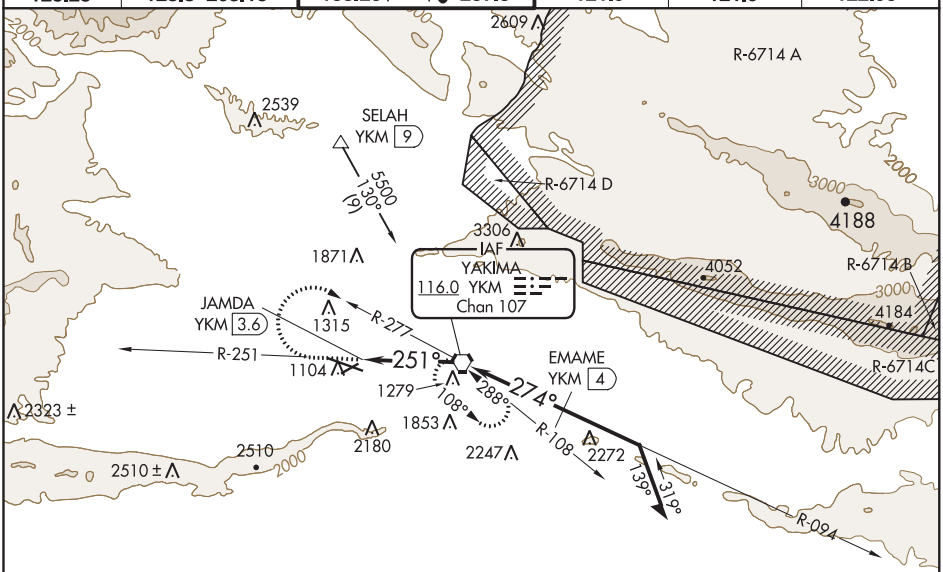
# VOR-A

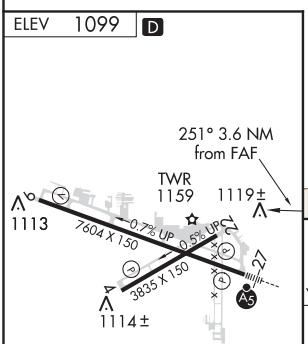
## YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

T DME required.
A Circling not authorized south of Rwy 9-27.
When local altimeter setting not received, procedure NA.

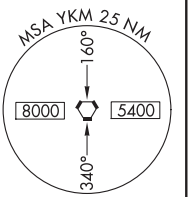
MISSED APPROACH: Climb to 2600 via YKM VORTAC R-251 then climbing right turn to 4600 via YKM VORTAC R-277 to YKM VORTAC and hold, continue climb-in-hold to 4600.

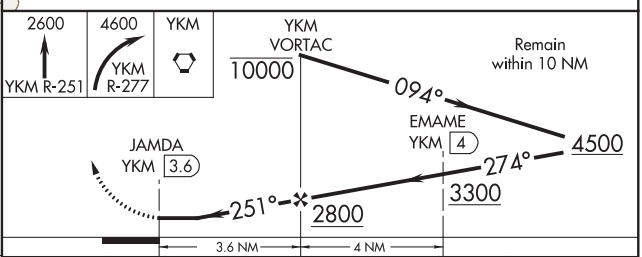
| ATIS | CHINOOK APP CON★ | YAKIMA TOWER★ | GND CON | CLNC DEL | UNICOM |
|---|---|---|---|---|---|
| 125.25 | 123.8 263.15 | 133.25 (CTAF) L 257.8 | 121.9 | 121.9 | 122.95 |




MIRL Rwy 4-22
HIRL Rwy 9-27 L
REIL Rwys 4, 9, and 22




| 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 | 1840-1<br>741 (800-1) | 1840-1¼<br>741 (800-1¼) | 1940-2½<br>841 (900-2½) | 2280-3<br>1181 (1200-3) |

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

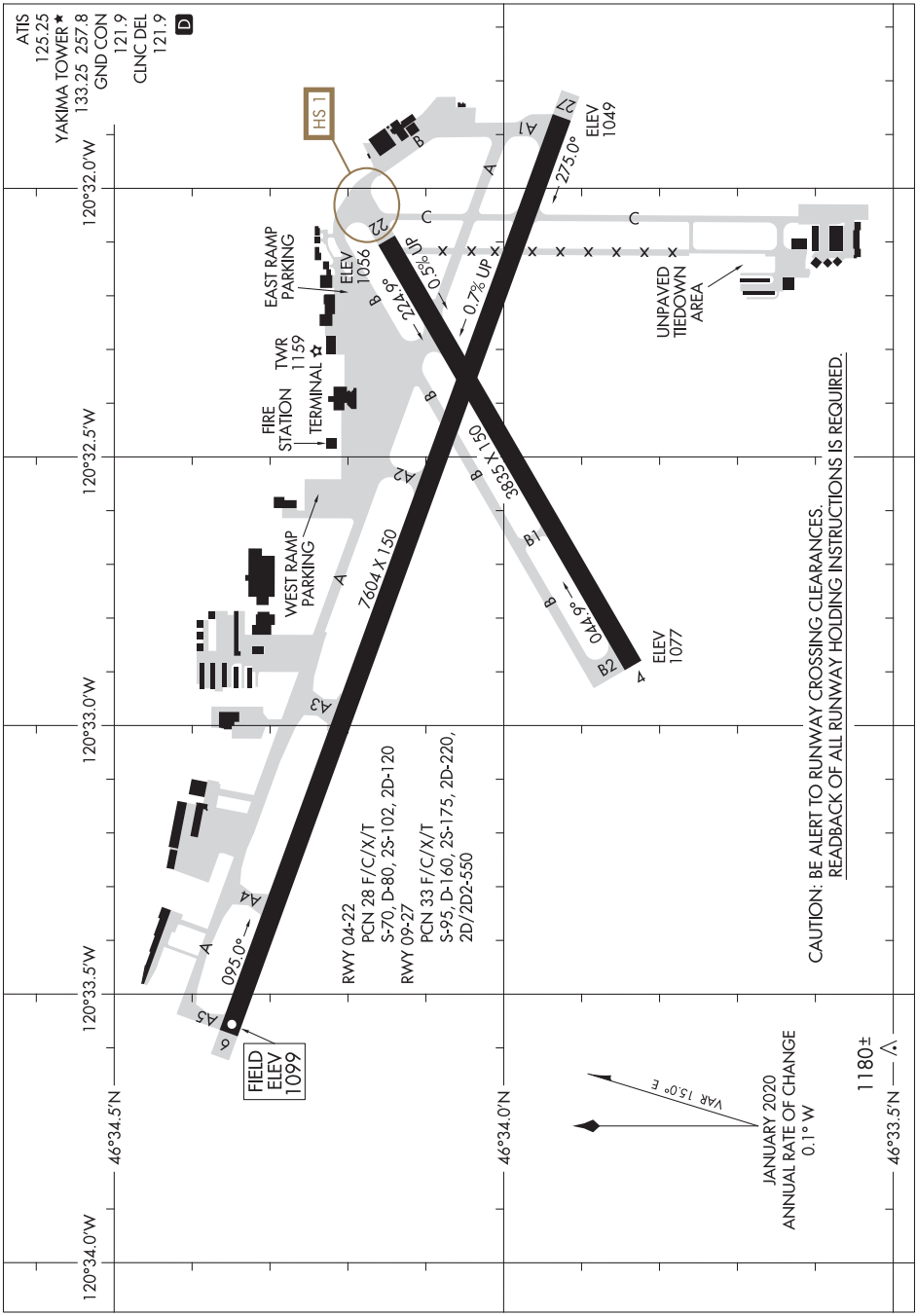
20086

# AIRPORT DIAGRAM

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

AL-465 (FAA)

YAKIMA, WASHINGTON

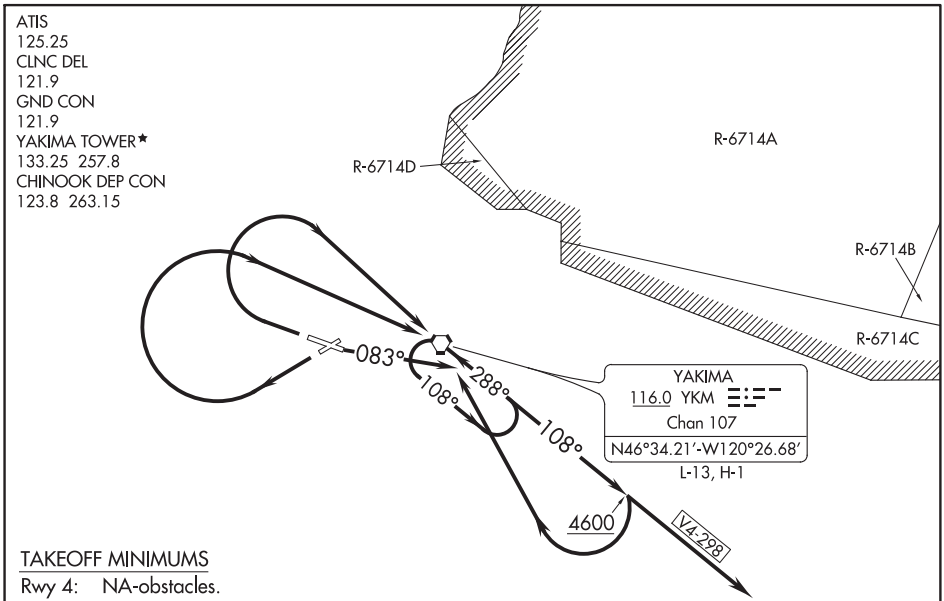



NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

AIRPORT DIAGRAM
20086
YAKIMA, WASHINGTON
YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

# ZILLA THREE DEPARTURE (OBSTACLE)




TAKEOFF MINIMUMS

Rwy 4: NA-obstacles.
Rwy 9: Standard with minimum climb of 250′ per NM to 2600.
Rwy 22: Standard with minimum climb of 325′ per NM to 3900.
Rwy 27: Standard with minimum climb of 330′ per NM to 2600.

TAKEOFF OBSTACLE NOTES

Rwy 9: OL on bldg 27′ from DER, 507′ right of centerline, 34′AGL/1074′MSL.
Pole 388′ from DER, 561′ right of centerline, 34′ AGL/1073′MSL.
Trees beginning 586′ from DER, 550′ right of centerline, up to 100′ AGL/1139′ MSL.
Rwy 22: Fence beginning 27′ from DER, 435′ right of centerline, up to 10′ AGL/1085′ MSL.
Trees beginning 570′ from DER, 228′ left of centerline, up to 100′ AGL/1199′ MSL.
Trees beginning 3195′ from DER, 202′ right of centerline, up to 100′ AGL/1199′ MSL.
Trees beginning 1 NM from DER, 732′ left of centerline, up to 100′ AGL/1239′ MSL.
Rwy 27: Antenna on bldg 398′ from DER, 282′ left of centerline, 15′ AGL/1117′ MSL.
Trees beginning 3824′ from DER, 1341′ right of centerline, up to 100′ AGL/1239′ MSL.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climb heading 083° and outbound YKM R-108. Thence. . . .
TAKEOFF RUNWAYS 22, 27: Climbing right turn direct YKM VORTAC and outbound YKM R-108. Thence. . . .

. . . . eastbound aircraft V4-298 continue on course, all other departures continue climb on YKM R-108 until 4600, then climbing right turn direct YKM VORTAC and hold to cross YKM VORTAC at or above MEA/MCA for route of flight.



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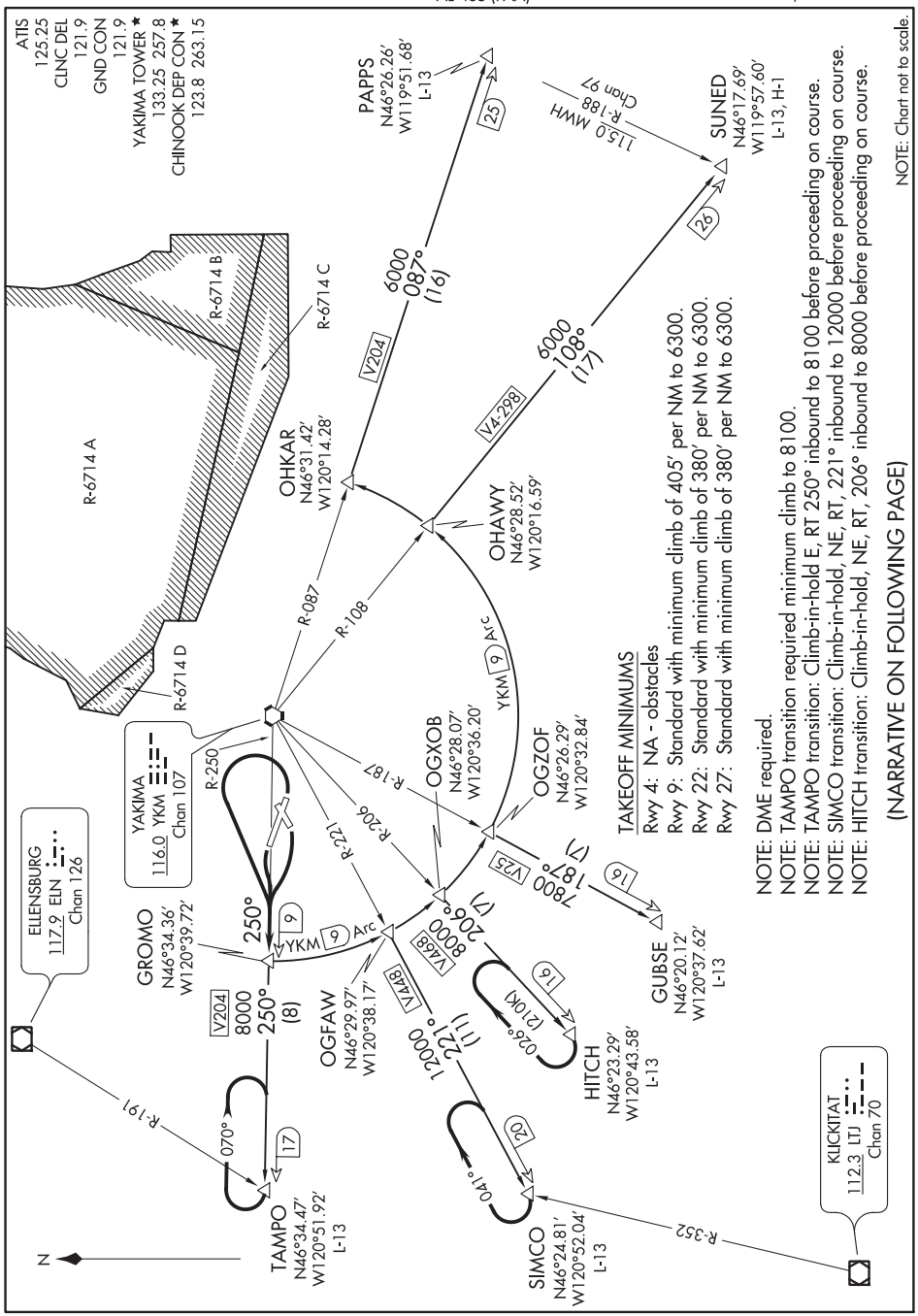
NW-1, 05 NOV 2020 to 31 DEC 2020

(GROMO4.GROMO) 18312

# GROMO FOUR DEPARTURE

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)
AL-465 (FAA)
YAKIMA, WASHINGTON




TAKEOFF MINIMUMS
Rwy 4: NA - obstacles
Rwy 9: Standard with minimum climb of 405′ per NM to 6300.
Rwy 22: Standard with minimum climb of 380′ per NM to 6300.
Rwy 27: Standard with minimum climb of 380′ per NM to 6300.

NOTE: DME required.
NOTE: TAMPO transition required minimum climb to 8100.
NOTE: TAMPO transition: Climb-in-hold E, RT 250° inbound to 8100 before proceeding on course.
NOTE: TAMPO transition: Climb-in-hold, NE, RT, 221° inbound to 12000 before proceeding on course.
NOTE: SIMCO transition: Climb-in-hold, NE, RT, 206° inbound to 8000 before proceeding on course.
NOTE: HITCH transition: Climb-in-hold, NE, RT, 206° inbound to 8000 before proceeding on course.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

GROMO FOUR DEPARTURE

(GROMO4.GROMO) 10NOV16

YAKIMA, WASHINGTON
YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 9, 27: Climbing left turn thence. . . .

TAKEOFF RUNWAY 22: Climbing right turn thence. . . .

. . . . intercept and proceed on YKM R-250 to GROMO/YKM 9 DME, then on assigned transition.

GUBSE TRANSITION (GROMO4.GUBSE): From over GROMO DME Fix on YKM 9 DME Arc to OGZOF DME fix and YKM VORTAC R-187 to GUBSE DME fix.

HITCH TRANSITION (GROMO4.HITCH): From over GROMO DME Fix on YKM 9 DME Arc to OGXOB DME fix and YKM VORTAC R-206 to HITCH DME fix.

PAPPS TRANSITION (GROMO4.PAPPS): From over GROMO DME Fix on YKM 9 DME Arc to OHKAR DME fix and YKM VORTAC R-087 to PAPPS DME fix.

SIMCO TRANSITION (GROMO4.SIMCO): From over GROMO DME Fix on YKM 9 DME Arc to OGFAW DME fix and YKM VORTAC R-221 to SIMCO INT.

SUNED TRANSITION (GROMO4.SUNED): From over GROMO DME Fix on YKM 9 DME Arc to OHAWY DME fix and YKM R-108 to SUNED INT.

TAMPO TRANSITION (GROMO4.TAMPO): From over GROMO DME Fix on YKM VORTAC R-250 to TAMPO INT.

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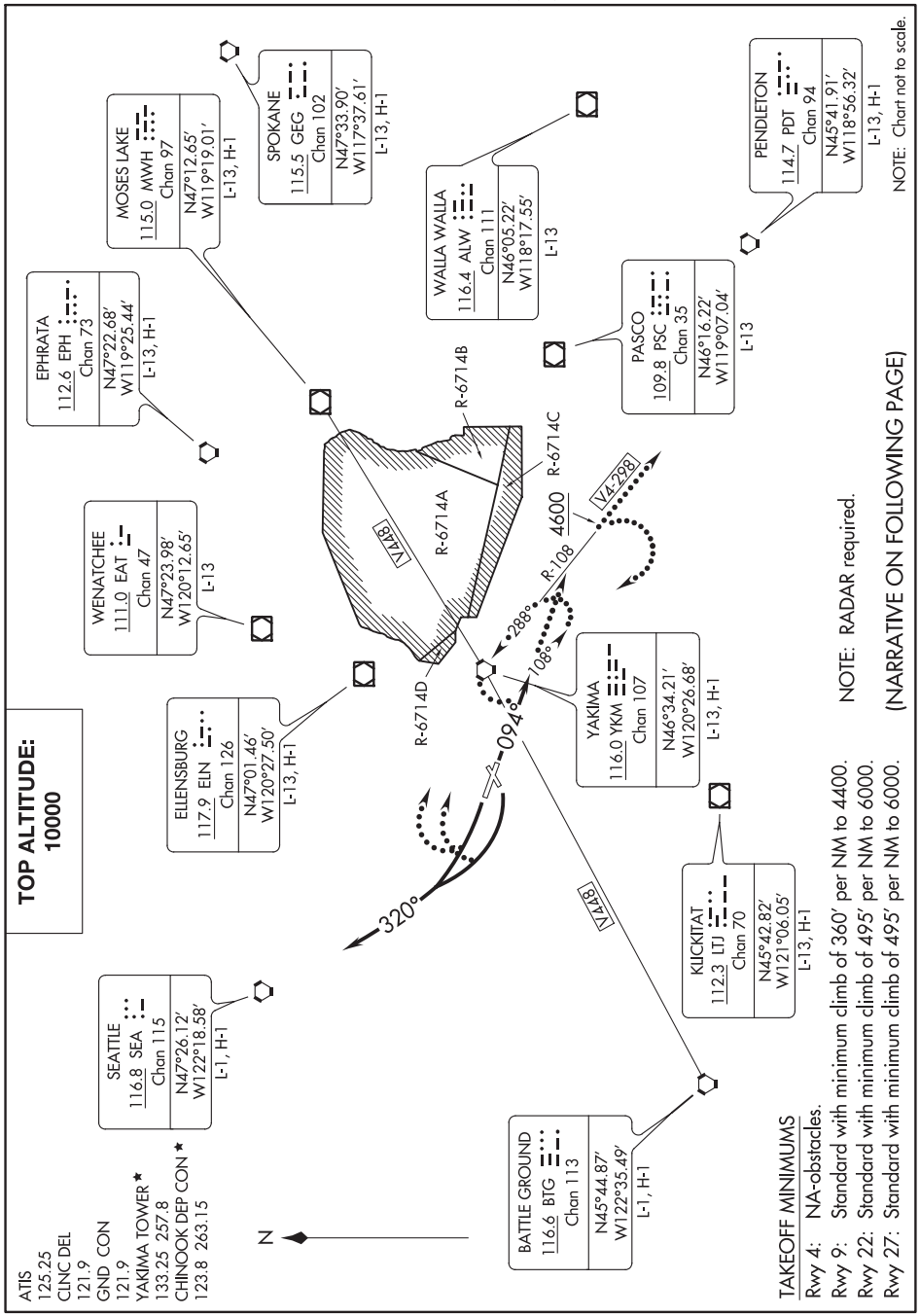
NW-1, 05 NOV 2020 to 31 DEC 2020

18312

# NACHES FOUR DEPARTURE

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)
AL-465 (FAA)
YAKIMA, WASHINGTON



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climb heading 094° for vector to assigned route/fix. Thence . . . .
TAKEOFF RUNWAYS 22, 27: Climbing right turn heading 320° for vector to assigned route/fix. Thence . . . .

. . . . maintain 10000 or assigned lower altitude. Expect clearance to filed altitude 5 minutes after departure.

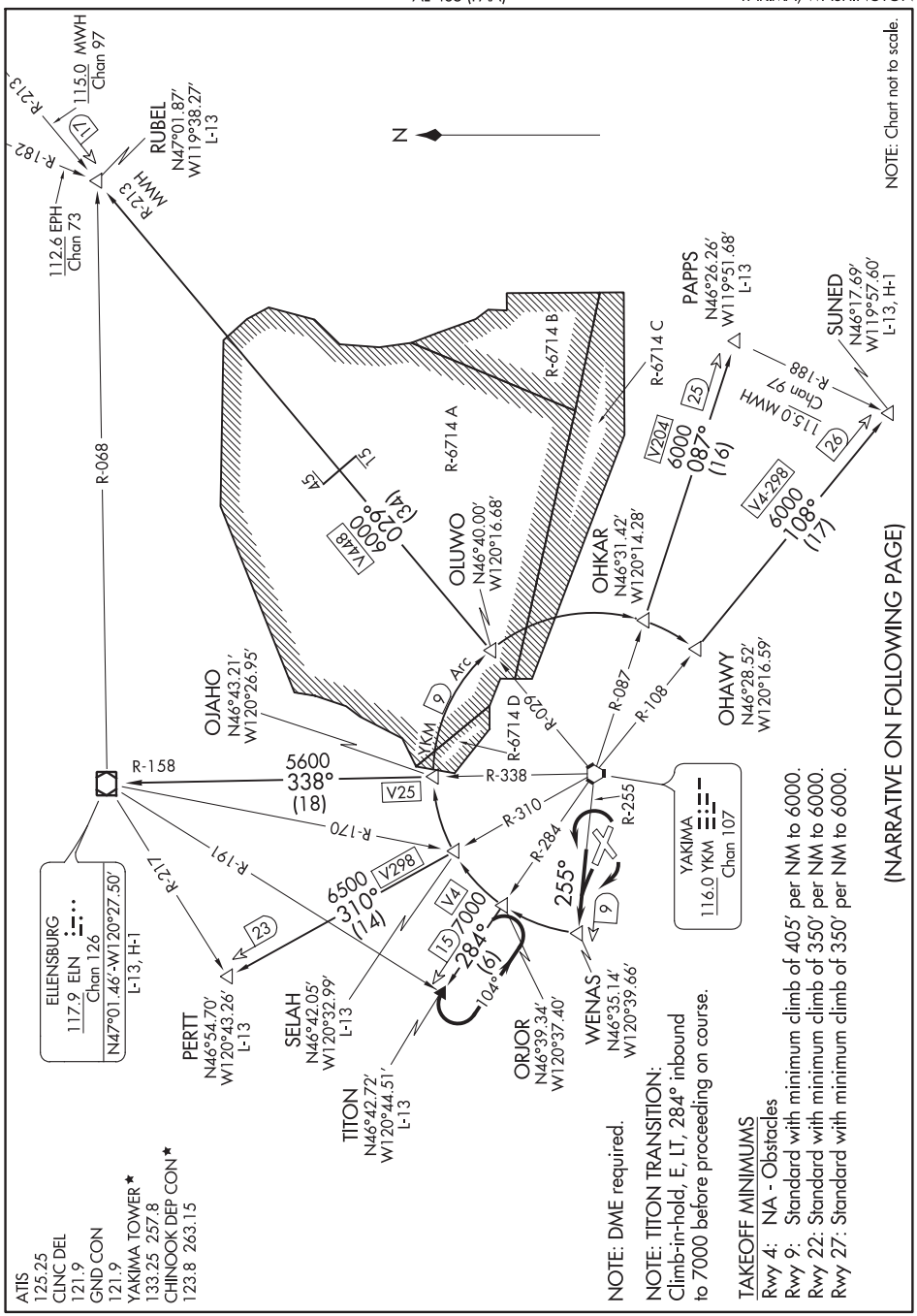
LOST COMMUNICATIONS
If no transmissions are received for one minute after departure:
RUNWAY 9: Climb heading 094° and outbound YKM VORTAC R-108.
RUNWAYS 22, 27: Climbing right turn direct YKM VORTAC and outbound YKM R-108, eastbound aircraft V4-V298 continue on course, all other departures continue climb on YKM R-108, until 4600, then climbing right turn direct YKM VORTAC and hold to cross YKM VORTAC at or above MEA or MCA for route of flight.

NW-1, 05 NOV 2020 to 31 DEC 2020
NW-1, 05 NOV 2020 to 31 DEC 2020

(WENAS7.WENAS) 18312

# WENAS SEVEN DEPARTURE

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)
AL-465 (FAA)
YAKIMA, WASHINGTON

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WENAS SEVEN DEPARTURE

YAKIMA, WASHINGTON
YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)

(WENAS7.WENAS) 10NOV16

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 9, 27: Climbing left turn thence. . . .
TAKEOFF RUNWAY 22 : Climbing right turn thence. . . .

. . . .intercept and proceed on YKM VORTAC R-255 to WENAS/YKM 9 DME, then on assigned transition.

ELLENSBURG TRANSITION (WENAS7.ELN): From over WENAS DME Fix on YKM 9 DME Arc to OJAHO DME fix and YKM VORTAC R-338 and ELN VOR/DME R-158 to ELN VOR/DME.
PAPPS TRANSITION (WENAS7.PAPPS): From over WENAS DME Fix on YKM 9 DME Arc to OHKAR DME fix and YKM VORTAC R-087 to PAPPS INT.
PERTT TRANSITION (WENAS7.PERTT): From over WENAS DME Fix on YKM 9 DME Arc to SELAH DME fix and YKM VORTAC R-310 to PERTT INT.
RUBEL TRANSITION (WENAS7.RUBEL): From over WENAS DME Fix on YKM 9 DME Arc to OLUWO DME fix and YKM VORTAC R-029 and MWH VOR/DME R-213 to RUBEL INT.
SUNED TRANSITION (WENAS7.SUNED): From over WENAS DME Fix on YKM 9 DME Arc to OHAWY DME fix and YKM VORTAC R-108 to SUNED INT.
TITON TRANSITION (WENAS7.TITON): From over WENAS DME Fix on YKM 9 DME Arc to ORJOR DME fix and YKM VORTAC R-284 to TITON INT.

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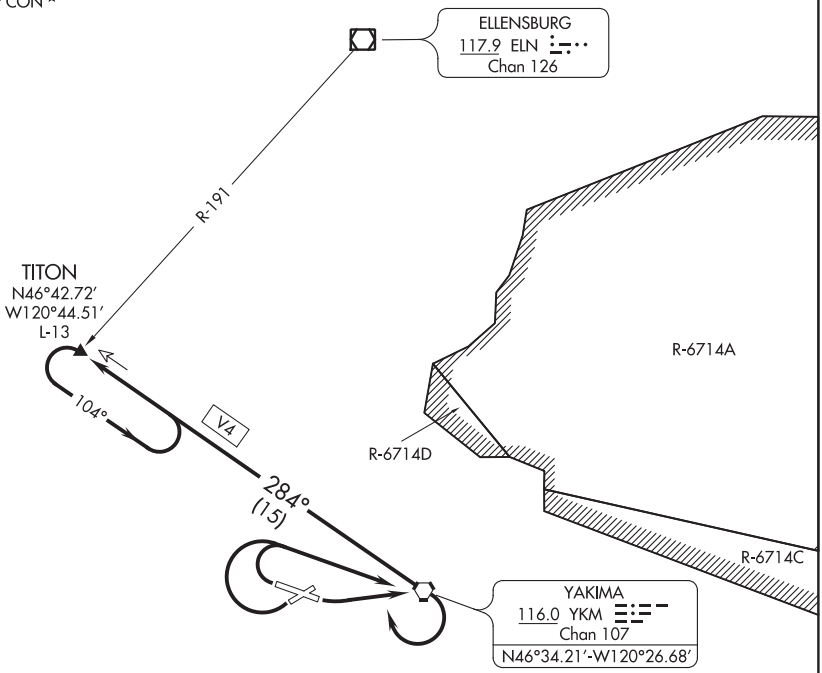
(YKM7.YKM) 18312

# YAKIMA SEVEN DEPARTURE

YAKIMA AIR TERMINAL/MCALLISTER FIELD (YKM)
AL-465 (FAA)
YAKIMA, WASHINGTON

ATIS
125.25
CLNC DEL
121.9
GND CON
121.9
YAKIMA TOWER★
133.25 257.8
CHINOOK DEP CON★
123.8 263.15




NW-1, 05 NOV 2020 to 31 DEC 2020

NW-1, 05 NOV 2020 to 31 DEC 2020

TAKEOFF MINIMUMS
Rwy 4: NA - obstacles.
Rwy 9: Standard with minimum climb of 325′ per NM to 5000.
Rwy 22: Standard with minimum climb of 325′ per NM to 5000.
Rwy 27: Standard with minimum climb of 325′ per NM to 5000.

NOTE: Chart not to scale.

## DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 9: Climbing left turn direct YKM VORTAC, Thence. . . .

TAKEOFF RUNWAYS 22, 27: Climbing right turn direct YKM VORTAC. Thence. . . .

. . . .then climbing right turn to intercept YKM R-284 outbound to TITON INT and hold. Continue climb in hold to MEA/MCA for route of flight. Then on (assigned route).

# CLIMB/DESCENT TABLE 10042

## INSTRUMENT TAKEOFF OR APPROACH PROCEDURE CHARTS
## RATE OF CLIMB/DESCENT TABLE

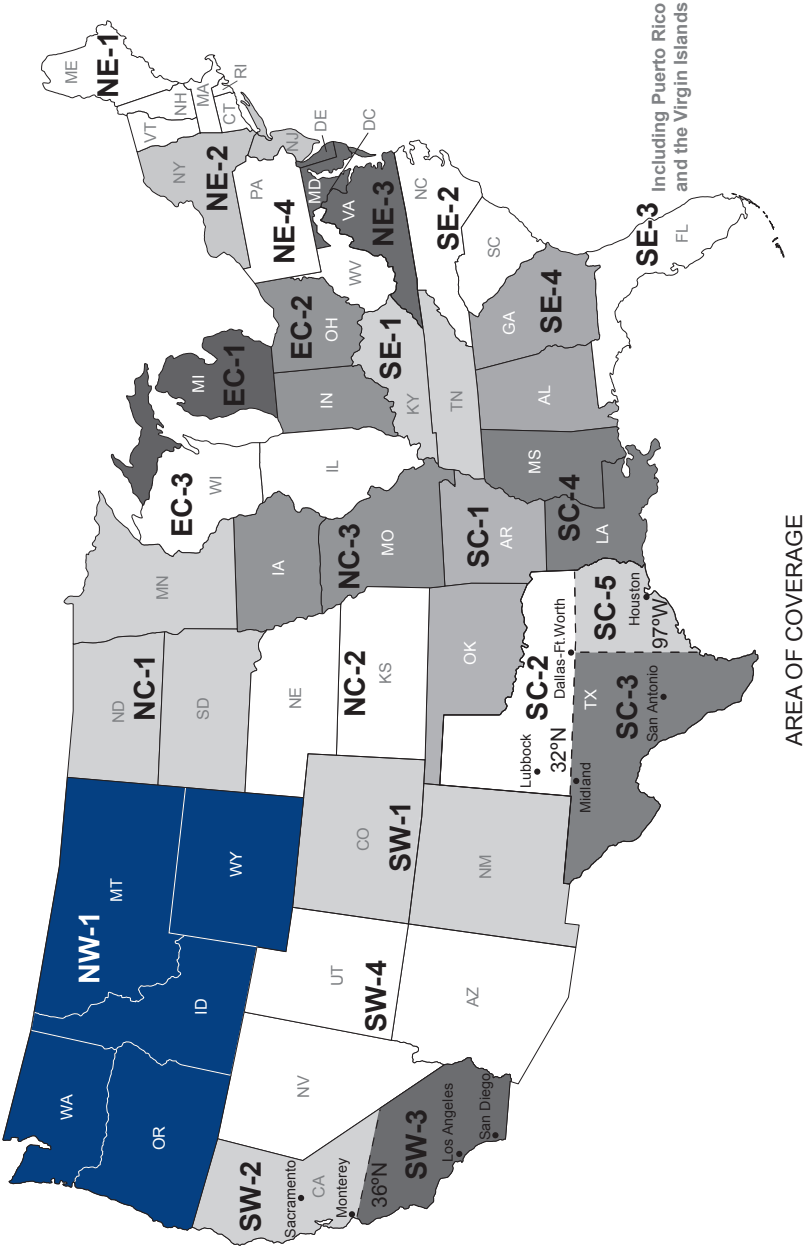
(ft. per min)

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




FAA Product ID: BTPPNW1

NSN 7641015059586

NGA REF. NO. OK-10-2859 TERMXFAABTPPNW1

EFF. DATE 20310